Human Cellular Retinaldehyde-Binding Protein Has Secondary Thermal 9-*cis*-Retinal Isomerase Activity - Supplementary Information

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Table S1: Data collection and refinement statistics for R234W:9-*cis*-retinal and WT CRALBP:9-*cis*-retinal

Structural data	**R234W:9-*cis*-retinal**	**WT CRALBP:9-*cis*-retinal**
Beam line	PSI PX III	PSI PX III
Wavelength (Å)	1.00	1.00
Resolution (Å)	50.0-1.9 (2.01-1.90)*	50.0-3.4 (3.61-3.40)*
Cell dimension		
Space group	5, C2	179, $P6_522$
Unit cell (Å)	a = 87.9, b = 57.9, c = 75.2; α = γ = 90°; β = 122.9°;	a = 70.6, b = 70.6, c = 299.8; α = 90°, β = 90°, γ = 120°;
Measured reflection / unique	116260/ 25014	87901 / 6770
Average multiplicity	4.6 (4.5)	13.0 (12.7)
Completeness (%)	98.4 (92.9)	99.6 (98.5)
Average I / σ(I)	18.48 (4.12)	22.68 (2.74)
R_{merge} (%)	8.7 (41.3)	10.3 (64.9)
Wilson B-factor	30.5	102.7
Refinement		
Resolution range (Å)	44.75-1.90	47.36-3.40
R_{work} (%)	16.51	23.40
R_{free} (%)	19.75	26.49
Average Biso ($Å^2$)		
All atoms	31.5	170.9
Protein atoms	29.74	171
Ligand atoms	31.99	133.4
Solvent atoms	43.18	112.5
RMSD from ideality angles (°)	0.841	0.57
Bonds (Å)	0.005	0.003
Water molecules	308	4
Ligand molecules	1	2
Protein Data Bank deposition code	4cj6	4ciz

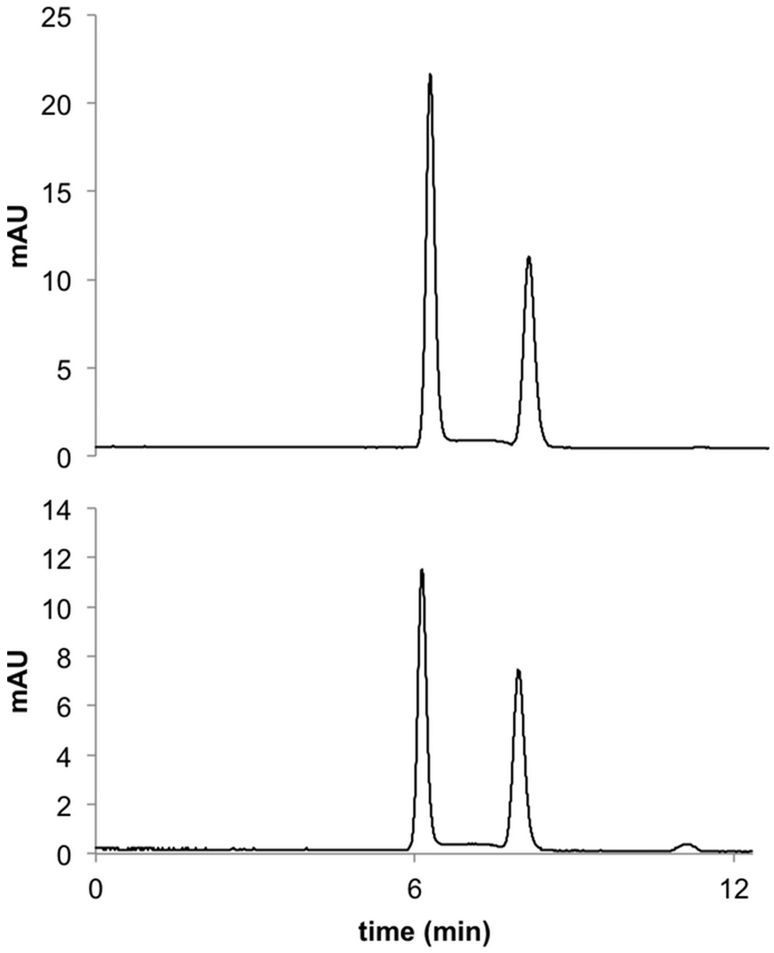

Figure S1: HPLC traces of retinoid extracts of R234W:9-*cis*-retinal freshly prepared (top), and after 48 h incubation at 37°C (bottom).

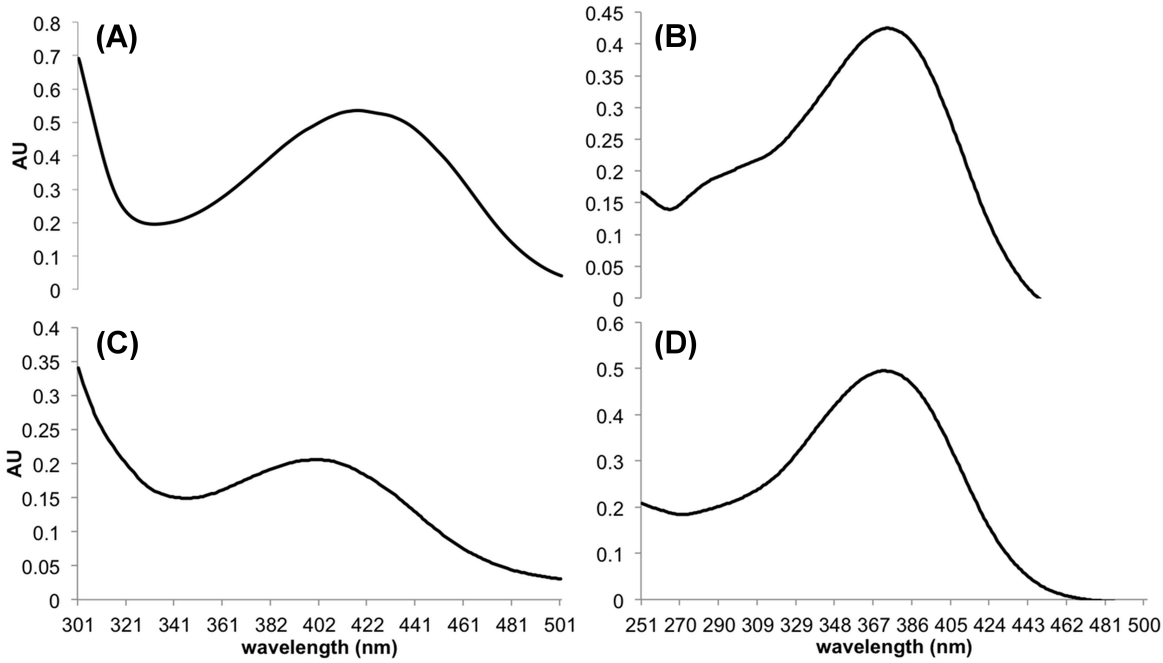

Figure S2: UV/VIS spectra of protein-ligand complexes in buffer and free ligands dissolved in pure ethanol. (**A**) Freshly prepared WT CRALBP:9-*cis*-retinal complex containing ~15% of 9,13-*dicis*-retinal (determined by HPLC). The complex has an absorption maximum at 415 nm. (**B**) Spectrum of free retinoids extracted from freshly prepared WT CRALBP:9-*cis*-retinal. Free 9-*cis*-retinal has an absorption maximum of 373 nm. (**C**) WT CRALBP:9-*cis*-retinal complex after incubation for 21 h at 37° containing ~85% of 9,13-dicis-retinal. The absorption maximum of the complex is at 400 nm. (**D**) Spectrum of free 9,13-*dicis*-retinal dissolved in pure ethanol has an absorption maximum at 368 nm.

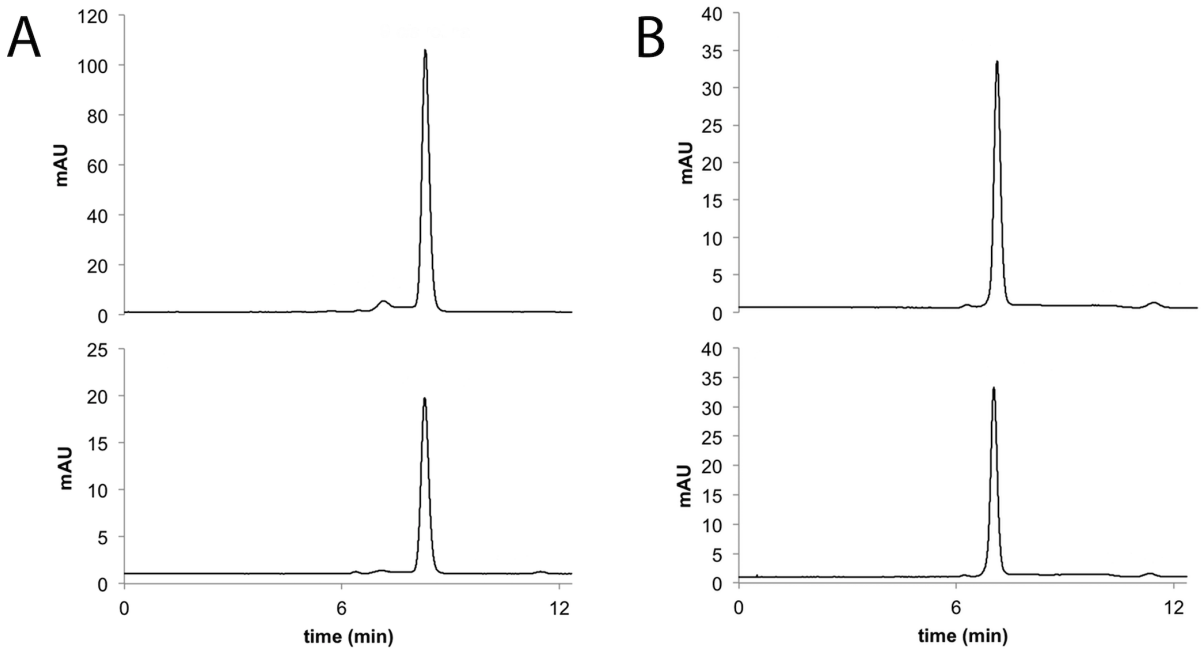

Figure S3. Negative controls for the isomerization reaction. A) HPLC traces of retinoid extracts of free 9-*cis*-retinal dissolved in buffer containing 2% ethanol (top) and after 24 h incubation at 37°C (bottom). B) HPLC traces of retinoid extracts of CRALBP:11-*cis*-retinal freshly prepared (top) and after 48 h incubation at 37°C (bottom).

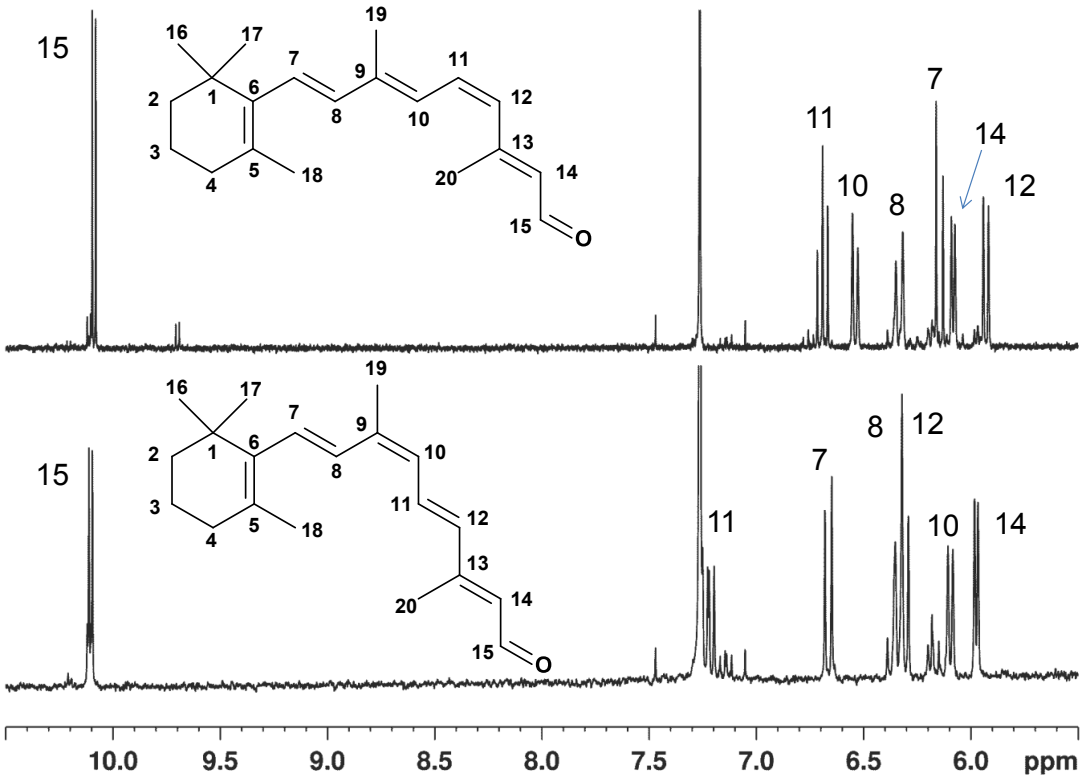

Figure S4: Low field portion of the 500 MHz ^{1}H-NMR spectra of 9-*cis*retinal (bottom) and 11-*cis*-retinal (top) dissolved in $CDCl_3$. Attribution of the six vinyl protons 7, 8, 10, 11, 12, and 14, as well as aldehyde proton 15 is indicated in the spectra, according to the numbering shown in the structures.

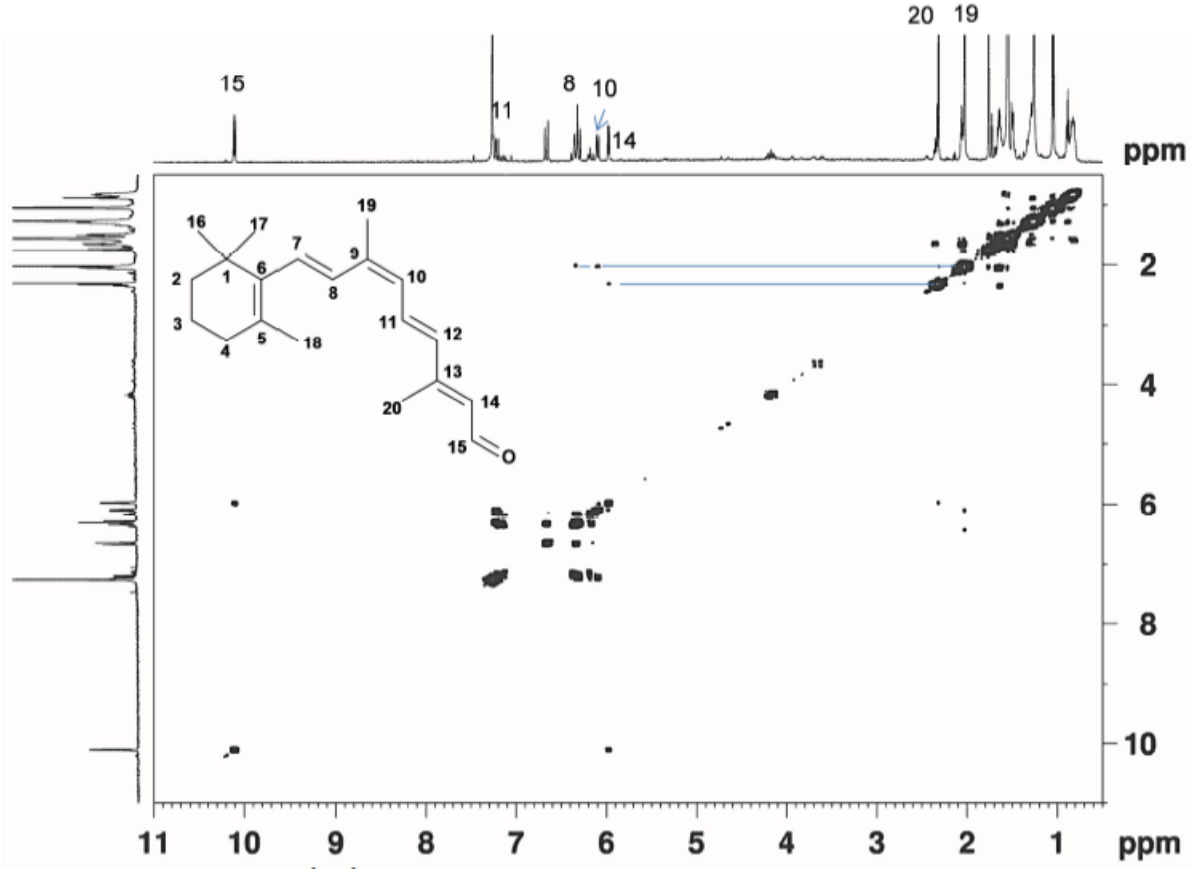

Figure S5: 500 MHz 2D ^{1}H-^{1}H COSY NMR spectrum of 9-cis retinal dissolved in $CDCl_3$. A partial attribution is indicated, with the decisive cross peaks for the final attribution showing the $^{4}J_{HH}$ couplings between H-14 and CH_3-20, and between H-10, H-8 and CH_3-19, respectively, indicated by blue lines.

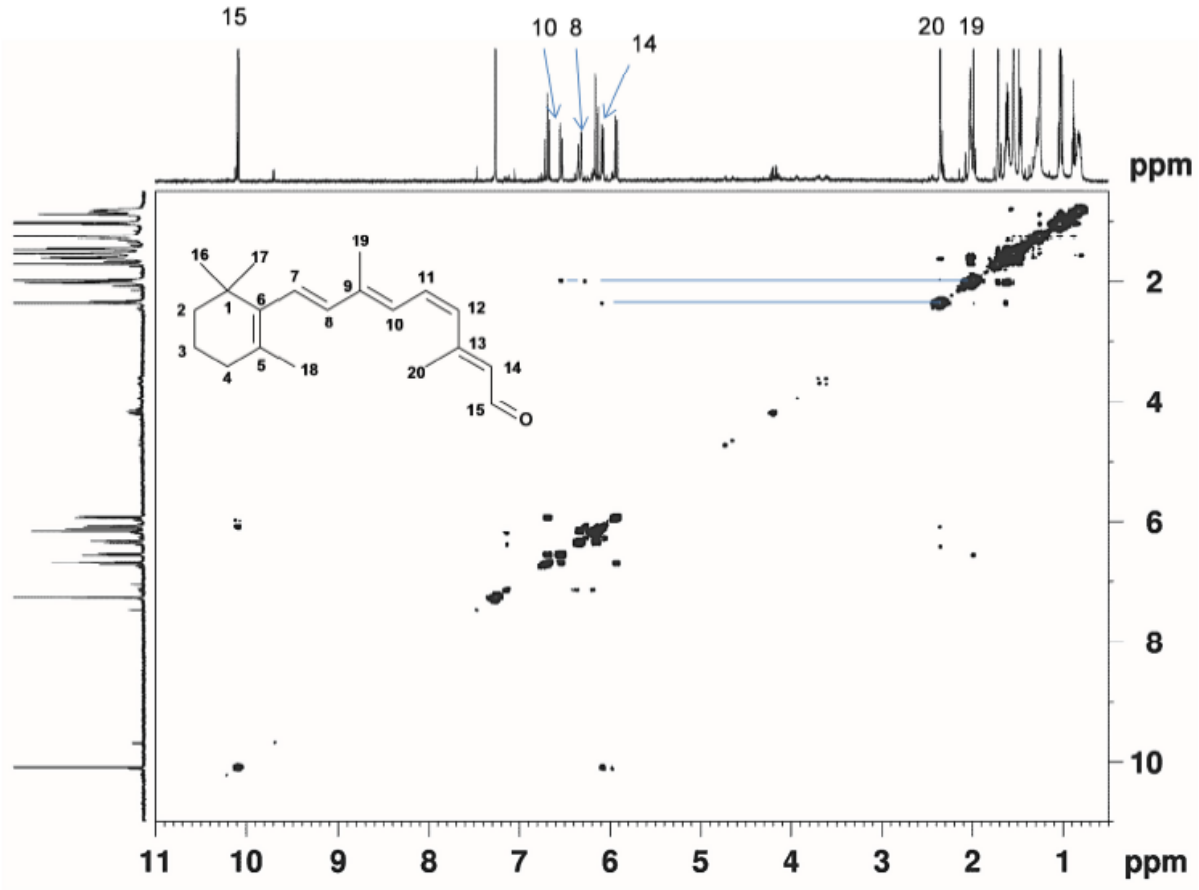

Figure S6: 500 MHz 2D ^{1}H-^{1}H COSY NMR spectrum of 11-cis retinal dissolved in $CDCl_3$. A partial attribution is indicated, with the decisive cross peaks for the final attribution showing the $^{4}J_{HH}$ couplings between H-14 and CH_3-20, and between H-10, H-8 and CH_3-19, respectively, indicated by blue lines.

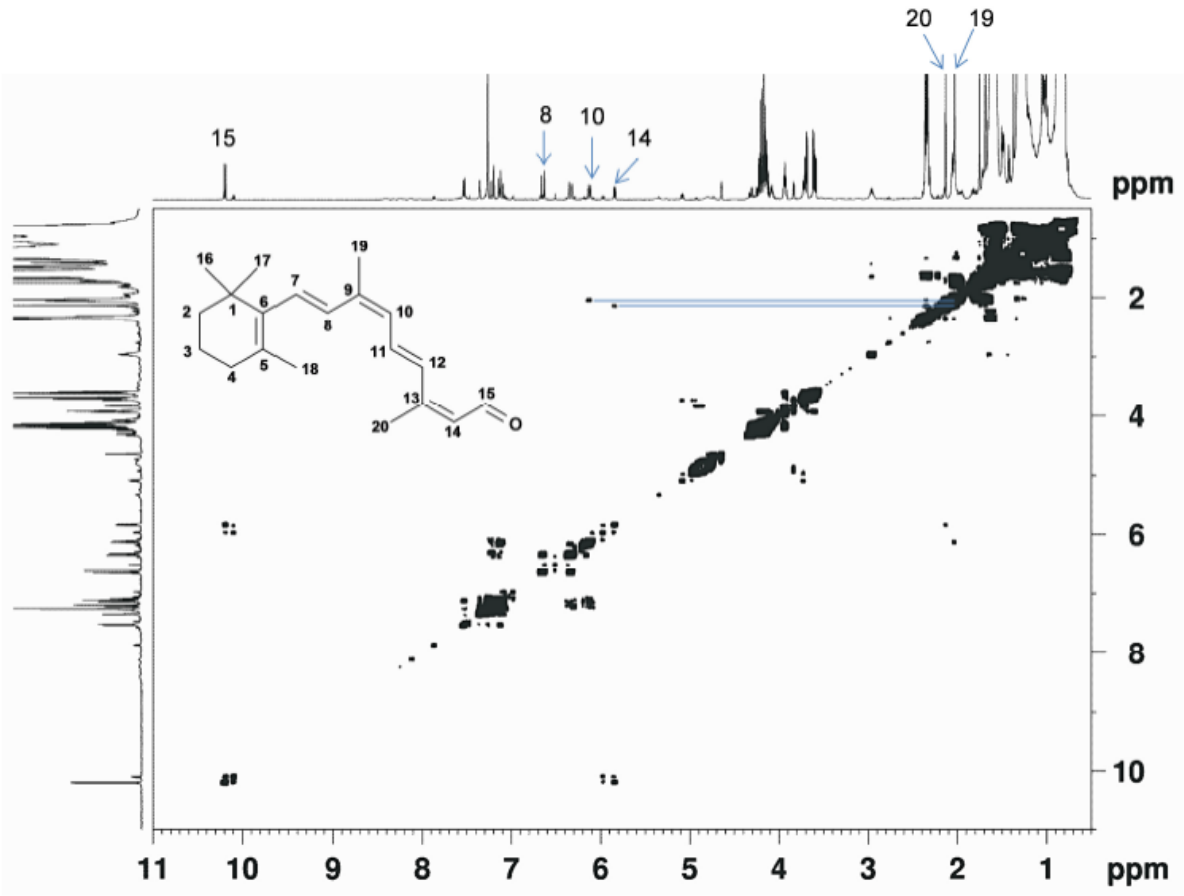

Figure S7: 500 MHz 2D ^{1}H-^{1}H COSY NMR spectrum of 9,13-dicis retinal dissolved in $CDCl_3$. A partial attribution is indicated, with the decisive cross peaks for the final attribution showing the $^{4}J_{HH}$ couplings between H-14 and CH_3-20, and between H-10, H-8 and CH_3-19, respectively, indicated by blue lines.

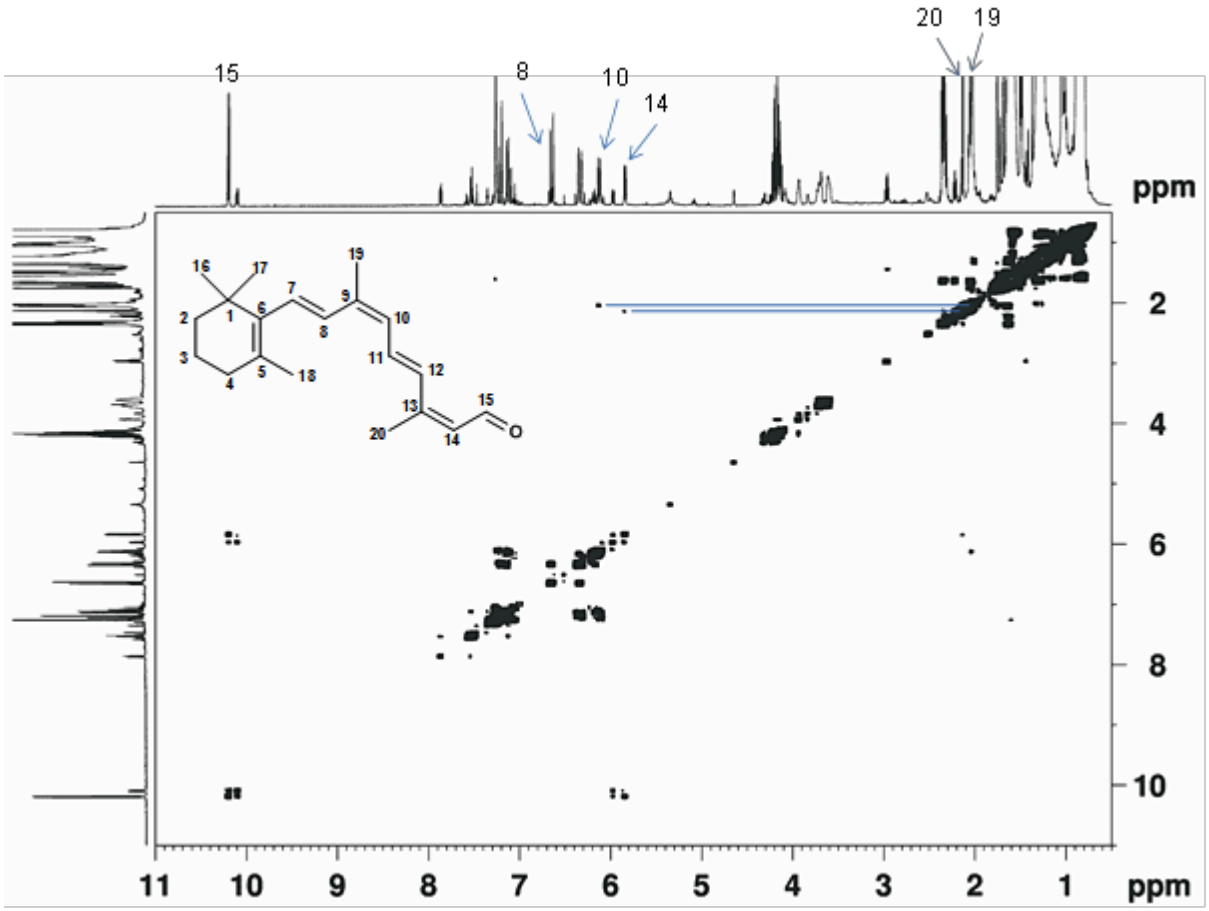

Figure S8: 500 MHz 2D ^{1}H-^{1}H COSY NMR spectrum of 9,13-*dicis*-retinal first treated in CRALBP with D_2O buffer and subsequently dissolved in $CDCl_3$. A partial attribution is indicated, with the decisive cross peaks for the final attribution showing the $^{4}J_{HH}$ couplings between H-14 and CH_3-20, and between H-10, H-8 and CH_3-19, respectively, indicated by blue lines.

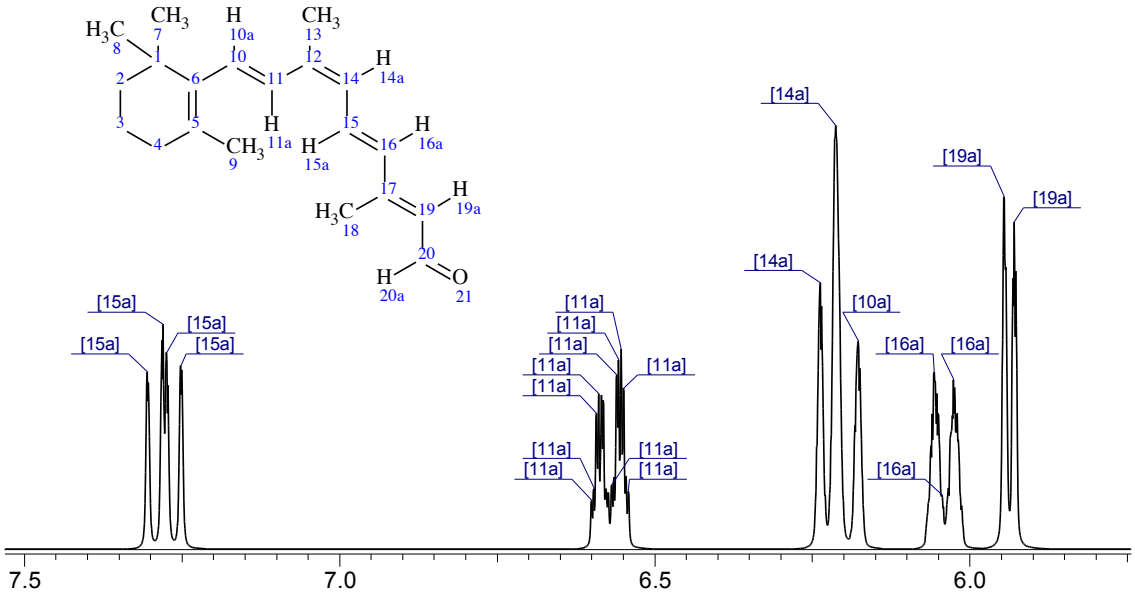

Figure S9: Low field part of the simulated 500 MHz ^{1}H-NMR spectrum of 9-*cis*-retinal in $CDCl_3$. Attribution for the six vinyl protons 10, 11, 14, 15, 16, and 19 is indicated in the spectrum according to the numbering given in the structures. The spectrum was simulated with the H-NMR predictor tool of ACDLabs software, version 12.00.

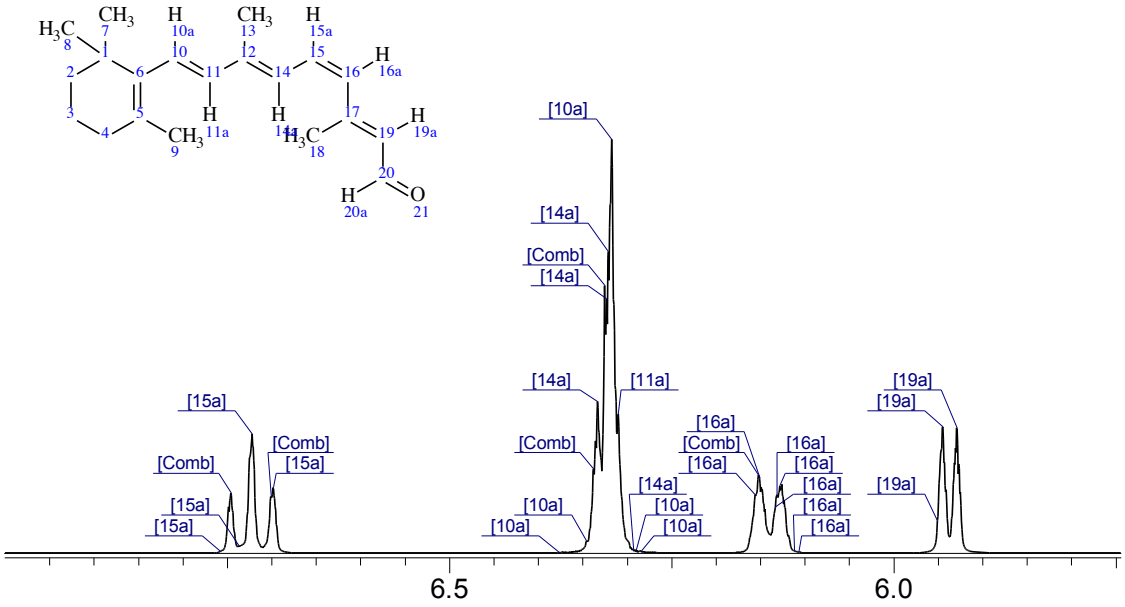

Figure S10: Low field part of the simulated 500 MHz ^{1}H-NMR spectrum of 11-*cis*-retinal in $CDCl_3$. Attribution for the six vinyl protons 10, 11, 14, 15, 16, and 19 is indicated in the spectrum according to the numbering given in the structures. The spectrum was simulated with the H-NMR predictor tool of ACDLabs software, version 12.00.

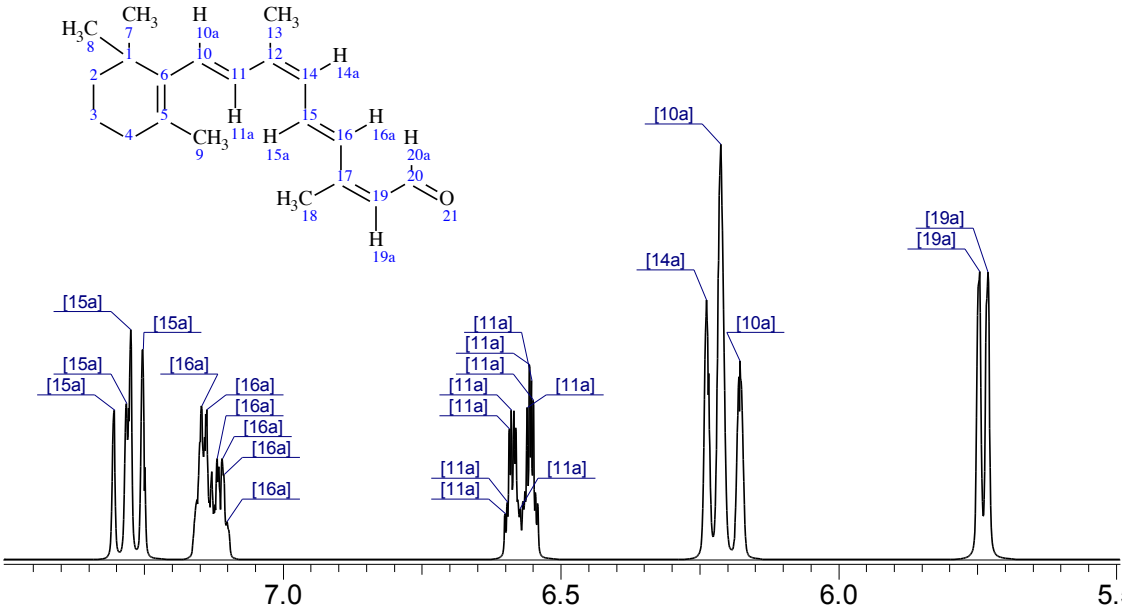

Figure S11: Low field part of the simulated 500 MHz ^{1}H-NMR spectrum of 9,13-*dicis*-retinal in $CDCl_3$. Attribution for the six vinyl protons 10, 11, 14, 15, 16, and 19 is indicated in the spectrum according to the numbering given in the structures. The spectrum was simulated with the H-NMR predictor tool of ACDLabs software, version 12.00.

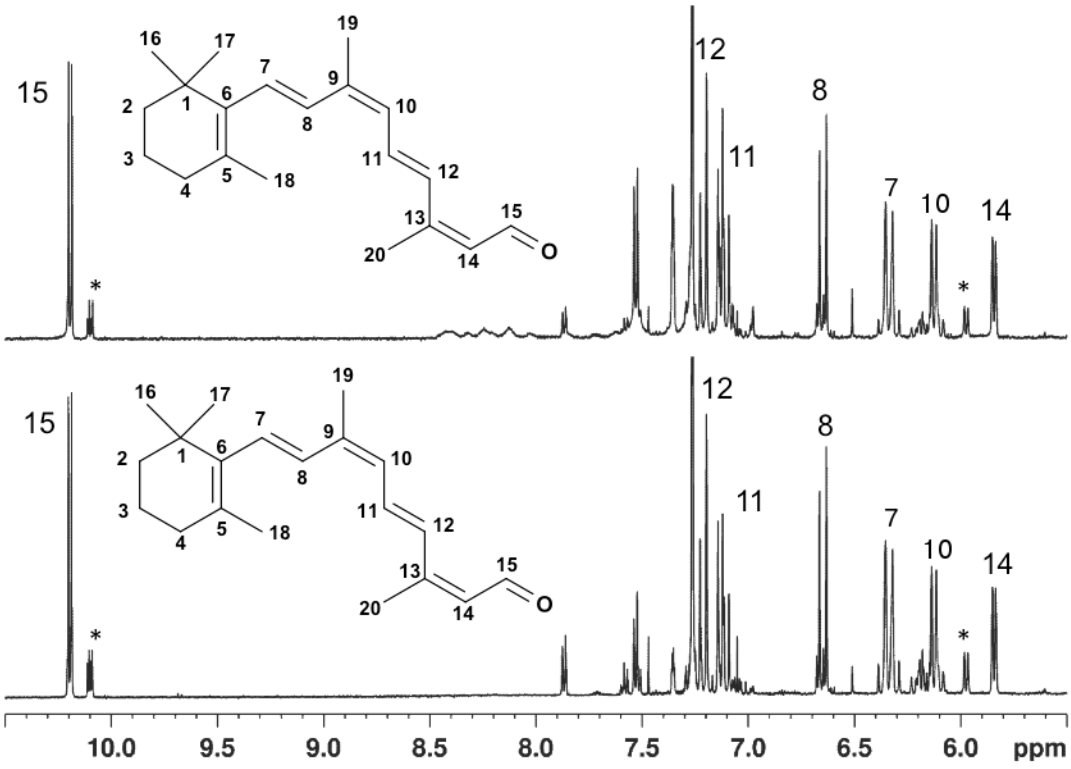

Figure S12: 500 MHz ^{1}H-NMR spectra of 9,13-*dicis*-retinal first treated in aqueous buffer and subsequently dissolved in $CDCl_3$ (top) and 9,13-*dicis*-retinal first treated in CRALBP with D_2O buffer and subsequently dissolved in $CDCl_3$ (bottom). Attribution of the six vinyl protons 7, 8, 10, 11, 12, and 14, as well as of the aldehyde proton 15 is indicated in both spectra, according to the numbering given in the structures. A second set of resonances visible for protons 14 and 15, denoted with stars, indicates traces of residual 9-*cis*-retinal.

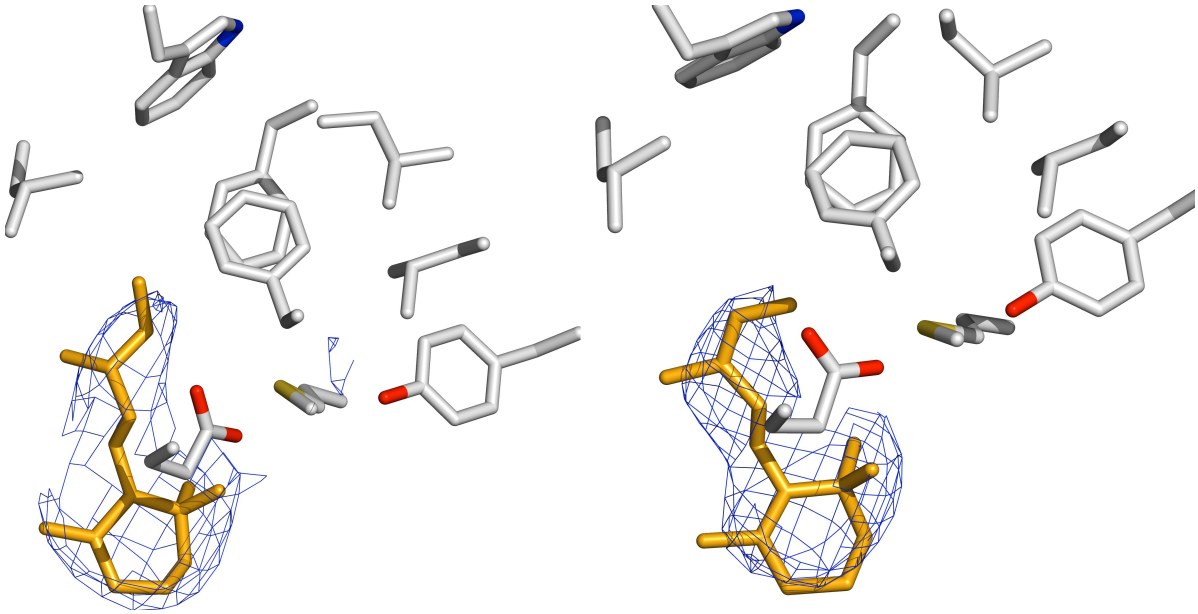

Figure S13: Close-up views of the ligand-binding pockets of WT CRALBP bound to A) 11-*cis*-retinal and to B) 9-*cis*-retinal. Side chains (gray) that form van der Waals contacts with the cis-retinoid tails (orange) or participate in hydrogen bonding within the ligand-binding pocket of the corresponding mutant R234W are shown as sticks. Electron densities of the ligands are shown as blue mesh at 1 σ in the 2Fo–Fc maps. Both ligands are truncated at C11 of the retinal due to a lack of electron density for the terminal tail region.

COORDINATES OF CRALBP:9-CIS-RETINAL IN PDB FORMAT:

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REMARK PHENIX refinement
REMARK
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REMARK   labels         : ['F(+)_parafin_7,SIGF(+)_parafin_7,F(-)_parafin_7,SIGF(-
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REMARK   file name      :
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REMARK Model file name(s):
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REMARK ******************* REFINEMENT SUMMARY: QUICK FACTS ******************
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REMARK Final: r_work = 0.2340 r_free = 0.2649 bonds = 0.003 angles = 0.567
REMARK ************************************************************************
REMARK
REMARK ****************** REFINEMENT STATISTICS STEP BY STEP ******************
REMARK leading digit, like 1_, means number of macro-cycle
REMARK 0    : statistics at the very beginning when nothing is done yet
REMARK 1_bss: bulk solvent correction and/or (anisotropic) scaling
REMARK 1_xyz: refinement of coordinates
REMARK 1_adp: refinement of ADPs (Atomic Displacement Parameters)
REMARK ------------------------------------------------------------------------
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REMARK    1_ohs:  0.2452 0.2668   2.843660e+00   2.918574e+00
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REMARK    1_ohs:  0.2340 0.2649   2.814870e+00   2.907498e+00
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REMARK    1_bss:  0.330 129.350   9.231   9.231 -18.461  -0.000  -0.000  -0.000
REMARK    1_ohs:  0.330 129.350   9.231   9.231 -18.461  -0.000  -0.000  -0.000
REMARK    1_xyz:  0.330 129.350   9.231   9.231 -18.461  -0.000  -0.000  -0.000
REMARK    1_adp:  0.330 129.350   9.231   9.231 -18.461  -0.000  -0.000  -0.000
REMARK    1_bss:  0.332 126.805   8.861   8.861 -17.722  -0.000  -0.000  -0.000
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REMARK    1_xyz:  31.455 0.7348  0.0721       76.788
REMARK    1_adp:  30.282 0.7482  0.0747       77.192
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REMARK ---------------------------------------------------------------------
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REMARK    1_xyz: 298.46  22.49 173.38 298.46  22.49 173.45 152.63 120.49 133.74
REMARK    1_adp: 293.47  88.11 172.76 293.47  88.11 172.86 122.63 103.93 114.51
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REMARK    1_ohs: 291.43  88.11 170.90 291.43  88.11 171.00 120.59 101.89 112.47
REMARK ---------------------------------------------------------------------
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REMARK               model from start model
REMARK                max      min     mean
REMARK    0    :    0.000    0.000    0.000
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REMARK    1_ohs:    0.000    0.000    0.000
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REMARK    1_adp:    1.067    0.000    0.022
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REMARK        S                        9            9.00
REMARK        O                      445          445.00
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REMARK   3   PROGRAM     : PHENIX (phenix.refine: 1.7.3_928)
REMARK   3   AUTHORS     : Adams,Afonine,Chen,Davis,Echols,Gildea,Gopal,
REMARK   3               : Grosse-Kunstleve,Headd,Hung,Immormino,Ioerger,McCoy,
REMARK   3               : McKee,Moriarty,Pai,Read,Richardson,Richardson,Romo,
REMARK   3               : Sacchettini,Sauter,Smith,Storoni,Terwilliger,Zwart
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REMARK   3     3  4.2864 -  3.7449    1.00     2696   143  0.2730 0.2424
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REMARK   3   METHOD USED        : FLAT BULK SOLVENT MODEL
REMARK   3   SOLVENT RADIUS     : 1.11
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REMARK   3   GRID STEP FACTOR   : 4.00
REMARK   3   K_SOL              : 0.332
REMARK   3   B_SOL              : 126.805
REMARK   3
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REMARK   3   PHASE ERROR (DEGREES, MAXIMUM-LIKELIHOOD BASED) : 30.34
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REMARK   3   SCALE = SUM(|F_OBS|*|F_MODEL|)/SUM(|F_MODEL|**2) : 0.0812
REMARK   3   ANISOTROPIC SCALE MATRIX ELEMENTS (IN CARTESIAN BASIS).
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REMARK   3    B13 : -0.0000
REMARK   3    B23 : -0.0000
REMARK   3
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REMARK   3   R = SUM(||F_OBS|-SCALE*|F_MODEL||)/SUM(|F_OBS|)
REMARK   3
REMARK   3  TOTAL MODEL STRUCTURE FACTOR (F_MODEL).
REMARK   3   F_MODEL = FB_CART * (F_CALC_ATOMS + F_BULK)
REMARK   3    F_BULK = K_SOL * EXP(-B_SOL * S**2 / 4) * F_MASK
REMARK   3    F_CALC_ATOMS = ATOMIC MODEL STRUCTURE FACTORS
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REMARK   3     (t) = TRANSPOSE, (-1) = INVERSE
REMARK   3
REMARK   3  STRUCTURE FACTORS CALCULATION ALGORITHM : FFT
REMARK   3
REMARK   3  DEVIATIONS FROM IDEAL VALUES.
REMARK   3                 RMSD     MAX  COUNT
REMARK   3   BOND      :  0.003   0.052   2391
REMARK   3   ANGLE     :  0.567   5.725   3227
REMARK   3   CHIRALITY :  0.042   0.218    340
REMARK   3   PLANARITY :  0.003   0.042    422
REMARK   3   DIHEDRAL  : 10.840  55.746    923
REMARK   3   MIN NONBONDED DISTANCE : 2.247
REMARK   3
REMARK   3  MOLPROBITY STATISTICS.
REMARK   3   ALL-ATOM CLASHSCORE : 16.41
REMARK   3   RAMACHANDRAN PLOT:
REMARK   3     OUTLIERS : 1.42  %
REMARK   3     ALLOWED  : 6.03  %
REMARK   3     FAVORED  : 92.55 %
REMARK   3   ROTAMER OUTLIERS : 2.41 %
REMARK   3   CBETA DEVIATIONS : 0
REMARK   3
REMARK   3  ATOMIC DISPLACEMENT PARAMETERS.
REMARK   3   WILSON B : 115.51
REMARK   3   RMS(B_ISO_OR_EQUIVALENT_BONDED) : 9.61
REMARK   3   ATOMS          NUMBER OF ATOMS
REMARK   3                    ISO.  ANISO.
REMARK   3    ALL         :   2345    2317
REMARK   3    ALL (NO H)  :   2345    2317
REMARK   3    SOLVENT     :      4       0
REMARK   3    NON-SOLVENT :   2341    2317
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REMARK   3    HYDROGENS   :      0       0
REMARK   3
REMARK   3  TLS DETAILS.
REMARK   3   NUMBER OF TLS GROUPS: 9
REMARK   3   ORIGIN: CENTER OF MASS
REMARK   3   TLS GROUP : 1
REMARK   3    SELECTION: (chain A and resid 23:41)
REMARK   3    ORIGIN FOR THE GROUP (A):  -5.5918  37.6017  27.3286
REMARK   3    T TENSOR
REMARK   3      T11:   2.1994 T22:   1.9958
REMARK   3      T33:   1.4079 T12:  -0.4736
REMARK   3      T13:  -0.0411 T23:  -0.5562
REMARK   3    L TENSOR
REMARK   3      L11:   7.8860 L22:   4.5901
REMARK   3      L33:   9.6221 L12:   0.9865
REMARK   3      L13:  -0.5561 L23:   1.5253
REMARK   3    S TENSOR
REMARK   3      S11:   0.3000 S12:  -0.3177 S13:   0.0568
REMARK   3      S21:   0.8084 S22:  -0.1019 S23:  -0.4012
REMARK   3      S31:  -0.8162 S32:  -0.9783 S33:  -0.2458
REMARK   3   TLS GROUP : 2
REMARK   3    SELECTION: (chain A and resid 42:55)
REMARK   3    ORIGIN FOR THE GROUP (A): -11.8415  30.7911  36.6263
REMARK   3    T TENSOR
REMARK   3      T11:   2.9085 T22:   1.9403
REMARK   3      T33:   1.6348 T12:  -0.4593
REMARK   3      T13:   0.1605 T23:  -0.3218
REMARK   3    L TENSOR
REMARK   3      L11:   2.0519 L22:   6.9728
REMARK   3      L33:   2.0070 L12:  -3.4712
REMARK   3      L13:   3.1137 L23:   5.5738
REMARK   3    S TENSOR
REMARK   3      S11:   1.5039 S12:  -1.2444 S13:   1.4686
REMARK   3      S21:   1.2691 S22:   0.8299 S23:  -0.9692
REMARK   3      S31:  -1.3234 S32:   0.0174 S33:  -2.2895
REMARK   3   TLS GROUP : 3
REMARK   3    SELECTION: (chain A and resid 56:85)
REMARK   3    ORIGIN FOR THE GROUP (A):  -0.1189  11.7135  42.8589
REMARK   3    T TENSOR
REMARK   3      T11:   1.3719 T22:   3.0648
REMARK   3      T33:   1.6220 T12:  -0.6570
REMARK   3      T13:  -0.2950 T23:   0.3508
REMARK   3    L TENSOR
REMARK   3      L11:   8.3400 L22:   9.6397
REMARK   3      L33:   2.1893 L12:  -4.2700
REMARK   3      L13:   1.3293 L23:  -2.8757
REMARK   3    S TENSOR
REMARK   3      S11:   0.8681 S12:  -2.2281 S13:  -0.8490
REMARK   3      S21:   0.6311 S22:  -1.3826 S23:   0.4318
REMARK   3      S31:   0.0217 S32:   0.9134 S33:   0.5386
REMARK   3   TLS GROUP : 4
REMARK   3    SELECTION: (chain A and resid 86:98)
REMARK   3    ORIGIN FOR THE GROUP (A):   6.5679  16.8040  36.9401
REMARK   3    T TENSOR
REMARK   3      T11:   1.5295 T22:   2.6147
REMARK   3      T33:   1.6530 T12:  -1.0821
REMARK   3      T13:  -0.3277 T23:   0.3613
REMARK   3    L TENSOR
REMARK   3      L11:   2.9372 L22:   9.4653
REMARK   3      L33:   7.7546 L12:   1.2980
REMARK   3      L13:  -1.2829 L23:   5.8943
REMARK   3    S TENSOR
REMARK   3      S11:   0.0330 S12:  -0.2465 S13:  -0.0152
REMARK   3      S21:  -0.3899 S22:   0.2387 S23:  -1.0539
REMARK   3      S31:  -0.4196 S32:   1.4365 S33:  -0.4623
REMARK   3   TLS GROUP : 5
REMARK   3    SELECTION: (chain A and resid 99:143)
REMARK   3    ORIGIN FOR THE GROUP (A):   3.5602  14.7805  25.7713
REMARK   3    T TENSOR
REMARK   3      T11:   1.4786 T22:   1.6464
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REMARK   3      T33:   1.6775 T12:  -0.5713
REMARK   3      T13:  -0.3221 T23:   0.1994
REMARK   3    L TENSOR
REMARK   3      L11:   1.2314 L22:   4.6137
REMARK   3      L33:   5.1821 L12:   1.7657
REMARK   3      L13:  -0.6364 L23:  -0.4875
REMARK   3    S TENSOR
REMARK   3      S11:   0.4016 S12:  -1.3190 S13:  -1.1200
REMARK   3      S21:  -0.0972 S22:  -1.2266 S23:  -1.6078
REMARK   3      S31:  -1.3717 S32:   1.7076 S33:   0.7275
REMARK   3   TLS GROUP : 6
REMARK   3    SELECTION: (chain A and resid 144:185)
REMARK   3    ORIGIN FOR THE GROUP (A):   2.1584  23.4104  13.0419
REMARK   3    T TENSOR
REMARK   3      T11:   1.5470 T22:   1.3685
REMARK   3      T33:   1.3940 T12:  -0.6263
REMARK   3      T13:  -0.2859 T23:   0.0245
REMARK   3    L TENSOR
REMARK   3      L11:   4.8858 L22:  10.0185
REMARK   3      L33:   9.2610 L12:  -1.4558
REMARK   3      L13:  -0.9991 L23:   1.5010
REMARK   3    S TENSOR
REMARK   3      S11:  -0.2844 S12:  -0.1394 S13:   0.5531
REMARK   3      S21:  -1.0291 S22:  -1.0833 S23:  -0.9428
REMARK   3      S31:  -1.7490 S32:   1.1707 S33:   1.1957
REMARK   3   TLS GROUP : 7
REMARK   3    SELECTION: (chain A and resid 186:255)
REMARK   3    ORIGIN FOR THE GROUP (A):  -5.0786  18.1984  12.8337
REMARK   3    T TENSOR
REMARK   3      T11:   1.8375 T22:   1.1086
REMARK   3      T33:   1.1457 T12:  -0.7763
REMARK   3      T13:  -0.1863 T23:  -0.0705
REMARK   3    L TENSOR
REMARK   3      L11:   3.2540 L22:   8.2616
REMARK   3      L33:   5.7362 L12:  -0.0841
REMARK   3      L13:  -1.1440 L23:   1.3476
REMARK   3    S TENSOR
REMARK   3      S11:   0.2582 S12:  -0.1726 S13:  -0.3769
REMARK   3      S21:  -1.4528 S22:  -1.2033 S23:  -0.7484
REMARK   3      S31:  -1.3196 S32:   1.2170 S33:   0.5800
REMARK   3   TLS GROUP : 8
REMARK   3    SELECTION: (chain A and resid 256:295)
REMARK   3    ORIGIN FOR THE GROUP (A): -10.7649  27.5537  11.1747
REMARK   3    T TENSOR
REMARK   3      T11:   2.0082 T22:   0.9124
REMARK   3      T33:   1.4094 T12:  -0.3464
REMARK   3      T13:  -0.2966 T23:  -0.1683
REMARK   3    L TENSOR
REMARK   3      L11:   2.8904 L22:   9.8943
REMARK   3      L33:   2.6632 L12:   2.9399
REMARK   3      L13:  -0.4110 L23:  -2.8237
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0025 S12:  -0.1289 S13:   0.7631
REMARK   3      S21:   0.2197 S22:  -0.3207 S23:   0.6423
REMARK   3      S31:  -1.5326 S32:  -0.2329 S33:   0.2759
REMARK   3   TLS GROUP : 9
REMARK   3    SELECTION: (chain A and resid 296:306)
REMARK   3    ORIGIN FOR THE GROUP (A):  10.0979  32.3403  15.3244
REMARK   3    T TENSOR
REMARK   3      T11:   3.3329 T22:   1.1558
REMARK   3      T33:   1.9624 T12:  -2.8554
REMARK   3      T13:   0.2941 T23:  -0.2076
REMARK   3    L TENSOR
REMARK   3      L11:   2.7005 L22:   4.7888
REMARK   3      L33:   4.1568 L12:   0.7439
REMARK   3      L13:  -0.3794 L23:   0.7100
REMARK   3    S TENSOR
REMARK   3      S11:  -0.9161 S12:  -0.1066 S13:  -0.2602
REMARK   3      S21:  -0.0904 S22:  -0.9511 S23:  -0.6308
REMARK   3      S31:   0.1489 S32:   1.0875 S33:   1.0744
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REMARK   3
CRYST1   70.556   70.556  299.747  90.00  90.00 120.00 P 65 2 2
SCALE1      0.014173  0.008183  0.000000        0.00000
SCALE2      0.000000  0.016366  0.000000        0.00000
SCALE3      0.000000  0.000000  0.003336        0.00000
ATOM      1  N   GLU A  23     -20.270  35.716  25.731  1.00243.58           N
ANISOU    1  N   GLU A  23    29539  39670  23339  -3571   1423  -6245       N
ATOM      2  CA  GLU A  23     -19.742  36.514  24.632  1.00249.26           C
ANISOU    2  CA  GLU A  23    30433  40064  24212  -3018   1228  -6150       C
ATOM      3  C   GLU A  23     -19.157  37.825  25.158  1.00262.55           C
ANISOU    3  C   GLU A  23    32687  41126  25946  -2402   1247  -6075       C
ATOM      4  O   GLU A  23     -18.582  37.856  26.247  1.00269.76           O
ANISOU    4  O   GLU A  23    34039  41553  26904  -2608   1307  -6077       O
ATOM      5  CB  GLU A  23     -20.838  36.786  23.599  1.00249.01           C
ANISOU    5  CB  GLU A  23    29731  40926  23956  -2590   1203  -6227       C
ATOM      6  CG  GLU A  23     -20.351  36.798  22.157  1.00242.83           C
ANISOU    6  CG  GLU A  23    28962  40012  23289  -2489    965  -6121       C
ATOM      7  CD  GLU A  23     -21.487  36.931  21.163  1.00244.81           C
ANISOU    7  CD  GLU A  23    28494  41278  23244  -2132    897  -6194       C
ATOM      8  OE1 GLU A  23     -22.659  36.931  21.596  1.00250.61           O
ANISOU    8  OE1 GLU A  23    28655  42841  23723  -2004   1037  -6353       O
ATOM      9  OE2 GLU A  23     -21.209  37.034  19.950  1.00241.71           O
ANISOU    9  OE2 GLU A  23    28079  40916  22843  -1986    702  -6098       O
ATOM     10  N   GLN A  24     -19.307  38.896  24.381  1.00266.93           N
ANISOU   10  N   GLN A  24    33253  41690  26477  -1667   1186  -6005       N
ATOM     11  CA  GLN A  24     -18.817  40.224  24.755  1.00269.42           C
ANISOU   11  CA  GLN A  24    34141  41359  26868  -1058   1217  -5950       C
ATOM     12  C   GLN A  24     -17.322  40.238  25.076  1.00267.03           C
ANISOU   12  C   GLN A  24    34538  40057  26864  -1433   1111  -5854       C
ATOM     13  O   GLN A  24     -16.907  40.759  26.112  1.00267.06           O
ANISOU   13  O   GLN A  24    34982  39605  26885  -1387   1192  -5936       O
ATOM     14  CB  GLN A  24     -19.615  40.785  25.938  1.00271.98           C
ANISOU   14  CB  GLN A  24    34393  41988  26959   -697   1465  -6163       C
ATOM     15  CG  GLN A  24     -21.116  40.868  25.703  1.00275.64           C
ANISOU   15  CG  GLN A  24    34089  43516  27125   -249   1590  -6297       C
ATOM     16  CD  GLN A  24     -21.872  41.349  26.927  1.00277.70           C
ANISOU   16  CD  GLN A  24    34239  44130  27146     71   1884  -6565       C
ATOM     17  OE1 GLN A  24     -21.272  41.689  27.947  1.00276.55           O
ANISOU   17  OE1 GLN A  24    34644  43404  27028    -20   1987  -6655       O
ATOM     18  NE2 GLN A  24     -23.196  41.378  26.832  1.00279.96           N
ANISOU   18  NE2 GLN A  24    33770  45436  27166    442   2023  -6727       N
ATOM     19  N   LEU A  25     -16.518  39.669  24.182  1.00262.19           N
ANISOU   19  N   LEU A  25    33990  39164  26468  -1803    932  -5719       N
ATOM     20  CA  LEU A  25     -15.076  39.602  24.390  1.00251.94           C
ANISOU   20  CA  LEU A  25    33237  37018  25468  -2168    818  -5646       C
ATOM     21  C   LEU A  25     -14.325  39.768  23.071  1.00249.47           C
ANISOU   21  C   LEU A  25    33035  36413  25341  -2135    680  -5483       C
ATOM     22  O   LEU A  25     -14.667  39.137  22.070  1.00249.54           O
ANISOU   22  O   LEU A  25    32642  36877  25295  -2252    619  -5464       O
ATOM     23  CB  LEU A  25     -14.695  38.273  25.048  1.00240.47           C
ANISOU   23  CB  LEU A  25    31730  35526  24112  -2902    769  -5699       C
ATOM     24  CG  LEU A  25     -13.338  38.215  25.752  1.00227.33           C
ANISOU   24  CG  LEU A  25    30587  33096  22692  -3227    650  -5661       C
ATOM     25  CD1 LEU A  25     -13.320  39.178  26.925  1.00222.10           C
ANISOU   25  CD1 LEU A  25    30298  32205  21884  -2966    746  -5748       C
ATOM     26  CD2 LEU A  25     -13.033  36.801  26.215  1.00226.26           C
ANISOU   26  CD2 LEU A  25    30365  32942  22661  -3876    563  -5646       C
ATOM     27  N   THR A  26     -13.303  40.619  23.075  1.00245.22           N
ANISOU   27  N   THR A  26    33033  35149  24990  -2023    647  -5388       N
ATOM     28  CA  THR A  26     -12.527  40.885  21.867  1.00239.64           C
ANISOU   28  CA  THR A  26    32470  34158  24424  -2021    564  -5214       C
ATOM     29  C   THR A  26     -11.240  40.065  21.822  1.00220.29           C
ANISOU   29  C   THR A  26    30128  31303  22271  -2641    455  -5255       C
ATOM     30  O   THR A  26     -10.913  39.348  22.767  1.00212.86           O
ANISOU   30  O   THR A  26    29206  30229  21441  -3024    409  -5376       O
ATOM     31  CB  THR A  26     -12.180  42.381  21.730  1.00251.30           C
ANISOU   31  CB  THR A  26    34471  35075  25935  -1544    622  -5056       C
ATOM     32  OG1 THR A  26     -11.322  42.778  22.806  1.00255.94           O
ANISOU   32  OG1 THR A  26    35531  35004  26710  -1751    639  -5170       O
ATOM     33  CG2 THR A  26     -13.444  43.227  21.753  1.00257.28           C
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ANISOU   33  CG2 THR A  26    35136  36182  26438   -809    718  -5014       C
ATOM     34  N   THR A  27     -10.512  40.183  20.715  1.00212.83           N
ANISOU   34  N   THR A  27    29245  30191  21432  -2710    416  -5140       N
ATOM     35  CA  THR A  27      -9.290  39.415  20.510  1.00207.60           C
ANISOU   35  CA  THR A  27    28599  29219  21059  -3227    330  -5213       C
ATOM     36  C   THR A  27      -8.111  39.990  21.286  1.00199.06           C
ANISOU   36  C   THR A  27    27966  27448  20221  -3384    300  -5219       C
ATOM     37  O   THR A  27      -7.089  39.326  21.459  1.00186.25           O
ANISOU   37  O   THR A  27    26329  25578  18859  -3787    201  -5311       O
ATOM     38  CB  THR A  27      -8.916  39.343  19.017  1.00216.64           C
ANISOU   38  CB  THR A  27    29607  30521  22184  -3267    340  -5131       C
ATOM     39  OG1 THR A  27      -7.689  38.620  18.863  1.00222.84           O
ANISOU   39  OG1 THR A  27    30378  31015  23275  -3726    284  -5256       O
ATOM     40  CG2 THR A  27      -8.748  40.741  18.443  1.00216.59           C
ANISOU   40  CG2 THR A  27    29964  30265  22066  -2897    424  -4870       C
ATOM     41  N   LYS A  28      -8.257  41.225  21.752  1.00212.93           N
ANISOU   41  N   LYS A  28    30106  28901  21896  -3054    379  -5150       N
ATOM     42  CA  LYS A  28      -7.191  41.889  22.493  1.00223.04           C
ANISOU   42  CA  LYS A  28    31825  29546  23375  -3236    355  -5204       C
ATOM     43  C   LYS A  28      -7.455  41.927  23.995  1.00218.87           C
ANISOU   43  C   LYS A  28    31448  28939  22775  -3243    325  -5375       C
ATOM     44  O   LYS A  28      -6.709  42.552  24.748  1.00219.51           O
ANISOU   44  O   LYS A  28    31899  28552  22953  -3374    295  -5473       O
ATOM     45  CB  LYS A  28      -6.962  43.305  21.960  1.00234.53           C
ANISOU   45  CB  LYS A  28    33714  30571  24824  -2963    478  -5040       C
ATOM     46  CG  LYS A  28      -6.137  43.358  20.685  1.00237.34           C
ANISOU   46  CG  LYS A  28    34053  30838  25286  -3169    507  -4873       C
ATOM     47  CD  LYS A  28      -5.659  44.772  20.404  1.00243.36           C
ANISOU   47  CD  LYS A  28    35364  31008  26092  -3061    636  -4695       C
ATOM     48  CE  LYS A  28      -5.002  45.381  21.634  1.00248.65           C
ANISOU   48  CE  LYS A  28    36437  31097  26942  -3265    618  -4902       C
ATOM     49  NZ  LYS A  28      -3.922  44.514  22.186  1.00247.06           N
ANISOU   49  NZ  LYS A  28    36008  30900  26963  -3831    462  -5127       N
ATOM     50  N   ASP A  29      -8.515  41.249  24.427  1.00212.22           N
ANISOU   50  N   ASP A  29    30305  28600  21730  -3149    344  -5429       N
ATOM     51  CA  ASP A  29      -8.840  41.160  25.846  1.00201.93           C
ANISOU   51  CA  ASP A  29    29102  27343  20278  -3199    345  -5579       C
ATOM     52  C   ASP A  29      -8.034  40.060  26.526  1.00192.41           C
ANISOU   52  C   ASP A  29    27834  26061  19212  -3726    152  -5614       C
ATOM     53  O   ASP A  29      -8.363  39.636  27.634  1.00194.29           O
ANISOU   53  O   ASP A  29    28080  26465  19276  -3856    130  -5675       O
ATOM     54  CB  ASP A  29     -10.333  40.894  26.043  1.00200.74           C
ANISOU   54  CB  ASP A  29    28623  27828  19823  -2921    482  -5610       C
ATOM     55  CG  ASP A  29     -11.186  42.119  25.781  1.00204.83           C
ANISOU   55  CG  ASP A  29    29248  28407  20172  -2274    654  -5612       C
ATOM     56  OD1 ASP A  29     -10.730  43.017  25.045  1.00212.52           O
ANISOU   56  OD1 ASP A  29    30507  28965  21275  -2044    663  -5497       O
ATOM     57  OD2 ASP A  29     -12.315  42.182  26.310  1.00203.53           O
ANISOU   57  OD2 ASP A  29    28879  28709  19745  -1986    789  -5718       O
ATOM     58  N   HIS A  30      -6.981  39.600  25.858  1.00181.57           N
ANISOU   58  N   HIS A  30    26396  24457  18137  -4005     18  -5563       N
ATOM     59  CA  HIS A  30      -6.159  38.515  26.376  1.00171.18           C
ANISOU   59  CA  HIS A  30    24992  23040  17007  -4416   -196  -5572       C
ATOM     60  C   HIS A  30      -4.681  38.882  26.402  1.00156.87           C
ANISOU   60  C   HIS A  30    23359  20777  15467  -4621   -347  -5619       C
ATOM     61  O   HIS A  30      -4.246  39.812  25.722  1.00148.03           O
ANISOU   61  O   HIS A  30    22382  19428  14436  -4537   -255  -5626       O
ATOM     62  CB  HIS A  30      -6.370  37.243  25.553  1.00169.88           C
ANISOU   62  CB  HIS A  30    24438  23130  16978  -4574   -224  -5526       C
ATOM     63  CG  HIS A  30      -7.785  36.759  25.550  1.00166.81           C
ANISOU   63  CG  HIS A  30    23806  23242  16332  -4491    -91  -5511       C
ATOM     64  ND1 HIS A  30      -8.679  37.079  24.550  1.00160.35           N
ANISOU   64  ND1 HIS A  30    22762  22796  15365  -4224     66  -5510       N
ATOM     65  CD2 HIS A  30      -8.467  35.990  26.431  1.00165.40           C
ANISOU   65  CD2 HIS A  30    23550  23305  15989  -4668    -89  -5489       C
ATOM     66  CE1 HIS A  30      -9.846  36.521  24.812  1.00157.81           C
ANISOU   66  CE1 HIS A  30    22180  22957  14822  -4247    153  -5531       C
ATOM     67  NE2 HIS A  30      -9.746  35.855  25.948  1.00163.37           N
ANISOU   67  NE2 HIS A  30    22982  23576  15516  -4542     86  -5515       N
ATOM     68  N   GLY A  31      -3.915  38.137  27.192  1.00154.42           N
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ANISOU   68  N   GLY A  31    23030  20365  15278  -4901   -584  -5632       N
ATOM     69  CA  GLY A  31      -2.489  38.368  27.317  1.00151.07           C
ANISOU   69  CA  GLY A  31    22670  19623  15107  -5116   -769  -5705       C
ATOM     70  C   GLY A  31      -1.699  37.874  26.121  1.00151.06           C
ANISOU   70  C   GLY A  31    22372  19573  15453  -5216   -782  -5709       C
ATOM     71  O   GLY A  31      -2.243  37.728  25.025  1.00145.15           O
ANISOU   71  O   GLY A  31    21457  18989  14705  -5094   -603  -5672       O
ATOM     72  N   PRO A  32      -0.402  37.614  26.327  1.00158.37           N
ANISOU   72  N   PRO A  32    23193  20334  16646  -5432   -999  -5781       N
ATOM     73  CA  PRO A  32       0.488  37.177  25.254  1.00159.88           C
ANISOU   73  CA  PRO A  32    23061  20512  17175  -5527   -993  -5847       C
ATOM     74  C   PRO A  32       0.642  35.666  25.200  1.00160.82           C
ANISOU   74  C   PRO A  32    22880  20699  17523  -5534  -1162  -5838       C
ATOM     75  O   PRO A  32       0.354  34.964  26.169  1.00166.93           O
ANISOU   75  O   PRO A  32    23729  21463  18235  -5534  -1354  -5736       O
ATOM     76  CB  PRO A  32       1.822  37.809  25.646  1.00166.76           C
ANISOU   76  CB  PRO A  32    23950  21204  18210  -5750  -1141  -5969       C
ATOM     77  CG  PRO A  32       1.749  37.989  27.156  1.00179.62           C
ANISOU   77  CG  PRO A  32    25835  22782  19629  -5793  -1370  -5963       C
ATOM     78  CD  PRO A  32       0.322  37.756  27.600  1.00175.20           C
ANISOU   78  CD  PRO A  32    25469  22353  18747  -5591  -1269  -5833       C
ATOM     79  N   VAL A  33       1.097  35.175  24.056  1.00154.60           N
ANISOU   79  N   VAL A  33    21786  19964  16991  -5546  -1072  -5945       N
ATOM     80  CA  VAL A  33       1.457  33.778  23.911  1.00159.09           C
ANISOU   80  CA  VAL A  33    22080  20497  17868  -5533  -1223  -6006       C
ATOM     81  C   VAL A  33       2.944  33.668  24.233  1.00169.80           C
ANISOU   81  C   VAL A  33    23233  21735  19548  -5595  -1465  -6110       C
ATOM     82  O   VAL A  33       3.562  34.649  24.655  1.00172.13           O
ANISOU   82  O   VAL A  33    23613  22012  19779  -5713  -1517  -6133       O
ATOM     83  CB  VAL A  33       1.180  33.284  22.479  1.00169.11           C
ANISOU   83  CB  VAL A  33    23098  21927  19229  -5500   -985  -6154       C
ATOM     84  CG1 VAL A  33       0.867  31.796  22.475  1.00183.44           C
ANISOU   84  CG1 VAL A  33    24789  23659  21250  -5472  -1081  -6202       C
ATOM     85  CG2 VAL A  33       0.019  34.058  21.876  1.00162.27           C
ANISOU   85  CG2 VAL A  33    22376  21296  17982  -5440   -714  -6075       C
ATOM     86  N   PHE A  34       3.508  32.477  24.048  1.00177.08           N
ANISOU   86  N   PHE A  34    23878  22577  20827  -5510  -1615  -6198       N
ATOM     87  CA  PHE A  34       4.938  32.234  24.246  1.00177.44           C
ANISOU   87  CA  PHE A  34    23613  22583  21225  -5487  -1858  -6326       C
ATOM     88  C   PHE A  34       5.406  32.499  25.678  1.00194.56           C
ANISOU   88  C   PHE A  34    25926  24697  23302  -5520  -2229  -6172       C
ATOM     89  O   PHE A  34       5.625  31.564  26.450  1.00198.90           O
ANISOU   89  O   PHE A  34    26470  25117  23987  -5375  -2557  -6034       O
ATOM     90  CB  PHE A  34       5.775  33.041  23.245  1.00157.98           C
ANISOU   90  CB  PHE A  34    20865  20307  18852  -5626  -1626  -6559       C
ATOM     91  CG  PHE A  34       5.326  32.888  21.819  1.00151.58           C
ANISOU   91  CG  PHE A  34    19931  19637  18024  -5616  -1258  -6701       C
ATOM     92  CD1 PHE A  34       5.639  31.748  21.098  1.00152.96           C
ANISOU   92  CD1 PHE A  34    19776  19824  18518  -5475  -1228  -6926       C
ATOM     93  CD2 PHE A  34       4.595  33.888  21.198  1.00149.75           C
ANISOU   93  CD2 PHE A  34    19924  19532  17442  -5724   -953  -6619       C
ATOM     94  CE1 PHE A  34       5.229  31.606  19.788  1.00152.39           C
ANISOU   94  CE1 PHE A  34    19586  19948  18367  -5497   -895  -7102       C
ATOM     95  CE2 PHE A  34       4.182  33.752  19.887  1.00151.32           C
ANISOU   95  CE2 PHE A  34    20002  19940  17551  -5714   -651  -6726       C
ATOM     96  CZ  PHE A  34       4.500  32.610  19.181  1.00156.12           C
ANISOU   96  CZ  PHE A  34    20266  20622  18432  -5629   -618  -6986       C
ATOM     97  N   GLY A  35       5.559  33.774  26.024  1.00200.81           N
ANISOU   97  N   GLY A  35    26876  25575  23846  -5717  -2181  -6193       N
ATOM     98  CA  GLY A  35       6.053  34.156  27.335  1.00204.40           C
ANISOU   98  CA  GLY A  35    27456  26050  24157  -5807  -2522  -6128       C
ATOM     99  C   GLY A  35       5.142  33.743  28.476  1.00201.65           C
ANISOU   99  C   GLY A  35    27484  25640  23494  -5730  -2694  -5862       C
ATOM    100  O   GLY A  35       3.941  34.018  28.442  1.00199.39           O
ANISOU   100  O   GLY A  35    27503  25341  22914  -5730  -2443  -5771       O
ATOM    101  N   PRO A  36       5.710  33.066  29.490  1.00198.70           N
ANISOU   101  N   PRO A  36    27068  25274  23158  -5654  -3126  -5720       N
ATOM    102  CA  PRO A  36       5.000  32.668  30.710  1.00192.57           C
ANISOU   102  CA  PRO A  36    26659  24488  22021  -5633  -3324  -5424       C
ATOM    103  C   PRO A  36       4.275  33.847  31.352  1.00181.91           C
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ANISOU  103  C   PRO A  36    25691  23263  20161  -5818  -3160  -5467       C
ATOM    104  O   PRO A  36       4.787  34.966  31.343  1.00185.00           O
ANISOU  104  O   PRO A  36    26079  23720  20494  -5981  -3116  -5705       O
ATOM    105  CB  PRO A  36       6.128  32.178  31.617  1.00195.54           C
ANISOU  105  CB  PRO A  36    26864  24939  22492  -5552  -3855  -5322       C
ATOM    106  CG  PRO A  36       7.143  31.645  30.672  1.00193.89           C
ANISOU  106  CG  PRO A  36    26149  24674  22848  -5380  -3907  -5498       C
ATOM    107  CD  PRO A  36       7.093  32.555  29.472  1.00195.69           C
ANISOU  107  CD  PRO A  36    26238  24948  23168  -5548  -3457  -5815       C
ATOM    108  N   CYS A  37       3.096  33.592  31.907  1.00169.79           N
ANISOU  108  N   CYS A  37    24484  21755  18273  -5806  -3052  -5262       N
ATOM    109  CA  CYS A  37       2.218  34.663  32.364  1.00174.94           C
ANISOU  109  CA  CYS A  37    25475  22531  18465  -5899  -2808  -5351       C
ATOM    110  C   CYS A  37       2.661  35.319  33.672  1.00196.46           C
ANISOU  110  C   CYS A  37    28417  25416  20814  -6047  -3072  -5417       C
ATOM    111  O   CYS A  37       3.764  35.078  34.163  1.00208.64           O
ANISOU  111  O   CYS A  37    29799  27020  22454  -6101  -3474  -5408       O
ATOM    112  CB  CYS A  37       0.788  34.147  32.503  1.00164.06           C
ANISOU  112  CB  CYS A  37    24287  21228  16820  -5849  -2572  -5152       C
ATOM    113  SG  CYS A  37      -0.412  35.446  32.804  1.00170.06           S
ANISOU  113  SG  CYS A  37    25360  22169  17086  -5837  -2189  -5321       S
ATOM    114  N   SER A  38       1.784  36.152  34.227  1.00195.84           N
ANISOU  114  N   SER A  38    28677  25444  20289  -6094  -2849  -5516       N
ATOM    115  CA  SER A  38       2.071  36.864  35.467  1.00197.54           C
ANISOU  115  CA  SER A  38    29146  25835  20074  -6258  -3042  -5662       C
ATOM    116  C   SER A  38       0.823  37.006  36.334  1.00215.32           C
ANISOU  116  C   SER A  38    31748  28304  21761  -6238  -2840  -5609       C
ATOM    117  O   SER A  38       0.808  36.586  37.491  1.00229.87           O
ANISOU  117  O   SER A  38    33744  30403  23194  -6334  -3083  -5450       O
ATOM    118  CB  SER A  38       2.660  38.240  35.163  1.00181.42           C
ANISOU  118  CB  SER A  38    27158  23646  18126  -6399  -2933  -6065       C
ATOM    119  OG  SER A  38       3.817  38.123  34.357  1.00170.55           O
ANISOU  119  OG  SER A  38    25409  22149  17242  -6472  -3076  -6128       O
ATOM    120  N   GLN A  39      -0.220  37.610  35.772  1.00212.43           N
ANISOU  120  N   GLN A  39    31486  27883  21346  -6097  -2394  -5736       N
ATOM    121  CA  GLN A  39      -1.495  37.748  36.465  1.00214.81           C
ANISOU  121  CA  GLN A  39    32024  28451  21143  -6032  -2133  -5728       C
ATOM    122  C   GLN A  39      -2.547  36.911  35.748  1.00216.03           C
ANISOU  122  C   GLN A  39    31995  28676  21409  -5901  -1875  -5481       C
ATOM    123  O   GLN A  39      -2.424  36.650  34.557  1.00200.14           O
ANISOU  123  O   GLN A  39    29741  26462  19842  -5808  -1800  -5442       O
ATOM    124  CB  GLN A  39      -1.931  39.215  36.494  1.00209.39           C
ANISOU  124  CB  GLN A  39    31592  27688  20277  -5920  -1822  -6131       C
ATOM    125  CG  GLN A  39      -3.155  39.486  37.360  1.00204.97           C
ANISOU  125  CG  GLN A  39    31254  27469  19156  -5821  -1551  -6223       C
ATOM    126  CD  GLN A  39      -3.884  40.754  36.964  1.00196.78           C
ANISOU  126  CD  GLN A  39    30387  26284  18097  -5529  -1150  -6564       C
ATOM    127  OE1 GLN A  39      -3.494  41.439  36.018  1.00197.10           O
ANISOU  127  OE1 GLN A  39    30432  25925  18531  -5424  -1075  -6677       O
ATOM    128  NE2 GLN A  39      -4.953  41.072  37.686  1.00188.01           N
ANISOU  128  NE2 GLN A  39    29421  25497  16517  -5379   -879  -6717       N
ATOM    129  N   LEU A  40      -3.586  36.496  36.464  1.00233.29           N
ANISOU  129  N   LEU A  40    34279  31196  23163  -5935  -1725  -5342       N
ATOM    130  CA  LEU A  40      -4.680  35.755  35.846  1.00238.15           C
ANISOU  130  CA  LEU A  40    34696  31949  23839  -5885  -1455  -5159       C
ATOM    131  C   LEU A  40      -5.968  36.574  35.871  1.00236.13           C
ANISOU  131  C   LEU A  40    34465  32000  23252  -5688  -1024  -5384       C
ATOM    132  O   LEU A  40      -6.886  36.262  36.627  1.00252.60           O
ANISOU  132  O   LEU A  40    36587  34490  24901  -5778   -854  -5306       O
ATOM    133  CB  LEU A  40      -4.905  34.419  36.562  1.00246.83           C
ANISOU  133  CB  LEU A  40    35829  33204  24749  -6138  -1601  -4762       C
ATOM    134  CG  LEU A  40      -3.697  33.517  36.832  1.00245.54           C
ANISOU  134  CG  LEU A  40    35693  32769  24830  -6265  -2075  -4479       C
ATOM    135  CD1 LEU A  40      -3.061  33.829  38.184  1.00245.58           C
ANISOU  135  CD1 LEU A  40    35969  32951  24390  -6379  -2384  -4450       C
ATOM    136  CD2 LEU A  40      -4.093  32.051  36.749  1.00244.93           C
ANISOU  136  CD2 LEU A  40    35575  32611  24876  -6427  -2106  -4071       C
ATOM    137  N   PRO A  41      -6.044  37.626  35.042  1.00215.13           N
ANISOU  137  N   PRO A  41    31781  29165  20793  -5404   -836  -5648       N
ATOM    138  CA  PRO A  41      -7.198  38.516  35.062  1.00213.32           C
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ANISOU  138  CA  PRO A  41    31581  29183  20287  -5100   -457  -5879       C
ATOM    139  C   PRO A  41      -8.078  38.210  33.870  1.00204.37           C
ANISOU  139  C   PRO A  41    30096  28197  19358  -4904   -233  -5790       C
ATOM    140  O   PRO A  41      -8.168  37.051  33.465  1.00193.21           O
ANISOU  140  O   PRO A  41    28439  26868  18103  -5116   -307  -5549       O
ATOM    141  CB  PRO A  41      -6.548  39.881  34.856  1.00218.10           C
ANISOU  141  CB  PRO A  41    32449  29379  21038  -4908   -454  -6181       C
ATOM    142  CG  PRO A  41      -5.297  39.574  34.003  1.00213.44           C
ANISOU  142  CG  PRO A  41    31759  28382  20956  -5074   -727  -6055       C
ATOM    143  CD  PRO A  41      -5.086  38.070  34.021  1.00205.64           C
ANISOU  143  CD  PRO A  41    30528  27531  20076  -5329   -947  -5730       C
ATOM    144  N   ARG A  42      -8.705  39.246  33.317  1.00247.96           N
ANISOU  144  N   ARG A  42    39744  24910  29560  -5442   7422  -5569       N
ATOM    145  CA  ARG A  42      -9.473  39.134  32.082  1.00249.28           C
ANISOU  145  CA  ARG A  42    40221  24954  29541  -5075   7742  -4730       C
ATOM    146  C   ARG A  42     -10.555  38.068  32.196  1.00248.98           C
ANISOU  146  C   ARG A  42    40145  25553  28903  -4643   7062  -4051       C
ATOM    147  O   ARG A  42     -10.876  37.391  31.219  1.00252.10           O
ANISOU  147  O   ARG A  42    40543  26053  29189  -4357   6910  -3476       O
ATOM    148  CB  ARG A  42      -8.534  38.831  30.913  1.00245.04           C
ANISOU  148  CB  ARG A  42    39526  24181  29397  -5283   7950  -4773       C
ATOM    149  CG  ARG A  42      -7.317  39.746  30.867  1.00252.59           C
ANISOU  149  CG  ARG A  42    40395  24535  31041  -5816   8601  -5550       C
ATOM    150  CD  ARG A  42      -6.240  39.210  29.942  1.00257.27           C
ANISOU  150  CD  ARG A  42    40661  25069  32020  -6111   8653  -5764       C
ATOM    151  NE  ARG A  42      -5.106  40.125  29.843  1.00271.36           N
ANISOU  151  NE  ARG A  42    42343  26220  34540  -6653   9394  -6521       N
ATOM    152  CZ  ARG A  42      -3.930  39.929  30.429  1.00279.14           C
ANISOU  152  CZ  ARG A  42    42760  27262  36039  -7125   9097  -7488       C
ATOM    153  NH1 ARG A  42      -3.720  38.840  31.154  1.00276.69           N
ANISOU  153  NH1 ARG A  42    42009  27611  35512  -7105   8028  -7802       N
ATOM    154  NH2 ARG A  42      -2.958  40.820  30.283  1.00287.21           N
ANISOU  154  NH2 ARG A  42    43671  27638  37817  -7608   9856  -8177       N
ATOM    155  N   HIS A  43     -11.091  37.924  33.407  1.00242.06           N
ANISOU  155  N   HIS A  43    39226  25085  27663  -4591   6663  -4146       N
ATOM    156  CA  HIS A  43     -12.106  36.921  33.746  1.00234.40           C
ANISOU  156  CA  HIS A  43    38187  24729  26143  -4268   6043  -3579       C
ATOM    157  C   HIS A  43     -11.790  35.497  33.271  1.00223.19           C
ANISOU  157  C   HIS A  43    36410  23746  24648  -4259   5278  -3306       C
ATOM    158  O   HIS A  43     -12.683  34.655  33.182  1.00219.47           O
ANISOU  158  O   HIS A  43    35886  23672  23830  -3937   4845  -2700       O
ATOM    159  CB  HIS A  43     -13.503  37.359  33.283  1.00244.59           C
ANISOU  159  CB  HIS A  43    39844  25881  27209  -3765   6458  -2942       C
ATOM    160  CG  HIS A  43     -13.729  37.223  31.808  1.00258.63           C
ANISOU  160  CG  HIS A  43    41777  27350  29141  -3429   6682  -2416       C
ATOM    161  ND1 HIS A  43     -13.939  36.007  31.196  1.00258.63           N
ANISOU  161  ND1 HIS A  43    41528  27711  29028  -3182   6096  -1923       N
ATOM    162  CD2 HIS A  43     -13.779  38.154  30.826  1.00266.88           C
ANISOU  162  CD2 HIS A  43    43251  27730  30422  -3257   7403  -2312       C
ATOM    163  CE1 HIS A  43     -14.107  36.193  29.898  1.00259.88           C
ANISOU  163  CE1 HIS A  43    41938  27456  29347  -2827   6439  -1553       C
ATOM    164  NE2 HIS A  43     -14.014  37.486  29.648  1.00265.31           N
ANISOU  164  NE2 HIS A  43    43082  27505  30218  -2872   7251  -1770       N
ATOM    165  N   THR A  44     -10.523  35.234  32.968  1.00216.02           N
ANISOU  165  N   THR A  44    35220  22755  24102  -4611   5094  -3795       N
ATOM    166  CA  THR A  44     -10.097  33.896  32.581  1.00197.38           C
ANISOU  166  CA  THR A  44    32478  20829  21687  -4628   4266  -3666       C
ATOM    167  C   THR A  44      -9.950  33.042  33.832  1.00203.27           C
ANISOU  167  C   THR A  44    33039  22114  22082  -4801   3369  -3961       C
ATOM    168  O   THR A  44     -10.094  31.821  33.785  1.00205.35           O
ANISOU  168  O   THR A  44    33087  22851  22085  -4703   2545  -3642       O
ATOM    169  CB  THR A  44      -8.768  33.916  31.805  1.00187.68           C
ANISOU  169  CB  THR A  44    30986  19340  20983  -4952   4377  -4176       C
ATOM    170  OG1 THR A  44      -7.743  34.494  32.621  1.00200.02           O
ANISOU  170  OG1 THR A  44    32433  20687  22880  -5422   4488  -5134       O
ATOM    171  CG2 THR A  44      -8.910  34.723  30.522  1.00176.78           C
ANISOU  171  CG2 THR A  44    29898  17394  19878  -4772   5305  -3823       C
ATOM    172  N   LEU A  45      -9.661  33.696  34.952  1.00209.17           N
ANISOU  172  N   LEU A  45    33910  22753  22811  -5026   3508  -4576       N
ATOM    173  CA  LEU A  45      -9.615  33.020  36.240  1.00210.55           C
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ANISOU  173  CA  LEU A  45    34076  23366  22555  -5120   2735  -4855       C
ATOM    174  C   LEU A  45     -11.029  32.626  36.638  1.00206.97           C
ANISOU  174  C   LEU A  45    33836  23296  21508  -4796   2645  -4066       C
ATOM    175  O   LEU A  45     -11.241  31.604  37.289  1.00201.59           O
ANISOU  175  O   LEU A  45    33137  23080  20378  -4798   1892  -3905       O
ATOM    176  CB  LEU A  45      -9.001  33.926  37.306  1.00219.50           C
ANISOU  176  CB  LEU A  45    35331  24231  23836  -5335   2955  -5728       C
ATOM    177  CG  LEU A  45      -8.713  33.263  38.655  1.00218.21           C
ANISOU  177  CG  LEU A  45    35239  24428  23242  -5410   2110  -6194       C
ATOM    178  CD1 LEU A  45      -7.803  32.062  38.459  1.00214.05           C
ANISOU  178  CD1 LEU A  45    34423  24141  22767  -5593   1142  -6515       C
ATOM    179  CD2 LEU A  45      -8.097  34.257  39.630  1.00220.33           C
ANISOU  179  CD2 LEU A  45    35625  24356  23736  -5516   2347  -7107       C
ATOM    180  N   GLN A  46     -11.995  33.450  36.243  1.00211.82           N
ANISOU  180  N   GLN A  46    34667  23678  22138  -4525   3420  -3611       N
ATOM    181  CA  GLN A  46     -13.402  33.130  36.436  1.00214.70           C
ANISOU  181  CA  GLN A  46    35163  24353  22060  -4193   3434  -2892       C
ATOM    182  C   GLN A  46     -13.800  32.021  35.471  1.00203.03           C
ANISOU  182  C   GLN A  46    33454  23106  20583  -3955   2969  -2211       C
ATOM    183  O   GLN A  46     -14.571  31.126  35.820  1.00199.03           O
ANISOU  183  O   GLN A  46    32885  23023  19715  -3821   2510  -1734       O
ATOM    184  CB  GLN A  46     -14.273  34.366  36.207  1.00226.98           C
ANISOU  184  CB  GLN A  46    37002  25543  23698  -3934   4334  -2728       C
ATOM    185  CG  GLN A  46     -15.760  34.120  36.413  1.00230.75           C
ANISOU  185  CG  GLN A  46    37568  26311  23795  -3585   4402  -2112       C
ATOM    186  CD  GLN A  46     -16.603  35.340  36.096  1.00234.35           C
ANISOU  186  CD  GLN A  46    38305  26375  24360  -3289   5204  -2043       C
ATOM    187  OE1 GLN A  46     -16.098  36.351  35.606  1.00233.94           O
ANISOU  187  OE1 GLN A  46    38431  25795  24661  -3331   5717  -2356       O
ATOM    188  NE2 GLN A  46     -17.899  35.252  36.377  1.00235.54           N
ANISOU  188  NE2 GLN A  46    38505  26763  24227  -2997   5309  -1667       N
ATOM    189  N   LYS A  47     -13.265  32.091  34.254  1.00191.74           N
ANISOU  189  N   LYS A  47    31899  21377  19577  -3890   3106  -2175       N
ATOM    190  CA  LYS A  47     -13.462  31.043  33.260  1.00167.53           C
ANISOU  190  CA  LYS A  47    28575  18509  16571  -3616   2587  -1616       C
ATOM    191  C   LYS A  47     -12.887  29.734  33.783  1.00160.76           C
ANISOU  191  C   LYS A  47    27413  18162  15505  -3856   1523  -1740       C
ATOM    192  O   LYS A  47     -13.468  28.666  33.589  1.00158.36           O
ANISOU  192  O   LYS A  47    26925  18217  15029  -3632    899  -1185       O
ATOM    193  CB  LYS A  47     -12.792  31.421  31.938  1.00162.24           C
ANISOU  193  CB  LYS A  47    27868  17419  16358  -3540   2953  -1678       C
ATOM    194  CG  LYS A  47     -12.835  30.328  30.879  1.00157.25           C
ANISOU  194  CG  LYS A  47    26938  17005  15806  -3217   2344  -1185       C
ATOM    195  CD  LYS A  47     -12.080  30.741  29.625  1.00157.56           C
ANISOU  195  CD  LYS A  47    26989  16635  16243  -3164   2770  -1302       C
ATOM    196  CE  LYS A  47     -12.111  29.646  28.570  1.00153.68           C
ANISOU  196  CE  LYS A  47    26186  16393  15811  -2771   2110   -835       C
ATOM    197  NZ  LYS A  47     -11.395  30.048  27.325  1.00153.52           N
ANISOU  197  NZ  LYS A  47    26227  15986  16118  -2688   2586   -925       N
ATOM    198  N   ALA A  48     -11.741  29.826  34.449  1.00163.42           N
ANISOU  198  N   ALA A  48    27709  18492  15891  -4290   1276  -2518       N
ATOM    199  CA  ALA A  48     -11.155  28.673  35.116  1.00163.76           C
ANISOU  199  CA  ALA A  48    27580  18963  15677  -4521    211  -2781       C
ATOM    200  C   ALA A  48     -12.122  28.154  36.171  1.00173.60           C
ANISOU  200  C   ALA A  48    29046  20578  16337  -4455    -91  -2377       C
ATOM    201  O   ALA A  48     -12.366  26.955  36.260  1.00172.93           O
ANISOU  201  O   ALA A  48    28837  20882  15986  -4411   -911  -1998       O
ATOM    202  CB  ALA A  48      -9.827  29.042  35.746  1.00166.15           C
ANISOU  202  CB  ALA A  48    27869  19096  16163  -4935     69  -3818       C
ATOM    203  N   LYS A  49     -12.690  29.068  36.953  1.00187.13           N
ANISOU  203  N   LYS A  49    31085  22162  17854  -4448    592  -2451       N
ATOM    204  CA  LYS A  49     -13.670  28.703  37.972  1.00197.45           C
ANISOU  204  CA  LYS A  49    32627  23806  18588  -4395    489  -2077       C
ATOM    205  C   LYS A  49     -14.911  28.052  37.362  1.00190.02           C
ANISOU  205  C   LYS A  49    31535  23072  17593  -4065    467  -1161       C
ATOM    206  O   LYS A  49     -15.656  27.354  38.050  1.00183.61           O
ANISOU  206  O   LYS A  49    30808  22602  16354  -4066    184   -765       O
ATOM    207  CB  LYS A  49     -14.071  29.925  38.804  1.00212.47           C
ANISOU  207  CB  LYS A  49    34859  25528  20341  -4393   1299  -2360       C
ATOM    208  CG  LYS A  49     -12.978  30.444  39.729  1.00217.13           C
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ANISOU  208  CG  LYS A  49    35627  25965  20908  -4665   1191  -3285       C
ATOM    209  CD  LYS A  49     -13.480  31.589  40.600  1.00210.74           C
ANISOU  209  CD  LYS A  49    35122  25035  19913  -4590   1907  -3514       C
ATOM    210  CE  LYS A  49     -12.408  32.054  41.576  1.00201.67           C
ANISOU  210  CE  LYS A  49    34140  23719  18766  -4773   1705  -4470       C
ATOM    211  NZ  LYS A  49     -12.897  33.144  42.465  1.00196.82           N
ANISOU  211  NZ  LYS A  49    33804  23024  17957  -4642   2318  -4706       N
ATOM    212  N   ASP A  50     -15.123  28.281  36.069  1.00192.53           N
ANISOU  212  N   ASP A  50    31646  23145  18363  -3764    771   -851       N
ATOM    213  CA  ASP A  50     -16.259  27.698  35.363  1.00200.24           C
ANISOU  213  CA  ASP A  50    32438  24233  19413  -3349    707    -68       C
ATOM    214  C   ASP A  50     -15.960  26.289  34.845  1.00193.75           C
ANISOU  214  C   ASP A  50    31258  23711  18648  -3298   -315    250       C
ATOM    215  O   ASP A  50     -16.773  25.691  34.139  1.00188.25           O
ANISOU  215  O   ASP A  50    30325  23086  18114  -2905   -512    867       O
ATOM    216  CB  ASP A  50     -16.714  28.610  34.223  1.00212.21           C
ANISOU  216  CB  ASP A  50    33992  25294  21345  -2933   1461    103       C
ATOM    217  CG  ASP A  50     -17.206  29.957  34.719  1.00222.36           C
ANISOU  217  CG  ASP A  50    35630  26294  22563  -2927   2393   -151       C
ATOM    218  OD1 ASP A  50     -17.684  30.030  35.872  1.00224.55           O
ANISOU  218  OD1 ASP A  50    36046  26819  22454  -3093   2487   -221       O
ATOM    219  OD2 ASP A  50     -17.115  30.944  33.959  1.00225.89           O
ANISOU  219  OD2 ASP A  50    36244  26264  23320  -2746   3019   -282       O
ATOM    220  N   GLU A  51     -14.784  25.772  35.189  1.00189.87           N
ANISOU  220  N   GLU A  51    30709  23373  18060  -3657  -1016   -232       N
ATOM    221  CA  GLU A  51     -14.481  24.356  34.994  1.00172.76           C
ANISOU  221  CA  GLU A  51    28250  21563  15829  -3674  -2151    -13       C
ATOM    222  C   GLU A  51     -13.976  23.740  36.301  1.00174.78           C
ANISOU  222  C   GLU A  51    28743  22096  15568  -4097  -2845   -381       C
ATOM    223  O   GLU A  51     -12.888  23.164  36.361  1.00169.20           O
ANISOU  223  O   GLU A  51    27944  21495  14851  -4321  -3670   -874       O
ATOM    224  CB  GLU A  51     -13.492  24.135  33.842  1.00148.72           C
ANISOU  224  CB  GLU A  51    24856  18435  13217  -3595  -2544   -254       C
ATOM    225  CG  GLU A  51     -12.337  25.113  33.789  1.00149.37           C
ANISOU  225  CG  GLU A  51    25026  18193  13535  -3883  -2067  -1077       C
ATOM    226  CD  GLU A  51     -10.984  24.428  33.801  1.00148.73           C
ANISOU  226  CD  GLU A  51    24700  18281  13529  -4192  -2984  -1737       C
ATOM    227  OE1 GLU A  51     -10.729  23.612  34.712  1.00149.28           O
ANISOU  227  OE1 GLU A  51    24846  18649  13223  -4421  -3851  -1943       O
ATOM    228  OE2 GLU A  51     -10.172  24.705  32.894  1.00148.05           O
ANISOU  228  OE2 GLU A  51    24371  18014  13868  -4202  -2841  -2081       O
ATOM    229  N   LEU A  52     -14.788  23.886  37.345  1.00174.66           N
ANISOU  229  N   LEU A  52    29071  22181  15110  -4178  -2499   -177       N
ATOM    230  CA  LEU A  52     -14.524  23.299  38.657  1.00185.51           C
ANISOU  230  CA  LEU A  52    30818  23790  15876  -4505  -3077   -409       C
ATOM    231  C   LEU A  52     -13.219  23.767  39.300  1.00197.38           C
ANISOU  231  C   LEU A  52    32570  25137  17289  -4792  -3273  -1401       C
ATOM    232  O   LEU A  52     -12.523  22.982  39.937  1.00213.14           O
ANISOU  232  O   LEU A  52    34757  27281  18947  -5001  -4201  -1767       O
ATOM    233  CB  LEU A  52     -14.562  21.767  38.587  1.00183.72           C
ANISOU  233  CB  LEU A  52    30447  23890  15469  -4535  -4223     15       C
ATOM    234  CG  LEU A  52     -15.893  21.137  38.172  1.00187.42           C
ANISOU  234  CG  LEU A  52    30672  24519  16021  -4271  -4154    971       C
ATOM    235  CD1 LEU A  52     -15.819  19.619  38.254  1.00192.44           C
ANISOU  235  CD1 LEU A  52    31209  25450  16459  -4358  -5371   1322       C
ATOM    236  CD2 LEU A  52     -17.030  21.670  39.030  1.00191.81           C
ANISOU  236  CD2 LEU A  52    31547  25088  16244  -4297  -3251   1273       C
ATOM    237  N   ASN A  53     -12.895  25.046  39.144  1.00187.81           N
ANISOU  237  N   ASN A  53    31372  23586  16403  -4780  -2436  -1877       N
ATOM    238  CA  ASN A  53     -11.709  25.603  39.787  1.00183.88           C
ANISOU  238  CA  ASN A  53    31064  22874  15929  -5018  -2536  -2883       C
ATOM    239  C   ASN A  53     -12.068  26.549  40.924  1.00192.26           C
ANISOU  239  C   ASN A  53    32573  23825  16653  -5033  -1854  -3141       C
ATOM    240  O   ASN A  53     -13.049  27.288  40.848  1.00187.99           O
ANISOU  240  O   ASN A  53    32075  23229  16123  -4864   -968  -2711       O
ATOM    241  CB  ASN A  53     -10.819  26.316  38.765  1.00177.59           C
ANISOU  241  CB  ASN A  53    29904  21727  15845  -5044  -2193  -3384       C
ATOM    242  CG  ASN A  53      -9.589  26.952  39.393  1.00182.53           C
ANISOU  242  CG  ASN A  53    30639  22068  16647  -5288  -2240  -4505       C
ATOM    243  OD1 ASN A  53      -9.166  26.575  40.486  1.00191.82           O
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ANISOU  243  OD1 ASN A  53    32126  23338  17418  -5404  -2871  -5005       O
ATOM    244  ND2 ASN A  53      -9.001  27.914  38.693  1.00180.02           N
ANISOU  244  ND2 ASN A  53    30087  21355  16956  -5345  -1580  -4931       N
ATOM    245  N   GLU A  54     -11.267  26.511  41.983  1.00203.43           N
ANISOU  245  N   GLU A  54    34328  25203  17764  -5189  -2334  -3897       N
ATOM    246  CA  GLU A  54     -11.419  27.440  43.094  1.00209.80           C
ANISOU  246  CA  GLU A  54    35553  25884  18275  -5149  -1786  -4291       C
ATOM    247  C   GLU A  54     -10.086  28.117  43.396  1.00205.29           C
ANISOU  247  C   GLU A  54    34982  24936  18083  -5243  -1929  -5451       C
ATOM    248  O   GLU A  54      -9.049  27.458  43.498  1.00199.44           O
ANISOU  248  O   GLU A  54    34215  24162  17400  -5371  -2837  -6078       O
ATOM    249  CB  GLU A  54     -11.959  26.725  44.332  1.00220.54           C
ANISOU  249  CB  GLU A  54    37471  27562  18762  -5147  -2194  -4036       C
ATOM    250  CG  GLU A  54     -13.330  26.097  44.129  1.00225.69           C
ANISOU  250  CG  GLU A  54    38094  28559  19099  -5088  -1959  -2933       C
ATOM    251  CD  GLU A  54     -13.843  25.394  45.370  1.00235.81           C
ANISOU  251  CD  GLU A  54    39971  30126  19502  -5145  -2268  -2667       C
ATOM    252  OE1 GLU A  54     -13.086  25.297  46.358  1.00243.65           O
ANISOU  252  OE1 GLU A  54    41461  31045  20068  -5187  -2793  -3332       O
ATOM    253  OE2 GLU A  54     -15.006  24.939  45.356  1.00234.04           O
ANISOU  253  OE2 GLU A  54    39738  30164  19022  -5132  -1974  -1820       O
ATOM    254  N   ARG A  55     -10.128  29.438  43.536  1.00203.56           N
ANISOU  254  N   ARG A  55    34768  24411  18163  -5166  -1059  -5780       N
ATOM    255  CA  ARG A  55      -8.933  30.250  43.741  1.00199.25           C
ANISOU  255  CA  ARG A  55    34135  23427  18142  -5240  -1033  -6883       C
ATOM    256  C   ARG A  55      -8.204  29.877  45.031  1.00204.23           C
ANISOU  256  C   ARG A  55    35186  24053  18360  -5205  -1867  -7714       C
ATOM    257  O   ARG A  55      -7.007  30.121  45.170  1.00205.47           O
ANISOU  257  O   ARG A  55    35218  23870  18981  -5274  -2236  -8761       O
ATOM    258  CB  ARG A  55      -9.318  31.734  43.760  1.00197.31           C
ANISOU  258  CB  ARG A  55    33879  22873  18217  -5125     50  -6963       C
ATOM    259  CG  ARG A  55      -8.147  32.708  43.724  1.00201.77           C
ANISOU  259  CG  ARG A  55    34234  22899  19532  -5223    255  -8020       C
ATOM    260  CD  ARG A  55      -8.630  34.152  43.822  1.00208.73           C
ANISOU  260  CD  ARG A  55    35160  23484  20663  -5088   1257  -8034       C
ATOM    261  NE  ARG A  55      -7.526  35.107  43.776  1.00221.08           N
ANISOU  261  NE  ARG A  55    36495  24480  23024  -5201   1488  -9030       N
ATOM    262  CZ  ARG A  55      -7.670  36.423  43.899  1.00229.24           C
ANISOU  262  CZ  ARG A  55    37537  25151  24413  -5110   2244  -9259       C
ATOM    263  NH1 ARG A  55      -8.875  36.947  44.079  1.00228.19           N
ANISOU  263  NH1 ARG A  55    37637  25194  23870  -4887   2806  -8600       N
ATOM    264  NH2 ARG A  55      -6.609  37.218  43.845  1.00234.20           N
ANISOU  264  NH2 ARG A  55    37915  25227  25843  -5243   2416 -10189       N
ATOM    265  N   GLU A  56      -8.929  29.266  45.962  1.00195.55           N
ANISOU  265  N   GLU A  56    19919  33593  20786  -9004   -461  -6749       N
ATOM    266  CA  GLU A  56      -8.399  28.994  47.295  1.00218.73           C
ANISOU  266  CA  GLU A  56    23042  37277  22788  -9257   -512  -6745       C
ATOM    267  C   GLU A  56      -7.461  27.787  47.387  1.00223.29           C
ANISOU  267  C   GLU A  56    23537  38321  22981  -9300   -791  -5925       C
ATOM    268  O   GLU A  56      -6.562  27.613  46.563  1.00219.56           O
ANISOU  268  O   GLU A  56    22915  37673  22835  -9275  -1171  -5496       O
ATOM    269  CB  GLU A  56      -9.537  28.866  48.316  1.00224.23           C
ANISOU  269  CB  GLU A  56    23882  38268  23047  -9190     73  -7059       C
ATOM    270  CG  GLU A  56     -10.818  28.245  47.774  1.00214.63           C
ANISOU  270  CG  GLU A  56    22438  36669  22443  -8893    549  -6828       C
ATOM    271  CD  GLU A  56     -11.756  29.270  47.157  1.00210.31           C
ANISOU  271  CD  GLU A  56    21831  35436  22641  -8755    768  -7443       C
ATOM    272  OE1 GLU A  56     -11.301  30.394  46.854  1.00210.90           O
ANISOU  272  OE1 GLU A  56    21997  35227  22908  -8866    493  -7932       O
ATOM    273  OE2 GLU A  56     -12.951  28.954  46.981  1.00208.70           O
ANISOU  273  OE2 GLU A  56    21448  34946  22902  -8539   1201  -7405       O
ATOM    274  N   GLU A  57      -7.688  26.959  48.403  1.00228.02           N
ANISOU  274  N   GLU A  57    24226  39517  22895  -9328   -555  -5672       N
ATOM    275  CA  GLU A  57      -6.763  25.890  48.778  1.00224.42           C
ANISOU  275  CA  GLU A  57    23723  39605  21940  -9412   -823  -4943       C
ATOM    276  C   GLU A  57      -6.758  24.700  47.817  1.00205.23           C
ANISOU  276  C   GLU A  57    21025  36910  20045  -9169   -842  -4176       C
ATOM    277  O   GLU A  57      -6.080  23.702  48.065  1.00199.45           O
ANISOU  277  O   GLU A  57    20218  36568  18996  -9195  -1018  -3517       O
ATOM    278  CB  GLU A  57      -7.088  25.402  50.194  1.00237.54           C
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ANISOU  278  CB  GLU A  57    25580  41996  22678  -9470   -513  -4883       C
ATOM    279  CG  GLU A  57      -7.247  26.520  51.218  1.00248.36           C
ANISOU  279  CG  GLU A  57    27310  43652  23402  -9605   -445  -5723       C
ATOM    280  CD  GLU A  57      -7.836  26.037  52.530  1.00256.05           C
ANISOU  280  CD  GLU A  57    28514  45318  23454  -9513     40  -5659       C
ATOM    281  OE1 GLU A  57      -8.085  24.821  52.662  1.00254.36           O
ANISOU  281  OE1 GLU A  57    28121  45352  23171  -9390    316  -4890       O
ATOM    282  OE2 GLU A  57      -8.055  26.873  53.432  1.00264.10           O
ANISOU  282  OE2 GLU A  57    29899  46623  23824  -9530    159  -6365       O
ATOM    283  N   THR A  58      -7.516  24.800  46.731  1.00196.01           N
ANISOU  283  N   THR A  58    19729  35065  19682  -8909   -699  -4284       N
ATOM    284  CA  THR A  58      -7.636  23.695  45.785  1.00183.88           C
ANISOU  284  CA  THR A  58    17997  33201  18666  -8612   -765  -3681       C
ATOM    285  C   THR A  58      -6.322  23.367  45.077  1.00171.94           C
ANISOU  285  C   THR A  58    16429  31695  17207  -8552  -1229  -3183       C
ATOM    286  O   THR A  58      -5.837  22.239  45.157  1.00169.72           O
ANISOU  286  O   THR A  58    16057  31665  16765  -8489  -1348  -2539       O
ATOM    287  CB  THR A  58      -8.730  23.966  44.733  1.00178.91           C
ANISOU  287  CB  THR A  58    17287  31816  18874  -8309   -613  -3981       C
ATOM    288  OG1 THR A  58      -8.555  25.278  44.185  1.00182.31           O
ANISOU  288  OG1 THR A  58    17806  31903  19562  -8329   -732  -4515       O
ATOM    289  CG2 THR A  58     -10.109  23.866  45.366  1.00170.48           C
ANISOU  289  CG2 THR A  58    16151  30709  17917  -8296   -106  -4220       C
ATOM    290  N   ARG A  59      -5.754  24.361  44.399  1.00165.82           N
ANISOU  290  N   ARG A  59    15677  30628  16700  -8552  -1455  -3441       N
ATOM    291  CA  ARG A  59      -4.576  24.170  43.554  1.00169.57           C
ANISOU  291  CA  ARG A  59    16056  31015  17358  -8407  -1802  -2939       C
ATOM    292  C   ARG A  59      -3.395  23.545  44.291  1.00181.96           C
ANISOU  292  C   ARG A  59    17552  33196  18387  -8636  -2061  -2398       C
ATOM    293  O   ARG A  59      -2.723  22.656  43.763  1.00161.35           O
ANISOU  293  O   ARG A  59    14832  30607  15869  -8418  -2214  -1753       O
ATOM    294  CB  ARG A  59      -4.136  25.506  42.958  1.00160.78           C
ANISOU  294  CB  ARG A  59    14930  29556  16603  -8445  -1940  -3284       C
ATOM    295  CG  ARG A  59      -5.272  26.466  42.669  1.00160.42           C
ANISOU  295  CG  ARG A  59    14969  29027  16956  -8379  -1694  -3980       C
ATOM    296  CD  ARG A  59      -4.726  27.782  42.152  1.00192.02           C
ANISOU  296  CD  ARG A  59    18917  32695  21347  -8446  -1849  -4239       C
ATOM    297  NE  ARG A  59      -5.777  28.766  41.916  1.00190.36           N
ANISOU  297  NE  ARG A  59    18773  32011  21543  -8397  -1625  -4908       N
ATOM    298  CZ  ARG A  59      -5.563  29.966  41.388  1.00187.52           C
ANISOU  298  CZ  ARG A  59    18352  31237  21660  -8411  -1699  -5175       C
ATOM    299  NH1 ARG A  59      -4.334  30.329  41.040  1.00181.60           N
ANISOU  299  NH1 ARG A  59    17444  30482  21074  -8477  -1975  -4798       N
ATOM    300  NH2 ARG A  59      -6.574  30.804  41.207  1.00189.31           N
ANISOU  300  NH2 ARG A  59    18629  31027  22272  -8353  -1485  -5770       N
ATOM    301  N   GLU A  60      -3.153  24.022  45.507  1.00195.66           N
ANISOU  301  N   GLU A  60    19371  35420  19551  -9042  -2131  -2685       N
ATOM    302  CA  GLU A  60      -2.000  23.606  46.298  1.00207.96           C
ANISOU  302  CA  GLU A  60    20870  37576  20570  -9299  -2469  -2245       C
ATOM    303  C   GLU A  60      -1.995  22.109  46.591  1.00211.43           C
ANISOU  303  C   GLU A  60    21243  38358  20735  -9171  -2386  -1546       C
ATOM    304  O   GLU A  60      -1.043  21.405  46.254  1.00209.77           O
ANISOU  304  O   GLU A  60    20864  38247  20594  -9082  -2632   -888       O
ATOM    305  CB  GLU A  60      -1.957  24.391  47.609  1.00222.18           C
ANISOU  305  CB  GLU A  60    22866  39830  21723  -9695  -2581  -2808       C
ATOM    306  CG  GLU A  60      -1.929  25.897  47.416  1.00227.97           C
ANISOU  306  CG  GLU A  60    23652  40185  22781  -9853  -2720  -3542       C
ATOM    307  CD  GLU A  60      -2.288  26.653  48.678  1.00236.97           C
ANISOU  307  CD  GLU A  60    25088  41671  23279 -10127  -2731  -4292       C
ATOM    308  OE1 GLU A  60      -2.427  26.010  49.740  1.00234.61           O
ANISOU  308  OE1 GLU A  60    24966  41993  22183 -10188  -2647  -4176       O
ATOM    309  OE2 GLU A  60      -2.437  27.891  48.605  1.00243.69           O
ANISOU  309  OE2 GLU A  60    26012  42167  24412 -10243  -2813  -4992       O
ATOM    310  N   GLU A  61      -3.063  21.628  47.215  1.00215.81           N
ANISOU  310  N   GLU A  61    21895  39063  21039  -9144  -2013  -1650       N
ATOM    311  CA  GLU A  61      -3.141  20.229  47.618  1.00211.52           C
ANISOU  311  CA  GLU A  61    21253  38830  20284  -9052  -1906   -966       C
ATOM    312  C   GLU A  61      -3.383  19.285  46.445  1.00186.43           C
ANISOU  312  C   GLU A  61    17908  35110  17815  -8654  -1878   -530       C
ATOM    313  O   GLU A  61      -2.983  18.123  46.490  1.00169.58           O
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ANISOU  313  O   GLU A  61    15640  33133  15659  -8550  -1968    146       O
ATOM    314  CB  GLU A  61      -4.222  20.035  48.682  1.00225.09           C
ANISOU  314  CB  GLU A  61    23081  40872  21573  -9125  -1456  -1135       C
ATOM    315  CG  GLU A  61      -3.941  20.761  49.985  1.00234.46           C
ANISOU  315  CG  GLU A  61    24519  42712  21855  -9435  -1501  -1516       C
ATOM    316  CD  GLU A  61      -4.961  20.440  51.057  1.00242.19           C
ANISOU  316  CD  GLU A  61    25618  44090  22312  -9407   -963  -1541       C
ATOM    317  OE1 GLU A  61      -5.838  19.586  50.807  1.00240.47           O
ANISOU  317  OE1 GLU A  61    25202  43625  22539  -9195   -571  -1164       O
ATOM    318  OE2 GLU A  61      -4.886  21.042  52.148  1.00250.52           O
ANISOU  318  OE2 GLU A  61    26963  45692  22531  -9567   -939  -1929       O
ATOM    319  N   ALA A  62      -4.037  19.786  45.400  1.00187.07           N
ANISOU  319  N   ALA A  62    18020  34541  18520  -8405  -1790   -937       N
ATOM    320  CA  ALA A  62      -4.361  18.967  44.234  1.00186.97           C
ANISOU  320  CA  ALA A  62    17928  33960  19154  -7961  -1833   -658       C
ATOM    321  C   ALA A  62      -3.111  18.343  43.624  1.00158.41           C
ANISOU  321  C   ALA A  62    14237  30383  15569  -7759  -2157    -49       C
ATOM    322  O   ALA A  62      -3.111  17.172  43.250  1.00157.19           O
ANISOU  322  O   ALA A  62    14005  30072  15648  -7475  -2225    426       O
ATOM    323  CB  ALA A  62      -5.106  19.789  43.195  1.00156.96           C
ANISOU  323  CB  ALA A  62    14218  29502  15918  -7713  -1774  -1226       C
ATOM    324  N   VAL A  63      -2.047  19.133  43.534  1.00158.79           N
ANISOU  324  N   VAL A  63    14280  30606  15447  -7892  -2353    -52       N
ATOM    325  CA  VAL A  63      -0.761  18.629  43.080  1.00171.82           C
ANISOU  325  CA  VAL A  63    15803  32361  17119  -7724  -2606    587       C
ATOM    326  C   VAL A  63      -0.234  17.604  44.078  1.00180.85           C
ANISOU  326  C   VAL A  63    16816  34070  17827  -7934  -2706   1176       C
ATOM    327  O   VAL A  63       0.288  16.556  43.695  1.00182.53           O
ANISOU  327  O   VAL A  63    16921  34251  18182  -7659  -2808   1785       O
ATOM    328  CB  VAL A  63       0.258  19.772  42.919  1.00169.70           C
ANISOU  328  CB  VAL A  63    15461  32164  16855  -7895  -2786    509       C
ATOM    329  CG1 VAL A  63       1.665  19.221  42.719  1.00163.40           C
ANISOU  329  CG1 VAL A  63    14444  31587  16054  -7797  -3018   1270       C
ATOM    330  CG2 VAL A  63      -0.143  20.676  41.765  1.00155.89           C
ANISOU  330  CG2 VAL A  63    13810  29820  15602  -7592  -2673    100       C
ATOM    331  N   ARG A  64      -0.389  17.912  45.361  1.00191.38           N
ANISOU  331  N   ARG A  64    18185  35922  18607  -8381  -2672    987       N
ATOM    332  CA  ARG A  64       0.051  17.022  46.427  1.00209.22           C
ANISOU  332  CA  ARG A  64    20352  38789  20354  -8586  -2758   1543       C
ATOM    333  C   ARG A  64      -0.727  15.710  46.386  1.00195.67           C
ANISOU  333  C   ARG A  64    18567  36915  18862  -8341  -2534   1938       C
ATOM    334  O   ARG A  64      -0.153  14.634  46.545  1.00202.25           O
ANISOU  334  O   ARG A  64    19242  37939  19662  -8262  -2658   2635       O
ATOM    335  CB  ARG A  64      -0.115  17.699  47.791  1.00229.40           C
ANISOU  335  CB  ARG A  64    23054  41927  22180  -9026  -2739   1162       C
ATOM    336  CG  ARG A  64       0.447  16.905  48.959  1.00233.43           C
ANISOU  336  CG  ARG A  64    23511  43153  22027  -9230  -2881   1745       C
ATOM    337  CD  ARG A  64       0.209  17.620  50.278  1.00236.89           C
ANISOU  337  CD  ARG A  64    24198  44175  21632  -9566  -2862   1282       C
ATOM    338  NE  ARG A  64      -1.215  17.801  50.545  1.00245.38           N
ANISOU  338  NE  ARG A  64    25444  45130  22660  -9488  -2327    821       N
ATOM    339  CZ  ARG A  64      -1.975  16.910  51.172  1.00264.11           C
ANISOU  339  CZ  ARG A  64    27795  47743  24814  -9398  -1932   1199       C
ATOM    340  NH1 ARG A  64      -1.449  15.770  51.600  1.00270.38           N
ANISOU  340  NH1 ARG A  64    28431  48911  25390  -9380  -2034   2029       N
ATOM    341  NH2 ARG A  64      -3.263  17.156  51.370  1.00273.62           N
ANISOU  341  NH2 ARG A  64    29091  48791  26080  -9315  -1413    800       N
ATOM    342  N   GLU A  65      -2.034  15.806  46.166  1.00175.23           N
ANISOU  342  N   GLU A  65    16054  33931  16592  -8224  -2227   1511       N
ATOM    343  CA  GLU A  65      -2.883  14.624  46.066  1.00169.38           C
ANISOU  343  CA  GLU A  65    15186  32906  16264  -8002  -2049   1849       C
ATOM    344  C   GLU A  65      -2.504  13.793  44.850  1.00166.04           C
ANISOU  344  C   GLU A  65    14695  31948  16445  -7550  -2297   2191       C
ATOM    345  O   GLU A  65      -2.573  12.565  44.878  1.00164.26           O
ANISOU  345  O   GLU A  65    14312  31620  16478  -7391  -2337   2728       O
ATOM    346  CB  GLU A  65      -4.353  15.028  45.980  1.00166.96           C
ANISOU  346  CB  GLU A  65    14923  32200  16316  -7963  -1712   1289       C
ATOM    347  CG  GLU A  65      -4.867  15.729  47.220  1.00184.43           C
ANISOU  347  CG  GLU A  65    17224  34929  17922  -8315  -1368    965       C
ATOM    348  CD  GLU A  65      -6.199  16.404  46.988  1.00196.30           C
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ANISOU  348  CD  GLU A  65    18764  35988  19832  -8253  -1034    325       C
ATOM    349  OE1 GLU A  65      -6.906  16.012  46.036  1.00167.84           O
ANISOU  349  OE1 GLU A  65    15046  31694  17032  -7959  -1062    279       O
ATOM    350  OE2 GLU A  65      -6.537  17.331  47.752  1.00202.63           O
ANISOU  350  OE2 GLU A  65    19716  37111  20162  -8474   -775   -152       O
ATOM    351  N   LEU A  66      -2.106  14.474  43.781  1.00166.82           N
ANISOU  351  N   LEU A  66    14922  31695  16769  -7306  -2453   1885       N
ATOM    352  CA  LEU A  66      -1.666  13.798  42.570  1.00166.57           C
ANISOU  352  CA  LEU A  66    14912  31195  17183  -6778  -2667   2159       C
ATOM    353  C   LEU A  66      -0.303  13.161  42.800  1.00174.96           C
ANISOU  353  C   LEU A  66    15828  32664  17986  -6777  -2850   2876       C
ATOM    354  O   LEU A  66      -0.103  11.984  42.505  1.00158.34           O
ANISOU  354  O   LEU A  66    13642  30381  16139  -6473  -2961   3358       O
ATOM    355  CB  LEU A  66      -1.601  14.781  41.399  1.00153.26           C
ANISOU  355  CB  LEU A  66    13422  29092  15719  -6470  -2711   1695       C
ATOM    356  CG  LEU A  66      -1.323  14.176  40.022  1.00150.72           C
ANISOU  356  CG  LEU A  66    13230  28245  15791  -5787  -2887   1865       C
ATOM    357  CD1 LEU A  66      -2.437  13.223  39.621  1.00150.31           C
ANISOU  357  CD1 LEU A  66    13232  27633  16246  -5474  -2981   1733       C
ATOM    358  CD2 LEU A  66      -1.151  15.268  38.981  1.00148.34           C
ANISOU  358  CD2 LEU A  66    13123  27660  15579  -5488  -2866   1502       C
ATOM    359  N   GLN A  67       0.626  13.948  43.335  1.00181.58           N
ANISOU  359  N   GLN A  67    16610  34007  18376  -7117  -2917   2936       N
ATOM    360  CA  GLN A  67       1.971  13.474  43.642  1.00186.01           C
ANISOU  360  CA  GLN A  67    16972  34986  18716  -7176  -3123   3628       C
ATOM    361  C   GLN A  67       1.920  12.263  44.569  1.00183.43           C
ANISOU  361  C   GLN A  67    16492  34998  18204  -7318  -3138   4194       C
ATOM    362  O   GLN A  67       2.658  11.293  44.384  1.00180.95           O
ANISOU  362  O   GLN A  67    16022  34701  18031  -7093  -3273   4840       O
ATOM    363  CB  GLN A  67       2.799  14.599  44.273  1.00193.42           C
ANISOU  363  CB  GLN A  67    17841  36399  19251  -7624  -3269   3513       C
ATOM    364  CG  GLN A  67       4.235  14.226  44.615  1.00201.55           C
ANISOU  364  CG  GLN A  67    18602  37850  20126  -7726  -3546   4231       C
ATOM    365  CD  GLN A  67       4.383  13.674  46.020  1.00208.99           C
ANISOU  365  CD  GLN A  67    19455  39443  20510  -8136  -3678   4575       C
ATOM    366  OE1 GLN A  67       3.486  13.814  46.851  1.00213.20           O
ANISOU  366  OE1 GLN A  67    20146  40197  20664  -8395  -3533   4221       O
ATOM    367  NE2 GLN A  67       5.518  13.040  46.291  1.00211.07           N
ANISOU  367  NE2 GLN A  67    19461  40027  20707  -8156  -3930   5308       N
ATOM    368  N   GLU A  68       1.039  12.329  45.563  1.00182.71           N
ANISOU  368  N   GLU A  68    16438  35171  17812  -7656  -2957   3984       N
ATOM    369  CA  GLU A  68       0.833  11.222  46.486  1.00187.76           C
ANISOU  369  CA  GLU A  68    16924  36130  18288  -7776  -2887   4558       C
ATOM    370  C   GLU A  68       0.273  10.017  45.743  1.00183.11           C
ANISOU  370  C   GLU A  68    16241  34915  18419  -7348  -2856   4833       C
ATOM    371  O   GLU A  68       0.673   8.882  45.992  1.00186.33           O
ANISOU  371  O   GLU A  68    16452  35406  18938  -7261  -2946   5525       O
ATOM    372  CB  GLU A  68      -0.118  11.637  47.609  1.00195.93           C
ANISOU  372  CB  GLU A  68    18044  37538  18864  -8132  -2592   4251       C
ATOM    373  CG  GLU A  68      -0.465  10.524  48.582  1.00205.47           C
ANISOU  373  CG  GLU A  68    19079  39076  19912  -8217  -2417   4905       C
ATOM    374  CD  GLU A  68      -1.492  10.955  49.610  1.00215.48           C
ANISOU  374  CD  GLU A  68    20449  40691  20733  -8460  -2010   4619       C
ATOM    375  OE1 GLU A  68      -1.851  12.152  49.626  1.00218.03           O
ANISOU  375  OE1 GLU A  68    20996  41029  20816  -8589  -1911   3867       O
ATOM    376  OE2 GLU A  68      -1.942  10.098  50.399  1.00220.93           O
ANISOU  376  OE2 GLU A  68    20985  41628  21333  -8490  -1755   5179       O
ATOM    377  N   MET A  69      -0.650  10.278  44.824  1.00176.99           N
ANISOU  377  N   MET A  69    15603  33478  18168  -7072  -2780   4272       N
ATOM    378  CA  MET A  69      -1.275   9.224  44.036  1.00175.33           C
ANISOU  378  CA  MET A  69    15340  32562  18715  -6641  -2860   4383       C
ATOM    379  C   MET A  69      -0.288   8.565  43.078  1.00173.52           C
ANISOU  379  C   MET A  69    15137  32057  18735  -6160  -3144   4729       C
ATOM    380  O   MET A  69      -0.297   7.346  42.914  1.00164.67           O
ANISOU  380  O   MET A  69    13888  30635  18047  -5902  -3277   5165       O
ATOM    381  CB  MET A  69      -2.466   9.783  43.257  1.00173.44           C
ANISOU  381  CB  MET A  69    15265  31685  18947  -6451  -2798   3639       C
ATOM    382  CG  MET A  69      -3.115   8.791  42.310  1.00175.14           C
ANISOU  382  CG  MET A  69    15470  31076  20001  -5962  -3022   3623       C
ATOM    383  SD  MET A  69      -4.519   9.516  41.448  1.00167.84           S
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ANISOU  383  SD  MET A  69    14720  29427  19626  -5763  -3034   2746       S
ATOM    384  CE  MET A  69      -5.582   9.923  42.829  1.00162.17           C
ANISOU  384  CE  MET A  69    13749  29080  18786  -6360  -2565   2688       C
ATOM    385  N   VAL A  70       0.562   9.377  42.455  1.00172.83           N
ANISOU  385  N   VAL A  70    15199  32054  18414  -6017  -3212   4559       N
ATOM    386  CA  VAL A  70       1.524   8.888  41.469  1.00172.21           C
ANISOU  386  CA  VAL A  70    15171  31734  18528  -5475  -3386   4879       C
ATOM    387  C   VAL A  70       2.409   7.772  42.023  1.00170.62           C
ANISOU  387  C   VAL A  70    14703  31837  18286  -5496  -3491   5713       C
ATOM    388  O   VAL A  70       2.598   6.739  41.378  1.00172.03           O
ANISOU  388  O   VAL A  70    14888  31599  18877  -5001  -3627   5998       O
ATOM    389  CB  VAL A  70       2.408  10.032  40.916  1.00174.27           C
ANISOU  389  CB  VAL A  70    15530  32160  18525  -5395  -3351   4730       C
ATOM    390  CG1 VAL A  70       3.574   9.473  40.124  1.00177.75           C
ANISOU  390  CG1 VAL A  70    15942  32508  19087  -4859  -3432   5258       C
ATOM    391  CG2 VAL A  70       1.584  10.971  40.049  1.00172.07           C
ANISOU  391  CG2 VAL A  70    15540  31426  18411  -5180  -3273   3974       C
ATOM    392  N   GLN A  71       2.936   7.978  43.224  1.00168.70           N
ANISOU  392  N   GLN A  71    14246  32308  17543  -6044  -3461   6082       N
ATOM    393  CA  GLN A  71       3.783   6.977  43.858  1.00180.11           C
ANISOU  393  CA  GLN A  71    15413  34107  18913  -6110  -3579   6918       C
ATOM    394  C   GLN A  71       2.971   5.860  44.501  1.00183.56           C
ANISOU  394  C   GLN A  71    15702  34439  19606  -6198  -3532   7239       C
ATOM    395  O   GLN A  71       3.404   4.709  44.526  1.00187.59           O
ANISOU  395  O   GLN A  71    16019  34849  20408  -5993  -3648   7874       O
ATOM    396  CB  GLN A  71       4.697   7.627  44.897  1.00205.16           C
ANISOU  396  CB  GLN A  71    18425  38088  21437  -6635  -3654   7201       C
ATOM    397  CG  GLN A  71       5.905   8.329  44.303  1.00221.47           C
ANISOU  397  CG  GLN A  71    20440  40241  23466  -6508  -3773   7279       C
ATOM    398  CD  GLN A  71       6.932   7.360  43.747  1.00227.35           C
ANISOU  398  CD  GLN A  71    20988  40846  24548  -6054  -3870   7995       C
ATOM    399  OE1 GLN A  71       6.820   6.146  43.924  1.00231.57           O
ANISOU  399  OE1 GLN A  71    21417  41263  25304  -5891  -3905   8448       O
ATOM    400  NE2 GLN A  71       7.945   7.894  43.074  1.00225.11           N
ANISOU  400  NE2 GLN A  71    20623  40551  24358  -5828  -3887   8138       N
ATOM    401  N   ALA A  72       1.797   6.205  45.022  1.00188.86           N
ANISOU  401  N   ALA A  72    16426  35108  20224  -6488  -3335   6843       N
ATOM    402  CA  ALA A  72       0.931   5.228  45.674  1.00197.59           C
ANISOU  402  CA  ALA A  72    17326  36101  21651  -6589  -3214   7202       C
ATOM    403  C   ALA A  72       0.521   4.131  44.700  1.00199.59           C
ANISOU  403  C   ALA A  72    17533  35475  22829  -6072  -3393   7264       C
ATOM    404  O   ALA A  72       0.534   2.948  45.042  1.00204.91           O
ANISOU  404  O   ALA A  72    17942  36025  23892  -6018  -3452   7904       O
ATOM    405  CB  ALA A  72      -0.296   5.905  46.263  1.00176.66           C
ANISOU  405  CB  ALA A  72    14732  33539  18852  -6913  -2903   6727       C
ATOM    406  N   GLN A  73       0.160   4.531  43.485  1.00192.84           N
ANISOU  406  N   GLN A  73    16949  33994  22328  -5671  -3515   6590       N
ATOM    407  CA  GLN A  73      -0.218   3.577  42.450  1.00188.25           C
ANISOU  407  CA  GLN A  73    16422  32529  22575  -5103  -3792   6497       C
ATOM    408  C   GLN A  73       1.019   2.894  41.877  1.00188.59           C
ANISOU  408  C   GLN A  73    16496  32517  22643  -4650  -4001   6934       C
ATOM    409  O   GLN A  73       0.929   1.818  41.286  1.00199.97           O
ANISOU  409  O   GLN A  73    17928  33324  24726  -4192  -4255   7063       O
ATOM    410  CB  GLN A  73      -1.007   4.268  41.336  1.00180.01           C
ANISOU  410  CB  GLN A  73    15717  30874  21803  -4768  -3896   5611       C
ATOM    411  CG  GLN A  73      -2.204   5.072  41.823  1.00178.77           C
ANISOU  411  CG  GLN A  73    15524  30753  21647  -5182  -3661   5138       C
ATOM    412  CD  GLN A  73      -3.245   4.220  42.523  1.00189.87           C
ANISOU  412  CD  GLN A  73    16568  31894  23679  -5409  -3590   5440       C
ATOM    413  OE1 GLN A  73      -3.362   3.022  42.263  1.00205.03           O
ANISOU  413  OE1 GLN A  73    18320  33275  26306  -5142  -3851   5775       O
ATOM    414  NE2 GLN A  73      -4.010   4.837  43.417  1.00185.32           N
ANISOU  414  NE2 GLN A  73    15854  31670  22888  -5879  -3216   5343       N
ATOM    415  N   ALA A  74       2.173   3.526  42.057  1.00175.06           N
ANISOU  415  N   ALA A  74    14799  31435  20282  -4765  -3907   7159       N
ATOM    416  CA  ALA A  74       3.435   2.946  41.621  1.00173.77           C
ANISOU  416  CA  ALA A  74    14591  31308  20125  -4362  -4026   7677       C
ATOM    417  C   ALA A  74       3.937   1.945  42.654  1.00192.45           C
ANISOU  417  C   ALA A  74    16561  34040  22521  -4636  -4056   8563       C
ATOM    418  O   ALA A  74       4.776   1.096  42.353  1.00200.52           O
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ANISOU  418  O   ALA A  74    17475  34935  23777  -4267  -4181   9078       O
ATOM    419  CB  ALA A  74       4.468   4.034  41.392  1.00169.31           C
ANISOU  419  CB  ALA A  74    14108  31220  19004  -4385  -3919   7639       C
ATOM    420  N   ALA A  75       3.411   2.048  43.871  1.00196.98           N
ANISOU  420  N   ALA A  75    16931  35074  22837  -5243  -3916   8758       N
ATOM    421  CA  ALA A  75       3.817   1.170  44.964  1.00198.43           C
ANISOU  421  CA  ALA A  75    16748  35692  22953  -5529  -3917   9646       C
ATOM    422  C   ALA A  75       3.325  -0.258  44.752  1.00203.47           C
ANISOU  422  C   ALA A  75    17198  35642  24471  -5219  -4042  10011       C
ATOM    423  O   ALA A  75       3.887  -1.204  45.303  1.00201.18           O
ANISOU  423  O   ALA A  75    16602  35517  24319  -5246  -4104  10826       O
ATOM    424  CB  ALA A  75       3.318   1.713  46.296  1.00195.70           C
ANISOU  424  CB  ALA A  75    16309  36045  22004  -6172  -3691   9728       C
ATOM    425  N   SER A  76       2.276  -0.407  43.948  1.00210.64           N
ANISOU  425  N   SER A  76    18267  35738  26028  -4924  -4125   9410       N
ATOM    426  CA  SER A  76       1.718  -1.723  43.654  1.00218.91           C
ANISOU  426  CA  SER A  76    19131  35978  28067  -4617  -4341   9641       C
ATOM    427  C   SER A  76       2.655  -2.540  42.767  1.00226.05           C
ANISOU  427  C   SER A  76    20120  36449  29319  -3980  -4628   9833       C
ATOM    428  O   SER A  76       2.519  -3.759  42.662  1.00235.67           O
ANISOU  428  O   SER A  76    21138  37081  31325  -3726  -4847  10194       O
ATOM    429  CB  SER A  76       0.343  -1.593  42.995  1.00212.63           C
ANISOU  429  CB  SER A  76    18483  34386  27922  -4467  -4454   8877       C
ATOM    430  OG  SER A  76       0.430  -0.914  41.754  1.00209.66           O
ANISOU  430  OG  SER A  76    18578  33664  27421  -3997  -4622   8064       O
ATOM    431  N   GLY A  77       3.603  -1.861  42.131  1.00218.88           N
ANISOU  431  N   GLY A  77    19491  35808  27866  -3698  -4605   9612       N
ATOM    432  CA  GLY A  77       4.572  -2.524  41.278  1.00214.94           C
ANISOU  432  CA  GLY A  77    19097  34983  27589  -3028  -4776   9811       C
ATOM    433  C   GLY A  77       4.065  -2.726  39.865  1.00212.66           C
ANISOU  433  C   GLY A  77    19252  33771  27779  -2272  -5037   9038       C
ATOM    434  O   GLY A  77       4.393  -3.718  39.214  1.00209.12           O
ANISOU  434  O   GLY A  77    18881  32742  27833  -1652  -5277   9144       O
ATOM    435  N   GLU A  78       3.260  -1.781  39.388  1.00217.83           N
ANISOU  435  N   GLU A  78    20222  34280  28261  -2289  -5020   8238       N
ATOM    436  CA  GLU A  78       2.725  -1.844  38.034  1.00224.70           C
ANISOU  436  CA  GLU A  78    21578  34322  29476  -1557  -5318   7438       C
ATOM    437  C   GLU A  78       3.718  -1.224  37.054  1.00229.90           C
ANISOU  437  C   GLU A  78    22637  35169  29546   -944  -5175   7259       C
ATOM    438  O   GLU A  78       4.358  -0.219  37.362  1.00230.86           O
ANISOU  438  O   GLU A  78    22696  36012  29008  -1261  -4833   7429       O
ATOM    439  CB  GLU A  78       1.366  -1.142  37.961  1.00222.07           C
ANISOU  439  CB  GLU A  78    21369  33716  29293  -1833  -5384   6710       C
ATOM    440  CG  GLU A  78       0.543  -1.491  36.730  1.00223.70           C
ANISOU  440  CG  GLU A  78    21991  32920  30086  -1145  -5863   5919       C
ATOM    441  CD  GLU A  78       0.826  -0.575  35.558  1.00220.30           C
ANISOU  441  CD  GLU A  78    22145  32484  29076   -545  -5837   5289       C
ATOM    442  OE1 GLU A  78       1.205   0.590  35.796  1.00227.10           O
ANISOU  442  OE1 GLU A  78    23018  34036  29232   -870  -5434   5306       O
ATOM    443  OE2 GLU A  78       0.669  -1.019  34.401  1.00211.60           O
ANISOU  443  OE2 GLU A  78    21498  30674  28227    277  -6234   4782       O
ATOM    444  N   GLU A  79       3.840  -1.831  35.877  1.00233.59           N
ANISOU  444  N   GLU A  79    23512  34963  30279    -36  -5440   6928       N
ATOM    445  CA  GLU A  79       4.871  -1.460  34.908  1.00236.95           C
ANISOU  445  CA  GLU A  79    24304  35536  30189    705  -5236   6911       C
ATOM    446  C   GLU A  79       4.811   0.002  34.459  1.00240.55           C
ANISOU  446  C   GLU A  79    25038  36347  30013    679  -4962   6468       C
ATOM    447  O   GLU A  79       5.846   0.649  34.295  1.00240.99           O
ANISOU  447  O   GLU A  79    25072  36929  29563    806  -4585   6818       O
ATOM    448  CB  GLU A  79       4.817  -2.391  33.692  1.00237.31           C
ANISOU  448  CB  GLU A  79    24843  34733  30590   1775  -5604   6504       C
ATOM    449  CG  GLU A  79       5.958  -2.196  32.705  1.00237.30           C
ANISOU  449  CG  GLU A  79    25214  34887  30060   2677  -5312   6620       C
ATOM    450  CD  GLU A  79       5.969  -3.248  31.613  1.00243.34           C
ANISOU  450  CD  GLU A  79    26493  34840  31124   3790  -5678   6247       C
ATOM    451  OE1 GLU A  79       5.072  -4.117  31.613  1.00247.18           O
ANISOU  451  OE1 GLU A  79    27026  34583  32309   3816  -6243   5856       O
ATOM    452  OE2 GLU A  79       6.875  -3.206  30.755  1.00245.60           O
ANISOU  452  OE2 GLU A  79    27129  35211  30976   4664  -5404   6351       O
ATOM    453  N   LEU A  80       3.602   0.520  34.266  1.00241.02           N
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ANISOU  453  N   LEU A  80    25305  36084  30187    512  -5153   5744       N
ATOM    454  CA  LEU A  80       3.430   1.894  33.801  1.00231.53           C
ANISOU  454  CA  LEU A  80    24373  35128  28471    509  -4928   5287       C
ATOM    455  C   LEU A  80       3.483   2.902  34.947  1.00216.53           C
ANISOU  455  C   LEU A  80    22049  33979  26244   -486  -4593   5540       C
ATOM    456  O   LEU A  80       4.151   3.931  34.845  1.00220.33           O
ANISOU  456  O   LEU A  80    22536  34948  26233   -556  -4265   5647       O
ATOM    457  CB  LEU A  80       2.114   2.043  33.032  1.00230.66           C
ANISOU  457  CB  LEU A  80    24685  34314  28642    817  -5315   4379       C
ATOM    458  CG  LEU A  80       1.811   3.434  32.469  1.00223.91           C
ANISOU  458  CG  LEU A  80    24134  33619  27324    874  -5124   3870       C
ATOM    459  CD1 LEU A  80       2.875   3.851  31.464  1.00221.23           C
ANISOU  459  CD1 LEU A  80    24163  33475  26420   1678  -4832   4019       C
ATOM    460  CD2 LEU A  80       0.429   3.472  31.838  1.00224.50           C
ANISOU  460  CD2 LEU A  80    24548  32971  27779   1106  -5589   3016       C
ATOM    461  N   ALA A  81       2.778   2.596  36.033  1.00194.87           N
ANISOU  461  N   ALA A  81    18940  31305  23798  -1217  -4680   5644       N
ATOM    462  CA  ALA A  81       2.690   3.490  37.185  1.00172.09           C
ANISOU  462  CA  ALA A  81    15722  29106  20558  -2118  -4405   5792       C
ATOM    463  C   ALA A  81       4.063   3.813  37.759  1.00164.96           C
ANISOU  463  C   ALA A  81    14542  28965  19170  -2382  -4144   6482       C
ATOM    464  O   ALA A  81       4.299   4.917  38.246  1.00163.38           O
ANISOU  464  O   ALA A  81    14237  29305  18533  -2876  -3937   6448       O
ATOM    465  CB  ALA A  81       1.795   2.888  38.255  1.00174.42           C
ANISOU  465  CB  ALA A  81    15673  29359  21240  -2717  -4490   5937       C
ATOM    466  N   VAL A  82       4.965   2.840  37.698  1.00170.88           N
ANISOU  466  N   VAL A  82    15153  29710  20062  -2046  -4196   7098       N
ATOM    467  CA  VAL A  82       6.337   3.041  38.142  1.00187.99           C
ANISOU  467  CA  VAL A  82    17014  32524  21891  -2215  -4004   7814       C
ATOM    468  C   VAL A  82       7.074   3.973  37.186  1.00186.59           C
ANISOU  468  C   VAL A  82    17046  32426  21426  -1755  -3776   7702       C
ATOM    469  O   VAL A  82       7.755   4.907  37.613  1.00183.33           O
ANISOU  469  O   VAL A  82    16397  32566  20693  -2173  -3603   7941       O
ATOM    470  CB  VAL A  82       7.095   1.704  38.253  1.00206.85           C
ANISOU  470  CB  VAL A  82    19179  34821  24594  -1902  -4107   8531       C
ATOM    471  CG1 VAL A  82       8.590   1.943  38.405  1.00216.35           C
ANISOU  471  CG1 VAL A  82    20089  36580  25536  -1888  -3916   9250       C
ATOM    472  CG2 VAL A  82       6.555   0.887  39.420  1.00210.35           C
ANISOU  472  CG2 VAL A  82    19287  35346  25290  -2480  -4265   8868       C
ATOM    473  N   ALA A  83       6.924   3.718  35.890  1.00190.79           N
ANISOU  473  N   ALA A  83    18020  32382  22090   -868  -3794   7346       N
ATOM    474  CA  ALA A  83       7.546   4.550  34.866  1.00192.92           C
ANISOU  474  CA  ALA A  83    18532  32684  22085   -294  -3511   7281       C
ATOM    475  C   ALA A  83       7.035   5.985  34.947  1.00192.26           C
ANISOU  475  C   ALA A  83    18505  32800  21744   -755  -3389   6799       C
ATOM    476  O   ALA A  83       7.769   6.932  34.665  1.00197.80           O
ANISOU  476  O   ALA A  83    19123  33797  22236   -709  -3105   7003       O
ATOM    477  CB  ALA A  83       7.290   3.971  33.484  1.00191.74           C
ANISOU  477  CB  ALA A  83    18954  31870  22029    803  -3595   6891       C
ATOM    478  N   VAL A  84       5.772   6.134  35.336  1.00184.43           N
ANISOU  478  N   VAL A  84    17617  31612  20848  -1190  -3593   6194       N
ATOM    479  CA  VAL A  84       5.177   7.450  35.534  1.00174.76           C
ANISOU  479  CA  VAL A  84    16426  30549  19427  -1678  -3491   5700       C
ATOM    480  C   VAL A  84       5.875   8.188  36.674  1.00173.62           C
ANISOU  480  C   VAL A  84    15823  31111  19033  -2504  -3354   6104       C
ATOM    481  O   VAL A  84       6.281   9.339  36.524  1.00172.87           O
ANISOU  481  O   VAL A  84    15677  31239  18765  -2640  -3174   6054       O
ATOM    482  CB  VAL A  84       3.670   7.347  35.837  1.00167.91           C
ANISOU  482  CB  VAL A  84    15686  29327  18786  -1992  -3716   5046       C
ATOM    483  CG1 VAL A  84       3.134   8.676  36.344  1.00164.33           C
ANISOU  483  CG1 VAL A  84    15168  29145  18124  -2631  -3573   4627       C
ATOM    484  CG2 VAL A  84       2.909   6.896  34.600  1.00166.59           C
ANISOU  484  CG2 VAL A  84    16008  28403  18887  -1182  -3953   4496       C
ATOM    485  N   ALA A  85       6.019   7.510  37.808  1.00173.85           N
ANISOU  485  N   ALA A  85    15519  31469  19066  -3031  -3478   6516       N
ATOM    486  CA  ALA A  85       6.686   8.089  38.968  1.00182.40           C
ANISOU  486  CA  ALA A  85    16208  33239  19859  -3788  -3460   6886       C
ATOM    487  C   ALA A  85       8.177   8.279  38.710  1.00204.45           C
ANISOU  487  C   ALA A  85    18735  36311  22636  -3588  -3361   7548       C
ATOM    488  O   ALA A  85       8.840   9.066  39.386  1.00216.04           O
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ANISOU  488  O   ALA A  85    19896  38257  23931  -4125  -3389   7767       O
ATOM    489  CB  ALA A  85       6.466   7.217  40.192  1.00177.82           C
ANISOU  489  CB  ALA A  85    15381  32947  19238  -4288  -3617   7225       C
ATOM    490  N   GLU A  86       8.696   7.553  37.727  1.00204.80           N
ANISOU  490  N   GLU A  86    21420  32693  23700  -8108  -3865   3891       N
ATOM    491  CA  GLU A  86      10.105   7.636  37.371  1.00204.74           C
ANISOU  491  CA  GLU A  86    20777  33017  23999  -7958  -3917   3637       C
ATOM    492  C   GLU A  86      10.403   8.915  36.595  1.00199.48           C
ANISOU  492  C   GLU A  86    19780  32595  23420  -8456  -3623   3434       C
ATOM    493  O   GLU A  86      11.466   9.514  36.751  1.00208.64           O
ANISOU  493  O   GLU A  86    20410  34096  24769  -8538  -3698   3183       O
ATOM    494  CB  GLU A  86      10.514   6.413  36.547  1.00204.88           C
ANISOU  494  CB  GLU A  86    20697  32910  24238  -7595  -3742   3545       C
ATOM    495  CG  GLU A  86      11.980   6.388  36.151  1.00211.19           C
ANISOU  495  CG  GLU A  86    20758  34052  25432  -7414  -3750   3181       C
ATOM    496  CD  GLU A  86      12.341   5.157  35.345  1.00213.89           C
ANISOU  496  CD  GLU A  86    21013  34238  26017  -7041  -3548   3057       C
ATOM    497  OE1 GLU A  86      11.439   4.333  35.083  1.00208.94           O
ANISOU  497  OE1 GLU A  86    20940  33227  25221  -6949  -3398   3279       O
ATOM    498  OE2 GLU A  86      13.525   5.014  34.973  1.00219.39           O
ANISOU  498  OE2 GLU A  86    21059  35197  27100  -6859  -3512   2685       O
ATOM    499  N   ARG A  87       9.457   9.329  35.760  1.00181.95           N
ANISOU  499  N   ARG A  87    17907  30179  21046  -8792  -3297   3516       N
ATOM    500  CA  ARG A  87       9.643  10.503  34.916  1.00170.07           C
ANISOU  500  CA  ARG A  87    16304  28783  19533  -9259  -2993   3372       C
ATOM    501  C   ARG A  87       9.431  11.812  35.672  1.00162.63           C
ANISOU  501  C   ARG A  87    15416  27924  18453  -9583  -3144   3407       C
ATOM    502  O   ARG A  87      10.267  12.714  35.618  1.00162.89           O
ANISOU  502  O   ARG A  87    15128  28188  18576  -9873  -3043   3202       O
ATOM    503  CB  ARG A  87       8.709  10.441  33.706  1.00167.05           C
ANISOU  503  CB  ARG A  87    16358  28125  18989  -9423  -2680   3447       C
ATOM    504  CG  ARG A  87       9.084   9.374  32.691  1.00181.22           C
ANISOU  504  CG  ARG A  87    18073  29867  20916  -9240  -2406   3332       C
ATOM    505  CD  ARG A  87      10.495   9.596  32.168  1.00206.82           C
ANISOU  505  CD  ARG A  87    20795  33384  24403  -9365  -2144   3012       C
ATOM    506  NE  ARG A  87      10.847   8.658  31.107  1.00223.88           N
ANISOU  506  NE  ARG A  87    22887  35481  26694  -9247  -1805   2850       N
ATOM    507  CZ  ARG A  87      10.683   8.901  29.810  1.00230.32           C
ANISOU  507  CZ  ARG A  87    23984  36180  27348  -9577  -1377   2770       C
ATOM    508  NH1 ARG A  87      10.169  10.056  29.410  1.00229.86           N
ANISOU  508  NH1 ARG A  87    24334  36023  26981  -9999  -1281   2863       N
ATOM    509  NH2 ARG A  87      11.032   7.989  28.913  1.00234.16           N
ANISOU  509  NH2 ARG A  87    24402  36614  27953  -9471  -1055   2594       N
ATOM    510  N   VAL A  88       8.313  11.909  36.382  1.00159.98           N
ANISOU  510  N   VAL A  88    15480  27390  17917  -9569  -3337   3617       N
ATOM    511  CA  VAL A  88       7.934  13.152  37.045  1.00165.86           C
ANISOU  511  CA  VAL A  88    16340  28151  18529  -9880  -3441   3639       C
ATOM    512  C   VAL A  88       8.555  13.303  38.430  1.00170.55           C
ANISOU  512  C   VAL A  88    16693  28979  19130  -9806  -3785   3605       C
ATOM    513  O   VAL A  88       8.161  14.180  39.199  1.00165.49           O
ANISOU  513  O   VAL A  88    16186  28334  18358 -10032  -3899   3628       O
ATOM    514  CB  VAL A  88       6.405  13.272  37.171  1.00167.97           C
ANISOU  514  CB  VAL A  88    17095  28108  18619  -9927  -3461   3784       C
ATOM    515  CG1 VAL A  88       5.757  13.210  35.797  1.00179.99           C
ANISOU  515  CG1 VAL A  88    18863  29419  20106  -9975  -3221   3780       C
ATOM    516  CG2 VAL A  88       5.859  12.175  38.075  1.00157.34           C
ANISOU  516  CG2 VAL A  88    15930  26641  17209  -9644  -3635   3900       C
ATOM    517  N   GLN A  89       9.529  12.455  38.742  1.00183.23           N
ANISOU  517  N   GLN A  89    17953  30783  20884  -9465  -3980   3525       N
ATOM    518  CA  GLN A  89      10.187  12.502  40.043  1.00202.28           C
ANISOU  518  CA  GLN A  89    20156  33431  23270  -9313  -4414   3473       C
ATOM    519  C   GLN A  89      10.959  13.806  40.231  1.00201.10           C
ANISOU  519  C   GLN A  89    19595  33605  23209  -9707  -4400   3210       C
ATOM    520  O   GLN A  89      11.228  14.222  41.358  1.00199.51           O
ANISOU  520  O   GLN A  89    19316  33582  22908  -9735  -4738   3161       O
ATOM    521  CB  GLN A  89      11.121  11.304  40.220  1.00225.30           C
ANISOU  521  CB  GLN A  89    22774  36473  26359  -8770  -4696   3399       C
ATOM    522  CG  GLN A  89      12.302  11.291  39.266  1.00244.30           C
ANISOU  522  CG  GLN A  89    24515  39161  29148  -8761  -4492   3046       C
ATOM    523  CD  GLN A  89      13.174  10.066  39.441  1.00261.81           C
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ANISOU  523  CD  GLN A  89    26408  41473  31595  -8137  -4811   2927       C
ATOM    524  OE1 GLN A  89      12.869   9.182  40.242  1.00269.22           O
ANISOU  524  OE1 GLN A  89    27736  42205  32349  -7690  -5195   3170       O
ATOM    525  NE2 GLN A  89      14.269  10.006  38.691  1.00268.17           N
ANISOU  525  NE2 GLN A  89    26533  42557  32801  -8105  -4632   2524       N
ATOM    526  N   GLU A  90      11.309  14.447  39.120  1.00194.31           N
ANISOU  526  N   GLU A  90    18534  32794  22500 -10048  -3978   3025       N
ATOM    527  CA  GLU A  90      12.036  15.709  39.157  1.00185.12           C
ANISOU  527  CA  GLU A  90    17043  31876  21419 -10519  -3832   2735       C
ATOM    528  C   GLU A  90      11.280  16.798  38.404  1.00167.63           C
ANISOU  528  C   GLU A  90    15380  29281  19033 -10863  -3381   2806       C
ATOM    529  O   GLU A  90      11.811  17.408  37.477  1.00168.54           O
ANISOU  529  O   GLU A  90    15456  29363  19219 -11150  -2950   2593       O
ATOM    530  CB  GLU A  90      13.433  15.538  38.563  1.00197.17           C
ANISOU  530  CB  GLU A  90    17871  33747  23299 -10545  -3655   2310       C
ATOM    531  CG  GLU A  90      14.288  14.507  39.276  1.00210.45           C
ANISOU  531  CG  GLU A  90    19029  35730  25202  -9985  -4142   2149       C
ATOM    532  CD  GLU A  90      15.656  14.356  38.645  1.00226.16           C
ANISOU  532  CD  GLU A  90    20216  38084  27632 -10003  -3942   1616       C
ATOM    533  OE1 GLU A  90      15.886  14.964  37.579  1.00229.74           O
ANISOU  533  OE1 GLU A  90    20608  38510  28171 -10504  -3329   1406       O
ATOM    534  OE2 GLU A  90      16.500  13.633  39.215  1.00234.57           O
ANISOU  534  OE2 GLU A  90    20733  39442  28950  -9514  -4394   1376       O
ATOM    535  N   LYS A  91      10.038  17.035  38.810  1.00162.45           N
ANISOU  535  N   LYS A  91    15268  28314  18141 -10819  -3487   3076       N
ATOM    536  CA  LYS A  91       9.205  18.047  38.174  1.00160.03           C
ANISOU  536  CA  LYS A  91    15502  27630  17672 -11036  -3200   3146       C
ATOM    537  C   LYS A  91       8.712  19.072  39.190  1.00160.09           C
ANISOU  537  C   LYS A  91    15781  27496  17551 -11091  -3302   3136       C
ATOM    538  O   LYS A  91       8.738  18.822  40.394  1.00159.43           O
ANISOU  538  O   LYS A  91    15579  27555  17440 -10951  -3593   3143       O
ATOM    539  CB  LYS A  91       8.022  17.392  37.461  1.00156.37           C
ANISOU  539  CB  LYS A  91    15395  26907  17112 -10926  -3207   3395       C
ATOM    540  CG  LYS A  91       8.359  16.825  36.090  1.00157.28           C
ANISOU  540  CG  LYS A  91    15436  27042  17281 -11019  -2953   3387       C
ATOM    541  CD  LYS A  91       8.637  17.943  35.097  1.00161.98           C
ANISOU  541  CD  LYS A  91    16307  27472  17765 -11407  -2579   3284       C
ATOM    542  CE  LYS A  91       8.877  17.403  33.697  1.00165.43           C
ANISOU  542  CE  LYS A  91    16853  27834  18170 -11458  -2257   3259       C
ATOM    543  NZ  LYS A  91       9.028  18.502  32.700  1.00162.64           N
ANISOU  543  NZ  LYS A  91    16966  27237  17593 -11908  -1881   3208       N
ATOM    544  N   ASP A  92       8.262  20.223  38.699  1.00158.57           N
ANISOU  544  N   ASP A  92    15984  27012  17252 -11329  -3077   3124       N
ATOM    545  CA  ASP A  92       7.841  21.321  39.566  1.00172.90           C
ANISOU  545  CA  ASP A  92    18042  28675  18978 -11427  -3120   3072       C
ATOM    546  C   ASP A  92       6.336  21.327  39.814  1.00154.71           C
ANISOU  546  C   ASP A  92    16125  26074  16584 -11279  -3273   3240       C
ATOM    547  O   ASP A  92       5.595  20.571  39.193  1.00152.54           O
ANISOU  547  O   ASP A  92    15954  25692  16310 -11131  -3331   3382       O
ATOM    548  CB  ASP A  92       8.278  22.664  38.978  1.00170.46           C
ANISOU  548  CB  ASP A  92    17943  28204  18621 -11823  -2798   2923       C
ATOM    549  CG  ASP A  92       7.713  22.904  37.593  1.00171.83           C
ANISOU  549  CG  ASP A  92    18555  28062  18669 -12005  -2625   3078       C
ATOM    550  OD1 ASP A  92       7.641  21.936  36.808  1.00177.90           O
ANISOU  550  OD1 ASP A  92    19254  28887  19455 -11891  -2625   3189       O
ATOM    551  OD2 ASP A  92       7.339  24.057  37.291  1.00170.62           O
ANISOU  551  OD2 ASP A  92    18855  27591  18383 -12292  -2511   3095       O
ATOM    552  N   SER A  93       5.893  22.193  40.722  1.00154.61           N
ANISOU  552  N   SER A  93    16283  25938  16523 -11341  -3317   3164       N
ATOM    553  CA  SER A  93       4.485  22.259  41.105  1.00167.45           C
ANISOU  553  CA  SER A  93    18183  27309  18133 -11221  -3429   3209       C
ATOM    554  C   SER A  93       3.587  22.757  39.980  1.00167.47           C
ANISOU  554  C   SER A  93    18494  26989  18146 -11291  -3413   3267       C
ATOM    555  O   SER A  93       2.451  22.308  39.845  1.00161.64           O
ANISOU  555  O   SER A  93    17840  26109  17465 -11122  -3541   3284       O
ATOM    556  CB  SER A  93       4.297  23.145  42.337  1.00164.22           C
ANISOU  556  CB  SER A  93    17860  26850  17687 -11323  -3439   3062       C
ATOM    557  OG  SER A  93       2.919  23.349  42.604  1.00151.77           O
ANISOU  557  OG  SER A  93    16506  25005  16154 -11252  -3484   3016       O
ATOM    558  N   GLY A  94       4.094  23.691  39.184  1.00178.25           N
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ANISOU  558  N   GLY A  94    20046  28234  19445 -11592  -3270   3272       N
ATOM    559  CA  GLY A  94       3.333  24.232  38.072  1.00183.16           C
ANISOU  559  CA  GLY A  94    21062  28526  20005 -11761  -3342   3374       C
ATOM    560  C   GLY A  94       2.999  23.172  37.039  1.00175.96           C
ANISOU  560  C   GLY A  94    20133  27647  19076 -11625  -3436   3510       C
ATOM    561  O   GLY A  94       1.908  23.168  36.465  1.00166.00           O
ANISOU  561  O   GLY A  94    19165  26102  17806 -11341  -3618   3515       O
ATOM    562  N   PHE A  95       3.946  22.266  36.814  1.00176.66           N
ANISOU  562  N   PHE A  95    19936  28016  19169 -11569  -3273   3537       N
ATOM    563  CA  PHE A  95       3.788  21.188  35.842  1.00170.46           C
ANISOU  563  CA  PHE A  95    19138  27265  18365 -11399  -3282   3633       C
ATOM    564  C   PHE A  95       2.608  20.277  36.161  1.00168.20           C
ANISOU  564  C   PHE A  95    18770  26955  18184 -11041  -3518   3623       C
ATOM    565  O   PHE A  95       1.812  19.953  35.281  1.00163.68           O
ANISOU  565  O   PHE A  95    18431  26187  17571 -10817  -3606   3627       O
ATOM    566  CB  PHE A  95       5.074  20.363  35.753  1.00158.49           C
ANISOU  566  CB  PHE A  95    17213  26095  16910 -11449  -3078   3610       C
ATOM    567  CG  PHE A  95       4.892  19.024  35.100  1.00151.48           C
ANISOU  567  CG  PHE A  95    16232  25269  16056 -11175  -3087   3675       C
ATOM    568  CD1 PHE A  95       4.743  18.922  33.728  1.00152.33           C
ANISOU  568  CD1 PHE A  95    16691  25172  16014 -11152  -2945   3715       C
ATOM    569  CD2 PHE A  95       4.880  17.865  35.859  1.00154.45           C
ANISOU  569  CD2 PHE A  95    16259  25858  16569 -10928  -3221   3688       C
ATOM    570  CE1 PHE A  95       4.579  17.691  33.125  1.00153.74           C
ANISOU  570  CE1 PHE A  95    16796  25396  16221 -10901  -2924   3738       C
ATOM    571  CE2 PHE A  95       4.716  16.632  35.263  1.00155.62           C
ANISOU  571  CE2 PHE A  95    16373  26007  16749 -10667  -3186   3728       C
ATOM    572  CZ  PHE A  95       4.567  16.544  33.894  1.00154.99           C
ANISOU  572  CZ  PHE A  95    16567  25761  16562 -10661  -3030   3737       C
ATOM    573  N   PHE A  96       2.504  19.860  37.418  1.00147.54           N
ANISOU  573  N   PHE A  96    15902  24484  15670 -10910  -3569   3559       N
ATOM    574  CA  PHE A  96       1.431  18.967  37.836  1.00149.85           C
ANISOU  574  CA  PHE A  96    16146  24736  16053 -10672  -3678   3497       C
ATOM    575  C   PHE A  96       0.073  19.660  37.793  1.00159.71           C
ANISOU  575  C   PHE A  96    17571  25727  17384 -10653  -3837   3335       C
ATOM    576  O   PHE A  96      -0.961  19.005  37.665  1.00144.45           O
ANISOU  576  O   PHE A  96    15595  23732  15557 -10504  -3918   3201       O
ATOM    577  CB  PHE A  96       1.695  18.417  39.239  1.00145.33           C
ANISOU  577  CB  PHE A  96    15420  24314  15486 -10583  -3651   3473       C
ATOM    578  CG  PHE A  96       2.823  17.424  39.304  1.00155.46           C
ANISOU  578  CG  PHE A  96    16459  25870  16740 -10549  -3644   3604       C
ATOM    579  CD1 PHE A  96       2.570  16.063  39.275  1.00160.85           C
ANISOU  579  CD1 PHE A  96    17072  26605  17440 -10448  -3678   3677       C
ATOM    580  CD2 PHE A  96       4.135  17.852  39.400  1.00169.81           C
ANISOU  580  CD2 PHE A  96    18080  27896  18544 -10646  -3612   3608       C
ATOM    581  CE1 PHE A  96       3.607  15.146  39.337  1.00169.97           C
ANISOU  581  CE1 PHE A  96    18007  27979  18596 -10353  -3720   3785       C
ATOM    582  CE2 PHE A  96       5.177  16.941  39.463  1.00176.36           C
ANISOU  582  CE2 PHE A  96    18580  29013  19416 -10592  -3674   3661       C
ATOM    583  CZ  PHE A  96       4.911  15.588  39.431  1.00176.47           C
ANISOU  583  CZ  PHE A  96    18543  29060  19446 -10440  -3763   3773       C
ATOM    584  N   LEU A  97       0.078  20.985  37.897  1.00156.63           N
ANISOU  584  N   LEU A  97    17352  25188  16973 -10824  -3887   3300       N
ATOM    585  CA  LEU A  97      -1.163  21.749  37.866  1.00161.59           C
ANISOU  585  CA  LEU A  97    18148  25529  17720 -10708  -4076   3098       C
ATOM    586  C   LEU A  97      -1.732  21.805  36.453  1.00172.25           C
ANISOU  586  C   LEU A  97    19804  26629  19013 -10423  -4260   3099       C
ATOM    587  O   LEU A  97      -2.924  22.050  36.263  1.00180.12           O
ANISOU  587  O   LEU A  97    20857  27422  20159 -10162  -4505   2865       O
ATOM    588  CB  LEU A  97      -0.948  23.162  38.412  1.00159.61           C
ANISOU  588  CB  LEU A  97    18063  25128  17455 -10927  -4065   3058       C
ATOM    589  CG  LEU A  97      -1.924  23.609  39.505  1.00169.46           C
ANISOU  589  CG  LEU A  97    19189  26290  18910 -10934  -4124   2772       C
ATOM    590  CD1 LEU A  97      -1.541  24.979  40.043  1.00178.36           C
ANISOU  590  CD1 LEU A  97    20496  27271  20002 -11189  -4068   2744       C
ATOM    591  CD2 LEU A  97      -3.357  23.617  38.997  1.00149.79           C
ANISOU  591  CD2 LEU A  97    16729  23552  16633 -10569  -4357   2499       C
ATOM    592  N   ARG A  98      -0.874  21.576  35.463  1.00165.75           N
ANISOU  592  N   ARG A  98    19175  25827  17974 -10471  -4151   3318       N
ATOM    593  CA  ARG A  98      -1.312  21.518  34.075  1.00157.76           C
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ANISOU  593  CA  ARG A  98    18544  24587  16810 -10226  -4320   3345       C
ATOM    594  C   ARG A  98      -2.324  20.396  33.896  1.00154.41           C
ANISOU  594  C   ARG A  98    17865  24253  16552  -9933  -4478   3152       C
ATOM    595  O   ARG A  98      -3.364  20.575  33.262  1.00154.61           O
ANISOU  595  O   ARG A  98    18059  24074  16611  -9630  -4800   2970       O
ATOM    596  CB  ARG A  98      -0.126  21.289  33.138  1.00151.54           C
ANISOU  596  CB  ARG A  98    17974  23850  15753 -10416  -4056   3572       C
ATOM    597  CG  ARG A  98       0.921  22.387  33.159  1.00156.64           C
ANISOU  597  CG  ARG A  98    18892  24396  16229 -10789  -3812   3690       C
ATOM    598  CD  ARG A  98       1.805  22.308  31.924  1.00172.44           C
ANISOU  598  CD  ARG A  98    21266  26323  17930 -10976  -3536   3824       C
ATOM    599  NE  ARG A  98       2.821  23.356  31.895  1.00187.82           N
ANISOU  599  NE  ARG A  98    23492  28156  19715 -11423  -3204   3866       N
ATOM    600  CZ  ARG A  98       4.109  23.153  32.151  1.00204.62           C
ANISOU  600  CZ  ARG A  98    25239  30599  21907 -11796  -2808   3817       C
ATOM    601  NH1 ARG A  98       4.544  21.936  32.450  1.00208.04           N
ANISOU  601  NH1 ARG A  98    25045  31449  22550 -11702  -2752   3770       N
ATOM    602  NH2 ARG A  98       4.965  24.164  32.102  1.00216.07           N
ANISOU  602  NH2 ARG A  98    26939  31932  23228 -12258  -2469   3775       N
ATOM    603  N   PHE A  99      -2.011  19.240  34.471  1.00135.33           N
ANISOU  603  N   PHE A  99    19079  18696  13644  -8199  -5121    361       N
ATOM    604  CA  PHE A  99      -2.863  18.062  34.368  1.00135.06           C
ANISOU  604  CA  PHE A  99    18663  18614  14039  -7634  -5005    318       C
ATOM    605  C   PHE A  99      -4.145  18.222  35.181  1.00127.67           C
ANISOU  605  C   PHE A  99    18110  17660  12737  -7581  -4991    -90       C
ATOM    606  O   PHE A  99      -5.140  17.542  34.927  1.00121.91           O
ANISOU  606  O   PHE A  99    17269  16792  12261  -7057  -4836   -332       O
ATOM    607  CB  PHE A  99      -2.103  16.815  34.824  1.00141.78           C
ANISOU  607  CB  PHE A  99    18685  19833  15352  -7755  -5163    992       C
ATOM    608  CG  PHE A  99      -0.986  16.412  33.902  1.00141.46           C
ANISOU  608  CG  PHE A  99    18152  19779  15816  -7631  -5093   1376       C
ATOM    609  CD1 PHE A  99      -1.135  15.339  33.040  1.00136.15           C
ANISOU  609  CD1 PHE A  99    17059  18919  15753  -7021  -4876   1444       C
ATOM    610  CD2 PHE A  99       0.212  17.106  33.895  1.00146.96           C
ANISOU  610  CD2 PHE A  99    18815  20651  16371  -8141  -5224   1662       C
ATOM    611  CE1 PHE A  99      -0.112  14.963  32.190  1.00134.44           C
ANISOU  611  CE1 PHE A  99    16404  18672  16005  -6891  -4759   1782       C
ATOM    612  CE2 PHE A  99       1.238  16.737  33.047  1.00147.22           C
ANISOU  612  CE2 PHE A  99    18363  20689  16886  -8023  -5119   2007       C
ATOM    613  CZ  PHE A  99       1.076  15.663  32.194  1.00140.81           C
ANISOU  613  CZ  PHE A  99    17140  19672  16690  -7381  -4871   2063       C
ATOM    614  N   ILE A 100      -4.114  19.118  36.162  1.00130.55           N
ANISOU  614  N   ILE A 100    18930  18171  12500  -8146  -5139   -168       N
ATOM    615  CA  ILE A 100      -5.290  19.399  36.979  1.00137.29           C
ANISOU  615  CA  ILE A 100    20184  18988  12993  -8065  -5028   -563       C
ATOM    616  C   ILE A 100      -6.250  20.310  36.215  1.00135.01           C
ANISOU  616  C   ILE A 100    20528  18243  12527  -7565  -4760  -1239       C
ATOM    617  O   ILE A 100      -7.460  20.075  36.186  1.00126.81           O
ANISOU  617  O   ILE A 100    19585  17077  11520  -7144  -4624  -1645       O
ATOM    618  CB  ILE A 100      -4.907  20.017  38.348  1.00131.07           C
ANISOU  618  CB  ILE A 100    19616  18429  11756  -8581  -5045   -329       C
ATOM    619  CG1 ILE A 100      -4.723  18.922  39.402  1.00140.35           C
ANISOU  619  CG1 ILE A 100    20257  20009  13062  -8862  -5236    160       C
ATOM    620  CG2 ILE A 100      -5.976  20.977  38.833  1.00131.59           C
ANISOU  620  CG2 ILE A 100    20344  18262  11393  -8409  -4774   -863       C
ATOM    621  CD1 ILE A 100      -3.569  17.985  39.138  1.00133.33           C
ANISOU  621  CD1 ILE A 100    18644  19388  12626  -9034  -5500    798       C
ATOM    622  N   ARG A 101      -5.698  21.336  35.575  1.00132.37           N
ANISOU  622  N   ARG A 101    20597  17667  12029  -7592  -4681  -1338       N
ATOM    623  CA  ARG A 101      -6.503  22.269  34.798  1.00124.26           C
ANISOU  623  CA  ARG A 101    20162  16183  10869  -7069  -4424  -1910       C
ATOM    624  C   ARG A 101      -6.985  21.637  33.498  1.00124.80           C
ANISOU  624  C   ARG A 101    20102  15991  11326  -6532  -4406  -2160       C
ATOM    625  O   ARG A 101      -7.923  22.126  32.873  1.00121.53           O
ANISOU  625  O   ARG A 101    20057  15225  10893  -5965  -4206  -2640       O
ATOM    626  CB  ARG A 101      -5.712  23.542  34.499  1.00126.32           C
ANISOU  626  CB  ARG A 101    20897  16254  10845  -7280  -4341  -1891       C
ATOM    627  CG  ARG A 101      -5.322  24.339  35.733  1.00143.33           C
ANISOU  627  CG  ARG A 101    23309  18582  12567  -7793  -4325  -1705       C
ATOM    628  CD  ARG A 101      -4.820  25.724  35.355  1.00155.28           C
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ANISOU  628  CD  ARG A 101    25400  19815  13783  -7897  -4184  -1799       C
ATOM    629  NE  ARG A 101      -4.474  26.524  36.526  1.00155.08           N
ANISOU  629  NE  ARG A 101    25678  19915  13331  -8408  -4159  -1633       N
ATOM    630  CZ  ARG A 101      -3.248  26.622  37.025  1.00159.55           C
ANISOU  630  CZ  ARG A 101    26114  20765  13743  -9091  -4331  -1155       C
ATOM    631  NH1 ARG A 101      -2.243  25.972  36.455  1.00156.88           N
ANISOU  631  NH1 ARG A 101    25295  20641  13672  -9325  -4540   -788       N
ATOM    632  NH2 ARG A 101      -3.025  27.374  38.093  1.00172.12           N
ANISOU  632  NH2 ARG A 101    28041  22433  14924  -9546  -4294  -1034       N
ATOM    633  N   ALA A 102      -6.335  20.548  33.097  1.00132.70           N
ANISOU  633  N   ALA A 102    20447  17149  12825  -6507  -4476  -1738       N
ATOM    634  CA  ALA A 102      -6.695  19.838  31.873  1.00130.02           C
ANISOU  634  CA  ALA A 102    19849  16548  13004  -5847  -4309  -1846       C
ATOM    635  C   ALA A 102      -7.863  18.885  32.106  1.00130.55           C
ANISOU  635  C   ALA A 102    19609  16668  13327  -5420  -4237  -2005       C
ATOM    636  O   ALA A 102      -8.723  18.711  31.238  1.00118.50           O
ANISOU  636  O   ALA A 102    18169  14852  12001  -4838  -4093  -2365       O
ATOM    637  CB  ALA A 102      -5.495  19.082  31.325  1.00116.57           C
ANISOU  637  CB  ALA A 102    17569  14954  11767  -5928  -4322  -1316       C
ATOM    638  N   ARG A 103      -7.886  18.266  33.280  1.00114.78           N
ANISOU  638  N   ARG A 103    17262  15046  11304  -5742  -4349  -1728       N
ATOM    639  CA  ARG A 103      -8.971  17.364  33.637  1.00126.72           C
ANISOU  639  CA  ARG A 103    18491  16644  13011  -5433  -4276  -1861       C
ATOM    640  C   ARG A 103      -9.945  18.023  34.607  1.00129.78           C
ANISOU  640  C   ARG A 103    19297  17102  12912  -5564  -4253  -2255       C
ATOM    641  O   ARG A 103     -10.362  17.413  35.591  1.00115.57           O
ANISOU  641  O   ARG A 103    17255  15579  11076  -5742  -4279  -2151       O
ATOM    642  CB  ARG A 103      -8.425  16.052  34.203  1.00115.05           C
ANISOU  642  CB  ARG A 103    16319  15499  11894  -5631  -4381  -1283       C
ATOM    643  CG  ARG A 103      -7.946  15.086  33.126  1.00125.71           C
ANISOU  643  CG  ARG A 103    17204  16710  13850  -5253  -4296  -1019       C
ATOM    644  CD  ARG A 103      -9.101  14.649  32.229  1.00138.51           C
ANISOU  644  CD  ARG A 103    18862  18035  15730  -4605  -4096  -1449       C
ATOM    645  NE  ARG A 103      -8.650  13.930  31.039  1.00139.05           N
ANISOU  645  NE  ARG A 103    18649  17881  16302  -4242  -3978  -1281       N
ATOM    646  CZ  ARG A 103      -8.500  14.487  29.840  1.00135.96           C
ANISOU  646  CZ  ARG A 103    18563  17142  15953  -3964  -3868  -1512       C
ATOM    647  NH1 ARG A 103      -8.766  15.775  29.665  1.00127.77           N
ANISOU  647  NH1 ARG A 103    18123  15933  14492  -3989  -3881  -1911       N
ATOM    648  NH2 ARG A 103      -8.087  13.755  28.814  1.00136.36           N
ANISOU  648  NH2 ARG A 103    18363  16995  16455  -3663  -3731  -1347       N
ATOM    649  N   LYS A 104     -10.289  19.275  34.304  1.00129.69           N
ANISOU  649  N   LYS A 104    19939  16815  12520  -5470  -4184  -2706       N
ATOM    650  CA  LYS A 104     -11.288  20.060  35.036  1.00128.23           C
ANISOU  650  CA  LYS A 104    20244  16602  11877  -5479  -4096  -3171       C
ATOM    651  C   LYS A 104     -11.249  19.895  36.553  1.00129.80           C
ANISOU  651  C   LYS A 104    20333  17172  11812  -5984  -4127  -2942       C
ATOM    652  O   LYS A 104     -12.293  19.821  37.205  1.00120.14           O
ANISOU  652  O   LYS A 104    19153  16022  10473  -5853  -3985  -3226       O
ATOM    653  CB  LYS A 104     -12.697  19.778  34.505  1.00130.64           C
ANISOU  653  CB  LYS A 104    20504  16729  12405  -4794  -3918  -3648       C
ATOM    654  CG  LYS A 104     -12.920  20.216  33.064  1.00112.60           C
ANISOU  654  CG  LYS A 104    18472  14020  10292  -4230  -3856  -3951       C
ATOM    655  CD  LYS A 104     -14.400  20.404  32.778  1.00154.07           C
ANISOU  655  CD  LYS A 104    23875  19101  15563  -3639  -3716  -4512       C
ATOM    656  CE  LYS A 104     -14.656  20.708  31.311  1.00143.22           C
ANISOU  656  CE  LYS A 104    22655  17334  14426  -3034  -3664  -4746       C
ATOM    657  NZ  LYS A 104     -14.436  19.517  30.445  1.00129.83           N
ANISOU  657  NZ  LYS A 104    20480  15615  13233  -2834  -3717  -4516       N
ATOM    658  N   PHE A 105     -10.038  19.839  37.098  1.00143.37           N
ANISOU  658  N   PHE A 105    21901  19125  13448  -6556  -4303  -2417       N
ATOM    659  CA  PHE A 105      -9.823  19.664  38.533  1.00151.19           C
ANISOU  659  CA  PHE A 105    22792  20460  14194  -7072  -4358  -2105       C
ATOM    660  C   PHE A 105     -10.420  18.363  39.054  1.00137.80           C
ANISOU  660  C   PHE A 105    20617  19035  12704  -7094  -4426  -2000       C
ATOM    661  O   PHE A 105     -11.391  18.359  39.810  1.00132.12           O
ANISOU  661  O   PHE A 105    20024  18381  11792  -7051  -4265  -2271       O
ATOM    662  CB  PHE A 105     -10.337  20.872  39.320  1.00168.24           C
ANISOU  662  CB  PHE A 105    25537  22501  15884  -7112  -4123  -2415       C
ATOM    663  CG  PHE A 105      -9.454  22.080  39.205  1.00175.00           C
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ANISOU  663  CG  PHE A 105    26818  23193  16483  -7332  -4101  -2317       C
ATOM    664  CD1 PHE A 105      -8.737  22.537  40.298  1.00164.62           C
ANISOU  664  CD1 PHE A 105    25665  22063  14819  -7933  -4151  -1983       C
ATOM    665  CD2 PHE A 105      -9.323  22.746  37.998  1.00181.25           C
ANISOU  665  CD2 PHE A 105    27855  23640  17370  -6965  -4032  -2542       C
ATOM    666  CE1 PHE A 105      -7.916  23.641  40.192  1.00156.92           C
ANISOU  666  CE1 PHE A 105    25080  20943  13599  -8182  -4130  -1885       C
ATOM    667  CE2 PHE A 105      -8.502  23.849  37.886  1.00179.70           C
ANISOU  667  CE2 PHE A 105    28051  23296  16930  -7202  -4002  -2440       C
ATOM    668  CZ  PHE A 105      -7.795  24.295  38.984  1.00163.63           C
ANISOU  668  CZ  PHE A 105    26163  21459  14551  -7823  -4052  -2114       C
ATOM    669  N   ASN A 106      -9.820  17.259  38.627  1.00132.04           N
ANISOU  669  N   ASN A 106    19297  18433  12438  -7073  -4589  -1570       N
ATOM    670  CA  ASN A 106     -10.206  15.932  39.070  1.00127.03           C
ANISOU  670  CA  ASN A 106    18125  18015  12125  -6998  -4590  -1331       C
ATOM    671  C   ASN A 106      -8.935  15.117  39.244  1.00129.19           C
ANISOU  671  C   ASN A 106    17871  18528  12686  -7319  -4842   -607       C
ATOM    672  O   ASN A 106      -8.233  14.847  38.271  1.00130.16           O
ANISOU  672  O   ASN A 106    17715  18523  13216  -7072  -4856   -389       O
ATOM    673  CB  ASN A 106     -11.120  15.275  38.036  1.00128.16           C
ANISOU  673  CB  ASN A 106    18034  17920  12742  -6270  -4374  -1636       C
ATOM    674  CG  ASN A 106     -11.787  14.018  38.557  1.00138.94           C
ANISOU  674  CG  ASN A 106    18967  19476  14349  -6198  -4324  -1519       C
ATOM    675  OD1 ASN A 106     -11.139  12.988  38.744  1.00148.77           O
ANISOU  675  OD1 ASN A 106    19742  20886  15899  -6339  -4456   -990       O
ATOM    676  ND2 ASN A 106     -13.095  14.092  38.779  1.00140.51           N
ANISOU  676  ND2 ASN A 106    19321  19647  14421  -5969  -4123  -2011       N
ATOM    677  N   VAL A 107      -8.635  14.739  40.482  1.00138.80           N
ANISOU  677  N   VAL A 107    18963  20089  13688  -7866  -5036   -230       N
ATOM    678  CA  VAL A 107      -7.374  14.072  40.796  1.00153.09           C
ANISOU  678  CA  VAL A 107    20287  22163  15716  -8226  -5329    497       C
ATOM    679  C   VAL A 107      -7.234  12.731  40.082  1.00152.75           C
ANISOU  679  C   VAL A 107    19610  22062  16367  -7749  -5280    807       C
ATOM    680  O   VAL A 107      -6.156  12.388  39.594  1.00144.79           O
ANISOU  680  O   VAL A 107    18210  21085  15717  -7733  -5402   1264       O
ATOM    681  CB  VAL A 107      -7.211  13.858  42.310  1.00166.68           C
ANISOU  681  CB  VAL A 107    22026  24202  17104  -8750  -5457    848       C
ATOM    682  CG1 VAL A 107      -5.759  13.560  42.648  1.00167.77           C
ANISOU  682  CG1 VAL A 107    21785  24574  17384  -9088  -5728   1589       C
ATOM    683  CG2 VAL A 107      -7.687  15.084  43.064  1.00177.37           C
ANISOU  683  CG2 VAL A 107    24062  25489  17841  -8968  -5267    456       C
ATOM    684  N   GLY A 108      -8.327  11.977  40.024  1.00123.58           N
ANISOU  684  N   GLY A 108    15820  18277  12856  -7371  -5083    552       N
ATOM    685  CA  GLY A 108      -8.328  10.692  39.351  1.00121.63           C
ANISOU  685  CA  GLY A 108    15058  17928  13228  -6919  -5001    788       C
ATOM    686  C   GLY A 108      -8.120  10.835  37.856  1.00139.54           C
ANISOU  686  C   GLY A 108    17280  19858  15880  -6386  -4830    615       C
ATOM    687  O   GLY A 108      -7.230  10.205  37.282  1.00135.43           O
ANISOU  687  O   GLY A 108    16354  19299  15805  -6242  -4866   1040       O
ATOM    688  N   ARG A 109      -8.944  11.671  37.230  1.00134.06           N
ANISOU  688  N   ARG A 109    17019  18911  15007  -6087  -4636     -8       N
ATOM    689  CA  ARG A 109      -8.856  11.924  35.795  1.00126.91           C
ANISOU  689  CA  ARG A 109    16180  17653  14386  -5598  -4475   -237       C
ATOM    690  C   ARG A 109      -7.494  12.485  35.405  1.00127.64           C
ANISOU  690  C   ARG A 109    16251  17744  14502  -5819  -4592     90       C
ATOM    691  O   ARG A 109      -6.956  12.147  34.352  1.00137.69           O
ANISOU  691  O   ARG A 109    17311  18819  16185  -5504  -4494    222       O
ATOM    692  CB  ARG A 109      -9.955  12.894  35.355  1.00131.13           C
ANISOU  692  CB  ARG A 109    17249  17945  14632  -5308  -4308   -945       C
ATOM    693  CG  ARG A 109     -11.363  12.383  35.580  1.00146.47           C
ANISOU  693  CG  ARG A 109    19170  19886  16596  -5032  -4161  -1318       C
ATOM    694  CD  ARG A 109     -11.696  11.240  34.640  1.00170.12           C
ANISOU  694  CD  ARG A 109    21802  22701  20136  -4539  -4030  -1290       C
ATOM    695  NE  ARG A 109     -12.727  10.371  35.199  1.00192.60           N
ANISOU  695  NE  ARG A 109    24448  25683  23047  -4482  -3952  -1396       N
ATOM    696  CZ  ARG A 109     -14.033  10.596  35.106  1.00203.81           C
ANISOU  696  CZ  ARG A 109    26043  27044  24353  -4218  -3807  -1938       C
ATOM    697  NH1 ARG A 109     -14.481  11.671  34.472  1.00217.38           N
ANISOU  697  NH1 ARG A 109    28156  28548  25890  -3947  -3743  -2418       N
ATOM    698  NH2 ARG A 109     -14.892   9.746  35.650  1.00196.58           N
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ANISOU  698  NH2 ARG A 109    24901  26285  23505  -4227  -3729  -1992       N
ATOM    699  N   ALA A 110      -6.944  13.342  36.260  1.00126.35           N
ANISOU  699  N   ALA A 110    16320  17805  13883  -6387  -4787    212       N
ATOM    700  CA  ALA A 110      -5.661  13.981  35.990  1.00128.83           C
ANISOU  700  CA  ALA A 110    16633  18165  14154  -6693  -4915    509       C
ATOM    701  C   ALA A 110      -4.524  12.966  35.923  1.00133.30           C
ANISOU  701  C   ALA A 110    16515  18916  15217  -6750  -5034   1198       C
ATOM    702  O   ALA A 110      -3.635  13.077  35.082  1.00121.66           O
ANISOU  702  O   ALA A 110    14871  17345  14009  -6658  -4986   1382       O
ATOM    703  CB  ALA A 110      -5.365  15.040  37.032  1.00123.18           C
ANISOU  703  CB  ALA A 110    16320  17673  12809  -7355  -5120    511       C
ATOM    704  N   TYR A 111      -4.556  11.977  36.810  1.00133.91           N
ANISOU  704  N   TYR A 111    16206  19252  15420  -6893  -5175   1579       N
ATOM    705  CA  TYR A 111      -3.535  10.933  36.818  1.00138.39           C
ANISOU  705  CA  TYR A 111    16110  19988  16485  -6896  -5296   2258       C
ATOM    706  C   TYR A 111      -3.644  10.040  35.584  1.00136.45           C
ANISOU  706  C   TYR A 111    15576  19417  16854  -6226  -5010   2228       C
ATOM    707  O   TYR A 111      -2.634   9.582  35.047  1.00133.02           O
ANISOU  707  O   TYR A 111    14706  18980  16857  -6109  -4992   2652       O
ATOM    708  CB  TYR A 111      -3.630  10.089  38.092  1.00138.88           C
ANISOU  708  CB  TYR A 111    15905  20368  16495  -7200  -5527   2659       C
ATOM    709  CG  TYR A 111      -2.629   8.957  38.145  1.00141.47           C
ANISOU  709  CG  TYR A 111    15547  20851  17353  -7151  -5667   3382       C
ATOM    710  CD1 TYR A 111      -1.294   9.199  38.435  1.00150.74           C
ANISOU  710  CD1 TYR A 111    16395  22313  18566  -7548  -5941   3933       C
ATOM    711  CD2 TYR A 111      -3.019   7.646  37.903  1.00142.37           C
ANISOU  711  CD2 TYR A 111    15339  20821  17933  -6705  -5525   3521       C
ATOM    712  CE1 TYR A 111      -0.373   8.169  38.481  1.00158.58           C
ANISOU  712  CE1 TYR A 111    16723  23452  20078  -7455  -6069   4611       C
ATOM    713  CE2 TYR A 111      -2.105   6.609  37.949  1.00149.95           C
ANISOU  713  CE2 TYR A 111    15699  21886  19390  -6615  -5635   4187       C
ATOM    714  CZ  TYR A 111      -0.784   6.876  38.237  1.00159.55           C
ANISOU  714  CZ  TYR A 111    16564  23394  20666  -6966  -5908   4735       C
ATOM    715  OH  TYR A 111       0.130   5.848  38.284  1.00168.19           O
ANISOU  715  OH  TYR A 111    17021  24597  22287  -6831  -6019   5414       O
ATOM    716  N   GLU A 112      -4.875   9.797  35.141  1.00133.57           N
ANISOU  716  N   GLU A 112    15453  18781  16515  -5799  -4780   1726       N
ATOM    717  CA  GLU A 112      -5.114   8.985  33.955  1.00136.26           C
ANISOU  717  CA  GLU A 112    15620  18782  17371  -5191  -4503   1632       C
ATOM    718  C   GLU A 112      -4.523   9.658  32.724  1.00138.65           C
ANISOU  718  C   GLU A 112    16066  18823  17793  -4988  -4343   1486       C
ATOM    719  O   GLU A 112      -4.010   8.992  31.824  1.00143.41           O
ANISOU  719  O   GLU A 112    16378  19233  18879  -4648  -4165   1684       O
ATOM    720  CB  GLU A 112      -6.612   8.746  33.759  1.00142.72           C
ANISOU  720  CB  GLU A 112    16714  19397  18116  -4847  -4327   1080       C
ATOM    721  CG  GLU A 112      -7.267   7.973  34.891  1.00150.78           C
ANISOU  721  CG  GLU A 112    17593  20649  19049  -5027  -4427   1200       C
ATOM    722  CD  GLU A 112      -6.700   6.575  35.050  1.00151.69           C
ANISOU  722  CD  GLU A 112    17175  20823  19638  -4951  -4458   1789       C
ATOM    723  OE1 GLU A 112      -6.373   5.943  34.022  1.00138.84           O
ANISOU  723  OE1 GLU A 112    15340  18931  18484  -4535  -4271   1894       O
ATOM    724  OE2 GLU A 112      -6.577   6.109  36.203  1.00160.84           O
ANISOU  724  OE2 GLU A 112    18155  22273  20684  -5307  -4664   2152       O
ATOM    725  N   LEU A 113      -4.600  10.984  32.695  1.00136.91           N
ANISOU  725  N   LEU A 113    16332  18576  17112  -5207  -4387   1133       N
ATOM    726  CA  LEU A 113      -4.004  11.763  31.622  1.00131.81           C
ANISOU  726  CA  LEU A 113    15900  17695  16488  -5110  -4257    992       C
ATOM    727  C   LEU A 113      -2.490  11.609  31.682  1.00122.52           C
ANISOU  727  C   LEU A 113    14253  16742  15557  -5400  -4355   1608       C
ATOM    728  O   LEU A 113      -1.822  11.514  30.653  1.00117.78           O
ANISOU  728  O   LEU A 113    13512  15949  15290  -5174  -4163   1700       O
ATOM    729  CB  LEU A 113      -4.385  13.237  31.767  1.00114.43           C
ANISOU  729  CB  LEU A 113    14359  15436  13684  -5353  -4318    525       C
ATOM    730  CG  LEU A 113      -4.744  14.008  30.496  1.00114.41           C
ANISOU  730  CG  LEU A 113    14859  15001  13610  -4993  -4107     14       C
ATOM    731  CD1 LEU A 113      -5.039  15.464  30.823  1.00115.01           C
ANISOU  731  CD1 LEU A 113    15597  15038  13065  -5280  -4196   -381       C
ATOM    732  CD2 LEU A 113      -3.644  13.906  29.455  1.00112.66           C
ANISOU  732  CD2 LEU A 113    14435  14633  13738  -4901  -3965    270       C
ATOM    733  N   LEU A 114      -1.960  11.578  32.901  1.00121.07           N
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ANISOU  733  N   LEU A 114    13819  16976  15205  -5913  -4655   2033       N
ATOM    734  CA  LEU A 114      -0.525  11.450  33.119  1.00124.96           C
ANISOU  734  CA  LEU A 114    13803  17762  15914  -6244  -4814   2663       C
ATOM    735  C   LEU A 114      -0.027  10.081  32.672  1.00128.05           C
ANISOU  735  C   LEU A 114    13543  18109  17002  -5837  -4680   3115       C
ATOM    736  O   LEU A 114       1.095   9.946  32.182  1.00129.75           O
ANISOU  736  O   LEU A 114    13351  18379  17570  -5829  -4621   3494       O
ATOM    737  CB  LEU A 114      -0.183  11.693  34.589  1.00130.27           C
ANISOU  737  CB  LEU A 114    14390  18898  16210  -6902  -5212   3011       C
ATOM    738  CG  LEU A 114       1.295  11.623  34.976  1.00142.90           C
ANISOU  738  CG  LEU A 114    15434  20881  17982  -7327  -5464   3700       C
ATOM    739  CD1 LEU A 114       2.124  12.559  34.112  1.00146.40           C
ANISOU  739  CD1 LEU A 114    15987  21242  18398  -7448  -5348   3623       C
ATOM    740  CD2 LEU A 114       1.474  11.953  36.449  1.00144.47           C
ANISOU  740  CD2 LEU A 114    15674  21513  17703  -8020  -5886   3974       C
ATOM    741  N   ARG A 115      -0.867   9.067  32.843  1.00135.92           N
ANISOU  741  N   ARG A 115    14450  18999  18192  -5504  -4610   3069       N
ATOM    742  CA  ARG A 115      -0.543   7.732  32.363  1.00158.81           C
ANISOU  742  CA  ARG A 115    16837  21770  21733  -5063  -4436   3433       C
ATOM    743  C   ARG A 115      -0.463   7.737  30.841  1.00173.73           C
ANISOU  743  C   ARG A 115    18838  23232  23938  -4578  -4043   3159       C
ATOM    744  O   ARG A 115       0.462   7.172  30.258  1.00180.61           O
ANISOU  744  O   ARG A 115    19276  24047  25300  -4373  -3881   3535       O
ATOM    745  CB  ARG A 115      -1.586   6.721  32.836  1.00164.46           C
ANISOU  745  CB  ARG A 115    17551  22420  22514  -4845  -4426   3364       C
ATOM    746  CG  ARG A 115      -1.651   6.551  34.342  1.00166.17           C
ANISOU  746  CG  ARG A 115    17651  23040  22447  -5317  -4790   3679       C
ATOM    747  CD  ARG A 115      -2.677   5.500  34.724  1.00172.54           C
ANISOU  747  CD  ARG A 115    18466  23755  23338  -5099  -4734   3604       C
ATOM    748  NE  ARG A 115      -2.308   4.171  34.245  1.00182.01           N
ANISOU  748  NE  ARG A 115    19225  24776  25154  -4675  -4573   3992       N
ATOM    749  CZ  ARG A 115      -1.714   3.245  34.991  1.00193.49           C
ANISOU  749  CZ  ARG A 115    20226  26433  26858  -4772  -4766   4624       C
ATOM    750  NH1 ARG A 115      -1.420   3.500  36.259  1.00202.93           N
ANISOU  750  NH1 ARG A 115    21343  28037  27723  -5311  -5154   4948       N
ATOM    751  NH2 ARG A 115      -1.415   2.062  34.471  1.00192.75           N
ANISOU  751  NH2 ARG A 115    19791  26113  27331  -4331  -4574   4937       N
ATOM    752  N   GLY A 116      -1.433   8.386  30.205  1.00175.16           N
ANISOU  752  N   GLY A 116    19611  23111  23833  -4394  -3887   2507       N
ATOM    753  CA  GLY A 116      -1.451   8.510  28.760  1.00169.30           C
ANISOU  753  CA  GLY A 116    19089  21942  23294  -3979  -3542   2193       C
ATOM    754  C   GLY A 116      -0.346   9.425  28.271  1.00157.74           C
ANISOU  754  C   GLY A 116    17640  20516  21777  -4215  -3503   2296       C
ATOM    755  O   GLY A 116       0.108   9.317  27.131  1.00156.72           O
ANISOU  755  O   GLY A 116    17495  20105  21946  -3931  -3201   2265       O
ATOM    756  N   TYR A 117       0.083  10.332  29.142  1.00144.29           N
ANISOU  756  N   TYR A 117    15997  19160  19669  -4772  -3798   2413       N
ATOM    757  CA  TYR A 117       1.190  11.228  28.841  1.00142.18           C
ANISOU  757  CA  TYR A 117    15718  18998  19307  -5111  -3804   2556       C
ATOM    758  C   TYR A 117       2.469  10.424  28.665  1.00144.86           C
ANISOU  758  C   TYR A 117    15306  19509  20227  -5067  -3723   3194       C
ATOM    759  O   TYR A 117       3.107  10.468  27.612  1.00142.47           O
ANISOU  759  O   TYR A 117    14924  19003  20207  -4875  -3424   3206       O
ATOM    760  CB  TYR A 117       1.362  12.253  29.966  1.00149.88           C
ANISOU  760  CB  TYR A 117    16897  20339  19709  -5774  -4172   2595       C
ATOM    761  CG  TYR A 117       2.491  13.241  29.751  1.00159.62           C
ANISOU  761  CG  TYR A 117    18152  21717  20780  -6222  -4213   2742       C
ATOM    762  CD1 TYR A 117       2.281  14.423  29.054  1.00159.63           C
ANISOU  762  CD1 TYR A 117    18827  21437  20389  -6290  -4085   2243       C
ATOM    763  CD2 TYR A 117       3.762  12.998  30.257  1.00163.90           C
ANISOU  763  CD2 TYR A 117    18041  22681  21552  -6593  -4394   3389       C
ATOM    764  CE1 TYR A 117       3.303  15.330  28.857  1.00161.17           C
ANISOU  764  CE1 TYR A 117    19075  21753  20407  -6743  -4111   2368       C
ATOM    765  CE2 TYR A 117       4.791  13.900  30.065  1.00167.26           C
ANISOU  765  CE2 TYR A 117    18458  23268  21825  -7048  -4431   3523       C
ATOM    766  CZ  TYR A 117       4.555  15.065  29.365  1.00166.47           C
ANISOU  766  CZ  TYR A 117    19067  22871  21314  -7139  -4279   3003       C
ATOM    767  OH  TYR A 117       5.573  15.969  29.168  1.00174.27           O
ANISOU  767  OH  TYR A 117    20083  24009  22124  -7632  -4303   3128       O
ATOM    768  N   VAL A 118       2.834   9.687  29.709  1.00154.29           N
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ANISOU  768  N   VAL A 118    15955  21073  21597  -5239  -3985   3729       N
ATOM    769  CA  VAL A 118       4.050   8.886  29.702  1.00161.52           C
ANISOU  769  CA  VAL A 118    16089  22198  23082  -5186  -3960   4398       C
ATOM    770  C   VAL A 118       3.999   7.818  28.615  1.00164.50           C
ANISOU  770  C   VAL A 118    16274  22171  24058  -4510  -3523   4396       C
ATOM    771  O   VAL A 118       4.967   7.622  27.880  1.00172.09           O
ANISOU  771  O   VAL A 118    16863  23083  25442  -4356  -3268   4653       O
ATOM    772  CB  VAL A 118       4.284   8.211  31.069  1.00159.07           C
ANISOU  772  CB  VAL A 118    15290  22320  22827  -5448  -4360   4962       C
ATOM    773  CG1 VAL A 118       5.552   7.372  31.041  1.00165.53           C
ANISOU  773  CG1 VAL A 118    15266  23351  24276  -5336  -4348   5680       C
ATOM    774  CG2 VAL A 118       4.355   9.258  32.171  1.00150.90           C
ANISOU  774  CG2 VAL A 118    14490  21681  21164  -6166  -4791   4970       C
ATOM    775  N   ASN A 119       2.857   7.145  28.511  1.00152.39           N
ANISOU  775  N   ASN A 119    15011  20346  22544  -4130  -3418   4094       N
ATOM    776  CA  ASN A 119       2.682   6.066  27.546  1.00149.79           C
ANISOU  776  CA  ASN A 119    14578  19604  22731  -3516  -3015   4068       C
ATOM    777  C   ASN A 119       2.817   6.541  26.100  1.00166.97           C
ANISOU  777  C   ASN A 119    17091  21378  24973  -3265  -2606   3686       C
ATOM    778  O   ASN A 119       3.170   5.760  25.216  1.00182.83           O
ANISOU  778  O   ASN A 119    18904  23096  27468  -2841  -2229   3798       O
ATOM    779  CB  ASN A 119       1.334   5.374  27.757  1.00135.25           C
ANISOU  779  CB  ASN A 119    13035  17551  20803  -3250  -3019   3763       C
ATOM    780  CG  ASN A 119       1.182   4.119  26.916  1.00134.72           C
ANISOU  780  CG  ASN A 119    12842  17081  21265  -2671  -2639   3811       C
ATOM    781  OD1 ASN A 119       2.162   3.442  26.605  1.00126.72           O
ANISOU  781  OD1 ASN A 119    11340  16044  20763  -2470  -2449   4268       O
ATOM    782  ND2 ASN A 119      -0.053   3.804  26.543  1.00138.75           N
ANISOU  782  ND2 ASN A 119    13795  17269  21653  -2405  -2519   3337       N
ATOM    783  N   PHE A 120       2.540   7.820  25.864  1.00163.26           N
ANISOU  783  N   PHE A 120    17166  20868  23997  -3532  -2668   3238       N
ATOM    784  CA  PHE A 120       2.658   8.381  24.521  1.00163.70           C
ANISOU  784  CA  PHE A 120    17622  20539  24038  -3352  -2315   2865       C
ATOM    785  C   PHE A 120       4.108   8.381  24.049  1.00163.79           C
ANISOU  785  C   PHE A 120    17148  20657  24427  -3428  -2098   3287       C
ATOM    786  O   PHE A 120       4.393   8.086  22.888  1.00154.32           O
ANISOU  786  O   PHE A 120    15997  19103  23535  -3089  -1670   3196       O
ATOM    787  CB  PHE A 120       2.084   9.798  24.463  1.00165.38           C
ANISOU  787  CB  PHE A 120    18542  20693  23602  -3644  -2465   2331       C
ATOM    788  CG  PHE A 120       2.131  10.410  23.091  1.00162.33           C
ANISOU  788  CG  PHE A 120    18651  19882  23145  -3473  -2133   1932       C
ATOM    789  CD1 PHE A 120       1.239  10.009  22.110  1.00158.83           C
ANISOU  789  CD1 PHE A 120    18619  18957  22773  -2988  -1878   1512       C
ATOM    790  CD2 PHE A 120       3.067  11.382  22.782  1.00163.50           C
ANISOU  790  CD2 PHE A 120    18875  20114  23133  -3829  -2085   1982       C
ATOM    791  CE1 PHE A 120       1.280  10.563  20.846  1.00155.02           C
ANISOU  791  CE1 PHE A 120    18634  18071  22197  -2850  -1592   1157       C
ATOM    792  CE2 PHE A 120       3.112  11.942  21.520  1.00164.91           C
ANISOU  792  CE2 PHE A 120    19554  19884  23219  -3695  -1774   1618       C
ATOM    793  CZ  PHE A 120       2.218  11.533  20.551  1.00160.76           C
ANISOU  793  CZ  PHE A 120    19456  18867  22758  -3199  -1532   1208       C
ATOM    794  N   ARG A 121       5.020   8.714  24.956  1.00177.75           N
ANISOU  794  N   ARG A 121    18448  22925  26164  -3895  -2391   3749       N
ATOM    795  CA  ARG A 121       6.445   8.674  24.654  1.00188.88           C
ANISOU  795  CA  ARG A 121    19265  24532  27967  -4003  -2227   4217       C
ATOM    796  C   ARG A 121       6.911   7.236  24.467  1.00193.62           C
ANISOU  796  C   ARG A 121    19210  25068  29289  -3519  -1978   4681       C
ATOM    797  O   ARG A 121       7.836   6.966  23.701  1.00200.96           O
ANISOU  797  O   ARG A 121    19775  25918  30663  -3333  -1610   4902       O
ATOM    798  CB  ARG A 121       7.248   9.350  25.764  1.00189.59           C
ANISOU  798  CB  ARG A 121    18993  25215  27827  -4659  -2667   4622       C
ATOM    799  CG  ARG A 121       7.207  10.863  25.708  1.00194.15           C
ANISOU  799  CG  ARG A 121    20170  25832  27766  -5175  -2796   4234       C
ATOM    800  CD  ARG A 121       7.963  11.480  26.870  1.00212.11           C
ANISOU  800  CD  ARG A 121    22119  28696  29778  -5873  -3255   4641       C
ATOM    801  NE  ARG A 121       8.276  12.885  26.627  1.00223.22           N
ANISOU  801  NE  ARG A 121    24005  30131  30678  -6386  -3286   4364       N
ATOM    802  CZ  ARG A 121       7.405  13.880  26.762  1.00222.51           C
ANISOU  802  CZ  ARG A 121    24745  29864  29934  -6601  -3419   3824       C
ATOM    803  NH1 ARG A 121       6.159  13.625  27.134  1.00214.64           N
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ANISOU  803  NH1 ARG A 121    24142  28681  28730  -6343  -3525   3497       N
ATOM    804  NH2 ARG A 121       7.779  15.129  26.520  1.00225.49           N
ANISOU  804  NH2 ARG A 121    25564  30245  29867  -7071  -3430   3610       N
ATOM    805  N   LEU A 122       6.262   6.317  25.173  1.00185.80           N
ANISOU  805  N   LEU A 122    18092  24097  28405  -3316  -2159   4820       N
ATOM    806  CA  LEU A 122       6.583   4.902  25.066  1.00184.13           C
ANISOU  806  CA  LEU A 122    17343  23774  28845  -2834  -1941   5246       C
ATOM    807  C   LEU A 122       6.036   4.329  23.762  1.00185.34           C
ANISOU  807  C   LEU A 122    17892  23307  29224  -2267  -1410   4847       C
ATOM    808  O   LEU A 122       6.689   3.516  23.108  1.00189.70           O
ANISOU  808  O   LEU A 122    18082  23659  30335  -1876  -1011   5112       O
ATOM    809  CB  LEU A 122       6.018   4.136  26.262  1.00177.19           C
ANISOU  809  CB  LEU A 122    16286  23094  27945  -2849  -2317   5506       C
ATOM    810  CG  LEU A 122       6.356   4.711  27.640  1.00167.39           C
ANISOU  810  CG  LEU A 122    14790  22443  26369  -3458  -2890   5843       C
ATOM    811  CD1 LEU A 122       5.785   3.836  28.746  1.00177.60           C
ANISOU  811  CD1 LEU A 122    15941  23875  27662  -3439  -3209   6104       C
ATOM    812  CD2 LEU A 122       7.858   4.884  27.805  1.00153.70           C
ANISOU  812  CD2 LEU A 122    12333  21114  24951  -3695  -2965   6441       C
ATOM    813  N   GLN A 123       4.834   4.760  23.391  1.00184.57           N
ANISOU  813  N   GLN A 123    18543  22902  28683  -2226  -1406   4213       N
ATOM    814  CA  GLN A 123       4.217   4.328  22.142  1.00191.51           C
ANISOU  814  CA  GLN A 123    19889  23194  29682  -1757   -959   3784       C
ATOM    815  C   GLN A 123       4.993   4.855  20.941  1.00193.27           C
ANISOU  815  C   GLN A 123    20226  23191  30015  -1709   -540   3661       C
ATOM    816  O   GLN A 123       5.089   4.188  19.911  1.00194.71           O
ANISOU  816  O   GLN A 123    20491  22948  30542  -1293    -66   3588       O
ATOM    817  CB  GLN A 123       2.759   4.795  22.068  1.00196.43           C
ANISOU  817  CB  GLN A 123    21255  23603  29775  -1769  -1119   3144       C
ATOM    818  CG  GLN A 123       1.776   3.932  22.850  1.00200.35           C
ANISOU  818  CG  GLN A 123    21732  24128  30263  -1644  -1333   3157       C
ATOM    819  CD  GLN A 123       1.408   2.651  22.121  1.00202.36           C
ANISOU  819  CD  GLN A 123    22024  23935  30926  -1127   -963   3134       C
ATOM    820  OE1 GLN A 123       1.414   2.599  20.891  1.00202.32           O
ANISOU  820  OE1 GLN A 123    22335  23503  31036   -854   -566   2865       O
ATOM    821  NE2 GLN A 123       1.085   1.610  22.880  1.00200.64           N
ANISOU  821  NE2 GLN A 123    21530  23798  30905  -1018  -1086   3416       N
ATOM    822  N   TYR A 124       5.548   6.055  21.080  1.00192.54           N
ANISOU  822  N   TYR A 124    20177  23374  29606  -2165   -701   3633       N
ATOM    823  CA  TYR A 124       6.287   6.679  19.989  1.00193.94           C
ANISOU  823  CA  TYR A 124    20504  23365  29818  -2207   -320   3498       C
ATOM    824  C   TYR A 124       7.599   7.285  20.474  1.00201.52           C
ANISOU  824  C   TYR A 124    20890  24826  30852  -2659   -444   3949       C
ATOM    825  O   TYR A 124       7.634   8.437  20.909  1.00202.99           O
ANISOU  825  O   TYR A 124    21313  25268  30544  -3166   -758   3815       O
ATOM    826  CB  TYR A 124       5.427   7.739  19.299  1.00185.22           C
ANISOU  826  CB  TYR A 124    20314  21935  28125  -2310   -322   2813       C
ATOM    827  CG  TYR A 124       4.100   7.201  18.818  1.00176.72           C
ANISOU  827  CG  TYR A 124    19786  20406  26955  -1900   -247   2363       C
ATOM    828  CD1 TYR A 124       4.032   6.342  17.730  1.00177.40           C
ANISOU  828  CD1 TYR A 124    19994  20016  27394  -1437    229   2266       C
ATOM    829  CD2 TYR A 124       2.916   7.546  19.457  1.00168.16           C
ANISOU  829  CD2 TYR A 124    19090  19376  25426  -1991   -642   2036       C
ATOM    830  CE1 TYR A 124       2.822   5.842  17.289  1.00171.09           C
ANISOU  830  CE1 TYR A 124    19692  18822  26492  -1110    272   1866       C
ATOM    831  CE2 TYR A 124       1.700   7.051  19.022  1.00163.42           C
ANISOU  831  CE2 TYR A 124    18934  18404  24753  -1638   -589   1637       C
ATOM    832  CZ  TYR A 124       1.660   6.200  17.937  1.00162.00           C
ANISOU  832  CZ  TYR A 124    18868  17770  24915  -1215   -150   1559       C
ATOM    833  OH  TYR A 124       0.455   5.702  17.496  1.00153.26           O
ANISOU  833  OH  TYR A 124    18203  16309  23720   -910   -120   1170       O
ATOM    834  N   PRO A 125       8.685   6.501  20.403  1.00206.01           N
ANISOU  834  N   PRO A 125    20696  25536  32044  -2478   -194   4492       N
ATOM    835  CA  PRO A 125      10.018   6.945  20.815  1.00212.48           C
ANISOU  835  CA  PRO A 125    20838  26864  33030  -2877   -288   4983       C
ATOM    836  C   PRO A 125      10.704   7.769  19.731  1.00210.55           C
ANISOU  836  C   PRO A 125    20804  26472  32722  -3041    117   4767       C
ATOM    837  O   PRO A 125      11.687   8.452  20.014  1.00212.48           O
ANISOU  837  O   PRO A 125    20654  27140  32939  -3505      8   5045       O
ATOM    838  CB  PRO A 125      10.766   5.628  21.013  1.00217.08           C
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ANISOU  838  CB  PRO A 125    20553  27558  34369  -2473   -110   5608       C
ATOM    839  CG  PRO A 125      10.138   4.709  20.026  1.00212.62           C
ANISOU  839  CG  PRO A 125    20357  26362  34068  -1842    385   5317       C
ATOM    840  CD  PRO A 125       8.680   5.088  19.983  1.00204.55           C
ANISOU  840  CD  PRO A 125    20226  25039  32457  -1867    181   4692       C
ATOM    841  N   GLU A 126      10.183   7.714  18.509  1.00206.64           N
ANISOU  841  N   GLU A 126    20947  25388  32178  -2702    570   4277       N
ATOM    842  CA  GLU A 126      10.807   8.404  17.382  1.00208.91           C
ANISOU  842  CA  GLU A 126    21496  25467  32412  -2826   1017   4056       C
ATOM    843  C   GLU A 126      10.597   9.917  17.421  1.00210.83           C
ANISOU  843  C   GLU A 126    22376  25790  31940  -3402    742   3672       C
ATOM    844  O   GLU A 126      10.977  10.626  16.488  1.00212.91           O
ANISOU  844  O   GLU A 126    23016  25842  32038  -3562   1071   3418       O
ATOM    845  CB  GLU A 126      10.303   7.838  16.050  1.00202.69           C
ANISOU  845  CB  GLU A 126    21251  23995  31766  -2299   1582   3658       C
ATOM    846  CG  GLU A 126       8.821   8.064  15.786  1.00188.89           C
ANISOU  846  CG  GLU A 126    20436  21825  29507  -2164   1406   3047       C
ATOM    847  CD  GLU A 126       7.948   6.972  16.371  1.00177.68           C
ANISOU  847  CD  GLU A 126    18900  20339  28270  -1781   1212   3123       C
ATOM    848  OE1 GLU A 126       6.710   7.135  16.366  1.00168.18           O
ANISOU  848  OE1 GLU A 126    18337  18898  26663  -1707    989   2675       O
ATOM    849  OE2 GLU A 126       8.497   5.949  16.830  1.00177.05           O
ANISOU  849  OE2 GLU A 126    18088  20441  28741  -1551   1286   3634       O
ATOM    850  N   LEU A 127       9.996  10.408  18.499  1.00210.44           N
ANISOU  850  N   LEU A 127    22480  26024  31455  -3717    160   3628       N
ATOM    851  CA  LEU A 127       9.732  11.833  18.639  1.00212.29           C
ANISOU  851  CA  LEU A 127    23363  26312  30986  -4248   -121   3264       C
ATOM    852  C   LEU A 127      10.461  12.424  19.843  1.00220.82           C
ANISOU  852  C   LEU A 127    23952  28043  31905  -4877   -581   3678       C
ATOM    853  O   LEU A 127      10.435  13.636  20.058  1.00219.77           O
ANISOU  853  O   LEU A 127    24294  28011  31198  -5400   -815   3452       O
ATOM    854  CB  LEU A 127       8.227  12.087  18.767  1.00201.19           C
ANISOU  854  CB  LEU A 127    22765  24593  29087  -4091   -383   2726       C
ATOM    855  CG  LEU A 127       7.320  11.437  17.719  1.00190.69           C
ANISOU  855  CG  LEU A 127    21931  22651  27873  -3486    -40   2317       C
ATOM    856  CD1 LEU A 127       5.862  11.786  17.979  1.00178.02           C
ANISOU  856  CD1 LEU A 127    21030  20839  25769  -3394   -369   1821       C
ATOM    857  CD2 LEU A 127       7.729  11.846  16.313  1.00192.47           C
ANISOU  857  CD2 LEU A 127    22589  22462  28081  -3432    459   2046       C
ATOM    858  N   PHE A 128      11.115  11.567  20.624  1.00227.49           N
ANISOU  858  N   PHE A 128    23877  29317  33243  -4835   -719   4293       N
ATOM    859  CA  PHE A 128      11.735  12.006  21.872  1.00231.23           C
ANISOU  859  CA  PHE A 128    23861  30433  33563  -5433  -1228   4728       C
ATOM    860  C   PHE A 128      13.130  11.427  22.115  1.00230.89           C
ANISOU  860  C   PHE A 128    22720  30860  34146  -5503  -1158   5442       C
ATOM    861  O   PHE A 128      13.812  11.829  23.058  1.00234.33           O
ANISOU  861  O   PHE A 128    22690  31865  34479  -6053  -1571   5849       O
ATOM    862  CB  PHE A 128      10.825  11.676  23.059  1.00229.62           C
ANISOU  862  CB  PHE A 128    23725  30382  33139  -5427  -1733   4764       C
ATOM    863  CG  PHE A 128       9.457  12.291  22.965  1.00221.58           C
ANISOU  863  CG  PHE A 128    23700  28982  31509  -5385  -1845   4094       C
ATOM    864  CD1 PHE A 128       9.230  13.580  23.421  1.00220.60           C
ANISOU  864  CD1 PHE A 128    24140  28979  30698  -5953  -2161   3820       C
ATOM    865  CD2 PHE A 128       8.397  11.581  22.422  1.00212.63           C
ANISOU  865  CD2 PHE A 128    22933  27368  30488  -4779  -1634   3745       C
ATOM    866  CE1 PHE A 128       7.973  14.150  23.337  1.00213.22           C
ANISOU  866  CE1 PHE A 128    24090  27691  29232  -5865  -2252   3214       C
ATOM    867  CE2 PHE A 128       7.138  12.146  22.335  1.00205.41           C
ANISOU  867  CE2 PHE A 128    22867  26136  29043  -4722  -1752   3147       C
ATOM    868  CZ  PHE A 128       6.925  13.431  22.794  1.00206.63           C
ANISOU  868  CZ  PHE A 128    23548  26415  28548  -5240  -2056   2884       C
ATOM    869  N   ASP A 129      13.550  10.485  21.275  1.00222.75           N
ANISOU  869  N   ASP A 129    21281  29592  33761  -4949   -638   5598       N
ATOM    870  CA  ASP A 129      14.860   9.854  21.431  1.00218.17           C
ANISOU  870  CA  ASP A 129    19615  29426  33856  -4908   -513   6279       C
ATOM    871  C   ASP A 129      16.003  10.819  21.139  1.00225.03           C
ANISOU  871  C   ASP A 129    20227  30626  34649  -5483   -405   6402       C
ATOM    872  O   ASP A 129      16.387  11.617  21.994  1.00226.78           O
ANISOU  872  O   ASP A 129    20307  31347  34511  -6155   -884   6594       O
ATOM    873  CB  ASP A 129      14.977   8.616  20.541  1.00212.67           C
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ANISOU  873  CB  ASP A 129    18624  28323  33857  -4133     87   6366       C
ATOM    874  CG  ASP A 129      14.376   7.383  21.181  1.00214.25           C
ANISOU  874  CG  ASP A 129    18583  28453  34370  -3636    -97   6606       C
ATOM    875  OD1 ASP A 129      13.467   7.532  22.024  1.00208.75           O
ANISOU  875  OD1 ASP A 129    18265  27817  33233  -3799   -589   6460       O
ATOM    876  OD2 ASP A 129      14.815   6.263  20.843  1.00222.40           O
ANISOU  876  OD2 ASP A 129    19063  29356  36082  -3086    271   6939       O
ATOM    877  N   SER A 130      16.547  10.740  19.930  1.00235.39           N
ANISOU  877  N   SER A 130    21500  31655  36283  -5247    240   6288       N
ATOM    878  CA  SER A 130      17.626  11.633  19.520  1.00250.45           C
ANISOU  878  CA  SER A 130    23193  33836  38131  -5785    431   6366       C
ATOM    879  C   SER A 130      17.069  12.997  19.128  1.00252.80           C
ANISOU  879  C   SER A 130    24578  33870  37604  -6275    372   5733       C
ATOM    880  O   SER A 130      17.319  13.489  18.028  1.00252.59           O
ANISOU  880  O   SER A 130    24957  33528  37488  -6325    862   5409       O
ATOM    881  CB  SER A 130      18.412  11.029  18.356  1.00257.07           C
ANISOU  881  CB  SER A 130    23607  34451  39617  -5350   1197   6465       C
ATOM    882  OG  SER A 130      17.578  10.824  17.229  1.00255.74           O
ANISOU  882  OG  SER A 130    24292  33534  39343  -4867   1684   5882       O
ATOM    883  N   LEU A 131      16.314  13.601  20.039  1.00253.73           N
ANISOU  883  N   LEU A 131    25188  34102  37115  -6630   -220   5563       N
ATOM    884  CA  LEU A 131      15.652  14.871  19.775  1.00248.99           C
ANISOU  884  CA  LEU A 131    25679  33215  35712  -7033   -325   4957       C
ATOM    885  C   LEU A 131      16.626  16.037  19.903  1.00244.54           C
ANISOU  885  C   LEU A 131    25047  33050  34819  -7864   -429   5073       C
ATOM    886  O   LEU A 131      16.799  16.600  20.985  1.00241.29           O
ANISOU  886  O   LEU A 131    24516  33105  34058  -8457   -973   5285       O
ATOM    887  CB  LEU A 131      14.468  15.057  20.728  1.00245.29           C
ANISOU  887  CB  LEU A 131    25751  32711  34736  -7074   -880   4730       C
ATOM    888  CG  LEU A 131      13.490  16.188  20.409  1.00241.05           C
ANISOU  888  CG  LEU A 131    26429  31745  33414  -7268   -961   4038       C
ATOM    889  CD1 LEU A 131      12.888  16.003  19.024  1.00235.32           C
ANISOU  889  CD1 LEU A 131    26345  30324  32744  -6709   -434   3533       C
ATOM    890  CD2 LEU A 131      12.397  16.256  21.464  1.00236.43           C
ANISOU  890  CD2 LEU A 131    26213  31200  32421  -7281 -1486   3886       C
ATOM    891  N   SER A 132      17.263  16.388  18.790  1.00241.74           N
ANISOU  891  N   SER A 132    24793  32502  34557  -7935    108   4929       N
ATOM    892  CA  SER A 132      18.197  17.508  18.756  1.00240.82           C
ANISOU  892  CA  SER A 132    24669  32713  34119  -8742     90   4996       C
ATOM    893  C   SER A 132      17.458  18.815  18.497  1.00234.02           C
ANISOU  893  C   SER A 132    25084  31460  32375  -9138    -31   4364       C
ATOM    894  O   SER A 132      16.860  18.993  17.436  1.00229.20           O
ANISOU  894  O   SER A 132    25281  30219  31585  -8810    353   3846       O
ATOM    895  CB  SER A 132      19.261  17.286  17.679  1.00240.33           C
ANISOU  895  CB  SER A 132    24113  32635  34566  -8664    762   5140       C
ATOM    896  OG  SER A 132      20.140  18.394  17.593  1.00239.10           O
ANISOU  896  OG  SER A 132    23990  32783  34073  -9483    772   5173       O
ATOM    897  N   PRO A 133      17.502  19.739  19.470  1.00231.94           N
ANISOU  897  N   PRO A 133    25029  31552  31544  -9852   -571   4412       N
ATOM    898  CA  PRO A 133      16.828  21.040  19.379  1.00222.11           C
ANISOU  898  CA  PRO A 133    25002  29960  29429 -10266   -735   3848       C
ATOM    899  C   PRO A 133      17.361  21.907  18.238  1.00213.60           C
ANISOU  899  C   PRO A 133    24454  28599  28105 -10599   -275   3557       C
ATOM    900  O   PRO A 133      16.754  22.925  17.907  1.00198.64           O
ANISOU  900  O   PRO A 133    23671  26277  25527 -10815   -309   3038       O
ATOM    901  CB  PRO A 133      17.149  21.694  20.728  1.00227.85           C
ANISOU  901  CB  PRO A 133    25558  31269  29745 -11044  -1357   4136       C
ATOM    902  CG  PRO A 133      17.466  20.555  21.641  1.00231.95           C
ANISOU  902  CG  PRO A 133    24952  32311  30867 -10818  -1628   4748       C
ATOM    903  CD  PRO A 133      18.155  19.549  20.776  1.00236.85           C
ANISOU  903  CD  PRO A 133    24760  32919  32314 -10288  -1087   5024       C
ATOM    904  N   GLU A 134      18.481  21.501  17.647  1.00224.57           N
ANISOU  904  N   GLU A 134    25064  30215  30047 -10632    164   3890       N
ATOM    905  CA  GLU A 134      19.096  22.253  16.559  1.00237.08           C
ANISOU  905  CA  GLU A 134    27063  31573  31442 -10985    653   3657       C
ATOM    906  C   GLU A 134      18.378  22.014  15.231  1.00231.44           C
ANISOU  906  C   GLU A 134    27121  30072  30744 -10331   1181   3138       C
ATOM    907  O   GLU A 134      18.258  22.922  14.408  1.00231.80           O
ANISOU  907  O   GLU A 134    28103  29685  30284 -10585   1416   2698       O
ATOM    908  CB  GLU A 134      20.580  21.890  16.439  1.00251.19           C
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ANISOU  908  CB  GLU A 134    27668  33931  33842 -11269    955   4217       C
ATOM    909  CG  GLU A 134      21.359  22.739  15.443  1.00258.46           C
ANISOU  909  CG  GLU A 134    28927  34730  34544 -11788   1445   4031       C
ATOM    910  CD  GLU A 134      22.847  22.438  15.458  1.00266.24           C
ANISOU  910  CD  GLU A 134    28654  36376  36129 -12137   1700   4613       C
ATOM    911  OE1 GLU A 134      23.275  21.580  16.258  1.00271.70           O
ANISOU  911  OE1 GLU A 134    28208  37617  37410 -11955   1460   5179       O
ATOM    912  OE2 GLU A 134      23.589  23.063  14.670  1.00265.76           O
ANISOU  912  OE2 GLU A 134    28735  36288  35953 -12595   2139   4512       O
ATOM    913  N   ALA A 135      17.896  20.791  15.030  1.00223.79           N
ANISOU  913  N   ALA A 135    25792  28908  30332  -9512   1351   3196       N
ATOM    914  CA  ALA A 135      17.221  20.430  13.787  1.00215.17           C
ANISOU  914  CA  ALA A 135    25369  27089  29296  -8878   1840   2743       C
ATOM    915  C   ALA A 135      15.723  20.709  13.850  1.00208.93           C
ANISOU  915  C   ALA A 135    25626  25785  27973  -8554   1511   2219       C
ATOM    916  O   ALA A 135      15.056  20.801  12.818  1.00199.80           O
ANISOU  916  O   ALA A 135    25305  23989  26620  -8202   1805   1746       O
ATOM    917  CB  ALA A 135      17.475  18.967  13.453  1.00214.13           C
ANISOU  917  CB  ALA A 135    24379  26961  30021  -8173   2242   3050       C
ATOM    918  N   VAL A 136      15.201  20.841  15.066  1.00214.35           N
ANISOU  918  N   VAL A 136    26253  26763  28426  -8683    902   2311       N
ATOM    919  CA  VAL A 136      13.778  21.093  15.275  1.00208.56           C
ANISOU  919  CA  VAL A 136    26401  25623  27220  -8381    564   1849       C
ATOM    920  C   VAL A 136      13.393  22.507  14.850  1.00207.50           C
ANISOU  920  C   VAL A 136    27466  25095  26279  -8785    498   1336       C
ATOM    921  O   VAL A 136      12.361  22.714  14.208  1.00194.85           O
ANISOU  921  O   VAL A 136    26762  22901  24371  -8391    542    835       O
ATOM    922  CB  VAL A 136      13.382  20.877  16.751  1.00205.50           C
ANISOU  922  CB  VAL A 136    25611  25683  26788  -8463    -41   2101       C
ATOM    923  CG1 VAL A 136      11.925  21.253  16.978  1.00198.51           C
ANISOU  923  CG1 VAL A 136    25647  24395  25382  -8197   -361   1597       C
ATOM    924  CG2 VAL A 136      13.635  19.435  17.161  1.00205.25           C
ANISOU  924  CG2 VAL A 136    24489  25966  27530  -7998     -2   2590       C
ATOM    925  N   ARG A 137      14.233  23.475  15.207  1.00218.12           N
ANISOU  925  N   ARG A 137    28826  26770  27280  -9577    381   1476       N
ATOM    926  CA  ARG A 137      13.991  24.873  14.864  1.00221.22           C
ANISOU  926  CA  ARG A 137    30364  26805  26885 -10038    319   1032       C
ATOM    927  C   ARG A 137      13.926  25.071  13.354  1.00231.85           C
ANISOU  927  C   ARG A 137    32417  27524  28152  -9807    847    649       C
ATOM    928  O   ARG A 137      13.189  25.926  12.863  1.00238.15           O
ANISOU  928  O   ARG A 137    34352  27783  28352  -9799    796    153       O
ATOM    929  CB  ARG A 137      15.082  25.763  15.456  1.00217.43           C
ANISOU  929  CB  ARG A 137    29669  26828  26116 -10987    164   1312       C
ATOM    930  CG  ARG A 137      14.813  27.251  15.319  1.00212.19           C
ANISOU  930  CG  ARG A 137    30224  25821  24577 -11529     26    881       C
ATOM    931  CD  ARG A 137      15.927  28.062  15.953  1.00215.87           C
ANISOU  931  CD  ARG A 137    30432  26820  24768 -12520   -134   1190       C
ATOM    932  NE  ARG A 137      15.647  29.494  15.939  1.00211.04           N
ANISOU  932  NE  ARG A 137    31034  25872  23281 -13068   -296    788       N
ATOM    933  CZ  ARG A 137      16.406  30.405  16.537  1.00208.56           C
ANISOU  933  CZ  ARG A 137    30788  25919  22536 -13992   -500    951       C
ATOM    934  NH1 ARG A 137      17.492  30.031  17.200  1.00211.45           N
ANISOU  934  NH1 ARG A 137    30029  27032  23280 -14476   -596   1520       N
ATOM    935  NH2 ARG A 137      16.081  31.688  16.475  1.00206.94           N
ANISOU  935  NH2 ARG A 137    31785  25323  21518 -14437   -619    553       N
ATOM    936  N   CYS A 138      14.700  24.274  12.625  1.00230.08           N
ANISOU  936  N   CYS A 138    31529  27361  28531  -9613   1360    887       N
ATOM    937  CA  CYS A 138      14.718  24.336  11.169  1.00219.52           C
ANISOU  937  CA  CYS A 138    30799  25443  27165  -9400   1918    560       C
ATOM    938  C   CYS A 138      13.359  23.954  10.592  1.00202.01           C
ANISOU  938  C   CYS A 138    29315  22587  24854  -8647   1898    114       C
ATOM    939  O   CYS A 138      12.971  24.427   9.524  1.00192.53           O
ANISOU  939  O   CYS A 138    29067  20786  23300  -8546   2137   -312       O
ATOM    940  CB  CYS A 138      15.804  23.417  10.610  1.00224.54           C
ANISOU  940  CB  CYS A 138    30472  26308  28536  -9286   2495    936       C
ATOM    941  SG  CYS A 138      17.458  23.750  11.262  1.00291.43           S
ANISOU  941  SG  CYS A 138    37897  35606  37225 -10139   2529   1518       S
ATOM    942  N   THR A 139      12.640  23.097  11.309  1.00198.32           N
ANISOU  942  N   THR A 139    28399  22261  24691  -8145   1597    224       N
ATOM    943  CA  THR A 139      11.300  22.693  10.906  1.00195.03           C
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ANISOU  943  CA  THR A 139    28582  21320  24201  -7457   1512   -170       C
ATOM    944  C   THR A 139      10.290  23.774  11.282  1.00186.06           C
ANISOU  944  C   THR A 139    28430  19934  22330  -7575   1031   -585       C
ATOM    945  O   THR A 139       9.337  24.032  10.546  1.00179.73           O
ANISOU  945  O   THR A 139    28522  18552  21215  -7214   1031  -1043       O
ATOM    946  CB  THR A 139      10.895  21.358  11.563  1.00198.14           C
ANISOU  946  CB  THR A 139    28129  21965  25188  -6903   1379    105       C
ATOM    947  OG1 THR A 139      11.898  20.370  11.297  1.00208.53           O
ANISOU  947  OG1 THR A 139    28496  23530  27207  -6789   1821    530       O
ATOM    948  CG2 THR A 139       9.560  20.873  11.019  1.00189.53           C
ANISOU  948  CG2 THR A 139    27625  20333  24056  -6215   1349   -301       C
ATOM    949  N   ILE A 140      10.510  24.409  12.429  1.00187.88           N
ANISOU  949  N   ILE A 140    28500  20601  22285  -8082    622   -418       N
ATOM    950  CA  ILE A 140       9.626  25.469  12.898  1.00194.22           C
ANISOU  950  CA  ILE A 140    30208  21195  22391  -8225    187   -787       C
ATOM    951  C   ILE A 140       9.762  26.719  12.032  1.00209.89           C
ANISOU  951  C   ILE A 140    33277  22712  23759  -8591    339  -1149       C
ATOM    952  O   ILE A 140       8.765  27.350  11.679  1.00209.54           O
ANISOU  952  O   ILE A 140    34228  22152  23237  -8350    180  -1608       O
ATOM    953  CB  ILE A 140       9.909  25.834  14.367  1.00198.03           C
ANISOU  953  CB  ILE A 140    30270  22264  22710  -8742   -258   -500       C
ATOM    954  CG1 ILE A 140       9.880  24.579  15.243  1.00199.75           C
ANISOU  954  CG1 ILE A 140    29394  22963  23538  -8429   -409    -89       C
ATOM    955  CG2 ILE A 140       8.903  26.860  14.866  1.00196.19           C
ANISOU  955  CG2 ILE A 140    30996  21771  21777  -8810   -665   -908       C
ATOM    956  CD1 ILE A 140      10.187  24.843  16.699  1.00205.73           C
ANISOU  956  CD1 ILE A 140    29705  24315  24149  -8950   -855    231       C
ATOM    957  N   GLU A 141      11.000  27.065  11.690  1.00223.00           N
ANISOU  957  N   GLU A 141    34732  24557  25439  -9173    648   -933       N
ATOM    958  CA  GLU A 141      11.270  28.214  10.831  1.00223.39           C
ANISOU  958  CA  GLU A 141    35784  24178  24916  -9592    845  -1238       C
ATOM    959  C   GLU A 141      10.677  28.012   9.444  1.00215.22           C
ANISOU  959  C   GLU A 141    35458  22450  23864  -9050   1174  -1618       C
ATOM    960  O   GLU A 141      10.396  28.976   8.731  1.00209.81           O
ANISOU  960  O   GLU A 141    35877  21240  22602  -9190   1210  -1996       O
ATOM    961  CB  GLU A 141      12.773  28.475  10.725  1.00229.89           C
ANISOU  961  CB  GLU A 141    36101  25397  25848 -10329   1162   -893       C
ATOM    962  CG  GLU A 141      13.394  29.045  11.987  1.00234.77           C
ANISOU  962  CG  GLU A 141    36314  26624  26262 -11055    794   -584       C
ATOM    963  CD  GLU A 141      14.877  29.309  11.836  1.00243.54           C
ANISOU  963  CD  GLU A 141    36895  28152  27489 -11805   1100   -240       C
ATOM    964  OE1 GLU A 141      15.440  28.944  10.783  1.00246.54           O
ANISOU  964  OE1 GLU A 141    37120  28374  28180 -11708   1640   -221       O
ATOM    965  OE2 GLU A 141      15.478  29.881  12.770  1.00247.30           O
ANISOU  965  OE2 GLU A 141    37110  29117  27736 -12511    810      8       O
ATOM    966  N   ALA A 142      10.486  26.752   9.068  1.00213.29           N
ANISOU  966  N   ALA A 142    34610  22193  24238  -8443   1404  -1509       N
ATOM    967  CA  ALA A 142       9.841  26.415   7.807  1.00208.23           C
ANISOU  967  CA  ALA A 142    34598  20912  23607  -7896   1682  -1854       C
ATOM    968  C   ALA A 142       8.336  26.640   7.909  1.00207.72           C
ANISOU  968  C   ALA A 142    35282  20449  23193  -7388   1244  -2258       C
ATOM    969  O   ALA A 142       7.614  26.545   6.917  1.00207.63           O
ANISOU  969  O   ALA A 142    35956  19870  23062  -6954   1348  -2596       O
ATOM    970  CB  ALA A 142      10.140  24.973   7.426  1.00199.22           C
ANISOU  970  CB  ALA A 142    32574  19888  23230  -7440   2078  -1597       C
ATOM    971  N   GLY A 143       7.870  26.939   9.119  1.00203.13           N
ANISOU  971  N   GLY A 143    34557  20176  22447  -7456    755  -2218       N
ATOM    972  CA  GLY A 143       6.465  27.207   9.357  1.00189.76           C
ANISOU  972  CA  GLY A 143    33490  18175  20435  -7000    335  -2585       C
ATOM    973  C   GLY A 143       5.654  25.939   9.530  1.00175.37           C
ANISOU  973  C   GLY A 143    31079  16426  19129  -6310    257  -2542       C
ATOM    974  O   GLY A 143       4.485  25.882   9.145  1.00168.20           O
ANISOU  974  O   GLY A 143    30712  15115  18082  -5787     87  -2890       O
ATOM    975  N   TYR A 144       6.275  24.919  10.115  1.00166.44           N
ANISOU  975  N   TYR A 144    22303  20250  20686  -7598  -1650   2275       N
ATOM    976  CA  TYR A 144       5.619  23.630  10.298  1.00151.87           C
ANISOU  976  CA  TYR A 144    20168  18699  18836  -7011  -1553   1979       C
ATOM    977  C   TYR A 144       5.849  23.061  11.696  1.00146.18           C
ANISOU  977  C   TYR A 144    18710  18423  18408  -7110  -1730   1919       C
ATOM    978  O   TYR A 144       6.889  22.458  11.962  1.00141.36           O
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ANISOU  978  O   TYR A 144    17405  18259  18046  -7256  -1423   2315       O
ATOM    979  CB  TYR A 144       6.092  22.633   9.238  1.00147.52           C
ANISOU  979  CB  TYR A 144    19477  18351  18222  -6701   -871   2275       C
ATOM    980  CG  TYR A 144       5.744  23.032   7.821  1.00147.46           C
ANISOU  980  CG  TYR A 144    20305  17923  17802  -6484   -690   2291       C
ATOM    981  CD1 TYR A 144       4.432  22.982   7.370  1.00144.67           C
ANISOU  981  CD1 TYR A 144    20583  17256  17129  -5974  -1015   1776       C
ATOM    982  CD2 TYR A 144       6.726  23.452   6.934  1.00152.84           C
ANISOU  982  CD2 TYR A 144    21139  18536  18398  -6780   -192   2819       C
ATOM    983  CE1 TYR A 144       4.105  23.344   6.078  1.00148.76           C
ANISOU  983  CE1 TYR A 144    21922  17402  17198  -5717   -933   1788       C
ATOM    984  CE2 TYR A 144       6.409  23.817   5.637  1.00157.63           C
ANISOU  984  CE2 TYR A 144    22626  18738  18529  -6551    -12   2865       C
ATOM    985  CZ  TYR A 144       5.096  23.762   5.215  1.00151.78           C
ANISOU  985  CZ  TYR A 144    22563  17688  17418  -5994   -425   2349       C
ATOM    986  OH  TYR A 144       4.772  24.123   3.926  1.00148.50           O
ANISOU  986  OH  TYR A 144    23080  16884  16460  -5708   -329   2391       O
ATOM    987  N   PRO A 145       4.869  23.246  12.595  1.00144.53           N
ANISOU  987  N   PRO A 145    18665  18102  18149  -6986  -2216   1424       N
ATOM    988  CA  PRO A 145       3.621  23.962  12.316  1.00143.47           C
ANISOU  988  CA  PRO A 145    19264  17476  17773  -6745  -2597    926       C
ATOM    989  C   PRO A 145       3.755  25.455  12.585  1.00155.98           C
ANISOU  989  C   PRO A 145    21294  18664  19308  -7196  -3032    918       C
ATOM    990  O   PRO A 145       4.766  25.896  13.131  1.00163.28           O
ANISOU  990  O   PRO A 145    21905  19724  20411  -7761  -3081   1236       O
ATOM    991  CB  PRO A 145       2.653  23.349  13.323  1.00132.89           C
ANISOU  991  CB  PRO A 145    17718  16293  16482  -6438  -2803    429       C
ATOM    992  CG  PRO A 145       3.518  23.052  14.502  1.00132.29           C
ANISOU  992  CG  PRO A 145    17029  16636  16601  -6774  -2812    686       C
ATOM    993  CD  PRO A 145       4.871  22.661  13.947  1.00138.53           C
ANISOU  993  CD  PRO A 145    17376  17713  17544  -6989  -2384   1308       C
ATOM    994  N   GLY A 146       2.739  26.221  12.208  1.00160.23           N
ANISOU  994  N   GLY A 146    22556  18702  19621  -6936  -3371    536       N
ATOM    995  CA  GLY A 146       2.750  27.654  12.432  1.00167.65           C
ANISOU  995  CA  GLY A 146    24059  19146  20492  -7288  -3787    485       C
ATOM    996  C   GLY A 146       2.108  28.029  13.752  1.00161.38           C
ANISOU  996  C   GLY A 146    23242  18325  19751  -7291  -4266     -6       C
ATOM    997  O   GLY A 146       1.157  27.384  14.193  1.00167.57           O
ANISOU  997  O   GLY A 146    23847  19292  20528  -6830  -4329   -447       O
ATOM    998  N   VAL A 147       2.632  29.072  14.389  1.00144.62           N
ANISOU  998  N   VAL A 147    21312  15960  17676  -7840  -4571     54       N
ATOM    999  CA  VAL A 147       2.072  29.555  15.644  1.00132.39           C
ANISOU  999  CA  VAL A 147    19865  14328  16109  -7859  -5026   -428       C
ATOM   1000  C   VAL A 147       1.673  31.013  15.537  1.00135.34           C
ANISOU 1000  C   VAL A 147    21123  13959  16343  -7947  -5437   -655       C
ATOM   1001  O   VAL A 147       2.531  31.894  15.473  1.00143.74           O
ANISOU 1001  O   VAL A 147    22450  14706  17457  -8568  -5522   -358       O
ATOM   1002  CB  VAL A 147       3.070  29.432  16.803  1.00130.42           C
ANISOU 1002  CB  VAL A 147    19041  14497  16017  -8432  -5114   -247       C
ATOM   1003  CG1 VAL A 147       2.442  29.957  18.088  1.00130.88           C
ANISOU 1003  CG1 VAL A 147    19244  14515  15970  -8116  -5374   -747       C
ATOM   1004  CG2 VAL A 147       3.516  27.993  16.969  1.00134.46           C
ANISOU 1004  CG2 VAL A 147    18720  15709  16660  -8299  -4732     16       C
ATOM   1005  N   LEU A 148       0.370  31.266  15.517  1.00131.90           N
ANISOU 1005  N   LEU A 148    21127  13229  15760  -7323  -5680  -1192       N
ATOM   1006  CA  LEU A 148      -0.124  32.632  15.484  1.00144.01           C
ANISOU 1006  CA  LEU A 148    23499  14057  17160  -7197  -6042  -1443       C
ATOM   1007  C   LEU A 148       0.316  33.347  16.752  1.00160.46           C
ANISOU 1007  C   LEU A 148    25465  16188  19316  -7457  -6117  -1526       C
ATOM   1008  O   LEU A 148       0.011  32.911  17.863  1.00166.32           O
ANISOU 1008  O   LEU A 148    25728  17372  20095  -7231  -6068  -1827       O
ATOM   1009  CB  LEU A 148      -1.646  32.662  15.358  1.00140.95           C
ANISOU 1009  CB  LEU A 148    23384  13503  16666  -6329  -6246  -2042       C
ATOM   1010  CG  LEU A 148      -2.202  33.660  14.340  1.00148.35           C
ANISOU 1010  CG  LEU A 148    25318  13655  17394  -6005  -6582  -2119       C
ATOM   1011  CD1 LEU A 148      -3.715  33.774  14.464  1.00138.62           C
ANISOU 1011  CD1 LEU A 148    24159  12374  16136  -5073  -6808  -2768       C
ATOM   1012  CD2 LEU A 148      -1.536  35.025  14.482  1.00147.67           C
ANISOU 1012  CD2 LEU A 148    25909  12941  17258  -6475  -6720  -1876       C
ATOM   1013  N   SER A 149       1.041  34.447  16.572  1.00165.71           N
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ANISOU 1013  N   SER A 149    26624  16360  19977  -7959  -6226  -1264       N
ATOM   1014  CA  SER A 149       1.573  35.218  17.688  1.00166.42           C
ANISOU 1014  CA  SER A 149    26670  16437  20125  -8284  -6344  -1350       C
ATOM   1015  C   SER A 149       0.460  35.851  18.515  1.00166.58           C
ANISOU 1015  C   SER A 149    27065  16212  20016  -7704  -6572  -1966       C
ATOM   1016  O   SER A 149       0.692  36.309  19.634  1.00170.21           O
ANISOU 1016  O   SER A 149    27453  16746  20472  -7850  -6669  -2167       O
ATOM   1017  CB  SER A 149       2.519  36.301  17.174  1.00180.28           C
ANISOU 1017  CB  SER A 149    28926  17641  21930  -8961  -6380   -963       C
ATOM   1018  OG  SER A 149       1.856  37.141  16.246  1.00194.18           O
ANISOU 1018  OG  SER A 149    31683  18585  23511  -8713  -6531  -1008       O
ATOM   1019  N   SER A 150      -0.745  35.878  17.957  1.00171.48           N
ANISOU 1019  N   SER A 150    28074  16551  20530  -7031  -6664  -2284       N
ATOM   1020  CA  SER A 150      -1.902  36.416  18.658  1.00176.87           C
ANISOU 1020  CA  SER A 150    29027  17045  21131  -6406  -6824  -2889       C
ATOM   1021  C   SER A 150      -2.861  35.301  19.073  1.00168.70           C
ANISOU 1021  C   SER A 150    27353  16609  20137  -5839  -6641  -3282       C
ATOM   1022  O   SER A 150      -2.803  34.188  18.547  1.00158.51           O
ANISOU 1022  O   SER A 150    25579  15731  18916  -5820  -6450  -3105       O
ATOM   1023  CB  SER A 150      -2.626  37.441  17.780  1.00184.29           C
ANISOU 1023  CB  SER A 150    30904  17171  21946  -5987  -7109  -3013       C
ATOM   1024  OG  SER A 150      -3.716  38.030  18.471  1.00157.17           O
ANISOU 1024  OG  SER A 150    27705  13548  18464  -5369  -7257  -3597       O
ATOM   1025  N   ARG A 151      -3.736  35.609  20.024  1.00165.64           N
ANISOU 1025  N   ARG A 151    26987  16244  19705  -5421  -6668  -3825       N
ATOM   1026  CA  ARG A 151      -4.749  34.665  20.478  1.00155.19           C
ANISOU 1026  CA  ARG A 151    25115  15424  18428  -4928  -6455  -4259       C
ATOM   1027  C   ARG A 151      -6.084  34.973  19.813  1.00156.77           C
ANISOU 1027  C   ARG A 151    25594  15317  18654  -4183  -6604  -4681       C
ATOM   1028  O   ARG A 151      -6.299  36.084  19.333  1.00163.15           O
ANISOU 1028  O   ARG A 151    27114  15483  19394  -3969  -6910  -4718       O
ATOM   1029  CB  ARG A 151      -4.899  34.736  21.999  1.00156.98           C
ANISOU 1029  CB  ARG A 151    25179  15908  18558  -4964  -6351  -4619       C
ATOM   1030  CG  ARG A 151      -3.634  34.390  22.764  1.00163.31           C
ANISOU 1030  CG  ARG A 151    25674  17067  19309  -5599  -6290  -4252       C
ATOM   1031  CD  ARG A 151      -3.833  34.507  24.267  1.00164.97           C
ANISOU 1031  CD  ARG A 151    25868  17483  19331  -5584  -6260  -4642       C
ATOM   1032  NE  ARG A 151      -2.685  33.981  25.000  1.00144.82           N
ANISOU 1032  NE  ARG A 151    22965  15355  16705  -6095  -6260  -4300       N
ATOM   1033  CZ  ARG A 151      -2.601  32.738  25.465  1.00156.77           C
ANISOU 1033  CZ  ARG A 151    23953  17437  18173  -6112  -6057  -4210       C
ATOM   1034  NH1 ARG A 151      -3.605  31.887  25.286  1.00149.32           N
ANISOU 1034  NH1 ARG A 151    22760  16698  17277  -5711  -5795  -4465       N
ATOM   1035  NH2 ARG A 151      -1.515  32.345  26.114  1.00155.08           N
ANISOU 1035  NH2 ARG A 151    23482  17574  17867  -6540  -6140  -3873       N
ATOM   1036  N   ASP A 152      -6.981  33.993  19.788  1.00138.63           N
ANISOU 1036  N   ASP A 152    22744  13462  16468  -3778  -6412  -5003       N
ATOM   1037  CA  ASP A 152      -8.302  34.192  19.197  1.00147.08           C
ANISOU 1037  CA  ASP A 152    23916  14348  17619  -3020  -6581  -5454       C
ATOM   1038  C   ASP A 152      -9.194  35.034  20.103  1.00151.72           C
ANISOU 1038  C   ASP A 152    24738  14722  18180  -2605  -6647  -6014       C
ATOM   1039  O   ASP A 152      -8.723  35.624  21.075  1.00147.63           O
ANISOU 1039  O   ASP A 152    24482  14085  17526  -2929  -6606  -6025       O
ATOM   1040  CB  ASP A 152      -8.974  32.851  18.880  1.00143.24           C
ANISOU 1040  CB  ASP A 152    22692  14417  17314  -2777  -6344  -5649       C
ATOM   1041  CG  ASP A 152      -8.966  31.889  20.058  1.00142.10           C
ANISOU 1041  CG  ASP A 152    21939  14844  17209  -3069  -5917  -5803       C
ATOM   1042  OD1 ASP A 152      -8.884  32.348  21.216  1.00156.84           O
ANISOU 1042  OD1 ASP A 152    23950  16695  18947  -3221  -5842  -5976       O
ATOM   1043  OD2 ASP A 152      -9.047  30.666  19.822  1.00130.96           O
ANISOU 1043  OD2 ASP A 152    19970  13860  15929  -3142  -5670  -5763       O
ATOM   1044  N   LYS A 153     -10.484  35.079  19.788  1.00152.11           N
ANISOU 1044  N   LYS A 153    24690  14736  18369  -1865  -6764  -6504       N
ATOM   1045  CA  LYS A 153     -11.422  35.854  20.590  1.00164.88           C
ANISOU 1045  CA  LYS A 153    26508  16145  19993  -1373  -6815  -7082       C
ATOM   1046  C   LYS A 153     -11.789  35.113  21.874  1.00175.33           C
ANISOU 1046  C   LYS A 153    27277  18005  21334  -1518  -6359  -7456       C
ATOM   1047  O   LYS A 153     -12.487  35.648  22.734  1.00188.60           O
ANISOU 1047  O   LYS A 153    29102  19576  22979  -1191  -6295  -7957       O
ATOM   1048  CB  LYS A 153     -12.676  36.208  19.786  1.00162.02           C
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ANISOU 1048  CB  LYS A 153    26178  15564  19817   -447  -7160  -7499       C
ATOM   1049  CG  LYS A 153     -13.696  35.092  19.671  1.00158.66           C
ANISOU 1049  CG  LYS A 153    24846  15739  19698    -67  -6966  -7919       C
ATOM   1050  CD  LYS A 153     -14.956  35.593  18.983  1.00174.02           C
ANISOU 1050  CD  LYS A 153    26769  17488  21861    918  -7400  -8415       C
ATOM   1051  CE  LYS A 153     -16.069  34.559  19.027  1.00188.14           C
ANISOU 1051  CE  LYS A 153    27528  19907  24048   1286  -7194  -8963       C
ATOM   1052  NZ  LYS A 153     -17.267  34.998  18.255  1.00200.20           N
ANISOU 1052  NZ  LYS A 153    28907  21325  25835   2277  -7714  -9470       N
ATOM   1053  N   TYR A 154     -11.311  33.879  21.996  1.00169.74           N
ANISOU 1053  N   TYR A 154    26005  17837  20653  -1988  -6038  -7213       N
ATOM   1054  CA  TYR A 154     -11.515  33.093  23.207  1.00165.47           C
ANISOU 1054  CA  TYR A 154    25060  17755  20056  -2203  -5614  -7485       C
ATOM   1055  C   TYR A 154     -10.226  33.015  24.017  1.00164.36           C
ANISOU 1055  C   TYR A 154    25084  17738  19629  -2932  -5518  -7081       C
ATOM   1056  O   TYR A 154     -10.225  32.543  25.152  1.00141.78           O
ANISOU 1056  O   TYR A 154    22096  15178  16595  -3144  -5249  -7272       O
ATOM   1057  CB  TYR A 154     -12.000  31.685  22.861  1.00167.05           C
ANISOU 1057  CB  TYR A 154    24498  18456  20517  -2148  -5330  -7563       C
ATOM   1058  CG  TYR A 154     -13.307  31.651  22.104  1.00174.82           C
ANISOU 1058  CG  TYR A 154    25113  19446  21863  -1414  -5438  -8030       C
ATOM   1059  CD1 TYR A 154     -14.521  31.762  22.771  1.00186.67           C
ANISOU 1059  CD1 TYR A 154    26319  21053  23554   -906  -5264  -8738       C
ATOM   1060  CD2 TYR A 154     -13.329  31.505  20.724  1.00167.24           C
ANISOU 1060  CD2 TYR A 154    24066  18420  21057  -1206  -5723  -7805       C
ATOM   1061  CE1 TYR A 154     -15.718  31.730  22.083  1.00189.05           C
ANISOU 1061  CE1 TYR A 154    26139  21435  24258   -215  -5409  -9222       C
ATOM   1062  CE2 TYR A 154     -14.520  31.470  20.028  1.00172.28           C
ANISOU 1062  CE2 TYR A 154    24326  19113  22022   -512  -5911  -8264       C
ATOM   1063  CZ  TYR A 154     -15.712  31.583  20.712  1.00180.41           C
ANISOU 1063  CZ  TYR A 154    24957  20287  23303    -21  -5775  -8978       C
ATOM   1064  OH  TYR A 154     -16.903  31.550  20.022  1.00178.60           O
ANISOU 1064  OH  TYR A 154    24223  20173  23462    685  -6016  -9494       O
ATOM   1065  N   GLY A 155      -9.130  33.471  23.417  1.00141.30           N
ANISOU 1065  N   GLY A 155    22438  14584  16667  -3281  -5765  -6535       N
ATOM   1066  CA  GLY A 155      -7.848  33.522  24.095  1.00166.46           C
ANISOU 1066  CA  GLY A 155    25703  17875  19671  -3904  -5773  -6138       C
ATOM   1067  C   GLY A 155      -7.010  32.265  23.963  1.00135.73           C
ANISOU 1067  C   GLY A 155    21267  14472  15834  -4321  -5596  -5673       C
ATOM   1068  O   GLY A 155      -6.116  32.018  24.773  1.00135.76           O
ANISOU 1068  O   GLY A 155    21184  14711  15686  -4740  -5575  -5423       O
ATOM   1069  N   ARG A 156      -7.288  31.472  22.936  1.00131.71           N
ANISOU 1069  N   ARG A 156    20412  14100  15532  -4171  -5505  -5553       N
ATOM   1070  CA  ARG A 156      -6.571  30.218  22.737  1.00131.06           C
ANISOU 1070  CA  ARG A 156    19838  14437  15521  -4510  -5312  -5128       C
ATOM   1071  C   ARG A 156      -5.406  30.387  21.770  1.00126.30           C
ANISOU 1071  C   ARG A 156    19338  13683  14966  -4848  -5471  -4487       C
ATOM   1072  O   ARG A 156      -5.465  31.201  20.848  1.00132.64           O
ANISOU 1072  O   ARG A 156    20549  14052  15795  -4715  -5702  -4420       O
ATOM   1073  CB  ARG A 156      -7.520  29.133  22.226  1.00123.52           C
ANISOU 1073  CB  ARG A 156    18435  13728  14768  -4212  -5079  -5398       C
ATOM   1074  CG  ARG A 156      -8.810  29.015  23.021  1.00125.35           C
ANISOU 1074  CG  ARG A 156    18567  14050  15009  -3872  -4895  -6078       C
ATOM   1075  CD  ARG A 156      -9.607  27.799  22.595  1.00136.52           C
ANISOU 1075  CD  ARG A 156    19412  15745  16715  -3666  -4621  -6301       C
ATOM   1076  NE  ARG A 156      -9.813  27.753  21.150  1.00141.90           N
ANISOU 1076  NE  ARG A 156    19998  16314  17605  -3396  -4779  -6179       N
ATOM   1077  CZ  ARG A 156     -10.900  28.203  20.532  1.00141.35           C
ANISOU 1077  CZ  ARG A 156    19905  16091  17712  -2818  -4930  -6572       C
ATOM   1078  NH1 ARG A 156     -11.891  28.734  21.234  1.00135.94           N
ANISOU 1078  NH1 ARG A 156    19216  15350  17085  -2438  -4900  -7122       N
ATOM   1079  NH2 ARG A 156     -10.997  28.119  19.213  1.00123.16           N
ANISOU 1079  NH2 ARG A 156    17583  13697  15517  -2584  -5139  -6443       N
ATOM   1080  N   VAL A 157      -4.348  29.615  21.989  1.00123.86           N
ANISOU 1080  N   VAL A 157    18700  13715  14646  -5292  -5351  -4008       N
ATOM   1081  CA  VAL A 157      -3.208  29.615  21.087  1.00123.43           C
ANISOU 1081  CA  VAL A 157    18648  13596  14655  -5678  -5422  -3399       C
ATOM   1082  C   VAL A 157      -3.607  29.005  19.757  1.00129.08           C
ANISOU 1082  C   VAL A 157    19274  14272  15498  -5462  -5340  -3338       C
ATOM   1083  O   VAL A 157      -3.811  27.796  19.660  1.00119.26           O
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ANISOU 1083  O   VAL A 157    17588  13385  14340  -5410  -5088  -3333       O
ATOM   1084  CB  VAL A 157      -2.049  28.790  21.646  1.00122.24           C
ANISOU 1084  CB  VAL A 157    18056  13904  14486  -6144  -5293  -2926       C
ATOM   1085  CG1 VAL A 157      -0.842  28.913  20.735  1.00123.07           C
ANISOU 1085  CG1 VAL A 157    18125  13949  14688  -6589  -5345  -2327       C
ATOM   1086  CG2 VAL A 157      -1.715  29.236  23.055  1.00125.64           C
ANISOU 1086  CG2 VAL A 157    18568  14438  14730  -6311  -5427  -3041       C
ATOM   1087  N   VAL A 158      -3.719  29.841  18.732  1.00149.11           N
ANISOU 1087  N   VAL A 158    22305  16336  18014  -5346  -5577  -3297       N
ATOM   1088  CA  VAL A 158      -4.119  29.365  17.414  1.00149.94           C
ANISOU 1088  CA  VAL A 158    22460  16351  18158  -5095  -5594  -3276       C
ATOM   1089  C   VAL A 158      -2.943  28.745  16.667  1.00144.17           C
ANISOU 1089  C   VAL A 158    21601  15752  17424  -5611  -5461  -2657       C
ATOM   1090  O   VAL A 158      -1.966  29.422  16.346  1.00122.19           O
ANISOU 1090  O   VAL A 158    19125  12719  14581  -6067  -5552  -2222       O
ATOM   1091  CB  VAL A 158      -4.732  30.490  16.566  1.00155.91           C
ANISOU 1091  CB  VAL A 158    23917  16508  18815  -4709  -5960  -3463       C
ATOM   1092  CG1 VAL A 158      -5.170  29.949  15.217  1.00152.02           C
ANISOU 1092  CG1 VAL A 158    23516  15952  18293  -4382  -6044  -3482       C
ATOM   1093  CG2 VAL A 158      -5.908  31.116  17.297  1.00162.71           C
ANISOU 1093  CG2 VAL A 158    24856  17262  19704  -4180  -6070  -4078       C
ATOM   1094  N   MET A 159      -3.046  27.448  16.401  1.00133.54           N
ANISOU 1094  N   MET A 159    19707  14845  16188  -5446  -5083  -2588       N
ATOM   1095  CA  MET A 159      -2.015  26.729  15.667  1.00139.23           C
ANISOU 1095  CA  MET A 159    20158  15798  16944  -5688  -4731  -1993       C
ATOM   1096  C   MET A 159      -2.251  26.858  14.168  1.00139.40           C
ANISOU 1096  C   MET A 159    20573  15539  16854  -5378  -4729  -1912       C
ATOM   1097  O   MET A 159      -3.390  26.967  13.715  1.00130.76           O
ANISOU 1097  O   MET A 159    19708  14262  15714  -4855  -4940  -2380       O
ATOM   1098  CB  MET A 159      -1.999  25.256  16.077  1.00142.23           C
ANISOU 1098  CB  MET A 159    19862  16710  17468  -5612  -4302  -1954       C
ATOM   1099  CG  MET A 159      -1.737  25.037  17.557  1.00142.22           C
ANISOU 1099  CG  MET A 159    19542  17007  17489  -5869  -4287  -1978       C
ATOM   1100  SD  MET A 159      -0.181  25.778  18.072  1.00153.71           S
ANISOU 1100  SD  MET A 159    21000  18503  18899  -6555  -4491  -1432       S
ATOM   1101  CE  MET A 159       0.974  24.890  17.030  1.00141.02           C
ANISOU 1101  CE  MET A 159    18970  17178  17432  -6679  -4038   -751       C
ATOM   1102  N   LEU A 160      -1.168  26.850  13.401  1.00139.41           N
ANISOU 1102  N   LEU A 160    20645  15527  16799  -5686  -4492  -1325       N
ATOM   1103  CA  LEU A 160      -1.266  27.001  11.957  1.00130.83           C
ANISOU 1103  CA  LEU A 160    20045  14161  15505  -5419  -4444  -1177       C
ATOM   1104  C   LEU A 160      -0.534  25.874  11.241  1.00132.59           C
ANISOU 1104  C   LEU A 160    19894  14741  15744  -5456  -3897   -762       C
ATOM   1105  O   LEU A 160       0.498  25.395  11.714  1.00122.50           O
ANISOU 1105  O   LEU A 160    18097  13808  14640  -5857  -3569   -358       O
ATOM   1106  CB  LEU A 160      -0.698  28.355  11.519  1.00136.04           C
ANISOU 1106  CB  LEU A 160    21414  14284  15992  -5737  -4636   -852       C
ATOM   1107  CG  LEU A 160      -1.311  29.618  12.128  1.00145.86           C
ANISOU 1107  CG  LEU A 160    23195  15036  17189  -5702  -5174  -1221       C
ATOM   1108  CD1 LEU A 160      -0.582  30.864  11.640  1.00132.54           C
ANISOU 1108  CD1 LEU A 160    22247  12761  15353  -6119  -5264   -807       C
ATOM   1109  CD2 LEU A 160      -2.798  29.706  11.816  1.00141.08           C
ANISOU 1109  CD2 LEU A 160    22880  14243  16479  -4927  -5536  -1840       C
ATOM   1110  N   PHE A 161      -1.082  25.450  10.105  1.00143.65           N
ANISOU 1110  N   PHE A 161    21567  16061  16953  -4994  -3827   -888       N
ATOM   1111  CA  PHE A 161      -0.424  24.470   9.248  1.00148.36           C
ANISOU 1111  CA  PHE A 161    21982  16901  17485  -4964  -3294   -525       C
ATOM   1112  C   PHE A 161      -0.915  24.583   7.807  1.00159.44           C
ANISOU 1112  C   PHE A 161    24065  18014  18500  -4519  -3363   -605       C
ATOM   1113  O   PHE A 161      -2.081  24.316   7.517  1.00158.84           O
ANISOU 1113  O   PHE A 161    24111  17890  18349  -4017  -3680  -1157       O
ATOM   1114  CB  PHE A 161      -0.641  23.047   9.767  1.00144.13           C
ANISOU 1114  CB  PHE A 161    20746  16818  17200  -4820  -2998   -725       C
ATOM   1115  CG  PHE A 161       0.275  22.032   9.143  1.00156.98           C
ANISOU 1115  CG  PHE A 161    22110  18709  18827  -4851  -2388   -287       C
ATOM   1116  CD1 PHE A 161       1.503  21.746   9.716  1.00159.39           C
ANISOU 1116  CD1 PHE A 161    21893  19324  19346  -5247  -2027    229       C
ATOM   1117  CD2 PHE A 161      -0.084  21.373   7.979  1.00152.02           C
ANISOU 1117  CD2 PHE A 161    23597  19861  19811  -4451  -2417   -417       C
ATOM   1118  CE1 PHE A 161       2.352  20.817   9.143  1.00161.57           C
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ANISOU 1118  CE1 PHE A 161    21897  19845  19648  -5201  -1438    622       C
ATOM   1119  CE2 PHE A 161       0.762  20.444   7.402  1.00169.96           C
ANISOU 1119  CE2 PHE A 161    23843  20507  20227  -4435  -1595    -41       C
ATOM   1120  CZ  PHE A 161       1.982  20.166   7.986  1.00166.19           C
ANISOU 1120  CZ  PHE A 161    22813  20334  19999  -4790  -1188    487       C
ATOM   1121  N   ASN A 162      -0.016  24.979   6.910  1.00172.25           N
ANISOU 1121  N   ASN A 162    26122  19459  19865  -4711  -3065    -59       N
ATOM   1122  CA  ASN A 162      -0.344  25.112   5.495  1.00181.42           C
ANISOU 1122  CA  ASN A 162    28056  20333  20541  -4296  -3087    -47       C
ATOM   1123  C   ASN A 162       0.236  23.959   4.682  1.00183.27           C
ANISOU 1123  C   ASN A 162    28121  20864  20651  -4195  -2461    200       C
ATOM   1124  O   ASN A 162       1.453  23.791   4.612  1.00182.77           O
ANISOU 1124  O   ASN A 162    27807  20968  20670  -4590  -1876    768       O
ATOM   1125  CB  ASN A 162       0.170  26.448   4.953  1.00190.79           C
ANISOU 1125  CB  ASN A 162    30059  21009  21424  -4540  -3142    396       C
ATOM   1126  CG  ASN A 162      -0.510  26.856   3.660  1.00199.99           C
ANISOU 1126  CG  ASN A 162    32223  21763  22002  -3981  -3414    291       C
ATOM   1127  OD1 ASN A 162      -1.114  26.031   2.973  1.00207.08           O
ANISOU 1127  OD1 ASN A 162    33174  22826  22680  -3473  -3452    -23       O
ATOM   1128  ND2 ASN A 162      -0.414  28.137   3.321  1.00201.59           N
ANISOU 1128  ND2 ASN A 162    33273  21397  21924  -4072  -3631    548       N
ATOM   1129  N   ILE A 163      -0.638  23.171   4.062  1.00186.00           N
ANISOU 1129  N   ILE A 163    28587  21273  20814  -3661  -2587   -260       N
ATOM   1130  CA  ILE A 163      -0.208  21.993   3.317  1.00188.05           C
ANISOU 1130  CA  ILE A 163    28737  21772  20940  -3506  -2017   -137       C
ATOM   1131  C   ILE A 163       0.298  22.348   1.921  1.00194.79           C
ANISOU 1131  C   ILE A 163    30444  22376  21192  -3376  -1728    259       C
ATOM   1132  O   ILE A 163       0.954  21.537   1.265  1.00195.37           O
ANISOU 1132  O   ILE A 163    30500  22623  21111  -3321  -1107    508       O
ATOM   1133  CB  ILE A 163      -1.346  20.958   3.189  1.00183.12           C
ANISOU 1133  CB  ILE A 163    27932  21282  20362  -3045  -2263   -838       C
ATOM   1134  CG1 ILE A 163      -0.773  19.552   3.000  1.00177.28           C
ANISOU 1134  CG1 ILE A 163    26785  20840  19734  -3034  -1594   -727       C
ATOM   1135  CG2 ILE A 163      -2.274  21.323   2.043  1.00188.63           C
ANISOU 1135  CG2 ILE A 163    29453  21691  20526  -2521  -2777  -1215       C
ATOM   1136  CD1 ILE A 163       0.199  19.144   4.079  1.00171.92           C
ANISOU 1136  CD1 ILE A 163    25310  20469  19544  -3459  -1117   -314       C
ATOM   1137  N   GLU A 164      -0.008  23.562   1.472  1.00196.99           N
ANISOU 1137  N   GLU A 164    31526  22218  21102  -3296  -2147    326       N
ATOM   1138  CA  GLU A 164       0.401  24.014   0.147  1.00202.84           C
ANISOU 1138  CA  GLU A 164    33238  22651  21181  -3157  -1887    728       C
ATOM   1139  C   GLU A 164       1.921  24.016   0.022  1.00205.15           C
ANISOU 1139  C   GLU A 164    33336  23061  21549  -3704   -992   1489       C
ATOM   1140  O   GLU A 164       2.623  24.520   0.899  1.00208.28           O
ANISOU 1140  O   GLU A 164    33229  23511  22398  -4283   -859   1812       O
ATOM   1141  CB  GLU A 164      -0.162  25.408  -0.143  1.00215.52           C
ANISOU 1141  CB  GLU A 164    35764  23700  22425  -3002  -2508    722       C
ATOM   1142  CG  GLU A 164       0.175  25.944  -1.525  1.00235.05           C
ANISOU 1142  CG  GLU A 164    39413  25779  24116  -2816  -2270   1160       C
ATOM   1143  CD  GLU A 164      -0.465  27.292  -1.801  1.00250.80           C
ANISOU 1143  CD  GLU A 164    42405  27159  25729  -2567  -2941   1146       C
ATOM   1144  OE1 GLU A 164      -1.263  27.757  -0.959  1.00251.20           O
ANISOU 1144  OE1 GLU A 164    42196  27116  26131  -2461  -3625    712       O
ATOM   1145  OE2 GLU A 164      -0.170  27.888  -2.859  1.00261.40           O
ANISOU 1145  OE2 GLU A 164    44835  28087  26396  -2448  -2752   1577       O
ATOM   1146  N   ASN A 165       2.415  23.433  -1.067  1.00210.11           N
ANISOU 1146  N   ASN A 165    34338  23753  21739  -3511   -386   1737       N
ATOM   1147  CA  ASN A 165       3.849  23.326  -1.328  1.00221.52           C
ANISOU 1147  CA  ASN A 165    35555  25365  23249  -3953    569   2435       C
ATOM   1148  C   ASN A 165       4.619  22.585  -0.237  1.00214.79           C
ANISOU 1148  C   ASN A 165    33425  25029  23156  -4337    948   2560       C
ATOM   1149  O   ASN A 165       5.787  22.880   0.015  1.00221.30           O
ANISOU 1149  O   ASN A 165    33806  26000  24278  -4876   1494   3120       O
ATOM   1150  CB  ASN A 165       4.468  24.707  -1.575  1.00239.64           C
ANISOU 1150  CB  ASN A 165    38450  27239  25362  -4428    720   3011       C
ATOM   1151  CG  ASN A 165       3.889  25.397  -2.794  1.00257.47           C
ANISOU 1151  CG  ASN A 165    42110  28957  26760  -4003    489   3032       C
ATOM   1152  OD1 ASN A 165       2.835  25.012  -3.298  1.00260.08           O
ANISOU 1152  OD1 ASN A 165    42918  29226  26675  -3335   -44   2506       O
ATOM   1153  ND2 ASN A 165       4.578  26.426  -3.275  1.00270.23           N
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ANISOU 1153  ND2 ASN A 165    44406  30169  28100  -4398    876   3641       N
ATOM   1154  N   TRP A 166       3.964  21.626   0.410  1.00202.86           N
ANISOU 1154  N   TRP A 166    31325  23789  21962  -4062    650   2041       N
ATOM   1155  CA  TRP A 166       4.637  20.803   1.408  1.00197.00           C
ANISOU 1155  CA  TRP A 166    29476  23517  21857  -4306    989   2160       C
ATOM   1156  C   TRP A 166       5.074  19.471   0.816  1.00194.02           C
ANISOU 1156  C   TRP A 166    28898  23411  21410  -3966   1681   2206       C
ATOM   1157  O   TRP A 166       4.270  18.742   0.236  1.00194.32           O
ANISOU 1157  O   TRP A 166    29329  23362  21142  -3468   1555   1738       O
ATOM   1158  CB  TRP A 166       3.747  20.563   2.628  1.00194.54           C
ANISOU 1158  CB  TRP A 166    28638  23310  21969  -4271    338   1633       C
ATOM   1159  CG  TRP A 166       4.392  19.674   3.651  1.00197.12           C
ANISOU 1159  CG  TRP A 166    27948  24087  22861  -4448    654   1771       C
ATOM   1160  CD1 TRP A 166       5.379  20.017   4.529  1.00204.52           C
ANISOU 1160  CD1 TRP A 166    28214  25276  24221  -4949    792   2204       C
ATOM   1161  CD2 TRP A 166       4.100  18.292   3.898  1.00192.72           C
ANISOU 1161  CD2 TRP A 166    26975  23759  22491  -4107    839   1478       C
ATOM   1162  NE1 TRP A 166       5.717  18.937   5.308  1.00201.91           N
ANISOU 1162  NE1 TRP A 166    27089  25341  24289  -4873   1018   2221       N
ATOM   1163  CE2 TRP A 166       4.947  17.866   4.940  1.00193.90           C
ANISOU 1163  CE2 TRP A 166    26250  24283  23139  -4364   1087   1798       C
ATOM   1164  CE3 TRP A 166       3.203  17.376   3.338  1.00185.85           C
ANISOU 1164  CE3 TRP A 166    26413  22786  21414  -3625    797    963       C
ATOM   1165  CZ2 TRP A 166       4.924  16.564   5.436  1.00184.10           C
ANISOU 1165  CZ2 TRP A 166    24511  23270  22168  -4111   1331   1670       C
ATOM   1166  CZ3 TRP A 166       3.183  16.084   3.832  1.00178.59           C
ANISOU 1166  CZ3 TRP A 166    24975  22073  20810  -3455   1071    806       C
ATOM   1167  CH2 TRP A 166       4.037  15.690   4.869  1.00178.00           C
ANISOU 1167  CH2 TRP A 166    24104  22324  21203  -3676   1353   1183       C
ATOM   1168  N   GLN A 167       6.357  19.161   0.969  1.00193.14           N
ANISOU 1168  N   GLN A 167    28156  23625  21604  -4231   2400   2745       N
ATOM   1169  CA  GLN A 167       6.909  17.916   0.457  1.00194.78           C
ANISOU 1169  CA  GLN A 167    28131  24085  21791  -3880   3140   2838       C
ATOM   1170  C   GLN A 167       7.361  17.022   1.603  1.00187.19           C
ANISOU 1170  C   GLN A 167    26091  23538  21493  -3927   3264   2884       C
ATOM   1171  O   GLN A 167       8.150  17.435   2.453  1.00181.07           O
ANISOU 1171  O   GLN A 167    24590  23026  21181  -4370   3283   3260       O
ATOM   1172  CB  GLN A 167       8.066  18.198  -0.499  1.00204.57           C
ANISOU 1172  CB  GLN A 167    29575  25373  22780  -4012   4004   3445       C
ATOM   1173  CG  GLN A 167       7.644  18.911  -1.774  1.00214.15           C
ANISOU 1173  CG  GLN A 167    32026  26146  23197  -3857   3995   3437       C
ATOM   1174  CD  GLN A 167       8.812  19.213  -2.690  1.00233.30           C
ANISOU 1174  CD  GLN A 167    34678  28606  25358  -4037   4963   4076       C
ATOM   1175  OE1 GLN A 167       9.966  18.956  -2.348  1.00242.61           O
ANISOU 1175  OE1 GLN A 167    34974  30174  27031  -4316   5624   4519       O
ATOM   1176  NE2 GLN A 167       8.518  19.763  -3.862  1.00241.47           N
ANISOU 1176  NE2 GLN A 167    36896  29249  25603  -3859   5059   4131       N
ATOM   1177  N   SER A 168       6.850  15.796   1.618  1.00187.26           N
ANISOU 1177  N   SER A 168    26044  23579  21527  -3469   3322   2491       N
ATOM   1178  CA  SER A 168       7.104  14.862   2.709  1.00183.11           C
ANISOU 1178  CA  SER A 168    24659  23355  21560  -3421   3391   2495       C
ATOM   1179  C   SER A 168       8.540  14.344   2.725  1.00184.69           C
ANISOU 1179  C   SER A 168    24171  23941  22061  -3401   4179   3081       C
ATOM   1180  O   SER A 168       9.064  13.986   3.780  1.00176.91           O
ANISOU 1180  O   SER A 168    22357  23278  21582  -3495   4160   3287       O
ATOM   1181  CB  SER A 168       6.121  13.691   2.643  1.00178.96           C
ANISOU 1181  CB  SER A 168    24370  22657  20968  -2966   3287   1904       C
ATOM   1182  OG  SER A 168       6.123  13.096   1.356  1.00183.74           O
ANISOU 1182  OG  SER A 168    25601  23094  21118  -2555   3766   1784       O
ATOM   1183  N   GLN A 169       9.172  14.304   1.556  1.00193.36           N
ANISOU 1183  N   GLN A 169    25616  25023  22829  -3241   4872   3346       N
ATOM   1184  CA  GLN A 169      10.538  13.801   1.457  1.00209.74           C
ANISOU 1184  CA  GLN A 169    27003  27487  25200  -3158   5705   3879       C
ATOM   1185  C   GLN A 169      11.531  14.738   2.142  1.00222.90           C
ANISOU 1185  C   GLN A 169    27867  29502  27322  -3766   5675   4410       C
ATOM   1186  O   GLN A 169      12.555  14.294   2.661  1.00231.89           O
ANISOU 1186  O   GLN A 169    28063  31087  28959  -3756   6039   4781       O
ATOM   1187  CB  GLN A 169      10.934  13.562  -0.005  1.00225.07           C
ANISOU 1187  CB  GLN A 169    29573  29318  26627  -2831   6528   4005       C
ATOM   1188  CG  GLN A 169      11.008  14.814  -0.869  1.00236.66           C
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ANISOU 1188  CG  GLN A 169    31726  30575  27619  -3190   6602   4223       C
ATOM   1189  CD  GLN A 169       9.655  15.254  -1.395  1.00233.00           C
ANISOU 1189  CD  GLN A 169    32379  29616  26537  -3075   5919   3701       C
ATOM   1190  OE1 GLN A 169       8.611  14.837  -0.892  1.00222.83           O
ANISOU 1190  OE1 GLN A 169    31173  28185  25307  -2891   5250   3158       O
ATOM   1191  NE2 GLN A 169       9.669  16.098  -2.421  1.00237.96           N
ANISOU 1191  NE2 GLN A 169    33868  29980  26566  -3170   6097   3870       N
ATOM   1192  N   GLU A 170      11.221  16.031   2.146  1.00224.26           N
ANISOU 1192  N   GLU A 170    28417  29455  27336  -4285   5207   4423       N
ATOM   1193  CA  GLU A 170      12.059  17.013   2.824  1.00223.79           C
ANISOU 1193  CA  GLU A 170    27682  29641  27706  -4965   5078   4843       C
ATOM   1194  C   GLU A 170      11.769  17.030   4.321  1.00226.25           C
ANISOU 1194  C   GLU A 170    27378  30125  28462  -5162   4297   4661       C
ATOM   1195  O   GLU A 170      12.668  16.838   5.140  1.00233.51           O
ANISOU 1195  O   GLU A 170    27315  31505  29901  -5339   4344   4964       O
ATOM   1196  CB  GLU A 170      11.853  18.409   2.229  1.00212.38           C
ANISOU 1196  CB  GLU A 170    27002  27796  25898  -5450   4917   4936       C
ATOM   1197  CG  GLU A 170      12.394  18.575   0.819  1.00214.58           C
ANISOU 1197  CG  GLU A 170    27844  27947  25738  -5388   5786   5268       C
ATOM   1198  CD  GLU A 170      12.304  20.007   0.325  1.00220.15           C
ANISOU 1198  CD  GLU A 170    29312  28222  26115  -5921   5660   5458       C
ATOM   1199  OE1 GLU A 170      11.625  20.822   0.984  1.00213.36           O
ANISOU 1199  OE1 GLU A 170    28685  27087  25296  -6223   4825   5228       O
ATOM   1200  OE2 GLU A 170      12.915  20.319  -0.719  1.00231.33           O
ANISOU 1200  OE2 GLU A 170    31137  29544  27214  -6024   6435   5846       O
ATOM   1201  N   ILE A 171      10.508  17.260   4.672  1.00214.87           N
ANISOU 1201  N   ILE A 171    26516  28332  26794  -5104   3576   4156       N
ATOM   1202  CA  ILE A 171      10.093  17.266   6.069  1.00195.70           C
ANISOU 1202  CA  ILE A 171    23651  26020  24685  -5249   2876   3930       C
ATOM   1203  C   ILE A 171       9.192  16.073   6.363  1.00185.23           C
ANISOU 1203  C   ILE A 171    22442  24627  23311  -4690   2763   3487       C
ATOM   1204  O   ILE A 171       8.101  15.956   5.804  1.00178.05           O
ANISOU 1204  O   ILE A 171    22264  23347  22040  -4423   2589   3028       O
ATOM   1205  CB  ILE A 171       9.336  18.556   6.436  1.00182.16           C
ANISOU 1205  CB  ILE A 171    22429  23957  22826  -5679   2135   3675       C
ATOM   1206  CG1 ILE A 171      10.048  19.782   5.862  1.00172.42           C
ANISOU 1206  CG1 ILE A 171    21392  22590  21529  -6230   2308   4067       C
ATOM   1207  CG2 ILE A 171       9.197  18.675   7.943  1.00186.56           C
ANISOU 1207  CG2 ILE A 171    22448  24711  23724  -5915   1514   3538       C
ATOM   1208  CD1 ILE A 171       9.369  21.092   6.206  1.00157.42           C
ANISOU 1208  CD1 ILE A 171    20052  20269  19492  -6631   1603   3842       C
ATOM   1209  N   THR A 172       9.652  15.191   7.243  1.00184.51           N
ANISOU 1209  N   THR A 172    21631  24884  23592  -4519   2850   3625       N
ATOM   1210  CA  THR A 172       8.881  14.010   7.607  1.00179.69           C
ANISOU 1210  CA  THR A 172    21121  24170  22982  -4045   2822   3262       C
ATOM   1211  C   THR A 172       7.650  14.407   8.414  1.00169.75           C
ANISOU 1211  C   THR A 172    20157  22680  21659  -4207   2097   2765       C
ATOM   1212  O   THR A 172       7.615  15.479   9.018  1.00164.66           O
ANISOU 1212  O   THR A 172    19444  22060  21060  -4652   1593   2779       O
ATOM   1213  CB  THR A 172       9.722  13.018   8.435  1.00178.17           C
ANISOU 1213  CB  THR A 172    20140  24372  23182  -3799   3075   3598       C
ATOM   1214  OG1 THR A 172       9.804  13.468   9.793  1.00171.59           O
ANISOU 1214  OG1 THR A 172    18846  23769  22581  -4133   2484   3665       O
ATOM   1215  CG2 THR A 172      11.124  12.893   7.855  1.00180.79           C
ANISOU 1215  CG2 THR A 172    19932  25059  23701  -3727   3720   4151       C
ATOM   1216  N   PHE A 173       6.641  13.541   8.415  1.00163.44           N
ANISOU 1216  N   PHE A 173    19683  21644  20773  -3860   2078   2305       N
ATOM   1217  CA  PHE A 173       5.435  13.771   9.199  1.00159.37           C
ANISOU 1217  CA  PHE A 173    19361  20944  20249  -3971   1500   1804       C
ATOM   1218  C   PHE A 173       5.801  13.790  10.677  1.00165.46           C
ANISOU 1218  C   PHE A 173    19563  22006  21296  -4174   1242   2011       C
ATOM   1219  O   PHE A 173       5.203  14.517  11.470  1.00163.03           O
ANISOU 1219  O   PHE A 173    19315  21653  20976  -4445    712   1769       O
ATOM   1220  CB  PHE A 173       4.405  12.670   8.927  1.00157.29           C
ANISOU 1220  CB  PHE A 173    19425  20408  19930  -3601   1646   1298       C
ATOM   1221  CG  PHE A 173       2.998  13.034   9.325  1.00158.08           C
ANISOU 1221  CG  PHE A 173    19801  20278  19984  -3705   1108    679       C
ATOM   1222  CD1 PHE A 173       2.081  13.448   8.373  1.00159.63           C
ANISOU 1222  CD1 PHE A 173    20545  20193  19915  -3617    856    209       C
ATOM   1223  CD2 PHE A 173       2.590  12.953  11.646  1.00161.72           C
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ANISOU 1223  CD2 PHE A 173     19972  20823  20651  -3852    861    560       C
ATOM   1224  CE1 PHE A 173       0.787  13.779   8.729  1.00154.71           C
ANISOU 1224  CE1 PHE A 173     20069  19405  19309  -3664    360   -384       C
ATOM   1225  CE2 PHE A 173       1.297  13.284  11.007  1.00163.58           C
ANISOU 1225  CE2 PHE A 173     20399  20876  20877  -3929    448    -25       C
ATOM   1226  CZ  PHE A 173       0.395  13.698  10.047  1.00158.02           C
ANISOU 1226  CZ  PHE A 173     20135  19921  19985  -3830    193   -507       C
ATOM   1227  N   ASP A 174       6.798  12.988  11.036  1.00174.06           N
ANISOU 1227  N   ASP A 174     20130  23399  22605  -3994   1611   2456       N
ATOM   1228  CA  ASP A 174       7.238  12.876  12.420  1.00175.82           C
ANISOU 1228  CA  ASP A 174     19836  23936  23033  -4097   1354   2696       C
ATOM   1229  C   ASP A 174       7.915  14.156  12.898  1.00164.67           C
ANISOU 1229  C   ASP A 174     18099  22783  21684  -4614    904   2941       C
ATOM   1230  O   ASP A 174       7.692  14.595  14.025  1.00159.90           O
ANISOU 1230  O   ASP A 174     17401  22270  21082  -4856    401   2845       O
ATOM   1231  CB  ASP A 174       8.177  11.680  12.583  1.00189.16           C
ANISOU 1231  CB  ASP A 174     21062  25879  24932  -3675   1837   3131       C
ATOM   1232  CG  ASP A 174       7.551  10.383  12.106  1.00187.05           C
ANISOU 1232  CG  ASP A 174     21182  25271  24616  -3191   2315   2881       C
ATOM   1233  OD1 ASP A 174       6.896   9.701  12.923  1.00173.51           O
ANISOU 1233  OD1 ASP A 174     19595  23409  22923  -3066   2250   2690       O
ATOM   1234  OD2 ASP A 174       7.711  10.048  10.913  1.00192.62           O
ANISOU 1234  OD2 ASP A 174     22109  25832  25244  -2958   2780   2865       O
ATOM   1235  N   GLU A 175       8.736  14.751  12.037  1.00162.98           N
ANISOU 1235  N   GLU A 175     17755  22663  21508  -4807   1116   3242       N
ATOM   1236  CA  GLU A 175       9.396  16.015  12.352  1.00168.68           C
ANISOU 1236  CA  GLU A 175     18208  23557  22326  -5391    739   3457       C
ATOM   1237  C   GLU A 175       8.382  17.098  12.699  1.00168.75           C
ANISOU 1237  C   GLU A 175     18775  23220  22124  -5732    133   3014       C
ATOM   1238  O   GLU A 175       8.642  17.955  13.544  1.00168.32           O
ANISOU 1238  O   GLU A 175     18538  23275  22139  -6175   -362   3045       O
ATOM   1239  CB  GLU A 175      10.269  16.478  11.185  1.00175.61           C
ANISOU 1239  CB  GLU A 175     19001  24477  23248  -5570   1194   3808       C
ATOM   1240  CG  GLU A 175      11.587  15.740  11.055  1.00181.72           C
ANISOU 1240  CG  GLU A 175     18976  25727  24343  -5371   1726   4327       C
ATOM   1241  CD  GLU A 175      12.382  16.188   9.846  1.00187.00           C
ANISOU 1241  CD  GLU A 175     19594  26422  25035  -5553   2302   4651       C
ATOM   1242  OE1 GLU A 175      11.852  16.987   9.047  1.00187.36           O
ANISOU 1242  OE1 GLU A 175     20355  26059  24774  -5780   2300   4483       O
ATOM   1243  OE2 GLU A 175      13.538  15.741   9.694  1.00192.40           O
ANISOU 1243  OE2 GLU A 175     19534  27537  26034  -5443   2776   5083       O
ATOM   1244  N   ILE A 176       7.229  17.053  12.039  1.00169.15           N
ANISOU 1244  N   ILE A 176     19498  22854  22918  -5501    153   2574       N
ATOM   1245  CA  ILE A 176       6.147  17.987  12.318  1.00165.13           C
ANISOU 1245  CA  ILE A 176     19514  22004  21222  -5684   -398   2101       C
ATOM   1246  C   ILE A 176       5.641  17.787  13.738  1.00158.45           C
ANISOU 1246  C   ILE A 176     18497  21272  20434  -5696   -776   1856       C
ATOM   1247  O   ILE A 176       5.466  18.744  14.492  1.00160.86           O
ANISOU 1247  O   ILE A 176     18892  21527  20700  -6034  -1278   1710       O
ATOM   1248  CB  ILE A 176       4.961  17.776  11.365  1.00156.26           C
ANISOU 1248  CB  ILE A 176     19032  20487  19851  -5325   -329   1635       C
ATOM   1249  CG1 ILE A 176       5.431  17.763   9.911  1.00153.60           C
ANISOU 1249  CG1 ILE A 176     18970  20041  19350  -5207    120   1874       C
ATOM   1250  CG2 ILE A 176       3.911  18.851  11.586  1.00154.25           C
ANISOU 1250  CG2 ILE A 176     19270  19902  19438  -5460   -915   1169       C
ATOM   1251  CD1 ILE A 176       5.923  19.095   9.424  1.00156.50           C
ANISOU 1251  CD1 ILE A 176     19609  20250  19603  -5619    -14   2122       C
ATOM   1252  N   LEU A 177       5.404  16.530  14.091  1.00149.12           N
ANISOU 1252  N   LEU A 177     17137  20206  19317  -5321   -494   1812       N
ATOM   1253  CA  LEU A 177       4.906  16.186  15.413  1.00147.37           C
ANISOU 1253  CA  LEU A 177     16824  20075  19096  -5289   -727   1619       C
ATOM   1254  C   LEU A 177       5.944  16.512  16.484  1.00150.07           C
ANISOU 1254  C   LEU A 177     16693  20808  19517  -5567  -1023   2010       C
ATOM   1255  O   LEU A 177       5.597  16.949  17.581  1.00150.17           O
ANISOU 1255  O   LEU A 177     16780  20857  19420  -5746  -1446   1816       O
ATOM   1256  CB  LEU A 177       4.516  14.708  15.460  1.00146.03           C
ANISOU 1256  CB  LEU A 177     16627  19875  18982  -4846   -268   1557       C
ATOM   1257  CG  LEU A 177       3.499  14.281  14.396  1.00138.46           C
ANISOU 1257  CG  LEU A 177     16093  18549  18967  -4596    -11   1115       C
ATOM   1258  CD1 LEU A 177       3.238  12.786  14.461  1.00136.84           C
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ANISOU 1258  CD1 LEU A 177    15862  18271  17862  -4234    476   1076       C
ATOM   1259  CD2 LEU A 177       2.198  15.061  14.539  1.00132.92           C
ANISOU 1259  CD2 LEU A 177    15763  17586  17154  -4720   -426    507       C
ATOM   1260  N   GLN A 178       7.216  16.301  16.155  1.00153.91           N
ANISOU 1260  N   GLN A 178    16680  21609  20190  -5591   -806   2533       N
ATOM   1261  CA  GLN A 178       8.312  16.662  17.048  1.00162.59           C
ANISOU 1261  CA  GLN A 178    17221  23139  21415  -5883  -1150   2901       C
ATOM   1262  C   GLN A 178       8.258  18.151  17.347  1.00159.10           C
ANISOU 1262  C   GLN A 178    16972  22578  20901  -6474  -1719   2715       C
ATOM   1263  O   GLN A 178       8.403  18.573  18.495  1.00154.51           O
ANISOU 1263  O   GLN A 178    16285  22170  20250  -6721  -2229   2663       O
ATOM   1264  CB  GLN A 178       9.657  16.318  16.409  1.00179.00           C
ANISOU 1264  CB  GLN A 178    18662  25569  23779  -5833   -776   3449       C
ATOM   1265  CG  GLN A 178       9.902  14.834  16.224  1.00187.35           C
ANISOU 1265  CG  GLN A 178    19490  26761  24933  -5203   -229   3684       C
ATOM   1266  CD  GLN A 178      10.987  14.550  15.206  1.00192.52           C
ANISOU 1266  CD  GLN A 178    19670  27636  25841  -5076    309   4111       C
ATOM   1267  OE1 GLN A 178      11.645  15.466  14.713  1.00194.23           O
ANISOU 1267  OE1 GLN A 178    19649  27961  26187  -5517    283   4280       O
ATOM   1268  NE2 GLN A 178      11.174  13.277  14.880  1.00194.74           N
ANISOU 1268  NE2 GLN A 178    19843  27952  26199  -4476    852   4281       N
ATOM   1269  N   ALA A 179       8.049  18.940  16.299  1.00159.66           N
ANISOU 1269  N   ALA A 179    17402  22314  20949  -6680  -1628   2612       N
ATOM   1270  CA  ALA A 179       7.900  20.380  16.439  1.00157.88           C
ANISOU 1270  CA  ALA A 179    17516  21828  20644  -7207  -2114   2416       C
ATOM   1271  C   ALA A 179       6.594  20.693  17.154  1.00154.98           C
ANISOU 1271  C   ALA A 179    17704  21159  20022  -7103  -2495   1844       C
ATOM   1272  O   ALA A 179       6.525  21.629  17.947  1.00162.38           O
ANISOU 1272  O   ALA A 179    18806  22016  20875  -7465  -3009   1654       O
ATOM   1273  CB  ALA A 179       7.940  21.054  15.079  1.00152.40           C
ANISOU 1273  CB  ALA A 179    17188  20784  19931  -7359  -1859   2487       C
ATOM   1274  N   TYR A 180       5.565  19.899  16.871  1.00141.38           N
ANISOU 1274  N   TYR A 180    16252  19270  18197  -6616  -2220   1544       N
ATOM   1275  CA  TYR A 180       4.266  20.056  17.518  1.00130.91           C
ANISOU 1275  CA  TYR A 180    15343  17707  16689  -6468  -2469    979       C
ATOM   1276  C   TYR A 180       4.384  19.859  19.024  1.00138.73           C
ANISOU 1276  C   TYR A 180    16136  18979  17596  -6543  -2729    964       C
ATOM   1277  O   TYR A 180       3.820  20.623  19.804  1.00140.86           O
ANISOU 1277  O   TYR A 180    16715  19108  17696  -6701  -3126    603       O
ATOM   1278  CB  TYR A 180       3.255  19.058  16.952  1.00121.52           C
ANISOU 1278  CB  TYR A 180    14319  16364  15491  -5979  -2070    686       C
ATOM   1279  CG  TYR A 180       2.216  19.663  16.036  1.00127.36           C
ANISOU 1279  CG  TYR A 180    15573  16681  16136  -5851  -2174    238       C
ATOM   1280  CD1 TYR A 180       1.147  20.387  16.549  1.00125.79           C
ANISOU 1280  CD1 TYR A 180    15711  16248  15834  -5841  -2549   -293       C
ATOM   1281  CD2 TYR A 180       2.293  19.496  14.659  1.00130.59           C
ANISOU 1281  CD2 TYR A 180    16149  16938  16532  -5683  -1906    336       C
ATOM   1282  CE1 TYR A 180       0.190  20.937  15.715  1.00121.91           C
ANISOU 1282  CE1 TYR A 180    15654  15397  15270  -5639  -2708   -706       C
ATOM   1283  CE2 TYR A 180       1.340  20.043  13.816  1.00129.99           C
ANISOU 1283  CE2 TYR A 180    16580  16494  16316  -5503  -2084    -68       C
ATOM   1284  CZ  TYR A 180       0.291  20.762  14.349  1.00123.59           C
ANISOU 1284  CZ  TYR A 180    16043  15471  15446  -5466  -2512   -584       C
ATOM   1285  OH  TYR A 180      -0.661  21.307  13.515  1.00116.48           O
ANISOU 1285  OH  TYR A 180    15609  14227  14419  -5208  -2751   -989       O
ATOM   1286  N   CYS A 181       5.121  18.828  19.424  1.00142.89           N
ANISOU 1286  N   CYS A 181    16197  19889  18204  -6382  -2501   1360       N
ATOM   1287  CA  CYS A 181       5.291  18.515  20.837  1.00141.64           C
ANISOU 1287  CA  CYS A 181    15906  20019  17891  -6376  -2740   1413       C
ATOM   1288  C   CYS A 181       6.051  19.609  21.581  1.00147.60           C
ANISOU 1288  C   CYS A 181    16555  20949  18576  -6873  -3363   1490       C
ATOM   1289  O   CYS A 181       5.598  20.086  22.620  1.00153.99           O
ANISOU 1289  O   CYS A 181    17668  21722  19120  -6992  -3741   1181       O
ATOM   1290  CB  CYS A 181       5.996  17.168  21.009  1.00141.74           C
ANISOU 1290  CB  CYS A 181    15476  20375  18002  -6021  -2384   1879       C
ATOM   1291  SG  CYS A 181       5.005  15.742  20.505  1.00183.39           S
ANISOU 1291  SG  CYS A 181    20979  25387  23315  -5471  -1680   1716       S
ATOM   1292  N   PHE A 182       7.202  20.003  21.041  1.00151.21           N
ANISOU 1292  N   PHE A 182    16585  21589  19277  -7185  -3440   1876       N
ATOM   1293  CA  PHE A 182       8.028  21.035  21.660  1.00160.54           C
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ANISOU 1293  CA  PHE A 182    17587  22937  20474  -7754  -4037   1947       C
ATOM   1294  C   PHE A 182       7.244  22.329  21.844  1.00145.65           C
ANISOU 1294  C   PHE A 182    16366  20579  18396  -8089  -4427   1439       C
ATOM   1295  O   PHE A 182       7.350  22.990  22.877  1.00144.77           O
ANISOU 1295  O   PHE A 182    16396  20515  18093  -8396  -4973   1245       O
ATOM   1296  CB  PHE A 182       9.281  21.299  20.823  1.00181.01           C
ANISOU 1296  CB  PHE A 182    19598  25731  23446  -8094  -3924   2405       C
ATOM   1297  CG  PHE A 182      10.253  22.246  21.470  1.00197.93           C
ANISOU 1297  CG  PHE A 182    21407  28103  25695  -8748  -4533   2495       C
ATOM   1298  CD1 PHE A 182      11.199  21.780  22.369  1.00208.70           C
ANISOU 1298  CD1 PHE A 182    22110  30064  27121  -8756  -4865   2775       C
ATOM   1299  CD2 PHE A 182      10.223  23.601  21.180  1.00195.53           C
ANISOU 1299  CD2 PHE A 182    21516  27364  25414  -9236  -4748   2266       C
ATOM   1300  CE1 PHE A 182      12.096  22.646  22.967  1.00211.34           C
ANISOU 1300  CE1 PHE A 182    22191  30561  27548  -9208  -5385   2758       C
ATOM   1301  CE2 PHE A 182      11.116  24.471  21.776  1.00200.78           C
ANISOU 1301  CE2 PHE A 182    22012  28107  26169  -9587  -5138   2244       C
ATOM   1302  CZ  PHE A 182      12.054  23.993  22.670  1.00208.25           C
ANISOU 1302  CZ  PHE A 182    22282  29655  27190  -9587  -5460   2460       C
ATOM   1303  N   ILE A 183       6.458  22.679  20.831  1.00137.05           N
ANISOU 1303  N   ILE A 183    15718  19023  17332  -7984  -4167   1211       N
ATOM   1304  CA  ILE A 183       5.601  23.857  20.882  1.00145.17           C
ANISOU 1304  CA  ILE A 183    17429  19539  18190  -8156  -4491    719       C
ATOM   1305  C   ILE A 183       4.546  23.711  21.976  1.00152.88           C
ANISOU 1305  C   ILE A 183    18755  20470  18862  -7876  -4646    234       C
ATOM   1306  O   ILE A 183       4.252  24.661  22.700  1.00165.52           O
ANISOU 1306  O   ILE A 183    20764  21850  20274  -8010  -5024   -117       O
ATOM   1307  CB  ILE A 183       4.928  24.111  19.517  1.00144.40           C
ANISOU 1307  CB  ILE A 183    17729  18986  18150  -7955  -4186    599       C
ATOM   1308  CG1 ILE A 183       5.952  24.640  18.511  1.00142.30           C
ANISOU 1308  CG1 ILE A 183    17320  18648  18099  -8359  -4069   1038       C
ATOM   1309  CG2 ILE A 183       3.783  25.095  19.649  1.00141.11           C
ANISOU 1309  CG2 ILE A 183    18026  18050  17538  -7892  -4495     27       C
ATOM   1310  CD1 ILE A 183       5.406  24.799  17.111  1.00140.11           C
ANISOU 1310  CD1 ILE A 183    17487  17957  17791  -8116  -3747   1003       C
ATOM   1311  N   LEU A 184       3.989  22.512  22.101  1.00146.48           N
ANISOU 1311  N   LEU A 184    17812  19833  18012  -7390  -4236    213       N
ATOM   1312  CA  LEU A 184       3.007  22.235  23.143  1.00141.95           C
ANISOU 1312  CA  LEU A 184    17522  19250  17162  -7134  -4239   -200       C
ATOM   1313  C   LEU A 184       3.659  22.185  24.523  1.00140.38           C
ANISOU 1313  C   LEU A 184    17221  19416  16701  -7313  -4592    -63       C
ATOM   1314  O   LEU A 184       3.073  22.623  25.512  1.00126.88           O
ANISOU 1314  O   LEU A 184    15915  17624  14669  -7328  -4825   -455       O
ATOM   1315  CB  LEU A 184       2.268  20.925  22.859  1.00135.02           C
ANISOU 1315  CB  LEU A 184    16532  18415  16354  -6643  -3645   -236       C
ATOM   1316  CG  LEU A 184       1.283  20.917  21.687  1.00127.91           C
ANISOU 1316  CG  LEU A 184    15817  17156  15627  -6391  -3364   -559       C
ATOM   1317  CD1 LEU A 184       0.651  19.543  21.531  1.00121.27           C
ANISOU 1317  CD1 LEU A 184    14819  16379  14879  -5999  -2803   -608       C
ATOM   1318  CD2 LEU A 184       0.216  21.983  21.865  1.00129.40           C
ANISOU 1318  CD2 LEU A 184    16482  16985  15699  -6381  -3650  -1165       C
ATOM   1319  N   GLU A 185       4.874  21.650  24.583  1.00149.08           N
ANISOU 1319  N   GLU A 185    17786  20935  17921  -7410  -4641    480       N
ATOM   1320  CA  GLU A 185       5.597  21.528  25.844  1.00161.12           C
ANISOU 1320  CA  GLU A 185    19163  22872  19183  -7529  -5060    655       C
ATOM   1321  C   GLU A 185       5.897  22.887  26.466  1.00161.32           C
ANISOU 1321  C   GLU A 185    19455  22802  19037  -8064  -5754    385       C
ATOM   1322  O   GLU A 185       5.935  23.025  27.689  1.00172.49           O
ANISOU 1322  O   GLU A 185    21095  24391  20052  -8116  -6148    234       O
ATOM   1323  CB  GLU A 185       6.904  20.755  25.642  1.00181.58           C
ANISOU 1323  CB  GLU A 185    21023  25949  22019  -7491  -5026   1291       C
ATOM   1324  CG  GLU A 185       6.737  19.247  25.497  1.00197.17           C
ANISOU 1324  CG  GLU A 185    22560  27817  23780  -6902  -4430   1583       C
ATOM   1325  CD  GLU A 185       6.507  18.544  26.824  1.00205.48           C
ANISOU 1325  CD  GLU A 185    24099  29329  24645  -6600  -4499   1603       C
ATOM   1326  OE1 GLU A 185       6.524  19.221  27.874  1.00218.10           O
ANISOU 1326  OE1 GLU A 185    25982  31017  25869  -6831  -5038   1389       O
ATOM   1327  OE2 GLU A 185       6.312  17.310  26.818  1.00197.78           O
ANISOU 1327  OE2 GLU A 185    23088  28393  23666  -6131  -3997   1836       O
ATOM   1328  N   LYS A 186       6.101  23.891  25.621  1.00171.69           N
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ANISOU 1328  N   LYS A 186    21774  23812  19647 -11686  -3556   2299       N
ATOM   1329  CA  LYS A 186       6.534  25.200  26.095  1.00184.16           C
ANISOU 1329  CA  LYS A 186    23558  25387  21025 -12083  -3674   2184       C
ATOM   1330  C   LYS A 186       5.398  26.212  26.226  1.00178.74           C
ANISOU 1330  C   LYS A 186    23692  24305  19915 -11985  -3605   1836       C
ATOM   1331  O   LYS A 186       5.421  27.064  27.113  1.00198.15           O
ANISOU 1331  O   LYS A 186    26397  26779  22112 -12227  -3789   1736       O
ATOM   1332  CB  LYS A 186       7.637  25.753  25.190  1.00200.26           C
ANISOU 1332  CB  LYS A 186    25277  27443  23370 -12422  -3452   2259       C
ATOM   1333  CG  LYS A 186       8.898  24.905  25.181  1.00220.87           C
ANISOU 1333  CG  LYS A 186    26967  30486  26468 -12564  -3516   2606       C
ATOM   1334  CD  LYS A 186       9.491  24.790  26.577  1.00238.44           C
ANISOU 1334  CD  LYS A 186    28823  33128  28644 -12789  -4014   2758       C
ATOM   1335  CE  LYS A 186      10.711  23.881  26.592  1.00251.49           C
ANISOU 1335  CE  LYS A 186    29501  35240  30815 -12875  -4129   3122       C
ATOM   1336  NZ  LYS A 186      10.365  22.479  26.229  1.00251.84           N
ANISOU 1336  NZ  LYS A 186    29278  35344  31065 -12441  -4028   3337       N
ATOM   1337  N   LEU A 187       4.408  26.124  25.345  1.00152.56           N
ANISOU 1337  N   LEU A 187    20785  20632  16549 -11631  -3344   1651       N
ATOM   1338  CA  LEU A 187       3.286  27.056  25.384  1.00143.52           C
ANISOU 1338  CA  LEU A 187    20363  19103  15067 -11483  -3270   1331       C
ATOM   1339  C   LEU A 187       2.361  26.783  26.561  1.00150.06           C
ANISOU 1339  C   LEU A 187    21382  19955  15680 -11262  -3433   1225       C
ATOM   1340  O   LEU A 187       1.579  27.646  26.959  1.00148.64           O
ANISOU 1340  O   LEU A 187    21702  19531  15242 -11212  -3412    986       O
ATOM   1341  CB  LEU A 187       2.493  27.006  24.080  1.00142.15           C
ANISOU 1341  CB  LEU A 187    20543  18547  14919 -11165  -2988   1170       C
ATOM   1342  CG  LEU A 187       3.181  27.645  22.878  1.00154.74           C
ANISOU 1342  CG  LEU A 187    22227  19974  16591 -11426  -2755   1207       C
ATOM   1343  CD1 LEU A 187       2.286  27.570  21.663  1.00155.02           C
ANISOU 1343  CD1 LEU A 187    22725  19607  16568 -11107  -2528   1044       C
ATOM   1344  CD2 LEU A 187       3.542  29.082  23.190  1.00160.60           C
ANISOU 1344  CD2 LEU A 187    23295  20605  17119 -11815  -2789   1114       C
ATOM   1345  N   LEU A 188       2.453  25.576  27.112  1.00154.05           N
ANISOU 1345  N   LEU A 188    21489  20737  16306 -11144  -3572   1414       N
ATOM   1346  CA  LEU A 188       1.621  25.189  28.244  1.00149.78           C
ANISOU 1346  CA  LEU A 188    21121  20224  15565 -10981  -3691   1344       C
ATOM   1347  C   LEU A 188       2.190  25.694  29.563  1.00155.00           C
ANISOU 1347  C   LEU A 188    21778  21129  15985 -11371  -3978   1439       C
ATOM   1348  O   LEU A 188       1.640  25.426  30.631  1.00162.34           O
ANISOU 1348  O   LEU A 188    22872  22110  16701 -11338  -4090   1415       O
ATOM   1349  CB  LEU A 188       1.429  23.672  28.290  1.00149.21           C
ANISOU 1349  CB  LEU A 188    20701  20305  15689 -10727  -3715   1514       C
ATOM   1350  CG  LEU A 188       0.367  23.118  27.339  1.00152.79           C
ANISOU 1350  CG  LEU A 188    21313  20442  16296 -10274  -3445   1308       C
ATOM   1351  CD1 LEU A 188       0.231  21.612  27.501  1.00127.22           C
ANISOU 1351  CD1 LEU A 188    17732  17352  13254 -10085  -3477   1481       C
ATOM   1352  CD2 LEU A 188      -0.967  23.809  27.578  1.00126.22           C
ANISOU 1352  CD2 LEU A 188    18493  16737  12729 -10037  -3318    936       C
ATOM   1353  N   GLU A 189       3.298  26.421  29.484  1.00148.39           N
ANISOU 1353  N   GLU A 189    20759  20436  15185 -11773  -4089   1536       N
ATOM   1354  CA  GLU A 189       3.829  27.104  30.650  1.00154.05           C
ANISOU 1354  CA  GLU A 189    21533  21335  15663 -12183  -4367   1565       C
ATOM   1355  C   GLU A 189       2.899  28.259  30.996  1.00154.44           C
ANISOU 1355  C   GLU A 189    22256  21031  15395 -12165  -4237   1235       C
ATOM   1356  O   GLU A 189       2.599  28.500  32.166  1.00157.57           O
ANISOU 1356  O   GLU A 189    22894  21467  15508 -12293  -4386   1177       O
ATOM   1357  CB  GLU A 189       5.238  27.621  30.375  1.00167.19           C
ANISOU 1357  CB  GLU A 189    22788  23215  17520 -12627  -4493   1708       C
ATOM   1358  CG  GLU A 189       6.258  26.527  30.127  1.00180.57           C
ANISOU 1358  CG  GLU A 189    23717  25298  19594 -12668  -4636   2051       C
ATOM   1359  CD  GLU A 189       7.609  27.079  29.726  1.00206.44           C
ANISOU 1359  CD  GLU A 189    26525  28757  23156 -13094  -4683   2150       C
ATOM   1360  OE1 GLU A 189       7.770  28.319  29.723  1.00210.43           O
ANISOU 1360  OE1 GLU A 189    27341  29088  23525 -13401  -4635   1953       O
ATOM   1361  OE2 GLU A 189       8.509  26.274  29.411  1.00221.33           O
ANISOU 1361  OE2 GLU A 189    27710  30952  25435 -13129  -4749   2423       O
ATOM   1362  N   ASN A 190       2.439  28.962  29.965  1.00150.71           N
ANISOU 1362  N   ASN A 190    22094  20200  14970 -12013  -3959   1030       N
ATOM   1363  CA  ASN A 190       1.520  30.081  30.138  1.00177.30           C
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ANISOU 1363  CA  ASN A 190    26076  23193  18095 -11950  -3820    724       C
ATOM   1364  C   ASN A 190       0.191  29.618  30.729  1.00145.53           C
ANISOU 1364  C   ASN A 190    22296  19031  13966 -11557  -3736    559       C
ATOM   1365  O   ASN A 190      -0.527  28.841  30.111  1.00140.39           O
ANISOU 1365  O   ASN A 190    21580  18272  13488 -11142  -3580    513       O
ATOM   1366  CB  ASN A 190       1.292  30.790  28.799  1.00148.46           C
ANISOU 1366  CB  ASN A 190    22697  19183  14530 -11840  -3567    583       C
ATOM   1367  CG  ASN A 190       0.583  32.124  28.953  1.00159.51           C
ANISOU 1367  CG  ASN A 190    24707  20201  15698 -11864  -3467    305       C
ATOM   1368  OD1 ASN A 190      -0.630  32.176  29.154  1.00146.01           O
ANISOU 1368  OD1 ASN A 190    23302  18251  13926 -11503  -3362     94       O
ATOM   1369  ND2 ASN A 190       1.339  33.213  28.848  1.00154.81           N
ANISOU 1369  ND2 ASN A 190    24272  19537  15014 -12299  -3492    295       N
ATOM   1370  N   GLU A 191      -0.122  30.099  31.928  1.00179.59           N
ANISOU 1370  N   GLU A 191    26883  23344  18010 -11720  -3829    454       N
ATOM   1371  CA  GLU A 191      -1.329  29.690  32.645  1.00175.52           C
ANISOU 1371  CA  GLU A 191    26581  22717  17393 -11430  -3730    288       C
ATOM   1372  C   GLU A 191      -2.610  29.948  31.856  1.00157.45           C
ANISOU 1372  C   GLU A 191    24554  20020  15250 -10954  -3439    -13       C
ATOM   1373  O   GLU A 191      -3.564  29.173  31.937  1.00149.52           O
ANISOU 1373  O   GLU A 191    23509  18952  14351 -10598  -3318   -121       O
ATOM   1374  CB  GLU A 191      -1.415  30.397  34.000  1.00194.35           C
ANISOU 1374  CB  GLU A 191    29295  25117  19434 -11750  -3846    190       C
ATOM   1375  CG  GLU A 191      -0.375  29.948  35.013  1.00214.67           C
ANISOU 1375  CG  GLU A 191    31631  28105  21829 -12183  -4190    471       C
ATOM   1376  CD  GLU A 191      -0.478  30.706  36.322  1.00235.92           C
ANISOU 1376  CD  GLU A 191    34715  30779  24144 -12529  -4310    347       C
ATOM   1377  OE1 GLU A 191      -0.783  31.917  36.285  1.00243.40           O
ANISOU 1377  OE1 GLU A 191    36043  31440  24999 -12602  -4188     95       O
ATOM   1378  OE2 GLU A 191      -0.261  30.091  37.387  1.00245.41           O
ANISOU 1378  OE2 GLU A 191    35878  32240  25126 -12741  -4533    504       O
ATOM   1379  N   GLU A 192      -2.629  31.037  31.094  1.00149.93           N
ANISOU 1379  N   GLU A 192    23868  18786  14313 -10968  -3344   -151       N
ATOM   1380  CA  GLU A 192      -3.819  31.418  30.342  1.00147.92           C
ANISOU 1380  CA  GLU A 192    23884  18127  14192 -10535  -3131   -436       C
ATOM   1381  C   GLU A 192      -4.048  30.483  29.154  1.00155.25           C
ANISOU 1381  C   GLU A 192    24559  19025  15404 -10166  -3040   -388       C
ATOM   1382  O   GLU A 192      -5.171  30.342  28.670  1.00164.37           O
ANISOU 1382  O   GLU A 192    25805  19920  16726  -9730  -2909   -621       O
ATOM   1383  CB  GLU A 192      -3.719  32.875  29.884  1.00149.69           C
ANISOU 1383  CB  GLU A 192    24531  18039  14307 -10701  -3088   -565       C
ATOM   1384  CG  GLU A 192      -5.052  33.509  29.522  1.00153.16           C
ANISOU 1384  CG  GLU A 192    25330  18042  14824 -10298  -2935   -900       C
ATOM   1385  CD  GLU A 192      -4.954  35.014  29.346  1.00167.85           C
ANISOU 1385  CD  GLU A 192    27679  19579  16516 -10519  -2917  -1022       C
ATOM   1386  OE1 GLU A 192      -3.859  35.576  29.569  1.00167.78           O
ANISOU 1386  OE1 GLU A 192    27733  19692  16325 -11016  -3006   -866       O
ATOM   1387  OE2 GLU A 192      -5.977  35.635  28.987  1.00175.52           O
ANISOU 1387  OE2 GLU A 192    28966  20167  17556 -10201  -2825  -1288       O
ATOM   1388  N   THR A 193      -2.976  29.847  28.691  1.00150.37           N
ANISOU 1388  N   THR A 193    23601  18672  14862 -10352  -3123   -102       N
ATOM   1389  CA  THR A 193      -3.069  28.835  27.642  1.00137.25           C
ANISOU 1389  CA  THR A 193    21680  17016  13455 -10058  -3044    -32       C
ATOM   1390  C   THR A 193      -3.747  27.582  28.189  1.00133.69           C
ANISOU 1390  C   THR A 193    20977  16692  13128  -9770  -3032    -53       C
ATOM   1391  O   THR A 193      -4.571  26.958  27.517  1.00121.75           O
ANISOU 1391  O   THR A 193    19416  15015  11829  -9371  -2912   -198       O
ATOM   1392  CB  THR A 193      -1.674  28.471  27.089  1.00134.06           C
ANISOU 1392  CB  THR A 193    20929  16879  13127 -10374  -3123    281       C
ATOM   1393  OG1 THR A 193      -1.162  29.564  26.318  1.00134.28           O
ANISOU 1393  OG1 THR A 193    21219  16723  13079 -10617  -3065    267       O
ATOM   1394  CG2 THR A 193      -1.746  27.237  26.209  1.00128.64           C
ANISOU 1394  CG2 THR A 193    19935  16239  12703 -10095  -3045    369       C
ATOM   1395  N   GLN A 194      -3.401  27.228  29.423  1.00127.92           N
ANISOU 1395  N   GLN A 194    20118  16241  12247 -10006  -3169     85       N
ATOM   1396  CA  GLN A 194      -3.962  26.056  30.080  1.00125.71           C
ANISOU 1396  CA  GLN A 194    19661  16085  12019  -9833  -3160     98       C
ATOM   1397  C   GLN A 194      -5.454  26.222  30.332  1.00135.69           C
ANISOU 1397  C   GLN A 194    21175  17056  13326  -9489  -2975   -272       C
ATOM   1398  O   GLN A 194      -6.206  25.247  30.319  1.00132.35           O
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ANISOU 1398  O   GLN A 194    20606  16604  13077  -9210  -2876   -366       O
ATOM   1399  CB  GLN A 194      -3.241  25.791  31.401  1.00129.71           C
ANISOU 1399  CB  GLN A 194    20078  16933  12271 -10231  -3383    342       C
ATOM   1400  CG  GLN A 194      -1.748  25.562  31.257  1.00136.68           C
ANISOU 1400  CG  GLN A 194    20602  18150  13179 -10572  -3618    706       C
ATOM   1401  CD  GLN A 194      -1.051  25.400  32.594  1.00143.10           C
ANISOU 1401  CD  GLN A 194    21343  19297  13731 -10978  -3911    939       C
ATOM   1402  OE1 GLN A 194      -1.691  25.151  33.615  1.00141.59           O
ANISOU 1402  OE1 GLN A 194    21367  19109  13321 -10999  -3923    878       O
ATOM   1403  NE2 GLN A 194       0.269  25.548  32.594  1.00149.37           N
ANISOU 1403  NE2 GLN A 194    21831  20373  14548 -11329  -4157   1203       N
ATOM   1404  N   ILE A 195      -5.878  27.462  30.558  1.00130.62           N
ANISOU 1404  N   ILE A 195    20884  16189  12555  -9522  -2929   -496       N
ATOM   1405  CA  ILE A 195      -7.276  27.745  30.868  1.00128.41           C
ANISOU 1405  CA  ILE A 195    20804  15639  12349  -9218  -2770   -871       C
ATOM   1406  C   ILE A 195      -8.112  27.991  29.606  1.00125.04           C
ANISOU 1406  C   ILE A 195    20405  14878  12226  -8768  -2663  -1132       C
ATOM   1407  O   ILE A 195      -9.300  27.668  29.561  1.00118.12           O
ANISOU 1407  O   ILE A 195    19474  13831  11575  -8402  -2554  -1430       O
ATOM   1408  CB  ILE A 195      -7.399  28.925  31.859  1.00138.27           C
ANISOU 1408  CB  ILE A 195    22422  16800  13314  -9476  -2784  -1006       C
ATOM   1409  CG1 ILE A 195      -6.600  28.621  33.129  1.00146.36           C
ANISOU 1409  CG1 ILE A 195    23444  18159  14006  -9936  -2934   -754       C
ATOM   1410  CG2 ILE A 195      -8.855  29.203  32.202  1.00126.58           C
ANISOU 1410  CG2 ILE A 195    21105  15046  11944  -9166  -2612  -1417       C
ATOM   1411  CD1 ILE A 195      -6.631  29.726  34.159  1.00153.19           C
ANISOU 1411  CD1 ILE A 195    24698  18953  14553 -10248  -2963   -880       C
ATOM   1412  N   ASN A 196      -7.485  28.540  28.572  1.00128.55           N
ANISOU 1412  N   ASN A 196    20939  15230  12675  -8820  -2710  -1026       N
ATOM   1413  CA  ASN A 196      -8.191  28.790  27.318  1.00133.51           C
ANISOU 1413  CA  ASN A 196    21665  15537  13526  -8436  -2655  -1240       C
ATOM   1414  C   ASN A 196      -8.104  27.631  26.327  1.00140.28           C
ANISOU 1414  C   ASN A 196    22235  16454  14612  -8217  -2639  -1149       C
ATOM   1415  O   ASN A 196      -9.102  27.263  25.709  1.00142.57           O
ANISOU 1415  O   ASN A 196    22463  16548  15160  -7796  -2596  -1409       O
ATOM   1416  CB  ASN A 196      -7.706  30.087  26.671  1.00132.74           C
ANISOU 1416  CB  ASN A 196    21950  15226  13260  -8620  -2692  -1207       C
ATOM   1417  CG  ASN A 196      -8.170  31.318  27.423  1.00136.13           C
ANISOU 1417  CG  ASN A 196    22727  15458  13539  -8703  -2687  -1418       C
ATOM   1418  OD1 ASN A 196      -9.248  31.326  28.018  1.00130.20           O
ANISOU 1418  OD1 ASN A 196    21969  14600  12903  -8447  -2636  -1710       O
ATOM   1419  ND2 ASN A 196      -7.358  32.368  27.399  1.00145.54           N
ANISOU 1419  ND2 ASN A 196    24226  16589  14484  -9084  -2729  -1292       N
ATOM   1420  N   GLY A 197      -6.912  27.062  26.174  1.00115.81           N
ANISOU 1420  N   GLY A 197    18942  13625  11436  -8510  -2689   -802       N
ATOM   1421  CA  GLY A 197      -6.727  25.913  25.306  1.00116.80           C
ANISOU 1421  CA  GLY A 197    18795  13818  11766  -8355  -2664   -698       C
ATOM   1422  C   GLY A 197      -6.035  26.217  23.991  1.00113.88           C
ANISOU 1422  C   GLY A 197    18561  13342  11365  -8454  -2662   -570       C
ATOM   1423  O   GLY A 197      -5.272  27.173  23.887  1.00170.97           O
ANISOU 1423  O   GLY A 197    26008  20563  18390  -8785  -2691   -442       O
ATOM   1424  N   PHE A 198      -6.302  25.396  22.982  1.00111.37           N
ANISOU 1424  N   PHE A 198    18146  12929  11241  -8201  -2615   -617       N
ATOM   1425  CA  PHE A 198      -5.655  25.541  21.685  1.00112.25           C
ANISOU 1425  CA  PHE A 198    18430  12925  11295  -8321  -2585   -493       C
ATOM   1426  C   PHE A 198      -6.659  25.569  20.541  1.00110.37           C
ANISOU 1426  C   PHE A 198    18479  12311  11145  -7906  -2573   -776       C
ATOM   1427  O   PHE A 198      -7.870  25.495  20.755  1.00108.48           O
ANISOU 1427  O   PHE A 198    18217  11926  11073  -7499  -2604  -1091       O
ATOM   1428  CB  PHE A 198      -4.658  24.406  21.454  1.00116.59           C
ANISOU 1428  CB  PHE A 198    18578  13759  11962  -8522  -2554   -200       C
ATOM   1429  CG  PHE A 198      -3.390  24.540  22.242  1.00117.80           C
ANISOU 1429  CG  PHE A 198    18457  14273  12029  -8976  -2616    121       C
ATOM   1430  CD1 PHE A 198      -2.258  25.088  21.666  1.00128.34           C
ANISOU 1430  CD1 PHE A 198    19821  15662  13280  -9360  -2579    329       C
ATOM   1431  CD2 PHE A 198      -3.327  24.114  23.556  1.00120.42           C
ANISOU 1431  CD2 PHE A 198    18506  14882  12368  -9033  -2716    207       C
ATOM   1432  CE1 PHE A 198      -1.088  25.212  22.387  1.00122.78           C
ANISOU 1432  CE1 PHE A 198    18779  15306  12566  -9760  -2666    594       C
ATOM   1433  CE2 PHE A 198      -2.159  24.234  24.283  1.00124.72           C
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ANISOU 1433  CE2 PHE A 198    18792  15763  12832  -9437  -2838    493       C
ATOM   1434  CZ  PHE A 198      -1.037  24.783  23.696  1.00123.06           C
ANISOU 1434  CZ  PHE A 198    18528  15626  12603  -9786  -2825    677       C
ATOM   1435  N   CYS A 199      -6.134  25.662  19.324  1.00111.46           N
ANISOU 1435  N   CYS A 199    18879  12297  11174  -8022  -2535   -674       N
ATOM   1436  CA  CYS A 199      -6.947  25.719  18.119  1.00110.60           C
ANISOU 1436  CA  CYS A 199    19143  11812  11068  -7656  -2567   -913       C
ATOM   1437  C   CYS A 199      -6.030  25.595  16.909  1.00112.43           C
ANISOU 1437  C   CYS A 199    19656  11940  11123  -7931  -2472   -708       C
ATOM   1438  O   CYS A 199      -5.066  26.344  16.783  1.00115.65           O
ANISOU 1438  O   CYS A 199    20276  12359  11307  -8374  -2390   -482       O
ATOM   1439  CB  CYS A 199      -7.711  27.042  18.057  1.00130.33           C
ANISOU 1439  CB  CYS A 199    22101  13988  13429  -7472  -2656  -1129       C
ATOM   1440  SG  CYS A 199      -8.982  27.115  16.782  1.00164.42           S
ANISOU 1440  SG  CYS A 199    26802  17870  17801  -6868  -2797  -1491       S
ATOM   1441  N   ILE A 200      -6.325  24.650  16.022  1.00113.62           N
ANISOU 1441  N   ILE A 200    19816  11974  11379  -7691  -2459   -807       N
ATOM   1442  CA  ILE A 200      -5.472  24.418  14.858  1.00128.41           C
ANISOU 1442  CA  ILE A 200    21991  13715  13086  -7966  -2313   -631       C
ATOM   1443  C   ILE A 200      -6.156  24.812  13.547  1.00127.40           C
ANISOU 1443  C   ILE A 200    22593  13096  12718  -7637  -2384   -856       C
ATOM   1444  O   ILE A 200      -7.345  24.559  13.354  1.00111.90           O
ANISOU 1444  O   ILE A 200    20643  10988  10886  -7075  -2567  -1181       O
ATOM   1445  CB  ILE A 200      -4.996  22.948  14.788  1.00129.41           C
ANISOU 1445  CB  ILE A 200    21621  14071  13478  -8041  -2196   -509       C
ATOM   1446  CG1 ILE A 200      -4.501  22.483  16.159  1.00125.14           C
ANISOU 1446  CG1 ILE A 200    20367  14002  13178  -8225  -2198   -300       C
ATOM   1447  CG2 ILE A 200      -3.902  22.778  13.741  1.00114.39           C
ANISOU 1447  CG2 ILE A 200    19944  12063  11458  -8439  -1937   -262       C
ATOM   1448  CD1 ILE A 200      -3.967  21.061  16.171  1.00124.39           C
ANISOU 1448  CD1 ILE A 200    19753  14134  13376  -8302  -2083   -117       C
ATOM   1449  N   ILE A 201      -5.397  25.447  12.657  1.00124.82           N
ANISOU 1449  N   ILE A 201    22861  12515  12048  -7977  -2231   -685       N
ATOM   1450  CA  ILE A 201      -5.898  25.839  11.346  1.00128.67           C
ANISOU 1450  CA  ILE A 201    24189  12494  12205  -7677  -2288   -846       C
ATOM   1451  C   ILE A 201      -5.180  25.060  10.253  1.00124.03           C
ANISOU 1451  C   ILE A 201    23898  11742  11485  -7877  -2030   -743       C
ATOM   1452  O   ILE A 201      -3.971  25.206  10.066  1.00123.77           O
ANISOU 1452  O   ILE A 201    23910  11738  11378  -8466  -1677   -424       O
ATOM   1453  CB  ILE A 201      -5.688  27.340  11.080  1.00147.38           C
ANISOU 1453  CB  ILE A 201    27266  14546  14186  -7881  -2261   -746       C
ATOM   1454  CG1 ILE A 201      -6.196  28.175  12.255  1.00152.86           C
ANISOU 1454  CG1 ILE A 201    27672  15390  15017  -7804  -2434   -815       C
ATOM   1455  CG2 ILE A 201      -6.381  27.751   9.788  1.00151.38           C
ANISOU 1455  CG2 ILE A 201    28680  14507  14329  -7428  -2390   -914       C
ATOM   1456  CD1 ILE A 201      -7.688  28.087  12.460  1.00163.29           C
ANISOU 1456  CD1 ILE A 201    28830  16638  16574  -7097  -2730  -1172       C
ATOM   1457  N   GLU A 202      -5.928  24.234   9.530  1.00121.45           N
ANISOU 1457  N   GLU A 202    23722  11246  11176  -7362  -2159  -1015       N
ATOM   1458  CA  GLU A 202      -5.358  23.429   8.458  1.00131.39           C
ANISOU 1458  CA  GLU A 202    25353  12280  12289  -7474  -1891   -982       C
ATOM   1459  C   GLU A 202      -5.731  23.972   7.086  1.00136.95           C
ANISOU 1459  C   GLU A 202    27138  12444  12454  -7108  -1933  -1132       C
ATOM   1460  O   GLU A 202      -6.863  23.813   6.631  1.00123.75           O
ANISOU 1460  O   GLU A 202    25612  10668  10738  -6385  -2277  -1442       O
ATOM   1461  CB  GLU A 202      -5.817  21.980   8.584  1.00130.11           C
ANISOU 1461  CB  GLU A 202    24632  12314  12490  -7151  -1971  -1193       C
ATOM   1462  CG  GLU A 202      -5.353  21.290   9.851  1.00125.61           C
ANISOU 1462  CG  GLU A 202    23071  12242  12411  -7497  -1887   -988       C
ATOM   1463  CD  GLU A 202      -3.877  20.948   9.819  1.00136.78           C
ANISOU 1463  CD  GLU A 202    24047  13952  13970  -7896  -1361   -470       C
ATOM   1464  OE1 GLU A 202      -3.249  21.100   8.750  1.00158.11           O
ANISOU 1464  OE1 GLU A 202    27151  16493  16428  -7837   -971   -288       O
ATOM   1465  OE2 GLU A 202      -3.344  20.522  10.865  1.00123.95           O
ANISOU 1465  OE2 GLU A 202    21645  12743  12708  -8221  -1321   -234       O
ATOM   1466  N   ASN A 203      -4.766  24.609   6.432  1.00142.83           N
ANISOU 1466  N   ASN A 203    28419  12985  12864  -7453  -1503   -802       N
ATOM   1467  CA  ASN A 203      -4.985  25.193   5.116  1.00150.67           C
ANISOU 1467  CA  ASN A 203    30524  13462  13263  -7113  -1464   -856       C
ATOM   1468  C   ASN A 203      -4.732  24.188   4.000  1.00154.26           C
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ANISOU 1468  C   ASN A 203    31105  13921  13585  -6706  -1115   -819       C
ATOM   1469  O   ASN A 203      -3.607  24.046   3.521  1.00149.35           O
ANISOU 1469  O   ASN A 203    30453  13387  12905  -6963   -461   -438       O
ATOM   1470  CB  ASN A 203      -4.096  26.423   4.929  1.00161.80           C
ANISOU 1470  CB  ASN A 203    32486  14634  14356  -7650  -1086   -491       C
ATOM   1471  CG  ASN A 203      -4.440  27.204   3.678  1.00169.04           C
ANISOU 1471  CG  ASN A 203    34702  14935  14589  -7303  -1110   -542       C
ATOM   1472  OD1 ASN A 203      -5.549  27.104   3.156  1.00170.67           O
ANISOU 1472  OD1 ASN A 203    35433  14864  14549  -6661  -1619   -920       O
ATOM   1473  ND2 ASN A 203      -3.487  27.992   3.192  1.00175.08           N
ANISOU 1473  ND2 ASN A 203    36003  15476  15043  -7732   -565   -163       N
ATOM   1474  N   PHE A 204      -5.787  23.493   3.587  1.00161.45           N
ANISOU 1474  N   PHE A 204    32148  14731  14465  -6080  -1539  -1244       N
ATOM   1475  CA  PHE A 204      -5.670  22.462   2.562  1.00166.86           C
ANISOU 1475  CA  PHE A 204    32973  15403  15023  -5663  -1270  -1291       C
ATOM   1476  C   PHE A 204      -5.990  22.981   1.163  1.00179.51           C
ANISOU 1476  C   PHE A 204    35834  16486  15887  -5242  -1334  -1397       C
ATOM   1477  O   PHE A 204      -6.668  22.313   0.384  1.00191.84           O
ANISOU 1477  O   PHE A 204    37728  17907  17256  -4681  -1585  -1729       O
ATOM   1478  CB  PHE A 204      -6.553  21.258   2.903  1.00159.85           C
ANISOU 1478  CB  PHE A 204    31458  14722  14557  -5270  -1653  -1700       C
ATOM   1479  CG  PHE A 204      -5.967  20.352   3.950  1.00144.52           C
ANISOU 1479  CG  PHE A 204    28358  13286  13268  -5597  -1371  -1497       C
ATOM   1480  CD1 PHE A 204      -6.692  19.283   4.447  1.00139.81           C
ANISOU 1480  CD1 PHE A 204    27136  12875  13112  -5346  -1647  -1812       C
ATOM   1481  CD2 PHE A 204      -4.688  20.567   4.434  1.00143.49           C
ANISOU 1481  CD2 PHE A 204    27771  13433  13316  -6155   -839   -988       C
ATOM   1482  CE1 PHE A 204      -6.149  18.447   5.406  1.00149.43           C
ANISOU 1482  CE1 PHE A 204    27373  14518  14886  -5616  -1394  -1590       C
ATOM   1483  CE2 PHE A 204      -4.142  19.734   5.393  1.00147.50           C
ANISOU 1483  CE2 PHE A 204    27238  14405  14400  -6406   -645   -783       C
ATOM   1484  CZ  PHE A 204      -4.874  18.674   5.880  1.00153.39           C
ANISOU 1484  CZ  PHE A 204    27447  15303  15530  -6121   -922  -1068       C
ATOM   1485  N   LYS A 205      -5.495  24.174   0.848  1.00176.70           N
ANISOU 1485  N   LYS A 205    36211  15828  15098  -5528  -1112  -1113       N
ATOM   1486  CA  LYS A 205      -5.676  24.742  -0.482  1.00181.25           C
ANISOU 1486  CA  LYS A 205    38094  15875  14898  -5169  -1104  -1128       C
ATOM   1487  C   LYS A 205      -4.857  23.970  -1.510  1.00183.30           C
ANISOU 1487  C   LYS A 205    38573  16160  14914  -5075   -402   -923       C
ATOM   1488  O   LYS A 205      -5.369  23.584  -2.561  1.00188.07           O
ANISOU 1488  O   LYS A 205    39902  16505  15050  -4517   -568  -1164       O
ATOM   1489  CB  LYS A 205      -5.288  26.223  -0.498  1.00190.28           C
ANISOU 1489  CB  LYS A 205    39985  16651  15661  -5559   -962   -837       C
ATOM   1490  CG  LYS A 205      -5.406  26.885  -1.866  1.00211.75           C
ANISOU 1490  CG  LYS A 205    44170  18772  17512  -5213   -904   -783       C
ATOM   1491  CD  LYS A 205      -6.814  26.757  -2.431  1.00226.16           C
ANISOU 1491  CD  LYS A 205    46277  20435  19219  -4319  -1716  -1126       C
ATOM   1492  CE  LYS A 205      -6.918  27.385  -3.814  1.00245.57           C
ANISOU 1492  CE  LYS A 205    50046  22335  20926  -3905  -1677   -956       C
ATOM   1493  NZ  LYS A 205      -8.279  27.228  -4.399  1.00254.18           N
ANISOU 1493  NZ  LYS A 205    51046  23384  22146  -2985  -2463  -1160       N
ATOM   1494  N   GLY A 206      -3.586  23.741  -1.196  1.00180.53           N
ANISOU 1494  N   GLY A 206    37578  16126  14890  -5614    372   -497       N
ATOM   1495  CA  GLY A 206      -2.693  23.028  -2.091  1.00179.09           C
ANISOU 1495  CA  GLY A 206    37502  15989  14555  -5570   1156   -278       C
ATOM   1496  C   GLY A 206      -2.560  21.556  -1.751  1.00167.39           C
ANISOU 1496  C   GLY A 206    34983  14954  13663  -5409   1289   -382       C
ATOM   1497  O   GLY A 206      -1.490  20.967  -1.910  1.00166.11           O
ANISOU 1497  O   GLY A 206    34360  15026  13729  -5609   2050    -82       O
ATOM   1498  N   PHE A 207      -3.652  20.959  -1.284  1.00155.52           N
ANISOU 1498  N   PHE A 207    33112  13549  12432  -5041    572   -813       N
ATOM   1499  CA  PHE A 207      -3.662  19.548  -0.915  1.00151.13           C
ANISOU 1499  CA  PHE A 207    31630  13353  12440  -4869    640   -945       C
ATOM   1500  C   PHE A 207      -3.889  18.655  -2.132  1.00164.02           C
ANISOU 1500  C   PHE A 207    33835  14775  13710  -4317    792  -1193       C
ATOM   1501  O   PHE A 207      -5.024  18.304  -2.452  1.00147.45           O
ANISOU 1501  O   PHE A 207    32069  12498  11457  -3836    157  -1677       O
ATOM   1502  CB  PHE A 207      -4.732  19.284   0.146  1.00139.36           C
ANISOU 1502  CB  PHE A 207    29494  12036  11419  -4772   -127  -1307       C
ATOM   1503  CG  PHE A 207      -4.820  17.850   0.572  1.00139.65           C
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ANISOU 1503  CG  PHE A 207    28642  12386  12033  -4608    -75  -1446       C
ATOM   1504  CD1 PHE A 207      -3.696  17.180   1.026  1.00139.14           C
ANISOU 1504  CD1 PHE A 207    27745  12687  12434  -4901    558  -1051       C
ATOM   1505  CD2 PHE A 207      -6.027  17.173   0.531  1.00140.21           C
ANISOU 1505  CD2 PHE A 207    28696  12369  12208  -4162   -663  -1975       C
ATOM   1506  CE1 PHE A 207      -3.773  15.857   1.423  1.00135.23           C
ANISOU 1506  CE1 PHE A 207    26495  12428  12460  -4723    614  -1153       C
ATOM   1507  CE2 PHE A 207      -6.111  15.852   0.928  1.00137.82           C
ANISOU 1507  CE2 PHE A 207    27626  12300  12439  -4042   -575  -2098       C
ATOM   1508  CZ  PHE A 207      -4.982  15.193   1.376  1.00132.80           C
ANISOU 1508  CZ  PHE A 207    26240  11990  12227  -4310     68  -1672       C
ATOM   1509  N   THR A 208      -2.801  18.290  -2.803  1.00170.19           N
ANISOU 1509  N   THR A 208    34714  15579  14372  -4400   1644   -881       N
ATOM   1510  CA  THR A 208      -2.875  17.475  -4.012  1.00169.81           C
ANISOU 1510  CA  THR A 208    35297  15307  13916  -3914   1909  -1091       C
ATOM   1511  C   THR A 208      -3.158  16.012  -3.686  1.00169.62           C
ANISOU 1511  C   THR A 208    34470  15525  14455  -3639   1833  -1356       C
ATOM   1512  O   THR A 208      -2.894  15.555  -2.575  1.00165.09           O
ANISOU 1512  O   THR A 208    32782  15336  14610  -3892   1859  -1215       O
ATOM   1513  CB  THR A 208      -1.569  17.555  -4.824  1.00176.20           C
ANISOU 1513  CB  THR A 208    36459  16052  14437  -4105   2960   -671       C
ATOM   1514  OG1 THR A 208      -0.516  16.896  -4.109  1.00173.90           O
ANISOU 1514  OG1 THR A 208    34973  16207  14892  -4432   3585   -333       O
ATOM   1515  CG2 THR A 208      -1.181  19.006  -5.067  1.00183.05           C
ANISOU 1515  CG2 THR A 208    38069  16669  14810  -4475   3142   -358       C
ATOM   1516  N   MET A 209      -3.692  15.280  -4.661  1.00177.61           N
ANISOU 1516  N   MET A 209    36099  16284  15099  -3128   1735  -1742       N
ATOM   1517  CA  MET A 209      -3.953  13.854  -4.493  1.00173.28           C
ANISOU 1517  CA  MET A 209    34924  15878  15035  -2859   1724  -2022       C
ATOM   1518  C   MET A 209      -2.645  13.096  -4.310  1.00177.19           C
ANISOU 1518  C   MET A 209    34684  16645  15997  -3050   2672  -1604       C
ATOM   1519  O   MET A 209      -2.615  12.021  -3.711  1.00151.97           O
ANISOU 1519  O   MET A 209    30636  13671  13436  -2985   2734  -1658       O
ATOM   1520  CB  MET A 209      -4.723  13.297  -5.692  1.00181.87           C
ANISOU 1520  CB  MET A 209    36945  16601  15557  -2303   1454  -2535       C
ATOM   1521  CG  MET A 209      -6.136  13.834  -5.817  1.00185.95           C
ANISOU 1521  CG  MET A 209    38015  16890  15747  -2029    397  -3030       C
ATOM   1522  SD  MET A 209      -7.038  13.161  -7.224  1.00224.78           S
ANISOU 1522  SD  MET A 209    43910  21445  20049  -1377    -20  -3625       S
ATOM   1523  CE  MET A 209      -6.957  11.409  -6.871  1.00192.48           C
ANISOU 1523  CE  MET A 209    38963  17514  16657  -1299    296  -3896       C
ATOM   1524  N   GLN A 210      -1.568  13.672  -4.834  1.00183.50           N
ANISOU 1524  N   GLN A 210    35824  17407  16491  -3278   3425  -1187       N
ATOM   1525  CA  GLN A 210      -0.229  13.134  -4.646  1.00186.98           C
ANISOU 1525  CA  GLN A 210    35505  18129  17411  -3494   4357   -751       C
ATOM   1526  C   GLN A 210       0.141  13.144  -3.167  1.00166.85           C
ANISOU 1526  C   GLN A 210    31662  16046  15686  -3908   4218   -448       C
ATOM   1527  O   GLN A 210       0.766  12.209  -2.666  1.00163.55           O
ANISOU 1527  O   GLN A 210    30321  15916  15903  -3905   4599   -268       O
ATOM   1528  CB  GLN A 210       0.781  13.960  -5.442  1.00203.95           C
ANISOU 1528  CB  GLN A 210    38276  20140  19076  -3740   5154   -378       C
ATOM   1529  CG  GLN A 210       2.225  13.556  -5.229  1.00214.30           C
ANISOU 1529  CG  GLN A 210    38717  21769  20937  -4009   6140     87       C
ATOM   1530  CD  GLN A 210       3.190  14.481  -5.939  1.00226.52           C
ANISOU 1530  CD  GLN A 210    40828  23181  22056  -4342   6943    447       C
ATOM   1531  OE1 GLN A 210       2.780  15.447  -6.583  1.00227.41           O
ANISOU 1531  OE1 GLN A 210    42060  22932  21415  -4373   6760    378       O
ATOM   1532  NE2 GLN A 210       4.481  14.191  -5.827  1.00235.11           N
ANISOU 1532  NE2 GLN A 210    41143  24548  23641  -4587   7848    835       N
ATOM   1533  N   GLN A 211      -0.252  14.208  -2.473  1.00153.64           N
ANISOU 1533  N   GLN A 211    29972  14428  13977  -4242   3659   -397       N
ATOM   1534  CA  GLN A 211      -0.005  14.325  -1.042  1.00149.08           C
ANISOU 1534  CA  GLN A 211    28293  14272  14078  -4653   3430   -151       C
ATOM   1535  C   GLN A 211      -0.985  13.474  -0.240  1.00155.79           C
ANISOU 1535  C   GLN A 211    28596  15234  15364  -4420   2779   -488       C
ATOM   1536  O   GLN A 211      -0.674  13.031   0.865  1.00156.29           O
ANISOU 1536  O   GLN A 211    27661  15660  16061  -4624   2748   -285       O
ATOM   1537  CB  GLN A 211      -0.104  15.784  -0.598  1.00148.29           C
ANISOU 1537  CB  GLN A 211    28450  14145  13748  -5100   3087    -15       C
ATOM   1538  CG  GLN A 211       0.949  16.693  -1.200  1.00154.18           C
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ANISOU 1538  CG  GLN A 211    29620  14798  14161  -5463   3773    372       C
ATOM   1539  CD  GLN A 211       0.757  18.139  -0.793  1.00160.56           C
ANISOU 1539  CD  GLN A 211    30794  15495  14715  -5894   3404    462       C
ATOM   1540  OE1 GLN A 211      -0.286  18.508  -0.253  1.00152.64           O
ANISOU 1540  OE1 GLN A 211    29917  14413  13666  -5819   2611    178       O
ATOM   1541  NE2 GLN A 211       1.765  18.966  -1.047  1.00173.28           N
ANISOU 1541  NE2 GLN A 211    32571  17079  16187  -6356   4011    844       N
ATOM   1542  N   ALA A 212      -2.168  13.252  -0.803  1.00163.82           N
ANISOU 1542  N   ALA A 212    30282  15931  16032  -4003   2257  -1005       N
ATOM   1543  CA  ALA A 212      -3.196  12.456  -0.143  1.00163.59           C
ANISOU 1543  CA  ALA A 212    29801  15953  16403  -3794   1664  -1389       C
ATOM   1544  C   ALA A 212      -2.762  11.003  -0.005  1.00166.32           C
ANISOU 1544  C   ALA A 212    29487  16438  17270  -3603   2101  -1336       C
ATOM   1545  O   ALA A 212      -2.886  10.408   1.065  1.00163.00           O
ANISOU 1545  O   ALA A 212    28225  16262  17446  -3702   1932  -1285       O
ATOM   1546  CB  ALA A 212      -4.509  12.546  -0.908  1.00168.09           C
ANISOU 1546  CB  ALA A 212    31232  16142  16492  -3386   1030  -1983       C
ATOM   1547  N   ALA A 213      -2.250  10.439  -1.093  1.00173.73           N
ANISOU 1547  N   ALA A 213    30863  17190  17957  -3319   2688  -1344       N
ATOM   1548  CA  ALA A 213      -1.822   9.045  -1.105  1.00177.03           C
ANISOU 1548  CA  ALA A 213    30770  17661  18831  -3073   3161  -1318       C
ATOM   1549  C   ALA A 213      -0.499   8.851  -0.371  1.00180.60           C
ANISOU 1549  C   ALA A 213    30263  18505  19851  -3349   3763   -720       C
ATOM   1550  O   ALA A 213      -0.242   7.784   0.188  1.00177.71           O
ANISOU 1550  O   ALA A 213    29168  18285  20067  -3227   3941   -620       O
ATOM   1551  CB  ALA A 213      -1.713   8.537  -2.533  1.00181.72           C
ANISOU 1551  CB  ALA A 213    32207  17903  18936  -2667   3612  -1554       C
ATOM   1552  N   SER A 214       0.333   9.888  -0.366  1.00184.77           N
ANISOU 1552  N   SER A 214    30792  19191  20223  -3722   4056   -326       N
ATOM   1553  CA  SER A 214       1.652   9.806   0.256  1.00185.76           C
ANISOU 1553  CA  SER A 214    29987  19710  20882  -4010   4610    230       C
ATOM   1554  C   SER A 214       1.581   9.844   1.781  1.00176.99           C
ANISOU 1554  C   SER A 214    27929  18983  20337  -4323   4115    432       C
ATOM   1555  O   SER A 214       2.600   9.718   2.459  1.00181.55           O
ANISOU 1555  O   SER A 214    27640  19931  21409  -4552   4422    880       O
ATOM   1556  CB  SER A 214       2.567  10.921  -0.260  1.00188.98           C
ANISOU 1556  CB  SER A 214    30699  20146  20958  -4365   5110    555       C
ATOM   1557  OG  SER A 214       2.105  12.196   0.150  1.00184.93           O
ANISOU 1557  OG  SER A 214    30488  19627  20150  -4751   4557    542       O
ATOM   1558  N   LEU A 215       0.377  10.020   2.316  1.00168.94           N
ANISOU 1558  N   LEU A 215    27077  17875  19236  -4326   3347     90       N
ATOM   1559  CA  LEU A 215       0.177  10.014   3.760  1.00167.83           C
ANISOU 1559  CA  LEU A 215    26154  18053  19559  -4602   2874    228       C
ATOM   1560  C   LEU A 215       0.047   8.593   4.289  1.00175.33           C
ANISOU 1560  C   LEU A 215    26500  19066  21051  -4310   2905    205       C
ATOM   1561  O   LEU A 215      -0.694   7.780   3.735  1.00183.49           O
ANISOU 1561  O   LEU A 215    27904  19791  22021  -3913   2857   -195       O
ATOM   1562  CB  LEU A 215      -1.064  10.825   4.139  1.00162.64           C
ANISOU 1562  CB  LEU A 215    25922  17263  18613  -4733   2105   -139       C
ATOM   1563  CG  LEU A 215      -0.935  12.347   4.081  1.00167.46           C
ANISOU 1563  CG  LEU A 215    26961  17862  18805  -5126   1952    -35       C
ATOM   1564  CD1 LEU A 215      -2.231  13.015   4.516  1.00163.71           C
ANISOU 1564  CD1 LEU A 215    26841  17237  18126  -5168   1185   -432       C
ATOM   1565  CD2 LEU A 215       0.225  12.813   4.944  1.00170.45           C
ANISOU 1565  CD2 LEU A 215    26596  18657  19509  -5633   2184    500       C
ATOM   1566  N   ARG A 216       0.771   8.297   5.363  1.00174.30           N
ANISOU 1566  N   ARG A 216    25465  19319  21443  -4512   2968    634       N
ATOM   1567  CA  ARG A 216       0.698   6.985   5.993  1.00173.69           C
ANISOU 1567  CA  ARG A 216    24816  19291  21886  -4252   2987    687       C
ATOM   1568  C   ARG A 216      -0.376   6.982   7.073  1.00161.26           C
ANISOU 1568  C   ARG A 216    23112  17742  20417  -4400   2314    477       C
ATOM   1569  O   ARG A 216      -0.452   7.905   7.884  1.00159.24           O
ANISOU 1569  O   ARG A 216    22699  17716  20090  -4812   1928    593       O
ATOM   1570  CB  ARG A 216       2.050   6.600   6.592  1.00180.02           C
ANISOU 1570  CB  ARG A 216    24716  20484  23198  -4329   3381   1280       C
ATOM   1571  CG  ARG A 216       3.215   6.735   5.628  1.00191.63           C
ANISOU 1571  CG  ARG A 216    26188  21990  24632  -4258   4107   1522       C
ATOM   1572  CD  ARG A 216       4.491   6.163   6.222  1.00203.92           C
ANISOU 1572  CD  ARG A 216    26745  23929  26805  -4237   4474   2064       C
ATOM   1573  NE  ARG A 216       4.378   4.730   6.473  1.00215.42           N
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ANISOU 1573  NE  ARG A 216    27889  25272  28690  -3767   4582   2071       N
ATOM   1574  CZ  ARG A 216       4.673   3.791   5.579  1.00231.01           C
ANISOU 1574  CZ  ARG A 216    30011  26982  30779  -3284   5185   1989       C
ATOM   1575  NH1 ARG A 216       5.100   4.133   4.371  1.00241.43           N
ANISOU 1575  NH1 ARG A 216    31797  28148  31790  -3209   5749   1895       N
ATOM   1576  NH2 ARG A 216       4.540   2.509   5.892  1.00233.50           N
ANISOU 1576  NH2 ARG A 216    30062  27157  31499  -2879   5254   2001       N
ATOM   1577  N   THR A 217      -1.206   5.945   7.077  1.00150.16           N
ANISOU 1577  N   THR A 217    21790  16081  19184  -4083   2212    148       N
ATOM   1578  CA  THR A 217      -2.286   5.843   8.050  1.00138.47           C
ANISOU 1578  CA  THR A 217    20197  14583  17832  -4213   1663    -95       C
ATOM   1579  C   THR A 217      -1.727   5.808   9.468  1.00140.20           C
ANISOU 1579  C   THR A 217    19662  15199  18408  -4507   1550    391       C
ATOM   1580  O   THR A 217      -2.323   6.356  10.394  1.00142.63           O
ANISOU 1580  O   THR A 217    19893  15627  18672  -4816   1091    322       O
ATOM   1581  CB  THR A 217      -3.155   4.597   7.803  1.00133.92           C
ANISOU 1581  CB  THR A 217    19771  13650  17465  -3848   1676   -505       C
ATOM   1582  OG1 THR A 217      -3.560   4.561   6.428  1.00142.37           O
ANISOU 1582  OG1 THR A 217    21548  14365  18180  -3554   1779   -947       O
ATOM   1583  CG2 THR A 217      -4.389   4.620   8.695  1.00115.69           C
ANISOU 1583  CG2 THR A 217    17410  11287  15258  -4021   1142   -836       C
ATOM   1584  N   SER A 218      -0.569   5.175   9.625  1.00146.87           N
ANISOU 1584  N   SER A 218    19964  16246  19592  -4393   1965    877       N
ATOM   1585  CA  SER A 218       0.094   5.103  10.921  1.00150.99           C
ANISOU 1585  CA  SER A 218    19763  17170  20436  -4628   1831   1383       C
ATOM   1586  C   SER A 218       0.569   6.478  11.383  1.00148.48           C
ANISOU 1586  C   SER A 218    19315  17208  19894  -5140   1573   1603       C
ATOM   1587  O   SER A 218       0.697   6.726  12.582  1.00148.20           O
ANISOU 1587  O   SER A 218    18872  17474  19962  -5450   1233   1855       O
ATOM   1588  CB  SER A 218       1.270   4.127  10.869  1.00158.85           C
ANISOU 1588  CB  SER A 218    20192  18292  21870  -4320   2321   1845       C
ATOM   1589  OG  SER A 218       2.179   4.483   9.844  1.00168.26           O
ANISOU 1589  OG  SER A 218    21429  19527  22976  -4249   2795   1962       O
ATOM   1590  N   ASP A 219       0.832   7.368  10.429  1.00145.23           N
ANISOU 1590  N   ASP A 219    19300  16734  19148  -5239   1745   1504       N
ATOM   1591  CA  ASP A 219       1.233   8.733  10.752  1.00145.55           C
ANISOU 1591  CA  ASP A 219    19322  17028  18950  -5752   1537   1662       C
ATOM   1592  C   ASP A 219       0.042   9.533  11.259  1.00143.34           C
ANISOU 1592  C   ASP A 219    19480  16629  18352  -6004    959   1286       C
ATOM   1593  O   ASP A 219       0.187  10.409  12.112  1.00152.98           O
ANISOU 1593  O   ASP A 219    20536  18098  19491  -6455    638   1431       O
ATOM   1594  CB  ASP A 219       1.847   9.427   9.535  1.00148.48           C
ANISOU 1594  CB  ASP A 219    20072  17300  19043  -5784   1962   1673       C
ATOM   1595  CG  ASP A 219       3.240   8.926   9.220  1.00163.59           C
ANISOU 1595  CG  ASP A 219    21403  19441  21314  -5676   2561   2116       C
ATOM   1596  OD1 ASP A 219       3.931   8.462  10.151  1.00160.12           O
ANISOU 1596  OD1 ASP A 219    20162  19361  21317  -5741   2511   2510       O
ATOM   1597  OD2 ASP A 219       3.645   9.002   8.040  1.00178.81           O
ANISOU 1597  OD2 ASP A 219    23681  21186  23075  -5513   3084   2068       O
ATOM   1598  N   LEU A 220      -1.135   9.227  10.726  1.00128.53           N
ANISOU 1598  N   LEU A 220    18152  14369  16316  -5709    828    779       N
ATOM   1599  CA  LEU A 220      -2.357   9.889  11.160  1.00121.15           C
ANISOU 1599  CA  LEU A 220    17588  13295  15149  -5869    301    367       C
ATOM   1600  C   LEU A 220      -2.727   9.461  12.574  1.00129.57           C
ANISOU 1600  C   LEU A 220    18187  14550  16494  -6034     11    449       C
ATOM   1601  O   LEU A 220      -3.122  10.287  13.397  1.00138.18           O
ANISOU 1601  O   LEU A 220    19308  15753  17442  -6386   -364    386       O
ATOM   1602  CB  LEU A 220      -3.500   9.594  10.190  1.00116.06           C
ANISOU 1602  CB  LEU A 220    17565  12211  14321  -5482    216   -215       C
ATOM   1603  CG  LEU A 220      -3.381  10.283   8.830  1.00133.20           C
ANISOU 1603  CG  LEU A 220    20415  14146  16047  -5351    366   -371       C
ATOM   1604  CD1 LEU A 220      -4.414   9.734   7.858  1.00144.74           C
ANISOU 1604  CD1 LEU A 220    22430  15200  17364  -4904    269   -927       C
ATOM   1605  CD2 LEU A 220      -3.520  11.796   8.980  1.00136.05           C
ANISOU 1605  CD2 LEU A 220    21131  14527  16032  -5711     50   -400       C
ATOM   1606  N   ARG A 221      -2.592   8.167  12.852  1.00127.27           N
ANISOU 1606  N   ARG A 221    17516  14262  16577  -5773    215    594       N
ATOM   1607  CA  ARG A 221      -2.815   7.650  14.195  1.00126.23           C
ANISOU 1607  CA  ARG A 221    16972  14296  16693  -5910     14    754       C
ATOM   1608  C   ARG A 221      -1.846   8.312  15.161  1.00136.86           C
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ANISOU 1608  C   ARG A 221    17881  16096  18025  -6330   -136   1253       C
ATOM   1609  O   ARG A 221      -2.203   8.636  16.292  1.00155.79           O
ANISOU 1609  O   ARG A 221    20184  18646  20364  -6637   -475   1276       O
ATOM   1610  CB  ARG A 221      -2.616   6.134  14.236  1.00131.87           C
ANISOU 1610  CB  ARG A 221    17383  14911  17812  -5532    328    919       C
ATOM   1611  CG  ARG A 221      -3.459   5.354  13.243  1.00143.46           C
ANISOU 1611  CG  ARG A 221    19253  15922  19332  -5127    508    429       C
ATOM   1612  CD  ARG A 221      -3.385   3.862  13.525  1.00157.10           C
ANISOU 1612  CD  ARG A 221    20703  17508  21481  -4820    785    578       C
ATOM   1613  NE  ARG A 221      -4.005   3.531  14.804  1.00166.48           N
ANISOU 1613  NE  ARG A 221    21709  18730  22816  -5012    550    605       N
ATOM   1614  CZ  ARG A 221      -5.210   2.984  14.930  1.00174.68           C
ANISOU 1614  CZ  ARG A 221    22965  19442  23964  -4959    484    151       C
ATOM   1615  NH1 ARG A 221      -5.924   2.690  13.851  1.00168.18           N
ANISOU 1615  NH1 ARG A 221    22519  18250  23131  -4711    567   -380       N
ATOM   1616  NH2 ARG A 221      -5.698   2.721  16.135  1.00183.43           N
ANISOU 1616  NH2 ARG A 221    23918  20589  25188  -5170    343    218       N
ATOM   1617  N   LYS A 222      -0.616   8.514  14.700  1.00133.74           N
ANISOU 1617  N   LYS A 222    17220  15912  17683  -6356    131   1629       N
ATOM   1618  CA  LYS A 222       0.427   9.120  15.516  1.00140.04           C
ANISOU 1618  CA  LYS A 222    17527  17164  18517  -6766    -12   2097       C
ATOM   1619  C   LYS A 222       0.046  10.541  15.917  1.00143.26           C
ANISOU 1619  C   LYS A 222    18260  17630  18544  -7268   -396   1909       C
ATOM   1620  O   LYS A 222       0.251  10.947  17.061  1.00140.22           O
ANISOU 1620  O   LYS A 222    17615  17539  18123  -7649   -729   2106       O
ATOM   1621  CB  LYS A 222       1.756   9.118  14.757  1.00148.60           C
ANISOU 1621  CB  LYS A 222    18267  18423  19771  -6699    414   2452       C
ATOM   1622  CG  LYS A 222       2.980   9.322  15.632  1.00161.39           C
ANISOU 1622  CG  LYS A 222    19151  20554  21615  -7016    299   2991       C
ATOM   1623  CD  LYS A 222       4.256   9.198  14.815  1.00172.33           C
ANISOU 1623  CD  LYS A 222    20117  22094  23265  -6899    801   3304       C
ATOM   1624  CE  LYS A 222       4.332   7.849  14.117  1.00171.35           C
ANISOU 1624  CE  LYS A 222    19913  21743  23451  -6261   1270   3324       C
ATOM   1625  NZ  LYS A 222       5.545   7.729  13.263  1.00172.40           N
ANISOU 1625  NZ  LYS A 222    19660  21999  23848  -6117   1842   3590       N
ATOM   1626  N   MET A 223      -0.521  11.287  14.973  1.00146.61           N
ANISOU 1626  N   MET A 223    19299  17748  18658  -7247   -362   1521       N
ATOM   1627  CA  MET A 223      -0.940  12.659  15.240  1.00138.50           C
ANISOU 1627  CA  MET A 223    18669  16690  17266  -7664   -698   1311       C
ATOM   1628  C   MET A 223      -2.168  12.703  16.144  1.00127.49           C
ANISOU 1628  C   MET A 223    17461  15189  15788  -7725  -1096    968       C
ATOM   1629  O   MET A 223      -2.227  13.502  17.079  1.00126.48           O
ANISOU 1629  O   MET A 223    17328  15225  15503  -8147  -1409    993       O
ATOM   1630  CB  MET A 223      -1.219  13.414  13.939  1.00128.68           C
ANISOU 1630  CB  MET A 223    18093  15103  15695  -7558   -557   1013       C
ATOM   1631  CG  MET A 223      -1.573  14.877  14.156  1.00122.04           C
ANISOU 1631  CG  MET A 223    17708  14180  14483  -7964   -873    829       C
ATOM   1632  SD  MET A 223      -1.777  15.813  12.632  1.00204.48           S
ANISOU 1632  SD  MET A 223    29008  24195  24492  -7832   -709    569       S
ATOM   1633  CE  MET A 223      -1.814  17.480  13.282  1.00113.72           C
ANISOU 1633  CE  MET A 223    17833  12698  12676  -8428  -1052    537       C
ATOM   1634  N   VAL A 224      -3.145  11.848  15.861  1.00106.80           N
ANISOU 1634  N   VAL A 224    15007  12286  13285  -7323  -1059    627       N
ATOM   1635  CA  VAL A 224      -4.354  11.776  16.676  1.00103.89           C
ANISOU 1635  CA  VAL A 224    14763  11800  12911  -7363  -1350    271       C
ATOM   1636  C   VAL A 224      -4.050  11.313  18.105  1.00113.26           C
ANISOU 1636  C   VAL A 224    15483  13299  14251  -7602  -1456    613       C
ATOM   1637  O   VAL A 224      -4.650  11.801  19.065  1.00117.87           O
ANISOU 1637  O   VAL A 224    16140  13954  14691  -7703  -1688    454       O
ATOM   1638  CB  VAL A 224      -5.420  10.867  16.027  1.00104.76           C
ANISOU 1638  CB  VAL A 224    15080  11542  13183  -6906  -1256   -179       C
ATOM   1639  CG1 VAL A 224      -6.603  10.663  16.963  1.00100.05           C
ANISOU 1639  CG1 VAL A 224    14486  10852  12677  -6978  -1474   -518       C
ATOM   1640  CG2 VAL A 224      -5.884  11.460  14.707  1.00102.12           C
ANISOU 1640  CG2 VAL A 224    15306  10892  12602  -6680  -1282   -577       C
ATOM   1641  N   ASP A 225      -3.107  10.385  18.245  1.00119.97           N
ANISOU 1641  N   ASP A 225    15857  14357  15369  -7470  -1241   1080       N
ATOM   1642  CA  ASP A 225      -2.698   9.916  19.567  1.00124.05           C
ANISOU 1642  CA  ASP A 225    15958  15178  15996  -7653  -1377   1474       C
ATOM   1643  C   ASP A 225      -2.087  11.048  20.385  1.00126.95           C
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ANISOU 1643  C   ASP A 225    16230  15898  16107  -8182  -1696   1695       C
ATOM   1644  O   ASP A 225      -2.134  11.033  21.616  1.00138.21           O
ANISOU 1644  O   ASP A 225    17547  17535  17432  -8234  -1904   1808       O
ATOM   1645  CB  ASP A 225      -1.720   8.744  19.461  1.00137.27           C
ANISOU 1645  CB  ASP A 225    17136  16995  18027  -7343  -1106   1955       C
ATOM   1646  CG  ASP A 225      -2.425   7.411  19.287  1.00158.67           C
ANISOU 1646  CG  ASP A 225    19905  19377  21005  -6905   -865   1796       C
ATOM   1647  OD1 ASP A 225      -3.574   7.403  18.798  1.00160.21           O
ANISOU 1647  OD1 ASP A 225    20512  19213  21148  -6784   -836   1260       O
ATOM   1648  OD2 ASP A 225      -1.831   6.371  19.643  1.00175.54           O
ANISOU 1648  OD2 ASP A 225    21674  21602  23422  -6681   -717   2200       O
ATOM   1649  N   MET A 226      -1.513  12.027  19.694  1.00118.11           N
ANISOU 1649  N   MET A 226    15207  14832  14838  -8312  -1666   1695       N
ATOM   1650  CA  MET A 226      -1.012  13.224  20.352  1.00112.08           C
ANISOU 1650  CA  MET A 226    14445  14346  13796  -8500  -1891   1755       C
ATOM   1651  C   MET A 226      -2.170  14.080  20.836  1.00124.85           C
ANISOU 1651  C   MET A 226    16570  15789  15080  -8365  -2068   1279       C
ATOM   1652  O   MET A 226      -2.258  14.415  22.017  1.00126.88           O
ANISOU 1652  O   MET A 226    16813  16235  15159  -8427  -2268   1308       O
ATOM   1653  CB  MET A 226      -0.148  14.045  19.397  1.00114.38           C
ANISOU 1653  CB  MET A 226    14753  14668  14039  -8696  -1737   1861       C
ATOM   1654  CG  MET A 226       0.151  15.446  19.909  1.00115.74           C
ANISOU 1654  CG  MET A 226    15091  14993  13893  -8893  -1944   1796       C
ATOM   1655  SD  MET A 226       0.821  16.537  18.645  1.00119.80           S
ANISOU 1655  SD  MET A 226    15851  15376  14290  -9125  -1704   1792       S
ATOM   1656  CE  MET A 226       2.278  15.620  18.163  1.00170.87           C
ANISOU 1656  CE  MET A 226    21562  22141  21220  -9269  -1372   2346       C
ATOM   1657  N   LEU A 227      -3.060  14.423  19.910  1.00121.51           N
ANISOU 1657  N   LEU A 227    16595  14999  14575  -8169  -1985    856       N
ATOM   1658  CA  LEU A 227      -4.166  15.334  20.187  1.00130.71           C
ANISOU 1658  CA  LEU A 227    18187  15988  15490  -7970  -2109    422       C
ATOM   1659  C   LEU A 227      -5.135  14.799  21.242  1.00128.25           C
ANISOU 1659  C   LEU A 227    17823  15666  15240  -7776  -2155    241       C
ATOM   1660  O   LEU A 227      -5.887  15.563  21.846  1.00131.49           O
ANISOU 1660  O   LEU A 227    18450  16032  15478  -7660  -2228     -9       O
ATOM   1661  CB  LEU A 227      -4.925  15.660  18.896  1.00137.37           C
ANISOU 1661  CB  LEU A 227    19474  16439  16281  -7744  -2048     30       C
ATOM   1662  CG  LEU A 227      -4.446  16.817  18.010  1.00135.84           C
ANISOU 1662  CG  LEU A 227    19645  16141  15828  -7903  -2038     42       C
ATOM   1663  CD1 LEU A 227      -2.971  16.695  17.643  1.00132.21           C
ANISOU 1663  CD1 LEU A 227    18908  15890  15438  -8296  -1878    503       C
ATOM   1664  CD2 LEU A 227      -5.303  16.906  16.750  1.00133.04           C
ANISOU 1664  CD2 LEU A 227    19788  15361  15400  -7624  -2026   -354       C
ATOM   1665  N   GLN A 228      -5.113  13.490  21.467  1.00122.00           N
ANISOU 1665  N   GLN A 228    16750  14891  14713  -7762  -2069    386       N
ATOM   1666  CA  GLN A 228      -6.051  12.878  22.401  1.00123.51           C
ANISOU 1666  CA  GLN A 228    16926  15022  14979  -7628  -2049    215       C
ATOM   1667  C   GLN A 228      -5.371  12.159  23.561  1.00129.21           C
ANISOU 1667  C   GLN A 228    17351  16029  15714  -7874  -2111    665       C
ATOM   1668  O   GLN A 228      -4.582  11.236  23.354  1.00136.48           O
ANISOU 1668  O   GLN A 228    17956  17037  16863  -7983  -2059   1050       O
ATOM   1669  CB  GLN A 228      -6.983  11.914  21.664  1.00127.12           C
ANISOU 1669  CB  GLN A 228    17423  15132  15744  -7359  -1880   -120       C
ATOM   1670  CG  GLN A 228      -7.884  12.587  20.645  1.00126.91           C
ANISOU 1670  CG  GLN A 228    17708  14820  15691  -7055  -1898   -621       C
ATOM   1671  CD  GLN A 228      -8.911  11.641  20.061  1.00117.03           C
ANISOU 1671  CD  GLN A 228    16466  13247  14752  -6766  -1787  -1018       C
ATOM   1672  OE1 GLN A 228      -9.962  12.067  19.583  1.00113.13           O
ANISOU 1672  OE1 GLN A 228    16131  12550  14302  -6438  -1850  -1481       O
ATOM   1673  NE2 GLN A 228      -8.612  10.349  20.097  1.00114.39           N
ANISOU 1673  NE2 GLN A 228    15935  12859  14670  -6875  -1629   -830       N
ATOM   1674  N   ASP A 229      -5.691  12.597  24.776  1.00131.61           N
ANISOU 1674  N   ASP A 229    17775  16464  15767  -7963  -2223    637       N
ATOM   1675  CA  ASP A 229      -5.273  11.921  26.001  1.00142.65           C
ANISOU 1675  CA  ASP A 229    19013  18094  17094  -8208  -2326   1018       C
ATOM   1676  C   ASP A 229      -3.768  11.696  26.078  1.00137.45           C
ANISOU 1676  C   ASP A 229    17972  17786  16467  -8468  -2515   1605       C
ATOM   1677  O   ASP A 229      -3.304  10.575  26.284  1.00127.97           O
ANISOU 1677  O   ASP A 229    16471  16662  15491  -8543  -2511   2003       O
ATOM   1678  CB  ASP A 229      -6.011  10.588  26.152  1.00150.09           C
ATOM   1678  CB  ASP A 229      -6.011  10.588  26.152  1.00150.09           C
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ANISOU 1678  CB  ASP A 229    19915  18799  18311  -8108  -2116    959       C
ATOM   1679  CG  ASP A 229      -7.512  10.736  26.011  1.00145.44           C
ANISOU 1679  CG  ASP A 229    19584  17879  17797  -7833  -1917    355       C
ATOM   1680  OD1 ASP A 229      -8.046  11.800  26.393  1.00145.11           O
ANISOU 1680  OD1 ASP A 229    19762  17856  17516  -7783  -1972     81       O
ATOM   1681  OD2 ASP A 229      -8.155   9.789  25.510  1.00138.79           O
ANISOU 1681  OD2 ASP A 229    18690  16751  17291  -7662  -1701    160       O
ATOM   1682  N   SER A 230      -3.009  12.769  25.902  1.00142.79           N
ANISOU 1682  N   SER A 230    18627  18665  16963  -8597  -2666   1677       N
ATOM   1683  CA  SER A 230      -1.561  12.689  26.001  1.00152.49           C
ANISOU 1683  CA  SER A 230    19410  20267  18263  -8844  -2856   2201       C
ATOM   1684  C   SER A 230      -1.007  13.956  26.638  1.00160.90           C
ANISOU 1684  C   SER A 230    20579  21586  18970  -9092  -3109   2227       C
ATOM   1685  O   SER A 230      -0.379  13.905  27.692  1.00173.07           O
ANISOU 1685  O   SER A 230    21959  23451  20350  -9352  -3406   2555       O
ATOM   1686  CB  SER A 230      -0.941  12.455  24.622  1.00148.88           C
ANISOU 1686  CB  SER A 230    18671  19747  18150  -8757  -2644   2306       C
ATOM   1687  OG  SER A 230      -1.402  11.237  24.063  1.00142.48           O
ANISOU 1687  OG  SER A 230    17777  18683  17676  -8554  -2398   2311       O
ATOM   1688  N   PHE A 231      -1.258  15.094  26.002  1.00154.07           N
ANISOU 1688  N   PHE A 231    20013  20553  17974  -9029  -3006   1891       N
ATOM   1689  CA  PHE A 231      -0.783  16.376  26.506  1.00159.62           C
ANISOU 1689  CA  PHE A 231    20866  21417  18364  -9268  -3184   1882       C
ATOM   1690  C   PHE A 231      -1.894  17.116  27.255  1.00167.49           C
ANISOU 1690  C   PHE A 231    22379  22231  19029  -9196  -3175   1515       C
ATOM   1691  O   PHE A 231      -3.068  16.989  26.906  1.00179.43           O
ANISOU 1691  O   PHE A 231    24146  23427  20602  -8897  -2970   1157       O
ATOM   1692  CB  PHE A 231      -0.242  17.228  25.354  1.00161.47           C
ANISOU 1692  CB  PHE A 231    21106  21571  18673  -9309  -3055   1813       C
ATOM   1693  CG  PHE A 231       1.011  16.678  24.728  1.00167.19           C
ANISOU 1693  CG  PHE A 231    21266  22527  19732  -9447  -3023   2204       C
ATOM   1694  CD1 PHE A 231       2.248  17.223  25.030  1.00171.35           C
ANISOU 1694  CD1 PHE A 231    21459  23386  20260  -9772  -3193   2481       C
ATOM   1695  CD2 PHE A 231       0.953  15.614  23.842  1.00172.98           C
ANISOU 1695  CD2 PHE A 231    21770  23139  20815  -9253  -2793   2291       C
ATOM   1696  CE1 PHE A 231       3.402  16.719  24.458  1.00179.13           C
ANISOU 1696  CE1 PHE A 231    21833  24603  21627  -9873  -3114   2840       C
ATOM   1697  CE2 PHE A 231       2.104  15.105  23.269  1.00179.97           C
ANISOU 1697  CE2 PHE A 231    22089  24237  22053  -9355  -2687   2677       C
ATOM   1698  CZ  PHE A 231       3.329  15.659  23.578  1.00182.96           C
ANISOU 1698  CZ  PHE A 231    22078  24971  22466  -9650  -2838   2954       C
ATOM   1699  N   PRO A 232      -1.526  17.888  28.293  1.00162.11           N
ANISOU 1699  N   PRO A 232    21822  21749  18025  -9477  -3388   1600       N
ATOM   1700  CA  PRO A 232      -2.476  18.653  29.114  1.00153.79           C
ANISOU 1700  CA  PRO A 232    21234  20543  16657  -9460  -3353   1295       C
ATOM   1701  C   PRO A 232      -3.050  19.868  28.390  1.00142.78           C
ANISOU 1701  C   PRO A 232    20174  18846  15230  -9288  -3175    927       C
ATOM   1702  O   PRO A 232      -3.188  20.933  28.997  1.00132.81           O
ANISOU 1702  O   PRO A 232    19203  17553  13705  -9424  -3218    806       O
ATOM   1703  CB  PRO A 232      -1.620  19.129  30.295  1.00156.72           C
ANISOU 1703  CB  PRO A 232    21596  21239  16711  -9881  -3662   1562       C
ATOM   1704  CG  PRO A 232      -0.396  18.277  30.269  1.00162.71           C
ANISOU 1704  CG  PRO A 232    21822  22347  17652 -10069  -3900   2031       C
ATOM   1705  CD  PRO A 232      -0.159  17.966  28.833  1.00163.60           C
ANISOU 1705  CD  PRO A 232    21661  22339  18159  -9846  -3690   2017       C
ATOM   1706  N   ALA A 233      -3.385  19.706  27.115  1.00138.19           N
ANISOU 1706  N   ALA A 233    19573  18030  14903  -9010  -2993    766       N
ATOM   1707  CA  ALA A 233      -3.887  20.806  26.304  1.00133.02           C
ANISOU 1707  CA  ALA A 233    19245  17080  14215  -8857  -2871    467       C
ATOM   1708  C   ALA A 233      -5.385  20.677  26.056  1.00127.31           C
ANISOU 1708  C   ALA A 233    18727  16028  13618  -8441  -2704     60       C
ATOM   1709  O   ALA A 233      -5.940  19.577  26.075  1.00130.46           O
ANISOU 1709  O   ALA A 233    18963  16389  14216  -8250  -2628     -3       O
ATOM   1710  CB  ALA A 233      -3.137  20.868  24.983  1.00113.52           C
ANISOU 1710  CB  ALA A 233    16669  14574  11890  -8904  -2818    582       C
ATOM   1711  N   ARG A 234      -6.034  21.811  25.821  1.00126.02           N
ANISOU 1711  N   ARG A 234    18891  15618  13371  -8311  -2651   -218       N
ATOM   1712  CA  ARG A 234      -7.459  21.828  25.532  1.00125.86           C
ANISOU 1712  CA  ARG A 234    18997  15292  13531  -7895  -2541   -629       C
ATOM   1713  C   ARG A 234      -7.719  22.261  24.094  1.00131.58           C
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ANISOU 1713  C   ARG A 234    19891  15739  14363  -7663  -2518   -798       C
ATOM   1714  O   ARG A 234      -8.096  23.405  23.851  1.00124.31           O
ANISOU 1714  O   ARG A 234    19271  14613  13346  -7592  -2537   -973       O
ATOM   1715  CB  ARG A 234      -8.185  22.783  26.478  1.00121.40           C
ANISOU 1715  CB  ARG A 234    18667  14638  12823  -7887  -2530   -851       C
ATOM   1716  CG  ARG A 234      -7.950  22.533  27.955  1.00121.91           C
ANISOU 1716  CG  ARG A 234    18698  14949  12673  -8177  -2564   -698       C
ATOM   1717  CD  ARG A 234      -8.778  23.504  28.779  1.00133.57           C
ANISOU 1717  CD  ARG A 234    20448  16283  14019  -8160  -2513   -972       C
ATOM   1718  NE  ARG A 234     -10.197  23.416  28.440  1.00145.60           N
ANISOU 1718  NE  ARG A 234    21951  17526  15845  -7733  -2383  -1395       N
ATOM   1719  CZ  ARG A 234     -11.099  24.347  28.733  1.00147.99           C
ANISOU 1719  CZ  ARG A 234    22445  17616  16166  -7594  -2338  -1723       C
ATOM   1720  NH1 ARG A 234     -10.733  25.451  29.366  1.00144.09           N
ANISOU 1720  NH1 ARG A 234    22236  17135  15378  -7857  -2384  -1674       N
ATOM   1721  NH2 ARG A 234     -12.368  24.180  28.385  1.00108.14           N
ANISOU 1721  NH2 ARG A 234    17290  12340  11458  -7197  -2265  -2120       N
ATOM   1722  N   PHE A 235      -7.509  21.355  23.145  1.00139.38           N
ANISOU 1722  N   PHE A 235    20729  16703  15526  -7568  -2485   -739       N
ATOM   1723  CA  PHE A 235      -7.836  21.633  21.753  1.00135.74           C
ANISOU 1723  CA  PHE A 235    20493  15957  15124  -7346  -2479   -919       C
ATOM   1724  C   PHE A 235      -9.338  21.836  21.654  1.00131.75           C
ANISOU 1724  C   PHE A 235    20066  15185  14807  -6890  -2487  -1375       C
ATOM   1725  O   PHE A 235     -10.109  20.892  21.823  1.00 99.82           O
ANISOU 1725  O   PHE A 235    15771  11123  11033  -6645  -2442  -1574       O
ATOM   1726  CB  PHE A 235      -7.411  20.474  20.854  1.00102.19           C
ANISOU 1726  CB  PHE A 235    16073  11722  11034  -7338  -2429   -804       C
ATOM   1727  CG  PHE A 235      -5.949  20.142  20.935  1.00104.22           C
ANISOU 1727  CG  PHE A 235    16118  12264  11216  -7764  -2416   -363       C
ATOM   1728  CD1 PHE A 235      -5.055  20.669  20.021  1.00125.28           C
ANISOU 1728  CD1 PHE A 235    18957  14896  13749  -8015  -2387   -189       C
ATOM   1729  CD2 PHE A 235      -5.470  19.293  21.919  1.00131.14           C
ANISOU 1729  CD2 PHE A 235    19140  15974  14712  -7922  -2432   -120       C
ATOM   1730  CE1 PHE A 235      -3.710  20.360  20.091  1.00132.61           C
ANISOU 1730  CE1 PHE A 235    19567  16110  14708  -8394  -2355    202       C
ATOM   1731  CE2 PHE A 235      -4.126  18.983  21.994  1.00107.21           C
ANISOU 1731  CE2 PHE A 235    15814  13232  11691  -8270  -2457    290       C
ATOM   1732  CZ  PHE A 235      -3.246  19.517  21.080  1.00109.27           C
ANISOU 1732  CZ  PHE A 235    16141  13481  11894  -8495  -2408    442       C
ATOM   1733  N   LYS A 236      -9.754  23.072  21.397  1.00120.37           N
ANISOU 1733  N   LYS A 236    18949  13536  13252  -6788  -2549  -1548       N
ATOM   1734  CA  LYS A 236     -11.173  23.411  21.429  1.00120.66           C
ANISOU 1734  CA  LYS A 236    18990  13354  13503  -6363  -2591  -1998       C
ATOM   1735  C   LYS A 236     -11.787  23.529  20.034  1.00119.06           C
ANISOU 1735  C   LYS A 236    18969  12872  13397  -5998  -2694  -2260       C
ATOM   1736  O   LYS A 236     -13.007  23.649  19.902  1.00123.77           O
ANISOU 1736  O   LYS A 236    19473  13315  14238  -5598  -2765  -2680       O
ATOM   1737  CB  LYS A 236     -11.398  24.703  22.220  1.00128.41           C
ANISOU 1737  CB  LYS A 236    20187  14276  14328  -6453  -2613  -2073       C
ATOM   1738  CG  LYS A 236     -10.968  24.629  23.684  1.00104.87           C
ANISOU 1738  CG  LYS A 236    17078  11554  11215  -6782  -2539  -1883       C
ATOM   1739  CD  LYS A 236     -12.057  24.053  24.565  1.00103.96           C
ANISOU 1739  CD  LYS A 236    16704  11451  11345  -6575  -2470  -2170       C
ATOM   1740  CE  LYS A 236     -13.261  24.977  24.612  1.00161.32           C
ANISOU 1740  CE  LYS A 236    24077  18459  18758  -6273  -2511  -2607       C
ATOM   1741  NZ  LYS A 236     -14.321  24.464  25.518  1.00155.41           N
ANISOU 1741  NZ  LYS A 236    23081  17711  18255  -6129  -2429  -2905       N
ATOM   1742  N   ALA A 237     -10.944  23.486  19.003  1.00118.27           N
ANISOU 1742  N   ALA A 237    19128  12713  13095  -6150  -2709  -2028       N
ATOM   1743  CA  ALA A 237     -11.414  23.577  17.620  1.00119.00           C
ANISOU 1743  CA  ALA A 237    19510  12528  13178  -5832  -2823  -2235       C
ATOM   1744  C   ALA A 237     -10.344  23.214  16.590  1.00103.53           C
ANISOU 1744  C   ALA A 237    17830  10524  10982  -6083  -2781  -1941       C
ATOM   1745  O   ALA A 237      -9.178  23.588  16.728  1.00104.98           O
ANISOU 1745  O   ALA A 237    18164  10808  10915  -6552  -2692  -1577       O
ATOM   1746  CB  ALA A 237     -11.961  24.974  17.335  1.00119.57           C
ANISOU 1746  CB  ALA A 237    19993  12337  13102  -5668  -2950  -2409       C
ATOM   1747  N   ILE A 238     -10.759  22.485  15.557  1.00108.19           N
ANISOU 1747  N   ILE A 238    18480  10967  11661  -5783  -2839  -2131       N
ATOM   1748  CA  ILE A 238      -9.912  22.223  14.397  1.00104.32           C
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ANISOU 1748  CA  ILE A 238    18391  10337  10909  -5964  -2797  -1934        C
ATOM   1749  C   ILE A 238     -10.578  22.766  13.137  1.00107.68           C
ANISOU 1749  C   ILE A 238    19367  10400  11149  -5566  -2974  -2176        C
ATOM   1750  O   ILE A 238     -11.730  22.441  12.847  1.00105.56           O
ANISOU 1750  O   ILE A 238    18929  10067  11111  -5062  -3127  -2561        O
ATOM   1751  CB  ILE A 238      -9.655  20.725  14.192  1.00108.35           C
ANISOU 1751  CB  ILE A 238    18583  10961  11623  -5987  -2696  -1916        C
ATOM   1752  CG1 ILE A 238      -8.980  20.121  15.421  1.00101.56           C
ANISOU 1752  CG1 ILE A 238    17193  10458  10935  -6352  -2548  -1637        C
ATOM   1753  CG2 ILE A 238      -8.776  20.514  12.975  1.00104.75           C
ANISOU 1753  CG2 ILE A 238    18606  10316  10876  -6202  -2607  -1746        C
ATOM   1754  CD1 ILE A 238      -7.521  20.473  15.543  1.00103.52           C
ANISOU 1754  CD1 ILE A 238    17512  10869  10952  -6933  -2418  -1184        C
ATOM   1755  N   HIS A 239      -9.852  23.592  12.390  1.00113.93           N
ANISOU 1755  N   HIS A 239    20817  10958  11513  -5807  -2948  -1952        N
ATOM   1756  CA  HIS A 239     -10.414  24.229  11.204  1.00115.45           C
ANISOU 1756  CA  HIS A 239    21665  10764  11436  -5426  -3133  -2118        C
ATOM   1757  C   HIS A 239      -9.722  23.809   9.915  1.00122.06           C
ANISOU 1757  C   HIS A 239    23093  11366  11919  -5513  -3039  -1996        C
ATOM   1758  O   HIS A 239      -8.496  23.863   9.807  1.00131.24           O
ANISOU 1758  O   HIS A 239    24507  12518  12839  -6079  -2780  -1674        O
ATOM   1759  CB  HIS A 239     -10.362  25.752  11.329  1.00118.86           C
ANISOU 1759  CB  HIS A 239    22583  10986  11594  -5546  -3189  -2006        C
ATOM   1760  CG  HIS A 239     -11.154  26.292  12.479  1.00120.49           C
ANISOU 1760  CG  HIS A 239    22343  11340  12097  -5404  -3274  -2189        C
ATOM   1761  ND1 HIS A 239     -12.527  26.264  12.516  1.00124.86           N
ANISOU 1761  ND1 HIS A 239    22625  11872  12945  -4849  -3479  -2606        N
ATOM   1762  CD2 HIS A 239     -10.753  26.884  13.631  1.00121.01           C
ANISOU 1762  CD2 HIS A 239    22205  11578  12195  -5767  -3161  -2036        C
ATOM   1763  CE1 HIS A 239     -12.946  26.814  13.646  1.00126.06           C
ANISOU 1763  CE1 HIS A 239    22451  12148  13298  -4888  -3456  -2713        C
ATOM   1764  NE2 HIS A 239     -11.891  27.196  14.336  1.00125.37           N
ANISOU 1764  NE2 HIS A 239    22427  12169  13039  -5416  -3278  -2365        N
ATOM   1765  N   PHE A 240     -10.520  23.392   8.939  1.00122.07           N
ANISOU 1765  N   PHE A 240    23299  11185  11898  -4963  -3228  -2278        N
ATOM   1766  CA  PHE A 240     -10.002  23.050   7.620  1.00123.91           C
ANISOU 1766  CA  PHE A 240    24221  11134  11723  -4934  -3143  -2216        C
ATOM   1767  C   PHE A 240     -10.535  24.036   6.589  1.00128.40           C
ANISOU 1767  C   PHE A 240    25593  11308  11885  -4523  -3377  -2279        C
ATOM   1768  O   PHE A 240     -11.741  24.271   6.501  1.00131.66           O
ANISOU 1768  O   PHE A 240    25832  11706  12486  -3977  -3713  -2564        O
ATOM   1769  CB  PHE A 240     -10.376  21.622   7.228  1.00123.06           C
ANISOU 1769  CB  PHE A 240    23766  11132  11862  -4622  -3161  -2470        C
ATOM   1770  CG  PHE A 240      -9.666  20.567   8.019  1.00124.43           C
ANISOU 1770  CG  PHE A 240    23350  11588  12341  -5058  -2896  -2346        C
ATOM   1771  CD1 PHE A 240      -8.454  20.056   7.585  1.00113.97           C
ANISOU 1771  CD1 PHE A 240    22343  10171  10790  -5522  -2560  -2115        C
ATOM   1772  CD2 PHE A 240     -10.214  20.073   9.190  1.00124.19           C
ANISOU 1772  CD2 PHE A 240    22470  11888  12829  -5017  -2948  -2463        C
ATOM   1773  CE1 PHE A 240      -7.800  19.081   8.311  1.00129.66           C
ANISOU 1773  CE1 PHE A 240    23746  12407  13112  -5938  -2330  -1969        C
ATOM   1774  CE2 PHE A 240      -9.562  19.095   9.915  1.00125.07           C
ANISOU 1774  CE2 PHE A 240    22080  12237  13202  -5397  -2728  -2302        C
ATOM   1775  CZ  PHE A 240      -8.363  18.583   9.472  1.00127.87           C
ANISOU 1775  CZ  PHE A 240    22691  12518  13375  -5850  -2445  -2045        C
ATOM   1776  N   ILE A 241      -9.629  24.633   5.825  1.00131.81           N
ANISOU 1776  N   ILE A 241    26917  11406  11757  -4824  -3173  -2008        N
ATOM   1777  CA  ILE A 241     -10.016  25.612   4.817  1.00148.88           C
ANISOU 1777  CA  ILE A 241    29991  13129  13447  -4464  -3369  -1995        C
ATOM   1778  C   ILE A 241      -9.504  25.243   3.425  1.00156.84           C
ANISOU 1778  C   ILE A 241    31868  13813  13911  -4366  -3189  -1929        C
ATOM   1779  O   ILE A 241      -8.423  24.667   3.277  1.00154.66           O
ANISOU 1779  O   ILE A 241    31745  13544  13473  -4848  -2748  -1785        O
ATOM   1780  CB  ILE A 241      -9.534  27.030   5.191  1.00152.97           C
ANISOU 1780  CB  ILE A 241    30997  13429  13696  -4881  -3271  -1724        C
ATOM   1781  CG1 ILE A 241      -8.039  27.015   5.512  1.00131.88           C
ANISOU 1781  CG1 ILE A 241    28434  10812  10864  -5751  -2763  -1405        C
ATOM   1782  CG2 ILE A 241     -10.322  27.560   6.379  1.00129.03           C
ANISOU 1782  CG2 ILE A 241    27272  10631  11122  -4772  -3509  -1860        C
ATOM   1783  CD1 ILE A 241      -7.473  28.375   5.836  1.00134.85           C
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ANISOU 1783  CD1 ILE A 241    29280  10981  10976  -6243  -2615  -1146       C
ATOM   1784  N   HIS A 242     -10.314  25.556   2.416  1.00163.04           N
ANISOU 1784  N   HIS A 242    33207  14314  14425  -3732  -3522  -2052       N
ATOM   1785  CA  HIS A 242      -9.940  25.414   1.011  1.00167.79           C
ANISOU 1785  CA  HIS A 242    34796  14550  14406  -3542  -3377  -1972       C
ATOM   1786  C   HIS A 242      -9.632  23.975   0.606  1.00161.01           C
ANISOU 1786  C   HIS A 242    33682  13875  13618  -3492  -3150  -2122       C
ATOM   1787  O   HIS A 242      -8.994  23.739  -0.420  1.00159.98           O
ANISOU 1787  O   HIS A 242    34355  13480  12948  -3500  -2821  -2026       O
ATOM   1788  CB  HIS A 242      -8.756  26.326   0.678  1.00173.99           C
ANISOU 1788  CB  HIS A 242    36598  14941  14569  -4119  -2901  -1604       C
ATOM   1789  CG  HIS A 242      -8.922  27.732   1.166  1.00182.38           C
ANISOU 1789  CG  HIS A 242    37934  15799  15563  -4270  -3057  -1443       C
ATOM   1790  ND1 HIS A 242     -10.156  28.322   1.333  1.00185.91           N
ANISOU 1790  ND1 HIS A 242    38188  16216  16234  -3698  -3628  -1605       N
ATOM   1791  CD2 HIS A 242      -8.008  28.662   1.532  1.00193.04           C
ANISOU 1791  CD2 HIS A 242    39731  16953  16662  -4955  -2690  -1160       C
ATOM   1792  CE1 HIS A 242      -9.996  29.556   1.778  1.00193.76           C
ANISOU 1792  CE1 HIS A 242    39548  16984  17088  -3978  -3610  -1419       C
ATOM   1793  NE2 HIS A 242      -8.701  29.786   1.906  1.00197.12           N
ANISOU 1793  NE2 HIS A 242    40358  17315  17224  -4749  -3053  -1144       N
ATOM   1794  N   GLN A 243     -10.093  23.019   1.406  1.00152.04           N
ANISOU 1794  N   GLN A 243    31477  13163  13128  -3434  -3278  -2363       N
ATOM   1795  CA  GLN A 243      -9.879  21.609   1.105  1.00147.66           C
ANISOU 1795  CA  GLN A 243    30644  12759  12702  -3371  -3083  -2534       C
ATOM   1796  C   GLN A 243     -10.655  21.222  -0.152  1.00151.38           C
ANISOU 1796  C   GLN A 243    31496  13076  12945  -2683  -3372  -2762       C
ATOM   1797  O   GLN A 243     -11.713  21.788  -0.431  1.00159.15           O
ANISOU 1797  O   GLN A 243    32495  14002  13971  -2207  -3868  -2896       O
ATOM   1798  CB  GLN A 243     -10.282  20.729   2.294  1.00136.59           C
ANISOU 1798  CB  GLN A 243    28052  11795  12050  -3463  -3169  -2731       C
ATOM   1799  CG  GLN A 243     -11.772  20.440   2.406  1.00133.91           C
ANISOU 1799  CG  GLN A 243    27044  11655  12181  -2876  -3659  -3112       C
ATOM   1800  CD  GLN A 243     -12.601  21.678   2.674  1.00144.61           C
ANISOU 1800  CD  GLN A 243    28405  12959  13580  -2658  -4020  -3130       C
ATOM   1801  OE1 GLN A 243     -12.092  22.693   3.153  1.00148.82           O
ANISOU 1801  OE1 GLN A 243    29209  13390  13944  -3001  -3915  -2861       O
ATOM   1802  NE2 GLN A 243     -13.890  21.601   2.365  1.00145.05           N
ANISOU 1802  NE2 GLN A 243    28174  13071  13867  -2118  -4435  -3465       N
ATOM   1803  N   PRO A 244     -10.118  20.271  -0.930  1.00150.39           N
ANISOU 1803  N   PRO A 244    31706  12871  12563  -2643  -3050  -2811       N
ATOM   1804  CA  PRO A 244     -10.751  19.883  -2.195  1.00152.29           C
ANISOU 1804  CA  PRO A 244    32376  12963  12525  -2033  -3297  -3007       C
ATOM   1805  C   PRO A 244     -11.969  18.990  -1.991  1.00149.33           C
ANISOU 1805  C   PRO A 244    31072  12898  12769  -1625  -3751  -3431       C
ATOM   1806  O   PRO A 244     -12.365  18.726  -0.856  1.00136.35           O
ANISOU 1806  O   PRO A 244    28483  11568  11757  -1786  -3844  -3563       O
ATOM   1807  CB  PRO A 244      -9.647  19.098  -2.914  1.00150.42           C
ANISOU 1807  CB  PRO A 244    32734  12568  11851  -2211  -2664  -2927       C
ATOM   1808  CG  PRO A 244      -8.378  19.395  -2.160  1.00152.46           C
ANISOU 1808  CG  PRO A 244    33085  12810  12033  -2952  -2064  -2644       C
ATOM   1809  CD  PRO A 244      -8.808  19.626  -0.754  1.00144.76           C
ANISOU 1809  CD  PRO A 244    31126  12149  11726  -3196  -2383  -2669       C
ATOM   1810  N   TRP A 245     -12.551  18.527  -3.092  1.00157.04           N
ANISOU 1810  N   TRP A 245    32347  13779  13543  -1140  -3995  -3644       N
ATOM   1811  CA  TRP A 245     -13.714  17.650  -3.040  1.00163.09           C
ANISOU 1811  CA  TRP A 245    32306  14810  14850   -810  -4385  -4079       C
ATOM   1812  C   TRP A 245     -13.339  16.263  -2.530  1.00149.61           C
ANISOU 1812  C   TRP A 245    29962  13318  13565  -1049  -4025  -4253       C
ATOM   1813  O   TRP A 245     -14.195  15.521  -2.050  1.00143.89           O
ANISOU 1813  O   TRP A 245    28381  12855  13437   -966  -4220  -4590       O
ATOM   1814  CB  TRP A 245     -14.362  17.539  -4.423  1.00181.32           C
ANISOU 1814  CB  TRP A 245    35194  16930  16770   -282  -4753  -4249       C
ATOM   1815  CG  TRP A 245     -13.428  17.028  -5.478  1.00186.54           C
ANISOU 1815  CG  TRP A 245    36717  17341  16818   -268  -4336  -4127       C
ATOM   1816  CD1 TRP A 245     -12.657  17.775  -6.321  1.00188.21           C
ANISOU 1816  CD1 TRP A 245    38076  17175  16258   -262  -4088  -3786       C
ATOM   1817  CD2 TRP A 245     -13.160  15.656  -5.800  1.00181.49           C
ANISOU 1817  CD2 TRP A 245    35905  16781  16274   -267  -4043  -4351       C
ATOM   1818  NE1 TRP A 245     -11.928  16.955  -7.148  1.00184.48           N
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ANISOU 1818  NE1 TRP A 245    38139  16568  15387   -252  -3620  -3787       N
ATOM   1819  CE2 TRP A 245     -12.218  15.651  -6.848  1.00183.53           C
ANISOU 1819  CE2 TRP A 245    37226  16718  15790   -239  -3603  -4136       C
ATOM   1820  CE3 TRP A 245     -13.626  14.435  -5.303  1.00179.49           C
ANISOU 1820  CE3 TRP A 245    34740  16803  16656   -297  -4063  -4715       C
ATOM   1821  CZ2 TRP A 245     -11.734  14.471  -7.408  1.00190.13           C
ANISOU 1821  CZ2 TRP A 245    38219  17514  16507   -207  -3189  -4285       C
ATOM   1822  CZ3 TRP A 245     -13.142  13.264  -5.862  1.00184.31           C
ANISOU 1822  CZ3 TRP A 245    35529  17343  17157   -274  -3696  -4857       C
ATOM   1823  CH2 TRP A 245     -12.207  13.291  -6.903  1.00189.97           C
ANISOU 1823  CH2 TRP A 245    37295  17750  17134   -213  -3267  -4649       C
ATOM   1824  N   TYR A 246     -12.059  15.918  -2.641  1.00150.59           N
ANISOU 1824  N   TYR A 246    30556  13293  13369  -1364  -3451  -4025       N
ATOM   1825  CA  TYR A 246     -11.588  14.590  -2.259  1.00154.24           C
ANISOU 1825  CA  TYR A 246    30585  13854  14165  -1564  -3067  -4162       C
ATOM   1826  C   TYR A 246     -10.942  14.568  -0.877  1.00153.23           C
ANISOU 1826  C   TYR A 246    29915  13874  14434  -2114  -2779  -3976       C
ATOM   1827  O   TYR A 246     -10.238  13.620  -0.523  1.00131.06           O
ANISOU 1827  O   TYR A 246    26947  11047  11803  -2382  -2350  -3974       O
ATOM   1828  CB  TYR A 246     -10.612  14.038  -3.303  1.00152.24           C
ANISOU 1828  CB  TYR A 246    31193  13317  13336  -1535  -2535  -4084       C
ATOM   1829  CG  TYR A 246      -9.392  14.902  -3.530  1.00154.08           C
ANISOU 1829  CG  TYR A 246    32307  13299  12938  -1873  -2012  -3676       C
ATOM   1830  CD1 TYR A 246      -8.272  14.788  -2.718  1.00150.59           C
ANISOU 1830  CD1 TYR A 246    31714  12883  12619  -2445  -1410  -3441       C
ATOM   1831  CD2 TYR A 246      -9.360  15.826  -4.563  1.00166.00           C
ANISOU 1831  CD2 TYR A 246    34752  14554  13766  -1655  -2071  -3501       C
ATOM   1832  CE1 TYR A 246      -7.158  15.575  -2.923  1.00143.81           C
ANISOU 1832  CE1 TYR A 246    31186  12018  11438  -2748   -806  -2898       C
ATOM   1833  CE2 TYR A 246      -8.249  16.614  -4.779  1.00171.94           C
ANISOU 1833  CE2 TYR A 246    36331  15063  13935  -2014  -1503  -3141       C
ATOM   1834  CZ  TYR A 246      -7.154  16.487  -3.955  1.00167.75           C
ANISOU 1834  CZ  TYR A 246    35391  14686  13661  -2586   -850  -2860       C
ATOM   1835  OH  TYR A 246      -6.049  17.274  -4.170  1.00172.72           O
ANISOU 1835  OH  TYR A 246    36363  15275  13987  -2934   -189  -2327       O
ATOM   1836  N   PHE A 247     -11.177  15.616  -0.097  1.00144.90           N
ANISOU 1836  N   PHE A 247    28605  12939  13513  -2287  -3005  -3815       N
ATOM   1837  CA  PHE A 247     -10.661  15.667   1.262  1.00143.19           C
ANISOU 1837  CA  PHE A 247    27828  12901  13678  -2825  -2808  -3630       C
ATOM   1838  C   PHE A 247     -11.376  14.655   2.151  1.00138.84           C
ANISOU 1838  C   PHE A 247    26266  12629  13859  -2790  -2935  -3905       C
ATOM   1839  O   PHE A 247     -10.808  14.156   3.124  1.00149.38           O
ANISOU 1839  O   PHE A 247    27177  14068  15514  -3222  -2676  -3774       O
ATOM   1840  CB  PHE A 247     -10.802  17.076   1.841  1.00152.54           C
ANISOU 1840  CB  PHE A 247    29013  14137  14807  -2983  -3016  -3412       C
ATOM   1841  CG  PHE A 247     -10.646  17.134   3.334  1.00145.38           C
ANISOU 1841  CG  PHE A 247    27336  13508  14395  -3434  -2956  -3291       C
ATOM   1842  CD1 PHE A 247      -9.398  17.016   3.920  1.00140.17           C
ANISOU 1842  CD1 PHE A 247    26715  12852  13692  -4089  -2531  -2981       C
ATOM   1843  CD2 PHE A 247     -11.751  17.300   4.153  1.00137.60           C
ANISOU 1843  CD2 PHE A 247    25578  12785  13918  -3235  -3283  -3494       C
ATOM   1844  CE1 PHE A 247      -9.256  17.063   5.294  1.00133.17           C
ANISOU 1844  CE1 PHE A 247    25098  12256  13246  -4506  -2513  -2830       C
ATOM   1845  CE2 PHE A 247     -11.614  17.351   5.527  1.00123.17           C
ANISOU 1845  CE2 PHE A 247    23091  11215  12493  -3614  -3194  -3372       C
ATOM   1846  CZ  PHE A 247     -10.366  17.232   6.097  1.00125.11           C
ANISOU 1846  CZ  PHE A 247    23378  11490  12669  -4231  -2845  -3019       C
ATOM   1847  N   THR A 248     -12.621  14.348   1.803  1.00128.61           N
ANISOU 1847  N   THR A 248    24607  11440  12821  -2325  -3305  -4280       N
ATOM   1848  CA  THR A 248     -13.445  13.447   2.601  1.00126.14           C
ANISOU 1848  CA  THR A 248    23361  11373  13193  -2309  -3376  -4588       C
ATOM   1849  C   THR A 248     -12.867  12.033   2.622  1.00119.63           C
ANISOU 1849  C   THR A 248    22449  10453  12553  -2449  -3033  -4655       C
ATOM   1850  O   THR A 248     -13.123  11.263   3.548  1.00116.82           O
ANISOU 1850  O   THR A 248    21408  10235  12743  -2618  -2947  -4764       O
ATOM   1851  CB  THR A 248     -14.895  13.414   2.086  1.00141.23           C
ANISOU 1851  CB  THR A 248    24981  13392  15287  -1877  -3761  -4999       C
ATOM   1852  OG1 THR A 248     -15.319  14.747   1.774  1.00154.20           O
ANISOU 1852  OG1 THR A 248    26959  14997  16633  -1684  -4077  -4904       O
ATOM   1853  CG2 THR A 248     -15.825  12.823   3.135  1.00142.17           C
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ANISOU 1853  CG2 THR A 248    24143  13787  16088  -1989  -3746  -5278       C
ATOM   1854  N   THR A 249     -12.080  11.703   1.603  1.00122.74           N
ANISOU 1854  N   THR A 249    23595  10571  12471  -2377  -2786  -4583       N
ATOM   1855  CA  THR A 249     -11.427  10.401   1.527  1.00128.34           C
ANISOU 1855  CA  THR A 249    24364  11102  13298  -2491  -2364  -4635       C
ATOM   1856  C   THR A 249     -10.440  10.218   2.674  1.00119.70           C
ANISOU 1856  C   THR A 249    22896  10101  12483  -3021  -1932  -4228       C
ATOM   1857  O   THR A 249     -10.447   9.192   3.354  1.00117.88           O
ANISOU 1857  O   THR A 249    22011   9983  12793  -3106  -1727  -4217       O
ATOM   1858  CB  THR A 249     -10.683  10.223   0.195  1.00139.20           C
ANISOU 1858  CB  THR A 249    26687  12162  14039  -2304  -2035  -4601       C
ATOM   1859  OG1 THR A 249     -11.613  10.329  -0.889  1.00131.24           O
ANISOU 1859  OG1 THR A 249    25870  11173  12821  -1798  -2438  -4883       O
ATOM   1860  CG2 THR A 249     -10.001   8.865   0.142  1.00139.66           C
ANISOU 1860  CG2 THR A 249    26571  12141  14351  -2327  -1445  -4555       C
ATOM   1861  N   THR A 250      -9.594  11.221   2.882  1.00119.50           N
ANISOU 1861  N   THR A 250    22981  10219  12207  -3285  -1721  -3736       N
ATOM   1862  CA  THR A 250      -8.616  11.191   3.962  1.00139.43           C
ANISOU 1862  CA  THR A 250    24798  13089  15092  -3697  -1293  -3166       C
ATOM   1863  C   THR A 250      -9.303  11.382   5.311  1.00124.02           C
ANISOU 1863  C   THR A 250    22249  11316  13558  -3960  -1667  -3269       C
ATOM   1864  O   THR A 250      -8.918  10.769   6.308  1.00111.01           O
ANISOU 1864  O   THR A 250    19900   9916  12364  -4189  -1427  -2997       O
ATOM   1865  CB  THR A 250      -7.543  12.284   3.779  1.00144.71           C
ANISOU 1865  CB  THR A 250    25757  13847  15378  -3958   -989  -2659       C
ATOM   1866  OG1 THR A 250      -7.015  12.219   2.448  1.00153.09           O
ANISOU 1866  OG1 THR A 250    27499  14695  15975  -3706   -630  -2611       O
ATOM   1867  CG2 THR A 250      -6.413  12.099   4.781  1.00139.42           C
ANISOU 1867  CG2 THR A 250    24306  13561  15107  -4358   -538  -2077       C
ATOM   1868  N   TYR A 251     -10.325  12.232   5.329  1.00112.53           N
ANISOU 1868  N   TYR A 251    21104   9718  11933  -3899  -2247  -3663       N
ATOM   1869  CA  TYR A 251     -11.082  12.520   6.543  1.00125.71           C
ANISOU 1869  CA  TYR A 251    22053  11671  14039  -3978  -2500  -3716       C
ATOM   1870  C   TYR A 251     -11.724  11.262   7.115  1.00126.43           C
ANISOU 1870  C   TYR A 251    21493  11836  14707  -3896  -2467  -3972       C
ATOM   1871  O   TYR A 251     -11.694  11.036   8.324  1.00116.21           O
ANISOU 1871  O   TYR A 251    19645  10733  13775  -4195  -2380  -3821       O
ATOM   1872  CB  TYR A 251     -12.162  13.563   6.247  1.00125.91           C
ANISOU 1872  CB  TYR A 251    22065  11791  13986  -3550  -2890  -3934       C
ATOM   1873  CG  TYR A 251     -12.999  13.974   7.441  1.00125.07           C
ANISOU 1873  CG  TYR A 251    21235  11975  14311  -3563  -3025  -4023       C
ATOM   1874  CD1 TYR A 251     -12.618  15.040   8.244  1.00132.12           C
ANISOU 1874  CD1 TYR A 251    22105  12991  15103  -3848  -3019  -3718       C
ATOM   1875  CD2 TYR A 251     -14.181  13.309   7.755  1.00129.06           C
ANISOU 1875  CD2 TYR A 251    21114  12622  15301  -3324  -3093  -4440       C
ATOM   1876  CE1 TYR A 251     -13.381  15.427   9.330  1.00133.26           C
ANISOU 1876  CE1 TYR A 251    21663  13370  15600  -3828  -3085  -3830       C
ATOM   1877  CE2 TYR A 251     -14.948  13.689   8.842  1.00134.50           C
ANISOU 1877  CE2 TYR A 251    21214  13551  16337  -3367  -3104  -4559       C
ATOM   1878  CZ  TYR A 251     -14.543  14.750   9.625  1.00134.68           C
ANISOU 1878  CZ  TYR A 251    21264  13671  16238  -3582  -3111  -4258       C
ATOM   1879  OH  TYR A 251     -15.299  15.140  10.708  1.00129.58           O
ANISOU 1879  OH  TYR A 251    20097  13233  15903  -3601  -3087  -4403       O
ATOM   1880  N   ASN A 252     -12.302  10.447   6.239  1.00109.74           N
ANISOU 1880  N   ASN A 252    19467   9566  12661  -3501  -2518  -4351       N
ATOM   1881  CA  ASN A 252     -13.028   9.257   6.665  1.00109.02           C
ANISOU 1881  CA  ASN A 252    18792   9500  13130  -3416  -2476  -4660       C
ATOM   1882  C   ASN A 252     -12.115   8.138   7.154  1.00108.37           C
ANISOU 1882  C   ASN A 252    18701   9240  13237  -3800  -2066  -4426       C
ATOM   1883  O   ASN A 252     -12.580   7.159   7.735  1.00119.75           O
ANISOU 1883  O   ASN A 252    19669  10668  15162  -3829  -3829  -4581       O
ATOM   1884  CB  ASN A 252     -13.948   8.757   5.550  1.00137.60           C
ANISOU 1884  CB  ASN A 252    22475  13040  16765  -2951  -2631  -5149       C
ATOM   1885  CG  ASN A 252     -15.062   9.738   5.229  1.00136.25           C
ANISOU 1885  CG  ASN A 252    22176  13091  16502  -2685  -2952  -5380       C
ATOM   1886  OD1 ASN A 252     -15.441  10.563   6.062  1.00135.66           O
ANISOU 1886  OD1 ASN A 252    21768  13235  16543  -2800  -3027  -5303       O
ATOM   1887  ND2 ASN A 252     -15.595   9.650   4.016  1.00139.42           N
ANISOU 1887  ND2 ASN A 252    22892  13414  16667  -2347  -3124  -5642       N
ATOM   1888  N   VAL A 253     -10.816   8.291   6.916  1.00122.41           N
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ANISOU 1888  N   VAL A 253    20607  11131  14772  -3876  -1651  -3871       N
ATOM   1889  CA  VAL A 253      -9.824   7.345   7.414  1.00115.98           C
ANISOU 1889  CA  VAL A 253    19311  10479  14278  -3974  -1097  -3376       C
ATOM   1890  C   VAL A 253      -9.378   7.741   8.820  1.00111.97           C
ANISOU 1890  C   VAL A 253    18257  10313  13974  -4384  -1054  -2920       C
ATOM   1891  O   VAL A 253      -9.172   6.887   9.682  1.00115.19           O
ANISOU 1891  O   VAL A 253    18151  10833  14784  -4491   -831  -2694       O
ATOM   1892  CB  VAL A 253      -8.599   7.272   6.484  1.00115.33           C
ANISOU 1892  CB  VAL A 253    19512  10399  13909  -3823   -622  -2992       C
ATOM   1893  CG1 VAL A 253      -7.552   6.325   7.050  1.00115.26           C
ANISOU 1893  CG1 VAL A 253    18931  10575  14290  -3881    -77  -2467       C
ATOM   1894  CG2 VAL A 253      -9.020   6.836   5.089  1.00117.21           C
ANISOU 1894  CG2 VAL A 253    20373  10285  13878  -3414   -645  -3450       C
ATOM   1895  N   VAL A 254      -9.234   9.045   9.042  1.00106.33           N
ANISOU 1895  N   VAL A 254    17713   9736  12951  -4611  -1281  -2789       N
ATOM   1896  CA  VAL A 254      -8.917   9.575  10.364  1.00107.55           C
ANISOU 1896  CA  VAL A 254    17442  10199  13222  -5029  -1328  -2436       C
ATOM   1897  C   VAL A 254     -10.122   9.408  11.286  1.00107.46           C
ANISOU 1897  C   VAL A 254    17184  10147  13499  -5129  -1634  -2829       C
ATOM   1898  O   VAL A 254      -9.985   9.000  12.438  1.00100.16           O
ANISOU 1898  O   VAL A 254    15791   9413  12853  -5371  -1522  -2587       O
ATOM   1899  CB  VAL A 254      -8.529  11.073  10.292  1.00103.67           C
ANISOU 1899  CB  VAL A 254    17282   9800  12308  -5261  -1499  -2268       C
ATOM   1900  CG1 VAL A 254      -8.121  11.608  11.662  1.00102.09           C
ANISOU 1900  CG1 VAL A 254    16663   9923  12203  -5726  -1549  -1910       C
ATOM   1901  CG2 VAL A 254      -7.411  11.285   9.289  1.00106.52           C
ANISOU 1901  CG2 VAL A 254    17938  10158  12376  -5183  -1144  -1929       C
ATOM   1902  N   LYS A 255     -11.300   9.711  10.749  1.00109.86           N
ANISOU 1902  N   LYS A 255    17773  10223  13744  -4882  -1999  -3421       N
ATOM   1903  CA  LYS A 255     -12.561   9.723  11.498  1.00111.65           C
ANISOU 1903  CA  LYS A 255    17464  10605  14354  -4614  -2175  -3725       C
ATOM   1904  C   LYS A 255     -12.757   8.617  12.552  1.00123.14           C
ANISOU 1904  C   LYS A 255    18428  12091  16270  -4796  -1967  -3670       C
ATOM   1905  O   LYS A 255     -13.236   8.901  13.649  1.00141.60           O
ANISOU 1905  O   LYS A 255    20380  14622  18799  -4834  -2006  -3625       O
ATOM   1906  CB  LYS A 255     -13.752   9.783  10.528  1.00109.55           C
ANISOU 1906  CB  LYS A 255    17231  10237  14156  -4072  -2417  -4302       C
ATOM   1907  CG  LYS A 255     -15.089  10.115  11.169  1.00122.13           C
ANISOU 1907  CG  LYS A 255    18265  12027  16111  -3860  -2526  -4688       C
ATOM   1908  CD  LYS A 255     -16.126  10.446  10.104  1.00139.74           C
ANISOU 1908  CD  LYS A 255    20591  14304  18198  -3549  -2605  -5172       C
ATOM   1909  CE  LYS A 255     -17.500  10.679  10.712  1.00158.78           C
ANISOU 1909  CE  LYS A 255    22655  16977  20696  -3632  -2425  -5407       C
ATOM   1910  NZ  LYS A 255     -18.012   9.458  11.396  1.00167.14           N
ANISOU 1910  NZ  LYS A 255    23657  18029  21818  -3927  -2113  -5252       N
ATOM   1911  N   PRO A 256     -12.394   7.359  12.234  1.00108.82           N
ANISOU 1911  N   PRO A 256    14840  11838  14668  -4143  -1549  -1398       N
ATOM   1912  CA  PRO A 256     -12.498   6.344  13.291  1.00 99.63           C
ANISOU 1912  CA  PRO A 256    13345  10850  13661  -4230  -1501  -1340       C
ATOM   1913  C   PRO A 256     -11.495   6.516  14.433  1.00 96.96           C
ANISOU 1913  C   PRO A 256    12914  10528  13397  -4418  -1497  -1158       C
ATOM   1914  O   PRO A 256     -11.710   5.941  15.501  1.00 88.11           O
ANISOU 1914  O   PRO A 256    11596   9557  12323  -4511  -1521  -1110       O
ATOM   1915  CB  PRO A 256     -12.213   5.034  12.549  1.00 97.92           C
ANISOU 1915  CB  PRO A 256    13022  10576  13608  -4294  -1339  -1290       C
ATOM   1916  CG  PRO A 256     -12.570   5.314  11.142  1.00105.33           C
ANISOU 1916  CG  PRO A 256    14277  11366  14379  -4210  -1358  -1409       C
ATOM   1917  CD  PRO A 256     -12.170   6.738  10.916  1.00113.25           C
ANISOU 1917  CD  PRO A 256    15547  12255  15226  -4167  -1430  -1402       C
ATOM   1918  N   PHE A 257     -10.426   7.281  14.223  1.00 90.06           N
ANISOU 1918  N   PHE A 257    12193   9491  12535  -4507  -1496  -1032       N
ATOM   1919  CA  PHE A 257      -9.421   7.463  15.269  1.00100.29           C
ANISOU 1919  CA  PHE A 257    13407  10770  13927  -4743  -1582   -802       C
ATOM   1920  C   PHE A 257      -9.943   8.396  16.348  1.00100.35           C
ANISOU 1920  C   PHE A 257    13621  10854  13653  -4774  -1749   -912       C
ATOM   1921  O   PHE A 257      -9.572   8.282  17.514  1.00 90.79           O
ANISOU 1921  O   PHE A 257    12381   9697  12418  -5004  -1865   -775       O
ATOM   1922  CB  PHE A 257      -8.120   8.046  14.709  1.00113.16           C
ANISOU 1922  CB  PHE A 257    15112  12176  15708  -4848  -1541   -602       C
ATOM   1923  CG  PHE A 257      -7.531   7.259  13.574  1.00124.52           C
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ANISOU 1923  CG  PHE A 257    16426  13464  17420  -4812  -1257   -512       C
ATOM   1924  CD1 PHE A 257      -7.814   5.913  13.414  1.00132.34           C
ANISOU 1924  CD1 PHE A 257    17185  14509  18590  -4780  -1095   -522       C
ATOM   1925  CD2 PHE A 257      -6.685   7.872  12.666  1.00127.76           C
ANISOU 1925  CD2 PHE A 257    16990  13648  17905  -4822  -1107   -423       C
ATOM   1926  CE1 PHE A 257      -7.269   5.196  12.366  1.00137.42           C
ANISOU 1926  CE1 PHE A 257    17793  14956  19464  -4755   -762   -471       C
ATOM   1927  CE2 PHE A 257      -6.137   7.162  11.619  1.00136.83           C
ANISOU 1927  CE2 PHE A 257    18094  14612  19285  -4798   -745   -362       C
ATOM   1928  CZ  PHE A 257      -6.429   5.823  11.467  1.00139.29           C
ANISOU 1928  CZ  PHE A 257    18215  14953  19757  -4762   -558   -398       C
ATOM   1929  N   LEU A 258     -10.805   9.323  15.944  1.00 94.15           N
ANISOU 1929  N   LEU A 258    13078  10039  12657  -4558  -1757  -1149       N
ATOM   1930  CA  LEU A 258     -11.253  10.393  16.826  1.00 95.67           C
ANISOU 1930  CA  LEU A 258    13536  10213  12601  -4553  -1827  -1283       C
ATOM   1931  C   LEU A 258     -12.296   9.941  17.841  1.00 95.41           C
ANISOU 1931  C   LEU A 258    13422  10348  12480  -4522  -1746  -1418       C
ATOM   1932  O   LEU A 258     -13.180   9.142  17.531  1.00 95.27           O
ANISOU 1932  O   LEU A 258    13159  10456  12581  -4363  -1658  -1499       O
ATOM   1933  CB  LEU A 258     -11.803  11.564  16.005  1.00 92.19           C
ANISOU 1933  CB  LEU A 258    13347   9627  12054  -4308  -1839  -1459       C
ATOM   1934  CG  LEU A 258     -10.882  12.174  14.943  1.00105.72           C
ANISOU 1934  CG  LEU A 258    15218  11152  13799  -4332  -1890  -1347       C
ATOM   1935  CD1 LEU A 258     -11.539  13.382  14.299  1.00105.15           C
ANISOU 1935  CD1 LEU A 258    15420  10931  13601  -4106  -1947  -1507       C
ATOM   1936  CD2 LEU A 258      -9.525  12.547  15.522  1.00 92.78           C
ANISOU 1936  CD2 LEU A 258    13661   9411  12181  -4630  -1978  -1125       C
ATOM   1937  N   LYS A 259     -12.178  10.460  19.060  1.00 93.84           N
ANISOU 1937  N   LYS A 259    13468  10130  12058  -4707  -1769  -1433       N
ATOM   1938  CA  LYS A 259     -13.207  10.275  20.072  1.00102.41           C
ANISOU 1938  CA  LYS A 259    14591  11321  12999  -4679  -1604  -1596       C
ATOM   1939  C   LYS A 259     -14.349  11.237  19.787  1.00103.01           C
ANISOU 1939  C   LYS A 259    14802  11293  13045  -4344  -1434  -1867       C
ATOM   1940  O   LYS A 259     -14.194  12.180  19.011  1.00 96.69           O
ANISOU 1940  O   LYS A 259    14154  10324  12259  -4202  -1509  -1911       O
ATOM   1941  CB  LYS A 259     -12.657  10.531  21.477  1.00125.53           C
ANISOU 1941  CB  LYS A 259    17857  14215  15625  -5046  -1668  -1524       C
ATOM   1942  CG  LYS A 259     -11.636   9.516  21.960  1.00144.33           C
ANISOU 1942  CG  LYS A 259    20060  16689  18092  -5408  -1885  -1195       C
ATOM   1943  CD  LYS A 259     -11.569   9.498  23.482  1.00157.19           C
ANISOU 1943  CD  LYS A 259    22026  18330  19367  -5777  -1938  -1151       C
ATOM   1944  CE  LYS A 259     -11.398  10.900  24.051  1.00158.73           C
ANISOU 1944  CE  LYS A 259    22828  18307  19175  -5918  -1970  -1289       C
ATOM   1945  NZ  LYS A 259     -11.492  10.916  25.537  1.00167.11           N
ANISOU 1945  NZ  LYS A 259    24360  19349  19787  -6300  -1965  -1303       N
ATOM   1946  N   SER A 260     -15.491  10.999  20.421  1.00110.76           N
ANISOU 1946  N   SER A 260    15703  12351  14031  -4219  -1191  -2022       N
ATOM   1947  CA  SER A 260     -16.668  11.833  20.217  1.00120.37           C
ANISOU 1947  CA  SER A 260    16947  13438  15352  -3874   -985  -2240       C
ATOM   1948  C   SER A 260     -16.391  13.289  20.571  1.00117.88           C
ANISOU 1948  C   SER A 260    17124  12853  14811  -3880   -929  -2367       C
ATOM   1949  O   SER A 260     -16.915  14.197  19.931  1.00114.84           O
ANISOU 1949  O   SER A 260    16775  12286  14575  -3591   -897  -2470       O
ATOM   1950  CB  SER A 260     -17.844  11.303  21.038  1.00142.26           C
ANISOU 1950  CB  SER A 260    19539  16308  18204  -3782   -655  -2353       C
ATOM   1951  OG  SER A 260     -17.473  11.116  22.392  1.00154.88           O
ANISOU 1951  OG  SER A 260    21443  17941  19462  -4104   -510  -2362       O
ATOM   1952  N   LYS A 261     -15.554  13.501  21.583  1.00126.38           N
ANISOU 1952  N   LYS A 261    18599  13883  15535  -4236   -956  -2336       N
ATOM   1953  CA  LYS A 261     -15.224  14.847  22.038  1.00127.48           C
ANISOU 1953  CA  LYS A 261    19296  13741  15401  -4318   -916  -2463       C
ATOM   1954  C   LYS A 261     -14.519  15.662  20.960  1.00113.01           C
ANISOU 1954  C   LYS A 261    17523  11756  13659  -4244  -1191  -2379       C
ATOM   1955  O   LYS A 261     -14.910  16.794  20.679  1.00106.80           O
ANISOU 1955  O   LYS A 261    16957  10725  12896  -4024  -1097  -2533       O
ATOM   1956  CB  LYS A 261     -14.355  14.795  23.297  1.00141.14           C
ANISOU 1956  CB  LYS A 261    21475  15451  16701  -4815  -1008  -2388       C
ATOM   1957  CG  LYS A 261     -13.981  16.168  23.843  1.00159.44           C
ANISOU 1957  CG  LYS A 261    24463  17444  18673  -4973   -992  -2527       C
ATOM   1958  CD  LYS A 261     -13.068  16.063  25.058  1.00170.29           C
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ANISOU 1958  CD  LYS A 261    26326  18787  19589  -5552  -1196  -2401       C
ATOM   1959  CE  LYS A 261     -11.710  15.480  24.688  1.00168.83           C
ANISOU 1959  CE  LYS A 261    25879  18732  19535  -5866  -1720  -2001       C
ATOM   1960  NZ  LYS A 261     -10.830  15.293  25.879  1.00161.05           N
ANISOU 1960  NZ  LYS A 261    25306  17713  18173  -6470  -2022  -1795       N
ATOM   1961  N   LEU A 262     -13.482  15.085  20.361  1.00105.17           N
ANISOU 1961  N   LEU A 262    16331  10880  12747  -4426  -1494  -2125       N
ATOM   1962  CA  LEU A 262     -12.683  15.798  19.366  1.00112.32           C
ANISOU 1962  CA  LEU A 262    17316  11638  13724  -4411  -1716  -2014       C
ATOM   1963  C   LEU A 262     -13.342  15.826  17.989  1.00112.71           C
ANISOU 1963  C   LEU A 262    17097  11684  14043  -4039  -1711  -2050       C
ATOM   1964  O   LEU A 262     -13.238  16.818  17.265  1.00118.63           O
ANISOU 1964  O   LEU A 262    18031  12235  14809  -3913  -1794  -2070       O
ATOM   1965  CB  LEU A 262     -11.280  15.193  19.259  1.00116.22           C
ANISOU 1965  CB  LEU A 262    17689  12206  14265  -4753  -1970  -1702       C
ATOM   1966  CG  LEU A 262     -10.354  15.854  18.234  1.00 98.94           C
ANISOU 1966  CG  LEU A 262    15556   9856  12182  -4770  -2140  -1553       C
ATOM   1967  CD1 LEU A 262     -10.163  17.329  18.546  1.00101.44           C
ANISOU 1967  CD1 LEU A 262    16367   9899  12277  -4830  -2206  -1653       C
ATOM   1968  CD2 LEU A 262      -9.015  15.142  18.168  1.00 97.97           C
ANISOU 1968  CD2 LEU A 262    15209   9783  12233  -5083  -2310  -1211       C
ATOM   1969  N   LEU A 263     -14.015  14.737  17.633  1.00103.06           N
ANISOU 1969  N   LEU A 263    15475  10668  13016  -3901  -1650  -2040       N
ATOM   1970  CA  LEU A 263     -14.674  14.636  16.337  1.00105.93           C
ANISOU 1970  CA  LEU A 263    15622  11027  13600  -3621  -1718  -2044       C
ATOM   1971  C   LEU A 263     -15.666  15.774  16.153  1.00121.60           C
ANISOU 1971  C   LEU A 263    17730  12802  15671  -3315  -1663  -2199       C
ATOM   1972  O   LEU A 263     -15.805  16.322  15.061  1.00125.49           O
ANISOU 1972  O   LEU A 263    18261  13161  16257  -3159  -1828  -2157       O
ATOM   1973  CB  LEU A 263     -15.392  13.293  16.203  1.00 99.63           C
ANISOU 1973  CB  LEU A 263    14413  10460  12982  -3557  -1668  -2027       C
ATOM   1974  CG  LEU A 263     -15.145  12.506  14.915  1.00 94.63           C
ANISOU 1974  CG  LEU A 263    13609   9886  12459  -3560  -1817  -1903       C
ATOM   1975  CD1 LEU A 263     -16.011  11.264  14.888  1.00 96.60           C
ANISOU 1975  CD1 LEU A 263    13495  10329  12882  -3502  -1780  -1912       C
ATOM   1976  CD2 LEU A 263     -15.397  13.364  13.689  1.00 98.51           C
ANISOU 1976  CD2 LEU A 263    14269  10189  12970  -3386  -1982  -1907       C
ATOM   1977  N   GLU A 264     -16.344  16.133  17.237  1.00102.65           N
ANISOU 1977  N   GLU A 264    15412  10342  13248  -3241  -1409  -2365       N
ATOM   1978  CA  GLU A 264     -17.333  17.200  17.205  1.00130.21           C
ANISOU 1978  CA  GLU A 264    18977  13581  16915  -2921  -1266  -2510       C
ATOM   1979  C   GLU A 264     -16.673  18.572  17.177  1.00107.31           C
ANISOU 1979  C   GLU A 264    16550  10386  13838  -2962  -1326  -2553       C
ATOM   1980  O   GLU A 264     -17.325  19.576  16.895  1.00109.98           O
ANISOU 1980  O   GLU A 264    16971  10458  14360  -2689  -1268  -2632       O
ATOM   1981  CB  GLU A 264     -18.276  17.081  18.403  1.00135.88           C
ANISOU 1981  CB  GLU A 264    19644  14290  17693  -2826   -853  -2687       C
ATOM   1982  CG  GLU A 264     -19.143  15.829  18.373  1.00156.84           C
ANISOU 1982  CG  GLU A 264    21782  17199  20611  -2735   -782  -2635       C
ATOM   1983  CD  GLU A 264     -19.759  15.507  19.722  1.00182.11           C
ANISOU 1983  CD  GLU A 264    24990  20437  23766  -2765   -334  -2782       C
ATOM   1984  OE1 GLU A 264     -19.633  16.334  20.650  1.00197.21           O
ANISOU 1984  OE1 GLU A 264    27354  22139  25439  -2829    -44  -2953       O
ATOM   1985  OE2 GLU A 264     -20.363  14.421  19.854  1.00182.84           O
ANISOU 1985  OE2 GLU A 264    24684  20750  24039  -2750   -257  -2730       O
ATOM   1986  N   ARG A 265     -15.375  18.610  17.463  1.00110.74           N
ANISOU 1986  N   ARG A 265    17267  10844  13966  -3312  -1460  -2470       N
ATOM   1987  CA  ARG A 265     -14.634  19.868  17.483  1.00118.54           C
ANISOU 1987  CA  ARG A 265    18717  11552  14771  -3418  -1554  -2485       C
ATOM   1988  C   ARG A 265     -13.913  20.128  16.160  1.00111.15           C
ANISOU 1988  C   ARG A 265    17761  10574  13897  -3431  -1855  -2292       C
ATOM   1989  O   ARG A 265     -13.255  21.157  15.996  1.00106.62           O
ANISOU 1989  O   ARG A 265    17532   9768  13210  -3521  -1967  -2263       O
ATOM   1990  CB  ARG A 265     -13.637  19.898  18.648  1.00120.71           C
ANISOU 1990  CB  ARG A 265    19354  11819  14690  -3844  -1564  -2473       C
ATOM   1991  CG  ARG A 265     -14.274  19.905  20.036  1.00110.84           C
ANISOU 1991  CG  ARG A 265    18345  10522  13249  -3896  -1231  -2694       C
ATOM   1992  CD  ARG A 265     -13.222  20.098  21.120  1.00112.24           C
ANISOU 1992  CD  ARG A 265    19012  10630  13002  -4393  -1349  -2652       C
ATOM   1993  NE  ARG A 265     -13.764  19.969  22.470  1.00115.38           N
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ANISOU 1993  NE  ARG A 265    19731  10990  13119  -4525  -1024  -2854       N
ATOM   1994  CZ  ARG A 265     -14.386  20.945  23.122  1.00130.76          C
ANISOU 1994  CZ  ARG A 265    22166  12616  14901  -4429   -667  -3142       C
ATOM   1995  NH1 ARG A 265     -14.557  22.127  22.546  1.00141.03          N
ANISOU 1995  NH1 ARG A 265    23641  13607  16338  -4178   -631  -3246       N
ATOM   1996  NH2 ARG A 265     -14.844  20.738  24.350  1.00137.77          N
ANISOU 1996  NH2 ARG A 265    23394  13462  15490  -4587   -311  -3325       N
ATOM   1997  N   VAL A 266     -14.040  19.191  15.223  1.00103.22          N
ANISOU 1997  N   VAL A 266    16398   9771  13049  -3365  -1963  -2164       N
ATOM   1998  CA  VAL A 266     -13.442  19.341  13.899  1.00111.49          C
ANISOU 1998  CA  VAL A 266    17479  10765  14118  -3387  -2177  -1996       C
ATOM   1999  C   VAL A 266     -14.406  20.052  12.954  1.00122.08          C
ANISOU 1999  C   VAL A 266    18834  11926  15625  -3071  -2289  -2021       C
ATOM   2000  O   VAL A 266     -15.538  19.609  12.762  1.00122.73          O
ANISOU 2000  O   VAL A 266    18633  12080  15919  -2847  -2285  -2060       O
ATOM   2001  CB  VAL A 266     -13.043  17.979  13.295  1.00114.69          C
ANISOU 2001  CB  VAL A 266    17594  11416  14568  -3511  -2206  -1853       C
ATOM   2002  CG1 VAL A 266     -12.468  18.163  11.902  1.00 98.96          C
ANISOU 2002  CG1 VAL A 266    15728   9321  12552  -3545  -2336  -1706       C
ATOM   2003  CG2 VAL A 266     -12.043  17.271  14.191  1.00115.43          C
ANISOU 2003  CG2 VAL A 266    17615  11652  14591  -3823  -2137  -1760       C
ATOM   2004  N   PHE A 267     -13.955  21.157  12.370  1.00105.08          N
ANISOU 2004  N   PHE A 267    16995   9523  13407  -3073  -2424  -1961       N
ATOM   2005  CA  PHE A 267     -14.806  21.957  11.496  1.00111.42          C
ANISOU 2005  CA  PHE A 267    17848  10107  14381  -2799  -2589  -1937       C
ATOM   2006  C   PHE A 267     -14.245  22.065  10.081  1.00111.59          C
ANISOU 2006  C   PHE A 267    18038  10069  14293  -2901  -2831  -1743       C
ATOM   2007  O   PHE A 267     -13.071  22.384   9.890  1.00113.72          O
ANISOU 2007  O   PHE A 267    18558  10278  14375  -3131  -2827  -1655       O
ATOM   2008  CB  PHE A 267     -15.006  23.358  12.079  1.00124.46          C
ANISOU 2008  CB  PHE A 267    19783  11427  16080  -2664  -2513  -2054       C
ATOM   2009  CG  PHE A 267     -15.666  23.366  13.429  1.00147.57          C
ANISOU 2009  CG  PHE A 267    22646  14335  19087  -2553  -2194  -2274       C
ATOM   2010  CD1 PHE A 267     -16.976  22.938  13.578  1.00160.92          C
ANISOU 2010  CD1 PHE A 267    23963  16074  21104  -2265  -2066  -2337       C
ATOM   2011  CD2 PHE A 267     -14.982  23.814  14.547  1.00153.69          C
ANISOU 2011  CD2 PHE A 267    23768  15017  19609  -2767  -2016  -2405       C
ATOM   2012  CE1 PHE A 267     -17.588  22.949  14.818  1.00163.50          C
ANISOU 2012  CE1 PHE A 267    24262  16356  21505  -2167  -1679  -2545       C
ATOM   2013  CE2 PHE A 267     -15.590  23.828  15.790  1.00159.05          C
ANISOU 2013  CE2 PHE A 267    24501  15645  20285  -2704  -1672  -2626       C
ATOM   2014  CZ  PHE A 267     -16.893  23.395  15.925  1.00160.37          C
ANISOU 2014  CZ  PHE A 267    24294  15859  20780  -2391  -1459  -2706       C
ATOM   2015  N   VAL A 268     -15.097  21.800   9.094  1.00116.23          N
ANISOU 2015  N   VAL A 268    18508  10654  15001  -2757  -3044  -1657       N
ATOM   2016  CA  VAL A 268     -14.720  21.910   7.688  1.00121.92          C
ANISOU 2016  CA  VAL A 268    19485  11284  15556  -2875  -3276  -1479       C
ATOM   2017  C   VAL A 268     -15.516  23.021   7.011  1.00141.43          C
ANISOU 2017  C   VAL A 268    22101  13458  18177  -2669  -3580  -1382       C
ATOM   2018  O   VAL A 268     -16.747  22.987   6.993  1.00150.95          O
ANISOU 2018  O   VAL A 268    23040  14626  19688  -2434  -3738  -1366       O
ATOM   2019  CB  VAL A 268     -14.962  20.591   6.935  1.00115.65          C
ANISOU 2019  CB  VAL A 268    18552  10698  14692  -2977  -3347  -1419       C
ATOM   2020  CG1 VAL A 268     -14.715  20.784   5.450  1.00124.12          C
ANISOU 2020  CG1 VAL A 268    20008  11620  15532  -3118  -3579  -1250       C
ATOM   2021  CG2 VAL A 268     -14.074  19.489   7.489  1.00103.99          C
ANISOU 2021  CG2 VAL A 268    16933   9466  13112  -3182  -3044  -1474       C
ATOM   2022  N   HIS A 269     -14.809  24.000   6.452  1.00144.06          N
ANISOU 2022  N   HIS A 269    22828  13563  18347  -2766  -3672  -1282       N
ATOM   2023  CA  HIS A 269     -15.448  25.186   5.888  1.00148.19          C
ANISOU 2023  CA  HIS A 269    23518  13758  19030  -2582  -3967  -1165       C
ATOM   2024  C   HIS A 269     -15.442  25.202   4.359  1.00154.59          C
ANISOU 2024  C   HIS A 269    24629  14472  19635  -2729  -4322   -929       C
ATOM   2025  O   HIS A 269     -16.470  25.454   3.730  1.00158.03          O
ANISOU 2025  O   HIS A 269    25013  14762  20270  -2588  -4700   -777       O
ATOM   2026  CB  HIS A 269     -14.778  26.455   6.421  1.00142.87          C
ANISOU 2026  CB  HIS A 269    23124  12828  18332  -2580  -3847  -1218       C
ATOM   2027  CG  HIS A 269     -14.713  26.525   7.917  1.00133.20          C
ANISOU 2027  CG  HIS A 269    21761  11644  17204  -2511  -3513  -1455       C
ATOM   2028  ND1 HIS A 269     -15.692  27.125   8.676  1.00129.77          N
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ANISOU 2028  ND1 HIS A 269    21190  11016  17101  -2205  -3412  -1587       N
ATOM   2029  CD2 HIS A 269     -13.782  26.070   8.788  1.00125.02           C
ANISOU 2029  CD2 HIS A 269    20739  10788  15973  -2738  -3255  -1564       C
ATOM   2030  CE1 HIS A 269     -15.369  27.036   9.955  1.00126.83           C
ANISOU 2030  CE1 HIS A 269    20833  10706  16650  -2267  -3081  -1802       C
ATOM   2031  NE2 HIS A 269     -14.216  26.401  10.050  1.00125.00           N
ANISOU 2031  NE2 HIS A 269    20688  10710  16098  -2603  -3032  -1774       N
ATOM   2032  N   GLY A 270     -14.280  24.942   3.768  1.00152.18           N
ANISOU 2032  N   GLY A 270    24653  14220  18949  -3032  -4195   -875       N
ATOM   2033  CA  GLY A 270     -14.145  24.953   2.324  1.00156.74           C
ANISOU 2033  CA  GLY A 270    25647  14681  19228  -3233  -4444   -673       C
ATOM   2034  C   GLY A 270     -13.827  26.334   1.791  1.00171.79           C
ANISOU 2034  C   GLY A 270    27953  16255  21065  -3253  -4625   -517       C
ATOM   2035  O   GLY A 270     -12.705  26.819   1.928  1.00175.58           O
ANISOU 2035  O   GLY A 270    28650  16666  21398  -3401  -4378   -521       O
ATOM   2036  N   ASP A 271     -14.821  26.970   1.179  1.00188.01           N
ANISOU 2036  N   ASP A 271    30082  18083  23268  -3117  -5088   -344       N
ATOM   2037  CA  ASP A 271     -14.663  28.327   0.665  1.00199.07           C
ANISOU 2037  CA  ASP A 271    31849  19132  24656  -3113  -5320   -165       C
ATOM   2038  C   ASP A 271     -15.733  29.248   1.244  1.00200.62           C
ANISOU 2038  C   ASP A 271    31747  19088  25393  -2733  -5547   -144       C
ATOM   2039  O   ASP A 271     -15.729  30.456   1.000  1.00203.62           O
ANISOU 2039  O   ASP A 271    32358  19131  25878  -2661  -5734     -8       O
ATOM   2040  CB  ASP A 271     -14.720  28.337  -0.864  1.00202.76           C
ANISOU 2040  CB  ASP A 271    32822  19460  24755  -3376  -5701    106       C
ATOM   2041  CG  ASP A 271     -13.565  27.582  -1.494  1.00200.45           C
ANISOU 2041  CG  ASP A 271    32920  19311  23930  -3751  -5352     78       C
ATOM   2042  OD1 ASP A 271     -12.444  27.637  -0.942  1.00197.13           O
ANISOU 2042  OD1 ASP A 271    32482  18960  23457  -3826  -4886    -44       O
ATOM   2043  OD2 ASP A 271     -13.775  26.932  -2.539  1.00201.34           O
ANISOU 2043  OD2 ASP A 271    33367  19436  23697  -3987  -5537    190       O
ATOM   2044  N   ASP A 272     -16.648  28.666   2.011  1.00195.28           N
ANISOU 2044  N   ASP A 272    30550  18556  25091  -2486  -5490   -270       N
ATOM   2045  CA  ASP A 272     -17.696  29.430   2.676  1.00193.09           C
ANISOU 2045  CA  ASP A 272    29919  18033  25413  -2090  -5562   -274       C
ATOM   2046  C   ASP A 272     -17.309  29.679   4.129  1.00181.13           C
ANISOU 2046  C   ASP A 272    28260  16546  24014  -1945  -5024   -597       C
ATOM   2047  O   ASP A 272     -17.644  28.893   5.016  1.00183.07           O
ANISOU 2047  O   ASP A 272    28137  17025  24395  -1846  -4738   -795       O
ATOM   2048  CB  ASP A 272     -19.030  28.687   2.599  1.00201.13           C
ANISOU 2048  CB  ASP A 272    30442  19141  26838  -1911  -5816   -175       C
ATOM   2049  CG  ASP A 272     -20.182  29.495   3.162  1.00210.98           C
ANISOU 2049  CG  ASP A 272    31270  20069  28822  -1477  -5865   -119       C
ATOM   2050  OD1 ASP A 272     -20.105  30.742   3.137  1.00214.49           O
ANISOU 2050  OD1 ASP A 272    31913  20139  29443  -1340  -5914    -48       O
ATOM   2051  OD2 ASP A 272     -21.168  28.884   3.625  1.00214.19           O
ANISOU 2051  OD2 ASP A 272    31139  20572  29671  -1269  -5825   -136       O
ATOM   2052  N   LEU A 273     -16.600  30.778   4.364  1.00164.64           N
ANISOU 2052  N   LEU A 273    26514  14202  21841  -1971  -4909   -638       N
ATOM   2053  CA  LEU A 273     -16.104  31.104   5.695  1.00150.14           C
ANISOU 2053  CA  LEU A 273    24696  12342  20008  -1929  -4455   -930       C
ATOM   2054  C   LEU A 273     -17.056  32.052   6.417  1.00159.05           C
ANISOU 2054  C   LEU A 273    25680  13095  21658  -1538  -4339  -1025       C
ATOM   2055  O   LEU A 273     -16.623  32.977   7.104  1.00150.20           O
ANISOU 2055  O   LEU A 273    24838  11709  20523  -1518  -4113  -1178       O
ATOM   2056  CB  LEU A 273     -14.716  31.736   5.590  1.00143.32           C
ANISOU 2056  CB  LEU A 273    24311  11391  18754  -2232  -4389   -919       C
ATOM   2057  CG  LEU A 273     -13.748  31.035   4.634  1.00134.73           C
ANISOU 2057  CG  LEU A 273    23416  10548  17228  -2599  -4471   -760       C
ATOM   2058  CD1 LEU A 273     -12.435  31.793   4.539  1.00133.07           C
ANISOU 2058  CD1 LEU A 273    23619  10188  16755  -2873  -4390   -702       C
ATOM   2059  CD2 LEU A 273     -13.505  29.602   5.064  1.00123.11           C
ANISOU 2059  CD2 LEU A 273    21653   9504  15618  -2725  -4226   -891       C
ATOM   2060  N   SER A 274     -18.354  31.814   6.257  1.00176.40           N
ANISOU 2060  N   SER A 274    27442  15235  24346  -1237  -4480   -922       N
ATOM   2061  CA  SER A 274     -19.372  32.670   6.856  1.00186.50           C
ANISOU 2061  CA  SER A 274    28500  16105  26256   -815  -4318   -970       C
ATOM   2062  C   SER A 274     -19.455  32.481   8.367  1.00192.03           C
ANISOU 2062  C   SER A 274    29100  16849  27012   -699  -3688  -1353       C
ATOM   2063  O   SER A 274     -19.884  33.379   9.091  1.00197.04           O
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ANISOU 2063  O   SER A 274    29786  17082  27997   -428  -3364  -1502       O
ATOM   2064  CB  SER A 274     -20.738  32.413   6.213  1.00185.20           C
ANISOU 2064  CB  SER A 274    27816  15856  26695   -545  -4677   -680       C
ATOM   2065  OG  SER A 274     -21.147  31.068   6.393  1.00176.42           O
ANISOU 2065  OG  SER A 274    26301  15158  25574   -593  -4621   -726       O
ATOM   2066  N   GLY A 275     -19.046  31.307   8.838  1.00189.63           N
ANISOU 2066  N   GLY A 275    28696  17002  26355   -918  -3501  -1507       N
ATOM   2067  CA  GLY A 275     -19.049  31.014  10.259  1.00186.04           C
ANISOU 2067  CA  GLY A 275    28216  16625  25846   -892  -2943  -1848       C
ATOM   2068  C   GLY A 275     -17.642  30.791  10.773  1.00174.24           C
ANISOU 2068  C   GLY A 275    27144  15351  23708  -1313  -2822  -2004       C
ATOM   2069  O   GLY A 275     -17.439  30.297  11.882  1.00177.74           O
ANISOU 2069  O   GLY A 275    27616  15955  23960  -1424  -2460  -2242       O
ATOM   2070  N   PHE A 276     -16.666  31.163   9.952  1.00156.63           N
ANISOU 2070  N   PHE A 276    25237  13106  21168  -1568  -3140  -1834       N
ATOM   2071  CA  PHE A 276     -15.262  30.963  10.278  1.00141.52           C
ANISOU 2071  CA  PHE A 276    23650  11378  18743  -1986  -3091  -1889       C
ATOM   2072  C   PHE A 276     -14.640  32.224  10.862  1.00147.37           C
ANISOU 2072  C   PHE A 276    24897  11736  19361  -2083  -2985  -2006       C
ATOM   2073  O   PHE A 276     -13.872  32.162  11.822  1.00152.37           O
ANISOU 2073  O   PHE A 276    25775  12425  19694  -2355  -2800  -2165       O
ATOM   2074  CB  PHE A 276     -14.493  30.523   9.031  1.00133.15           C
ANISOU 2074  CB  PHE A 276    22629  10526  17437  -2239  -3424  -1622       C
ATOM   2075  CG  PHE A 276     -13.002  30.503   9.210  1.00134.34           C
ANISOU 2075  CG  PHE A 276    23068  10775  17199  -2648  -3385  -1597       C
ATOM   2076  CD1 PHE A 276     -12.379  29.435   9.832  1.00130.05           C
ANISOU 2076  CD1 PHE A 276    22368  10580  16464  -2888  -3219  -1660       C
ATOM   2077  CD2 PHE A 276     -12.222  31.546   8.743  1.00144.89           C
ANISOU 2077  CD2 PHE A 276    24797  11837  18418  -2801  -3534  -1470       C
ATOM   2078  CE1 PHE A 276     -11.007  29.413   9.993  1.00129.48           C
ANISOU 2078  CE1 PHE A 276    22481  10567  16146  -3266  -3215  -1571       C
ATOM   2079  CE2 PHE A 276     -10.851  31.529   8.903  1.00143.73           C
ANISOU 2079  CE2 PHE A 276    24848  11761  18003  -3187  -3508  -1397       C
ATOM   2080  CZ  PHE A 276     -10.243  30.461   9.528  1.00133.78           C
ANISOU 2080  CZ  PHE A 276    23384  10837  16611  -3417  -3356  -1435       C
ATOM   2081  N   TYR A 277     -14.979  33.370  10.282  1.00151.65           N
ANISOU 2081  N   TYR A 277    25614  11866  20139  -1885  -3142  -1905       N
ATOM   2082  CA  TYR A 277     -14.412  34.643  10.714  1.00158.61           C
ANISOU 2082  CA  TYR A 277    27013  12330  20922  -1977  -3076  -2000       C
ATOM   2083  C   TYR A 277     -15.090  35.188  11.966  1.00165.90           C
ANISOU 2083  C   TYR A 277    28084  12921  22027  -1756  -2632  -2327       C
ATOM   2084  O   TYR A 277     -14.846  36.325  12.371  1.00155.94           O
ANISOU 2084  O   TYR A 277    27289  11220  20741  -1776  -2529  -2446       O
ATOM   2085  CB  TYR A 277     -14.460  35.664   9.576  1.00164.95           C
ANISOU 2085  CB  TYR A 277    27978  12793  21902  -1871  -3419  -1745       C
ATOM   2086  CG  TYR A 277     -13.493  35.346   8.461  1.00164.33           C
ANISOU 2086  CG  TYR A 277    27979  12953  21506  -2197  -3763  -1460       C
ATOM   2087  CD1 TYR A 277     -12.178  35.002   8.740  1.00157.50           C
ANISOU 2087  CD1 TYR A 277    27299  12309  20234  -2622  -3715  -1464       C
ATOM   2088  CD2 TYR A 277     -13.896  35.371   7.132  1.00167.22           C
ANISOU 2088  CD2 TYR A 277    28244  13298  21996  -2101  -4121  -1165       C
ATOM   2089  CE1 TYR A 277     -11.286  34.705   7.729  1.00152.64           C
ANISOU 2089  CE1 TYR A 277    26739  11870  19388  -2903  -3918  -1203       C
ATOM   2090  CE2 TYR A 277     -13.011  35.073   6.112  1.00160.78           C
ANISOU 2090  CE2 TYR A 277    27582  12664  20842  -2419  -4343   -928       C
ATOM   2091  CZ  TYR A 277     -11.707  34.740   6.417  1.00149.51           C
ANISOU 2091  CZ  TYR A 277    26309  11439  19057  -2799  -4191   -959       C
ATOM   2092  OH  TYR A 277     -10.818  34.442   5.411  1.00135.94           O
ANISOU 2092  OH  TYR A 277    24727   9861  17063  -3097  -4304   -723       O
ATOM   2093  N   GLN A 278     -15.943  34.368  12.571  1.00183.93           N
ANISOU 2093  N   GLN A 278    30003  15394  24488  -1560  -2334  -2477       N
ATOM   2094  CA  GLN A 278     -16.546  34.693  13.856  1.00201.31           C
ANISOU 2094  CA  GLN A 278    32374  17318  26794  -1396  -1793  -2818       C
ATOM   2095  C   GLN A 278     -15.728  34.046  14.962  1.00196.74           C
ANISOU 2095  C   GLN A 278    32078  17012  25662  -1819  -1604  -3023       C
ATOM   2096  O   GLN A 278     -15.402  34.685  15.959  1.00203.73           O
ANISOU 2096  O   GLN A 278    33519  17603  26287  -1988  -1335  -3274       O
ATOM   2097  CB  GLN A 278     -17.994  34.203  13.922  1.00214.17           C
ANISOU 2097  CB  GLN A 278    33429  18955  28990  -942  -1528  -2839       C
ATOM   2098  CG  GLN A 278     -18.975  35.015  13.090  1.00229.24           C
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ANISOU 2098  CG  GLN A 278    35066  20455  31578   -489  -1663  -2638       C
ATOM   2099  CD  GLN A 278     -18.777  34.830  11.599  1.00235.45           C
ANISOU 2099  CD  GLN A 278    35622  21436  32401   -552  -2328  -2236       C
ATOM   2100  OE1 GLN A 278     -18.048  33.938  11.162  1.00231.05           O
ANISOU 2100  OE1 GLN A 278    35025  21346  31418   -879  -2604  -2127       O
ATOM   2101  NE2 GLN A 278     -19.425  35.676  10.807  1.00244.42           N
ANISOU 2101  NE2 GLN A 278    36637  22179  34050   -251  -2572  -2002       N
ATOM   2102  N   GLU A 279     -15.395  32.773  14.772  1.00181.45           N
ANISOU 2102  N   GLU A 279    29788  15612  23544  -2013  -1770  -2899       N
ATOM   2103  CA  GLU A 279     -14.565  32.048  15.725  1.00172.07           C
ANISOU 2103  CA  GLU A 279    28791  14710  21878  -2441  -1689  -3006       C
ATOM   2104  C   GLU A 279     -13.128  32.556  15.670  1.00174.66           C
ANISOU 2104  C   GLU A 279    29565  14978  21820  -2899  -2002  -2890       C
ATOM   2105  O   GLU A 279     -12.547  32.915  16.694  1.00190.04           O
ANISOU 2105  O   GLU A 279    32016  16768  23423  -3224  -1904  -3048       O
ATOM   2106  CB  GLU A 279     -14.609  30.546  15.442  1.00158.41           C
ANISOU 2106  CB  GLU A 279    26514  13530  20146  -2495  -1792  -2868       C
ATOM   2107  CG  GLU A 279     -16.014  29.970  15.389  1.00163.05           C
ANISOU 2107  CG  GLU A 279    26591  14200  21159  -2074  -1556  -2923       C
ATOM   2108  CD  GLU A 279     -16.790  30.199  16.673  1.00177.97           C
ANISOU 2108  CD  GLU A 279    28656  15858  23109  -1925   -995  -3244       C
ATOM   2109  OE1 GLU A 279     -16.191  30.082  17.762  1.00180.06           O
ANISOU 2109  OE1 GLU A 279    29340  16147  22927  -2266   -811  -3423       O
ATOM   2110  OE2 GLU A 279     -17.999  30.500  16.592  1.00189.18           O
ANISOU 2110  OE2 GLU A 279    29803  17040  25035  -1483   -731  -3298       O
ATOM   2111  N   ILE A 280     -12.562  32.587  14.467  1.00157.03           N
ANISOU 2111  N   ILE A 280    27169  12850  19644  -2955  -2378  -2596       N
ATOM   2112  CA  ILE A 280     -11.219  33.122  14.271  1.00145.15           C
ANISOU 2112  CA  ILE A 280    26012  11259  17879  -3363  -2661  -2431       C
ATOM   2113  C   ILE A 280     -11.256  34.401  13.446  1.00149.89           C
ANISOU 2113  C   ILE A 280    26859  11447  18644  -3209  -2822  -2335       C
ATOM   2114  O   ILE A 280     -11.539  34.373  12.248  1.00137.49           O
ANISOU 2114  O   ILE A 280    25029   9927  17284  -3009  -3010  -2126       O
ATOM   2115  CB  ILE A 280     -10.294  32.116  13.572  1.00134.57           C
ANISOU 2115  CB  ILE A 280    24334  10346  16452  -3629  -2903  -2139       C
ATOM   2116  CG1 ILE A 280     -10.206  30.820  14.379  1.00135.07           C
ANISOU 2116  CG1 ILE A 280    24132  10801  16389  -3794  -2777  -2196       C
ATOM   2117  CG2 ILE A 280      -8.912  32.719  13.387  1.00134.02           C
ANISOU 2117  CG2 ILE A 280    24565  10145  16211  -4043  -3153  -1931       C
ATOM   2118  CD1 ILE A 280      -9.502  30.977  15.709  1.00141.48           C
ANISOU 2118  CD1 ILE A 280    25337  11528  16890  -4202  -2757  -2299       C
ATOM   2119  N   ASP A 281     -10.962  35.520  14.100  1.00164.38           N
ANISOU 2119  N   ASP A 281    29249  12853  20355  -3338  -2765  -2481       N
ATOM   2120  CA  ASP A 281     -10.996  36.825  13.455  1.00169.00           C
ANISOU 2120  CA  ASP A 281    30126  12982  21103  -3203  -2898  -2408       C
ATOM   2121  C   ASP A 281      -9.996  36.909  12.304  1.00158.19           C
ANISOU 2121  C   ASP A 281    28703  11730  19672  -3442  -3285  -2046       C
ATOM   2122  O   ASP A 281      -8.858  36.457  12.422  1.00156.06           O
ANISOU 2122  O   ASP A 281    28441  11693  19160  -3867  -3425  -1901       O
ATOM   2123  CB  ASP A 281     -10.720  37.924  14.482  1.00186.22           C
ANISOU 2123  CB  ASP A 281    32985  14675  23094  -3384  -2753  -2653       C
ATOM   2124  CG  ASP A 281     -10.838  39.313  13.895  1.00207.48           C
ANISOU 2124  CG  ASP A 281    35998  16839  25997  -3215  -2600  -2600       C
ATOM   2125  OD1 ASP A 281     -11.561  39.477  12.889  1.00213.11           O
ANISOU 2125  OD1 ASP A 281    36387  17495  27090  -2824  -2938  -2443       O
ATOM   2126  OD2 ASP A 281     -10.211  40.243  14.444  1.00217.08           O
ANISOU 2126  OD2 ASP A 281    37810  17674  26997  -3498  -2884  -2696       O
ATOM   2127  N   GLU A 282     -10.438  37.484  11.191  1.00154.87           N
ANISOU 2127  N   GLU A 282    28221  11122  19501  -3175  -3445  -1876       N
ATOM   2128  CA  GLU A 282      -9.600  37.627  10.006  1.00154.26           C
ANISOU 2128  CA  GLU A 282    28154  11108  19351  -3382  -3753  -1534       C
ATOM   2129  C   GLU A 282      -8.427  38.565  10.265  1.00158.20           C
ANISOU 2129  C   GLU A 282    29125  11325  19660  -3776  -3879  -1462       C
ATOM   2130  O   GLU A 282      -7.323  38.352   9.762  1.00137.63           O
ANISOU 2130  O   GLU A 282    26494   8882  16916  -4126  -4034  -1204       O
ATOM   2131  CB  GLU A 282     -10.433  38.160   8.840  1.00160.24           C
ANISOU 2131  CB  GLU A 282    28842  11653  20389  -3031  -3932  -1365       C
ATOM   2132  CG  GLU A 282      -9.630  38.461   7.588  1.00167.27           C
ANISOU 2132  CG  GLU A 282    29868  12530  21155  -3256  -4217  -1019       C
ATOM   2133  CD  GLU A 282     -10.445  39.180   6.533  1.00181.33           C
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ANISOU 2133  CD  GLU A 282    31700  14013  23182  -2962  -4461   -832       C
ATOM   2134  OE1 GLU A 282     -11.600  39.555   6.826  1.00183.73           O
ANISOU 2134  OE1 GLU A 282    31902  14070  23839  -2565  -4414   -957       O
ATOM   2135  OE2 GLU A 282      -9.929  39.370   5.412  1.00191.28           O
ANISOU 2135  OE2 GLU A 282    33105  15264  24308  -3138  -4691   -537       O
ATOM   2136  N   ASN A 283      -8.683  39.600  11.059  1.00160.33           N
ANISOU 2136  N   ASN A 283    29828  11140  19951  -3724  -3783  -1688       N
ATOM   2137  CA  ASN A 283      -7.704  40.642  11.348  1.00158.92           C
ANISOU 2137  CA  ASN A 283    30148  10626  19609  -4083  -3926  -1636       C
ATOM   2138  C   ASN A 283      -6.398  40.117  11.945  1.00155.33           C
ANISOU 2138  C   ASN A 283    29557  10596  18864  -4558  -3975  -1495       C
ATOM   2139  O   ASN A 283      -5.339  40.719  11.764  1.00152.53           O
ANISOU 2139  O   ASN A 283    29282  10248  18427  -4841  -4139  -1252       O
ATOM   2140  CB  ASN A 283      -8.320  41.692  12.276  1.00173.11           C
ANISOU 2140  CB  ASN A 283    32362  11966  21446  -3895  -3691  -1953       C
ATOM   2141  CG  ASN A 283      -7.380  42.848  12.558  1.00196.67           C
ANISOU 2141  CG  ASN A 283    35678  14792  24255  -4171  -3784  -1859       C
ATOM   2142  OD1 ASN A 283      -6.587  43.242  11.702  1.00213.35           O
ANISOU 2142  OD1 ASN A 283    37746  16946  26371  -4343  -4047  -1535       O
ATOM   2143  ND2 ASN A 283      -7.464  43.399  13.764  1.00196.79           N
ANISOU 2143  ND2 ASN A 283    36059  14611  24100  -4232  -3555  -2140       N
ATOM   2144  N   ILE A 284      -6.475  38.995  12.653  1.00155.48           N
ANISOU 2144  N   ILE A 284    29353  10947  18777  -4643  -3855  -1615       N
ATOM   2145  CA  ILE A 284      -5.297  38.422  13.294  1.00151.98           C
ANISOU 2145  CA  ILE A 284    28739  10877  18131  -5077  -3941  -1441       C
ATOM   2146  C   ILE A 284      -4.681  37.298  12.464  1.00153.68           C
ANISOU 2146  C   ILE A 284    28468  11472  18453  -5215  -4035  -1142       C
ATOM   2147  O   ILE A 284      -3.701  36.682  12.877  1.00152.01           O
ANISOU 2147  O   ILE A 284    28010  11556  18189  -5544  -4107   -942       O
ATOM   2148  CB  ILE A 284      -5.620  37.890  14.705  1.00143.96           C
ANISOU 2148  CB  ILE A 284    27808   9988  16901  -5153  -3762  -1711       C
ATOM   2149  CG1 ILE A 284      -6.424  36.593  14.623  1.00137.05           C
ANISOU 2149  CG1 ILE A 284    26598   9358  16119  -4959  -3612  -1846       C
ATOM   2150  CG2 ILE A 284      -6.373  38.934  15.509  1.00145.46           C
ANISOU 2150  CG2 ILE A 284    28525   9752  16990  -4981  -3542  -2060       C
ATOM   2151  CD1 ILE A 284      -6.788  36.020  15.972  1.00137.67           C
ANISOU 2151  CD1 ILE A 284    26770   9565  15975  -5038  -3407  -2103       C
ATOM   2152  N   LEU A 285      -5.254  37.042  11.291  1.00157.02           N
ANISOU 2152  N   LEU A 285    28770  11849  19042  -4970  -4036  -1094       N
ATOM   2153  CA  LEU A 285      -4.807  35.940  10.441  1.00152.26           C
ANISOU 2153  CA  LEU A 285    27721  11616  18514  -5041  -4019   -846       C
ATOM   2154  C   LEU A 285      -3.801  36.382   9.383  1.00148.07           C
ANISOU 2154  C   LEU A 285    27236  10980  18042  -5269  -4133   -492       C
ATOM   2155  O   LEU A 285      -3.933  37.462   8.809  1.00141.38           O
ANISOU 2155  O   LEU A 285    26687   9826  17206  -5171  -4228   -441       O
ATOM   2156  CB  LEU A 285      -6.007  35.264   9.774  1.00148.10           C
ANISOU 2156  CB  LEU A 285    26897  11301  18071  -4590  -3881   -950       C
ATOM   2157  CG  LEU A 285      -6.868  34.392  10.688  1.00147.42           C
ANISOU 2157  CG  LEU A 285    26579  11453  17980  -4399  -3702  -1224       C
ATOM   2158  CD1 LEU A 285      -8.116  33.923   9.959  1.00142.00           C
ANISOU 2158  CD1 LEU A 285    25616  10895  17442  -3958  -3633  -1288       C
ATOM   2159  CD2 LEU A 285      -6.058  33.207  11.192  1.00148.92           C
ANISOU 2159  CD2 LEU A 285    26461  12014  18109  -4711  -3657  -1126       C
ATOM   2160  N   PRO A 286      -2.786  35.540   9.123  1.00152.11           N
ANISOU 2160  N   PRO A 286    27401  11768  18625  -5542  -4071   -225       N
ATOM   2161  CA  PRO A 286      -1.781  35.798   8.087  1.00155.36           C
ANISOU 2161  CA  PRO A 286    27764  12136  19131  -5737  -4047    133       C
ATOM   2162  C   PRO A 286      -2.405  35.810   6.693  1.00154.91           C
ANISOU 2162  C   PRO A 286    27810  12026  19022  -5487  -3969    173       C
ATOM   2163  O   PRO A 286      -3.575  35.461   6.543  1.00150.78           O
ANISOU 2163  O   PRO A 286    27239  11615  18436  -5129  -3946    -38       O
ATOM   2164  CB  PRO A 286      -0.827  34.602   8.216  1.00128.50           C
ANISOU 2164  CB  PRO A 286    23881   9047  15896  -5993  -3896    353       C
ATOM   2165  CG  PRO A 286      -1.051  34.071   9.585  1.00127.48           C
ANISOU 2165  CG  PRO A 286    23602   9110  15725  -6021  -3963    164       C
ATOM   2166  CD  PRO A 286      -2.499  34.303   9.868  1.00127.11           C
ANISOU 2166  CD  PRO A 286    23854   8944  15499  -5686  -3986   -232       C
ATOM   2167  N   SER A 287      -1.631  36.201   5.687  1.00157.77           N
ANISOU 2167  N   SER A 287    28285  12251  19407  -5671  -3923    468       N
ATOM   2168  CA  SER A 287      -2.122  36.239   4.315  1.00159.02           C
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ANISOU 2168  CA  SER A 287    28604  12381  19436  -5487  -3859    549       C
ATOM   2169  C   SER A 287      -2.323  34.822   3.786  1.00156.83           C
ANISOU 2169  C   SER A 287    28013  12467  19110  -5399  -3594    537       C
ATOM   2170  O   SER A 287      -3.121  34.597   2.882  1.00156.30           O
ANISOU 2170  O   SER A 287    28073  12439  18878  -5196  -3603    504       O
ATOM   2171  CB  SER A 287      -1.139  36.993   3.418  1.00163.95           C
ANISOU 2171  CB  SER A 287    29478  12752  20064  -5766  -3817    879       C
ATOM   2172  OG  SER A 287       0.022  36.214   3.173  1.00162.79           O
ANISOU 2172  OG  SER A 287    29031  12763  20060  -6055  -3498   1122       O
ATOM   2173  N   ASP A 288      -1.588  33.870   4.355  1.00155.57           N
ANISOU 2173  N   ASP A 288    27460  12544  19107  -5577  -3390    586       N
ATOM   2174  CA  ASP A 288      -1.675  32.473   3.945  1.00151.96           C
ANISOU 2174  CA  ASP A 288    26694  12401  18644  -5515  -3097    571       C
ATOM   2175  C   ASP A 288      -3.021  31.873   4.308  1.00150.84           C
ANISOU 2175  C   ASP A 288    26444  12470  18396  -5177  -3206    264       C
ATOM   2176  O   ASP A 288      -3.415  30.842   3.772  1.00160.82           O
ANISOU 2176  O   ASP A 288    27567  13951  19585  -5073  -3038    217       O
ATOM   2177  CB  ASP A 288      -0.568  31.659   4.614  1.00157.87           C
ANISOU 2177  CB  ASP A 288    26996  13305  19683  -5776  -2890    725       C
ATOM   2178  CG  ASP A 288       0.809  32.208   4.328  1.00177.07           C
ANISOU 2178  CG  ASP A 288    29424  15514  22339  -6125  -2776   1081       C
ATOM   2179  OD1 ASP A 288       1.080  32.540   3.157  1.00190.51           O
ANISOU 2179  OD1 ASP A 288    31378  17059  23948  -6172  -2576   1239       O
ATOM   2180  OD2 ASP A 288       1.616  32.316   5.276  1.00180.02           O
ANISOU 2180  OD2 ASP A 288    29562  15854  22985  -6381  -2902   1225       O
ATOM   2181  N   PHE A 289      -3.722  32.526   5.225  1.00144.15           N
ANISOU 2181  N   PHE A 289    25681  11530  17561  -5019  -3458     58       N
ATOM   2182  CA  PHE A 289      -4.966  31.991   5.753  1.00143.80           C
ANISOU 2182  CA  PHE A 289    25473  11663  17502  -4705  -3513   -221       C
ATOM   2183  C   PHE A 289      -6.131  32.965   5.576  1.00152.17           C
ANISOU 2183  C   PHE A 289    26801  12473  18545  -4395  -3748   -350       C
ATOM   2184  O   PHE A 289      -7.027  33.038   6.415  1.00150.05           O
ANISOU 2184  O   PHE A 289    26453  12199  18360  -4160  -3791   -587       O
ATOM   2185  CB  PHE A 289      -4.787  31.608   7.227  1.00135.40           C
ANISOU 2185  CB  PHE A 289    24183  10736  16528  -4792  -3489   -369       C
ATOM   2186  CG  PHE A 289      -3.709  30.579   7.460  1.00135.98           C
ANISOU 2186  CG  PHE A 289    23911  11042  16715  -5079  -3308   -197       C
ATOM   2187  CD1 PHE A 289      -4.019  29.230   7.522  1.00138.43           C
ANISOU 2187  CD1 PHE A 289    23859  11677  17062  -4989  -3136   -265       C
ATOM   2188  CD2 PHE A 289      -2.385  30.961   7.614  1.00137.97           C
ANISOU 2188  CD2 PHE A 289    24168  11158  17098  -5442  -3321     65       C
ATOM   2189  CE1 PHE A 289      -3.030  28.284   7.735  1.00137.60           C
ANISOU 2189  CE1 PHE A 289    23404  11741  17138  -5232  -2959    -80       C
ATOM   2190  CE2 PHE A 289      -1.394  30.019   7.825  1.00119.14           C
ANISOU 2190  CE2 PHE A 289    21389   8944  14936  -5692  -3160    279       C
ATOM   2191  CZ  PHE A 289      -1.717  28.680   7.886  1.00116.57           C
ANISOU 2191  CZ  PHE A 289    20705   8926  14661  -5575  -2968    205       C
ATOM   2192  N   GLY A 290      -6.105  33.712   4.476  1.00161.38           N
ANISOU 2192  N   GLY A 290    28281  13405  19632  -4402  -3874   -171       N
ATOM   2193  CA  GLY A 290      -7.179  34.631   4.142  1.00167.90           C
ANISOU 2193  CA  GLY A 290    29331  13954  20510  -4114  -4136   -211       C
ATOM   2194  C   GLY A 290      -7.339  35.766   5.133  1.00166.48           C
ANISOU 2194  C   GLY A 290    29324  13457  20475  -4026  -4220   -360       C
ATOM   2195  O   GLY A 290      -8.452  36.224   5.392  1.00168.53           O
ANISOU 2195  O   GLY A 290    29590  13538  20906  -3693  -4320   -505       O
ATOM   2196  N   GLY A 291      -6.222  36.228   5.683  1.00162.08           N
ANISOU 2196  N   GLY A 291    28914  12791  19877  -4337  -4169   -311       N
ATOM   2197  CA  GLY A 291      -6.256  37.269   6.689  1.00161.98           C
ANISOU 2197  CA  GLY A 291    29162  12451  19933  -4333  -4234   -474       C
ATOM   2198  C   GLY A 291      -5.618  38.559   6.223  1.00162.70           C
ANISOU 2198  C   GLY A 291    29666  12141  20013  -4510  -4400   -284       C
ATOM   2199  O   GLY A 291      -5.112  38.648   5.104  1.00157.59           O
ANISOU 2199  O   GLY A 291    29096  11483  19299  -4647  -4449     -6       O
ATOM   2200  N   THR A 292      -5.640  39.561   7.095  1.00163.40           N
ANISOU 2200  N   THR A 292    30064  11874  20145  -4527  -4460   -440       N
ATOM   2201  CA  THR A 292      -5.104  40.877   6.776  1.00163.98           C
ANISOU 2201  CA  THR A 292    30514  11569  20223  -4662  -4613   -281       C
ATOM   2202  C   THR A 292      -3.598  40.938   6.997  1.00165.09           C
ANISOU 2202  C   THR A 292    30552  11914  20262  -5085  -4578    -60       C
ATOM   2203  O   THR A 292      -2.891  41.667   6.304  1.00166.56           O
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ANISOU 2203  O   THR A 292    30865  11978  20442  -5242  -4655    202       O
ATOM   2204  CB  THR A 292      -5.773  41.968   7.626  1.00167.11           C
ANISOU 2204  CB  THR A 292    31207  11575  20712  -4438  -4609   -543       C
ATOM   2205  OG1 THR A 292      -5.466  41.752   9.009  1.00167.52           O
ANISOU 2205  OG1 THR A 292    31236  11771  20641  -4587  -4453   -772       O
ATOM   2206  CG2 THR A 292      -7.280  41.937   7.436  1.00165.31           C
ANISOU 2206  CG2 THR A 292    30948  11145  20717  -3956  -4598   -718       C
ATOM   2207  N   LEU A 293      -3.113  40.168   7.967  1.00166.83           N
ANISOU 2207  N   LEU A 293    30524  12428  20436  -5273  -4480   -138       N
ATOM   2208  CA  LEU A 293      -1.693  40.162   8.307  1.00166.10           C
ANISOU 2208  CA  LEU A 293    30261  12509  20340  -5676  -4501    109       C
ATOM   2209  C   LEU A 293      -0.854  39.584   7.168  1.00168.45           C
ANISOU 2209  C   LEU A 293    30297  12973  20735  -5858  -4406    462       C
ATOM   2210  O   LEU A 293      -1.354  38.799   6.362  1.00166.79           O
ANISOU 2210  O   LEU A 293    29999  12856  20519  -5720  -4291    464       O
ATOM   2211  CB  LEU A 293      -1.455  39.377   9.602  1.00155.80           C
ANISOU 2211  CB  LEU A 293    28739  11474  18985  -5830  -4467    -16       C
ATOM   2212  CG  LEU A 293      -2.254  39.832  10.826  1.00147.09           C
ANISOU 2212  CG  LEU A 293    27944  10216  17729  -5691  -4462   -387       C
ATOM   2213  CD1 LEU A 293      -1.720  39.181  12.093  1.00141.84           C
ANISOU 2213  CD1 LEU A 293    27131   9817  16946  -5963  -4483   -412       C
ATOM   2214  CD2 LEU A 293      -2.243  41.344  10.947  1.00146.21           C
ANISOU 2214  CD2 LEU A 293    28279   9708  17565  -5675  -4561   -432       C
ATOM   2215  N   PRO A 294       0.426  39.983   7.092  1.00169.88           N
ANISOU 2215  N   PRO A 294    30370  13163  21014  -6177  -4429    763       N
ATOM   2216  CA  PRO A 294       1.341  39.473   6.064  1.00168.90           C
ANISOU 2216  CA  PRO A 294    29981  13154  21038  -6365  -4232   1110       C
ATOM   2217  C   PRO A 294       1.554  37.966   6.153  1.00167.40           C
ANISOU 2217  C   PRO A 294    29347  13286  20971  -6424  -4012   1149       C
ATOM   2218  O   PRO A 294       1.061  37.322   7.079  1.00162.38           O
ANISOU 2218  O   PRO A 294    28587  12815  20297  -6349  -4064    926       O
ATOM   2219  CB  PRO A 294       2.651  40.200   6.375  1.00174.92           C
ANISOU 2219  CB  PRO A 294    30633  13861  21967  -6691  -4324   1389       C
ATOM   2220  CG  PRO A 294       2.231  41.451   7.056  1.00181.51           C
ANISOU 2220  CG  PRO A 294    31885  14440  22639  -6627  -4596   1195       C
ATOM   2221  CD  PRO A 294       1.036  41.071   7.877  1.00178.44           C
ANISOU 2221  CD  PRO A 294    31628  14086  22084  -6367  -4626    798       C
ATOM   2222  N   LYS A 295       2.289  37.424   5.187  1.00177.56           N
ANISOU 2222  N   LYS A 295    30416  14638  22409  -6558  -3726   1432       N
ATOM   2223  CA  LYS A 295       2.580  35.996   5.122  1.00178.87           C
ANISOU 2223  CA  LYS A 295    30156  15060  22747  -6615  -3442   1506       C
ATOM   2224  C   LYS A 295       3.223  35.515   6.417  1.00172.33           C
ANISOU 2224  C   LYS A 295    28885  14436  22157  -6785  -3557   1560       C
ATOM   2225  O   LYS A 295       4.055  36.216   6.996  1.00187.15           O
ANISOU 2225  O   LYS A 295    30671  16259  24177  -6988  -3745   1732       O
ATOM   2226  CB  LYS A 295       3.503  35.710   3.935  1.00186.02           C
ANISOU 2226  CB  LYS A 295    30917  15928  23834  -6768  -3032   1842       C
ATOM   2227  CG  LYS A 295       3.781  34.239   3.691  1.00184.95           C
ANISOU 2227  CG  LYS A 295    30388  15991  23893  -6801  -2634   1918       C
ATOM   2228  CD  LYS A 295       4.617  34.041   2.437  1.00185.65           C
ANISOU 2228  CD  LYS A 295    30436  15976  24127  -6926  -2115   2215       C
ATOM   2229  CE  LYS A 295       4.845  32.566   2.158  1.00188.77           C
ANISOU 2229  CE  LYS A 295    30487  16519  24717  -6935  -1640   2265       C
ATOM   2230  NZ  LYS A 295       5.475  31.878   3.319  1.00189.92           N
ANISOU 2230  NZ  LYS A 295    29970  16857  25333  -7020  -1710   2375       N
ATOM   2231  N   TYR A 296       2.826  34.329   6.873  1.00206.78           N
ANISOU 2231  N   TYR A 296    35089  22701  20777 -14761   2160  -2725       N
ATOM   2232  CA  TYR A 296       3.332  33.790   8.132  1.00197.96           C
ANISOU 2232  CA  TYR A 296    33861  21633  19723 -14706   2312  -2696       C
ATOM   2233  C   TYR A 296       4.849  33.641   8.131  1.00201.39           C
ANISOU 2233  C   TYR A 296    34293  22109  20119 -14773   2321  -2457       C
ATOM   2234  O   TYR A 296       5.429  33.063   7.210  1.00191.44           O
ANISOU 2234  O   TYR A 296    33106  20833  18799 -14822   2511  -2445       O
ATOM   2235  CB  TYR A 296       2.679  32.447   8.473  1.00190.57           C
ANISOU 2235  CB  TYR A 296    32894  20681  18831 -14628   2745  -2961       C
ATOM   2236  CG  TYR A 296       3.324  31.761   9.661  1.00195.90           C
ANISOU 2236  CG  TYR A 296    33499  21381  19555 -14587   2921  -2914       C
ATOM   2237  CD1 TYR A 296       3.012  32.138  10.960  1.00200.65           C
ANISOU 2237  CD1 TYR A 296    34011  22005  20222 -14550   2802  -2909       C
ATOM   2238  CD2 TYR A 296       4.253  30.743   9.482  1.00199.50           C
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ANISOU 2238  CD2 TYR A 296    33980  21811  20009 -14591   3197  -2871       C
ATOM   2239  CE1 TYR A 296       3.604  31.518  12.048  1.00201.64          C
ANISOU 2239  CE1 TYR A 296    34095  22140  20378 -14530   2937  -2851       C
ATOM   2240  CE2 TYR A 296       4.849  30.119  10.561  1.00199.54          C
ANISOU 2240  CE2 TYR A 296    33915  21801  20099 -14554   3322  -2809       C
ATOM   2241  CZ  TYR A 296       4.523  30.510  11.841  1.00197.99          C
ANISOU 2241  CZ  TYR A 296    33652  21641  19936 -14529   3182  -2793       C
ATOM   2242  OH  TYR A 296       5.115  29.887  12.916  1.00193.79          O
ANISOU 2242  OH  TYR A 296    33073  21084  19476 -14510   3286  -2717       O
ATOM   2243  N   ASP A 297       5.482  34.166   9.176  1.00205.22          N
ANISOU 2243  N   ASP A 297    34678  22634  20662 -14782   2115  -2276       N
ATOM   2244  CA  ASP A 297       6.928  34.087   9.319  1.00206.84          C
ANISOU 2244  CA  ASP A 297    34814  22871  20906 -14853   2080  -2034       C
ATOM   2245  C   ASP A 297       7.309  33.078  10.396  1.00208.13          C
ANISOU 2245  C   ASP A 297    34865  23025  21190 -14787   2310  -2052       C
ATOM   2246  O   ASP A 297       7.092  33.311  11.584  1.00189.99          O
ANISOU 2246  O   ASP A 297    32508  20752  18928 -14757   2200  -2037       O
ATOM   2247  CB  ASP A 297       7.507  35.462   9.654  1.00205.30          C
ANISOU 2247  CB  ASP A 297    34584  22722  20700 -14947   1644  -1778       C
ATOM   2248  CG  ASP A 297       9.022  35.462   9.694  1.00207.10          C
ANISOU 2248  CG  ASP A 297    34699  22985  21007 -15050   1586  -1515       C
ATOM   2249  OD1 ASP A 297       9.634  34.558   9.086  1.00208.05          O
ANISOU 2249  OD1 ASP A 297    34787  23073  21189 -15059   1860  -1517       O
ATOM   2250  OD2 ASP A 297       9.603  36.368  10.329  1.00207.08          O
ANISOU 2250  OD2 ASP A 297    34623  23029  21029 -15130   1272  -1305       O
ATOM   2251  N   GLY A 298       7.876  31.955   9.969  1.00207.20          N
ANISOU 2251  N   GLY A 298    34733  22849  21143 -14771   2634  -2080       N
ATOM   2252  CA  GLY A 298       8.286  30.910  10.887  1.00202.81          C
ANISOU 2252  CA  GLY A 298    34083  22239  20738 -14708   2864  -2078       C
ATOM   2253  C   GLY A 298       9.583  31.243  11.595  1.00203.46          C
ANISOU 2253  C   GLY A 298    33984  22338  20982 -14773   2644  -1763       C
ATOM   2254  O   GLY A 298       9.873  30.701  12.660  1.00199.96          O
ANISOU 2254  O   GLY A 298    33451  21860  20665 -14737   2702  -1704       O
ATOM   2255  N   LYS A 299      10.365  32.139  11.001  1.00208.02          N
ANISOU 2255  N   LYS A 299    34508  22967  21562 -14885   2389  -1550       N
ATOM   2256  CA  LYS A 299      11.645  32.538  11.572  1.00212.25          C
ANISOU 2256  CA  LYS A 299    34836  23533  22278 -14977   2168  -1230       C
ATOM   2257  C   LYS A 299      11.464  33.286  12.891  1.00204.60          C
ANISOU 2257  C   LYS A 299    33837  22640  21263 -14997   1858  -1151       C
ATOM   2258  O   LYS A 299      12.047  32.915  13.910  1.00193.23          O
ANISOU 2258  O   LYS A 299    32256  21186  19976 -15002   1839  -1013       O
ATOM   2259  CB  LYS A 299      12.430  33.406  10.582  1.00227.03          C
ANISOU 2259  CB  LYS A 299    36674  25450  24139 -15119   1978  -1039       C
ATOM   2260  CG  LYS A 299      12.670  32.755   9.226  1.00237.62          C
ANISOU 2260  CG  LYS A 299    38065  26717  25501 -15130   2282  -1107       C
ATOM   2261  CD  LYS A 299      13.617  33.587   8.363  1.00243.21          C
ANISOU 2261  CD  LYS A 299    38716  27468  26225 -15301   2112   -879       C
ATOM   2262  CE  LYS A 299      13.058  34.976   8.084  1.00236.80          C
ANISOU 2262  CE  LYS A 299    38084  26741  25146 -15388   1745   -877       C
ATOM   2263  NZ  LYS A 299      13.980  35.795   7.245  1.00227.10          N
ANISOU 2263  NZ  LYS A 299    36830  25546  23912 -15579   1588   -655       N
ATOM   2264  N   ALA A 300      10.648  34.336  12.864  1.00201.91          N
ANISOU 2264  N   ALA A 300    33632  22360  20725 -15015   1620  -1231       N
ATOM   2265  CA  ALA A 300      10.439  35.184  14.034  1.00202.63          C
ANISOU 2265  CA  ALA A 300    33720  22511  20760 -15047   1322  -1165       C
ATOM   2266  C   ALA A 300       9.765  34.434  15.177  1.00198.07          C
ANISOU 2266  C   ALA A 300    33165  21908  20186 -14951   1502  -1327       C
ATOM   2267  O   ALA A 300      10.112  34.623  16.342  1.00196.61          O
ANISOU 2267  O   ALA A 300    32922  21755  20027 -14997   1347  -1207       O
ATOM   2268  CB  ALA A 300       9.632  36.419  13.659  1.00207.05          C
ANISOU 2268  CB  ALA A 300    34418  23091  21160 -15070   1069  -1225       C
ATOM   2269  N   VAL A 301       8.799  33.587  14.838  1.00198.88          N
ANISOU 2269  N   VAL A 301    33364  21954  20249 -14838   1833  -1599       N
ATOM   2270  CA  VAL A 301       8.097  32.789  15.836  1.00195.32          C
ANISOU 2270  CA  VAL A 301    32954  21469  19790 -14761   2059  -1777       C
ATOM   2271  C   VAL A 301       9.054  31.809  16.508  1.00197.49          C
ANISOU 2271  C   VAL A 301    33128  21686  20223 -14766   2192  -1631       C
ATOM   2272  O   VAL A 301       9.031  31.645  17.728  1.00192.98          O
ANISOU 2272  O   VAL A 301    32558  21115  19649 -14780   2161  -1602       O
ATOM   2273  CB  VAL A 301       6.912  32.019  15.216  1.00190.59          C
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ANISOU 2273  CB  VAL A 301    32462  20817  19136 -14659   2416  -2099       C
ATOM   2274  CG1 VAL A 301       6.256  31.126  16.254  1.00188.87           C
ANISOU 2274  CG1 VAL A 301    32290  20560  18914 -14603   2686  -2279       C
ATOM   2275  CG2 VAL A 301       5.897  32.988  14.629  1.00188.97           C
ANISOU 2275  CG2 VAL A 301    32319  20642  18839 -14653   2260  -2226       C
ATOM   2276  N   ALA A 302       9.905  31.174  15.709  1.00200.07           N
ANISOU 2276  N   ALA A 302    33364  21947  20707 -14763   2339  -1525       N
ATOM   2277  CA  ALA A 302      10.869  30.208  16.228  1.00197.84           C
ANISOU 2277  CA  ALA A 302    32942  21563  20664 -14758   2476  -1347       C
ATOM   2278  C   ALA A 302      11.915  30.872  17.119  1.00199.32           C
ANISOU 2278  C   ALA A 302    32955  21812  20964 -14873   2123  -1017       C
ATOM   2279  O   ALA A 302      12.460  30.240  18.025  1.00193.69           O
ANISOU 2279  O   ALA A 302    32145  21030  20417 -14880   2160   -865       O
ATOM   2280  CB  ALA A 302      11.541  29.461  15.088  1.00192.54           C
ANISOU 2280  CB  ALA A 302    32187  20788  20183 -14729   2728  -1295       C
ATOM   2281  N   GLU A 303      12.193  32.145  16.857  1.00210.64           N
ANISOU 2281  N   GLU A 303    34357  23366  22312 -14975   1778   -896       N
ATOM   2282  CA  GLU A 303      13.181  32.882  17.637  1.00223.30           C
ANISOU 2282  CA  GLU A 303    35799  25046  24000 -15113   1424   -590       C
ATOM   2283  C   GLU A 303      12.665  33.201  19.037  1.00232.98           C
ANISOU 2283  C   GLU A 303    37132  26321  25070 -15141   1261   -634       C
ATOM   2284  O   GLU A 303      13.430  33.204  20.002  1.00243.00           O
ANISOU 2284  O   GLU A 303    38282  27608  26440 -15231   1092   -408       O
ATOM   2285  CB  GLU A 303      13.593  34.170  16.921  1.00219.10           C
ANISOU 2285  CB  GLU A 303    35233  24614  23400 -15231   1119   -461       C
ATOM   2286  CG  GLU A 303      14.668  34.958  17.653  1.00215.95           C
ANISOU 2286  CG  GLU A 303    34658  24302  23089 -15399    758   -144       C
ATOM   2287  CD  GLU A 303      15.122  36.180  16.887  1.00221.44           C
ANISOU 2287  CD  GLU A 303    35332  25080  23725 -15533    487    -13       C
ATOM   2288  OE1 GLU A 303      14.608  36.409  15.772  1.00221.72           O
ANISOU 2288  OE1 GLU A 303    35499  25097  23649 -15493    574   -157       O
ATOM   2289  OE2 GLU A 303      15.994  36.912  17.401  1.00226.61           O
ANISOU 2289  OE2 GLU A 303    35850  25815  24438 -15694    185    239       O
ATOM   2290  N   GLN A 304      11.366  33.465  19.145  1.00227.58           N
ANISOU 2290  N   GLN A 304    36661  25656  24155 -15073   1322   -916       N
ATOM   2291  CA  GLN A 304      10.755  33.751  20.437  1.00219.74           C
ANISOU 2291  CA  GLN A 304    35785  24698  23007 -15101   1224   -992       C
ATOM   2292  C   GLN A 304      10.775  32.518  21.329  1.00215.88           C
ANISOU 2292  C   GLN A 304    35313  24123  22588 -15065   1470  -1015       C
ATOM   2293  O   GLN A 304      10.686  32.623  22.551  1.00221.79           O
ANISOU 2293  O   GLN A 304    36130  24896  23245 -15134   1364   -984       O
ATOM   2294  CB  GLN A 304       9.322  34.254  20.266  1.00191.88           C
ANISOU 2294  CB  GLN A 304    32431  21184  19292 -15030   1288  -1287       C
ATOM   2295  CG  GLN A 304       9.206  35.522  19.444  1.00215.78           C
ANISOU 2295  CG  GLN A 304    35467  24257  22262 -15064   1026  -1253       C
ATOM   2296  CD  GLN A 304       7.917  36.271  19.712  1.00213.61           C
ANISOU 2296  CD  GLN A 304    35316  23976  21869 -15026    980  -1468       C
ATOM   2297  OE1 GLN A 304       7.269  36.067  20.739  1.00191.67           O
ANISOU 2297  OE1 GLN A 304    32605  21190  19032 -15014   1076  -1603       O
ATOM   2298  NE2 GLN A 304       7.538  37.147  18.788  1.00211.98           N
ANISOU 2298  NE2 GLN A 304    35136  23755  21651 -15014    835  -1498       N
ATOM   2299  N   LEU A 305      10.888  31.348  20.708  1.00209.35           N
ANISOU 2299  N   LEU A 305    34445  23180  20918 -14967   1804  -1069       N
ATOM   2300  CA  LEU A 305      11.001  30.097  21.444  1.00213.75           C
ANISOU 2300  CA  LEU A 305    35019  23609  22587 -14930   2058  -1057       C
ATOM   2301  C   LEU A 305      12.399  29.948  22.035  1.00229.39           C
ANISOU 2301  C   LEU A 305    36785  25556  24818 -15024   1864   -668       C
ATOM   2302  O   LEU A 305      12.552  29.702  23.232  1.00232.18           O
ANISOU 2302  O   LEU A 305    37174  25886  25158 -15088   1795   -565       O
ATOM   2303  CB  LEU A 305      10.681  28.907  20.537  1.00206.97           C
ANISOU 2303  CB  LEU A 305    34192  22608  21838 -14796   2491  -1232       C
ATOM   2304  CG  LEU A 305       9.231  28.416  20.495  1.00199.19           C
ANISOU 2304  CG  LEU A 305    33432  21600  20651 -14709   2817  -1622       C
ATOM   2305  CD1 LEU A 305       8.279  29.505  20.019  1.00190.76           C
ANISOU 2305  CD1 LEU A 305    32438  20672  19371 -14711   2685  -1816       C
ATOM   2306  CD2 LEU A 305       9.118  27.182  19.614  1.00194.08           C
ANISOU 2306  CD2 LEU A 305    32812  20800  20129 -14601   3236  -1758       C
ATOM   2307  N   PHE A 306      13.412  30.104  21.187  1.00239.19           N
ANISOU 2307  N   PHE A 306    37793  26794  26294 -15045   1787   -443       N
ATOM   2308  CA  PHE A 306      14.805  30.005  21.613  1.00243.44           C
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ANISOU 2308  CA  PHE A 306    38049  27307  27141 -15140   1620    -36       C
ATOM   2309  C   PHE A 306      15.748  30.545  20.542  1.00249.25           C
ANISOU 2309  C   PHE A 306    38536  28093  28074 -15192   1512    165       C
ATOM   2310  O   PHE A 306      16.475  31.512  20.771  1.00251.71           O
ANISOU 2310  O   PHE A 306    38705  28534  28401 -15341   1163    385       O
ATOM   2311  CB  PHE A 306      15.166  28.556  21.954  1.00233.81           C
ANISOU 2311  CB  PHE A 306    36749  25873  26215 -15055   1937     92       C
ATOM   2312  CG  PHE A 306      14.876  27.580  20.850  1.00221.60           C
ANISOU 2312  CG  PHE A 306    35229  24171  24800 -14899   2364    -67       C
ATOM   2313  CD1 PHE A 306      15.865  27.213  19.953  1.00223.06           C
ANISOU 2313  CD1 PHE A 306    35142  24266  25346 -14870   2497    172       C
ATOM   2314  CD2 PHE A 306      13.615  27.025  20.711  1.00213.35           C
ANISOU 2314  CD2 PHE A 306    34475  23071  23518 -14794   2654   -455       C
ATOM   2315  CE1 PHE A 306      15.599  26.314  18.940  1.00222.58           C
ANISOU 2315  CE1 PHE A 306    35134  24056  25382 -14739   2900     17       C
ATOM   2316  CE2 PHE A 306      13.343  26.130  19.698  1.00213.07           C
ANISOU 2316  CE2 PHE A 306    34486  22897  23574 -14670   3043   -618       C
ATOM   2317  CZ  PHE A 306      14.336  25.772  18.813  1.00216.64           C
ANISOU 2317  CZ  PHE A 306    34700  23252  24360 -14642   3161   -387       C
ATOM   2318  C18 RET B 400      -8.758  14.552   9.658  1.00147.74           C
ATOM   2319  C5  RET B 400      -8.115  15.221  10.823  1.00139.58           C
ATOM   2320  C6  RET B 400      -6.773  15.283  10.955  1.00143.62           C
ATOM   2321  C1  RET B 400      -6.068  15.182  12.290  1.00137.39           C
ATOM   2322  C2  RET B 400      -7.093  14.759  13.354  1.00141.66           C
ATOM   2323  C3  RET B 400      -8.332  15.639  13.302  1.00141.66           C
ATOM   2324  C4  RET B 400      -9.047  15.475  11.971  1.00135.03           C
ATOM   2325  C16 RET B 400      -5.429  16.535  12.674  1.00132.77           C
ATOM   2326  C17 RET B 400      -4.934  14.143  12.251  1.00142.10           C
ATOM   2327  C7  RET B 400      -5.906  15.091   9.799  1.00156.02           C
ATOM   2328  C8  RET B 400      -4.977  15.921   9.322  1.00152.33           C
ATOM   2329  C9  RET B 400      -4.297  15.673   8.049  1.00138.37           C
ATOM   2330  C10 RET B 400      -2.956  15.842   7.931  1.00125.96           C
ATOM   2331  C19 RET B 400      -5.152  15.225   6.895  1.00142.88           C
TER
ATOM   2332  O1  TAR C 500     -14.302  20.601  28.055  1.00101.99           O
ATOM   2333  O11 TAR C 500     -13.167  21.176  26.214  1.00113.34           O
ATOM   2334  C1  TAR C 500     -13.259  20.615  27.493  1.00108.06           C
ATOM   2335  C2  TAR C 500     -11.981  20.226  28.234  1.00122.35           C
ATOM   2336  O2  TAR C 500     -10.992  21.215  28.185  1.00129.24           O
ATOM   2337  C3  TAR C 500     -11.451  18.854  27.833  1.00135.71           C
ATOM   2338  O3  TAR C 500     -12.459  17.895  27.658  1.00152.20           O
ATOM   2339  C4  TAR C 500     -10.448  18.921  26.680  1.00132.08           C
ATOM   2340  O4  TAR C 500     -10.746  19.455  25.665  1.00128.59           O
ATOM   2341  O41 TAR C 500      -9.168  18.372  26.830  1.00132.40           O
TER
HETATM 2342  O   HOH S   1      -4.720  26.402  46.063  1.00101.89           O
HETATM 2343  O   HOH S   2       2.830   6.442  39.080  1.00112.65           O
HETATM 2344  O   HOH S   3      -5.225  37.136   3.342  1.00120.59           O
HETATM 2345  O   HOH S   4      -3.061  36.157  32.459  1.00114.73           O
TER
END
```

COORDINATES OF R234W:9-CIS-RETINAL IN PDB FORMAT:

```
REMARK Date 2009-11-11 Time 16:55:11 CET +0100 (1257954911.83 s)
REMARK PHENIX refinement
REMARK
REMARK ****************** INPUT FILES AND LABELS ****************************
REMARK Reflections:
REMARK   file name      : 9-cis.mtz
REMARK   labels         : ['FP,SIGFP']
REMARK R-free flags:
REMARK   file name      : 9-cis.mtz
REMARK   label          : FreeRflag
REMARK   test_flag_value: 0
REMARK Model file name(s):
REMARK   /home/achim/xray_data/xiaoqin/9cis/process/refine/9cis_test_001.pdb
REMARK
REMARK ******************* REFINEMENT SUMMARY: QUICK FACTS ******************
REMARK Start: r_work = 0.1586 r_free = 0.1931 bonds = 0.007 angles = 0.978
REMARK Final: r_work = 0.1651 r_free = 0.1975 bonds = 0.005 angles = 0.841
REMARK ******************************************************************************
REMARK
REMARK ****************** REFINEMENT STATISTICS STEP BY STEP ******************
REMARK leading digit, like 1_, means number of macro-cycle
REMARK   0  : statistics at the very beginning when nothing is done yet
REMARK   1 s: bulk solvent correction and/or (anisotropic) scaling
REMARK   1 z: refinement of coordinates
REMARK   1 p: refinement of ADPs (Atomic Displacement Parameters)
REMARK   1 t: ordered solvent update (add / remove)
REMARK ------------------------------------------------------------------------
REMARK  R-factors, x-ray target values and norm of gradient of x-ray target
REMARK  stage     r-work r-free  xray_target_w  xray_target_t
REMARK    0    :  0.2758 0.2848   2.962936e+00   3.076127e+00
REMARK    1_bss:  0.1586 0.1931   2.700979e+00   2.873534e+00
REMARK    1_xyz:  0.1660 0.1996   2.742926e+00   2.900151e+00
REMARK    1_adp:  0.1648 0.1978   2.732830e+00   2.889278e+00
REMARK    1_bss:  0.1651 0.1975   2.733333e+00   2.888987e+00
REMARK ------------------------------------------------------------------------
REMARK  stage     k_sol   b_sol     b11     b22     b33     b12     b13     b23
REMARK    0    :  0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000
REMARK    1_bss:  0.369  59.092   7.410  -3.138  -4.937  -0.000   0.450  -0.000
REMARK    1_xyz:  0.369  59.092   7.410  -3.138  -4.937  -0.000   0.450  -0.000
REMARK    1_adp:  0.369  59.092   7.410  -3.138  -4.937  -0.000   0.450  -0.000
REMARK    1_bss:  0.369  58.870   7.632  -2.917  -4.715  -0.000   0.450  -0.000
REMARK ------------------------------------------------------------------------
REMARK  stage     <pher>    fom   alpha         beta
REMARK    0    :  25.794 0.8112  0.0884      180.662
REMARK    1_bss:  19.294 0.8776  0.0910       64.240
REMARK    1_xyz:  20.103 0.8699  0.0935       67.237
REMARK    1_adp:  19.754 0.8733  0.0915       66.465
REMARK    1_bss:  19.752 0.8733  0.0915       66.184
REMARK ------------------------------------------------------------------------
REMARK  stage       angl   bond   chir   dihe   plan   repu  geom_target
REMARK    0    :   0.978  0.007  0.062 16.906  0.004  4.109   6.4861e-02
REMARK    1_bss:   0.978  0.007  0.062 16.906  0.004  4.109   6.4861e-02
REMARK    1_xyz:   0.841  0.005  0.055 16.387  0.003  4.111   5.1545e-02
REMARK    1_adp:   0.841  0.005  0.055 16.387  0.003  4.111   5.1545e-02
REMARK    1_bss:   0.841  0.005  0.055 16.387  0.003  4.110   5.1568e-02
REMARK ------------------------------------------------------------------------
REMARK                      Maximal deviations:
REMARK  stage       angl   bond   chir   dihe   plan   repu       |grad|
REMARK    0    :   6.640  0.064  0.212175.026  0.021  2.113   5.6877e-02
REMARK    1_bss:   6.640  0.064  0.212175.026  0.021  2.113   5.6877e-02
REMARK    1_xyz:   6.335  0.045  0.191159.768  0.021  2.330   3.4878e-02
REMARK    1_adp:   6.335  0.045  0.191159.768  0.021  2.330   3.4878e-02
REMARK    1_bss:   6.335  0.045  0.191159.768  0.021  2.330   3.4894e-02
REMARK ------------------------------------------------------------------------
REMARK            |-----overall-----|---macromolecule----|------solvent-------|
REMARK   stage    b_max  b_min  b_ave  b_max  b_min  b_ave  b_max  b_min  b_ave
REMARK    0    : 104.64  10.08  32.01 104.64  10.08  30.13  71.56  14.01  43.90
```

```
REMARK    1_bss: 104.64  10.08  32.01 104.64  10.08  30.13  71.56  14.01  43.90
REMARK    1_xyz: 114.97  10.26  33.00 114.97  10.26  31.47  69.07  14.32  43.02
REMARK    1_adp: 104.56  11.20  31.81 104.56  11.20  29.99  72.24  14.18  43.75
REMARK    1_bss: 104.34  10.98  31.58 104.34  10.98  29.76  72.02  13.96  43.51
REMARK ---------------------------------------------------------------------------
REMARK  stage        Deviation of refined
REMARK               model from start model
REMARK                max      min     mean
REMARK    0    :    0.000    0.000    0.000
REMARK    1_bss:    0.000    0.000    0.000
REMARK    1_xyz:    0.148    0.001    0.018
REMARK    1_adp:    0.148    0.001    0.018
REMARK    1_bss:    0.148    0.001    0.018
REMARK ---------------------------------------------------------------------------
REMARK  stage  number of ordered solvent
REMARK      0    :              327
REMARK      1_bss:              327
REMARK      1_xyz:              316
REMARK      1_adp:              316
REMARK      1_bss:              315
REMARK ---------------------------------------------------------------------------
REMARK MODEL CONTENT.
REMARK  ELEMENT        ATOM RECORD COUNT   OCCUPANCY SUM
REMARK        C                     1338         1338.00
REMARK        S                        8            8.00
REMARK        O                      697          697.00
REMARK        N                      340          340.00
REMARK    TOTAL                     2383         2383.00
REMARK ---------------------------------------------------------------------------
REMARK r_free_flags.md5.hexdigest 4d329d92ca5f17b4668057ad2c5e22d2
REMARK
REMARK IF THIS FILE IS FOR PDB DEPOSITION: REMOVE ALL FROM THIS LINE UP.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3  PROGRAM     : PHENIX (phenix.refine)
REMARK   3  AUTHORS     : Paul Adams, Pavel Afonine, Vincent Chen, Ian
REMARK   3              : Davis, Kreshna Gopal, Ralf Grosse-Kunstleve,
REMARK   3              : Jeffrey Headd, Li-Wei Hung, Robert
REMARK   3              : Immormino, Tom Ioerger, Airlie McCoy, Erik
REMARK   3              : McKee, Nigel Moriarty, Reetal Pai,  Randy
REMARK   3              : Read, Jane Richardson, David Richardson, Tod
REMARK   3              : Romo, Jim Sacchettini, Nicholas Sauter,
REMARK   3              : Jacob Smith, Laurent Storoni, Tom
REMARK   3              : Terwilliger, Peter Zwart
REMARK   3
REMARK   3  REFINEMENT TARGET : ML
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 1.896
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 44.745
REMARK   3   MIN(FOBS/SIGMA_FOBS)              : 2.00
REMARK   3   COMPLETENESS FOR RANGE        (%) : 98.75
REMARK   3   NUMBER OF REFLECTIONS             : 25013
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.1683
REMARK   3   R VALUE           (WORKING SET) : 0.1651
REMARK   3   FREE R VALUE                     : 0.1975
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 10.00
REMARK   3   FREE R VALUE TEST SET COUNT      : 2502
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT (IN BINS).
REMARK   3   BIN  RESOLUTION RANGE  COMPL.    NWORK NFREE   RWORK  RFREE
REMARK   3     1 44.7573 -  4.9663    0.99     1305   146  0.1825 0.1960
REMARK   3     2  4.9663 -  3.9426    1.00     1284   142  0.1369 0.1568
REMARK   3     3  3.9426 -  3.4445    0.99     1263   140  0.1414 0.1698
REMARK   3     4  3.4445 -  3.1296    1.00     1262   141  0.1470 0.1767
REMARK   3     5  3.1296 -  2.9053    1.00     1264   140  0.1571 0.2135
REMARK   3     6  2.9053 -  2.7341    1.00     1282   143  0.1699 0.1981
REMARK   3     7  2.7341 -  2.5972    1.00     1250   139  0.1711 0.2187
```

```
REMARK   3     8  2.5972 -  2.4841    1.00     1259   139  0.1773 0.2087
REMARK   3     9  2.4841 -  2.3885    1.00     1246   139  0.1641 0.2028
REMARK   3    10  2.3885 -  2.3061    1.00     1275   142  0.1592 0.2009
REMARK   3    11  2.3061 -  2.2340    1.00     1267   140  0.1725 0.2202
REMARK   3    12  2.2340 -  2.1701    1.00     1241   138  0.1661 0.2213
REMARK   3    13  2.1701 -  2.1130    1.00     1252   139  0.1695 0.2155
REMARK   3    14  2.1130 -  2.0614    1.00     1277   142  0.1723 0.2256
REMARK   3    15  2.0614 -  2.0146    1.00     1251   139  0.1692 0.2087
REMARK   3    16  2.0146 -  1.9717    1.00     1263   140  0.1830 0.2107
REMARK   3    17  1.9717 -  1.9323    1.00     1247   139  0.1972 0.2203
REMARK   3    18  1.9323 -  1.8958    0.80     1023   114  0.2380 0.2472
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED        : FLAT BULK SOLVENT MODEL
REMARK   3   SOLVENT RADIUS     : 0.80
REMARK   3   SHRINKAGE RADIUS   : 0.80
REMARK   3   GRID STEP FACTOR   : 4.00
REMARK   3   K_SOL              : 0.369
REMARK   3   B_SOL              : 58.870
REMARK   3
REMARK   3  ERROR ESTIMATES.
REMARK   3   COORDINATE ERROR (MAXIMUM-LIKELIHOOD BASED)     : 0.20
REMARK   3   PHASE ERROR (DEGREES, MAXIMUM-LIKELIHOOD BASED) : 19.75
REMARK   3
REMARK   3  OVERALL SCALE FACTORS.
REMARK   3   SCALE = SUM(|F_OBS|*|F_MODEL|)/SUM(|F_MODEL|**2) : 0.0948
REMARK   3   ANISOTROPIC SCALE MATRIX ELEMENTS (IN CARTESIAN BASIS).
REMARK   3    B11 : 7.6317
REMARK   3    B22 : -2.9166
REMARK   3    B33 : -4.7151
REMARK   3    B12 : -0.0000
REMARK   3    B13 : 0.4498
REMARK   3    B23 : -0.0000
REMARK   3
REMARK   3  R FACTOR FORMULA.
REMARK   3   R = SUM(||F_OBS|-SCALE*|F_MODEL||)/SUM(|F_OBS|)
REMARK   3
REMARK   3  TOTAL MODEL STRUCTURE FACTOR (F_MODEL).
REMARK   3   F_MODEL = FB_CART * (F_CALC_ATOMS + F_BULK)
REMARK   3    F_BULK = K_SOL * EXP(-B_SOL * S**2 / 4) * F_MASK
REMARK   3    F_CALC_ATOMS = ATOMIC MODEL STRUCTURE FACTORS
REMARK   3    FB_CART = EXP(-H(t) * A(-1) * B * A(-1t) * H)
REMARK   3     A = orthogonalization matrix, H = MILLER INDEX
REMARK   3     (t) = TRANSPOSE, (-1) = INVERSE
REMARK   3
REMARK   3  STRUCTURE FACTORS CALCULATION ALGORITHM : FFT
REMARK   3
REMARK   3  DEVIATIONS FROM IDEAL VALUES.
REMARK   3                 RMSD     MAX  COUNT
REMARK   3   BOND      :  0.005   0.045   2115
REMARK   3   ANGLE     :  0.841   6.335   2855
REMARK   3   CHIRALITY :  0.055   0.191    300
REMARK   3   PLANARITY :  0.003   0.021    370
REMARK   3   DIHEDRAL  : 16.387 159.768    795
REMARK   3   MIN NONBONDED DISTANCE : 2.330
REMARK   3
REMARK   3  ATOMIC DISPLACEMENT PARAMETERS.
REMARK   3   WILSON B : None
REMARK   3   RMS(B_ISO_OR_EQUIVALENT_BONDED) : 3.93
REMARK   3   ATOMS          NUMBER OF ATOMS
REMARK   3                     ISO.  ANISO.
REMARK   3    ALL         :   2383    2047
REMARK   3    ALL (NO H)  :   2383    2047
REMARK   3    SOLVENT     :    315       0
REMARK   3    NON-SOLVENT :   2068    2047
REMARK   3    HYDROGENS   :      0       0
REMARK   3
REMARK   3  TLS DETAILS.
REMARK   3   NUMBER OF TLS GROUPS: 7
REMARK   3   ORIGIN: CENTER OF MASS
```

```
REMARK   3   TLS GROUP : 1
REMARK   3    SELECTION: (chain A and resid 57:85)
REMARK   3    ORIGIN FOR THE GROUP (A): -14.3369  31.9499   8.9848
REMARK   3    T TENSOR
REMARK   3      T11:   0.2981 T22:   0.1423
REMARK   3      T33:   0.2513 T12:   0.1563
REMARK   3      T13:  -0.0870 T23:  -0.0356
REMARK   3    L TENSOR
REMARK   3      L11:   0.2863 L22:  -0.8070
REMARK   3      L33:   5.1607 L12:   0.8936
REMARK   3      L13:   0.9129 L23:   0.1310
REMARK   3    S TENSOR
REMARK   3      S11:  -0.1549 S12:   0.0452 S13:   0.3945
REMARK   3      S21:  -0.1084 S22:  -0.0993 S23:   0.2382
REMARK   3      S31:  -0.8851 S32:  -0.2117 S33:   0.2938
REMARK   3   TLS GROUP : 2
REMARK   3    SELECTION: (chain A and resid 86:98)
REMARK   3    ORIGIN FOR THE GROUP (A): -17.1863  23.5800  13.8063
REMARK   3    T TENSOR
REMARK   3      T11:   0.0740 T22:   0.1990
REMARK   3      T33:   0.2120 T12:   0.0922
REMARK   3      T13:  -0.0044 T23:  -0.0652
REMARK   3    L TENSOR
REMARK   3      L11:   4.3053 L22:   1.6617
REMARK   3      L33:   1.4195 L12:  -1.6226
REMARK   3      L13:  -0.8597 L23:   0.1731
REMARK   3    S TENSOR
REMARK   3      S11:   0.1595 S12:   0.6543 S13:  -0.6978
REMARK   3      S21:   0.0453 S22:   0.0372 S23:   0.4534
REMARK   3      S31:  -0.2022 S32:  -0.3200 S33:  -0.0998
REMARK   3   TLS GROUP : 3
REMARK   3    SELECTION: (chain A and resid 99:143)
REMARK   3    ORIGIN FOR THE GROUP (A):  -9.8733  16.4298  12.8980
REMARK   3    T TENSOR
REMARK   3      T11:   0.0475 T22:   0.1173
REMARK   3      T33:   0.0963 T12:   0.0022
REMARK   3      T13:   0.0270 T23:   0.0028
REMARK   3    L TENSOR
REMARK   3      L11:  -0.1262 L22:   0.5076
REMARK   3      L33:   1.2756 L12:  -0.3005
REMARK   3      L13:   0.4507 L23:   0.1640
REMARK   3    S TENSOR
REMARK   3      S11:   0.0261 S12:  -0.0488 S13:  -0.0071
REMARK   3      S21:  -0.0310 S22:  -0.0783 S23:   0.2215
REMARK   3      S31:  -0.1067 S32:  -0.2687 S33:   0.0112
REMARK   3   TLS GROUP : 4
REMARK   3    SELECTION: (chain A and resid 144:185)
REMARK   3    ORIGIN FOR THE GROUP (A):  -3.4660   4.6655  20.5590
REMARK   3    T TENSOR
REMARK   3      T11:   0.1119 T22:   0.0403
REMARK   3      T33:   0.0915 T12:  -0.0340
REMARK   3      T13:   0.0134 T23:   0.0140
REMARK   3    L TENSOR
REMARK   3      L11:   1.4353 L22:   1.1464
REMARK   3      L33:   1.9986 L12:   0.1384
REMARK   3      L13:   1.0779 L23:  -0.5242
REMARK   3    S TENSOR
REMARK   3      S11:   0.0902 S12:  -0.0252 S13:  -0.2170
REMARK   3      S21:   0.2103 S22:   0.0469 S23:   0.0364
REMARK   3      S31:   0.2393 S32:  -0.0575 S33:  -0.1183
REMARK   3   TLS GROUP : 5
REMARK   3    SELECTION: (chain A and resid 186:255)
REMARK   3    ORIGIN FOR THE GROUP (A):   3.3083   7.4464  15.0599
REMARK   3    T TENSOR
REMARK   3      T11:   0.0542 T22:   0.0740
REMARK   3      T33:   0.0744 T12:   0.0077
REMARK   3      T13:   0.0121 T23:  -0.0032
REMARK   3    L TENSOR
REMARK   3      L11:   0.4999 L22:   0.6442
REMARK   3      L33:   0.6306 L12:  -0.3420
```

```
REMARK   3      L13:   0.4140 L23:  -0.0786
REMARK   3    S TENSOR
REMARK   3      S11:   0.0238 S12:   0.1314 S13:  -0.0075
REMARK   3      S21:   0.0678 S22:  -0.0468 S23:  -0.0139
REMARK   3      S31:   0.0294 S32:   0.0910 S33:   0.0095
REMARK   3   TLS GROUP : 6
REMARK   3    SELECTION: (chain A and resid 256:295)
REMARK   3    ORIGIN FOR THE GROUP (A):   9.1620   8.0125  24.3525
REMARK   3    T TENSOR
REMARK   3      T11:   0.0905 T22:   0.0743
REMARK   3      T33:   0.1118 T12:  -0.0247
REMARK   3      T13:  -0.0222 T23:   0.0155
REMARK   3    L TENSOR
REMARK   3      L11:   0.2191 L22:   1.1090
REMARK   3      L33:   0.3304 L12:  -0.1958
REMARK   3      L13:   0.6117 L23:   0.5279
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0299 S12:   0.0355 S13:   0.0173
REMARK   3      S21:   0.2764 S22:  -0.0170 S23:  -0.2060
REMARK   3      S31:  -0.0232 S32:   0.1604 S33:   0.0406
REMARK   3   TLS GROUP : 7
REMARK   3    SELECTION: (chain A and resid 296:306)
REMARK   3    ORIGIN FOR THE GROUP (A): -11.3359   3.3341  29.3839
REMARK   3    T TENSOR
REMARK   3      T11:   0.1901 T22:   0.1457
REMARK   3      T33:   0.0474 T12:  -0.1286
REMARK   3      T13:   0.2676 T23:   0.1319
REMARK   3    L TENSOR
REMARK   3      L11:   4.2506 L22:   0.6650
REMARK   3      L33:   2.4857 L12:   0.0001
REMARK   3      L13:  -0.6505 L23:  -0.6498
REMARK   3    S TENSOR
REMARK   3      S11:   0.7640 S12:  -0.5752 S13:   0.2772
REMARK   3      S21:   0.2434 S22:  -0.0010 S23:   0.1460
REMARK   3      S31:  -0.2766 S32:  -0.1711 S33:  -0.5849
REMARK   3
CRYST1   87.870   57.918   75.206  90.00 122.88  90.00 C 1 2 1
SCALE1      0.011380  0.000000  0.007356        0.00000
SCALE2      0.000000  0.017266  0.000000        0.00000
SCALE3      0.000000  0.000000  0.015833        0.00000
ATOM      1  N   GLU A  57     -16.819  40.185  24.393  1.00 75.40           N
ANISOU    1  N   GLU A  57    11136   7693   9821   2413   -810  -1780       N
ATOM      2  CA  GLU A  57     -15.592  39.544  24.852  1.00 72.74           C
ANISOU    2  CA  GLU A  57    10698   7400   9540   1983   -661  -1653       C
ATOM      3  C   GLU A  57     -14.742  39.062  23.678  1.00 63.00           C
ANISOU    3  C   GLU A  57     9504   6146   8286   1777   -646  -1452       C
ATOM      4  CB  GLU A  57     -15.911  38.389  25.805  1.00 78.38           C
ANISOU    4  CB  GLU A  57    10956   8459  10367   1888   -550  -1757       C
ATOM      5  CG  GLU A  57     -16.633  38.816  27.074  1.00 86.05           C
ANISOU    5  CG  GLU A  57    11845   9496  11353   2033   -553  -1957       C
ATOM      6  CD  GLU A  57     -15.791  39.733  27.939  1.00 90.76           C
ANISOU    6  CD  GLU A  57    12727   9838  11921   1859   -504  -1926       C
ATOM      7  OE1 GLU A  57     -14.556  39.546  27.976  1.00 91.96           O
ANISOU    7  OE1 GLU A  57    12953   9916  12074   1506   -405  -1759       O
ATOM      8  OE2 GLU A  57     -16.361  40.638  28.584  1.00 92.83           O
ANISOU    8  OE2 GLU A  57    13139   9993  12138   2076   -565  -2069       O
ATOM      9  O   GLU A  57     -15.256  38.802  22.588  1.00 60.95           O
ANISOU    9  O   GLU A  57     9206   5934   8019   1940   -721  -1429       O
ATOM     10  N   THR A  58     -13.439  38.949  23.907  1.00 54.81           N
ANISOU   10  N   THR A  58     8533   5068   7223   1419   -549  -1311       N
ATOM     11  CA  THR A  58     -12.508  38.626  22.835  1.00 55.22           C
ANISOU   11  CA  THR A  58     8646   5120   7215   1215   -541  -1124       C
ATOM     12  C   THR A  58     -12.785  37.266  22.188  1.00 45.30           C
ANISOU   12  C   THR A  58     7039   4131   6044   1247   -505  -1111       C
ATOM     13  CB  THR A  58     -11.039  38.682  23.314  1.00 61.44           C
ANISOU   13  CB  THR A  58     9515   5906   7923    821   -431   -985       C
ATOM     14  OG1 THR A  58     -10.713  37.480  24.024  1.00 64.99           O
ANISOU   14  OG1 THR A  58     9592   6631   8470    676   -288   -998       O
ATOM     15  CG2 THR A  58     -10.820  39.886  24.217  1.00 59.81           C
ANISOU   15  CG2 THR A  58     9626   5467   7631    748   -440  -1013       C
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ATOM     16  O   THR A  58     -12.669  37.129  20.971  1.00 44.36           O
ANISOU   16  O   THR A  58     6975   3996   5884   1267   -563  -1015       O
ATOM     17  N   ARG A  59     -13.156  36.271  22.991  1.00 40.26           N
ANISOU   17  N   ARG A  59     6061   3728   5507   1237   -418  -1208       N
ATOM     18  CA  ARG A  59     -13.359  34.914  22.468  1.00 40.51           C
ANISOU   18  CA  ARG A  59     5806   3998   5589   1228   -384  -1192       C
ATOM     19  CB  ARG A  59     -13.629  33.916  23.598  1.00 38.68           C
ANISOU   19  CB  ARG A  59     5266   3994   5436   1149   -296  -1297       C
ATOM     20  CG  ARG A  59     -12.392  33.442  24.330  1.00 37.27           C
ANISOU   20  CG  ARG A  59     5030   3867   5264    856   -171  -1213       C
ATOM     21  CD  ARG A  59     -12.746  32.392  25.377  1.00 33.83           C
ANISOU   21  CD  ARG A  59     4305   3647   4902    781   -106  -1318       C
ATOM     22  NE  ARG A  59     -11.562  31.936  26.092  1.00 33.14           N
ANISOU   22  NE  ARG A  59     4164   3614   4815    522     11  -1237       N
ATOM     23  CZ  ARG A  59     -11.507  30.830  26.826  1.00 30.01           C
ANISOU   23  CZ  ARG A  59     3551   3392   4459    406     71  -1276       C
ATOM     24  NH1 ARG A  59     -12.575  30.056  26.951  1.00 29.09           N
ANISOU   24  NH1 ARG A  59     3261   3419   4374    487     19  -1394       N
ATOM     25  NH2 ARG A  59     -10.376  30.498  27.430  1.00 25.77           N
ANISOU   25  NH2 ARG A  59     2981   2904   3906    196    174  -1193       N
ATOM     26  C   ARG A  59     -14.488  34.846  21.447  1.00 39.11           C
ANISOU   26  C   ARG A  59     5598   3856   5406   1498   -491  -1239       C
ATOM     27  O   ARG A  59     -14.334  34.268  20.370  1.00 34.94           O
ANISOU   27  O   ARG A  59     5035   3380   4860   1479   -505  -1145       O
ATOM     28  N   GLU A  60     -15.624  35.442  21.790  1.00 40.45           N
ANISOU   28  N   GLU A  60     5773   4021   5576   1758   -566  -1387       N
ATOM     29  CA  GLU A  60     -16.795  35.408  20.922  1.00 48.24           C
ANISOU   29  CA  GLU A  60     6700   5096   6532   2035   -663  -1445       C
ATOM     30  CB  GLU A  60     -18.018  35.969  21.652  1.00 61.45           C
ANISOU   30  CB  GLU A  60     8311   6856   8182   2322   -727  -1642       C
ATOM     31  CG  GLU A  60     -18.421  35.176  22.893  1.00 70.46           C
ANISOU   31  CG  GLU A  60     9131   8279   9363   2231   -651  -1778       C
ATOM     32  CD  GLU A  60     -17.446  35.349  24.048  1.00 77.03           C
ANISOU   32  CD  GLU A  60    10016   8997  10254   1988   -557  -1764       C
ATOM     33  OE1 GLU A  60     -16.629  36.290  24.002  1.00 79.62           O
ANISOU   33  OE1 GLU A  60    10651   9034  10566   1933   -562  -1678       O
ATOM     34  OE2 GLU A  60     -17.500  34.546  25.003  1.00 78.06           O
ANISOU   34  OE2 GLU A  60     9891   9339  10431   1829   -482  -1835       O
ATOM     35  C   GLU A  60     -16.544  36.175  19.626  1.00 44.55           C
ANISOU   35  C   GLU A  60     6523   4397   6005   2118   -759  -1323       C
ATOM     36  O   GLU A  60     -17.023  35.788  18.558  1.00 47.09           O
ANISOU   36  O   GLU A  60     6778   4803   6312   2217   -805  -1285       O
ATOM     37  N   GLU A  61     -15.789  37.264  19.732  1.00 41.32           N
ANISOU   37  N   GLU A  61     6451   3701   5546   2048   -794  -1259       N
ATOM     38  CA  GLU A  61     -15.412  38.056  18.568  1.00 47.29           C
ANISOU   38  CA  GLU A  61     7530   4219   6220   2060   -900  -1132       C
ATOM     39  CB  GLU A  61     -14.754  39.365  19.006  1.00 58.59           C
ANISOU   39  CB  GLU A  61     9374   5333   7556   1979   -953  -1098       C
ATOM     40  CG  GLU A  61     -14.090  40.131  17.876  1.00 70.52           C
ANISOU   40  CG  GLU A  61    11251   6601   8944   1870  -1061   -941       C
ATOM     41  CD  GLU A  61     -13.213  41.264  18.376  1.00 80.12           C
ANISOU   41  CD  GLU A  61    12885   7535  10022   1668  -1096   -879       C
ATOM     42  OE1 GLU A  61     -13.315  41.616  19.571  1.00 82.45           O
ANISOU   42  OE1 GLU A  61    13223   7778  10328   1694  -1051   -979       O
ATOM     43  OE2 GLU A  61     -12.420  41.800  17.573  1.00 83.52           O
ANISOU   43  OE2 GLU A  61    13610   7810  10316   1459  -1171   -730       O
ATOM     44  C   GLU A  61     -14.465  37.270  17.666  1.00 41.08           C
ANISOU   44  C   GLU A  61     6665   3513   5430   1797   -847   -965       C
ATOM     45  O   GLU A  61     -14.606  37.276  16.441  1.00 38.36           O
ANISOU   45  O   GLU A  61     6378   3142   5057   1855   -921   -889       O
ATOM     46  N   ALA A  62     -13.498  36.596  18.281  1.00 37.32           N
ANISOU   46  N   ALA A  62     6054   3154   4974   1522   -721   -914       N
ATOM     47  CA  ALA A  62     -12.536  35.786  17.540  1.00 34.79           C
ANISOU   47  CA  ALA A  62     5637   2953   4628   1299   -665   -773       C
ATOM     48  CB  ALA A  62     -11.465  35.244  18.480  1.00 35.12           C
ANISOU   48  CB  ALA A  62     5563   3117   4665   1037   -530   -737       C
ATOM     49  C   ALA A  62     -13.222  34.647  16.796  1.00 37.15           C
ANISOU   49  C   ALA A  62     5677   3452   4988   1415   -657   -791       C
ATOM     50  O   ALA A  62     -12.898  34.361  15.640  1.00 33.74           O
ANISOU   50  O   ALA A  62     5258   3044   4520   1368   -686   -686       O
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ATOM     51  N   VAL A  63     -14.168  33.993  17.464  1.00 36.76           N
ANISOU   51  N   VAL A  63     5396   3561   5011   1543   -621   -924       N
ATOM     52  CA  VAL A  63     -14.923  32.907  16.849  1.00 35.01           C
ANISOU   52  CA  VAL A  63     4950   3542   4811   1625   -616   -947       C
ATOM     53  CB  VAL A  63     -15.876  32.234  17.854  1.00 36.12           C
ANISOU   53  CB  VAL A  63     4849   3889   4986   1692   -577  -1101       C
ATOM     54  CG1 VAL A  63     -16.868  31.346  17.125  1.00 35.03           C
ANISOU   54  CG1 VAL A  63     4536   3957   4818   1785   -600  -1128       C
ATOM     55  CG2 VAL A  63     -15.086  31.439  18.881  1.00 33.83           C
ANISOU   55  CG2 VAL A  63     4442   3684   4727   1466   -468  -1103       C
ATOM     56  C   VAL A  63     -15.732  33.430  15.675  1.00 37.05           C
ANISOU   56  C   VAL A  63     5299   3739   5038   1833   -727   -932       C
ATOM     57  O   VAL A  63     -15.782  32.809  14.614  1.00 33.46           O
ANISOU   57  O   VAL A  63     4780   3364   4570   1816   -734   -857       O
ATOM     58  N   ARG A  64     -16.361  34.586  15.873  1.00 40.33           N
ANISOU   58  N   ARG A  64     5877   4012   5433   2040   -816  -1005       N
ATOM     59  CA  ARG A  64     -17.122  35.233  14.815  1.00 41.37           C
ANISOU   59  CA  ARG A  64     6132   4065   5522   2269   -936   -993       C
ATOM     60  CB  ARG A  64     -17.789  36.516  15.323  1.00 44.05           C
ANISOU   60  CB  ARG A  64     6676   4241   5821   2537  -1037  -1103       C
ATOM     61  CG  ARG A  64     -18.408  37.359  14.212  1.00 48.94           C
ANISOU   61  CG  ARG A  64     7500   4720   6376   2785  -1181  -1075       C
ATOM     62  CD  ARG A  64     -19.073  38.621  14.752  1.00 62.28           C
ANISOU   62  CD  ARG A  64     9430   6234   7999   3099  -1295  -1198       C
ATOM     63  NE  ARG A  64     -18.124  39.485  15.448  1.00 71.11           N
ANISOU   63  NE  ARG A  64    10872   7055   9091   2950  -1308  -1170       N
ATOM     64  CZ  ARG A  64     -17.250  40.280  14.839  1.00 76.27           C
ANISOU   64  CZ  ARG A  64    11901   7405   9674   2795  -1388  -1033       C
ATOM     65  NH1 ARG A  64     -17.200  40.323  13.513  1.00 74.50           N
ANISOU   65  NH1 ARG A  64    11763   7126   9419   2780  -1467   -917       N
ATOM     66  NH2 ARG A  64     -16.423  41.029  15.556  1.00 78.58           N
ANISOU   66  NH2 ARG A  64    12487   7463   9907   2625  -1392  -1010       N
ATOM     67  C   ARG A  64     -16.238  35.557  13.619  1.00 38.51           C
ANISOU   67  C   ARG A  64     5976   3532   5125   2128   -986   -823       C
ATOM     68  O   ARG A  64     -16.612  35.302  12.477  1.00 33.53           O
ANISOU   68  O   ARG A  64     5303   2953   4483   2189  -1029   -766       O
ATOM     69  N   GLU A  65     -15.071  36.134  13.885  1.00 35.08           N
ANISOU   69  N   GLU A  65     5759   2920   4651   1917   -982   -743       N
ATOM     70  CA  GLU A  65     -14.149  36.504  12.818  1.00 37.42           C
ANISOU   70  CA  GLU A  65     6254   3093   4872   1735  -1040   -584       C
ATOM     71  CB  GLU A  65     -12.929  37.234  13.380  1.00 41.50           C
ANISOU   71  CB  GLU A  65     7015   3458   5297   1481  -1034   -514       C
ATOM     72  CG  GLU A  65     -13.240  38.599  13.970  1.00 51.13           C
ANISOU   72  CG  GLU A  65     8577   4396   6455   1600  -1133   -574       C
ATOM     73  CD  GLU A  65     -11.988  39.410  14.249  1.00 57.41           C
ANISOU   73  CD  GLU A  65     9681   5028   7103   1290  -1150   -469       C
ATOM     74  OE1 GLU A  65     -10.899  38.998  13.792  1.00 54.25           O
ANISOU   74  OE1 GLU A  65     9224   4757   6630    996  -1104   -342       O
ATOM     75  OE2 GLU A  65     -12.092  40.461  14.919  1.00 64.15           O
ANISOU   75  OE2 GLU A  65    10842   5643   7888   1338  -1212   -516       O
ATOM     76  C   GLU A  65     -13.709  35.278  12.019  1.00 33.80           C
ANISOU   76  C   GLU A  65     5557   2851   4435   1590   -967   -498       C
ATOM     77  O   GLU A  65     -13.653  35.311  10.791  1.00 29.96           O
ANISOU   77  O   GLU A  65     5118   2349   3916   1572  -1033   -408       O
ATOM     78  N   LEU A  66     -13.401  34.197  12.725  1.00 32.22           N
ANISOU   78  N   LEU A  66     5117   2846   4280   1492   -839   -531       N
ATOM     79  CA  LEU A  66     -13.009  32.954  12.067  1.00 31.56           C
ANISOU   79  CA  LEU A  66     4834   2958   4198   1389   -772   -467       C
ATOM     80  CB  LEU A  66     -12.644  31.886  13.096  1.00 26.29           C
ANISOU   80  CB  LEU A  66     3969   2459   3561   1297   -646   -518       C
ATOM     81  CG  LEU A  66     -12.297  30.507  12.527  1.00 25.11           C
ANISOU   81  CG  LEU A  66     3650   2495   3394   1230   -584   -472       C
ATOM     82  CD1 LEU A  66     -11.301  30.618  11.380  1.00 21.77           C
ANISOU   82  CD1 LEU A  66     3305   2079   2887   1110   -615   -337       C
ATOM     83  CD2 LEU A  66     -11.759  29.593  13.628  1.00 22.78           C
ANISOU   83  CD2 LEU A  66     3229   2324   3104   1134   -478   -513       C
ATOM     84  C   LEU A  66     -14.124  32.455  11.154  1.00 33.83           C
ANISOU   84  C   LEU A  66     5002   3331   4519   1559   -808   -488       C
ATOM     85  O   LEU A  66     -13.881  32.085  10.007  1.00 35.18           O
ANISOU   85  O   LEU A  66     5155   3547   4665   1504   -827   -396       O
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ATOM     86  N   GLN A  67     -15.347  32.450  11.672  1.00 35.67           N
ANISOU   86  N   GLN A  67     5144   3617   4790   1755   -817   -610       N
ATOM     87  CA  GLN A  67     -16.509  32.051  10.890  1.00 35.84           C
ANISOU   87  CA  GLN A  67     5043   3765   4808   1913   -849   -635       C
ATOM     88  CB  GLN A  67     -17.776  32.116  11.748  1.00 34.79           C
ANISOU   88  CB  GLN A  67     4788   3758   4674   2113   -854   -790       C
ATOM     89  CG  GLN A  67     -17.917  30.942  12.703  1.00 37.53           C
ANISOU   89  CG  GLN A  67     4917   4319   5024   2005   -755   -869       C
ATOM     90  CD  GLN A  67     -19.000  31.150  13.739  1.00 43.18           C
ANISOU   90  CD  GLN A  67     5512   5178   5718   2161   -768  -1033       C
ATOM     91  OE1 GLN A  67     -19.272  32.277  14.152  1.00 48.56           O
ANISOU   91  OE1 GLN A  67     6308   5740   6403   2335   -831  -1099       O
ATOM     92  NE2 GLN A  67     -19.620  30.060  14.175  1.00 43.05           N
ANISOU   92  NE2 GLN A  67     5279   5427   5652   2091   -719  -1104       N
ATOM     93  C   GLN A  67     -16.651  32.917   9.639  1.00 35.52           C
ANISOU   93  C   GLN A  67     5173   3581   4742   1998   -961   -550       C
ATOM     94  O   GLN A  67     -16.912  32.408   8.549  1.00 35.77           O
ANISOU   94  O   GLN A  67     5125   3701   4763   1992   -968   -484       O
ATOM     95  N   GLU A  68     -16.463  34.225   9.799  1.00 35.03           N
ANISOU   95  N   GLU A  68     5367   3284   4658   2062  -1054   -547       N
ATOM     96  CA  GLU A  68     -16.549  35.149   8.671  1.00 38.66           C
ANISOU   96  CA  GLU A  68     6047   3568   5076   2128  -1185   -465       C
ATOM     97  CB  GLU A  68     -16.453  36.603   9.151  1.00 41.39           C
ANISOU   97  CB  GLU A  68     6730   3627   5368   2220  -1298   -493       C
ATOM     98  CG  GLU A  68     -17.619  37.031  10.033  1.00 46.36           C
ANISOU   98  CG  GLU A  68     7341   4269   6003   2541  -1323   -656       C
ATOM     99  CD  GLU A  68     -17.405  38.387  10.698  1.00 54.38           C
ANISOU   99  CD  GLU A  68     8722   4984   6956   2623  -1422   -696       C
ATOM    100  OE1 GLU A  68     -16.295  38.948  10.581  1.00 57.22           O
ANISOU  100  OE1 GLU A  68     9349   5133   7258   2378  -1459   -590       O
ATOM    101  OE2 GLU A  68     -18.353  38.887  11.342  1.00 51.58           O
ANISOU  101  OE2 GLU A  68     8393   4621   6583   2927  -1467   -836       O
ATOM    102  C   GLU A  68     -15.474  34.843   7.628  1.00 37.57           C
ANISOU  102  C   GLU A  68     5940   3425   4911   1869  -1186   -312       C
ATOM    103  O   GLU A  68     -15.742  34.857   6.426  1.00 37.57           O
ANISOU  103  O   GLU A  68     5944   3429   4900   1890  -1247   -240       O
ATOM    104  N   MET A  69     -14.265  34.551   8.093  1.00 33.99           N
ANISOU  104  N   MET A  69     5487   2995   4431   1628  -1116   -268       N
ATOM    105  CA  MET A  69     -13.174  34.200   7.193  1.00 30.98           C
ANISOU  105  CA  MET A  69     5098   2680   3992   1387  -1112   -139       C
ATOM    106  CB  MET A  69     -11.860  34.062   7.962  1.00 29.04           C
ANISOU  106  CB  MET A  69     4864   2489   3680   1157  -1039   -110       C
ATOM    107  CG  MET A  69     -10.676  33.711   7.083  1.00 29.44           C
ANISOU  107  CG  MET A  69     4882   2677   3628    921  -1037     11       C
ATOM    108  SD  MET A  69      -9.088  33.911   7.915  1.00 31.70           S
ANISOU  108  SD  MET A  69     5225   3056   3764    641   -981     61       S
ATOM    109  CE  MET A  69      -9.100  35.673   8.264  1.00 24.92           C
ANISOU  109  CE  MET A  69     4765   1887   2815    568  -1114     81       C
ATOM    110  C   MET A  69     -13.494  32.913   6.438  1.00 32.82           C
ANISOU  110  C   MET A  69     5074   3127   4267   1406  -1043   -123       C
ATOM    111  O   MET A  69     -13.260  32.810   5.234  1.00 33.94           O
ANISOU  111  O   MET A  69     5215   3302   4380   1329  -1087    -31       O
ATOM    112  N   VAL A  70     -14.038  31.931   7.148  1.00 33.71           N
ANISOU  112  N   VAL A  70     4987   3387   4435   1489   -940   -213       N
ATOM    113  CA  VAL A  70     -14.475  30.694   6.511  1.00 31.77           C
ANISOU  113  CA  VAL A  70     4544   3326   4201   1503   -880   -206       C
ATOM    114  CB  VAL A  70     -15.130  29.731   7.530  1.00 27.92           C
ANISOU  114  CB  VAL A  70     3891   2980   3737   1566   -788   -318       C
ATOM    115  CG1 VAL A  70     -15.818  28.581   6.817  1.00 29.48           C
ANISOU  115  CG1 VAL A  70     3944   3348   3909   1577   -749   -310       C
ATOM    116  CG2 VAL A  70     -14.084  29.212   8.509  1.00 26.25           C
ANISOU  116  CG2 VAL A  70     3659   2803   3514   1432   -707   -333       C
ATOM    117  C   VAL A  70     -15.431  30.985   5.344  1.00 32.28           C
ANISOU  117  C   VAL A  70     4611   3381   4274   1620   -956   -171       C
ATOM    118  O   VAL A  70     -15.280  30.436   4.252  1.00 30.81           O
ANISOU  118  O   VAL A  70     4364   3272   4070   1545   -952    -91       O
ATOM    119  N   GLN A  71     -16.401  31.866   5.574  1.00 34.04           N
ANISOU  119  N   GLN A  71     4906   3518   4511   1826  -1026   -232       N
ATOM    120  CA  GLN A  71     -17.359  32.234   4.524  1.00 38.24           C
ANISOU  120  CA  GLN A  71     5442   4053   5036   1958  -1103   -202       C
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ATOM    121  CB  GLN A  71     -18.548  33.001   5.113  1.00 42.52           C
ANISOU  121  CB  GLN A  71     6014   4574   5566   2239  -1161   -313       C
ATOM    122  CG  GLN A  71     -19.461  32.150   5.981  1.00 50.86           C
ANISOU  122  CG  GLN A  71     6834   5883   6606   2329  -1070   -435       C
ATOM    123  CD  GLN A  71     -19.976  30.917   5.256  1.00 52.73           C
ANISOU  123  CD  GLN A  71     6859   6370   6807   2250   -996   -398       C
ATOM    124  OE1 GLN A  71     -20.422  30.996   4.110  1.00 55.24           O
ANISOU  124  OE1 GLN A  71     7161   6725   7103   2289  -1034   -326       O
ATOM    125  NE2 GLN A  71     -19.923  29.769   5.927  1.00 47.67           N
ANISOU  125  NE2 GLN A  71     6075   5893   6143   2124   -895   -446       N
ATOM    126  C   GLN A  71     -16.712  33.045   3.402  1.00 41.01           C
ANISOU  126  C   GLN A  71     5983   4233   5367   1861  -1213    -78       C
ATOM    127  O   GLN A  71     -16.943  32.783   2.220  1.00 43.85           O
ANISOU  127  O   GLN A  71     6282   4655   5724   1832  -1235     -1       O
ATOM    128  N   ALA A  72     -15.904  34.029   3.779  1.00 38.62           N
ANISOU  128  N   ALA A  72     5918   3725   5031   1782  -1287    -57       N
ATOM    129  CA  ALA A  72     -15.241  34.885   2.807  1.00 40.58           C
ANISOU  129  CA  ALA A  72     6386   3810   5220   1641  -1414     60       C
ATOM    130  CB  ALA A  72     -14.401  35.941   3.512  1.00 41.84           C
ANISOU  130  CB  ALA A  72     6836   3758   5302   1529  -1486     67       C
ATOM    131  C   ALA A  72     -14.385  34.060   1.852  1.00 39.74           C
ANISOU  131  C   ALA A  72     6143   3864   5094   1401  -1370    162       C
ATOM    132  O   ALA A  72     -14.458  34.227   0.635  1.00 35.86           O
ANISOU  132  O   ALA A  72     5672   3364   4587   1347  -1446    247       O
ATOM    133  N   GLN A  73     -13.583  33.159   2.407  1.00 35.76           N
ANISOU  133  N   GLN A  73     5495   3513   4579   1271  -1253    148       N
ATOM    134  CA  GLN A  73     -12.705  32.324   1.594  1.00 37.56           C
ANISOU  134  CA  GLN A  73     5590   3919   4762   1082  -1210    226       C
ATOM    135  CB  GLN A  73     -11.722  31.556   2.481  1.00 34.15           C
ANISOU  135  CB  GLN A  73     5060   3629   4287    983  -1098    195       C
ATOM    136  CG  GLN A  73     -10.738  32.456   3.208  1.00 41.40           C
ANISOU  136  CG  GLN A  73     6151   4467   5112    834  -1137    213       C
ATOM    137  CD  GLN A  73      -9.890  33.275   2.253  1.00 50.02           C
ANISOU  137  CD  GLN A  73     7393   5542   6070    607  -1260    327       C
ATOM    138  OE1 GLN A  73      -9.866  34.505   2.320  1.00 50.79           O
ANISOU  138  OE1 GLN A  73     7752   5438   6109    543  -1378    356       O
ATOM    139  NE2 GLN A  73      -9.193  32.594   1.350  1.00 54.16           N
ANISOU  139  NE2 GLN A  73     7771   6283   6526    478  -1245    388       N
ATOM    140  C   GLN A  73     -13.492  31.367   0.706  1.00 37.51           C
ANISOU  140  C   GLN A  73     5395   4048   4810   1163  -1161    236       C
ATOM    141  O   GLN A  73     -13.093  31.081  -0.421  1.00 39.12           O
ANISOU  141  O   GLN A  73     5546   4336   4982   1042  -1184    318       O
ATOM    142  N   ALA A  74     -14.615  30.876   1.216  1.00 34.58           N
ANISOU  142  N   ALA A  74     4919   3720   4499   1346  -1096    152       N
ATOM    143  CA  ALA A  74     -15.449  29.958   0.456  1.00 34.83           C
ANISOU  143  CA  ALA A  74     4788   3899   4548   1397  -1044    163       C
ATOM    144  CB  ALA A  74     -16.565  29.406   1.331  1.00 35.95           C
ANISOU  144  CB  ALA A  74     4820   4135   4703   1551   -969     56       C
ATOM    145  C   ALA A  74     -16.021  30.666  -0.772  1.00 38.19           C
ANISOU  145  C   ALA A  74     5262   4264   4985   1429  -1145    240       C
ATOM    146  O   ALA A  74     -16.201  30.059  -1.826  1.00 33.50           O
ANISOU  146  O   ALA A  74     4563   3780   4387   1368  -1123    303       O
ATOM    147  N   ALA A  75     -16.285  31.961  -0.629  1.00 38.17           N
ANISOU  147  N   ALA A  75     5442   4075   4987   1527  -1261    235       N
ATOM    148  CA  ALA A  75     -16.893  32.743  -1.700  1.00 41.81           C
ANISOU  148  CA  ALA A  75     5986   4450   5449   1592  -1377    301       C
ATOM    149  CB  ALA A  75     -17.109  34.177  -1.249  1.00 38.36           C
ANISOU  149  CB  ALA A  75     5818   3766   4991   1734  -1515    271       C
ATOM    150  C   ALA A  75     -16.069  32.703  -2.986  1.00 45.27           C
ANISOU  150  C   ALA A  75     6435   4901   5865   1356  -1430    426       C
ATOM    151  O   ALA A  75     -16.605  32.876  -4.079  1.00 44.44           O
ANISOU  151  O   ALA A  75     6309   4805   5772   1367  -1485    494       O
ATOM    152  N   SER A  76     -14.767  32.468  -2.849  1.00 49.32           N
ANISOU  152  N   SER A  76     6963   5447   6329   1141  -1412    454       N
ATOM    153  CA  SER A  76     -13.872  32.415  -4.002  1.00 51.21           C
ANISOU  153  CA  SER A  76     7188   5755   6514    901  -1466    559       C
ATOM    154  CB  SER A  76     -12.407  32.449  -3.551  1.00 50.13           C
ANISOU  154  CB  SER A  76     7100   5675   6274    692  -1467    570       C
ATOM    155  OG  SER A  76     -12.024  31.228  -2.937  1.00 45.84           O
ANISOU  155  OG  SER A  76     6373   5313   5729    716  -1316    512       O
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ATOM    156  C   SER A  76     -14.124  31.178  -4.861  1.00 49.57           C
ANISOU  156  C   SER A  76     6743   5756   6336    877  -1366    586       C
ATOM    157  O   SER A  76     -13.829  31.173  -6.055  1.00 50.74           O
ANISOU  157  O   SER A  76     6852   5964   6463    730  -1419    672       O
ATOM    158  N   GLY A  77     -14.669  30.133  -4.247  1.00 45.42           N
ANISOU  158  N   GLY A  77     6076   5339   5842   1001  -1229    512       N
ATOM    159  CA  GLY A  77     -14.938  28.888  -4.944  1.00 38.87           C
ANISOU  159  CA  GLY A  77     5071   4687   5010    972  -1130    532       C
ATOM    160  C   GLY A  77     -13.777  27.908  -4.900  1.00 36.83           C
ANISOU  160  C   GLY A  77     4745   4566   4684    856  -1060    526       C
ATOM    161  O   GLY A  77     -13.878  26.796  -5.414  1.00 39.26           O
ANISOU  161  O   GLY A  77     4949   5003   4966    839   -981    533       O
ATOM    162  N   GLU A  78     -12.668  28.328  -4.295  1.00 38.46           N
ANISOU  162  N   GLU A  78     5023   4754   4836    782  -1094    512       N
ATOM    163  CA  GLU A  78     -11.509  27.458  -4.126  1.00 36.63           C
ANISOU  163  CA  GLU A  78     4721   4686   4510    714  -1032    494       C
ATOM    164  CB  GLU A  78     -10.431  28.159  -3.290  1.00 36.15           C
ANISOU  164  CB  GLU A  78     4745   4618   4373    633  -1072    481       C
ATOM    165  CG  GLU A  78      -9.044  27.536  -3.385  1.00 30.40           C
ANISOU  165  CG  GLU A  78     3931   4123   3498    539  -1044    485       C
ATOM    166  CD  GLU A  78      -8.638  26.782  -2.127  1.00 39.25           C
ANISOU  166  CD  GLU A  78     5029   5301   4584    645   -940    402       C
ATOM    167  OE1 GLU A  78      -9.398  26.799  -1.136  1.00 34.58           O
ANISOU  167  OE1 GLU A  78     4489   4561   4087    758   -894    342       O
ATOM    168  OE2 GLU A  78      -7.546  26.179  -2.129  1.00 45.23           O
ANISOU  168  OE2 GLU A  78     5710   6271   5204    621   -910    393       O
ATOM    169  C   GLU A  78     -11.973  26.172  -3.456  1.00 35.40           C
ANISOU  169  C   GLU A  78     4505   4582   4361    845   -904    417       C
ATOM    170  O   GLU A  78     -12.694  26.213  -2.461  1.00 34.38           O
ANISOU  170  O   GLU A  78     4411   4369   4285    953   -867    352       O
ATOM    171  N   GLU A  79     -11.577  25.034  -4.016  1.00 30.51           N
ANISOU  171  N   GLU A  79     3816   4105   3672    831   -848    422       N
ATOM    172  CA  GLU A  79     -12.114  23.747  -3.585  1.00 29.61           C
ANISOU  172  CA  GLU A  79     3699   4017   3533    927   -747    363       C
ATOM    173  CB  GLU A  79     -11.428  22.594  -4.325  1.00 30.39           C
ANISOU  173  CB  GLU A  79     3771   4256   3521    915   -710    373       C
ATOM    174  CG  GLU A  79     -12.009  21.241  -3.976  1.00 33.21           C
ANISOU  174  CG  GLU A  79     4194   4606   3818    991   -625    320       C
ATOM    175  CD  GLU A  79     -11.332  20.091  -4.705  1.00 39.32           C
ANISOU  175  CD  GLU A  79     4992   5487   4460   1013   -599    322       C
ATOM    176  OE1 GLU A  79     -10.485  20.351  -5.588  1.00 36.90           O
ANISOU  176  OE1 GLU A  79     4606   5297   4117    970   -644    363       O
ATOM    177  OE2 GLU A  79     -11.654  18.925  -4.384  1.00 34.92           O
ANISOU  177  OE2 GLU A  79     4550   4903   3815   1070   -544    277       O
ATOM    178  C   GLU A  79     -12.032  23.514  -2.077  1.00 28.43           C
ANISOU  178  C   GLU A  79     3600   3822   3377   1010   -698    274       C
ATOM    179  O   GLU A  79     -13.025  23.167  -1.443  1.00 27.30           O
ANISOU  179  O   GLU A  79     3478   3632   3263   1069   -655    223       O
ATOM    180  N   LEU A  80     -10.851  23.693  -1.502  1.00 24.06           N
ANISOU  180  N   LEU A  80     3056   3317   2768    997   -705    256       N
ATOM    181  CA  LEU A  80     -10.686  23.408  -0.078  1.00 23.51           C
ANISOU  181  CA  LEU A  80     3025   3218   2690   1064   -653    176       C
ATOM    182  CB  LEU A  80      -9.209  23.430   0.322  1.00 25.50           C
ANISOU  182  CB  LEU A  80     3261   3593   2836   1042   -652    172       C
ATOM    183  CG  LEU A  80      -8.896  23.050   1.774  1.00 26.57           C
ANISOU  183  CG  LEU A  80     3427   3719   2950   1106   -592     96       C
ATOM    184  CD1 LEU A  80      -9.710  21.832   2.213  1.00 27.20           C
ANISOU  184  CD1 LEU A  80     3559   3744   3031   1198   -535     32       C
ATOM    185  CD2 LEU A  80      -7.399  22.811   1.978  1.00 25.60           C
ANISOU  185  CD2 LEU A  80     3263   3789   2675   1108   -580     98       C
ATOM    186  C   LEU A  80     -11.506  24.376   0.776  1.00 26.38           C
ANISOU  186  C   LEU A  80     3420   3439   3163   1084   -672    143       C
ATOM    187  O   LEU A  80     -12.194  23.960   1.706  1.00 25.48           O
ANISOU  187  O   LEU A  80     3318   3288   3075   1147   -625     71       O
ATOM    188  N   ALA A  81     -11.443  25.664   0.441  1.00 28.54           N
ANISOU  188  N   ALA A  81     3724   3639   3481   1028   -753    193       N
ATOM    189  CA  ALA A  81     -12.185  26.688   1.173  1.00 27.36           C
ANISOU  189  CA  ALA A  81     3637   3340   3417   1080   -789    158       C
ATOM    190  CB  ALA A  81     -11.926  28.064   0.574  1.00 26.10           C
ANISOU  190  CB  ALA A  81     3573   3080   3264   1003   -903    229       C
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ATOM    191  C   ALA A  81     -13.680  26.390   1.194  1.00 31.59           C
ANISOU  191  C   ALA A  81     4133   3858   4010   1191   -766    115       C
ATOM    192  O   ALA A  81     -14.352  26.580   2.213  1.00 25.18           O
ANISOU  192  O   ALA A  81     3326   3006   3234   1276   -749     35       O
ATOM    193  N   VAL A  82     -14.197  25.924   0.061  1.00 31.06           N
ANISOU  193  N   VAL A  82     4015   3856   3933   1178   -766    166       N
ATOM    194  CA  VAL A  82     -15.606  25.578  -0.050  1.00 27.70           C
ANISOU  194  CA  VAL A  82     3532   3478   3514   1251   -739    140       C
ATOM    195  CB  VAL A  82     -16.004  25.260  -1.514  1.00 27.35           C
ANISOU  195  CB  VAL A  82     3438   3504   3451   1198   -746    227       C
ATOM    196  CG1 VAL A  82     -17.402  24.662  -1.569  1.00 27.80           C
ANISOU  196  CG1 VAL A  82     3424   3676   3461   1237   -696    203       C
ATOM    197  CG2 VAL A  82     -15.914  26.517  -2.377  1.00 24.57           C
ANISOU  197  CG2 VAL A  82     3119   3060   3157   1188   -850    303       C
ATOM    198  C   VAL A  82     -15.926  24.385   0.840  1.00 24.87           C
ANISOU  198  C   VAL A  82     3151   3206   3092   1257   -653     60       C
ATOM    199  O   VAL A  82     -16.954  24.364   1.511  1.00 29.51           O
ANISOU  199  O   VAL A  82     3702   3841   3670   1316   -638     -7       O
ATOM    200  N   ALA A  83     -15.036  23.394   0.850  1.00 23.02           N
ANISOU  200  N   ALA A  83     2948   3007   2793   1198   -608     64       N
ATOM    201  CA  ALA A  83     -15.231  22.204   1.679  1.00 25.13           C
ANISOU  201  CA  ALA A  83     3249   3324   2975   1189   -545     -6       C
ATOM    202  CB  ALA A  83     -14.197  21.121   1.336  1.00 22.47           C
ANISOU  202  CB  ALA A  83     2981   3013   2542   1162   -515     14       C
ATOM    203  C   ALA A  83     -15.185  22.527   3.167  1.00 26.73           C
ANISOU  203  C   ALA A  83     3455   3487   3213   1226   -537    -95       C
ATOM    204  O   ALA A  83     -15.936  21.949   3.953  1.00 25.53           O
ANISOU  204  O   ALA A  83     3301   3387   3011   1215   -510   -166       O
ATOM    205  N   VAL A  84     -14.302  23.440   3.558  1.00 25.28           N
ANISOU  205  N   VAL A  84     3281   3227   3096   1243   -563    -89       N
ATOM    206  CA  VAL A  84     -14.217  23.826   4.960  1.00 23.99           C
ANISOU  206  CA  VAL A  84     3121   3021   2973   1267   -551   -169       C
ATOM    207  CB  VAL A  84     -13.116  24.882   5.227  1.00 24.57           C
ANISOU  207  CB  VAL A  84     3232   3016   3087   1246   -579   -138       C
ATOM    208  CG1 VAL A  84     -13.289  25.490   6.624  1.00 22.78           C
ANISOU  208  CG1 VAL A  84     3013   2727   2915   1272   -570   -219       C
ATOM    209  CG2 VAL A  84     -11.724  24.272   5.062  1.00 23.84           C
ANISOU  209  CG2 VAL A  84     3150   2997   2909   1191   -550    -98       C
ATOM    210  C   VAL A  84     -15.568  24.364   5.426  1.00 26.67           C
ANISOU  210  C   VAL A  84     3411   3368   3353   1334   -571   -233       C
ATOM    211  O   VAL A  84     -16.099  23.932   6.446  1.00 28.18           O
ANISOU  211  O   VAL A  84     3571   3615   3519   1333   -543   -321       O
ATOM    212  N   ALA A  85     -16.125  25.300   4.664  1.00 30.62           N
ANISOU  212  N   ALA A  85     3903   3833   3897   1397   -629   -194       N
ATOM    213  CA  ALA A  85     -17.397  25.914   5.034  1.00 30.36           C
ANISOU  213  CA  ALA A  85     3817   3841   3880   1513   -660   -261       C
ATOM    214  CB  ALA A  85     -17.833  26.929   3.980  1.00 30.93           C
ANISOU  214  CB  ALA A  85     3911   3854   3985   1602   -737   -198       C
ATOM    215  C   ALA A  85     -18.476  24.856   5.237  1.00 29.68           C
ANISOU  215  C   ALA A  85     3635   3951   3690   1484   -615   -316       C
ATOM    216  O   ALA A  85     -19.214  24.885   6.219  1.00 32.76           O
ANISOU  216  O   ALA A  85     3959   4438   4048   1526   -611   -417       O
ATOM    217  N   GLU A  86     -18.548  23.907   4.310  1.00 38.49           N
ANISOU  217  N   GLU A  86     2979   7476   4169   1653   -814  -1739       N
ATOM    218  CA  GLU A  86     -19.559  22.860   4.372  1.00 41.16           C
ANISOU  218  CA  GLU A  86     3056   7789   4793   1593   -961  -1994       C
ATOM    219  CB  GLU A  86     -19.570  22.058   3.067  1.00 52.40           C
ANISOU  219  CB  GLU A  86     4215   9556   6139   1675  -1172  -2390       C
ATOM    220  CG  GLU A  86     -20.664  21.012   2.994  1.00 67.50           C
ANISOU  220  CG  GLU A  86     5814  11466   8367   1618  -1337  -2700       C
ATOM    221  CD  GLU A  86     -20.737  20.344   1.636  1.00 82.74           C
ANISOU  221  CD  GLU A  86     7469  13786  10182   1728  -1560  -3126       C
ATOM    222  OE1 GLU A  86     -20.069  20.827   0.697  1.00 86.57           O
ANISOU  222  OE1 GLU A  86     8013  14604  10277   1890  -1575  -3131       O
ATOM    223  OE2 GLU A  86     -21.465  19.337   1.507  1.00 90.33           O
ANISOU  223  OE2 GLU A  86     8145  14726  11450   1659  -1715  -3462       O
ATOM    224  C   GLU A  86     -19.327  21.933   5.566  1.00 37.70           C
ANISOU  224  C   GLU A  86     2641   6921   4760   1375   -929  -2033       C
ATOM    225  O   GLU A  86     -20.276  21.490   6.208  1.00 40.52           O
ANISOU  225  O   GLU A  86     2884   7109   5405   1305   -933  -2036       O
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ATOM    226  N   ARG A  87     -18.060  21.664   5.869  1.00 32.00           N
ANISOU  226  N   ARG A  87     2065   6034   4061   1283   -884  -2041       N
ATOM    227  CA  ARG A  87     -17.700  20.684   6.891  1.00 30.56           C
ANISOU  227  CA  ARG A  87     1891   5481   4240   1105   -861  -2089       C
ATOM    228  CB  ARG A  87     -16.314  20.081   6.605  1.00 33.33           C
ANISOU  228  CB  ARG A  87     2281   5801   4582   1049   -900  -2256       C
ATOM    229  CG  ARG A  87     -16.201  19.315   5.289  1.00 44.21           C
ANISOU  229  CG  ARG A  87     3427   7452   5920   1108  -1083  -2642       C
ATOM    230  CD  ARG A  87     -17.151  18.134   5.242  1.00 51.41           C
ANISOU  230  CD  ARG A  87     4048   8280   7206   1040  -1212  -2928       C
ATOM    231  NE  ARG A  87     -16.980  17.335   4.030  1.00 55.35           N
ANISOU  231  NE  ARG A  87     4315   9025   7690   1091  -1398  -3352       N
ATOM    232  CZ  ARG A  87     -16.319  16.183   3.983  1.00 51.90           C
ANISOU  232  CZ  ARG A  87     3779   8429   7511    998  -1464  -3623       C
ATOM    233  NH1 ARG A  87     -15.764  15.690   5.083  1.00 44.98           N
ANISOU  233  NH1 ARG A  87     3015   7154   6921    855  -1356  -3487       N
ATOM    234  NH2 ARG A  87     -16.219  15.520   2.839  1.00 54.00           N
ANISOU  234  NH2 ARG A  87     3828   8946   7744   1063  -1638  -4035       N
ATOM    235  C   ARG A  87     -17.727  21.214   8.327  1.00 32.89           C
ANISOU  235  C   ARG A  87     2403   5467   4624   1036   -684  -1756       C
ATOM    236  O   ARG A  87     -17.613  20.433   9.274  1.00 31.14           O
ANISOU  236  O   ARG A  87     2178   4954   4699    917   -648  -1747       O
ATOM    237  N   VAL A  88     -17.855  22.526   8.506  1.00 31.55           N
ANISOU  237  N   VAL A  88     2420   5362   4204   1123   -566  -1484       N
ATOM    238  CA  VAL A  88     -17.858  23.076   9.865  1.00 27.71           C
ANISOU  238  CA  VAL A  88     2142   4607   3780   1073   -404  -1203       C
ATOM    239  CB  VAL A  88     -16.683  24.066  10.116  1.00 30.22           C
ANISOU  239  CB  VAL A  88     2728   4887   3869   1080   -291  -1035       C
ATOM    240  CG1 VAL A  88     -15.336  23.368   9.941  1.00 25.50           C
ANISOU  240  CG1 VAL A  88     2145   4245   3299    997   -345  -1199       C
ATOM    241  CG2 VAL A  88     -16.795  25.287   9.213  1.00 32.27           C
ANISOU  241  CG2 VAL A  88     3047   5395   3820   1222   -248   -923       C
ATOM    242  C   VAL A  88     -19.171  23.760  10.236  1.00 29.98           C
ANISOU  242  C   VAL A  88     2419   4906   4065   1148   -332  -1013       C
ATOM    243  O   VAL A  88     -19.262  24.398  11.279  1.00 29.50           O
ANISOU  243  O   VAL A  88     2535   4669   4004   1142   -192   -779       O
ATOM    244  N   GLN A  89     -20.190  23.611   9.396  1.00 25.35           N
ANISOU  244  N   GLN A  89     1615   4541   3477   1228   -434  -1132       N
ATOM    245  CA  GLN A  89     -21.437  24.341   9.613  1.00 29.24           C
ANISOU  245  CA  GLN A  89     2085   5088   3938   1323   -369   -950       C
ATOM    246  CB  GLN A  89     -22.317  24.343   8.352  1.00 32.40           C
ANISOU  246  CB  GLN A  89     2245   5839   4228   1452   -509  -1107       C
ATOM    247  CG  GLN A  89     -22.731  22.978   7.847  1.00 37.84           C
ANISOU  247  CG  GLN A  89     2619   6581   5177   1380   -691  -1456       C
ATOM    248  CD  GLN A  89     -23.452  23.048   6.508  1.00 43.54           C
ANISOU  248  CD  GLN A  89     3103   7715   5726   1532   -853  -1653       C
ATOM    249  OE1 GLN A  89     -24.246  23.958   6.261  1.00 43.59           O
ANISOU  249  OE1 GLN A  89     3108   7912   5542   1682   -818  -1485       O
ATOM    250  NE2 GLN A  89     -23.180  22.082   5.639  1.00 47.24           N
ANISOU  250  NE2 GLN A  89     3361   8333   6255   1509  -1034  -2018       N
ATOM    251  C   GLN A  89     -22.229  23.885  10.845  1.00 33.72           C
ANISOU  251  C   GLN A  89     2614   5386   4812   1240   -291   -844       C
ATOM    252  O   GLN A  89     -23.075  24.623  11.345  1.00 34.37           O
ANISOU  252  O   GLN A  89     2747   5450   4862   1311   -188   -633       O
ATOM    253  N   GLU A  90     -21.953  22.683  11.344  1.00 33.86           N
ANISOU  253  N   GLU A  90     2539   5194   5131   1104   -323   -970       N
ATOM    254  CA  GLU A  90     -22.653  22.195  12.532  1.00 33.03           C
ANISOU  254  CA  GLU A  90     2390   4833   5328   1039   -223   -836       C
ATOM    255  CB  GLU A  90     -22.954  20.699  12.421  1.00 36.94           C
ANISOU  255  CB  GLU A  90     2603   5209   6224    925   -317  -1068       C
ATOM    256  CG  GLU A  90     -23.727  20.296  11.182  1.00 48.15           C
ANISOU  256  CG  GLU A  90     3720   6867   7707    953   -494  -1357       C
ATOM    257  CD  GLU A  90     -24.120  18.830  11.199  1.00 57.22           C
ANISOU  257  CD  GLU A  90     4571   7841   9328    825   -567  -1593       C
ATOM    258  OE1 GLU A  90     -23.930  18.177  12.247  1.00 60.46           O
ANISOU  258  OE1 GLU A  90     5013   7933  10027    729   -449  -1466       O
ATOM    259  OE2 GLU A  90     -24.622  18.333  10.168  1.00 57.88           O
ANISOU  259  OE2 GLU A  90     4380   8109   9504    830   -738  -1906       O
ATOM    260  C   GLU A  90     -21.879  22.456  13.825  1.00 34.22           C
ANISOU  260  C   GLU A  90     2804   4743   5455   1001    -68   -612       C
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ATOM    261  O   GLU A  90     -22.396  22.235  14.921  1.00 35.45           O
ANISOU  261  O   GLU A  90     2967   4710   5792    984     47   -442       O
ATOM    262  N   LYS A  91     -20.642  22.925  13.700  1.00 30.40           N
ANISOU  262  N   LYS A  91     2523   4283   4744   1000    -66   -614       N
ATOM    263  CA  LYS A  91     -19.754  23.037  14.857  1.00 28.75           C
ANISOU  263  CA  LYS A  91     2533   3873   4517    959     44   -468       C
ATOM    264  CB  LYS A  91     -18.304  23.195  14.397  1.00 22.64           C
ANISOU  264  CB  LYS A  91     1887   3149   3565    927     -7   -574       C
ATOM    265  CG  LYS A  91     -17.822  22.069  13.498  1.00 22.47           C
ANISOU  265  CG  LYS A  91     1683   3180   3675    862   -154   -846       C
ATOM    266  CD  LYS A  91     -17.734  20.756  14.266  1.00 30.88           C
ANISOU  266  CD  LYS A  91     2645   4010   5077    771   -149   -883       C
ATOM    267  CE  LYS A  91     -17.294  19.617  13.354  1.00 34.03           C
ANISOU  267  CE  LYS A  91     2850   4438   5643    708   -293  -1181       C
ATOM    268  NZ  LYS A  91     -17.042  18.367  14.115  1.00 34.19           N
ANISOU  268  NZ  LYS A  91     2787   4195   6007    627   -266  -1193       N
ATOM    269  C   LYS A  91     -20.129  24.178  15.807  1.00 32.81           C
ANISOU  269  C   LYS A  91     3248   4335   4885   1038    199   -207       C
ATOM    270  O   LYS A  91     -20.556  25.248  15.372  1.00 28.89           O
ANISOU  270  O   LYS A  91     2812   3971   4194   1127    229   -133       O
ATOM    271  N   ASP A  92     -19.957  23.942  17.105  1.00 33.28           N
ANISOU  271  N   ASP A  92     3405   4207   5034   1020    302    -68       N
ATOM    272  CA  ASP A  92     -20.226  24.971  18.105  1.00 34.24           C
ANISOU  272  CA  ASP A  92     3720   4280   5011   1102    446    146       C
ATOM    273  CB  ASP A  92     -20.616  24.348  19.452  1.00 34.06           C
ANISOU  273  CB  ASP A  92     3685   4094   5160   1113    555    302       C
ATOM    274  CG  ASP A  92     -19.489  23.545  20.082  1.00 38.34           C
ANISOU  274  CG  ASP A  92     4280   4522   5765   1054    543    273       C
ATOM    275  OD1 ASP A  92     -18.321  23.707  19.674  1.00 39.65           O
ANISOU  275  OD1 ASP A  92     4541   4724   5800   1009    467    146       O
ATOM    276  OD2 ASP A  92     -19.773  22.750  21.001  1.00 46.09           O
ANISOU  276  OD2 ASP A  92     5200   5380   6930   1066    621    396       O
ATOM    277  C   ASP A  92     -19.029  25.899  18.260  1.00 35.36           C
ANISOU  277  C   ASP A  92     4101   4425   4907   1107    470    145       C
ATOM    278  O   ASP A  92     -17.991  25.693  17.634  1.00 31.89           O
ANISOU  278  O   ASP A  92     3674   4024   4418   1044    383      1       O
ATOM    279  N   SER A  93     -19.177  26.920  19.096  1.00 30.13           N
ANISOU  279  N   SER A  93     3618   3721   4110   1181    590    290       N
ATOM    280  CA  SER A  93     -18.111  27.893  19.308  1.00 30.40           C
ANISOU  280  CA  SER A  93     3865   3736   3950   1180    622    272       C
ATOM    281  CB  SER A  93     -18.597  29.023  20.223  1.00 36.47           C
ANISOU  281  CB  SER A  93     4794   4452   4609   1279    760    414       C
ATOM    282  OG  SER A  93     -19.538  29.843  19.550  1.00 42.72           O
ANISOU  282  OG  SER A  93     5561   5316   5353   1357    804    489       O
ATOM    283  C   SER A  93     -16.872  27.246  19.909  1.00 29.42           C
ANISOU  283  C   SER A  93     3797   3539   3844   1107    580    191       C
ATOM    284  O   SER A  93     -15.746  27.650  19.619  1.00 31.89           O
ANISOU  284  O   SER A  93     4202   3863   4052   1058    545     93       O
ATOM    285  N   GLY A  94     -17.088  26.252  20.760  1.00 23.92           N
ANISOU  285  N   GLY A  94     3033   2767   3289   1109    595    248       N
ATOM    286  CA  GLY A  94     -15.994  25.557  21.408  1.00 27.96           C
ANISOU  286  CA  GLY A  94     3582   3222   3820   1067    562    202       C
ATOM    287  C   GLY A  94     -15.049  24.953  20.390  1.00 27.99           C
ANISOU  287  C   GLY A  94     3506   3257   3872    968    436     21       C
ATOM    288  O   GLY A  94     -13.832  24.996  20.556  1.00 24.50           O
ANISOU  288  O   GLY A  94     3150   2813   3346    927    397    -60       O
ATOM    289  N   PHE A  95     -15.616  24.390  19.330  1.00 26.11           N
ANISOU  289  N   PHE A  95     3092   3064   3763    932    368    -58       N
ATOM    290  CA  PHE A  95     -14.819  23.796  18.263  1.00 24.26           C
ANISOU  290  CA  PHE A  95     2764   2887   3566    854    246   -251       C
ATOM    291  CB  PHE A  95     -15.744  23.208  17.195  1.00 26.57           C
ANISOU  291  CB  PHE A  95     2840   3253   4002    843    171   -349       C
ATOM    292  CG  PHE A  95     -15.035  22.721  15.963  1.00 24.11           C
ANISOU  292  CG  PHE A  95     2426   3047   3688    790     43   -572       C
ATOM    293  CD1 PHE A  95     -14.542  21.426  15.894  1.00 24.40           C
ANISOU  293  CD1 PHE A  95     2336   3002   3934    724    -30   -709       C
ATOM    294  CE1 PHE A  95     -13.902  20.970  14.754  1.00 26.42           C
ANISOU  294  CE1 PHE A  95     2492   3366   4180    690   -147   -935       C
ATOM    295  CZ  PHE A  95     -13.751  21.811  13.670  1.00 30.78           C
ANISOU  295  CZ  PHE A  95     3070   4131   4492    730   -186  -1003       C
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ATOM    296  CE2 PHE A  95     -14.243  23.103  13.723  1.00 27.11           C
ANISOU  296  CE2 PHE A  95     2730   3741   3828    799   -102   -838       C
ATOM    297  CD2 PHE A  95     -14.882  23.551  14.866  1.00 25.25           C
ANISOU  297  CD2 PHE A  95     2595   3376   3624    823      8   -635       C
ATOM    298  C   PHE A  95     -13.866  24.820  17.649  1.00 24.52           C
ANISOU  298  C   PHE A  95     2929   3014   3374    841    229   -321       C
ATOM    299  O   PHE A  95     -12.676  24.551  17.491  1.00 26.01           O
ANISOU  299  O   PHE A  95     3143   3205   3536    786    176   -428       O
ATOM    300  N   PHE A  96     -14.389  26.000  17.315  1.00 21.40           N
ANISOU  300  N   PHE A  96     2609   2687   2836    898    290   -245       N
ATOM    301  CA  PHE A  96     -13.576  27.031  16.678  1.00 24.97           C
ANISOU  301  CA  PHE A  96     3169   3207   3111    892    306   -277       C
ATOM    302  CB  PHE A  96     -14.448  28.167  16.124  1.00 27.38           C
ANISOU  302  CB  PHE A  96     3506   3590   3307    980    380   -166       C
ATOM    303  CG  PHE A  96     -15.321  27.752  14.971  1.00 29.49           C
ANISOU  303  CG  PHE A  96     3591   4021   3593   1026    308   -207       C
ATOM    304  CD1 PHE A  96     -14.794  27.630  13.696  1.00 28.31           C
ANISOU  304  CD1 PHE A  96     3361   4037   3360   1025    232   -322       C
ATOM    305  CE1 PHE A  96     -15.590  27.244  12.633  1.00 28.48           C
ANISOU  305  CE1 PHE A  96     3200   4250   3373   1087    148   -393       C
ATOM    306  CZ  PHE A  96     -16.931  26.973  12.836  1.00 28.25           C
ANISOU  306  CZ  PHE A  96     3057   4229   3448   1132    137   -351       C
ATOM    307  CE2 PHE A  96     -17.473  27.093  14.103  1.00 27.40           C
ANISOU  307  CE2 PHE A  96     3028   3938   3445   1124    227   -214       C
ATOM    308  CD2 PHE A  96     -16.667  27.478  15.164  1.00 27.33           C
ANISOU  308  CD2 PHE A  96     3212   3757   3415   1079    313   -142       C
ATOM    309  C   PHE A  96     -12.503  27.573  17.627  1.00 27.67           C
ANISOU  309  C   PHE A  96     3681   3447   3384    859    355   -272       C
ATOM    310  O   PHE A  96     -11.410  27.927  17.198  1.00 24.12           O
ANISOU  310  O   PHE A  96     3278   3023   2865    804    336   -348       O
ATOM    311  N   LEU A  97     -12.812  27.619  18.918  1.00 27.46           N
ANISOU  311  N   LEU A  97     3734   3325   3375    889    411   -182       N
ATOM    312  CA  LEU A  97     -11.860  28.124  19.905  1.00 24.92           C
ANISOU  312  CA  LEU A  97     3556   2943   2968    859    431   -193       C
ATOM    313  CB  LEU A  97     -12.524  28.279  21.277  1.00 30.65           C
ANISOU  313  CB  LEU A  97     4360   3611   3675    945    510    -82       C
ATOM    314  CG  LEU A  97     -13.309  29.580  21.440  1.00 41.20           C
ANISOU  314  CG  LEU A  97     5801   4922   4930   1017    619      5       C
ATOM    315  CD1 LEU A  97     -14.180  29.557  22.690  1.00 46.19           C
ANISOU  315  CD1 LEU A  97     6477   5524   5548   1128    703    121       C
ATOM    316  CD2 LEU A  97     -12.356  30.768  21.457  1.00 39.67           C
ANISOU  316  CD2 LEU A  97     5736   4689   4648    970    640    -72       C
ATOM    317  C   LEU A  97     -10.583  27.283  20.006  1.00 22.85           C
ANISOU  317  C   LEU A  97     3255   2688   2738    779    333   -308       C
ATOM    318  O   LEU A  97      -9.506  27.822  20.243  1.00 24.44           O
ANISOU  318  O   LEU A  97     3532   2884   2868    728    316   -370       O
ATOM    319  N   ARG A  98     -10.698  25.968  19.828  1.00 25.04           N
ANISOU  319  N   ARG A  98     3400   2967   3148    771    272   -339       N
ATOM    320  CA  ARG A  98      -9.509  25.109  19.796  1.00 21.91           C
ANISOU  320  CA  ARG A  98     2951   2576   2798    708    183   -449       C
ATOM    321  CB  ARG A  98      -9.851  23.694  19.318  1.00 23.26           C
ANISOU  321  CB  ARG A  98     2949   2724   3165    701    126   -496       C
ATOM    322  CG  ARG A  98     -10.854  22.949  20.160  1.00 31.70           C
ANISOU  322  CG  ARG A  98     3958   3701   4386    766    181   -362       C
ATOM    323  CD  ARG A  98     -11.361  21.742  19.387  1.00 37.28           C
ANISOU  323  CD  ARG A  98     4461   4370   5336    739    127   -437       C
ATOM    324  NE  ARG A  98     -11.948  20.733  20.259  1.00 46.84           N
ANISOU  324  NE  ARG A  98     5585   5452   6761    776    181   -307       N
ATOM    325  CZ  ARG A  98     -13.252  20.572  20.448  1.00 51.95           C
ANISOU  325  CZ  ARG A  98     6148   6048   7543    808    248   -192       C
ATOM    326  NH1 ARG A  98     -14.119  21.356  19.826  1.00 57.85           N
ANISOU  326  NH1 ARG A  98     6889   6877   8214    814    252   -201       N
ATOM    327  NH2 ARG A  98     -13.689  19.619  21.258  1.00 50.90           N
ANISOU  327  NH2 ARG A  98     5927   5784   7631    843    320    -52       N
ATOM    328  C   ARG A  98      -8.461  25.681  18.852  1.00 23.73           C
ANISOU  328  C   ARG A  98     3193   2878   2947    629    136   -557       C
ATOM    329  O   ARG A  98      -7.296  25.805  19.200  1.00 22.37           O
ANISOU  329  O   ARG A  98     3057   2710   2734    581    102   -612       O
ATOM    330  N   PHE A  99      -8.887  26.017  17.640  1.00 20.69           N
ANISOU  330  N   PHE A  99     2708   2725   2427    415    245      1       N
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ATOM    331  CA  PHE A  99      -7.968  26.493  16.617  1.00 17.84           C
ANISOU  331  CA  PHE A  99     2438   2298   2043    383    203     23       C
ATOM    332  CB  PHE A  99      -8.636  26.421  15.241  1.00 17.74           C
ANISOU  332  CB  PHE A  99     2403   2301   2036    415    165     -3       C
ATOM    333  CG  PHE A  99      -9.043  25.025  14.855  1.00 18.65           C
ANISOU  333  CG  PHE A  99     2399   2474   2212    373    195     -9       C
ATOM    334  CD1 PHE A  99      -8.181  24.218  14.133  1.00 16.98           C
ANISOU  334  CD1 PHE A  99     2184   2245   2022    297    203     20       C
ATOM    335  CE1 PHE A  99      -8.534  22.927  13.798  1.00 18.28           C
ANISOU  335  CE1 PHE A  99     2256   2455   2234    261    221     17       C
ATOM    336  CZ  PHE A  99      -9.759  22.428  14.187  1.00 19.24           C
ANISOU  336  CZ  PHE A  99     2279   2643   2386    287    237    -15       C
ATOM    337  CE2 PHE A  99     -10.627  23.218  14.918  1.00 21.45           C
ANISOU  337  CE2 PHE A  99     2548   2953   2648    359    237    -45       C
ATOM    338  CD2 PHE A  99     -10.265  24.510  15.253  1.00 22.48           C
ANISOU  338  CD2 PHE A  99     2779   3037   2727    408    215    -43       C
ATOM    339  C   PHE A  99      -7.487  27.905  16.913  1.00 18.89           C
ANISOU  339  C   PHE A  99     2704   2362   2112    419    162     34       C
ATOM    340  O   PHE A  99      -6.307  28.216  16.761  1.00 20.86           O
ANISOU  340  O   PHE A  99     3032   2553   2343    357    152     70       O
ATOM    341  N   ILE A 100      -8.415  28.754  17.328  1.00 19.63           N
ANISOU  341  N   ILE A 100     2824   2467   2168    518    133      1       N
ATOM    342  CA  ILE A 100      -8.096  30.126  17.695  1.00 22.64           C
ANISOU  342  CA  ILE A 100     3343   2779   2479    564     84      7       C
ATOM    343  CB  ILE A 100      -9.375  30.892  18.085  1.00 23.80           C
ANISOU  343  CB  ILE A 100     3499   2960   2583    697     51    -41       C
ATOM    344  CG1 ILE A 100     -10.218  31.161  16.834  1.00 24.34           C
ANISOU  344  CG1 ILE A 100     3566   3047   2636    760      2    -84       C
ATOM    345  CD1 ILE A 100     -11.631  31.597  17.128  1.00 28.36           C
ANISOU  345  CD1 ILE A 100     4039   3623   3115    893    -22   -142       C
ATOM    346  CG2 ILE A 100      -9.035  32.193  18.793  1.00 26.87           C
ANISOU  346  CG2 ILE A 100     4034   3280   2897    748      3    -31       C
ATOM    347  C   ILE A 100      -7.070  30.185  18.833  1.00 18.72           C
ANISOU  347  C   ILE A 100     2890   2242   1980    509    111     48       C
ATOM    348  O   ILE A 100      -6.069  30.893  18.735  1.00 21.51           O
ANISOU  348  O   ILE A 100     3355   2521   2298    467     79     79       O
ATOM    349  N   ARG A 101      -7.304  29.429  19.900  1.00 19.27           N
ANISOU  349  N   ARG A 101     2875   2359   2088    505    169     46       N
ATOM    350  CA  ARG A 101      -6.400  29.471  21.047  1.00 18.93           C
ANISOU  350  CA  ARG A 101     2875   2275   2042    465    192     78       C
ATOM    351  CB  ARG A 101      -7.029  28.820  22.283  1.00 20.30           C
ANISOU  351  CB  ARG A 101     2965   2504   2243    495    251     64       C
ATOM    352  CG  ARG A 101      -8.277  29.548  22.772  1.00 21.39           C
ANISOU  352  CG  ARG A 101     3106   2680   2342    621    232     28       C
ATOM    353  CD  ARG A 101      -8.841  28.923  24.026  1.00 21.22           C
ANISOU  353  CD  ARG A 101     3004   2716   2341    645    296     19       C
ATOM    354  NE  ARG A 101      -7.974  29.143  25.178  1.00 19.45           N
ANISOU  354  NE  ARG A 101     2855   2430   2105    629    308     49       N
ATOM    355  CZ  ARG A 101      -7.220  28.204  25.741  1.00 25.27           C
ANISOU  355  CZ  ARG A 101     3560   3156   2885    545    361     71       C
ATOM    356  NH1 ARG A 101      -7.220  26.963  25.261  1.00 21.91           N
ANISOU  356  NH1 ARG A 101     3035   2777   2514    467    406     69       N
ATOM    357  NH2 ARG A 101      -6.466  28.508  26.787  1.00 25.15           N
ANISOU  357  NH2 ARG A 101     3622   3080   2855    542    364     92       N
ATOM    358  C   ARG A 101      -5.053  28.845  20.708  1.00 23.12           C
ANISOU  358  C   ARG A 101     3407   2775   2602    347    213    115       C
ATOM    359  O   ARG A 101      -4.006  29.346  21.127  1.00 19.24           O
ANISOU  359  O   ARG A 101     2998   2222   2088    306    198    146       O
ATOM    360  N   ALA A 102      -5.072  27.763  19.933  1.00 17.88           N
ANISOU  360  N   ALA A 102     2653   2156  1985    296    242    113       N
ATOM    361  CA  ALA A 102      -3.825  27.128  19.519  1.00 19.13           C
ANISOU  361  CA  ALA A 102     2808   2299   2164    196    258    144       C
ATOM    362  CB  ALA A 102      -4.103  25.863  18.717  1.00 20.63           C
ANISOU  362  CB  ALA A 102     2896   2544   2398    162    286    135       C
ATOM    363  C   ALA A 102      -2.932  28.073  18.720  1.00 17.80           C
ANISOU  363  C   ALA A 102     2742   2069   1952    162    209    170       C
ATOM    364  O   ALA A 102      -1.732  27.835  18.586  1.00 21.15           O
ANISOU  364  O   ALA A 102     3180   2476   2378     82    219    201       O
ATOM    365  N   ARG A 103      -3.514  29.139  18.180  1.00 18.24           N
ANISOU  365  N   ARG A 103     2871   2097   1963    223    156    157       N
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ATOM    366  CA  ARG A 103      -2.742  30.093  17.387  1.00 18.08           C
ANISOU  366  CA  ARG A 103     2962   2014   1894    188    106    183       C
ATOM    367  CB  ARG A 103      -3.214  30.097  15.926  1.00 20.09           C
ANISOU  367  CB  ARG A 103     3214   2278   2141    205     81    168       C
ATOM    368  CG  ARG A 103      -2.760  28.867  15.140  1.00 20.54           C
ANISOU  368  CG  ARG A 103     3179   2379   2246    139    120    179       C
ATOM    369  CD  ARG A 103      -1.247  28.774  15.164  1.00 26.85           C
ANISOU  369  CD  ARG A 103     4005   3159   3038     38    136    224       C
ATOM    370  NE  ARG A 103      -0.718  27.627  14.432  1.00 26.56           N
ANISOU  370  NE  ARG A 103     3889   3167   3036    -17    169    236       N
ATOM    371  CZ  ARG A 103      -0.127  26.586  15.010  1.00 26.93           C
ANISOU  371  CZ  ARG A 103     3863   3252   3118    -63    214    244       C
ATOM    372  NH1 ARG A 103       0.001  26.535  16.333  1.00 21.60           N
ANISOU  372  NH1 ARG A 103     3181   2573   2454    -63    235    242       N
ATOM    373  NH2 ARG A 103       0.335  25.594  14.264  1.00 25.65           N
ANISOU  373  NH2 ARG A 103     3642   3129   2974   -101    234    253       N
ATOM    374  C   ARG A 103      -2.767  31.499  17.995  1.00 21.70           C
ANISOU  374  C   ARG A 103     3553   2406   2288    234     52    186       C
ATOM    375  O   ARG A 103      -2.591  32.493  17.294  1.00 24.61           O
ANISOU  375  O   ARG A 103     4031   2719   2600    235     -4    195       O
ATOM    376  N   LYS A 104      -2.974  31.562  19.308  1.00 23.23           N
ANISOU  376  N   LYS A 104     3743   2600   2485    273     67    181       N
ATOM    377  CA  LYS A 104      -2.906  32.818  20.059  1.00 25.62           C
ANISOU  377  CA  LYS A 104     4175   2835   2725    319     13    188       C
ATOM    378  CB  LYS A 104      -1.458  33.296  20.159  1.00 26.54           C
ANISOU  378  CB  LYS A 104     4380   2885   2820    219     -7    236       C
ATOM    379  CG  LYS A 104      -0.578  32.353  20.956  1.00 29.52           C
ANISOU  379  CG  LYS A 104     4680   3285   3253    146     52    255       C
ATOM    380  CD  LYS A 104       0.893  32.662  20.770  1.00 40.65           C
ANISOU  380  CD  LYS A 104     6146   4651   4647     34     36    299       C
ATOM    381  CE  LYS A 104       1.754  31.515  21.283  1.00 46.71           C
ANISOU  381  CE  LYS A 104     6817   5460   5472    -35     97    308       C
ATOM    382  NZ  LYS A 104       1.485  30.231  20.563  1.00 49.16           N
ANISOU  382  NZ  LYS A 104     7001   5847   5832    -49    150    291       N
ATOM    383  C   LYS A 104      -3.804  33.920  19.495  1.00 27.12           C
ANISOU  383  C   LYS A 104     4461   2998   2848    414    -56    161       C
ATOM    384  O   LYS A 104      -3.400  35.084  19.394  1.00 23.52           O
ANISOU  384  O   LYS A 104     4152   2464   2323    414   -122    178       O
ATOM    385  N   PHE A 105      -5.026  33.536  19.137  1.00 23.39           N
ANISOU  385  N   PHE A 105     3907   2589   2392    495    -45    116       N
ATOM    386  CA  PHE A 105      -6.055  34.468  18.673  1.00 26.40           C
ANISOU  386  CA  PHE A 105     4360   2961   2710    608   -110     76       C
ATOM    387  CB  PHE A 105      -6.395  35.502  19.761  1.00 23.52           C
ANISOU  387  CB  PHE A 105     4099   2560   2279    703   -156     67       C
ATOM    388  CG  PHE A 105      -7.124  34.910  20.940  1.00 25.15           C
ANISOU  388  CG  PHE A 105     4198   2839   2520    767   -102     46       C
ATOM    389  CD1 PHE A 105      -8.509  34.859  20.963  1.00 30.47           C
ANISOU  389  CD1 PHE A 105     4802   3591   3185    885   -102     -7       C
ATOM    390  CE1 PHE A 105      -9.181  34.302  22.037  1.00 30.52           C
ANISOU  390  CE1 PHE A 105     4705   3672   3221    936    -46    -23       C
ATOM    391  CZ  PHE A 105      -8.472  33.780  23.102  1.00 32.10           C
ANISOU  391  CZ  PHE A 105     4879   3858   3457    874      8     13       C
ATOM    392  CE2 PHE A 105      -7.093  33.819  23.092  1.00 29.31           C
ANISOU  392  CE2 PHE A 105     4597   3424   3114    764      3     61       C
ATOM    393  CD2 PHE A 105      -6.423  34.378  22.011  1.00 25.53           C
ANISOU  393  CD2 PHE A 105     4211   2882   2608    709    -51     79       C
ATOM    394  C   PHE A 105      -5.739  35.123  17.327  1.00 28.64           C
ANISOU  394  C   PHE A 105     4746   3187   2947    581   -167     81       C
ATOM    395  O   PHE A 105      -6.375  36.103  16.935  1.00 27.60           O
ANISOU  395  O   PHE A 105     4720   3022   2745    669   -236     51       O
ATOM    396  N   ASN A 106      -4.769  34.560  16.611  1.00 26.48           N
ANISOU  396  N   ASN A 106     4446   2906   2710    464   -138    117       N
ATOM    397  CA  ASN A 106      -4.494  34.979  15.240  1.00 25.86           C
ANISOU  397  CA  ASN A 106     4443   2785   2596    432   -177    123       C
ATOM    398  CB  ASN A 106      -3.039  34.684  14.871  1.00 26.58           C
ANISOU  398  CB  ASN A 106     4542   2852   2704    289   -149    180       C
ATOM    399  CG  ASN A 106      -2.660  35.210  13.494  1.00 32.48           C
ANISOU  399  CG  ASN A 106     5382   3552   3405    248   -187    194       C
ATOM    400  OD1 ASN A 106      -3.361  34.979  12.507  1.00 29.28           O
ANISOU  400  OD1 ASN A 106     4953   3166   3005    297   -196    162       O
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ATOM    401  ND2 ASN A 106      -1.529  35.906  13.420  1.00 32.48           N
ANISOU  401  ND2 ASN A 106     5490   3489   3359    155   -209    241       N
ATOM    402  C   ASN A 106      -5.452  34.257  14.302  1.00 29.05           C
ANISOU  402  C   ASN A 106     4747   3251   3039    483   -163     81       C
ATOM    403  O   ASN A 106      -5.304  33.061  14.044  1.00 25.36           O
ANISOU  403  O   ASN A 106     4151   2842   2644    430   -104     89       O
ATOM    404  N   VAL A 107      -6.451  34.980  13.810  1.00 26.38           N
ANISOU  404  N   VAL A 107     4474   2901   2650    590   -222     34       N
ATOM    405  CA  VAL A 107      -7.545  34.345  13.089  1.00 25.99           C
ANISOU  405  CA  VAL A 107     4322   2916   2637    658   -215    -16       C
ATOM    406  CB  VAL A 107      -8.696  35.340  12.818  1.00 26.44           C
ANISOU  406  CB  VAL A 107     4464   2960   2622    799   -291    -77       C
ATOM    407  CG1 VAL A 107      -9.757  34.714  11.925  1.00 27.30           C
ANISOU  407  CG1 VAL A 107     4472   3133   2770    863   -292   -130       C
ATOM    408  CG2 VAL A 107      -9.315  35.780  14.139  1.00 26.64           C
ANISOU  408  CG2 VAL A 107     4489   3014   2620    889   -299    -99       C
ATOM    409  C   VAL A 107      -7.074  33.655  11.808  1.00 26.27           C
ANISOU  409  C   VAL A 107     4322   2951   2709    584   -197      2       C
ATOM    410  O   VAL A 107      -7.432  32.505  11.556  1.00 25.98           O
ANISOU  410  O   VAL A 107     4146   2982   2744    572   -152     -9       O
ATOM    411  N   GLY A 108      -6.259  34.346  11.014  1.00 25.64           N
ANISOU  411  N   GLY A 108     4373   2794   2577    531   -232     31       N
ATOM    412  CA  GLY A 108      -5.762  33.786   9.767  1.00 25.80           C
ANISOU  412  CA  GLY A 108     4374   2810   2620    467   -216     51       C
ATOM    413  C   GLY A 108      -5.019  32.479   9.984  1.00 25.17           C
ANISOU  413  C   GLY A 108     4157   2787   2619    371   -140     89       C
ATOM    414  O   GLY A 108      -5.200  31.514   9.237  1.00 22.78           O
ANISOU  414  O   GLY A 108     3763   2526   2366    363   -115     82       O
ATOM    415  N   ARG A 109      -4.176  32.442  11.010  1.00 25.02           N
ANISOU  415  N   ARG A 109     4131   2769   2608    303   -107    127       N
ATOM    416  CA  ARG A 109      -3.452  31.218  11.338  1.00 25.35           C
ANISOU  416  CA  ARG A 109     4052   2864   2715    220    -39    157       C
ATOM    417  CB  ARG A 109      -2.339  31.490  12.354  1.00 23.15           C
ANISOU  417  CB  ARG A 109     3807   2564   2426    143    -20    199       C
ATOM    418  CG  ARG A 109      -1.210  32.347  11.793  1.00 29.25           C
ANISOU  418  CG  ARG A 109     4700   3275   3140     63    -47    242       C
ATOM    419  CD  ARG A 109      -0.180  32.707  12.854  1.00 37.71           C
ANISOU  419  CD  ARG A 109     5806   4324   4198     -9    -37    280       C
ATOM    420  NE  ARG A 109       0.938  33.455  12.282  1.00 46.37           N
ANISOU  420  NE  ARG A 109     7005   5373   5242   -103    -59    325       N
ATOM    421  CZ  ARG A 109       1.834  34.135  12.992  1.00 55.40           C
ANISOU  421  CZ  ARG A 109     8219   6476   6353   -171    -74    360       C
ATOM    422  NH1 ARG A 109       1.751  34.176  14.316  1.00 58.83           N
ANISOU  422  NH1 ARG A 109     8642   6905   6804   -146    -71    354       N
ATOM    423  NH2 ARG A 109       2.814  34.783  12.375  1.00 58.21           N
ANISOU  423  NH2 ARG A 109     8661   6796   6659   -266    -93    402       N
ATOM    424  C   ARG A 109      -4.382  30.111  11.834  1.00 20.43           C
ANISOU  424  C   ARG A 109     3284   2317   2160    266     -1    123       C
ATOM    425  O   ARG A 109      -4.175  28.941  11.513  1.00 21.15           O
ANISOU  425  O   ARG A 109     3277   2455   2304    224     39    132       O
ATOM    426  N   ALA A 110      -5.401  30.468  12.613  1.00 21.53           N
ANISOU  426  N   ALA A 110     3414   2473   2295    352    -15     86       N
ATOM    427  CA  ALA A 110      -6.381  29.473  13.050  1.00 21.75           C
ANISOU  427  CA  ALA A 110     3303   2579   2381    391     22     54       C
ATOM    428  CB  ALA A 110      -7.408  30.099  13.983  1.00 21.37           C
ANISOU  428  CB  ALA A 110     3259   2550   2311    489      5      16       C
ATOM    429  C   ALA A 110      -7.064  28.861  11.826  1.00 23.73           C
ANISOU  429  C   ALA A 110     3495   2860   2661    417      9     27       C
ATOM    430  O   ALA A 110      -7.327  27.652  11.767  1.00 18.40           O
ANISOU  430  O   ALA A 110     2703   2242   2045    392     46     23       O
ATOM    431  N   TYR A 111      -7.340  29.707  10.841  1.00 19.11           N
ANISOU  431  N   TYR A 111     3002   2230   2028    468    -49      8       N
ATOM    432  CA  TYR A 111      -7.995  29.254   9.620  1.00 18.58           C
ANISOU  432  CA  TYR A 111     2897   2179   1983    503    -71    -21       C
ATOM    433  CB  TYR A 111      -8.413  30.437   8.741  1.00 17.50           C
ANISOU  433  CB  TYR A 111     2888   1982   1779    580   -143    -53       C
ATOM    434  CG  TYR A 111      -9.028  30.004   7.425  1.00 25.17           C
ANISOU  434  CG  TYR A 111     3832   2960   2770    621   -171    -84       C
ATOM    435  CD1 TYR A 111     -10.291  29.428   7.385  1.00 26.61           C
ANISOU  435  CD1 TYR A 111     3904   3211   2997    691   -177   -136       C
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ATOM    436  CE1 TYR A 111     -10.857  29.025   6.184  1.00 19.39           C
ANISOU  436  CE1 TYR A 111     2966   2298   2104    729   -209   -166       C
ATOM    437  CZ  TYR A 111     -10.156  29.182   5.006  1.00 23.83           C
ANISOU  437  CZ  TYR A 111     3621   2792   2640    703   -231   -142       C
ATOM    438  OH  TYR A 111     -10.721  28.772   3.809  1.00 23.98           O
ANISOU  438  OH  TYR A 111     3623   2807   2679    748   -266   -172       O
ATOM    439  CE2 TYR A 111      -8.898  29.747   5.017  1.00 23.78           C
ANISOU  439  CE2 TYR A 111     3722   2725   2587    630   -219    -89       C
ATOM    440  CD2 TYR A 111      -8.341  30.159   6.226  1.00 26.63           C
ANISOU  440  CD2 TYR A 111     4102   3087   2930    587   -191    -60       C
ATOM    441  C   TYR A 111      -7.106  28.301   8.836  1.00 22.34           C
ANISOU  441  C   TYR A 111     3339   2656   2494    416    -42     18       C
ATOM    442  O   TYR A 111      -7.589  27.343   8.232  1.00 21.19           O
ANISOU  442  O   TYR A 111     3108   2549   2395    424    -36      3       O
ATOM    443  N   GLU A 112      -5.803  28.563   8.842  1.00 21.88           N
ANISOU  443  N   GLU A 112     3348   2557   2408    336    -27     68       N
ATOM    444  CA  GLU A 112      -4.871  27.674   8.162  1.00 22.14           C
ANISOU  444  CA  GLU A 112     3347   2601   2464    259      2    106       C
ATOM    445  CB  GLU A 112      -3.460  28.273   8.134  1.00 26.84           C
ANISOU  445  CB  GLU A 112     4032   3154   3014    177     11    158       C
ATOM    446  CG  GLU A 112      -2.423  27.377   7.470  1.00 35.19           C
ANISOU  446  CG  GLU A 112     5050   4235   4086    103     43    196       C
ATOM    447  CD  GLU A 112      -2.829  26.953   6.068  1.00 48.19           C
ANISOU  447  CD  GLU A 112     6691   5880   5738    140     21    184       C
ATOM    448  OE1 GLU A 112      -3.356  27.802   5.317  1.00 51.31           O
ANISOU  448  OE1 GLU A 112     7173   6226   6096    193    -25    163       O
ATOM    449  OE2 GLU A 112      -2.621  25.768   5.720  1.00 54.24           O
ANISOU  449  OE2 GLU A 112     7377   6690   6542    121     45    194       O
ATOM    450  C   GLU A 112      -4.870  26.287   8.806  1.00 22.83           C
ANISOU  450  C   GLU A 112     3303   2755   2616    223     54    112       C
ATOM    451  O   GLU A 112      -4.829  25.275   8.099  1.00 16.82           O
ANISOU  451  O   GLU A 112     2484   2021   1887    207     62    116       O
ATOM    452  N   LEU A 113      -4.920  26.236  10.139  1.00 19.56           N
ANISOU  452  N   LEU A 113     2854   2363   2216    214     83    111       N
ATOM    453  CA  LEU A 113      -5.023  24.957  10.841  1.00 21.88           C
ANISOU  453  CA  LEU A 113     3035   2714   2564    183    130    111       C
ATOM    454  CB  LEU A 113      -5.015  25.141  12.365  1.00 19.70           C
ANISOU  454  CB  LEU A 113     2746   2448   2291    177    161    111       C
ATOM    455  CG  LEU A 113      -3.687  25.430  13.064  1.00 25.16           C
ANISOU  455  CG  LEU A 113     3490   3110   2960    112    182    150       C
ATOM    456  CD1 LEU A 113      -3.880  25.390  14.581  1.00 24.26           C
ANISOU  456  CD1 LEU A 113     3351   3010   2859    119    214    143       C
ATOM    457  CD2 LEU A 113      -2.603  24.454  12.616  1.00 22.29           C
ANISOU  457  CD2 LEU A 113     3095   2763   2609     37    208    180       C
ATOM    458  C   LEU A 113      -6.301  24.233  10.460  1.00 22.53           C
ANISOU  458  C   LEU A 113     3031   2842   2688    232    121     73       C
ATOM    459  O   LEU A 113      -6.304  23.025  10.250  1.00 20.63           O
ANISOU  459  O   LEU A 113     2717   2636   2486    199    139     78       O
ATOM    460  N   LEU A 114      -7.395  24.984  10.402  1.00 21.08           N
ANISOU  460  N   LEU A 114     2858   2659   2492    313     87     32       N
ATOM    461  CA  LEU A 114      -8.697  24.428  10.070  1.00 17.75           C
ANISOU  461  CA  LEU A 114     2348   2287   2107    364     73    -10       C
ATOM    462  CB  LEU A 114      -9.762  25.527  10.180  1.00 21.43           C
ANISOU  462  CB  LEU A 114     2843   2757   2544    464     34    -58       C
ATOM    463  CG  LEU A 114     -11.226  25.100  10.146  1.00 27.27           C
ANISOU  463  CG  LEU A 114     3475   3567   3318    525     24   -109       C
ATOM    464  CD1 LEU A 114     -11.512  24.110  11.270  1.00 27.19           C
ANISOU  464  CD1 LEU A 114     3350   3626   3354    477     83   -102       C
ATOM    465  CD2 LEU A 114     -12.148  26.320  10.250  1.00 22.59           C
ANISOU  465  CD2 LEU A 114     2926   2979   2680    637    -21   -160       C
ATOM    466  C   LEU A 114      -8.705  23.790   8.674  1.00 18.67           C
ANISOU  466  C   LEU A 114     2456   2396   2243    360     45     -9       C
ATOM    467  O   LEU A 114      -9.319  22.744   8.463  1.00 18.47           O
ANISOU  467  O   LEU A 114     2339   2414   2263    353     49    -22       O
ATOM    468  N   ARG A 115      -8.016  24.417   7.724  1.00 16.78           N
ANISOU  468  N   ARG A 115     2316   2097   1964    361     16      8       N
ATOM    469  CA  ARG A 115      -7.910  23.873   6.371  1.00 18.93           C
ANISOU  469  CA  ARG A 115     2594   2354   2245    362    -10     13       C
ATOM    470  CB  ARG A 115      -7.137  24.839   5.464  1.00 20.28           C
ANISOU  470  CB  ARG A 115     2892   2455   2358    366    -38     32       C
ANISOU  470  CB  ARG A 115     2892   2455   2358    366    -38     32       C
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ATOM    471  CG  ARG A 115      -7.956  26.039   5.017  1.00 18.71           C
ANISOU  471  CG  ARG A 115     2774   2217   2119    454    -93    -12       C
ATOM    472  CD  ARG A 115      -7.091  27.064   4.285  1.00 21.04           C
ANISOU  472  CD  ARG A 115     3213   2436   2346    441   -116     14       C
ATOM    473  NE  ARG A 115      -6.523  26.547   3.042  1.00 29.20           N
ANISOU  473  NE  ARG A 115     4266   3449   3379    417   -120     39       N
ATOM    474  CZ  ARG A 115      -7.159  26.545   1.875  1.00 33.13           C
ANISOU  474  CZ  ARG A 115     4793   3920   3874    483   -166      9       C
ATOM    475  NH1 ARG A 115      -8.396  27.019   1.792  1.00 35.24           N
ANISOU  475  NH1 ARG A 115     5064   4183   4142    575   -213    -52       N
ATOM    476  NH2 ARG A 115      -6.563  26.061   0.792  1.00 29.88           N
ANISOU  476  NH2 ARG A 115     4405   3490   3459    462   -167     37       N
ATOM    477  C   ARG A 115      -7.262  22.483   6.353  1.00 21.86           C
ANISOU  477  C   ARG A 115     2900   2754   2651    291     24     47       C
ATOM    478  O   ARG A 115      -7.748  21.574   5.681  1.00 20.63           O
ANISOU  478  O   ARG A 115     2691   2617   2528    301      6     36       O
ATOM    479  N   GLY A 116      -6.180  22.316   7.109  1.00 17.48           N
ANISOU  479  N   GLY A 116     2353   2203   2085    223     67     84       N
ATOM    480  CA  GLY A 116      -5.504  21.029   7.183  1.00 17.40           C
ANISOU  480  CA  GLY A 116     2292   2222   2097    163     95    112       C
ATOM    481  C   GLY A 116      -6.368  19.969   7.847  1.00 14.97           C
ANISOU  481  C   GLY A 116     1886   1964   1838    156    110     92       C
ATOM    482  O   GLY A 116      -6.361  18.797   7.456  1.00 17.20           O
ANISOU  482  O   GLY A 116     2127   2265   2142    134    105     99       O
ATOM    483  N   TYR A 117      -7.106  20.390   8.867  1.00 17.51           N
ANISOU  483  N   TYR A 117     2175   2306   2172    174    127     68       N
ATOM    484  CA  TYR A 117      -8.024  19.516   9.591  1.00 20.23           C
ANISOU  484  CA  TYR A 117     2424   2703   2558    163    146     48       C
ATOM    485  CB  TYR A 117      -8.646  20.309  10.739  1.00 19.44           C
ANISOU  485  CB  TYR A 117     2308   2624   2454    193    169     25       C
ATOM    486  CG  TYR A 117      -9.666  19.569  11.562  1.00 17.00           C
ANISOU  486  CG  TYR A 117     1898   2378   2183    183    196      4       C
ATOM    487  CD1 TYR A 117      -9.291  18.838  12.684  1.00 18.24           C
ANISOU  487  CD1 TYR A 117     2027   2553   2349    121    247     22       C
ATOM    488  CE1 TYR A 117     -10.240  18.175  13.453  1.00 22.43           C
ANISOU  488  CE1 TYR A 117     2470   3143   2909    104    276      5       C
ATOM    489  CZ  TYR A 117     -11.572  18.245  13.091  1.00 24.76           C
ANISOU  489  CZ  TYR A 117     2692   3487   3226    147    254    -31       C
ATOM    490  OH  TYR A 117     -12.540  17.599  13.827  1.00 26.86           O
ANISOU  490  OH  TYR A 117     2864   3823   3520    122    285    -47       O
ATOM    491  CE2 TYR A 117     -11.960  18.972  11.989  1.00 23.88           C
ANISOU  491  CE2 TYR A 117     2605   3361   3109    215    200    -54       C
ATOM    492  CD2 TYR A 117     -11.015  19.626  11.234  1.00 19.19           C
ANISOU  492  CD2 TYR A 117     2110   2700   2483    233    171    -37       C
ATOM    493  C   TYR A 117      -9.109  18.972   8.659  1.00 21.32           C
ANISOU  493  C   TYR A 117     2508   2863   2728    196    105     20       C
ATOM    494  O   TYR A 117      -9.410  17.778   8.653  1.00 15.93           O
ANISOU  494  O   TYR A 117     1766   2211   2078    159    108     22       O
ATOM    495  N   VAL A 118      -9.683  19.852   7.850  1.00 16.32           N
ANISOU  495  N   VAL A 118     1907   2210   2084    267     62     -8       N
ATOM    496  CA  VAL A 118     -10.705  19.440   6.886  1.00 17.17           C
ANISOU  496  CA  VAL A 118     1969   2332   2220    308     14    -39       C
ATOM    497  CB  VAL A 118     -11.473  20.662   6.332  1.00 19.17           C
ANISOU  497  CB  VAL A 118     2260   2569   2453    402    -31    -83       C
ATOM    498  CG1 VAL A 118     -12.417  20.247   5.203  1.00 18.59           C
ANISOU  498  CG1 VAL A 118     2151   2503   2410    450    -87   -118       C
ATOM    499  CG2 VAL A 118     -12.237  21.347   7.460  1.00 21.97           C
ANISOU  499  CG2 VAL A 118     2575   2969   2803    437    -10   -115       C
ATOM    500  C   VAL A 118     -10.111  18.619   5.738  1.00 16.76           C
ANISOU  500  C   VAL A 118     1947   2249   2172    287    -13    -13       C
ATOM    501  O   VAL A 118     -10.720  17.651   5.276  1.00 19.90           O
ANISOU  501  O   VAL A 118     2289   2667   2605    281    -39    -22       O
ATOM    502  N   ASN A 119      -8.924  19.003   5.281  1.00 18.38           N
ANISOU  502  N   ASN A 119     2239   2406   2337    277    -10     20       N
ATOM    503  CA  ASN A 119      -8.268  18.289   4.186  1.00 16.36           C
ANISOU  503  CA  ASN A 119     2017   2126   2074    266    -34     47       C
ATOM    504  CB  ASN A 119      -6.921  18.929   3.835  1.00 18.59           C
ANISOU  504  CB  ASN A 119     2390   2368   2303    251    -19     84       C
ATOM    505  CG  ASN A 119      -6.356  18.409   2.513  1.00 23.32           C
ANISOU  505  CG  ASN A 119     3033   2943   2886    263    -48    107       C
ANISOU  505  CG  ASN A 119     3033   2943   2886    263    -48    107       C
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ATOM    506  OD1 ASN A 119      -6.992  18.534   1.475  1.00 24.73           O
ANISOU  506  OD1 ASN A 119     3233   3094   3069    321    -96     87       O
ATOM    507  ND2 ASN A 119      -5.160  17.829   2.557  1.00 25.52           N
ANISOU  507  ND2 ASN A 119     3324   3232   3138    216    -22    148       N
ATOM    508  C   ASN A 119      -8.070  16.818   4.517  1.00 17.64           C
ANISOU  508  C   ASN A 119     2124   2320   2259    208    -20     67       C
ATOM    509  O   ASN A 119      -8.267  15.943   3.666  1.00 16.37           O
ANISOU  509  O   ASN A 119     1954   2153   2112    217    -58     70       O
ATOM    510  N   PHE A 120      -7.674  16.548   5.759  1.00 15.60           N
ANISOU  510  N   PHE A 120     1838   2090   2002    153     30     80       N
ATOM    511  CA  PHE A 120      -7.495  15.178   6.220  1.00 16.07           C
ANISOU  511  CA  PHE A 120     1858   2175   2075     96     43     96       C
ATOM    512  CB  PHE A 120      -7.010  15.145   7.672  1.00 15.59           C
ANISOU  512  CB  PHE A 120     1783   2135   2007     44    102    105       C
ATOM    513  CG  PHE A 120      -6.728  13.757   8.181  1.00 14.29           C
ANISOU  513  CG  PHE A 120     1597   1990   1844    -13    114    119       C
ATOM    514  CD1 PHE A 120      -5.600  13.071   7.749  1.00 11.99           C
ANISOU  514  CD1 PHE A 120     1352   1685   1517    -29    105    146       C
ATOM    515  CE1 PHE A 120      -5.335  11.784   8.206  1.00 14.82           C
ANISOU  515  CE1 PHE A 120     1708   2057   1867    -74    107    154       C
ATOM    516  CZ  PHE A 120      -6.202  11.168   9.101  1.00 17.89           C
ANISOU  516  CZ  PHE A 120     2047   2467   2284   -116    122    139       C
ATOM    517  CE2 PHE A 120      -7.330  11.851   9.550  1.00 18.97           C
ANISOU  517  CE2 PHE A 120     2125   2623   2459   -107    140    115       C
ATOM    518  CD2 PHE A 120      -7.589  13.137   9.080  1.00 17.72           C
ANISOU  518  CD2 PHE A 120     1969   2456   2308    -50    133    103       C
ATOM    519  C   PHE A 120      -8.790  14.390   6.095  1.00 16.65           C
ANISOU  519  C   PHE A 120     1859   2276   2193     96     14     70       C
ATOM    520  O   PHE A 120      -8.788  13.222   5.700  1.00 16.22           O
ANISOU  520  O   PHE A 120     1797   2222   2145     71    -13     82       O
ATOM    521  N   ARG A 121      -9.901  15.028   6.445  1.00 15.66           N
ANISOU  521  N   ARG A 121     1681   2175   2093    124     15     35       N
ATOM    522  CA  ARG A 121     -11.193  14.365   6.375  1.00 17.26           C
ANISOU  522  CA  ARG A 121     1802   2417   2340    119    -10      8       C
ATOM    523  CB  ARG A 121     -12.234  15.128   7.211  1.00 18.18           C
ANISOU  523  CB  ARG A 121     1849   2583   2474    143     15    -30       C
ATOM    524  CG  ARG A 121     -12.150  14.757   8.689  1.00 20.21           C
ANISOU  524  CG  ARG A 121     2066   2879   2733     78     79    -18       C
ATOM    525  CD  ARG A 121     -12.274  15.944   9.634  1.00 23.43           C
ANISOU  525  CD  ARG A 121     2472   3304   3125    114    120    -34       C
ATOM    526  NE  ARG A 121     -11.976  15.521  11.002  1.00 23.01           N
ANISOU  526  NE  ARG A 121     2400   3275   3069     53    181    -17       N
ATOM    527  CZ  ARG A 121     -10.751  15.462  11.517  1.00 20.67           C
ANISOU  527  CZ  ARG A 121     2169   2941   2745     19    212     15       C
ATOM    528  NH1 ARG A 121      -9.702  15.831  10.788  1.00 14.71           N
ANISOU  528  NH1 ARG A 121     1494   2132   1962     35    191     35       N
ATOM    529  NH2 ARG A 121     -10.575  15.043  12.764  1.00 24.25           N
ANISOU  529  NH2 ARG A 121     2606   3413   3196    -31    265     25       N
ATOM    530  C   ARG A 121     -11.657  14.156   4.935  1.00 19.09           C
ANISOU  530  C   ARG A 121     2046   2623   2586    168    -81     -5       C
ATOM    531  O   ARG A 121     -12.374  13.198   4.646  1.00 22.25           O
ANISOU  531  O   ARG A 121     2395   3041   3016    145   -115    -12       O
ATOM    532  N   LEU A 122     -11.236  15.034   4.029  1.00 17.75           N
ANISOU  532  N   LEU A 122     1948   2406   2389    231   -106     -7       N
ATOM    533  CA  LEU A 122     -11.556  14.852   2.611  1.00 15.50           C
ANISOU  533  CA  LEU A 122     1692   2086   2112    284   -174    -17       C
ATOM    534  CB  LEU A 122     -11.282  16.134   1.821  1.00 16.46           C
ANISOU  534  CB  LEU A 122     1895   2159   2200    359   -192    -29       C
ATOM    535  CG  LEU A 122     -12.169  17.343   2.098  1.00 25.62           C
ANISOU  535  CG  LEU A 122     3040   3333   3363    418   -196    -77       C
ATOM    536  CD1 LEU A 122     -11.640  18.559   1.349  1.00 28.10           C
ANISOU  536  CD1 LEU A 122     3464   3584   3627    478   -213    -79       C
ATOM    537  CD2 LEU A 122     -13.597  17.029   1.680  1.00 30.28           C
ANISOU  537  CD2 LEU A 122     3552   3954   3997    459   -247   -127       C
ATOM    538  C   LEU A 122     -10.758  13.708   1.990  1.00 18.22           C
ANISOU  538  C   LEU A 122     2077   2403   2443    254   -195     23       C
ATOM    539  O   LEU A 122     -11.257  12.988   1.134  1.00 19.51           O
ANISOU  539  O   LEU A 122     2234   2553   2626    253   -253     18       O
ATOM    540  N   GLN A 123      -9.512  13.554   2.418  1.00 14.28           N
ANISOU  540  N   GLN A 123     1622   1899   1906    215   -154     61       N
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ATOM    541  CA  GLN A 123      -8.614  12.589   1.791  1.00 18.17           C
ANISOU  541  CA  GLN A 123     2164   2370   2369    204   -175     97       C
ATOM    542  CB  GLN A 123      -7.158  13.028   1.946  1.00 19.99           C
ANISOU  542  CB  GLN A 123     2456   2592   2547    193   -132    131       C
ATOM    543  CG  GLN A 123      -6.829  14.333   1.208  1.00 22.83           C
ANISOU  543  CG  GLN A 123     2876   2919   2882    245   -133    129       C
ATOM    544  CD  GLN A 123      -5.337  14.581   1.117  1.00 23.93           C
ANISOU  544  CD  GLN A 123     3073   3054   2965    228    -99    168       C
ATOM    545  OE1 GLN A 123      -4.595  14.325   2.066  1.00 23.23           O
ANISOU  545  OE1 GLN A 123     2970   2995   2861    175    -55    185       O
ATOM    546  NE2 GLN A 123      -4.886  15.060  -0.037  1.00 27.22           N
ANISOU  546  NE2 GLN A 123     3555   3438   3349    272   -120    181       N
ATOM    547  C   GLN A 123      -8.798  11.174   2.323  1.00 18.77           C
ANISOU  547  C   GLN A 123     2204   2471   2459    143   -183    108       C
ATOM    548  O   GLN A 123      -8.498  10.191   1.633  1.00 18.64           O
ANISOU  548  O   GLN A 123     2222   2434   2425    147   -228    127       O
ATOM    549  N   TYR A 124      -9.296  11.074   3.550  1.00 14.98           N
ANISOU  549  N   TYR A 124     1660   2029   2002     88   -142     95       N
ATOM    550  CA  TYR A 124      -9.490   9.783   4.191  1.00 13.27           C
ANISOU  550  CA  TYR A 124     1416   1833   1791     19   -144    104       C
ATOM    551  CB  TYR A 124      -8.493   9.642   5.337  1.00 15.70           C
ANISOU  551  CB  TYR A 124     1746   2155   2066    -31    -83    123       C
ATOM    552  CG  TYR A 124      -7.060   9.783   4.873  1.00 16.16           C
ANISOU  552  CG  TYR A 124     1880   2189   2071     -3    -79    150       C
ATOM    553  CD1 TYR A 124      -6.431   8.741   4.196  1.00 15.08           C
ANISOU  553  CD1 TYR A 124     1797   2036   1897      5   -122    172       C
ATOM    554  CE1 TYR A 124      -5.117   8.857   3.754  1.00 13.65           C
ANISOU  554  CE1 TYR A 124     1676   1849   1662     34   -116    195       C
ATOM    555  CZ  TYR A 124      -4.415  10.025   3.993  1.00 17.31           C
ANISOU  555  CZ  TYR A 124     2147   2318   2112     44    -67    199       C
ATOM    556  OH  TYR A 124      -3.106  10.132   3.564  1.00 16.12           O
ANISOU  556  OH  TYR A 124     2046   2173   1907     65    -58    223       O
ATOM    557  CE2 TYR A 124      -5.023  11.083   4.655  1.00 14.97           C
ANISOU  557  CE2 TYR A 124     1810   2026   1851     34    -29    180       C
ATOM    558  CD2 TYR A 124      -6.345  10.954   5.094  1.00 15.89           C
ANISOU  558  CD2 TYR A 124     1866   2153   2019     17    -35    154       C
ATOM    559  C   TYR A 124     -10.915   9.608   4.707  1.00 19.14           C
ANISOU  559  C   TYR A 124     2068   2616   2587    -15   -146     75       C
ATOM    560  O   TYR A 124     -11.121   9.368   5.894  1.00 20.94           O
ANISOU  560  O   TYR A 124     2253   2880   2822    -76    -98     73       O
ATOM    561  N   PRO A 125     -11.906   9.704   3.807  1.00 23.00           N
ANISOU  561  N   PRO A 125     2526   3104   3111     25   -202     51       N
ATOM    562  CA  PRO A 125     -13.317   9.660   4.206  1.00 25.22           C
ANISOU  562  CA  PRO A 125     2705   3436   3442      1   -205     18       C
ATOM    563  CB  PRO A 125     -14.054   9.829   2.871  1.00 26.87           C
ANISOU  563  CB  PRO A 125     2910   3622   3677     69   -282     -7       C
ATOM    564  CG  PRO A 125     -13.063   9.306   1.847  1.00 27.46           C
ANISOU  564  CG  PRO A 125     3087   3631   3715     98   -327     26       C
ATOM    565  CD  PRO A 125     -11.765   9.860   2.348  1.00 21.05           C
ANISOU  565  CD  PRO A 125     2335   2807   2857    100   -266     52       C
ATOM    566  C   PRO A 125     -13.684   8.323   4.851  1.00 27.58           C
ANISOU  566  C   PRO A 125     2969   3760   3750    -97   -207     33       C
ATOM    567  O   PRO A 125     -14.633   8.255   5.635  1.00 28.01           O
ANISOU  567  O   PRO A 125     2935   3873   3835   -145   -180     14       O
ATOM    568  N   GLU A 126     -12.936   7.272   4.522  1.00 22.78           N
ANISOU  568  N   GLU A 126     2436   3111   3110   -125   -240     66       N
ATOM    569  CA  GLU A 126     -13.197   5.952   5.083  1.00 25.10           C
ANISOU  569  CA  GLU A 126     2723   3415   3399   -219   -251     82       C
ATOM    570  CB  GLU A 126     -12.300   4.884   4.437  1.00 24.24           C
ANISOU  570  CB  GLU A 126     2720   3249   3241   -219   -308    115       C
ATOM    571  CG  GLU A 126     -10.822   4.958   4.820  1.00 21.25           C
ANISOU  571  CG  GLU A 126     2422   2850   2803   -203   -267    137       C
ATOM    572  CD  GLU A 126     -10.060   6.024   4.055  1.00 20.80           C
ANISOU  572  CD  GLU A 126     2399   2772   2731   -111   -260    138       C
ATOM    573  OE1 GLU A 126     -10.647   6.658   3.154  1.00 20.02           O
ANISOU  573  OE1 GLU A 126     2278   2664   2664    -53   -293    121       O
ATOM    574  OE2 GLU A 126      -8.868   6.227   4.356  1.00 19.92           O
ANISOU  574  OE2 GLU A 126     2339   2654   2574    -98   -223    154       O
ATOM    575  C   GLU A 126     -13.043   5.953   6.608  1.00 22.08           C
ANISOU  575  C   GLU A 126     2313   3071   3006   -288   -168     85       C
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ATOM    576  O   GLU A 126     -13.641   5.130   7.292  1.00 23.67           O
ANISOU  576  O   GLU A 126     2479   3299   3215   -375   -160     88       O
ATOM    577  N   LEU A 127     -12.248   6.880   7.140  1.00 23.15           N
ANISOU  577  N   LEU A 127     2468   3205   3121   -252   -107     85       N
ATOM    578  CA  LEU A 127     -12.100   6.995   8.588  1.00 21.52           C
ANISOU  578  CA  LEU A 127     2240   3031   2906   -305    -30     86       C
ATOM    579  CB  LEU A 127     -10.830   7.773   8.944  1.00 23.42           C
ANISOU  579  CB  LEU A 127     2541   3247   3110   -263     15     96       C
ATOM    580  CG  LEU A 127      -9.497   7.208   8.457  1.00 19.92           C
ANISOU  580  CG  LEU A 127     2197   2758   2615   -250    -11    122       C
ATOM    581  CD1 LEU A 127      -8.354   8.089   8.927  1.00 15.48           C
ANISOU  581  CD1 LEU A 127     1672   2186   2023   -219     40    129       C
ATOM    582  CD2 LEU A 127      -9.305   5.775   8.942  1.00 18.39           C
ANISOU  582  CD2 LEU A 127     2044   2554   2391   -322    -25    137       C
ATOM    583  C   LEU A 127     -13.302   7.663   9.271  1.00 23.39           C
ANISOU  583  C   LEU A 127     2367   3332   3186   -314     12     56       C
ATOM    584  O   LEU A 127     -13.451   7.584  10.489  1.00 26.29           O
ANISOU  584  O   LEU A 127     2705   3734   3551   -367     73     56       O
ATOM    585  N   PHE A 128     -14.147   8.332   8.495  1.00 25.98           N
ANISOU  585  N   PHE A 128     2640   3681   3550   -257    -21     29       N
ATOM    586  CA  PHE A 128     -15.164   9.205   9.087  1.00 27.34           C
ANISOU  586  CA  PHE A 128     2714   3922   3752   -237     18     -5       C
ATOM    587  CB  PHE A 128     -14.819  10.676   8.805  1.00 25.20           C
ANISOU  587  CB  PHE A 128     2470   3635   3471   -134     27    -23       C
ATOM    588  CG  PHE A 128     -13.491  11.093   9.356  1.00 22.47           C
ANISOU  588  CG  PHE A 128     2209   3247   3084   -128     71      2       C
ATOM    589  CD1 PHE A 128     -13.355  11.416  10.696  1.00 23.16           C
ANISOU  589  CD1 PHE A 128     2280   3360   3159   -153    141      4       C
ATOM    590  CE1 PHE A 128     -12.127  11.791  11.214  1.00 22.69           C
ANISOU  590  CE1 PHE A 128     2297   3261   3064   -149    176     26       C
ATOM    591  CZ  PHE A 128     -11.019  11.841  10.391  1.00 21.59           C
ANISOU  591  CZ  PHE A 128     2243   3064   2898   -124    146     46       C
ATOM    592  CE2 PHE A 128     -11.142  11.522   9.054  1.00 19.11           C
ANISOU  592  CE2 PHE A 128     1944   2727   2590    -97     82     47       C
ATOM    593  CD2 PHE A 128     -12.373  11.145   8.541  1.00 19.28           C
ANISOU  593  CD2 PHE A 128     1898   2778   2650    -97     42     25       C
ATOM    594  C   PHE A 128     -16.588   8.912   8.628  1.00 32.47           C
ANISOU  594  C   PHE A 128     3264   4627   4448   -249    -23    -33       C
ATOM    595  O   PHE A 128     -17.542   9.161   9.365  1.00 35.53           O
ANISOU  595  O   PHE A 128     3552   5092   4857   -268     15    -57       O
ATOM    596  N   ASP A 129     -16.724   8.386   7.415  1.00 33.29           N
ANISOU  596  N   ASP A 129     3392   4694   4564   -235   -102    -31       N
ATOM    597  CA  ASP A 129     -18.030   8.219   6.782  1.00 38.50           C
ANISOU  597  CA  ASP A 129     3961   5397   5269   -232   -155    -63       C
ATOM    598  CB  ASP A 129     -17.893   7.517   5.425  1.00 43.02           C
ANISOU  598  CB  ASP A 129     4595   5905   5847   -216   -249    -51       C
ATOM    599  CG  ASP A 129     -17.517   8.472   4.302  1.00 50.13           C
ANISOU  599  CG  ASP A 129     5553   6752   6741    -94   -288    -68       C
ATOM    600  OD1 ASP A 129     -17.488   9.702   4.537  1.00 49.04           O
ANISOU  600  OD1 ASP A 129     5405   6632   6597    -26   -250    -94       O
ATOM    601  OD2 ASP A 129     -17.254   7.989   3.178  1.00 53.35           O
ANISOU  601  OD2 ASP A 129     6026   7098   7145    -67   -360    -56       O
ATOM    602  C   ASP A 129     -19.026   7.461   7.655  1.00 40.91           C
ANISOU  602  C   ASP A 129     4163   5783   5599   -338   -128    -66       C
ATOM    603  O   ASP A 129     -20.115   7.960   7.938  1.00 45.91           O
ANISOU  603  O   ASP A 129     4680   6500   6261   -326   -111   -103       O
ATOM    604  N   SER A 130     -18.659   6.255   8.075  1.00 37.24           N
ANISOU  604  N   SER A 130     3741   5294   5114   -441   -126    -27       N
ATOM    605  CA  SER A 130     -19.581   5.424   8.843  1.00 45.91           C
ANISOU  605  CA  SER A 130     4754   6460   6229   -559   -104    -24       C
ATOM    606  CB  SER A 130     -19.838   4.095   8.126  1.00 52.77           C
ANISOU  606  CB  SER A 130     5654   7292   7103   -636   -187     -2       C
ATOM    607  OG  SER A 130     -18.639   3.360   7.962  1.00 57.10           O
ANISOU  607  OG  SER A 130     6344   7748   7602   -651   -212     38       O
ATOM    608  C   SER A 130     -19.074   5.179  10.260  1.00 46.25           C
ANISOU  608  C   SER A 130     4820   6514   6237   -629    -17      0       C
ATOM    609  O   SER A 130     -19.244   4.094  10.818  1.00 47.56           O
ANISOU  609  O   SER A 130     4994   6687   6391   -745     24     24       O
ATOM    610  N   LEU A 131     -18.451   6.201  10.836  1.00 40.99           N
ANISOU  610  N   LEU A 131     4175   5846   5553   -560     44     -7       N
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ATOM    611  CA  LEU A 131     -17.910   6.109  12.182  1.00 40.75           C
ANISOU  611  CA  LEU A 131     4174   5819   5489   -608    125     11       C
ATOM    612  CB  LEU A 131     -17.284   7.443  12.592  1.00 33.55           C
ANISOU  612  CB  LEU A 131     3284   4899   4563   -510    175     -2       C
ATOM    613  CG  LEU A 131     -16.398   7.423  13.838  1.00 44.50           C
ANISOU  613  CG  LEU A 131     4734   6263   5912   -538    247     19       C
ATOM    614  CD1 LEU A 131     -15.276   6.411  13.675  1.00 45.08           C
ANISOU  614  CD1 LEU A 131     4928   6254   5947   -584    219     52       C
ATOM    615  CD2 LEU A 131     -15.834   8.811  14.112  1.00 46.06           C
ANISOU  615  CD2 LEU A 131     4954   6450   6097   -438    282      6       C
ATOM    616  C   LEU A 131     -19.003   5.723  13.171  1.00 45.30           C
ANISOU  616  C   LEU A 131     4644   6487   6081   -700    178      5       C
ATOM    617  O   LEU A 131     -20.037   6.384  13.252  1.00 45.44           O
ANISOU  617  O   LEU A 131     4542   6593   6130   -670    196    -27       O
ATOM    618  N   SER A 132     -18.766   4.643  13.909  1.00 45.70           N
ANISOU  618  N   SER A 132     4741   6519   6103   -811    201     35       N
ATOM    619  CA  SER A 132     -19.675   4.182  14.954  1.00 44.41           C
ANISOU  619  CA  SER A 132     4493   6437   5944   -915    260     37       C
ATOM    620  CB  SER A 132     -20.087   2.731  14.693  1.00 44.17           C
ANISOU  620  CB  SER A 132     4481   6393   5909  -1047    210     62       C
ATOM    621  OG  SER A 132     -20.690   2.149  15.835  1.00 44.58           O
ANISOU  621  OG  SER A 132     4487   6504   5948  -1166    275     74       O
ATOM    622  C   SER A 132     -18.996   4.288  16.317  1.00 43.05           C
ANISOU  622  C   SER A 132     4376   6249   5731   -932    347     51       C
ATOM    623  O   SER A 132     -18.035   3.567  16.589  1.00 35.37           O
ANISOU  623  O   SER A 132     3526   5196   4716   -972    342     76       O
ATOM    624  N   PRO A 133     -19.489   5.194  17.175  1.00 43.66           N
ANISOU  624  N   PRO A 133     4368   6404   5818   -894    423     31       N
ATOM    625  CA  PRO A 133     -18.922   5.396  18.513  1.00 44.35           C
ANISOU  625  CA  PRO A 133     4503   6479   5868   -899    506     42       C
ATOM    626  CB  PRO A 133     -19.916   6.361  19.167  1.00 47.59           C
ANISOU  626  CB  PRO A 133     4782   7003   6298   -853    570     15       C
ATOM    627  CG  PRO A 133     -20.506   7.113  18.018  1.00 44.89           C
ANISOU  627  CG  PRO A 133     4362   6700   5995   -764    511    -17       C
ATOM    628  CD  PRO A 133     -20.615   6.106  16.909  1.00 42.95           C
ANISOU  628  CD  PRO A 133     4135   6417   5767   -830    428     -6       C
ATOM    629  C   PRO A 133     -18.836   4.095  19.310  1.00 44.32           C
ANISOU  629  C   PRO A 133     4556   6453   5830  -1036    533     71       C
ATOM    630  O   PRO A 133     -17.938   3.937  20.136  1.00 41.38           O
ANISOU  630  O   PRO A 133     4284   6020   5417  -1043    572     84       O
ATOM    631  N   GLU A 134     -19.762   3.176  19.056  1.00 45.37           N
ANISOU  631  N   GLU A 134     4630   6631   5977  -1145    508     79       N
ATOM    632  CA  GLU A 134     -19.765   1.879  19.721  1.00 46.27           C
ANISOU  632  CA  GLU A 134     4808   6720   6052  -1287    523    108       C
ATOM    633  CB  GLU A 134     -21.065   1.132  19.418  1.00 60.79           C
ANISOU  633  CB  GLU A 134     6542   8637   7916  -1406    500    112       C
ATOM    634  CG  GLU A 134     -21.076  -0.313  19.886  1.00 74.48           C
ANISOU  634  CG  GLU A 134     8363  10332   9605  -1566    493    146       C
ATOM    635  CD  GLU A 134     -22.272  -1.085  19.360  1.00 87.31           C
ANISOU  635  CD  GLU A 134     9896  12021  11256  -1687    447    154       C
ATOM    636  OE1 GLU A 134     -23.191  -0.450  18.799  1.00 90.07           O
ANISOU  636  OE1 GLU A 134    10095  12466  11662  -1647    437    129       O
ATOM    637  OE2 GLU A 134     -22.291  -2.326  19.506  1.00 91.50           O
ANISOU  637  OE2 GLU A 134    10511  12506  11747  -1823    417    183       O
ATOM    638  C   GLU A 134     -18.568   1.033  19.297  1.00 39.27           C
ANISOU  638  C   GLU A 134     4093   5706   5121  -1301    458    128       C
ATOM    639  O   GLU A 134     -17.899   0.423  20.132  1.00 34.71           O
ANISOU  639  O   GLU A 134     3626   5071   4492  -1351    487    143       O
ATOM    640  N   ALA A 135     -18.302   0.997  17.996  1.00 40.36           N
ANISOU  640  N   ALA A 135     4257   5802   5277  -1249    368    126       N
ATOM    641  CA  ALA A 135     -17.178   0.233  17.466  1.00 39.38           C
ANISOU  641  CA  ALA A 135     4288   5567   5106  -1244    299    143       C
ATOM    642  CB  ALA A 135     -17.233   0.194  15.947  1.00 42.41           C
ANISOU  642  CB  ALA A 135     4669   5928   5517  -1193    200    141       C
ATOM    643  C   ALA A 135     -15.852   0.819  17.936  1.00 34.01           C
ANISOU  643  C   ALA A 135     3700   4828   4393  -1153    334    139       C
ATOM    644  O   ALA A 135     -14.919   0.086  18.265  1.00 28.63           O
ANISOU  644  O   ALA A 135     3151   4073   3654  -1177    321    151       O
ATOM    645  N   VAL A 136     -15.773   2.146  17.961  1.00 30.67           N
ANISOU  645  N   VAL A 136     3212   4439   4003  -1049    373    119       N
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ATOM    646  CA  VAL A 136     -14.567   2.824  18.411  1.00 27.97           C
ANISOU  646  CA  VAL A 136     2945   4047   3634   -966    406    115       C
ATOM    647  CB  VAL A 136     -14.664   4.352  18.225  1.00 28.24           C
ANISOU  647  CB  VAL A 136     2902   4121   3708   -852    432     95       C
ATOM    648  CG1 VAL A 136     -13.392   5.026  18.712  1.00 29.77           C
ANISOU  648  CG1 VAL A 136     3178   4260   3872   -780    461     94       C
ATOM    649  CG2 VAL A 136     -14.926   4.694  16.765  1.00 30.76           C
ANISOU  649  CG2 VAL A 136     3183   4444   4061   -794    358     87       C
ATOM    650  C   VAL A 136     -14.311   2.492  19.877  1.00 30.59           C
ANISOU  650  C   VAL A 136     3325   4369   3927  -1021    480    120       C
ATOM    651  O   VAL A 136     -13.169   2.283  20.283  1.00 28.86           O
ANISOU  651  O   VAL A 136     3221   4082   3664  -1001    484    123       O
ATOM    652  N   ARG A 137     -15.380   2.428  20.669  1.00 30.48           N
ANISOU  652  N   ARG A 137     3225   4426   3928  -1089    540    120       N
ATOM    653  CA  ARG A 137     -15.243   2.053  22.072  1.00 31.01           C
ANISOU  653  CA  ARG A 137     3352   4481   3950  -1137    604    121       C
ATOM    654  CB  ARG A 137     -16.589   2.058  22.799  1.00 35.85           C
ANISOU  654  CB  ARG A 137     3846   5192   4582  -1208    669    120       C
ATOM    655  CG  ARG A 137     -16.506   1.389  24.165  1.00 43.27           C
ANISOU  655  CG  ARG A 137     4864   6111   5468  -1281    727    125       C
ATOM    656  CD  ARG A 137     -17.615   1.815  25.112  1.00 50.55           C
ANISOU  656  CD  ARG A 137     5668   7135   6405  -1309    814    121       C
ATOM    657  NE  ARG A 137     -17.242   1.533  26.496  1.00 53.22           N
ANISOU  657  NE  ARG A 137     6097   7434   6690  -1333    876    120       N
ATOM    658  CZ  ARG A 137     -17.854   2.040  27.560  1.00 55.95           C
ANISOU  658  CZ  ARG A 137     6378   7846   7036  -1326    961    115       C
ATOM    659  NH1 ARG A 137     -18.885   2.859  27.409  1.00 61.32           N
ANISOU  659  NH1 ARG A 137     6895   8643   7760  -1293    994    109       N
ATOM    660  NH2 ARG A 137     -17.434   1.726  28.778  1.00 49.77           N
ANISOU  660  NH2 ARG A 137     5693   7013   6203  -1346   1011    115       N
ATOM    661  C   ARG A 137     -14.576   0.691  22.226  1.00 30.88           C
ANISOU  661  C   ARG A 137     3480   4382   3871  -1217    567    135       C
ATOM    662  O   ARG A 137     -13.700   0.510  23.069  1.00 29.95           O
ANISOU  662  O   ARG A 137     3472   4204   3702  -1198    588    127       O
ATOM    663  N   CYS A 138     -14.991  -0.267  21.407  1.00 34.25           N
ANISOU  663  N   CYS A 138     3910   4803   4300  -1303    504    153       N
ATOM    664  CA  CYS A 138     -14.429  -1.609  21.470  1.00 37.51           C
ANISOU  664  CA  CYS A 138     4472   5135   4646  -1379    455    167       C
ATOM    665  CB  CYS A 138     -15.194  -2.551  20.537  1.00 43.36           C
ANISOU  665  CB  CYS A 138     5201   5883   5392  -1467    374    184       C
ATOM    666  SG  CYS A 138     -16.934  -2.773  20.998  1.00 55.20           S
ANISOU  666  SG  CYS A 138     6553   7490   6931  -1604    425    195       S
ATOM    667  C   CYS A 138     -12.935  -1.605  21.145  1.00 33.09           C
ANISOU  667  C   CYS A 138     4040   4489   4044  -1286    411    159       C
ATOM    668  O   CYS A 138     -12.146  -2.314  21.769  1.00 29.30           O
ANISOU  668  O   CYS A 138     3695   3943   3495  -1307    408    157       O
ATOM    669  N   THR A 139     -12.546  -0.794  20.170  1.00 26.27           N
ANISOU  669  N   THR A 139     3136   3630   3215  -1181    376    152       N
ATOM    670  CA  THR A 139     -11.139  -0.662  19.826  1.00 23.89           C
ANISOU  670  CA  THR A 139     2935   3265   2876  -1090    340    145       C
ATOM    671  CB  THR A 139     -10.954   0.266  18.613  1.00 24.60           C
ANISOU  671  CB  THR A 139     2962   3373   3012   -988    303    142       C
ATOM    672  OG1 THR A 139     -11.734  -0.229  17.518  1.00 26.99           O
ANISOU  672  OG1 THR A 139     3227   3689   3337  -1020    233    152       O
ATOM    673  CG2 THR A 139      -9.486   0.338  18.209  1.00 19.26           C
ANISOU  673  CG2 THR A 139     2383   2641   2292   -903    267    137       C
ATOM    674  C   THR A 139     -10.367  -0.102  21.014  1.00 25.03           C
ANISOU  674  C   THR A 139     3120   3392   2997  -1043    410    127       C
ATOM    675  O   THR A 139      -9.305  -0.605  21.382  1.00 26.08           O
ANISOU  675  O   THR A 139     3375   3465   3068  -1025    394    117       O
ATOM    676  N   ILE A 140     -10.918   0.936  21.623  1.00 22.01           N
ANISOU  676  N   ILE A 140     2643   3063   2657  -1009    475    115       N
ATOM    677  CA  ILE A 140     -10.266   1.561  22.758  1.00 23.74           C
ANISOU  677  CA  ILE A 140     2902   3261   2858   -951    528     92       C
ATOM    678  CB  ILE A 140     -10.969   2.872  23.139  1.00 25.05           C
ANISOU  678  CB  ILE A 140     2951   3488   3078   -900    585     85       C
ATOM    679  CG1 ILE A 140     -10.844   3.878  21.988  1.00 25.41           C
ANISOU  679  CG1 ILE A 140     2932   3553   3168   -817    552     87       C
ATOM    680  CD1 ILE A 140     -11.768   5.058  22.111  1.00 29.64           C
ANISOU  680  CD1 ILE A 140     3348   4158   3755   -776    595     82       C
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ATOM    681  CG2 ILE A 140     -10.382   3.446  24.419  1.00 24.43           C
ANISOU  681  CG2 ILE A 140     2922   3380   2982   -849    636     64       C
ATOM    682  C   ILE A 140     -10.197   0.591  23.943  1.00 28.69           C
ANISOU  682  C   ILE A 140     3622   3852   3427  -1025    556     85       C
ATOM    683  O   ILE A 140      -9.167   0.484  24.615  1.00 25.26           O
ANISOU  683  O   ILE A 140     3289   3361   2949   -987    560     65       O
ATOM    684  N   GLU A 141     -11.285  -0.132  24.181  1.00 27.08           N
ANISOU  684  N   GLU A 141     3386   3682   3223  -1134    574    101       N
ATOM    685  CA  GLU A 141     -11.305  -1.121  25.259  1.00 33.48           C
ANISOU  685  CA  GLU A 141     4294   4455   3972  -1220    601     98       C
ATOM    686  CB  GLU A 141     -12.686  -1.768  25.390  1.00 36.14           C
ANISOU  686  CB  GLU A 141     4565   4847   4319  -1351    624    121       C
ATOM    687  CG  GLU A 141     -13.729  -0.842  25.997  1.00 40.45           C
ANISOU  687  CG  GLU A 141     4966   5485   4918  -1346    706    119       C
ATOM    688  CD  GLU A 141     -15.064  -1.521  26.230  1.00 52.37           C
ANISOU  688  CD  GLU A 141     6405   7061   6432  -1485    736    141       C
ATOM    689  OE1 GLU A 141     -15.176  -2.738  25.965  1.00 57.78           O
ANISOU  689  OE1 GLU A 141     7166   7711   7077  -1595    690    159       O
ATOM    690  OE2 GLU A 141     -16.004  -0.832  26.678  1.00 54.33           O
ANISOU  690  OE2 GLU A 141     6522   7401   6719  -1485    803    140       O
ATOM    691  C   GLU A 141     -10.227  -2.179  25.057  1.00 36.25           C
ANISOU  691  C   GLU A 141     4806   4718   4248  -1231    537     94       C
ATOM    692  O   GLU A 141      -9.650  -2.682  26.021  1.00 40.65           O
ANISOU  692  O   GLU A 141     5479   5220   4745  -1243    555     76       O
ATOM    693  N   ALA A 142      -9.943  -2.499  23.798  1.00 35.44           N
ANISOU  693  N   ALA A 142     4716   4602   4146  -1219    460    109       N
ATOM    694  CA  ALA A 142      -8.898  -3.462  23.477  1.00 31.93           C
ANISOU  694  CA  ALA A 142     4424   4080   3627  -1215    390    107       C
ATOM    695  CB  ALA A 142      -9.097  -4.016  22.074  1.00 34.21           C
ANISOU  695  CB  ALA A 142     4713   4364   3922  -1234    301    131       C
ATOM    696  C   ALA A 142      -7.493  -2.874  23.636  1.00 33.27           C
ANISOU  696  C   ALA A 142     4648   4218   3776  -1094    389     78       C
ATOM    697  O   ALA A 142      -6.500  -3.571  23.432  1.00 35.13           O
ANISOU  697  O   ALA A 142     5007   4397   3944  -1071    336     70       O
ATOM    698  N   GLY A 143      -7.416  -1.593  23.991  1.00 27.19           N
ANISOU  698  N   GLY A 143     3787   3484   3060  -1017    443     61       N
ATOM    699  CA  GLY A 143      -6.145  -0.953  24.276  1.00 29.75           C
ANISOU  699  CA  GLY A 143     4152   3781   3373   -914    445     32       C
ATOM    700  C   GLY A 143      -5.489  -0.169  23.148  1.00 28.88           C
ANISOU  700  C   GLY A 143     3992   3689   3293   -826    407     37       C
ATOM    701  O   GLY A 143      -4.327   0.223  23.274  1.00 25.25           O
ANISOU  701  O   GLY A 143     3571   3205   2816   -751    398     14       O
ATOM    702  N   TYR A 144      -6.223   0.078  22.061  1.00 24.88           N
ANISOU  702  N   TYR A 144     3648   2477   3326   -607    -15    388       N
ATOM    703  CA  TYR A 144      -5.659   0.722  20.869  1.00 24.95           C
ANISOU  703  CA  TYR A 144     3601   2522   3357   -530     -3    281       C
ATOM    704  C   TYR A 144      -6.365   2.019  20.474  1.00 27.21           C
ANISOU  704  C   TYR A 144     3792   2925   3620   -534     98    279       C
ATOM    705  CB  TYR A 144      -5.717  -0.229  19.665  1.00 22.60           C
ANISOU  705  CB  TYR A 144     3317   2153   3118   -533    -85    226       C
ATOM    706  CG  TYR A 144      -5.025  -1.554  19.884  1.00 27.70           C
ANISOU  706  CG  TYR A 144     4064   2662   3799   -510   -205    210       C
ATOM    707  CD1 TYR A 144      -3.671  -1.612  20.176  1.00 30.75           C
ANISOU  707  CD1 TYR A 144     4481   3022   4181   -409   -241    154       C
ATOM    708  CD2 TYR A 144      -5.729  -2.746  19.810  1.00 34.05           C
ANISOU  708  CD2 TYR A 144     4933   3360   4644   -590   -293    257       C
ATOM    709  CE1 TYR A 144      -3.034  -2.824  20.382  1.00 32.86           C
ANISOU  709  CE1 TYR A 144     4841   3157   4488   -372   -359    136       C
ATOM    710  CE2 TYR A 144      -5.101  -3.965  20.018  1.00 38.42           C
ANISOU  710  CE2 TYR A 144     5594   3767   5236   -563   -420    241       C
ATOM    711  CZ  TYR A 144      -3.752  -3.995  20.301  1.00 34.98           C
ANISOU  711  CZ  TYR A 144     5186   3305   4799   -445   -451    176       C
ATOM    712  OH  TYR A 144      -3.119  -5.202  20.507  1.00 33.87           O
ANISOU  712  OH  TYR A 144     5152   3014   4704   -402   -585    157       O
ATOM    713  O   TYR A 144      -7.521   1.991  20.061  1.00 32.77           O
ANISOU  713  O   TYR A 144     4448   3661   4341   -598    126    320       O
ATOM    714  N   PRO A 145      -5.682   3.167  20.621  1.00 21.12           N
ANISOU  714  N   PRO A 145     2997   2213   2814   -469    144    239       N
ATOM    715  CA  PRO A 145      -4.440   3.311  21.379  1.00 17.75           C
ANISOU  715  CA  PRO A 145     2622   1763   2359   -412    115    219       C
ANISOU  715  CA  PRO A 145     2622   1763   2359   -412    115    219       C
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ATOM    716  C   PRO A 145      -4.810   3.521  22.837  1.00 18.89           C
ANISOU  716  C   PRO A 145     2815   1919   2444   -440    155    293       C
ATOM    717  CB  PRO A 145      -3.853   4.606  20.827  1.00 20.59           C
ANISOU  717  CB  PRO A 145     2923   2194   2704   -359    147    163       C
ATOM    718  CG  PRO A 145      -5.050   5.419  20.434  1.00 18.51           C
ANISOU  718  CG  PRO A 145     2598   1996   2438   -391    220    184       C
ATOM    719  CD  PRO A 145      -6.124   4.444  20.029  1.00 17.53           C
ANISOU  719  CD  PRO A 145     2461   1848   2350   -455    213    220       C
ATOM    720  O   PRO A 145      -6.000   3.555  23.151  1.00 22.05           O
ANISOU  720  O   PRO A 145     3194   2358   2826   -496    212    354       O
ATOM    721  N   GLY A 146      -3.813   3.678  23.698  1.00 16.68           N
ANISOU  721  N   GLY A 146     2592   1618   2128   -403    126    289       N
ATOM    722  CA  GLY A 146      -4.047   3.962  25.100  1.00 13.21           C
ANISOU  722  CA  GLY A 146     2209   1197   1611   -423    161    349       C
ATOM    723  C   GLY A 146      -3.868   5.434  25.438  1.00 17.21           C
ANISOU  723  C   GLY A 146     2709   1769   2062   -379    217    317       C
ATOM    724  O   GLY A 146      -3.356   6.217  24.637  1.00 18.76           O
ANISOU  724  O   GLY A 146     2859   1984   2284   -339    210    257       O
ATOM    725  N   VAL A 147      -4.299   5.809  26.634  1.00 16.03           N
ANISOU  725  N   VAL A 147     2610   1653   1829   -388    266    357       N
ATOM    726  CA  VAL A 147      -4.164   7.183  27.107  1.00 14.76           C
ANISOU  726  CA  VAL A 147     2470   1535   1603   -340    305    321       C
ATOM    727  CB  VAL A 147      -5.487   7.964  26.947  1.00 22.47           C
ANISOU  727  CB  VAL A 147     3390   2590   2559   -327    408    320       C
ATOM    728  CG1 VAL A 147      -5.308   9.421  27.383  1.00 26.75           C
ANISOU  728  CG1 VAL A 147     3972   3152   3041   -261    430    266       C
ATOM    729  CG2 VAL A 147      -5.996   7.881  25.516  1.00 28.12           C
ANISOU  729  CG2 VAL A 147     4003   3315   3367   -340    415    304       C
ATOM    730  C   VAL A 147      -3.807   7.161  28.586  1.00 19.24           C
ANISOU  730  C   VAL A 147     3141   2095   2072   -342    295    353       C
ATOM    731  O   VAL A 147      -4.454   6.455  29.359  1.00 23.54           O
ANISOU  731  O   VAL A 147     3715   2661   2569   -386    326    421       O
ATOM    732  N   LEU A 148      -2.785   7.915  28.984  1.00 18.54           N
ANISOU  732  N   LEU A 148     3111   1984   1951   -306    244    314       N
ATOM    733  CA  LEU A 148      -2.414   8.002  30.401  1.00 18.62           C
ANISOU  733  CA  LEU A 148     3231   1988   1855   -308    225    339       C
ATOM    734  CB  LEU A 148      -0.968   8.480  30.575  1.00 20.12           C
ANISOU  734  CB  LEU A 148     3471   2127   2045   -288    122    307       C
ATOM    735  CG  LEU A 148       0.189   7.593  30.107  1.00 25.54           C
ANISOU  735  CG  LEU A 148     4129   2758   2815   -298     21    321       C
ATOM    736  CD1 LEU A 148       1.523   8.214  30.531  1.00 24.27           C
ANISOU  736  CD1 LEU A 148     4016   2574   2633   -285    -74    306       C
ATOM    737  CD2 LEU A 148       0.044   6.170  30.645  1.00 25.39           C
ANISOU  737  CD2 LEU A 148     4146   2703   2799   -337     -5    388       C
ATOM    738  C   LEU A 148      -3.340   8.947  31.160  1.00 22.45           C
ANISOU  738  C   LEU A 148     3754   2542   2234   -276    319    323       C
ATOM    739  O   LEU A 148      -3.789   9.959  30.622  1.00 20.38           O
ANISOU  739  O   LEU A 148     3453   2306   1985   -229    364    269       O
ATOM    740  N   SER A 149      -3.615   8.624  32.420  1.00 22.66           N
ANISOU  740  N   SER A 149     3860   2601   2150   -295    347    369       N
ATOM    741  CA  SER A 149      -4.456   9.492  33.237  1.00 25.98           C
ANISOU  741  CA  SER A 149     4321   3102   2447   -247    442    344       C
ATOM    742  CB  SER A 149      -4.946   8.747  34.479  1.00 31.63           C
ANISOU  742  CB  SER A 149     5092   3884   3042   -292    489    423       C
ATOM    743  OG  SER A 149      -3.873   8.533  35.375  1.00 41.58           O
ANISOU  743  OG  SER A 149     6471   5088   4240   -316    395    439       O
ATOM    744  C   SER A 149      -3.719  10.769  33.644  1.00 26.47           C
ANISOU  744  C   SER A 149     4481   3125   2451   -184    393    261       C
ATOM    745  O   SER A 149      -4.344  11.807  33.858  1.00 29.92           O
ANISOU  745  O   SER A 149     4941   3603   2826   -112    457    201       O
ATOM    746  N   SER A 150      -2.394  10.695  33.750  1.00 24.47           N
ANISOU  746  N   SER A 150     4286   2792   2221   -209    272    260       N
ATOM    747  CA  SER A 150      -1.592  11.866  34.114  1.00 25.01           C
ANISOU  747  CA  SER A 150     4450   2811   2242   -172    197    196       C
ATOM    748  CB  SER A 150      -0.526  11.497  35.144  1.00 28.37           C
ANISOU  748  CB  SER A 150     4986   3195   2598   -212     96    230       C
ATOM    749  OG  SER A 150      -1.124  11.088  36.359  1.00 39.02           O
ANISOU  749  OG  SER A 150     6414   4602   3810   -220    157    265       O
ATOM    750  C   SER A 150      -0.918  12.506  32.909  1.00 22.94           C
ANISOU  750  C   SER A 150     4122   2495   2098   -167    127    158       C
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ATOM    751  O   SER A 150      -0.595  11.823  31.937  1.00 21.32           O
ANISOU  751  O   SER A 150     3814   2281   2005   -199    103    186       O
ATOM    752  N   ARG A 151      -0.710  13.822  32.978  1.00 16.72           N
ANISOU  752  N   ARG A 151     3400   1675   1280   -127     87     94       N
ATOM    753  CA  ARG A 151       0.027  14.538  31.945  1.00 17.44           C
ANISOU  753  CA  ARG A 151     3440   1718   1467   -140      2     74       C
ATOM    754  CB  ARG A 151      -0.303  16.042  31.993  1.00 20.22           C
ANISOU  754  CB  ARG A 151     3867   2034   1782    -85    -13      2       C
ATOM    755  CG  ARG A 151      -1.754  16.402  31.637  1.00 20.78           C
ANISOU  755  CG  ARG A 151     3890   2151   1855    -12    111    -37       C
ATOM    756  CD  ARG A 151      -2.072  17.902  31.865  1.00 19.77           C
ANISOU  756  CD  ARG A 151     3862   1969   1679     65     82   -119       C
ATOM    757  NE  ARG A 151      -3.493  18.178  31.638  1.00 23.33           N
ANISOU  757  NE  ARG A 151     4259   2477   2127    153    206   -155       N
ATOM    758  CZ  ARG A 151      -4.030  18.448  30.448  1.00 27.80           C
ANISOU  758  CZ  ARG A 151     4711   3052   2800    162    229   -151       C
ATOM    759  NH1 ARG A 151      -3.268  18.505  29.359  1.00 21.66           N
ANISOU  759  NH1 ARG A 151     3865   2235   2130     88    143   -116       N
ATOM    760  NH2 ARG A 151      -5.334  18.671  30.344  1.00 22.47           N
ANISOU  760  NH2 ARG A 151     3983   2436   2119    246    339   -178       N
ATOM    761  C   ARG A 151       1.521  14.330  32.190  1.00 20.91           C
ANISOU  761  C   ARG A 151     3912   2113   1920   -197   -131    109       C
ATOM    762  O   ARG A 151       1.920  14.014  33.311  1.00 17.28           O
ANISOU  762  O   ARG A 151     3550   1639   1375   -211   -170    129       O
ATOM    763  N   ASP A 152       2.343  14.506  31.152  1.00 20.75           N
ANISOU  763  N   ASP A 152     3800   2083   2000   -230   -202    123       N
ATOM    764  CA  ASP A 152       3.798  14.474  31.320  1.00 20.00           C
ANISOU  764  CA  ASP A 152     3714   1963   1921   -281   -334    161       C
ATOM    765  CB  ASP A 152       4.519  14.061  30.027  1.00 19.91           C
ANISOU  765  CB  ASP A 152     3545   1991   2028   -307   -363    192       C
ATOM    766  CG  ASP A 152       4.282  15.022  28.868  1.00 19.51           C
ANISOU  766  CG  ASP A 152     3424   1956   2034   -313   -356    171       C
ATOM    767  OD1 ASP A 152       3.979  16.216  29.104  1.00 18.09           O
ANISOU  767  OD1 ASP A 152     3328   1732   1814   -310   -383    140       O
ATOM    768  OD2 ASP A 152       4.417  14.571  27.704  1.00 20.59           O
ANISOU  768  OD2 ASP A 152     3425   2147   2252   -320   -331    184       O
ATOM    769  C   ASP A 152       4.313  15.816  31.833  1.00 19.93           C
ANISOU  769  C   ASP A 152     3820   1897   1856   -298   -438    137       C
ATOM    770  O   ASP A 152       3.523  16.706  32.144  1.00 18.66           O
ANISOU  770  O   ASP A 152     3749   1706   1636   -255   -406     80       O
ATOM    771  N   LYS A 153       5.633  15.965  31.923  1.00 18.21           N
ANISOU  771  N   LYS A 153     3600   1662   1656   -357   -571    181       N
ATOM    772  CA  LYS A 153       6.207  17.157  32.547  1.00 24.56           C
ANISOU  772  CA  LYS A 153     4534   2399   2401   -391   -697    169       C
ATOM    773  CB  LYS A 153       7.694  16.952  32.853  1.00 22.77           C
ANISOU  773  CB  LYS A 153     4291   2172   2188   -465   -841    240       C
ATOM    774  CG  LYS A 153       8.583  16.853  31.624  1.00 23.55           C
ANISOU  774  CG  LYS A 153     4209   2335   2404   -514   -886    300       C
ATOM    775  CD  LYS A 153      10.037  16.659  32.014  1.00 30.63           C
ANISOU  775  CD  LYS A 153     5078   3248   3311   -580  -1027    375       C
ATOM    776  CE  LYS A 153      10.957  16.812  30.816  1.00 33.61           C
ANISOU  776  CE  LYS A 153     5273   3711   3788   -631  -1077    437       C
ATOM    777  NZ  LYS A 153      12.385  16.723  31.223  1.00 31.00           N
ANISOU  777  NZ  LYS A 153     4902   3410   3467   -697  -1221    520       N
ATOM    778  C   LYS A 153       5.985  18.403  31.689  1.00 23.93           C
ANISOU  778  C   LYS A 153     4440   2287   2363   -400   -728    143       C
ATOM    779  O   LYS A 153       6.164  19.530  32.154  1.00 23.60           O
ANISOU  779  O   LYS A 153     4529   2166   2271   -417   -828    117       O
ATOM    780  N   TYR A 154       5.585  18.194  30.440  1.00 21.89           N
ANISOU  780  N   TYR A 154     4035   2085   2197   -392   -652    151       N
ATOM    781  CA  TYR A 154       5.280  19.304  29.544  1.00 21.04           C
ANISOU  781  CA  TYR A 154     3907   1954   2135   -403   -677    136       C
ATOM    782  CB  TYR A 154       5.670  18.949  28.106  1.00 21.62           C
ANISOU  782  CB  TYR A 154     3789   2114   2314   -447   -661    190       C
ATOM    783  CG  TYR A 154       7.140  18.638  27.907  1.00 22.88           C
ANISOU  783  CG  TYR A 154     3860   2327   2507   -525   -762    267       C
ATOM    784  CD1 TYR A 154       8.066  19.656  27.696  1.00 27.84           C
ANISOU  784  CD1 TYR A 154     4491   2939   3147   -616   -906    321       C
ATOM    785  CE1 TYR A 154       9.410  19.378  27.505  1.00 30.85           C
ANISOU  785  CE1 TYR A 154     4768   3394   3558   -688   -994    403       C
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ATOM    786  CZ  TYR A 154       9.846  18.067  27.522  1.00 33.61           C
ANISOU  786  CZ  TYR A 154     5017   3825   3930   -651   -938    418       C
ATOM    787  OH  TYR A 154      11.183  17.787  27.328  1.00 31.88           O
ANISOU  787  OH  TYR A 154     4679   3692   3742   -704  -1022    496       O
ATOM    788  CE2 TYR A 154       8.948  17.035  27.734  1.00 24.80           C
ANISOU  788  CE2 TYR A 154     3915   2703   2805   -559   -807    359       C
ATOM    789  CD2 TYR A 154       7.604  17.323  27.920  1.00 23.09           C
ANISOU  789  CD2 TYR A 154     3794   2423   2556   -507   -719    291       C
ATOM    790  C   TYR A 154       3.792  19.650  29.602  1.00 20.38           C
ANISOU  790  C   TYR A 154     3877   1844   2021   -311   -564     60       C
ATOM    791  O   TYR A 154       3.319  20.534  28.885  1.00 22.73           O
ANISOU  791  O   TYR A 154     4164   2115   2360   -302   -574     41       O
ATOM    792  N   GLY A 155       3.057  18.941  30.454  1.00 20.03           N
ANISOU  792  N   GLY A 155     3883   1819   1908   -247   -461     26       N
ATOM    793  CA  GLY A 155       1.616  19.111  30.562  1.00 20.03           C
ANISOU  793  CA  GLY A 155     3907   1829   1875   -154   -336    -36       C
ATOM    794  C   GLY A 155       0.861  18.510  29.380  1.00 21.09           C
ANISOU  794  C   GLY A 155     3876   2035   2102   -145   -227    -17       C
ATOM    795  O   GLY A 155      -0.301  18.842  29.141  1.00 17.48           O
ANISOU  795  O   GLY A 155     3404   1590   1647    -79   -141    -56       O
ATOM    796  N   ARG A 156       1.521  17.621  28.641  1.00 18.71           N
ANISOU  796  N   ARG A 156     3452   1784   1874   -204   -235     40       N
ATOM    797  CA  ARG A 156       0.912  16.982  27.475  1.00 19.60           C
ANISOU  797  CA  ARG A 156     3418   1961   2069   -203   -149     55       C
ATOM    798  CB  ARG A 156       1.982  16.587  26.447  1.00 17.85           C
ANISOU  798  CB  ARG A 156     3078   1779   1925   -268   -209    103       C
ATOM    799  CG  ARG A 156       2.832  17.769  25.976  1.00 18.11           C
ANISOU  799  CG  ARG A 156     3114   1787   1979   -323   -328    124       C
ATOM    800  CD  ARG A 156       3.940  17.342  25.015  1.00 16.97           C
ANISOU  800  CD  ARG A 156     2835   1717   1895   -385   -376    178       C
ATOM    801  NE  ARG A 156       4.728  16.209  25.513  1.00 18.14           N
ANISOU  801  NE  ARG A 156     2961   1894   2036   -383   -384    199       N
ATOM    802  CZ  ARG A 156       5.976  15.944  25.124  1.00 21.54           C
ANISOU  802  CZ  ARG A 156     3303   2384   2498   -424   -453    246       C
ATOM    803  NH1 ARG A 156       6.583  16.746  24.251  1.00 18.12           N
ANISOU  803  NH1 ARG A 156     2793   1998   2094   -485   -517    285       N
ATOM    804  NH2 ARG A 156       6.622  14.886  25.609  1.00 21.10           N
ANISOU  804  NH2 ARG A 156     3229   2345   2441   -405   -463    260       N
ATOM    805  C   ARG A 156       0.105  15.750  27.845  1.00 20.33           C
ANISOU  805  C   ARG A 156     3484   2099   2143   -175    -35     61       C
ATOM    806  O   ARG A 156       0.418  15.046  28.811  1.00 17.58           O
ANISOU  806  O   ARG A 156     3194   1746   1738   -180    -39     78       O
ATOM    807  N   VAL A 157      -0.934  15.483  27.062  1.00 18.38           N
ANISOU  807  N   VAL A 157     3146   1894   1943   -155     55     57       N
ATOM    808  CA  VAL A 157      -1.586  14.187  27.129  1.00 19.66           C
ANISOU  808  CA  VAL A 157     3257   2101   2111   -157    141     83       C
ATOM    809  CB  VAL A 157      -2.930  14.184  26.402  1.00 21.74           C
ANISOU  809  CB  VAL A 157     3437   2409   2415   -134    235     78       C
ATOM    810  CG1 VAL A 157      -3.543  12.793  26.455  1.00 22.32           C
ANISOU  810  CG1 VAL A 157     3459   2521   2499   -159    302    119       C
ATOM    811  CG2 VAL A 157      -3.868  15.187  27.045  1.00 21.43           C
ANISOU  811  CG2 VAL A 157     3457   2372   2313    -64    288     39       C
ATOM    812  C   VAL A 157      -0.642  13.162  26.502  1.00 19.86           C
ANISOU  812  C   VAL A 157     3212   2133   2200   -204     92    115       C
ATOM    813  O   VAL A 157      -0.002  13.438  25.486  1.00 15.63           O
ANISOU  813  O   VAL A 157     2605   1610   1725   -225     43    114       O
ATOM    814  N   VAL A 158      -0.549  11.990  27.119  1.00 18.40           N
ANISOU  814  N   VAL A 158     3048   1946   1998   -216    102    145       N
ATOM    815  CA  VAL A 158       0.321  10.930  26.623  1.00 16.14           C
ANISOU  815  CA  VAL A 158     2707   1655   1771   -237     51    165       C
ATOM    816  CB  VAL A 158       1.240  10.398  27.739  1.00 18.95           C
ANISOU  816  CB  VAL A 158     3143   1975   2083   -245    -18    194       C
ATOM    817  CG1 VAL A 158       2.171   9.321  27.189  1.00 16.19           C
ANISOU  817  CG1 VAL A 158     2730   1617   1803   -245    -77    208       C
ATOM    818  CG2 VAL A 158       2.040  11.540  28.353  1.00 19.75           C
ANISOU  818  CG2 VAL A 158     3315   2057   2132   -249    -89    185       C
ATOM    819  C   VAL A 158      -0.506   9.772  26.078  1.00 17.58           C
ANISOU  819  C   VAL A 158     2830   1849   1999   -246    107    179       C
ATOM    820  O   VAL A 158      -1.249   9.130  26.822  1.00 18.33           O
ANISOU  820  O   VAL A 158     2969   1939   2059   -257    151    211       O
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ATOM    821  N   MET A 159      -0.384   9.523  24.773  1.00 14.67           N
ANISOU  821  N   MET A 159     2367   1502   1704   -247    102    160       N
ATOM    822  CA  MET A 159      -1.065   8.415  24.117  1.00 16.18           C
ANISOU  822  CA  MET A 159     2511   1692   1945   -259    132    165       C
ATOM    823  CB  MET A 159      -1.640   8.863  22.766  1.00 16.11           C
ANISOU  823  CB  MET A 159     2412   1728   1983   -263    167    138       C
ATOM    824  CG  MET A 159      -2.547  10.091  22.919  1.00 21.82           C
ANISOU  824  CG  MET A 159     3136   2478   2676   -259    223    139       C
ATOM    825  SD  MET A 159      -3.534  10.498  21.473  1.00 27.54           S
ANISOU  825  SD  MET A 159     3759   3249   3455   -272    264    127       S
ATOM    826  CE  MET A 159      -4.768   9.200  21.567  1.00 21.28           C
ANISOU  826  CE  MET A 159     2951   2455   2682   -304    316    163       C
ATOM    827  C   MET A 159      -0.104   7.242  23.957  1.00 16.42           C
ANISOU  827  C   MET A 159     2538   1686   2014   -247     62    163       C
ATOM    828  O   MET A 159       1.117   7.432  23.918  1.00 14.02           O
ANISOU  828  O   MET A 159     2223   1389   1716   -223      1    149       O
ATOM    829  N   LEU A 160      -0.657   6.031  23.885  1.00 13.16           N
ANISOU  829  N   LEU A 160     2137   1234   1631   -262     63    179       N
ATOM    830  CA  LEU A 160       0.154   4.819  23.914  1.00 15.24           C
ANISOU  830  CA  LEU A 160     2422   1437   1930   -239    -15    176       C
ATOM    831  CB  LEU A 160      -0.042   4.081  25.242  1.00 15.28           C
ANISOU  831  CB  LEU A 160     2524   1380   1902   -270    -41    241       C
ATOM    832  CG  LEU A 160       0.166   4.841  26.553  1.00 17.37           C
ANISOU  832  CG  LEU A 160     2856   1660   2083   -282    -31    278       C
ATOM    833  CD1 LEU A 160      -0.320   3.974  27.706  1.00 23.12           C
ANISOU  833  CD1 LEU A 160     3671   2343   2769   -330    -43    353       C
ATOM    834  CD2 LEU A 160       1.628   5.249  26.741  1.00 18.14           C
ANISOU  834  CD2 LEU A 160     2956   1758   2179   -241   -105    257       C
ATOM    835  C   LEU A 160      -0.206   3.846  22.813  1.00 15.98           C
ANISOU  835  C   LEU A 160     2478   1505   2087   -233    -29    144       C
ATOM    836  O   LEU A 160      -1.369   3.720  22.434  1.00 17.49           O
ANISOU  836  O   LEU A 160     2656   1702   2288   -278     17    158       O
ATOM    837  N   PHE A 161       0.798   3.126  22.326  1.00 14.57           N
ANISOU  837  N   PHE A 161     2287   1301   1949   -173    -98    100       N
ATOM    838  CA  PHE A 161       0.548   2.001  21.446  1.00 16.23           C
ANISOU  838  CA  PHE A 161     2496   1459   2212   -155   -133     59       C
ATOM    839  CB  PHE A 161       0.503   2.417  19.970  1.00 14.45           C
ANISOU  839  CB  PHE A 161     2180   1311   1999   -130    -99    -10       C
ATOM    840  CG  PHE A 161       0.134   1.276  19.054  1.00 18.84           C
ANISOU  840  CG  PHE A 161     2753   1809   2598   -114   -140    -61       C
ATOM    841  CD1 PHE A 161      -1.190   0.909  18.884  1.00 23.94           C
ANISOU  841  CD1 PHE A 161     3426   2412   3258   -193   -126    -29       C
ATOM    842  CE1 PHE A 161      -1.537  -0.165  18.062  1.00 24.05           C
ANISOU  842  CE1 PHE A 161     3473   2355   3310   -188   -184    -74       C
ATOM    843  CZ  PHE A 161      -0.550  -0.886  17.420  1.00 23.49           C
ANISOU  843  CZ  PHE A 161     3413   2255   3258    -84   -250   -167       C
ATOM    844  CE2 PHE A 161       0.773  -0.540  17.593  1.00 25.53           C
ANISOU  844  CE2 PHE A 161     3629   2570   3502      8   -251   -202       C
ATOM    845  CD2 PHE A 161       1.114   0.536  18.417  1.00 20.20           C
ANISOU  845  CD2 PHE A 161     2916   1966   2794    -16   -200   -141       C
ATOM    846  C   PHE A 161       1.597   0.919  21.664  1.00 17.59           C
ANISOU  846  C   PHE A 161     2709   1555   2420    -82   -231     35       C
ATOM    847  O   PHE A 161       2.795   1.175  21.578  1.00 17.52           O
ANISOU  847  O   PHE A 161     2656   1591   2411    -11   -257      2       O
ATOM    848  N   ASN A 162       1.135  -0.287  21.979  1.00 18.44           N
ANISOU  848  N   ASN A 162     2900   1547   2560   -104   -293     61       N
ATOM    849  CA  ASN A 162       2.021  -1.424  22.161  1.00 20.29           C
ANISOU  849  CA  ASN A 162     3187   1682   2840    -28   -402     36       C
ATOM    850  CB  ASN A 162       1.841  -2.045  23.554  1.00 20.76           C
ANISOU  850  CB  ASN A 162     3353   1641   2893    -87   -463    135       C
ATOM    851  CG  ASN A 162       2.902  -3.097  23.873  1.00 27.48           C
ANISOU  851  CG  ASN A 162     4260   2386   3794      1   -590    119       C
ATOM    852  OD1 ASN A 162       3.369  -3.810  22.989  1.00 26.72           O
ANISOU  852  OD1 ASN A 162     4155   2246   3753     98   -648     32       O
ATOM    853  ND2 ASN A 162       3.271  -3.203  25.143  1.00 31.52           N
ANISOU  853  ND2 ASN A 162     4833   2859   4284    -26   -638    201       N
ATOM    854  C   ASN A 162       1.697  -2.419  21.064  1.00 24.44           C
ANISOU  854  C   ASN A 162     3732   2139   3417      7   -451    -36       C
ATOM    855  O   ASN A 162       0.593  -2.959  21.011  1.00 24.14           O
ANISOU  855  O   ASN A 162     3748   2030   3393    -77   -464      1       O
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ATOM    856  N   ILE A 163       2.645  -2.636  20.161  1.00 23.64           N
ANISOU  856  N   ILE A 163     3580   2067   3337    130   -477   -139       N
ATOM    857  CA  ILE A 163       2.360  -3.421  18.973  1.00 25.49           C
ANISOU  857  CA  ILE A 163     3830   2254   3601    177   -513   -232       C
ATOM    858  CB  ILE A 163       3.358  -3.112  17.841  1.00 27.64           C
ANISOU  858  CB  ILE A 163     3998   2647   3856    306   -483   -348       C
ATOM    859  CG1 ILE A 163       2.763  -3.500  16.486  1.00 31.10           C
ANISOU  859  CG1 ILE A 163     4440   3085   4291    321   -480   -439       C
ATOM    860  CD1 ILE A 163       3.382  -2.763  15.326  1.00 34.23           C
ANISOU  860  CD1 ILE A 163     4710   3658   4636    394   -404   -522       C
ATOM    861  CG2 ILE A 163       4.690  -3.810  18.096  1.00 29.92           C
ANISOU  861  CG2 ILE A 163     4291   2900   4176    453   -564   -398       C
ATOM    862  C   ILE A 163       2.354  -4.921  19.261  1.00 24.75           C
ANISOU  862  C   ILE A 163     3864   1972   3567    208   -649   -240       C
ATOM    863  O   ILE A 163       1.967  -5.718  18.407  1.00 28.89           O
ANISOU  863  O   ILE A 163     4439   2418   4120    232   -705   -311       O
ATOM    864  N   GLU A 164       2.758  -5.305  20.466  1.00 28.98           N
ANISOU  864  N   GLU A 164     4462   2426   4121    202   -716   -165       N
ATOM    865  CA  GLU A 164       2.895  -6.729  20.779  1.00 34.08           C
ANISOU  865  CA  GLU A 164     5236   2881   4833    240   -867   -167       C
ATOM    866  CB  GLU A 164       3.463  -6.944  22.178  1.00 33.40           C
ANISOU  866  CB  GLU A 164     5202   2733   4755    229   -932    -70       C
ATOM    867  CG  GLU A 164       3.791  -8.406  22.451  1.00 46.32           C
ANISOU  867  CG  GLU A 164     6968   4165   6468    290  -1107    -77       C
ATOM    868  CD  GLU A 164       4.760  -8.586  23.593  1.00 58.65           C
ANISOU  868  CD  GLU A 164     8556   5687   8043    335  -1181    -14       C
ATOM    869  OE1 GLU A 164       4.730  -7.761  24.529  1.00 62.85           O
ANISOU  869  OE1 GLU A 164     9055   6307   8516    247  -1114     84       O
ATOM    870  OE2 GLU A 164       5.549  -9.555  23.558  1.00 65.57           O
ANISOU  870  OE2 GLU A 164     9488   6439   8987    464  -1314    -66       O
ATOM    871  C   GLU A 164       1.589  -7.509  20.609  1.00 34.32           C
ANISOU  871  C   GLU A 164     5368   2783   4888    121   -924   -125       C
ATOM    872  O   GLU A 164       0.568  -7.175  21.198  1.00 32.42           O
ANISOU  872  O   GLU A 164     5136   2561   4620    -34   -876    -10       O
ATOM    873  N   ASN A 165       1.629  -8.553  19.795  1.00 40.48           N
ANISOU  873  N   ASN A 165     6223   3438   5720    195  -1031   -220       N
ATOM    874  CA  ASN A 165       0.424  -9.329  19.526  1.00 53.24           C
ANISOU  874  CA  ASN A 165     7940   4924   7365     74  -1107   -182       C
ATOM    875  CB  ASN A 165      -0.073 -10.001  20.809  1.00 64.46           C
ANISOU  875  CB  ASN A 165     9469   6210   8812    -58  -1202    -23       C
ATOM    876  CG  ASN A 165       0.929 -10.986  21.374  1.00 72.92           C
ANISOU  876  CG  ASN A 165    10643   7122   9943     51  -1356    -39       C
ATOM    877  OD1 ASN A 165       1.554 -11.747  20.632  1.00 74.67           O
ANISOU  877  OD1 ASN A 165    10917   7239  10214    201  -1456   -171       O
ATOM    878  ND2 ASN A 165       1.089 -10.978  22.693  1.00 75.71           N
ANISOU  878  ND2 ASN A 165    11024   7455  10286    -16  -1378     93       N
ATOM    879  C   ASN A 165      -0.713  -8.528  18.876  1.00 47.58           C
ANISOU  879  C   ASN A 165     7146   4329   6604    -45   -989   -160       C
ATOM    880  O   ASN A 165      -1.853  -8.990  18.851  1.00 45.37           O
ANISOU  880  O   ASN A 165     6924   3972   6341   -183  -1036    -87       O
ATOM    881  N   TRP A 166      -0.419  -7.333  18.364  1.00 34.27           N
ANISOU  881  N   TRP A 166     5325   2831   4864      1   -848   -211       N
ATOM    882  CA  TRP A 166      -1.406  -6.643  17.539  1.00 29.06           C
ANISOU  882  CA  TRP A 166     4595   2275   4172    -85   -756   -212       C
ATOM    883  CB  TRP A 166      -0.930  -5.248  17.104  1.00 25.92           C
ANISOU  883  CB  TRP A 166     4052   2080   3715    -33   -612   -254       C
ATOM    884  CG  TRP A 166      -1.785  -4.665  16.025  1.00 27.72           C
ANISOU  884  CG  TRP A 166     4216   2400   3916    -92   -543   -280       C
ATOM    885  CD1 TRP A 166      -3.136  -4.481  16.061  1.00 28.68           C
ANISOU  885  CD1 TRP A 166     4333   2524   4040   -237   -517   -191       C
ATOM    886  NE1 TRP A 166      -3.572  -3.925  14.878  1.00 26.07           N
ANISOU  886  NE1 TRP A 166     3934   2289   3684   -248   -465   -244       N
ATOM    887  CE2 TRP A 166      -2.492  -3.730  14.059  1.00 33.07           C
ANISOU  887  CE2 TRP A 166     4780   3244   4541   -114   -450   -367       C
ATOM    888  CD2 TRP A 166      -1.349  -4.189  14.747  1.00 31.67           C
ANISOU  888  CD2 TRP A 166     4639   3013   4380     -8   -495   -393       C
ATOM    889  CE3 TRP A 166      -0.104  -4.103  14.117  1.00 37.92           C
ANISOU  889  CE3 TRP A 166     5382   3881   5146    143   -484   -508       C
ATOM    890  CZ3 TRP A 166      -0.040  -3.575  12.842  1.00 43.57           C
ANISOU  890  CZ3 TRP A 166     6019   4726   5810    176   -427   -589       C
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ATOM    891  CH2 TRP A 166      -1.193  -3.128  12.184  1.00 45.32           C
ANISOU  891  CH2 TRP A 166     6218   4987   6014     63   -389   -559       C
ATOM    892  CZ2 TRP A 166      -2.425  -3.196  12.774  1.00 42.25           C
ANISOU  892  CZ2 TRP A 166     5871   4522   5661    -79   -402   -450       C
ATOM    893  C   TRP A 166      -1.675  -7.521  16.325  1.00 31.07           C
ANISOU  893  C   TRP A 166     4917   2437   4452    -49   -847   -319       C
ATOM    894  O   TRP A 166      -0.745  -7.964  15.646  1.00 32.41           O
ANISOU  894  O   TRP A 166     5105   2582   4627    108   -894   -456       O
ATOM    895  N   GLN A 167      -2.948  -7.802  16.075  1.00 28.65           N
ANISOU  895  N   GLN A 167     4647   2079   4158   -192   -877   -258       N
ATOM    896  CA  GLN A 167      -3.338  -8.587  14.911  1.00 36.23           C
ANISOU  896  CA  GLN A 167     5683   2947   5137   -182   -972   -353       C
ATOM    897  CB  GLN A 167      -4.057  -9.861  15.345  1.00 42.28           C
ANISOU  897  CB  GLN A 167     6600   3498   5967   -291  -1139   -275       C
ATOM    898  CG  GLN A 167      -3.165 -10.805  16.133  1.00 54.60           C
ANISOU  898  CG  GLN A 167     8273   4895   7575   -203  -1264   -284       C
ATOM    899  CD  GLN A 167      -3.852 -12.110  16.474  1.00 66.94           C
ANISOU  899  CD  GLN A 167    10002   6229   9205   -318  -1454   -206       C
ATOM    900  OE1 GLN A 167      -5.071 -12.158  16.636  1.00 71.55           O
ANISOU  900  OE1 GLN A 167    10587   6805   9795   -511  -1466    -76       O
ATOM    901  NE2 GLN A 167      -3.072 -13.179  16.590  1.00 71.76           N
ANISOU  901  NE2 GLN A 167    10747   6649   9868   -202  -1613   -277       N
ATOM    902  C   GLN A 167      -4.197  -7.751  13.965  1.00 32.47           C
ANISOU  902  C   GLN A 167     5111   2608   4619   -258   -877   -357       C
ATOM    903  O   GLN A 167      -5.370  -7.482  14.235  1.00 28.01           O
ANISOU  903  O   GLN A 167     4516   2066   4060   -419   -850   -234       O
ATOM    904  N   SER A 168      -3.591  -7.332  12.861  1.00 36.81           N
ANISOU  904  N   SER A 168     5604   3260   5122   -140   -826   -493       N
ATOM    905  CA  SER A 168      -4.219  -6.387  11.943  1.00 37.26           C
ANISOU  905  CA  SER A 168     5557   3468   5130   -197   -729   -499       C
ATOM    906  CB  SER A 168      -3.271  -6.057  10.792  1.00 38.58           C
ANISOU  906  CB  SER A 168     5673   3750   5236    -47   -684   -654       C
ATOM    907  OG  SER A 168      -2.951  -7.228  10.061  1.00 44.08           O
ANISOU  907  OG  SER A 168     6489   4322   5935     51   -807   -789       O
ATOM    908  C   SER A 168      -5.542  -6.894  11.388  1.00 39.56           C
ANISOU  908  C   SER A 168     5906   3682   5444   -338   -806   -459       C
ATOM    909  O   SER A 168      -6.388  -6.103  10.976  1.00 42.58           O
ANISOU  909  O   SER A 168     6200   4175   5805   -434   -732   -404       O
ATOM    910  N   GLN A 169      -5.720  -8.212  11.380  1.00 38.99           N
ANISOU  910  N   GLN A 169     5984   3412   5418   -352   -966   -483       N
ATOM    911  CA  GLN A 169      -6.928  -8.808  10.822  1.00 48.86           C
ANISOU  911  CA  GLN A 169     7302   4570   6692   -494  -1068   -445       C
ATOM    912  CB  GLN A 169      -6.658 -10.238  10.339  1.00 51.69           C
ANISOU  912  CB  GLN A 169     7848   4712   7080   -432  -1260   -559       C
ATOM    913  CG  GLN A 169      -6.559 -11.279  11.448  1.00 61.21           C
ANISOU  913  CG  GLN A 169     9180   5717   8360   -464  -1394   -481       C
ATOM    914  CD  GLN A 169      -5.265 -11.195  12.249  1.00 65.76           C
ANISOU  914  CD  GLN A 169     9742   6304   8940   -306  -1350   -518       C
ATOM    915  OE1 GLN A 169      -4.394 -10.368  11.974  1.00 59.54           O
ANISOU  915  OE1 GLN A 169     8845   5676   8099   -170  -1221   -603       O
ATOM    916  NE2 GLN A 169      -5.136 -12.065  13.246  1.00 71.43           N
ANISOU  916  NE2 GLN A 169    10570   6851   9721   -333  -1470   -443       N
ATOM    917  C   GLN A 169      -8.094  -8.788  11.812  1.00 52.51           C
ANISOU  917  C   GLN A 169     7740   5012   7200   -692  -1071   -242       C
ATOM    918  O   GLN A 169      -9.245  -9.004  11.431  1.00 56.47           O
ANISOU  918  O   GLN A 169     8247   5489   7719   -841  -1126   -170       O
ATOM    919  N   GLU A 170      -7.791  -8.532  13.080  1.00 43.42           N
ANISOU  919  N   GLU A 170     6556   3882   6060   -696  -1013   -147       N
ATOM    920  CA  GLU A 170      -8.826  -8.437  14.105  1.00 40.70           C
ANISOU  920  CA  GLU A 170     6172   3555   5738   -870   -991     47       C
ATOM    921  CB  GLU A 170      -8.388  -9.167  15.373  1.00 45.96           C
ANISOU  921  CB  GLU A 170     6929   4101   6435   -877  -1063    122       C
ATOM    922  CG  GLU A 170      -8.139 -10.656  15.165  1.00 56.03           C
ANISOU  922  CG  GLU A 170     8389   5135   7767   -866  -1275     73       C
ATOM    923  CD  GLU A 170      -7.894 -11.398  16.466  1.00 61.60           C
ANISOU  923  CD  GLU A 170     9183   5713   8507   -909  -1363    183       C
ATOM    924  OE1 GLU A 170      -7.659 -10.731  17.497  1.00 59.44           O
ANISOU  924  OE1 GLU A 170     8832   5549   8202   -910  -1249    266       O
ATOM    925  OE2 GLU A 170      -7.935 -12.648  16.456  1.00 69.20           O
ANISOU  925  OE2 GLU A 170    10305   6461   9527   -944  -1557    188       O
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ATOM    926  C   GLU A 170      -9.153  -6.978  14.420  1.00 36.81           C
ANISOU  926  C   GLU A 170     5508   3277   5200   -888   -801    113       C
ATOM    927  O   GLU A 170     -10.309  -6.618  14.637  1.00 34.05           O
ANISOU  927  O   GLU A 170     5080   3003   4853  -1025   -755    238       O
ATOM    928  N   ILE A 171      -8.123  -6.142  14.451  1.00 27.93           N
ANISOU  928  N   ILE A 171     4326   2251   4036   -748   -698     29       N
ATOM    929  CA  ILE A 171      -8.306  -4.706  14.629  1.00 25.16           C
ANISOU  929  CA  ILE A 171     3832   2086   3643   -746   -536     68       C
ATOM    930  CB  ILE A 171      -7.897  -4.250  16.032  1.00 25.03           C
ANISOU  930  CB  ILE A 171     3795   2108   3607   -729   -463    143       C
ATOM    931  CG1 ILE A 171      -8.773  -4.933  17.090  1.00 32.32           C
ANISOU  931  CG1 ILE A 171     4761   2968   4552   -867   -508    296       C
ATOM    932  CD1 ILE A 171      -8.290  -4.723  18.500  1.00 31.75           C
ANISOU  932  CD1 ILE A 171     4701   2912   4450   -850   -463    364       C
ATOM    933  CG2 ILE A 171      -7.967  -2.720  16.145  1.00 25.72           C
ANISOU  933  CG2 ILE A 171     3753   2370   3649   -704   -310    157       C
ATOM    934  C   ILE A 171      -7.437  -4.017  13.597  1.00 29.77           C
ANISOU  934  C   ILE A 171     4366   2759   4189   -617   -483    -72       C
ATOM    935  O   ILE A 171      -6.210  -4.102  13.657  1.00 31.15           O
ANISOU  935  O   ILE A 171     4566   2921   4349   -489   -489   -160       O
ATOM    936  N   THR A 172      -8.074  -3.354  12.635  1.00 27.50           N
ANISOU  936  N   THR A 172     3999   2568   3883   -655   -437    -84       N
ATOM    937  CA  THR A 172      -7.350  -2.840  11.481  1.00 22.49           C
ANISOU  937  CA  THR A 172     3325   2018   3203   -554   -405   -209       C
ATOM    938  CB  THR A 172      -8.291  -2.582  10.279  1.00 24.11           C
ANISOU  938  CB  THR A 172     3486   2277   3396   -629   -412   -215       C
ATOM    939  OG1 THR A 172      -9.162  -1.483  10.577  1.00 24.92           O
ANISOU  939  OG1 THR A 172     3475   2491   3503   -709   -317   -105       O
ATOM    940  CG2 THR A 172      -9.119  -3.825   9.957  1.00 26.18           C
ANISOU  940  CG2 THR A 172     3852   2399   3698   -721   -548   -202       C
ATOM    941  C   THR A 172      -6.608  -1.554  11.788  1.00 22.22           C
ANISOU  941  C   THR A 172     3191   2122   3130   -484   -285   -211       C
ATOM    942  O   THR A 172      -6.923  -0.851  12.756  1.00 22.07           O
ANISOU  942  O   THR A 172     3124   2147   3116   -525   -214   -115       O
ATOM    943  N   PHE A 173      -5.620  -1.248  10.951  1.00 22.02           N
ANISOU  943  N   PHE A 173     3136   2169   3060   -380   -266   -319       N
ATOM    944  CA  PHE A 173      -4.907   0.023  11.035  1.00 21.35           C
ANISOU  944  CA  PHE A 173     2952   2223   2935   -331   -169   -316       C
ATOM    945  CB  PHE A 173      -3.911   0.154   9.873  1.00 25.27           C
ANISOU  945  CB  PHE A 173     3413   2813   3375   -233   -163   -432       C
ATOM    946  CG  PHE A 173      -2.822   1.165  10.115  1.00 31.22           C
ANISOU  946  CG  PHE A 173     4082   3687   4093   -171    -93   -430       C
ATOM    947  CD1 PHE A 173      -1.551   0.759  10.490  1.00 34.62           C
ANISOU  947  CD1 PHE A 173     4524   4114   4517    -61   -110   -484       C
ATOM    948  CE1 PHE A 173      -0.546   1.691  10.719  1.00 34.71           C
ANISOU  948  CE1 PHE A 173     4449   4240   4497    -20    -57   -468       C
ATOM    949  CZ  PHE A 173      -0.810   3.042  10.577  1.00 32.84           C
ANISOU  949  CZ  PHE A 173     4131   4108   4237    -90      6   -401       C
ATOM    950  CE2 PHE A 173      -2.073   3.458  10.198  1.00 32.48           C
ANISOU  950  CE2 PHE A 173     4081   4058   4201   -187     22   -355       C
ATOM    951  CD2 PHE A 173      -3.072   2.522   9.972  1.00 33.48           C
ANISOU  951  CD2 PHE A 173     4278   4085   4358   -226    -23   -367       C
ATOM    952  C   PHE A 173      -5.894   1.194  11.027  1.00 23.04           C
ANISOU  952  C   PHE A 173     3081   2525   3150   -423    -95   -225       C
ATOM    953  O   PHE A 173      -5.768   2.132  11.822  1.00 20.38           O
ANISOU  953  O   PHE A 173     2697   2238   2809   -423    -29   -166       O
ATOM    954  N   ASP A 174      -6.873   1.139  10.125  1.00 19.66           N
ANISOU  954  N   ASP A 174     2637   2108   2725   -494   -116   -218       N
ATOM    955  CA  ASP A 174      -7.887   2.190  10.032  1.00 21.25           C
ANISOU  955  CA  ASP A 174     2751   2387   2934   -572    -58   -133       C
ATOM    956  CB  ASP A 174      -8.852   1.923   8.876  1.00 19.83           C
ANISOU  956  CB  ASP A 174     2562   2215   2758   -647   -106   -136       C
ATOM    957  CG  ASP A 174      -8.302   2.350   7.529  1.00 23.25           C
ANISOU  957  CG  ASP A 174     2962   2740   3131   -608   -106   -219       C
ATOM    958  OD1 ASP A 174      -7.200   2.944   7.466  1.00 20.19           O
ANISOU  958  OD1 ASP A 174     2543   2428   2701   -530    -62   -263       O
ATOM    959  OD2 ASP A 174      -8.997   2.096   6.526  1.00 28.20           O
ANISOU  959  OD2 ASP A 174     3593   3374   3749   -666   -155   -232       O
ATOM    960  C   ASP A 174      -8.694   2.322  11.319  1.00 20.73           C
ANISOU  960  C   ASP A 174     2679   2291   2909   -629    -23    -22       C
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ATOM    961  O   ASP A 174      -9.000   3.431  11.752  1.00 16.99           O
ANISOU  961  O   ASP A 174     2137   1888   2432   -634     50     34       O
ATOM    962  N   GLU A 175      -9.068   1.191  11.914  1.00 18.30           N
ANISOU  962  N   GLU A 175     2443   1877   2633   -673    -81     11       N
ATOM    963  CA  GLU A 175      -9.871   1.222  13.126  1.00 21.03           C
ANISOU  963  CA  GLU A 175     2776   2213   3001   -736    -45    126       C
ATOM    964  CB  GLU A 175     -10.313  -0.193  13.533  1.00 24.58           C
ANISOU  964  CB  GLU A 175     3312   2541   3485   -810   -137    170       C
ATOM    965  CG  GLU A 175     -11.426  -0.739  12.661  1.00 25.45           C
ANISOU  965  CG  GLU A 175     3413   2630   3628   -916   -205    203       C
ATOM    966  CD  GLU A 175     -11.772  -2.187  12.975  1.00 28.44           C
ANISOU  966  CD  GLU A 175     3894   2867   4043  -1000   -325    246       C
ATOM    967  OE1 GLU A 175     -10.855  -2.970  13.287  1.00 23.41           O
ANISOU  967  OE1 GLU A 175     3365   2123   3409   -940   -390    188       O
ATOM    968  OE2 GLU A 175     -12.968  -2.533  12.909  1.00 39.54           O
ANISOU  968  OE2 GLU A 175     5271   4271   5481  -1128   -362    346       O
ATOM    969  C   GLU A 175      -9.106   1.897  14.255  1.00 22.00           C
ANISOU  969  C   GLU A 175     2898   2364   3096   -667     24    135       C
ATOM    970  O   GLU A 175      -9.692   2.578  15.093  1.00 17.69           O
ANISOU  970  O   GLU A 175     2307   1871   2542   -689     96    211       O
ATOM    971  N   ILE A 176      -7.790   1.726  14.258  1.00 18.97           N
ANISOU  971  N   ILE A 176     2561   1952   2693   -580      0     55       N
ATOM    972  CA  ILE A 176      -6.966   2.332  15.297  1.00 18.37           C
ANISOU  972  CA  ILE A 176     2492   1897   2591   -521     46     64       C
ATOM    973  CB  ILE A 176      -5.615   1.602  15.443  1.00 20.34           C
ANISOU  973  CB  ILE A 176     2810   2083   2837   -439    -15     -6       C
ATOM    974  CG1 ILE A 176      -5.857   0.200  16.016  1.00 22.80           C
ANISOU  974  CG1 ILE A 176     3217   2265   3181   -475    -96     25       C
ATOM    975  CD1 ILE A 176      -4.665  -0.714  15.906  1.00 29.50           C
ANISOU  975  CD1 ILE A 176     4137   3031   4042   -384   -180    -57       C
ATOM    976  CG2 ILE A 176      -4.667   2.375  16.354  1.00 24.73           C
ANISOU  976  CG2 ILE A 176     3359   2675   3361   -382     25      1       C
ATOM    977  C   ILE A 176      -6.792   3.840  15.072  1.00 20.71           C
ANISOU  977  C   ILE A 176     2709   2301   2859   -490    120     57       C
ATOM    978  O   ILE A 176      -6.774   4.609  16.029  1.00 15.76           O
ANISOU  978  O   ILE A 176     2076   1700   2211   -478    171     98       O
ATOM    979  N   LEU A 177      -6.705   4.267  13.815  1.00 15.15           N
ANISOU  979  N   LEU A 177     1952   1654   2148   -482    116      9       N
ATOM    980  CA  LEU A 177      -6.638   5.702  13.525  1.00 14.84           C
ANISOU  980  CA  LEU A 177     1842   1706   2089   -470    167     18       C
ATOM    981  CB  LEU A 177      -6.216   5.967  12.076  1.00 15.91           C
ANISOU  981  CB  LEU A 177     1932   1909   2205   -460    146    -40       C
ATOM    982  CG  LEU A 177      -4.789   5.618  11.650  1.00 16.54           C
ANISOU  982  CG  LEU A 177     2022   2012   2251   -391    118   -118       C
ATOM    983  CD1 LEU A 177      -4.533   6.171  10.250  1.00 19.59           C
ANISOU  983  CD1 LEU A 177     2342   2504   2599   -395    117   -153       C
ATOM    984  CD2 LEU A 177      -3.765   6.172  12.629  1.00 15.40           C
ANISOU  984  CD2 LEU A 177     1883   1876   2091   -345    134   -105       C
ATOM    985  C   LEU A 177      -7.976   6.385  13.813  1.00 17.43           C
ANISOU  985  C   LEU A 177     2124   2062   2436   -519    216     93       C
ATOM    986  O   LEU A 177      -8.016   7.547  14.214  1.00 17.78           O
ANISOU  986  O   LEU A 177     2145   2149   2462   -484    254    110       O
ATOM    987  N   GLN A 178      -9.074   5.669  13.593  1.00 17.71           N
ANISOU  987  N   GLN A 178     2152   2076   2503   -583    201    131       N
ATOM    988  CA  GLN A 178     -10.387   6.182  13.992  1.00 20.95           C
ANISOU  988  CA  GLN A 178     2512   2533   2917   -595    240    200       C
ATOM    989  CB  GLN A 178     -11.497   5.212  13.606  1.00 20.21           C
ANISOU  989  CB  GLN A 178     2401   2420   2856   -680    203    249       C
ATOM    990  CG  GLN A 178     -11.789   5.153  12.122  1.00 23.01           C
ANISOU  990  CG  GLN A 178     2724   2794   3223   -713    152    220       C
ATOM    991  CD  GLN A 178     -12.862   4.137  11.799  1.00 24.40           C
ANISOU  991  CD  GLN A 178     2896   2939   3436   -813     98    274       C
ATOM    992  OE1 GLN A 178     -12.700   2.951  12.066  1.00 24.79           O
ANISOU  992  OE1 GLN A 178     3016   2897   3508   -869     45    277       O
ATOM    993  NE2 GLN A 178     -13.968   4.601  11.224  1.00 29.11           N
ANISOU  993  NE2 GLN A 178     3415   3601   4045   -842     96    324       N
ATOM    994  C   GLN A 178     -10.434   6.417  15.495  1.00 21.85           C
ANISOU  994  C   GLN A 178     2649   2642   3011   -570    295    242       C
ATOM    995  O   GLN A 178     -11.001   7.405  15.962  1.00 23.65           O
ANISOU  995  O   GLN A 178     2837   2922   3227   -535    348    268       O
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ATOM    996  N   ALA A 179      -9.853   5.492  16.251  1.00 19.45           N
ANISOU  996  N   ALA A 179     2417   2269   2704   -591    279    250       N
ATOM    997  CA  ALA A 179      -9.789   5.632  17.701  1.00 21.66           C
ANISOU  997  CA  ALA A 179     2734   2545   2949   -576    328    293       C
ATOM    998  CB  ALA A 179      -9.317   4.334  18.357  1.00 21.32           C
ANISOU  998  CB  ALA A 179     2777   2418   2904   -603    273    309       C
ATOM    999  C   ALA A 179      -8.907   6.813  18.114  1.00 19.56           C
ANISOU  999  C   ALA A 179     2484   2301   2646   -497    358    250       C
ATOM   1000  O   ALA A 179      -9.279   7.581  18.998  1.00 21.13           O
ANISOU 1000  O   ALA A 179     2680   2536   2810   -469    418    277       O
ATOM   1001  N   TYR A 180      -7.743   6.966  17.482  1.00 16.50           N
ANISOU 1001  N   TYR A 180     2113   1897   2259   -461    312    184       N
ATOM   1002  CA  TYR A 180      -6.935   8.164  17.711  1.00 15.92           C
ANISOU 1002  CA  TYR A 180     2045   1848   2155   -407    322    155       C
ATOM   1003  CB  TYR A 180      -5.740   8.224  16.758  1.00 15.67           C
ANISOU 1003  CB  TYR A 180     2000   1826   2127   -386    269     98       C
ATOM   1004  CG  TYR A 180      -4.453   7.608  17.246  1.00 16.30           C
ANISOU 1004  CG  TYR A 180     2133   1869   2191   -351    226     70       C
ATOM   1005  CD1 TYR A 180      -3.631   8.284  18.142  1.00 16.67           C
ANISOU 1005  CD1 TYR A 180     2216   1913   2205   -321    221     75       C
ATOM   1006  CE1 TYR A 180      -2.441   7.737  18.567  1.00 17.35           C
ANISOU 1006  CE1 TYR A 180     2338   1972   2281   -289    174     56       C
ATOM   1007  CZ  TYR A 180      -2.046   6.501  18.090  1.00 17.90           C
ANISOU 1007  CZ  TYR A 180     2411   2014   2376   -272    134     23       C
ATOM   1008  OH  TYR A 180      -0.857   5.957  18.515  1.00 20.26           O
ANISOU 1008  OH  TYR A 180     2738   2288   2672   -225     83      5       O
ATOM   1009  CE2 TYR A 180      -2.836   5.809  17.192  1.00 17.31           C
ANISOU 1009  CE2 TYR A 180     2316   1931   2330   -296    135      6       C
ATOM   1010  CD2 TYR A 180      -4.030   6.372  16.767  1.00 16.93           C
ANISOU 1010  CD2 TYR A 180     2228   1915   2290   -343    180     34       C
ATOM   1011  C   TYR A 180      -7.753   9.432  17.498  1.00 17.59           C
ANISOU 1011  C   TYR A 180     2203   2111   2370   -395    365    171       C
ATOM   1012  O   TYR A 180      -7.712  10.354  18.314  1.00 15.98           O
ANISOU 1012  O   TYR A 180     2026   1911   2136   -356    394    176       O
ATOM   1013  N   CYS A 181      -8.471   9.502  16.381  1.00 14.46           N
ANISOU 1013  N   CYS A 181     1743   1749   2003   -409    349    167       N
ATOM   1014  CA  CYS A 181      -9.199  10.730  16.057  1.00 20.62           C
ANISOU 1014  CA  CYS A 181     2473   2568   2794   -384    367    179       C
ATOM   1015  CB  CYS A 181      -9.717  10.706  14.613  1.00 21.66           C
ANISOU 1015  CB  CYS A 181     2545   2732   2951   -408    326    174       C
ATOM   1016  SG  CYS A 181      -8.400  10.835  13.394  1.00 20.96           S
ANISOU 1016  SG  CYS A 181     2462   2661   2841   -412    262    122       S
ATOM   1017  C   CYS A 181     -10.342  10.971  17.024  1.00 21.57           C
ANISOU 1017  C   CYS A 181     2574   2708   2912   -372    441    228       C
ATOM   1018  O   CYS A 181     -10.584  12.105  17.442  1.00 21.22           O
ANISOU 1018  O   CYS A 181     2523   2679   2860   -331    483    234       O
ATOM   1019  N   PHE A 182     -11.037   9.898  17.386  1.00 18.83           N
ANISOU 1019  N   PHE A 182     2216   2368   2570   -413    461    269       N
ATOM   1020  CA  PHE A 182     -12.152   9.995  18.322  1.00 21.46           C
ANISOU 1020  CA  PHE A 182     2513   2752   2889   -409    542    329       C
ATOM   1021  CB  PHE A 182     -12.837   8.634  18.469  1.00 22.27           C
ANISOU 1021  CB  PHE A 182     2597   2862   3003   -486    535    390       C
ATOM   1022  CG  PHE A 182     -14.058   8.664  19.346  1.00 29.33           C
ANISOU 1022  CG  PHE A 182     3427   3840   3876   -494    621    470       C
ATOM   1023  CD1 PHE A 182     -15.318   8.843  18.794  1.00 35.45           C
ANISOU 1023  CD1 PHE A 182     4089   4687   4691   -511    639    519       C
ATOM   1024  CE1 PHE A 182     -16.444   8.876  19.597  1.00 38.49           C
ANISOU 1024  CE1 PHE A 182     4394   5178   5054   -513    729    600       C
ATOM   1025  CZ  PHE A 182     -16.317   8.733  20.967  1.00 41.09           C
ANISOU 1025  CZ  PHE A 182     4764   5544   5306   -499    806    626       C
ATOM   1026  CE2 PHE A 182     -15.065   8.557  21.529  1.00 36.89           C
ANISOU 1026  CE2 PHE A 182     4360   4927   4728   -487    781    576       C
ATOM   1027  CD2 PHE A 182     -13.944   8.526  20.717  1.00 31.41           C
ANISOU 1027  CD2 PHE A 182     3737   4126   4071   -484    688    500       C
ATOM   1028  C   PHE A 182     -11.672  10.497  19.682  1.00 23.81           C
ANISOU 1028  C   PHE A 182     2881   3046   3121   -355    598    321       C
ATOM   1029  O   PHE A 182     -12.254  11.413  20.266  1.00 22.99           O
ANISOU 1029  O   PHE A 182     2761   2986   2989   -287    657    320       O
ATOM   1030  N   ILE A 183     -10.609   9.887  20.188  1.00 16.96           N
ANISOU 1030  N   ILE A 183     2101   2122   2223   -367    560    301       N
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ATOM   1031  CA  ILE A 183     -10.021  10.316  21.453  1.00 18.27           C
ANISOU 1031  CA  ILE A 183     2352   2273   2317   -313    581    282       C
ATOM   1032  CB  ILE A 183      -8.848   9.412  21.842  1.00 20.73           C
ANISOU 1032  CB  ILE A 183     2746   2518   2611   -341    521    274       C
ATOM   1033  CG1 ILE A 183      -9.361   8.007  22.163  1.00 20.45           C
ANISOU 1033  CG1 ILE A 183     2710   2478   2581   -414    523    339       C
ATOM   1034  CD1 ILE A 183      -8.264   6.986  22.254  1.00 23.32           C
ANISOU 1034  CD1 ILE A 183     3145   2761   2953   -438    443    328       C
ATOM   1035  CG2 ILE A 183      -8.112   9.979  23.027  1.00 19.96           C
ANISOU 1035  CG2 ILE A 183     2741   2401   2440   -291    523    251       C
ATOM   1036  C   ILE A 183      -9.548  11.770  21.409  1.00 20.83           C
ANISOU 1036  C   ILE A 183     2705   2583   2628   -239    568    225       C
ATOM   1037  O   ILE A 183      -9.899  12.572  22.276  1.00 22.60           O
ANISOU 1037  O   ILE A 183     2961   2826   2800   -172    614    212       O
ATOM   1038  N   LEU A 184      -8.763  12.114  20.391  1.00 20.68           N
ANISOU 1038  N   LEU A 184     2676   2531   2649   -251    499    192       N
ATOM   1039  CA  LEU A 184      -8.228  13.473  20.283  1.00 21.14           C
ANISOU 1039  CA  LEU A 184     2766   2565   2700   -204    462    154       C
ATOM   1040  CB  LEU A 184      -7.294  13.604  19.072  1.00 18.25           C
ANISOU 1040  CB  LEU A 184     2374   2187   2374   -245    386    139       C
ATOM   1041  CG  LEU A 184      -5.942  12.926  19.314  1.00 19.85           C
ANISOU 1041  CG  LEU A 184     2623   2363   2555   -266    338    125       C
ATOM   1042  CD1 LEU A 184      -5.164  12.751  18.015  1.00 19.07           C
ANISOU 1042  CD1 LEU A 184     2469   2290   2489   -304    284    114       C
ATOM   1043  CD2 LEU A 184      -5.120  13.684  20.356  1.00 23.14           C
ANISOU 1043  CD2 LEU A 184     3131   2740   2921   -233    305    110       C
ATOM   1044  C   LEU A 184      -9.314  14.544  20.244  1.00 23.79           C
ANISOU 1044  C   LEU A 184     3066   2925   3047   -145    502    152       C
ATOM   1045  O   LEU A 184      -9.160  15.604  20.848  1.00 23.07           O
ANISOU 1045  O   LEU A 184     3040   2803   2922    -78    492    119       O
ATOM   1046  N   GLU A 185     -10.411  14.268  19.545  1.00 23.67           N
ANISOU 1046  N   GLU A 185     2953   2962   3080   -164    538    186       N
ATOM   1047  CA  GLU A 185     -11.534  15.202  19.511  1.00 29.70           C
ANISOU 1047  CA  GLU A 185     3664   3759   3861    -96    578    190       C
ATOM   1048  CB  GLU A 185     -12.670  14.659  18.646  1.00 35.19           C
ANISOU 1048  CB  GLU A 185     4236   4520   4617   -143    605    244       C
ATOM   1049  CG  GLU A 185     -12.405  14.745  17.164  1.00 44.54           C
ANISOU 1049  CG  GLU A 185     5375   5688   5861   -204    530    248       C
ATOM   1050  CD  GLU A 185     -12.353  16.176  16.668  1.00 46.00           C
ANISOU 1050  CD  GLU A 185     5563   5842   6072   -153    480    228       C
ATOM   1051  OE1 GLU A 185     -13.187  16.997  17.112  1.00 47.15           O
ANISOU 1051  OE1 GLU A 185     5692   6000   6224    -65    515    225       O
ATOM   1052  OE2 GLU A 185     -11.481  16.473  15.827  1.00 40.23           O
ANISOU 1052  OE2 GLU A 185     4852   5080   5354   -198    403    219       O
ATOM   1053  C   GLU A 185     -12.059  15.486  20.912  1.00 29.44           C
ANISOU 1053  C   GLU A 185     3672   3754   3758    -10    656    176       C
ATOM   1054  O   GLU A 185     -12.366  16.629  21.245  1.00 30.09           O
ANISOU 1054  O   GLU A 185     3782   3825   3826     87    664    138       O
ATOM   1055  N   LYS A 186     -12.170  14.440  21.723  1.00 27.83           N
ANISOU 1055  N   LYS A 186     3513   3412   3650    142    407    -94       N
ATOM   1056  CA  LYS A 186     -12.619  14.586  23.104  1.00 26.63           C
ANISOU 1056  CA  LYS A 186     3394   3256   3468    172    446    -89       C
ATOM   1057  CB  LYS A 186     -12.926  13.219  23.729  1.00 32.97           C
ANISOU 1057  CB  LYS A 186     4183   4061   4282    151    498    -71       C
ATOM   1058  CG  LYS A 186     -14.172  12.540  23.185  1.00 45.42           C
ANISOU 1058  CG  LYS A 186     5688   5664   5905    133    533    -72       C
ATOM   1059  CD  LYS A 186     -15.442  13.201  23.701  1.00 57.15           C
ANISOU 1059  CD  LYS A 186     7153   7177   7384    170    573    -76       C
ATOM   1060  CE  LYS A 186     -16.685  12.403  23.314  1.00 60.38           C
ANISOU 1060  CE  LYS A 186     7484   7611   7846    147    613    -71       C
ATOM   1061  NZ  LYS A 186     -16.980  12.474  21.854  1.00 56.93           N
ANISOU 1061  NZ  LYS A 186     6996   7181   7455    130    573    -94       N
ATOM   1062  C   LYS A 186     -11.583  15.313  23.951  1.00 24.94           C
ANISOU 1062  C   LYS A 186     3254   3013   3210    194    414    -85       C
ATOM   1063  O   LYS A 186     -11.920  16.232  24.694  1.00 21.56           O
ANISOU 1063  O   LYS A 186     2861   2581   2751    237    414    -93       O
ATOM   1064  N   LEU A 187     -10.324  14.897  23.848  1.00 21.15           N
ANISOU 1064  N   LEU A 187     2795   2513   2727    168    384    -75       N
ATOM   1065  CA  LEU A 187      -9.258  15.497  24.650  1.00 21.37           C
ANISOU 1065  CA  LEU A 187     2890   2509   2720    183    346    -70       C
ANISOU 1065  CA  LEU A 187     3254   3013   3210    194    414    -85       C
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ATOM   1066  CB  LEU A 187      -7.913  14.814  24.376  1.00 28.30           C
ANISOU 1066  CB  LEU A 187     3774   3373   3607    149    318    -58       C
ATOM   1067  CG  LEU A 187      -7.727  13.333  24.716  1.00 32.72           C
ANISOU 1067  CG  LEU A 187     4328   3932   4172    127    351    -47       C
ATOM   1068  CD1 LEU A 187      -6.392  12.852  24.166  1.00 31.21           C
ANISOU 1068  CD1 LEU A 187     4134   3733   3991    100    313    -41       C
ATOM   1069  CD2 LEU A 187      -7.805  13.089  26.212  1.00 29.98           C
ANISOU 1069  CD2 LEU A 187     4036   3567   3787    152    379    -40       C
ATOM   1070  C   LEU A 187      -9.121  16.986  24.356  1.00 24.24           C
ANISOU 1070  C   LEU A 187     3273   2861   3075    205    295    -80       C
ATOM   1071  O   LEU A 187      -8.787  17.773  25.241  1.00 20.14           O
ANISOU 1071  O   LEU A 187     2813   2315   2524    236    269    -84       O
ATOM   1072  N   LEU A 188      -9.376  17.369  23.110  1.00 17.28           N
ANISOU 1072  N   LEU A 188     2348   1996   2222    190    276    -84       N
ATOM   1073  CA  LEU A 188      -9.158  18.757  22.694  1.00 18.73           C
ANISOU 1073  CA  LEU A 188     2551   2164   2402    203    221    -88       C
ATOM   1074  CB  LEU A 188      -8.930  18.841  21.188  1.00 21.14           C
ANISOU 1074  CB  LEU A 188     2809   2486   2738    171    197    -80       C
ATOM   1075  CG  LEU A 188      -7.546  18.352  20.750  1.00 21.20           C
ANISOU 1075  CG  LEU A 188     2812   2490   2753    133    172    -58       C
ATOM   1076  CD1 LEU A 188      -7.493  18.145  19.237  1.00 21.99           C
ANISOU 1076  CD1 LEU A 188     2858   2620   2876    108    166    -52       C
ATOM   1077  CD2 LEU A 188      -6.487  19.349  21.197  1.00 20.22           C
ANISOU 1077  CD2 LEU A 188     2737   2331   2616    132    115    -43       C
ATOM   1078  C   LEU A 188     -10.273  19.696  23.141  1.00 22.26           C
ANISOU 1078  C   LEU A 188     3015   2611   2832    252    227   -108       C
ATOM   1079  O   LEU A 188     -10.251  20.890  22.836  1.00 23.56           O
ANISOU 1079  O   LEU A 188     3199   2759   2994    269    179   -114       O
ATOM   1080  N   GLU A 189     -11.242  19.153  23.872  1.00 22.63           N
ANISOU 1080  N   GLU A 189     3052   2678   2868    277    286   -117       N
ATOM   1081  CA  GLU A 189     -12.234  19.980  24.547  1.00 20.60           C
ANISOU 1081  CA  GLU A 189     2816   2427   2585    335    298   -137       C
ATOM   1082  CB  GLU A 189     -13.391  19.120  25.072  1.00 26.97           C
ANISOU 1082  CB  GLU A 189     3584   3271   3391    349    378   -138       C
ATOM   1083  CG  GLU A 189     -14.343  18.621  24.006  1.00 35.24           C
ANISOU 1083  CG  GLU A 189     4551   4354   4486    325    406   -141       C
ATOM   1084  CD  GLU A 189     -15.349  17.620  24.549  1.00 43.75           C
ANISOU 1084  CD  GLU A 189     5585   5465   5572    326    482   -133       C
ATOM   1085  OE1 GLU A 189     -15.571  17.605  25.780  1.00 39.59           O
ANISOU 1085  OE1 GLU A 189     5092   4943   5007    361    520   -127       O
ATOM   1086  OE2 GLU A 189     -15.912  16.845  23.745  1.00 47.85           O
ANISOU 1086  OE2 GLU A 189     6038   6006   6138    291    504   -129       O
ATOM   1087  C   GLU A 189     -11.576  20.706  25.722  1.00 22.18           C
ANISOU 1087  C   GLU A 189     3099   2589   2740    373    263   -141       C
ATOM   1088  O   GLU A 189     -12.055  21.746  26.171  1.00 24.57           O
ANISOU 1088  O   GLU A 189     3437   2882   3016    426    242   -162       O
ATOM   1089  N   ASN A 190     -10.480  20.143  26.216  1.00 18.82           N
ANISOU 1089  N   ASN A 190     2706   2141   2305    349    252   -125       N
ATOM   1090  CA  ASN A 190      -9.779  20.687  27.372  1.00 19.72           C
ANISOU 1090  CA  ASN A 190     2900   2216   2377    383    215   -130       C
ATOM   1091  CB  ASN A 190      -9.018  19.570  28.094  1.00 19.41           C
ANISOU 1091  CB  ASN A 190     2880   2169   2325    363    238   -113       C
ATOM   1092  CG  ASN A 190      -8.184  20.079  29.253  1.00 24.48           C
ANISOU 1092  CG  ASN A 190     3608   2768   2926    397    192   -119       C
ATOM   1093  OD1 ASN A 190      -7.077  20.577  29.064  1.00 21.23           O
ANISOU 1093  OD1 ASN A 190     3221   2319   2527    376    121   -114       O
ATOM   1094  ND2 ASN A 190      -8.701  19.926  30.469  1.00 27.03           N
ANISOU 1094  ND2 ASN A 190     3975   3095   3199    450    230   -127       N
ATOM   1095  C   ASN A 190      -8.845  21.830  26.971  1.00 23.96           C
ANISOU 1095  C   ASN A 190     3471   2709   2924    374    125   -130       C
ATOM   1096  O   ASN A 190      -8.045  21.695  26.047  1.00 20.92           O
ANISOU 1096  O   ASN A 190     3056   2320   2574    321     95   -111       O
ATOM   1097  N   GLU A 191      -8.946  22.950  27.677  1.00 22.28           N
ANISOU 1097  N   GLU A 191     3321   2464   2679    427     80   -150       N
ATOM   1098  CA  GLU A 191      -8.235  24.161  27.282  1.00 22.52           C
ANISOU 1098  CA  GLU A 191     3384   2449   2725    420    -11   -149       C
ATOM   1099  CB  GLU A 191      -8.852  25.393  27.965  1.00 23.77           C
ANISOU 1099  CB  GLU A 191     3605   2580   2848    493    -51   -181       C
ATOM   1100  CG  GLU A 191     -10.211  25.750  27.361  1.00 27.27           C
ANISOU 1100  CG  GLU A 191     4007   3060   3296    522    -17   -199       C
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ATOM   1101  CD  GLU A 191     -10.798  27.053  27.873  1.00 30.84           C
ANISOU 1101  CD  GLU A 191     4518   3485   3716    598    -66   -233       C
ATOM   1102  OE1 GLU A 191     -10.160  27.717  28.712  1.00 26.00           O
ANISOU 1102  OE1 GLU A 191     3983   2820   3076    630   -130   -244       O
ATOM   1103  OE2 GLU A 191     -11.906  27.408  27.422  1.00 30.23           O
ANISOU 1103  OE2 GLU A 191     4409   3436   3641    629    -44   -251       O
ATOM   1104  C   GLU A 191      -6.720  24.092  27.469  1.00 19.78           C
ANISOU 1104  C   GLU A 191     3066   2061   2390    380    -68   -128       C
ATOM   1105  O   GLU A 191      -5.969  24.694  26.699  1.00 25.43           O
ANISOU 1105  O   GLU A 191     3771   2752   3139    340   -129   -109       O
ATOM   1106  N   GLU A 192      -6.258  23.358  28.478  1.00 16.29           N
ANISOU 1106  N   GLU A 192     2657   1613   1922    390    -49   -128       N
ATOM   1107  CA  GLU A 192      -4.821  23.209  28.643  1.00 15.00           C
ANISOU 1107  CA  GLU A 192     2513   1415   1773    353   -102   -109       C
ATOM   1108  CB  GLU A 192      -4.465  22.611  30.007  1.00 19.41           C
ANISOU 1108  CB  GLU A 192     3129   1956   2289    385    -91   -118       C
ATOM   1109  CG  GLU A 192      -4.228  23.619  31.094  1.00 32.90           C
ANISOU 1109  CG  GLU A 192     4928   3611   3961    442   -160   -141       C
ATOM   1110  CD  GLU A 192      -3.729  22.960  32.365  1.00 36.44           C
ANISOU 1110  CD  GLU A 192     5435   4044   4368    471   -153   -147       C
ATOM   1111  OE1 GLU A 192      -4.485  22.159  32.949  1.00 34.02           O
ANISOU 1111  OE1 GLU A 192     5130   3773   4022    502    -74   -152       O
ATOM   1112  OE2 GLU A 192      -2.580  23.235  32.769  1.00 34.70           O
ANISOU 1112  OE2 GLU A 192     5255   3775   4155    461   -228   -145       O
ATOM   1113  C   GLU A 192      -4.248  22.344  27.527  1.00 17.79           C
ANISOU 1113  C   GLU A 192     2791   1798   2170    283    -79    -79       C
ATOM   1114  O   GLU A 192      -3.185  22.638  26.995  1.00 16.58           O
ANISOU 1114  O   GLU A 192     2625   1626   2047    241   -133    -57       O
ATOM   1115  N   THR A 193      -4.955  21.271  27.182  1.00 20.59           N
ANISOU 1115  N   THR A 193     3096   2202   2527    274      0    -79       N
ATOM   1116  CA  THR A 193      -4.510  20.383  26.107  1.00 22.19           C
ANISOU 1116  CA  THR A 193     3231   2436   2766    218     23    -57       C
ATOM   1117  CB  THR A 193      -5.366  19.108  26.051  1.00 19.64           C
ANISOU 1117  CB  THR A 193     2867   2154   2440    217    105    -62       C
ATOM   1118  OG1 THR A 193      -5.269  18.436  27.312  1.00 22.06           O
ANISOU 1118  OG1 THR A 193     3219   2449   2713    240    131    -66       O
ATOM   1119  CG2 THR A 193      -4.882  18.179  24.951  1.00 15.60           C
ANISOU 1119  CG2 THR A 193     2293   1671   1962    167    120    -45       C
ATOM   1120  C   THR A 193      -4.493  21.103  24.752  1.00 20.46           C
ANISOU 1120  C   THR A 193     2966   2227   2580    189     -7    -44       C
ATOM   1121  O   THR A 193      -3.613  20.858  23.918  1.00 15.83           O
ANISOU 1121  O   THR A 193     2343   1652   2021    144    -24    -20       O
ATOM   1122  N   GLN A 194      -5.440  22.015  24.548  1.00 17.30           N
ANISOU 1122  N   GLN A 194     2572   1825   2175    217    -14    -59       N
ATOM   1123  CA  GLN A 194      -5.453  22.852  23.343  1.00 19.45           C
ANISOU 1123  CA  GLN A 194     2815   2100   2474    195    -50    -46       C
ATOM   1124  CB  GLN A 194      -6.603  23.866  23.386  1.00 18.55           C
ANISOU 1124  CB  GLN A 194     2722   1978   2349    240    -61    -70       C
ATOM   1125  CG  GLN A 194      -7.968  23.280  23.130  1.00 21.16           C
ANISOU 1125  CG  GLN A 194     3011   2354   2676    262     10    -91       C
ATOM   1126  CD  GLN A 194      -9.075  24.276  23.402  1.00 24.15           C
ANISOU 1126  CD  GLN A 194     3415   2725   3037    318     -1   -119       C
ATOM   1127  OE1 GLN A 194      -8.820  25.466  23.576  1.00 23.83           O
ANISOU 1127  OE1 GLN A 194     3423   2642   2990    338    -68   -122       O
ATOM   1128  NE2 GLN A 194     -10.313  23.792  23.450  1.00 22.08           N
ANISOU 1128  NE2 GLN A 194     3118   2502   2769    346     62   -139       N
ATOM   1129  C   GLN A 194      -4.137  23.600  23.141  1.00 18.82           C
ANISOU 1129  C   GLN A 194     2754   1984   2414    161   -126    -17       C
ATOM   1130  O   GLN A 194      -3.792  23.977  22.016  1.00 18.90           O
ANISOU 1130  O   GLN A 194     2727   2005   2450    125   -149     10       O
ATOM   1131  N   ILE A 195      -3.406  23.832  24.227  1.00 15.76           N
ANISOU 1131  N   ILE A 195     2421   1553   2013    173   -167    -19       N
ATOM   1132  CA  ILE A 195      -2.116  24.506  24.134  1.00 14.24           C
ANISOU 1132  CA  ILE A 195     2242   1323   1846    137   -244     11       C
ATOM   1133  CB  ILE A 195      -1.952  25.583  25.232  1.00 14.86           C
ANISOU 1133  CB  ILE A 195     2403   1334   1909    173   -318     -6       C
ATOM   1134  CG1 ILE A 195      -3.214  26.455  25.333  1.00 15.95           C
ANISOU 1134  CG1 ILE A 195     2574   1461   2026    226   -322    -36       C
ATOM   1135  CD1 ILE A 195      -3.573  27.208  24.045  1.00 15.21           C
ANISOU 1135  CD1 ILE A 195     2444   1377   1960    202   -340    -17       C
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ATOM   1136  CG2 ILE A 195      -0.693  26.408  24.980  1.00 16.91           C
ANISOU 1136  CG2 ILE A 195     2668   1551   2207    128   -406     30       C
ATOM   1137  C   ILE A 195      -0.941  23.525  24.212  1.00 14.81           C
ANISOU 1137  C   ILE A 195     2289   1409   1931    101   -235     31       C
ATOM   1138  O   ILE A 195      -0.033  23.555  23.372  1.00 18.05           O
ANISOU 1138  O   ILE A 195     2655   1832   2373     53   -256     67       O
ATOM   1139  N   ASN A 196      -0.956  22.656  25.218  1.00 14.72           N
ANISOU 1139  N   ASN A 196     2304   1396   1892    126   -203     10       N
ATOM   1140  CA  ASN A 196       0.156  21.738  25.452  1.00 15.65           C
ANISOU 1140  CA  ASN A 196     2408   1520   2018    100   -202     24       C
ATOM   1141  CB  ASN A 196       0.081  21.146  26.865  1.00 15.18           C
ANISOU 1141  CB  ASN A 196     2408   1439   1921    141   -187     -2       C
ATOM   1142  CG  ASN A 196      -0.004  22.212  27.941  1.00 17.94           C
ANISOU 1142  CG  ASN A 196     2838   1732   2247    184   -246    -21       C
ATOM   1143  OD1 ASN A 196       0.406  23.356  27.738  1.00 18.28           O
ANISOU 1143  OD1 ASN A 196     2896   1739   2312    173   -319    -11       O
ATOM   1144  ND2 ASN A 196      -0.552  21.842  29.092  1.00 15.82           N
ANISOU 1144  ND2 ASN A 196     2624   1455   1932    236   -217    -49       N
ATOM   1145  C   ASN A 196       0.231  20.605  24.418  1.00 17.16           C
ANISOU 1145  C   ASN A 196     2526   1770   2225     68   -144     38       C
ATOM   1146  O   ASN A 196       1.314  20.129  24.092  1.00 15.55           O
ANISOU 1146  O   ASN A 196     2289   1579   2040     37   -156     59       O
ATOM   1147  N   GLY A 197      -0.919  20.176  23.910  1.00 17.58           N
ANISOU 1147  N   GLY A 197     2551   1859   2270     80    -84     23       N
ATOM   1148  CA  GLY A 197      -0.950  19.127  22.904  1.00 15.20           C
ANISOU 1148  CA  GLY A 197     2186   1608   1983     57    -36     31       C
ATOM   1149  C   GLY A 197      -0.744  17.740  23.490  1.00 16.07           C
ANISOU 1149  C   GLY A 197     2298   1727   2081     61      3     20       C
ATOM   1150  O   GLY A 197      -1.049  17.491  24.662  1.00 15.55           O
ANISOU 1150  O   GLY A 197     2281   1637   1989     89     16      4       O
ATOM   1151  N   PHE A 198      -0.228  16.826  22.673  1.00 16.13           N
ANISOU 1151  N   PHE A 198     2255   1770   2103     37     21     30       N
ATOM   1152  CA  PHE A 198      -0.037  15.436  23.103  1.00 12.33           C
ANISOU 1152  CA  PHE A 198     1775   1297   1614     40     54     20       C
ATOM   1153  CB  PHE A 198      -1.211  14.566  22.658  1.00 13.04           C
ANISOU 1153  CB  PHE A 198     1836   1412   1704     46    112      4       C
ATOM   1154  CG  PHE A 198      -1.289  14.374  21.166  1.00 13.03           C
ANISOU 1154  CG  PHE A 198     1773   1454   1723     29    120      8       C
ATOM   1155  CD1 PHE A 198      -0.845  13.191  20.577  1.00 16.08           C
ANISOU 1155  CD1 PHE A 198     2127   1867   2117     20    134      6       C
ATOM   1156  CE1 PHE A 198      -0.917  13.008  19.199  1.00 16.90           C
ANISOU 1156  CE1 PHE A 198     2178   2011   2233     13    139      7       C
ATOM   1157  CZ  PHE A 198      -1.435  14.015  18.391  1.00 13.18           C
ANISOU 1157  CZ  PHE A 198     1687   1555   1767     10    132     14       C
ATOM   1158  CE2 PHE A 198      -1.885  15.197  18.968  1.00 13.21           C
ANISOU 1158  CE2 PHE A 198     1723   1530   1766     16    117     18       C
ATOM   1159  CD2 PHE A 198      -1.806  15.370  20.354  1.00 13.14           C
ANISOU 1159  CD2 PHE A 198     1767   1481   1746     26    110     13       C
ATOM   1160  C   PHE A 198       1.245  14.839  22.548  1.00 15.08           C
ANISOU 1160  C   PHE A 198     2088   1666   1977     18     36     35       C
ATOM   1161  O   PHE A 198       1.877  15.398  21.652  1.00 15.94           O
ANISOU 1161  O   PHE A 198     2159   1796   2102     -2     10     57       O
ATOM   1162  N   CYS A 199       1.621  13.689  23.095  1.00 12.50           N
ANISOU 1162  N   CYS A 199     1773   1335   1641     25     50     26       N
ATOM   1163  CA  CYS A 199       2.697  12.900  22.543  1.00 12.27           C
ANISOU 1163  CA  CYS A 199     1708   1333   1623     13     41     34       C
ATOM   1164  CB  CYS A 199       3.971  13.024  23.371  1.00 12.50           C
ANISOU 1164  CB  CYS A 199     1763   1336   1652     12     -5     43       C
ATOM   1165  SG  CYS A 199       3.852  12.320  25.044  1.00 16.17           S
ANISOU 1165  SG  CYS A 199     2305   1750   2088     39     -1     23       S
ATOM   1166  C   CYS A 199       2.239  11.447  22.433  1.00 13.37           C
ANISOU 1166  C   CYS A 199     1839   1484   1757     21     82     14       C
ATOM   1167  O   CYS A 199       1.170  11.082  22.934  1.00 14.38           O
ANISOU 1167  O   CYS A 199     1991   1595   1875     31    116      1       O
ATOM   1168  N   ILE A 200       3.040  10.641  21.748  1.00 13.44           N
ANISOU 1168  N   ILE A 200     1811   1523   1773     18     77     15       N
ATOM   1169  CA  ILE A 200       2.734   9.232  21.541  1.00 12.21           C
ANISOU 1169  CA  ILE A 200     1648   1375   1616     27     -5     -5       C
ATOM   1170  CB  ILE A 200       2.422   8.941  20.044  1.00 11.98           C
ANISOU 1170  CB  ILE A 200     1561   1393   1597     27    118    -11       C
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ATOM   1171  CG1 ILE A 200       1.224   9.770  19.556  1.00 15.30           C
ANISOU 1171  CG1 ILE A 200     1970   1820   2024     20    137    -10       C
ATOM   1172  CD1 ILE A 200       0.850   9.523  18.064  1.00 15.41           C
ANISOU 1172  CD1 ILE A 200     1932   1879   2045     24    147    -18       C
ATOM   1173  CG2 ILE A 200       2.196   7.444  19.832  1.00 11.42           C
ANISOU 1173  CG2 ILE A 200     1487   1324   1528     38    133    -34       C
ATOM   1174  C   ILE A 200       3.945   8.400  21.925  1.00 15.16           C
ANISOU 1174  C   ILE A 200     2030   1745   1986     36     80     -7       C
ATOM   1175  O   ILE A 200       5.081   8.742  21.568  1.00 14.07           O
ANISOU 1175  O   ILE A 200     1863   1629   1852     33     51      6       O
ATOM   1176  N   ILE A 201       3.697   7.318  22.656  1.00 15.60           N
ANISOU 1176  N   ILE A 201     2123   1771   2033     46     93    -22       N
ATOM   1177  CA  ILE A 201       4.730   6.360  23.024  1.00 17.29           C
ANISOU 1177  CA  ILE A 201     2350   1977   2241     59     71    -30       C
ATOM   1178  CB  ILE A 201       4.740   6.063  24.535  1.00 19.95           C
ANISOU 1178  CB  ILE A 201     2758   2261   2561     68     66    -30       C
ATOM   1179  CG1 ILE A 201       4.646   7.348  25.364  1.00 24.86           C
ANISOU 1179  CG1 ILE A 201     3414   2859   3172     65     54    -17       C
ATOM   1180  CD1 ILE A 201       5.746   8.353  25.089  1.00 32.14           C
ANISOU 1180  CD1 ILE A 201     4310   3796   4106     58      9     -4       C
ATOM   1181  CG2 ILE A 201       5.973   5.244  24.899  1.00 19.45           C
ANISOU 1181  CG2 ILE A 201     2707   2189   2492     83     32    -38       C
ATOM   1182  C   ILE A 201       4.458   5.045  22.311  1.00 12.48           C
ANISOU 1182  C   ILE A 201     1721   1382   1637     68     85    -49       C
ATOM   1183  O   ILE A 201       3.406   4.431  22.501  1.00 17.07           O
ANISOU 1183  O   ILE A 201     2322   1941   2222     64    112    -58       O
ATOM   1184  N   GLU A 202       5.406   4.621  21.486  1.00 13.69           N
ANISOU 1184  N   GLU A 202     1835   1573   1794     82     64    -56       N
ATOM   1185  CA  GLU A 202       5.267   3.401  20.708  1.00 16.78           C
ANISOU 1185  CA  GLU A 202     2208   1979   2188     99     67    -80       C
ATOM   1186  CB  GLU A 202       5.584   3.675  19.234  1.00 16.48           C
ANISOU 1186  CB  GLU A 202     2106   2006   2151    110     65    -81       C
ATOM   1187  CG  GLU A 202       4.700   4.729  18.574  1.00 19.14           C
ANISOU 1187  CG  GLU A 202     2416   2362   2493     91     88    -68       C
ATOM   1188  CD  GLU A 202       3.449   4.140  17.949  1.00 19.64           C
ANISOU 1188  CD  GLU A 202     2475   2422   2567     93    108    -89       C
ATOM   1189  OE1 GLU A 202       3.287   2.899  17.970  1.00 20.25           O
ANISOU 1189  OE1 GLU A 202     2567   2479   2647    106    102   -113       O
ATOM   1190  OE2 GLU A 202       2.630   4.920  17.421  1.00 20.88           O
ANISOU 1190  OE2 GLU A 202     2613   2592   2729     80    124    -82       O
ATOM   1191  C   GLU A 202       6.230   2.351  21.240  1.00 18.37           C
ANISOU 1191  C   GLU A 202     2436   2164   2382    122     39    -93       C
ATOM   1192  O   GLU A 202       7.444   2.500  21.115  1.00 18.30           O
ANISOU 1192  O   GLU A 202     2404   2182   2368    136     13    -90       O
ATOM   1193  N   ASN A 203       5.694   1.289  21.833  1.00 19.55           N
ANISOU 1193  N   ASN A 203     2631   2267   2532    124     43   -106       N
ATOM   1194  CA  ASN A 203       6.545   0.206  22.289  1.00 17.05           C
ANISOU 1194  CA  ASN A 203     2343   1929   2207    148     12   -121       C
ATOM   1195  CB  ASN A 203       6.031  -0.399  23.594  1.00 21.02           C
ANISOU 1195  CB  ASN A 203     2917   2364   2704    138     19   -115       C
ATOM   1196  CG  ASN A 203       6.998  -1.405  24.179  1.00 24.39           C
ANISOU 1196  CG  ASN A 203     3381   2764   3120    164    -19   -128       C
ATOM   1197  OD1 ASN A 203       7.952  -1.820  23.517  1.00 23.23           O
ANISOU 1197  OD1 ASN A 203     3204   2650   2973    193    -49   -148       O
ATOM   1198  ND2 ASN A 203       6.770  -1.795  25.425  1.00 23.74           N
ANISOU 1198  ND2 ASN A 203     3367   2627   3027    158    -17   -117       N
ATOM   1199  C   ASN A 203       6.601  -0.850  21.201  1.00 15.68           C
ANISOU 1199  C   ASN A 203     2142   1778   2038    173     -1   -150       C
ATOM   1200  O   ASN A 203       5.610  -1.539  20.943  1.00 16.49           O
ANISOU 1200  O   ASN A 203     2256   1857   2153    165     10   -161       O
ATOM   1201  N   PHE A 204       7.761  -0.955  20.557  1.00 18.16           N
ANISOU 1201  N   PHE A 204     2419   2139   2343    205    -26   -161       N
ATOM   1202  CA  PHE A 204       7.949  -1.860  19.426  1.00 19.89           C
ANISOU 1202  CA  PHE A 204     2609   2390   2559    242    -42   -192       C
ATOM   1203  CB  PHE A 204       8.581  -1.109  18.249  1.00 20.15           C
ANISOU 1203  CB  PHE A 204     2570   2505   2581    260    -36   -186       C
ATOM   1204  CG  PHE A 204       7.573  -0.496  17.315  1.00 20.30           C
ANISOU 1204  CG  PHE A 204     2558   2549   2605    243     -8   -181       C
ATOM   1205  CD1 PHE A 204       6.451   0.149  17.813  1.00 21.90           C
ANISOU 1205  CD1 PHE A 204     2783   2716   2824    200     19   -163       C
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ATOM   1206  CE1 PHE A 204       5.519   0.713  16.955  1.00 20.18           C
ANISOU 1206  CE1 PHE A 204     2536   2520   2612    188     41   -160       C
ATOM   1207  CZ  PHE A 204       5.701   0.633  15.592  1.00 19.88           C
ANISOU 1207  CZ  PHE A 204     2453   2540   2561    218     37   -174       C
ATOM   1208  CE2 PHE A 204       6.816  -0.007  15.083  1.00 23.27           C
ANISOU 1208  CE2 PHE A 204     2862   3010   2970    264     15   -190       C
ATOM   1209  CD2 PHE A 204       7.745  -0.566  15.944  1.00 25.29           C
ANISOU 1209  CD2 PHE A 204     3142   3244   3223    276     -7   -194       C
ATOM   1210  C   PHE A 204       8.772  -3.090  19.799  1.00 19.83           C
ANISOU 1210  C   PHE A 204     2633   2360   2543    279    -82   -218       C
ATOM   1211  O   PHE A 204       9.298  -3.792  18.934  1.00 19.56           O
ANISOU 1211  O   PHE A 204     2574   2359   2498    323   -104   -246       O
ATOM   1212  N   LYS A 205       8.879  -3.352  21.095  1.00 21.94           N
ANISOU 1212  N   LYS A 205     2958   2569   2810    266    -92   -208       N
ATOM   1213  CA  LYS A 205       9.542  -4.562  21.572  1.00 26.88           C
ANISOU 1213  CA  LYS A 205     3626   3160   3429    300   -132   -232       C
ATOM   1214  CB  LYS A 205       9.291  -4.728  23.073  1.00 34.22           C
ANISOU 1214  CB  LYS A 205     4628   4016   4356    275   -133   -213       C
ATOM   1215  CG  LYS A 205       9.865  -5.998  23.676  1.00 49.78           C
ANISOU 1215  CG  LYS A 205     6655   5940   6320    306   -176   -233       C
ATOM   1216  CD  LYS A 205      11.382  -5.947  23.731  1.00 62.68           C
ANISOU 1216  CD  LYS A 205     8268   7609   7940    348   -214   -247       C
ATOM   1217  CE  LYS A 205      11.961  -7.255  24.250  1.00 70.63           C
ANISOU 1217  CE  LYS A 205     9330   8568   8938    385   -263   -272       C
ATOM   1218  NZ  LYS A 205      13.450  -7.283  24.163  1.00 73.79           N
ANISOU 1218  NZ  LYS A 205     9699   9011   9328    433   -302   -290       N
ATOM   1219  C   LYS A 205       9.058  -5.795  20.802  1.00 29.41           C
ANISOU 1219  C   LYS A 205     3954   3465   3754    323   -151   -265       C
ATOM   1220  O   LYS A 205       9.855  -6.662  20.425  1.00 26.81           O
ANISOU 1220  O   LYS A 205     3624   3147   3415    373   -190   -297       O
ATOM   1221  N   GLY A 206       7.754  -5.866  20.553  1.00 27.81           N
ANISOU 1221  N   GLY A 206     3759   3237   3571    291   -128   -260       N
ATOM   1222  CA  GLY A 206       7.169  -7.022  19.890  1.00 30.88           C
ANISOU 1222  CA  GLY A 206     4160   3599   3973    307   -153   -291       C
ATOM   1223  C   GLY A 206       6.919  -6.883  18.398  1.00 28.87           C
ANISOU 1223  C   GLY A 206     3850   3402   3718    330   -152   -314       C
ATOM   1224  O   GLY A 206       6.116  -7.623  17.825  1.00 33.41           O
ANISOU 1224  O   GLY A 206     4434   3950   4311    332   -169   -336       O
ATOM   1225  N   PHE A 207       7.612  -5.945  17.761  1.00 23.97           N
ANISOU 1225  N   PHE A 207     3172   2858   3076    349   -136   -309       N
ATOM   1226  CA  PHE A 207       7.466  -5.716  16.326  1.00 24.30           C
ANISOU 1226  CA  PHE A 207     3162   2963   3109    377   -131   -327       C
ATOM   1227  CB  PHE A 207       8.099  -4.370  15.952  1.00 23.67           C
ANISOU 1227  CB  PHE A 207     3023   2959   3011    374    -99   -298       C
ATOM   1228  CG  PHE A 207       7.804  -3.907  14.549  1.00 27.08           C
ANISOU 1228  CG  PHE A 207     3403   3457   3431    393    -84   -305       C
ATOM   1229  CD1 PHE A 207       6.537  -4.042  14.000  1.00 26.21           C
ANISOU 1229  CD1 PHE A 207     3299   3324   3336    378    -80   -317       C
ATOM   1230  CE1 PHE A 207       6.269  -3.597  12.709  1.00 22.47           C
ANISOU 1230  CE1 PHE A 207     2782   2909   2846    400    -69   -324       C
ATOM   1231  CZ  PHE A 207       7.270  -2.992  11.960  1.00 25.67           C
ANISOU 1231  CZ  PHE A 207     3135   3400   3217    435    -57   -312       C
ATOM   1232  CE2 PHE A 207       8.534  -2.843  12.503  1.00 31.42           C
ANISOU 1232  CE2 PHE A 207     3851   4155   3934    446    -58   -295       C
ATOM   1233  CD2 PHE A 207       8.794  -3.292  13.793  1.00 26.93           C
ANISOU 1233  CD2 PHE A 207     3326   3523   3383    425    -74   -294       C
ATOM   1234  C   PHE A 207       8.143  -6.843  15.559  1.00 28.46           C
ANISOU 1234  C   PHE A 207     3689   3509   3616    447   -178   -374       C
ATOM   1235  O   PHE A 207       9.370  -6.899  15.489  1.00 34.24           O
ANISOU 1235  O   PHE A 207     4401   4286   4324    490   -191   -381       O
ATOM   1236  N   THR A 208       7.341  -7.737  14.984  1.00 28.12           N
ANISOU 1236  N   THR A 208     3667   3431   3586    459   -205   -406       N
ATOM   1237  CA  THR A 208       7.869  -8.898  14.266  1.00 30.05           C
ANISOU 1237  CA  THR A 208     3922   3682   3812    531   -259   -458       C
ATOM   1238  CB  THR A 208       6.885 -10.076  14.311  1.00 26.72           C
ANISOU 1238  CB  THR A 208     3556   3175   3424    424   -303   -485       C
ATOM   1239  OG1 THR A 208       5.679  -9.710  13.628  1.00 24.88           O
ANISOU 1239  OG1 THR A 208     3302   2940   3211    492   -284   -483       O
ATOM   1240  CG2 THR A 208       6.559 -10.445  15.740  1.00 29.20           C
ANISOU 1240  CG2 THR A 208     3925   3401   3767    466   -303   -457       C
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ATOM   1241  C   THR A 208       8.116  -8.586  12.800  1.00 29.51           C
ANISOU 1241  C   THR A 208     3800   3702   3711    586   -255   -480       C
ATOM   1242  O   THR A 208       7.536  -7.653  12.248  1.00 25.06           O
ANISOU 1242  O   THR A 208     3199   3174   3148    561   -217   -459       O
ATOM   1243  N   MET A 209       8.961  -9.385  12.161  1.00 31.44           N
ANISOU 1243  N   MET A 209     4043   3981   3924    667   -294   -523       N
ATOM   1244  CA  MET A 209       9.211  -9.219  10.736  1.00 35.22           C
ANISOU 1244  CA  MET A 209     4475   4545   4362    731   -292   -547       C
ATOM   1245  CB  MET A 209      10.284 -10.199  10.252  1.00 36.83           C
ANISOU 1245  CB  MET A 209     4683   4785   4527    828   -338   -596       C
ATOM   1246  CG  MET A 209      11.549 -10.171  11.093  1.00 42.34           C
ANISOU 1246  CG  MET A 209     5371   5502   5214    840   -335   -580       C
ATOM   1247  SD  MET A 209      12.984 -10.891  10.273  1.00 64.93           S
ANISOU 1247  SD  MET A 209     8202   8451   8017    964   -367   -628       S
ATOM   1248  CE  MET A 209      13.271  -9.685   8.981  1.00 68.84           C
ANISOU 1248  CE  MET A 209     8606   9081   8469    988   -304   -599       C
ATOM   1249  C   MET A 209       7.918  -9.408   9.953  1.00 33.75           C
ANISOU 1249  C   MET A 209     4302   4330   4192    722   -307   -569       C
ATOM   1250  O   MET A 209       7.712  -8.778   8.916  1.00 31.41           O
ANISOU 1250  O   MET A 209     3964   4099   3872    742   -284   -568       O
ATOM   1251  N   GLN A 210       7.039 -10.267  10.463  1.00 31.70           N
ANISOU 1251  N   GLN A 210     4098   3971   3975    690   -346   -585       N
ATOM   1252  CA  GLN A 210       5.753 -10.498   9.815  1.00 36.67           C
ANISOU 1252  CA  GLN A 210     4739   4563   4632    674   -366   -605       C
ATOM   1253  CB  GLN A 210       4.991 -11.628  10.506  1.00 44.28           C
ANISOU 1253  CB  GLN A 210     5764   5412   5648    640   -417   -619       C
ATOM   1254  CG  GLN A 210       3.660 -11.965   9.852  1.00 59.68           C
ANISOU 1254  CG  GLN A 210     7724   7317   7637    621   -449   -641       C
ATOM   1255  CD  GLN A 210       3.167 -13.357  10.211  1.00 72.47           C
ANISOU 1255  CD  GLN A 210     9404   8830   9301    613   -521   -668       C
ATOM   1256  OE1 GLN A 210       3.943 -14.212  10.645  1.00 77.78           O
ANISOU 1256  OE1 GLN A 210    10118   9473   9963    647   -561   -687       O
ATOM   1257  NE2 GLN A 210       1.873 -13.593  10.026  1.00 73.87           N
ANISOU 1257  NE2 GLN A 210     9587   8948   9531    567   -543   -669       N
ATOM   1258  C   GLN A 210       4.918  -9.221   9.808  1.00 35.91           C
ANISOU 1258  C   GLN A 210     4605   4487   4554    608   -306   -560       C
ATOM   1259  O   GLN A 210       4.353  -8.840   8.784  1.00 37.37           O
ANISOU 1259  O   GLN A 210     4763   4706   4729    623   -302   -571       O
ATOM   1260  N   GLN A 211       4.843  -8.560  10.956  1.00 31.87           N
ANISOU 1260  N   GLN A 211     4094   3951   4065    539   -263   -510       N
ATOM   1261  CA  GLN A 211       4.152  -7.282  11.040  1.00 28.08           C
ANISOU 1261  CA  GLN A 211     3580   3491   3597    482   -207   -467       C
ATOM   1262  CB  GLN A 211       4.140  -6.775  12.482  1.00 29.62           C
ANISOU 1262  CB  GLN A 211     3792   3647   3815    416   -171   -420       C
ATOM   1263  CG  GLN A 211       3.265  -7.602  13.419  1.00 32.30           C
ANISOU 1263  CG  GLN A 211     4182   3890   3890    369   -188   -417       C
ATOM   1264  CD  GLN A 211       3.366  -7.143  14.854  1.00 34.40           C
ANISOU 1264  CD  GLN A 211     4470   4124   4124    318   -152   -372       C
ATOM   1265  OE1 GLN A 211       4.412  -6.663  15.289  1.00 36.79           O
ANISOU 1265  OE1 GLN A 211     4766   4460   4460    330   -139   -357       O
ATOM   1266  NE2 GLN A 211       2.278  -7.292  15.606  1.00 38.75           N
ANISOU 1266  NE2 GLN A 211     5045   4611   4611    261   -138   -350       N
ATOM   1267  C   GLN A 211       4.826  -6.273  10.112  1.00 29.70           C
ANISOU 1267  C   GLN A 211     3730   3798   3757    517   -175   -456       C
ATOM   1268  O   GLN A 211       4.166  -5.610   9.307  1.00 33.44           O
ANISOU 1268  O   GLN A 211     4176   4303   4227    512   -158   -452       O
ATOM   1269  N   ALA A 212       6.148  -6.179  10.210  1.00 29.15           N
ANISOU 1269  N   ALA A 212     3643   3780   3652    554   -169   -450       N
ATOM   1270  CA  ALA A 212       6.913  -5.251   9.380  1.00 30.92           C
ANISOU 1270  CA  ALA A 212     3809   4104   3834    585   -137   -430       C
ATOM   1271  CB  ALA A 212       8.407  -5.445   9.602  1.00 29.26           C
ANISOU 1271  CB  ALA A 212     3581   3943   3594    628   -140   -428       C
ATOM   1272  C   ALA A 212       6.574  -5.419   7.905  1.00 31.95           C
ANISOU 1272  C   ALA A 212     3921   4284   3933    643   -151   -463       C
ATOM   1273  O   ALA A 212       6.330  -4.445   7.195  1.00 34.29           O
ANISOU 1273  O   ALA A 212     4181   4634   4214    636   -118   -439       O
ATOM   1274  N   ALA A 213       6.558  -6.665   7.451  1.00 33.31           N
ANISOU 1274  N   ALA A 213     4126   4434   4096    702   -204   -519       N
ATOM   1275  CA  ALA A 213       6.353  -6.957   6.041  1.00 34.00           C
ANISOU 1275  CA  ALA A 213     4204   4569   4147    773   -228   -560       C
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ATOM   1276  CB  ALA A 213       6.718  -8.410   5.742  1.00 37.96           C
ANISOU 1276  CB  ALA A 213     4745   5047   4632    850   -295   -624       C
ATOM   1277  C   ALA A 213       4.926  -6.666   5.598  1.00 34.63           C
ANISOU 1277  C   ALA A 213     4291   4611   4256    736   -232   -564       C
ATOM   1278  O   ALA A 213       4.675  -6.438   4.417  1.00 43.39           O
ANISOU 1278  O   ALA A 213     5383   5771   5331    781   -235   -581       O
ATOM   1279  N   SER A 214       3.992  -6.677   6.544  1.00 35.04           N
ANISOU 1279  N   SER A 214     4367   4577   4368    658   -231   -548       N
ATOM   1280  CA  SER A 214       2.584  -6.487   6.213  1.00 37.17           C
ANISOU 1280  CA  SER A 214     4642   4807   4675    620   -239   -554       C
ATOM   1281  CB  SER A 214       1.699  -7.363   7.104  1.00 42.72           C
ANISOU 1281  CB  SER A 214     5387   5402   5443    568   -273   -564       C
ATOM   1282  OG  SER A 214       1.278  -6.657   8.256  1.00 50.97           O
ANISOU 1282  OG  SER A 214     6427   6414   6524    486   -225   -513       O
ATOM   1283  C   SER A 214       2.124  -5.023   6.284  1.00 38.55           C
ANISOU 1283  C   SER A 214     4779   5013   4856    565   -179   -503       C
ATOM   1284  O   SER A 214       1.048  -4.685   5.788  1.00 38.11           O
ANISOU 1284  O   SER A 214     4716   4945   4819    547   -182   -508       O
ATOM   1285  N   LEU A 215       2.929  -4.160   6.901  1.00 32.68           N
ANISOU 1285  N   LEU A 215     4013   4307   4097    540   -132   -456       N
ATOM   1286  CA  LEU A 215       2.595  -2.735   6.980  1.00 27.10           C
ANISOU 1286  CA  LEU A 215     3276   3627   3395    492    -82   -407       C
ATOM   1287  CB  LEU A 215       3.639  -1.972   7.793  1.00 29.43           C
ANISOU 1287  CB  LEU A 215     3553   3950   3678    466    -44   -359       C
ATOM   1288  CG  LEU A 215       3.508  -2.081   9.308  1.00 31.99           C
ANISOU 1288  CG  LEU A 215     3908   4202   4043    408    -37   -341       C
ATOM   1289  CD1 LEU A 215       4.561  -1.229  10.011  1.00 30.48           C
ANISOU 1289  CD1 LEU A 215     3699   4041   3840    388     -8   -296       C
ATOM   1290  CD2 LEU A 215       2.106  -1.670   9.728  1.00 38.00           C
ANISOU 1290  CD2 LEU A 215     4682   4910   4848    350    -24   -330       C
ATOM   1291  C   LEU A 215       2.484  -2.118   5.593  1.00 28.23           C
ANISOU 1291  C   LEU A 215     3386   3841   3497    532    -74   -410       C
ATOM   1292  O   LEU A 215       3.438  -2.145   4.816  1.00 30.91           O
ANISOU 1292  O   LEU A 215     3705   4254   3784    593    -72   -414       O
ATOM   1293  N   ARG A 216       1.321  -1.560   5.284  1.00 25.13           N
ANISOU 1293  N   ARG A 216     2989   3430   3127    502    -69   -407       N
ATOM   1294  CA  ARG A 216       1.122  -0.909   3.996  1.00 25.20           C
ANISOU 1294  CA  ARG A 216     2975   3503   3099    539    -63   -407       C
ATOM   1295  CB  ARG A 216      -0.351  -0.960   3.587  1.00 31.04           C
ANISOU 1295  CB  ARG A 216     3724   4197   3873    523    -88   -433       C
ATOM   1296  CG  ARG A 216      -0.865  -2.351   3.260  1.00 41.90           C
ANISOU 1296  CG  ARG A 216     5130   5523   5268    557   -150   -495       C
ATOM   1297  CD  ARG A 216      -2.369  -2.344   3.031  1.00 53.58           C
ANISOU 1297  CD  ARG A 216     6610   6964   6784    543   -177   -518       C
ATOM   1298  NE  ARG A 216      -3.114  -1.968   4.233  1.00 65.70           N
ANISOU 1298  NE  ARG A 216     8123   8563   8277    574   -165   -512       N
ATOM   1299  CZ  ARG A 216      -4.441  -1.885   4.301  1.00 71.47           C
ANISOU 1299  CZ  ARG A 216     8859   9342   8956    653   -196   -547       C
ATOM   1300  NH1 ARG A 216      -5.180  -2.145   3.230  1.00 76.90           N
ANISOU 1300  NH1 ARG A 216     9572  10021   9627    712   -245   -596       N
ATOM   1301  NH2 ARG A 216      -5.030  -1.539   5.440  1.00 64.94           N
ANISOU 1301  NH2 ARG A 216     8015   8571   8089    678   -182   -534       N
ATOM   1302  C   ARG A 216       1.601   0.538   4.049  1.00 27.56           C
ANISOU 1302  C   ARG A 216     3239   3854   3378    509    -12   -346       C
ATOM   1303  O   ARG A 216       1.272   1.281   4.975  1.00 22.11           O
ANISOU 1303  O   ARG A 216     2549   3129   2722    445     13   -311       O
ATOM   1304  N   THR A 217       2.380   0.937   3.054  1.00 22.92           N
ANISOU 1304  N   THR A 217     2624   3352   2733    559      2   -331       N
ATOM   1305  CA  THR A 217       2.851   2.313   2.966  1.00 21.37           C
ANISOU 1305  CA  THR A 217     2394   3207   2519    531     46   -269       C
ATOM   1306  CB  THR A 217       3.715   2.508   1.719  1.00 25.84           C
ANISOU 1306  CB  THR A 217     2929   3874   3016    596     60   -255       C
ATOM   1307  OG1 THR A 217       4.889   1.703   1.851  1.00 29.63           O
ANISOU 1307  OG1 THR A 217     3399   4387   3471    640     56   -267       O
ATOM   1308  CG2 THR A 217       4.114   3.975   1.546  1.00 23.05           C
ANISOU 1308  CG2 THR A 217     2540   3570   2648    561    102   -183       C
ATOM   1309  C   THR A 217       1.697   3.312   2.981  1.00 19.55           C
ANISOU 1309  C   THR A 217     2167   2946   2317    481    56   -250       C
ATOM   1310  O   THR A 217       1.804   4.386   3.575  1.00 21.75           O
ANISOU 1310  O   THR A 217     2434   3220   2612    429     83   -201       O
ANISOU 1310  O   THR A 217     2434   3220   2612    429     83   -201       O
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ATOM   1311  N   SER A 218       0.584   2.957   2.346  1.00 20.19           N
ANISOU 1311  N   SER A 218     2263   3002   2406    500     28   -291       N
ATOM   1312  CA  SER A 218      -0.575   3.844   2.335  1.00 19.35           C
ANISOU 1312  CA  SER A 218     2158   2866   2328    459     33   -279       C
ATOM   1313  CB  SER A 218      -1.656   3.330   1.374  1.00 26.63           C
ANISOU 1313  CB  SER A 218     3091   3775   3251    497     -6   -330       C
ATOM   1314  OG  SER A 218      -2.111   2.042   1.748  1.00 26.25           O
ANISOU 1314  OG  SER A 218     3066   3668   3240    501    -43   -380       O
ATOM   1315  C   SER A 218      -1.150   4.086   3.735  1.00 19.13           C
ANISOU 1315  C   SER A 218     2142   2766   2361    388     44   -265       C
ATOM   1316  O   SER A 218      -1.703   5.155   4.008  1.00 17.99           O
ANISOU 1316  O   SER A 218     1992   2608   2233    348     63   -236       O
ATOM   1317  N   ASP A 219      -1.017   3.096   4.616  1.00 22.64           N
ANISOU 1317  N   ASP A 219     2605   3163   2832    377     33   -287       N
ATOM   1318  CA  ASP A 219      -1.478   3.223   5.998  1.00 22.41           C
ANISOU 1318  CA  ASP A 219     2592   3070   2853    316     47   -272       C
ATOM   1319  CB  ASP A 219      -1.609   1.839   6.650  1.00 23.83           C
ANISOU 1319  CB  ASP A 219     2798   3195   3063    315     23   -306       C
ATOM   1320  CG  ASP A 219      -2.843   1.082   6.189  1.00 27.90           C
ANISOU 1320  CG  ASP A 219     3320   3670   3612    321    -12   -349       C
ATOM   1321  OD1 ASP A 219      -3.768   1.709   5.626  1.00 30.20           O
ANISOU 1321  OD1 ASP A 219     3596   3966   3912    316    -12   -351       O
ATOM   1322  OD2 ASP A 219      -2.889  -0.145   6.400  1.00 31.44           O
ANISOU 1322  OD2 ASP A 219     3789   4077   4079    331    -43   -381       O
ATOM   1323  C   ASP A 219      -0.519   4.096   6.810  1.00 17.12           C
ANISOU 1323  C   ASP A 219     1916   2416   2173    286     78   -222       C
ATOM   1324  O   ASP A 219      -0.943   4.942   7.603  1.00 17.60           O
ANISOU 1324  O   ASP A 219     1982   2447   2257    241     97   -195       O
ATOM   1325  N   LEU A 220       0.777   3.886   6.618  1.00 14.80           N
ANISOU 1325  N   LEU A 220     1611   2167   1845    315     80   -211       N
ATOM   1326  CA  LEU A 220       1.767   4.736   7.260  1.00 14.48           C
ANISOU 1326  CA  LEU A 220     1559   2145   1798    288    102   -162       C
ATOM   1327  CB  LEU A 220       3.182   4.268   6.932  1.00 18.30           C
ANISOU 1327  CB  LEU A 220     2023   2686   2247    328    100   -157       C
ATOM   1328  CG  LEU A 220       3.537   2.862   7.436  1.00 22.88           C
ANISOU 1328  CG  LEU A 220     2626   3236   2833    352     77   -197       C
ATOM   1329  CD1 LEU A 220       4.927   2.440   6.957  1.00 21.66           C
ANISOU 1329  CD1 LEU A 220     2444   3147   2637    403     75   -196       C
ATOM   1330  CD2 LEU A 220       3.428   2.802   8.953  1.00 25.71           C
ANISOU 1330  CD2 LEU A 220     3015   3525   3230    303     79   -189       C
ATOM   1331  C   LEU A 220       1.581   6.186   6.826  1.00 20.09           C
ANISOU 1331  C   LEU A 220     2249   2884   2499    266    120   -120       C
ATOM   1332  O   LEU A 220       1.695   7.100   7.640  1.00 18.22           O
ANISOU 1332  O   LEU A 220     2017   2625   2281    223    132    -85       O
ATOM   1333  N   ARG A 221       1.292   6.399   5.545  1.00 19.59           N
ANISOU 1333  N   ARG A 221     2169   2866   2408    299    118   -125       N
ATOM   1334  CA  ARG A 221       1.089   7.761   5.049  1.00 12.94           C
ANISOU 1334  CA  ARG A 221     1312   2050   1555    281    132    -83       C
ATOM   1335  CB  ARG A 221       0.954   7.788   3.521  1.00 16.13           C
ANISOU 1335  CB  ARG A 221     1699   2513   1915    331    128    -90       C
ATOM   1336  CG  ARG A 221       2.262   7.579   2.777  1.00 15.65           C
ANISOU 1336  CG  ARG A 221     1610   2534   1805    374    140    -69       C
ATOM   1337  CD  ARG A 221       2.075   7.819   1.283  1.00 20.57           C
ANISOU 1337  CD  ARG A 221     2221   3220   2377    423    141    -67       C
ATOM   1338  NE  ARG A 221       1.795   9.226   1.000  1.00 15.85           N
ANISOU 1338  NE  ARG A 221     1615   2631   1778    389    154    -15       N
ATOM   1339  CZ  ARG A 221       1.787   9.749  -0.224  1.00 23.17           C
ANISOU 1339  CZ  ARG A 221     2530   3616   2657    422    162       7       C
ATOM   1340  NH1 ARG A 221       2.032   8.977  -1.277  1.00 22.03           N
ANISOU 1340  NH1 ARG A 221     2380   3530   2460    493    159    -20       N
ATOM   1341  NH2 ARG A 221       1.530  11.040  -0.392  1.00 26.29           N
ANISOU 1341  NH2 ARG A 221     2923   4009   3055    386    169     57       N
ATOM   1342  C   ARG A 221      -0.153   8.370   5.676  1.00 13.56           C
ANISOU 1342  C   ARG A 221     1412   2067   1674    240    130    -87       C
ATOM   1343  O   ARG A 221      -0.204   9.573   5.940  1.00 13.53           O
ANISOU 1343  O   ARG A 221     1408   2057   1677    207    139    -49       O
ATOM   1344  N   LYS A 222      -1.165   7.540   5.912  1.00 13.92           N
ANISOU 1344  N   LYS A 222     1476   2067   1747    243    117   -134       N
ATOM   1345  CA  LYS A 222      -2.383   8.024   6.548  1.00 13.97           C
ANISOU 1345  CA  LYS A 222     1496   2020   1792    208    120   -139       C
ANISOU 1345  CA  LYS A 222     1496   2020   1792    208    120   -139       C
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ATOM   1346  CB  LYS A 222      -3.437   6.910   6.559  1.00 16.83           C
ANISOU 1346  CB  LYS A 222     1867   2344   2185    217    103   -189       C
ATOM   1347  CG  LYS A 222      -4.866   7.359   6.827  1.00 18.15           C
ANISOU 1347  CG  LYS A 222     2034   2472   2390    192    105   -199       C
ATOM   1348  CD  LYS A 222      -5.840   6.177   6.718  1.00 20.65           C
ANISOU 1348  CD  LYS A 222     2350   2754   2742    199     84   -245       C
ATOM   1349  CE  LYS A 222      -5.686   5.395   5.402  1.00 19.17           C
ANISOU 1349  CE  LYS A 222     2156   2596   2530    249     50   -280       C
ATOM   1350  NZ  LYS A 222      -6.815   4.433   5.175  1.00 20.94           N
ANISOU 1350  NZ  LYS A 222     2378   2781   2797    252     18   -324       N
ATOM   1351  C   LYS A 222      -2.068   8.530   7.965  1.00 15.61           C
ANISOU 1351  C   LYS A 222     1720   2190   2021    165    135   -111       C
ATOM   1352  O   LYS A 222      -2.565   9.582   8.395  1.00 13.91           O
ANISOU 1352  O   LYS A 222     1513   1955   1819    139    143    -90       O
ATOM   1353  N   MET A 223      -1.230   7.793   8.690  1.00 16.16           N
ANISOU 1353  N   MET A 223     1800   2249   2091    163    136   -112       N
ATOM   1354  CA  MET A 223      -0.827   8.245  10.017  1.00 15.52           C
ANISOU 1354  CA  MET A 223     1739   2134   2024    128    146    -87       C
ATOM   1355  CB  MET A 223      -0.070   7.152  10.784  1.00 15.51           C
ANISOU 1355  CB  MET A 223     1753   2115   2025    133    142    -99       C
ATOM   1356  CG  MET A 223       0.214   7.536  12.233  1.00 18.68           C
ANISOU 1356  CG  MET A 223     2184   2474   2441    101    148    -78       C
ATOM   1357  SD  MET A 223       0.753   6.114  13.191  1.00 21.85           S
ANISOU 1357  SD  MET A 223     2614   2841   2848    108    141    -99       S
ATOM   1358  CE  MET A 223       0.823   6.835  14.839  1.00 21.61           C
ANISOU 1358  CE  MET A 223     2623   2760   2828     74    149    -74       C
ATOM   1359  C   MET A 223      -0.005   9.531   9.961  1.00 14.42           C
ANISOU 1359  C   MET A 223     1589   2021   1871    113    147    -39       C
ATOM   1360  O   MET A 223      -0.216  10.440  10.764  1.00 15.05           O
ANISOU 1360  O   MET A 223     1687   2068   1964     84    149    -19       O
ATOM   1361  N   VAL A 224       0.925   9.609   9.012  1.00 15.57           N
ANISOU 1361  N   VAL A 224     1704   2225   1987    133    145    -20       N
ATOM   1362  CA  VAL A 224       1.687  10.841   8.799  1.00 15.58           C
ANISOU 1362  CA  VAL A 224     1687   2254   1977    115    145     33       C
ATOM   1363  CB  VAL A 224       2.607  10.726   7.560  1.00 14.72           C
ANISOU 1363  CB  VAL A 224     1538   2222   1832    145    151     54       C
ATOM   1364  CG1 VAL A 224       3.107  12.105   7.110  1.00 13.82           C
ANISOU 1364  CG1 VAL A 224     1403   2139   1710    121    152    115       C
ATOM   1365  CG2 VAL A 224       3.772   9.797   7.858  1.00 17.35           C
ANISOU 1365  CG2 VAL A 224     1858   2578   2157    163    151     48       C
ATOM   1366  C   VAL A 224       0.749  12.035   8.627  1.00 15.05           C
ANISOU 1366  C   VAL A 224     1631   2168   1920     95    143     48       C
ATOM   1367  O   VAL A 224       0.903  13.070   9.292  1.00 15.85           O
ANISOU 1367  O   VAL A 224     1745   2241   2035     63    134     79       O
ATOM   1368  N   ASP A 225      -0.229  11.894   7.736  1.00 15.63           N
ANISOU 1368  N   ASP A 225     1700   2253   1986    118    143     23       N
ATOM   1369  CA  ASP A 225      -1.147  12.992   7.449  1.00 17.75           C
ANISOU 1369  CA  ASP A 225     1976   2507   2260    107    138     33       C
ATOM   1370  CB  ASP A 225      -1.977  12.705   6.183  1.00 15.30           C
ANISOU 1370  CB  ASP A 225     1655   2226   1935    142    134      6       C
ATOM   1371  CG  ASP A 225      -1.127  12.673   4.920  1.00 18.70           C
ANISOU 1371  CG  ASP A 225     2058   2725   2321    171    137     29       C
ATOM   1372  OD1 ASP A 225      -0.019  13.241   4.932  1.00 20.81           O
ANISOU 1372  OD1 ASP A 225     2311   3021   2575    155    143     79       O
ATOM   1373  OD2 ASP A 225      -1.574  12.087   3.916  1.00 17.91           O
ANISOU 1373  OD2 ASP A 225     1951   2654   2201    211    132      -1       O
ATOM   1374  C   ASP A 225      -2.046  13.317   8.645  1.00 16.98           C
ANISOU 1374  C   ASP A 225     1910   2346   2196     83    137     17       C
ATOM   1375  O   ASP A 225      -2.437  14.471   8.842  1.00 14.60           O
ANISOU 1375  O   ASP A 225     1622   2024   1902     67    128     37       O
ATOM   1376  N   MET A 226      -2.366  12.311   9.459  1.00 15.38           N
ANISOU 1376  N   MET A 226     1720   2112   2011     84    146    -16       N
ATOM   1377  CA  MET A 226      -3.116  12.570  10.682  1.00 16.02           C
ANISOU 1377  CA  MET A 226     1829   2140   2117     65    152    -26       C
ATOM   1378  CB  MET A 226      -3.424  11.276  11.451  1.00 14.61           C
ANISOU 1378  CB  MET A 226     1661   1934   1955     84    155    -57       C
ATOM   1379  CG  MET A 226      -4.361  11.487  12.640  1.00 16.82           C
ANISOU 1379  CG  MET A 226     1967   2168   2257     53    179    -66       C
ATOM   1380  SD  MET A 226      -4.657   9.999  13.617  1.00 17.12           S
ANISOU 1380  SD  MET A 226     2019   2172   2313     48    197    -90       S
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ATOM   1381  CE  MET A 226      -3.068   9.820  14.424  1.00 15.31           C
ANISOU 1381  CE  MET A 226     1815   1937   2065     42    189    -68       C
ATOM   1382  C   MET A 226      -2.344  13.540  11.575  1.00 16.59           C
ANISOU 1382  C   MET A 226     1923   2191   2188     42    142     10       C
ATOM   1383  O   MET A 226      -2.923  14.467  12.135  1.00 16.20           O
ANISOU 1383  O   MET A 226     1896   2111   2148     33    137     15       O
ATOM   1384  N   LEU A 227      -1.037  13.328  11.706  1.00 15.21           N
ANISOU 1384  N   LEU A 227     1742   2033   2004     36    136     32       N
ATOM   1385  CA  LEU A 227      -0.230  14.171  12.591  1.00 13.06           C
ANISOU 1385  CA  LEU A 227     1489   1735   1736     12    119     65       C
ATOM   1386  CB  LEU A 227       1.034  13.435  13.041  1.00 11.17           C
ANISOU 1386  CB  LEU A 227     1245   1505   1494     10    116     72       C
ATOM   1387  CG  LEU A 227       0.785  12.086  13.721  1.00 14.83           C
ANISOU 1387  CG  LEU A 227     1726   1949   1961     23    131     34       C
ATOM   1388  CD1 LEU A 227       2.108  11.388  14.016  1.00 15.49           C
ANISOU 1388  CD1 LEU A 227     1802   2046   2039     26    122     41       C
ATOM   1389  CD2 LEU A 227      -0.053  12.251  14.989  1.00 15.76           C
ANISOU 1389  CD2 LEU A 227     1887   2009   2090     15    137     19       C
ATOM   1390  C   LEU A 227       0.156  15.495  11.938  1.00 18.33           C
ANISOU 1390  C   LEU A 227     2144   2419   2400     -3     99    108       C
ATOM   1391  O   LEU A 227       0.230  16.528  12.604  1.00 19.40           O
ANISOU 1391  O   LEU A 227     2306   2518   2546    -22     76    128       O
ATOM   1392  N   GLN A 228       0.384  15.452  10.632  1.00 17.25           N
ANISOU 1392  N   GLN A 228     1971   2335   2246      7    104    123       N
ATOM   1393  CA  GLN A 228       0.915  16.582   9.880  1.00 21.89           C
ANISOU 1393  CA  GLN A 228     2542   2948   2827     -9     88    174       C
ATOM   1394  CB  GLN A 228       1.809  16.051   8.750  1.00 24.33           C
ANISOU 1394  CB  GLN A 228     2805   3329   3110      6    103    195       C
ATOM   1395  CG  GLN A 228       2.829  17.022   8.209  1.00 26.41           C
ANISOU 1395  CG  GLN A 228     3040   3624   3368    -18     92    263       C
ATOM   1396  CD  GLN A 228       3.969  16.311   7.498  1.00 23.32           C
ANISOU 1396  CD  GLN A 228     2601   3306   2954     -2    112    284       C
ATOM   1397  OE1 GLN A 228       5.103  16.303   7.975  1.00 23.74           O
ANISOU 1397  OE1 GLN A 228     2634   3368   3019    -21    106    313       O
ATOM   1398  NE2 GLN A 228       3.668  15.695   6.366  1.00 15.48           N
ANISOU 1398  NE2 GLN A 228     1590   2367   1927     39    134    266       N
ATOM   1399  C   GLN A 228      -0.182  17.486   9.311  1.00 21.89           C
ANISOU 1399  C   GLN A 228     2554   2936   2825     -5     80    173       C
ATOM   1400  O   GLN A 228       0.022  18.698   9.138  1.00 19.17           O
ANISOU 1400  O   GLN A 228     2217   2582   2485    -26     57    215       O
ATOM   1401  N   ASP A 229      -1.347  16.908   9.028  1.00 15.89           N
ANISOU 1401  N   ASP A 229     1799   2176   2064     21     94    127       N
ATOM   1402  CA  ASP A 229      -2.472  17.684   8.504  1.00 14.95           C
ANISOU 1402  CA  ASP A 229     1689   2045   1944     31     85    119       C
ATOM   1403  CB  ASP A 229      -3.094  16.992   7.289  1.00 15.26           C
ANISOU 1403  CB  ASP A 229     1706   2126   1967     64     97     92       C
ATOM   1404  CG  ASP A 229      -2.517  17.474   5.984  1.00 33.51           C
ANISOU 1404  CG  ASP A 229     3996   4488   4247     71     92    133       C
ATOM   1405  OD1 ASP A 229      -1.426  18.083   5.998  1.00 39.88           O
ANISOU 1405  OD1 ASP A 229     4795   5309   5048     46     86    186       O
ATOM   1406  OD2 ASP A 229      -3.169  17.238   4.944  1.00 34.29           O
ANISOU 1406  OD2 ASP A 229     4085   4614   4328    101     93    113       O
ATOM   1407  C   ASP A 229      -3.569  17.924   9.527  1.00 17.19           C
ANISOU 1407  C   ASP A 229     2006   2275   2251     32     82     86       C
ATOM   1408  O   ASP A 229      -3.999  19.055   9.733  1.00 18.00           O
ANISOU 1408  O   ASP A 229     2131   2348   2360     26     61     97       O
ATOM   1409  N   SER A 230      -4.041  16.856  10.156  1.00 12.59           N
ANISOU 1409  N   SER A 230     1424   1680   1679     42    104     46       N
ATOM   1410  CA  SER A 230      -5.173  16.983  11.066  1.00 15.25           C
ANISOU 1410  CA  SER A 230     1784   1977   2035     48    111     16       C
ATOM   1411  CB  SER A 230      -5.810  15.615  11.325  1.00 18.44           C
ANISOU 1411  CB  SER A 230     2175   2380   2451     58    138    -24       C
ATOM   1412  OG  SER A 230      -6.982  15.762  12.097  1.00 17.23           O
ANISOU 1412  OG  SER A 230     2034   2197   2315     64    151    -48       O
ATOM   1413  C   SER A 230      -4.814  17.656  12.396  1.00 19.66           C
ANISOU 1413  C   SER A 230     2380   2492   2598     34     100     29       C
ATOM   1414  O   SER A 230      -5.520  18.564  12.852  1.00 16.85           O
ANISOU 1414  O   SER A 230     2050   2107   2247     41     88     24       O
ATOM   1415  N   PHE A 231      -3.715  17.220  13.010  1.00 14.77           N
ANISOU 1415  N   PHE A 231     1768   1868   1976     19     99     44       N
ANISOU 1415  N   PHE A 231     1768   1868   1976     19     99     44       N
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ATOM   1416  CA  PHE A 231      -3.372  17.663  14.366  1.00 16.34           C
ANISOU 1416  CA  PHE A 231     2008   2023   2177     11     87     50       C
ATOM   1417  CB  PHE A 231      -3.533  16.483  15.345  1.00 11.70           C
ANISOU 1417  CB  PHE A 231     1432   1422   1591     18    116     23       C
ATOM   1418  CG  PHE A 231      -4.899  15.863  15.335  1.00 14.43           C
ANISOU 1418  CG  PHE A 231     1768   1770   1946     34    148    -11       C
ATOM   1419  CD1 PHE A 231      -5.996  16.557  15.816  1.00 18.00           C
ANISOU 1419  CD1 PHE A 231     2237   2201   2400     49    153    -25       C
ATOM   1420  CE1 PHE A 231      -7.256  15.983  15.812  1.00 22.11           C
ANISOU 1420  CE1 PHE A 231     2739   2727   2934     62    184    -53       C
ATOM   1421  CZ  PHE A 231      -7.428  14.694  15.336  1.00 23.05           C
ANISOU 1421  CZ  PHE A 231     2826   2865   3067     57    205    -67       C
ATOM   1422  CE2 PHE A 231      -6.339  13.989  14.852  1.00 19.84           C
ANISOU 1422  CE2 PHE A 231     2410   2475   2654     46    196    -57       C
ATOM   1423  CD2 PHE A 231      -5.083  14.572  14.860  1.00 19.57           C
ANISOU 1423  CD2 PHE A 231     2390   2442   2603     36    171    -30       C
ATOM   1424  C   PHE A 231      -1.977  18.283  14.582  1.00 13.70           C
ANISOU 1424  C   PHE A 231     1683   1681   1843    -13     53     91       C
ATOM   1425  O   PHE A 231      -1.432  18.168  15.687  1.00 15.16           O
ANISOU 1425  O   PHE A 231     1896   1836   2030    -18     43     91       O
ATOM   1426  N   PRO A 232      -1.399  18.951  13.559  1.00 13.12           N
ANISOU 1426  N   PRO A 232     1584   1632   1768    -28     32    128       N
ATOM   1427  CA  PRO A 232      -0.020  19.450  13.691  1.00 16.79           C
ANISOU 1427  CA  PRO A 232     2044   2095   2239    -57      2    173       C
ATOM   1428  CB  PRO A 232       0.239  20.126  12.332  1.00 21.00           C
ANISOU 1428  CB  PRO A 232     2545   2666   2768    -69     -8    215       C
ATOM   1429  CG  PRO A 232      -1.133  20.449  11.815  1.00 17.35           C
ANISOU 1429  CG  PRO A 232     2093   2201   2299    -47      0    189       C
ATOM   1430  CD  PRO A 232      -1.933  19.241  12.217  1.00 15.69           C
ANISOU 1430  CD  PRO A 232     1882   1993   2085    -20     37    135       C
ATOM   1431  C   PRO A 232       0.201  20.451  14.837  1.00 18.28           C
ANISOU 1431  C   PRO A 232     2282   2223   2441    -69    -41    183       C
ATOM   1432  O   PRO A 232       1.297  20.480  15.391  1.00 18.70           O
ANISOU 1432  O   PRO A 232     2337   2263   2504    -88    -65    204       O
ATOM   1433  N   ALA A 233      -0.803  21.250  15.189  1.00 16.18           N
ANISOU 1433  N   ALA A 233     2053   1919   2175    -53    -56    165       N
ATOM   1434  CA  ALA A 233      -0.644  22.211  16.284  1.00 14.99           C
ANISOU 1434  CA  ALA A 233     1955   1708   2032    -55   -103    167       C
ATOM   1435  CB  ALA A 233      -1.807  23.186  16.321  1.00 18.26           C
ANISOU 1435  CB  ALA A 233     2403   2093   2442    -31   -120    149       C
ATOM   1436  C   ALA A 233      -0.502  21.524  17.634  1.00 18.09           C
ANISOU 1436  C   ALA A 233     2381   2075   2418    -39    -93    138       C
ATOM   1437  O   ALA A 233      -0.014  22.121  18.604  1.00 17.77           O
ANISOU 1437  O   ALA A 233     2383   1986   2381    -41   -137    143       O
ATOM   1438  N   TRP A 234      -0.932  20.267  17.694  1.00 13.90           N
ANISOU 1438  N   TRP A 234     1833   1572   1876    -24    -41    109       N
ATOM   1439  CA  TRP A 234      -1.027  19.546  18.963  1.00 16.40           C
ANISOU 1439  CA  TRP A 234     2184   1865   2181     -5    -23     81       C
ATOM   1440  CB  TRP A 234      -2.483  19.142  19.232  1.00 15.75           C
ANISOU 1440  CB  TRP A 234     2111   1786   2087     26     22     44       C
ATOM   1441  CG  TRP A 234      -3.372  20.341  19.255  1.00 17.12           C
ANISOU 1441  CG  TRP A 234     2309   1938   2258     45      2     36       C
ATOM   1442  CD1 TRP A 234      -3.363  21.346  20.181  1.00 18.28           C
ANISOU 1442  CD1 TRP A 234     2511   2038   2396     63    -39     33       C
ATOM   1443  NE1 TRP A 234      -4.304  22.292  19.858  1.00 15.07           N
ANISOU 1443  NE1 TRP A 234     2114   1624   1989     83    -52     23       N
ATOM   1444  CE2 TRP A 234      -4.943  21.909  18.707  1.00 18.60           C
ANISOU 1444  CE2 TRP A 234     2509   2113   2445     77    -19     20       C
ATOM   1445  CD2 TRP A 234      -4.377  20.684  18.294  1.00 18.24           C
ANISOU 1445  CD2 TRP A 234     2424   2103   2405     54     14     28       C
ATOM   1446  CE3 TRP A 234      -4.861  20.074  17.127  1.00 16.69           C
ANISOU 1446  CE3 TRP A 234     2175   1949   2216     49     44     24       C
ATOM   1447  CZ3 TRP A 234      -5.878  20.701  16.417  1.00 18.45           C
ANISOU 1447  CZ3 TRP A 234     2387   2181   2442     65     42     14       C
ATOM   1448  CH2 TRP A 234      -6.410  21.925  16.850  1.00 19.32           C
ANISOU 1448  CH2 TRP A 234     2536   2258   2548     86     11      7       C
ATOM   1449  CZ2 TRP A 234      -5.965  22.535  17.994  1.00 21.23           C
ANISOU 1449  CZ2 TRP A 234     2830   2455   2781     94    -20     10       C
ATOM   1450  C   TRP A 234      -0.097  18.335  19.081  1.00 17.90           C
ANISOU 1450  C   TRP A 234     2354   2076   2372    -16     -6     85       C
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ATOM   1451  O   TRP A 234       0.260  17.942  20.192  1.00 15.17           O
ANISOU 1451  O   TRP A 234    2043   1703   2018     -8    -10     74       O
ATOM   1452  N   PHE A 235       0.300  17.747  17.956  1.00 15.76           N
ANISOU 1452  N   PHE A 235    2029   1853   2106    -29     11     98       N
ATOM   1453  CA  PHE A 235       1.253  16.638  18.007  1.00 14.66           C
ANISOU 1453  CA  PHE A 235    1868   1735   1966    -35     21     99       C
ATOM   1454  CB  PHE A 235       1.277  15.836  16.705  1.00 14.37           C
ANISOU 1454  CB  PHE A 235    1778   1756   1927    -33     50     99       C
ATOM   1455  CG  PHE A 235       2.424  14.868  16.647  1.00 10.98           C
ANISOU 1455  CG  PHE A 235    1324   1352   1495    -34     52    105       C
ATOM   1456  CD1 PHE A 235       2.448  13.768  17.487  1.00 12.23           C
ANISOU 1456  CD1 PHE A 235    1506   1492   1649    -21     65     77       C
ATOM   1457  CE1 PHE A 235       3.510  12.884  17.467  1.00 15.64           C
ANISOU 1457  CE1 PHE A 235    1919   1945   2079    -17     62     79       C
ATOM   1458  CZ  PHE A 235       4.574  13.114  16.630  1.00 19.77           C
ANISOU 1458  CZ  PHE A 235    2395   2513   2605    -26     48    109       C
ATOM   1459  CE2 PHE A 235       4.574  14.227  15.800  1.00 20.50           C
ANISOU 1459  CE2 PHE A 235    2461   2627   2702    -43     38    142       C
ATOM   1460  CD2 PHE A 235       3.507  15.101  15.820  1.00 18.32           C
ANISOU 1460  CD2 PHE A 235    2210   2324   2429    -48     38    139       C
ATOM   1461  C   PHE A 235       2.654  17.152  18.318  1.00 15.11           C
ANISOU 1461  C   PHE A 235    1925   1781   2035    -57    -24    133       C
ATOM   1462  O   PHE A 235       3.242  17.896  17.521  1.00 15.21           O
ANISOU 1462  O   PHE A 235    1906   1814   2060    -79    -46    170       O
ATOM   1463  N   LYS A 236       3.191  16.762  19.473  1.00 13.15           N
ANISOU 1463  N   LYS A 236    1711   1500   1784    -51    -38    122       N
ATOM   1464  CA  LYS A 236       4.441  17.342  19.960  1.00 12.55           C
ANISOU 1464  CA  LYS A 236    1641   1402   1724    -71    -90    150       C
ATOM   1465  CB  LYS A 236       4.280  17.816  21.416  1.00 14.67           C
ANISOU 1465  CB  LYS A 236    1982   1605   1986    -56   -123    132       C
ATOM   1466  CG  LYS A 236       3.210  18.901  21.602  1.00 12.46           C
ANISOU 1466  CG  LYS A 236    1741   1293   1700    -44   -134    123       C
ATOM   1467  CD  LYS A 236       3.510  20.145  20.770  1.00 14.52           C
ANISOU 1467  CD  LYS A 236    1979   1554   1985    -73   -175    160       C
ATOM   1468  CE  LYS A 236       2.441  21.229  20.964  1.00 17.40           C
ANISOU 1468  CE  LYS A 236    2386   1882   2342    -56   -192    147       C
ATOM   1469  NZ  LYS A 236       2.679  22.482  20.166  1.00 14.57           N
ANISOU 1469  NZ  LYS A 236    2013   1516   2008    -85   -238    186       N
ATOM   1470  C   LYS A 236       5.663  16.430  19.850  1.00 14.47           C
ANISOU 1470  C   LYS A 236    1849   1677   1974    -77    -91    159       C
ATOM   1471  O   LYS A 236       6.777  16.909  19.647  1.00 17.12           O
ANISOU 1471  O   LYS A 236    2154   2021   2330   -102   -127    194       O
ATOM   1472  N   ALA A 237       5.461  15.123  19.992  1.00 13.59           N
ANISOU 1472  N   ALA A 237    1738   1580   1846    -55    -54    130       N
ATOM   1473  CA  ALA A 237       6.581  14.196  20.030  1.00 12.58           C
ANISOU 1473  CA  ALA A 237    1584   1475   1720    -53    -58    131       C
ATOM   1474  CB  ALA A 237       7.346  14.354  21.360  1.00 13.45           C
ANISOU 1474  CB  ALA A 237    1739   1535   1836    -53   -103    130       C
ATOM   1475  C   ALA A 237       6.084  12.767  19.901  1.00 15.37           C
ANISOU 1475  C   ALA A 237    1939   1847   2056    -27    -15     97       C
ATOM   1476  O   ALA A 237       4.977  12.449  20.317  1.00 13.98           O
ANISOU 1476  O   ALA A 237    1798   1645   1867    -14     11     72       O
ATOM   1477  N   ILE A 238       6.907  11.907  19.320  1.00 13.08           N
ANISOU 1477  N   ILE A 238    1606   1598   1764    -19    -10     98       N
ATOM   1478  CA  ILE A 238       6.621  10.474  19.336  1.00 13.06           C
ANISOU 1478  CA  ILE A 238    1612   1603   1748      6     17     64       C
ATOM   1479  CB  ILE A 238       6.055   9.966  17.976  1.00 14.60           C
ANISOU 1479  CB  ILE A 238    1764   1847   1936     18     49     54       C
ATOM   1480  CG1 ILE A 238       5.643   8.490  18.074  1.00 13.83           C
ANISOU 1480  CG1 ILE A 238    1683   1741   1829     43     67     16       C
ATOM   1481  CD1 ILE A 238       4.745   8.014  16.898  1.00 12.08           C
ANISOU 1481  CD1 ILE A 238    1435   1551   1603     56     93     -2       C
ATOM   1482  CG2 ILE A 238       7.050  10.218  16.830  1.00 15.34           C
ANISOU 1482  CG2 ILE A 238    1793   2007   2029     19     43     81       C
ATOM   1483  C   ILE A 238       7.897   9.743  19.735  1.00 13.91           C
ANISOU 1483  C   ILE A 238    1713   1716   1856     18     -7     62       C
ATOM   1484  O   ILE A 238       8.983  10.027  19.214  1.00 16.16           O
ANISOU 1484  O   ILE A 238    1948   2041   2150     12    -25     87       O
ATOM   1485  N   HIS A 239       7.765   8.842  20.702  1.00 15.39           N
ANISOU 1485  N   HIS A 239    1950   1864   2035     34     -7     36       N
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ATOM   1486  CA  HIS A 239       8.900   8.118  21.254  1.00 17.47           C
ANISOU 1486  CA  HIS A 239     2219   2123   2298     49    -34     29       C
ATOM   1487  CB  HIS A 239       8.974   8.326  22.776  1.00 15.19           C
ANISOU 1487  CB  HIS A 239     1998   1769   2004     48    -60     25       C
ATOM   1488  CG  HIS A 239       9.301   9.732  23.183  1.00 16.75           C
ANISOU 1488  CG  HIS A 239     2202   1947   2216     26    -94     51       C
ATOM   1489  ND1 HIS A 239      10.586  10.225  23.185  1.00 20.55           N
ANISOU 1489  ND1 HIS A 239     2650   2441   2718     15   -138     73       N
ATOM   1490  CE1 HIS A 239      10.575  11.488  23.567  1.00 19.66           C
ANISOU 1490  CE1 HIS A 239     2553   2297   2619     -7   -170     93       C
ATOM   1491  NE2 HIS A 239       9.325  11.835  23.818  1.00 18.91           N
ANISOU 1491  NE2 HIS A 239     2503   2175   2509     -4   -145     82       N
ATOM   1492  CD2 HIS A 239       8.507  10.755  23.586  1.00 19.10           C
ANISOU 1492  CD2 HIS A 239     2534   2212   2512     14    -95     57       C
ATOM   1493  C   HIS A 239       8.774   6.622  20.947  1.00 20.05           C
ANISOU 1493  C   HIS A 239     2546   2461   2611     77    -16     -2       C
ATOM   1494  O   HIS A 239       7.862   5.961  21.440  1.00 18.37           O
ANISOU 1494  O   HIS A 239     2379   2212   2391     82      3    -22       O
ATOM   1495  N   PHE A 240       9.688   6.102  20.132  1.00 15.65           N
ANISOU 1495  N   PHE A 240     1937   1956   2053     96    -23     -3       N
ATOM   1496  CA  PHE A 240       9.749   4.673  19.857  1.00 15.16           C
ANISOU 1496  CA  PHE A 240     1878   1902   1979    129    -19    -36       C
ATOM   1497  CB  PHE A 240      10.203   4.422  18.420  1.00 15.95           C
ANISOU 1497  CB  PHE A 240     1910   2078   2071    153    -10    -37       C
ATOM   1498  CG  PHE A 240       9.168   4.781  17.383  1.00 16.99           C
ANISOU 1498  CG  PHE A 240     2021   2235   2200    146     20    -35       C
ATOM   1499  CD1 PHE A 240       8.266   3.833  16.936  1.00 19.48           C
ANISOU 1499  CD1 PHE A 240     2353   2541   2509    164     34    -68       C
ATOM   1500  CE1 PHE A 240       7.311   4.152  15.984  1.00 17.17           C
ANISOU 1500  CE1 PHE A 240     2040   2269   2213    160     56    -70       C
ATOM   1501  CZ  PHE A 240       7.250   5.436  15.477  1.00 15.48           C
ANISOU 1501  CZ  PHE A 240     1794   2086   2002    138     68    -37       C
ATOM   1502  CE2 PHE A 240       8.143   6.395  15.907  1.00 16.18           C
ANISOU 1502  CE2 PHE A 240     1868   2182   2099    117     54      0       C
ATOM   1503  CD2 PHE A 240       9.102   6.063  16.862  1.00 17.66           C
ANISOU 1503  CD2 PHE A 240     2071   2347   2290    120     30      0       C
ATOM   1504  C   PHE A 240      10.725   4.013  20.823  1.00 18.12           C
ANISOU 1504  C   PHE A 240     2282   2250   2351    147    -53    -47       C
ATOM   1505  O   PHE A 240      11.864   4.463  20.957  1.00 17.49           O
ANISOU 1505  O   PHE A 240     2173   2191   2281    147    -81    -29       O
ATOM   1506  N   ILE A 241      10.279   2.959  21.506  1.00 17.15           N
ANISOU 1506  N   ILE A 241     2217   2079   2220    161    -54    -73       N
ATOM   1507  CA  ILE A 241      11.161   2.214  22.401  1.00 18.37           C
ANISOU 1507  CA  ILE A 241     2406   2204   2369    183    -88    -86       C
ATOM   1508  CB  ILE A 241      10.716   2.309  23.881  1.00 21.50           C
ANISOU 1508  CB  ILE A 241     2882   2527   2759    170    -94    -82       C
ATOM   1509  CG1 ILE A 241       9.312   1.731  24.064  1.00 21.66           C
ANISOU 1509  CG1 ILE A 241     2947   2510   2772    161    -58    -91       C
ATOM   1510  CD1 ILE A 241       8.789   1.823  25.495  1.00 22.79           C
ANISOU 1510  CD1 ILE A 241     3168   2590   2903    151    -53    -83       C
ATOM   1511  CG2 ILE A 241      10.763   3.757  24.375  1.00 17.64           C
ANISOU 1511  CG2 ILE A 241     2397   2029   2278    143   -101    -55       C
ATOM   1512  C   ILE A 241      11.264   0.748  21.983  1.00 19.33           C
ANISOU 1512  C   ILE A 241     2533   2331   2482    220     -94   -119       C
ATOM   1513  O   ILE A 241      10.315   0.175  21.443  1.00 16.67           O
ANISOU 1513  O   ILE A 241     2202   1989   2143    221     -72   -134       O
ATOM   1514  N   HIS A 242      12.438   0.169  22.207  1.00 22.83           N
ANISOU 1514  N   HIS A 242     2971   2783   2921    251   -130   -131       N
ATOM   1515  CA  HIS A 242      12.674  -1.262  22.002  1.00 24.31           C
ANISOU 1515  CA  HIS A 242     3175   2964   2897    293   -149   -166       C
ATOM   1516  CB  HIS A 242      11.777  -2.104  22.923  1.00 22.48           C
ANISOU 1516  CB  HIS A 242     3027   2653   2861    285   -148   -178       C
ATOM   1517  CG  HIS A 242      11.917  -1.789  24.383  1.00 26.13           C
ANISOU 1517  CG  HIS A 242     3551   3058   3319    269   -161   -162       C
ATOM   1518  ND1 HIS A 242      13.133  -1.777  25.031  1.00 29.41           N
ANISOU 1518  ND1 HIS A 242     3973   3470   3731    290   -203   -164       N
ATOM   1519  CE1 HIS A 242      12.950  -1.473  26.305  1.00 26.58           C
ANISOU 1519  CE1 HIS A 242     3679   3055   3364    274   -210   -151       C
ATOM   1520  NE2 HIS A 242      11.656  -1.304  26.510  1.00 23.50           N
ANISOU 1520  NE2 HIS A 242     3322   2635   2971    246   -169   -139       N
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ATOM   1521  CD2 HIS A 242      10.987  -1.496  25.326  1.00 24.84           C
ANISOU 1521  CD2 HIS A 242     3446   2841   3151    239   -139   -145       C
ATOM   1522  C   HIS A 242      12.468  -1.726  20.561  1.00 23.69           C
ANISOU 1522  C   HIS A 242     3046   2942   3013    320   -134   -185       C
ATOM   1523  O   HIS A 242      12.144  -2.892  20.331  1.00 20.51           O
ANISOU 1523  O   HIS A 242     2671   2518   2604    347   -145   -217       O
ATOM   1524  N   GLN A 243      12.650  -0.836  19.588  1.00 21.52           N
ANISOU 1524  N   GLN A 243     2702   2735   2739    314   -114   -166       N
ATOM   1525  CA  GLN A 243      12.409  -1.218  18.199  1.00 18.86           C
ANISOU 1525  CA  GLN A 243     2322   2453   2389    344    -99   -184       C
ATOM   1526  CB  GLN A 243      12.266   0.013  17.296  1.00 21.75           C
ANISOU 1526  CB  GLN A 243     2627   2881   2757    321    -67   -151       C
ATOM   1527  CG  GLN A 243      13.581   0.674  16.880  1.00 20.94           C
ANISOU 1527  CG  GLN A 243     2453   2853   2652    332    -71   -123       C
ATOM   1528  CD  GLN A 243      14.313   1.340  18.032  1.00 24.33           C
ANISOU 1528  CD  GLN A 243     2890   3252   3102    302    -93    -97       C
ATOM   1529  OE1 GLN A 243      13.716   1.678  19.061  1.00 21.17           O
ANISOU 1529  OE1 GLN A 243     2547   2781   2714    266    -98    -91       O
ATOM   1530  NE2 GLN A 243      15.616   1.537  17.862  1.00 23.78           N
ANISOU 1530  NE2 GLN A 243     2762   3237   3036    319   -109    -80       N
ATOM   1531  C   GLN A 243      13.528  -2.134  17.706  1.00 20.46           C
ANISOU 1531  C   GLN A 243     2497   2702   2575    406   -127   -212       C
ATOM   1532  O   GLN A 243      14.687  -1.949  18.072  1.00 22.25           O
ANISOU 1532  O   GLN A 243     2697   2953   2803    419   -146   -202       O
ATOM   1533  N   PRO A 244      13.180  -3.133  16.884  1.00 22.99           N
ANISOU 1533  N   PRO A 244     2822   3033   2880    449   -133   -250       N
ATOM   1534  CA  PRO A 244      14.170  -4.077  16.345  1.00 23.85           C
ANISOU 1534  CA  PRO A 244     2908   3187   2966    521   -162   -284       C
ATOM   1535  CB  PRO A 244      13.307  -5.239  15.845  1.00 24.38           C
ANISOU 1535  CB  PRO A 244     3020   3219   3026    550   -179   -329       C
ATOM   1536  CG  PRO A 244      12.005  -4.617  15.487  1.00 24.67           C
ANISOU 1536  CG  PRO A 244     3059   3239   3075    503   -145   -313       C
ATOM   1537  CD  PRO A 244      11.813  -3.429  16.420  1.00 22.34           C
ANISOU 1537  CD  PRO A 244     2768   2919   2801    435   -119   -265       C
ATOM   1538  C   PRO A 244      14.978  -3.481  15.191  1.00 26.19           C
ANISOU 1538  C   PRO A 244     3116   3592   3242    552   -140   -268       C
ATOM   1539  O   PRO A 244      14.647  -2.399  14.704  1.00 21.11           O
ANISOU 1539  O   PRO A 244     2433   2984   2602    516   -105   -232       O
ATOM   1540  N   TRP A 245      16.020  -4.185  14.750  1.00 24.42           N
ANISOU 1540  N   TRP A 245     2861   3423   2996    621   -162   -294       N
ATOM   1541  CA  TRP A 245      16.901  -3.670  13.699  1.00 25.61           C
ANISOU 1541  CA  TRP A 245     2921   3687   3123    656   -137   -274       C
ATOM   1542  CB  TRP A 245      18.057  -4.644  13.416  1.00 24.22           C
ANISOU 1542  CB  TRP A 245     2719   3563   2921    742   -166   -310       C
ATOM   1543  CG  TRP A 245      17.649  -5.926  12.737  1.00 25.38           C
ANISOU 1543  CG  TRP A 245     2905   3702   3037    813   -192   -373       C
ATOM   1544  CD1 TRP A 245      17.326  -7.110  13.339  1.00 28.90           C
ANISOU 1544  CD1 TRP A 245     3430   4062   3488    834   -240   -421       C
ATOM   1545  NE1 TRP A 245      17.014  -8.056  12.388  1.00 30.85           N
ANISOU 1545  NE1 TRP A 245     3695   4324   3704    903   -260   -472       N
ATOM   1546  CE2 TRP A 245      17.138  -7.494  11.146  1.00 31.30           C
ANISOU 1546  CE2 TRP A 245     3683   4480   3728    934   -222   -459       C
ATOM   1547  CD2 TRP A 245      17.539  -6.153  11.324  1.00 27.61           C
ANISOU 1547  CD2 TRP A 245     3153   4061   3277    876   -176   -393       C
ATOM   1548  CE3 TRP A 245      17.736  -5.351  10.195  1.00 29.69           C
ANISOU 1548  CE3 TRP A 245     3341   4427   3512    889   -129   -361       C
ATOM   1549  CZ3 TRP A 245      17.528  -5.907   8.937  1.00 32.13           C
ANISOU 1549  CZ3 TRP A 245     3643   4791   3774    966   -128   -398       C
ATOM   1550  CH2 TRP A 245      17.131  -7.244   8.793  1.00 31.82           C
ANISOU 1550  CH2 TRP A 245     3670   4702   3719   1027   -179   -469       C
ATOM   1551  CZ2 TRP A 245      16.930  -8.051   9.881  1.00 33.09           C
ANISOU 1551  CZ2 TRP A 245     3903   4758   3913   1009   -227   -499       C
ATOM   1552  C   TRP A 245      16.172  -3.312  12.402  1.00 21.94           C
ANISOU 1552  C   TRP A 245     2428   3274   2635    665   -102   -269       C
ATOM   1553  O   TRP A 245      16.517  -2.332  11.744  1.00 24.35           O
ANISOU 1553  O   TRP A 245     2665   3655   2933    652    -66   -225       O
ATOM   1554  N   TYR A 246      15.159  -4.089  12.036  1.00 24.28           N
ANISOU 1554  N   TYR A 246     2777   3527   2923    683   -115   -311       N
ATOM   1555  CA  TYR A 246      14.469  -3.846  10.766  1.00 27.99           C
ANISOU 1555  CA  TYR A 246     3225   4044   3368    701    -89   -314       C
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ATOM   1556  CB  TYR A 246      13.790  -5.121  10.245  1.00 28.49           C
ANISOU 1556  CB  TYR A 246     3340   4072   3414    756   -125   -379       C
ATOM   1557  CG  TYR A 246      13.104  -5.932  11.314  1.00 26.26           C
ANISOU 1557  CG  TYR A 246     3137   3673   3166    725   -162   -405       C
ATOM   1558  CD1 TYR A 246      11.777  -5.692  11.653  1.00 23.98           C
ANISOU 1558  CD1 TYR A 246     2890   3312   2909    661   -154   -396       C
ATOM   1559  CE1 TYR A 246      11.146  -6.432  12.635  1.00 24.96           C
ANISOU 1559  CE1 TYR A 246     3084   3334   3064    630   -182   -412       C
ATOM   1560  CZ  TYR A 246      11.849  -7.426  13.297  1.00 30.82           C
ANISOU 1560  CZ  TYR A 246     3862   4041   3805    663   -224   -439       C
ATOM   1561  OH  TYR A 246      11.235  -8.169  14.277  1.00 29.95           O
ANISOU 1561  OH  TYR A 246     3825   3830   3725    631   -252   -448       O
ATOM   1562  CE2 TYR A 246      13.171  -7.682  12.975  1.00 30.72           C
ANISOU 1562  CE2 TYR A 246     3813   4096   3762    730   -238   -453       C
ATOM   1563  CD2 TYR A 246      13.788  -6.937  11.992  1.00 30.06           C
ANISOU 1563  CD2 TYR A 246     3653   4119   3648    760   -205   -436       C
ATOM   1564  C   TYR A 246      13.481  -2.679  10.819  1.00 27.71           C
ANISOU 1564  C   TYR A 246     3190   3984   3356    624    -55   -272       C
ATOM   1565  O   TYR A 246      12.771  -2.419   9.852  1.00 24.10           O
ANISOU 1565  O   TYR A 246     2721   3553   2881    631    -37   -273       O
ATOM   1566  N   PHE A 247      13.436  -1.978  11.947  1.00 22.69           N
ANISOU 1566  N   PHE A 247     2569   3296   2755    555    -50   -237       N
ATOM   1567  CA  PHE A 247      12.617  -0.776  12.043  1.00 24.06           C
ANISOU 1567  CA  PHE A 247     2741   3452   2950    488    -21   -196       C
ATOM   1568  CB  PHE A 247      12.634  -0.226  13.467  1.00 19.01           C
ANISOU 1568  CB  PHE A 247     2133   2744   2346    426    -27   -169       C
ATOM   1569  CG  PHE A 247      11.865   1.060  13.635  1.00 21.89           C
ANISOU 1569  CG  PHE A 247     2498   3089   2731    362     -2   -129       C
ATOM   1570  CD1 PHE A 247      10.488   1.044  13.802  1.00 21.87           C
ANISOU 1570  CD1 PHE A 247     2542   3028   2741    334      7   -142       C
ATOM   1571  CE1 PHE A 247       9.777   2.226  13.964  1.00 22.63           C
ANISOU 1571  CE1 PHE A 247     2638   3106   2853    282     28   -109       C
ATOM   1572  CZ  PHE A 247      10.440   3.433  13.966  1.00 19.69           C
ANISOU 1572  CZ  PHE A 247     2226   2769   2487    255     36    -61       C
ATOM   1573  CE2 PHE A 247      11.818   3.463  13.807  1.00 24.43           C
ANISOU 1573  CE2 PHE A 247     2778   3425   3080    275     27    -44       C
ATOM   1574  CD2 PHE A 247      12.523   2.280  13.645  1.00 22.41           C
ANISOU 1574  CD2 PHE A 247     2516   3192   2806    330     10    -78       C
ATOM   1575  C   PHE A 247      13.166   0.271  11.088  1.00 25.41           C
ANISOU 1575  C   PHE A 247     2836   3715   3102    489     12   -151       C
ATOM   1576  O   PHE A 247      12.444   1.156  10.627  1.00 26.25           O
ANISOU 1576  O   PHE A 247     2932   3829   3212    455     37   -124       O
ATOM   1577  N   THR A 248      14.455   0.154  10.790  1.00 24.45           N
ANISOU 1577  N   THR A 248     2659   3667   2963    529     12   -140       N
ATOM   1578  CA  THR A 248      15.140   1.120   9.943  1.00 24.86           C
ANISOU 1578  CA  THR A 248     2632   3814   3000    528     45    -87       C
ATOM   1579  CB  THR A 248      16.639   0.774   9.816  1.00 32.59           C
ANISOU 1579  CB  THR A 248     3549   4870   3964    577     41    -80       C
ATOM   1580  OG1 THR A 248      17.290   1.064  11.060  1.00 34.22           O
ANISOU 1580  OG1 THR A 248     3759   5032   4212    534     18    -60       O
ATOM   1581  CG2 THR A 248      17.295   1.581   8.706  1.00 35.56           C
ANISOU 1581  CG2 THR A 248     3837   5359   4314    589     82    -26       C
ATOM   1582  C   THR A 248      14.492   1.225   8.565  1.00 24.66           C
ANISOU 1582  C   THR A 248     2591   3843   2936    560     72    -91       C
ATOM   1583  O   THR A 248      14.312   2.322   8.040  1.00 26.31           O
ANISOU 1583  O   THR A 248     2766   4088   3144    525    102    -42       O
ATOM   1584  N   THR A 249      14.127   0.083   7.992  1.00 28.34           N
ANISOU 1584  N   THR A 249     3086   4311   3371    626     56   -151       N
ATOM   1585  CA  THR A 249      13.461   0.061   6.691  1.00 31.29           C
ANISOU 1585  CA  THR A 249     3455   4729   3705    665     72   -165       C
ATOM   1586  CB  THR A 249      13.263  -1.377   6.186  1.00 34.84           C
ANISOU 1586  CB  THR A 249     3941   5173   4122    749     38   -239       C
ATOM   1587  OG1 THR A 249      14.540  -1.981   5.946  1.00 42.01           O
ANISOU 1587  OG1 THR A 249     4810   6154   4998    820     34   -251       O
ATOM   1588  CG2 THR A 249      12.457  -1.381   4.898  1.00 39.95           C
ANISOU 1588  CG2 THR A 249     4593   5855   4731    788     46   -258       C
ATOM   1589  C   THR A 249      12.103   0.757   6.745  1.00 29.31           C
ANISOU 1589  C   THR A 249     3240   4417   3480    604     79   -154       C
ATOM   1590  O   THR A 249      11.763   1.547   5.864  1.00 27.92           O
ANISOU 1590  O   THR A 249     3038   4287   3284    599    107   -124       O
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ATOM   1591  N   THR A 250      11.330   0.446   7.781  1.00 23.36           N
ANISOU 1591  N   THR A 250     2546   3562   2766    561      56   -177       N
ATOM   1592  CA  THR A 250      10.026   1.062   7.998  1.00 21.52           C
ANISOU 1592  CA  THR A 250     2347   3268   2563    503      63   -169       C
ATOM   1593  CB  THR A 250       9.367   0.507   9.282  1.00 27.12           C
ANISOU 1593  CB  THR A 250     3119   3872   3314    464      39   -194       C
ATOM   1594  OG1 THR A 250       9.291  -0.922   9.202  1.00 32.51           O
ANISOU 1594  OG1 THR A 250     3836   4529   3988    515       5   -252       O
ATOM   1595  CG2 THR A 250       7.971   1.074   9.452  1.00 26.43           C
ANISOU 1595  CG2 THR A 250     3060   3729   3254    413      49   -188       C
ATOM   1596  C   THR A 250      10.150   2.583   8.122  1.00 26.80           C
ANISOU 1596  C   THR A 250     2982   3956   3246    443      92   -102       C
ATOM   1597  O   THR A 250       9.380   3.337   7.523  1.00 24.88           O
ANISOU 1597  O   THR A 250     2733   3720   2999    424     109    -85       O
ATOM   1598  N   TYR A 251      11.127   3.029   8.902  1.00 22.49           N
ANISOU 1598  N   TYR A 251     2413   3414   2717    415      93    -67       N
ATOM   1599  CA  TYR A 251      11.385   4.453   9.066  1.00 23.17           C
ANISOU 1599  CA  TYR A 251     2467   3514   2822    358     110     -2       C
ATOM   1600  CB  TYR A 251      12.496   4.665  10.090  1.00 24.09           C
ANISOU 1600  CB  TYR A 251     2568   3620   2965    333      96     24       C
ATOM   1601  CG  TYR A 251      12.927   6.106  10.255  1.00 32.24           C
ANISOU 1601  CG  TYR A 251     3564   4665   4021    275     104     92       C
ATOM   1602  CD1 TYR A 251      12.450   6.877  11.307  1.00 33.74           C
ANISOU 1602  CD1 TYR A 251     3794   4777   4249    215      88    107       C
ATOM   1603  CE1 TYR A 251      12.845   8.195  11.469  1.00 40.82           C
ANISOU 1603  CE1 TYR A 251     4663   5677   5171    163      85    167       C
ATOM   1604  CZ  TYR A 251      13.732   8.758  10.569  1.00 49.24           C
ANISOU 1604  CZ  TYR A 251     5655   6827   6228    164     101    220       C
ATOM   1605  OH  TYR A 251      14.128  10.068  10.726  1.00 52.39           O
ANISOU 1605  OH  TYR A 251     6025   7222   6657    107      92    284       O
ATOM   1606  CE2 TYR A 251      14.224   8.011   9.514  1.00 43.54           C
ANISOU 1606  CE2 TYR A 251     4887   6192   5465    224     126    210       C
ATOM   1607  CD2 TYR A 251      13.823   6.692   9.366  1.00 39.99           C
ANISOU 1607  CD2 TYR A 251     4470   5736   4986    282     125    143       C
ATOM   1608  C   TYR A 251      11.773   5.100   7.739  1.00 23.97           C
ANISOU 1608  C   TYR A 251     2507   3710   2889    379     140     38       C
ATOM   1609  O   TYR A 251      11.325   6.206   7.414  1.00 21.68           O
ANISOU 1609  O   TYR A 251     2208   3424   2605    339     156     79       O
ATOM   1610  N   ASN A 252      12.613   4.410   6.977  1.00 22.33           N
ANISOU 1610  N   ASN A 252     2259   3582   2642    444     147     27       N
ATOM   1611  CA  ASN A 252      13.055   4.926   5.690  1.00 27.40           C
ANISOU 1611  CA  ASN A 252     2842   4326   3243    473     181     67       C
ATOM   1612  CB  ASN A 252      14.127   4.019   5.076  1.00 27.91           C
ANISOU 1612  CB  ASN A 252     2863   4478   3263    555     187     49       C
ATOM   1613  CG  ASN A 252      15.487   4.200   5.724  1.00 30.08           C
ANISOU 1613  CG  ASN A 252     3085   4784   3561    539     187     87       C
ATOM   1614  OD1 ASN A 252      15.726   5.176   6.438  1.00 30.68           O
ANISOU 1614  OD1 ASN A 252     3146   4829   3681    465     185    139       O
ATOM   1615  ND2 ASN A 252      16.389   3.259   5.470  1.00 33.10           N
ANISOU 1615  ND2 ASN A 252     3438   5227   3913    611     184     60       N
ATOM   1616  C   ASN A 252      11.898   5.115   4.713  1.00 27.38           C
ANISOU 1616  C   ASN A 252     2864   4327   3213    488     191     53       C
ATOM   1617  O   ASN A 252      11.918   6.032   3.896  1.00 22.96           O
ANISOU 1617  O   ASN A 252     2269   3821   2633    478    219    104       O
ATOM   1618  N   VAL A 253      10.892   4.248   4.802  1.00 24.27           N
ANISOU 1618  N   VAL A 253     2528   3873   2821    510    167    -13       N
ATOM   1619  CA  VAL A 253       9.724   4.337   3.925  1.00 23.48           C
ANISOU 1619  CA  VAL A 253     2454   3767   2702    525    169    -34       C
ATOM   1620  CB  VAL A 253       8.823   3.081   4.050  1.00 26.63           C
ANISOU 1620  CB  VAL A 253     2910   4102   3106    558    133   -113       C
ATOM   1621  CG1 VAL A 253       7.421   3.355   3.501  1.00 26.20           C
ANISOU 1621  CG1 VAL A 253     2886   4015   3056    549    127   -131       C
ATOM   1622  CG2 VAL A 253       9.464   1.892   3.348  1.00 30.23           C
ANISOU 1622  CG2 VAL A 253     3359   4613   3515    649    119   -158       C
ATOM   1623  C   VAL A 253       8.899   5.602   4.194  1.00 22.31           C
ANISOU 1623  C   VAL A 253     2317   3574   2586    452    178      6       C
ATOM   1624  O   VAL A 253       8.357   6.207   3.272  1.00 24.56           O
ANISOU 1624  O   VAL A 253     2595   3888   2847    458    191     23       O
ATOM   1625  N   VAL A 254       8.825   6.005   5.458  1.00 18.85           N
ANISOU 1625  N   VAL A 254     1898   3065   2197    388     168     21       N
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ATOM   1626  CA  VAL A 254       7.999   7.134   5.865  1.00 18.42           C
ANISOU 1626  CA  VAL A 254     1864   2959   2176    325    170     50       C
ATOM   1627  CB  VAL A 254       7.558   6.965   7.337  1.00 25.63           C
ANISOU 1627  CB  VAL A 254     2824   3778   3137    281    150     28       C
ATOM   1628  CG1 VAL A 254       6.663   8.101   7.758  1.00 32.78           C
ANISOU 1628  CG1 VAL A 254     3752   4632   4072    225    151     52       C
ATOM   1629  CG2 VAL A 254       6.848   5.634   7.520  1.00 31.80           C
ANISOU 1629  CG2 VAL A 254     3645   4515   3921    313    133    -39       C
ATOM   1630  C   VAL A 254       8.744   8.462   5.720  1.00 18.42           C
ANISOU 1630  C   VAL A 254     1819   2999   2179    285    187    126       C
ATOM   1631  O   VAL A 254       8.142   9.516   5.519  1.00 22.20           O
ANISOU 1631  O   VAL A 254     2305   3463   2667    249    191    158       O
ATOM   1632  N   LYS A 255      10.065   8.399   5.825  1.00 22.88           N
ANISOU 1632  N   LYS A 255     2340   3614   2740    291    193    157       N
ATOM   1633  CA  LYS A 255      10.900   9.599   5.872  1.00 21.55           C
ANISOU 1633  CA  LYS A 255     2126   3476   2587    244    202    235       C
ATOM   1634  CB  LYS A 255      12.378   9.201   5.826  1.00 35.02           C
ANISOU 1634  CB  LYS A 255     3771   5251   4283    268    210    258       C
ATOM   1635  CG  LYS A 255      13.347  10.326   6.130  1.00 50.56           C
ANISOU 1635  CG  LYS A 255     5689   7238   6283    210    210    337       C
ATOM   1636  CD  LYS A 255      14.776   9.890   5.840  1.00 61.14           C
ANISOU 1636  CD  LYS A 255     6957   8666   7609    243    225    362       C
ATOM   1637  CE  LYS A 255      15.697  11.086   5.652  1.00 67.44           C
ANISOU 1637  CE  LYS A 255     7685   9509   8430    189    235    457       C
ATOM   1638  NZ  LYS A 255      16.978  10.698   4.993  1.00 70.38           N
ANISOU 1638  NZ  LYS A 255     7971   9994   8774    232    264    489       N
ATOM   1639  C   LYS A 255      10.593  10.652   4.793  1.00 22.22           C
ANISOU 1639  C   LYS A 255     2188   3604   2650    232    223    287       C
ATOM   1640  O   LYS A 255      10.479  11.832   5.104  1.00 22.96           O
ANISOU 1640  O   LYS A 255     2284   3666   2774    172    215    335       O
ATOM   1641  N   PRO A 256      10.455  10.235   3.521  1.00 20.39           N
ANISOU 1641  N   PRO A 256     2037   2969   2741   -235    549    296       N
ATOM   1642  CA  PRO A 256      10.274  11.250   2.468  1.00 22.40           C
ANISOU 1642  CA  PRO A 256     2380   3193   2937   -281    579    320       C
ATOM   1643  CB  PRO A 256      10.235  10.417   1.180  1.00 24.11           C
ANISOU 1643  CB  PRO A 256     2590   3445   3123   -197    638    307       C
ATOM   1644  CG  PRO A 256      10.954   9.159   1.520  1.00 19.68           C
ANISOU 1644  CG  PRO A 256     1899   2971   2609   -144    652    291       C
ATOM   1645  CD  PRO A 256      10.583   8.880   2.956  1.00 16.89           C
ANISOU 1645  CD  PRO A 256     1528   2582   2307   -137    582    270       C
ATOM   1646  C   PRO A 256       8.980  12.047   2.614  1.00 18.98           C
ANISOU 1646  C   PRO A 256     2079   2647   2484   -283    522    298       C
ATOM   1647  O   PRO A 256       8.854  13.134   2.052  1.00 24.00           O
ANISOU 1647  O   PRO A 256     2801   3242   3076   -343    520    320       O
ATOM   1648  N   PHE A 257       8.029  11.505   3.365  1.00 18.80           N
ANISOU 1648  N   PHE A 257     2073   2575   2494   -219    475    253       N
ATOM   1649  CA  PHE A 257       6.729  12.143   3.531  1.00 20.24           C
ANISOU 1649  CA  PHE A 257     2369   2653   2669   -210    421    215       C
ATOM   1650  CB  PHE A 257       5.628  11.081   3.609  1.00 22.91           C
ANISOU 1650  CB  PHE A 257     2717   2950   3039    -99    409    156       C
ATOM   1651  CG  PHE A 257       5.554  10.214   2.388  1.00 19.53           C
ANISOU 1651  CG  PHE A 257     2282   2541   2598    -11    452    144       C
ATOM   1652  CD1 PHE A 257       5.123  10.742   1.183  1.00 22.77           C
ANISOU 1652  CD1 PHE A 257     2788   2902   2963      5    459    136       C
ATOM   1653  CE1 PHE A 257       5.069   9.954   0.046  1.00 25.97           C
ANISOU 1653  CE1 PHE A 257     3193   3322   3351     93    496    125       C
ATOM   1654  CZ  PHE A 257       5.458   8.633   0.105  1.00 27.30           C
ANISOU 1654  CZ  PHE A 257     3259   3561   3553    165    521    121       C
ATOM   1655  CE2 PHE A 257       5.900   8.097   1.300  1.00 26.51           C
ANISOU 1655  CE2 PHE A 257     3063   3511   3499    146    510    127       C
ATOM   1656  CD2 PHE A 257       5.951   8.891   2.433  1.00 27.11           C
ANISOU 1656  CD2 PHE A 257     3146   3567   3587     59    477    140       C
ATOM   1657  C   PHE A 257       6.666  13.069   4.742  1.00 25.30           C
ANISOU 1657  C   PHE A 257     3030   3259   3324   -287    362    221       C
ATOM   1658  O   PHE A 257       5.655  13.728   4.966  1.00 26.26           O
ANISOU 1658  O   PHE A 257     3240   3297   3440   -289    311    186       O
ATOM   1659  N   LEU A 258       7.753  13.123   5.508  1.00 24.39           N
ANISOU 1659  N   LEU A 258     2831   3205   3230   -345    363    260       N
ATOM   1660  CA  LEU A 258       7.799  13.926   6.730  1.00 24.09           C
ANISOU 1660  CA  LEU A 258     2806   3139   3210   -409    301    267       C
ANISOU 1660  CA  LEU A 258     2806   3139   3210   -409    301    267       C
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ATOM   1661  CB  LEU A 258       8.596  13.187   7.809  1.00 23.12           C
ANISOU 1661  CB  LEU A 258     2583   3070   3130   -405    296    276       C
ATOM   1662  CG  LEU A 258       8.122  11.774   8.141  1.00 31.87           C
ANISOU 1662  CG  LEU A 258     3658   4188   4263   -311    308    237       C
ATOM   1663  CD1 LEU A 258       9.032  11.121   9.178  1.00 34.32           C
ANISOU 1663  CD1 LEU A 258     3882   4547   4610   -315    291    248       C
ATOM   1664  CD2 LEU A 258       6.690  11.810   8.625  1.00 25.31           C
ANISOU 1664  CD2 LEU A 258     2910   3276   3432   -271    274    188       C
ATOM   1665  C   LEU A 258       8.427  15.297   6.504  1.00 24.03           C
ANISOU 1665  C   LEU A 258     2828   3126   3178   -514    284    314       C
ATOM   1666  O   LEU A 258       9.567  15.397   6.064  1.00 23.13           O
ANISOU 1666  O   LEU A 258     2650   3074   3063   -564    326    360       O
ATOM   1667  N   LYS A 259       7.686  16.354   6.813  1.00 18.79           N
ANISOU 1667  N   LYS A 259     2257   2386   2498   -549    219    299       N
ATOM   1668  CA  LYS A 259       8.271  17.689   6.838  1.00 25.66           C
ANISOU 1668  CA  LYS A 259     3154   3243   3353   -653    181    344       C
ATOM   1669  CB  LYS A 259       7.188  18.745   7.068  1.00 30.37           C
ANISOU 1669  CB  LYS A 259     3867   3745   3927   -670     98    309       C
ATOM   1670  CG  LYS A 259       6.118  18.725   5.985  1.00 39.04           C
ANISOU 1670  CG  LYS A 259     5063   4782   4988   -619    104    265       C
ATOM   1671  CD  LYS A 259       5.297  19.997   5.952  1.00 48.85           C
ANISOU 1671  CD  LYS A 259     6425   5932   6205   -656     15    236       C
ATOM   1672  CE  LYS A 259       4.132  19.939   6.918  1.00 52.41           C
ANISOU 1672  CE  LYS A 259     6904   6325   6683   -605    -46    159       C
ATOM   1673  NZ  LYS A 259       3.036  20.881   6.529  1.00 51.65           N
ANISOU 1673  NZ  LYS A 259     6932   6129   6564   -606   -125    101       N
ATOM   1674  C   LYS A 259       9.326  17.746   7.935  1.00 25.55           C
ANISOU 1674  C   LYS A 259     3050   3276   3384   -700    161    378       C
ATOM   1675  O   LYS A 259       9.261  16.989   8.904  1.00 20.70           O
ANISOU 1675  O   LYS A 259     2389   2674   2803   -653    148    353       O
ATOM   1676  N   SER A 260      10.300  18.640   7.781  1.00 26.70           N
ANISOU 1676  N   SER A 260     3173   3440   3531   -793    155    433       N
ATOM   1677  CA  SER A 260      11.421  18.718   8.715  1.00 30.81           C
ANISOU 1677  CA  SER A 260     3600   4001   4106   -838    133    463       C
ATOM   1678  CB  SER A 260      12.427  19.776   8.252  1.00 37.17           C
ANISOU 1678  CB  SER A 260     4388   4822   4915   -947    137    525       C
ATOM   1679  OG  SER A 260      11.891  21.077   8.407  1.00 41.12           O
ANISOU 1679  OG  SER A 260     4987   5247   5389  -1002     56    534       O
ATOM   1680  C   SER A 260      10.974  18.999  10.154  1.00 28.06           C
ANISOU 1680  C   SER A 260     3277   3603   3779   -826     41    437       C
ATOM   1681  O   SER A 260      11.564  18.485  11.105  1.00 25.28           O
ANISOU 1681  O   SER A 260     2856   3278   3472   -810     25    436       O
ATOM   1682  N   LYS A 261       9.933  19.812  10.308  1.00 29.26           N
ANISOU 1682  N   LYS A 261     3534   3682   3900   -830    -21    412       N
ATOM   1683  CA  LYS A 261       9.397  20.138  11.628  1.00 31.81           C
ANISOU 1683  CA  LYS A 261     3892   3959   4236   -815   -105    381       C
ATOM   1684  CB  LYS A 261       8.242  21.133  11.507  1.00 41.50           C
ANISOU 1684  CB  LYS A 261     5234   5108   5424   -824   -171    346       C
ATOM   1685  CG  LYS A 261       8.603  22.452  10.858  1.00 55.24           C
ANISOU 1685  CG  LYS A 261     7021   6823   7145   -914   -214    389       C
ATOM   1686  CD  LYS A 261       7.351  23.283  10.606  1.00 63.51           C
ANISOU 1686  CD  LYS A 261     8189   7788   8153   -909   -282    339       C
ATOM   1687  CE  LYS A 261       6.281  22.461   9.897  1.00 64.98           C
ANISOU 1687  CE  LYS A 261     8416   7955   8317   -828   -229    280       C
ATOM   1688  NZ  LYS A 261       5.006  23.213   9.749  1.00 65.69           N
ANISOU 1688  NZ  LYS A 261     8619   7958   8381   -814   -304    213       N
ATOM   1689  C   LYS A 261       8.905  18.886  12.348  1.00 29.21           C
ANISOU 1689  C   LYS A 261     3539   3641   3920   -727    -81    336       C
ATOM   1690  O   LYS A 261       9.042  18.759  13.567  1.00 28.82           O
ANISOU 1690  O   LYS A 261     3474   3584   3891   -715   -125    327       O
ATOM   1691  N   LEU A 262       8.326  17.966  11.582  1.00 24.36           N
ANISOU 1691  N   LEU A 262     2927   3039   3291   -665    -14    308       N
ATOM   1692  CA  LEU A 262       7.801  16.717  12.124  1.00 21.48           C
ANISOU 1692  CA  LEU A 262     2543   2682   2939   -583     14    267       C
ATOM   1693  CB  LEU A 262       6.801  16.103  11.136  1.00 26.32           C
ANISOU 1693  CB  LEU A 262     3191   3277   3533   -519     65    227       C
ATOM   1694  CG  LEU A 262       6.392  14.641  11.332  1.00 40.31           C
ANISOU 1694  CG  LEU A 262     4927   5066   5323   -434    109    194       C
ATOM   1695  CD1 LEU A 262       5.850  14.396  12.728  1.00 39.09           C
ANISOU 1695  CD1 LEU A 262     4792   4881   5178   -413     75    162       C
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ATOM   1696  CD2 LEU A 262       5.365  14.243  10.284  1.00 48.26           C
ANISOU 1696  CD2 LEU A 262     5976   6042   6318   -373    145    153       C
ATOM   1697  C   LEU A 262       8.914  15.721  12.438  1.00 23.33           C
ANISOU 1697  C   LEU A 262     2675   2983   3207   -569     46    292       C
ATOM   1698  O   LEU A 262       8.877  15.035  13.462  1.00 21.18           O
ANISOU 1698  O   LEU A 262     2388   2710   2951   -532     30    273       O
ATOM   1699  N   LEU A 263       9.905  15.641  11.556  1.00 21.42           N
ANISOU 1699  N   LEU A 263     2367   2798   2974   -598     91    330       N
ATOM   1700  CA  LEU A 263      11.049  14.770  11.787  1.00 24.95           C
ANISOU 1700  CA  LEU A 263     2708   3310   3461   -587    115    344       C
ATOM   1701  CB  LEU A 263      12.057  14.865  10.638  1.00 29.22           C
ANISOU 1701  CB  LEU A 263     3179   3914   4008   -628    175    381       C
ATOM   1702  CG  LEU A 263      11.880  13.818   9.536  1.00 42.14           C
ANISOU 1702  CG  LEU A 263     4788   5596   5628   -564    252    365       C
ATOM   1703  CD1 LEU A 263      12.699  14.174   8.299  1.00 45.15           C
ANISOU 1703  CD1 LEU A 263     5127   6031   5997   -614    317    401       C
ATOM   1704  CD2 LEU A 263      12.244  12.430  10.053  1.00 44.16           C
ANISOU 1704  CD2 LEU A 263     4965   5894   5918   -496    257    338       C
ATOM   1705  C   LEU A 263      11.733  15.101  13.102  1.00 22.51           C
ANISOU 1705  C   LEU A 263     2376   2990   3188   -619     45    355       C
ATOM   1706  O   LEU A 263      12.184  14.207  13.818  1.00 21.11           O
ANISOU 1706  O   LEU A 263     2149   2832   3039   -582     33    341       O
ATOM   1707  N   GLU A 264      11.813  16.391  13.412  1.00 20.15           N
ANISOU 1707  N   GLU A 264     2117   2652   2886   -685    -11    378       N
ATOM   1708  CA  GLU A 264      12.422  16.846  14.658  1.00 20.54           C
ANISOU 1708  CA  GLU A 264     2154   2679   2970   -713    -90    388       C
ATOM   1709  CB  GLU A 264      12.488  18.377  14.688  1.00 23.72           C
ANISOU 1709  CB  GLU A 264     2601   3042   3369   -790   -150    418       C
ATOM   1710  CG  GLU A 264      13.441  18.974  13.673  1.00 35.55           C
ANISOU 1710  CG  GLU A 264     4043   4577   4887   -866   -115    466       C
ATOM   1711  CD  GLU A 264      13.285  20.475  13.542  1.00 44.25           C
ANISOU 1711  CD  GLU A 264     5208   5630   5973   -942   -175    496       C
ATOM   1712  OE1 GLU A 264      12.528  21.073  14.340  1.00 42.41           O
ANISOU 1712  OE1 GLU A 264     5054   5339   5723   -931   -254    475       O
ATOM   1713  OE2 GLU A 264      13.917  21.055  12.635  1.00 51.81           O
ANISOU 1713  OE2 GLU A 264     6139   6609   6935  -1013   -142    538       O
ATOM   1714  C   GLU A 264      11.690  16.352  15.904  1.00 22.53           C
ANISOU 1714  C   GLU A 264     2461   2889   3209   -654   -133    349       C
ATOM   1715  O   GLU A 264      12.213  16.443  17.017  1.00 21.27           O
ANISOU 1715  O   GLU A 264     2295   2711   3075   -657   -197    351       O
ATOM   1716  N   ARG A 265      10.476  15.846  15.719  1.00 19.28           N
ANISOU 1716  N   ARG A 265     2107   2458   2759   -601    -99    312       N
ATOM   1717  CA  ARG A 265       9.655  15.415  16.846  1.00 20.60           C
ANISOU 1717  CA  ARG A 265     2334   2585   2909   -553   -125    275       C
ATOM   1718  CB  ARG A 265       8.224  15.936  16.687  1.00 20.40           C
ANISOU 1718  CB  ARG A 265     2396   2509   2845   -541   -124    238       C
ATOM   1719  CG  ARG A 265       8.136  17.469  16.618  1.00 23.23           C
ANISOU 1719  CG  ARG A 265     2802   2832   3192   -603   -186    250       C
ATOM   1720  CD  ARG A 265       6.686  17.928  16.560  1.00 24.87           C
ANISOU 1720  CD  ARG A 265     3096   2987   3367   -584   -197    197       C
ATOM   1721  NE  ARG A 265       6.514  19.385  16.614  1.00 34.51           N
ANISOU 1721  NE  ARG A 265     4371   4167   4576   -637   -274    198       N
ATOM   1722  CZ  ARG A 265       6.644  20.145  17.705  1.00 34.36           C
ANISOU 1722  CZ  ARG A 265     4381   4120   4556   -658   -356    199       C
ATOM   1723  NH1 ARG A 265       6.992  19.619  18.882  1.00 20.37           N
ANISOU 1723  NH1 ARG A 265     2595   2353   2791   -632   -369    200       N
ATOM   1724  NH2 ARG A 265       6.431  21.454  17.610  1.00 30.34           N
ANISOU 1724  NH2 ARG A 265     3920   3573   4034   -703   -431    197       N
ATOM   1725  C   ARG A 265       9.650  13.897  16.998  1.00 21.35           C
ANISOU 1725  C   ARG A 265     2394   2706   3011   -487    -82    255       C
ATOM   1726  O   ARG A 265       8.924  13.359  17.835  1.00 20.05           O
ANISOU 1726  O   ARG A 265     2281   2511   2828   -446    -87    225       O
ATOM   1727  N   VAL A 266      10.461  13.213  16.191  1.00 19.92           N
ANISOU 1727  N   VAL A 266     2129   2584   2856   -480    -39    271       N
ATOM   1728  CA  VAL A 266      10.552  11.754  16.242  1.00 18.76           C
ANISOU 1728  CA  VAL A 266     1942   2466   2719   -416     -9    252       C
ATOM   1729  CB  VAL A 266      10.617  11.151  14.829  1.00 20.78           C
ANISOU 1729  CB  VAL A 266     2141   2775   2978   -391     62    253       C
ATOM   1730  CG1 VAL A 266      10.677   9.621  14.913  1.00 17.04           C
ANISOU 1730  CG1 VAL A 266     1629   2329   2518   -320     79    230       C
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ATOM   1731  CG2 VAL A 266       9.426  11.608  14.000  1.00 15.60           C
ANISOU 1731  CG2 VAL A 266     1549   2088   2288   -383     98    239       C
ATOM   1732  C   VAL A 266      11.793  11.302  17.005  1.00 21.39           C
ANISOU 1732  C   VAL A 266     2216   2819   3091   -419    -55    259       C
ATOM   1733  O   VAL A 266      12.910  11.695  16.666  1.00 22.33           O
ANISOU 1733  O   VAL A 266     2262   2974   3248   -460    -64    282       O
ATOM   1734  N   PHE A 267      11.593  10.482  18.033  1.00 19.33           N
ANISOU 1734  N   PHE A 267     1991   2532   2823   -376    -85    238       N
ATOM   1735  CA  PHE A 267      12.690   9.977  18.853  1.00 22.17           C
ANISOU 1735  CA  PHE A 267     2312   2895   3218   -369   -145    235       C
ATOM   1736  CB  PHE A 267      12.633  10.585  20.257  1.00 23.95           C
ANISOU 1736  CB  PHE A 267     2617   3054   3429   -384   -220    235       C
ATOM   1737  CG  PHE A 267      12.578  12.081  20.245  1.00 29.31           C
ANISOU 1737  CG  PHE A 267     3319   3711   4105   -442   -244    257       C
ATOM   1738  CD1 PHE A 267      13.728  12.825  20.030  1.00 33.32           C
ANISOU 1738  CD1 PHE A 267     3757   4237   4665   -492   -280    282       C
ATOM   1739  CE1 PHE A 267      13.682  14.212  19.994  1.00 34.97           C
ANISOU 1739  CE1 PHE A 267     3990   4423   4875   -548   -310    306       C
ATOM   1740  CZ  PHE A 267      12.475  14.862  20.160  1.00 30.73           C
ANISOU 1740  CZ  PHE A 267     3546   3846   4284   -550   -309    299       C
ATOM   1741  CE2 PHE A 267      11.316  14.128  20.365  1.00 28.36           C
ANISOU 1741  CE2 PHE A 267     3309   3531   3936   -499   -269    267       C
ATOM   1742  CD2 PHE A 267      11.372  12.744  20.400  1.00 25.87           C
ANISOU 1742  CD2 PHE A 267     2970   3236   3622   -448   -234    250       C
ATOM   1743  C   PHE A 267      12.686   8.454  18.918  1.00 20.83           C
ANISOU 1743  C   PHE A 267     2123   2743   3049   -305   -134    209       C
ATOM   1744  O   PHE A 267      11.642   7.834  19.111  1.00 16.94           O
ANISOU 1744  O   PHE A 267     1692   2225   2520   -266   -108    194       O
ATOM   1745  N   VAL A 268      13.862   7.861  18.748  1.00 19.34           N
ANISOU 1745  N   VAL A 268     1845   2596   2908   -296   -158    201       N
ATOM   1746  CA  VAL A 268      13.996   6.412  18.677  1.00 21.17           C
ANISOU 1746  CA  VAL A 268     2046   2851   3147   -235   -159    174       C
ATOM   1747  CB  VAL A 268      14.472   5.981  17.276  1.00 25.66           C
ANISOU 1747  CB  VAL A 268     2504   3502   3745   -221   -103    170       C
ATOM   1748  CG1 VAL A 268      14.576   4.477  17.184  1.00 23.18           C
ANISOU 1748  CG1 VAL A 268     2157   3211   3438   -152   -116    138       C
ATOM   1749  CG2 VAL A 268      13.522   6.510  16.203  1.00 24.73           C
ANISOU 1749  CG2 VAL A 268     2406   3397   3593   -229    -21    189       C
ATOM   1750  C   VAL A 268      15.010   5.996  19.737  1.00 25.93           C
ANISOU 1750  C   VAL A 268     2641   3429   3783   -226   -252    154       C
ATOM   1751  O   VAL A 268      16.161   6.421  19.690  1.00 25.76           O
ANISOU 1751  O   VAL A 268     2544   3429   3816   -256   -287    152       O
ATOM   1752  N   HIS A 269      14.582   5.182  20.699  1.00 26.19           N
ANISOU 1752  N   HIS A 269     2756   3411   3784   -187   -293    138       N
ATOM   1753  CA  HIS A 269      15.375   4.962  21.911  1.00 27.39           C
ANISOU 1753  CA  HIS A 269     2942   3513   3953   -180   -394    119       C
ATOM   1754  CB  HIS A 269      14.509   5.182  23.156  1.00 24.31           C
ANISOU 1754  CB  HIS A 269     2697   3040   3498   -180   -418    128       C
ATOM   1755  CG  HIS A 269      13.976   6.573  23.283  1.00 24.72           C
ANISOU 1755  CG  HIS A 269     2793   3071   3529   -227   -395    155       C
ATOM   1756  ND1 HIS A 269      14.689   7.591  23.876  1.00 23.32           N
ANISOU 1756  ND1 HIS A 269     2619   2863   3377   -260   -461    163       N
ATOM   1757  CE1 HIS A 269      13.980   8.704  23.843  1.00 25.89           C
ANISOU 1757  CE1 HIS A 269     2986   3175   3674   -295   -432    185       C
ATOM   1758  NE2 HIS A 269      12.827   8.444  23.248  1.00 26.64           N
ANISOU 1758  NE2 HIS A 269     3104   3289   3729   -285   -348    186       N
ATOM   1759  CD2 HIS A 269      12.802   7.120  22.886  1.00 25.67           C
ANISOU 1759  CD2 HIS A 269     2952   3192   3608   -242   -322    169       C
ATOM   1760  C   HIS A 269      16.039   3.592  22.017  1.00 30.18           C
ANISOU 1760  C   HIS A 269     3258   3878   4332   -129   -447     81       C
ATOM   1761  O   HIS A 269      16.958   3.403  22.818  1.00 29.30           O
ANISOU 1761  O   HIS A 269     3151   3731   4252   -122   -542     55       O
ATOM   1762  N   GLY A 270      15.565   2.630  21.241  1.00 25.99           N
ANISOU 1762  N   GLY A 270     2695   3389   3789    -90   -399     73       N
ATOM   1763  CA  GLY A 270      16.062   1.273  21.381  1.00 24.69           C
ANISOU 1763  CA  GLY A 270     2508   3230   3643    -37   -460     35       C
ATOM   1764  C   GLY A 270      15.882   0.783  22.808  1.00 27.73           C
ANISOU 1764  C   GLY A 270     3023   3526   3988    -21   -541     25       C
ATOM   1765  O   GLY A 270      14.832   0.997  23.414  1.00 24.36           O
ANISOU 1765  O   GLY A 270     2709   3046   3498    -32   -509     50       O
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ATOM   1766  N   ASP A 271      16.906   0.132  23.358  1.00 31.37           N
ANISOU 1766  N   ASP A 271     3471   3965   4484      4   -646    -16       N
ATOM   1767  CA  ASP A 271      16.785  -0.474  24.684  1.00 31.60           C
ANISOU 1767  CA  ASP A 271     3637   3902   4469     24   -733    -28       C
ATOM   1768  CB  ASP A 271      17.470  -1.847  24.729  1.00 30.44           C
ANISOU 1768  CB  ASP A 271     3463   3754   4348     77   -825    -78       C
ATOM   1769  CG  ASP A 271      16.695  -2.917  23.979  1.00 34.22           C
ANISOU 1769  CG  ASP A 271     3924   4274   4804    113   -773    -74       C
ATOM   1770  OD1 ASP A 271      15.452  -2.817  23.874  1.00 29.05           O
ANISOU 1770  OD1 ASP A 271     3332   3612   4095    103   -684    -33       O
ATOM   1771  OD2 ASP A 271      17.333  -3.873  23.494  1.00 40.54           O
ANISOU 1771  OD2 ASP A 271     4644   5112   5645    156   -828   -116       O
ATOM   1772  C   ASP A 271      17.331   0.419  25.800  1.00 36.12           C
ANISOU 1772  C   ASP A 271     4278   4402   5044     -2   -807    -28       C
ATOM   1773  O   ASP A 271      17.244   0.070  26.977  1.00 40.38           O
ANISOU 1773  O   ASP A 271     4948   4855   5538     12   -880    -36       O
ATOM   1774  N   ASP A 272      17.887   1.569  25.433  1.00 33.57           N
ANISOU 1774  N   ASP A 272     3873   4109   4772    -40   -791    -19       N
ATOM   1775  CA  ASP A 272      18.420   2.503  26.421  1.00 37.42           C
ANISOU 1775  CA  ASP A 272     4416   4529   5275    -62   -865    -19       C
ATOM   1776  CB  ASP A 272      19.710   3.140  25.901  1.00 45.19           C
ANISOU 1776  CB  ASP A 272     5255   5552   6362    -85   -898    -42       C
ATOM   1777  CG  ASP A 272      20.295   4.152  26.869  1.00 56.44           C
ANISOU 1777  CG  ASP A 272     6726   6902   7815   -105   -983    -42       C
ATOM   1778  OD1 ASP A 272      19.854   4.191  28.038  1.00 59.37           O
ANISOU 1778  OD1 ASP A 272     7248   7187   8124    -89  -1036    -35       O
ATOM   1779  OD2 ASP A 272      21.200   4.907  26.459  1.00 59.33           O
ANISOU 1779  OD2 ASP A 272     6980   7297   8268   -135   -996    -50       O
ATOM   1780  C   ASP A 272      17.394   3.585  26.765  1.00 33.20           C
ANISOU 1780  C   ASP A 272     3970   3967   4676    -99   -802     30       C
ATOM   1781  O   ASP A 272      17.298   4.599  26.077  1.00 34.95           O
ANISOU 1781  O   ASP A 272     4125   4235   4922   -139   -741     56       O
ATOM   1782  N   LEU A 273      16.634   3.372  27.835  1.00 32.36           N
ANISOU 1782  N   LEU A 273     4018   3786   4490    -86   -819     40       N
ATOM   1783  CA  LEU A 273      15.535   4.277  28.171  1.00 34.20           C
ANISOU 1783  CA  LEU A 273     4338   3999   4658   -115   -754     76       C
ATOM   1784  CB  LEU A 273      14.394   3.516  28.848  1.00 34.95           C
ANISOU 1784  CB  LEU A 273     4571   4049   4661    -97   -718     83       C
ATOM   1785  CG  LEU A 273      13.848   2.262  28.163  1.00 38.06           C
ANISOU 1785  CG  LEU A 273     4936   4482   5042    -73   -660     78       C
ATOM   1786  CD1 LEU A 273      12.656   1.711  28.935  1.00 42.85           C
ANISOU 1786  CD1 LEU A 273     5686   5035   5559    -68   -617     90       C
ATOM   1787  CD2 LEU A 273      13.468   2.556  26.727  1.00 29.30           C
ANISOU 1787  CD2 LEU A 273     3701   3460   3970    -87   -562     91       C
ATOM   1788  C   LEU A 273      15.953   5.448  29.057  1.00 38.13           C
ANISOU 1788  C   LEU A 273     4888   4438   5161   -133   -825     83       C
ATOM   1789  O   LEU A 273      15.099   6.182  29.564  1.00 34.02           O
ANISOU 1789  O   LEU A 273     4457   3888   4581   -149   -793    105       O
ATOM   1790  N   SER A 274      17.256   5.628  29.245  1.00 41.51           N
ANISOU 1790  N   SER A 274     5259   4848   5665   -127   -925     58       N
ATOM   1791  CA  SER A 274      17.744   6.683  30.129  1.00 39.97           C
ANISOU 1791  CA  SER A 274     5113   4587   5486   -135  -1010     61       C
ATOM   1792  CB  SER A 274      19.275   6.671  30.218  1.00 43.48           C
ANISOU 1792  CB  SER A 274     5473   5011   6037   -123  -1123     22       C
ATOM   1793  OG  SER A 274      19.868   6.953  28.963  1.00 47.69           O
ANISOU 1793  OG  SER A 274     5831   5632   6657   -156  -1074     22       O
ATOM   1794  C   SER A 274      17.228   8.054  29.691  1.00 38.32           C
ANISOU 1794  C   SER A 274     4873   4410   5276   -183   -948     99       C
ATOM   1795  O   SER A 274      16.670   8.799  30.497  1.00 34.59           O
ANISOU 1795  O   SER A 274     4506   3887   4751   -186   -966    114       O
ATOM   1796  N   GLY A 275      17.400   8.374  28.411  1.00 38.04           N
ANISOU 1796  N   GLY A 275     4700   4458   5295   -218   -879    112       N
ATOM   1797  CA  GLY A 275      16.896   9.624  27.870  1.00 34.78           C
ANISOU 1797  CA  GLY A 275     4260   4076   4879   -267   -823    147       C
ATOM   1798  C   GLY A 275      15.378   9.654  27.804  1.00 31.81           C
ANISOU 1798  C   GLY A 275     3968   3708   4412   -269   -732    164       C
ATOM   1799  O   GLY A 275      14.752  10.689  28.029  1.00 33.31           O
ANISOU 1799  O   GLY A 275     4207   3879   4569   -292   -732    181       O
ATOM   1800  N   PHE A 276      14.783   8.506  27.497  1.00 27.01           N
ANISOU 1800  N   PHE A 276     3372   3123   3767   -242   -669    154       N
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ATOM   1801  CA  PHE A 276      13.333   8.383  27.427  1.00 22.33           C
ANISOU 1801  CA  PHE A 276     2851   2533   3099   -241   -580    161       C
ATOM   1802  CB  PHE A 276      12.949   6.972  26.960  1.00 21.66           C
ANISOU 1802  CB  PHE A 276     2753   2477   3001   -209   -524    148       C
ATOM   1803  CG  PHE A 276      11.493   6.643  27.135  1.00 21.27           C
ANISOU 1803  CG  PHE A 276     2789   2413   2880   -201   -444    148       C
ATOM   1804  CD1 PHE A 276      10.539   7.172  26.273  1.00 22.74           C
ANISOU 1804  CD1 PHE A 276     2945   2635   3061   -220   -357    153       C
ATOM   1805  CE1 PHE A 276       9.200   6.865  26.432  1.00 23.02           C
ANISOU 1805  CE1 PHE A 276     3049   2652   3044   -212   -284    143       C
ATOM   1806  CZ  PHE A 276       8.799   6.018  27.447  1.00 26.54           C
ANISOU 1806  CZ  PHE A 276     3597   3049   3438   -191   -287    135       C
ATOM   1807  CE2 PHE A 276       9.740   5.480  28.306  1.00 27.29           C
ANISOU 1807  CE2 PHE A 276     3736   3108   3527   -174   -374    136       C
ATOM   1808  CD2 PHE A 276      11.078   5.791  28.145  1.00 25.00           C
ANISOU 1808  CD2 PHE A 276     3374   2831   3295   -175   -456    138       C
ATOM   1809  C   PHE A 276      12.665   8.735  28.761  1.00 25.43           C
ANISOU 1809  C   PHE A 276     3391   2852   3418   -232   -610    159       C
ATOM   1810  O   PHE A 276      11.661   9.451  28.789  1.00 21.51           O
ANISOU 1810  O   PHE A 276     2939   2354   2880   -250   -560    164       O
ATOM   1811  N   TYR A 277      13.228   8.241  29.864  1.00 26.04           N
ANISOU 1811  N   TYR A 277     3547   2866   3479   -202   -694    146       N
ATOM   1812  CA  TYR A 277      12.688   8.511  31.199  1.00 28.84           C
ANISOU 1812  CA  TYR A 277     4054   3147   3757   -189   -726    143       C
ATOM   1813  CB  TYR A 277      13.315   7.591  32.244  1.00 33.67           C
ANISOU 1813  CB  TYR A 277     4759   3690   4345   -149   -812    126       C
ATOM   1814  CG  TYR A 277      12.839   6.155  32.221  1.00 33.34           C
ANISOU 1814  CG  TYR A 277     4758   3648   4261   -129   -763    119       C
ATOM   1815  CD1 TYR A 277      11.519   5.829  31.915  1.00 26.59           C
ANISOU 1815  CD1 TYR A 277     3929   2820   3352   -141   -646    127       C
ATOM   1816  CE1 TYR A 277      11.095   4.500  31.915  1.00 33.37           C
ANISOU 1816  CE1 TYR A 277     4826   3675   4178   -125   -607    122       C
ATOM   1817  CZ  TYR A 277      11.999   3.498  32.241  1.00 35.98           C
ANISOU 1817  CZ  TYR A 277     5176   3972   4522    -95   -695    108       C
ATOM   1818  OH  TYR A 277      11.628   2.171  32.263  1.00 31.26           O
ANISOU 1818  OH  TYR A 277     4620   3364   3892    -79   -672    105       O
ATOM   1819  CE2 TYR A 277      13.300   3.813  32.556  1.00 39.47           C
ANISOU 1819  CE2 TYR A 277     5594   4386   5016    -80   -815     93       C
ATOM   1820  CD2 TYR A 277      13.708   5.127  32.551  1.00 37.67           C
ANISOU 1820  CD2 TYR A 277     5323   4163   4827    -97   -846     99       C
ATOM   1821  C   TYR A 277      12.887   9.958  31.650  1.00 28.33           C
ANISOU 1821  C   TYR A 277     4008   3055   3701   -206   -785    152       C
ATOM   1822  O   TYR A 277      12.177  10.443  32.533  1.00 27.57           O
ANISOU 1822  O   TYR A 277     4024   2915   3535   -200   -788    150       O
ATOM   1823  N   GLN A 278      13.868  10.641  31.074  1.00 23.86           N
ANISOU 1823  N   GLN A 278     3331   2512   3221   -226   -836    160       N
ATOM   1824  CA  GLN A 278      14.014  12.070  31.327  1.00 32.64           C
ANISOU 1824  CA  GLN A 278     4447   3605   4352   -248   -891    173       C
ATOM   1825  CB  GLN A 278      15.346  12.592  30.781  1.00 44.10           C
ANISOU 1825  CB  GLN A 278     5772   5072   5911   -271   -958    181       C
ATOM   1826  CG  GLN A 278      16.539  12.302  31.675  1.00 57.09           C
ANISOU 1826  CG  GLN A 278     7440   6650   7604   -235  -1083    160       C
ATOM   1827  CD  GLN A 278      17.864  12.563  30.981  1.00 65.81           C
ANISOU 1827  CD  GLN A 278     8394   7780   8829   -260  -1128    157       C
ATOM   1828  OE1 GLN A 278      17.902  13.067  29.856  1.00 66.79           O
ANISOU 1828  OE1 GLN A 278     8407   7974   8997   -309  -1064    179       O
ATOM   1829  NE2 GLN A 278      18.959  12.216  31.648  1.00 68.51           N
ANISOU 1829  NE2 GLN A 278     8738   8064   9230   -226  -1239    127       N
ATOM   1830  C   GLN A 278      12.855  12.847  30.708  1.00 32.87           C
ANISOU 1830  C   GLN A 278     4469   3675   4347   -282   -806    184       C
ATOM   1831  O   GLN A 278      12.508  13.935  31.171  1.00 30.09           O
ANISOU 1831  O   GLN A 278     4165   3296   3972   -291   -842    187       O
ATOM   1832  N   GLU A 279      12.258  12.285  29.660  1.00 24.02           N
ANISOU 1832  N   GLU A 279     3289   2615   3224   -295   -701    184       N
ATOM   1833  CA  GLU A 279      11.147  12.944  28.977  1.00 23.97           C
ANISOU 1833  CA  GLU A 279     3275   2642   3192   -323   -624    185       C
ATOM   1834  CB  GLU A 279      11.152  12.585  27.485  1.00 21.20           C
ANISOU 1834  CB  GLU A 279     2810   2361   2885   -343   -545    193       C
ATOM   1835  CG  GLU A 279      12.361  13.099  26.728  1.00 22.17           C
ANISOU 1835  CG  GLU A 279     2819   2516   3088   -375   -584    216       C
ANISOU 1835  CG  GLU A 279     2819   2516   3088   -375   -584    216       C
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ATOM   1836  CD  GLU A 279      12.439  14.610  26.749  1.00 27.19           C
ANISOU 1836  CD  GLU A 279     3455   3136   3738   -416   -637    233       C
ATOM   1837  OE1 GLU A 279      11.379  15.255  26.632  1.00 29.99           O
ANISOU 1837  OE1 GLU A 279     3858   3487   4050   -428   -606    225       O
ATOM   1838  OE2 GLU A 279      13.554  15.149  26.893  1.00 28.99           O
ANISOU 1838  OE2 GLU A 279     3635   3353   4027   -435   -713    249       O
ATOM   1839  C   GLU A 279       9.792  12.580  29.590  1.00 23.61           C
ANISOU 1839  C   GLU A 279     3337   2573   3063   -302   -561    161       C
ATOM   1840  O   GLU A 279       8.965  13.455  29.852  1.00 22.60           O
ANISOU 1840  O   GLU A 279     3258   2431   2898   -313   -554    148       O
ATOM   1841  N   ILE A 280       9.569  11.282  29.791  1.00 22.23           N
ANISOU 1841  N   ILE A 280     3193   2394   2860   -275   -516    152       N
ATOM   1842  CA  ILE A 280       8.302  10.776  30.308  1.00 20.21           C
ANISOU 1842  CA  ILE A 280     3029   2118   2531   -262   -442    131       C
ATOM   1843  CB  ILE A 280       7.642   9.768  29.338  1.00 26.23           C
ANISOU 1843  CB  ILE A 280     3738   2923   3305   -257   -341    124       C
ATOM   1844  CG1 ILE A 280       7.607  10.309  27.907  1.00 25.08           C
ANISOU 1844  CG1 ILE A 280     3478   2834   3218   -280   -307    128       C
ATOM   1845  CD1 ILE A 280       6.881  11.629  27.758  1.00 27.15           C
ANISOU 1845  CD1 ILE A 280     3752   3093   3470   -306   -301    114       C
ATOM   1846  CG2 ILE A 280       6.233   9.401  29.812  1.00 24.37           C
ANISOU 1846  CG2 ILE A 280     3586   2666   3007   -252   -256     97       C
ATOM   1847  C   ILE A 280       8.552  10.072  31.638  1.00 24.83           C
ANISOU 1847  C   ILE A 280     3731   2643   3061   -232   -486    128       C
ATOM   1848  O   ILE A 280       9.249   9.060  31.688  1.00 26.21           O
ANISOU 1848  O   ILE A 280     3898   2810   3251   -213   -512    135       O
ATOM   1849  N   ASP A 281       7.982  10.620  32.707  1.00 21.10           N
ANISOU 1849  N   ASP A 281     3371   2125   2521   -227   -497    116       N
ATOM   1850  CA  ASP A 281       8.192  10.121  34.064  1.00 22.79           C
ANISOU 1850  CA  ASP A 281     3720   2272   2669   -199   -544    114       C
ATOM   1851  CB  ASP A 281       7.311  10.915  35.033  1.00 27.83           C
ANISOU 1851  CB  ASP A 281     4468   2876   3229   -197   -531     96       C
ATOM   1852  CG  ASP A 281       7.531  10.540  36.497  1.00 36.69           C
ANISOU 1852  CG  ASP A 281     5748   3922   4270   -166   -583     95       C
ATOM   1853  OD1 ASP A 281       8.282   9.584  36.799  1.00 38.67           O
ANISOU 1853  OD1 ASP A 281     6034   4138   4520   -147   -629    107       O
ATOM   1854  OD2 ASP A 281       6.933  11.221  37.351  1.00 37.16           O
ANISOU 1854  OD2 ASP A 281     5902   3954   4263   -160   -582     79       O
ATOM   1855  C   ASP A 281       7.871   8.630  34.159  1.00 19.83           C
ANISOU 1855  C   ASP A 281     3387   1888   2259   -188   -483    114       C
ATOM   1856  O   ASP A 281       6.772   8.202  33.817  1.00 21.60           O
ANISOU 1856  O   ASP A 281     3610   2136   2460   -201   -375    103       O
ATOM   1857  N   GLU A 282       8.841   7.846  34.617  1.00 22.10           N
ANISOU 1857  N   GLU A 282     3711   2137   2551   -164   -561    122       N
ATOM   1858  CA  GLU A 282       8.650   6.411  34.786  1.00 25.32           C
ANISOU 1858  CA  GLU A 282     4170   2526   2923   -152   -526    123       C
ATOM   1859  CB  GLU A 282       9.912   5.783  35.382  1.00 29.51           C
ANISOU 1859  CB  GLU A 282     4747   3001   3463   -121   -650    124       C
ATOM   1860  CG  GLU A 282       9.804   4.296  35.632  1.00 32.88           C
ANISOU 1860  CG  GLU A 282     5243   3400   3851   -109   -637    123       C
ATOM   1861  CD  GLU A 282      11.015   3.728  36.362  1.00 32.35           C
ANISOU 1861  CD  GLU A 282     5246   3261   3786    -74   -777    113       C
ATOM   1862  OE1 GLU A 282      11.920   4.509  36.740  1.00 30.68           O
ANISOU 1862  OE1 GLU A 282     5032   3018   3608    -57   -881    105       O
ATOM   1863  OE2 GLU A 282      11.056   2.494  36.556  1.00 34.15           O
ANISOU 1863  OE2 GLU A 282     5531   3459   3985    -62   -789    111       O
ATOM   1864  C   GLU A 282       7.447   6.122  35.681  1.00 25.94           C
ANISOU 1864  C   GLU A 282     4388   2568   2900   -160   -444    117       C
ATOM   1865  O   GLU A 282       6.764   5.107  35.529  1.00 22.61           O
ANISOU 1865  O   GLU A 282     3986   2152   2454   -167   -364    118       O
ATOM   1866  N   ASN A 283       7.183   7.031  36.609  1.00 22.89           N
ANISOU 1866  N   ASN A 283     4096   2145   2456   -158   -463    109       N
ATOM   1867  CA  ASN A 283       6.175   6.798  37.632  1.00 25.31           C
ANISOU 1867  CA  ASN A 283     4550   2411   2657   -163   -392    101       C
ATOM   1868  CB  ASN A 283       6.515   7.613  38.876  1.00 23.51           C
ANISOU 1868  CB  ASN A 283     4448   2121   2365   -140   -476     97       C
ATOM   1869  CG  ASN A 283       6.218   6.875  40.162  1.00 31.75           C
ANISOU 1869  CG  ASN A 283     5682   3090   3292   -130   -462     99       C
ATOM   1870  OD1 ASN A 283       6.403   5.659  40.258  1.00 29.30           O
ANISOU 1870  OD1 ASN A 283     5419   2751   2961   -130   -458    112       O
ANISOU 1870  OD1 ASN A 283     5419   2751   2961   -130   -458    112       O
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ATOM   1871  ND2 ASN A 283       5.779   7.615  41.176  1.00 34.55           N
ANISOU 1871  ND2 ASN A 283     6153   3409   3564   -121   -460     86       N
ATOM   1872  C   ASN A 283       4.762   7.113  37.152  1.00 25.49           C
ANISOU 1872  C   ASN A 283     4529   2483   2672   -194   -256     79       C
ATOM   1873  O   ASN A 283       3.806   6.984  37.908  1.00 27.34           O
ANISOU 1873  O   ASN A 283     4867   2694   2828   -205   -176     65       O
ATOM   1874  N   ILE A 284       4.631   7.531  35.894  1.00 23.54           N
ANISOU 1874  N   ILE A 284     4132   2301   2512   -206   -229     72       N
ATOM   1875  CA  ILE A 284       3.313   7.742  35.302  1.00 19.25           C
ANISOU 1875  CA  ILE A 284     3538   1798   1978   -230   -109     43       C
ATOM   1876  CB  ILE A 284       3.123   9.187  34.763  1.00 27.58           C
ANISOU 1876  CB  ILE A 284     4516   2889   3076   -239   -129     21       C
ATOM   1877  CG1 ILE A 284       3.916   9.390  33.464  1.00 23.62           C
ANISOU 1877  CG1 ILE A 284     3872   2433   2670   -241   -176     40       C
ATOM   1878  CD1 ILE A 284       3.616  10.707  32.749  1.00 24.14           C
ANISOU 1878  CD1 ILE A 284     3862   2533   2779   -257   -186     20       C
ATOM   1879  CG2 ILE A 284       3.495  10.217  35.827  1.00 30.05           C
ANISOU 1879  CG2 ILE A 284     4915   3164   3339   -226   -215     18       C
ATOM   1880  C   ILE A 284       3.017   6.744  34.179  1.00 17.65           C
ANISOU 1880  C   ILE A 284     3238   1633   1834   -235    -41     47       C
ATOM   1881  O   ILE A 284       1.930   6.757  33.609  1.00 22.17           O
ANISOU 1881  O   ILE A 284     3764   2231   2427   -249     56     19       O
ATOM   1882  N   LEU A 285       3.979   5.878  33.868  1.00 19.71           N
ANISOU 1882  N   LEU A 285     3468   1894   2126   -219    -97     76       N
ATOM   1883  CA  LEU A 285       3.798   4.894  32.803  1.00 21.89           C
ANISOU 1883  CA  LEU A 285     3653   2206   2460   -215    -47     80       C
ATOM   1884  CB  LEU A 285       5.094   4.738  32.003  1.00 21.00           C
ANISOU 1884  CB  LEU A 285     3437   2124   2417   -197   -135    100       C
ATOM   1885  CG  LEU A 285       5.481   5.894  31.084  1.00 22.01           C
ANISOU 1885  CG  LEU A 285     3451   2301   2609   -205   -161     97       C
ATOM   1886  CD1 LEU A 285       6.966   5.809  30.736  1.00 20.84           C
ANISOU 1886  CD1 LEU A 285     3234   2170   2516   -192   -261    116       C
ATOM   1887  CD2 LEU A 285       4.618   5.870  29.838  1.00 21.71           C
ANISOU 1887  CD2 LEU A 285     3317   2312   2620   -210    -73     82       C
ATOM   1888  C   LEU A 285       3.360   3.523  33.326  1.00 20.05           C
ANISOU 1888  C   LEU A 285     3503   1936   2179   -215      0     88       C
ATOM   1889  O   LEU A 285       3.768   3.106  34.413  1.00 19.10           O
ANISOU 1889  O   LEU A 285     3505   1760   1991   -211    -47    102       O
ATOM   1890  N   PRO A 286       2.531   2.817  32.543  1.00 19.15           N
ANISOU 1890  N   PRO A 286     3328   1847   2102   -218     87     78       N
ATOM   1891  CA  PRO A 286       2.164   1.426  32.840  1.00 20.80           C
ANISOU 1891  CA  PRO A 286     3595   2023   2283   -218    126     90       C
ATOM   1892  CB  PRO A 286       1.170   1.073  31.726  1.00 19.24           C
ANISOU 1892  CB  PRO A 286     3294   1863   2154   -217    221     71       C
ATOM   1893  CG  PRO A 286       0.760   2.373  31.126  1.00 22.49           C
ANISOU 1893  CG  PRO A 286     3630   2311   2604   -223    247     40       C
ATOM   1894  CD  PRO A 286       1.945   3.272  31.272  1.00 18.62           C
ANISOU 1894  CD  PRO A 286     3132   1833   2111   -217    143     56       C
ATOM   1895  C   PRO A 286       3.379   0.518  32.721  1.00 18.03           C
ANISOU 1895  C   PRO A 286     3235   1666   1948   -192     23    116       C
ATOM   1896  O   PRO A 286       4.338   0.852  32.022  1.00 16.43           O
ANISOU 1896  O   PRO A 286     2936   1502   1805   -171    -51    119       O
ATOM   1897  N   SER A 287       3.322  -0.631  33.380  1.00 15.81           N
ANISOU 1897  N   SER A 287     3053   1336   1617   -194     18    132       N
ATOM   1898  CA  SER A 287       4.439  -1.566  33.399  1.00 20.91           C
ANISOU 1898  CA  SER A 287     3708   1964   2272   -166    -93    147       C
ATOM   1899  CB  SER A 287       4.105  -2.764  34.292  1.00 20.48           C
ANISOU 1899  CB  SER A 287     3796   1841   2144   -179    -86    164       C
ATOM   1900  OG  SER A 287       3.046  -3.518  33.730  1.00 19.20           O
ANISOU 1900  OG  SER A 287     3594   1694   2007   -191     14    165       O
ATOM   1901  C   SER A 287       4.835  -2.053  32.007  1.00 23.82           C
ANISOU 1901  C   SER A 287     3918   2396   2738   -136   -114    143       C
ATOM   1902  O   SER A 287       5.993  -2.393  31.778  1.00 21.18           O
ANISOU 1902  O   SER A 287     3542   2071   2435   -108   -220    144       O
ATOM   1903  N   ASP A 288       3.880  -2.102  31.080  1.00 21.22           N
ANISOU 1903  N   ASP A 288     3499   2108   2457   -138    -18    134       N
ATOM   1904  CA  ASP A 288       4.186  -2.577  29.740  1.00 17.71           C
ANISOU 1904  CA  ASP A 288     2912   1721   2097   -104   -33    130       C
ATOM   1905  CB  ASP A 288       2.995  -3.300  29.066  1.00 20.18           C
ANISOU 1905  CB  ASP A 288     3183   2041   2444    -98     61    124       C
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ATOM   1906  CG  ASP A 288       1.694  -2.513  29.122  1.00 25.75           C
ANISOU 1906  CG  ASP A 288     3899   2740   3144   -128    178    104       C
ATOM   1907  OD1 ASP A 288       1.454  -1.798  30.116  1.00 22.15           O
ANISOU 1907  OD1 ASP A 288     3538   2254   2626   -161    200    100       O
ATOM   1908  OD2 ASP A 288       0.889  -2.637  28.169  1.00 26.13           O
ANISOU 1908  OD2 ASP A 288     3864   2812   3254   -113    244     85       O
ATOM   1909  C   ASP A 288       4.763  -1.468  28.857  1.00 23.01           C
ANISOU 1909  C   ASP A 288     3463   2453   2825    -95    -53    120       C
ATOM   1910  O   ASP A 288       5.008  -1.672  27.672  1.00 25.32           O
ANISOU 1910  O   ASP A 288     3636   2801   3185    -68    -55    115       O
ATOM   1911  N   PHE A 289       4.978  -0.297  29.450  1.00 17.71           N
ANISOU 1911  N   PHE A 289     2833   1771   2124   -119    -67    119       N
ATOM   1912  CA  PHE A 289       5.717   0.776  28.795  1.00 21.02           C
ANISOU 1912  CA  PHE A 289     3157   2237   2591   -118   -105    116       C
ATOM   1913  CB  PHE A 289       4.802   1.960  28.488  1.00 18.63           C
ANISOU 1913  CB  PHE A 289     2835   1951   2294   -143    -29    102       C
ATOM   1914  CG  PHE A 289       3.801   1.678  27.405  1.00 21.27           C
ANISOU 1914  CG  PHE A 289     3095   2315   2672   -132     59     86       C
ATOM   1915  CD1 PHE A 289       4.058   2.040  26.093  1.00 24.64           C
ANISOU 1915  CD1 PHE A 289     3403   2796   3162   -118     61     83       C
ATOM   1916  CE1 PHE A 289       3.134   1.775  25.092  1.00 22.30           C
ANISOU 1916  CE1 PHE A 289     3048   2518   2908   -100    132     64       C
ATOM   1917  CZ  PHE A 289       1.947   1.142  25.401  1.00 21.68           C
ANISOU 1917  CZ  PHE A 289     3018   2401   2818    -98    202     47       C
ATOM   1918  CE2 PHE A 289       1.684   0.774  26.704  1.00 26.13           C
ANISOU 1918  CE2 PHE A 289     3693   2916   3320   -120    210     52       C
ATOM   1919  CD2 PHE A 289       2.609   1.042  27.697  1.00 22.39           C
ANISOU 1919  CD2 PHE A 289     3289   2424   2794   -136    138     73       C
ATOM   1920  C   PHE A 289       6.888   1.214  29.668  1.00 28.20           C
ANISOU 1920  C   PHE A 289     4119   3118   3479   -121   -211    123       C
ATOM   1921  O   PHE A 289       7.342   2.353  29.584  1.00 27.95           O
ANISOU 1921  O   PHE A 289     4051   3101   3466   -134   -240    123       O
ATOM   1922  N   GLY A 290       7.365   0.299  30.508  1.00 25.47           N
ANISOU 1922  N   GLY A 290     3862   2722   3095   -108   -276    127       N
ATOM   1923  CA  GLY A 290       8.545   0.532  31.327  1.00 26.80           C
ANISOU 1923  CA  GLY A 290     4083   2849   3251    -99   -394    126       C
ATOM   1924  C   GLY A 290       8.301   1.278  32.628  1.00 28.76           C
ANISOU 1924  C   GLY A 290     4472   3033   3422   -117   -405    130       C
ATOM   1925  O   GLY A 290       9.245   1.724  33.283  1.00 27.33           O
ANISOU 1925  O   GLY A 290     4331   2814   3238   -107   -506    126       O
ATOM   1926  N   GLY A 291       7.036   1.406  33.015  1.00 21.35           N
ANISOU 1926  N   GLY A 291     3608   2080   2426   -140   -305    132       N
ATOM   1927  CA  GLY A 291       6.678   2.209  34.173  1.00 20.67           C
ANISOU 1927  CA  GLY A 291     3647   1943   2264   -155   -300    131       C
ATOM   1928  C   GLY A 291       6.374   1.406  35.425  1.00 22.66           C
ANISOU 1928  C   GLY A 291     4075   2117   2418   -157   -301    138       C
ATOM   1929  O   GLY A 291       6.528   0.183  35.451  1.00 21.84           O
ANISOU 1929  O   GLY A 291     4003   1991   2305   -149   -319    146       O
ATOM   1930  N   THR A 292       5.928   2.106  36.464  1.00 21.85           N
ANISOU 1930  N   THR A 292     4091   1972   2237   -169   -281    136       N
ATOM   1931  CA  THR A 292       5.640   1.494  37.755  1.00 24.37           C
ANISOU 1931  CA  THR A 292     4599   2213   2448   -175   -277    144       C
ATOM   1932  CB  THR A 292       6.206   2.343  38.915  1.00 24.23           C
ANISOU 1932  CB  THR A 292     4703   2134   2368   -157   -365    141       C
ATOM   1933  OG1 THR A 292       5.622   3.651  38.874  1.00 23.32           O
ANISOU 1933  OG1 THR A 292     4550   2055   2256   -168   -314    126       O
ATOM   1934  CG2 THR A 292       7.734   2.462  38.824  1.00 21.89           C
ANISOU 1934  CG2 THR A 292     4367   1817   2133   -119   -526    138       C
ATOM   1935  C   THR A 292       4.139   1.317  37.991  1.00 22.56           C
ANISOU 1935  C   THR A 292     4423   1988   2162   -212   -124    140       C
ATOM   1936  O   THR A 292       3.732   0.782  39.023  1.00 23.02           O
ANISOU 1936  O   THR A 292     4640   1985   2123   -227    -92    149       O
ATOM   1937  N   LEU A 293       3.319   1.781  37.049  1.00 20.11           N
ANISOU 1937  N   LEU A 293     3985   1745   1913   -228    -29    123       N
ATOM   1938  CA  LEU A 293       1.865   1.645  37.176  1.00 22.11           C
ANISOU 1938  CA  LEU A 293     4264   2003   2133   -262    118    107       C
ATOM   1939  CB  LEU A 293       1.141   2.807  36.482  1.00 22.53           C
ANISOU 1939  CB  LEU A 293     4205   2115   2241   -270    182     71       C
ATOM   1940  CG  LEU A 293       1.386   4.231  37.012  1.00 24.35           C
ANISOU 1940  CG  LEU A 293     4464   2345   2444   -263    131     55       C
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ATOM   1941  CD1 LEU A 293       0.416   5.212  36.354  1.00 23.25           C
ANISOU 1941  CD1 LEU A 293     4227   2255   2350   -276    206     12       C
ATOM   1942  CD2 LEU A 293       1.275   4.308  38.522  1.00 31.72           C
ANISOU 1942  CD2 LEU A 293     5578   3215   3259   -267    129     57       C
ATOM   1943  C   LEU A 293       1.389   0.298  36.627  1.00 21.90           C
ANISOU 1943  C   LEU A 293     4206   1980   2135   -272    180    118       C
ATOM   1944  O   LEU A 293       2.137  -0.392  35.931  1.00 20.30           O
ANISOU 1944  O   LEU A 293     3932   1791   1989   -249    110    134       O
ATOM   1945  N   PRO A 294       0.150  -0.101  36.961  1.00 20.36           N
ANISOU 1945  N   PRO A 294     4063   1770   1903   -307    308    108       N
ATOM   1946  CA  PRO A 294      -0.335  -1.395  36.476  1.00 23.84           C
ANISOU 1946  CA  PRO A 294     4476   2206   2375   -318    362    120       C
ATOM   1947  CB  PRO A 294      -1.767  -1.463  37.024  1.00 22.68           C
ANISOU 1947  CB  PRO A 294     4392   2041   2185   -364    515    100       C
ATOM   1948  CG  PRO A 294      -1.733  -0.605  38.246  1.00 24.07           C
ANISOU 1948  CG  PRO A 294     4700   2187   2259   -376    515     92       C
ATOM   1949  CD  PRO A 294      -0.797   0.529  37.901  1.00 23.07           C
ANISOU 1949  CD  PRO A 294     4503   2093   2168   -338    404     84       C
ATOM   1950  C   PRO A 294      -0.325  -1.502  34.951  1.00 24.45           C
ANISOU 1950  C   PRO A 294     4369   2346   2575   -292    359    109       C
ATOM   1951  O   PRO A 294      -0.433  -0.497  34.248  1.00 21.39           O
ANISOU 1951  O   PRO A 294     3875   2006   2244   -281    367     82       O
ATOM   1952  N   LYS A 295      -0.164  -2.723  34.455  1.00 16.28           N
ANISOU 1952  N   LYS A 295     3305   1306   1576   -280    338    129       N
ATOM   1953  CA  LYS A 295      -0.243  -2.997  33.028  1.00 24.83           C
ANISOU 1953  CA  LYS A 295     4225   2442   2768   -250    341    119       C
ATOM   1954  CB  LYS A 295      -0.371  -4.501  32.786  1.00 26.25           C
ANISOU 1954  CB  LYS A 295     4409   2599   2966   -243    337    140       C
ATOM   1955  CG  LYS A 295      -0.406  -4.891  31.314  1.00 25.69           C
ANISOU 1955  CG  LYS A 295     4177   2579   3005   -201    329    130       C
ATOM   1956  CD  LYS A 295      -0.764  -6.367  31.145  1.00 33.33           C
ANISOU 1956  CD  LYS A 295     5155   3518   3992   -196    336    148       C
ATOM   1957  CE  LYS A 295      -0.444  -6.846  29.740  1.00 33.26           C
ANISOU 1957  CE  LYS A 295     4996   3559   4082   -139    288    141       C
ATOM   1958  NZ  LYS A 295       1.027  -6.742  29.500  1.00 39.19           N
ANISOU 1958  NZ  LYS A 295     5713   4343   4835   -103    157    150       N
ATOM   1959  C   LYS A 295      -1.441  -2.271  32.429  1.00 20.49           C
ANISOU 1959  C   LYS A 295     3591   1923   2271   -261    454     78       C
ATOM   1960  O   LYS A 295      -2.540  -2.304  32.997  1.00 19.86           O
ANISOU 1960  O   LYS A 295     3570   1815   2161   -297    561     59       O
ATOM   1961  N   TYR A 296      -1.226  -1.608  31.296  1.00 25.94           N
ANISOU 1961  N   TYR A 296     3662   3956   2237  -1513    595    384       N
ATOM   1962  CA  TYR A 296      -2.276  -0.784  30.700  1.00 24.07           C
ANISOU 1962  CA  TYR A 296     3511   3525   2110  -1399    745    301       C
ATOM   1963  CB  TYR A 296      -1.811  -0.067  29.423  1.00 24.70           C
ANISOU 1963  CB  TYR A 296     3662   3413   2311  -1251    862    171       C
ATOM   1964  CG  TYR A 296      -2.911   0.819  28.885  1.00 23.84           C
ANISOU 1964  CG  TYR A 296     3624   3120   2315  -1134   1030    128       C
ATOM   1965  CD1 TYR A 296      -3.200   2.040  29.489  1.00 26.58           C
ANISOU 1965  CD1 TYR A 296     4035   3415   2648  -1234   1259     -2       C
ATOM   1966  CE1 TYR A 296      -4.228   2.840  29.028  1.00 25.90           C
ANISOU 1966  CE1 TYR A 296     4008   3153   2680  -1114   1428     -6       C
ATOM   1967  CZ  TYR A 296      -4.988   2.423  27.955  1.00 25.70           C
ANISOU 1967  CZ  TYR A 296     3958   3040   2765   -898   1355    121       C
ATOM   1968  OH  TYR A 296      -6.012   3.211  27.492  1.00 24.67           O
ANISOU 1968  OH  TYR A 296     3863   2764   2746   -770   1524    151       O
ATOM   1969  CE2 TYR A 296      -4.730   1.216  27.344  1.00 25.68           C
ANISOU 1969  CE2 TYR A 296     3888   3108   2762   -820   1126    223       C
ATOM   1970  CD2 TYR A 296      -3.700   0.414  27.817  1.00 26.03           C
ANISOU 1970  CD2 TYR A 296     3892   3288   2710   -934    971    227       C
ATOM   1971  C   TYR A 296      -3.548  -1.574  30.405  1.00 26.07           C
ANISOU 1971  C   TYR A 296     3739   3718   2447  -1288    626    475       C
ATOM   1972  O   TYR A 296      -3.511  -2.617  29.758  1.00 23.75           O
ANISOU 1972  O   TYR A 296     3411   3385   2229  -1193    455    598       O
ATOM   1973  N   ASP A 297      -4.673  -1.045  30.869  1.00 23.05           N
ANISOU 1973  N   ASP A 297     3371   3329   2058  -1310    731    476       N
ATOM   1974  CA  ASP A 297      -5.971  -1.654  30.631  1.00 30.69           C
ANISOU 1974  CA  ASP A 297     4297   4263   3100  -1225    642    635       C
ATOM   1975  CB  ASP A 297      -6.575  -2.115  31.960  1.00 34.48           C
ANISOU 1975  CB  ASP A 297     4701   4933   3469  -1387    572    777       C
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ATOM   1976  CG  ASP A 297      -7.921  -2.781  31.791  1.00 44.79           C
ANISOU 1976  CG  ASP A 297     5945   6223   4852  -1329    471    961       C
ATOM   1977  OD1 ASP A 297      -8.344  -2.995  30.637  1.00 43.82           O
ANISOU 1977  OD1 ASP A 297     5830   5959   4860  -1176    436    975       O
ATOM   1978  OD2 ASP A 297      -8.552  -3.092  32.822  1.00 53.99           O
ANISOU 1978  OD2 ASP A 297     7037   7542   5936  -1451    429   1097       O
ATOM   1979  C   ASP A 297      -6.891  -0.646  29.954  1.00 29.44           C
ANISOU 1979  C   ASP A 297     4196   3950   3038  -1088    833    561       C
ATOM   1980  O   ASP A 297      -7.234   0.374  30.543  1.00 31.66           O
ANISOU 1980  O   ASP A 297     4524   4221   3286  -1145   1030    472       O
ATOM   1981  N   GLY A 298      -7.287  -0.937  28.718  1.00 29.14           N
ANISOU 1981  N   GLY A 298     4148   3801   3122   -913    785    608       N
ATOM   1982  CA  GLY A 298      -8.092  -0.018  27.927  1.00 29.90           C
ANISOU 1982  CA  GLY A 298     4277   3767   3319   -759    959    577       C
ATOM   1983  C   GLY A 298      -9.474   0.278  28.485  1.00 32.50           C
ANISOU 1983  C   GLY A 298     4572   4128   3647   -767   1039    669       C
ATOM   1984  O   GLY A 298     -10.078   1.297  28.158  1.00 35.04           O
ANISOU 1984  O   GLY A 298     4933   4343   4040   -665   1241    642       O
ATOM   1985  N   LYS A 299      -9.978  -0.607  29.339  1.00 37.87           N
ANISOU 1985  N   LYS A 299     5176   4958   4256   -887    887    802       N
ATOM   1986  CA  LYS A 299     -11.322  -0.447  29.896  1.00 45.58           C
ANISOU 1986  CA  LYS A 299     6097   6000   5220   -902    944    918       C
ATOM   1987  CB  LYS A 299     -11.708  -1.669  30.730  1.00 56.64           C
ANISOU 1987  CB  LYS A 299     7393   7575   6552  -1047    726   1102       C
ATOM   1988  CG  LYS A 299     -11.985  -2.917  29.905  1.00 64.87           C
ANISOU 1988  CG  LYS A 299     8361   8599   7688  -1009    493   1243       C
ATOM   1989  CD  LYS A 299     -12.221  -4.126  30.797  1.00 72.19           C
ANISOU 1989  CD  LYS A 299     9195   9657   8578  -1175    280   1445       C
ATOM   1990  CE  LYS A 299     -10.966  -4.479  31.578  1.00 76.52           C
ANISOU 1990  CE  LYS A 299     9766  10271   9038  -1297    205   1422       C
ATOM   1991  NZ  LYS A 299     -11.230  -5.460  32.665  1.00 80.22           N
ANISOU 1991  NZ  LYS A 299    10131  10893   9458  -1465     38   1653       N
ATOM   1992  C   LYS A 299     -11.508   0.835  30.708  1.00 49.31           C
ANISOU 1992  C   LYS A 299     6639   6454   5641   -951   1209    809       C
ATOM   1993  O   LYS A 299     -12.558   1.471  30.637  1.00 47.13           O
ANISOU 1993  O   LYS A 299     6356   6136   5415   -867   1362    857       O
ATOM   1994  N   ALA A 300     -10.491   1.212  31.476  1.00 53.79           N
ANISOU 1994  N   ALA A 300     7268   7059   6110  -1098   1273    663       N
ATOM   1995  CA  ALA A 300     -10.567   2.409  32.310  1.00 55.08           C
ANISOU 1995  CA  ALA A 300     7501   7209   6217  -1193   1539    523       C
ATOM   1996  CB  ALA A 300      -9.330   2.520  33.186  1.00 56.78           C
ANISOU 1996  CB  ALA A 300     7743   7542   6290  -1405   1547    370       C
ATOM   1997  C   ALA A 300     -10.758   3.685  31.486  1.00 57.38           C
ANISOU 1997  C   ALA A 300     7894   7246   6663  -1041   1805    420       C
ATOM   1998  O   ALA A 300     -11.624   4.510  31.789  1.00 56.77           O
ANISOU 1998  O   ALA A 300     7840   7111   6618  -1012   2025    421       O
ATOM   1999  N   VAL A 301      -9.940   3.846  30.450  1.00 50.07           N
ANISOU 1999  N   VAL A 301     7019   6171   5833   -941   1796    353       N
ATOM   2000  CA  VAL A 301     -10.058   4.993  29.561  1.00 55.28           C
ANISOU 2000  CA  VAL A 301     7759   6588   6655   -786   2035    303       C
ATOM   2001  CB  VAL A 301      -8.958   4.991  28.479  1.00 54.10           C
ANISOU 2001  CB  VAL A 301     7642   6334   6579   -705   1982    244       C
ATOM   2002  CG1 VAL A 301      -9.477   5.604  27.191  1.00 55.81           C
ANISOU 2002  CG1 VAL A 301     7866   6373   6964   -465   2107    335       C
ATOM   2003  CG2 VAL A 301      -7.725   5.729  28.974  1.00 56.53           C
ANISOU 2003  CG2 VAL A 301     8039   6586   6854   -879   2122     35       C
ATOM   2004  C   VAL A 301     -11.418   4.998  28.887  1.00 51.70           C
ANISOU 2004  C   VAL A 301     7244   6097   6302   -582   2061    490       C
ATOM   2005  O   VAL A 301     -12.097   6.022  28.840  1.00 50.81           O
ANISOU 2005  O   VAL A 301     7173   5849   6282   -499   2318    506       O
ATOM   2006  N   ALA A 302     -11.807   3.838  28.369  1.00 45.95           N
ANISOU 2006  N   ALA A 302     6406   5494   5558   -514   1804    635       N
ATOM   2007  CA  ALA A 302     -13.073   3.695  27.667  1.00 41.76           C
ANISOU 2007  CA  ALA A 302     5782   4980   5103   -346   1792    820       C
ATOM   2008  CB  ALA A 302     -13.295   2.241  27.280  1.00 31.07           C
ANISOU 2008  CB  ALA A 302     4307   3788   3711   -359   1485    939       C
ATOM   2009  C   ALA A 302     -14.239   4.210  28.507  1.00 47.64           C
ANISOU 2009  C   ALA A 302     6507   5764   5832   -362   1955    900       C
ATOM   2010  O   ALA A 302     -15.052   5.005  28.036  1.00 48.73           O
ANISOU 2010  O   ALA A 302     6639   5806   6072   -204   2148    987       O
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ATOM   2011  N   GLU A 303     -14.314   3.758  29.753  1.00 55.52           N
ANISOU 2011  N   GLU A 303     7482   6918   6694   -549   1884    889       N
ATOM   2012  CA  GLU A 303     -15.386   4.183  30.645  1.00 66.49           C
ANISOU 2012  CA  GLU A 303     8840   8385   8040   -583   2037    963       C
ATOM   2013  CB  GLU A 303     -15.351   3.390  31.955  1.00 71.95           C
ANISOU 2013  CB  GLU A 303     9470   9315   8552   -804   1889    984       C
ATOM   2014  CG  GLU A 303     -15.866   1.962  31.811  1.00 76.81           C
ANISOU 2014  CG  GLU A 303     9939  10105   9139   -826   1579   1193       C
ATOM   2015  CD  GLU A 303     -15.702   1.134  33.073  1.00 81.57           C
ANISOU 2015  CD  GLU A 303    10474  10939   9578  -1046   1424   1254       C
ATOM   2016  OE1 GLU A 303     -15.151   1.651  34.067  1.00 83.61           O
ANISOU 2016  OE1 GLU A 303    10790  11264   9716  -1185   1548   1120       O
ATOM   2017  OE2 GLU A 303     -16.125  -0.042  33.067  1.00 81.57           O
ANISOU 2017  OE2 GLU A 303    10356  11064   9572  -1092   1182   1446       O
ATOM   2018  C   GLU A 303     -15.334   5.686  30.909  1.00 70.17           C
ANISOU 2018  C   GLU A 303     9430   8663   8570   -558   2403    826       C
ATOM   2019  O   GLU A 303     -16.367   6.320  31.114  1.00 71.21           O
ANISOU 2019  O   GLU A 303     9543   8774   8741   -477   2606    912       O
ATOM   2020  N   GLN A 304     -14.133   6.256  30.886  1.00 72.85           N
ANISOU 2020  N   GLN A 304     9890   8861   8929   -634   2501    621       N
ATOM   2021  CA  GLN A 304     -13.965   7.687  31.114  1.00 78.00           C
ANISOU 2021  CA  GLN A 304    10665   9301   9668   -649   2869    470       C
ATOM   2022  C   GLN A 304     -14.464   8.523  29.936  1.00 77.03           C
ANISOU 2022  C   GLN A 304    10571   8939   9758   -394   3067    581       C
ATOM   2023  CB  GLN A 304     -12.502   8.023  31.396  1.00 86.02           C
ANISOU 2023  CB  GLN A 304    11781  10252  10650   -832   2911    224       C
ATOM   2024  CG  GLN A 304     -12.243   9.512  31.541  1.00 95.95           C
ANISOU 2024  CG  GLN A 304    13164  11263  12029   -875   3310     48       C
ATOM   2025  CD  GLN A 304     -10.819   9.900  31.198  1.00101.51           C
ANISOU 2025  CD  GLN A 304    13951  11839  12779   -976   3348   -138       C
ATOM   2026  OE1 GLN A 304      -9.931   9.051  31.125  1.00102.14           O
ANISOU 2026  OE1 GLN A 304    13995  12059  12753  -1054   3078   -169       O
ATOM   2027  NE2 GLN A 304     -10.595  11.190  30.982  1.00104.34           N
ANISOU 2027  NE2 GLN A 304    14411  11928  13305   -976   3699   -252       N
ATOM   2028  O   GLN A 304     -15.031   9.599  30.123  1.00 78.69           O
ANISOU 2028  O   GLN A 304    10834   8998  10067   -337   3392    580       O
ATOM   2029  N   LEU A 305     -14.243   8.029  28.722  1.00 74.16           N
ANISOU 2029  N   LEU A 305    10162   8554   9462   -240   2885    684       N
ATOM   2030  CA  LEU A 305     -14.659   8.749  27.522  1.00 72.86           C
ANISOU 2030  CA  LEU A 305     9993   8212   9477      9   3048    823       C
ATOM   2031  C   LEU A 305     -16.153   8.589  27.279  1.00 74.23           C
ANISOU 2031  C   LEU A 305    10040   8491   9673    178   3051   1070       C
ATOM   2032  CB  LEU A 305     -13.879   8.262  26.298  1.00 67.95           C
ANISOU 2032  CB  LEU A 305     9343   7585   8890    104   2855    843       C
ATOM   2033  CG  LEU A 305     -12.360   8.430  26.345  1.00 65.51           C
ANISOU 2033  CG  LEU A 305     9139   7183   8569    -35   2850    630       C
ATOM   2034  CD1 LEU A 305     -11.730   7.899  25.068  1.00 63.05           C
ANISOU 2034  CD1 LEU A 305     8776   6898   8283     87   2662    683       C
ATOM   2035  CD2 LEU A 305     -11.983   9.889  26.569  1.00 66.55           C
ANISOU 2035  CD2 LEU A 305     9403   7052   8833    -71   3227    516       C
ATOM   2036  O   LEU A 305     -16.876   9.574  27.134  1.00 77.85           O
ANISOU 2036  O   LEU A 305    10514   8815  10251    319   3339   1174       O
ATOM   2037  N   PHE A 306     -16.606   7.341  27.232  1.00 73.07           N
ANISOU 2037  N   PHE A 306     9760   8588   9417    156   2741   1174       N
ATOM   2038  CA  PHE A 306     -18.018   7.042  27.029  1.00 74.49           C
ANISOU 2038  CA  PHE A 306     9789   8917   9596    277   2706   1413       C
ATOM   2039  C   PHE A 306     -18.761   6.976  28.361  1.00 80.01           C
ANISOU 2039  C   PHE A 306    10464   9745  10191    149   2761   1429       C
ATOM   2040  CB  PHE A 306     -18.182   5.722  26.275  1.00 67.40           C
ANISOU 2040  CB  PHE A 306     8745   8218   8644    286   2361   1519       C
ATOM   2041  CG  PHE A 306     -17.499   5.698  24.937  1.00 61.12           C
ANISOU 2041  CG  PHE A 306     7950   7351   7921    408   2299   1508       C
ATOM   2042  CD1 PHE A 306     -18.170   6.101  23.794  1.00 58.13           C
ANISOU 2042  CD1 PHE A 306     7479   6978   7630    627   2381   1696       C
ATOM   2043  CD2 PHE A 306     -16.187   5.269  24.823  1.00 58.07           C
ANISOU 2043  CD2 PHE A 306     7642   6922   7501    306   2161   1328       C
ATOM   2044  CE1 PHE A 306     -17.544   6.077  22.562  1.00 56.97           C
ANISOU 2044  CE1 PHE A 306     7318   6803   7526    734   2326   1699       C
ATOM   2045  CE2 PHE A 306     -15.555   5.245  23.594  1.00 53.90           C
ANISOU 2045  CE2 PHE A 306     7106   6351   7025    418   2112   1324       C
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ATOM   2046  CZ  PHE A 306     -16.234   5.649  22.462  1.00 54.06           C
ANISOU 2046  CZ  PHE A 306     7034   6385   7123    629   2194   1507       C
ATOM   2047  O   PHE A 306     -19.673   7.762  28.616  1.00 82.85           O
ANISOU 2047  O   PHE A 306    10811  10068  10601    246   3011   1530       O
TER    2048      PHE A 306
ATOM   2048  C18 RET B 400       8.566   6.307  11.943  1.00 24.03           C
ATOM   2049  C5  RET B 400       7.379   7.203  12.021  1.00 20.83           C
ATOM   2050  C6  RET B 400       6.109   6.750  11.941  1.00 19.19           C
ATOM   2051  C1  RET B 400       4.937   7.703  11.796  1.00 24.47           C
ATOM   2052  C2  RET B 400       5.388   9.090  11.313  1.00 28.40           C
ATOM   2053  C3  RET B 400       6.586   9.596  12.091  1.00 28.52           C
ATOM   2054  C4  RET B 400       7.743   8.644  11.872  1.00 24.32           C
ATOM   2055  C16 RET B 400       4.215   7.856  13.147  1.00 27.06           C
ATOM   2056  C17 RET B 400       3.904   7.219  10.773  1.00 21.24           C
ATOM   2057  C7  RET B 400       5.842   5.302  12.008  1.00 21.50           C
ATOM   2058  C8  RET B 400       4.795   4.570  12.433  1.00 26.28           C
ATOM   2059  C9  RET B 400       4.762   3.098  12.339  1.00 30.68           C
ATOM   2060  C10 RET B 400       3.771   2.341  12.851  1.00 37.20           C
ATOM   2061  C11 RET B 400       2.534   2.856  13.398  1.00 39.19           C
ATOM   2062  C12 RET B 400       1.742   2.158  14.216  1.00 42.22           C
ATOM   2063  C13 RET B 400       0.908   1.020  13.830  1.00 42.10           C
ATOM   2064  C14 RET B 400      -0.348   0.984  14.271  1.00 42.95           C
ATOM   2065  C15 RET B 400      -1.240  -0.161  14.008  1.00 45.99           C
ATOM   2066  O1  RET B 400      -2.427  -0.130  14.262  1.00 48.88           O
ATOM   2067  C20 RET B 400       1.577  -0.220  13.364  1.00 47.36           C
ATOM   2068  C19 RET B 400       6.010   2.370  11.977  1.00 29.34           C
TER    2070      RET B 400
HETATM 2069  O   HOH S   1       0.000   0.651   0.000  1.00 13.96           O
HETATM 2070  O   HOH S   2      -2.133  13.731   1.777  1.00 22.07           O
HETATM 2071  O   HOH S   3      -2.096  11.821  29.637  1.00 17.64           O
HETATM 2072  O   HOH S   4       3.919  21.110  24.583  1.00 18.33           O
HETATM 2073  O   HOH S   5       9.437  16.660  23.224  1.00 23.00           O
HETATM 2074  O   HOH S   6       6.358  19.658  23.907  1.00 24.06           O
HETATM 2075  O   HOH S   7      -4.490  14.678   4.789  1.00 20.15           O
HETATM 2076  O   HOH S   8      -7.142   2.228  25.372  1.00 21.65           O
HETATM 2077  O   HOH S   9      -8.336   7.433   1.385  1.00 17.96           O
HETATM 2078  O   HOH S  10       7.334  13.553  32.082  1.00 20.90           O
HETATM 2079  O   HOH S  11       9.558  16.829  20.553  1.00 22.68           O
HETATM 2080  O   HOH S  12       2.599  24.372  26.568  1.00 20.08           O
HETATM 2081  O   HOH S  13       2.897  21.722  17.302  1.00 21.79           O
HETATM 2082  O   HOH S  14      -1.637  -3.738  28.240  1.00 27.29           O
HETATM 2083  O   HOH S  15       9.398  14.460  24.772  1.00 19.86           O
HETATM 2084  O   HOH S  16       3.635  19.004  15.126  1.00 17.92           O
HETATM 2085  O   HOH S  17     -13.363  28.258   3.997  1.00 25.66           O
HETATM 2086  O   HOH S  18      -6.952  -0.649   7.818  1.00 26.87           O
HETATM 2087  O   HOH S  19      11.314  18.185  18.960  1.00 27.16           O
HETATM 2088  O   HOH S  20      -1.607  15.342  35.280  1.00 26.47           O
HETATM 2089  O   HOH S  21       6.425   1.734  -0.205  1.00 38.61           O
HETATM 2090  O   HOH S  22       2.313  20.486   9.133  1.00 23.10           O
HETATM 2091  O   HOH S  23       9.023   5.797   0.673  1.00 24.20           O
HETATM 2092  O   HOH S  24       4.335  22.275  27.010  1.00 20.43           O
HETATM 2093  O   HOH S  25      -0.548   7.973  34.292  1.00 21.05           O
HETATM 2094  O   HOH S  26       7.175  15.440   2.371  1.00 30.09           O
HETATM 2095  O   HOH S  27      -0.435  23.547  31.454  1.00 23.49           O
HETATM 2096  O   HOH S  28      -3.491  21.347  14.159  1.00 19.10           O
HETATM 2097  O   HOH S  29       1.440  -0.890  39.778  1.00 28.97           O
HETATM 2098  O   HOH S  30      -7.184  16.618  27.444  1.00 20.47           O
HETATM 2099  O   HOH S  31      -1.473  27.956  11.524  1.00 25.04           O
HETATM 2100  O   HOH S  32     -11.282  -1.210   8.978  1.00 28.24           O
HETATM 2101  O   HOH S  33       1.005  30.504  17.501  1.00 28.06           O
HETATM 2102  O   HOH S  34      -1.277  28.729  21.622  1.00 20.52           O
HETATM 2103  O   HOH S  35      -3.267   6.266   1.897  1.00 25.74           O
HETATM 2104  O   HOH S  36       2.622  24.010  15.948  1.00 27.68           O
HETATM 2105  O   HOH S  37       1.438  24.488  21.287  1.00 30.11           O
HETATM 2106  O   HOH S  38      -0.826  -1.538   7.113  1.00 30.49           O
HETATM 2107  O   HOH S  39      -6.048   5.704   1.875  1.00 28.70           O
HETATM 2108  O   HOH S  40     -10.909  23.138  29.911  1.00 28.45           O
HETATM 2109  O   HOH S  41     -12.178   1.959  15.891  1.00 21.80           O
HETATM 2110  O   HOH S  42      -4.871  -3.160   8.785  1.00 27.47           O
HETATM 2111  O   HOH S  43      -6.420  37.906  13.884  1.00 29.95           O
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HETATM 2112  O   HOH S  44     -14.312   1.809  14.003  1.00 29.06           O
HETATM 2113  O   HOH S  45       2.651  25.453  23.922  1.00 24.99           O
HETATM 2114  O   HOH S  46      -8.858   1.808   3.996  1.00 29.91           O
HETATM 2115  O   HOH S  47      -4.620   1.086  32.770  1.00 34.97           O
HETATM 2116  O   HOH S  48      11.496   8.916  35.230  1.00 30.42           O
HETATM 2117  O   HOH S  49      -2.524   6.251  33.694  1.00 21.97           O
HETATM 2118  O   HOH S  50      16.867  -6.095  16.604  1.00 29.61           O
HETATM 2119  O   HOH S  51       5.857  -4.306  22.058  1.00 28.81           O
HETATM 2120  O   HOH S  52       7.222  21.074  21.346  1.00 37.21           O
HETATM 2121  O   HOH S  53      -1.907   1.595  34.119  1.00 27.91           O
HETATM 2122  O   HOH S  54     -16.351   3.085  10.414  1.00 30.18           O
HETATM 2123  O   HOH S  55      -0.510  -5.115  22.034  1.00 36.39           O
HETATM 2124  O   HOH S  56     -15.729  16.587   7.911  1.00 30.94           O
HETATM 2125  O   HOH S  57      15.865  -2.025  20.432  1.00 34.07           O
HETATM 2126  O   HOH S  58      -4.268   2.277   3.234  1.00 40.73           O
HETATM 2127  O   HOH S  59       8.092  -1.743  34.109  1.00 26.29           O
HETATM 2128  O   HOH S  60      16.247   9.718  18.653  1.00 36.77           O
HETATM 2129  O   HOH S  61      -0.683   8.582  37.016  1.00 31.29           O
HETATM 2130  O   HOH S  62     -12.591  13.836  14.186  1.00 39.62           O
HETATM 2131  O   HOH S  63     -13.579  37.901  29.986  1.00 35.98           O
HETATM 2132  O   HOH S  64       5.403  20.392  14.042  1.00 42.41           O
HETATM 2133  O   HOH S  65      -4.986  -7.028  18.075  1.00 41.39           O
HETATM 2134  O   HOH S  66      16.577   7.170  25.744  1.00 35.43           O
HETATM 2135  O   HOH S  67       9.640  20.976  15.306  1.00 34.95           O
HETATM 2136  O   HOH S  68       0.856  15.785   5.422  1.00 28.77           O
HETATM 2137  O   HOH S  69      -8.421  23.333  30.937  1.00 33.07           O
HETATM 2138  O   HOH S  70      18.203   2.867  18.730  1.00 37.79           O
HETATM 2139  O   HOH S  71      15.682  -1.561  28.279  1.00 37.18           O
HETATM 2140  O   HOH S  72      -1.524  16.588   2.784  1.00 31.98           O
HETATM 2141  O   HOH S  73     -15.154  21.624  -2.325  1.00 32.35           O
HETATM 2142  O   HOH S  74      -1.429  -0.507  23.121  1.00 33.19           O
HETATM 2143  O   HOH S  75      -4.657  21.385  11.409  1.00 40.45           O
HETATM 2144  O   HOH S  76     -13.800  11.662  14.935  1.00 35.55           O
HETATM 2145  O   HOH S  77       5.413  23.549  19.547  1.00 37.78           O
HETATM 2146  O   HOH S  78     -17.268  18.648   0.677  1.00 50.14           O
HETATM 2147  O   HOH S  79     -20.316  20.606  10.935  1.00 32.73           O
HETATM 2148  O   HOH S  80      -6.883   2.958   2.763  1.00 29.52           O
HETATM 2149  O   HOH S  81      -7.090  21.341  32.642  1.00 36.87           O
HETATM 2150  O   HOH S  82      -8.178  23.606  -3.008  1.00 36.66           O
HETATM 2151  O   HOH S  83       8.410  -3.710  27.304  1.00 34.84           O
HETATM 2152  O   HOH S  84     -12.203  18.870  18.670  1.00 48.65           O
HETATM 2153  O   HOH S  85     -12.803  25.001  23.276  1.00 35.79           O
HETATM 2154  O   HOH S  86       6.899  23.291  27.001  1.00 33.64           O
HETATM 2155  O   HOH S  87     -19.382  25.567   1.014  1.00 37.21           O
HETATM 2156  O   HOH S  88     -12.793   8.899  14.828  1.00 39.31           O
HETATM 2157  O   HOH S  89     -12.434  -3.213  17.267  1.00 42.95           O
HETATM 2158  O   HOH S  90      -2.557   7.150  38.231  1.00 48.69           O
HETATM 2159  O   HOH S  91      11.288  12.940  34.177  1.00 47.67           O
HETATM 2160  O   HOH S  92      13.372   6.909  36.188  1.00 40.42           O
HETATM 2161  O   HOH S  93      -3.758   5.401  36.088  1.00 38.01           O
HETATM 2162  O   HOH S  94      -2.294   3.966  32.582  1.00 31.12           O
HETATM 2163  O   HOH S  95     -19.778  27.040   7.748  1.00 37.31           O
HETATM 2164  O   HOH S  96       8.837  13.675  34.131  1.00 29.78           O
HETATM 2165  O   HOH S  97       7.635  -2.031   7.663  1.00 35.46           O
HETATM 2166  O   HOH S  98       2.995  22.775  13.352  1.00 35.12           O
HETATM 2167  O   HOH S  99      15.122  13.745  16.763  1.00 47.79           O
HETATM 2168  O   HOH S 100       1.813  22.836  10.703  1.00 41.28           O
HETATM 2169  O   HOH S 101     -10.038  25.064  -6.452  1.00 44.75           O
HETATM 2170  O   HOH S 102     -14.930  12.137  19.929  1.00 34.74           O
HETATM 2171  O   HOH S 103      -4.649  14.492  32.539  1.00 52.16           O
HETATM 2172  O   HOH S 104      -6.057  13.569  30.618  1.00 62.62           O
HETATM 2173  O   HOH S 105      -7.352   3.144  30.422  1.00 44.77           O
HETATM 2174  O   HOH S 106      -5.630  37.168  11.045  1.00 40.05           O
HETATM 2175  O   HOH S 107      -1.060  20.812   7.032  1.00 34.64           O
HETATM 2176  O   HOH S 108     -15.474  14.040   8.542  1.00 38.18           O
HETATM 2177  O   HOH S 109     -15.858   5.388   8.776  1.00 35.14           O
HETATM 2178  O   HOH S 110     -10.706  19.483  16.806  1.00 38.61           O
HETATM 2179  O   HOH S 111       7.588 -12.614  12.036  1.00 38.59           O
HETATM 2180  O   HOH S 112     -15.526  30.490  26.155  1.00 45.64           O
HETATM 2181  O   HOH S 113      11.413  18.303  23.928  1.00 43.56           O
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HETATM 2182  O   HOH S 114     -14.733  -2.210  16.502  1.00 53.35           O
HETATM 2183  O   HOH S 115     -11.702   5.699   0.780  1.00 40.41           O
HETATM 2184  O   HOH S 116      -8.576  39.348  14.786  1.00 46.18           O
HETATM 2185  O   HOH S 117     -19.546  21.087  17.662  1.00 39.61           O
HETATM 2186  O   HOH S 118     -15.062  17.390  12.226  1.00 34.09           O
HETATM 2187  O   HOH S 119     -15.390  18.603   9.758  1.00 35.44           O
HETATM 2188  O   HOH S 120       3.793 -11.450  13.742  1.00 39.35           O
HETATM 2189  O   HOH S 121     -16.757   2.866  13.298  1.00 44.41           O
HETATM 2190  O   HOH S 122      14.230  16.715  29.085  1.00 42.02           O
HETATM 2191  O   HOH S 123       5.475  -0.224   4.233  1.00 35.98           O
HETATM 2192  O   HOH S 124     -14.786  12.840   5.752  1.00 43.03           O
HETATM 2193  O   HOH S 125     -14.710  14.609  11.468  1.00 35.97           O
HETATM 2194  O   HOH S 126     -15.922  12.543  13.063  1.00 42.56           O
HETATM 2195  O   HOH S 127      -0.931  -7.460  12.163  1.00 61.81           O
HETATM 2196  O   HOH S 128       7.376  22.720  15.045  1.00 49.59           O
HETATM 2197  O   HOH S 129     -13.591  12.984  -0.094  1.00 35.56           O
HETATM 2198  O   HOH S 130      13.456  16.871  23.173  1.00 61.44           O
HETATM 2199  O   HOH S 131      16.443  -4.892  20.452  1.00 57.87           O
HETATM 2200  O   HOH S 132     -15.496  12.141  17.089  1.00 42.68           O
HETATM 2201  O   HOH S 133      -2.453  22.491   9.246  1.00 40.39           O
HETATM 2202  O   HOH S 134       0.266  32.605  16.048  1.00 44.10           O
HETATM 2203  O   HOH S 135       2.681 -10.875  16.636  1.00 56.07           O
HETATM 2204  O   HOH S 136      -3.113   2.898  36.417  1.00 33.97           O
HETATM 2205  O   HOH S 137      -6.504  -6.274  23.108  1.00 44.45           O
HETATM 2206  O   HOH S 138       7.090  20.075  34.782  1.00 44.23           O
HETATM 2207  O   HOH S 139     -23.577  19.376   7.643  1.00 57.66           O
HETATM 2208  O   HOH S 140     -14.666  21.923  22.392  1.00 39.18           O
HETATM 2209  O   HOH S 141      10.770  15.026   2.012  1.00 41.72           O
HETATM 2210  O   HOH S 142       8.783  21.154  23.313  1.00 57.45           O
HETATM 2211  O   HOH S 143     -10.499  29.444  30.829  1.00 41.31           O
HETATM 2212  O   HOH S 144       1.158  26.043  11.650  1.00 41.60           O
HETATM 2213  O   HOH S 145      10.583  -3.302   8.368  1.00 37.63           O
HETATM 2214  O   HOH S 146     -12.862   1.419   9.831  1.00 40.35           O
HETATM 2215  O   HOH S 147       7.127  17.781   1.558  1.00 40.51           O
HETATM 2217  O   HOH S 149     -12.162   9.048  12.327  1.00 43.59           O
HETATM 2218  O   HOH S 150      -6.454  -5.457   8.264  1.00 43.98           O
HETATM 2219  O   HOH S 151      -6.261  -3.018  27.138  1.00 34.75           O
HETATM 2220  O   HOH S 152     -15.048  16.842  -1.749  1.00 49.24           O
HETATM 2221  O   HOH S 153     -17.145  20.957  -0.674  1.00 49.03           O
HETATM 2222  O   HOH S 154      -6.492   0.643   5.685  1.00 57.42           O
HETATM 2223  O   HOH S 155      10.138  20.467  17.850  1.00 38.66           O
HETATM 2224  O   HOH S 156     -13.113  -4.431  22.891  1.00 42.34           O
HETATM 2225  O   HOH S 157     -18.599  28.540   9.738  1.00 44.48           O
HETATM 2226  O   HOH S 158       1.440   8.249  38.825  1.00 34.15           O
HETATM 2227  O   HOH S 159     -17.487  11.204  11.241  1.00 43.55           O
HETATM 2228  O   HOH S 160     -13.005  35.830  28.230  1.00 46.13           O
HETATM 2229  O   HOH S 161      14.968  16.343  17.364  1.00 49.07           O
HETATM 2230  O   HOH S 162      17.690   1.881  30.060  1.00 45.20           O
HETATM 2231  O   HOH S 163      14.305  17.368  25.553  1.00 43.40           O
HETATM 2232  O   HOH S 164     -16.960  21.730  20.801  1.00 49.71           O
HETATM 2233  O   HOH S 165     -12.393  37.640   9.152  1.00 38.21           O
HETATM 2234  O   HOH S 166     -14.060  23.150  24.599  1.00 46.10           O
HETATM 2235  O   HOH S 167      -4.791  32.122   6.374  1.00 46.22           O
HETATM 2236  O   HOH S 168      -4.301  22.543   3.810  1.00 48.42           O
HETATM 2237  O   HOH S 169      15.943  11.623  24.884  1.00 50.99           O
HETATM 2238  O   HOH S 170     -19.005   5.400  30.735  1.00 58.00           O
HETATM 2239  O   HOH S 171      -7.271  -8.151  19.022  1.00 53.29           O
HETATM 2240  O   HOH S 172      -1.872  -3.529   8.362  1.00 47.39           O
HETATM 2241  O   HOH S 173       4.761  22.908  22.252  1.00 37.73           O
HETATM 2242  O   HOH S 174     -19.085  -0.465  22.471  1.00 42.62           O
HETATM 2243  O   HOH S 175      -7.644  25.820  31.832  1.00 56.83           O
HETATM 2244  O   HOH S 176      -3.747  20.187  34.779  1.00 45.66           O
HETATM 2245  O   HOH S 177       6.131  -5.488  24.794  1.00 44.48           O
HETATM 2246  O   HOH S 178     -19.285  25.682  22.693  1.00 40.83           O
HETATM 2247  O   HOH S 179     -13.581  30.833  30.486  1.00 50.17           O
HETATM 2249  O   HOH S 181      -0.230  23.712   9.483  1.00 51.31           O
HETATM 2250  O   HOH S 182      -7.118  11.374  30.474  1.00 57.03           O
HETATM 2251  O   HOH S 183     -15.175   0.191  29.482  1.00 53.33           O
HETATM 2252  O   HOH S 184      -7.734  27.736  30.132  1.00 44.89           O
HETATM 2253  O   HOH S 185       4.105  -9.266  18.578  1.00 36.66           O
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HETATM 2254  O   HOH S 186       7.440  25.255  28.502  1.00 37.93           O
HETATM 2255  O   HOH S 187     -13.626  26.429  25.545  1.00 42.59           O
HETATM 2256  O   HOH S 188       1.217  -5.344  26.961  1.00 44.72           O
HETATM 2257  O   HOH S 189     -24.254  26.752  10.190  1.00 42.07           O
HETATM 2258  O   HOH S 190      13.310  15.135   1.824  1.00 46.20           O
HETATM 2259  O   HOH S 191      15.841   0.794   4.191  1.00 48.56           O
HETATM 2260  O   HOH S 192     -15.274   5.530   2.295  1.00 56.08           O
HETATM 2261  O   HOH S 193     -19.871  27.883  -0.195  1.00 54.43           O
HETATM 2262  O   HOH S 194     -20.988  23.641  -0.237  1.00 54.18           O
HETATM 2263  O   HOH S 195      17.175  -1.717  16.772  1.00 50.97           O
HETATM 2264  O   HOH S 196      -0.358  26.254   9.474  1.00 48.57           O
HETATM 2265  O   HOH S 197       3.224  17.391  12.883  1.00 42.27           O
HETATM 2266  O   HOH S 198     -14.218  19.117  -2.709  1.00 48.23           O
HETATM 2267  O   HOH S 199       6.021  10.896  40.004  1.00 54.09           O
HETATM 2268  O   HOH S 200      -4.608  16.859  34.281  1.00 62.14           O
HETATM 2269  O   HOH S 201      18.808   3.959  16.353  1.00 56.19           O
HETATM 2270  O   HOH S 202       7.850  -0.522   5.441  1.00 50.15           O
HETATM 2271  O   HOH S 203     -16.608   3.683   5.955  1.00 55.92           O
HETATM 2272  O   HOH S 204      -2.814  20.472   3.667  1.00 45.71           O
HETATM 2273  O   HOH S 205      15.936  13.635  26.811  1.00 54.30           O
HETATM 2274  O   HOH S 206       0.000  13.999   0.000  1.00 46.38           O
HETATM 2275  O   HOH S 207      -0.645  36.948  15.890  1.00 50.18           O
HETATM 2276  O   HOH S 208      14.153   7.512   3.311  1.00 44.68           O
HETATM 2277  O   HOH S 209     -18.187  12.964   9.175  1.00 54.27           O
HETATM 2278  O   HOH S 210     -16.083  12.586   1.543  1.00 61.75           O
HETATM 2279  O   HOH S 211      -8.252  38.565  17.174  1.00 54.59           O
HETATM 2280  O   HOH S 212      -2.175  15.710  -2.188  1.00 58.00           O
HETATM 2281  O   HOH S 213     -13.268  -4.614  19.307  1.00 48.40           O
HETATM 2282  O   HOH S 214     -10.949   2.273   2.002  1.00 44.31           O
HETATM 2283  O   HOH S 215     -13.731  33.153  29.130  1.00 48.38           O
HETATM 2284  O   HOH S 216      13.381  22.168  10.358  1.00 54.34           O
HETATM 2285  O   HOH S 217      -4.219  24.995   3.136  1.00 54.49           O
HETATM 2286  O   HOH S 218     -20.139  -5.309  22.839  1.00 60.99           O
HETATM 2287  O   HOH S 219      -8.657  15.936  29.633  1.00 48.40           O
HETATM 2288  O   HOH S 220      -2.634   3.435  39.169  1.00 54.30           O
HETATM 2289  O   HOH S 221      15.585  -8.679  16.967  1.00 55.63           O
HETATM 2290  O   HOH S 222      15.005  13.114  13.869  1.00 51.43           O
HETATM 2291  O   HOH S 223     -12.186  -4.898  14.875  1.00 56.00           O
HETATM 2292  O   HOH S 224      16.375  16.826  15.109  1.00 64.33           O
HETATM 2293  O   HOH S 225       0.299   3.907  16.781  1.00 21.95           O
HETATM 2294  O   HOH S 226      -9.094  20.402  34.453  1.00 61.15           O
HETATM 2295  O   HOH S 227     -20.077  18.089  12.589  1.00 58.07           O
HETATM 2296  O   HOH S 228      18.911   0.123  18.799  1.00 47.44           O
HETATM 2297  O   HOH S 229     -16.101  22.555  -4.717  1.00 52.80           O
HETATM 2299  O   HOH S 231     -12.408  37.461   6.289  1.00 44.62           O
HETATM 2300  O   HOH S 232     -14.404  39.376   5.611  1.00 55.08           O
HETATM 2301  O   HOH S 233     -18.622  -6.773  21.367  1.00 66.84           O
HETATM 2302  O   HOH S 234      -8.245   7.819  32.567  1.00 57.83           O
HETATM 2303  O   HOH S 235      -1.787  22.086  35.014  1.00 63.53           O
HETATM 2304  O   HOH S 236       5.615  25.465  23.164  1.00 56.74           O
HETATM 2305  O   HOH S 237      19.415  -2.845  16.765  1.00 50.94           O
HETATM 2306  O   HOH S 238     -25.519  26.276   7.709  1.00 46.07           O
HETATM 2307  O   HOH S 239     -11.870  16.377  27.752  1.00 45.26           O
HETATM 2308  O   HOH S 240       9.021 -10.829  18.908  1.00 58.67           O
HETATM 2309  O   HOH S 241     -21.666  26.018   3.058  1.00 50.38           O
HETATM 2310  O   HOH S 242     -13.709  11.319  -2.340  1.00 39.02           O
HETATM 2311  O   HOH S 243      10.391  -8.588  18.259  1.00 61.78           O
HETATM 2312  O   HOH S 244      15.626  16.644  12.660  1.00 54.88           O
HETATM 2313  O   HOH S 245       4.202  25.619  12.365  1.00 62.28           O
HETATM 2314  O   HOH S 246      10.783  -5.037  27.674  1.00 52.02           O
HETATM 2315  O   HOH S 247       2.141  18.396  34.178  1.00 38.44           O
HETATM 2316  O   HOH S 248      20.065  -5.349  16.855  1.00 39.55           O
HETATM 2317  O   HOH S 249      -1.203   4.169  14.481  1.00 32.54           O
HETATM 2318  O   HOH S 250       9.748  22.909  29.823  1.00 48.65           O
HETATM 2319  O   HOH S 251      18.255  -1.190  20.912  1.00 52.48           O
HETATM 2320  O   HOH S 252      -3.650  14.054  -3.286  1.00 46.05           O
HETATM 2321  O   HOH S 253      18.659  -0.840  12.243  1.00 43.68           O
HETATM 2322  O   HOH S 254     -13.401  36.550  25.786  1.00 48.25           O
HETATM 2323  O   HOH S 255      11.479  20.551  30.970  1.00 47.64           O
HETATM 2324  O   HOH S 256       1.625  27.116  19.655  1.00 57.34           O
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HETATM 2325  O   HOH S 257      11.867  11.294  36.524  1.00 56.39           O
HETATM 2326  O   HOH S 258     -10.006  42.022  16.109  1.00 65.93           O
HETATM 2327  O   HOH S 259     -21.539  27.767  20.241  1.00 44.33           O
HETATM 2328  O   HOH S 260     -15.109   2.505   3.185  1.00 55.11           O
HETATM 2329  O   HOH S 261      -1.538   2.450  41.305  1.00 53.50           O
HETATM 2330  O   HOH S 262      -6.171  34.176   5.315  1.00 65.41           O
HETATM 2331  O   HOH S 263      -3.828  38.765  14.310  1.00 57.43           O
HETATM 2332  O   HOH S 264     -11.535   1.111   6.812  1.00 40.01           O
HETATM 2333  O   HOH S 265       0.376 -10.609  15.551  1.00 51.23           O
HETATM 2334  O   HOH S 266       7.451  22.848  30.975  1.00 55.10           O
HETATM 2335  O   HOH S 267      15.769   0.329  30.736  1.00 53.91           O
HETATM 2336  O   HOH S 268      13.138  -5.411  19.590  1.00 47.45           O
HETATM 2337  O   HOH S 269       9.036  20.824  31.417  1.00 52.23           O
HETATM 2339  O   HOH S 271      20.782  -0.963  13.750  1.00 62.37           O
HETATM 2340  O   HOH S 272     -16.114  27.507  25.011  1.00 57.42           O
HETATM 2341  O   HOH S 273      -6.289  -5.692  27.599  1.00 46.02           O
HETATM 2342  O   HOH S 274     -14.916   9.334  -1.282  1.00 59.72           O
HETATM 2343  O   HOH S 275       5.579 -13.945  13.948  1.00 52.20           O
HETATM 2344  O   HOH S 276       5.228  27.250  21.027  1.00 43.65           O
HETATM 2345  O   HOH S 277      18.741   5.948  23.010  1.00 53.71           O
HETATM 2346  O   HOH S 278      -3.254   2.415  13.592  1.00 42.15           O
HETATM 2348  O   HOH S 280      13.324  13.938  23.041  1.00 44.78           O
HETATM 2349  O   HOH S 281     -11.151  38.866  19.484  1.00 49.85           O
HETATM 2350  O   HOH S 282     -21.017  19.270  16.854  1.00 68.17           O
HETATM 2351  O   HOH S 283      16.542  10.999  21.812  1.00 51.19           O
HETATM 2352  O   HOH S 284       4.684  18.965  11.159  1.00 51.36           O
HETATM 2353  O   HOH S 285     -10.652  36.540   4.565  1.00 44.83           O
HETATM 2354  O   HOH S 286      10.066  -7.789   7.212  1.00 50.87           O
HETATM 2355  O   HOH S 287     -15.897  14.679  26.844  1.00 59.46           O
HETATM 2356  O   HOH S 288       0.002  19.869  33.823  1.00 49.20           O
HETATM 2357  O   HOH S 289      17.837   8.618  22.256  1.00 60.36           O
HETATM 2358  O   HOH S 290      10.325 -11.630  13.910  1.00 37.15           O
HETATM 2359  O   HOH S 291      12.233  13.969   4.969  1.00 45.26           O
HETATM 2360  O   HOH S 292       8.026   3.349  -0.713  1.00 46.61           O
HETATM 2361  O   HOH S 293     -16.082  -4.892  22.518  1.00 61.25           O
HETATM 2362  O   HOH S 294     -17.200  -2.644  23.870  1.00 59.86           O
HETATM 2363  O   HOH S 295      19.399  -7.610  16.089  1.00 53.06           O
HETATM 2364  O   HOH S 296      -7.055  16.430  32.282  1.00 62.01           O
HETATM 2365  O   HOH S 297       1.595 -11.134  12.005  1.00 51.93           O
HETATM 2366  O   HOH S 298     -19.109  32.138  20.979  1.00 55.48           O
HETATM 2367  O   HOH S 299      16.660  10.959   9.716  1.00 56.09           O
HETATM 2368  O   HOH S 300      12.049  16.481   5.499  1.00 50.61           O
HETATM 2369  O   HOH S 301     -20.968  26.572  13.087  1.00 47.61           O
HETATM 2370  O   HOH S 302      -4.515   0.152   1.111  1.00 61.83           O
HETATM 2371  O   HOH S 303      11.378  -5.549   7.022  1.00 66.60           O
HETATM 2372  O   HOH S 304       8.901  27.289  26.656  1.00 54.68           O
HETATM 2373  O   HOH S 305     -17.063  -3.778  15.831  1.00 56.98           O
HETATM 2374  O   HOH S 306       9.201  21.633   8.018  1.00 42.14           O
HETATM 2375  O   HOH S 307      -8.104  23.160  -6.001  1.00 48.40           O
HETATM 2377  O   HOH S 309     -12.581  18.698  29.365  1.00 67.30           O
HETATM 2378  O   HOH S 310      -6.488  21.061  -2.477  1.00 46.69           O
HETATM 2379  O   HOH S 311     -17.221  -6.079  25.012  1.00 62.62           O
HETATM 2380  O   HOH S 312      -2.580  35.629   9.721  1.00 46.00           O
HETATM 2381  O   HOH S 313      19.084 -10.119  15.726  1.00 51.22           O
HETATM 2383  O   HOH S 315      -4.425  21.833  -1.044  1.00 66.35           O
TER    2379      HOH S 315
END
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