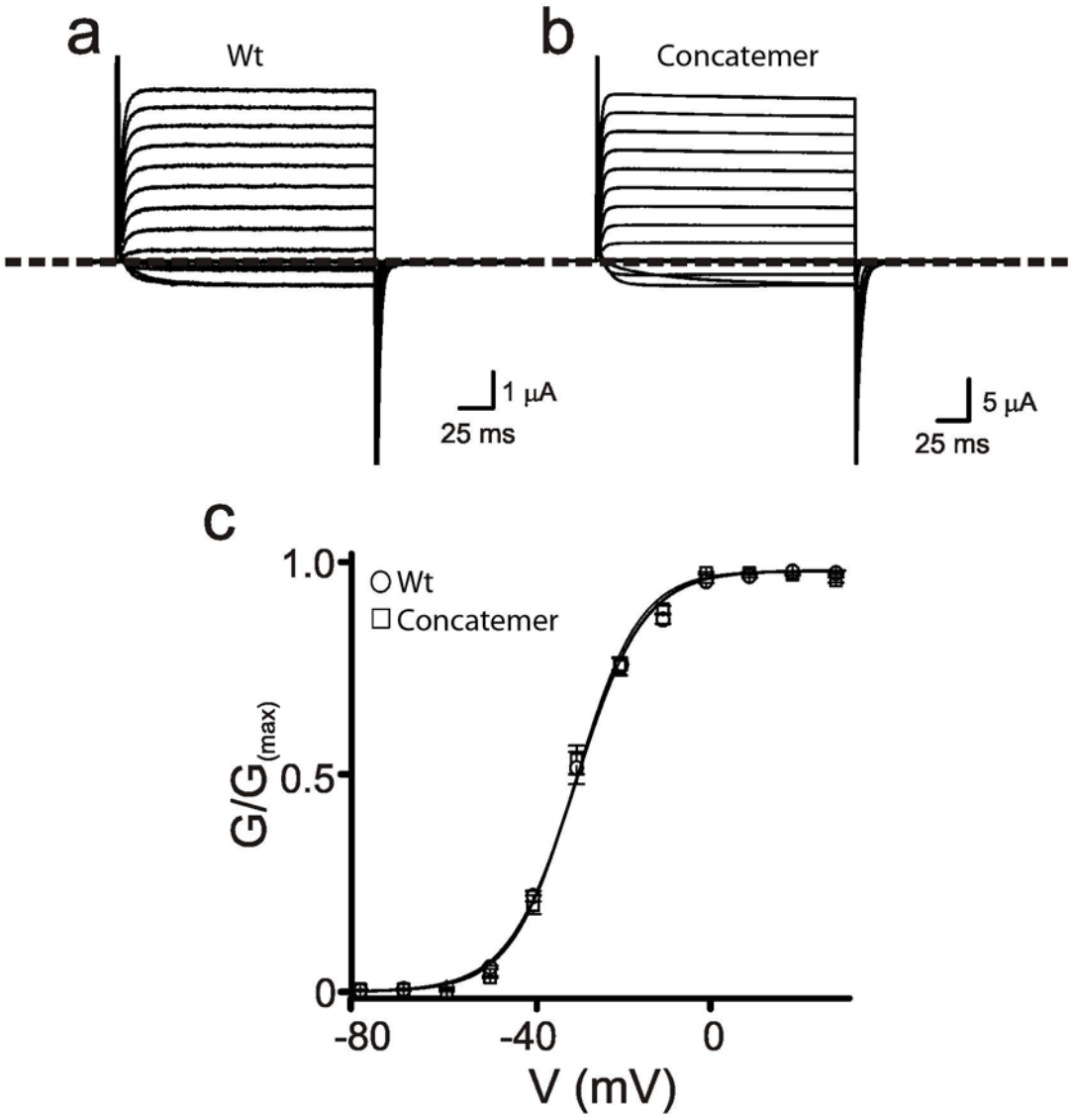
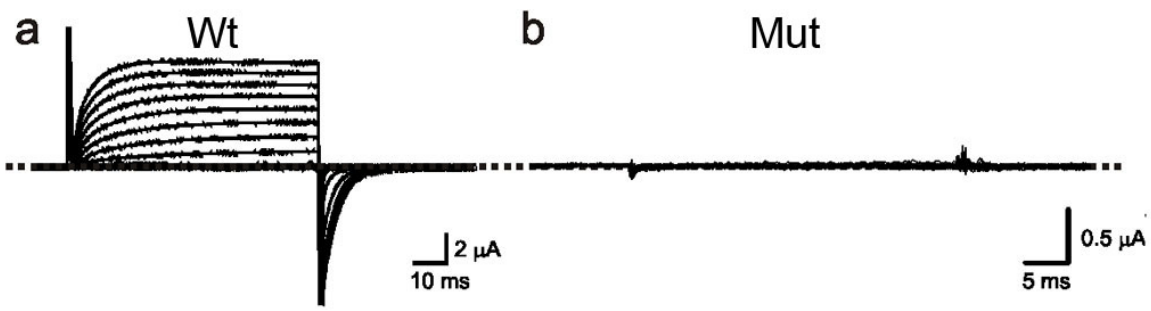


Supplementary Figure 1

Comparison of the tetrameric Shaker channel and a concatemer construct.

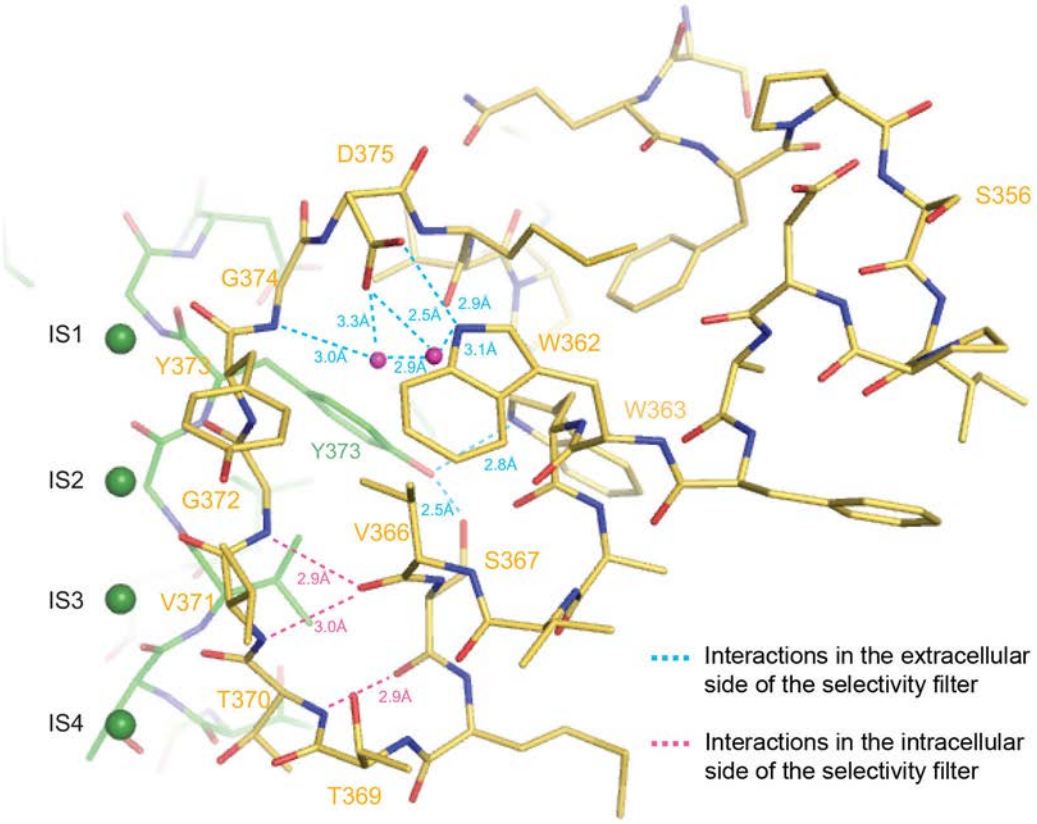
(**a, b)** Currents of tetrameric (**a**) and concatemer (**b**) channels, recorded from oocytes in the presence of 100 mM extracellular K^+, as membrane voltage was stepped from the -80 mV holding potential to 80 mV in 10 mV increments and back to -80 mV. The dashed line identifies the zero current level. (**c**) Normalized tail currents (mean ± s.e.m.; n = 10 - 12) of tetrameric (open circles) and concatemer (open squares) channels plotted against membrane voltage; curves are fits of Boltzmann functions with midpoint voltage $V_{1/2}$ (mean ± s.e.m.) of -30 ± 0.5 mV and apparent valence Z of 3.5 ± 0.3 for tetrameric channels or $V_{1/2}$ of -30 ± 0.6 mV and apparent valence Z of 3.3 ± 0.2 for concatemer channels.



Supplementary Figure 2

Ionic currents of wild-type and mutant Kv1.2 channels, recorded from oocytes in the presence of 100 mM extracellular K^+.

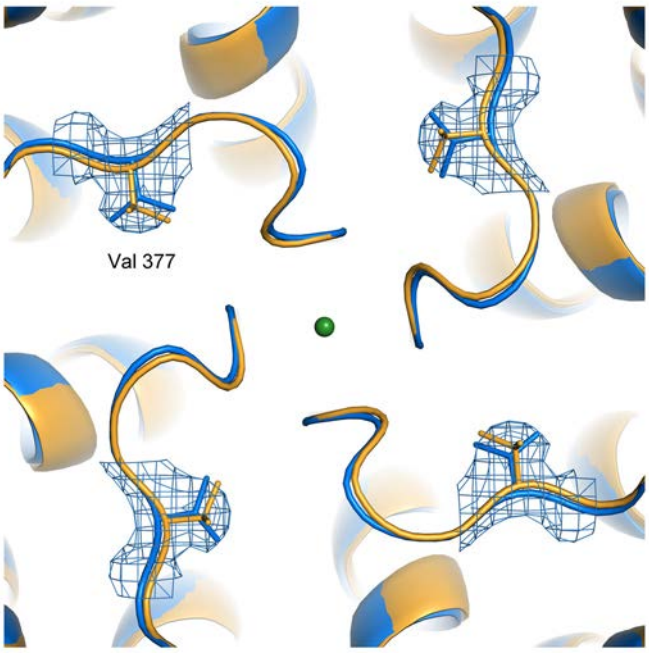
Ionic currents of wild-type (a) and mutant Kv1.2 (b) channels, The mutation in Kv1.2 corresponds to V478W in the Shaker channel. Currents were elicited by stepping membrane voltage from the -80 mV holding potential to 80 mV in 10 mV increments and back to -80 mV. The dashed line identifies the zero current level.



Supplementary Figure 3

Illustration of hydrogen bonds between the selectivity filter and the pore helix of Kv1.2-2.1, as defined by distances between 2.5 and 3.3 Å.

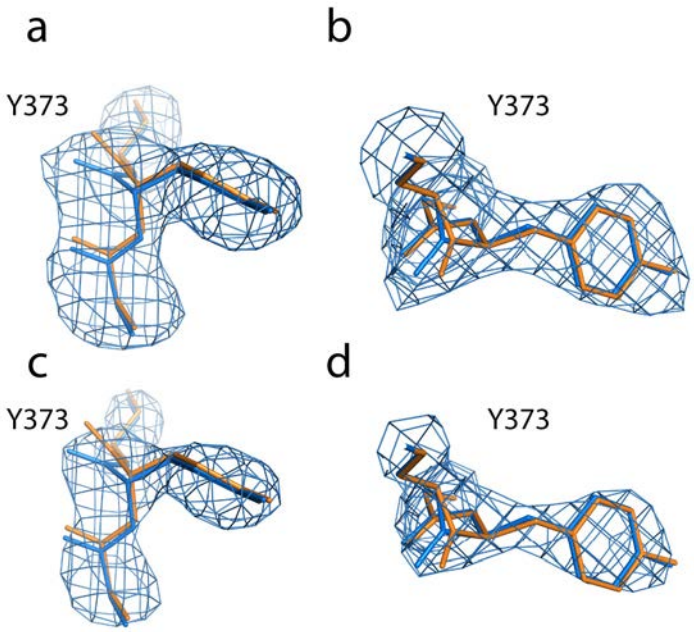
Carbon atoms of wild-type selectivity filter of two contiguous subunits (PDB: 2R9R) are shown as green and yellow sticks, oxygen atoms in red, and nitrogen atoms in blue; K^+ ions and water molecules are shown as green and magenta spheres, respectively. Hydrogen bonds in the extracellular and intracellular regions are indicated by dashed blue and magenta lines, respectively.



Supplementary Figure 4

Comparison of Val377 positions in wild-type and V406W mutant I structures.

Section of super-positioned wild-type (orange) and mutant (blue) structures around the central axis of the selectivity filter, as viewed from the outside of the cell. The part of electron density (2*Fo-Fc* composite-omit map contoured at 1.5 σ) corresponding to Val 377 is shown.



Supplementary Figure 5

Comparison of Tyr373 in wild-type Kv1.2-2.1 and mutant I structures.

Structures of Gly372-Tyr373-Gly374 in wild-type (orange) and mutant (blue) channels are shown in two views (**a** and **c** versus **b** and **d**). The two structures were aligned according to C_α atoms of residues 364-372. The super-positioned *Fo-Fc* omit map of mutant molecule I, contoured at 5 σ (**a**, **b**) and 8 σ (**c**, **d**), was calculated with a model of the mutant molecule where Gly372-Tyr373-Gly374 were omitted.

Supplemental Table 1. Re-refinement statistics of KcsA

Refinement	9.97 - 3.201 (3.311 - 3.201)
No. of reflections	12169
No. of atoms	2985
R_{work} (%)**	24.70 (36.78)
R_{free} (%)**	25.63 (45.91)
Root-mean-square-deviations	
Bond length (Å)	0.011
Angle (°)	1.45
Ramachandran (%)	
Allowed region	100
Disallowed region	0
Rotamer outliers (%)	0

Statistics for structure refinement and Ramachandran analysis are obtained from Phenix.

**R factor = Σ | F(obs) – F(calc) | / Σ F(obs), where part of data set excluded from refinement was the same as 1BL8 and used to calculate R_{free}.

Parentheses indicate values for outer resolution shell.

```
REMARK     PDB of re-refined KcsA against 3.2 angstrom data from PDB 1Bl8
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : PHENIX (1.10.1_2155: ???)
REMARK   3   AUTHORS     : Adams,Afonine,Bunkoczi,Burnley,Chen,Dar,Davis,
REMARK   3               : Draizen,Echols,Gildea,Gros,Grosse-Kunstleve,Headd,
REMARK   3               : Hintze,Hung,Ioerger,McCoy,McKee,Moriarty,Oeffner,
REMARK   3               : Read,Richardson,Richardson,Sacchettini,Sauter,
REMARK   3               : Sobolev,Storoni,Terwilliger,Williams,Zwart
REMARK   3
REMARK   3  REFINEMENT TARGET : ML
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 3.201
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 9.986
REMARK   3   MIN(FOBS/SIGMA_FOBS)              : 1.37
REMARK   3   COMPLETENESS FOR RANGE        (%) : 93.33
REMARK   3   NUMBER OF REFLECTIONS             : 12170
REMARK   3   NUMBER OF REFLECTIONS (NON-ANOMALOUS) : 12170
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.2480
REMARK   3   R VALUE           (WORKING SET) : 0.2469
REMARK   3   FREE R VALUE                    : 0.2564
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 10.39
REMARK   3   FREE R VALUE TEST SET COUNT      : 1264
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT (IN BINS).
REMARK   3   BIN  RESOLUTION RANGE  COMPL.    NWORK NFREE   RWORK  RFREE  CCWORK
CCFREE
REMARK   3     1 9.9863 - 6.1592      0.99     1321   141  0.2031 0.2030   0.930
0.872
REMARK   3     2 6.1592 - 5.0962      1.00     1303   141  0.2561 0.2405   0.857
0.847
REMARK   3     3 5.0962 - 4.5197      0.99     1305   140  0.2214 0.2329   0.905
0.893
REMARK   3     4 4.5197 - 4.1386      0.97     1282   141  0.2288 0.2580   0.867
0.788
REMARK   3     5 4.1386 - 3.8604      1.00     1260   154  0.2580 0.2437   0.838
0.855
REMARK   3     6 3.8604 - 3.6445      1.00     1262   176  0.2862 0.3067   0.842
0.795
REMARK   3     7 3.6445 - 3.4700      0.99     1250   173  0.3109 0.3892   0.761
0.654
REMARK   3     8 3.4700 - 3.3247      0.80     1063    96  0.3345 0.3983   0.711
0.510
REMARK   3     9 3.3247 - 3.2011      0.67      860   102  0.3577 0.4591   0.667
0.350
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED        : FLAT BULK SOLVENT MODEL
REMARK   3   SOLVENT RADIUS     : 1.11
REMARK   3   SHRINKAGE RADIUS   : 0.90
REMARK   3   GRID STEP FACTOR   : 4.00
REMARK   3
REMARK   3  ERROR ESTIMATES.
REMARK   3   COORDINATE ERROR (MAXIMUM-LIKELIHOOD BASED)     : 0.52
REMARK   3   PHASE ERROR (DEGREES, MAXIMUM-LIKELIHOOD BASED) : 35.07
REMARK   3
REMARK   3  STRUCTURE FACTORS CALCULATION ALGORITHM : FFT
REMARK   3
REMARK   3  RESTRAINTS LIBRARY
REMARK   3    GEOSTD + MON.LIB. + CDL v1.2
REMARK   3
```

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REMARK   3  DEVIATIONS FROM IDEAL VALUES.
REMARK   3                RMSD     MAX  COUNT
REMARK   3   BOND      :  0.011   0.086   3042
REMARK   3   ANGLE     :  1.448  10.820   4195
REMARK   3   CHIRALITY :  0.084   0.401    520
REMARK   3   PLANARITY :  0.008   0.081    502
REMARK   3   DIHEDRAL  : 14.929 157.014    955
REMARK   3   MIN NONBONDED DISTANCE : 1.812
REMARK   3
REMARK   3  MOLPROBITY STATISTICS.
REMARK   3   ALL-ATOM CLASHSCORE : 9.07
REMARK   3   RAMACHANDRAN PLOT:
REMARK   3     OUTLIERS : 0.00  %
REMARK   3     ALLOWED  : 0.25  %
REMARK   3     FAVORED  : 99.75 %
REMARK   3   ROTAMER OUTLIERS : 0.00 %
REMARK   3   CBETA DEVIATIONS : 0
REMARK   3
REMARK   3  ATOMIC DISPLACEMENT PARAMETERS.
REMARK   3   WILSON B : 102.29
REMARK   3   RMS(B_ISO_OR_EQUIVALENT_BONDED) : 5.85
REMARK   3   ATOMS          NUMBER OF ATOMS
REMARK   3                    ISO.  ANISO.
REMARK   3    ALL         :   2985    2967
REMARK   3    ALL (NO H)  :   2985    2967
REMARK   3    SOLVENT     :     12       0
REMARK   3    NON-SOLVENT :   2973    2967
REMARK   3    HYDROGENS   :      0       0
REMARK   3
REMARK   3  TLS DETAILS.
REMARK   3   NUMBER OF TLS GROUPS: 16
REMARK   3   ORIGIN: CENTER OF MASS
REMARK   3   TLS GROUP : 1
REMARK   3    SELECTION: chain 'C' and (resid   22  through   61 )
REMARK   3    ORIGIN FOR THE GROUP (A):  55.3222  28.4061  25.1709
REMARK   3    T TENSOR
REMARK   3      T11:   0.7251 T22:   1.3799
REMARK   3      T33:   0.8123 T12:   0.1395
REMARK   3      T13:   0.1614 T23:  -0.0248
REMARK   3    L TENSOR
REMARK   3      L11:   0.1015 L22:   0.4043
REMARK   3      L33:   0.0824 L12:   0.1233
REMARK   3      L13:  -0.1590 L23:   0.1773
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0999 S12:  -0.4311 S13:  -0.4068
REMARK   3      S21:   0.1728 S22:  -0.1706 S23:   0.4448
REMARK   3      S31:  -0.1471 S32:  -0.6221 S33:   0.0000
REMARK   3   TLS GROUP : 2
REMARK   3    SELECTION: chain 'C' and (resid   62  through   73 )
REMARK   3    ORIGIN FOR THE GROUP (A):  55.8507  24.8806  16.7873
REMARK   3    T TENSOR
REMARK   3      T11:   0.7112 T22:   0.9261
REMARK   3      T33:   0.8274 T12:  -0.0298
REMARK   3      T13:   0.1187 T23:   0.0241
REMARK   3    L TENSOR
REMARK   3      L11:   0.0076 L22:   0.0112
REMARK   3      L33:   0.0476 L12:   0.0787
REMARK   3      L13:   0.0284 L23:  -0.0755
REMARK   3    S TENSOR
REMARK   3      S11:   0.1154 S12:  -0.1573 S13:  -0.0599
REMARK   3      S21:   0.3203 S22:  -0.2524 S23:  -0.0383
REMARK   3      S31:  -0.2512 S32:  -1.0487 S33:  -0.0000
REMARK   3   TLS GROUP : 3
```

```
REMARK   3    SELECTION: chain 'C' and (resid   74  through   87 )
REMARK   3    ORIGIN FOR THE GROUP (A):  60.2431  31.1268  13.3600
REMARK   3    T TENSOR
REMARK   3      T11:   0.8798 T22:   0.6250
REMARK   3      T33:   0.9041 T12:   0.0748
REMARK   3      T13:  -0.1156 T23:  -0.1110
REMARK   3    L TENSOR
REMARK   3      L11:   0.0137 L22:  -0.0104
REMARK   3      L33:  -0.0610 L12:  -0.0177
REMARK   3      L13:   0.0334 L23:  -0.0269
REMARK   3    S TENSOR
REMARK   3      S11:   0.0145 S12:  -0.0607 S13:  -0.0490
REMARK   3      S21:  -0.1350 S22:  -0.2604 S23:  -0.4682
REMARK   3      S31:  -0.6131 S32:  -0.6743 S33:  -0.0000
REMARK   3   TLS GROUP : 4
REMARK   3    SELECTION: chain 'C' and (resid   88  through  122 )
REMARK   3    ORIGIN FOR THE GROUP (A):  70.8589  25.6143  33.7053
REMARK   3    T TENSOR
REMARK   3      T11:   0.8096 T22:   0.8925
REMARK   3      T33:   0.5894 T12:   0.0258
REMARK   3      T13:  -0.0031 T23:   0.0137
REMARK   3    L TENSOR
REMARK   3      L11:   0.0989 L22:   0.5790
REMARK   3      L33:   0.3585 L12:   0.3999
REMARK   3      L13:   0.0393 L23:   0.6513
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0913 S12:  -0.4301 S13:   0.2615
REMARK   3      S21:   0.7286 S22:  -0.1817 S23:  -0.0016
REMARK   3      S31:  -0.5909 S32:  -0.1597 S33:   0.0000
REMARK   3   TLS GROUP : 5
REMARK   3    SELECTION: chain 'B' and (resid   22  through   61 )
REMARK   3    ORIGIN FOR THE GROUP (A):  73.5828  44.2112  17.5302
REMARK   3    T TENSOR
REMARK   3      T11:   1.4952 T22:  -0.3590
REMARK   3      T33:   0.8742 T12:  -0.4244
REMARK   3      T13:  -0.4471 T23:  -0.4010
REMARK   3    L TENSOR
REMARK   3      L11:  -0.0503 L22:  -0.0712
REMARK   3      L33:   0.0251 L12:   0.1793
REMARK   3      L13:  -0.1086 L23:  -0.0713
REMARK   3    S TENSOR
REMARK   3      S11:   0.2635 S12:   1.8073 S13:   2.1370
REMARK   3      S21:  -0.0258 S22:  -0.5034 S23:  -0.6945
REMARK   3      S31:  -0.0411 S32:   0.0386 S33:   0.0000
REMARK   3   TLS GROUP : 6
REMARK   3    SELECTION: chain 'B' and (resid   62  through   73 )
REMARK   3    ORIGIN FOR THE GROUP (A):  67.4269  40.4189  12.1617
REMARK   3    T TENSOR
REMARK   3      T11:   1.0671 T22:   0.6264
REMARK   3      T33:   1.0642 T12:   0.0383
REMARK   3      T13:  -0.0312 T23:  -0.0643
REMARK   3    L TENSOR
REMARK   3      L11:   0.0280 L22:  -0.0276
REMARK   3      L33:   0.0277 L12:  -0.0782
REMARK   3      L13:   0.0391 L23:   0.0121
REMARK   3    S TENSOR
REMARK   3      S11:  -0.4418 S12:  -0.2871 S13:   0.6554
REMARK   3      S21:  -0.2459 S22:   0.3272 S23:  -0.0903
REMARK   3      S31:  -0.5435 S32:   0.0946 S33:   0.0000
REMARK   3   TLS GROUP : 7
REMARK   3    SELECTION: chain 'B' and (resid   74  through  87 )
REMARK   3    ORIGIN FOR THE GROUP (A):  72.7960  35.1351   8.4253
REMARK   3    T TENSOR
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REMARK   3      T11:   0.7354 T22:   0.7060
REMARK   3      T33:   0.6916 T12:  -0.2553
REMARK   3      T13:   0.0458 T23:   0.1317
REMARK   3    L TENSOR
REMARK   3      L11:   0.0065 L22:  -0.0428
REMARK   3      L33:   0.0447 L12:   0.0225
REMARK   3      L13:   0.1039 L23:  -0.1272
REMARK   3    S TENSOR
REMARK   3      S11:  -0.4429 S12:  -0.1789 S13:  -0.2110
REMARK   3      S21:   0.0094 S22:  -0.0015 S23:  -0.1251
REMARK   3      S31:  -1.0793 S32:   0.2545 S33:  -0.0000
REMARK   3   TLS GROUP : 8
REMARK   3    SELECTION: chain 'D' and (resid   22  through   61 )
REMARK   3    ORIGIN FOR THE GROUP (A):  88.0550  24.6149  12.2850
REMARK   3    T TENSOR
REMARK   3      T11:   0.2461 T22:   1.6998
REMARK   3      T33:   0.8444 T12:  -0.1965
REMARK   3      T13:   0.0750 T23:   0.1144
REMARK   3    L TENSOR
REMARK   3      L11:   0.1603 L22:   0.0641
REMARK   3      L33:  -0.0636 L12:  -0.4313
REMARK   3      L13:   0.1782 L23:   0.1829
REMARK   3    S TENSOR
REMARK   3      S11:   0.6294 S12:   0.1147 S13:   0.3720
REMARK   3      S21:  -1.2228 S22:  -1.3443 S23:  -0.4183
REMARK   3      S31:   0.2671 S32:   0.5484 S33:   0.0000
REMARK   3   TLS GROUP : 9
REMARK   3    SELECTION: chain 'D' and (resid   62  through   73 )
REMARK   3    ORIGIN FOR THE GROUP (A):  82.0363  28.1833   6.5590
REMARK   3    T TENSOR
REMARK   3      T11:   0.6148 T22:   0.8851
REMARK   3      T33:   0.8539 T12:  -0.1898
REMARK   3      T13:   0.0610 T23:   0.1133
REMARK   3    L TENSOR
REMARK   3      L11:  -0.0099 L22:   0.0733
REMARK   3      L33:   0.0629 L12:   0.0336
REMARK   3      L13:   0.0887 L23:  -0.0144
REMARK   3    S TENSOR
REMARK   3      S11:   0.2391 S12:   0.5723 S13:  -0.0616
REMARK   3      S21:   0.2196 S22:  -0.2567 S23:   0.0478
REMARK   3      S31:   0.3024 S32:   0.9466 S33:   0.0000
REMARK   3   TLS GROUP : 10
REMARK   3    SELECTION: chain 'D' and (resid   74  through   87 )
REMARK   3    ORIGIN FOR THE GROUP (A):  76.5107  21.8383   6.9020
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REMARK   3      T11:   0.8064 T22:   0.5891
REMARK   3      T33:   0.7861 T12:   0.0055
REMARK   3      T13:   0.0292 T23:   0.0067
REMARK   3    L TENSOR
REMARK   3      L11:   0.0812 L22:   0.0590
REMARK   3      L33:   0.0391 L12:   0.1990
REMARK   3      L13:  -0.0918 L23:  -0.0687
REMARK   3    S TENSOR
REMARK   3      S11:  -0.2009 S12:   0.3335 S13:  -0.2406
REMARK   3      S21:  -0.0769 S22:  -0.1698 S23:  -0.4175
REMARK   3      S31:  -0.3679 S32:   0.4977 S33:  -0.0000
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REMARK   3    SELECTION: chain 'D' and (resid   88  through  122 )
REMARK   3    ORIGIN FOR THE GROUP (A):  82.5410  26.7742  28.3371
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REMARK   3      T11:   0.6234 T22:   0.7898
REMARK   3      T33:   0.5807 T12:  -0.0450
REMARK   3      T13:  -0.0966 T23:   0.0053
```

```
REMARK   3    L TENSOR
REMARK   3      L11:   0.1300 L22:   0.3380
REMARK   3      L33:   0.1239 L12:  -0.1666
REMARK   3      L13:   0.0910 L23:  -0.3731
REMARK   3    S TENSOR
REMARK   3      S11:  -0.1106 S12:  -0.2913 S13:  -0.3196
REMARK   3      S21:   0.4349 S22:  -0.2349 S23:  -0.0563
REMARK   3      S31:   0.3616 S32:   0.7183 S33:  -0.0000
REMARK   3   TLS GROUP : 12
REMARK   3    SELECTION: chain 'E' and (resid   22  through   61 )
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REMARK   3      T11:   1.1832 T22:   0.7927
REMARK   3      T33:   0.8028 T12:  -0.2319
REMARK   3      T13:  -0.1984 T23:   0.2158
REMARK   3    L TENSOR
REMARK   3      L11:   0.1848 L22:   0.1950
REMARK   3      L33:   0.0764 L12:  -0.1402
REMARK   3      L13:  -0.2311 L23:   0.1243
REMARK   3    S TENSOR
REMARK   3      S11:   0.2992 S12:   0.0172 S13:  -0.1520
REMARK   3      S21:  -0.1222 S22:  -0.2054 S23:   0.0314
REMARK   3      S31:   0.9841 S32:   0.2715 S33:   0.0000
REMARK   3   TLS GROUP : 13
REMARK   3    SELECTION: chain 'E' and (resid   62  through   73 )
REMARK   3    ORIGIN FOR THE GROUP (A):  70.3907  12.5331  11.1227
REMARK   3    T TENSOR
REMARK   3      T11:   1.0361 T22:   0.4538
REMARK   3      T33:   0.9133 T12:   0.0240
REMARK   3      T13:  -0.1110 T23:   0.1211
REMARK   3    L TENSOR
REMARK   3      L11:   0.0370 L22:  -0.0123
REMARK   3      L33:   0.0863 L12:  -0.0593
REMARK   3      L13:  -0.0088 L23:   0.0112
REMARK   3    S TENSOR
REMARK   3      S11:   0.3888 S12:   0.3021 S13:  -0.0894
REMARK   3      S21:  -0.0579 S22:   0.3186 S23:   0.3895
REMARK   3      S31:   1.0528 S32:   0.0516 S33:   0.0000
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REMARK   3      T11:   0.5678 T22:   1.1042
REMARK   3      T33:   0.6448 T12:  -0.2473
REMARK   3      T13:   0.1249 T23:  -0.0149
REMARK   3    L TENSOR
REMARK   3      L11:   0.0046 L22:  -0.0008
REMARK   3      L33:  -0.0488 L12:  -0.0063
REMARK   3      L13:  -0.0122 L23:   0.0485
REMARK   3    S TENSOR
REMARK   3      S11:  -0.0902 S12:   0.3684 S13:   0.0997
REMARK   3      S21:   0.0349 S22:  -0.0892 S23:   0.1046
REMARK   3      S31:   0.0318 S32:  -0.0662 S33:   0.0000
REMARK   3   TLS GROUP : 15
REMARK   3    SELECTION: chain 'E' and (resid   86  through  122 )
REMARK   3    ORIGIN FOR THE GROUP (A):  75.7420  19.6197  30.0097
REMARK   3    T TENSOR
REMARK   3      T11:   0.7497 T22:   0.9444
REMARK   3      T33:   0.6931 T12:  -0.2296
REMARK   3      T13:  -0.1583 T23:   0.1295
REMARK   3    L TENSOR
REMARK   3      L11:   0.0255 L22:   0.4388
REMARK   3      L33:   0.4565 L12:   0.2876
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REMARK   3      L13:  -0.2722 L23:  -0.5836
REMARK   3    S TENSOR
REMARK   3      S11:   0.0484 S12:  -0.7261 S13:  -0.6454
REMARK   3      S21:   0.1256 S22:   0.0976 S23:   0.0240
REMARK   3      S31:   0.1697 S32:  -0.2066 S33:  -0.0000
REMARK   3   TLS GROUP : 16
REMARK   3    SELECTION: chain 'B' and (resid  88 through  122)
REMARK   3    ORIGIN FOR THE GROUP (A):  76.1175  33.1040  30.8525
REMARK   3    T TENSOR
REMARK   3      T11:   0.8594 T22:   0.7645
REMARK   3      T33:   0.5409 T12:  -0.1939
REMARK   3      T13:   0.0048 T23:  -0.0093
REMARK   3    L TENSOR
REMARK   3      L11:   0.2656 L22:   0.1532
REMARK   3      L33:   0.1013 L12:   0.1492
REMARK   3      L13:   0.3415 L23:   0.1532
REMARK   3    S TENSOR
REMARK   3      S11:  -0.1374 S12:  -0.2984 S13:   0.2428
REMARK   3      S21:   0.0243 S22:  -0.0828 S23:  -0.0338
REMARK   3      S31:   0.0257 S32:   0.4600 S33:  -0.0000
REMARK   3
CRYST1  128.780   68.930  112.040  90.00 124.63  90.00 C 1 2 1
SCALE1      0.007765  0.000000  0.005363        0.00000
SCALE2      0.000000  0.014507  0.000000        0.00000
SCALE3      0.000000  0.000000  0.010847        0.00000
ATOM      1  N   SER C  22      65.055  19.287  49.655  1.00171.67           N
ANISOU    1  N   SER C  22    19941  26491  18796   -114   3426   3076       N
ATOM      2  CA  SER C  22      65.410  19.714  48.304  1.00166.69           C
ANISOU    2  CA  SER C  22    19338  25749  18248    -49   3294   2963       C
ATOM      3  CB  SER C  22      64.216  19.554  47.361  1.00162.13           C
ANISOU    3  CB  SER C  22    18599  25196  17805    -32   3319   2809       C
ATOM      4  C   SER C  22      65.945  21.148  48.272  1.00159.92           C
ANISOU    4  C   SER C  22    18630  24906  17224     81   3175   2877       C
ATOM      5  O   SER C  22      65.275  22.084  48.703  1.00156.93           O
ANISOU    5  O   SER C  22    18255  24658  16712    169   3191   2776       O
ATOM      6  N   ALA C  23      67.160  21.300  47.756  1.00149.72           N
ANISOU    6  N   ALA C  23    17463  23479  15945     92   3059   2917       N
ATOM      7  CA  ALA C  23      67.815  22.599  47.671  1.00148.11           C
ANISOU    7  CA  ALA C  23    17412  23269  15594    209   2941   2845       C
ATOM      8  CB  ALA C  23      69.315  22.433  47.522  1.00146.85           C
ANISOU    8  CB  ALA C  23    17391  22961  15443    178   2850   2959       C
ATOM      9  C   ALA C  23      67.261  23.469  46.562  1.00150.11           C
ANISOU    9  C   ALA C  23    17644  23522  15869    320   2860   2642       C
ATOM     10  O   ALA C  23      66.699  22.978  45.602  1.00158.21           O
ANISOU   10  O   ALA C  23    18558  24502  17054    299   2861   2569       O
ATOM     11  N   LEU C  24      67.442  24.772  46.706  1.00146.04           N
ANISOU   11  N   LEU C  24    17239  23057  15191    439   2787   2552       N
ATOM     12  CA  LEU C  24      66.914  25.769  45.774  1.00144.11           C
ANISOU   12  CA  LEU C  24    16991  22828  14937    560   2707   2355       C
ATOM     13  CB  LEU C  24      67.580  27.128  46.017  1.00134.78           C
ANISOU   13  CB  LEU C  24    15977  21664  13568    675   2613   2303       C
ATOM     14  CG  LEU C  24      67.140  28.318  45.152  1.00131.20           C
ANISOU   14  CG  LEU C  24    15547  21228  13074    814   2523   2102       C
ATOM     15  CD1 LEU C  24      65.710  28.757  45.437  1.00137.14           C
ANISOU   15  CD1 LEU C  24    16182  22143  13782    871   2597   1981       C
ATOM     16  CD2 LEU C  24      68.108  29.488  45.281  1.00129.54           C
ANISOU   16  CD2 LEU C  24    15523  20992  12703    909   2420   2078       C
ATOM     17  C   LEU C  24      67.080  25.387  44.301  1.00145.19           C
ANISOU   17  C   LEU C  24    17093  22818  15253    550   2626   2288       C
ATOM     18  O   LEU C  24      66.104  25.453  43.543  1.00145.88           O
ANISOU   18  O   LEU C  24    17070  22934  15424    585   2629   2153       O
ATOM     19  N   HIS C  25      68.255  24.926  43.921  1.00143.15           N
ANISOU   19  N   HIS C  25    16920  22408  15062    495   2563   2384       N
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ATOM     20  CA  HIS C  25      68.447  24.615  42.532  1.00138.62           C
ANISOU   20  CA  HIS C  25    16324  21693  14651    486   2486   2318       C
ATOM     21  CB  HIS C  25      69.890  24.190  42.258  1.00130.73           C
ANISOU   21  CB  HIS C  25    15441  20525  13706    427   2416   2435       C
ATOM     22  CG  HIS C  25      70.464  23.250  43.267  1.00132.93           C
ANISOU   22  CG  HIS C  25    15725  20794  13989    312   2494   2636       C
ATOM     23  ND1 HIS C  25      71.278  23.670  44.290  1.00130.57           N
ANISOU   23  ND1 HIS C  25    15554  20523  13534    325   2484   2736       N
ATOM     24  CE1 HIS C  25      71.654  22.628  45.004  1.00133.92           C
ANISOU   24  CE1 HIS C  25    15954  20926  14003    210   2558   2911       C
ATOM     25  NE2 HIS C  25      71.127  21.546  44.469  1.00128.98           N
ANISOU   25  NE2 HIS C  25    15189  20257  13559    122   2618   2928       N
ATOM     26  CD2 HIS C  25      70.382  21.907  43.378  1.00132.17           C
ANISOU   26  CD2 HIS C  25    15526  20657  14037    183   2579   2758       C
ATOM     27  C   HIS C  25      67.479  23.584  42.016  1.00137.16           C
ANISOU   27  C   HIS C  25    15957  21512  14647    409   2564   2298       C
ATOM     28  O   HIS C  25      66.888  23.791  40.972  1.00140.14           O
ANISOU   28  O   HIS C  25    16272  21867  15107    455   2519   2157       O
ATOM     29  N   TRP C  26      67.265  22.507  42.745  1.00134.05           N
ANISOU   29  N   TRP C  26    15474  21150  14310    296   2681   2431       N
ATOM     30  CA  TRP C  26      66.338  21.499  42.280  1.00137.37           C
ANISOU   30  CA  TRP C  26    15718  21574  14903    219   2762   2413       C
ATOM     31  CB  TRP C  26      66.382  20.264  43.154  1.00141.59           C
ANISOU   31  CB  TRP C  26    16184  22120  15493     84   2887   2591       C
ATOM     32  CG  TRP C  26      67.677  19.532  43.128  1.00138.60           C
ANISOU   32  CG  TRP C  26    15889  21592  15180     -4   2855   2749       C
ATOM     33  CD1 TRP C  26      68.537  19.379  44.156  1.00144.88           C
ANISOU   33  CD1 TRP C  26    16782  22384  15882    -46   2875   2907       C
ATOM     34  NE1 TRP C  26      69.610  18.632  43.770  1.00145.15           N
ANISOU   34  NE1 TRP C  26    16865  22259  16026   -126   2834   3021       N
ATOM     35  CE2 TRP C  26      69.453  18.287  42.460  1.00136.89           C
ANISOU   35  CE2 TRP C  26    15755  21110  15148   -140   2790   2936       C
ATOM     36  CD2 TRP C  26      68.244  18.835  42.027  1.00136.46           C
ANISOU   36  CD2 TRP C  26    15608  21155  15086    -64   2800   2765       C
ATOM     37  CE3 TRP C  26      67.846  18.624  40.717  1.00143.37           C
ANISOU   37  CE3 TRP C  26    16405  21954  16115    -62   2759   2651       C
ATOM     38  CZ3 TRP C  26      68.660  17.890  39.897  1.00147.58           C
ANISOU   38  CZ3 TRP C  26    16958  22317  16800   -137   2713   2709       C
ATOM     39  CH2 TRP C  26      69.859  17.359  40.357  1.00140.60           C
ANISOU   39  CH2 TRP C  26    16165  21335  15922   -211   2706   2879       C
ATOM     40  CZ2 TRP C  26      70.272  17.548  41.634  1.00134.90           C
ANISOU   40  CZ2 TRP C  26    15518  20684  15052   -213   2742   2995       C
ATOM     41  C   TRP C  26      64.928  22.051  42.183  1.00137.56           C
ANISOU   41  C   TRP C  26    15629  21738  14900    295   2801   2252       C
ATOM     42  O   TRP C  26      64.173  21.670  41.308  1.00133.16           O
ANISOU   42  O   TRP C  26    14949  21164  14481    284   2809   2160       O
ATOM     43  N   ARG C  27      64.562  22.930  43.105  1.00140.74           N
ANISOU   43  N   ARG C  27    16068  22280  15125    370   2828   2220       N
ATOM     44  CA  ARG C  27      63.216  23.485  43.110  1.00141.63           C
ANISOU   44  CA  ARG C  27    16075  22534  15206    444   2870   2070       C
ATOM     45  CB  ARG C  27      62.946  24.203  44.429  1.00153.73           C
ANISOU   45  CB  ARG C  27    17651  24218  16542    492   2931   2087       C
ATOM     46  CG  ARG C  27      63.025  23.295  45.637  1.00159.19           C
ANISOU   46  CG  ARG C  27    18312  24957  17217    378   3059   2262       C
ATOM     47  CD  ARG C  27      62.593  24.021  46.893  1.00160.27           C
ANISOU   47  CD  ARG C  27    18478  25254  17164    426   3127   2260       C
ATOM     48  NE  ARG C  27      61.216  24.490  46.793  1.00169.89           N
ANISOU   48  NE  ARG C  27    19575  26599  18378    491   3174   2102       N
ATOM     49  CZ  ARG C  27      60.574  25.119  47.771  1.00171.02           C
ANISOU   49  CZ  ARG C  27    19711  26892  18377    537   3245   2070       C
ATOM     50  NH1 ARG C  27      61.185  25.350  48.925  1.00170.68           N
ANISOU   50  NH1 ARG C  27    19777  26893  18179    522   3275   2185       N
ATOM     51  NH2 ARG C  27      59.319  25.510  47.597  1.00172.80           N
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ANISOU   51  NH2 ARG C  27    19818  27223  18615    595   3285   1921       N
ATOM     52  C   ARG C  27      63.056  24.440  41.939  1.00137.60           C
ANISOU   52  C   ARG C  27    15595  21985  14701    563   2746   1888       C
ATOM     53  O   ARG C  27      62.048  24.414  41.230  1.00142.41           O
ANISOU   53  O   ARG C  27    16081  22626  15401    590   2752   1760       O
ATOM     54  N   ALA C  28      64.076  25.267  41.732  1.00138.06           N
ANISOU   54  N   ALA C  28    15821  21971  14663    632   2631   1881       N
ATOM     55  CA  ALA C  28      64.076  26.233  40.640  1.00135.96           C
ANISOU   55  CA  ALA C  28    15612  21657  14389    747   2504   1717       C
ATOM     56  CB  ALA C  28      65.297  27.138  40.736  1.00130.21           C
ANISOU   56  CB  ALA C  28    15085  20865  13526    814   2399   1738       C
ATOM     57  C   ALA C  28      64.030  25.512  39.286  1.00126.96           C
ANISOU   57  C   ALA C  28    14401  20388  13452    700   2458   1673       C
ATOM     58  O   ALA C  28      63.381  25.978  38.343  1.00124.94           O
ANISOU   58  O   ALA C  28    14098  20132  13240    774   2400   1515       O
ATOM     59  N   ALA C  29      64.724  24.375  39.209  1.00128.52           N
ANISOU   59  N   ALA C  29    14590  20472  13769    576   2485   1814       N
ATOM     60  CA  ALA C  29      64.773  23.559  37.998  1.00119.25           C
ANISOU   60  CA  ALA C  29    13350  19166  12793    513   2452   1794       C
ATOM     61  CB  ALA C  29      65.693  22.368  38.192  1.00119.28           C
ANISOU   61  CB  ALA C  29    13368  19055  12899    375   2491   1977       C
ATOM     62  C   ALA C  29      63.388  23.091  37.590  1.00121.08           C
ANISOU   62  C   ALA C  29    13391  19473  13142    496   2521   1699       C
ATOM     63  O   ALA C  29      62.949  23.344  36.467  1.00128.75           O
ANISOU   63  O   ALA C  29    14323  20406  14191    546   2452   1560       O
ATOM     64  N   GLY C  30      62.710  22.403  38.503  1.00121.64           N
ANISOU   64  N   GLY C  30    13346  19649  13224    425   2657   1773       N
ATOM     65  CA  GLY C  30      61.365  21.930  38.254  1.00118.56           C
ANISOU   65  CA  GLY C  30    12768  19342  12938    404   2736   1689       C
ATOM     66  C   GLY C  30      60.459  23.100  37.922  1.00120.60           C
ANISOU   66  C   GLY C  30    13006  19701  13118    543   2685   1497       C
ATOM     67  O   GLY C  30      59.592  22.997  37.050  1.00128.62           O
ANISOU   67  O   GLY C  30    13906  20722  14242    562   2672   1372       O
ATOM     68  N   ALA C  31      60.671  24.217  38.615  1.00119.24           N
ANISOU   68  N   ALA C  31    12945  19604  12755    640   2654   1474       N
ATOM     69  CA  ALA C  31      59.876  25.418  38.395  1.00122.19           C
ANISOU   69  CA  ALA C  31    13315  20077  13037    779   2605   1297       C
ATOM     70  CB  ALA C  31      60.266  26.501  39.380  1.00115.94           C
ANISOU   70  CB  ALA C  31    12655  19366  12030    863   2591   1311       C
ATOM     71  C   ALA C  31      60.032  25.922  36.965  1.00129.00           C
ANISOU   71  C   ALA C  31    14219  20833  13962    853   2466   1163       C
ATOM     72  O   ALA C  31      59.046  26.263  36.307  1.00132.20           O
ANISOU   72  O   ALA C  31    14531  21286  14411    918   2443   1010       O
ATOM     73  N   ALA C  32      61.271  25.958  36.487  1.00124.63           N
ANISOU   73  N   ALA C  32    13807  20134  13413    842   2373   1220       N
ATOM     74  CA  ALA C  32      61.547  26.435  35.136  1.00117.46           C
ANISOU   74  CA  ALA C  32    12959  19111  12558    907   2239   1102       C
ATOM     75  CB  ALA C  32      63.055  26.442  34.862  1.00106.27           C
ANISOU   75  CB  ALA C  32    11714  17537  11129    881   2155   1193       C
ATOM     76  C   ALA C  32      60.827  25.567  34.115  1.00120.64           C
ANISOU   76  C   ALA C  32    13210  19467  13160    847   2251   1042       C
ATOM     77  O   ALA C  32      60.137  26.082  33.233  1.00125.22           O
ANISOU   77  O   ALA C  32    13747  20058  13771    928   2187    884       O
ATOM     78  N   THR C  33      60.989  24.252  34.251  1.00117.35           N
ANISOU   78  N   THR C  33    12712  18999  12875    707   2335   1171       N
ATOM     79  CA  THR C  33      60.341  23.289  33.366  1.00114.22           C
ANISOU   79  CA  THR C  33    12166  18558  12677    633   2362   1133       C
ATOM     80  CB  THR C  33      60.603  21.860  33.807  1.00105.23           C
ANISOU   80  CB  THR C  33    10950  17376  11656    474   2473   1301       C
ATOM     81  OG1 THR C  33      62.006  21.602  33.706  1.00106.83           O
ANISOU   81  OG1 THR C  33    11292  17432  11866    422   2421   1422       O
ATOM     82  CG2 THR C  33      59.846  20.889  32.917  1.00105.73           C
ANISOU   82  CG2 THR C  33    10848  17404  11920    400   2509   1253       C
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ATOM     83  C   THR C  33      58.841  23.505  33.293  1.00121.75           C
ANISOU   83  C   THR C  33    12961  19650  13649    686   2408    993       C
ATOM     84  O   THR C  33      58.262  23.573  32.205  1.00124.08           O
ANISOU   84  O   THR C  33    13190  19916  14040    720   2350    862       O
ATOM     85  N   VAL C  34      58.211  23.600  34.459  1.00127.20           N
ANISOU   85  N   VAL C  34    13590  20490  14250    691   2513   1022       N
ATOM     86  CA  VAL C  34      56.778  23.816  34.512  1.00132.69           C
ANISOU   86  CA  VAL C  34    14133  21324  14957    741   2566    894       C
ATOM     87  CB  VAL C  34      56.251  23.766  35.954  1.00129.27           C
ANISOU   87  CB  VAL C  34    13645  21045  14428    721   2700    960       C
ATOM     88  CG1 VAL C  34      54.766  24.094  35.982  1.00134.31           C
ANISOU   88  CG1 VAL C  34    14130  21826  15075    782   2749    813       C
ATOM     89  CG2 VAL C  34      56.516  22.402  36.562  1.00125.79           C
ANISOU   89  CG2 VAL C  34    13142  20577  14077    565   2822   1134       C
ATOM     90  C   VAL C  34      56.444  25.158  33.874  1.00133.18           C
ANISOU   90  C   VAL C  34    14252  21415  14934    897   2447    715       C
ATOM     91  O   VAL C  34      55.497  25.269  33.089  1.00136.66           O
ANISOU   91  O   VAL C  34    14585  21884  15455    941   2420    573       O
ATOM     92  N   LEU C  35      57.273  26.156  34.147  1.00133.07           N
ANISOU   92  N   LEU C  35    14413  21383  14763    979   2369    722       N
ATOM     93  CA  LEU C  35      57.038  27.477  33.603  1.00130.91           C
ANISOU   93  CA  LEU C  35    14211  21135  14396   1131   2256    560       C
ATOM     94  CB  LEU C  35      57.972  28.504  34.253  1.00129.83           C
ANISOU   94  CB  LEU C  35    14264  21000  14065   1207   2204    599       C
ATOM     95  CG  LEU C  35      57.775  29.960  33.814  1.00135.35           C
ANISOU   95  CG  LEU C  35    15050  21732  14646   1370   2093    437       C
ATOM     96  CD1 LEU C  35      56.331  30.394  34.047  1.00135.51           C
ANISOU   96  CD1 LEU C  35    14930  21911  14647   1441   2143    307       C
ATOM     97  CD2 LEU C  35      58.756  30.885  34.541  1.00128.65           C
ANISOU   97  CD2 LEU C  35    14389  20886  13608   1431   2055    490       C
ATOM     98  C   LEU C  35      57.214  27.453  32.081  1.00125.66           C
ANISOU   98  C   LEU C  35    13563  20335  13848   1150   2136    466       C
ATOM     99  O   LEU C  35      56.545  28.202  31.366  1.00123.58           O
ANISOU   99  O   LEU C  35    13278  20100  13579   1255   2062    304       O
ATOM    100  N   LEU C  36      58.111  26.600  31.595  1.00124.87           N
ANISOU  100  N   LEU C  36    13504  20086  13854   1049   2118    568       N
ATOM    101  CA  LEU C  36      58.385  26.470  30.158  1.00116.84           C
ANISOU  101  CA  LEU C  36    12512  18926  12956   1049   2010    494       C
ATOM    102  CB  LEU C  36      59.639  25.640  29.924  1.00115.84           C
ANISOU  102  CB  LEU C  36    12468  18637  12908    937   1999    638       C
ATOM    103  CG  LEU C  36      60.047  25.501  28.465  1.00108.20           C
ANISOU  103  CG  LEU C  36    11543  17509  12058    930   1889    572       C
ATOM    104  CD1 LEU C  36      60.177  26.862  27.823  1.00 96.06           C
ANISOU  104  CD1 LEU C  36    10133  15952  10411   1078   1753    428       C
ATOM    105  CD2 LEU C  36      61.346  24.728  28.341  1.00106.70           C
ANISOU  105  CD2 LEU C  36    11444  17161  11937    819   1883    720       C
ATOM    106  C   LEU C  36      57.278  25.931  29.268  1.00110.11           C
ANISOU  106  C   LEU C  36    11487  18087  12263   1029   2020    387       C
ATOM    107  O   LEU C  36      57.035  26.474  28.201  1.00107.52           O
ANISOU  107  O   LEU C  36    11176  17714  11961   1106   1914    249       O
ATOM    108  N   VAL C  37      56.602  24.873  29.690  1.00111.01           N
ANISOU  108  N   VAL C  37    11436  18262  12483    927   2145    446       N
ATOM    109  CA  VAL C  37      55.519  24.350  28.868  1.00107.34           C
ANISOU  109  CA  VAL C  37    10800  17815  12171    906   2159    341       C
ATOM    110  CB  VAL C  37      55.015  22.950  29.234  1.00107.08           C
ANISOU  110  CB  VAL C  37    10595  17809  12281    763   2300    433       C
ATOM    111  CG1 VAL C  37      53.814  22.597  28.376  1.00109.89           C
ANISOU  111  CG1 VAL C  37    10777  18198  12778    763   2304    300       C
ATOM    112  CG2 VAL C  37      56.103  21.915  29.073  1.00101.98           C
ANISOU  112  CG2 VAL C  37    10127  17142  11858    631   2318    589       C
ATOM    113  C   VAL C  37      54.448  25.409  28.821  1.00105.76           C
ANISOU  113  C   VAL C  37    10551  17743  11889   1044   2123    170       C
ATOM    114  O   VAL C  37      53.667  25.469  27.902  1.00108.02           O
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ANISOU  114  O   VAL C  37    10748  18031  12262   1082   2075     37       O
ATOM    115  N   ILE C  38      54.403  26.239  29.844  1.00115.53           N
ANISOU  115  N   ILE C  38    11846  19090  12959   1119   2150    177       N
ATOM    116  CA  ILE C  38      53.468  27.341  29.886  1.00117.78           C
ANISOU  116  CA  ILE C  38    12102  19498  13152   1257   2116     20       C
ATOM    117  CB  ILE C  38      53.464  27.987  31.271  1.00122.02           C
ANISOU  117  CB  ILE C  38    12686  20162  13514   1302   2185     68       C
ATOM    118  CG1 ILE C  38      52.912  26.980  32.274  1.00119.40           C
ANISOU  118  CG1 ILE C  38    12211  19922  13235   1190   2351    170       C
ATOM    119  CD1 ILE C  38      53.090  27.381  33.710  1.00124.99           C
ANISOU  119  CD1 ILE C  38    12975  20735  13781   1201   2433    256       C
ATOM    120  CG2 ILE C  38      52.627  29.248  31.268  1.00117.71           C
ANISOU  120  CG2 ILE C  38    12133  19730  12863   1455   2136    -96       C
ATOM    121  C   ILE C  38      53.786  28.341  28.772  1.00110.77           C
ANISOU  121  C   ILE C  38    11334  18527  12226   1375   1951   -109       C
ATOM    122  O   ILE C  38      52.880  28.849  28.137  1.00105.87           O
ANISOU  122  O   ILE C  38    10643  17953  11628   1461   1899   -264       O
ATOM    123  N   VAL C  39      55.072  28.597  28.549  1.00110.56           N
ANISOU  123  N   VAL C  39    11488  18375  12145   1375   1873    -42       N
ATOM    124  CA  VAL C  39      55.543  29.489  27.485  1.00106.54           C
ANISOU  124  CA  VAL C  39    11115  17766  11599   1475   1718   -148       C
ATOM    125  CB  VAL C  39      57.044  29.755  27.582  1.00 98.60           C
ANISOU  125  CB  VAL C  39    10314  16638  10510   1465   1661    -47       C
ATOM    126  CG1 VAL C  39      57.480  30.571  26.398  1.00 98.09           C
ANISOU  126  CG1 VAL C  39    10380  16463  10427   1557   1507   -162       C
ATOM    127  CG2 VAL C  39      57.383  30.495  28.856  1.00 98.98           C
ANISOU  127  CG2 VAL C  39    10453  16781  10372   1517   1701     12       C
ATOM    128  C   VAL C  39      55.286  28.945  26.087  1.00107.30           C
ANISOU  128  C   VAL C  39    11147  17758  11864   1442   1652   -226       C
ATOM    129  O   VAL C  39      54.914  29.670  25.182  1.00100.01           O
ANISOU  129  O   VAL C  39    10246  16818  10936   1542   1546   -373       O
ATOM    130  N   LEU C  40      55.517  27.643  25.905  1.00103.43           N
ANISOU  130  N   LEU C  40    10581  17191  11525   1298   1715   -123       N
ATOM    131  CA  LEU C  40      55.302  26.989  24.615  1.00 97.48           C
ANISOU  131  CA  LEU C  40     9761  16336  10943   1248   1665   -182       C
ATOM    132  CB  LEU C  40      55.799  25.544  24.658  1.00 92.44           C
ANISOU  132  CB  LEU C  40     9064  15608  10449   1077   1749    -32       C
ATOM    133  CG  LEU C  40      57.243  25.240  24.985  1.00 85.61           C
ANISOU  133  CG  LEU C  40     8349  14624   9555   1005   1749    126       C
ATOM    134  CD1 LEU C  40      57.447  23.752  25.108  1.00 96.74           C
ANISOU  134  CD1 LEU C  40     9661  15977  11121    838   1852    264       C
ATOM    135  CD2 LEU C  40      58.102  25.787  23.887  1.00 86.94           C
ANISOU  135  CD2 LEU C  40     8677  14639   9718   1052   1605     69       C
ATOM    136  C   LEU C  40      53.845  26.972  24.166  1.00103.23           C
ANISOU  136  C   LEU C  40    10309  17163  11749   1288   1674   -327       C
ATOM    137  O   LEU C  40      53.533  27.335  23.041  1.00107.46           O
ANISOU  137  O   LEU C  40    10848  17650  12332   1349   1570   -458       O
ATOM    138  N   LEU C  41      52.945  26.576  25.057  1.00105.34           N
ANISOU  138  N   LEU C  41    10424  17573  12029   1257   1799   -306       N
ATOM    139  CA  LEU C  41      51.517  26.597  24.738  1.00102.44           C
ANISOU  139  CA  LEU C  41     9880  17313  11731   1300   1816   -446       C
ATOM    140  CB  LEU C  41      50.704  25.907  25.840  1.00 99.53           C
ANISOU  140  CB  LEU C  41     9345  17083  11391   1230   1980   -385       C
ATOM    141  CG  LEU C  41      51.077  24.452  26.153  1.00 99.96           C
ANISOU  141  CG  LEU C  41     9328  17081  11569   1057   2095   -225       C
ATOM    142  CD1 LEU C  41      50.199  23.881  27.249  1.00105.33           C
ANISOU  142  CD1 LEU C  41     9849  17906  12266   1001   2255   -180       C
ATOM    143  CD2 LEU C  41      50.010  23.587  24.909  1.00 95.44           C
ANISOU  143  CD2 LEU C  41     8685  16394  11183    980   2057   -255       C
ATOM    144  C   LEU C  41      51.036  28.033  24.525  1.00107.44           C
ANISOU  144  C   LEU C  41    10569  18016  12238   1473   1715   -605       C
ATOM    145  O   LEU C  41      50.252  28.315  23.617  1.00107.88           O
ANISOU  145  O   LEU C  41    10555  18081  12354   1537   1643   -752       O
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ATOM    146  N   ALA C  42      51.520  28.934  25.374  1.00107.64           N
ANISOU  146  N   ALA C  42    10722  18089  12089   1547   1711   -573       N
ATOM    147  CA  ALA C  42      51.156  30.344  25.300  1.00108.19           C
ANISOU  147  CA  ALA C  42    10859  18227  12023   1712   1623   -711       C
ATOM    148  CB  ALA C  42      51.764  31.121  26.458  1.00115.72           C
ANISOU  148  CB  ALA C  42    11942  19238  12788   1762   1651   -639       C
ATOM    149  C   ALA C  42      51.609  30.927  23.980  1.00101.16           C
ANISOU  149  C   ALA C  42    10088  17207  11140   1784   1462   -808       C
ATOM    150  O   ALA C  42      50.834  31.586  23.289  1.00103.92           O
ANISOU  150  O   ALA C  42    10401  17592  11493   1888   1383   -965       O
ATOM    151  N   GLY C  43      52.872  30.680  23.640  1.00101.17           N
ANISOU  151  N   GLY C  43    10236  17059  11146   1727   1416   -714       N
ATOM    152  CA  GLY C  43      53.434  31.144  22.385  1.00106.00           C
ANISOU  152  CA  GLY C  43    10975  17530  11769   1780   1270   -792       C
ATOM    153  C   GLY C  43      52.739  30.513  21.192  1.00102.02           C
ANISOU  153  C   GLY C  43    10349  16977  11438   1744   1231   -882       C
ATOM    154  O   GLY C  43      52.431  31.196  20.214  1.00100.57           O
ANISOU  154  O   GLY C  43    10199  16761  11250   1840   1113  -1023       O
ATOM    155  N   SER C  44      52.484  29.209  21.286  1.00 99.06           N
ANISOU  155  N   SER C  44     9830  16598  11211   1605   1331   -800       N
ATOM    156  CA  SER C  44      51.798  28.467  20.234  1.00103.81           C
ANISOU  156  CA  SER C  44    10297  17159  11986   1553   1312   -874       C
ATOM    157  CB  SER C  44      51.552  27.020  20.672  1.00105.27           C
ANISOU  157  CB  SER C  44    10322  17362  12314   1394   1454   -759       C
ATOM    158  OG  SER C  44      52.768  26.316  20.834  1.00101.95           O
ANISOU  158  OG  SER C  44     9996  16819  11921   1280   1485   -600       O
ATOM    159  C   SER C  44      50.469  29.126  19.875  1.00107.73           C
ANISOU  159  C   SER C  44    10682  17770  12480   1669   1268  -1051       C
ATOM    160  O   SER C  44      50.184  29.371  18.702  1.00111.65           O
ANISOU  160  O   SER C  44    11182  18206  13033   1718   1159  -1172       O
ATOM    161  N   TYR C  45      49.652  29.374  20.893  1.00109.05           N
ANISOU  161  N   TYR C  45    10747  18101  12587   1708   1357  -1065       N
ATOM    162  CA  TYR C  45      48.358  30.016  20.719  1.00114.91           C
ANISOU  162  CA  TYR C  45    11374  18966  13320   1819   1329  -1228       C
ATOM    163  CB  TYR C  45      47.541  29.995  22.006  1.00117.02           C
ANISOU  163  CB  TYR C  45    11512  19407  13542   1821   1463  -1207       C
ATOM    164  CG  TYR C  45      46.252  30.777  21.894  1.00126.32           C
ANISOU  164  CG  TYR C  45    12584  20714  14699   1946   1432  -1377       C
ATOM    165  CD1 TYR C  45      46.213  32.132  22.179  1.00123.15           C
ANISOU  165  CD1 TYR C  45    12284  20372  14135   2095   1367  -1456       C
ATOM    166  CE1 TYR C  45      45.045  32.853  22.073  1.00128.17           C
ANISOU  166  CE1 TYR C  45    12821  21122  14754   2211   1337  -1612       C
ATOM    167  CZ  TYR C  45      43.901  32.224  21.659  1.00138.69           C
ANISOU  167  CZ  TYR C  45    13952  22510  16235   2180   1369  -1693       C
ATOM    168  OH  TYR C  45      42.732  32.933  21.541  1.00142.61           O
ANISOU  168  OH  TYR C  45    14346  23117  16721   2296   1336  -1851       O
ATOM    169  CE2 TYR C  45      43.913  30.883  21.367  1.00135.37           C
ANISOU  169  CE2 TYR C  45    13428  22033  15975   2033   1434  -1620       C
ATOM    170  CD2 TYR C  45      45.082  30.167  21.480  1.00127.76           C
ANISOU  170  CD2 TYR C  45    12563  20954  15026   1917   1466  -1462       C
ATOM    171  C   TYR C  45      48.498  31.437  20.259  1.00113.09           C
ANISOU  171  C   TYR C  45    11289  18724  12958   1981   1189  -1348       C
ATOM    172  O   TYR C  45      47.754  31.893  19.426  1.00118.00           O
ANISOU  172  O   TYR C  45    11863  19359  13611   2066   1102  -1496       O
ATOM    173  N   LEU C  46      49.429  32.175  20.829  1.00110.30           N
ANISOU  173  N   LEU C  46    11111  18348  12450   2029   1169  -1286       N
ATOM    174  CA  LEU C  46      49.614  33.540  20.388  1.00109.16           C
ANISOU  174  CA  LEU C  46    11114  18187  12177   2183   1038  -1398       C
ATOM    175  CB  LEU C  46      50.519  34.315  21.314  1.00112.58           C
ANISOU  175  CB  LEU C  46    11714  18631  12430   2230   1048  -1320       C
ATOM    176  CG  LEU C  46      49.904  34.477  22.682  1.00111.53           C
ANISOU  176  CG  LEU C  46    11490  18668  12218   2244   1170  -1288       C
ATOM    177  CD1 LEU C  46      50.941  35.129  23.569  1.00 96.49           C
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ANISOU  177  CD1 LEU C  46     9762  16757  10144   2272   1181  -1194       C
ATOM    178  CD2 LEU C  46       48.677  35.350  22.560  1.00121.30           C
ANISOU  178  CD2 LEU C  46    12639  20028  13421   2378   1134  -1456       C
ATOM    179  C   LEU C  46       50.140  33.633  18.979  1.00107.36           C
ANISOU  179  C   LEU C  46    10991  17798  12002   2197    899  -1459       C
ATOM    180  O   LEU C  46       49.735  34.498  18.227  1.00109.36           O
ANISOU  180  O   LEU C  46    11281  18049  12222   2317    786  -1602       O
ATOM    181  N   ALA C  47       51.061  32.751  18.617  1.00106.97           N
ANISOU  181  N   ALA C  47    10995  17611  12037   2074    907  -1349       N
ATOM    182  CA  ALA C  47       51.637  32.825  17.285  1.00106.39           C
ANISOU  182  CA  ALA C  47    11034  17376  12015   2080    779  -1401       C
ATOM    183  CB  ALA C  47       52.660  31.727  17.130  1.00 94.44           C
ANISOU  183  CB  ALA C  47     9562  15724  10597   1925    820  -1256       C
ATOM    184  C   ALA C  47       50.616  32.707  16.187  1.00104.44           C
ANISOU  184  C   ALA C  47    10668  17133  11883   2109    712  -1546       C
ATOM    185  O   ALA C  47       50.595  33.504  15.265  1.00102.28           O
ANISOU  185  O   ALA C  47    10484  16803  11573   2211    581  -1665       O
ATOM    186  N   VAL C  48       49.737  31.733  16.303  1.00106.60           N
ANISOU  186  N   VAL C  48    10736  17475  12291   2025    803  -1537       N
ATOM    187  CA  VAL C  48       48.682  31.550  15.315  1.00100.83           C
ANISOU  187  CA  VAL C  48     9872  16760  11678   2047    748  -1674       C
ATOM    188  CB  VAL C  48       47.746  30.374  15.668  1.00 98.12           C
ANISOU  188  CB  VAL C  48     9291  16506  11483   1938    876  -1644       C
ATOM    189  CG1 VAL C  48       46.547  30.363  14.742  1.00101.54           C
ANISOU  189  CG1 VAL C  48     9583  16980  12019   1984    815  -1803       C
ATOM    190  CG2 VAL C  48       48.478  29.053  15.576  1.00 96.52           C
ANISOU  190  CG2 VAL C  48     9075  16195  11404   1764    949  -1501       C
ATOM    191  C   VAL C  48       47.869  32.828  15.204  1.00102.20           C
ANISOU  191  C   VAL C  48    10050  17032  11749   2221    663  -1834       C
ATOM    192  O   VAL C  48       47.574  33.286  14.107  1.00107.53           O
ANISOU  192  O   VAL C  48    10753  17656  12446   2296    539  -1962       O
ATOM    193  N   LEU C  49       47.533  33.416  16.346  1.00105.37           N
ANISOU  193  N   LEU C  49    10429  17572  12036   2286    730  -1825       N
ATOM    194  CA  LEU C  49       46.766  34.654  16.373  1.00110.65           C
ANISOU  194  CA  LEU C  49    11099  18342  12600   2453    662  -1969       C
ATOM    195  CB  LEU C  49       46.488  35.089  17.809  1.00113.14           C
ANISOU  195  CB  LEU C  49    11381  18809  12800   2491    769  -1927       C
ATOM    196  CG  LEU C  49       45.711  36.402  17.968  1.00117.37           C
ANISOU  196  CG  LEU C  49    11918  19457  13219   2663    711  -2069       C
ATOM    197  CD1 LEU C  49       44.199  36.161  18.091  1.00122.30           C
ANISOU  197  CD1 LEU C  49    12310  20223  13935   2681    764  -2168       C
ATOM    198  CD2 LEU C  49       46.266  37.271  19.085  1.00118.51           C
ANISOU  198  CD2 LEU C  49    12187  19660  13180   2727    749  -2012       C
ATOM    199  C   LEU C  49       47.539  35.758  15.662  1.00104.22           C
ANISOU  199  C   LEU C  49    10506  17423  11672   2564    514  -2031       C
ATOM    200  O   LEU C  49       46.976  36.546  14.904  1.00102.54           O
ANISOU  200  O   LEU C  49    10305  17218  11438   2683    401  -2178       O
ATOM    201  N   ALA C  50       48.831  35.835  15.952  1.00105.46           N
ANISOU  201  N   ALA C  50    10837  17484  11749   2527    516  -1916       N
ATOM    202  CA  ALA C  50       49.670  36.860  15.360  1.00102.99           C
ANISOU  202  CA  ALA C  50    10745  17066  11322   2625    386  -1963       C
ATOM    203  CB  ALA C  50       51.013  36.935  16.098  1.00102.62           C
ANISOU  203  CB  ALA C  50    10864  16956  11172   2580    427  -1819       C
ATOM    204  C   ALA C  50       49.894  36.614  13.873  1.00104.25           C
ANISOU  204  C   ALA C  50    10955  17074  11580   2606    269  -2028       C
ATOM    205  O   ALA C  50       49.967  37.566  13.091  1.00103.13           O
ANISOU  205  O   ALA C  50    10933  16879  11371   2722    139  -2140       O
ATOM    206  N   GLU C  51       49.996  35.339  13.487  1.00104.42           N
ANISOU  206  N   GLU C  51    10889  17026  11761   2459    316  -1958       N
ATOM    207  CA  GLU C  51       50.277  34.974  12.093  1.00102.02           C
ANISOU  207  CA  GLU C  51    10632  16568  11562   2420    216  -2005       C
ATOM    208  CB  GLU C  51       51.246  33.792  12.060  1.00 98.16           C
ANISOU  208  CB  GLU C  51    10168  15956  11173   2250    281  -1854       C
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ATOM    209  CG  GLU C  51      52.554  34.074  12.791  1.00 92.58           C
ANISOU  209  CG  GLU C  51     9638  15190  10349   2233    309  -1728        C
ATOM    210  CD  GLU C  51      53.528  34.860  11.933  1.00 89.03           C
ANISOU  210  CD  GLU C  51     9416  14587   9823   2296    176  -1772        C
ATOM    211  OE1 GLU C  51      54.026  34.307  10.924  1.00 86.85           O
ANISOU  211  OE1 GLU C  51     9189  14162   9649   2221    124  -1767        O
ATOM    212  OE2 GLU C  51      53.800  36.033  12.272  1.00 80.22           O
ANISOU  212  OE2 GLU C  51     8432  13501   8547   2419    127  -1812        O
ATOM    213  C   GLU C  51      49.079  34.657  11.186  1.00102.45           C
ANISOU  213  C   GLU C  51    10525  16657  11745   2432    170  -2134        C
ATOM    214  O   GLU C  51      49.021  35.172  10.078  1.00103.92           O
ANISOU  214  O   GLU C  51    10788  16766  11933   2503     39  -2247        O
ATOM    215  N   ARG C  52      48.154  33.802  11.631  1.00104.56           N
ANISOU  215  N   ARG C  52    10574  17032  12121   2360    277  -2117        N
ATOM    216  CA  ARG C  52      47.010  33.384  10.798  1.00104.76           C
ANISOU  216  CA  ARG C  52    10430  17091  12283   2358    243  -2233        C
ATOM    217  CB  ARG C  52      45.971  32.614  11.616  1.00103.30           C
ANISOU  217  CB  ARG C  52    10007  17057  12185   2296    382  -2209        C
ATOM    218  CG  ARG C  52      45.164  31.637  10.800  1.00104.79           C
ANISOU  218  CG  ARG C  52    10020  17236  12559   2215    386  -2263        C
ATOM    219  CD  ARG C  52      43.945  31.127  11.549  1.00125.45           C
ANISOU  219  CD  ARG C  52    12399  20019  15247   2190    506  -2280        C
ATOM    220  NE  ARG C  52      43.203  30.177  10.725  1.00150.31           N
ANISOU  220  NE  ARG C  52    15381  23153  18576   2110    509  -2335        N
ATOM    221  CZ  ARG C  52      42.277  30.517   9.828  1.00159.22           C
ANISOU  221  CZ  ARG C  52    16435  24307  19755   2190    409  -2493        C
ATOM    222  NH1 ARG C  52      41.960  31.792   9.640  1.00160.68           N
ANISOU  222  NH1 ARG C  52    16695  24534  19824   2355    299  -2614        N
ATOM    223  NH2 ARG C  52      41.663  29.580   9.115  1.00155.77           N
ANISOU  223  NH2 ARG C  52    15847  23854  19485   2106    419  -2532        N
ATOM    224  C   ARG C  52      46.328  34.556  10.106  1.00108.35           C
ANISOU  224  C   ARG C  52    10919  17579  12671   2526    105  -2410        C
ATOM    225  O   ARG C  52      45.984  35.553  10.744  1.00102.65           O
ANISOU  225  O   ARG C  52    10219  16963  11822   2650     98  -2461        O
ATOM    226  N   GLY C  53      46.121  34.415   8.802  1.00114.49           N
ANISOU  226  N   GLY C  53    11699  18265  13536   2527     -2  -2502        N
ATOM    227  CA  GLY C  53      45.499  35.462   8.018  1.00118.98           C
ANISOU  227  CA  GLY C  53    12305  18850  14053   2681   -143  -2670        C
ATOM    228  C   GLY C  53      46.477  36.487   7.469  1.00118.44           C
ANISOU  228  C   GLY C  53    12490  18659  13854   2771   -269  -2698        C
ATOM    229  O   GLY C  53      46.076  37.439   6.800  1.00122.44           O
ANISOU  229  O   GLY C  53    13055  19165  14301   2906   -394  -2834        O
ATOM    230  N   ALA C  54      47.762  36.304   7.751  1.00112.71           N
ANISOU  230  N   ALA C  54    11916  17827  13082   2700   -236  -2570        N
ATOM    231  CA  ALA C  54      48.778  37.210   7.233  1.00111.41           C
ANISOU  231  CA  ALA C  54    11998  17535  12799   2773   -347  -2590        C
ATOM    232  CB  ALA C  54      49.977  37.272   8.169  1.00111.66           C
ANISOU  232  CB  ALA C  54    12163  17529  12732   2730   -273  -2445        C
ATOM    233  C   ALA C  54      49.206  36.747   5.855  1.00113.22           C
ANISOU  233  C   ALA C  54    12299  17593  13127   2710   -440  -2619        C
ATOM    234  O   ALA C  54      48.976  35.598   5.490  1.00117.71           O
ANISOU  234  O   ALA C  54    12742  18132  13852   2583   -393  -2583        O
ATOM    235  N   PRO C  55      49.856  37.630   5.086  1.00113.75           N
ANISOU  235  N   PRO C  55    12573  17543  13104   2794   -567  -2682        N
ATOM    236  CA  PRO C  55      50.300  37.222   3.750  1.00109.80           C
ANISOU  236  CA  PRO C  55    12154  16872  12692   2733   -657  -2712        C
ATOM    237  CB  PRO C  55      50.344  38.535   2.965  1.00 97.40           C
ANISOU  237  CB  PRO C  55    10754  15251  11004   2892   -812  -2847        C
ATOM    238  CG  PRO C  55      50.314  39.618   3.972  1.00108.20           C
ANISOU  238  CG  PRO C  55    12175  16730  12205   3020   -794  -2855        C
ATOM    239  CD  PRO C  55      50.160  39.045   5.351  1.00116.78           C
ANISOU  239  CD  PRO C  55    13122  17945  13303   2950   -636  -2737        C
ATOM    240  C   PRO C  55      51.680  36.558   3.828  1.00108.13           C
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ANISOU  240  C   PRO C  55    12065  16514  12507   2599   -604  -2566       C
ATOM    241  O   PRO C  55      52.595  37.104   4.452  1.00102.17           O
ANISOU  241  O   PRO C  55    11459  15731  11630   2627   -587  -2499       O
ATOM    242  N   GLY C  56      51.807  35.398   3.210  1.00104.80           N
ANISOU  242  N   GLY C  56    11575  16002  12242   2456   -579  -2522       N
ATOM    243  CA  GLY C  56      53.029  34.648   3.248  1.00 96.34           C
ANISOU  243  CA  GLY C  56    10595  14792  11217   2318   -524  -2385       C
ATOM    244  C   GLY C  56      53.375  34.217   4.640  1.00 88.07           C
ANISOU  244  C   GLY C  56     9491  13825  10147   2253   -380  -2237       C
ATOM    245  O   GLY C  56      54.507  34.237   5.020  1.00 96.41           O
ANISOU  245  O   GLY C  56    10684  14799  11150   2212   -353  -2135       O
ATOM    246  N   ALA C  57      52.388  33.817   5.410  1.00 89.53           N
ANISOU  246  N   ALA C  57     9471  14172  10372   2242   -287  -2226       N
ATOM    247  CA  ALA C  57      52.624  33.372   6.764  1.00 84.94           C
ANISOU  247  CA  ALA C  57     8826  13677   9771   2177   -145  -2086       C
ATOM    248  CB  ALA C  57      51.646  34.038   7.685  1.00 93.43           C
ANISOU  248  CB  ALA C  57     9797  14947  10756   2289   -108  -2138       C
ATOM    249  C   ALA C  57      52.391  31.902   6.790  1.00 88.26           C
ANISOU  249  C   ALA C  57     9075  14093  10368   2012    -40  -2001       C
ATOM    250  O   ALA C  57      51.532  31.442   6.087  1.00 98.39           O
ANISOU  250  O   ALA C  57    10226  15393  11766   1990    -62  -2080       O
ATOM    251  N   GLN C  58      53.160  31.149   7.559  1.00 90.98           N
ANISOU  251  N   GLN C  58     9422  14408  10738   1894     70  -1841       N
ATOM    252  CA  GLN C  58      52.946  29.711   7.595  1.00 98.41           C
ANISOU  252  CA  GLN C  58    10199  15343  11851   1732    176  -1755       C
ATOM    253  CB  GLN C  58      54.168  28.985   7.060  1.00101.41           C
ANISOU  253  CB  GLN C  58    10690  15532  12308   1604    176  -1655       C
ATOM    254  CG  GLN C  58      53.835  27.701   6.324  1.00107.52           C
ANISOU  254  CG  GLN C  58    11326  16248  13280   1464    213  -1642       C
ATOM    255  CD  GLN C  58      53.478  27.922   4.873  1.00111.11           C
ANISOU  255  CD  GLN C  58    11808  16619  13791   1500     84  -1785       C
ATOM    256  OE1 GLN C  58      54.120  28.699   4.177  1.00115.41           O
ANISOU  256  OE1 GLN C  58    12539  17052  14259   1567    -32  -1842       O
ATOM    257  NE2 GLN C  58      52.452  27.226   4.407  1.00122.87           N
ANISOU  257  NE2 GLN C  58    13112  18160  15414   1454    104  -1845       N
ATOM    258  C   GLN C  58      52.541  29.169   8.956  1.00 95.54           C
ANISOU  258  C   GLN C  58     9684  15125  11492   1681    329  -1653       C
ATOM    259  O   GLN C  58      52.078  28.049   9.079  1.00 95.02           O
ANISOU  259  O   GLN C  58     9450  15090  11564   1565    425  -1601       O
ATOM    260  N   LEU C  59      52.719  29.994   9.971  1.00 95.72           N
ANISOU  260  N   LEU C  59     9773  15235  11360   1769    351  -1626       N
ATOM    261  CA  LEU C  59      52.412  29.671  11.356  1.00 99.21           C
ANISOU  261  CA  LEU C  59    10102  15818  11774   1736    491  -1530       C
ATOM    262  CB  LEU C  59      53.265  30.529  12.302  1.00 89.14           C
ANISOU  262  CB  LEU C  59     8990  14558  10322   1803    497  -1461       C
ATOM    263  CG  LEU C  59      54.021  29.905  13.477  1.00 80.10           C
ANISOU  263  CG  LEU C  59     7853  13422   9159   1701    624  -1280       C
ATOM    264  CD1 LEU C  59      54.765  28.650  13.058  1.00 76.17           C
ANISOU  264  CD1 LEU C  59     7350  12783   8809   1535    666  -1165       C
ATOM    265  CD2 LEU C  59      54.991  30.934  14.036  1.00 76.51           C
ANISOU  265  CD2 LEU C  59     7601  12944   8525   1784    584  -1243       C
ATOM    266  C   LEU C  59      50.911  29.930  11.520  1.00 95.47           C
ANISOU  266  C   LEU C  59     9449  15514  11311   1816    505  -1649       C
ATOM    267  O   LEU C  59      50.488  30.748  12.332  1.00 98.81           O
ANISOU  267  O   LEU C  59     9866  16066  11612   1920    521  -1682       O
ATOM    268  N   ILE C  60      50.111  29.225  10.727  1.00 95.23           N
ANISOU  268  N   ILE C  60     9271  15480  11431   1765    498  -1716       N
ATOM    269  CA  ILE C  60      48.680  29.487  10.661  1.00 95.75           C
ANISOU  269  CA  ILE C  60     9169  15688  11522   1844    491  -1850       C
ATOM    270  CB  ILE C  60      48.267  29.810   9.196  1.00104.59           C
ANISOU  270  CB  ILE C  60    10307  16736  12697   1904    345  -2003       C
ATOM    271  CG1 ILE C  60      48.411  28.590   8.293  1.00 97.46           C
ANISOU  271  CG1 ILE C  60     9340  15716  11973   1758    355  -1972       C
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ATOM    272  CD1 ILE C  60      48.026  28.857   6.856  1.00 95.46           C
ANISOU  272  CD1 ILE C  60     9107  15389  11775   1808    214  -2118       C
ATOM    273  CG2 ILE C  60      49.099  30.963   8.647  1.00 95.17           C
ANISOU  273  CG2 ILE C  60     9351  15439  11369   2013    206  -2054       C
ATOM    274  C   ILE C  60      47.760  28.388  11.206  1.00 96.95           C
ANISOU  274  C   ILE C  60     9082  15951  11804   1743    630  -1811       C
ATOM    275  O   ILE C  60      46.545  28.472  11.057  1.00103.14           O
ANISOU  275  O   ILE C  60     9711  16843  12633   1794    626  -1925       O
ATOM    276  N   THR C  61      48.320  27.353  11.820  1.00 98.53           N
ANISOU  276  N   THR C  61     9249  16121  12067   1600    752  -1654       N
ATOM    277  CA  THR C  61      47.487  26.346  12.481  1.00104.74           C
ANISOU  277  CA  THR C  61     9816  17018  12962   1505    897  -1608       C
ATOM    278  CB  THR C  61      47.252  25.061  11.614  1.00 95.72           C
ANISOU  278  CB  THR C  61     8549  15798  12022   1367    924  -1601       C
ATOM    279  OG1 THR C  61      48.320  24.121  11.788  1.00 99.20           O
ANISOU  279  OG1 THR C  61     9047  16124  12522   1222    995  -1438       O
ATOM    280  CG2 THR C  61      47.130  25.398  10.156  1.00 91.81           C
ANISOU  280  CG2 THR C  61     8105  15208  11572   1417    773  -1734       C
ATOM    281  C   THR C  61      48.167  25.989  13.810  1.00107.24           C
ANISOU  281  C   THR C  61    10163  17365  13219   1434   1027  -1437       C
ATOM    282  O   THR C  61      49.382  26.119  13.946  1.00106.83           O
ANISOU  282  O   THR C  61    10281  17208  13101   1410   1007  -1338       O
ATOM    283  N   TYR C  62      47.366  25.550  14.786  1.00107.65           N
ANISOU  283  N   TYR C  62    11460  16778  12665    321   1672   -355       N
ATOM    284  CA  TYR C  62      47.854  25.214  16.132  1.00113.56           C
ANISOU  284  CA  TYR C  62    12320  17413  13415    154   1637   -303       C
ATOM    285  CB  TYR C  62      46.687  24.873  17.072  1.00122.90           C
ANISOU  285  CB  TYR C  62    13394  18895  14406     84   1697   -360       C
ATOM    286  CG  TYR C  62      45.729  25.994  17.397  1.00130.17           C
ANISOU  286  CG  TYR C  62    14292  20029  15138    313   1747   -450       C
ATOM    287  CD1 TYR C  62      46.063  26.981  18.293  1.00130.60           C
ANISOU  287  CD1 TYR C  62    14501  19977  15146    425   1721   -449       C
ATOM    288  CE1 TYR C  62      45.182  28.000  18.584  1.00136.94           C
ANISOU  288  CE1 TYR C  62    15281  20975  15776    634   1768   -532       C
ATOM    289  CZ  TYR C  62      43.949  28.030  17.986  1.00140.83           C
ANISOU  289  CZ  TYR C  62    15594  21775  16141    732   1841   -616       C
ATOM    290  OH  TYR C  62      43.058  29.034  18.261  1.00143.49           O
ANISOU  290  OH  TYR C  62    15905  22310  16306    940   1889   -699       O
ATOM    291  CE2 TYR C  62      43.591  27.050  17.104  1.00143.16           C
ANISOU  291  CE2 TYR C  62    15734  22184  16478    621   1868   -617       C
ATOM    292  CD2 TYR C  62      44.477  26.037  16.822  1.00143.25           C
ANISOU  292  CD2 TYR C  62    15770  21998  16661    412   1821   -535       C
ATOM    293  C   TYR C  62      48.819  24.063  16.255  1.00110.24           C
ANISOU  293  C   TYR C  62    11947  16778  13162   -107   1585   -207       C
ATOM    294  O   TYR C  62      49.845  24.180  16.896  1.00113.62           O
ANISOU  294  O   TYR C  62    12539  16947  13684   -171   1523   -138       O
ATOM    295  N   PRO C  63      48.518  22.949  15.625  1.00106.50           N
ANISOU  295  N   PRO C  63    11332  16405  12729   -260   1608   -201       N
ATOM    296  CA  PRO C  63      49.432  21.795  15.731  1.00105.52           C
ANISOU  296  CA  PRO C  63    11247  16079  12766   -518   1559   -109       C
ATOM    297  CB  PRO C  63      48.686  20.702  14.948  1.00105.59           C
ANISOU  297  CB  PRO C  63    11057  16299  12764   -638   1608   -133       C
ATOM    298  CG  PRO C  63      47.914  21.447  13.924  1.00116.22           C
ANISOU  298  CG  PRO C  63    12303  17820  14034   -405   1657   -212       C
ATOM    299  CD  PRO C  63      47.466  22.682  14.624  1.00111.17           C
ANISOU  299  CD  PRO C  63    11727  17265  13248   -202   1674   -269       C
ATOM    300  C   PRO C  63      50.844  21.986  15.162  1.00 98.69           C
ANISOU  300  C   PRO C  63    10530  14857  12112   -508   1485    -28       C
ATOM    301  O   PRO C  63      51.745  21.223  15.491  1.00 88.16           O
ANISOU  301  O   PRO C  63     9272  13316  10911   -708   1435     55       O
ATOM    302  N   ARG C  64      51.016  22.953  14.276  1.00106.21           N
ANISOU  302  N   ARG C  64    11514  15744  13095   -283   1479    -52       N
ATOM    303  CA  ARG C  64      52.326  23.241  13.710  1.00102.31           C
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ANISOU  303  CA  ARG C  64    11162  14918  12794   -251   1410     20       C
ATOM    304  CB  ARG C  64      52.244  23.643  12.227  1.00108.52           C
ANISOU  304  CB  ARG C  64    11882  15715  13635    -83   1423    -11       C
ATOM    305  CG  ARG C  64      51.331  24.806  11.919  1.00104.42           C
ANISOU  305  CG  ARG C  64    11311  15397  12965    188   1471   -105       C
ATOM    306  CD  ARG C  64      51.477  25.250  10.484  1.00103.68           C
ANISOU  306  CD  ARG C  64    11183  15258  12952    350   1471   -121       C
ATOM    307  NE  ARG C  64      51.136  24.195   9.537  1.00109.66           N
ANISOU  307  NE  ARG C  64    11781  16123  13760    228   1500   -123       N
ATOM    308  CZ  ARG C  64      51.142  24.351   8.216  1.00111.73           C
ANISOU  308  CZ  ARG C  64    11981  16381  14090    335   1508   -139       C
ATOM    309  NH1 ARG C  64      51.473  25.523   7.688  1.00104.94           N
ANISOU  309  NH1 ARG C  64    11203  15414  13256    566   1488   -155       N
ATOM    310  NH2 ARG C  64      50.818  23.336   7.427  1.00104.53           N
ANISOU  310  NH2 ARG C  64    10925  15572  13221    209   1536   -139       N
ATOM    311  C   ARG C  64      53.001  24.319  14.527  1.00 89.54           C
ANISOU  311  C   ARG C  64     9739  13108  11175   -134   1363     43       C
ATOM    312  O   ARG C  64      54.203  24.254  14.763  1.00 91.38           O
ANISOU  312  O   ARG C  64    10122  13043  11555   -213   1294    127       O
ATOM    313  N   ALA C  65      52.225  25.327  14.923  1.00 89.47           N
ANISOU  313  N   ALA C  65     9725  13269  11000     60   1400    -33       N
ATOM    314  CA  ALA C  65      52.737  26.448  15.708  1.00 92.14           C
ANISOU  314  CA  ALA C  65    10240  13454  11314    194   1362    -22       C
ATOM    315  CB  ALA C  65      51.661  27.470  15.928  1.00 93.38           C
ANISOU  315  CB  ALA C  65    10349  13856  11276    415   1418   -120       C
ATOM    316  C   ALA C  65      53.289  25.977  17.045  1.00 93.94           C
ANISOU  316  C   ALA C  65    10578  13555  11559     -1   1325     41       C
ATOM    317  O   ALA C  65      54.080  26.670  17.679  1.00 93.81           O
ANISOU  317  O   ALA C  65    10737  13326  11582     50   1274     81       O
ATOM    318  N   LEU C  66      52.847  24.793  17.460  1.00 97.97           N
ANISOU  318  N   LEU C  66    10983  14202  12039   -226   1350     48       N
ATOM    319  CA  LEU C  66      53.309  24.133  18.680  1.00 91.55           C
ANISOU  319  CA  LEU C  66    10249  13288  11246   -445   1318    109       C
ATOM    320  CB  LEU C  66      52.318  23.059  19.108  1.00 94.91           C
ANISOU  320  CB  LEU C  66    10512  13987  11564   -626   1373     77       C
ATOM    321  CG  LEU C  66      52.643  22.150  20.288  1.00101.14           C
ANISOU  321  CG  LEU C  66    11345  14715  12369   -885   1348    135       C
ATOM    322  CD1 LEU C  66      51.466  22.027  21.231  1.00104.26           C
ANISOU  322  CD1 LEU C  66    11645  15407  12561   -917   1407     69       C
ATOM    323  CD2 LEU C  66      53.086  20.777  19.781  1.00 93.79           C
ANISOU  323  CD2 LEU C  66    10349  13705  11583  -1123   1330    198       C
ATOM    324  C   LEU C  66      54.693  23.522  18.430  1.00 85.90           C
ANISOU  324  C   LEU C  66     9643  12242  10753   -602   1244    217       C
ATOM    325  O   LEU C  66      55.582  23.576  19.285  1.00 86.15           O
ANISOU  325  O   LEU C  66     9830  12051  10852   -687   1189    285       O
ATOM    326  N   TRP C  67      54.862  22.975  17.228  1.00 85.72           N
ANISOU  326  N   TRP C  67     9537  12190  10843   -632   1245    231       N
ATOM    327  CA  TRP C  67      56.099  22.362  16.760  1.00 82.81           C
ANISOU  327  CA  TRP C  67     9248  11528  10690   -768   1182    327       C
ATOM    328  CB  TRP C  67      55.860  21.681  15.411  1.00 89.74           C
ANISOU  328  CB  TRP C  67     9979  12480  11639   -796   1207    315       C
ATOM    329  CG  TRP C  67      57.091  21.320  14.595  1.00 86.50           C
ANISOU  329  CG  TRP C  67     9644  11771  11451   -863   1147    399       C
ATOM    330  CD1 TRP C  67      57.316  21.658  13.289  1.00 84.86           C
ANISOU  330  CD1 TRP C  67     9412  11501  11331   -728   1143    391       C
ATOM    331  NE1 TRP C  67      58.507  21.134  12.856  1.00 87.24           N
ANISOU  331  NE1 TRP C  67     9795  11518  11835   -847   1083    481       N
ATOM    332  CE2 TRP C  67      59.071  20.408  13.873  1.00 88.36           C
ANISOU  332  CE2 TRP C  67    10011  11534  12026  -1068   1048    551       C
ATOM    333  CD2 TRP C  67      58.199  20.489  14.985  1.00 86.95           C
ANISOU  333  CD2 TRP C  67     9798  11570  11669  -1087   1087    502       C
ATOM    334  CE3 TRP C  67      58.553  19.823  16.165  1.00 83.18           C
ANISOU  334  CE3 TRP C  67     9384  11019  11203  -1300   1060    557       C
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ATOM    335  CZ3 TRP C  67      59.750  19.111  16.199  1.00 83.50           C
ANISOU  335  CZ3 TRP C  67     9519  10776  11431  -1484    997    659       C
ATOM    336  CH2 TRP C  67      60.594  19.053  15.077  1.00 88.11           C
ANISOU  336  CH2 TRP C  67    10135  11151  12190  -1457    961    706       C
ATOM    337  CZ2 TRP C  67      60.271  19.690  13.907  1.00 84.73           C
ANISOU  337  CZ2 TRP C  67     9647  10792  11756  -1252    985    653       C
ATOM    338  C   TRP C  67      57.155  23.433  16.640  1.00 80.74           C
ANISOU  338  C   TRP C  67     9172  10979  10526   -611   1120    368       C
ATOM    339  O   TRP C  67      58.317  23.209  16.982  1.00 81.42           O
ANISOU  339  O   TRP C  67     9399  10781  10755   -724   1054    458       O
ATOM    340  N   TRP C  68      56.750  24.575  16.088  1.00 81.56           N
ANISOU  340  N   TRP C  68     9273  11159  10558   -349   1142    303       N
ATOM    341  CA  TRP C  68      57.636  25.717  15.915  1.00 74.49           C
ANISOU  341  CA  TRP C  68     8546  10019   9739   -168   1089    331       C
ATOM    342  CB  TRP C  68      56.890  26.909  15.326  1.00 78.66           C
ANISOU  342  CB  TRP C  68     9032  10707  10150    120   1129    241       C
ATOM    343  CG  TRP C  68      57.688  28.170  15.381  1.00 78.34           C
ANISOU  343  CG  TRP C  68     9170  10440  10155    312   1077    262       C
ATOM    344  CD1 TRP C  68      58.773  28.494  14.612  1.00 76.20           C
ANISOU  344  CD1 TRP C  68     9005   9895  10054    373   1019    319       C
ATOM    345  NE1 TRP C  68      59.246  29.739  14.960  1.00 72.78           N
ANISOU  345  NE1 TRP C  68     8730   9317   9607    557    983    322       N
ATOM    346  CE2 TRP C  68      58.469  30.241  15.974  1.00 82.76           C
ANISOU  346  CE2 TRP C  68     9994  10760  10692    618   1019    266       C
ATOM    347  CD2 TRP C  68      57.478  29.278  16.267  1.00 83.50           C
ANISOU  347  CD2 TRP C  68     9923  11119  10683    467   1079    227       C
ATOM    348  CE3 TRP C  68      56.546  29.551  17.277  1.00 78.04           C
ANISOU  348  CE3 TRP C  68     9199  10652   9803    494   1125    166       C
ATOM    349  CZ3 TRP C  68      56.630  30.755  17.947  1.00 78.56           C
ANISOU  349  CZ3 TRP C  68     9393  10668   9789    668   1111    146       C
ATOM    350  CH2 TRP C  68      57.628  31.693  17.633  1.00 84.39           C
ANISOU  350  CH2 TRP C  68    10294  11138  10631    815   1050    186       C
ATOM    351  CZ2 TRP C  68      58.557  31.453  16.654  1.00 82.93           C
ANISOU  351  CZ2 TRP C  68    10146  10731  10632    792   1003    246       C
ATOM    352  C   TRP C  68      58.269  26.124  17.219  1.00 74.35           C
ANISOU  352  C   TRP C  68     8703   9834   9713   -205   1043    378       C
ATOM    353  O   TRP C  68      59.450  26.426  17.252  1.00 80.11           O
ANISOU  353  O   TRP C  68     9594  10264  10581   -204    975    452       O
ATOM    354  N   SER C  69      57.469  26.146  18.283  1.00 81.58           N
ANISOU  354  N   SER C  69     9587  10947  10464   -235   1081    333       N
ATOM    355  CA  SER C  69      57.935  26.566  19.610  1.00 85.76           C
ANISOU  355  CA  SER C  69    10274  11349  10961   -266   1045    369       C
ATOM    356  CB  SER C  69      56.769  26.585  20.611  1.00 80.37           C
ANISOU  356  CB  SER C  69     9513  10954  10070   -276   1104    298       C
ATOM    357  OG  SER C  69      55.648  27.287  20.093  1.00 85.13           O
ANISOU  357  OG  SER C  69    10001  11821  10525    -63   1168    196       O
ATOM    358  C   SER C  69      59.044  25.651  20.140  1.00 75.22           C
ANISOU  358  C   SER C  69     9039   9759   9783   -518    982    477       C
ATOM    359  O   SER C  69      60.069  26.126  20.636  1.00 67.86           O
ANISOU  359  O   SER C  69     8287   8561   8935   -510    920    542       O
ATOM    360  N   VAL C  70      58.833  24.342  20.018  1.00 74.35           N
ANISOU  360  N   VAL C  70     8810   9731   9710   -740   1000    497       N
ATOM    361  CA  VAL C  70      59.876  23.439  20.488  1.00 75.21           C
ANISOU  361  CA  VAL C  70     9007   9600   9971   -983    942    600       C
ATOM    362  CB  VAL C  70      59.426  21.975  20.390  1.00 74.81           C
ANISOU  362  CB  VAL C  70     8800   9694   9932  -1224    972    607       C
ATOM    363  CG1 VAL C  70      60.566  21.046  20.775  1.00 72.49           C
ANISOU  363  CG1 VAL C  70     8599   9136   9809  -1470    909    717       C
ATOM    364  CG2 VAL C  70      58.221  21.743  21.278  1.00 89.91           C
ANISOU  364  CG2 VAL C  70    10606  11911  11646  -1272   1033    539       C
ATOM    365  C   VAL C  70      61.175  23.593  19.713  1.00 76.05           C
ANISOU  365  C   VAL C  70     9232   9381  10284   -960    874    679       C
ATOM    366  O   VAL C  70      62.253  23.679  20.301  1.00 78.77           O
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ANISOU  366  O   VAL C  70     9741   9455  10733  -1032    810    760       O
ATOM    367  N   GLU C  71      61.063  23.626  18.400  1.00 82.03           N
ANISOU  367  N   GLU C  71     9904  10167  11097   -862    890    655       N
ATOM    368  CA  GLU C  71      62.277  23.730  17.602  1.00 80.21           C
ANISOU  368  CA  GLU C  71     9778   9634  11065   -843    827    728       C
ATOM    369  CB  GLU C  71      62.026  23.358  16.138  1.00 76.09           C
ANISOU  369  CB  GLU C  71     9119   9183  10607   -804    854    703       C
ATOM    370  CG  GLU C  71      61.369  24.436  15.314  1.00 75.82           C
ANISOU  370  CG  GLU C  71     9034   9291  10484   -525    891    618       C
ATOM    371  CD  GLU C  71      61.392  24.104  13.828  1.00 89.77           C
ANISOU  371  CD  GLU C  71    10697  11061  12350   -491    902    611       C
ATOM    372  OE1 GLU C  71      61.708  24.987  12.991  1.00108.62           O
ANISOU  372  OE1 GLU C  71    13132  13353  14786   -290    885    599       O
ATOM    373  OE2 GLU C  71      61.103  22.939  13.495  1.00 89.67           O
ANISOU  373  OE2 GLU C  71    10557  11144  12370   -669    926    618       O
ATOM    374  C   GLU C  71      62.812  25.149  17.707  1.00 77.66           C
ANISOU  374  C   GLU C  71     9618   9149  10742   -615    790    729       C
ATOM    375  O   GLU C  71      63.913  25.440  17.248  1.00 86.42           O
ANISOU  375  O   GLU C  71    10849   9980  12006   -581    729    795       O
ATOM    376  N   THR C  72      62.030  26.038  18.309  1.00 72.68           N
ANISOU  376  N   THR C  72     8989   8691   9935   -459    825    657       N
ATOM    377  CA  THR C  72      62.501  27.394  18.517  1.00 71.94           C
ANISOU  377  CA  THR C  72     9053   8451   9829   -246    790    657       C
ATOM    378  CB  THR C  72      61.415  28.440  18.260  1.00 73.24           C
ANISOU  378  CB  THR C  72     9147   8862   9820     10    847    548       C
ATOM    379  OG1 THR C  72      61.050  28.411  16.876  1.00 74.60           O
ANISOU  379  OG1 THR C  72     9195   9128  10024    111    877    506       O
ATOM    380  CG2 THR C  72      61.913  29.826  18.615  1.00 79.66           C
ANISOU  380  CG2 THR C  72    10132   9520  10614    217    809    550       C
ATOM    381  C   THR C  72      63.036  27.522  19.941  1.00 78.90           C
ANISOU  381  C   THR C  72    10089   9195  10695   -342    750    709       C
ATOM    382  O   THR C  72      64.065  28.161  20.158  1.00 78.21           O
ANISOU  382  O   THR C  72    10178   8839  10700   -287    687    769       O
ATOM    383  N   ALA C  73      62.388  26.866  20.881  1.00 79.94           N
ANISOU  383  N   ALA C  73    10154   9500  10720   -496    784    691       N
ATOM    384  CA  ALA C  73      62.801  26.899  22.265  1.00 83.01           C
ANISOU  384  CA  ALA C  73    10673   9783  11084   -602    751    737       C
ATOM    385  CB  ALA C  73      61.807  26.146  23.108  1.00 76.33           C
ANISOU  385  CB  ALA C  73     9707   9199  10096   -752    805    695       C
ATOM    386  C   ALA C  73      64.165  26.320  22.488  1.00 77.62           C
ANISOU  386  C   ALA C  73    10123   8776  10595   -785    676    855       C
ATOM    387  O   ALA C  73      64.904  26.791  23.305  1.00 76.66           O
ANISOU  387  O   ALA C  73    10167   8459  10501   -789    626    906       O
ATOM    388  N   THR C  74      64.486  25.264  21.784  1.00 74.58           N
ANISOU  388  N   THR C  74     9113   7406  11817   -809  -1505   -602       N
ATOM    389  CA  THR C  74      65.752  24.610  21.956  1.00 76.14           C
ANISOU  389  CA  THR C  74     9238   7383  12309  -1033  -1462   -483       C
ATOM    390  CB  THR C  74      65.589  23.217  21.463  1.00 80.78           C
ANISOU  390  CB  THR C  74     9630   8083  12978  -1158  -1371   -487       C
ATOM    391  OG1 THR C  74      65.154  23.298  20.117  1.00 83.39           O
ANISOU  391  OG1 THR C  74    10015   8461  13208  -1036  -1276   -537       O
ATOM    392  CG2 THR C  74      64.504  22.574  22.237  1.00 77.13           C
ANISOU  392  CG2 THR C  74     9012   7919  12374  -1154  -1435   -569       C
ATOM    393  C   THR C  74      66.831  25.245  21.124  1.00 80.56           C
ANISOU  393  C   THR C  74     9954   7645  13011  -1035  -1394   -401       C
ATOM    394  O   THR C  74      67.975  24.858  21.186  1.00 69.96           O
ANISOU  394  O   THR C  74     8580   6085  11916  -1209  -1356   -295       O
ATOM    395  N   THR C  75      66.439  26.228  20.336  1.00 80.55           N
ANISOU  395  N   THR C  75    10121   7638  12846   -837  -1379   -452       N
ATOM    396  CA  THR C  75      67.316  26.975  19.422  1.00 77.43           C
ANISOU  396  CA  THR C  75     9896   6979  12545   -798  -1314   -390       C
ATOM    397  CB  THR C  75      68.579  27.596  20.125  1.00 81.70           C
ANISOU  397  CB  THR C  75    10535   7229  13278   -894  -1366   -278       C
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ATOM    398  OG1 THR C  75      69.508  26.572  20.515  1.00 82.14           O
ANISOU  398  OG1 THR C  75    10446   7165  13598  -1137  -1333   -182       O
ATOM    399  CG2 THR C  75      68.158  28.392  21.368  1.00 82.29           C
ANISOU  399  CG2 THR C  75    10670   7377  13220   -813  -1509   -313       C
ATOM    400  C   THR C  75      67.765  26.161  18.198  1.00 79.15           C
ANISOU  400  C   THR C  75    10051   7119  12904   -885  -1171   -352       C
ATOM    401  O   THR C  75      68.759  26.494  17.556  1.00 88.13           O
ANISOU  401  O   THR C  75    11289   8003  14195   -921  -1108   -272       O
ATOM    402  N   VAL C  76      67.016  25.114  17.852  1.00 78.48           N
ANISOU  402  N   VAL C  76     9803   7253  12762   -912  -1119   -411       N
ATOM    403  CA  VAL C  76      67.372  24.300  16.682  1.00 84.21           C
ANISOU  403  CA  VAL C  76    10462   7923  13612   -991   -983   -381       C
ATOM    404  CB  VAL C  76      66.588  22.966  16.665  1.00 79.79           C
ANISOU  404  CB  VAL C  76     9681   7619  13016  -1064   -948   -437       C
ATOM    405  CG1 VAL C  76      66.860  22.196  15.357  1.00 71.62           C
ANISOU  405  CG1 VAL C  76     8588   6538  12085  -1121   -805   -417       C
ATOM    406  CG2 VAL C  76      67.025  22.112  17.850  1.00 84.57           C
ANISOU  406  CG2 VAL C  76    10123   8223  13787  -1271   -999   -380       C
ATOM    407  C   VAL C  76      67.099  25.095  15.399  1.00 88.58           C
ANISOU  407  C   VAL C  76    11178   8444  14036   -804   -917   -424       C
ATOM    408  O   VAL C  76      67.982  25.240  14.550  1.00 95.14           O
ANISOU  408  O   VAL C  76    12085   9051  15011   -840   -832   -354       O
ATOM    409  N   GLY C  77      65.879  25.621  15.271  1.00 89.22           N
ANISOU  409  N   GLY C  77    11312   8746  13843   -603   -957   -539       N
ATOM    410  CA  GLY C  77      65.519  26.437  14.118  1.00 87.13           C
ANISOU  410  CA  GLY C  77    11204   8469  13431   -410   -904   -588       C
ATOM    411  C   GLY C  77      65.755  25.897  12.714  1.00 90.17           C
ANISOU  411  C   GLY C  77    11569   8799  13893   -431   -763   -574       C
ATOM    412  O   GLY C  77      66.492  26.502  11.919  1.00 97.68           O
ANISOU  412  O   GLY C  77    12659   9530  14924   -400   -705   -521       O
ATOM    413  N   TYR C  78      65.099  24.782  12.391  1.00 90.92           N
ANISOU  413  N   TYR C  78    11493   9097  13955   -477   -708   -624       N
ATOM    414  CA  TYR C  78      65.233  24.162  11.077  1.00 76.34           C
ANISOU  414  CA  TYR C  78     9608   7225  12173   -500   -574   -617       C
ATOM    415  CB  TYR C  78      64.284  22.965  10.946  1.00 68.92           C
ANISOU  415  CB  TYR C  78     8470   6562  11155   -533   -540   -690       C
ATOM    416  CG  TYR C  78      64.613  21.800  11.850  1.00 70.78           C
ANISOU  416  CG  TYR C  78     8503   6832  11557   -751   -560   -641       C
ATOM    417  CD1 TYR C  78      65.845  21.152  11.766  1.00 71.02           C
ANISOU  417  CD1 TYR C  78     8470   6642  11872   -957   -498   -527       C
ATOM    418  CE1 TYR C  78      66.125  20.026  12.555  1.00 74.78           C
ANISOU  418  CE1 TYR C  78     8753   7157  12503  -1160   -511   -484       C
ATOM    419  CZ  TYR C  78      65.157  19.556  13.433  1.00 67.92           C
ANISOU  419  CZ  TYR C  78     7754   6551  11501  -1154   -588   -557       C
ATOM    420  OH  TYR C  78      65.383  18.435  14.190  1.00 66.96           O
ANISOU  420  OH  TYR C  78     7438   6480  11524  -1349   -601   -519       O
ATOM    421  CE2 TYR C  78      63.929  20.193  13.537  1.00 69.34           C
ANISOU  421  CE2 TYR C  78     7995   6952  11399   -950   -651   -670       C
ATOM    422  CD2 TYR C  78      63.663  21.307  12.749  1.00 76.76           C
ANISOU  422  CD2 TYR C  78     9127   7850  12187   -750   -637   -712       C
ATOM    423  C   TYR C  78      64.947  25.114   9.924  1.00 71.10           C
ANISOU  423  C   TYR C  78     9125   6525  11366   -300   -525   -662       C
ATOM    424  O   TYR C  78      65.625  25.079   8.912  1.00 69.48           O
ANISOU  424  O   TYR C  78     8969   6149  11280   -327   -425   -610       O
ATOM    425  N   GLY C  79      63.958  25.957  10.125  1.00 73.53           N
ANISOU  425  N   GLY C  79     9526   6992  11420   -103   -598   -756       N
ATOM    426  CA  GLY C  79      63.538  26.889   9.112  1.00 76.93           C
ANISOU  426  CA  GLY C  79    10124   7420  11685    101   -562   -811       C
ATOM    427  C   GLY C  79      62.309  26.488   8.340  1.00 78.40           C
ANISOU  427  C   GLY C  79    10251   7870  11668    224   -513   -923       C
ATOM    428  O   GLY C  79      61.964  27.133   7.382  1.00 73.19           O
ANISOU  428  O   GLY C  79     9716   7212  10881    384   -468   -968       O
ATOM    429  N   ASP C  80      61.657  25.411   8.736  1.00 83.41           N
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ANISOU  429  N   ASP C  80    10693   8724  12273    148   -518   -966       N
ATOM    430  CA  ASP C  80      60.435  24.991   8.082  1.00 75.35           C
ANISOU  430  CA  ASP C  80     9606   7969  11053    263   -478  -1075       C
ATOM    431  CB  ASP C  80      60.054  23.585   8.472  1.00 71.89           C
ANISOU  431  CB  ASP C  80     8933   7716  10665    120   -464  -1090       C
ATOM    432  CG  ASP C  80      59.897  23.419   9.924  1.00 77.95           C
ANISOU  432  CG  ASP C  80     9615   8571  11431     46   -580  -1090       C
ATOM    433  OD1 ASP C  80      60.513  24.159  10.677  1.00 81.64           O
ANISOU  433  OD1 ASP C  80    10179   8882  11959     29   -655  -1037       O
ATOM    434  OD2 ASP C  80      59.164  22.526  10.331  1.00 77.39           O
ANISOU  434  OD2 ASP C  80     9376   8726  11302      1   -596  -1141       O
ATOM    435  C   ASP C  80      59.292  25.926   8.385  1.00 72.69           C
ANISOU  435  C   ASP C  80     9369   7820  10428    480   -566  -1183       C
ATOM    436  O   ASP C  80      58.351  26.029   7.624  1.00 70.37           O
ANISOU  436  O   ASP C  80     9098   7695   9943    631   -531  -1273       O
ATOM    437  N   LEU C  81      59.381  26.586   9.529  1.00 78.42           N
ANISOU  437  N   LEU C  81    10152   8519  11126    492   -683  -1172       N
ATOM    438  CA  LEU C  81      58.340  27.482  10.031  1.00 74.15           C
ANISOU  438  CA  LEU C  81     9700   8152  10320    685   -784  -1268       C
ATOM    439  CB  LEU C  81      57.359  26.733  10.941  1.00 73.35           C
ANISOU  439  CB  LEU C  81     9429   8334  10106    658   -852  -1338       C
ATOM    440  CG  LEU C  81      56.516  25.598  10.347  1.00 74.47           C
ANISOU  440  CG  LEU C  81     9405   8711  10181    645   -780  -1405       C
ATOM    441  CD1 LEU C  81      56.110  24.620  11.436  1.00 74.19           C
ANISOU  441  CD1 LEU C  81     9170   8857  10161    522   -840  -1420       C
ATOM    442  CD2 LEU C  81      55.307  26.119   9.580  1.00 89.89           C
ANISOU  442  CD2 LEU C  81    11437  10859  11858    873   -766  -1523       C
ATOM    443  C   LEU C  81      58.986  28.646  10.784  1.00 68.79           C
ANISOU  443  C   LEU C  81     9181   7284   9672    715   -876  -1217       C
ATOM    444  O   LEU C  81      60.023  28.455  11.417  1.00 75.87           O
ANISOU  444  O   LEU C  81    10050   7994  10784    551   -896  -1118       O
ATOM    445  N   TYR C  82      58.404  29.842  10.675  1.00 68.26           N
ANISOU  445  N   TYR C  82     9283   7258   9396    923   -929  -1282       N
ATOM    446  CA  TYR C  82      58.891  31.037  11.373  1.00 73.52           C
ANISOU  446  CA  TYR C  82    10111   7764  10061    977  -1022  -1246       C
ATOM    447  CB  TYR C  82      60.326  31.369  10.932  1.00 72.27           C
ANISOU  447  CB  TYR C  82    10052   7268  10139    884   -966  -1126       C
ATOM    448  CG  TYR C  82      60.522  31.458   9.439  1.00 79.15           C
ANISOU  448  CG  TYR C  82    10998   8048  11027    946   -842  -1123       C
ATOM    449  CD1 TYR C  82      60.256  32.633   8.746  1.00 78.93           C
ANISOU  449  CD1 TYR C  82    11164   7979  10847   1145   -839  -1164       C
ATOM    450  CE1 TYR C  82      60.444  32.707   7.367  1.00 87.85           C
ANISOU  450  CE1 TYR C  82    12361   9024  11993   1201   -725  -1160       C
ATOM    451  CZ  TYR C  82      60.889  31.595   6.673  1.00 86.48           C
ANISOU  451  CZ  TYR C  82    12061   8809  11989   1057   -613  -1115       C
ATOM    452  OH  TYR C  82      61.070  31.652   5.312  1.00 89.36           O
ANISOU  452  OH  TYR C  82    12490   9092  12371   1111   -500  -1111       O
ATOM    453  CE2 TYR C  82      61.148  30.418   7.339  1.00 80.17           C
ANISOU  453  CE2 TYR C  82    11069   8051  11340    859   -615  -1074       C
ATOM    454  CD2 TYR C  82      60.966  30.354   8.714  1.00 84.56           C
ANISOU  454  CD2 TYR C  82    11559   8691  11880    804   -729  -1078       C
ATOM    455  C   TYR C  82      57.963  32.243  11.164  1.00 77.68           C
ANISOU  455  C   TYR C  82    10802   8402  10312   1227  -1075  -1343       C
ATOM    456  O   TYR C  82      57.231  32.301  10.186  1.00 79.58           O
ANISOU  456  O   TYR C  82    11072   8763  10403   1359  -1014  -1416       O
ATOM    457  N   PRO C  83      58.009  33.227  12.077  1.00 84.32           N
ANISOU  457  N   PRO C  83    11755   9196  11088   1294  -1189  -1341       N
ATOM    458  CA  PRO C  83      57.167  34.423  11.981  1.00 87.16           C
ANISOU  458  CA  PRO C  83    12275   9652  11190   1528  -1249  -1429       C
ATOM    459  CB  PRO C  83      57.342  35.048  13.365  1.00 88.39           C
ANISOU  459  CB  PRO C  83    12473   9771  11339   1517  -1384  -1409       C
ATOM    460  CG  PRO C  83      58.764  34.745  13.663  1.00 85.64           C
ANISOU  460  CG  PRO C  83    12103   9151  11285   1316  -1363  -1277       C
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ATOM    461  CD  PRO C  83      58.806  33.273  13.316  1.00 85.48           C
ANISOU  461  CD  PRO C  83    11880   9209  11391   1155  -1273  -1261       C
ATOM    462  C   PRO C  83      57.577  35.414  10.889  1.00 87.13           C
ANISOU  462  C   PRO C  83    12468   9465  11174   1652  -1190  -1413       C
ATOM    463  O   PRO C  83      58.759  35.597  10.594  1.00 84.01           O
ANISOU  463  O   PRO C  83    12138   8799  10982   1563  -1146  -1313       O
ATOM    464  N   VAL C  84      56.574  36.045  10.287  1.00 94.43           N
ANISOU  464  N   VAL C  84    13485  10541  11853   1861  -1190  -1514       N
ATOM    465  CA  VAL C  84      56.788  37.070   9.267  1.00102.52           C
ANISOU  465  CA  VAL C  84    14703  11424  12826   2006  -1143  -1515       C
ATOM    466  CB  VAL C  84      56.097  36.706   7.931  1.00 85.98           C
ANISOU  466  CB  VAL C  84    12589   9458  10620   2101  -1034  -1583       C
ATOM    467  CG1 VAL C  84      56.732  35.469   7.329  1.00 76.86           C
ANISOU  467  CG1 VAL C  84    11291   8232   9680   1918   -920  -1519       C
ATOM    468  CG2 VAL C  84      54.622  36.494   8.145  1.00 89.97           C
ANISOU  468  CG2 VAL C  84    13022  10293  10869   2221  -1077  -1709       C
ATOM    469  C   VAL C  84      56.278  38.429   9.764  1.00102.60           C
ANISOU  469  C   VAL C  84    14881  11468  12633   2195  -1252  -1570       C
ATOM    470  O   VAL C  84      56.558  39.470   9.166  1.00 99.45           O
ANISOU  470  O   VAL C  84    14664  10926  12198   2315  -1239  -1562       O
ATOM    471  N   THR C  85      55.510  38.407  10.851  1.00 99.81           N
ANISOU  471  N   THR C  85    14467  11311  12147   2222  -1358  -1629       N
ATOM    472  CA  THR C  85      54.959  39.629  11.438  1.00103.21           C
ANISOU  472  CA  THR C  85    15041  11795  12379   2395  -1469  -1686       C
ATOM    473  CB  THR C  85      53.509  39.406  11.886  1.00104.66           C
ANISOU  473  CB  THR C  85    15142  12311  12312   2501  -1530  -1808       C
ATOM    474  OG1 THR C  85      53.459  38.345  12.848  1.00109.61           O
ANISOU  474  OG1 THR C  85    15576  13046  13024   2338  -1567  -1792       O
ATOM    475  CG2 THR C  85      52.649  39.036  10.696  1.00105.40           C
ANISOU  475  CG2 THR C  85    15207  12573  12266   2604  -1436  -1890       C
ATOM    476  C   THR C  85      55.761  40.171  12.630  1.00110.53           C
ANISOU  476  C   THR C  85    16020  12554  13421   2318  -1572  -1611       C
ATOM    477  O   THR C  85      56.439  39.415  13.333  1.00112.21           O
ANISOU  477  O   THR C  85    16112  12695  13829   2125  -1583  -1537       O
ATOM    478  N   LEU C  86      55.651  41.483  12.858  1.00113.86           N
ANISOU  478  N   LEU C  86    16623  12922  13718   2472  -1648  -1633       N
ATOM    479  CA  LEU C  86      56.382  42.176  13.930  1.00114.33           C
ANISOU  479  CA  LEU C  86    16759  12814  13866   2427  -1749  -1567       C
ATOM    480  CB  LEU C  86      56.188  43.695  13.814  1.00115.39           C
ANISOU  480  CB  LEU C  86    17114  12888  13841   2630  -1808  -1602       C
ATOM    481  CG  LEU C  86      57.338  44.573  14.313  1.00116.80           C
ANISOU  481  CG  LEU C  86    17427  12782  14168   2589  -1861  -1505       C
ATOM    482  CD1 LEU C  86      58.634  44.121  13.669  1.00121.08           C
ANISOU  482  CD1 LEU C  86    17958  13060  14986   2431  -1760  -1390       C
ATOM    483  CD2 LEU C  86      57.088  46.047  14.012  1.00120.90           C
ANISOU  483  CD2 LEU C  86    18165  13250  14520   2802  -1906  -1546       C
ATOM    484  C   LEU C  86      55.966  41.707  15.321  1.00104.07           C
ANISOU  484  C   LEU C  86    15329  11674  12538   2351  -1853  -1587       C
ATOM    485  O   LEU C  86      56.695  41.888  16.287  1.00103.86           O
ANISOU  485  O   LEU C  86    15309  11511  12641   2251  -1924  -1517       O
ATOM    486  N   TRP C  87      54.785  41.114  15.404  1.00102.10           N
ANISOU  486  N   TRP C  87    14962  11714  12115   2402  -1862  -1684       N
ATOM    487  CA  TRP C  87      54.271  40.541  16.637  1.00 99.48           C
ANISOU  487  CA  TRP C  87    14489  11566  11744   2332  -1951  -1713       C
ATOM    488  CB  TRP C  87      52.758  40.688  16.720  1.00107.82           C
ANISOU  488  CB  TRP C  87    15529  12934  12505   2505  -1999  -1847       C
ATOM    489  CG  TRP C  87      52.382  42.007  17.302  1.00126.23           C
ANISOU  489  CG  TRP C  87    18023  15277  14662   2672  -2111  -1890       C
ATOM    490  CD1 TRP C  87      52.089  43.160  16.633  1.00131.80           C
ANISOU  490  CD1 TRP C  87    18915  15949  15213   2868  -2111  -1935       C
ATOM    491  NE1 TRP C  87      51.800  44.163  17.535  1.00129.10           N
ANISOU  491  NE1 TRP C  87    18678  15631  14742   2974  -2235  -1965       N
ATOM    492  CE2 TRP C  87      51.889  43.665  18.795  1.00131.74           C
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ANISOU  492  CE2 TRP C  87    18895  16018  15144   2849  -2316  -1940       C
ATOM    493  CD2 TRP C  87      52.250  42.304  18.702  1.00128.92           C
ANISOU  493  CD2 TRP C  87    18351  15670  14964   2656  -2242  -1894       C
ATOM    494  CE3 TRP C  87      52.408  41.552  19.864  1.00128.24           C
ANISOU  494  CE3 TRP C  87    18113  15634  14978   2499  -2303  -1861       C
ATOM    495  CZ3 TRP C  87      52.205  42.169  21.084  1.00139.09           C
ANISOU  495  CZ3 TRP C  87    19527  17049  16273   2537  -2434  -1876       C
ATOM    496  CH2 TRP C  87      51.845  43.521  21.161  1.00144.98           C
ANISOU  496  CH2 TRP C  87    20459  17786  16841   2730  -2506  -1922       C
ATOM    497  CZ2 TRP C  87      51.684  44.281  20.035  1.00139.06           C
ANISOU  497  CZ2 TRP C  87    19860  16987  15991   2886  -2449  -1955       C
ATOM    498  C   TRP C  87      54.698  39.097  16.729  1.00100.18           C
ANISOU  498  C   TRP C  87    14372  11660  12031   2114  -1889  -1658       C
ATOM    499  O   TRP C  87      55.123  38.633  17.787  1.00104.80           O
ANISOU  499  O   TRP C  87    14858  12218  12742   1966  -1947  -1606       O
ATOM    500  N   GLY C  88      54.576  38.378  15.620  1.00 96.49           N
ANISOU  500  N   GLY C  88    12251  11887  12524   2964      1  -1411       N
ATOM    501  CA  GLY C  88      54.981  36.985  15.582  1.00 92.60           C
ANISOU  501  CA  GLY C  88    11561  11585  12037   2842    138  -1259       C
ATOM    502  C   GLY C  88      56.426  36.862  16.000  1.00 90.04           C
ANISOU  502  C   GLY C  88    11317  11256  11637   2618     64  -1106       C
ATOM    503  O   GLY C  88      56.828  35.905  16.673  1.00 88.40           O
ANISOU  503  O   GLY C  88    11019  11205  11366   2518    170  -1035       O
ATOM    504  N   ARG C  89      57.198  37.855  15.585  1.00 88.05           N
ANISOU  504  N   ARG C  89    11243  10818  11393   2541   -123  -1061       N
ATOM    505  CA  ARG C  89      58.604  37.918  15.888  1.00 95.06           C
ANISOU  505  CA  ARG C  89    12228  11672  12219   2331   -219   -930       C
ATOM    506  CB  ARG C  89      59.232  38.940  14.969  1.00 90.47           C
ANISOU  506  CB  ARG C  89    11801  10880  11692   2268   -411   -877       C
ATOM    507  CG  ARG C  89      59.378  38.306  13.628  1.00 88.16           C
ANISOU  507  CG  ARG C  89    11355  10611  11532   2207   -397   -732       C
ATOM    508  CD  ARG C  89      59.792  39.199  12.524  1.00 91.13           C
ANISOU  508  CD  ARG C  89    11859  10788  11979   2160   -565   -683       C
ATOM    509  NE  ARG C  89      59.816  38.357  11.343  1.00 86.73           N
ANISOU  509  NE  ARG C  89    11113  10295  11544   2105   -512   -547       N
ATOM    510  CZ  ARG C  89      60.323  38.702  10.179  1.00 74.34           C
ANISOU  510  CZ  ARG C  89    9588   8600  10057   2012   -623   -450       C
ATOM    511  NH1 ARG C  89      60.863  39.898  10.011  1.00 83.03           N
ANISOU  511  NH1 ARG C  89    10923   9497  11129   1962   -799   -472       N
ATOM    512  NH2 ARG C  89      60.282  37.836   9.186  1.00 66.37           N
ANISOU  512  NH2 ARG C  89    8390   7671   9158   1964   -553   -332       N
ATOM    513  C   ARG C  89      58.878  38.211  17.375  1.00 94.10           C
ANISOU  513  C   ARG C  89    12239  11570  11944   2306   -218  -1017       C
ATOM    514  O   ARG C  89      59.873  37.747  17.950  1.00 86.45           O
ANISOU  514  O   ARG C  89    11276  10665  10905   2141   -221   -913       O
ATOM    515  N   CYS C  90      57.970  38.959  17.999  1.00 98.76           N
ANISOU  515  N   CYS C  90    12930  12108  12485   2471   -211  -1211       N
ATOM    516  CA  CYS C  90      58.061  39.247  19.426  1.00 91.78           C
ANISOU  516  CA  CYS C  90    12167  11247  11457   2465   -194  -1315       C
ATOM    517  CB  CYS C  90      57.055  40.315  19.850  1.00 93.14           C
ANISOU  517  CB  CYS C  90    12468  11316  11605   2653   -220  -1538       C
ATOM    518  SG  CYS C  90      57.522  42.005  19.403  1.00 95.71           S
ANISOU  518  SG  CYS C  90    13057  11365  11943   2656   -461  -1575       S
ATOM    519  C   CYS C  90      57.832  37.986  20.229  1.00 88.04           C
ANISOU  519  C   CYS C  90    11537  10993  10921   2442     -8  -1302       C
ATOM    520  O   CYS C  90      58.650  37.653  21.085  1.00 92.39           O
ANISOU  520  O   CYS C  90    12131  11604  11370   2306     -6  -1239       O
ATOM    521  N   VAL C  91      56.717  37.302  19.966  1.00 79.71           N
ANISOU  521  N   VAL C  91    10307  10055   9925   2576    146  -1367       N
ATOM    522  CA  VAL C  91      56.404  36.037  20.634  1.00 84.08           C
ANISOU  522  CA  VAL C  91    10701  10822  10425   2560    337  -1357       C
ATOM    523  CB  VAL C  91      55.208  35.324  19.986  1.00 85.37           C
ANISOU  523  CB  VAL C  91    10657  11094  10686   2706    492  -1410       C
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ATOM    524  CG1 VAL C  91      54.831  34.082  20.809  1.00 76.85           C
ANISOU  524  CG1 VAL C  91     9435  10232   9531   2693    697  -1423       C
ATOM    525  CG2 VAL C  91      54.029  36.254  19.882  1.00 90.99           C
ANISOU  525  CG2 VAL C  91    11428  11708  11435   2915    479  -1622       C
ATOM    526  C   VAL C  91      57.613  35.111  20.549  1.00 86.38           C
ANISOU  526  C   VAL C  91    10917  11199  10706   2354    334  -1140       C
ATOM    527  O   VAL C  91      57.955  34.405  21.499  1.00 80.54           O
ANISOU  527  O   VAL C  91    10157  10581   9862   2268    412  -1109       O
ATOM    528  N   ALA C  92      58.248  35.139  19.378  1.00 88.71           N
ANISOU  528  N   ALA C  92    11173  11423  11110   2273    237   -993       N
ATOM    529  CA  ALA C  92      59.422  34.333  19.092  1.00 82.93           C
ANISOU  529  CA  ALA C  92    10359  10753  10397   2076    217   -788       C
ATOM    530  CB  ALA C  92      59.883  34.577  17.658  1.00 79.54           C
ANISOU  530  CB  ALA C  92     9899  10218  10105   2019    109   -667       C
ATOM    531  C   ALA C  92      60.556  34.625  20.060  1.00 84.08           C
ANISOU  531  C   ALA C  92    10663  10863  10422   1926    119   -748       C
ATOM    532  O   ALA C  92      61.085  33.712  20.700  1.00 82.80           O
ANISOU  532  O   ALA C  92    10434  10830  10196   1817    184   -665       O
ATOM    533  N   VAL C  93      60.893  35.903  20.196  1.00 83.39           N
ANISOU  533  N   VAL C  93    10786  10599  10300   1926    -37   -813       N
ATOM    534  CA  VAL C  93      61.979  36.314  21.073  1.00 83.61           C
ANISOU  534  CA  VAL C  93    10977  10575  10215   1787   -143   -785       C
ATOM    535  CB  VAL C  93      62.145  37.841  21.083  1.00 81.56           C
ANISOU  535  CB  VAL C  93    10951  10108   9931   1819   -308   -879       C
ATOM    536  CG1 VAL C  93      63.331  38.234  21.936  1.00 74.45           C
ANISOU  536  CG1 VAL C  93    10211   9158   8919   1665   -417   -842       C
ATOM    537  CG2 VAL C  93      62.330  38.360  19.680  1.00 88.00           C
ANISOU  537  CG2 VAL C  93    11773  10786  10876   1809   -416   -814       C
ATOM    538  C   VAL C  93      61.731  35.823  22.494  1.00 84.43           C
ANISOU  538  C   VAL C  93    11093  10808  10179   1799    -33   -859       C
ATOM    539  O   VAL C  93      62.646  35.340  23.164  1.00 84.11           O
ANISOU  539  O   VAL C  93    11069  10829  10061   1654    -49   -771       O
ATOM    540  N   VAL C  94      60.481  35.916  22.936  1.00 79.94           N
ANISOU  540  N   VAL C  94    10512  10282   9580   1969     80  -1025       N
ATOM    541  CA  VAL C  94      60.117  35.445  24.261  1.00 79.01           C
ANISOU  541  CA  VAL C  94    10406  10287   9328   1986    200  -1112       C
ATOM    542  CB  VAL C  94      58.696  35.898  24.664  1.00 76.69           C
ANISOU  542  CB  VAL C  94    10134   9994   9011   2186    297  -1334       C
ATOM    543  CG1 VAL C  94      58.216  35.134  25.893  1.00 69.63           C
ANISOU  543  CG1 VAL C  94     9207   9259   7991   2195    460  -1413       C
ATOM    544  CG2 VAL C  94      58.672  37.402  24.914  1.00 73.79           C
ANISOU  544  CG2 VAL C  94     9986   9440   8612   2245    155  -1464       C
ATOM    545  C   VAL C  94      60.235  33.921  24.304  1.00 83.39           C
ANISOU  545  C   VAL C  94    10763  11036   9885   1911    340   -990       C
ATOM    546  O   VAL C  94      60.724  33.373  25.290  1.00 87.24           O
ANISOU  546  O   VAL C  94    11277  11611  10258   1813    374   -955       O
ATOM    547  N   VAL C  95      59.796  33.239  23.243  1.00 77.67           N
ANISOU  547  N   VAL C  95     9846  10376   9288   1955    419   -924       N
ATOM    548  CA  VAL C  95      59.925  31.775  23.171  1.00 82.71           C
ANISOU  548  CA  VAL C  95    10289  11196   9943   1883    551   -798       C
ATOM    549  CB  VAL C  95      59.243  31.169  21.913  1.00 81.50           C
ANISOU  549  CB  VAL C  95     9923  11101   9941   1962    644   -752       C
ATOM    550  CG1 VAL C  95      59.563  29.677  21.782  1.00 73.80           C
ANISOU  550  CG1 VAL C  95     8751  10303   8989   1863    761   -600       C
ATOM    551  CG2 VAL C  95      57.739  31.387  21.953  1.00 78.79           C
ANISOU  551  CG2 VAL C  95     9544  10782   9609   2170    765   -943       C
ATOM    552  C   VAL C  95      61.401  31.355  23.202  1.00 86.36           C
ANISOU  552  C   VAL C  95    10759  11663  10393   1674    450   -610       C
ATOM    553  O   VAL C  95      61.781  30.426  23.920  1.00 84.37           O
ANISOU  553  O   VAL C  95    10457  11536  10063   1584    517   -544       O
ATOM    554  N   MET C  96      62.223  32.033  22.406  1.00 84.57           N
ANISOU  554  N   MET C  96    10593  11296  10243   1596    287   -528       N
ATOM    555  CA  MET C  96      63.656  31.757  22.351  1.00 88.31           C
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ANISOU  555  CA  MET C  96    11078  11756  10719   1396    176   -365       C
ATOM    556  CB  MET C  96      64.322  32.701  21.352  1.00 88.95           C
ANISOU  556  CB  MET C  96    11241  11662  10894   1339      7   -315       C
ATOM    557  CG  MET C  96      63.847  32.602  19.918  1.00 92.10           C
ANISOU  557  CG  MET C  96    11505  12037  11452   1396     30   -271       C
ATOM    558  SD  MET C  96      64.529  34.034  19.068  1.00 97.19           S
ANISOU  558  SD  MET C  96    12330  12443  12157   1343   -185   -265       S
ATOM    559  CE  MET C  96      64.911  33.402  17.463  1.00 85.47           C
ANISOU  559  CE  MET C  96    10658  10967  10849   1251   -188    -98       C
ATOM    560  C   MET C  96      64.358  31.909  23.711  1.00 83.01           C
ANISOU  560  C   MET C  96    10561  11087   9891   1306    122   -386       C
ATOM    561  O   MET C  96      65.026  30.991  24.187  1.00 78.75           O
ANISOU  561  O   MET C  96     9960  10653   9308   1188    146   -283       O
ATOM    562  N   VAL C  97      64.203  33.084  24.316  1.00 82.77           N
ANISOU  562  N   VAL C  97    10733  10936   9778   1363     43   -520       N
ATOM    563  CA  VAL C  97      64.803  33.405  25.616  1.00 90.04           C
ANISOU  563  CA  VAL C  97    11823  11842  10546   1289    -18   -559       C
ATOM    564  CB  VAL C  97      64.550  34.908  25.990  1.00 86.10           C
ANISOU  564  CB  VAL C  97    11546  11180   9989   1369   -117   -714       C
ATOM    565  CG1 VAL C  97      64.583  35.138  27.484  1.00 80.63           C
ANISOU  565  CG1 VAL C  97    11003  10509   9125   1357   -107   -812       C
ATOM    566  CG2 VAL C  97      65.525  35.833  25.253  1.00 81.70           C
ANISOU  566  CG2 VAL C  97    11093  10452   9495   1278   -305   -649       C
ATOM    567  C   VAL C  97      64.287  32.486  26.730  1.00 84.12           C
ANISOU  567  C   VAL C  97    11028  11256   9679   1313    136   -603       C
ATOM    568  O   VAL C  97      65.051  32.080  27.616  1.00 77.12           O
ANISOU  568  O   VAL C  97    10193  10419   8690   1195    109   -548       O
ATOM    569  N   ALA C  98      63.009  32.121  26.644  1.00 77.90           N
ANISOU  569  N   ALA C  98    10138  10551   8909   1460    296   -699       N
ATOM    570  CA  ALA C  98      62.390  31.254  27.635  1.00 78.09           C
ANISOU  570  CA  ALA C  98    10118  10730   8823   1490    459   -756       C
ATOM    571  CB  ALA C  98      60.926  31.050  27.320  1.00 76.65           C
ANISOU  571  CB  ALA C  98     9823  10613   8687   1666    624   -882       C
ATOM    572  C   ALA C  98      63.113  29.922  27.673  1.00 83.62           C
ANISOU  572  C   ALA C  98    10685  11564   9522   1354    500   -584       C
ATOM    573  O   ALA C  98      63.388  29.385  28.743  1.00 87.00           O
ANISOU  573  O   ALA C  98    11162  12073   9822   1284    535   -576       O
ATOM    574  N   GLY C  99      63.447  29.409  26.494  1.00 88.13           N
ANISOU  574  N   GLY C  99    11094  12152  10239   1312    488   -446       N
ATOM    575  CA  GLY C  99      64.142  28.141  26.376  1.00 81.83           C
ANISOU  575  CA  GLY C  99    10150  11475   9465   1185    521   -277       C
ATOM    576  C   GLY C  99      65.593  28.200  26.813  1.00 79.56           C
ANISOU  576  C   GLY C  99     9958  11140   9131   1009    363   -167       C
ATOM    577  O   GLY C  99      66.050  27.315  27.534  1.00 81.80           O
ANISOU  577  O   GLY C  99    10219  11526   9337    919    393    -98       O
ATOM    578  N   ILE C 100      66.319  29.224  26.359  1.00 78.56           N
ANISOU  578  N   ILE C 100     9939  10858   9053    958    194   -153       N
ATOM    579  CA  ILE C 100      67.729  29.400  26.710  1.00 78.42           C
ANISOU  579  CA  ILE C 100    10016  10781   9000    790     33    -62       C
ATOM    580  CB  ILE C 100      68.358  30.628  26.012  1.00 79.47           C
ANISOU  580  CB  ILE C 100    10261  10732   9202    752   -138    -65       C
ATOM    581  CG1 ILE C 100      68.132  30.571  24.504  1.00 81.10           C
ANISOU  581  CG1 ILE C 100    10322  10910   9585    779   -126     -3       C
ATOM    582  CD1 ILE C 100      68.616  31.811  23.785  1.00 86.02           C
ANISOU  582  CD1 ILE C 100    11067  11347  10269    751   -283    -19       C
ATOM    583  CG2 ILE C 100      69.841  30.728  26.340  1.00 78.15           C
ANISOU  583  CG2 ILE C 100    10174  10514   9005    572   -297     27       C
ATOM    584  C   ILE C 100      67.899  29.553  28.221  1.00 87.38           C
ANISOU  584  C   ILE C 100    11319  11931   9950    765    -17   -136       C
ATOM    585  O   ILE C 100      68.807  28.967  28.815  1.00 85.99           O
ANISOU  585  O   ILE C 100    11152  11804   9715    637    -34    -46       O
ATOM    586  N   THR C 101      67.027  30.343  28.841  1.00 89.32           N
ANISOU  586  N   THR C 101    11698  12134  10107    887     58   -302       N
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ATOM    587  CA  THR C 101      67.090  30.533  30.287  1.00 87.15           C
ANISOU  587  CA  THR C 101    11589  11872   9653    867     54   -385       C
ATOM    588  CB  THR C 101      66.135  31.658  30.761  1.00 86.43           C
ANISOU  588  CB  THR C 101    11649  11699   9492   1006     79   -582       C
ATOM    589  OG1 THR C 101      66.669  32.932  30.367  1.00 77.47           O
ANISOU  589  OG1 THR C 101    10646  10391   8396    992    -84   -606       O
ATOM    590  CG2 THR C 101      66.028  31.660  32.279  1.00104.31           C
ANISOU  590  CG2 THR C 101    14059  14006  11568    989    115   -674       C
ATOM    591  C   THR C 101      66.774  29.238  31.031  1.00 85.63           C
ANISOU  591  C   THR C 101    11311  11852   9374    851    197   -356       C
ATOM    592  O   THR C 101      67.523  28.833  31.921  1.00 94.39           O
ANISOU  592  O   THR C 101    12488  12997  10377    739    149   -302       O
ATOM    593  N   SER C 102      65.679  28.590  30.655  1.00 82.57           N
ANISOU  593  N   SER C 102    10777  11565   9031    959    369   -391       N
ATOM    594  CA  SER C 102      65.262  27.349  31.299  1.00 90.16           C
ANISOU  594  CA  SER C 102    11655  12691   9912    951    523   -373       C
ATOM    595  CB  SER C 102      64.009  26.792  30.614  1.00 91.33           C
ANISOU  595  CB  SER C 102    11627  12933  10142   1085    709   -421       C
ATOM    596  OG  SER C 102      62.925  27.697  30.702  1.00 95.19           O
ANISOU  596  OG  SER C 102    12189  13364  10614   1235    764   -608       O
ATOM    597  C   SER C 102      66.361  26.284  31.290  1.00 91.74           C
ANISOU  597  C   SER C 102    11767  12964  10126    796    472   -187       C
ATOM    598  O   SER C 102      66.728  25.755  32.346  1.00 93.27           O
ANISOU  598  O   SER C 102    12033  13219  10186    719    475   -166       O
ATOM    599  N   PHE C 103      66.884  25.973  30.105  1.00 88.82           N
ANISOU  599  N   PHE C 103    11244  12585   9917    749    424    -55       N
ATOM    600  CA  PHE C 103      67.952  24.984  29.984  1.00 88.03           C
ANISOU  600  CA  PHE C 103    11045  12549   9855    602    368    120       C
ATOM    601  CB  PHE C 103      68.206  24.626  28.522  1.00 91.51           C
ANISOU  601  CB  PHE C 103    11285  12991  10492    578    358    239       C
ATOM    602  CG  PHE C 103      67.164  23.717  27.922  1.00 84.23           C
ANISOU  602  CG  PHE C 103    10166  12196   9640    673    551    247       C
ATOM    603  CD1 PHE C 103      67.156  22.356  28.207  1.00 84.02           C
ANISOU  603  CD1 PHE C 103    10015  12321   9588    628    658    333       C
ATOM    604  CE1 PHE C 103      66.215  21.514  27.637  1.00 78.25           C
ANISOU  604  CE1 PHE C 103    9099  11709   8922    712    839    340       C
ATOM    605  CZ  PHE C 103      65.293  22.022  26.748  1.00 86.63           C
ANISOU  605  CZ  PHE C 103    10094  12739  10081    841    908    263       C
ATOM    606  CE2 PHE C 103      65.307  23.371  26.433  1.00 85.55           C
ANISOU  606  CE2 PHE C 103    10082  12447   9976    887    793    182       C
ATOM    607  CD2 PHE C 103      66.243  24.207  27.011  1.00 81.64           C
ANISOU  607  CD2 PHE C 103    9774  11834   9412    801    618    175       C
ATOM    608  C   PHE C 103      69.250  25.471  30.628  1.00 87.62           C
ANISOU  608  C   PHE C 103    11149  12407   9734    467    176    162       C
ATOM    609  O   PHE C 103      70.075  24.670  31.081  1.00 86.11           O
ANISOU  609  O   PHE C 103    10936  12276   9506    349    131    266       O
ATOM    610  N   GLY C 104      69.431  26.789  30.651  1.00 89.08           N
ANISOU  610  N   GLY C 104    11492  12448   9907    485     62     77       N
ATOM    611  CA  GLY C 104      70.611  27.393  31.246  1.00 92.41           C
ANISOU  611  CA  GLY C 104    12073  12776  10263    366   -119     98       C
ATOM    612  C   GLY C 104      70.627  27.148  32.736  1.00 99.12           C
ANISOU  612  C   GLY C 104    13062  13679  10921    340   -101     49       C
ATOM    613  O   GLY C 104      71.679  26.931  33.347  1.00 96.70           O
ANISOU  613  O   GLY C 104    12821  13367  10554    214   -217    118       O
ATOM    614  N   LEU C 105      69.442  27.198  33.328  1.00102.46           N
ANISOU  614  N   LEU C 105    13532  14150  11248    458     43    -80       N
ATOM    615  CA  LEU C 105      69.300  26.959  34.750  1.00101.57           C
ANISOU  615  CA  LEU C 105    13556  14091  10945    438     82   -143       C
ATOM    616  CB  LEU C 105      67.937  27.474  35.227  1.00106.30           C
ANISOU  616  CB  LEU C 105    14232  14696  11460    582    222   -328       C
ATOM    617  CG  LEU C 105      67.594  27.516  36.715  1.00120.35           C
ANISOU  617  CG  LEU C 105    16185  16510  13035    577    274   -438       C
ATOM    618  CD1 LEU C 105      66.684  28.694  37.040  1.00122.03           C
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ANISOU  618  CD1 LEU C 105    16527  16642  13196    696    314   -634       C
ATOM    619  CD2 LEU C 105      66.897  26.222  37.056  1.00113.25           C
ANISOU  619  CD2 LEU C 105    15182  15770  12078    594    455   -424       C
ATOM    620  C   LEU C 105      69.500  25.473  35.074  1.00 97.85           C
ANISOU  620  C   LEU C 105    12974  13765  10438    367    154    -28       C
ATOM    621  O   LEU C 105      70.132  25.145  36.074  1.00107.91           O
ANISOU  621  O   LEU C 105    14353  15061  11588    272     93      4       O
ATOM    622  N   VAL C 106      68.993  24.582  34.222  1.00 91.70           N
ANISOU  622  N   VAL C 106    11988  13081   9771    409    277     35       N
ATOM    623  CA  VAL C 106      69.168  23.139  34.424  1.00 90.38           C
ANISOU  623  CA  VAL C 106    11704  13052   9585    344    349    150       C
ATOM    624  CB  VAL C 106      68.437  22.315  33.358  1.00 83.32           C
ANISOU  624  CB  VAL C 106    10575  12255   8826    414    502    199       C
ATOM    625  CG1 VAL C 106      68.775  20.834  33.499  1.00 65.71           C
ANISOU  625  CG1 VAL C 106     8221  10157   6589    333    556    333       C
ATOM    626  CG2 VAL C 106      66.938  22.516  33.496  1.00 88.14           C
ANISOU  626  CG2 VAL C 106    11192  12909   9390    568    688     40       C
ATOM    627  C   VAL C 106      70.666  22.808  34.426  1.00 93.71           C
ANISOU  627  C   VAL C 106    12119  13445  10040    187    170    300       C
ATOM    628  O   VAL C 106      71.127  21.902  35.131  1.00 93.28           O
ANISOU  628  O   VAL C 106    12074  13466   9903    103    160    374       O
ATOM    629  N   THR C 107      71.426  23.556  33.631  1.00 92.87           N
ANISOU  629  N   THR C 107    12002  13228  10056    145     26    339       N
ATOM    630  CA  THR C 107      72.880  23.407  33.602  1.00 92.59           C
ANISOU  630  CA  THR C 107    11968  13150  10062     -6   -156    459       C
ATOM    631  CB  THR C 107      73.512  24.249  32.474  1.00 93.90           C
ANISOU  631  CB  THR C 107    12094  13196  10387    -38   -280    488       C
ATOM    632  OG1 THR C 107      73.362  23.549  31.231  1.00 93.13           O
ANISOU  632  OG1 THR C 107    11767  13156  10463    -32   -210    582       O
ATOM    633  CG2 THR C 107      74.997  24.461  32.725  1.00 80.45           C
ANISOU  633  CG2 THR C 107    10461  11420   8686   -189   -484    557       C
ATOM    634  C   THR C 107      73.487  23.803  34.944  1.00 97.17           C
ANISOU  634  C   THR C 107    12766  13686  10469    -73   -268    416       C
ATOM    635  O   THR C 107      74.406  23.138  35.438  1.00 96.63           O
ANISOU  635  O   THR C 107    12703  13649  10363   -186   -359    508       O
ATOM    636  N   ALA C 108      72.964  24.879  35.532  1.00101.29           N
ANISOU  636  N   ALA C 108    13466  14133  10885     -3   -264    272       N
ATOM    637  CA  ALA C 108      73.442  25.371  36.824  1.00102.05           C
ANISOU  637  CA  ALA C 108    13783  14182  10810    -60   -361    215       C
ATOM    638  CB  ALA C 108      72.768  26.681  37.176  1.00109.35           C
ANISOU  638  CB  ALA C 108    14874  15013  11662     33   -345     50       C
ATOM    639  C   ALA C 108      73.204  24.345  37.923  1.00104.51           C
ANISOU  639  C   ALA C 108    14132  14608  10968    -85   -279    229       C
ATOM    640  O   ALA C 108      74.106  24.044  38.709  1.00109.35           O
ANISOU  640  O   ALA C 108    14833  15221  11495   -193   -394    285       O
ATOM    641  N   ALA C 109      71.981  23.820  37.967  1.00100.21           N
ANISOU  641  N   ALA C 109    13526  14159  10389     14    -82    172       N
ATOM    642  CA  ALA C 109      71.603  22.821  38.954  1.00109.24           C
ANISOU  642  CA  ALA C 109    14706  15416  11384     -5     21    174       C
ATOM    643  CB  ALA C 109      70.187  22.329  38.701  1.00111.05           C
ANISOU  643  CB  ALA C 109    14833  15745  11616    116    251    103       C
ATOM    644  C   ALA C 109      72.587  21.663  38.911  1.00110.77           C
ANISOU  644  C   ALA C 109    14804  15672  11613   -123    -57    344       C
ATOM    645  O   ALA C 109      72.978  21.133  39.952  1.00118.92           O
ANISOU  645  O   ALA C 109    15942  16738  12503   -198    -95    371       O
ATOM    646  N   LEU C 110      72.995  21.283  37.704  1.00105.34           N
ANISOU  646  N   LEU C 110    13916  14993  11115   -141    -85    455       N
ATOM    647  CA  LEU C 110      73.982  20.223  37.552  1.00107.19           C
ANISOU  647  CA  LEU C 110    14041  15279  11409   -253   -169    614       C
ATOM    648  CB  LEU C 110      74.129  19.818  36.087  1.00103.71           C
ANISOU  648  CB  LEU C 110    13356  14860  11190   -251   -151    713       C
ATOM    649  CG  LEU C 110      72.998  19.011  35.465  1.00 96.04           C
ANISOU  649  CG  LEU C 110    12210  14004  10277   -157     63    720       C
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ATOM    650  CD1 LEU C 110      73.306  18.755  33.995  1.00 91.77           C
ANISOU  650  CD1 LEU C 110    11441  13465   9961   -171     52    821       C
ATOM    651  CD2 LEU C 110      72.829  17.697  36.216  1.00 83.20           C
ANISOU  651  CD2 LEU C 110    10567  12504   8543   -189    150    776       C
ATOM    652  C   LEU C 110      75.342  20.636  38.117  1.00107.86           C
ANISOU  652  C   LEU C 110    14254  15275  11454   -375   -394    654       C
ATOM    653  O   LEU C 110      76.039  19.823  38.721  1.00110.38           O
ANISOU  653  O   LEU C 110    14589  15636  11715   -466   -467    738       O
ATOM    654  N   ALA C 111      75.720  21.897  37.922  1.00105.69           N
ANISOU  654  N   ALA C 111    14073  14876  11209   -376   -506    590       N
ATOM    655  CA  ALA C 111      76.997  22.383  38.430  1.00105.34           C
ANISOU  655  CA  ALA C 111    14152  14742  11129   -489   -717    614       C
ATOM    656  CB  ALA C 111      77.311  23.758  37.854  1.00101.29           C
ANISOU  656  CB  ALA C 111    13696  14096  10695   -480   -815    550       C
ATOM    657  C   ALA C 111      76.988  22.426  39.961  1.00121.39           C
ANISOU  657  C   ALA C 111    16404  16782  12938   -514   -741    553       C
ATOM    658  O   ALA C 111      77.961  22.031  40.614  1.00125.66           O
ANISOU  658  O   ALA C 111    17006  17319  13421   -619   -876    619       O
ATOM    659  N   THR C 112      75.880  22.896  40.526  1.00119.12           N
ANISOU  659  N   THR C 112    16232  16501  12527   -419   -609    424       N
ATOM    660  CA  THR C 112      75.734  22.985  41.975  1.00116.33           C
ANISOU  660  CA  THR C 112    16094  16154  11954   -440   -609    351       C
ATOM    661  CB  THR C 112      74.389  23.628  42.363  1.00124.01           C
ANISOU  661  CB  THR C 112    17164  17128  12826   -323   -445    188       C
ATOM    662  OG1 THR C 112      74.244  24.887  41.688  1.00126.44           O
ANISOU  662  OG1 THR C 112    17483  17331  13227   -259   -477    108       O
ATOM    663  CG2 THR C 112      74.301  23.839  43.874  1.00125.25           C
ANISOU  663  CG2 THR C 112    17557  17279  12754   -359   -454    104       C
ATOM    664  C   THR C 112      75.853  21.594  42.598  1.00118.99           C
ANISOU  664  C   THR C 112    16406  16600  12206   -500   -576    443       C
ATOM    665  O   THR C 112      76.604  21.397  43.548  1.00132.71           O
ANISOU  665  O   THR C 112    18275  18325  13825   -592   -696    474       O
ATOM    666  N   TRP C 113      75.132  20.632  42.026  1.00116.76           N
ANISOU  666  N   TRP C 113    15952  16423  11987   -448   -418    488       N
ATOM    667  CA  TRP C 113      75.165  19.236  42.469  1.00125.43           C
ANISOU  667  CA  TRP C 113    17006  17630  13021   -497   -369    581       C
ATOM    668  CB  TRP C 113      74.273  18.354  41.555  1.00127.39           C
ANISOU  668  CB  TRP C 113    17036  17987  13378   -422   -177    619       C
ATOM    669  CG  TRP C 113      74.209  16.867  41.939  1.00132.73           C
ANISOU  669  CG  TRP C 113    17657  18783  13993   -466   -106    714       C
ATOM    670  CD1 TRP C 113      74.178  16.344  43.201  1.00135.21           C
ANISOU  670  CD1 TRP C 113    18136  19133  14105   -517   -100    703       C
ATOM    671  NE1 TRP C 113      74.105  14.973  43.145  1.00139.67           N
ANISOU  671  NE1 TRP C 113    18593  19804  14673   -544    -28    806       N
ATOM    672  CE2 TRP C 113      74.031  14.581  41.839  1.00132.75           C
ANISOU  672  CE2 TRP C 113    17469  18969  14003   -507     27    880       C
ATOM    673  CD2 TRP C 113      74.081  15.742  41.041  1.00129.36           C
ANISOU  673  CD2 TRP C 113    16997  18452  13703   -458    -19    826       C
ATOM    674  CE3 TRP C 113      73.999  15.612  39.652  1.00122.73           C
ANISOU  674  CE3 TRP C 113    15924  17631  13078   -417     25    883       C
ATOM    675  CZ3 TRP C 113      73.915  14.335  39.106  1.00124.87           C
ANISOU  675  CZ3 TRP C 113    16004  18009  13433   -429    110    996       C
ATOM    676  CH2 TRP C 113      73.870  13.201  39.925  1.00128.91           C
ANISOU  676  CH2 TRP C 113    16559  18607  13814   -475    155   1048       C
ATOM    677  CZ2 TRP C 113      73.925  13.302  41.288  1.00128.55           C
ANISOU  677  CZ2 TRP C 113    16750  18542  13553   -515    113    992       C
ATOM    678  C   TRP C 113      76.591  18.708  42.504  1.00120.56           C
ANISOU  678  C   TRP C 113    16359  16994  12456   -623   -570    719       C
ATOM    679  O   TRP C 113      77.034  18.123  43.495  1.00128.17           O
ANISOU  679  O   TRP C 113    17436  17981  13284   -697   -637    758       O
ATOM    680  N   PHE C 114      77.285  18.899  41.394  1.00117.99           N
ANISOU  680  N   PHE C 114    15878  16625  12329   -646   -664    789       N
ATOM    681  CA  PHE C 114      78.653  18.442  41.242  1.00120.42           C
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ANISOU  681  CA  PHE C 114    16123  16911  12721   -763   -854    911       C
ATOM    682  CB  PHE C 114      79.100  18.624  39.786  1.00119.48           C
ANISOU  682  CB  PHE C 114    15795  16760  12843   -770   -896    971       C
ATOM    683  CG  PHE C 114      78.472  17.646  38.835  1.00112.44           C
ANISOU  683  CG  PHE C 114    14673  15970  12078   -723   -740   1043       C
ATOM    684  CD1 PHE C 114      77.859  16.503  39.308  1.00120.97           C
ANISOU  684  CD1 PHE C 114    15727  17167  13070   -703   -611   1080       C
ATOM    685  CE1 PHE C 114      77.275  15.604  38.438  1.00122.25           C
ANISOU  685  CE1 PHE C 114    15676  17427  13347   -660   -462   1144       C
ATOM    686  CZ  PHE C 114      77.299  15.819  37.100  1.00106.54           C
ANISOU  686  CZ  PHE C 114    13498  15421  11561   -638   -443   1176       C
ATOM    687  CE2 PHE C 114      77.912  16.958  36.593  1.00110.60           C
ANISOU  687  CE2 PHE C 114    14040  15817  12166   -662   -574   1142       C
ATOM    688  CD2 PHE C 114      78.488  17.868  37.470  1.00113.35           C
ANISOU  688  CD2 PHE C 114    14603  16068  12397   -703   -720   1074       C
ATOM    689  C   PHE C 114      79.597  19.177  42.194  1.00117.67           C
ANISOU  689  C   PHE C 114    15982  16465  12261   -842  -1049    875       C
ATOM    690  O   PHE C 114      80.564  18.599  42.693  1.00114.52           O
ANISOU  690  O   PHE C 114    15610  16068  11834   -939  -1193    954       O
ATOM    691  N   VAL C 115      79.306  20.448  42.450  1.00120.81           N
ANISOU  691  N   VAL C 115    16527  16779  12596   -799  -1054    753       N
ATOM    692  CA  VAL C 115      80.116  21.262  43.351  1.00130.73           C
ANISOU  692  CA  VAL C 115    17988  17943  13742   -867  -1224    705       C
ATOM    693  CB  VAL C 115      79.929  22.777  43.059  1.00125.78           C
ANISOU  693  CB  VAL C 115    17445  17207  13138   -817  -1240    588       C
ATOM    694  CG1 VAL C 115      80.297  23.619  44.278  1.00130.94           C
ANISOU  694  CG1 VAL C 115    18351  17786  13614   -858  -1346    503       C
ATOM    695  CG2 VAL C 115      80.758  23.188  41.855  1.00111.17           C
ANISOU  695  CG2 VAL C 115    15455  15290  11496   -856  -1352    640       C
ATOM    696  C   VAL C 115      79.755  20.920  44.801  1.00136.82           C
ANISOU  696  C   VAL C 115    18955  18753  14276   -880  -1189    663       C
ATOM    697  O   VAL C 115      80.632  20.790  45.657  1.00141.78           O
ANISOU  697  O   VAL C 115    19707  19355  14810   -970  -1342    694       O
ATOM    698  N   GLY C 116      78.468  20.772  45.069  1.00136.93           N
ANISOU  698  N   GLY C 116    19000  18830  14196   -793   -989    589       N
ATOM    699  CA  GLY C 116      78.027  20.428  46.404  1.00136.95           C
ANISOU  699  CA  GLY C 116    19190  18874  13973   -809   -934    540       C
ATOM    700  C   GLY C 116      78.711  19.152  46.830  1.00141.50           C
ANISOU  700  C   GLY C 116    19744  19509  14510   -899  -1012    669       C
ATOM    701  O   GLY C 116      79.289  19.075  47.903  1.00152.96           O
ANISOU  701  O   GLY C 116    21368  20936  15814   -977  -1129    676       O
ATOM    702  N   ARG C 117      78.658  18.151  45.963  1.00135.61           N
ANISOU  702  N   ARG C 117    18783  18839  13902   -888   -953    774       N
ATOM    703  CA  ARG C 117      79.257  16.858  46.229  1.00130.43           C
ANISOU  703  CA  ARG C 117    18078  18244  13234   -965  -1019    902       C
ATOM    704  CB  ARG C 117      78.882  15.852  45.147  1.00117.67           C
ANISOU  704  CB  ARG C 117    16209  16722  11779   -927   -898    993       C
ATOM    705  C   ARG C 117      80.757  16.919  46.385  1.00134.39           C
ANISOU  705  C   ARG C 117    18604  18675  13784  -1071  -1275    978       C
ATOM    706  O   ARG C 117      81.308  16.211  47.198  1.00146.29           O
ANISOU  706  O   ARG C 117    20198  20198  15189  -1144  -1374   1038       O
ATOM    707  N   GLU C 118      81.431  17.727  45.589  1.00131.91           N
ANISOU  707  N   GLU C 118    18209  18283  13627  -1082  -1385    976       N
ATOM    708  CA  GLU C 118      82.880  17.793  45.700  1.00137.84           C
ANISOU  708  CA  GLU C 118    18971  18968  14434  -1187  -1628   1037       C
ATOM    709  CB  GLU C 118      83.552  18.478  44.528  1.00136.94           C
ANISOU  709  CB  GLU C 118    18711  18786  14535  -1201  -1716   1047       C
ATOM    710  CG  GLU C 118      84.986  18.010  44.342  1.00139.54           C
ANISOU  710  CG  GLU C 118    18954  19088  14977  -1311  -1930   1143       C
ATOM    711  CD  GLU C 118      85.125  16.498  44.282  1.00147.89           C
ANISOU  711  CD  GLU C 118    19879  20241  16073  -1341  -1919   1265       C
ATOM    712  OE1 GLU C 118      84.117  15.781  44.400  1.00144.41           O
ANISOU  712  OE1 GLU C 118    19416  19888  15564  -1280  -1743   1280       O
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ATOM    713  OE2 GLU C 118      86.258  16.020  44.112  1.00160.78           O
ANISOU  713  OE2 GLU C 118    21426  21857  17807  -1426  -2090   1342       O
ATOM    714  C   GLU C 118      83.386  18.327  47.008  1.00152.34           C
ANISOU  714  C   GLU C 118    21062  20740  16082  -1244  -1763    982       C
ATOM    715  O   GLU C 118      84.410  17.888  47.484  1.00161.19           O
ANISOU  715  O   GLU C 118    22220  21842  17184  -1331  -1940   1047       O
ATOM    716  N   GLN C 119      82.697  19.296  47.585  1.00155.36           N
ANISOU  716  N   GLN C 119    21617  21084  16328  -1195  -1688    857       N
ATOM    717  CA  GLN C 119      83.161  19.853  48.841  1.00161.45           C
ANISOU  717  CA  GLN C 119    22635  21794  16916  -1253  -1812    800       C
ATOM    718  CB  GLN C 119      82.230  20.964  49.301  1.00168.98           C
ANISOU  718  CB  GLN C 119    23749  22710  17744  -1186  -1694    652       C
ATOM    719  CG  GLN C 119      82.230  22.175  48.402  1.00171.90           C
ANISOU  719  CG  GLN C 119    24058  23004  18253  -1137  -1697    585       C
ATOM    720  CD  GLN C 119      83.596  22.791  48.309  1.00176.78           C
ANISOU  720  CD  GLN C 119    24698  23527  18941  -1221  -1925    607       C
ATOM    721  OE1 GLN C 119      84.308  22.873  49.302  1.00174.66           O
ANISOU  721  OE1 GLN C 119    24591  23224  18549  -1296  -2067    604       O
ATOM    722  NE2 GLN C 119      83.973  23.231  47.119  1.00174.55           N
ANISOU  722  NE2 GLN C 119    24260  23202  18859  -1212  -1962    624       N
ATOM    723  C   GLN C 119      83.198  18.777  49.906  1.00161.64           C
ANISOU  723  C   GLN C 119    22768  21876  16773  -1305  -1830    855       C
ATOM    724  O   GLN C 119      84.154  18.679  50.648  1.00164.86           O
ANISOU  724  O   GLN C 119    23289  22243  17109  -1390  -2014    888       O
ATOM    725  N   GLU C 120      82.172  17.961  49.993  1.00158.36           N
ANISOU  725  N   GLU C 120    22324  21553  16293  -1257  -1643    864       N
ATOM    726  CA  GLU C 120      82.160  16.905  50.983  1.00160.07           C
ANISOU  726  CA  GLU C 120    22652  21823  16344  -1309  -1651    918       C
ATOM    727  CB  GLU C 120      80.754  16.340  51.198  1.00159.66           C
ANISOU  727  CB  GLU C 120    22616  21865  16182  -1245  -1399    875       C
ATOM    728  CG  GLU C 120      80.412  15.103  50.401  1.00155.94           C
ANISOU  728  CG  GLU C 120    21930  21492  15826  -1218  -1289    977       C
ATOM    729  CD  GLU C 120      78.922  14.917  50.246  1.00154.15           C
ANISOU  729  CD  GLU C 120    21673  21348  15549  -1128  -1016    902       C
ATOM    730  OE1 GLU C 120      78.159  15.738  50.780  1.00162.35           O
ANISOU  730  OE1 GLU C 120    22858  22365  16462  -1089   -915    767       O
ATOM    731  OE2 GLU C 120      78.507  13.946  49.593  1.00151.24           O
ANISOU  731  OE2 GLU C 120    21131  21066  15266  -1098   -899    972       O
ATOM    732  C   GLU C 120      83.209  15.813  50.774  1.00164.48           C
ANISOU  732  C   GLU C 120    23096  22402  16997  -1383  -1810   1064       C
ATOM    733  O   GLU C 120      83.824  15.381  51.726  1.00175.35           O
ANISOU  733  O   GLU C 120    24616  23762  18247  -1458  -1946   1103       O
ATOM    734  N   ARG C 121      83.445  15.390  49.538  1.00161.39           N
ANISOU  734  N   ARG C 121    22451  22040  16831  -1364  -1802   1143       N
ATOM    735  CA  ARG C 121      84.422  14.319  49.320  1.00163.38           C
ANISOU  735  CA  ARG C 121    22582  22313  17182  -1432  -1949   1277       C
ATOM    736  CB  ARG C 121      84.453  13.846  47.867  1.00163.41           C
ANISOU  736  CB  ARG C 121    22289  22362  17437  -1403  -1891   1352       C
ATOM    737  CG  ARG C 121      85.618  12.922  47.544  1.00162.85           C
ANISOU  737  CG  ARG C 121    22078  22297  17502  -1481  -2069   1477       C
ATOM    738  CD  ARG C 121      85.387  12.202  46.228  1.00161.90           C
ANISOU  738  CD  ARG C 121    21672  22247  17597  -1449  -1962   1556       C
ATOM    739  NE  ARG C 121      86.629  11.859  45.549  1.00158.45           N
ANISOU  739  NE  ARG C 121    21061  21783  17361  -1521  -2145   1638       N
ATOM    740  CZ  ARG C 121      87.517  12.757  45.142  1.00157.57           C
ANISOU  740  CZ  ARG C 121    20921  21584  17364  -1564  -2294   1603       C
ATOM    741  NH1 ARG C 121      87.308  14.042  45.367  1.00162.20           N
ANISOU  741  NH1 ARG C 121    21649  22102  17880  -1538  -2286   1494       N
ATOM    742  NH2 ARG C 121      88.620  12.375  44.521  1.00150.19           N
ANISOU  742  NH2 ARG C 121    19819  20630  16615  -1635  -2451   1671       N
ATOM    743  C   ARG C 121      85.817  14.698  49.779  1.00165.48           C
ANISOU  743  C   ARG C 121    22933  22488  17453  -1523  -2219   1293       C
ATOM    744  O   ARG C 121      86.546  13.867  50.301  1.00170.47           O
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ANISOU  744  O   ARG C 121    23598  23126  18049  -1590  -2362   1373       O
ATOM    745  N   ARG C 122      86.206  15.943  49.559  1.00165.80           N
ANISOU  745  N   ARG C 122    23007  22445  17545  -1524  -2293   1215       N
ATOM    746  CA  ARG C 122      87.519  16.381  49.974  1.00170.42           C
ANISOU  746  CA  ARG C 122    23671  22943  18137  -1609  -2543   1217       C
ATOM    747  CB  ARG C 122      88.525  16.155  48.852  1.00172.05           C
ANISOU  747  CB  ARG C 122    23641  23133  18597  -1650  -2668   1288       C
ATOM    748  C   ARG C 122      87.499  17.842  50.382  1.00171.62           C
ANISOU  748  C   ARG C 122    23994  23010  18204  -1600  -2568   1093       C
ATOM    749  O   ARG C 122      87.259  18.162  51.541  1.00174.67           O
ANISOU  749  O   ARG C 122    24612  23376  18379  -1612  -2574   1033       O
TER
HETATM  750  O   HOH C1001      61.972  26.532  12.038  1.00 81.83           O
HETATM  751  O   HOH C1002      72.669  27.558  27.599  1.00 67.04           O
HETATM  752  O   HOH C1003      71.205  25.955  24.088  1.00 54.08           O
TER
ATOM    753  N   SER B  22      74.727  44.282  45.952  1.00199.18           N
ANISOU  753  N   SER B  22    28571  20170  26940  -1437  -2866  -2758       N
ATOM    754  CA  SER B  22      74.682  43.215  44.961  1.00188.58           C
ANISOU  754  CA  SER B  22    27314  18983  25353  -1407  -2817  -2710       C
ATOM    755  CB  SER B  22      74.016  43.703  43.676  1.00182.08           C
ANISOU  755  CB  SER B  22    26498  18157  24528  -1418  -2802  -2667       C
ATOM    756  C   SER B  22      76.082  42.707  44.666  1.00188.05           C
ANISOU  756  C   SER B  22    27259  18934  25258  -1412  -2811  -2684       C
ATOM    757  O   SER B  22      77.018  43.482  44.543  1.00193.90           O
ANISOU  757  O   SER B  22    27933  19548  26193  -1449  -2840  -2679       O
ATOM    758  N   ALA B  23      76.215  41.398  44.527  1.00181.11           N
ANISOU  758  N   ALA B  23    26464  18210  24140  -1373  -2773  -2661       N
ATOM    759  CA  ALA B  23      77.501  40.790  44.259  1.00176.60           C
ANISOU  759  CA  ALA B  23    25912  17671  23516  -1373  -2763  -2634       C
ATOM    760  CB  ALA B  23      77.406  39.285  44.335  1.00166.83           C
ANISOU  760  CB  ALA B  23    24771  16608  22008  -1325  -2721  -2608       C
ATOM    761  C   ALA B  23      77.862  41.235  42.872  1.00177.97           C
ANISOU  761  C   ALA B  23    26078  17815  23727  -1396  -2757  -2583       C
ATOM    762  O   ALA B  23      77.026  41.771  42.179  1.00182.64           O
ANISOU  762  O   ALA B  23    26665  18390  24340  -1403  -2753  -2566       O
ATOM    763  N   LEU B  24      79.114  41.058  42.482  1.00179.16           N
ANISOU  763  N   LEU B  24    26223  17950  23898  -1409  -2758  -2557       N
ATOM    764  CA  LEU B  24      79.595  41.501  41.175  1.00177.34           C
ANISOU  764  CA  LEU B  24    25979  17681  23721  -1435  -2753  -2505       C
ATOM    765  CB  LEU B  24      81.102  41.237  41.054  1.00180.11           C
ANISOU  765  CB  LEU B  24    26319  18010  24105  -1449  -2758  -2486       C
ATOM    766  CG  LEU B  24      81.818  41.558  39.738  1.00175.91           C
ANISOU  766  CG  LEU B  24    25774  17441  23621  -1476  -2752  -2427       C
ATOM    767  CD1 LEU B  24      81.749  43.040  39.443  1.00183.16           C
ANISOU  767  CD1 LEU B  24    26594  18176  24823  -1527  -2785  -2417       C
ATOM    768  CD2 LEU B  24      83.255  41.076  39.724  1.00176.73           C
ANISOU  768  CD2 LEU B  24    25882  17551  23716  -1482  -2753  -2410       C
ATOM    769  C   LEU B  24      78.895  40.887  39.979  1.00169.27           C
ANISOU  769  C   LEU B  24    25039  16791  22484  -1409  -2712  -2451       C
ATOM    770  O   LEU B  24      78.681  41.563  38.980  1.00165.28           O
ANISOU  770  O   LEU B  24    24512  16236  22052  -1433  -2712  -2418       O
ATOM    771  N   HIS B  25      78.556  39.612  40.059  1.00167.37           N
ANISOU  771  N   HIS B  25    24893  16714  21984  -1362  -2676  -2433       N
ATOM    772  CA  HIS B  25      77.955  38.962  38.911  1.00158.07           C
ANISOU  772  CA  HIS B  25    23803  15665  20591  -1335  -2635  -2369       C
ATOM    773  CB  HIS B  25      77.766  37.469  39.166  1.00146.42           C
ANISOU  773  CB  HIS B  25    22432  14356  18845  -1285  -2593  -2337       C
ATOM    774  C   HIS B  25      76.654  39.579  38.453  1.00154.39           C
ANISOU  774  C   HIS B  25    23333  15187  20143  -1338  -2633  -2367       C
ATOM    775  O   HIS B  25      76.460  39.774  37.260  1.00154.52           O
ANISOU  775  O   HIS B  25    23369  15221  20121  -1346  -2619  -2319       O
ATOM    776  N   TRP B  26      75.779  39.921  39.378  1.00151.74           N
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ANISOU  776  N   TRP B  26    22968  14817  19870  -1333  -2649  -2417       N
ATOM    777  CA  TRP B  26      74.512  40.488  38.978  1.00149.92           C
ANISOU  777  CA  TRP B  26    22733  14576  19652  -1335  -2647  -2415       C
ATOM    778  CB  TRP B  26      73.507  40.527  40.113  1.00157.00           C
ANISOU  778  CB  TRP B  26    23622  15473  20559  -1318  -2656  -2467       C
ATOM    779  CG  TRP B  26      72.865  39.198  40.222  1.00157.13           C
ANISOU  779  CG  TRP B  26    23740  15657  20304  -1267  -2615  -2434       C
ATOM    780  CD1 TRP B  26      73.502  38.008  40.302  1.00156.82           C
ANISOU  780  CD1 TRP B  26    23768  15722  20094  -1239  -2587  -2399       C
ATOM    781  NE1 TRP B  26      72.596  36.986  40.367  1.00155.10           N
ANISOU  781  NE1 TRP B  26    23636  15635  19660  -1198  -2546  -2361       N
ATOM    782  CE2 TRP B  26      71.333  37.508  40.315  1.00162.72           C
ANISOU  782  CE2 TRP B  26    24593  16588  20645  -1196  -2550  -2374       C
ATOM    783  CD2 TRP B  26      71.464  38.907  40.217  1.00164.54           C
ANISOU  783  CD2 TRP B  26    24729  16674  21117  -1238  -2594  -2421       C
ATOM    784  CE3 TRP B  26      70.309  39.690  40.151  1.00166.77           C
ANISOU  784  CE3 TRP B  26    24983  16912  21471  -1246  -2605  -2442       C
ATOM    785  CZ3 TRP B  26      69.079  39.058  40.184  1.00162.15           C
ANISOU  785  CZ3 TRP B  26    24465  16433  20713  -1210  -2576  -2418       C
ATOM    786  CH2 TRP B  26      68.982  37.659  40.280  1.00161.35           C
ANISOU  786  CH2 TRP B  26    24458  16472  20377  -1169  -2532  -2368       C
ATOM    787  CZ2 TRP B  26      70.094  36.870  40.347  1.00159.39           C
ANISOU  787  CZ2 TRP B  26    24238  16264  20059  -1162  -2518  -2344       C
ATOM    788  C   TRP B  26      74.714  41.783  38.236  1.00149.13           C
ANISOU  788  C   TRP B  26    22553  14334  19775  -1384  -2671  -2409       C
ATOM    789  O   TRP B  26      73.979  42.078  37.312  1.00140.50           O
ANISOU  789  O   TRP B  26    21476  13257  18651  -1387  -2658  -2377       O
ATOM    790  N   ARG B  27      75.706  42.560  38.640  1.00158.44           N
ANISOU  790  N   ARG B  27    23646  15368  21187  -1424  -2705  -2433       N
ATOM    791  CA  ARG B  27      75.999  43.799  37.941  1.00162.93           C
ANISOU  791  CA  ARG B  27    24132  15782  21993  -1475  -2725  -2410       C
ATOM    792  CB  ARG B  27      77.170  44.547  38.583  1.00179.13           C
ANISOU  792  CB  ARG B  27    26092  17671  24300  -1515  -2765  -2428       C
ATOM    793  CG  ARG B  27      76.840  45.428  39.778  1.00186.84           C
ANISOU  793  CG  ARG B  27    26991  18516  25482  -1533  -2805  -2480       C
ATOM    794  CD  ARG B  27      78.059  46.228  40.231  1.00198.21           C
ANISOU  794  CD  ARG B  27    28340  19788  27182  -1574  -2848  -2476       C
ATOM    795  NE  ARG B  27      78.185  47.498  39.518  1.00213.25           N
ANISOU  795  NE  ARG B  27    30159  21525  29340  -1621  -2870  -2421       N
ATOM    796  CZ  ARG B  27      78.812  48.571  39.991  1.00220.83           C
ANISOU  796  CZ  ARG B  27    31017  22300  30589  -1658  -2920  -2406       C
ATOM    797  NH1 ARG B  27      79.381  48.541  41.188  1.00220.99           N
ANISOU  797  NH1 ARG B  27    31009  22281  30675  -1654  -2954  -2453       N
ATOM    798  NH2 ARG B  27      78.863  49.679  39.264  1.00225.53           N
ANISOU  798  NH2 ARG B  27    31533  22746  31412  -1697  -2938  -2336       N
ATOM    799  C   ARG B  27      76.422  43.416  36.545  1.00151.78           C
ANISOU  799  C   ARG B  27    22765  14437  20469  -1476  -2697  -2342       C
ATOM    800  O   ARG B  27      76.030  44.042  35.571  1.00152.15           O
ANISOU  800  O   ARG B  27    22792  14438  20580  -1499  -2692  -2303       O
ATOM    801  N   ALA B  28      77.235  42.372  36.455  1.00148.83           N
ANISOU  801  N   ALA B  28    22454  14170  19927  -1452  -2679  -2325       N
ATOM    802  CA  ALA B  28      77.717  41.920  35.163  1.00149.78           C
ANISOU  802  CA  ALA B  28    22625  14362  19924  -1450  -2652  -2258       C
ATOM    803  CB  ALA B  28      78.825  40.900  35.326  1.00144.76           C
ANISOU  803  CB  ALA B  28    22039  13809  19154  -1430  -2640  -2246       C
ATOM    804  C   ALA B  28      76.579  41.332  34.375  1.00144.61           C
ANISOU  804  C   ALA B  28    22062  13850  19035  -1416  -2617  -2220       C
ATOM    805  O   ALA B  28      76.313  41.739  33.253  1.00144.99           O
ANISOU  805  O   ALA B  28    22109  13885  19094  -1433  -2607  -2175       O
ATOM    806  N   ALA B  29      75.888  40.374  34.966  1.00144.69           N
ANISOU  806  N   ALA B  29    22149  13989  18836  -1368  -2596  -2231       N
ATOM    807  CA  ALA B  29      74.783  39.763  34.241  1.00130.97           C
ANISOU  807  CA  ALA B  29    20505  12387  16870  -1334  -2557  -2183       C
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ATOM    808  CB  ALA B  29      73.948  38.893  35.157  1.00129.94           C
ANISOU  808  CB  ALA B  29    20437  12359  16576  -1289  -2537  -2199       C
ATOM    809  C   ALA B  29      73.925  40.840  33.595  1.00129.10           C
ANISOU  809  C   ALA B  29    20221  12072  16760  -1361  -2569  -2182       C
ATOM    810  O   ALA B  29      73.731  40.845  32.374  1.00135.29           O
ANISOU  810  O   ALA B  29    21041  12897  17465  -1366  -2549  -2125       O
ATOM    811  N   GLY B  30      73.414  41.755  34.413  1.00133.50           N
ANISOU  811  N   GLY B  30    20696  12511  17516  -1381  -2601  -2241       N
ATOM    812  CA  GLY B  30      72.609  42.847  33.903  1.00124.42           C
ANISOU  812  CA  GLY B  30    19491  11268  16515  -1411  -2612  -2240       C
ATOM    813  C   GLY B  30      73.409  43.660  32.904  1.00123.02           C
ANISOU  813  C   GLY B  30    19251  10976  16516  -1461  -2620  -2199       C
ATOM    814  O   GLY B  30      72.870  44.139  31.914  1.00126.22           O
ANISOU  814  O   GLY B  30    19651  11363  16944  -1478  -2610  -2158       O
ATOM    815  N   ALA B  31      74.705  43.801  33.175  1.00128.61           N
ANISOU  815  N   ALA B  31    19909  11603  17355  -1486  -2637  -2202       N
ATOM    816  CA  ALA B  31      75.611  44.579  32.335  1.00130.18           C
ANISOU  816  CA  ALA B  31    20037  11672  17752  -1537  -2645  -2153       C
ATOM    817  CB  ALA B  31      76.985  44.649  32.970  1.00138.86           C
ANISOU  817  CB  ALA B  31    21084  12687  18988  -1557  -2667  -2168       C
ATOM    818  C   ALA B  31      75.726  44.032  30.912  1.00134.23           C
ANISOU  818  C   ALA B  31    20620  12291  18089  -1530  -2613  -2083       C
ATOM    819  O   ALA B  31      75.697  44.805  29.948  1.00133.87           O
ANISOU  819  O   ALA B  31    20527  12156  18182  -1570  -2609  -2031       O
ATOM    820  N   ALA B  32      75.876  42.712  30.782  1.00132.93           N
ANISOU  820  N   ALA B  32    20568  12310  17629  -1481  -2587  -2070       N
ATOM    821  CA  ALA B  32      76.012  42.075  29.468  1.00121.87           C
ANISOU  821  CA  ALA B  32    19251  11026  16029  -1470  -2555  -1998       C
ATOM    822  CB  ALA B  32      76.234  40.583  29.610  1.00118.18           C
ANISOU  822  CB  ALA B  32    18908  10746  15251  -1416  -2523  -1980       C
ATOM    823  C   ALA B  32      74.786  42.343  28.603  1.00121.64           C
ANISOU  823  C   ALA B  32    19252  11036  15929  -1468  -2538  -1965       C
ATOM    824  O   ALA B  32      74.917  42.688  27.424  1.00133.77           O
ANISOU  824  O   ALA B  32    20782  12550  17495  -1496  -2528  -1908       O
ATOM    825  N   THR B  33      73.605  42.182  29.200  1.00114.95           N
ANISOU  825  N   THR B  33    18438  10245  14994  -1437  -2533  -1999       N
ATOM    826  CA  THR B  33      72.338  42.424  28.520  1.00111.90           C
ANISOU  826  CA  THR B  33    18082   9898  14536  -1431  -2518  -1975       C
ATOM    827  CB  THR B  33      71.167  42.414  29.501  1.00110.32           C
ANISOU  827  CB  THR B  33    17889   9720  14308  -1403  -2523  -2027       C
ATOM    828  OG1 THR B  33      71.081  41.128  30.125  1.00111.98           O
ANISOU  828  OG1 THR B  33    18196  10078  14272  -1350  -2497  -2027       O
ATOM    829  CG2 THR B  33      69.863  42.740  28.779  1.00111.89           C
ANISOU  829  CG2 THR B  33    18113   9950  14449  -1401  -2508  -2001       C
ATOM    830  C   THR B  33      72.357  43.762  27.803  1.00116.91           C
ANISOU  830  C   THR B  33    18611  10365  15446  -1492  -2535  -1954       C
ATOM    831  O   THR B  33      71.977  43.854  26.637  1.00120.97           O
ANISOU  831  O   THR B  33    19155  10914  15896  -1502  -2516  -1896       O
ATOM    832  N   VAL B  34      72.836  44.766  28.511  1.00123.77           N
ANISOU  832  N   VAL B  34    19358  11048  16622  -1534  -2566  -1989       N
ATOM    833  CA  VAL B  34      72.944  46.109  27.993  1.00129.28           C
ANISOU  833  CA  VAL B  34    19940  11547  17632  -1598  -2575  -1950       C
ATOM    834  CB  VAL B  34      73.453  47.058  29.069  1.00134.06           C
ANISOU  834  CB  VAL B  34    20429  11960  18547  -1634  -2608  -1984       C
ATOM    835  CG1 VAL B  34      73.127  48.483  28.683  1.00136.80           C
ANISOU  835  CG1 VAL B  34    20667  12104  19208  -1691  -2612  -1929       C
ATOM    836  CG2 VAL B  34      72.823  46.720  30.407  1.00135.57           C
ANISOU  836  CG2 VAL B  34    20647  12208  18657  -1594  -2625  -2072       C
ATOM    837  C   VAL B  34      73.906  46.146  26.823  1.00130.33           C
ANISOU  837  C   VAL B  34    20061  11651  17807  -1631  -2560  -1868       C
ATOM    838  O   VAL B  34      73.679  46.838  25.843  1.00139.18           O
ANISOU  838  O   VAL B  34    21138  12688  19053  -1670  -2545  -1798       O
ATOM    839  N   LEU B  35      74.993  45.405  26.935  1.00127.15           N
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ANISOU  839  N   LEU B  35    19694  11309  17306  -1617  -2560  -1870       N
ATOM    840  CA  LEU B  35      75.980  45.328  25.863  1.00125.00           C
ANISOU  840  CA  LEU B  35    19419  11022  17055  -1645  -2545  -1794       C
ATOM    841  CB  LEU B  35      77.293  44.713  26.365  1.00121.42           C
ANISOU  841  CB  LEU B  35    18976  10592  16567  -1635  -2555  -1813       C
ATOM    842  CG  LEU B  35      78.454  44.623  25.357  1.00119.03           C
ANISOU  842  CG  LEU B  35    18664  10265  16299  -1666  -2542  -1735       C
ATOM    843  CD1 LEU B  35      78.852  45.983  24.783  1.00118.89           C
ANISOU  843  CD1 LEU B  35    18509  10010  16655  -1741  -2538  -1647       C
ATOM    844  CD2 LEU B  35      79.668  43.924  25.957  1.00121.22           C
ANISOU  844  CD2 LEU B  35    18962  10581  16514  -1650  -2552  -1763       C
ATOM    845  C   LEU B  35      75.427  44.519  24.684  1.00124.13           C
ANISOU  845  C   LEU B  35    19426  11092  16644  -1616  -2515  -1747       C
ATOM    846  O   LEU B  35      75.728  44.816  23.524  1.00119.08           O
ANISOU  846  O   LEU B  35    18768  10413  16064  -1652  -2499  -1668       O
ATOM    847  N   LEU B  36      74.574  43.539  24.979  1.00119.80           N
ANISOU  847  N   LEU B  36    18998  10733  15789  -1555  -2502  -1782       N
ATOM    848  CA  LEU B  36      73.978  42.705  23.936  1.00114.33           C
ANISOU  848  CA  LEU B  36    18433  10222  14785  -1523  -2467  -1728       C
ATOM    849  CB  LEU B  36      73.221  41.521  24.541  1.00108.14           C
ANISOU  849  CB  LEU B  36    17776   9625  13687  -1454  -2440  -1751       C
ATOM    850  CG  LEU B  36      72.710  40.523  23.498  1.00 93.90           C
ANISOU  850  CG  LEU B  36    16118   8011  11549  -1420  -2386  -1676       C
ATOM    851  CD1 LEU B  36      73.883  39.974  22.701  1.00 86.32           C
ANISOU  851  CD1 LEU B  36    15203   7102  10495  -1430  -2366  -1619       C
ATOM    852  CD2 LEU B  36      71.922  39.393  24.141  1.00 82.38           C
ANISOU  852  CD2 LEU B  36    14769   6703   9830  -1360  -2344  -1676       C
ATOM    853  C   LEU B  36      73.036  43.509  23.065  1.00106.21           C
ANISOU  853  C   LEU B  36    17373   9140  13842  -1552  -2461  -1690       C
ATOM    854  O   LEU B  36      73.206  43.570  21.847  1.00106.75           O
ANISOU  854  O   LEU B  36    17459   9222  13880  -1577  -2444  -1618       O
ATOM    855  N   VAL B  37      72.041  44.112  23.710  1.00107.06           N
ANISOU  855  N   VAL B  37    17435   9185  14058  -1551  -2475  -1737       N
ATOM    856  CA  VAL B  37      71.044  44.940  23.045  1.00106.59           C
ANISOU  856  CA  VAL B  37    17336   9061  14102  -1579  -2470  -1706       C
ATOM    857  CB  VAL B  37      70.042  45.508  24.066  1.00103.16           C
ANISOU  857  CB  VAL B  37    16853   8562  13782  -1571  -2488  -1773       C
ATOM    858  CG1 VAL B  37      69.048  46.439  23.398  1.00105.29           C
ANISOU  858  CG1 VAL B  37    17073   8747  14187  -1604  -2481  -1737       C
ATOM    859  CG2 VAL B  37      69.298  44.364  24.746  1.00 99.59           C
ANISOU  859  CG2 VAL B  37    16524   8304  13011  -1499  -2477  -1818       C
ATOM    860  C   VAL B  37      71.726  46.059  22.247  1.00114.28           C
ANISOU  860  C   VAL B  37    18185   9832  15405  -1655  -2468  -1630       C
ATOM    861  O   VAL B  37      71.199  46.518  21.234  1.00122.62           O
ANISOU  861  O   VAL B  37    19226  10856  16507  -1684  -2449  -1562       O
ATOM    862  N   ILE B  38      72.919  46.465  22.677  1.00117.40           N
ANISOU  862  N   ILE B  38    18489  10085  16030  -1688  -2481  -1625       N
ATOM    863  CA  ILE B  38      73.675  47.472  21.931  1.00121.41           C
ANISOU  863  CA  ILE B  38    18878  10387  16867  -1760  -2464  -1516       C
ATOM    864  CB  ILE B  38      74.840  48.072  22.760  1.00124.73           C
ANISOU  864  CB  ILE B  38    19190  10628  17574  -1793  -2482  -1514       C
ATOM    865  CG1 ILE B  38      74.314  48.923  23.915  1.00129.08           C
ANISOU  865  CG1 ILE B  38    19664  11048  18333  -1800  -2507  -1567       C
ATOM    866  CD1 ILE B  38      75.391  49.310  24.924  1.00133.61           C
ANISOU  866  CD1 ILE B  38    20161  11490  19116  -1817  -2536  -1586       C
ATOM    867  CG2 ILE B  38      75.718  48.953  21.884  1.00118.21           C
ANISOU  867  CG2 ILE B  38    18255   9603  17057  -1861  -2452  -1360       C
ATOM    868  C   ILE B  38      74.254  46.857  20.651  1.00117.24           C
ANISOU  868  C   ILE B  38    18411   9952  16184  -1767  -2439  -1435       C
ATOM    869  O   ILE B  38      74.086  47.417  19.562  1.00114.35           O
ANISOU  869  O   ILE B  38    18001   9504  15945  -1811  -2408  -1323       O
ATOM    870  N   VAL B  39      74.898  45.696  20.791  1.00113.72           N
ANISOU  870  N   VAL B  39    18068   9676  15463  -1724  -2448  -1480       N
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ATOM    871  CA  VAL B  39      75.501  44.972  19.666  1.00112.77           C
ANISOU  871  CA  VAL B  39    18027   9670  15152  -1725  -2427  -1413       C
ATOM    872  CB  VAL B  39      76.213  43.680  20.142  1.00107.02           C
ANISOU  872  CB  VAL B  39    17414   9121  14130  -1669  -2432  -1468       C
ATOM    873  CG1 VAL B  39      76.714  42.850  18.955  1.00 94.87           C
ANISOU  873  CG1 VAL B  39    15979   7724  12345  -1665  -2405  -1398       C
ATOM    874  CG2 VAL B  39      77.368  44.026  21.063  1.00110.81           C
ANISOU  874  CG2 VAL B  39    17795   9459  14848  -1690  -2455  -1499       C
ATOM    875  C   VAL B  39      74.473  44.615  18.589  1.00110.71           C
ANISOU  875  C   VAL B  39    17865   9551  14650  -1711  -2403  -1371       C
ATOM    876  O   VAL B  39      74.780  44.640  17.390  1.00107.89           O
ANISOU  876  O   VAL B  39    17514   9191  14287  -1746  -2380  -1275       O
ATOM    877  N   LEU B  40      73.258  44.273  19.008  1.00104.81           N
ANISOU  877  N   LEU B  40    17196   8924  13703  -1663  -2405  -1432       N
ATOM    878  CA  LEU B  40      72.212  43.962  18.047  1.00 95.27           C
ANISOU  878  CA  LEU B  40    16085   7850  12262  -1649  -2380  -1392       C
ATOM    879  CB  LEU B  40      70.924  43.514  18.734  1.00 84.30           C
ANISOU  879  CB  LEU B  40    14780   6589  10662  -1589  -2376  -1457       C
ATOM    880  CG  LEU B  40      70.958  42.262  19.608  1.00 80.28           C
ANISOU  880  CG  LEU B  40    14387   6248   9868  -1519  -2358  -1503       C
ATOM    881  CD1 LEU B  40      69.562  41.984  20.142  1.00 80.68           C
ANISOU  881  CD1 LEU B  40    14499   6387   9771  -1473  -2342  -1535       C
ATOM    882  CD2 LEU B  40      71.496  41.077  18.840  1.00 71.80           C
ANISOU  882  CD2 LEU B  40    13448   5350   8485  -1494  -2310  -1441       C
ATOM    883  C   LEU B  40      71.947  45.183  17.182  1.00104.68           C
ANISOU  883  C   LEU B  40    17156   8856  13763  -1721  -2372  -1304       C
ATOM    884  O   LEU B  40      71.942  45.091  15.958  1.00114.64           O
ANISOU  884  O   LEU B  40    18452  10157  14950  -1747  -2347  -1215       O
ATOM    885  N   LEU B  41      71.742  46.326  17.821  1.00109.36           N
ANISOU  885  N   LEU B  41    17605   9235  14713  -1755  -2382  -1309       N
ATOM    886  CA  LEU B  41      71.473  47.558  17.088  1.00113.88           C
ANISOU  886  CA  LEU B  41    18046   9593  15629  -1824  -2350  -1184       C
ATOM    887  CB  LEU B  41      71.206  48.709  18.063  1.00118.45           C
ANISOU  887  CB  LEU B  41    18491   9957  16557  -1848  -2355  -1199       C
ATOM    888  CG  LEU B  41      70.078  48.530  19.079  1.00111.89           C
ANISOU  888  CG  LEU B  41    17712   9222  15579  -1798  -2389  -1338       C
ATOM    889  CD1 LEU B  41      69.958  49.775  19.931  1.00113.22           C
ANISOU  889  CD1 LEU B  41    17742   9157  16120  -1833  -2393  -1331       C
ATOM    890  CD2 LEU B  41      68.753  48.215  18.405  1.00101.91           C
ANISOU  890  CD2 LEU B  41    16541   8104  14077  -1773  -2380  -1339       C
ATOM    891  C   LEU B  41      72.636  47.920  16.158  1.00115.70           C
ANISOU  891  C   LEU B  41    18195   9683  16083  -1884  -2309  -1023       C
ATOM    892  O   LEU B  41      72.423  48.275  14.995  1.00116.31           O
ANISOU  892  O   LEU B  41    18243   9701  16247  -1924  -2260   -871       O
ATOM    893  N   ALA B  42      73.859  47.804  16.672  1.00118.26           N
ANISOU  893  N   ALA B  42    18483   9953  16499  -1888  -2320  -1038       N
ATOM    894  CA  ALA B  42      75.064  48.098  15.901  1.00114.03           C
ANISOU  894  CA  ALA B  42    17869   9282  16175  -1939  -2276   -874       C
ATOM    895  CB  ALA B  42      76.292  48.022  16.782  1.00117.36           C
ANISOU  895  CB  ALA B  42    18251   9645  16697  -1937  -2302   -925       C
ATOM    896  C   ALA B  42      75.196  47.139  14.730  1.00117.33           C
ANISOU  896  C   ALA B  42    18404   9885  16291  -1932  -2263   -831       C
ATOM    897  O   ALA B  42      75.440  47.553  13.593  1.00117.45           O
ANISOU  897  O   ALA B  42    18358   9793  16473  -1980  -2199   -626       O
ATOM    898  N   GLY B  43      75.040  45.854  15.029  1.00117.20           N
ANISOU  898  N   GLY B  43    18558  10142  15829  -1867  -2309   -989       N
ATOM    899  CA  GLY B  43      75.122  44.809  14.025  1.00112.25           C
ANISOU  899  CA  GLY B  43    18081   9733  14837  -1850  -2300   -968       C
ATOM    900  C   GLY B  43      74.035  44.941  12.977  1.00108.40           C
ANISOU  900  C   GLY B  43    17636   9299  14251  -1867  -2274   -893       C
ATOM    901  O   GLY B  43      74.306  44.786  11.786  1.00111.05           O
ANISOU  901  O   GLY B  43    17994   9656  14542  -1905  -2239   -767       O
ATOM    902  N   SER B  44      72.809  45.224  13.422  1.00103.75           N
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ANISOU  902  N   SER B  44    17058   8731  13634  -1843  -2287   -961       N
ATOM    903  CA  SER B  44      71.679  45.434  12.518  1.00106.34           C
ANISOU  903  CA  SER B  44    17419   9099  13887  -1860  -2263   -896       C
ATOM    904  CB  SER B  44      70.418  45.834  13.291  1.00106.69           C
ANISOU  904  CB  SER B  44    17453   9136  13947  -1829  -2283   -987       C
ATOM    905  OG  SER B  44      69.653  44.700  13.656  1.00 94.06           O
ANISOU  905  OG  SER B  44    16038   7815  11885  -1748  -2295  -1106       O
ATOM    906  C   SER B  44      71.981  46.491  11.467  1.00115.69           C
ANISOU  906  C   SER B  44    18444  10028  15485  -1944  -2196   -650       C
ATOM    907  O   SER B  44      71.754  46.271  10.274  1.00114.23           O
ANISOU  907  O   SER B  44    18309   9903  15188  -1970  -2157   -522       O
ATOM    908  N   TYR B  45      72.462  47.647  11.921  1.00118.77           N
ANISOU  908  N   TYR B  45    18644  10129  16353  -1980  -2158   -539       N
ATOM    909  CA  TYR B  45      72.818  48.743  11.027  1.00124.85           C
ANISOU  909  CA  TYR B  45    19249  10629  17561  -2035  -2042   -199       C
ATOM    910  CB  TYR B  45      73.201  49.998  11.819  1.00135.37           C
ANISOU  910  CB  TYR B  45    20412  11686  19336  -2055  -2009   -113       C
ATOM    911  CG  TYR B  45      73.623  51.175  10.952  1.00153.08           C
ANISOU  911  CG  TYR B  45    22501  13669  21991  -2083  -1871    306       C
ATOM    912  CD1 TYR B  45      74.922  51.270  10.447  1.00158.39           C
ANISOU  912  CD1 TYR B  45    23131  14239  22810  -2098  -1851    551       C
ATOM    913  CE1 TYR B  45      75.310  52.339   9.649  1.00167.87           C
ANISOU  913  CE1 TYR B  45    24237  15196  24349  -2125  -1907   1038       C
ATOM    914  CZ  TYR B  45      74.401  53.338   9.351  1.00175.10           C
ANISOU  914  CZ  TYR B  45    25072  15990  25467  -2125  -1909   1261       C
ATOM    915  OH  TYR B  45      74.800  54.400   8.562  1.00179.56           O
ANISOU  915  OH  TYR B  45    25471  16381  26374  -2125  -1953   1774       O
ATOM    916  CE2 TYR B  45      73.107  53.273   9.842  1.00169.63           C
ANISOU  916  CE2 TYR B  45    24429  15383  24638  -2112  -1861    986       C
ATOM    917  CD2 TYR B  45      72.724  52.193  10.638  1.00162.57           C
ANISOU  917  CD2 TYR B  45    23627  14737  23407  -2086  -1804    503       C
ATOM    918  C   TYR B  45      73.961  48.336  10.103  1.00121.24           C
ANISOU  918  C   TYR B  45    18867  10133  17064  -2074  -2088     20       C
ATOM    919  O   TYR B  45      73.921  48.611   8.904  1.00135.09           O
ANISOU  919  O   TYR B  45    20769  11729  18831  -2155  -2260    412       O
ATOM    920  N   LEU B  46      74.995  47.724  10.670  1.00113.95           N
ANISOU  920  N   LEU B  46    17908   9316  16073  -2042  -2041   -153       N
ATOM    921  CA  LEU B  46      76.144  47.314   9.875  1.00117.73           C
ANISOU  921  CA  LEU B  46    18508   9739  16486  -2092  -2148     58       C
ATOM    922  CB  LEU B  46      77.295  46.866  10.779  1.00122.37           C
ANISOU  922  CB  LEU B  46    18988  10412  17095  -2046  -2055   -158       C
ATOM    923  CG  LEU B  46      78.016  47.978  11.543  1.00131.24           C
ANISOU  923  CG  LEU B  46    19939  11266  18659  -2065  -2024    -68       C
ATOM    924  CD1 LEU B  46      79.040  47.402  12.501  1.00121.39           C
ANISOU  924  CD1 LEU B  46    18727  10081  17317  -2048  -2098   -265       C
ATOM    925  CD2 LEU B  46      78.691  48.928  10.562  1.00139.32           C
ANISOU  925  CD2 LEU B  46    20830  12047  20056  -2097  -1910    366       C
ATOM    926  C   LEU B  46      75.807  46.211   8.878  1.00116.87           C
ANISOU  926  C   LEU B  46    18772   9805  15829  -2142  -2350     92       C
ATOM    927  O   LEU B  46      76.458  46.092   7.842  1.00121.74           O
ANISOU  927  O   LEU B  46    19565  10315  16374  -2232  -2488    423       O
ATOM    928  N   ALA B  47      74.784  45.419   9.180  1.00114.90           N
ANISOU  928  N   ALA B  47    18634   9848  15175  -2081  -2329   -211       N
ATOM    929  CA  ALA B  47      74.386  44.337   8.286  1.00112.64           C
ANISOU  929  CA  ALA B  47    18752   9774  14274  -2123  -2465   -216       C
ATOM    930  CB  ALA B  47      73.435  43.387   8.992  1.00 99.09           C
ANISOU  930  CB  ALA B  47    16985   8463  12201  -1978  -2323   -575       C
ATOM    931  C   ALA B  47      73.743  44.894   7.015  1.00115.37           C
ANISOU  931  C   ALA B  47    19097   9658  14323  -2267  -2631    170       C
ATOM    932  O   ALA B  47      74.108  44.500   5.907  1.00112.91           O
ANISOU  932  O   ALA B  47    19346   9573  13982  -2385  -2746    450       O
ATOM    933  N   VAL B  48      72.795  45.816   7.179  1.00115.54           N
ANISOU  933  N   VAL B  48    19209   9798  14892  -2257  -2604    241       N
ANISOU  933  N   VAL B  48    19209   9798  14892  -2257  -2604    241       N
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ATOM    934  CA  VAL B  48      72.131  46.435   6.036  1.00114.76           C
ANISOU  934  CA  VAL B  48    19243   9526  14835  -2365  -2711    696       C
ATOM    935  CB  VAL B  48      71.049  47.440   6.469  1.00118.53           C
ANISOU  935  CB  VAL B  48    19488   9888  15660  -2320  -2650    688       C
ATOM    936  CG1 VAL B  48      70.565  48.243   5.277  1.00130.37           C
ANISOU  936  CG1 VAL B  48    20986  11226  17324  -2393  -2713   1301       C
ATOM    937  CG2 VAL B  48      69.886  46.730   7.132  1.00121.18           C
ANISOU  937  CG2 VAL B  48    19937  10512  15593  -2246  -2607    203       C
ATOM    938  C   VAL B  48      73.145  47.160   5.170  1.00120.74           C
ANISOU  938  C   VAL B  48    19839  10065  15974  -2414  -2728   1325       C
ATOM    939  O   VAL B  48      73.147  47.024   3.951  1.00128.66           O
ANISOU  939  O   VAL B  48    20990  11139  16757  -2469  -2775   1834       O
ATOM    940  N   LEU B  49      74.015  47.922   5.819  1.00124.28           N
ANISOU  940  N   LEU B  49    19929  10339  16953  -2353  -2633   1341       N
ATOM    941  CA  LEU B  49      75.048  48.682   5.130  1.00131.87           C
ANISOU  941  CA  LEU B  49    20638  11150  18316  -2350  -2604   1920       C
ATOM    942  CB  LEU B  49      75.778  49.585   6.121  1.00143.60           C
ANISOU  942  CB  LEU B  49    21783  12443  20334  -2282  -2463   1784       C
ATOM    943  CG  LEU B  49      76.974  50.354   5.566  1.00160.28           C
ANISOU  943  CG  LEU B  49    23627  14429  22844  -2258  -2414   2296       C
ATOM    944  CD1 LEU B  49      76.538  51.559   4.724  1.00166.96           C
ANISOU  944  CD1 LEU B  49    24200  15209  24029  -2219  -2377   2882       C
ATOM    945  CD2 LEU B  49      77.864  50.783   6.731  1.00166.23           C
ANISOU  945  CD2 LEU B  49    24214  15055  23891  -2217  -2281   1986       C
ATOM    946  C   LEU B  49      76.036  47.787   4.381  1.00127.93           C
ANISOU  946  C   LEU B  49    20331  10789  17489  -2393  -2668   2129       C
ATOM    947  O   LEU B  49      76.412  48.086   3.244  1.00132.64           O
ANISOU  947  O   LEU B  49    20801  11469  18127  -2380  -2657   2777       O
ATOM    948  N   ALA B  50      76.468  46.704   5.015  1.00124.02           N
ANISOU  948  N   ALA B  50    20076  10402  16645  -2411  -2697   1614       N
ATOM    949  CA  ALA B  50      77.423  45.801   4.386  1.00123.62           C
ANISOU  949  CA  ALA B  50    20246  10480  16245  -2459  -2745   1756       C
ATOM    950  CB  ALA B  50      77.993  44.819   5.427  1.00119.45           C
ANISOU  950  CB  ALA B  50    19842  10065  15479  -2432  -2736   1110       C
ATOM    951  C   ALA B  50      76.813  45.035   3.208  1.00120.58           C
ANISOU  951  C   ALA B  50    20113  10498  15204  -2454  -2734   1985       C
ATOM    952  O   ALA B  50      77.510  44.696   2.255  1.00121.98           O
ANISOU  952  O   ALA B  50    20119  11102  15126  -2343  -2617   2319       O
ATOM    953  N   GLU B  51      75.517  44.744   3.292  1.00120.84           N
ANISOU  953  N   GLU B  51    20340  10669  14905  -2458  -2744   1704       N
ATOM    954  CA  GLU B  51      74.838  43.945   2.269  1.00114.90           C
ANISOU  954  CA  GLU B  51    19625  10595  13436  -2332  -2618   1752       C
ATOM    955  CB  GLU B  51      73.792  43.032   2.922  1.00110.92           C
ANISOU  955  CB  GLU B  51    19565  10131  12450  -2403  -2695   1095       C
ATOM    956  CG  GLU B  51      74.336  42.091   4.007  1.00100.67           C
ANISOU  956  CG  GLU B  51    18674   8575  11001  -2532  -2822    463       C
ATOM    957  CD  GLU B  51      74.968  40.824   3.459  1.00 91.81           C
ANISOU  957  CD  GLU B  51    17695   7949   9240  -2467  -2746    348       C
ATOM    958  OE1 GLU B  51      74.234  39.989   2.884  1.00 88.35           O
ANISOU  958  OE1 GLU B  51    17403   8017   8148  -2395  -2672    211       O
ATOM    959  OE2 GLU B  51      76.194  40.648   3.636  1.00 87.34           O
ANISOU  959  OE2 GLU B  51    17105   7256   8822  -2492  -2764    380       O
ATOM    960  C   GLU B  51      74.164  44.737   1.142  1.00125.89           C
ANISOU  960  C   GLU B  51    20647  12311  14876  -2200  -2486   2337       C
ATOM    961  O   GLU B  51      74.294  44.367  -0.014  1.00129.97           O
ANISOU  961  O   GLU B  51    21003  13391  14989  -2066  -2345   2668       O
ATOM    962  N   ARG B  52      73.412  45.786   1.475  1.00131.69           N
ANISOU  962  N   ARG B  52    21256  12702  16078  -2237  -2532   2451       N
ATOM    963  CA  ARG B  52      72.656  46.555   0.468  1.00137.87           C
ANISOU  963  CA  ARG B  52    21703  13772  16911  -2118  -2413   2977       C
ATOM    964  CB  ARG B  52      72.128  47.870   1.059  1.00141.01           C
ANISOU  964  CB  ARG B  52    21946  13633  17999  -2186  -2488   3105       C
ATOM    965  CG  ARG B  52      70.621  47.895   1.186  1.00142.72           C
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ANISOU  965  CG  ARG B  52    22305  13909  18015  -2195  -2504   2887       C
ATOM    966  CD  ARG B  52      70.060  49.302   1.301  1.00155.13           C
ANISOU  966  CD  ARG B  52    23601  15121  20219  -2208  -2519   3219       C
ATOM    967  NE  ARG B  52      68.600  49.275   1.186  1.00165.17           N
ANISOU  967  NE  ARG B  52    24973  16562  21222  -2189  -2505   3083       N
ATOM    968  CZ  ARG B  52      67.926  49.502   0.056  1.00175.63           C
ANISOU  968  CZ  ARG B  52    26059  18357  22317  -2055  -2370   3499       C
ATOM    969  NH1 ARG B  52      68.576  49.787  -1.067  1.00180.32           N
ANISOU  969  NH1 ARG B  52    26294  19298  22920  -1929  -2237   4085       N
ATOM    970  NH2 ARG B  52      66.598  49.441   0.046  1.00171.73           N
ANISOU  970  NH2 ARG B  52    25684  17987  21578  -2049  -2368   3330       N
ATOM    971  C   ARG B  52      73.410  46.891  -0.816  1.00143.34           C
ANISOU  971  C   ARG B  52    21985  14855  17621  -1973  -2261   3650       C
ATOM    972  O   ARG B  52      74.548  47.363  -0.788  1.00149.45           O
ANISOU  972  O   ARG B  52    22559  15410  18816  -1980  -2266   3923       O
ATOM    973  N   GLY B  53      72.755  46.618  -1.940  1.00145.93           N
ANISOU  973  N   GLY B  53    22198  15773  17476  -1843  -2125   3906       N
ATOM    974  CA  GLY B  53      73.314  46.886  -3.248  1.00153.03           C
ANISOU  974  CA  GLY B  53    22714  17106  18325  -1697  -1969   4544       C
ATOM    975  C   GLY B  53      74.199  45.758  -3.723  1.00154.70           C
ANISOU  975  C   GLY B  53    23031  17726  18021  -1647  -1906   4473       C
ATOM    976  O   GLY B  53      74.727  45.800  -4.837  1.00159.53           O
ANISOU  976  O   GLY B  53    23358  18749  18507  -1525  -1773   4963       O
ATOM    977  N   ALA B  54      74.360  44.737  -2.888  1.00142.03           N
ANISOU  977  N   ALA B  54    21837  16016  16110  -1740  -2000   3862       N
ATOM    978  CA  ALA B  54      75.159  43.597  -3.294  1.00135.30           C
ANISOU  978  CA  ALA B  54    21115  15554  14739  -1697  -1942   3753       C
ATOM    979  CB  ALA B  54      75.772  42.893  -2.107  1.00130.73           C
ANISOU  979  CB  ALA B  54    20905  14609  14159  -1832  -2080   3165       C
ATOM    980  C   ALA B  54      74.248  42.668  -4.056  1.00133.63           C
ANISOU  980  C   ALA B  54    21046  15965  13761  -1611  -1842   3639       C
ATOM    981  O   ALA B  54      73.028  42.801  -3.982  1.00137.87           O
ANISOU  981  O   ALA B  54    21665  16537  14181  -1616  -1852   3508       O
ATOM    982  N   PRO B  55      74.841  41.732  -4.804  1.00132.66           N
ANISOU  982  N   PRO B  55    20950  16338  13115  -1531  -1741   3696       N
ATOM    983  CA  PRO B  55      74.095  40.733  -5.573  1.00128.27           C
ANISOU  983  CA  PRO B  55    20541  16413  11782  -1447  -1637   3583       C
ATOM    984  CB  PRO B  55      75.104  40.298  -6.653  1.00123.04           C
ANISOU  984  CB  PRO B  55    19652  16223  10874  -1318  -1486   3947       C
ATOM    985  CG  PRO B  55      76.032  41.432  -6.781  1.00129.49           C
ANISOU  985  CG  PRO B  55    20115  16733  12350  -1320  -1496   4480       C
ATOM    986  CD  PRO B  55      76.172  41.968  -5.393  1.00133.22           C
ANISOU  986  CD  PRO B  55    20733  16485  13398  -1469  -1672   4147       C
ATOM    987  C   PRO B  55      73.663  39.535  -4.742  1.00119.73           C
ANISOU  987  C   PRO B  55    19891  15323  10277  -1511  -1700   2809       C
ATOM    988  O   PRO B  55      74.479  39.004  -3.997  1.00114.62           O
ANISOU  988  O   PRO B  55    19465  14432   9653  -1597  -1787   2468       O
ATOM    989  N   GLY B  56      72.406  39.152  -4.882  1.00117.16           N
ANISOU  989  N   GLY B  56    19512  15252   9752  -1415  -1602   2491       N
ATOM    990  CA  GLY B  56      71.845  38.041  -4.162  1.00114.30           C
ANISOU  990  CA  GLY B  56    19248  14889   9291  -1390  -1565   1720       C
ATOM    991  C   GLY B  56      71.843  38.144  -2.664  1.00101.24           C
ANISOU  991  C   GLY B  56    18016  12593   7860  -1614  -1786   1271       C
ATOM    992  O   GLY B  56      72.077  37.169  -1.991  1.00 99.06           O
ANISOU  992  O   GLY B  56    17736  12227   7674  -1596  -1733    743       O
ATOM    993  N   ALA B  57      71.562  39.316  -2.135  1.00100.02           N
ANISOU  993  N   ALA B  57    18151  11970   7883  -1795  -2019   1524       N
ATOM    994  CA  ALA B  57      71.528  39.486  -0.709  1.00 89.39           C
ANISOU  994  CA  ALA B  57    17143   9991   6832  -1975  -2228   1067       C
ATOM    995  CB  ALA B  57      72.477  40.567  -0.303  1.00100.50           C
ANISOU  995  CB  ALA B  57    18289  10879   9017  -2024  -2286   1368       C
ATOM    996  C   ALA B  57      70.151  39.890  -0.332  1.00 99.68           C
ANISOU  996  C   ALA B  57    18539  11147  8187  -2013  -2281    887       C
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ATOM    997  O   ALA B  57      69.475  40.509  -1.115  1.00108.26           O
ANISOU  997  O   ALA B  57    19367  12460   9306  -1924  -2189   1295       O
ATOM    998  N   GLN B  58      69.752  39.538   0.882  1.00106.79           N
ANISOU  998  N   GLN B  58    19640  11653   9281  -2102  -2348    277       N
ATOM    999  CA  GLN B  58      68.433  39.868   1.387  1.00107.94           C
ANISOU  999  CA  GLN B  58    19804  11615   9593  -2117  -2355     68       C
ATOM   1000  CB  GLN B  58      67.672  38.595   1.694  1.00104.31           C
ANISOU 1000  CB  GLN B  58    18884  11450   9298  -1871  -1997   -297       C
ATOM   1001  CG  GLN B  58      68.438  37.631   2.568  1.00 98.24           C
ANISOU 1001  CG  GLN B  58    17854  10643   8829  -1757  -1847   -528       C
ATOM   1002  CD  GLN B  58      69.223  36.628   1.765  1.00 95.50           C
ANISOU 1002  CD  GLN B  58    17286  10723   8277  -1642  -1702   -514       C
ATOM   1003  OE1 GLN B  58      68.827  36.242   0.677  1.00114.21           O
ANISOU 1003  OE1 GLN B  58    19450  13575  10370  -1524  -1588   -425       O
ATOM   1004  NE2 GLN B  58      70.337  36.196   2.304  1.00 93.70           N
ANISOU 1004  NE2 GLN B  58    17030  10365   8206  -1641  -1692   -583       N
ATOM   1005  C   GLN B  58      68.383  40.769   2.611  1.00101.61           C
ANISOU 1005  C   GLN B  58    19225  10102   9281  -2303  -2599   -116       C
ATOM   1006  O   GLN B  58      67.310  41.193   3.009  1.00104.16           O
ANISOU 1006  O   GLN B  58    19498  10284   9797  -2290  -2588   -201       O
ATOM   1007  N   LEU B  59      69.523  41.061   3.216  1.00 97.15           N
ANISOU 1007  N   LEU B  59    18700   9108   9104  -2409  -2720   -145       N
ATOM   1008  CA  LEU B  59      69.523  41.915   4.384  1.00 98.32           C
ANISOU 1008  CA  LEU B  59    18559   8821   9976  -2370  -2716   -183       C
ATOM   1009  CB  LEU B  59      70.769  41.654   5.221  1.00 95.76           C
ANISOU 1009  CB  LEU B  59    17964   8479   9943  -2260  -2632   -279       C
ATOM   1010  CG  LEU B  59      70.874  40.354   5.993  1.00 75.38           C
ANISOU 1010  CG  LEU B  59    15072   6332   7237  -2006  -2347   -541       C
ATOM   1011  CD1 LEU B  59      72.198  40.294   6.702  1.00 73.72           C
ANISOU 1011  CD1 LEU B  59    14657   6039   7313  -1966  -2325   -593       C
ATOM   1012  CD2 LEU B  59      69.779  40.321   7.015  1.00 65.23           C
ANISOU 1012  CD2 LEU B  59    13385   5210   6190  -1829  -2165   -733       C
ATOM   1013  C   LEU B  59      69.535  43.312   3.843  1.00 97.08           C
ANISOU 1013  C   LEU B  59    18286   8258  10341  -2495  -2816    321       C
ATOM   1014  O   LEU B  59      70.448  44.066   4.067  1.00103.10           O
ANISOU 1014  O   LEU B  59    18835   8664  11673  -2527  -2844    585       O
ATOM   1015  N   ILE B  60      68.499  43.656   3.108  1.00107.34           N
ANISOU 1015  N   ILE B  60    19435   9861  11489  -2405  -2728    581       N
ATOM   1016  CA  ILE B  60      68.422  44.965   2.496  1.00115.40           C
ANISOU 1016  CA  ILE B  60    20013  10812  13020  -2336  -2657   1214       C
ATOM   1017  CB  ILE B  60      67.992  44.851   1.039  1.00120.91           C
ANISOU 1017  CB  ILE B  60    20471  12185  13285  -2165  -2479   1674       C
ATOM   1018  CG1 ILE B  60      66.614  44.241   0.952  1.00102.32           C
ANISOU 1018  CG1 ILE B  60    18361  10132  10384  -2150  -2468   1352       C
ATOM   1019  CD1 ILE B  60      66.181  44.020  -0.468  1.00103.52           C
ANISOU 1019  CD1 ILE B  60    18306  10971  10055  -1987  -2293   1767       C
ATOM   1020  CG2 ILE B  60      68.959  43.974   0.276  1.00106.92           C
ANISOU 1020  CG2 ILE B  60    18676  10877  11073  -2081  -2382   1799       C
ATOM   1021  C   ILE B  60      67.548  45.983   3.197  1.00114.10           C
ANISOU 1021  C   ILE B  60    19817  10166  13370  -2416  -2745   1167       C
ATOM   1022  O   ILE B  60      67.378  47.087   2.722  1.00117.84           O
ANISOU 1022  O   ILE B  60    19935  10572  14266  -2361  -2689   1673       O
ATOM   1023  N   THR B  61      66.989  45.617   4.326  1.00106.11           N
ANISOU 1023  N   THR B  61    19130   8870  12317  -2521  -2865    558       N
ATOM   1024  CA  THR B  61      66.162  46.572   5.074  1.00113.18           C
ANISOU 1024  CA  THR B  61    19688   9652  13663  -2434  -2817    468       C
ATOM   1025  CB  THR B  61      64.630  46.487   4.762  1.00 99.95           C
ANISOU 1025  CB  THR B  61    18225   8095  11658  -2458  -2839    392       C
ATOM   1026  OG1 THR B  61      64.014  45.497   5.584  1.00 97.81           O
ANISOU 1026  OG1 THR B  61    17941   8249  10974  -2293  -2723   -144       O
ATOM   1027  CG2 THR B  61      64.375  46.166   3.325  1.00104.68           C
ANISOU 1027  CG2 THR B  61    18867   9125  11783  -2417  -2764    802       C
ATOM   1028  C   THR B  61      66.363  46.364   6.569  1.00116.73           C
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ANISOU 1028  C   THR B  61    19799  10275  14280  -2251  -2669    -17       C
ATOM   1029  O   THR B  61      66.785  45.295   7.011  1.00110.46          O
ANISOU 1029  O   THR B  61    19024   9784  13163  -2154  -2583   -297       O
ATOM   1030  N   TYR B  62      66.112  47.445   7.294  1.00136.90          N
ANISOU 1030  N   TYR B  62    19644  12950  19424   -259   -971   -390       N
ATOM   1031  CA  TYR B  62      66.287  47.542   8.732  1.00140.30          C
ANISOU 1031  CA  TYR B  62    19944  13504  19858    -86   -998   -566       C
ATOM   1032  CB  TYR B  62      66.182  49.025   9.107  1.00156.27          C
ANISOU 1032  CB  TYR B  62    22012  15355  22011    -51  -1155   -679       C
ATOM   1033  CG  TYR B  62      67.300  49.903   8.534  1.00175.70          C
ANISOU 1033  CG  TYR B  62    24543  17649  24567   -249  -1183   -696       C
ATOM   1034  CD1 TYR B  62      68.505  50.066   9.211  1.00183.57          C
ANISOU 1034  CD1 TYR B  62    25458  18699  25590   -277  -1160   -825       C
ATOM   1035  CE1 TYR B  62      69.512  50.860   8.698  1.00191.54          C
ANISOU 1035  CE1 TYR B  62    26531  19559  26686   -456  -1186   -841       C
ATOM   1036  CZ  TYR B  62      69.337  51.497   7.483  1.00196.61          C
ANISOU 1036  CZ  TYR B  62    27319  19994  27388   -612  -1234   -725       C
ATOM   1037  OH  TYR B  62      70.346  52.287   6.966  1.00202.71          O
ANISOU 1037  OH  TYR B  62    28155  20617  28248   -792  -1259   -739       O
ATOM   1038  CE2 TYR B  62      68.156  51.345   6.789  1.00191.96          C
ANISOU 1038  CE2 TYR B  62    26814  19349  26774   -589  -1257   -596       C
ATOM   1039  CD2 TYR B  62      67.148  50.552   7.314  1.00184.73          C
ANISOU 1039  CD2 TYR B  62    25834  18584  25772   -409  -1232   -583       C
ATOM   1040  C   TYR B  62      65.383  46.704   9.630  1.00126.56          C
ANISOU 1040  C   TYR B  62    18101  11958  18028    134   -971   -594       C
ATOM   1041  O   TYR B  62      65.875  45.976  10.466  1.00126.82          O
ANISOU 1041  O   TYR B  62    18009  12177  17998    211   -893   -671       O
ATOM   1042  N   PRO B  63      64.077  46.736   9.439  1.00116.43          N
ANISOU 1042  N   PRO B  63    16867  10639  16733    233  -1027   -528       N
ATOM   1043  CA  PRO B  63      63.220  45.874  10.268  1.00112.89          C
ANISOU 1043  CA  PRO B  63    16319  10382  16194    440   -993   -548       C
ATOM   1044  CB  PRO B  63      61.813  46.203   9.778  1.00116.31          C
ANISOU 1044  CB  PRO B  63    16844  10707  16640    503  -1077   -459       C
ATOM   1045  CG  PRO B  63      61.996  46.570   8.365  1.00131.18          C
ANISOU 1045  CG  PRO B  63    18870  12405  18565    291  -1081   -324       C
ATOM   1046  CD  PRO B  63      63.304  47.330   8.353  1.00126.20          C
ANISOU 1046  CD  PRO B  63    18250  11681  18018    152  -1099   -407       C
ATOM   1047  C   PRO B  63      63.540  44.386  10.098  1.00108.85          C
ANISOU 1047  C   PRO B  63    15738  10063  15555    411   -831   -465       C
ATOM   1048  O   PRO B  63      63.151  43.544  10.916  1.00 95.76          O
ANISOU 1048  O   PRO B  63    13972   8598  13815    571   -779   -502       O
ATOM   1049  N   ARG B  64      64.249  44.087   9.014  1.00112.11          N
ANISOU 1049  N   ARG B  64    16218  10422  15955    204   -753   -352       N
ATOM   1050  CA  ARG B  64      64.668  42.737   8.684  1.00102.56          C
ANISOU 1050  CA  ARG B  64    14961   9375  14633    142   -598   -262       C
ATOM   1051  CB  ARG B  64      64.871  42.574   7.181  1.00101.64          C
ANISOU 1051  CB  ARG B  64    14967   9140  14512    -73   -549    -90       C
ATOM   1052  CG  ARG B  64      63.661  42.462   6.285  1.00 94.98          C
ANISOU 1052  CG  ARG B  64    14225   8213  13650    -74   -575     61       C
ATOM   1053  CD  ARG B  64      64.212  42.271   4.885  1.00102.56          C
ANISOU 1053  CD  ARG B  64    15289   9073  14606   -307   -510    210       C
ATOM   1054  NE  ARG B  64      63.254  41.764   3.913  1.00106.90          N
ANISOU 1054  NE  ARG B  64    15921   9589  15105   -334   -486    379       N
ATOM   1055  CZ  ARG B  64      63.600  41.313   2.712  1.00103.16          C
ANISOU 1055  CZ  ARG B  64    15525   9070  14602   -515   -409    526       C
ATOM   1056  NH1 ARG B  64      64.858  41.402   2.306  1.00 96.56          N
ANISOU 1056  NH1 ARG B  64    14701   8198  13788   -689   -358    524       N
ATOM   1057  NH2 ARG B  64      62.693  40.751   1.927  1.00107.40          N
ANISOU 1057  NH2 ARG B  64    16123   9600  15085   -521   -381    674       N
ATOM   1058  C   ARG B  64      65.973  42.390   9.360  1.00 96.57          C
ANISOU 1058  C   ARG B  64    14095   8744  13855    114   -520   -369       C
ATOM   1059  O   ARG B  64      66.127  41.309   9.912  1.00 93.49          O
ANISOU 1059  O   ARG B  64    13597   8559  13367    191   -418   -383       O
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ATOM   1060  N   ALA B  65      66.929  43.306   9.285  1.00102.89           N
ANISOU 1060  N   ALA B  65    14927   9419  14747     -3   -567   -440       N
ATOM   1061  CA  ALA B  65      68.231  43.082   9.894  1.00103.22           C
ANISOU 1061  CA  ALA B  65    14874   9566  14780    -42   -499   -546       C
ATOM   1062  CB  ALA B  65      69.195  44.185   9.515  1.00107.10           C
ANISOU 1062  CB  ALA B  65    15433   9877  15382   -203   -559   -592       C
ATOM   1063  C   ALA B  65      68.114  42.974  11.411  1.00108.64           C
ANISOU 1063  C   ALA B  65    15420  10410  15448    174   -519   -711       C
ATOM   1064  O   ALA B  65      68.981  42.396  12.071  1.00115.57           O
ANISOU 1064  O   ALA B  65    16190  11442  16280    190   -436   -789       O
ATOM   1065  N   LEU B  66      67.031  43.520  11.959  1.00104.81           N
ANISOU 1065  N   LEU B  66    14937   9889  14998    342   -628   -761       N
ATOM   1066  CA  LEU B  66      66.794  43.490  13.396  1.00 99.94           C
ANISOU 1066  CA  LEU B  66    14193   9412  14369    559   -659   -915       C
ATOM   1067  CB  LEU B  66      65.770  44.559  13.789  1.00 97.91           C
ANISOU 1067  CB  LEU B  66    13976   9032  14193    692   -815   -976       C
ATOM   1068  CG  LEU B  66      65.321  44.651  15.244  1.00 96.93           C
ANISOU 1068  CG  LEU B  66    13734   9030  14065    931   -868  -1131       C
ATOM   1069  CD1 LEU B  66      65.310  46.108  15.669  1.00 98.16           C
ANISOU 1069  CD1 LEU B  66    13925   9023  14348    967  -1020  -1253       C
ATOM   1070  CD2 LEU B  66      63.952  44.009  15.454  1.00 90.79           C
ANISOU 1070  CD2 LEU B  66    12935   8349  13213   1100   -867  -1071       C
ATOM   1071  C   LEU B  66      66.326  42.095  13.792  1.00 97.60           C
ANISOU 1071  C   LEU B  66    13800   9342  13941    679   -549   -873       C
ATOM   1072  O   LEU B  66      66.684  41.578  14.858  1.00100.20           O
ANISOU 1072  O   LEU B  66    13999   9850  14223    798   -500   -982       O
ATOM   1073  N   TRP B  67      65.508  41.501  12.931  1.00 92.48           N
ANISOU 1073  N   TRP B  67    13218   8686  13235    651   -512   -714       N
ATOM   1074  CA  TRP B  67      65.011  40.153  13.150  1.00 91.95           C
ANISOU 1074  CA  TRP B  67    13073   8821  13042    749   -405   -653       C
ATOM   1075  CB  TRP B  67      63.889  39.832  12.161  1.00 92.30           C
ANISOU 1075  CB  TRP B  67    13215   8802  13051    728   -406   -483       C
ATOM   1076  CG  TRP B  67      63.465  38.397  12.119  1.00 85.21           C
ANISOU 1076  CG  TRP B  67    12257   8096  12023    786   -285   -390       C
ATOM   1077  CD1 TRP B  67      63.331  37.615  11.009  1.00 85.74           C
ANISOU 1077  CD1 TRP B  67    12388   8163  12025    663   -198   -220       C
ATOM   1078  NE1 TRP B  67      62.905  36.358  11.364  1.00 91.24           N
ANISOU 1078  NE1 TRP B  67    12998   9062  12606    771   -101   -181       N
ATOM   1079  CE2 TRP B  67      62.751  36.309  12.726  1.00 88.32           C
ANISOU 1079  CE2 TRP B  67    12506   8829  12224    968   -123   -326       C
ATOM   1080  CD2 TRP B  67      63.093  37.579  13.234  1.00 86.57           C
ANISOU 1080  CD2 TRP B  67    12295   8484  12114    983   -239   -461       C
ATOM   1081  CE3 TRP B  67      63.019  37.795  14.614  1.00 92.47           C
ANISOU 1081  CE3 TRP B  67    12929   9334  12872   1173   -284   -625       C
ATOM   1082  CZ3 TRP B  67      62.618  36.751  15.432  1.00 96.20           C
ANISOU 1082  CZ3 TRP B  67    13281  10025  13244   1338   -213   -649       C
ATOM   1083  CH2 TRP B  67      62.286  35.496  14.899  1.00 93.89           C
ANISOU 1083  CH2 TRP B  67    12981   9851  12842   1317    -97   -512       C
ATOM   1084  CZ2 TRP B  67      62.346  35.254  13.553  1.00 88.50           C
ANISOU 1084  CZ2 TRP B  67    12408   9073  12146   1134    -51   -351       C
ATOM   1085  C   TRP B  67      66.170  39.174  13.006  1.00 86.63           C
ANISOU 1085  C   TRP B  67    12339   8283  12294    636   -258   -630       C
ATOM   1086  O   TRP B  67      66.302  38.212  13.765  1.00 83.35           O
ANISOU 1086  O   TRP B  67    11803   8075  11790    741   -171   -673       O
ATOM   1087  N   TRP B  68      66.989  39.422  11.989  1.00 91.57           N
ANISOU 1087  N   TRP B  68    13052   8786  12955    418   -231   -557       N
ATOM   1088  CA  TRP B  68      68.136  38.572  11.679  1.00 88.70           C
ANISOU 1088  CA  TRP B  68    12649   8525  12527    282    -95   -522       C
ATOM   1089  CB  TRP B  68      68.907  39.129  10.474  1.00 89.69           C
ANISOU 1089  CB  TRP B  68    12894   8467  12715     38    -97   -441       C
ATOM   1090  CG  TRP B  68      70.206  38.415  10.218  1.00 87.83           C
ANISOU 1090  CG  TRP B  68    12619   8324  12429   -107     31   -424       C
ATOM   1091  CD1 TRP B  68      70.362  37.167   9.689  1.00 82.98           C
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ANISOU 1091  CD1 TRP B  68    11986   7836  11706   -171    165   -307       C
ATOM   1092  NE1 TRP B  68      71.699  36.845   9.620  1.00 80.76           N
ANISOU 1092  NE1 TRP B  68    11668   7611  11408   -301    254   -333       N
ATOM   1093  CE2 TRP B  68      72.432  37.887  10.109  1.00 85.22           C
ANISOU 1093  CE2 TRP B  68    12224   8085  12070   -323    178   -468       C
ATOM   1094  CD2 TRP B  68      71.530  38.898  10.505  1.00 89.43           C
ANISOU 1094  CD2 TRP B  68    12791   8502  12685   -202     37   -530       C
ATOM   1095  CE3 TRP B  68      72.031  40.083  11.046  1.00 84.72           C
ANISOU 1095  CE3 TRP B  68    12194   7798  12198   -198    -64   -670       C
ATOM   1096  CZ3 TRP B  68      73.394  40.229  11.170  1.00 92.13           C
ANISOU 1096  CZ3 TRP B  68    13099   8744  13162   -313    -22   -742       C
ATOM   1097  CH2 TRP B  68      74.275  39.210  10.772  1.00 91.45           C
ANISOU 1097  CH2 TRP B  68    12979   8775  12991   -432    120   -679       C
ATOM   1098  CZ2 TRP B  68      73.816  38.036  10.245  1.00 88.08           C
ANISOU 1098  CZ2 TRP B  68    12552   8458  12456   -439    221   -543       C
ATOM   1099  C   TRP B  68      69.073  38.416  12.871  1.00 80.53           C
ANISOU 1099  C   TRP B  68    11478   7637  11482    355    -58   -686       C
ATOM   1100  O   TRP B  68      69.516  37.314  13.179  1.00 79.15           O
ANISOU 1100  O   TRP B  68    11212   7650  11211    373     63   -683       O
ATOM   1101  N   SER B  69      69.356  39.530  13.537  1.00 83.94           N
ANISOU 1101  N   SER B  69    11899   7980  12013    400   -164   -829       N
ATOM   1102  CA  SER B  69      70.277  39.547  14.675  1.00 93.56           C
ANISOU 1102  CA  SER B  69    12997   9316  13237    466   -143   -995       C
ATOM   1103  CB  SER B  69      70.553  40.990  15.101  1.00 91.27           C
ANISOU 1103  CB  SER B  69    12733   8867  13077    474   -279  -1127       C
ATOM   1104  OG  SER B  69      69.393  41.795  14.957  1.00 95.56           O
ANISOU 1104  OG  SER B  69    13354   9271  13682    551   -406  -1106       O
ATOM   1105  C   SER B  69      69.786  38.729  15.877  1.00 85.82           C
ANISOU 1105  C   SER B  69    11877   8559  12173    689   -103  -1073       C
ATOM   1106  O   SER B  69      70.564  37.994  16.499  1.00 76.54           O
ANISOU 1106  O   SER B  69    10592   7555  10936    712     -7  -1138       O
ATOM   1107  N   VAL B  70      68.500  38.862  16.187  1.00 76.20           N
ANISOU 1107  N   VAL B  70    10663   7336  10952    850   -176  -1066       N
ATOM   1108  CA  VAL B  70      68.000  38.114  17.334  1.00 76.15           C
ANISOU 1108  CA  VAL B  70    10525   7538  10868   1066   -142  -1141       C
ATOM   1109  CB  VAL B  70      66.554  38.515  17.681  1.00 75.87           C
ANISOU 1109  CB  VAL B  70    10509   7466  10854   1244   -249  -1145       C
ATOM   1110  CG1 VAL B  70      66.014  37.637  18.799  1.00 79.54           C
ANISOU 1110  CG1 VAL B  70    10839   8155  11230   1461   -204  -1207       C
ATOM   1111  CG2 VAL B  70      66.490  39.984  18.069  1.00 85.08           C
ANISOU 1111  CG2 VAL B  70    11714   8464  12148   1280   -403  -1261       C
ATOM   1112  C   VAL B  70      68.056  36.605  17.103  1.00 79.04           C
ANISOU 1112  C   VAL B  70    10836   8093  11101   1053     11  -1040       C
ATOM   1113  O   VAL B  70      68.412  35.847  18.005  1.00 83.56           O
ANISOU 1113  O   VAL B  70    11282   8862  11605   1155     87  -1119       O
ATOM   1114  N   GLU B  71      67.650  36.195  15.854  1.00 83.00           N
ANISOU 1114  N   GLU B  71    11440   8528  11570    929     52   -861       N
ATOM   1115  CA  GLU B  71      67.649  34.774  15.539  1.00 80.58           C
ANISOU 1115  CA  GLU B  71    11092   8388  11138    909    194   -754       C
ATOM   1116  CB  GLU B  71      66.727  34.477  14.349  1.00 81.23           C
ANISOU 1116  CB  GLU B  71    11286   8387  11192    840    200   -568       C
ATOM   1117  CG  GLU B  71      67.257  34.858  12.985  1.00 79.25           C
ANISOU 1117  CG  GLU B  71    11167   7959  10986    601    206   -452       C
ATOM   1118  CD  GLU B  71      66.383  34.309  11.860  1.00 79.47           C
ANISOU 1118  CD  GLU B  71    11286   7944  10963    542    237   -264       C
ATOM   1119  OE1 GLU B  71      66.548  33.131  11.466  1.00 73.72           O
ANISOU 1119  OE1 GLU B  71    10532   7344  10134    493    362   -166       O
ATOM   1120  OE2 GLU B  71      65.531  35.072  11.360  1.00 82.34           O
ANISOU 1120  OE2 GLU B  71    11752   8145  11390    543    135   -213       O
ATOM   1121  C   GLU B  71      69.059  34.287  15.273  1.00 79.72           C
ANISOU 1121  C   GLU B  71    10953   8338  10997    748    305   -753       C
ATOM   1122  O   GLU B  71      69.288  33.089  15.112  1.00 83.27           O
ANISOU 1122  O   GLU B  71    11354   8942  11343    724    432   -684       O
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ATOM   1123  N   THR B  72      70.003  35.221  15.215  1.00 80.46           N
ANISOU 1123  N   THR B  72    11080   8308  11183    636    256   -830       N
ATOM   1124  CA  THR B  72      71.405  34.866  15.036  1.00 84.55           C
ANISOU 1124  CA  THR B  72    11568   8876  11681    485    353   -846       C
ATOM   1125  CB  THR B  72      72.125  35.840  14.068  1.00 82.74           C
ANISOU 1125  CB  THR B  72    11459   8427  11550    271    304   -811       C
ATOM   1126  OG1 THR B  72      71.547  35.739  12.758  1.00 89.98           O
ANISOU 1126  OG1 THR B  72    12502   9228  12460    151    308   -633       O
ATOM   1127  CG2 THR B  72      73.621  35.533  14.001  1.00 81.89           C
ANISOU 1127  CG2 THR B  72    11311   8376  11426    126    399   -846       C
ATOM   1128  C   THR B  72      72.124  34.842  16.392  1.00 81.30           C
ANISOU 1128  C   THR B  72    11017   8606  11267    602    368  -1029       C
ATOM   1129  O   THR B  72      72.932  33.946  16.662  1.00 75.10           O
ANISOU 1129  O   THR B  72    10148   7981  10405    577    485  -1047       O
ATOM   1130  N   ALA B  73      71.842  35.841  17.228  1.00 78.80           N
ANISOU 1130  N   ALA B  73    10680   8227  11035    726    247  -1164       N
ATOM   1131  CA  ALA B  73      72.442  35.942  18.565  1.00 84.14           C
ANISOU 1131  CA  ALA B  73    11227   9023  11719    850    244  -1346       C
ATOM   1132  CB  ALA B  73      72.111  37.294  19.193  1.00 81.22           C
ANISOU 1132  CB  ALA B  73    10873   8521  11466    946     88  -1473       C
ATOM   1133  C   ALA B  73      71.996  34.821  19.495  1.00 83.34           C
ANISOU 1133  C   ALA B  73    10995   9162  11508   1038    320  -1380       C
ATOM   1134  O   ALA B  73      72.746  34.381  20.367  1.00 86.54           O
ANISOU 1134  O   ALA B  73    11285   9721  11876   1094    384  -1488       O
ATOM   1135  N   THR B  74      70.769  34.389  19.360  1.00 74.34           N
ANISOU 1135  N   THR B  74     9320   9813   9115  -1298    334   1586       N
ATOM   1136  CA  THR B  74      70.229  33.293  20.163  1.00 77.22           C
ANISOU 1136  CA  THR B  74     9381  10305   9655  -1088    483   1610       C
ATOM   1137  CB  THR B  74      68.683  33.300  20.166  1.00 81.45           C
ANISOU 1137  CB  THR B  74     9982  10780  10184   -790    481   1493       C
ATOM   1138  OG1 THR B  74      68.208  33.286  18.810  1.00 78.40           O
ANISOU 1138  OG1 THR B  74     9643  10317   9828   -802    514   1408       O
ATOM   1139  CG2 THR B  74      68.146  34.535  20.891  1.00 86.85           C
ANISOU 1139  CG2 THR B  74    11021  11347  10632   -681    278   1439       C
ATOM   1140  C   THR B  74      70.691  31.944  19.592  1.00 76.60           C
ANISOU 1140  C   THR B  74     8917  10360   9829  -1166    701   1667       C
ATOM   1141  O   THR B  74      70.459  30.901  20.192  1.00 74.45           O
ANISOU 1141  O   THR B  74     8347  10212   9728  -1034    844   1705       O
ATOM   1142  N   THR B  75      71.343  32.008  18.432  1.00 76.14           N
ANISOU 1142  N   THR B  75     8875  10270   9785  -1381    718   1672       N
ATOM   1143  CA  THR B  75      71.844  30.853  17.671  1.00 72.16           C
ANISOU 1143  CA  THR B  75     8043   9872   9501  -1486    910   1719       C
ATOM   1144  CB  THR B  75      72.828  29.936  18.488  1.00 76.69           C
ANISOU 1144  CB  THR B  75     8300  10615  10223  -1576   1032   1854       C
ATOM   1145  OG1 THR B  75      72.131  29.220  19.519  1.00 87.47           O
ANISOU 1145  OG1 THR B  75     9470  12072  11694  -1337   1115   1861       O
ATOM   1146  CG2 THR B  75      73.937  30.784  19.126  1.00 85.55           C
ANISOU 1146  CG2 THR B  75     9598  11722  11185  -1777    891   1937       C
ATOM   1147  C   THR B  75      70.727  29.986  17.066  1.00 75.94           C
ANISOU 1147  C   THR B  75     8341  10369  10143  -1282   1053   1640       C
ATOM   1148  O   THR B  75      70.951  28.824  16.732  1.00 80.40           O
ANISOU 1148  O   THR B  75     8580  11048  10920  -1302   1235   1682       O
ATOM   1149  N   VAL B  76      69.535  30.556  16.890  1.00 77.92           N
ANISOU 1149  N   VAL B  76     8806  10506  10295  -1091    969   1526       N
ATOM   1150  CA  VAL B  76      68.427  29.796  16.299  1.00 76.35           C
ANISOU 1150  CA  VAL B  76     8456  10314  10238   -893   1095   1447       C
ATOM   1151  CB  VAL B  76      67.076  30.522  16.502  1.00 68.93           C
ANISOU 1151  CB  VAL B  76     7772   9256   9163   -650    980   1332       C
ATOM   1152  CG1 VAL B  76      65.950  29.789  15.747  1.00 64.43           C
ANISOU 1152  CG1 VAL B  76     7064   8683   8734   -463   1105   1248       C
ATOM   1153  CG2 VAL B  76      66.743  30.557  17.990  1.00 81.17           C
ANISOU 1153  CG2 VAL B  76     9311  10857  10674   -474    940   1361       C
ATOM   1154  C   VAL B  76      68.693  29.574  14.805  1.00 77.54           C
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ANISOU 1154  C   VAL B  76     8569  10432  10460  -1048   1163   1419       C
ATOM   1155  O   VAL B  76      68.657  28.439  14.324  1.00 82.20           O
ANISOU 1155  O   VAL B  76     8858  11116  11260  -1030   1342   1436       O
ATOM   1156  N   GLY B  77      68.977  30.659  14.081  1.00 84.83           N
ANISOU 1156  N   GLY B  77     9799  11224  11209  -1203   1017   1378       N
ATOM   1157  CA  GLY B  77      69.297  30.565  12.663  1.00 78.17           C
ANISOU 1157  CA  GLY B  77     8947  10341  10412  -1368   1063   1353       C
ATOM   1158  C   GLY B  77      68.347  29.829  11.728  1.00 66.66           C
ANISOU 1158  C   GLY B  77     7348   8877   9101  -1228   1194   1273       C
ATOM   1159  O   GLY B  77      68.737  28.848  11.073  1.00 66.63           O
ANISOU 1159  O   GLY B  77     7072   8960   9283  -1310   1356   1309       O
ATOM   1160  N   TYR B  78      67.112  30.322  11.630  1.00 71.05           N
ANISOU 1160  N   TYR B  78     8097   9328   9571  -1023   1122   1163       N
ATOM   1161  CA  TYR B  78      66.104  29.714  10.767  1.00 69.86           C
ANISOU 1161  CA  TYR B  78     7843   9159   9544   -874   1231   1080       C
ATOM   1162  CB  TYR B  78      64.822  30.551  10.763  1.00 60.25           C
ANISOU 1162  CB  TYR B  78     6913   7803   8177   -668   1106    961       C
ATOM   1163  CG  TYR B  78      64.088  30.584  12.084  1.00 65.87           C
ANISOU 1163  CG  TYR B  78     7634   8541   8851   -428   1070    957       C
ATOM   1164  CD1 TYR B  78      63.620  29.408  12.674  1.00 63.78           C
ANISOU 1164  CD1 TYR B  78     7051   8405   8778   -243   1230    986       C
ATOM   1165  CE1 TYR B  78      62.877  29.443  13.864  1.00 59.09           C
ANISOU 1165  CE1 TYR B  78     6470   7834   8149    -11   1196    976       C
ATOM   1166  CZ  TYR B  78      62.611  30.669  14.461  1.00 65.56           C
ANISOU 1166  CZ  TYR B  78     7626   8544   8739     36   1001    937       C
ATOM   1167  OH  TYR B  78      61.856  30.742  15.602  1.00 69.38           O
ANISOU 1167  OH  TYR B  78     8134   9044   9181    267    963    924       O
ATOM   1168  CE2 TYR B  78      63.077  31.846  13.894  1.00 68.01           C
ANISOU 1168  CE2 TYR B  78     8257   8726   8858   -146    840    908       C
ATOM   1169  CD2 TYR B  78      63.810  31.798  12.713  1.00 71.37           C
ANISOU 1169  CD2 TYR B  78     8665   9132   9321   -376    875    918       C
ATOM   1170  C   TYR B  78      66.560  29.550   9.324  1.00 66.20           C
ANISOU 1170  C   TYR B  78     7348   8666   9141  -1065   1289   1065       C
ATOM   1171  O   TYR B  78      66.273  28.547   8.695  1.00 60.69           O
ANISOU 1171  O   TYR B  78     6401   8028   8630  -1016   1453   1055       O
ATOM   1172  N   GLY B  79      67.236  30.552   8.799  1.00 67.92           N
ANISOU 1172  N   GLY B  79     7822   8788   9196  -1276   1152   1061       N
ATOM   1173  CA  GLY B  79      67.648  30.540   7.415  1.00 61.31           C
ANISOU 1173  CA  GLY B  79     6994   7908   8391  -1460   1186   1041       C
ATOM   1174  C   GLY B  79      66.851  31.416   6.471  1.00 61.07           C
ANISOU 1174  C   GLY B  79     7260   7715   8230  -1424   1076    920       C
ATOM   1175  O   GLY B  79      67.058  31.370   5.279  1.00 55.58           O
ANISOU 1175  O   GLY B  79     6568   6981   7569  -1554   1110    893       O
ATOM   1176  N   ASP B  80      65.932  32.211   6.986  1.00 67.32           N
ANISOU 1176  N   ASP B  80     8300   8409   8871  -1246    945    847       N
ATOM   1177  CA  ASP B  80      65.165  33.094   6.136  1.00 59.61           C
ANISOU 1177  CA  ASP B  80     7617   7272   7760  -1209    832    731       C
ATOM   1178  CB  ASP B  80      63.874  33.532   6.809  1.00 64.25           C
ANISOU 1178  CB  ASP B  80     8368   7790   8254   -932    752    650       C
ATOM   1179  CG  ASP B  80      64.096  34.201   8.129  1.00 73.01           C
ANISOU 1179  CG  ASP B  80     9624   8901   9217   -897    621    691       C
ATOM   1180  OD1 ASP B  80      65.112  33.955   8.770  1.00 71.77           O
ANISOU 1180  OD1 ASP B  80     9341   8839   9089  -1027    642    794       O
ATOM   1181  OD2 ASP B  80      63.236  34.969   8.551  1.00 68.10           O
ANISOU 1181  OD2 ASP B  80     9242   8183   8449   -734    496    619       O
ATOM   1182  C   ASP B  80      65.974  34.298   5.781  1.00 60.01           C
ANISOU 1182  C   ASP B  80     7968   7221   7610  -1442    657    736       C
ATOM   1183  O   ASP B  80      65.613  35.029   4.894  1.00 60.24           O
ANISOU 1183  O   ASP B  80     8232   7124   7534  -1477    567    653       O
ATOM   1184  N   LEU B  81      67.072  34.497   6.499  1.00 73.01           N
ANISOU 1184  N   LEU B  81     9607   8928   9207  -1599    609    835       N
ATOM   1185  CA  LEU B  81      67.963  35.647   6.363  1.00 70.89           C
ANISOU 1185  CA  LEU B  81     9616   8576   8742  -1828    434    858       C
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ATOM   1186  CB  LEU B  81      67.461  36.774   7.264  1.00 66.09           C
ANISOU 1186  CB  LEU B  81     9323   7870   7917  -1712    242    817       C
ATOM   1187  CG  LEU B  81      66.107  37.415   7.007  1.00 65.02           C
ANISOU 1187  CG  LEU B  81     9428   7600   7675  -1506    153    686       C
ATOM   1188  CD1 LEU B  81      65.543  37.892   8.326  1.00 74.63           C
ANISOU 1188  CD1 LEU B  81    10778   8801   8777  -1314     51    677       C
ATOM   1189  CD2 LEU B  81      66.283  38.584   6.068  1.00 74.67           C
ANISOU 1189  CD2 LEU B  81    10982   8672   8717  -1666     -7    626       C
ATOM   1190  C   LEU B  81      69.402  35.281   6.751  1.00 67.85           C
ANISOU 1190  C   LEU B  81     9059   8309   8413  -2051    479    992       C
ATOM   1191  O   LEU B  81      69.606  34.541   7.718  1.00 66.22           O
ANISOU 1191  O   LEU B  81     8621   8226   8312  -1981    571   1066       O
ATOM   1192  N   TYR B  82      70.386  35.813   6.022  1.00 67.35           N
ANISOU 1192  N   TYR B  82     9112   8206   8273  -2317    411   1022       N
ATOM   1193  CA  TYR B  82      71.803  35.589   6.328  1.00 70.96           C
ANISOU 1193  CA  TYR B  82     9438   8761   8761  -2549    436   1149       C
ATOM   1194  CB  TYR B  82      72.155  34.099   6.201  1.00 70.52           C
ANISOU 1194  CB  TYR B  82     8960   8866   8967  -2557    668   1218       C
ATOM   1195  CG  TYR B  82      71.828  33.480   4.852  1.00 76.27           C
ANISOU 1195  CG  TYR B  82     9559   9586   9833  -2573    794   1163       C
ATOM   1196  CD1 TYR B  82      72.719  33.576   3.783  1.00 71.23           C
ANISOU 1196  CD1 TYR B  82     8928   8937   9201  -2826    801   1189       C
ATOM   1197  CE1 TYR B  82      72.427  33.010   2.564  1.00 78.64           C
ANISOU 1197  CE1 TYR B  82     9747   9868  10263  -2840    916   1139       C
ATOM   1198  CZ  TYR B  82      71.224  32.343   2.385  1.00 81.08           C
ANISOU 1198  CZ  TYR B  82     9933  10180  10694  -2599   1023   1062       C
ATOM   1199  OH  TYR B  82      70.915  31.777   1.163  1.00 83.70           O
ANISOU 1199  OH  TYR B  82    10149  10503  11151  -2611   1138   1012       O
ATOM   1200  CE2 TYR B  82      70.325  32.242   3.424  1.00 74.98           C
ANISOU 1200  CE2 TYR B  82     9153   9418   9916  -2347   1017   1036       C
ATOM   1201  CD2 TYR B  82      70.628  32.808   4.645  1.00 76.32           C
ANISOU 1201  CD2 TYR B  82     9441   9597   9962  -2334    903   1086       C
ATOM   1202  C   TYR B  82      72.728  36.418   5.421  1.00 73.51           C
ANISOU 1202  C   TYR B  82     9964   9007   8959  -2830    325   1161       C
ATOM   1203  O   TYR B  82      72.348  36.787   4.317  1.00 76.07           O
ANISOU 1203  O   TYR B  82    10425   9233   9245  -2862    292   1080       O
ATOM   1204  N   PRO B  83      73.959  36.700   5.880  1.00 77.41           N
ANISOU 1204  N   PRO B  83    10472   9547   9392  -3038    268   1266       N
ATOM   1205  CA  PRO B  83      74.929  37.446   5.075  1.00 81.85           C
ANISOU 1205  CA  PRO B  83    11210  10049   9841  -3316    165   1291       C
ATOM   1206  CB  PRO B  83      75.980  37.824   6.119  1.00 78.92           C
ANISOU 1206  CB  PRO B  83    10879   9729   9379  -3450     80   1402       C
ATOM   1207  CG  PRO B  83      75.996  36.643   6.990  1.00 75.55           C
ANISOU 1207  CG  PRO B  83    10112   9455   9139  -3333    248   1472       C
ATOM   1208  CD  PRO B  83      74.511  36.446   7.221  1.00 81.39           C
ANISOU 1208  CD  PRO B  83    10860  10156   9911  -3027    277   1367       C
ATOM   1209  C   PRO B  83      75.564  36.645   3.926  1.00 84.99           C
ANISOU 1209  C   PRO B  83    11378  10512  10402  -3487    314   1323       C
ATOM   1210  O   PRO B  83      75.829  35.447   4.048  1.00 85.41           O
ANISOU 1210  O   PRO B  83    11090  10702  10661  -3472    499   1385       O
ATOM   1211  N   VAL B  84      75.752  37.326   2.803  1.00 91.32           N
ANISOU 1211  N   VAL B  84    12376  11212  11110  -3640    230   1276       N
ATOM   1212  CA  VAL B  84      76.476  36.805   1.645  1.00 92.73           C
ANISOU 1212  CA  VAL B  84    12397  11433  11402  -3840    335   1307       C
ATOM   1213  CB  VAL B  84      75.710  37.018   0.353  1.00 87.14           C
ANISOU 1213  CB  VAL B  84    11803  10618  10689  -3808    331   1192       C
ATOM   1214  CG1 VAL B  84      76.289  36.138  -0.729  1.00 94.29           C
ANISOU 1214  CG1 VAL B  84    12460  11598  11769  -3957    491   1224       C
ATOM   1215  CG2 VAL B  84      74.254  36.689   0.537  1.00 74.06           C
ANISOU 1215  CG2 VAL B  84    10120   8930   9089  -3508    384   1093       C
ATOM   1216  C   VAL B  84      77.787  37.573   1.447  1.00 90.80           C
ANISOU 1216  C   VAL B  84    12305  11168  11024  -4135    213   1384       C
ATOM   1217  O   VAL B  84      78.704  37.099   0.806  1.00 92.22           O
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ANISOU 1217  O   VAL B  84    12307  11427  11307  -4203    288   1406       O
ATOM   1218  N   THR B  85      77.842  38.781   1.995  1.00 99.35           N
ANISOU 1218  N   THR B  85    13708  12155  11886  -4161      9   1373       N
ATOM   1219  CA  THR B  85      78.963  39.686   1.928  1.00104.51           C
ANISOU 1219  CA  THR B  85    14559  12771  12379  -4417   -139   1437       C
ATOM   1220  CB  THR B  85      78.545  41.080   2.408  1.00107.81           C
ANISOU 1220  CB  THR B  85    15371  13047  12546  -4368   -372   1379       C
ATOM   1221  OG1 THR B  85      77.510  41.600   1.575  1.00109.84           O
ANISOU 1221  OG1 THR B  85    15828  13171  12735  -4264   -433   1247       O
ATOM   1222  CG2 THR B  85      79.726  42.029   2.390  1.00103.19           C
ANISOU 1222  CG2 THR B  85    14992  12424  11791  -4635   -531   1451       C
ATOM   1223  C   THR B  85      80.057  39.316   2.873  1.00104.99           C
ANISOU 1223  C   THR B  85    14450  12962  12482  -4499   -105   1563       C
ATOM   1224  O   THR B  85      79.805  39.093   4.029  1.00101.00           O
ANISOU 1224  O   THR B  85    13884  12502  11988  -4386    -91   1603       O
ATOM   1225  N   LEU B  86      81.292  39.318   2.405  1.00114.54           N
ANISOU 1225  N   LEU B  86    15568  14243  13708  -4542   -111   1568       N
ATOM   1226  CA  LEU B  86      82.410  38.988   3.258  1.00115.91           C
ANISOU 1226  CA  LEU B  86    15577  14540  13924  -4539    -86   1650       C
ATOM   1227  CB  LEU B  86      83.687  39.085   2.470  1.00120.82           C
ANISOU 1227  CB  LEU B  86    16149  15207  14551  -4589   -101   1637       C
ATOM   1228  CG  LEU B  86      84.889  38.501   3.171  1.00112.96           C
ANISOU 1228  CG  LEU B  86    14934  14338  13646  -4552    -37   1705       C
ATOM   1229  CD1 LEU B  86      84.571  37.061   3.501  1.00111.99           C
ANISOU 1229  CD1 LEU B  86    14467  14307  13776  -4357    176   1706       C
ATOM   1230  CD2 LEU B  86      86.054  38.571   2.205  1.00122.45           C
ANISOU 1230  CD2 LEU B  86    16101  15566  14859  -4591    -44   1681       C
ATOM   1231  C   LEU B  86      82.561  39.750   4.537  1.00108.36           C
ANISOU 1231  C   LEU B  86    14817  13554  12800  -4628   -228   1731       C
ATOM   1232  O   LEU B  86      82.858  39.193   5.560  1.00104.09           O
ANISOU 1232  O   LEU B  86    14101  13112  12335  -4571   -162   1802       O
ATOM   1233  N   TRP B  87      82.369  41.053   4.418  1.00111.19           N
ANISOU 1233  N   TRP B  87    15553  13767  12928  -4761   -430   1714       N
ATOM   1234  CA  TRP B  87      82.300  41.983   5.532  1.00109.00           C
ANISOU 1234  CA  TRP B  87    15552  13407  12455  -4844   -600   1778       C
ATOM   1235  C   TRP B  87      80.995  41.830   6.289  1.00 98.87           C
ANISOU 1235  C   TRP B  87    14284  12096  11186  -4564   -584   1710       C
ATOM   1236  O   TRP B  87      80.916  41.990   7.479  1.00106.76           O
ANISOU 1236  O   TRP B  87    15315  13116  12131  -4466   -634   1743       O
ATOM   1237  CB  TRP B  87      82.527  43.426   5.064  1.00120.81           C
ANISOU 1237  CB  TRP B  87    17439  14756  13708  -4986   -827   1738       C
ATOM   1238  CG  TRP B  87      83.971  43.687   4.949  1.00128.47           C
ANISOU 1238  CG  TRP B  87    18357  15820  14638  -5076   -875   1771       C
ATOM   1239  CD1 TRP B  87      84.718  43.650   3.826  1.00129.55           C
ANISOU 1239  CD1 TRP B  87    18413  16005  14807  -5108   -850   1727       C
ATOM   1240  CD2 TRP B  87      84.870  43.919   6.024  1.00140.46           C
ANISOU 1240  CD2 TRP B  87    19874  17404  16091  -5132   -964   1862       C
ATOM   1241  NE1 TRP B  87      86.027  43.872   4.125  1.00132.06           N
ANISOU 1241  NE1 TRP B  87    18692  16408  15078  -5182   -899   1784       N
ATOM   1242  CE2 TRP B  87      86.146  44.042   5.476  1.00144.93           C
ANISOU 1242  CE2 TRP B  87    20368  18051  16648  -5200   -956   1865       C
ATOM   1243  CE3 TRP B  87      84.716  44.045   7.401  1.00139.77           C
ANISOU 1243  CE3 TRP B  87    19848  17312  15948  -5126   -987   1944       C
ATOM   1244  CZ2 TRP B  87      87.264  44.292   6.253  1.00150.43           C
ANISOU 1244  CZ2 TRP B  87    21052  18821  17284  -5267  -1019   1941       C
ATOM   1245  CZ3 TRP B  87      85.822  44.294   8.168  1.00142.63           C
ANISOU 1245  CZ3 TRP B  87    20192  17750  16251  -5193  -1050   2019       C
ATOM   1246  CH2 TRP B  87      87.079  44.417   7.598  1.00144.35           C
ANISOU 1246  CH2 TRP B  87    20337  18045  16463  -5264  -1066   2015       C
ATOM   1247  N   GLY B  88      79.962  41.555   5.528  1.00100.23           N
ANISOU 1247  N   GLY B  88    14393  11918  11774  -3411   -457    899       N
ATOM   1248  CA  GLY B  88      78.586  41.393   5.942  1.00101.38           C
ANISOU 1248  CA  GLY B  88    14628  11894  11997  -3362   -460    819       C
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ATOM   1249  C   GLY B  88      78.694  40.251   6.920  1.00 89.26           C
ANISOU 1249  C   GLY B  88    13074  10463  10377  -3201   -361    812       C
ATOM   1250  O   GLY B  88      78.069  40.256   7.956  1.00 78.77           O
ANISOU 1250  O   GLY B  88    11756   9099   9076  -3156   -372    733       O
ATOM   1251  N   ARG B  89      79.401  39.238   6.566  1.00 87.86           N
ANISOU 1251  N   ARG B  89    12876  10405  10101  -3114   -266    891       N
ATOM   1252  CA  ARG B  89      79.586  38.074   7.397  1.00 84.31           C
ANISOU 1252  CA  ARG B  89    12408  10061   9566  -2960   -171    895       C
ATOM   1253  CB  ARG B  89      80.248  36.933   6.600  1.00 85.76           C
ANISOU 1253  CB  ARG B  89    12588  10340   9656  -2874    -69    992       C
ATOM   1254  CG  ARG B  89      79.328  36.329   5.547  1.00 87.92           C
ANISOU 1254  CG  ARG B  89    12974  10460   9970  -2841    -23   1016       C
ATOM   1255  CD  ARG B  89      79.840  35.155   4.710  1.00 88.18           C
ANISOU 1255  CD  ARG B  89    13014  10569   9920  -2750     79   1105       C
ATOM   1256  NE  ARG B  89      78.738  34.604   3.900  1.00 89.48           N
ANISOU 1256  NE  ARG B  89    13298  10564  10137  -2710    116   1111       N
ATOM   1257  CZ  ARG B  89      78.861  33.772   2.871  1.00 87.10           C
ANISOU 1257  CZ  ARG B  89    13031  10264   9798  -2658    187   1182       C
ATOM   1258  NH1 ARG B  89      80.039  33.361   2.475  1.00 92.10           N
ANISOU 1258  NH1 ARG B  89    13591  11064  10341  -2638    232   1253       N
ATOM   1259  NH2 ARG B  89      77.792  33.358   2.229  1.00 81.51           N
ANISOU 1259  NH2 ARG B  89    12433   9390   9146  -2627    213   1178       N
ATOM   1260  C   ARG B  89      80.322  38.372   8.702  1.00 94.33           C
ANISOU 1260  C   ARG B  89    13576  11479  10786  -2948   -196    860       C
ATOM   1261  O   ARG B  89      79.949  37.873   9.736  1.00 90.32           O
ANISOU 1261  O   ARG B  89    13073  10985  10258  -2856   -165    813       O
ATOM   1262  N   CYS B  90      81.343  39.211   8.684  1.00 95.67           N
ANISOU 1262  N   CYS B  90    13654  11758  10938  -3045   -256    882       N
ATOM   1263  CA  CYS B  90      82.077  39.465   9.922  1.00 91.66           C
ANISOU 1263  CA  CYS B  90    13049  11395  10381  -3029   -278    852       C
ATOM   1264  CB  CYS B  90      83.193  40.474   9.702  1.00101.86           C
ANISOU 1264  CB  CYS B  90    14246  12793  11663  -3151   -350    883       C
ATOM   1265  SG  CYS B  90      84.580  39.873   8.726  1.00115.71           S
ANISOU 1265  SG  CYS B  90    15938  14716  13310  -3138   -282   1002       S
ATOM   1266  C   CYS B  90      81.157  39.992  10.985  1.00 86.30           C
ANISOU 1266  C   CYS B  90    12393  10622   9773  -3037   -335    746       C
ATOM   1267  O   CYS B  90      81.190  39.562  12.106  1.00 97.46           O
ANISOU 1267  O   CYS B  90    13779  12109  11144  -2953   -305    710       O
ATOM   1268  N   VAL B  91      80.306  40.917  10.622  1.00 80.26           N
ANISOU 1268  N   VAL B  91    11681   9694   9120  -3140   -419    694       N
ATOM   1269  CA  VAL B  91      79.320  41.445  11.572  1.00 76.24           C
ANISOU 1269  CA  VAL B  91    11199   9081   8688  -3151   -477    584       C
ATOM   1270  CB  VAL B  91      78.307  42.392  10.895  1.00 81.62           C
ANISOU 1270  CB  VAL B  91    11953   9558   9502  -3265   -567    534       C
ATOM   1271  CG1 VAL B  91      77.300  42.914  11.914  1.00 83.26           C
ANISOU 1271  CG1 VAL B  91    12182   9665   9788  -3272   -626    413       C
ATOM   1272  CG2 VAL B  91      79.025  43.546  10.219  1.00 88.13           C
ANISOU 1272  CG2 VAL B  91    12726  10401  10360  -3415   -664    566       C
ATOM   1273  C   VAL B  91      78.562  40.296  12.237  1.00 79.36           C
ANISOU 1273  C   VAL B  91    11650   9451   9051  -3006   -387    554       C
ATOM   1274  O   VAL B  91      78.276  40.338  13.436  1.00 81.31           O
ANISOU 1274  O   VAL B  91    11875   9721   9296  -2967   -397    481       O
ATOM   1275  N   ALA B  92      78.252  39.271  11.442  1.00 83.16           N
ANISOU 1275  N   ALA B  92    12202   9887   9507  -2928   -300    611       N
ATOM   1276  CA  ALA B  92      77.529  38.095  11.913  1.00 79.29           C
ANISOU 1276  CA  ALA B  92    11774   9367   8986  -2789   -211    595       C
ATOM   1277  CB  ALA B  92      77.313  37.122  10.783  1.00 81.29           C
ANISOU 1277  CB  ALA B  92    12101   9568   9218  -2727   -130    670       C
ATOM   1278  C   ALA B  92      78.271  37.414  13.054  1.00 80.80           C
ANISOU 1278  C   ALA B  92    11893   9737   9071  -2689   -157    603       C
ATOM   1279  O   ALA B  92      77.678  37.122  14.094  1.00 83.15           O
ANISOU 1279  O   ALA B  92    12204  10022  9366  -2626   -143    538       O
ATOM   1280  N   VAL B  93      79.567  37.219  12.902  1.00 82.17           N
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ANISOU 1280  N   VAL B  93    11985  10077   9160  -2681   -133    677       N
ATOM   1281  CA  VAL B  93      80.337  36.543  13.934  1.00 85.88           C
ANISOU 1281  CA  VAL B  93    12385  10719   9528  -2585    -83    689       C
ATOM   1282  CB  VAL B  93      81.820  36.411  13.502  1.00 72.86           C
ANISOU 1282  CB  VAL B  93    10645   9243   7794  -2592    -63    777       C
ATOM   1283  CG1 VAL B  93      82.768  36.198  14.664  1.00 66.53           C
ANISOU 1283  CG1 VAL B  93     9749   8624   6907  -2539    -51    776       C
ATOM   1284  CG2 VAL B  93      81.989  35.264  12.534  1.00 73.42           C
ANISOU 1284  CG2 VAL B  93    10756   9327   7812  -2508     30    861       C
ATOM   1285  C   VAL B  93      80.227  37.309  15.226  1.00 76.41           C
ANISOU 1285  C   VAL B  93    11135   9544   8351  -2621   -150    602       C
ATOM   1286  O   VAL B  93      80.073  36.752  16.282  1.00 76.38           O
ANISOU 1286  O   VAL B  93    11124   9592   8303  -2536   -115    568       O
ATOM   1287  N   VAL B  94      80.312  38.602  15.135  1.00 77.05           N
ANISOU 1287  N   VAL B  94    11183   9590   8502  -2751   -250    564       N
ATOM   1288  CA  VAL B  94      80.252  39.424  16.326  1.00 77.22           C
ANISOU 1288  CA  VAL B  94    11152   9637   8551  -2793   -321    478       C
ATOM   1289  CB  VAL B  94      80.489  40.911  15.990  1.00 75.38           C
ANISOU 1289  CB  VAL B  94    10877   9367   8398  -2949   -440    452       C
ATOM   1290  CG1 VAL B  94      80.060  41.806  17.148  1.00 62.83           C
ANISOU 1290  CG1 VAL B  94     9256   7753   6864  -2995   -523    343       C
ATOM   1291  CG2 VAL B  94      81.947  41.142  15.617  1.00 76.17           C
ANISOU 1291  CG2 VAL B  94    10884   9625   8433  -2992   -448    534       C
ATOM   1292  C   VAL B  94      78.907  39.240  17.009  1.00 74.65           C
ANISOU 1292  C   VAL B  94    10900   9186   8278  -2749   -317    387       C
ATOM   1293  O   VAL B  94      78.846  39.084  18.221  1.00 81.65           O
ANISOU 1293  O   VAL B  94    11756  10137   9132  -2699   -310    334       O
ATOM   1294  N   VAL B  95      77.841  39.204  16.218  1.00 75.62           N
ANISOU 1294  N   VAL B  95    11121   9134   8479  -2765   -316    371       N
ATOM   1295  CA  VAL B  95      76.488  39.026  16.735  1.00 79.37           C
ANISOU 1295  CA  VAL B  95    11672   9475   9011  -2728   -311    284       C
ATOM   1296  CB  VAL B  95      75.434  39.090  15.584  1.00 84.27           C
ANISOU 1296  CB  VAL B  95    12399   9895   9725  -2763   -318    280       C
ATOM   1297  CG1 VAL B  95      74.026  38.790  16.108  1.00 74.63           C
ANISOU 1297  CG1 VAL B  95    11260   8539   8558  -2713   -303    192       C
ATOM   1298  CG2 VAL B  95      75.465  40.442  14.899  1.00 81.90           C
ANISOU 1298  CG2 VAL B  95    12087   9512   9520  -2914   -430    261       C
ATOM   1299  C   VAL B  95      76.367  37.690  17.481  1.00 80.91           C
ANISOU 1299  C   VAL B  95    11885   9742   9115  -2580   -208    297       C
ATOM   1300  O   VAL B  95      75.814  37.622  18.586  1.00 78.18           O
ANISOU 1300  O   VAL B  95    11540   9395   8769  -2543   -209    220       O
ATOM   1301  N   MET B  96      76.878  36.631  16.858  1.00 80.22           N
ANISOU 1301  N   MET B  96    11811   9716   8951  -2498   -122    394       N
ATOM   1302  CA  MET B  96      76.836  35.290  17.435  1.00 81.30           C
ANISOU 1302  CA  MET B  96    11968   9923   9000  -2356    -26    420       C
ATOM   1303  CB  MET B  96      77.474  34.295  16.456  1.00 83.15           C
ANISOU 1303  CB  MET B  96    12215  10212   9167  -2287     53    533       C
ATOM   1304  CG  MET B  96      76.820  34.207  15.066  1.00 82.11           C
ANISOU 1304  CG  MET B  96    12172   9926   9100  -2311     66    565       C
ATOM   1305  SD  MET B  96      77.827  33.232  13.909  1.00 92.23           S
ANISOU 1305  SD  MET B  96    13441  11304  10297  -2249    145    696       S
ATOM   1306  CE  MET B  96      76.887  33.355  12.388  1.00 91.20           C
ANISOU 1306  CE  MET B  96    13419  10971  10260  -2298    142    714       C
ATOM   1307  C   MET B  96      77.557  35.186  18.787  1.00 83.71           C
ANISOU 1307  C   MET B  96    12187  10395   9225  -2316    -23    400       C
ATOM   1308  O   MET B  96      76.963  34.827  19.813  1.00 86.95           O
ANISOU 1308  O   MET B  96    12614  10802   9620  -2258     -5    342       O
ATOM   1309  N   VAL B  97      78.837  35.546  18.774  1.00 85.53           N
ANISOU 1309  N   VAL B  97    12323  10768   9406  -2352    -46    448       N
ATOM   1310  CA  VAL B  97      79.693  35.482  19.956  1.00 84.26           C
ANISOU 1310  CA  VAL B  97    12073  10776   9167  -2319    -47    440       C
ATOM   1311  CB  VAL B  97      81.168  35.781  19.572  1.00 76.96           C
ANISOU 1311  CB  VAL B  97    11053   9999   8190  -2358    -62    513       C
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ATOM   1312  CG1 VAL B  97      81.982  36.185  20.772  1.00 88.41           C
ANISOU 1312  CG1 VAL B  97    12404  11596   9591  -2367    -98    485       C
ATOM   1313  CG2 VAL B  97      81.787  34.565  18.878  1.00 74.25           C
ANISOU 1313  CG2 VAL B  97    10718   9730   7764  -2262     29    615       C
ATOM   1314  C   VAL B  97      79.192  36.424  21.057  1.00 82.86           C
ANISOU 1314  C   VAL B  97    11871  10572   9042  -2379   -122    331       C
ATOM   1315  O   VAL B  97      79.248  36.091  22.243  1.00 82.62           O
ANISOU 1315  O   VAL B  97    11811  10625   8958  -2322   -105    295       O
ATOM   1316  N   ALA B  98      78.679  37.585  20.657  1.00 80.68           N
ANISOU 1316  N   ALA B  98    11607  10177   8870  -2495   -207    275       N
ATOM   1317  CA  ALA B  98      78.100  38.533  21.601  1.00 77.35           C
ANISOU 1317  CA  ALA B  98    11166   9711   8511  -2557   -285    163       C
ATOM   1318  CB  ALA B  98      77.693  39.808  20.912  1.00 81.30           C
ANISOU 1318  CB  ALA B  98    11678  10082   9129  -2689   -383    119       C
ATOM   1319  C   ALA B  98      76.900  37.896  22.270  1.00 80.33           C
ANISOU 1319  C   ALA B  98    11616  10008   8897  -2482   -242     96       C
ATOM   1320  O   ALA B  98      76.686  38.050  23.468  1.00 88.93           O
ANISOU 1320  O   ALA B  98    12676  11141   9974  -2469   -258     23       O
ATOM   1321  N   GLY B  99      76.110  37.188  21.475  1.00 85.47           N
ANISOU 1321  N   GLY B  99    12362  10540   9571  -2436   -186    122       N
ATOM   1322  CA  GLY B  99      74.932  36.519  21.985  1.00 88.76           C
ANISOU 1322  CA  GLY B  99    12856  10872   9997  -2364   -141     67       C
ATOM   1323  C   GLY B  99      75.268  35.304  22.835  1.00 89.39           C
ANISOU 1323  C   GLY B  99    12923  11080   9960  -2239    -56    102       C
ATOM   1324  O   GLY B  99      74.697  35.129  23.914  1.00 89.36           O
ANISOU 1324  O   GLY B  99    12926  11085   9943  -2205    -48     32       O
ATOM   1325  N   ILE B 100      76.172  34.451  22.341  1.00 85.36           N
ANISOU 1325  N   ILE B 100    12396  10668   9367  -2173      7    209       N
ATOM   1326  CA  ILE B 100      76.578  33.250  23.074  1.00 88.75           C
ANISOU 1326  CA  ILE B 100    12814  11223   9685  -2053     84    253       C
ATOM   1327  CB  ILE B 100      77.582  32.378  22.286  1.00 88.51           C
ANISOU 1327  CB  ILE B 100    12767  11284   9577  -1988    145    372       C
ATOM   1328  CG1 ILE B 100      76.994  31.948  20.947  1.00 84.89           C
ANISOU 1328  CG1 ILE B 100    12397  10693   9165  -1973    182    419       C
ATOM   1329  CD1 ILE B 100      77.972  31.182  20.094  1.00 89.28           C
ANISOU 1329  CD1 ILE B 100    12933  11336   9653  -1918    237    530       C
ATOM   1330  CG2 ILE B 100      77.954  31.137  23.098  1.00 82.93           C
ANISOU 1330  CG2 ILE B 100    12049  10700   8760  -1863    216    411       C
ATOM   1331  C   ILE B 100      77.207  33.578  24.423  1.00 88.70           C
ANISOU 1331  C   ILE B 100    12718  11359   9623  -2059     53    212       C
ATOM   1332  O   ILE B 100      76.912  32.924  25.431  1.00 89.87           O
ANISOU 1332  O   ILE B 100    12875  11553   9716  -1987     90    185       O
ATOM   1333  N   THR B 101      78.080  34.580  24.440  1.00 93.09           N
ANISOU 1333  N   THR B 101    13190  11987  10193  -2145    -14    209       N
ATOM   1334  CA  THR B 101      78.739  34.983  25.673  1.00 90.77           C
ANISOU 1334  CA  THR B 101    12807  11829   9851  -2157    -49    171       C
ATOM   1335  CB  THR B 101      79.838  36.028  25.403  1.00 88.76           C
ANISOU 1335  CB  THR B 101    12460  11653   9612  -2252   -120    191       C
ATOM   1336  OG1 THR B 101      80.901  35.422  24.651  1.00 84.98           O
ANISOU 1336  OG1 THR B 101    11955  11268   9068  -2212    -74    301       O
ATOM   1337  CG2 THR B 101      80.391  36.565  26.723  1.00 99.36           C
ANISOU 1337  CG2 THR B 101    13714  13118  10919  -2272   -166    138       C
ATOM   1338  C   THR B 101      77.729  35.541  26.670  1.00 87.58           C
ANISOU 1338  C   THR B 101    12418  11359   9499  -2190    -92     51       C
ATOM   1339  O   THR B 101      77.698  35.128  27.825  1.00 92.54           O
ANISOU 1339  O   THR B 101    13027  12067  10067  -2137    -71     18       O
ATOM   1340  N   SER B 102      76.886  36.452  26.197  1.00 86.12           N
ANISOU 1340  N   SER B 102    12270  11026   9426  -2277   -153    -16       N
ATOM   1341  CA  SER B 102      75.885  37.100  27.041  1.00 95.26           C
ANISOU 1341  CA  SER B 102    13440  12108  10646  -2319   -202   -140       C
ATOM   1342  CB  SER B 102      74.980  38.003  26.194  1.00107.53           C
ANISOU 1342  CB  SER B 102    15046  13480  12332  -2411   -266   -197       C
ATOM   1343  OG  SER B 102      73.965  38.616  26.971  1.00118.24           O
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ANISOU 1343  OG  SER B 102    16415  14758  13755  -2449   -315   -323       O
ATOM   1344  C   SER B 102      75.021  36.101  27.803  1.00 93.55           C
ANISOU 1344  C   SER B 102    13281  11877  10385  -2225   -133   -173       C
ATOM   1345  O   SER B 102      74.900  36.188  29.022  1.00 96.78           O
ANISOU 1345  O   SER B 102    13656  12353  10763  -2214   -144   -240       O
ATOM   1346  N   PHE B 103      74.420  35.159  27.083  1.00 98.11           N
ANISOU 1346  N   PHE B 103    13948  12368  10960  -2158    -64   -126       N
ATOM   1347  CA  PHE B 103      73.603  34.126  27.717  1.00 99.85           C
ANISOU 1347  CA  PHE B 103    14230  12572  11136  -2065      6   -146       C
ATOM   1348  CB  PHE B 103      72.842  33.300  26.672  1.00 95.94           C
ANISOU 1348  CB  PHE B 103    13840  11947  10667  -2011     67    -98       C
ATOM   1349  CG  PHE B 103      71.601  33.963  26.135  1.00 86.01           C
ANISOU 1349  CG  PHE B 103    12651  10498   9532  -2076     27   -177       C
ATOM   1350  CD1 PHE B 103      70.430  33.958  26.874  1.00 82.70           C
ANISOU 1350  CD1 PHE B 103    12273  10003   9144  -2069     27   -277       C
ATOM   1351  CE1 PHE B 103      69.272  34.535  26.376  1.00 87.53           C
ANISOU 1351  CE1 PHE B 103    12949  10437   9872  -2125    -10   -353       C
ATOM   1352  CZ  PHE B 103      69.272  35.112  25.120  1.00 88.79           C
ANISOU 1352  CZ  PHE B 103    13133  10487  10115  -2190    -49   -326       C
ATOM   1353  CE2 PHE B 103      70.426  35.110  24.364  1.00 92.19           C
ANISOU 1353  CE2 PHE B 103    13524  10993  10511  -2199    -48   -223       C
ATOM   1354  CD2 PHE B 103      71.584  34.531  24.869  1.00 95.88           C
ANISOU 1354  CD2 PHE B 103    13925  11642  10863  -2141     -8   -151       C
ATOM   1355  C   PHE B 103      74.436  33.186  28.591  1.00 91.20           C
ANISOU 1355  C   PHE B 103    13091  11651   9912  -1975     61    -90       C
ATOM   1356  O   PHE B 103      73.929  32.616  29.560  1.00 90.08           O
ANISOU 1356  O   PHE B 103    12968  11536   9723  -1921     94   -129       O
ATOM   1357  N   GLY B 104      75.708  33.020  28.237  1.00 88.75           N
ANISOU 1357  N   GLY B 104    12721  11456   9543  -1961     70      1       N
ATOM   1358  CA  GLY B 104      76.605  32.158  28.989  1.00 96.39           C
ANISOU 1358  CA  GLY B 104    13643  12590  10392  -1878    116     58       C
ATOM   1359  C   GLY B 104      76.882  32.712  30.372  1.00100.45           C
ANISOU 1359  C   GLY B 104    14083  13208  10875  -1909     72    -13       C
ATOM   1360  O   GLY B 104      76.936  31.980  31.362  1.00 96.91           O
ANISOU 1360  O   GLY B 104    13629  12848  10345  -1840    109    -13       O
ATOM   1361  N   LEU B 105      77.044  34.028  30.422  1.00102.53           N
ANISOU 1361  N   LEU B 105    14291  13459  11207  -2014    -12    -73       N
ATOM   1362  CA  LEU B 105      77.282  34.748  31.657  1.00 94.41           C
ANISOU 1362  CA  LEU B 105    13189  12518  10166  -2057    -66   -151       C
ATOM   1363  CB  LEU B 105      77.845  36.145  31.343  1.00 97.84           C
ANISOU 1363  CB  LEU B 105    13551  12952  10670  -2170   -159   -178       C
ATOM   1364  CG  LEU B 105      78.368  37.084  32.429  1.00115.26           C
ANISOU 1364  CG  LEU B 105    15663  15258  12871  -2229   -231   -245       C
ATOM   1365  CD1 LEU B 105      79.514  37.931  31.916  1.00115.10           C
ANISOU 1365  CD1 LEU B 105    15564  15300  12869  -2300   -290   -201       C
ATOM   1366  CD2 LEU B 105      77.218  37.983  32.736  1.00114.22           C
ANISOU 1366  CD2 LEU B 105    15554  15004  12838  -2300   -291   -370       C
ATOM   1367  C   LEU B 105      76.005  34.792  32.500  1.00 97.53           C
ANISOU 1367  C   LEU B 105    13630  12838  10590  -2058    -68   -259       C
ATOM   1368  O   LEU B 105      76.075  34.682  33.718  1.00109.59           O
ANISOU 1368  O   LEU B 105    15120  14459  12060  -2037    -68   -303       O
ATOM   1369  N   VAL B 106      74.845  34.938  31.863  1.00 99.71           N
ANISOU 1369  N   VAL B 106    13984  12948  10953  -2081    -70   -304       N
ATOM   1370  CA  VAL B 106      73.563  34.903  32.580  1.00 97.55           C
ANISOU 1370  CA  VAL B 106    13760  12596  10709  -2077    -66   -407       C
ATOM   1371  CB  VAL B 106      72.353  35.152  31.658  1.00 93.55           C
ANISOU 1371  CB  VAL B 106    13340  11893  10312  -2110    -75   -450       C
ATOM   1372  CG1 VAL B 106      71.054  34.917  32.425  1.00 88.46           C
ANISOU 1372  CG1 VAL B 106    12748  11179   9683  -2091    -56   -549       C
ATOM   1373  CG2 VAL B 106      72.384  36.568  31.093  1.00 98.36           C
ANISOU 1373  CG2 VAL B 106    13915  12424  11034  -2227   -172   -502       C
ATOM   1374  C   VAL B 106      73.419  33.532  33.239  1.00100.22           C
ANISOU 1374  C   VAL B 106    14134  13003  10940  -1967     21   -368       C
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ATOM   1375  O   VAL B 106      72.867  33.394  34.328  1.00103.06           O
ANISOU 1375  O   VAL B 106    14496  13392  11272  -1953     28   -439       O
ATOM   1376  N   THR B 107      73.912  32.510  32.549  1.00100.50           N
ANISOU 1376  N   THR B 107    14202  13065  10920  -1889     86   -252       N
ATOM   1377  CA  THR B 107      73.939  31.155  33.091  1.00100.61           C
ANISOU 1377  CA  THR B 107    14246  13152  10828  -1781    164   -198       C
ATOM   1378  CB  THR B 107      74.355  30.127  32.016  1.00105.05           C
ANISOU 1378  CB  THR B 107    14853  13706  11356  -1703    227    -75       C
ATOM   1379  OG1 THR B 107      73.397  30.159  30.949  1.00108.79           O
ANISOU 1379  OG1 THR B 107    15410  14007  11917  -1717    237    -83       O
ATOM   1380  CG2 THR B 107      74.345  28.714  32.583  1.00100.72           C
ANISOU 1380  CG2 THR B 107    14339  13227  10703  -1591    301    -20       C
ATOM   1381  C   THR B 107      74.879  31.067  34.286  1.00106.62           C
ANISOU 1381  C   THR B 107    14924  14092  11493  -1764    156   -192       C
ATOM   1382  O   THR B 107      74.574  30.409  35.280  1.00110.22           O
ANISOU 1382  O   THR B 107    15394  14604  11881  -1713    189   -212       O
ATOM   1383  N   ALA B 108      76.021  31.742  34.181  1.00109.07           N
ANISOU 1383  N   ALA B 108    15151  14492  11800  -1808    110   -165       N
ATOM   1384  CA  ALA B 108      77.032  31.743  35.235  1.00109.08           C
ANISOU 1384  CA  ALA B 108    15066  14663  11715  -1796     96   -155       C
ATOM   1385  CB  ALA B 108      78.272  32.483  34.771  1.00105.91           C
ANISOU 1385  CB  ALA B 108    14581  14334  11324  -1847     48   -111       C
ATOM   1386  C   ALA B 108      76.505  32.357  36.529  1.00115.49           C
ANISOU 1386  C   ALA B 108    15848  15500  12531  -1841     56   -270       C
ATOM   1387  O   ALA B 108      76.649  31.767  37.605  1.00122.43           O
ANISOU 1387  O   ALA B 108    16712  16482  13323  -1793     81   -273       O
ATOM   1388  N   ALA B 109      75.895  33.536  36.419  1.00112.61           N
ANISOU 1388  N   ALA B 109    15475  15042  12269  -1934    -10   -366       N
ATOM   1389  CA  ALA B 109      75.325  34.230  37.573  1.00122.26           C
ANISOU 1389  CA  ALA B 109    16667  16278  13509  -1984    -55   -488       C
ATOM   1390  CB  ALA B 109      74.611  35.501  37.129  1.00124.86           C
ANISOU 1390  CB  ALA B 109    16997  16475  13969  -2084   -129   -585       C
ATOM   1391  C   ALA B 109      74.367  33.318  38.320  1.00122.38           C
ANISOU 1391  C   ALA B 109    16745  16280  13474  -1922      4   -522       C
ATOM   1392  O   ALA B 109      74.294  33.336  39.547  1.00129.33           O
ANISOU 1392  O   ALA B 109    17591  17246  14302  -1922     -2   -581       O
ATOM   1393  N   LEU B 110      73.628  32.529  37.552  1.00120.24           N
ANISOU 1393  N   LEU B 110    16566  15902  13218  -1873     61   -485       N
ATOM   1394  CA  LEU B 110      72.677  31.573  38.095  1.00124.00           C
ANISOU 1394  CA  LEU B 110    17112  16352  13649  -1811    122   -505       C
ATOM   1395  CB  LEU B 110      71.858  30.951  36.963  1.00118.05           C
ANISOU 1395  CB  LEU B 110    16459  15450  12943  -1773    170   -465       C
ATOM   1396  CG  LEU B 110      70.881  31.890  36.252  1.00109.58           C
ANISOU 1396  CG  LEU B 110    15423  14210  12005  -1849    126   -549       C
ATOM   1397  CD1 LEU B 110      70.153  31.163  35.123  1.00116.04           C
ANISOU 1397  CD1 LEU B 110    16342  14888  12860  -1801    179   -498       C
ATOM   1398  CD2 LEU B 110      69.909  32.520  37.229  1.00107.73           C
ANISOU 1398  CD2 LEU B 110    15181  13945  11806  -1901     91   -690       C
ATOM   1399  C   LEU B 110      73.393  30.481  38.892  1.00119.49           C
ANISOU 1399  C   LEU B 110    16524  15932  12944  -1728    172   -430       C
ATOM   1400  O   LEU B 110      72.883  29.995  39.899  1.00121.91           O
ANISOU 1400  O   LEU B 110    16848  16280  13193  -1701    198   -471       O
ATOM   1401  N   ALA B 111      74.561  30.072  38.406  1.00115.85           N
ANISOU 1401  N   ALA B 111    16033  15550  12435  -1687    187   -321       N
ATOM   1402  CA  ALA B 111      75.354  29.052  39.081  1.00119.94           C
ANISOU 1402  CA  ALA B 111    16531  16210  12830  -1608    228   -244       C
ATOM   1403  CB  ALA B 111      76.474  28.559  38.179  1.00122.69           C
ANISOU 1403  CB  ALA B 111    16861  16606  13148  -1560    248   -122       C
ATOM   1404  C   ALA B 111      75.922  29.586  40.399  1.00130.84           C
ANISOU 1404  C   ALA B 111    17826  17728  14160  -1644    185   -298       C
ATOM   1405  O   ALA B 111      75.920  28.887  41.414  1.00134.43           O
ANISOU 1405  O   ALA B 111    18283  18270  14525  -1599    212   -296       O
ATOM   1406  N   THR B 112      76.413  30.825  40.373  1.00130.30           N
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ANISOU 1406  N   THR B 112    17683  17676  14148  -1726    116   -344       N
ATOM   1407  CA  THR B 112      76.977  31.459  41.563  1.00130.32           C
ANISOU 1407  CA  THR B 112    17599  17802  14113  -1767     68   -399       C
ATOM   1408  CB  THR B 112      77.526  32.853  41.250  1.00131.12           C
ANISOU 1408  CB  THR B 112    17626  17900  14294  -1858    -12   -439       C
ATOM   1409  OG1 THR B 112      78.436  32.765  40.152  1.00135.53           O
ANISOU 1409  OG1 THR B 112    18170  18464  14862  -1845     -8   -338       O
ATOM   1410  CG2 THR B 112      78.232  33.442  42.460  1.00129.96           C
ANISOU 1410  CG2 THR B 112    17386  17891  14102  -1892    -60   -484       C
ATOM   1411  C   THR B 112      75.911  31.564  42.643  1.00137.87           C
ANISOU 1411  C   THR B 112    18577  18744  15064  -1787     66   -510       C
ATOM   1412  O   THR B 112      76.133  31.181  43.786  1.00148.12           O
ANISOU 1412  O   THR B 112    19849  20155  16274  -1763     76   -520       O
ATOM   1413  N   TRP B 113      74.742  32.057  42.247  1.00136.84           N
ANISOU 1413  N   TRP B 113    18494  18471  15026  -1832     53   -591       N
ATOM   1414  CA  TRP B 113      73.590  32.205  43.131  1.00139.54           C
ANISOU 1414  CA  TRP B 113    18861  18781  15379  -1856     52   -706       C
ATOM   1415  CB  TRP B 113      72.403  32.753  42.342  1.00143.21           C
ANISOU 1415  CB  TRP B 113    19382  19068  15963  -1902     36   -779       C
ATOM   1416  CG  TRP B 113      71.132  32.791  43.108  1.00143.70           C
ANISOU 1416  CG  TRP B 113    19479  19082  16039  -1921     44   -894       C
ATOM   1417  CD1 TRP B 113      70.975  33.108  44.421  1.00144.02           C
ANISOU 1417  CD1 TRP B 113    19472  19212  16038  -1949     22   -984       C
ATOM   1418  NE1 TRP B 113      69.652  33.023  44.775  1.00145.52           N
ANISOU 1418  NE1 TRP B 113    19713  19323  16254  -1960     40  -1080       N
ATOM   1419  CE2 TRP B 113      68.923  32.643  43.674  1.00140.87           C
ANISOU 1419  CE2 TRP B 113    19210  18587  15727  -1937     73  -1051       C
ATOM   1420  CD2 TRP B 113      69.829  32.488  42.609  1.00141.94           C
ANISOU 1420  CD2 TRP B 113    19345  18712  15872  -1912     76   -934       C
ATOM   1421  CE3 TRP B 113      69.334  32.102  41.357  1.00136.58           C
ANISOU 1421  CE3 TRP B 113    18747  17895  15253  -1885    108   -883       C
ATOM   1422  CZ3 TRP B 113      67.974  31.890  41.218  1.00133.23           C
ANISOU 1422  CZ3 TRP B 113    18400  17345  14878  -1884    134   -949       C
ATOM   1423  CH2 TRP B 113      67.101  32.053  42.299  1.00138.50           C
ANISOU 1423  CH2 TRP B 113    19064  18026  15534  -1909    130  -1066       C
ATOM   1424  CZ2 TRP B 113      67.555  32.432  43.535  1.00140.71           C
ANISOU 1424  CZ2 TRP B 113    19265  18444  15755  -1937    100  -1119       C
ATOM   1425  C   TRP B 113      73.224  30.870  43.788  1.00135.06           C
ANISOU 1425  C   TRP B 113    18348  18262  14706  -1775    125   -669       C
ATOM   1426  O   TRP B 113      73.098  30.770  45.011  1.00139.30           O
ANISOU 1426  O   TRP B 113    18860  18888  15177  -1778    125   -721       O
ATOM   1427  N   PHE B 114      73.048  29.851  42.953  1.00136.27           N
ANISOU 1427  N   PHE B 114    18578  18355  14844  -1704    186   -578       N
ATOM   1428  CA  PHE B 114      72.736  28.491  43.390  1.00136.35           C
ANISOU 1428  CA  PHE B 114    18648  18400  14759  -1621    255   -525       C
ATOM   1429  CB  PHE B 114      72.491  27.602  42.170  1.00133.66           C
ANISOU 1429  CB  PHE B 114    18390  17958  14436  -1554    308   -432       C
ATOM   1430  CG  PHE B 114      71.107  27.719  41.596  1.00130.62           C
ANISOU 1430  CG  PHE B 114    18085  17407  14139  -1573    323   -494       C
ATOM   1431  CD1 PHE B 114      70.195  28.623  42.111  1.00132.40           C
ANISOU 1431  CD1 PHE B 114    18301  17578  14426  -1648    286   -628       C
ATOM   1432  CE1 PHE B 114      68.921  28.720  41.580  1.00135.40           C
ANISOU 1432  CE1 PHE B 114    18754  17803  14889  -1664    298   -688       C
ATOM   1433  CZ  PHE B 114      68.562  27.949  40.494  1.00133.27           C
ANISOU 1433  CZ  PHE B 114    18567  17428  14643  -1607    347   -612       C
ATOM   1434  CE2 PHE B 114      69.468  27.065  39.951  1.00133.20           C
ANISOU 1434  CE2 PHE B 114    18566  17471  14572  -1533    383   -478       C
ATOM   1435  CD2 PHE B 114      70.739  26.962  40.495  1.00133.92           C
ANISOU 1435  CD2 PHE B 114    18583  17720  14581  -1516    370   -421       C
ATOM   1436  C   PHE B 114      73.835  27.907  44.270  1.00129.19           C
ANISOU 1436  C   PHE B 114    17689  17664  13732  -1576    263   -459       C
ATOM   1437  O   PHE B 114      73.571  27.036  45.104  1.00122.81           O
ANISOU 1437  O   PHE B 114    16910  16916  12837  -1531    300   -449       O
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ATOM   1438  N   VAL B 115      75.067  28.360  44.053  1.00129.83           N
ANISOU 1438  N   VAL B 115    17696  17823  13810  -1589    227   -412       N
ATOM   1439  CA  VAL B 115      76.199  27.917  44.860  1.00136.67           C
ANISOU 1439  CA  VAL B 115    18506  18852  14571  -1553    227   -353       C
ATOM   1440  CB  VAL B 115      77.548  28.154  44.142  1.00131.60           C
ANISOU 1440  CB  VAL B 115    17804  18264  13935  -1546    205   -269       C
ATOM   1441  CG1 VAL B 115      78.692  28.239  45.141  1.00135.95           C
ANISOU 1441  CG1 VAL B 115    18270  18981  14404  -1545    177   -252       C
ATOM   1442  CG2 VAL B 115      77.808  27.049  43.136  1.00121.98           C
ANISOU 1442  CG2 VAL B 115    16641  17013  12693  -1461    260   -151       C
ATOM   1443  C   VAL B 115      76.185  28.629  46.216  1.00140.36           C
ANISOU 1443  C   VAL B 115    18909  19409  15011  -1611    183   -452       C
ATOM   1444  O   VAL B 115      76.383  27.995  47.260  1.00140.55           O
ANISOU 1444  O   VAL B 115    18926  19540  14936  -1578    201   -440       O
ATOM   1445  N   GLY B 116      75.947  29.938  46.199  1.00138.36           N
ANISOU 1445  N   GLY B 116    18611  19113  14847  -1698    125   -549       N
ATOM   1446  CA  GLY B 116      75.881  30.719  47.422  1.00134.85           C
ANISOU 1446  CA  GLY B 116    18104  18745  14389  -1759     78   -653       C
ATOM   1447  C   GLY B 116      74.852  30.171  48.396  1.00141.46           C
ANISOU 1447  C   GLY B 116    18987  19588  15173  -1747    112   -716       C
ATOM   1448  O   GLY B 116      75.174  29.798  49.525  1.00150.90           O
ANISOU 1448  O   GLY B 116    20155  20907  16273  -1732    118   -717       O
ATOM   1449  N   ARG B 117      73.616  30.048  47.956  1.00140.81           N
ANISOU 1449  N   ARG B 117    18978  19376  15147  -1752    138   -763       N
ATOM   1450  CA  ARG B 117      72.592  29.540  48.846  1.00138.31           C
ANISOU 1450  CA  ARG B 117    18705  19063  14782  -1745    172   -826       C
ATOM   1451  CB  ARG B 117      71.222  29.598  48.179  1.00126.82           C
ANISOU 1451  CB  ARG B 117    17327  17445  13414  -1759    192   -886       C
ATOM   1452  C   ARG B 117      72.877  28.129  49.363  1.00143.32           C
ANISOU 1452  C   ARG B 117    19379  19788  15289  -1662    231   -731       C
ATOM   1453  O   ARG B 117      72.612  27.849  50.514  1.00159.32           O
ANISOU 1453  O   ARG B 117    21399  21896  17239  -1667    240   -772       O
ATOM   1454  N   GLU B 118      73.397  27.239  48.534  1.00141.13           N
ANISOU 1454  N   GLU B 118    19140  19496  14987  -1589    268   -606       N
ATOM   1455  CA  GLU B 118      73.660  25.883  48.994  1.00141.95           C
ANISOU 1455  CA  GLU B 118    19282  19679  14975  -1510    317   -514       C
ATOM   1456  CB  GLU B 118      74.048  24.961  47.852  1.00146.19           C
ANISOU 1456  CB  GLU B 118    19870  20166  15509  -1430    357   -387       C
ATOM   1457  CG  GLU B 118      74.368  23.546  48.312  1.00140.90           C
ANISOU 1457  CG  GLU B 118    19237  19577  14721  -1345    400   -291       C
ATOM   1458  CD  GLU B 118      73.164  22.842  48.888  1.00141.98           C
ANISOU 1458  CD  GLU B 118    19449  19679  14819  -1331    440   -326       C
ATOM   1459  OE1 GLU B 118      72.361  23.506  49.561  1.00149.72           O
ANISOU 1459  OE1 GLU B 118    20420  20646  15821  -1397    425   -440       O
ATOM   1460  OE2 GLU B 118      73.026  21.626  48.675  1.00137.18           O
ANISOU 1460  OE2 GLU B 118    18907  19059  14157  -1255    484   -241       O
ATOM   1461  C   GLU B 118      74.686  25.757  50.089  1.00150.86           C
ANISOU 1461  C   GLU B 118    20343  20975  16003  -1504    296   -490       C
ATOM   1462  O   GLU B 118      74.535  24.927  50.958  1.00158.50           O
ANISOU 1462  O   GLU B 118    21335  22014  16876  -1472    323   -472       O
ATOM   1463  N   GLN B 119      75.731  26.563  50.012  1.00155.63           N
ANISOU 1463  N   GLN B 119    20864  21638  16630  -1535    248   -484       N
ATOM   1464  CA  GLN B 119      76.820  26.510  50.974  1.00159.61           C
ANISOU 1464  CA  GLN B 119    21299  22301  17047  -1529    223   -456       C
ATOM   1465  CB  GLN B 119      77.977  27.405  50.530  1.00159.33           C
ANISOU 1465  CB  GLN B 119    21179  22303  17057  -1558    173   -437       C
ATOM   1466  CG  GLN B 119      78.901  26.819  49.479  1.00166.07           C
ANISOU 1466  CG  GLN B 119    22038  23154  17907  -1494    192   -311       C
ATOM   1467  CD  GLN B 119      80.096  26.110  50.069  1.00164.26           C
ANISOU 1467  CD  GLN B 119    21770  23068  17573  -1440    193   -226       C
ATOM   1468  OE1 GLN B 119      81.196  26.651  50.099  1.00163.05           O
ANISOU 1468  OE1 GLN B 119    21539  22992  17420  -1457    155   -205       O
ATOM   1469  NE2 GLN B 119      79.887  24.890  50.532  1.00158.14           N
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ANISOU 1469  NE2 GLN B 119    21049  22326  16709  -1375    236   -174       N
ATOM   1470  C   GLN B 119      76.426  26.909  52.373  1.00166.44           C
ANISOU 1470  C   GLN B 119    22130  23242  17866  -1581    202   -557       C
ATOM   1471  O   GLN B 119      77.033  26.459  53.333  1.00174.06           O
ANISOU 1471  O   GLN B 119    23067  24334  18733  -1561    200   -528       O
ATOM   1472  N   GLU B 120      75.414  27.749  52.503  1.00162.34           N
ANISOU 1472  N   GLU B 120    21613  22650  17418  -1648    184   -678       N
ATOM   1473  CA  GLU B 120      75.017  28.186  53.826  1.00158.56           C
ANISOU 1473  CA  GLU B 120    21098  22247  16900  -1701    162   -784       C
ATOM   1474  CB  GLU B 120      73.853  29.169  53.751  1.00147.12           C
ANISOU 1474  CB  GLU B 120    19653  20696  15551  -1774    139   -922       C
ATOM   1475  C   GLU B 120      74.630  26.957  54.615  1.00164.39           C
ANISOU 1475  C   GLU B 120    21893  23044  17525  -1654    213   -748       C
ATOM   1476  O   GLU B 120      74.995  26.820  55.765  1.00170.83           O
ANISOU 1476  O   GLU B 120    22673  23984  18253  -1662    202   -760       O
ATOM   1477  N   ARG B 121      73.924  26.038  53.984  1.00163.10           N
ANISOU 1477  N   ARG B 121    21819  22790  17360  -1603    266   -698       N
ATOM   1478  CA  ARG B 121      73.523  24.832  54.667  1.00162.70           C
ANISOU 1478  CA  ARG B 121    21828  22787  17204  -1558    313   -658       C
ATOM   1479  CB  ARG B 121      72.324  24.206  53.966  1.00160.73           C
ANISOU 1479  CB  ARG B 121    21677  22404  16991  -1530    364   -655       C
ATOM   1480  C   ARG B 121      74.699  23.896  54.607  1.00165.94           C
ANISOU 1480  C   ARG B 121    22235  23282  17532  -1484    323   -521       C
ATOM   1481  O   ARG B 121      74.709  22.943  53.845  1.00168.71           O
ANISOU 1481  O   ARG B 121    22647  23580  17873  -1413    360   -424       O
ATOM   1482  N   ARG B 122      75.701  24.186  55.422  1.00167.21           N
ANISOU 1482  N   ARG B 122    22321  23575  17637  -1499    285   -515       N
ATOM   1483  CA  ARG B 122      76.899  23.373  55.475  1.00168.78           C
ANISOU 1483  CA  ARG B 122    22505  23866  17757  -1433    287   -394       C
ATOM   1484  CB  ARG B 122      77.529  23.277  54.092  1.00168.77           C
ANISOU 1484  CB  ARG B 122    22509  23797  17820  -1386    292   -307       C
ATOM   1485  C   ARG B 122      77.898  23.949  56.467  1.00169.92           C
ANISOU 1485  C   ARG B 122    22559  24151  17853  -1468    238   -416       C
ATOM   1486  O   ARG B 122      79.058  24.177  56.133  1.00170.45           O
ANISOU 1486  O   ARG B 122    22571  24265  17929  -1451    211   -359       O
TER
HETATM 1487  O   HOH B1001      68.169  33.052   9.613  1.00 73.06           O
HETATM 1488  O   HOH B1002      75.913  29.049  26.317  1.00 74.07           O
HETATM 1489  O   HOH B1003      72.600  28.859  23.633  1.00 71.68           O
TER
ATOM   1490  N   SER D  22      98.186  33.584  36.217  1.00162.89           N
ANISOU 1490  N   SER D  22    15314  25600  20978  -3639    -41   1639       N
ATOM   1491  CA  SER D  22      97.044  33.204  35.398  1.00150.80           C
ANISOU 1491  CA  SER D  22    13873  24043  19382  -3614    -60   1479       C
ATOM   1492  CB  SER D  22      97.451  33.129  33.920  1.00144.50           C
ANISOU 1492  CB  SER D  22    13029  23243  18630  -3521     10   1612       C
ATOM   1493  C   SER D  22      96.445  31.873  35.857  1.00146.00           C
ANISOU 1493  C   SER D  22    13374  23476  18623  -3628    -84   1354       C
ATOM   1494  O   SER D  22      97.047  30.810  35.677  1.00145.40           O
ANISOU 1494  O   SER D  22    13299  23457  18491  -3586    -41   1459       O
ATOM   1495  N   ALA D  23      95.254  31.951  36.450  1.00133.21           N
ANISOU 1495  N   ALA D  23    11847  21830  16936  -3683   -149   1132       N
ATOM   1496  CA  ALA D  23      94.525  30.780  36.935  1.00127.52           C
ANISOU 1496  CA  ALA D  23    11239  21144  16067  -3701   -172    987       C
ATOM   1497  CB  ALA D  23      93.275  31.202  37.662  1.00125.89           C
ANISOU 1497  CB  ALA D  23    11118  20903  15810  -3761   -234    758       C
ATOM   1498  C   ALA D  23      94.183  29.832  35.794  1.00134.96           C
ANISOU 1498  C   ALA D  23    12233  22097  16946  -3633   -145    966       C
ATOM   1499  O   ALA D  23      94.089  30.252  34.639  1.00142.30           O
ANISOU 1499  O   ALA D  23    13135  22992  17940  -3580   -125    995       O
ATOM   1500  N   LEU D  24      93.972  28.565  36.134  1.00126.65           N
ANISOU 1500  N   LEU D  24    11257  21094  15769  -3633   -144    910       N
ATOM   1501  CA  LEU D  24      93.711  27.515  35.158  1.00121.73           C
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ANISOU 1501  CA  LEU D  24    10683  20490  15077  -3567   -117    895       C
ATOM   1502  CB  LEU D  24      93.417  26.205  35.890  1.00110.34           C
ANISOU 1502  CB  LEU D  24     9331  19102  13492  -3590   -127    810       C
ATOM   1503  CG  LEU D  24      93.386  24.951  35.025  1.00107.68           C
ANISOU 1503  CG  LEU D  24     9034  18799  13081  -3521    -95    827       C
ATOM   1504  CD1 LEU D  24      94.812  24.677  34.587  1.00112.97           C
ANISOU 1504  CD1 LEU D  24     9602  19513  13809  -3462    -33   1088       C
ATOM   1505  CD2 LEU D  24      92.798  23.771  35.756  1.00114.54           C
ANISOU 1505  CD2 LEU D  24    10009  19709  13805  -3552   -113    691       C
ATOM   1506  C   LEU D  24      92.547  27.860  34.201  1.00128.08           C
ANISOU 1506  C   LEU D  24    11546  21236  15883  -3540   -141    733       C
ATOM   1507  O   LEU D  24      92.692  27.773  32.974  1.00128.67           O
ANISOU 1507  O   LEU D  24    11592  21301  15997  -3466   -107    801       O
ATOM   1508  N   HIS D  25      91.400  28.255  34.722  1.00129.31           N
ANISOU 1508  N   HIS D  25    11782  21354  15997  -3592   -195    522       N
ATOM   1509  CA  HIS D  25      90.304  28.515  33.815  1.00124.25           C
ANISOU 1509  CA  HIS D  25    11200  20658  15351  -3561   -218    367       C
ATOM   1510  CB  HIS D  25      89.036  28.838  34.579  1.00125.88           C
ANISOU 1510  CB  HIS D  25    11504  20831  15493  -3617   -268    131       C
ATOM   1511  CG  HIS D  25      89.247  29.772  35.715  1.00133.19           C
ANISOU 1511  CG  HIS D  25    12391  21749  16466  -3687   -292    144       C
ATOM   1512  ND1 HIS D  25      90.127  29.508  36.736  1.00131.01           N
ANISOU 1512  ND1 HIS D  25    12071  21524  16181  -3726   -278    258       N
ATOM   1513  CE1 HIS D  25      90.101  30.504  37.600  1.00131.05           C
ANISOU 1513  CE1 HIS D  25    12045  21508  16238  -3780   -306    238       C
ATOM   1514  NE2 HIS D  25      89.232  31.400  37.178  1.00131.34           N
ANISOU 1514  NE2 HIS D  25    12106  21482  16315  -3779   -337    116       N
ATOM   1515  CD2 HIS D  25      88.684  30.964  36.001  1.00136.27           C
ANISOU 1515  CD2 HIS D  25    12779  22087  16913  -3722   -329     54       C
ATOM   1516  C   HIS D  25      90.646  29.598  32.818  1.00125.82           C
ANISOU 1516  C   HIS D  25    11311  20809  15686  -3521   -206    465       C
ATOM   1517  O   HIS D  25      90.364  29.446  31.641  1.00127.76           O
ANISOU 1517  O   HIS D  25    11564  21034  15943  -3455   -192    453       O
ATOM   1518  N   TRP D  26      91.283  30.667  33.258  1.00124.57           N
ANISOU 1518  N   TRP D  26    11066  20633  15631  -3556   -208    568       N
ATOM   1519  CA  TRP D  26      91.654  31.709  32.327  1.00123.67           C
ANISOU 1519  CA  TRP D  26    10863  20475  15649  -3518   -188    669       C
ATOM   1520  CB  TRP D  26      92.246  32.904  33.040  1.00133.19           C
ANISOU 1520  CB  TRP D  26    11984  21661  16961  -3570   -199    753       C
ATOM   1521  CG  TRP D  26      91.276  33.687  33.865  1.00136.78           C
ANISOU 1521  CG  TRP D  26    12494  22071  17406  -3639   -269    567       C
ATOM   1522  CD1 TRP D  26      91.442  34.082  35.148  1.00144.46           C
ANISOU 1522  CD1 TRP D  26    13454  23054  18381  -3708   -294    557       C
ATOM   1523  NE1 TRP D  26      90.360  34.800  35.572  1.00144.81           N
ANISOU 1523  NE1 TRP D  26    13557  23050  18413  -3749   -351    371       N
ATOM   1524  CE2 TRP D  26      89.460  34.873  34.549  1.00139.34           C
ANISOU 1524  CE2 TRP D  26    12921  22314  17707  -3708   -367    254       C
ATOM   1525  CD2 TRP D  26      90.008  34.189  33.457  1.00134.19           C
ANISOU 1525  CD2 TRP D  26    12239  21683  17063  -3639   -318    371       C
ATOM   1526  CE3 TRP D  26      89.280  34.122  32.280  1.00133.33           C
ANISOU 1526  CE3 TRP D  26    12175  21538  16947  -3584   -324    283       C
ATOM   1527  CZ3 TRP D  26      88.053  34.731  32.234  1.00141.92           C
ANISOU 1527  CZ3 TRP D  26    13336  22569  18016  -3600   -380     82       C
ATOM   1528  CH2 TRP D  26      87.537  35.406  33.333  1.00136.63           C
ANISOU 1528  CH2 TRP D  26    12696  21880  17337  -3667   -423    -26       C
ATOM   1529  CZ2 TRP D  26      88.222  35.486  34.498  1.00137.51           C
ANISOU 1529  CZ2 TRP D  26    12762  22028  17458  -3721   -417     58       C
ATOM   1530  C   TRP D  26      92.627  31.116  31.306  1.00128.48           C
ANISOU 1530  C   TRP D  26    11403  21123  16289  -3432   -110    871       C
ATOM   1531  O   TRP D  26      92.592  31.465  30.145  1.00130.84           O
ANISOU 1531  O   TRP D  26    11669  21395  16649  -3368    -82    910       O
ATOM   1532  N   ARG D  27      93.518  30.238  31.742  1.00130.99           N
ANISOU 1532  N   ARG D  27    11699  21507  16565  -3424    -69   1006       N
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ATOM   1533  CA  ARG D  27      94.453  29.598  30.821  1.00129.71           C
ANISOU 1533  CA  ARG D  27    11477  21389  16419  -3333     15   1205       C
ATOM   1534  CB  ARG D  27      95.498  28.781  31.579  1.00139.73           C
ANISOU 1534  CB  ARG D  27    12717  22729  17646  -3340     49   1355       C
ATOM   1535  CG  ARG D  27      96.519  29.597  32.361  1.00147.35           C
ANISOU 1535  CG  ARG D  27    13587  23699  18699  -3380     61   1505       C
ATOM   1536  CD  ARG D  27      97.706  28.758  32.825  1.00155.23           C
ANISOU 1536  CD  ARG D  27    14544  24770  19667  -3360    110   1691       C
ATOM   1537  NE  ARG D  27      98.611  28.449  31.721  1.00169.25           N
ANISOU 1537  NE  ARG D  27    16254  26576  21479  -3253    203   1904       N
ATOM   1538  CZ  ARG D  27      99.834  27.948  31.861  1.00174.08           C
ANISOU 1538  CZ  ARG D  27    16807  27244  22093  -3210    263   2116       C
ATOM   1539  NH1 ARG D  27     100.325  27.698  33.069  1.00171.26           N
ANISOU 1539  NH1 ARG D  27    16444  26920  21709  -3270    235   2140       N
ATOM   1540  NH2 ARG D  27     100.568  27.709  30.784  1.00177.40           N
ANISOU 1540  NH2 ARG D  27    17175  27690  22541  -3099    355   2306       N
ATOM   1541  C   ARG D  27      93.769  28.681  29.820  1.00123.18           C
ANISOU 1541  C   ARG D  27    10718  20567  15518  -3264     25   1119       C
ATOM   1542  O   ARG D  27      94.106  28.661  28.656  1.00126.48           O
ANISOU 1542  O   ARG D  27    11088  20988  15980  -3174     88   1229       O
ATOM   1543  N   ALA D  28      92.804  27.916  30.294  1.00122.02           N
ANISOU 1543  N   ALA D  28    10683  20424  15254  -3300    -30    922       N
ATOM   1544  CA  ALA D  28      92.058  26.951  29.494  1.00120.61           C
ANISOU 1544  CA  ALA D  28    10582  20252  14991  -3242    -31    812       C
ATOM   1545  CB  ALA D  28      91.263  26.031  30.395  1.00119.08           C
ANISOU 1545  CB  ALA D  28    10505  20078  14661  -3298    -80    629       C
ATOM   1546  C   ALA D  28      91.144  27.666  28.479  1.00107.31           C
ANISOU 1546  C   ALA D  28     8916  18502  13355  -3206    -56    688       C
ATOM   1547  O   ALA D  28      90.916  27.161  27.371  1.00100.54           O
ANISOU 1547  O   ALA D  28     8070  17648  12484  -3120    -28    684       O
ATOM   1548  N   ALA D  29      90.604  28.820  28.883  1.00106.93           N
ANISOU 1548  N   ALA D  29     8875  18395  13359  -3268   -109    584       N
ATOM   1549  CA  ALA D  29      89.758  29.634  28.013  1.00 95.62           C
ANISOU 1549  CA  ALA D  29     7458  16895  11978  -3240   -141    466       C
ATOM   1550  CB  ALA D  29      89.265  30.871  28.739  1.00 90.26           C
ANISOU 1550  CB  ALA D  29     6788  16161  11348  -3320   -202    363       C
ATOM   1551  C   ALA D  29      90.522  30.030  26.767  1.00102.00           C
ANISOU 1551  C   ALA D  29     8161  17703  12893  -3149    -70    652       C
ATOM   1552  O   ALA D  29      90.090  29.756  25.649  1.00111.84           O
ANISOU 1552  O   ALA D  29     9423  18939  14134  -3069    -56    611       O
ATOM   1553  N   GLY D  30      91.663  30.675  26.969  1.00 99.09           N
ANISOU 1553  N   GLY D  30     7683  17349  12618  -3156    -17    859       N
ATOM   1554  CA  GLY D  30      92.510  31.071  25.869  1.00104.02           C
ANISOU 1554  CA  GLY D  30     8203  17981  13340  -3065     76   1062       C
ATOM   1555  C   GLY D  30      92.906  29.861  25.043  1.00106.54           C
ANISOU 1555  C   GLY D  30     8521  18359  13600  -2958    156   1166       C
ATOM   1556  O   GLY D  30      92.984  29.934  23.812  1.00106.28           O
ANISOU 1556  O   GLY D  30     8451  18325  13607  -2854    222   1236       O
ATOM   1557  N   ALA D  31      93.152  28.745  25.722  1.00107.83           N
ANISOU 1557  N   ALA D  31     8727  18577  13668  -2978    154   1178       N
ATOM   1558  CA  ALA D  31      93.531  27.517  25.041  1.00104.00           C
ANISOU 1558  CA  ALA D  31     8246  18152  13118  -2878    226   1276       C
ATOM   1559  CB  ALA D  31      93.856  26.432  26.050  1.00103.93           C
ANISOU 1559  CB  ALA D  31     8279  18199  13011  -2924    210   1287       C
ATOM   1560  C   ALA D  31      92.430  27.054  24.094  1.00106.07           C
ANISOU 1560  C   ALA D  31     8578  18393  13332  -2815    201   1104       C
ATOM   1561  O   ALA D  31      92.705  26.667  22.956  1.00106.01           O
ANISOU 1561  O   ALA D  31     8536  18411  13331  -2691    286   1208       O
ATOM   1562  N   ALA D  32      91.188  27.078  24.572  1.00109.32           N
ANISOU 1562  N   ALA D  32     9090  18760  13687  -2891    -91    844       N
ATOM   1563  CA  ALA D  32      90.059  26.661  23.750  1.00 96.43           C
ANISOU 1563  CA  ALA D  32     7533  17102  12003  -2836     50    657       C
ATOM   1564  CB  ALA D  32      88.763  26.690  24.546  1.00 82.67           C
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ANISOU 1564  CB  ALA D  32     5915  15313  10183  -2932    -64    377       C
ATOM   1565  C   ALA D  32      89.952  27.556  22.530  1.00101.25           C
ANISOU 1565  C   ALA D  32     8083  17674  12714  -2754     81    690       C
ATOM   1566  O   ALA D  32      89.848  27.059  21.405  1.00115.54           O
ANISOU 1566  O   ALA D  32     9882  19502  14515  -2635    129    712       O
ATOM   1567  N   THR D  33      90.007  28.870  22.759  1.00 98.10           N
ANISOU 1567  N   THR D  33     7640  17224  12411  -2811     58    700       N
ATOM   1568  CA  THR D  33      89.930  29.851  21.676  1.00 96.23           C
ANISOU 1568  CA  THR D  33     7341  16946  12277  -2742     87    734       C
ATOM   1569  CB  THR D  33      90.179  31.264  22.191  1.00 93.01           C
ANISOU 1569  CB  THR D  33     6879  16489  11973  -2823     64    769       C
ATOM   1570  OG1 THR D  33      89.144  31.614  23.112  1.00 84.65           O
ANISOU 1570  OG1 THR D  33     5915  15378  10871  -2933    -61    537       O
ATOM   1571  CG2 THR D  33      90.188  32.254  21.043  1.00 96.36           C
ANISOU 1571  CG2 THR D  33     7232  16876  12505  -2747    106    822       C
ATOM   1572  C   THR D  33      90.927  29.555  20.560  1.00 98.85           C
ANISOU 1572  C   THR D  33     7578  17332  12649  -2598    237    977       C
ATOM   1573  O   THR D  33      90.569  29.497  19.380  1.00 99.25           O
ANISOU 1573  O   THR D  33     7619  17379  12711  -2484    274    957       O
ATOM   1574  N   VAL D  34      92.181  29.355  20.945  1.00103.17           N
ANISOU 1574  N   VAL D  34     8061  17933  13208  -2593    329   1208       N
ATOM   1575  CA  VAL D  34      93.215  29.044  19.981  1.00104.91           C
ANISOU 1575  CA  VAL D  34     8207  18210  13444  -2447    491   1462       C
ATOM   1576  CB  VAL D  34      94.607  28.984  20.648  1.00 98.00           C
ANISOU 1576  CB  VAL D  34     7270  17384  12581  -2465    566   1709       C
ATOM   1577  CG1 VAL D  34      95.675  28.540  19.646  1.00 93.79           C
ANISOU 1577  CG1 VAL D  34     6685  16915  12036  -2296    743   1982       C
ATOM   1578  CG2 VAL D  34      94.957  30.330  21.262  1.00 98.01           C
ANISOU 1578  CG2 VAL D  34     7211  17341  12686  -2561    535   1750       C
ATOM   1579  C   VAL D  34      92.908  27.713  19.308  1.00105.84           C
ANISOU 1579  C   VAL D  34     8376  18376  13463  -2336    530   1430       C
ATOM   1580  O   VAL D  34      92.986  27.594  18.084  1.00113.55           O
ANISOU 1580  O   VAL D  34     9328  19373  14444  -2182    636   1509       O
ATOM   1581  N   LEU D  35      92.485  26.733  20.097  1.00106.57           N
ANISOU 1581  N   LEU D  35     8546  18485  13460  -2405    445   1301       N
ATOM   1582  CA  LEU D  35      92.200  25.418  19.547  1.00111.21           C
ANISOU 1582  CA  LEU D  35     9183  19120  13950  -2306    473   1264       C
ATOM   1583  CB  LEU D  35      92.018  24.388  20.666  1.00118.25           C
ANISOU 1583  CB  LEU D  35    10152  20039  14740  -2404    391   1168       C
ATOM   1584  CG  LEU D  35      91.821  22.936  20.215  1.00123.23           C
ANISOU 1584  CG  LEU D  35    10833  20724  15266  -2309    419   1142       C
ATOM   1585  CD1 LEU D  35      92.991  22.469  19.349  1.00122.63           C
ANISOU 1585  CD1 LEU D  35    10689  20716  15190  -2143    595   1426       C
ATOM   1586  CD2 LEU D  35      91.640  22.011  21.414  1.00124.14           C
ANISOU 1586  CD2 LEU D  35    11024  20862  15282  -2420    337   1043       C
ATOM   1587  C   LEU D  35      90.967  25.479  18.643  1.00106.83           C
ANISOU 1587  C   LEU D  35     8673  18527  13391  -2244    416   1054       C
ATOM   1588  O   LEU D  35      90.874  24.732  17.667  1.00108.55           O
ANISOU 1588  O   LEU D  35     8894  18783  13565  -2095    488   1078       O
ATOM   1589  N   LEU D  36      90.046  26.394  18.943  1.00100.74           N
ANISOU 1589  N   LEU D  36     7937  17680  12661  -2343    291    855       N
ATOM   1590  CA  LEU D  36      88.834  26.560  18.134  1.00100.79           C
ANISOU 1590  CA  LEU D  36     7991  17641  12662  -2290    212    640       C
ATOM   1591  CB  LEU D  36      87.839  27.504  18.816  1.00 95.70           C
ANISOU 1591  CB  LEU D  36     7415  16911  12036  -2430     60    412       C
ATOM   1592  CG  LEU D  36      86.488  27.603  18.097  1.00 85.98           C
ANISOU 1592  CG  LEU D  36     6262  15628  10777  -2385    -48    160       C
ATOM   1593  CD1 LEU D  36      85.846  26.226  18.018  1.00 80.72           C
ANISOU 1593  CD1 LEU D  36     5690  14994   9985  -2342    -92     15       C
ATOM   1594  CD2 LEU D  36      85.547  28.602  18.773  1.00 77.86           C
ANISOU 1594  CD2 LEU D  36     5313  14513   9756  -2511   -176    -49       C
ATOM   1595  C   LEU D  36      89.161  27.082  16.733  1.00101.25           C
ANISOU 1595  C   LEU D  36     7961  17708  12799  -2124    332    773       C
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ATOM   1596  O   LEU D  36      88.757  26.485  15.733  1.00 97.08           O
ANISOU 1596  O   LEU D  36     7434  17247  12206  -1986    362    737       O
ATOM   1597  N   VAL D  37      89.867  28.213  16.680  1.00101.31           N
ANISOU 1597  N   VAL D  37     7886  17697  12909  -2140    402    930       N
ATOM   1598  CA  VAL D  37      90.279  28.843  15.425  1.00 98.86           C
ANISOU 1598  CA  VAL D  37     7497  17396  12670  -1983    545   1079       C
ATOM   1599  CB  VAL D  37      91.141  30.090  15.700  1.00 94.39           C
ANISOU 1599  CB  VAL D  37     6851  16806  12208  -2044    605   1252       C
ATOM   1600  CG1 VAL D  37      91.656  30.692  14.406  1.00 94.86           C
ANISOU 1600  CG1 VAL D  37     6826  16934  12283  -1881    773   1451       C
ATOM   1601  CG2 VAL D  37      90.336  31.120  16.468  1.00 94.75           C
ANISOU 1601  CG2 VAL D  37     6921  16765  12314  -2212    429   1049       C
ATOM   1602  C   VAL D  37      91.060  27.859  14.552  1.00102.38           C
ANISOU 1602  C   VAL D  37     7871  18104  12924  -1818    717   1350       C
ATOM   1603  O   VAL D  37      91.003  27.909  13.325  1.00103.02           O
ANISOU 1603  O   VAL D  37     7855  18457  12832  -1666    803   1501       O
ATOM   1604  N   ILE D  38      91.740  26.922  15.197  1.00100.99           N
ANISOU 1604  N   ILE D  38     7747  17872  12753  -1825    765   1422       N
ATOM   1605  CA  ILE D  38      92.489  25.899  14.487  1.00100.40           C
ANISOU 1605  CA  ILE D  38     7624  18040  12482  -1662    917   1693       C
ATOM   1606  CB  ILE D  38      93.473  25.167  15.435  1.00103.98           C
ANISOU 1606  CB  ILE D  38     8143  18352  13011  -1704    965   1770       C
ATOM   1607  CG1 ILE D  38      94.560  26.135  15.910  1.00101.47           C
ANISOU 1607  CG1 ILE D  38     7769  17984  12800  -1765   1021   1960       C
ATOM   1608  CD1 ILE D  38      95.416  25.599  17.027  1.00114.63           C
ANISOU 1608  CD1 ILE D  38     9431  19686  14437  -1860    996   2075       C
ATOM   1609  CG2 ILE D  38      94.122  23.983  14.736  1.00 96.81           C
ANISOU 1609  CG2 ILE D  38     7212  17677  11895  -1526   1100   2027       C
ATOM   1610  C   ILE D  38      91.521  24.908  13.857  1.00 95.24           C
ANISOU 1610  C   ILE D  38     6966  17617  11602  -1579    859   1580       C
ATOM   1611  O   ILE D  38      91.650  24.570  12.682  1.00 94.66           O
ANISOU 1611  O   ILE D  38     6820  17822  11326  -1362    982   1777       O
ATOM   1612  N   VAL D  39      90.545  24.467  14.647  1.00 96.01           N
ANISOU 1612  N   VAL D  39     7161  17585  11735  -1721    679   1261       N
ATOM   1613  CA  VAL D  39      89.515  23.537  14.186  1.00 96.80           C
ANISOU 1613  CA  VAL D  39     7274  17876  11628  -1670    590   1078       C
ATOM   1614  CB  VAL D  39      88.550  23.166  15.331  1.00 87.04           C
ANISOU 1614  CB  VAL D  39     6193  16390  10487  -1846    392    736       C
ATOM   1615  CG1 VAL D  39      87.398  22.311  14.812  1.00 80.27           C
ANISOU 1615  CG1 VAL D  39     5364  15719   9417  -1801    285    498       C
ATOM   1616  CG2 VAL D  39      89.305  22.442  16.435  1.00 90.84           C
ANISOU 1616  CG2 VAL D  39     6752  16688  11073  -1906    427    808       C
ATOM   1617  C   VAL D  39      88.716  24.105  13.010  1.00 97.77           C
ANISOU 1617  C   VAL D  39     7312  18224  11613  -1557    567   1003       C
ATOM   1618  O   VAL D  39      88.335  23.374  12.085  1.00 90.38           O
ANISOU 1618  O   VAL D  39     6321  17578  10441  -1373    601    996       O
ATOM   1619  N   LEU D  40      88.463  25.410  13.051  1.00 98.72           N
ANISOU 1619  N   LEU D  40     7420  18209  11878  -1640    512    932       N
ATOM   1620  CA  LEU D  40      87.751  26.070  11.967  1.00 94.42           C
ANISOU 1620  CA  LEU D  40     6792  17863  11219  -1531    487    853       C
ATOM   1621  CB  LEU D  40      87.483  27.535  12.316  1.00 90.28           C
ANISOU 1621  CB  LEU D  40     6289  17106  10906  -1675    398    749       C
ATOM   1622  CG  LEU D  40      86.627  27.781  13.555  1.00 82.08           C
ANISOU 1622  CG  LEU D  40     5429  15703  10054  -1889    189    424       C
ATOM   1623  CD1 LEU D  40      86.412  29.274  13.799  1.00 85.50           C
ANISOU 1623  CD1 LEU D  40     5882  15913  10692  -2076    124    361       C
ATOM   1624  CD2 LEU D  40      85.306  27.069  13.380  1.00 81.84           C
ANISOU 1624  CD2 LEU D  40     5494  15734   9866  -1888     23     93       C
ATOM   1625  C   LEU D  40      88.544  25.990  10.663  1.00 97.30           C
ANISOU 1625  C   LEU D  40     7021  18541  11406  -1226    728   1219       C
ATOM   1626  O   LEU D  40      88.059  25.463   9.658  1.00 98.49           O
ANISOU 1626  O   LEU D  40     7120  18979  11322   -982    768   1189       O
ATOM   1627  N   LEU D  41      89.788  26.460  10.705  1.00 99.54           N
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ANISOU 1627  N   LEU D  41     7278  18744  11799  -1193    901   1562       N
ATOM   1628  CA  LEU D  41      90.649  26.459   9.527  1.00 91.38           C
ANISOU 1628  CA  LEU D  41     6182  17919  10620   -868   1160   1963       C
ATOM   1629  CB  LEU D  41      91.993  27.121   9.827  1.00 88.18           C
ANISOU 1629  CB  LEU D  41     5779  17337  10387   -906   1295   2272       C
ATOM   1630  CG  LEU D  41      91.950  28.556  10.348  1.00 93.64           C
ANISOU 1630  CG  LEU D  41     6446  17816  11316  -1120   1205   2167       C
ATOM   1631  CD1 LEU D  41      93.355  29.098  10.580  1.00 88.69           C
ANISOU 1631  CD1 LEU D  41     5822  17049  10829  -1118   1349   2462       C
ATOM   1632  CD2 LEU D  41      91.172  29.428   9.385  1.00 89.25           C
ANISOU 1632  CD2 LEU D  41     5813  17407  10690  -1009   1196   2113       C
ATOM   1633  C   LEU D  41      90.881  25.052   9.027  1.00100.42           C
ANISOU 1633  C   LEU D  41     7363  19257  11536   -619   1282   2101       C
ATOM   1634  O   LEU D  41      90.845  24.799   7.828  1.00103.24           O
ANISOU 1634  O   LEU D  41     7720  19835  11670   -253   1446   2263       O
ATOM   1635  N   ALA D  42      91.111  24.131   9.950  1.00104.62           N
ANISOU 1635  N   ALA D  42     7957  19681  12114   -778   1212   2033       N
ATOM   1636  CA  ALA D  42      91.363  22.747   9.576  1.00103.44           C
ANISOU 1636  CA  ALA D  42     7852  19690  11759   -562   1315   2156       C
ATOM   1637  CB  ALA D  42      91.735  21.923  10.814  1.00 98.56           C
ANISOU 1637  CB  ALA D  42     7299  18896  11253   -798   1223   2080       C
ATOM   1638  C   ALA D  42      90.148  22.133   8.883  1.00104.05           C
ANISOU 1638  C   ALA D  42     7920  20010  11605   -384   1250   1902       C
ATOM   1639  O   ALA D  42      90.257  21.613   7.773  1.00106.43           O
ANISOU 1639  O   ALA D  42     8261  20515  11665     17   1433   2075       O
ATOM   1640  N   GLY D  43      88.990  22.242   9.539  1.00 99.07           N
ANISOU 1640  N   GLY D  43     7281  19318  11045   -650    990   1472       N
ATOM   1641  CA  GLY D  43      87.731  21.716   9.039  1.00 95.52           C
ANISOU 1641  CA  GLY D  43     6822  19066  10406   -530    860   1124       C
ATOM   1642  C   GLY D  43      87.284  22.368   7.753  1.00 97.13           C
ANISOU 1642  C   GLY D  43     7004  19446  10455   -190    934   1107       C
ATOM   1643  O   GLY D  43      86.828  21.692   6.833  1.00100.52           O
ANISOU 1643  O   GLY D  43     7800  19742  10653    188    905    983       O
ATOM   1644  N   SER D  44      87.396  23.689   7.701  1.00 95.03           N
ANISOU 1644  N   SER D  44     6649  19122  10335   -294    941   1174       N
ATOM   1645  CA  SER D  44      87.047  24.435   6.501  1.00 98.82           C
ANISOU 1645  CA  SER D  44     7377  19472  10700     45    957   1145       C
ATOM   1646  CB  SER D  44      87.352  25.923   6.676  1.00 98.69           C
ANISOU 1646  CB  SER D  44     7128  19480  10891   -152    997   1279       C
ATOM   1647  OG  SER D  44      86.510  26.469   7.672  1.00 94.12           O
ANISOU 1647  OG  SER D  44     6436  18819  10506   -587    715    904       O
ATOM   1648  C   SER D  44      87.809  23.862   5.314  1.00101.08           C
ANISOU 1648  C   SER D  44     7954  19696  10756    564   1210   1488       C
ATOM   1649  O   SER D  44      87.235  23.605   4.261  1.00107.00           O
ANISOU 1649  O   SER D  44     9080  20283  11293    950   1164   1338       O
ATOM   1650  N   TYR D  45      89.112  23.679   5.496  1.00102.78           N
ANISOU 1650  N   TYR D  45     7989  20044  11017    572   1477   1951       N
ATOM   1651  CA  TYR D  45      89.965  23.095   4.472  1.00110.18           C
ANISOU 1651  CA  TYR D  45     9164  20950  11748   1038   1735   2318       C
ATOM   1652  CB  TYR D  45      91.417  23.100   4.948  1.00113.83           C
ANISOU 1652  CB  TYR D  45     9351  21567  12333    924   2001   2810       C
ATOM   1653  CG  TYR D  45      92.366  22.365   4.031  1.00120.46           C
ANISOU 1653  CG  TYR D  45    10407  22394  12967   1369   2265   3197       C
ATOM   1654  CD1 TYR D  45      92.606  21.002   4.207  1.00121.45           C
ANISOU 1654  CD1 TYR D  45    10631  22540  12975   1444   2276   3220       C
ATOM   1655  CE1 TYR D  45      93.466  20.313   3.379  1.00128.11           C
ANISOU 1655  CE1 TYR D  45    11696  23339  13642   1841   2481   3551       C
ATOM   1656  CZ  TYR D  45      94.111  20.984   2.362  1.00129.02           C
ANISOU 1656  CZ  TYR D  45    11947  23376  13699   2169   2677   3866       C
ATOM   1657  OH  TYR D  45      94.974  20.291   1.541  1.00127.56           O
ANISOU 1657  OH  TYR D  45    11996  23113  13357   2555   2847   4176       O
ATOM   1658  CE2 TYR D  45      93.896  22.339   2.167  1.00125.12           C
ANISOU 1658  CE2 TYR D  45    11357  22867  13315   2107   2687   3862       C
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ATOM   1659  CD2 TYR D  45      93.027  23.021   3.000  1.00118.31           C
ANISOU 1659  CD2 TYR D  45    10262  22063  12627   1709   2484   3530       C
ATOM   1660  C   TYR D  45      89.544  21.676   4.120  1.00114.15           C
ANISOU 1660  C   TYR D  45     9951  21402  12019   1291   1671   2151       C
ATOM   1661  O   TYR D  45      89.410  21.321   2.942  1.00126.23           O
ANISOU 1661  O   TYR D  45    11847  22798  13319   1755   1724   2170       O
ATOM   1662  N   LEU D  46      89.400  20.858   5.141  1.00103.87           N
ANISOU 1662  N   LEU D  46     8473  20212  10782    993   1571   2012       N
ATOM   1663  CA  LEU D  46      89.067  19.471   4.951  1.00107.72           C
ANISOU 1663  CA  LEU D  46     9185  20671  11074   1187   1513   1869       C
ATOM   1664  CB  LEU D  46      89.100  18.737   6.275  1.00111.40           C
ANISOU 1664  CB  LEU D  46     9366  21294  11666    778   1432   1779       C
ATOM   1665  CG  LEU D  46      90.480  18.388   6.817  1.00104.13           C
ANISOU 1665  CG  LEU D  46     8229  20506  10828    672   1664   2222       C
ATOM   1666  CD1 LEU D  46      90.495  18.436   8.326  1.00 95.09           C
ANISOU 1666  CD1 LEU D  46     6979  19188   9964    136   1440   2049       C
ATOM   1667  CD2 LEU D  46      90.876  17.009   6.350  1.00106.14           C
ANISOU 1667  CD2 LEU D  46     8658  20819  10851    996   1799   2375       C
ATOM   1668  C   LEU D  46      87.730  19.333   4.285  1.00109.75           C
ANISOU 1668  C   LEU D  46     9780  20737  11181   1390   1273   1418       C
ATOM   1669  O   LEU D  46      87.501  18.417   3.522  1.00115.76           O
ANISOU 1669  O   LEU D  46    10859  21408  11719   1755   1273   1359       O
ATOM   1670  N   ALA D  47      86.831  20.245   4.585  1.00107.51           N
ANISOU 1670  N   ALA D  47     9430  20395  11026   1151   1062   1090       N
ATOM   1671  CA  ALA D  47      85.502  20.172   4.023  1.00110.52           C
ANISOU 1671  CA  ALA D  47    10117  20596  11282   1311    818    631       C
ATOM   1672  CB  ALA D  47      84.666  21.285   4.593  1.00103.99           C
ANISOU 1672  CB  ALA D  47     9124  19745  10643    954    599    312       C
ATOM   1673  C   ALA D  47      85.461  20.239   2.514  1.00113.26           C
ANISOU 1673  C   ALA D  47    10866  20770  11397   1863    910    707       C
ATOM   1674  O   ALA D  47      84.729  19.505   1.879  1.00111.67           O
ANISOU 1674  O   ALA D  47    10985  20440  11003   2147    795    454       O
ATOM   1675  N   VAL D  48      86.240  21.122   1.930  1.00115.59           N
ANISOU 1675  N   VAL D  48    11148  21059  11712   2024   1116   1053       N
ATOM   1676  CA  VAL D  48      86.245  21.246   0.495  1.00110.15           C
ANISOU 1676  CA  VAL D  48    10831  20211  10808   2551   1215   1146       C
ATOM   1677  CB  VAL D  48      87.192  22.341   0.063  1.00105.62           C
ANISOU 1677  CB  VAL D  48    10163  19660  10307   2640   1451   1555       C
ATOM   1678  CG1 VAL D  48      87.000  22.637  -1.393  1.00113.31           C
ANISOU 1678  CG1 VAL D  48    11524  20454  11075   3156   1513   1582       C
ATOM   1679  CG2 VAL D  48      86.927  23.579   0.868  1.00109.92           C
ANISOU 1679  CG2 VAL D  48    10404  20250  11110   2199   1340   1436       C
ATOM   1680  C   VAL D  48      86.714  19.959  -0.123  1.00117.67           C
ANISOU 1680  C   VAL D  48    12017  21159  11535   2936   1351   1327       C
ATOM   1681  O   VAL D  48      86.183  19.534  -1.123  1.00127.37           O
ANISOU 1681  O   VAL D  48    13611  22235  12548   3341   1302   1177       O
ATOM   1682  N   LEU D  49      87.716  19.336   0.476  1.00116.35           N
ANISOU 1682  N   LEU D  49    11634  21158  11416   2812   1522   1648       N
ATOM   1683  CA  LEU D  49      88.251  18.093  -0.048  1.00124.94           C
ANISOU 1683  CA  LEU D  49    12917  22258  12295   3158   1660   1848       C
ATOM   1684  CB  LEU D  49      89.447  17.624   0.788  1.00131.57           C
ANISOU 1684  CB  LEU D  49    13446  23306  13237   2936   1856   2226       C
ATOM   1685  CG  LEU D  49      90.306  16.428   0.331  1.00140.89           C
ANISOU 1685  CG  LEU D  49    14765  24538  14228   3263   2055   2540       C
ATOM   1686  CD1 LEU D  49      91.774  16.534   0.705  1.00147.46           C
ANISOU 1686  CD1 LEU D  49    15329  25545  15156   3168   2343   3058       C
ATOM   1687  CD2 LEU D  49      89.736  15.108   0.786  1.00136.25           C
ANISOU 1687  CD2 LEU D  49    14243  23966  13559   3203   1892   2266       C
ATOM   1688  C   LEU D  49      87.208  17.018  -0.049  1.00123.18           C
ANISOU 1688  C   LEU D  49    12909  21953  11940   3229   1430   1432       C
ATOM   1689  O   LEU D  49      87.101  16.261  -0.988  1.00130.52           O
ANISOU 1689  O   LEU D  49    14167  22784  12784   3662   1458   1429       O
ATOM   1690  N   ALA D  50      86.436  16.932   1.011  1.00113.22           N
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ANISOU 1690  N   ALA D  50    11459  20734  10825   2805   1200   1079       N
ATOM   1691  CA  ALA D  50      85.427  15.888   1.043  1.00118.18           C
ANISOU 1691  CA  ALA D  50    12284  21283  11336   2860    977    677       C
ATOM   1692  CB  ALA D  50      84.911  15.696   2.474  1.00118.40           C
ANISOU 1692  CB  ALA D  50    12005  21420  11560   2318    780    399       C
ATOM   1693  C   ALA D  50      84.275  16.195   0.082  1.00121.80           C
ANISOU 1693  C   ALA D  50    13096  21524  11660   3151    795    308       C
ATOM   1694  O   ALA D  50      83.680  15.284  -0.495  1.00121.97           O
ANISOU 1694  O   ALA D  50    13415  21435  11494   3445    696     94       O
ATOM   1695  N   GLU D  51      83.978  17.486  -0.089  1.00123.97           N
ANISOU 1695  N   GLU D  51    13334  21735  12033   3072    752    237       N
ATOM   1696  CA  GLU D  51      82.842  17.928  -0.903  1.00116.61           C
ANISOU 1696  CA  GLU D  51    12707  20600  11000   3296    566   -137       C
ATOM   1697  CB  GLU D  51      82.221  19.183  -0.285  1.00112.18           C
ANISOU 1697  CB  GLU D  51    11939  20033  10649   2904    401   -377       C
ATOM   1698  CG  GLU D  51      81.703  18.962   1.121  1.00103.78           C
ANISOU 1698  CG  GLU D  51    10576  19080   9775   2370    199   -654       C
ATOM   1699  CD  GLU D  51      80.317  18.336   1.109  1.00100.23           C
ANISOU 1699  CD  GLU D  51    10339  18504   9241   2385    -95  -1192       C
ATOM   1700  OE1 GLU D  51      79.344  19.027   0.697  1.00 92.17           O
ANISOU 1700  OE1 GLU D  51     9477  17337   8206   2432   -275  -1526       O
ATOM   1701  OE2 GLU D  51      80.207  17.146   1.496  1.00 99.68           O
ANISOU 1701  OE2 GLU D  51    10280  18476   9117   2355   -146  -1279       O
ATOM   1702  C   GLU D  51      83.104  18.196  -2.382  1.00120.27           C
ANISOU 1702  C   GLU D  51    13513  20923  11261   3851    717     51       C
ATOM   1703  O   GLU D  51      82.298  17.786  -3.214  1.00126.89           O
ANISOU 1703  O   GLU D  51    14699  21597  11915   4189    595   -221       O
ATOM   1704  N   ARG D  52      84.172  18.894  -2.722  1.00123.32           N
ANISOU 1704  N   ARG D  52    13810  21368  11680   3950    972    494       N
ATOM   1705  CA  ARG D  52      84.365  19.251  -4.112  1.00126.75           C
ANISOU 1705  CA  ARG D  52    14563  21666  11932   4463   1107    656       C
ATOM   1706  CB  ARG D  52      85.663  20.025  -4.283  1.00121.28           C
ANISOU 1706  CB  ARG D  52    13700  21068  11313   4496   1404   1182       C
ATOM   1707  CG  ARG D  52      85.731  20.822  -5.562  1.00132.94           C
ANISOU 1707  CG  ARG D  52    15441  22402  12668   4917   1513   1306       C
ATOM   1708  CD  ARG D  52      86.803  21.886  -5.502  1.00142.62           C
ANISOU 1708  CD  ARG D  52    16432  23719  14038   4820   1752   1742       C
ATOM   1709  NE  ARG D  52      86.318  23.102  -6.128  1.00159.55           N
ANISOU 1709  NE  ARG D  52    18693  25730  16200   4920   1703   1629       N
ATOM   1710  CZ  ARG D  52      86.663  23.517  -7.338  1.00174.94           C
ANISOU 1710  CZ  ARG D  52    20890  27576  18004   5368   1868   1849       C
ATOM   1711  NH1 ARG D  52      87.533  22.822  -8.059  1.00179.69           N
ANISOU 1711  NH1 ARG D  52    21644  28196  18432   5760   2099   2210       N
ATOM   1712  NH2 ARG D  52      86.143  24.640  -7.822  1.00175.26           N
ANISOU 1712  NH2 ARG D  52    21023  27495  18072   5422   1802   1711       N
ATOM   1713  C   ARG D  52      84.328  18.060  -5.037  1.00131.23           C
ANISOU 1713  C   ARG D  52    15483  22146  12231   4952   1145    663       C
ATOM   1714  O   ARG D  52      84.912  17.026  -4.781  1.00132.50           O
ANISOU 1714  O   ARG D  52    15599  22407  12337   4981   1240    844       O
ATOM   1715  N   GLY D  53      83.612  18.227  -6.130  1.00132.49           N
ANISOU 1715  N   GLY D  53    16002  22116  12223   5343   1064    454       N
ATOM   1716  CA  GLY D  53      83.474  17.181  -7.111  1.00136.19           C
ANISOU 1716  CA  GLY D  53    16834  22480  12430   5843   1081    428       C
ATOM   1717  C   GLY D  53      82.344  16.230  -6.813  1.00135.14           C
ANISOU 1717  C   GLY D  53    16827  22277  12242   5786    807    -50       C
ATOM   1718  O   GLY D  53      82.079  15.323  -7.593  1.00139.74           O
ANISOU 1718  O   GLY D  53    17721  22761  12614   6189    782   -135       O
ATOM   1719  N   ALA D  54      81.662  16.437  -5.696  1.00127.30           N
ANISOU 1719  N   ALA D  54    15597  21332  11440   5292    597   -367       N
ATOM   1720  CA  ALA D  54      80.543  15.563  -5.381  1.00125.68           C
ANISOU 1720  CA  ALA D  54    15504  21056  11193   5220    329   -837       C
ATOM   1721  CB  ALA D  54      80.349  15.436  -3.879  1.00119.94           C
ANISOU 1721  CB  ALA D  54    14408  20474  10688   4629    197   -991       C
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ATOM   1722  C   ALA D  54      79.289  16.120  -6.037  1.00130.58           C
ANISOU 1722  C   ALA D  54    16394  21471  11749   5380    110  -1276       C
ATOM   1723  O   ALA D  54      79.257  17.291  -6.421  1.00139.74           O
ANISOU 1723  O   ALA D  54    17567  22574  12953   5407    142  -1241       O
ATOM   1724  N   PRO D  55      78.308  15.265  -6.207  1.00125.36           N
ANISOU 1724  N   PRO D  55    15954  20697  10979   5506   -100  -1670       N
ATOM   1725  CA  PRO D  55      77.065  15.657  -6.829  1.00119.75           C
ANISOU 1725  CA  PRO D  55    15518  19785  10196   5673   -321  -2117       C
ATOM   1726  CB  PRO D  55      76.354  14.331  -7.043  1.00114.41           C
ANISOU 1726  CB  PRO D  55    15076  19015   9382   5873   -480  -2412       C
ATOM   1727  CG  PRO D  55      77.386  13.289  -6.891  1.00113.56           C
ANISOU 1727  CG  PRO D  55    14895  19047   9206   5965   -286  -2045       C
ATOM   1728  CD  PRO D  55      78.318  13.842  -5.880  1.00124.91           C
ANISOU 1728  CD  PRO D  55    15920  20690  10852   5528   -138  -1716       C
ATOM   1729  C   PRO D  55      76.279  16.481  -5.856  1.00119.64           C
ANISOU 1729  C   PRO D  55    15268  19791  10399   5163   -536  -2451       C
ATOM   1730  O   PRO D  55      76.164  16.108  -4.709  1.00110.09           O
ANISOU 1730  O   PRO D  55    13793  18701   9336   4739   -633  -2556       O
ATOM   1731  N   GLY D  56      75.713  17.578  -6.316  1.00122.70           N
ANISOU 1731  N   GLY D  56    15759  20061  10800   5211   -617  -2628       N
ATOM   1732  CA  GLY D  56      74.922  18.389  -5.435  1.00118.25           C
ANISOU 1732  CA  GLY D  56    14985  19510  10435   4740   -832  -2961       C
ATOM   1733  C   GLY D  56      75.663  18.762  -4.188  1.00111.00           C
ANISOU 1733  C   GLY D  56    13617  18807   9752   4228   -750  -2719       C
ATOM   1734  O   GLY D  56      75.233  18.443  -3.110  1.00108.18           O
ANISOU 1734  O   GLY D  56    13042  18532   9531   3819   -911  -2943       O
ATOM   1735  N   ALA D  57      76.800  19.409  -4.332  1.00117.16           N
ANISOU 1735  N   ALA D  57    14254  19679  10580   4258   -494  -2253       N
ATOM   1736  CA  ALA D  57      77.563  19.808  -3.181  1.00104.35           C
ANISOU 1736  CA  ALA D  57    12202  18260   9185   3788   -402  -2002       C
ATOM   1737  CB  ALA D  57      78.903  19.142  -3.224  1.00104.95           C
ANISOU 1737  CB  ALA D  57    12192  18469   9214   3925   -117  -1495       C
ATOM   1738  C   ALA D  57      77.731  21.286  -3.276  1.00116.26           C
ANISOU 1738  C   ALA D  57    13595  19763  10816   3675   -354  -1900       C
ATOM   1739  O   ALA D  57      77.723  21.815  -4.367  1.00125.31           O
ANISOU 1739  O   ALA D  57    14995  20780  11838   4048   -281  -1837       O
ATOM   1740  N   GLN D  58      77.838  21.966  -2.143  1.00118.21           N
ANISOU 1740  N   GLN D  58    13465  20144  11306   3164   -406  -1900       N
ATOM   1741  CA  GLN D  58      78.029  23.414  -2.145  1.00120.95           C
ANISOU 1741  CA  GLN D  58    13667  20496  11790   3019   -364  -1794       C
ATOM   1742  CB  GLN D  58      76.794  24.123  -1.593  1.00117.19           C
ANISOU 1742  CB  GLN D  58    13125  19963  11440   2682   -670  -2288       C
ATOM   1743  CG  GLN D  58      75.487  23.763  -2.280  1.00126.34           C
ANISOU 1743  CG  GLN D  58    14655  20920  12428   2937   -903  -2773       C
ATOM   1744  CD  GLN D  58      75.213  24.574  -3.528  1.00136.40           C
ANISOU 1744  CD  GLN D  58    16237  22017  13572   3329   -876  -2804       C
ATOM   1745  OE1 GLN D  58      75.690  25.695  -3.677  1.00140.83           O
ANISOU 1745  OE1 GLN D  58    16689  22598  14222   3286   -764  -2585       O
ATOM   1746  NE2 GLN D  58      74.428  24.008  -4.430  1.00134.58           N
ANISOU 1746  NE2 GLN D  58    16393  21609  13131   3716   -983  -3083       N
ATOM   1747  C   GLN D  58      79.277  23.897  -1.399  1.00112.42           C
ANISOU 1747  C   GLN D  58    12196  19614  10903   2727   -147  -1339       C
ATOM   1748  O   GLN D  58      79.745  25.004  -1.609  1.00114.11           O
ANISOU 1748  O   GLN D  58    12316  19837  11204   2711    -33  -1122       O
ATOM   1749  N   LEU D  59      79.800  23.056  -0.526  1.00107.01           N
ANISOU 1749  N   LEU D  59    11287  19086  10288   2500    -95  -1202       N
ATOM   1750  CA  LEU D  59      80.978  23.368   0.280  1.00110.10           C
ANISOU 1750  CA  LEU D  59    11294  19674  10864   2206    102   -787       C
ATOM   1751  CB  LEU D  59      80.936  22.510   1.551  1.00104.85           C
ANISOU 1751  CB  LEU D  59    10366  19159  10314   1811      7   -891       C
ATOM   1752  CG  LEU D  59      81.113  23.130   2.934  1.00 90.74           C
ANISOU 1752  CG  LEU D  59     8127  17542   8810   1235    -53   -887       C
ATOM   1753  CD1 LEU D  59      80.260  24.370   3.020  1.00 85.85           C
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ANISOU 1753  CD1 LEU D  59     7468  16844   8307   1041   -250  -1190       C
ATOM   1754  CD2 LEU D  59      80.696  22.127   4.001  1.00 81.86           C
ANISOU 1754  CD2 LEU D  59     6851  16511   7742    922   -211  -1123       C
ATOM   1755  C   LEU D  59      82.238  23.092  -0.560  1.00110.09           C
ANISOU 1755  C   LEU D  59    11400  19696  10732   2605    432   -265       C
ATOM   1756  O   LEU D  59      83.124  22.327  -0.165  1.00109.48           O
ANISOU 1756  O   LEU D  59    11182  19754  10661   2568    594     32       O
ATOM   1757  N   ILE D  60      82.315  23.753  -1.714  1.00117.85           N
ANISOU 1757  N   ILE D  60    12628  20549  11601   2982    530   -154       N
ATOM   1758  CA  ILE D  60      83.350  23.480  -2.711  1.00117.57           C
ANISOU 1758  CA  ILE D  60    12766  20501  11403   3435    823    294       C
ATOM   1759  CB  ILE D  60      82.674  23.125  -4.058  1.00119.87           C
ANISOU 1759  CB  ILE D  60    13534  20586  11427   3971    771    102       C
ATOM   1760  CG1 ILE D  60      81.935  24.336  -4.625  1.00112.61           C
ANISOU 1760  CG1 ILE D  60    12749  19518  10520   4037    657   -121       C
ATOM   1761  CD1 ILE D  60      81.218  24.057  -5.922  1.00113.09           C
ANISOU 1761  CD1 ILE D  60    13272  19371  10327   4552    592   -335       C
ATOM   1762  CG2 ILE D  60      81.708  21.955  -3.877  1.00112.91           C
ANISOU 1762  CG2 ILE D  60    12817  19647  10436   3988    544   -310       C
ATOM   1763  C   ILE D  60      84.392  24.576  -2.968  1.00118.24           C
ANISOU 1763  C   ILE D  60    12700  20639  11588   3459   1070    736       C
ATOM   1764  O   ILE D  60      85.213  24.442  -3.873  1.00127.93           O
ANISOU 1764  O   ILE D  60    14088  21843  12676   3855   1313   1102       O
ATOM   1765  N   THR D  61      84.357  25.658  -2.196  1.00117.46           N
ANISOU 1765  N   THR D  61    12297  20606  11727   3047   1009    703       N
ATOM   1766  CA  THR D  61      85.403  26.683  -2.273  1.00119.57           C
ANISOU 1766  CA  THR D  61    12364  20942  12123   3011   1242   1135       C
ATOM   1767  CB  THR D  61      85.026  27.932  -3.125  1.00112.98           C
ANISOU 1767  CB  THR D  61    11691  19960  11275   3193   1225   1076       C
ATOM   1768  OG1 THR D  61      84.318  28.884  -2.320  1.00108.42           O
ANISOU 1768  OG1 THR D  61    10891  19396  10909   2757   1007    777       O
ATOM   1769  CG2 THR D  61      84.196  27.557  -4.327  1.00121.58           C
ANISOU 1769  CG2 THR D  61    13245  20848  12102   3665   1136    820       C
ATOM   1770  C   THR D  61      85.703  27.114  -0.852  1.00126.60           C
ANISOU 1770  C   THR D  61    12790  22010  13300   2436   1200   1171       C
ATOM   1771  O   THR D  61      84.817  27.076   0.006  1.00125.27           O
ANISOU 1771  O   THR D  61    12498  21862  13239   2080    943    779       O
ATOM   1772  N   TYR D  62      86.946  27.548  -0.620  1.00114.35           N
ANISOU 1772  N   TYR D  62    11464  17718  14265   -915    345   1224       N
ATOM   1773  CA  TYR D  62      87.464  27.927   0.706  1.00116.02           C
ANISOU 1773  CA  TYR D  62    11751  17853  14479  -1064    350   1302       C
ATOM   1774  CB  TYR D  62      88.980  28.170   0.634  1.00122.60           C
ANISOU 1774  CB  TYR D  62    12397  19055  15130  -1019    303   1398       C
ATOM   1775  CG  TYR D  62      89.830  26.961   0.286  1.00124.79           C
ANISOU 1775  CG  TYR D  62    12619  19531  15265   -740    223   1311       C
ATOM   1776  CD1 TYR D  62      89.890  25.871   1.121  1.00121.64           C
ANISOU 1776  CD1 TYR D  62    12381  18964  14873   -625    184   1213       C
ATOM   1777  CE1 TYR D  62      90.661  24.774   0.812  1.00124.41           C
ANISOU 1777  CE1 TYR D  62    12682  19493  15095   -373    110   1134       C
ATOM   1778  CZ  TYR D  62      91.389  24.763  -0.336  1.00129.81           C
ANISOU 1778  CZ  TYR D  62    13153  20528  15641   -232     76   1154       C
ATOM   1779  OH  TYR D  62      92.155  23.671  -0.633  1.00131.84           O
ANISOU 1779  OH  TYR D  62    13362  20960  15770     19      3   1075       O
ATOM   1780  CE2 TYR D  62      91.363  25.837  -1.183  1.00134.28           C
ANISOU 1780  CE2 TYR D  62    13555  21271  16195   -342    114   1252       C
ATOM   1781  CD2 TYR D  62      90.587  26.930  -0.869  1.00133.17           C
ANISOU 1781  CD2 TYR D  62    13466  20950  16184   -595    187   1331       C
ATOM   1782  C   TYR D  62      86.807  29.083   1.462  1.00105.66           C
ANISOU 1782  C   TYR D  62    10524  16320  13302  -1358    424   1396       C
ATOM   1783  O   TYR D  62      86.549  28.970   2.642  1.00108.94           O
ANISOU 1783  O   TYR D  62    11112  16483  13796  -1453    438   1385       O
ATOM   1784  N   PRO D  63      86.523  30.185   0.810  1.00 96.07           N
ANISOU 1784  N   PRO D  63     9195  15191  12116  -1502    470   1486       N
ANISOU 1784  N   PRO D  63     9195  15191  12116  -1502    470   1486       N
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ATOM   1785  CA  PRO D  63      85.835  31.283   1.503  1.00101.84           C
ANISOU 1785  CA  PRO D  63    10011  15701  12982  -1781    541   1571       C
ATOM   1786  CB  PRO D  63      85.747  32.361   0.422  1.00100.43           C
ANISOU 1786  CB  PRO D  63     9648  15720  12790  -1874    575   1663       C
ATOM   1787  CG  PRO D  63      86.942  32.115  -0.429  1.00 99.15           C
ANISOU 1787  CG  PRO D  63     9275  15957  12441  -1699    515   1687       C
ATOM   1788  CD  PRO D  63      87.039  30.624  -0.501  1.00 98.49           C
ANISOU 1788  CD  PRO D  63     9265  15843  12312  -1437    457   1540       C
ATOM   1789  C   PRO D  63      84.439  30.926   2.033  1.00 95.77           C
ANISOU 1789  C   PRO D  63     9475  14515  12399  -1839    585   1473       C
ATOM   1790  O   PRO D  63      83.887  31.639   2.872  1.00 89.94           O
ANISOU 1790  O   PRO D  63     8848  13547  11777  -2058    638   1527       O
ATOM   1791  N   ARG D  64      83.875  29.854   1.489  1.00 96.33           N
ANISOU 1791  N   ARG D  64     9609  14498  12494  -1644    562   1333       N
ATOM   1792  CA  ARG D  64      82.560  29.355   1.866  1.00 94.89           C
ANISOU 1792  CA  ARG D  64     9641  13934  12477  -1662    595   1224       C
ATOM   1793  CB  ARG D  64      81.971  28.575   0.714  1.00101.10           C
ANISOU 1793  CB  ARG D  64    10405  14736  13271  -1465    578   1106       C
ATOM   1794  CG  ARG D  64      81.461  29.434  -0.419  1.00 86.57           C
ANISOU 1794  CG  ARG D  64     8433  12994  11464  -1539    620   1155       C
ATOM   1795  CD  ARG D  64      80.781  28.566  -1.455  1.00 96.29           C
ANISOU 1795  CD  ARG D  64     9672  14196  12718  -1342    603   1025       C
ATOM   1796  NE  ARG D  64      80.179  29.365  -2.499  1.00110.65           N
ANISOU 1796  NE  ARG D  64    11383  16074  14584  -1419    646   1065       N
ATOM   1797  CZ  ARG D  64      79.397  28.869  -3.435  1.00102.62           C
ANISOU 1797  CZ  ARG D  64    10374  15003  13614  -1299    647    970       C
ATOM   1798  NH1 ARG D  64      79.119  27.581  -3.452  1.00 92.52           N
ANISOU 1798  NH1 ARG D  64     9204  13608  12340  -1097    609    829       N
ATOM   1799  NH2 ARG D  64      78.889  29.671  -4.341  1.00102.83           N
ANISOU 1799  NH2 ARG D  64    10300  15088  13682  -1384    687   1016       N
ATOM   1800  C   ARG D  64      82.595  28.433   3.054  1.00 86.82           C
ANISOU 1800  C   ARG D  64     8812  12694  11482  -1608    569   1146       C
ATOM   1801  O   ARG D  64      81.808  28.544   3.958  1.00 86.71           O
ANISOU 1801  O   ARG D  64     8979  12362  11603  -1746    610   1130       O
ATOM   1802  N   ALA D  65      83.560  27.542   3.024  1.00 88.45           N
ANISOU 1802  N   ALA D  65     8969  13086  11550  -1406    498   1103       N
ATOM   1803  CA  ALA D  65      83.767  26.609   4.086  1.00 93.53           C
ANISOU 1803  CA  ALA D  65     9775  13569  12194  -1332    463   1031       C
ATOM   1804  CB  ALA D  65      84.894  25.671   3.742  1.00 90.23           C
ANISOU 1804  CB  ALA D  65     9257  13420  11605  -1086    381    986       C
ATOM   1805  C   ALA D  65      84.097  27.394   5.327  1.00 94.08           C
ANISOU 1805  C   ALA D  65     9905  13548  12291  -1552    490   1139       C
ATOM   1806  O   ALA D  65      83.705  27.019   6.411  1.00 98.04           O
ANISOU 1806  O   ALA D  65    10600  13773  12878  -1605    499   1094       O
ATOM   1807  N   LEU D  66      84.841  28.478   5.188  1.00 93.64           N
ANISOU 1807  N   LEU D  66     9686  13730  12162  -1681    503   1282       N
ATOM   1808  CA  LEU D  66      85.189  29.271   6.350  1.00 92.98           C
ANISOU 1808  CA  LEU D  66     9653  13573  12101  -1894    529   1391       C
ATOM   1809  CB  LEU D  66      86.105  30.418   5.944  1.00 97.34           C
ANISOU 1809  CB  LEU D  66     9989  14447  12549  -2002    534   1547       C
ATOM   1810  CG  LEU D  66      86.585  31.445   6.964  1.00101.31           C
ANISOU 1810  CG  LEU D  66    10499  14938  13057  -2235    561   1686       C
ATOM   1811  CD1 LEU D  66      88.036  31.764   6.688  1.00100.04           C
ANISOU 1811  CD1 LEU D  66    10131  15164  12715  -2188    515   1786       C
ATOM   1812  CD2 LEU D  66      85.749  32.714   6.952  1.00 89.65           C
ANISOU 1812  CD2 LEU D  66     9029  13327  11705  -2488    639   1772       C
ATOM   1813  C   LEU D  66      83.924  29.806   6.977  1.00 90.56           C
ANISOU 1813  C   LEU D  66     9521  12904  11985  -2103    603   1391       C
ATOM   1814  O   LEU D  66      83.778  29.782   8.175  1.00 93.13           O
ANISOU 1814  O   LEU D  66    10005  13004  12377  -2211    617   1394       O
ATOM   1815  N   TRP D  67      83.003  30.295   6.168  1.00 85.80           N
ANISOU 1815  N   TRP D  67     8888  12242  11470  -2163    650   1386       N
ATOM   1816  CA  TRP D  67      81.757  30.797   6.693  1.00 82.65           C
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ANISOU 1816  CA  TRP D  67     8649  11498  11254  -2356    721   1381       C
ATOM   1817  CB  TRP D  67      80.967  31.390   5.554  1.00 86.16           C
ANISOU 1817  CB  TRP D  67     9005  11970  11760  -2398    763   1390       C
ATOM   1818  CG  TRP D  67      79.563  31.763   5.828  1.00 82.73           C
ANISOU 1818  CG  TRP D  67     8726  11191  11517  -2556    833   1362       C
ATOM   1819  CD1 TRP D  67      78.507  31.497   5.045  1.00 79.97           C
ANISOU 1819  CD1 TRP D  67     8411  10714  11259  -2501    856   1276       C
ATOM   1820  NE1 TRP D  67      77.374  32.021   5.584  1.00 81.01           N
ANISOU 1820  NE1 TRP D  67     8690  10527  11562  -2692    924   1279       N
ATOM   1821  CE2 TRP D  67      77.693  32.656   6.744  1.00 80.72           C
ANISOU 1821  CE2 TRP D  67     8717  10406  11546  -2879    946   1369       C
ATOM   1822  CD2 TRP D  67      79.064  32.526   6.922  1.00 83.94           C
ANISOU 1822  CD2 TRP D  67     9012  11091  11791  -2801    890   1425       C
ATOM   1823  CE3 TRP D  67      79.643  33.096   8.042  1.00 86.90           C
ANISOU 1823  CE3 TRP D  67     9424  11443  12152  -2960    899   1522       C
ATOM   1824  CZ3 TRP D  67      78.850  33.756   8.916  1.00 90.73           C
ANISOU 1824  CZ3 TRP D  67    10053  11638  12783  -3184    962   1557       C
ATOM   1825  CH2 TRP D  67      77.494  33.868   8.711  1.00 85.17           C
ANISOU 1825  CH2 TRP D  67     9457  10666  12238  -3255   1017   1499       C
ATOM   1826  CZ2 TRP D  67      76.897  33.325   7.631  1.00 78.18           C
ANISOU 1826  CZ2 TRP D  67     8540   9794  11372  -3105   1010   1405       C
ATOM   1827  C   TRP D  67      80.972  29.677   7.283  1.00 81.73           C
ANISOU 1827  C   TRP D  67     8755  11065  11235  -2263    714   1238       C
ATOM   1828  O   TRP D  67      80.471  29.779   8.374  1.00 83.13           O
ANISOU 1828  O   TRP D  67     9106  10960  11519  -2401    747   1236       O
ATOM   1829  N   TRP D  68      80.900  28.577   6.564  1.00 82.14           N
ANISOU 1829  N   TRP D  68     8799  11168  11243  -2024    668   1117       N
ATOM   1830  CA  TRP D  68      80.149  27.402   7.010  1.00 79.41           C
ANISOU 1830  CA  TRP D  68     8658  10532  10982  -1908    655    969       C
ATOM   1831  CB  TRP D  68      80.303  26.252   6.010  1.00 80.21           C
ANISOU 1831  CB  TRP D  68     8700  10778  11000  -1624    596    852       C
ATOM   1832  CG  TRP D  68      79.803  24.945   6.553  1.00 80.81           C
ANISOU 1832  CG  TRP D  68     8975  10599  11129  -1482    567    704       C
ATOM   1833  CD1 TRP D  68      78.498  24.568   6.733  1.00 76.32           C
ANISOU 1833  CD1 TRP D  68     8588   9693  10719  -1505    603    608       C
ATOM   1834  NE1 TRP D  68      78.442  23.303   7.277  1.00 76.54           N
ANISOU 1834  NE1 TRP D  68     8766   9568  10747  -1348    558    486       N
ATOM   1835  CE2 TRP D  68      79.717  22.848   7.475  1.00 85.19           C
ANISOU 1835  CE2 TRP D  68     9782  10899  11686  -1222    492    502       C
ATOM   1836  CD2 TRP D  68      80.608  23.857   7.039  1.00 84.64           C
ANISOU 1836  CD2 TRP D  68     9503  11143  11513  -1302    496    639       C
ATOM   1837  CE3 TRP D  68      81.988  23.636   7.136  1.00 76.03           C
ANISOU 1837  CE3 TRP D  68     8294  10339  10256  -1200    435    682       C
ATOM   1838  CZ3 TRP D  68      82.435  22.431   7.651  1.00 68.86           C
ANISOU 1838  CZ3 TRP D  68     7478   9398   9289  -1023    371    588       C
ATOM   1839  CH2 TRP D  68      81.533  21.446   8.077  1.00 75.14           C
ANISOU 1839  CH2 TRP D  68     8482   9880  10189   -947    368    452       C
ATOM   1840  CZ2 TRP D  68      80.175  21.634   8.000  1.00 83.12           C
ANISOU 1840  CZ2 TRP D  68     9613  10606  11364  -1044    427    408       C
ATOM   1841  C   TRP D  68      80.572  26.911   8.384  1.00 79.82           C
ANISOU 1841  C   TRP D  68     8859  10441  11028  -1925    632    955       C
ATOM   1842  O   TRP D  68      79.731  26.635   9.238  1.00 84.04           O
ANISOU 1842  O   TRP D  68     9600  10640  11693  -1998    661    897       O
ATOM   1843  N   SER D  69      81.881  26.820   8.590  1.00 80.55           N
ANISOU 1843  N   SER D  69     8846  10792  10969  -1858    579   1011       N
ATOM   1844  CA  SER D  69      82.435  26.310   9.838  1.00 84.87           C
ANISOU 1844  CA  SER D  69     9515  11242  11489  -1854    547    999       C
ATOM   1845  CB  SER D  69      83.958  26.219   9.741  1.00 87.48           C
ANISOU 1845  CB  SER D  69     9680  11927  11630  -1750    484   1062       C
ATOM   1846  OG  SER D  69      84.537  27.515   9.685  1.00 88.56           O
ANISOU 1846  OG  SER D  69     9668  12258  11722  -1928    512   1220       O
ATOM   1847  C   SER D  69      82.026  27.192  11.017  1.00 76.53           C
ANISOU 1847  C   SER D  69     8585   9944  10548  -2124    608   1081       C
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ATOM   1848  O   SER D  69      81.669  26.692  12.082  1.00 73.22           O
ANISOU 1848  O   SER D  69     8362   9254  10205  -2155    611   1025       O
ATOM   1849  N   VAL D  70      82.106  28.503  10.814  1.00 73.32           N
ANISOU 1849  N   VAL D  70     8064   9643  10151  -2317    655   1214       N
ATOM   1850  CA  VAL D  70      81.702  29.492  11.811  1.00 72.30           C
ANISOU 1850  CA  VAL D  70     8034   9306  10132  -2587    717   1304       C
ATOM   1851  CB  VAL D  70      81.941  30.925  11.304  1.00 74.58           C
ANISOU 1851  CB  VAL D  70     8147   9789  10399  -2766    758   1453       C
ATOM   1852  CG1 VAL D  70      81.316  31.934  12.246  1.00 66.66           C
ANISOU 1852  CG1 VAL D  70     7260   8539   9531  -3045    829   1533       C
ATOM   1853  CG2 VAL D  70      83.424  31.181  11.100  1.00 82.93           C
ANISOU 1853  CG2 VAL D  70     9011  11223  11275  -2713    708   1549       C
ATOM   1854  C   VAL D  70      80.235  29.381  12.207  1.00 72.95           C
ANISOU 1854  C   VAL D  70     8321   8992  10404  -2681    775   1225       C
ATOM   1855  O   VAL D  70      79.881  29.446  13.387  1.00 72.64           O
ANISOU 1855  O   VAL D  70     8455   8688  10456  -2813    802   1227       O
ATOM   1856  N   GLU D  71      79.374  29.208  11.211  1.00 77.35           N
ANISOU 1856  N   GLU D  71     8860   9508  11022  -2611    793   1156       N
ATOM   1857  CA  GLU D  71      77.945  29.135  11.480  1.00 78.16           C
ANISOU 1857  CA  GLU D  71     9146   9245  11307  -2697    849   1082       C
ATOM   1858  CB  GLU D  71      77.128  29.474  10.232  1.00 75.12           C
ANISOU 1858  CB  GLU D  71     8675   8888  10979  -2687    883   1064       C
ATOM   1859  CG  GLU D  71      76.988  28.367   9.204  1.00 79.10           C
ANISOU 1859  CG  GLU D  71     9143   9477  11436  -2424    835    937       C
ATOM   1860  CD  GLU D  71      75.961  28.758   8.154  1.00 82.56           C
ANISOU 1860  CD  GLU D  71     9538   9866  11966  -2451    880    916       C
ATOM   1861  OE1 GLU D  71      75.364  27.887   7.470  1.00105.25           O
ANISOU 1861  OE1 GLU D  71    12448  12676  14866  -2281    863    795       O
ATOM   1862  OE2 GLU D  71      75.723  29.974   8.053  1.00 74.51           O
ANISOU 1862  OE2 GLU D  71     8454   8859  10997  -2654    935   1023       O
ATOM   1863  C   GLU D  71      77.601  27.741  11.981  1.00 79.05           C
ANISOU 1863  C   GLU D  71     9441   9143  11451  -2532    813    933       C
ATOM   1864  O   GLU D  71      76.494  27.493  12.450  1.00 83.14           O
ANISOU 1864  O   GLU D  71    10144   9329  12117  -2591    851    860       O
ATOM   1865  N   THR D  72      78.571  26.839  11.901  1.00 74.20           N
ANISOU 1865  N   THR D  72     8775   8720  10697  -2326    738    889       N
ATOM   1866  CA  THR D  72      78.379  25.485  12.379  1.00 74.85           C
ANISOU 1866  CA  THR D  72     9020   8627  10793  -2158    695    751       C
ATOM   1867  CB  THR D  72      79.035  24.461  11.428  1.00 75.54           C
ANISOU 1867  CB  THR D  72     8992   8968  10741  -1872    618    671       C
ATOM   1868  OG1 THR D  72      78.342  24.469  10.172  1.00 75.81           O
ANISOU 1868  OG1 THR D  72     8949   9046  10808  -1799    635    626       O
ATOM   1869  CG2 THR D  72      78.974  23.069  12.008  1.00 79.32           C
ANISOU 1869  CG2 THR D  72     9636   9282  11220  -1699    568    536       C
ATOM   1870  C   THR D  72      78.929  25.341  13.800  1.00 74.71           C
ANISOU 1870  C   THR D  72     9124   8500  10762  -2231    679    778       C
ATOM   1871  O   THR D  72      78.295  24.709  14.644  1.00 73.96           O
ANISOU 1871  O   THR D  72     9235   8103  10763  -2237    686    693       O
ATOM   1872  N   ALA D  73      80.073  25.948  14.070  1.00 75.01           N
ANISOU 1872  N   ALA D  73     9038   8776  10687  -2293    661    895       N
ATOM   1873  CA  ALA D  73      80.659  25.892  15.402  1.00 78.01           C
ANISOU 1873  CA  ALA D  73     9521   9071  11048  -2371    647    932       C
ATOM   1874  CB  ALA D  73      82.050  26.507  15.395  1.00 76.89           C
ANISOU 1874  CB  ALA D  73     9196   9265  10752  -2397    616   1060       C
ATOM   1875  C   ALA D  73      79.779  26.571  16.459  1.00 80.40           C
ANISOU 1875  C   ALA D  73     9998   9038  11512  -2622    719    968       C
ATOM   1876  O   ALA D  73      79.683  26.104  17.594  1.00 82.10           O
ANISOU 1876  O   ALA D  73    10389   9030  11773  -2652    713    929       O
ATOM   1877  N   THR D  74      79.154  27.684  16.080  1.00 71.68           N
ANISOU 1877  N   THR D  74    10464   7172   9601   -645   -890   1040       N
ATOM   1878  CA  THR D  74      78.332  28.479  16.990  1.00 72.93           C
ANISOU 1878  CA  THR D  74    10823   7194   9691   -669  -1034   1041       C
ATOM   1879  CB  THR D  74      78.143  29.922  16.469  1.00 77.15           C
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ANISOU 1879  CB  THR D  74    11535   7726  10054   -781  -1130   1080       C
ATOM   1880  OG1 THR D  74      77.613  29.878  15.133  1.00 77.84           O
ANISOU 1880  OG1 THR D  74    11641   7865  10070   -731  -1040    971       O
ATOM   1881  CG2 THR D  74      79.470  30.682  16.476  1.00 87.47           C
ANISOU 1881  CG2 THR D  74    12791   9117  11326   -939  -1185   1253       C
ATOM   1882  C   THR D  74      76.940  27.846  17.132  1.00 73.39           C
ANISOU 1882  C   THR D  74    10959   7153   9774   -520  -1001    873       C
ATOM   1883  O   THR D  74      76.138  28.280  17.951  1.00 69.07           O
ANISOU 1883  O   THR D  74    10566   6483   9194   -513  -1105    851       O
ATOM   1884  N   THR D  75      76.693  26.819  16.319  1.00 71.37           N
ANISOU 1884  N   THR D  75    10591   6951   9576   -405   -854    758       N
ATOM   1885  CA  THR D  75      75.424  26.080  16.240  1.00 76.31           C
ANISOU 1885  CA  THR D  75    11264   7503  10228   -254   -794    589       C
ATOM   1886  CB  THR D  75      74.968  25.458  17.610  1.00 75.35           C
ANISOU 1886  CB  THR D  75    11150   7266  10213   -178   -839    564       C
ATOM   1887  OG1 THR D  75      74.557  26.481  18.530  1.00 72.24           O
ANISOU 1887  OG1 THR D  75    10940   6761   9745   -250  -1000    617       O
ATOM   1888  CG2 THR D  75      76.114  24.652  18.235  1.00 74.82           C
ANISOU 1888  CG2 THR D  75    10880   7254  10292   -188   -797    659       C
ATOM   1889  C   THR D  75      74.269  26.907  15.647  1.00 80.42           C
ANISOU 1889  C   THR D  75    11988   7965  10602   -247   -841    499       C
ATOM   1890  O   THR D  75      73.101  26.580  15.849  1.00 85.02           O
ANISOU 1890  O   THR D  75    12661   8455  11187   -141   -838    375       O
ATOM   1891  N   VAL D  76      74.591  27.953  14.888  1.00 75.38           N
ANISOU 1891  N   VAL D  76    11418   7383   9839   -357   -880    560       N
ATOM   1892  CA  VAL D  76      73.542  28.777  14.272  1.00 72.86           C
ANISOU 1892  CA  VAL D  76    11289   7015   9379   -357   -924    482       C
ATOM   1893  CB  VAL D  76      74.115  30.109  13.734  1.00 69.42           C
ANISOU 1893  CB  VAL D  76    10933   6633   8810   -510  -1003    592       C
ATOM   1894  CG1 VAL D  76      73.036  30.888  12.960  1.00 63.00           C
ANISOU 1894  CG1 VAL D  76    10302   5781   7855   -504  -1032    505       C
ATOM   1895  CG2 VAL D  76      74.605  30.955  14.904  1.00 80.20           C
ANISOU 1895  CG2 VAL D  76    12374   7938  10162   -625  -1152    732       C
ATOM   1896  C   VAL D  76      72.869  27.990  13.141  1.00 77.34           C
ANISOU 1896  C   VAL D  76    11810   7626   9948   -238   -782    329       C
ATOM   1897  O   VAL D  76      71.643  27.853  13.116  1.00 81.09           O
ANISOU 1897  O   VAL D  76    12397   8019  10396   -145   -782    204       O
ATOM   1898  N   GLY D  77      73.674  27.462  12.219  1.00 83.74           N
ANISOU 1898  N   GLY D  77    12454   8569  10793   -242   -661    339       N
ATOM   1899  CA  GLY D  77      73.151  26.654  11.125  1.00 77.67           C
ANISOU 1899  CA  GLY D  77    11623   7854  10034   -136   -516    201       C
ATOM   1900  C   GLY D  77      72.030  27.205  10.255  1.00 72.61           C
ANISOU 1900  C   GLY D  77    11141   7184   9262   -111   -521     95       C
ATOM   1901  O   GLY D  77      70.945  26.608  10.168  1.00 77.62           O
ANISOU 1901  O   GLY D  77    11820   7760   9912     12   -472    -44       O
ATOM   1902  N   TYR D  78      72.300  28.320   9.577  1.00 79.68           N
ANISOU 1902  N   TYR D  78    12118   8126  10030   -226   -576    159       N
ATOM   1903  CA  TYR D  78      71.316  28.951   8.703  1.00 67.17           C
ANISOU 1903  CA  TYR D  78    10685   6522   8313   -218   -587     74       C
ATOM   1904  CB  TYR D  78      71.932  30.146   7.968  1.00 59.35           C
ANISOU 1904  CB  TYR D  78    9748   5605   7196   -364   -642    173       C
ATOM   1905  CG  TYR D  78      72.312  31.304   8.859  1.00 60.25           C
ANISOU 1905  CG  TYR D  78    9974   5661   7256   -488   -805    309       C
ATOM   1906  CD1 TYR D  78      71.352  31.956   9.636  1.00 66.17           C
ANISOU 1906  CD1 TYR D  78    10915   6274   7952   -480   -927    289       C
ATOM   1907  CE1 TYR D  78      71.690  33.077  10.409  1.00 77.11           C
ANISOU 1907  CE1 TYR D  78    12412   7607   9281   -601  -1076    413       C
ATOM   1908  CZ  TYR D  78      73.000  33.538  10.401  1.00 77.64           C
ANISOU 1908  CZ  TYR D  78    12397   7761   9342   -728  -1103    560       C
ATOM   1909  OH  TYR D  78      73.355  34.654  11.113  1.00 81.04           O
ANISOU 1909  OH  TYR D  78    12936   8145   9710   -850  -1246    684       O
ATOM   1910  CE2 TYR D  78      73.970  32.897   9.641  1.00 71.23           C
ANISOU 1910  CE2 TYR D  78    11395   7085   8583   -735   -985    583       C
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ATOM   1911  CD2 TYR D  78      73.622  31.788   8.878  1.00 70.38           C
ANISOU 1911  CD2 TYR D  78    11179   7028   8535   -616   -837    458       C
ATOM   1912  C   TYR D  78      70.737  28.007   7.659  1.00 63.88           C
ANISOU 1912  C   TYR D  78    10198   6157   7915   -102   -434    -74       C
ATOM   1913  O   TYR D  78      69.552  28.051   7.375  1.00 61.34           O
ANISOU 1913  O   TYR D  78     9996   5773   7537    -30   -433   -189       O
ATOM   1914  N   GLY D  79      71.557  27.135   7.123  1.00 63.79           N
ANISOU 1914  N   GLY D  79     9992   6258   7988    -82   -305    -71       N
ATOM   1915  CA  GLY D  79      71.089  26.223   6.108  1.00 70.07           C
ANISOU 1915  CA  GLY D  79    10711   7110   8803     21   -153   -207       C
ATOM   1916  C   GLY D  79      71.461  26.511   4.674  1.00 70.17           C
ANISOU 1916  C   GLY D  79    10684   7245   8732    -38    -77   -210       C
ATOM   1917  O   GLY D  79      71.089  25.781   3.787  1.00 60.71           O
ANISOU 1917  O   GLY D  79     9424   6099   7546     41     51   -321       O
ATOM   1918  N   ASP D  80      72.193  27.578   4.434  1.00 74.19           N
ANISOU 1918  N   ASP D  80    11231   7803   9156   -178   -155    -89       N
ATOM   1919  CA  ASP D  80      72.646  27.888   3.098  1.00 68.93           C
ANISOU 1919  CA  ASP D  80    10521   7257   8410   -245    -88    -81       C
ATOM   1920  CB  ASP D  80      73.252  29.268   3.038  1.00 70.63           C
ANISOU 1920  CB  ASP D  80    10826   7494   8514   -403   -210     53       C
ATOM   1921  CG  ASP D  80      74.199  29.526   4.131  1.00 76.45           C
ANISOU 1921  CG  ASP D  80    11521   8215   9312   -477   -298    195       C
ATOM   1922  OD1 ASP D  80      74.258  28.758   5.082  1.00 80.36           O
ANISOU 1922  OD1 ASP D  80    11946   8659   9927   -408   -288    192       O
ATOM   1923  OD2 ASP D  80      74.895  30.523   4.048  1.00 77.98           O
ANISOU 1923  OD2 ASP D  80    11754   8446   9430   -608   -380    313       O
ATOM   1924  C   ASP D  80      73.657  26.891   2.600  1.00 65.07           C
ANISOU 1924  C   ASP D  80     9807   6891   8028   -230     58    -70       C
ATOM   1925  O   ASP D  80      73.726  26.608   1.425  1.00 73.22           O
ANISOU 1925  O   ASP D  80    10774   8015   9031   -222    169   -127       O
ATOM   1926  N   LEU D  81      74.466  26.399   3.525  1.00 76.10           N
ANISOU 1926  N   LEU D  81    11085   8283   9544   -231     53      9       N
ATOM   1927  CA  LEU D  81      75.592  25.504   3.261  1.00 74.90           C
ANISOU 1927  CA  LEU D  81    10711   8241   9507   -228    175     47       C
ATOM   1928  CB  LEU D  81      76.920  26.268   3.294  1.00 75.43           C
ANISOU 1928  CB  LEU D  81    10726   8384   9550   -379    114    214       C
ATOM   1929  CG  LEU D  81      77.224  27.318   2.234  1.00 69.64           C
ANISOU 1929  CG  LEU D  81    10056   7729   8674   -498     88    260       C
ATOM   1930  CD1 LEU D  81      78.158  28.365   2.800  1.00 78.37           C
ANISOU 1930  CD1 LEU D  81    11196   8843   9738   -642    -43    430       C
ATOM   1931  CD2 LEU D  81      77.854  26.646   1.031  1.00 80.99           C
ANISOU 1931  CD2 LEU D  81    11327   9304  10143   -492    248    227       C
ATOM   1932  C   LEU D  81      75.628  24.360   4.279  1.00 73.03           C
ANISOU 1932  C   LEU D  81    10364   7953   9431   -124    218     24       C
ATOM   1933  O   LEU D  81      75.336  24.560   5.466  1.00 72.91           O
ANISOU 1933  O   LEU D  81    10427   7832   9443   -114    110     57       O
ATOM   1934  N   TYR D  82      76.001  23.176   3.799  1.00 69.43           N
ANISOU 1934  N   TYR D  82     9725   7573   9082    -50    376    -32       N
ATOM   1935  CA  TYR D  82      76.140  21.983   4.624  1.00 67.65           C
ANISOU 1935  CA  TYR D  82     9368   7318   9018     51    438    -55       C
ATOM   1936  CB  TYR D  82      74.790  21.596   5.238  1.00 69.23           C
ANISOU 1936  CB  TYR D  82     9680   7391   9233    175    414   -177       C
ATOM   1937  CG  TYR D  82      73.638  21.483   4.251  1.00 69.20           C
ANISOU 1937  CG  TYR D  82     9764   7381   9146    250    481   -330       C
ATOM   1938  CD1 TYR D  82      73.427  20.328   3.507  1.00 64.66           C
ANISOU 1938  CD1 TYR D  82     9068   6863   8637    355    650   -449       C
ATOM   1939  CE1 TYR D  82      72.375  20.235   2.624  1.00 67.33           C
ANISOU 1939  CE1 TYR D  82     9488   7196   8897    419    709   -586       C
ATOM   1940  CZ  TYR D  82      71.514  21.306   2.471  1.00 69.19           C
ANISOU 1940  CZ  TYR D  82     9930   7371   8990    381    598   -604       C
ATOM   1941  OH  TYR D  82      70.457  21.239   1.591  1.00 78.30           O
ANISOU 1941  OH  TYR D  82    11168   8519  10063    442    653   -737       O
ATOM   1942  CE2 TYR D  82      71.702  22.454   3.195  1.00 60.03           C
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ANISOU 1942  CE2 TYR D  82     8893   6152   7765    279    432   -490       C
ATOM   1943  CD2 TYR D  82      72.754  22.536   4.078  1.00 67.64           C
ANISOU 1943  CD2 TYR D  82     9774   7121   8805    214    375   -355       C
ATOM   1944  C   TYR D  82      76.715  20.809   3.830  1.00 74.29           C
ANISOU 1944  C   TYR D  82    10000   8269   9960    109    624   -104       C
ATOM   1945  O   TYR D  82      76.559  20.734   2.614  1.00 77.60           O
ANISOU 1945  O   TYR D  82    10402   8763  10321    112    719   -174       O
ATOM   1946  N   PRO D  83      77.370  19.867   4.523  1.00 81.24           N
ANISOU 1946  N   PRO D  83    10716   9156  10993    154    678    -69       N
ATOM   1947  CA  PRO D  83      77.937  18.697   3.848  1.00 87.87           C
ANISOU 1947  CA  PRO D  83    11350  10096  11942    213    858   -113       C
ATOM   1948  CB  PRO D  83      78.853  18.114   4.927  1.00 85.89           C
ANISOU 1948  CB  PRO D  83    10955   9838  11841    215    850    -13       C
ATOM   1949  CG  PRO D  83      78.088  18.395   6.174  1.00 80.43           C
ANISOU 1949  CG  PRO D  83    10402   9009  11149    249    716    -15       C
ATOM   1950  CD  PRO D  83      77.738  19.857   5.950  1.00 79.69           C
ANISOU 1950  CD  PRO D  83    10509   8888  10883    143    579     27       C
ATOM   1951  C   PRO D  83      76.881  17.685   3.406  1.00 84.82           C
ANISOU 1951  C   PRO D  83    10954   9685  11590    362    980   -291       C
ATOM   1952  O   PRO D  83      75.843  17.551   4.056  1.00 87.07           O
ANISOU 1952  O   PRO D  83    11349   9860  11875    446    930   -368       O
ATOM   1953  N   VAL D  84      77.127  17.036   2.270  1.00 88.15           N
ANISOU 1953  N   VAL D  84    11254  10208  12030    390   1138   -356       N
ATOM   1954  CA  VAL D  84      76.247  15.990   1.744  1.00 91.02           C
ANISOU 1954  CA  VAL D  84    11585  10566  12433    527   1275   -522       C
ATOM   1955  CB  VAL D  84      75.724  16.337   0.350  1.00 83.52           C
ANISOU 1955  CB  VAL D  84    10703   9675  11354    510   1336   -610       C
ATOM   1956  CG1 VAL D  84      74.795  17.539   0.421  1.00 83.40           C
ANISOU 1956  CG1 VAL D  84    10923   9581  11184    467   1189   -619       C
ATOM   1957  CG2 VAL D  84      76.877  16.570  -0.595  1.00 88.15           C
ANISOU 1957  CG2 VAL D  84    11175  10397  11923    404   1402   -531       C
ATOM   1958  C   VAL D  84      76.936  14.633   1.674  1.00 92.49           C
ANISOU 1958  C   VAL D  84    11544  10817  12783    599   1436   -542       C
ATOM   1959  O   VAL D  84      76.293  13.613   1.431  1.00 88.50           O
ANISOU 1959  O   VAL D  84    10989  10301  12337    723   1554   -673       O
ATOM   1960  N   THR D  85      78.252  14.642   1.858  1.00 95.23           N
ANISOU 1960  N   THR D  85    11752  11233  13198    519   1442   -410       N
ATOM   1961  CA  THR D  85      79.073  13.437   1.783  1.00101.97           C
ANISOU 1961  CA  THR D  85    12378  12157  14209    570   1590   -407       C
ATOM   1962  CB  THR D  85      80.416  13.753   1.090  1.00 99.46           C
ANISOU 1962  CB  THR D  85    11937  11966  13888    450   1632   -293       C
ATOM   1963  OG1 THR D  85      81.204  14.609   1.922  1.00107.22           O
ANISOU 1963  OG1 THR D  85    12945  12932  14860    339   1487   -130       O
ATOM   1964  CG2 THR D  85      80.172  14.452  -0.223  1.00 92.07           C
ANISOU 1964  CG2 THR D  85    11083  11095  12802    386   1655   -336       C
ATOM   1965  C   THR D  85      79.332  12.810   3.169  1.00101.21           C
ANISOU 1965  C   THR D  85    12206  11990  14258    626   1553   -355       C
ATOM   1966  O   THR D  85      79.255  13.489   4.194  1.00 92.50           O
ANISOU 1966  O   THR D  85    11207  10806  13132    583   1399   -276       O
ATOM   1967  N   LEU D  86      79.610  11.507   3.186  1.00102.24           N
ANISOU 1967  N   LEU D  86    12159  12151  14538    721   1697   -404       N
ATOM   1968  CA  LEU D  86      79.822  10.769   4.433  1.00106.69           C
ANISOU 1968  CA  LEU D  86    12635  12652  15250    786   1681   -368       C
ATOM   1969  CB  LEU D  86      79.939   9.272   4.122  1.00109.22           C
ANISOU 1969  CB  LEU D  86    12767  13016  15717    904   1871   -458       C
ATOM   1970  CG  LEU D  86      80.233   8.237   5.217  1.00106.65           C
ANISOU 1970  CG  LEU D  86    12308  12647  15569    988   1899   -437       C
ATOM   1971  CD1 LEU D  86      79.137   8.175   6.262  1.00 98.89           C
ANISOU 1971  CD1 LEU D  86    11458  11528  14588   1072   1803   -499       C
ATOM   1972  CD2 LEU D  86      80.477   6.862   4.638  1.00125.11           C
ANISOU 1972  CD2 LEU D  86    14452  15051  18036   1086   2102   -520       C
ATOM   1973  C   LEU D  86      81.053  11.232   5.228  1.00106.96           C
ANISOU 1973  C   LEU D  86    12599  12705  15335    677   1587   -184       C
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ATOM   1974  O   LEU D  86      81.098  11.087   6.448  1.00111.47           O
ANISOU 1974  O   LEU D  86    13169  13201  15983    697   1505   -130       O
ATOM   1975  N   TRP D  87      82.035  11.791   4.536  1.00107.36           N
ANISOU 1975  N   TRP D  87    12594  12858  15341    560   1598    -88       N
ATOM   1976  CA  TRP D  87      83.190  12.324   5.235  1.00113.13           C
ANISOU 1976  CA  TRP D  87    13269  13610  16105    448   1503     89       C
ATOM   1977  CB  TRP D  87      84.473  12.217   4.408  1.00125.77           C
ANISOU 1977  CB  TRP D  87    14700  15346  17739    369   1601    170       C
ATOM   1978  CG  TRP D  87      84.982  10.805   4.202  1.00139.37           C
ANISOU 1978  CG  TRP D  87    16199  17126  19629    458   1779    130       C
ATOM   1979  CD1 TRP D  87      84.738  10.002   3.138  1.00147.90           C
ANISOU 1979  CD1 TRP D  87    17196  18267  20732    532   1950      7       C
ATOM   1980  NE1 TRP D  87      85.351   8.796   3.309  1.00145.69           N
ANISOU 1980  NE1 TRP D  87    16711  18023  20624    601   2080      8       N
ATOM   1981  CE2 TRP D  87      86.016   8.801   4.502  1.00147.04           C
ANISOU 1981  CE2 TRP D  87    16825  18158  20886    572   1992    136       C
ATOM   1982  CD2 TRP D  87      85.806  10.047   5.092  1.00145.13           C
ANISOU 1982  CD2 TRP D  87    16762  17856  20526    482   1803    214       C
ATOM   1983  CE3 TRP D  87      86.381  10.305   6.336  1.00152.02           C
ANISOU 1983  CE3 TRP D  87    17619  18683  21459    433   1682    350       C
ATOM   1984  CZ3 TRP D  87      87.137   9.331   6.928  1.00158.46           C
ANISOU 1984  CZ3 TRP D  87    18243  19515  22448    476   1752    403       C
ATOM   1985  CH2 TRP D  87      87.328   8.104   6.317  1.00162.57           C
ANISOU 1985  CH2 TRP D  87    18588  20095  23085    567   1940    323       C
ATOM   1986  CZ2 TRP D  87      86.776   7.818   5.103  1.00155.89           C
ANISOU 1986  CZ2 TRP D  87    17753  19294  22183    616   2063    188       C
ATOM   1987  C   TRP D  87      82.925  13.774   5.651  1.00108.42           C
ANISOU 1987  C   TRP D  87    12877  12955  15363    341   1311    166       C
ATOM   1988  O   TRP D  87      83.147  14.135   6.794  1.00108.42           O
ANISOU 1988  O   TRP D  87    12915  12892  15390    304   1186    263       O
ATOM   1989  N   GLY D  88      82.414  14.592   4.736  1.00 97.55           N
ANISOU 1989  N   GLY D  88    11700  11912  13451   1940     53   -772       N
ATOM   1990  CA  GLY D  88      82.102  15.981   5.027  1.00 91.85           C
ANISOU 1990  CA  GLY D  88    10895  11288  12715   1714    -21   -847       C
ATOM   1991  C   GLY D  88      81.190  16.120   6.235  1.00 91.11           C
ANISOU 1991  C   GLY D  88    10903  11087  12628   1554      3   -878       C
ATOM   1992  O   GLY D  88      81.322  17.063   7.017  1.00 86.90           O
ANISOU 1992  O   GLY D  88    10302  10694  12021   1408    -63   -857       O
ATOM   1993  N   ARG D  89      80.246  15.197   6.373  1.00 91.84           N
ANISOU 1993  N   ARG D  89    11158  10925  12810   1582     97   -929       N
ATOM   1994  CA  ARG D  89      79.345  15.211   7.521  1.00 92.50           C
ANISOU 1994  CA  ARG D  89    11349  10890  12907   1447    131   -952       C
ATOM   1995  CB  ARG D  89      78.153  14.275   7.291  1.00 88.19           C
ANISOU 1995  CB  ARG D  89    10976  10035  12498   1469    234  -1044       C
ATOM   1996  CG  ARG D  89      77.071  14.940   6.440  1.00 82.67           C
ANISOU 1996  CG  ARG D  89    10295   9190  11927   1319    239  -1233       C
ATOM   1997  CD  ARG D  89      76.022  14.004   5.873  1.00 79.90           C
ANISOU 1997  CD  ARG D  89    10096   8540  11723   1365    330  -1328       C
ATOM   1998  NE  ARG D  89      75.083  14.764   5.044  1.00 82.89           N
ANISOU 1998  NE  ARG D  89    10472   8808  12215   1213    322  -1502       N
ATOM   1999  CZ  ARG D  89      73.913  14.313   4.606  1.00 80.87           C
ANISOU 1999  CZ  ARG D  89    10341   8284  12100   1178    388  -1618       C
ATOM   2000  NH1 ARG D  89      73.518  13.087   4.908  1.00 84.48           N
ANISOU 2000  NH1 ARG D  89    10939   8552  12609   1286    466  -1580       N
ATOM   2001  NH2 ARG D  89      73.137  15.098   3.867  1.00 70.19           N
ANISOU 2001  NH2 ARG D  89     8972   6856  10843   1032    373  -1770       N
ATOM   2002  C   ARG D  89      80.113  14.862   8.795  1.00 93.07           C
ANISOU 2002  C   ARG D  89    11416  11098  12849   1508    119   -779       C
ATOM   2003  O   ARG D  89      79.779  15.337   9.886  1.00 85.25           O
ANISOU 2003  O   ARG D  89    10449  10131  11813   1372    103   -767       O
ATOM   2004  N   CYS D  90      81.162  14.058   8.648  1.00 98.09           N
ANISOU 2004  N   CYS D  90    12020  11829  13422   1714    124   -645       N
ATOM   2005  CA  CYS D  90      82.014  13.727   9.783  1.00 97.06           C
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ANISOU 2005  CA  CYS D  90    11870  11846  13163   1784    107   -471       C
ATOM   2006  CB  CYS D  90      82.991  12.600   9.443  1.00109.74           C
ANISOU 2006  CB  CYS D  90    13468  13496  14731   2034    138   -338       C
ATOM   2007  SG  CYS D  90      82.262  10.941   9.466  1.00122.36           S
ANISOU 2007  SG  CYS D  90    15263  14801  16426   2183    269   -343       S
ATOM   2008  C   CYS D  90      82.772  14.967  10.244  1.00 87.56           C
ANISOU 2008  C   CYS D  90    10515  10910  11843   1669     -6   -416       C
ATOM   2009  O   CYS D  90      82.710  15.321  11.423  1.00 88.88           O
ANISOU 2009  O   CYS D  90    10697  11135  11938   1567    -31   -367       O
ATOM   2010  N   VAL D  91      83.468  15.626   9.317  1.00 78.25           N
ANISOU 2010  N   VAL D  91     9195   9889  10648   1686    -75   -425       N
ATOM   2011  CA  VAL D  91      84.207  16.857   9.622  1.00 84.34           C
ANISOU 2011  CA  VAL D  91     9811  10916  11318   1576   -190   -377       C
ATOM   2012  CB  VAL D  91      84.726  17.554   8.345  1.00 77.85           C
ANISOU 2012  CB  VAL D  91     8845  10217  10516   1589   -251   -423       C
ATOM   2013  CG1 VAL D  91      85.494  18.827   8.692  1.00 73.82           C
ANISOU 2013  CG1 VAL D  91     8173   9971   9904   1474   -375   -369       C
ATOM   2014  CG2 VAL D  91      85.597  16.612   7.545  1.00 79.66           C
ANISOU 2014  CG2 VAL D  91     9046  10481  10741   1831   -220   -330       C
ATOM   2015  C   VAL D  91      83.313  17.828  10.395  1.00 85.07           C
ANISOU 2015  C   VAL D  91     9936  10972  11415   1336   -218   -473       C
ATOM   2016  O   VAL D  91      83.753  18.500  11.333  1.00 79.67           O
ANISOU 2016  O   VAL D  91     9193  10452  10625   1246   -290   -399       O
ATOM   2017  N   ALA D  92      82.048  17.882   9.982  1.00 86.26           N
ANISOU 2017  N   ALA D  92    10183  10901  11690   1237   -160   -637       N
ATOM   2018  CA  ALA D  92      81.039  18.733  10.601  1.00 83.63           C
ANISOU 2018  CA  ALA D  92     9898  10497  11383   1013   -169   -744       C
ATOM   2019  CB  ALA D  92      79.725  18.601   9.857  1.00 78.39           C
ANISOU 2019  CB  ALA D  92     9335   9576  10876    946    -95   -919       C
ATOM   2020  C   ALA D  92      80.846  18.405  12.083  1.00 82.98           C
ANISOU 2020  C   ALA D  92     9909  10389  11231    981   -145   -661       C
ATOM   2021  O   ALA D  92      80.848  19.300  12.934  1.00 76.53           O
ANISOU 2021  O   ALA D  92     9060   9681  10339    833   -207   -650       O
ATOM   2022  N   VAL D  93      80.673  17.118  12.376  1.00 82.38           N
ANISOU 2022  N   VAL D  93     9952  10167  11181   1121    -54   -603       N
ATOM   2023  CA  VAL D  93      80.451  16.661  13.739  1.00 83.17           C
ANISOU 2023  CA  VAL D  93    10153  10223  11225   1110    -18   -522       C
ATOM   2024  CB  VAL D  93      80.351  15.135  13.798  1.00 84.51           C
ANISOU 2024  CB  VAL D  93    10442  10230  11439   1295     84   -459       C
ATOM   2025  CG1 VAL D  93      80.183  14.667  15.235  1.00 77.15           C
ANISOU 2025  CG1 VAL D  93     9605   9266  10443   1289    120   -366       C
ATOM   2026  CG2 VAL D  93      79.182  14.659  12.958  1.00 87.79           C
ANISOU 2026  CG2 VAL D  93    10965  10375  12018   1289    169   -605       C
ATOM   2027  C   VAL D  93      81.587  17.135  14.638  1.00 89.09           C
ANISOU 2027  C   VAL D  93    10803  11236  11813   1110   -109   -373       C
ATOM   2028  O   VAL D  93      81.355  17.598  15.761  1.00 96.84           O
ANISOU 2028  O   VAL D  93    11816  12252  12729    990   -132   -351       O
ATOM   2029  N   VAL D  94      82.813  17.060  14.123  1.00 86.30           N
ANISOU 2029  N   VAL D  94    10326  11069  11397   1240   -163   -272       N
ATOM   2030  CA  VAL D  94      83.979  17.512  14.874  1.00 79.96           C
ANISOU 2030  CA  VAL D  94     9413  10524  10442   1248   -258   -123       C
ATOM   2031  CB  VAL D  94      85.306  17.126  14.179  1.00 74.52           C
ANISOU 2031  CB  VAL D  94     8604  10005   9705   1436   -294      1       C
ATOM   2032  CG1 VAL D  94      86.464  17.937  14.734  1.00 58.34           C
ANISOU 2032  CG1 VAL D  94     6411   8240   7515   1402   -415    128       C
ATOM   2033  CG2 VAL D  94      85.562  15.622  14.296  1.00 67.86           C
ANISOU 2033  CG2 VAL D  94     7850   9066   8869   1648   -202    103       C
ATOM   2034  C   VAL D  94      83.902  19.027  15.050  1.00 77.82           C
ANISOU 2034  C   VAL D  94     9051  10386  10130   1039   -361   -189       C
ATOM   2035  O   VAL D  94      84.143  19.537  16.140  1.00 78.38           O
ANISOU 2035  O   VAL D  94     9111  10571  10099    950   -418   -123       O
ATOM   2036  N   VAL D  95      83.523  19.738  13.988  1.00 76.08           N
ANISOU 2036  N   VAL D  95     8772  10142   9992    957   -382   -324       N
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ATOM   2037  CA  VAL D  95      83.410  21.190  14.058  1.00 77.67           C
ANISOU 2037  CA  VAL D  95     8884  10461  10165    757   -478   -398       C
ATOM   2038  CB  VAL D  95      83.051  21.810  12.689  1.00 71.14           C
ANISOU 2038  CB  VAL D  95     7987   9600   9442    700   -491   -543       C
ATOM   2039  CG1 VAL D  95      82.772  23.304  12.827  1.00 65.67           C
ANISOU 2039  CG1 VAL D  95     7219   9003   8729    478   -581   -632       C
ATOM   2040  CG2 VAL D  95      84.168  21.569  11.691  1.00 62.54           C
ANISOU 2040  CG2 VAL D  95     6770   8653   8338    866   -526   -466       C
ATOM   2041  C   VAL D  95      82.367  21.603  15.102  1.00 81.79           C
ANISOU 2041  C   VAL D  95     9519  10871  10687    580   -457   -468       C
ATOM   2042  O   VAL D  95      82.644  22.463  15.948  1.00 75.83           O
ANISOU 2042  O   VAL D  95     8719  10260   9832    461   -540   -429       O
ATOM   2043  N   MET D  96      81.182  20.987  15.049  1.00 87.65           N
ANISOU 2043  N   MET D  96    10407  11357  11539    566   -348   -567       N
ATOM   2044  CA  MET D  96      80.118  21.305  15.998  1.00 86.32           C
ANISOU 2044  CA  MET D  96    10354  11063  11382    408   -314   -635       C
ATOM   2045  CB  MET D  96      78.842  20.490  15.726  1.00 83.72           C
ANISOU 2045  CB  MET D  96    10178  10437  11195    419   -187   -739       C
ATOM   2046  CG  MET D  96      78.193  20.688  14.373  1.00 74.09           C
ANISOU 2046  CG  MET D  96     8945   9092  10115    386   -161   -893       C
ATOM   2047  SD  MET D  96      76.815  19.532  14.121  1.00 85.51           S
ANISOU 2047  SD  MET D  96    10578  10189  11725    429    -13   -986       S
ATOM   2048  CE  MET D  96      77.440  18.395  12.901  1.00 77.41           C
ANISOU 2048  CE  MET D  96     9531   9126  10756    665     25   -949       C
ATOM   2049  C   MET D  96      80.556  21.063  17.438  1.00 74.10           C
ANISOU 2049  C   MET D  96     8848   9600   9705    426   -330   -494       C
ATOM   2050  O   MET D  96      80.442  21.951  18.274  1.00 73.80           O
ANISOU 2050  O   MET D  96     8804   9643   9593    278   -389   -498       O
ATOM   2051  N   VAL D  97      81.055  19.864  17.718  1.00 74.64           N
ANISOU 2051  N   VAL D  97     8963   9650   9748    609   -278   -371       N
ATOM   2052  CA  VAL D  97      81.451  19.505  19.073  1.00 82.82           C
ANISOU 2052  CA  VAL D  97    10048  10753  10668    642   -282   -233       C
ATOM   2053  CB  VAL D  97      81.906  18.022  19.127  1.00 80.47           C
ANISOU 2053  CB  VAL D  97     9806  10398  10373    864   -206   -113       C
ATOM   2054  CG1 VAL D  97      82.688  17.735  20.405  1.00 77.55           C
ANISOU 2054  CG1 VAL D  97     9440  10164   9860    919   -236     56       C
ATOM   2055  CG2 VAL D  97      80.703  17.098  19.035  1.00 79.37           C
ANISOU 2055  CG2 VAL D  97     9825   9970  10361    892    -75   -196       C
ATOM   2056  C   VAL D  97      82.565  20.433  19.582  1.00 78.54           C
ANISOU 2056  C   VAL D  97     9373  10491   9978    592   -416   -133       C
ATOM   2057  O   VAL D  97      82.548  20.863  20.736  1.00 71.74           O
ANISOU 2057  O   VAL D  97     8543   9691   9022    499   -454    -88       O
ATOM   2058  N   ALA D  98      83.488  20.790  18.693  1.00 77.87           N
ANISOU 2058  N   ALA D  98     9140  10571   9877    646   -491   -104       N
ATOM   2059  CA  ALA D  98      84.588  21.685  19.030  1.00 72.69           C
ANISOU 2059  CA  ALA D  98     8343  10183   9091    602   -625     -8       C
ATOM   2060  CB  ALA D  98      85.552  21.800  17.881  1.00 78.44           C
ANISOU 2060  CB  ALA D  98     8918  11057   9828    702   -680     29       C
ATOM   2061  C   ALA D  98      84.083  23.062  19.433  1.00 73.11           C
ANISOU 2061  C   ALA D  98     8378  10284   9118    374   -700   -104       C
ATOM   2062  O   ALA D  98      84.602  23.678  20.358  1.00 81.14           O
ANISOU 2062  O   ALA D  98     9358  11458  10013    302   -789    -25       O
ATOM   2063  N   GLY D  99      83.075  23.552  18.730  1.00 79.63           N
ANISOU 2063  N   GLY D  99     9229  10971  10056    259   -667   -275       N
ATOM   2064  CA  GLY D  99      82.518  24.849  19.053  1.00 76.62           C
ANISOU 2064  CA  GLY D  99     8835  10618   9659     40   -731   -377       C
ATOM   2065  C   GLY D  99      81.739  24.801  20.353  1.00 72.73           C
ANISOU 2065  C   GLY D  99     8487  10020   9128    -51   -687   -382       C
ATOM   2066  O   GLY D  99      81.885  25.679  21.198  1.00 73.65           O
ANISOU 2066  O   GLY D  99     8587  10252   9145   -176   -769   -361       O
ATOM   2067  N   ILE D 100      80.902  23.776  20.504  1.00 70.44           N
ANISOU 2067  N   ILE D 100     8341   9506   8918     14   -560   -409       N
ATOM   2068  CA  ILE D 100      80.080  23.599  21.704  1.00 71.62           C
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ANISOU 2068  CA  ILE D 100     8638   9530   9044    -56   -501   -413       C
ATOM   2069  CB  ILE D 100      79.175  22.353  21.606  1.00 77.04           C
ANISOU 2069  CB  ILE D 100     9470   9957   9846     38   -354   -445       C
ATOM   2070  CG1 ILE D 100      78.289  22.403  20.361  1.00 80.44           C
ANISOU 2070  CG1 ILE D 100     9909  10216  10438     -0   -296   -606       C
ATOM   2071  CD1 ILE D 100      77.497  21.120  20.152  1.00 79.75           C
ANISOU 2071  CD1 ILE D 100     9955   9877  10469    108   -160   -630       C
ATOM   2072  CG2 ILE D 100      78.311  22.230  22.846  1.00 73.67           C
ANISOU 2072  CG2 ILE D 100     9189   9404   9396    -39   -294   -447       C
ATOM   2073  C   ILE D 100      80.921  23.466  22.974  1.00 81.43           C
ANISOU 2073  C   ILE D 100     9885  10927  10130    -13   -554   -249       C
ATOM   2074  O   ILE D 100      80.606  24.064  24.008  1.00 84.65           O
ANISOU 2074  O   ILE D 100    10346  11355  10462   -137   -584   -250       O
ATOM   2075  N   THR D 101      81.994  22.683  22.893  1.00 85.66           N
ANISOU 2075  N   THR D 101    10364  11569  10614    164   -567   -108       N
ATOM   2076  CA  THR D 101      82.863  22.475  24.044  1.00 75.39           C
ANISOU 2076  CA  THR D 101     9061  10417   9166    220   -618     57       C
ATOM   2077  CB  THR D 101      83.932  21.399  23.753  1.00 73.23           C
ANISOU 2077  CB  THR D 101     8735  10222   8869    439   -605    205       C
ATOM   2078  OG1 THR D 101      83.308  20.114  23.634  1.00 71.79           O
ANISOU 2078  OG1 THR D 101     8673   9824   8779    562   -467    195       O
ATOM   2079  CG2 THR D 101      84.933  21.340  24.885  1.00 94.38           C
ANISOU 2079  CG2 THR D 101    11388  13084  11390    483   -676    378       C
ATOM   2080  C   THR D 101      83.552  23.767  24.453  1.00 73.70           C
ANISOU 2080  C   THR D 101     8738  10433   8832     92   -767     89       C
ATOM   2081  O   THR D 101      83.499  24.160  25.614  1.00 85.30           O
ANISOU 2081  O   THR D 101    10261  11949  10202      7   -804    129       O
ATOM   2082  N   SER D 102      84.170  24.438  23.492  1.00 69.73           N
ANISOU 2082  N   SER D 102     8086  10069   8341     77   -851     68       N
ATOM   2083  CA  SER D 102      84.874  25.686  23.765  1.00 79.09           C
ANISOU 2083  CA  SER D 102     9153  11477   9420    -42  -1001     98       C
ATOM   2084  CB  SER D 102      85.443  26.268  22.469  1.00 81.33           C
ANISOU 2084  CB  SER D 102     9273  11879   9751    -37  -1071     62       C
ATOM   2085  OG  SER D 102      86.363  25.365  21.881  1.00 87.33           O
ANISOU 2085  OG  SER D 102     9963  12702  10517    162  -1055    175       O
ATOM   2086  C   SER D 102      83.996  26.736  24.451  1.00 75.18           C
ANISOU 2086  C   SER D 102     8725  10937   8902   -254  -1030    -10       C
ATOM   2087  O   SER D 102      84.368  27.292  25.481  1.00 79.00           O
ANISOU 2087  O   SER D 102     9212  11544   9261   -328  -1113     59       O
ATOM   2088  N   PHE D 103      82.835  27.013  23.877  1.00 78.96           N
ANISOU 2088  N   PHE D 103     9260  11241   9501   -353   -962   -177       N
ATOM   2089  CA  PHE D 103      81.953  28.005  24.464  1.00 81.81           C
ANISOU 2089  CA  PHE D 103     9686  11551   9848   -553   -981   -285       C
ATOM   2090  CB  PHE D 103      80.768  28.297  23.530  1.00 88.28           C
ANISOU 2090  CB  PHE D 103    10536  12186  10819   -647   -908   -471       C
ATOM   2091  CG  PHE D 103      81.113  29.189  22.355  1.00 79.61           C
ANISOU 2091  CG  PHE D 103     9284  11198   9767   -707   -991   -546       C
ATOM   2092  CD1 PHE D 103      81.223  30.564  22.520  1.00 79.71           C
ANISOU 2092  CD1 PHE D 103     9222  11345   9720   -877  -1106   -593       C
ATOM   2093  CE1 PHE D 103      81.529  31.391  21.450  1.00 78.11           C
ANISOU 2093  CE1 PHE D 103     8874  11242   9560   -934  -1181   -660       C
ATOM   2094  CZ  PHE D 103      81.713  30.847  20.196  1.00 87.74           C
ANISOU 2094  CZ  PHE D 103    10026  12427  10883   -818  -1139   -683       C
ATOM   2095  CE2 PHE D 103      81.595  29.482  20.014  1.00 87.90           C
ANISOU 2095  CE2 PHE D 103    10126  12312  10961   -647  -1024   -640       C
ATOM   2096  CD2 PHE D 103      81.292  28.661  21.086  1.00 84.12           C
ANISOU 2096  CD2 PHE D 103     9788  11732  10441   -594   -951   -572       C
ATOM   2097  C   PHE D 103      81.459  27.533  25.826  1.00 78.63           C
ANISOU 2097  C   PHE D 103     9440  11053   9382   -559   -921   -235       C
ATOM   2098  O   PHE D 103      81.191  28.335  26.718  1.00 76.67           O
ANISOU 2098  O   PHE D 103     9236  10841   9053   -696   -971   -252       O
ATOM   2099  N   GLY D 104      81.358  26.223  25.987  1.00 81.07           N
ANISOU 2099  N   GLY D 104     9835  11243   9727   -404   -814   -170       N
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ATOM   2100  CA  GLY D 104      80.916  25.655  27.244  1.00 79.43           C
ANISOU 2100  CA  GLY D 104     9774  10940   9465   -390   -748   -114       C
ATOM   2101  C   GLY D 104      81.936  25.916  28.329  1.00 89.12           C
ANISOU 2101  C   GLY D 104    10970  12373  10520   -380   -853     35       C
ATOM   2102  O   GLY D 104      81.615  26.134  29.502  1.00 88.77           O
ANISOU 2102  O   GLY D 104    11022  12316  10392   -452   -856     58       O
ATOM   2103  N   LEU D 105      83.197  25.859  27.937  1.00 90.63           N
ANISOU 2103  N   LEU D 105    11023  12755  10655   -284   -939    144       N
ATOM   2104  CA  LEU D 105      84.275  26.100  28.874  1.00 80.13           C
ANISOU 2104  CA  LEU D 105     9647  11634   9164   -268  -1049    295       C
ATOM   2105  CB  LEU D 105      85.579  25.597  28.258  1.00 75.93           C
ANISOU 2105  CB  LEU D 105     8978  11262   8611   -107  -1099    425       C
ATOM   2106  CG  LEU D 105      86.910  25.966  28.921  1.00 88.55           C
ANISOU 2106  CG  LEU D 105    10479  13113  10054    -87  -1238    588       C
ATOM   2107  CD1 LEU D 105      88.027  25.000  28.586  1.00 88.31           C
ANISOU 2107  CD1 LEU D 105    10367  13180  10006    116  -1235    743       C
ATOM   2108  CD2 LEU D 105      87.378  27.359  28.602  1.00 90.56           C
ANISOU 2108  CD2 LEU D 105    10600  13544  10263   -226  -1387    554       C
ATOM   2109  C   LEU D 105      84.378  27.591  29.247  1.00 81.46           C
ANISOU 2109  C   LEU D 105     9763  11942   9248   -458  -1184    251       C
ATOM   2110  O   LEU D 105      84.522  27.936  30.411  1.00100.28           O
ANISOU 2110  O   LEU D 105    12200  14393  11510   -518  -1238    312       O
ATOM   2111  N   VAL D 106      84.243  28.467  28.261  1.00 80.72           N
ANISOU 2111  N   VAL D 106     9571  11879   9220   -554  -1233    139       N
ATOM   2112  CA  VAL D 106      84.283  29.911  28.482  1.00 86.23           C
ANISOU 2112  CA  VAL D 106    10213  12698   9852   -738  -1359     82       C
ATOM   2113  CB  VAL D 106      84.131  30.666  27.158  1.00 86.66           C
ANISOU 2113  CB  VAL D 106    10151  12769  10009   -812  -1392    -43       C
ATOM   2114  CG1 VAL D 106      84.005  32.157  27.389  1.00 77.28           C
ANISOU 2114  CG1 VAL D 106     8920  11679   8765  -1014  -1510   -118       C
ATOM   2115  CG2 VAL D 106      85.321  30.368  26.274  1.00 84.74           C
ANISOU 2115  CG2 VAL D 106     9747  12680   9771   -677  -1448     54       C
ATOM   2116  C   VAL D 106      83.163  30.283  29.466  1.00 90.04           C
ANISOU 2116  C   VAL D 106    10854  13045  10311   -875  -1313     -1       C
ATOM   2117  O   VAL D 106      83.269  31.234  30.254  1.00 86.95           O
ANISOU 2117  O   VAL D 106    10470  12753   9813  -1003  -1410      4       O
ATOM   2118  N   THR D 107      82.087  29.518  29.406  1.00 88.44           N
ANISOU 2118  N   THR D 107    10779  12611  10212   -843  -1162    -74       N
ATOM   2119  CA  THR D 107      80.992  29.695  30.333  1.00 89.75           C
ANISOU 2119  CA  THR D 107    11103  12631  10366   -948  -1098   -141       C
ATOM   2120  CB  THR D 107      79.730  28.943  29.863  1.00 94.19           C
ANISOU 2120  CB  THR D 107    11775  12926  11085   -923   -932   -249       C
ATOM   2121  OG1 THR D 107      79.326  29.465  28.598  1.00 93.26           O
ANISOU 2121  OG1 THR D 107    11580  12764  11089   -991   -931   -386       O
ATOM   2122  CG2 THR D 107      78.561  29.110  30.810  1.00 92.09           C
ANISOU 2122  CG2 THR D 107    11674  12502  10814  -1028   -858   -313       C
ATOM   2123  C   THR D 107      81.454  29.238  31.700  1.00 97.14           C
ANISOU 2123  C   THR D 107    12119  13627  11164   -887  -1112      4       C
ATOM   2124  O   THR D 107      81.200  29.879  32.697  1.00103.59           O
ANISOU 2124  O   THR D 107    13007  14465  11885   -996  -1153      1       O
ATOM   2125  N   ALA D 108      82.143  28.112  31.729  1.00100.48           N
ANISOU 2125  N   ALA D 108    12528  14073  11575   -707  -1077    132       N
ATOM   2126  CA  ALA D 108      82.630  27.545  32.987  1.00107.87           C
ANISOU 2126  CA  ALA D 108    13537  15064  12386   -630  -1083    280       C
ATOM   2127  CB  ALA D 108      83.318  26.211  32.736  1.00116.72           C
ANISOU 2127  CB  ALA D 108    14631  16189  13529   -420  -1026    405       C
ATOM   2128  C   ALA D 108      83.581  28.507  33.703  1.00104.36           C
ANISOU 2128  C   ALA D 108    13022  14853  11778   -707  -1249    364       C
ATOM   2129  O   ALA D 108      83.423  28.773  34.898  1.00104.58           O
ANISOU 2129  O   ALA D 108    13146  14892  11697   -769  -1273    399       O
ATOM   2130  N   ALA D 109      84.552  29.034  32.956  1.00 97.87           N
ANISOU 2130  N   ALA D 109    12034  14212  10941   -705  -1366    396       N
ATOM   2131  CA  ALA D 109      85.522  29.979  33.498  1.00103.59           C
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ANISOU 2131  CA  ALA D 109    12673  15166  11522   -778  -1536    478       C
ATOM   2132  CB  ALA D 109      86.444  30.486  32.408  1.00105.89           C
ANISOU 2132  CB  ALA D 109    12772  15625  11837   -768  -1642    494       C
ATOM   2133  C   ALA D 109      84.802  31.140  34.171  1.00104.83           C
ANISOU 2133  C   ALA D 109    12905  15302  11624   -975  -1586    377       C
ATOM   2134  O   ALA D 109      85.239  31.641  35.204  1.00115.16           O
ANISOU 2134  O   ALA D 109    14239  16727  12791  -1031  -1684    451       O
ATOM   2135  N   LEU D 110      83.698  31.565  33.569  1.00102.48           N
ANISOU 2135  N   LEU D 110    12645  14855  11439  -1079  -1519    208       N
ATOM   2136  CA  LEU D 110      82.879  32.631  34.126  1.00106.54           C
ANISOU 2136  CA  LEU D 110    13239  15324  11916  -1265  -1546     98       C
ATOM   2137  CB  LEU D 110      81.798  33.058  33.135  1.00102.34           C
ANISOU 2137  CB  LEU D 110    12708  14642  11534  -1363  -1475    -85       C
ATOM   2138  CG  LEU D 110      82.244  33.864  31.923  1.00 96.14           C
ANISOU 2138  CG  LEU D 110    11752  13972  10806  -1419  -1567   -148       C
ATOM   2139  CD1 LEU D 110      81.041  34.145  31.041  1.00103.01           C
ANISOU 2139  CD1 LEU D 110    12649  14663  11829  -1509  -1474   -330       C
ATOM   2140  CD2 LEU D 110      82.901  35.166  32.367  1.00 88.84           C
ANISOU 2140  CD2 LEU D 110    10753  13249   9755  -1552  -1743   -126       C
ATOM   2141  C   LEU D 110      82.236  32.230  35.450  1.00110.39           C
ANISOU 2141  C   LEU D 110    13910  15699  12336  -1268  -1471    126       C
ATOM   2142  O   LEU D 110      82.070  33.067  36.337  1.00114.47           O
ANISOU 2142  O   LEU D 110    14488  16259  12747  -1390  -1539    113       O
ATOM   2143  N   ALA D 111      81.844  30.964  35.569  1.00106.88           N
ANISOU 2143  N   ALA D 111    13554  15104  11952  -1134  -1330    163       N
ATOM   2144  CA  ALA D 111      81.219  30.480  36.795  1.00111.84           C
ANISOU 2144  CA  ALA D 111    14355  15616  12524  -1122  -1247    196       C
ATOM   2145  CB  ALA D 111      80.636  29.096  36.577  1.00105.09           C
ANISOU 2145  CB  ALA D 111    13579  14567  11784   -980  -1078    204       C
ATOM   2146  C   ALA D 111      82.230  30.468  37.947  1.00123.69           C
ANISOU 2146  C   ALA D 111    15861  17288  13846  -1080  -1349    357       C
ATOM   2147  O   ALA D 111      81.927  30.902  39.060  1.00123.91           O
ANISOU 2147  O   ALA D 111    15997  17314  13769  -1159  -1371    364       O
ATOM   2148  N   THR D 112      83.411  29.956  37.683  1.00123.03           N
ANISOU 2148  N   THR D 112    15666  17349  13729   -954  -1407    486       N
ATOM   2149  CA  THR D 112      84.387  29.885  38.731  1.00120.26           C
ANISOU 2149  CA  THR D 112    15316  17159  13217   -909  -1502    644       C
ATOM   2150  CB  THR D 112      85.682  29.238  38.226  1.00119.10           C
ANISOU 2150  CB  THR D 112    15029  17162  13060   -757  -1553    785       C
ATOM   2151  OG1 THR D 112      85.366  28.130  37.391  1.00120.92           O
ANISOU 2151  OG1 THR D 112    15258  17255  13431   -623  -1415    767       O
ATOM   2152  CG2 THR D 112      86.499  28.736  39.359  1.00125.88           C
ANISOU 2152  CG2 THR D 112    15922  18128  13778   -670  -1597    958       C
ATOM   2153  C   THR D 112      84.664  31.300  39.200  1.00123.55           C
ANISOU 2153  C   THR D 112    15705  17722  13518  -1075  -1660    620       C
ATOM   2154  O   THR D 112      84.776  31.557  40.385  1.00137.83           O
ANISOU 2154  O   THR D 112    17598  19578  15192  -1115  -1711    680       O
ATOM   2155  N   TRP D 113      84.744  32.235  38.269  1.00124.27           N
ANISOU 2155  N   TRP D 113    15678  17875  13660  -1175  -1738    528       N
ATOM   2156  CA  TRP D 113      85.060  33.601  38.627  1.00126.01           C
ANISOU 2156  CA  TRP D 113    15859  18243  13775  -1333  -1897    506       C
ATOM   2157  CB  TRP D 113      85.045  34.452  37.360  1.00133.69           C
ANISOU 2157  CB  TRP D 113    16693  19259  14843  -1422  -1953    393       C
ATOM   2158  CG  TRP D 113      85.395  35.881  37.548  1.00137.18           C
ANISOU 2158  CG  TRP D 113    17073  19853  15195  -1584  -2121    362       C
ATOM   2159  CD1 TRP D 113      86.291  36.390  38.424  1.00139.34           C
ANISOU 2159  CD1 TRP D 113    17328  20304  15312  -1615  -2270    475       C
ATOM   2160  NE1 TRP D 113      86.364  37.745  38.290  1.00142.93           N
ANISOU 2160  NE1 TRP D 113    17722  20858  15729  -1778  -2403    403       N
ATOM   2161  CE2 TRP D 113      85.510  38.136  37.296  1.00141.04           C
ANISOU 2161  CE2 TRP D 113    17457  20508  15626  -1855  -2337    241       C
ATOM   2162  CD2 TRP D 113      84.894  36.986  36.799  1.00133.07           C
ANISOU 2162  CD2 TRP D 113    16496  19324  14742  -1736  -2162    212       C
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ATOM   2163  CE3 TRP D 113      83.971  37.113  35.767  1.00126.86           C
ANISOU 2163  CE3 TRP D 113    15696  18396  14108  -1785  -2067     57       C
ATOM   2164  CZ3 TRP D 113      83.702  38.365  35.273  1.00128.11           C
ANISOU 2164  CZ3 TRP D 113    15792  18594  14290  -1948  -2147    -63       C
ATOM   2165  CH2 TRP D 113      84.328  39.488  35.784  1.00130.23           C
ANISOU 2165  CH2 TRP D 113    16012  19037  14432  -2062  -2320    -32       C
ATOM   2166  CZ2 TRP D 113      85.237  39.398  36.794  1.00137.38           C
ANISOU 2166  CZ2 TRP D 113    16931  20082  15187  -2018  -2419    119       C
ATOM   2167  C   TRP D 113      84.046  34.161  39.573  1.00123.97           C
ANISOU 2167  C   TRP D 113    15763  17875  13464  -1461  -1866    420       C
ATOM   2168  O   TRP D 113      84.407  34.734  40.586  1.00132.13           O
ANISOU 2168  O   TRP D 113    16841  19011  14351  -1524  -1969    478       O
ATOM   2169  N   PHE D 114      82.777  33.975  39.268  1.00125.88           N
ANISOU 2169  N   PHE D 114    16099  17907  13823  -1496  -1724    288       N
ATOM   2170  CA  PHE D 114      81.767  34.484  40.154  1.00131.38           C
ANISOU 2170  CA  PHE D 114    16953  18490  14474  -1613  -1684    209       C
ATOM   2171  CB  PHE D 114      80.395  34.382  39.505  1.00131.29           C
ANISOU 2171  CB  PHE D 114    17008  18255  14622  -1661  -1535     50       C
ATOM   2172  CG  PHE D 114      80.263  35.228  38.280  1.00122.12           C
ANISOU 2172  CG  PHE D 114    15723  17118  13560  -1763  -1581    -75       C
ATOM   2173  CD1 PHE D 114      81.133  36.268  38.056  1.00128.43           C
ANISOU 2173  CD1 PHE D 114    16393  18120  14285  -1845  -1753    -62       C
ATOM   2174  CE1 PHE D 114      81.008  37.063  36.939  1.00131.62           C
ANISOU 2174  CE1 PHE D 114    16681  18548  14779  -1940  -1796   -176       C
ATOM   2175  CZ  PHE D 114      80.002  36.829  36.040  1.00131.41           C
ANISOU 2175  CZ  PHE D 114    16671  18343  14918  -1954  -1668   -307       C
ATOM   2176  CE2 PHE D 114      79.115  35.799  36.258  1.00131.84           C
ANISOU 2176  CE2 PHE D 114    16856  18189  15046  -1875  -1498   -321       C
ATOM   2177  CD2 PHE D 114      79.248  35.006  37.374  1.00127.40           C
ANISOU 2177  CD2 PHE D 114    16407  17605  14395  -1779  -1456   -205       C
ATOM   2178  C   PHE D 114      81.868  33.751  41.477  1.00131.66           C
ANISOU 2178  C   PHE D 114    17120  18506  14398  -1527  -1645    330       C
ATOM   2179  O   PHE D 114      81.836  34.360  42.530  1.00136.37           O
ANISOU 2179  O   PHE D 114    17803  19148  14863  -1608  -1710    349       O
ATOM   2180  N   VAL D 115      82.010  32.437  41.422  1.00131.06           N
ANISOU 2180  N   VAL D 115    17060  18365  14372  -1361  -1541    414       N
ATOM   2181  CA  VAL D 115      82.126  31.667  42.640  1.00137.50           C
ANISOU 2181  CA  VAL D 115    17995  19161  15089  -1269  -1499    534       C
ATOM   2182  CB  VAL D 115      82.093  30.175  42.346  1.00133.66           C
ANISOU 2182  CB  VAL D 115    17521  18566  14697  -1088  -1360    600       C
ATOM   2183  CG1 VAL D 115      82.277  29.381  43.619  1.00139.31           C
ANISOU 2183  CG1 VAL D 115    18352  19273  15306   -990  -1321    732       C
ATOM   2184  CG2 VAL D 115      80.793  29.812  41.678  1.00125.77           C
ANISOU 2184  CG2 VAL D 115    16588  17333  13868  -1100  -1200    463       C
ATOM   2185  C   VAL D 115      83.413  31.985  43.362  1.00144.81           C
ANISOU 2185  C   VAL D 115    18864  20312  15845  -1254  -1661    678       C
ATOM   2186  O   VAL D 115      83.433  32.140  44.567  1.00152.60           O
ANISOU 2186  O   VAL D 115    19957  21324  16699  -1279  -1693    736       O
ATOM   2187  N   GLY D 116      84.496  32.084  42.610  1.00144.75           N
ANISOU 2187  N   GLY D 116    18686  20469  15841  -1213  -1765    740       N
ATOM   2188  CA  GLY D 116      85.797  32.360  43.180  1.00139.37           C
ANISOU 2188  CA  GLY D 116    17932  20010  15011  -1194  -1925    886       C
ATOM   2189  C   GLY D 116      85.930  33.699  43.856  1.00141.60           C
ANISOU 2189  C   GLY D 116    18235  20404  15164  -1357  -2076    860       C
ATOM   2190  O   GLY D 116      86.558  33.812  44.891  1.00156.97           O
ANISOU 2190  O   GLY D 116    20220  22461  16961  -1353  -2168    971       O
ATOM   2191  N   ARG D 117      85.282  34.702  43.286  1.00137.60           N
ANISOU 2191  N   ARG D 117    17710  19858  14715  -1503  -2097    708       N
ATOM   2192  CA  ARG D 117      85.298  36.031  43.855  1.00134.82           C
ANISOU 2192  CA  ARG D 117    17382  19595  14249  -1669  -2235    664       C
ATOM   2193  CB  ARG D 117      85.282  37.094  42.767  1.00126.17           C
ANISOU 2193  CB  ARG D 117    16156  18556  13228  -1792  -2316    548       C
ATOM   2194  C   ARG D 117      84.086  36.209  44.726  1.00135.88           C
ANISOU 2194  C   ARG D 117    19595  14249  14249  -1669  -2235    664       C
ATOM   2195  CB  ARG D 117      84.086  36.209  44.726  1.00135.88           C
ANISOU 2195  CB  ARG D 117    19595  14249  14249  -1669  -2235    664       C
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ANISOU 2194  C   ARG D 117    17711  19563  14355  -1746  -2142    576       C
ATOM   2195  O   ARG D 117      83.756  37.319  45.096  1.00133.05           O
ANISOU 2195  O   ARG D 117    17398  19225  13931  -1895  -2219    499       O
ATOM   2196  N   GLU D 118      83.398  35.121  45.030  1.00137.90           N
ANISOU 2196  N   GLU D 118    18082  19650  14665  -1643  -1973    586       N
ATOM   2197  CA  GLU D 118      82.242  35.227  45.890  1.00140.88           C
ANISOU 2197  CA  GLU D 118    18646  19865  15016  -1705  -1876    515       C
ATOM   2198  CB  GLU D 118      81.066  34.416  45.384  1.00146.78           C
ANISOU 2198  CB  GLU D 118    19463  20380  15928  -1654  -1674    426       C
ATOM   2199  CG  GLU D 118      79.897  34.400  46.359  1.00146.83           C
ANISOU 2199  CG  GLU D 118    19667  20216  15905  -1699  -1564    374       C
ATOM   2200  CD  GLU D 118      79.278  35.767  46.554  1.00145.55           C
ANISOU 2200  CD  GLU D 118    19556  20047  15699  -1886  -1625    250       C
ATOM   2201  OE1 GLU D 118      79.586  36.668  45.764  1.00141.34           O
ANISOU 2201  OE1 GLU D 118    18901  19610  15192  -1983  -1729    182       O
ATOM   2202  OE2 GLU D 118      78.480  35.944  47.494  1.00161.73           O
ANISOU 2202  OE2 GLU D 118    21766  21994  17688  -1934  -1566    222       O
ATOM   2203  C   GLU D 118      82.589  34.762  47.263  1.00154.40           C
ANISOU 2203  C   GLU D 118    20473  21613  16579  -1636  -1888    647       C
ATOM   2204  O   GLU D 118      82.227  35.392  48.231  1.00166.72           O
ANISOU 2204  O   GLU D 118    22154  23164  18028  -1725  -1922    627       O
ATOM   2205  N   GLN D 119      83.281  33.656  47.361  1.00153.92           N
ANISOU 2205  N   GLN D 119    20379  21590  16515  -1476  -1857    782       N
ATOM   2206  CA  GLN D 119      83.633  33.161  48.660  1.00162.92           C
ANISOU 2206  CA  GLN D 119    21623  22764  17514  -1405  -1865    913       C
ATOM   2207  CB  GLN D 119      84.366  31.834  48.528  1.00165.99           C
ANISOU 2207  CB  GLN D 119    21954  23182  17932  -1217  -1814   1054       C
ATOM   2208  CG  GLN D 119      84.209  30.902  49.710  1.00171.02           C
ANISOU 2208  CG  GLN D 119    22734  23750  18494  -1113  -1726   1156       C
ATOM   2209  CD  GLN D 119      84.625  29.486  49.379  1.00172.65           C
ANISOU 2209  CD  GLN D 119    22892  23930  18776   -926  -1630   1261       C
ATOM   2210  OE1 GLN D 119      85.253  29.238  48.352  1.00169.26           O
ANISOU 2210  OE1 GLN D 119    22314  23569  18427   -869  -1655   1282       O
ATOM   2211  NE2 GLN D 119      84.275  28.547  50.249  1.00173.11           N
ANISOU 2211  NE2 GLN D 119    23078  23888  18807   -828  -1518   1330       N
ATOM   2212  C   GLN D 119      84.513  34.191  49.337  1.00169.64           C
ANISOU 2212  C   GLN D 119    22449  23815  18193  -1496  -2066    972       C
ATOM   2213  O   GLN D 119      84.441  34.393  50.541  1.00178.79           O
ANISOU 2213  O   GLN D 119    23735  24983  19213  -1523  -2097   1016       O
ATOM   2214  N   GLU D 120      85.363  34.842  48.564  1.00163.60           N
ANISOU 2214  N   GLU D 120    21518  23210  17434  -1543  -2207    978       N
ATOM   2215  CA  GLU D 120      86.295  35.777  49.151  1.00162.00           C
ANISOU 2215  CA  GLU D 120    21276  23205  17073  -1623  -2409   1048       C
ATOM   2216  CB  GLU D 120      87.043  36.554  48.072  1.00152.75           C
ANISOU 2216  CB  GLU D 120    19909  22184  15946  -1686  -2547   1026       C
ATOM   2217  C   GLU D 120      85.454  36.715  50.007  1.00171.33           C
ANISOU 2217  C   GLU D 120    22612  24319  18165  -1767  -2426    951       C
ATOM   2218  O   GLU D 120      85.839  37.068  51.108  1.00185.53           O
ANISOU 2218  O   GLU D 120    24490  26200  19803  -1796  -2524   1024       O
ATOM   2219  N   ARG D 121      84.292  37.107  49.507  1.00166.94           N
ANISOU 2219  N   ARG D 121    22105  23609  17714  -1855  -2329    788       N
ATOM   2220  CA  ARG D 121      83.410  37.979  50.264  1.00169.97           C
ANISOU 2220  CA  ARG D 121    22641  23917  18025  -1989  -2330    690       C
ATOM   2221  CB  ARG D 121      82.205  38.409  49.434  1.00164.42           C
ANISOU 2221  CB  ARG D 121    21951  23054  17467  -2084  -2225    509       C
ATOM   2222  C   ARG D 121      82.958  37.254  51.517  1.00175.82           C
ANISOU 2222  C   ARG D 121    23566  24556  18683  -1913  -2229    755       C
ATOM   2223  O   ARG D 121      82.837  37.844  52.584  1.00185.34           O
ANISOU 2223  O   ARG D 121    24894  25781  19744  -1982  -2290    763       O
ATOM   2224  N   ARG D 122      82.698  35.963  51.378  1.00174.33           N
ANISOU 2224  N   ARG D 122    23398  24254  18586  -1768  -2072    801       N
ATOM   2225  CA  ARG D 122      82.260  35.160  52.509  1.00180.34           C
ANISOU 2225  CA  ARG D 122    24326  24912  19283  -1682  -1963    869       C
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ATOM   2226  CB  ARG D 122      80.953  34.443  52.181  1.00178.72           C
ANISOU 2226  CB  ARG D 122    24206  24468  19230  -1642  -1747    778       C
ATOM   2227  C   ARG D 122      83.324  34.144  52.912  1.00184.21           C
ANISOU 2227  C   ARG D 122    24773  25506  19712  -1525  -1987   1049       C
ATOM   2228  O   ARG D 122      84.268  34.464  53.636  1.00185.10           O
ANISOU 2228  O   ARG D 122    24877  25782  19672  -1530  -2133   1155       O
TER
HETATM 2229  O   HOH D1001      74.203  26.458   7.232  1.00 77.55           O
HETATM 2230  O   HOH D1002      77.192  25.300  25.717  1.00 72.41           O
HETATM 2231  O   HOH D1003      75.741  27.014  22.400  1.00 72.64           O
TER
ATOM   2232  N   SER E  22      88.511  10.203  39.520  1.00171.95           N
ANISOU 2232  N   SER E  22    22805  22494  20035   -660  -1614   2742       N
ATOM   2233  CA  SER E  22      87.297   9.401  39.418  1.00172.99           C
ANISOU 2233  CA  SER E  22    23179  22414  20135   -818  -1680   2762       C
ATOM   2234  CB  SER E  22      87.621   7.920  39.612  1.00180.59           C
ANISOU 2234  CB  SER E  22    24457  23214  20945   -674  -1776   2796       C
ATOM   2235  C   SER E  22      86.182   9.851  40.374  1.00167.83           C
ANISOU 2235  C   SER E  22    22451  21758  19559  -1109  -1664   2774       C
ATOM   2236  O   SER E  22      85.571   9.045  41.061  1.00172.33           O
ANISOU 2236  O   SER E  22    23216  22191  20071  -1209  -1726   2805       O
ATOM   2237  N   ALA E  23      85.919  11.149  40.392  1.00158.05           N
ANISOU 2237  N   ALA E  23    20930  20669  18453  -1244  -1579   2748       N
ATOM   2238  CA  ALA E  23      84.882  11.738  41.223  1.00148.05           C
ANISOU 2238  CA  ALA E  23    19557  19419  17275  -1523  -1552   2755       C
ATOM   2239  CB  ALA E  23      85.131  13.219  41.411  1.00138.53           C
ANISOU 2239  CB  ALA E  23    17999  18436  16201  -1589  -1447   2728       C
ATOM   2240  C   ALA E  23      83.571  11.517  40.513  1.00142.25           C
ANISOU 2240  C   ALA E  23    18953  18521  16575  -1697  -1577   2750       C
ATOM   2241  O   ALA E  23      83.546  10.903  39.467  1.00149.28           O
ANISOU 2241  O   ALA E  23    20009  19294  17415  -1592  -1615   2741       O
ATOM   2242  N   LEU E  24      82.478  11.997  41.074  1.00135.44           N
ANISOU 2242  N   LEU E  24    18018  17645  15797  -1962  -1556   2754       N
ATOM   2243  CA  LEU E  24      81.199  11.819  40.421  1.00120.11           C
ANISOU 2243  CA  LEU E  24    16191  15551  13892  -2136  -1578   2745       C
ATOM   2244  CB  LEU E  24      80.061  12.282  41.329  1.00115.26           C
ANISOU 2244  CB  LEU E  24    15502  14928  13363  -2431  -1560   2756       C
ATOM   2245  CG  LEU E  24      78.686  12.383  40.672  1.00101.30           C
ANISOU 2245  CG  LEU E  24    13788  13037  11664  -2640  -1565   2741       C
ATOM   2246  CD1 LEU E  24      78.326  11.050  40.066  1.00106.54           C
ANISOU 2246  CD1 LEU E  24    14781  13476  12224  -2577  -1657   2747       C
ATOM   2247  CD2 LEU E  24      77.596  12.846  41.615  1.00108.16           C
ANISOU 2247  CD2 LEU E  24    14579  13900  12617  -2930  -1545   2752       C
ATOM   2248  C   LEU E  24      81.054  12.537  39.099  1.00121.53           C
ANISOU 2248  C   LEU E  24    16248  15776  14151  -2118  -1527   2707       C
ATOM   2249  O   LEU E  24      80.531  11.966  38.153  1.00129.95           O
ANISOU 2249  O   LEU E  24    17490  16696  15188  -2109  -1570   2697       O
ATOM   2250  N   HIS E  25      81.492  13.787  39.023  1.00122.17           N
ANISOU 2250  N   HIS E  25    16031  16056  14332  -2115  -1434   2685       N
ATOM   2251  CA  HIS E  25      81.279  14.530  37.792  1.00114.93           C
ANISOU 2251  CA  HIS E  25    14989  15183  13496  -2113  -1379   2650       C
ATOM   2252  CB  HIS E  25      81.565  16.009  37.967  1.00114.90           C
ANISOU 2252  CB  HIS E  25    14636  15400  13621  -2168  -1267   2629       C
ATOM   2253  CG  HIS E  25      82.964  16.310  38.386  1.00122.79           C
ANISOU 2253  CG  HIS E  25    15491  16566  14598  -1970  -1228   2627       C
ATOM   2254  ND1 HIS E  25      83.415  16.098  39.670  1.00129.04           N
ANISOU 2254  ND1 HIS E  25    16273  17408  15348  -1967  -1246   2650       N
ATOM   2255  CE1 HIS E  25      84.680  16.457  39.753  1.00128.48           C
ANISOU 2255  CE1 HIS E  25    16059  17491  15267  -1771  -1205   2638       C
ATOM   2256  NE2 HIS E  25      85.068  16.885  38.568  1.00119.60           N
ANISOU 2256  NE2 HIS E  25    14853  16414  14176  -1647  -1159   2609       N
ATOM   2257  CD2 HIS E  25      84.013  16.804  37.696  1.00121.99           C
ANISOU 2257  CD2 HIS E  25    15249  16591  14509  -1766  -1173   2603       C
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ATOM   2258  C   HIS E  25      81.952  13.997  36.563  1.00115.77           C
ANISOU 2258  C   HIS E  25    15219  15239  13531  -1872  -1404   2635       C
ATOM   2259  O   HIS E  25      81.297  13.853  35.553  1.00122.87           O
ANISOU 2259  O   HIS E  25    16206  16037  14441  -1905  -1420   2619       O
ATOM   2260  N   TRP E  26      83.225  13.656  36.631  1.00114.60           N
ANISOU 2260  N   TRP E  26    15087  15150  13304  -1629  -1413   2640       N
ATOM   2261  CA  TRP E  26      83.876  13.096  35.460  1.00114.20           C
ANISOU 2261  CA  TRP E  26    15166  15044  13180  -1395  -1440   2627       C
ATOM   2262  CB  TRP E  26      85.382  12.970  35.612  1.00125.40           C
ANISOU 2262  CB  TRP E  26    16541  16571  14534  -1132  -1431   2630       C
ATOM   2263  CG  TRP E  26      86.133  14.175  35.108  1.00127.76           C
ANISOU 2263  CG  TRP E  26    16550  17069  14923  -1038  -1328   2598       C
ATOM   2264  CD1 TRP E  26      85.843  15.480  35.345  1.00125.19           C
ANISOU 2264  CD1 TRP E  26    15938  16897  14733  -1188  -1234   2580       C
ATOM   2265  NE1 TRP E  26      86.752  16.291  34.730  1.00123.88           N
ANISOU 2265  NE1 TRP E  26    15566  16885  14617  -1034  -1154   2552       N
ATOM   2266  CE2 TRP E  26      87.662  15.507  34.080  1.00137.55           C
ANISOU 2266  CE2 TRP E  26    17452  18566  16246   -778  -1197   2551       C
ATOM   2267  CD2 TRP E  26      87.302  14.172  34.300  1.00134.32           C
ANISOU 2267  CD2 TRP E  26    17352  17965  15718   -774  -1306   2580       C
ATOM   2268  CE3 TRP E  26      88.084  13.165  33.742  1.00141.21           C
ANISOU 2268  CE3 TRP E  26    18431  18750  16470   -533  -1368   2586       C
ATOM   2269  CZ3 TRP E  26      89.173  13.518  32.992  1.00144.85           C
ANISOU 2269  CZ3 TRP E  26    18787  19316  16934   -310  -1319   2563       C
ATOM   2270  CH2 TRP E  26      89.508  14.856  32.788  1.00147.49           C
ANISOU 2270  CH2 TRP E  26    18812  19839  17388   -318  -1209   2534       C
ATOM   2271  CZ2 TRP E  26      88.766  15.863  33.327  1.00146.03           C
ANISOU 2271  CZ2 TRP E  26    18419  19744  17323   -550  -1146   2527       C
ATOM   2272  C   TRP E  26      83.179  11.778  35.256  1.00115.44           C
ANISOU 2272  C   TRP E  26    15655  14968  13240  -1422  -1543   2645       C
ATOM   2273  O   TRP E  26      83.050  11.295  34.152  1.00115.59           O
ANISOU 2273  O   TRP E  26    15818  14881  13221  -1337  -1575   2631       O
ATOM   2274  N   ARG E  27      82.735  11.193  36.357  1.00124.07           N
ANISOU 2274  N   ARG E  27    16868  15979  14292  -1542  -1593   2675       N
ATOM   2275  CA  ARG E  27      82.027   9.928  36.312  1.00130.39           C
ANISOU 2275  CA  ARG E  27    17984  16554  15004  -1586  -1688   2693       C
ATOM   2276  CB  ARG E  27      81.750   9.411  37.729  1.00132.06           C
ANISOU 2276  CB  ARG E  27    18288  16714  15176  -1700  -1728   2730       C
ATOM   2277  C   ARG E  27      80.705  10.059  35.586  1.00125.85           C
ANISOU 2277  C   ARG E  27    17454  15868  14494  -1779  -1693   2672       C
ATOM   2278  O   ARG E  27      80.328   9.180  34.839  1.00132.59           O
ANISOU 2278  O   ARG E  27    18538  16555  15284  -1739  -1755   2667       O
ATOM   2279  N   ALA E  28      79.987  11.146  35.812  1.00117.55           N
ANISOU 2279  N   ALA E  28    16186  14910  13569  -1989  -1628   2660       N
ATOM   2280  CA  ALA E  28      78.697  11.318  35.159  1.00117.82           C
ANISOU 2280  CA  ALA E  28    16251  14845  13669  -2182  -1632   2639       C
ATOM   2281  CB  ALA E  28      77.896  12.401  35.854  1.00105.03           C
ANISOU 2281  CB  ALA E  28    14407  13322  12179  -2440  -1568   2638       C
ATOM   2282  C   ALA E  28      78.819  11.635  33.686  1.00118.13           C
ANISOU 2282  C   ALA E  28    16254  14900  13732  -2071  -1607   2605       C
ATOM   2283  O   ALA E  28      78.061  11.147  32.870  1.00109.36           O
ANISOU 2283  O   ALA E  28    15302  13646  12606  -2116  -1650   2589       O
ATOM   2284  N   ALA E  29      79.790  12.464  33.363  1.00114.80           N
ANISOU 2284  N   ALA E  29    15617  14655  13347  -1926  -1534   2592       N
ATOM   2285  CA  ALA E  29      80.031  12.938  32.004  1.00101.44           C
ANISOU 2285  CA  ALA E  29    13847  13009  11687  -1809  -1494   2560       C
ATOM   2286  CB  ALA E  29      81.296  13.772  31.955  1.00 94.46           C
ANISOU 2286  CB  ALA E  29    12727  12329  10833  -1633  -1413   2552       C
ATOM   2287  C   ALA E  29      80.131  11.836  30.979  1.00105.96           C
ANISOU 2287  C   ALA E  29    14687  13419  12153  -1649  -1570   2552       C
ATOM   2288  O   ALA E  29      79.226  11.671  30.168  1.00117.21           O
ANISOU 2288  O   ALA E  29    16206  14734  13593  -1737  -1594   2532       O
ATOM   2289  N   GLY E  30      81.177  11.027  31.095  1.00107.48           N
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ANISOU 2289  N   GLY E  30    15013  13590  12236  -1427  -1611   2568       N
ATOM   2290  CA  GLY E  30      81.461   9.957  30.157  1.00113.95           C
ANISOU 2290  CA  GLY E  30    16083  14266  12947  -1245  -1680   2562       C
ATOM   2291  C   GLY E  30      80.261   9.055  30.016  1.00120.10           C
ANISOU 2291  C   GLY E  30    17112  14832  13690  -1393  -1760   2562       C
ATOM   2292  O   GLY E  30      80.043   8.445  28.968  1.00121.28           O
ANISOU 2292  O   GLY E  30    17431  14859  13790  -1318  -1804   2544       O
ATOM   2293  N   ALA E  31      79.539   8.896  31.119  1.00122.23           N
ANISOU 2293  N   ALA E  31    17415  15051  13975  -1593  -1782   2584       N
ATOM   2294  CA  ALA E  31      78.327   8.092  31.128  1.00121.70           C
ANISOU 2294  CA  ALA E  31    17571  14783  13886  -1761  -1852   2583       C
ATOM   2295  CB  ALA E  31      77.781   7.984  32.534  1.00120.70           C
ANISOU 2295  CB  ALA E  31    17456  14632  13775  -1954  -1865   2612       C
ATOM   2296  C   ALA E  31      77.262   8.674  30.188  1.00121.57           C
ANISOU 2296  C   ALA E  31    17490  14741  13958  -1912  -1830   2546       C
ATOM   2297  O   ALA E  31      76.646   7.935  29.408  1.00118.63           O
ANISOU 2297  O   ALA E  31    17323  14208  13544  -1919  -1889   2527       O
ATOM   2298  N   ALA E  32      77.051   9.992  30.271  1.00119.65           N
ANISOU 2298  N   ALA E  32    16965  14659  13838  -2030  -1744   2535       N
ATOM   2299  CA  ALA E  32      76.064  10.691  29.441  1.00107.63           C
ANISOU 2299  CA  ALA E  32    15348  13137  12411  -2179  -1712   2502       C
ATOM   2300  CB  ALA E  32      76.011  12.176  29.793  1.00 92.51           C
ANISOU 2300  CB  ALA E  32    13100  11420  10628  -2300  -1609   2498       C
ATOM   2301  C   ALA E  32      76.399  10.515  27.974  1.00108.36           C
ANISOU 2301  C   ALA E  32    15505  13202  12466  -1995  -1721   2473       C
ATOM   2302  O   ALA E  32      75.529  10.214  27.152  1.00118.09           O
ANISOU 2302  O   ALA E  32    16855  14313  13699  -2066  -1757   2447       O
ATOM   2303  N   THR E  33      77.674  10.717  27.665  1.00 99.46           N
ANISOU 2303  N   THR E  33    14295  12189  11306  -1759  -1685   2476       N
ATOM   2304  CA  THR E  33      78.186  10.564  26.316  1.00105.16           C
ANISOU 2304  CA  THR E  33    15070  12900  11988  -1555  -1687   2451       C
ATOM   2305  CB  THR E  33      79.697  10.649  26.307  1.00 97.11           C
ANISOU 2305  CB  THR E  33    13975  12000  10921  -1296  -1654   2463       C
ATOM   2306  OG1 THR E  33      80.079  11.951  26.763  1.00 88.52           O
ANISOU 2306  OG1 THR E  33    12576  11120   9938  -1337  -1554   2464       O
ATOM   2307  CG2 THR E  33      80.235  10.402  24.911  1.00 94.71           C
ANISOU 2307  CG2 THR E  33    13747  11672  10568  -1077  -1661   2439       C
ATOM   2308  C   THR E  33      77.749   9.238  25.718  1.00114.17           C
ANISOU 2308  C   THR E  33    16530  13823  13025  -1511  -1788   2443       C
ATOM   2309  O   THR E  33      77.246   9.182  24.590  1.00119.10           O
ANISOU 2309  O   THR E  33    17216  14381  13654  -1506  -1801   2412       O
ATOM   2310  N   VAL E  34      77.935   8.173  26.489  1.00117.22           N
ANISOU 2310  N   VAL E  34    17120  14098  13319  -1482  -1857   2470       N
ATOM   2311  CA  VAL E  34      77.535   6.846  26.047  1.00122.52           C
ANISOU 2311  CA  VAL E  34    18105  14555  13890  -1445  -1952   2464       C
ATOM   2312  CB  VAL E  34      77.955   5.763  27.053  1.00127.73           C
ANISOU 2312  CB  VAL E  34    18961  15122  14450  -1390  -2014   2501       C
ATOM   2313  CG1 VAL E  34      77.458   4.397  26.602  1.00126.11           C
ANISOU 2313  CG1 VAL E  34    19081  14688  14148  -1368  -2108   2493       C
ATOM   2314  CG2 VAL E  34      79.469   5.759  27.226  1.00134.85           C
ANISOU 2314  CG2 VAL E  34    19804  16139  15293  -1137  -1991   2522       C
ATOM   2315  C   VAL E  34      76.021   6.793  25.845  1.00130.53           C
ANISOU 2315  C   VAL E  34    19189  15448  14958  -1691  -1981   2440       C
ATOM   2316  O   VAL E  34      75.543   6.239  24.852  1.00139.90           O
ANISOU 2316  O   VAL E  34    20537  16508  16110  -1667  -2028   2411       O
ATOM   2317  N   LEU E  35      75.274   7.415  26.757  1.00125.98           N
ANISOU 2317  N   LEU E  35    18481  14916  14470  -1927  -1950   2449       N
ATOM   2318  CA  LEU E  35      73.818   7.428  26.664  1.00121.37           C
ANISOU 2318  CA  LEU E  35    17945  14224  13945  -2175  -1973   2427       C
ATOM   2319  CB  LEU E  35      73.200   7.968  27.963  1.00119.29           C
ANISOU 2319  CB  LEU E  35    17555  14008  13762  -2415  -1943   2450       C
ATOM   2320  CG  LEU E  35      71.666   7.943  28.044  1.00124.79           C
ANISOU 2320  CG  LEU E  35    18306  14587  14521  -2689  -1968   2430       C
ANISOU 2320  CG  LEU E  35    18306  14587  14521  -2689  -1968   2430       C
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ATOM   2321  CD1 LEU E  35      71.115   6.524  27.906  1.00123.47           C
ANISOU 2321  CD1 LEU E  35    18466  14185  14261  -2698  -2067   2422       C
ATOM   2322  CD2 LEU E  35      71.144   8.614  29.305  1.00123.71           C
ANISOU 2322  CD2 LEU E  35    18013  14520  14472  -2916  -1927   2453       C
ATOM   2323  C   LEU E  35      73.340   8.264  25.466  1.00120.83           C
ANISOU 2323  C   LEU E  35    17742  14213  13955  -2208  -1931   2387       C
ATOM   2324  O   LEU E  35      72.313   7.952  24.850  1.00116.02           O
ANISOU 2324  O   LEU E  35    17248  13478  13355  -2320  -1972   2356       O
ATOM   2325  N   LEU E  36      74.093   9.307  25.123  1.00116.26           N
ANISOU 2325  N   LEU E  36    16923  13822  13429  -2104  -1849   2385       N
ATOM   2326  CA  LEU E  36      73.742  10.156  23.988  1.00111.80           C
ANISOU 2326  CA  LEU E  36    16216  13325  12937  -2116  -1799   2350       C
ATOM   2327  CB  LEU E  36      74.584  11.433  23.942  1.00105.31           C
ANISOU 2327  CB  LEU E  36    15093  12729  12190  -2032  -1693   2356       C
ATOM   2328  CG  LEU E  36      74.096  12.423  22.873  1.00 93.54           C
ANISOU 2328  CG  LEU E  36    13435  11315  10789  -2077  -1633   2323       C
ATOM   2329  CD1 LEU E  36      72.645  12.774  23.156  1.00 87.30           C
ANISOU 2329  CD1 LEU E  36    12610  10475  10085  -2369  -1636   2311       C
ATOM   2330  CD2 LEU E  36      74.941  13.685  22.841  1.00 85.62           C
ANISOU 2330  CD2 LEU E  36    12134  10534   9864  -1993  -1521   2329       C
ATOM   2331  C   LEU E  36      73.891   9.365  22.695  1.00104.07           C
ANISOU 2331  C   LEU E  36    15437  12232  11872  -1941  -1855   2323       C
ATOM   2332  O   LEU E  36      72.983   9.352  21.865  1.00103.12           O
ANISOU 2332  O   LEU E  36    15370  12034  11775  -2028  -1876   2289       O
ATOM   2333  N   VAL E  37      75.053   8.739  22.519  1.00102.79           N
ANISOU 2333  N   VAL E  37    15377  12066  11613  -1694  -1876   2336       N
ATOM   2334  CA  VAL E  37      75.326   7.913  21.342  1.00103.94           C
ANISOU 2334  CA  VAL E  37    15722  12102  11666  -1507  -1931   2314       C
ATOM   2335  CB  VAL E  37      76.711   7.240  21.459  1.00102.37           C
ANISOU 2335  CB  VAL E  37    15620  11912  11362  -1243  -1949   2339       C
ATOM   2336  CG1 VAL E  37      76.956   6.256  20.324  1.00 98.01           C
ANISOU 2336  CG1 VAL E  37    15303  11228  10708  -1058  -2013   2317       C
ATOM   2337  CG2 VAL E  37      77.800   8.299  21.491  1.00106.95           C
ANISOU 2337  CG2 VAL E  37    15936  12707  11992  -1111  -1855   2350       C
ATOM   2338  C   VAL E  37      74.234   6.842  21.152  1.00109.70           C
ANISOU 2338  C   VAL E  37    16721  12612  12348  -1626  -2025   2293       C
ATOM   2339  O   VAL E  37      73.909   6.455  20.023  1.00110.33           O
ANISOU 2339  O   VAL E  37    16923  12602  12395  -1569  -2061   2259       O
ATOM   2340  N   ILE E  38      73.628   6.412  22.258  1.00113.41           N
ANISOU 2340  N   ILE E  38    17273  12999  12820  -1801  -2060   2313       N
ATOM   2341  CA  ILE E  38      72.552   5.424  22.222  1.00114.60           C
ANISOU 2341  CA  ILE E  38    17668  12941  12934  -1935  -2143   2294       C
ATOM   2342  CB  ILE E  38      72.302   4.813  23.621  1.00121.74           C
ANISOU 2342  CB  ILE E  38    18676  13764  13815  -2061  -2178   2328       C
ATOM   2343  CG1 ILE E  38      73.519   4.015  24.086  1.00124.96           C
ANISOU 2343  CG1 ILE E  38    19207  14158  14113  -1844  -2204   2365       C
ATOM   2344  CD1 ILE E  38      73.446   3.602  25.551  1.00121.58           C
ANISOU 2344  CD1 ILE E  38    18836  13691  13668  -1950  -2222   2406       C
ATOM   2345  CG2 ILE E  38      71.078   3.913  23.600  1.00117.77           C
ANISOU 2345  CG2 ILE E  38    18404  13051  13294  -2227  -2254   2305       C
ATOM   2346  C   ILE E  38      71.243   6.035  21.718  1.00111.22           C
ANISOU 2346  C   ILE E  38    17160  12496  12601  -2151  -2131   2255       C
ATOM   2347  O   ILE E  38      70.576   5.471  20.843  1.00108.87           O
ANISOU 2347  O   ILE E  38    17024  12067  12276  -2166  -2185   2217       O
ATOM   2348  N   VAL E  39      70.886   7.187  22.280  1.00107.46           N
ANISOU 2348  N   VAL E  39    16436  12156  12238  -2317  -2060   2264       N
ATOM   2349  CA  VAL E  39      69.677   7.900  21.891  1.00104.11           C
ANISOU 2349  CA  VAL E  39    15904  11738  11914  -2529  -2039   2232       C
ATOM   2350  CB  VAL E  39      69.493   9.177  22.743  1.00 95.77           C
ANISOU 2350  CB  VAL E  39    14561  10849  10979  -2697  -1952   2253       C
ATOM   2351  CG1 VAL E  39      68.272   9.961  22.299  1.00 85.50           C
ANISOU 2351  CG1 VAL E  39    13140   9562   9785  -2909  -1926   2220       C
ATOM   2352  CG2 VAL E  39      69.341   8.802  24.194  1.00106.24           C
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ANISOU 2352  CG2 VAL E  39    15936  12131  12300  -2827  -1972   2289       C
ATOM   2353  C   VAL E  39      69.720   8.239  20.397  1.00106.25           C
ANISOU 2353  C   VAL E  39    16140  12041  12189  -2411  -2024   2193       C
ATOM   2354  O   VAL E  39      68.692   8.222  19.715  1.00104.47           O
ANISOU 2354  O   VAL E  39    15963  11736  11993  -2528  -2050   2154       O
ATOM   2355  N   LEU E  40      70.909   8.551  19.890  1.00101.29           N
ANISOU 2355  N   LEU E  40    15425  11530  11532  -2177  -1981   2202       N
ATOM   2356  CA  LEU E  40      71.036   8.870  18.482  1.00 95.55           C
ANISOU 2356  CA  LEU E  40    14664  10837  10803  -2048  -1964   2169       C
ATOM   2357  CB  LEU E  40      72.452   9.327  18.147  1.00 88.67           C
ANISOU 2357  CB  LEU E  40    13665  10115   9911  -1797  -1902   2187       C
ATOM   2358  CG  LEU E  40      72.983  10.569  18.844  1.00 87.36           C
ANISOU 2358  CG  LEU E  40    13200  10156   9837  -1827  -1800   2214       C
ATOM   2359  CD1 LEU E  40      74.383  10.857  18.330  1.00 91.11           C
ANISOU 2359  CD1 LEU E  40    13586  10753  10279  -1555  -1749   2224       C
ATOM   2360  CD2 LEU E  40      72.063  11.751  18.631  1.00 75.80           C
ANISOU 2360  CD2 LEU E  40    11519   8783   8500  -2022  -1735   2196       C
ATOM   2361  C   LEU E  40      70.658   7.670  17.619  1.00105.52           C
ANISOU 2361  C   LEU E  40    16214  11907  11971  -1980  -2058   2135       C
ATOM   2362  O   LEU E  40      69.766   7.772  16.780  1.00111.73           O
ANISOU 2362  O   LEU E  40    17025  12640  12785  -2063  -2076   2094       O
ATOM   2363  N   LEU E  41      71.298   6.526  17.854  1.00113.35           N
ANISOU 2363  N   LEU E  41    17424  12793  12853  -1837  -2120   2151       N
ATOM   2364  CA  LEU E  41      71.002   5.326  17.074  1.00112.94           C
ANISOU 2364  CA  LEU E  41    17653  12553  12706  -1765  -2210   2120       C
ATOM   2365  CB  LEU E  41      71.935   4.175  17.448  1.00106.93           C
ANISOU 2365  CB  LEU E  41    17100  11704  11826  -1583  -2262   2148       C
ATOM   2366  CG  LEU E  41      73.436   4.395  17.288  1.00103.52           C
ANISOU 2366  CG  LEU E  41    16583  11399  11350  -1321  -2218   2176       C
ATOM   2367  CD1 LEU E  41      74.183   3.133  17.675  1.00102.43           C
ANISOU 2367  CD1 LEU E  41    16681  11147  11090  -1165  -2281   2201       C
ATOM   2368  CD2 LEU E  41      73.746   4.795  15.856  1.00101.14           C
ANISOU 2368  CD2 LEU E  41    16228  11154  11046  -1164  -2192   2143       C
ATOM   2369  C   LEU E  41      69.554   4.894  17.255  1.00115.36           C
ANISOU 2369  C   LEU E  41    18084  12708  13041  -2009  -2266   2091       C
ATOM   2370  O   LEU E  41      68.887   4.531  16.287  1.00116.92           O
ANISOU 2370  O   LEU E  41    18399  12805  13221  -2023  -2311   2045       O
ATOM   2371  N   ALA E  42      69.070   4.932  18.491  1.00110.09           N
ANISOU 2371  N   ALA E  42    17390  12024  12416  -2201  -2265   2116       N
ATOM   2372  CA  ALA E  42      67.687   4.561  18.758  1.00108.06           C
ANISOU 2372  CA  ALA E  42    17241  11625  12193  -2445  -2313   2089       C
ATOM   2373  CB  ALA E  42      67.412   4.539  20.246  1.00112.70           C
ANISOU 2373  CB  ALA E  42    17805  12200  12814  -2619  -2307   2127       C
ATOM   2374  C   ALA E  42      66.740   5.527  18.068  1.00108.59           C
ANISOU 2374  C   ALA E  42    17144  11753  12361  -2594  -2278   2051       C
ATOM   2375  O   ALA E  42      65.859   5.114  17.309  1.00111.13           O
ANISOU 2375  O   ALA E  42    17593  11957  12677  -2660  -2329   2003       O
ATOM   2376  N   GLY E  43      66.974   6.819  18.291  1.00107.38           N
ANISOU 2376  N   GLY E  43    16709  11791  12300  -2633  -2189   2070       N
ATOM   2377  CA  GLY E  43      66.142   7.868  17.727  1.00109.30           C
ANISOU 2377  CA  GLY E  43    16767  12115  12647  -2773  -2142   2040       C
ATOM   2378  C   GLY E  43      66.158   7.864  16.213  1.00109.06           C
ANISOU 2378  C   GLY E  43    16775  12076  12586  -2634  -2154   1997       C
ATOM   2379  O   GLY E  43      65.119   8.048  15.580  1.00106.19           O
ANISOU 2379  O   GLY E  43    16414  11667  12266  -2761  -2171   1955       O
ATOM   2380  N   SER E  44      67.345   7.676  15.641  1.00109.57           N
ANISOU 2380  N   SER E  44    16865  12189  12579  -2370  -2145   2008       N
ATOM   2381  CA  SER E  44      67.515   7.582  14.199  1.00106.78           C
ANISOU 2381  CA  SER E  44    16565  11825  12183  -2205  -2158   1971       C
ATOM   2382  CB  SER E  44      68.979   7.310  13.835  1.00108.29           C
ANISOU 2382  CB  SER E  44    16786  12069  12289  -1911  -2144   1993       C
ATOM   2383  OG  SER E  44      69.802   8.412  14.172  1.00 96.83           O
ANISOU 2383  OG  SER E  44    15075  10818  10899  -1850  -2046   2028       O
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ATOM   2384  C   SER E  44      66.615   6.488  13.633  1.00113.20           C
ANISOU 2384  C   SER E  44    17641  12433  12936  -2259  -2257   1923       C
ATOM   2385  O   SER E  44      65.889   6.720  12.667  1.00115.30           O
ANISOU 2385  O   SER E  44    17900  12681  13227  -2303  -2267   1878       O
ATOM   2386  N   TYR E  45      66.662   5.304  14.247  1.00114.61           N
ANISOU 2386  N   TYR E  45    18049  12460  13038  -2256  -2328   1933       N
ATOM   2387  CA  TYR E  45      65.853   4.165  13.813  1.00118.34           C
ANISOU 2387  CA  TYR E  45    18787  12727  13452  -2306  -2422   1889       C
ATOM   2388  CB  TYR E  45      66.161   2.926  14.654  1.00130.06           C
ANISOU 2388  CB  TYR E  45    20501  14067  14850  -2275  -2483   1913       C
ATOM   2389  CG  TYR E  45      65.321   1.706  14.303  1.00141.09           C
ANISOU 2389  CG  TYR E  45    22178  15242  16189  -2336  -2578   1867       C
ATOM   2390  CD1 TYR E  45      64.052   1.517  14.853  1.00146.23           C
ANISOU 2390  CD1 TYR E  45    22882  15785  16893  -2594  -2610   1845       C
ATOM   2391  CE1 TYR E  45      63.287   0.407  14.532  1.00152.01           C
ANISOU 2391  CE1 TYR E  45    23866  16315  17576  -2650  -2693   1800       C
ATOM   2392  CZ  TYR E  45      63.790  -0.538  13.662  1.00158.03           C
ANISOU 2392  CZ  TYR E  45    24832  16980  18233  -2446  -2746   1777       C
ATOM   2393  OH  TYR E  45      63.030  -1.644  13.347  1.00166.46           O
ANISOU 2393  OH  TYR E  45    26148  17845  19252  -2503  -2826   1728       O
ATOM   2394  CE2 TYR E  45      65.047  -0.378  13.108  1.00153.45           C
ANISOU 2394  CE2 TYR E  45    24206  16502  17595  -2188  -2718   1800       C
ATOM   2395  CD2 TYR E  45      65.804   0.737  13.429  1.00146.63           C
ANISOU 2395  CD2 TYR E  45    23090  15841  16783  -2134  -2634   1845       C
ATOM   2396  C   TYR E  45      64.372   4.487  13.903  1.00113.45           C
ANISOU 2396  C   TYR E  45    18131  12056  12920  -2581  -2435   1852       C
ATOM   2397  O   TYR E  45      63.606   4.172  12.997  1.00124.21           O
ANISOU 2397  O   TYR E  45    19596  13326  14272  -2616  -2482   1798       O
ATOM   2398  N   LEU E  46      63.969   5.077  15.020  1.00105.20           N
ANISOU 2398  N   LEU E  46    16945  11067  11958  -2777  -2395   1881       N
ATOM   2399  CA  LEU E  46      62.573   5.431  15.227  1.00107.31           C
ANISOU 2399  CA  LEU E  46    17165  11292  12316  -3050  -2402   1851       C
ATOM   2400  CB  LEU E  46      62.351   5.886  16.674  1.00111.55           C
ANISOU 2400  CB  LEU E  46    17579  11878  12926  -3240  -2362   1895       C
ATOM   2401  CG  LEU E  46      62.362   4.816  17.764  1.00110.51           C
ANISOU 2401  CG  LEU E  46    17646  11604  12739  -3288  -2415   1920       C
ATOM   2402  CD1 LEU E  46      63.226   5.206  18.940  1.00108.74           C
ANISOU 2402  CD1 LEU E  46    17296  11495  12526  -3261  -2361   1985       C
ATOM   2403  CD2 LEU E  46      60.927   4.605  18.214  1.00100.88           C
ANISOU 2403  CD2 LEU E  46    16492  10259  11579  -3566  -2451   1891       C
ATOM   2404  C   LEU E  46      62.067   6.512  14.271  1.00112.14           C
ANISOU 2404  C   LEU E  46    17586  12017  13007  -3094  -2355   1818       C
ATOM   2405  O   LEU E  46      60.874   6.561  13.970  1.00119.42           O
ANISOU 2405  O   LEU E  46    18529  12870  13977  -3272  -2383   1774       O
ATOM   2406  N   ALA E  47      62.968   7.366  13.791  1.00114.23           N
ANISOU 2406  N   ALA E  47    17666  12452  13283  -2932  -2284   1838       N
ATOM   2407  CA  ALA E  47      62.586   8.438  12.872  1.00107.91           C
ANISOU 2407  CA  ALA E  47    16675  11769  12555  -2955  -2230   1812       C
ATOM   2408  CB  ALA E  47      63.698   9.462  12.754  1.00102.55           C
ANISOU 2408  CB  ALA E  47    15765  11295  11906  -2797  -2133   1850       C
ATOM   2409  C   ALA E  47      62.235   7.879  11.503  1.00103.10           C
ANISOU 2409  C   ALA E  47    16224  11064  11887  -2860  -2291   1754       C
ATOM   2410  O   ALA E  47      61.211   8.237  10.925  1.00104.18           O
ANISOU 2410  O   ALA E  47    16321  11185  12075  -2991  -2299   1711       O
ATOM   2411  N   VAL E  48      63.092   6.999  10.998  1.00105.17           N
ANISOU 2411  N   VAL E  48    16663  11260  12038  -2631  -2334   1753       N
ATOM   2412  CA  VAL E  48      62.869   6.344   9.717  1.00106.43           C
ANISOU 2412  CA  VAL E  48    16994  11319  12127  -2519  -2396   1699       C
ATOM   2413  CB  VAL E  48      64.039   5.407   9.357  1.00109.03           C
ANISOU 2413  CB  VAL E  48    17501  11593  12333  -2250  -2432   1711       C
ATOM   2414  CG1 VAL E  48      63.684   4.532   8.177  1.00118.20           C
ANISOU 2414  CG1 VAL E  48    18878  12616  13416  -2162  -2510   1652       C
ATOM   2415  CG2 VAL E  48      65.292   6.211   9.077  1.00105.85           C
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ANISOU 2415  CG2 VAL E  48    16916  11370  11931  -2043  -2348   1749       C
ATOM   2416  C   VAL E  48      61.555   5.569   9.758  1.00106.17           C
ANISOU 2416  C   VAL E  48    17142  11104  12094  -2714  -2480   1648       C
ATOM   2417  O   VAL E  48      60.778   5.602   8.812  1.00114.17           O
ANISOU 2417  O   VAL E  48    18185  12077  13116  -2755  -2510   1593       O
ATOM   2418  N   LEU E  49      61.322   4.864  10.859  1.00105.97           N
ANISOU 2418  N   LEU E  49    17238  10968  12057  -2832  -2518   1667       N
ATOM   2419  CA  LEU E  49      60.093   4.109  11.053  1.00107.80           C
ANISOU 2419  CA  LEU E  49    17642  11022  12295  -3029  -2593   1622       C
ATOM   2420  CB  LEU E  49      60.175   3.286  12.344  1.00121.02           C
ANISOU 2420  CB  LEU E  49    19454  12586  13942  -3104  -2623   1657       C
ATOM   2421  CG  LEU E  49      58.968   2.465  12.827  1.00131.63           C
ANISOU 2421  CG  LEU E  49    20977  13739  15296  -3322  -2692   1621       C
ATOM   2422  CD1 LEU E  49      59.439   1.159  13.465  1.00138.96           C
ANISOU 2422  CD1 LEU E  49    22152  14516  16130  -3246  -2747   1642       C
ATOM   2423  CD2 LEU E  49      58.088   3.240  13.812  1.00126.57           C
ANISOU 2423  CD2 LEU E  49    20172  13144  14773  -3595  -2652   1635       C
ATOM   2424  C   LEU E  49      58.874   5.027  11.092  1.00110.37           C
ANISOU 2424  C   LEU E  49    17800  11396  12738  -3276  -2565   1596       C
ATOM   2425  O   LEU E  49      57.857   4.754  10.456  1.00118.54           O
ANISOU 2425  O   LEU E  49    18922  12335  13783  -3376  -2616   1535       O
ATOM   2426  N   ALA E  50      58.983   6.115  11.847  1.00105.13           N
ANISOU 2426  N   ALA E  50    16896  10885  12166  -3373  -2484   1640       N
ATOM   2427  CA  ALA E  50      57.878   7.058  12.016  1.00109.55           C
ANISOU 2427  CA  ALA E  50    17278  11502  12844  -3614  -2448   1624       C
ATOM   2428  CB  ALA E  50      58.166   7.987  13.199  1.00104.40           C
ANISOU 2428  CB  ALA E  50    16403  10989  12274  -3718  -2365   1685       C
ATOM   2429  C   ALA E  50      57.559   7.891  10.767  1.00113.31           C
ANISOU 2429  C   ALA E  50    17619  12076  13358  -3579  -2419   1586       C
ATOM   2430  O   ALA E  50      56.398   8.229  10.523  1.00107.08           O
ANISOU 2430  O   ALA E  50    16787  11264  12636  -3763  -2430   1545       O
ATOM   2431  N   GLU E  51      58.588   8.219   9.985  1.00114.63           N
ANISOU 2431  N   GLU E  51    17720  12352  13481  -3340  -2380   1600       N
ATOM   2432  CA  GLU E  51      58.432   9.068   8.797  1.00103.11           C
ANISOU 2432  CA  GLU E  51    16122  11002  12055  -3279  -2341   1571       C
ATOM   2433  CB  GLU E  51      59.678   9.934   8.583  1.00 99.72           C
ANISOU 2433  CB  GLU E  51    15500  10760  11630  -3081  -2249   1618       C
ATOM   2434  CG  GLU E  51      59.994  10.888   9.714  1.00100.81           C
ANISOU 2434  CG  GLU E  51    15407  11039  11856  -3179  -2160   1676       C
ATOM   2435  CD  GLU E  51      59.209  12.183   9.590  1.00 95.23           C
ANISOU 2435  CD  GLU E  51    14455  10456  11270  -3348  -2089   1670       C
ATOM   2436  OE1 GLU E  51      59.491  12.952   8.640  1.00 89.63           O
ANISOU 2436  OE1 GLU E  51    13610   9866  10578  -3232  -2034   1662       O
ATOM   2437  OE2 GLU E  51      58.325  12.435  10.440  1.00 98.82           O
ANISOU 2437  OE2 GLU E  51    14852  10891  11804  -3593  -2086   1673       O
ATOM   2438  C   GLU E  51      58.144   8.329   7.503  1.00107.12           C
ANISOU 2438  C   GLU E  51    16816  11400  12484  -3169  -2416   1508       C
ATOM   2439  O   GLU E  51      57.286   8.763   6.746  1.00112.24           O
ANISOU 2439  O   GLU E  51    17410  12062  13175  -3251  -2420   1463       O
ATOM   2440  N   ARG E  52      58.838   7.238   7.246  1.00107.58           N
ANISOU 2440  N   ARG E  52    17091  11355  12431  -2987  -2473   1504       N
ATOM   2441  CA  ARG E  52      58.721   6.553   5.976  1.00112.92           C
ANISOU 2441  CA  ARG E  52    17940  11939  13027  -2853  -2539   1447       C
ATOM   2442  CB  ARG E  52      59.466   5.234   6.069  1.00108.36           C
ANISOU 2442  CB  ARG E  52    17614  11227  12331  -2690  -2604   1453       C
ATOM   2443  CG  ARG E  52      60.346   4.877   4.890  1.00110.07           C
ANISOU 2443  CG  ARG E  52    17920  11451  12452  -2411  -2618   1439       C
ATOM   2444  CD  ARG E  52      60.956   3.508   5.131  1.00121.65           C
ANISOU 2444  CD  ARG E  52    19646  12767  13807  -2285  -2686   1445       C
ATOM   2445  NE  ARG E  52      62.230   3.299   4.457  1.00132.15           N
ANISOU 2445  NE  ARG E  52    21016  14142  15052  -1997  -2672   1465       N
ATOM   2446  CZ  ARG E  52      63.069   2.316   4.763  1.00141.88           C
ANISOU 2446  CZ  ARG E  52    22426  15289  16193  -1851  -2708   1489       C
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ATOM   2447  NH1 ARG E  52      62.767   1.466   5.728  1.00142.94           N
ANISOU 2447  NH1 ARG E  52    22712  15289  16309  -1965  -2756   1497       N
ATOM   2448  NH2 ARG E  52      64.208   2.180   4.109  1.00148.53           N
ANISOU 2448  NH2 ARG E  52    23295  16178  16962  -1591  -2693   1505       N
ATOM   2449  C   ARG E  52      57.281   6.287   5.633  1.00121.24           C
ANISOU 2449  C   ARG E  52    19077  12879  14112  -3049  -2602   1379       C
ATOM   2450  O   ARG E  52      56.504   5.877   6.468  1.00129.15           O
ANISOU 2450  O   ARG E  52    20152  13776  15145  -3250  -2638   1371       O
ATOM   2451  N   GLY E  53      56.928   6.548   4.383  1.00113.74           N
ANISOU 2451  N   GLY E  53    18110  11953  13153  -2989  -2612   1330       N
ATOM   2452  CA  GLY E  53      55.567   6.365   3.926  1.00113.49           C
ANISOU 2452  CA  GLY E  53    18145  11827  13152  -3162  -2671   1259       C
ATOM   2453  C   GLY E  53      54.675   7.561   4.203  1.00113.32           C
ANISOU 2453  C   GLY E  53    17888  11913  13256  -3379  -2613   1260       C
ATOM   2454  O   GLY E  53      53.490   7.535   3.875  1.00122.13           O
ANISOU 2454  O   GLY E  53    19031  12964  14408  -3541  -2655   1203       O
ATOM   2455  N   ALA E  54      55.212   8.611   4.813  1.00104.92           N
ANISOU 2455  N   ALA E  54    16592  11012  12259  -3390  -2517   1323       N
ATOM   2456  CA  ALA E  54      54.397   9.795   5.013  1.00103.49           C
ANISOU 2456  CA  ALA E  54    16180  10942  12199  -3587  -2456   1325       C
ATOM   2457  CB  ALA E  54      54.861  10.591   6.217  1.00107.38           C
ANISOU 2457  CB  ALA E  54    16476  11556  12768  -3665  -2370   1398       C
ATOM   2458  C   ALA E  54      54.523  10.597   3.738  1.00104.63           C
ANISOU 2458  C   ALA E  54    16195  11211  12347  -3456  -2413   1306       C
ATOM   2459  O   ALA E  54      55.479  10.407   2.983  1.00106.07           O
ANISOU 2459  O   ALA E  54    16424  11426  12452  -3210  -2407   1313       O
ATOM   2460  N   PRO E  55      53.586  11.522   3.504  1.00107.34           N
ANISOU 2460  N   PRO E  55    16372  11628  12783  -3616  -2379   1286       N
ATOM   2461  CA  PRO E  55      53.656  12.320   2.281  1.00107.75           C
ANISOU 2461  CA  PRO E  55    16299  11801  12841  -3496  -2335   1268       C
ATOM   2462  CB  PRO E  55      52.206  12.756   2.065  1.00 99.15           C
ANISOU 2462  CB  PRO E  55    15146  10697  11831  -3724  -2353   1219       C
ATOM   2463  CG  PRO E  55      51.608  12.727   3.397  1.00101.02           C
ANISOU 2463  CG  PRO E  55    15359  10883  12140  -3970  -2355   1238       C
ATOM   2464  CD  PRO E  55      52.298  11.683   4.196  1.00108.13           C
ANISOU 2464  CD  PRO E  55    16439  11675  12972  -3910  -2398   1264       C
ATOM   2465  C   PRO E  55      54.565  13.526   2.449  1.00107.31           C
ANISOU 2465  C   PRO E  55    15987  11948  12839  -3404  -2212   1334       C
ATOM   2466  O   PRO E  55      54.418  14.270   3.416  1.00 98.85           O
ANISOU 2466  O   PRO E  55    14742  10957  11861  -3559  -2148   1375       O
ATOM   2467  N   GLY E  56      55.526  13.699   1.548  1.00109.03           N
ANISOU 2467  N   GLY E  56    16184  12245  12999  -3151  -2178   1344       N
ATOM   2468  CA  GLY E  56      56.410  14.847   1.632  1.00107.34           C
ANISOU 2468  CA  GLY E  56    15726  12221  12835  -3052  -2057   1402       C
ATOM   2469  C   GLY E  56      57.220  14.763   2.903  1.00 99.38           C
ANISOU 2469  C   GLY E  56    14684  11235  11839  -3058  -2023   1463       C
ATOM   2470  O   GLY E  56      57.322  15.718   3.662  1.00 97.08           O
ANISOU 2470  O   GLY E  56    14177  11068  11640  -3157  -1936   1507       O
ATOM   2471  N   ALA E  57      57.787  13.591   3.131  1.00 99.16           N
ANISOU 2471  N   ALA E  57    14876  11085  11716  -2951  -2094   1463       N
ATOM   2472  CA  ALA E  57      58.618  13.350   4.289  1.00 84.62           C
ANISOU 2472  CA  ALA E  57    13035   9249   9866  -2931  -2074   1518       C
ATOM   2473  CB  ALA E  57      58.127  12.175   5.087  1.00 86.84           C
ANISOU 2473  CB  ALA E  57    13537   9348  10108  -3057  -2170   1504       C
ATOM   2474  C   ALA E  57      59.988  13.100   3.713  1.00 96.02           C
ANISOU 2474  C   ALA E  57    14525  10735  11224  -2634  -2055   1539       C
ATOM   2475  O   ALA E  57      60.097  12.608   2.592  1.00 96.15           O
ANISOU 2475  O   ALA E  57    14672  10698  11162  -2479  -2100   1501       O
ATOM   2476  N   GLN E  58      61.037  13.403   4.464  1.00104.69           N
ANISOU 2476  N   GLN E  58    15520  11925  12331  -2552  -1991   1597       N
ATOM   2477  CA  GLN E  58      62.368  13.278   3.895  1.00103.70           C
ANISOU 2477  CA  GLN E  58    15414  11854  12132  -2267  -1964   1618       C
ATOM   2478  CB  GLN E  58      62.958  14.664   3.690  1.00 95.05           C
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ANISOU 2478  CB  GLN E  58    14035  10966  11113  -2197  -1836   1651       C
ATOM   2479  CG  GLN E  58      62.254  15.471   2.620  1.00110.46           C
ANISOU 2479  CG  GLN E  58    15872  12985  13112  -2224  -1801   1618       C
ATOM   2480  CD  GLN E  58      62.677  15.045   1.239  1.00109.15           C
ANISOU 2480  CD  GLN E  58    15830  12788  12854  -1989  -1832   1586       C
ATOM   2481  OE1 GLN E  58      63.758  14.493   1.075  1.00113.16           O
ANISOU 2481  OE1 GLN E  58    16435  13279  13280  -1776  -1841   1602       O
ATOM   2482  NE2 GLN E  58      61.842  15.311   0.236  1.00105.80           N
ANISOU 2482  NE2 GLN E  58    15401  12359  12440  -2023  -1846   1541       N
ATOM   2483  C   GLN E  58      63.291  12.449   4.762  1.00 97.47           C
ANISOU 2483  C   GLN E  58    14750  11008  11279  -2177  -1992   1654       C
ATOM   2484  O   GLN E  58      64.377  12.044   4.331  1.00105.33           O
ANISOU 2484  O   GLN E  58    15820  12008  12193  -1938  -1993   1666       O
ATOM   2485  N   LEU E  59      62.820  12.162   5.968  1.00 93.00           N
ANISOU 2485  N   LEU E  59    14213  10379  10745  -2371  -2019   1669       N
ATOM   2486  CA  LEU E  59      63.557  11.364   6.923  1.00 94.74           C
ANISOU 2486  CA  LEU E  59    14552  10536  10907  -2318  -2049   1705       C
ATOM   2487  CB  LEU E  59      63.174  11.801   8.330  1.00 91.54           C
ANISOU 2487  CB  LEU E  59    14025  10168  10589  -2542  -2016   1739       C
ATOM   2488  CG  LEU E  59      64.310  12.044   9.312  1.00 78.44           C
ANISOU 2488  CG  LEU E  59    12264   8607   8934  -2460  -1958   1799       C
ATOM   2489  CD1 LEU E  59      65.419  12.837   8.633  1.00 77.64           C
ANISOU 2489  CD1 LEU E  59    11996   8669   8835  -2238  -1871   1818       C
ATOM   2490  CD2 LEU E  59      63.736  12.827  10.483  1.00 75.19           C
ANISOU 2490  CD2 LEU E  59    11668   8266   8633  -2705  -1907   1826       C
ATOM   2491  C   LEU E  59      63.230   9.900   6.654  1.00 93.24           C
ANISOU 2491  C   LEU E  59    14675  10138  10614  -2290  -2169   1667       C
ATOM   2492  O   LEU E  59      62.642   9.216   7.484  1.00 96.77           O
ANISOU 2492  O   LEU E  59    15249  10463  11058  -2447  -2228   1664       O
ATOM   2493  N   ILE E  60      63.565   9.450   5.449  1.00 93.51           N
ANISOU 2493  N   ILE E  60    14830  10133  10569  -2095  -2203   1635       N
ATOM   2494  CA  ILE E  60      63.197   8.113   4.988  1.00 98.45           C
ANISOU 2494  CA  ILE E  60    15746  10563  11097  -2061  -2314   1590       C
ATOM   2495  CB  ILE E  60      62.379   8.210   3.684  1.00105.88           C
ANISOU 2495  CB  ILE E  60    16719  11476  12036  -2066  -2344   1527       C
ATOM   2496  CG1 ILE E  60      63.207   8.858   2.574  1.00100.79           C
ANISOU 2496  CG1 ILE E  60    15963  10961  11372  -1836  -2283   1531       C
ATOM   2497  CD1 ILE E  60      62.459   9.015   1.265  1.00 96.60           C
ANISOU 2497  CD1 ILE E  60    15453  10416  10836  -1827  -2308   1471       C
ATOM   2498  CG2 ILE E  60      61.139   9.057   3.898  1.00 97.75           C
ANISOU 2498  CG2 ILE E  60    15532  10489  11118  -2324  -2319   1508       C
ATOM   2499  C   ILE E  60      64.325   7.095   4.758  1.00 98.26           C
ANISOU 2499  C   ILE E  60    15915  10468  10953  -1813  -2355   1603       C
ATOM   2500  O   ILE E  60      64.069   6.002   4.264  1.00103.63           O
ANISOU 2500  O   ILE E  60    16834  10990  11549  -1766  -2443   1563       O
ATOM   2501  N   THR E  61      65.565   7.428   5.095  1.00 95.04           N
ANISOU 2501  N   THR E  61    15407  10171  10533  -1652  -2293   1655       N
ATOM   2502  CA  THR E  61      66.630   6.422   5.043  1.00103.57           C
ANISOU 2502  CA  THR E  61    16673  11178  11501  -1432  -2333   1672       C
ATOM   2503  CB  THR E  61      67.503   6.486   3.764  1.00 97.40           C
ANISOU 2503  CB  THR E  61    15900  10449  10657  -1161  -2314   1661       C
ATOM   2504  OG1 THR E  61      68.560   7.434   3.936  1.00101.93           O
ANISOU 2504  OG1 THR E  61    16255  11203  11269  -1037  -2213   1708       O
ATOM   2505  CG2 THR E  61      66.696   6.848   2.549  1.00100.79           C
ANISOU 2505  CG2 THR E  61    16308  10881  11105  -1185  -2322   1607       C
ATOM   2506  C   THR E  61      67.508   6.616   6.269  1.00114.34           C
ANISOU 2506  C   THR E  61    17944  12619  12881  -1413  -2285   1735       C
ATOM   2507  O   THR E  61      67.605   7.723   6.805  1.00115.44           O
ANISOU 2507  O   THR E  61    17840  12910  13113  -1492  -2200   1766       O
ATOM   2508  N   TYR E  62      68.110   5.528   6.734  1.00119.44           N
ANISOU 2508  N   TYR E  62    18939  10868  15577    -63  -2775   1176       N
ATOM   2509  CA  TYR E  62      68.885   5.568   7.966  1.00122.76           C
ANISOU 2509  CA  TYR E  62    19408  11258  15976     64  -2675   1061       C
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ATOM   2510  CB  TYR E  62      69.237   4.144   8.399  1.00134.96           C
ANISOU 2510  CB  TYR E  62    21314  12604  17361    135  -2914    930       C
ATOM   2511  CG  TYR E  62      68.022   3.314   8.789  1.00150.40           C
ANISOU 2511  CG  TYR E  62    23425  14351  19367    -89  -3057   1109       C
ATOM   2512  CD1 TYR E  62      67.342   3.563   9.975  1.00155.13           C
ANISOU 2512  CD1 TYR E  62    23964  14869  20108   -232  -2934   1264       C
ATOM   2513  CE1 TYR E  62      66.212   2.817  10.336  1.00161.49           C
ANISOU 2513  CE1 TYR E  62    24908  15487  20965   -441  -3062   1432       C
ATOM   2514  CZ  TYR E  62      65.753   1.823   9.491  1.00163.90           C
ANISOU 2514  CZ  TYR E  62    25410  15684  21179   -508  -3315   1446       C
ATOM   2515  OH  TYR E  62      64.641   1.086   9.838  1.00163.46           O
ANISOU 2515  OH  TYR E  62    25479  15459  21170   -713  -3435   1606       O
ATOM   2516  CE2 TYR E  62      66.411   1.567   8.299  1.00164.40           C
ANISOU 2516  CE2 TYR E  62    25535  15828  21103   -368  -3441   1294       C
ATOM   2517  CD2 TYR E  62      67.532   2.313   7.952  1.00159.25           C
ANISOU 2517  CD2 TYR E  62    24744  15363  20401   -161  -3312   1128       C
ATOM   2518  C   TYR E  62      70.133   6.459   7.909  1.00113.53           C
ANISOU 2518  C   TYR E  62    18078  10285  14774    288  -2496    885       C
ATOM   2519  O   TYR E  62      70.320   7.272   8.818  1.00122.11           O
ANISOU 2519  O   TYR E  62    19000  11433  15963    303  -2276    909       O
ATOM   2520  N   PRO E  63      70.952   6.365   6.845  1.00100.73           N
ANISOU 2520  N   PRO E  63    16488   8768  13018    455  -2580    716       N
ATOM   2521  CA  PRO E  63      72.104   7.275   6.827  1.00102.75           C
ANISOU 2521  CA  PRO E  63    16575   9214  13253    660  -2395    559       C
ATOM   2522  CB  PRO E  63      72.780   6.949   5.501  1.00 87.44           C
ANISOU 2522  CB  PRO E  63    14709   7355  11158    806  -2543    400       C
ATOM   2523  CG  PRO E  63      72.449   5.524   5.269  1.00 96.37           C
ANISOU 2523  CG  PRO E  63    16158   8291  12166    762  -2836    380       C
ATOM   2524  CD  PRO E  63      71.023   5.385   5.742  1.00 97.67           C
ANISOU 2524  CD  PRO E  63    16309   8323  12477    492  -2843    634       C
ATOM   2525  C   PRO E  63      71.723   8.759   6.910  1.00 98.28           C
ANISOU 2525  C   PRO E  63    15645   8818  12879    575  -2108    707       C
ATOM   2526  O   PRO E  63      72.555   9.586   7.260  1.00 93.61           O
ANISOU 2526  O   PRO E  63    14899   8363  12305    716  -1917    608       O
ATOM   2527  N   ARG E  64      70.465   9.073   6.615  1.00 98.94           N
ANISOU 2527  N   ARG E  64    15598   8890  13105    344  -2081    944       N
ATOM   2528  CA  ARG E  64      69.966  10.442   6.665  1.00 93.62           C
ANISOU 2528  CA  ARG E  64    14583   8367  12620    239  -1819   1106       C
ATOM   2529  CB  ARG E  64      68.800  10.643   5.702  1.00 95.69           C
ANISOU 2529  CB  ARG E  64    14731   8652  12976     36  -1858   1309       C
ATOM   2530  CG  ARG E  64      69.132  10.592   4.232  1.00 90.80           C
ANISOU 2530  CG  ARG E  64    14103   8140  12257    119  -1965   1224       C
ATOM   2531  CD  ARG E  64      67.836  10.713   3.447  1.00100.55           C
ANISOU 2531  CD  ARG E  64    15240   9369  13596   -109  -2008   1448       C
ATOM   2532  NE  ARG E  64      67.989  11.293   2.115  1.00113.63           N
ANISOU 2532  NE  ARG E  64    16736  11198  15240    -65  -1985   1430       N
ATOM   2533  CZ  ARG E  64      66.994  11.817   1.404  1.00104.80           C
ANISOU 2533  CZ  ARG E  64    15439  10140  14240   -241  -1942   1623       C
ATOM   2534  NH1 ARG E  64      65.768  11.869   1.901  1.00 94.55           N
ANISOU 2534  NH1 ARG E  64    14091   8748  13085   -474  -1910   1851       N
ATOM   2535  NH2 ARG E  64      67.238  12.307   0.200  1.00107.56           N
ANISOU 2535  NH2 ARG E  64    15656  10647  14565   -181  -1927   1587       N
ATOM   2536  C   ARG E  64      69.487  10.763   8.062  1.00 88.71           C
ANISOU 2536  C   ARG E  64    13899   7671  12137    129  -1667   1231       C
ATOM   2537  O   ARG E  64      69.817  11.809   8.616  1.00 86.57           O
ANISOU 2537  O   ARG E  64    13407   7522  11963    173  -1425   1236       O
ATOM   2538  N   ALA E  65      68.696   9.856   8.626  1.00 95.35           N
ANISOU 2538  N   ALA E  65    14934   8310  12986    -17  -1810   1333       N
ATOM   2539  CA  ALA E  65      68.167  10.039   9.968  1.00 93.54           C
ANISOU 2539  CA  ALA E  65    14670   7989  12883   -133  -1689   1459       C
ATOM   2540  CB  ALA E  65      67.154   8.977  10.280  1.00 98.04           C
ANISOU 2540  CB  ALA E  65    15456   8339  13457   -315  -1880   1589       C
ATOM   2541  C   ALA E  65      69.278  10.033  11.003  1.00 96.77           C
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ANISOU 2541  C   ALA E  65    15147   8394  13226     59  -1608   1277       C
ATOM   2542  O   ALA E  65      69.108  10.557  12.097  1.00104.73           O
ANISOU 2542  O   ALA E  65    16050   9394  14351     10  -1435   1352       O
ATOM   2543  N   LEU E  66      70.419   9.446  10.658  1.00 96.76           N
ANISOU 2543  N   LEU E  66    15322   8402  13041    279  -1732   1036       N
ATOM   2544  CA  LEU E  66      71.551   9.423  11.576  1.00 94.04           C
ANISOU 2544  CA  LEU E  66    15047   8061  12622    477  -1663    847       C
ATOM   2545  CB  LEU E  66      72.602   8.402  11.134  1.00 93.98           C
ANISOU 2545  CB  LEU E  66    15313   8008  12389    686  -1878    598       C
ATOM   2546  CG  LEU E  66      73.894   8.354  11.956  1.00100.91           C
ANISOU 2546  CG  LEU E  66    16271   8903  13169    916  -1817    377       C
ATOM   2547  CD1 LEU E  66      74.277   6.919  12.253  1.00109.10           C
ANISOU 2547  CD1 LEU E  66    17668   9752  14033    997  -2067    237       C
ATOM   2548  CD2 LEU E  66      75.046   9.092  11.268  1.00 95.65           C
ANISOU 2548  CD2 LEU E  66    15459   8446  12435   1129  -1712    198       C
ATOM   2549  C   LEU E  66      72.158  10.808  11.594  1.00 90.16           C
ANISOU 2549  C   LEU E  66    14254   7789  12213    576  -1390    811       C
ATOM   2550  O   LEU E  66      72.518  11.341  12.637  1.00 89.47           O
ANISOU 2550  O   LEU E  66    14078   7728  12189    624  -1214    791       O
ATOM   2551  N   TRP E  67      72.228  11.387  10.406  1.00 88.90           N
ANISOU 2551  N   TRP E  67    13935   7786  12056    597  -1360    811       N
ATOM   2552  CA  TRP E  67      72.773  12.709  10.197  1.00 85.36           C
ANISOU 2552  CA  TRP E  67    13194   7559  11682    688  -1116    780       C
ATOM   2553  CB  TRP E  67      72.941  12.951   8.702  1.00 82.72           C
ANISOU 2553  CB  TRP E  67    12776   7362  11293    735  -1169    740       C
ATOM   2554  CG  TRP E  67      73.191  14.345   8.338  1.00 76.97           C
ANISOU 2554  CG  TRP E  67    11723   6855  10668    772   -924    764       C
ATOM   2555  CD1 TRP E  67      72.506  15.066   7.424  1.00 75.25           C
ANISOU 2555  CD1 TRP E  67    11290   6752  10552    652   -854    911       C
ATOM   2556  NE1 TRP E  67      73.030  16.325   7.324  1.00 81.62           N
ANISOU 2556  NE1 TRP E  67    11819   7760  11431    738   -614    882       N
ATOM   2557  CE2 TRP E  67      74.100  16.428   8.162  1.00 84.20           C
ANISOU 2557  CE2 TRP E  67    12181   8109  11701    921   -526    709       C
ATOM   2558  CD2 TRP E  67      74.245  15.194   8.819  1.00 83.77           C
ANISOU 2558  CD2 TRP E  67    12436   7859  11534    951   -718    627       C
ATOM   2559  CE3 TRP E  67      75.278  15.034   9.746  1.00 80.17           C
ANISOU 2559  CE3 TRP E  67    12078   7384  11001   1130   -675    447       C
ATOM   2560  CZ3 TRP E  67      76.125  16.103   9.985  1.00 77.57           C
ANISOU 2560  CZ3 TRP E  67    11535   7229  10709   1270   -445    355       C
ATOM   2561  CH2 TRP E  67      75.959  17.322   9.319  1.00 76.36           C
ANISOU 2561  CH2 TRP E  67    11075   7268  10669   1236   -258    440       C
ATOM   2562  CZ2 TRP E  67      74.959  17.504   8.407  1.00 82.43           C
ANISOU 2562  CZ2 TRP E  67    11745   8061  11515   1063   -294    616       C
ATOM   2563  C   TRP E  67      71.858  13.753  10.833  1.00 77.11           C
ANISOU 2563  C   TRP E  67    11882   6559  10859    502   -882   1008       C
ATOM   2564  O   TRP E  67      72.316  14.706  11.466  1.00 72.67           O
ANISOU 2564  O   TRP E  67    11127   6108  10375    569   -652    986       O
ATOM   2565  N   TRP E  68      70.560  13.578  10.616  1.00 75.72           N
ANISOU 2565  N   TRP E  68    11691   6298  10781    268   -943   1228       N
ATOM   2566  CA  TRP E  68      69.546  14.452  11.180  1.00 73.58           C
ANISOU 2566  CA  TRP E  68    11188   6049  10720     67   -748   1465       C
ATOM   2567  CB  TRP E  68      68.143  13.973  10.787  1.00 72.07           C
ANISOU 2567  CB  TRP E  68    11045   5740  10598   -181   -880   1684       C
ATOM   2568  CG  TRP E  68      67.101  14.652  11.580  1.00 73.79           C
ANISOU 2568  CG  TRP E  68    11080   5939  11017   -387   -708   1919       C
ATOM   2569  CD1 TRP E  68      66.674  15.944  11.458  1.00 71.43           C
ANISOU 2569  CD1 TRP E  68    10460   5796  10884   -474   -473   2062       C
ATOM   2570  NE1 TRP E  68      65.718  16.214  12.416  1.00 73.54           N
ANISOU 2570  NE1 TRP E  68    10647   5985  11309   -663   -367   2263       N
ATOM   2571  CE2 TRP E  68      65.533  15.103  13.183  1.00 79.02           C
ANISOU 2571  CE2 TRP E  68    11610   6473  11942   -697   -529   2250       C
ATOM   2572  CD2 TRP E  68      66.395  14.091  12.693  1.00 79.27           C
ANISOU 2572  CD2 TRP E  68    11901   6449  11769   -526   -747   2034       C
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ATOM   2573  CE3 TRP E  68      66.402  12.837  13.312  1.00 71.02           C
ANISOU 2573  CE3 TRP E  68    11163   5198  10623   -521   -944   1977       C
ATOM   2574  CZ3 TRP E  68      65.558  12.622  14.385  1.00 74.46           C
ANISOU 2574  CZ3 TRP E  68    11639   5490  11163   -687   -921   2134       C
ATOM   2575  CH2 TRP E  68      64.705  13.641  14.856  1.00 80.79           C
ANISOU 2575  CH2 TRP E  68    12178   6351  12168   -857   -704   2349       C
ATOM   2576  CZ2 TRP E  68      64.678  14.881  14.269  1.00 75.86           C
ANISOU 2576  CZ2 TRP E  68    11250   5927  11645   -865   -507   2409       C
ATOM   2577  C   TRP E  68      69.659  14.540  12.696  1.00 75.77           C
ANISOU 2577  C   TRP E  68    11482   6249  11059     69   -627   1473       C
ATOM   2578  O   TRP E  68      69.563  15.619  13.272  1.00 73.29           O
ANISOU 2578  O   TRP E  68    10924   6036  10888     35   -383   1555       O
ATOM   2579  N   SER E  69      69.852  13.391  13.332  1.00 76.95           N
ANISOU 2579  N   SER E  69    11922   6217  11100    107   -802   1388       N
ATOM   2580  CA  SER E  69      69.950  13.315  14.789  1.00 81.12           C
ANISOU 2580  CA  SER E  69    12503   6649  11672    110   -717   1389       C
ATOM   2581  CB  SER E  69      70.023  11.852  15.233  1.00 83.51           C
ANISOU 2581  CB  SER E  69    13161   6733  11837    131   -965   1306       C
ATOM   2582  OG  SER E  69      71.248  11.264  14.838  1.00 87.92           O
ANISOU 2582  OG  SER E  69    13897   7308  12200    367  -1091   1049       O
ATOM   2583  C   SER E  69      71.160  14.093  15.329  1.00 74.56           C
ANISOU 2583  C   SER E  69    11547   5956  10825    319   -519   1220       C
ATOM   2584  O   SER E  69      71.058  14.822  16.323  1.00 69.66           O
ANISOU 2584  O   SER E  69    10773   5364  10330    283   -314   1292       O
ATOM   2585  N   VAL E  70      72.310  13.916  14.643  1.00 69.95           N
ANISOU 2585  N   VAL E  70    11035   5458  10083    539   -588    994       N
ATOM   2586  CA  VAL E  70      73.436  14.651  15.191  1.00 68.44           C
ANISOU 2586  CA  VAL E  70    10727   5396   9882    732   -399    838       C
ATOM   2587  CB  VAL E  70      74.740  14.283  14.456  1.00 63.98           C
ANISOU 2587  CB  VAL E  70    10284   4905   9122    983   -505    573       C
ATOM   2588  CG1 VAL E  70      75.899  15.139  14.943  1.00 73.65           C
ANISOU 2588  CG1 VAL E  70    11362   6280  10342   1181   -297    416       C
ATOM   2589  CG2 VAL E  70      75.029  12.804  14.603  1.00 73.34           C
ANISOU 2589  CG2 VAL E  70    11831   5902  10133   1050   -775    446       C
ATOM   2590  C   VAL E  70      73.224  16.151  15.088  1.00 69.01           C
ANISOU 2590  C   VAL E  70    10437   5660  10124    680   -122    952       C
ATOM   2591  O   VAL E  70      73.459  16.892  16.039  1.00 75.05           O
ANISOU 2591  O   VAL E  70    11057   6476  10981    705     86    963       O
ATOM   2592  N   GLU E  71      72.725  16.596  13.895  1.00 75.27           N
ANISOU 2592  N   GLU E  71    11082   6557  10961    597   -122   1048       N
ATOM   2593  CA  GLU E  71      72.518  18.030  13.713  1.00 76.58           C
ANISOU 2593  CA  GLU E  71    10900   6911  11284    548    138   1158       C
ATOM   2594  CB  GLU E  71      72.365  18.403  12.230  1.00 74.11           C
ANISOU 2594  CB  GLU E  71    10463   6731  10962    534    108   1183       C
ATOM   2595  CG  GLU E  71      71.179  17.806  11.518  1.00 75.21           C
ANISOU 2595  CG  GLU E  71    10682   6770  11125    332    -66   1354       C
ATOM   2596  CD  GLU E  71      70.861  18.547  10.221  1.00 82.54           C
ANISOU 2596  CD  GLU E  71    11397   7860  12104    283    -14   1431       C
ATOM   2597  OE1 GLU E  71      70.724  19.795  10.245  1.00 83.03           O
ANISOU 2597  OE1 GLU E  71    11164   8076  12307    246    225   1522       O
ATOM   2598  OE2 GLU E  71      70.740  17.876   9.171  1.00 97.65           O
ANISOU 2598  OE2 GLU E  71    13440   9746  13917    281   -215   1401       O
ATOM   2599  C   GLU E  71      71.310  18.496  14.503  1.00 75.51           C
ANISOU 2599  C   GLU E  71    10626   6717  11345    314    267   1411       C
ATOM   2600  O   GLU E  71      71.033  19.692  14.574  1.00 80.58           O
ANISOU 2600  O   GLU E  71    10981   7496  12139    252    497   1524       O
ATOM   2601  N   THR E  72      70.580  17.555  15.086  1.00 73.18           N
ANISOU 2601  N   THR E  72    10536   6221  11049    183    119   1502       N
ATOM   2602  CA  THR E  72      69.439  17.931  15.898  1.00 75.27           C
ANISOU 2602  CA  THR E  72    10686   6420  11495    -37    233   1739       C
ATOM   2603  CB  THR E  72      68.254  16.960  15.711  1.00 74.73           C
ANISOU 2603  CB  THR E  72    10793   6168  11433   -243     23   1899       C
ATOM   2604  OG1 THR E  72      67.802  16.996  14.349  1.00 83.65           O
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ANISOU 2604  OG1 THR E  72    11869   7363  12552   -311    -66   1961       O
ATOM   2605  CG2 THR E  72      67.111  17.318  16.657  1.00 71.76           C
ANISOU 2605  CG2 THR E  72    10308   5715  11241   -465    143   2138       C
ATOM   2606  C   THR E  72      69.879  17.979  17.366  1.00 73.02           C
ANISOU 2606  C   THR E  72    10437   6074  11234     27    345   1684       C
ATOM   2607  O   THR E  72      69.471  18.866  18.117  1.00 71.43           O
ANISOU 2607  O   THR E  72    10028   5919  11193    -63    560   1815       O
ATOM   2608  N   ALA E  73      70.699  17.007  17.767  1.00 69.81           N
ANISOU 2608  N   ALA E  73    10298   5561  10667    182    196   1492       N
ATOM   2609  CA  ALA E  73      71.223  16.920  19.137  1.00 74.15           C
ANISOU 2609  CA  ALA E  73    10915   6043  11214    265    277   1413       C
ATOM   2610  CB  ALA E  73      71.955  15.599  19.334  1.00 69.58           C
ANISOU 2610  CB  ALA E  73    10679   5321  10439    410     47   1216       C
ATOM   2611  C   ALA E  73      72.151  18.082  19.497  1.00 74.37           C
ANISOU 2611  C   ALA E  73    10714   6256  11287    420    532   1311       C
ATOM   2612  O   ALA E  73      72.227  18.499  20.651  1.00 77.11           O
ANISOU 2612  O   ALA E  73    10991   6591  11718    420    689   1336       O
ATOM   2613  N   THR E  74      72.902  18.569  18.558  1.00 70.80           N
ANISOU 2613  N   THR E  74     7468  11567   7865  -2437   1390    -39       N
ATOM   2614  CA  THR E  74      73.840  19.668  18.783  1.00 79.11           C
ANISOU 2614  CA  THR E  74     8529  12588   8942  -2417   1338     69       C
ATOM   2615  CB  THR E  74      74.967  19.676  17.726  1.00 79.69           C
ANISOU 2615  CB  THR E  74     8572  12751   8957  -2411   1311    138       C
ATOM   2616  OG1 THR E  74      74.383  19.700  16.412  1.00 75.20           O
ANISOU 2616  OG1 THR E  74     7924  12301   8347  -2417   1290    137       O
ATOM   2617  CG2 THR E  74      75.861  18.445  17.874  1.00 93.73           C
ANISOU 2617  CG2 THR E  74    10401  14520  10692  -2421   1365     96       C
ATOM   2618  C   THR E  74      73.104  21.013  18.695  1.00 78.79           C
ANISOU 2618  C   THR E  74     8441  12549   8948  -2406   1279    124       C
ATOM   2619  O   THR E  74      73.679  22.057  18.983  1.00 76.15           O
ANISOU 2619  O   THR E  74     8111  12179   8645  -2388   1232    211       O
ATOM   2620  N   THR E  75      71.835  20.947  18.297  1.00 77.57           N
ANISOU 2620  N   THR E  75     8241  12434   8796  -2416   1282     69       N
ATOM   2621  CA  THR E  75      70.942  22.099  18.097  1.00 78.42           C
ANISOU 2621  CA  THR E  75     8298  12556   8943  -2408   1230    106       C
ATOM   2622  CB  THR E  75      70.780  23.002  19.374  1.00 85.12           C
ANISOU 2622  CB  THR E  75     9188  13286   9870  -2397   1212    134       C
ATOM   2623  OG1 THR E  75      71.990  23.723  19.653  1.00 89.45           O
ANISOU 2623  OG1 THR E  75     9758  13798  10429  -2380   1177    230       O
ATOM   2624  CG2 THR E  75      70.415  22.143  20.591  1.00 90.32           C
ANISOU 2624  CG2 THR E  75     9919  13843  10557  -2409   1276     42       C
ATOM   2625  C   THR E  75      71.336  22.978  16.898  1.00 90.72           C
ANISOU 2625  C   THR E  75     9784  14212  10472  -2396   1165    201       C
ATOM   2626  O   THR E  75      70.937  24.139  16.818  1.00103.19           O
ANISOU 2626  O   THR E  75    11327  15793  12088  -2385   1112    259       O
ATOM   2627  N   VAL E  76      72.085  22.420  15.949  1.00 88.48           N
ANISOU 2627  N   VAL E  76     9480  14014  10124  -2399   1169    216       N
ATOM   2628  CA  VAL E  76      72.484  23.192  14.765  1.00 87.34           C
ANISOU 2628  CA  VAL E  76     9269  13969   9949  -2388   1110    304       C
ATOM   2629  CB  VAL E  76      73.611  22.479  13.979  1.00 82.37           C
ANISOU 2629  CB  VAL E  76     8637  13409   9251  -2390   1122    323       C
ATOM   2630  CG1 VAL E  76      73.908  23.225  12.665  1.00 72.70           C
ANISOU 2630  CG1 VAL E  76     7338  12295   7991  -2381   1063    407       C
ATOM   2631  CG2 VAL E  76      74.873  22.444  14.835  1.00 91.11           C
ANISOU 2631  CG2 VAL E  76     9814  14434  10370  -2381   1132    362       C
ATOM   2632  C   VAL E  76      71.264  23.416  13.861  1.00 91.80           C
ANISOU 2632  C   VAL E  76     9759  14617  10504  -2394   1090    280       C
ATOM   2633  O   VAL E  76      70.954  24.552  13.495  1.00 97.04           O
ANISOU 2633  O   VAL E  76    10374  15306  11190  -2383   1033    345       O
ATOM   2634  N   GLY E  77      70.567  22.331  13.520  1.00 95.23           N
ANISOU 2634  N   GLY E  77    10184  15093  10907  -2412   1138    184       N
ATOM   2635  CA  GLY E  77      69.362  22.424  12.706  1.00 92.84           C
ANISOU 2635  CA  GLY E  77     9814  14867  10594  -2419   1126    150       C
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ATOM   2636  C   GLY E  77      69.408  23.172  11.382  1.00 93.48           C
ANISOU 2636  C   GLY E  77     9814  15060  10643  -2411   1067    223       C
ATOM   2637  O   GLY E  77      68.670  24.151  11.181  1.00100.67           O
ANISOU 2637  O   GLY E  77    10681  15984  11585  -2404   1022    255       O
ATOM   2638  N   TYR E  78      70.243  22.692  10.460  1.00 91.95           N
ANISOU 2638  N   TYR E  78     9601  14949  10386  -2412   1067    246       N
ATOM   2639  CA  TYR E  78      70.381  23.312   9.146  1.00 82.84           C
ANISOU 2639  CA  TYR E  78     8372  13907   9196  -2404   1014    316       C
ATOM   2640  CB  TYR E  78      71.318  22.488   8.256  1.00 70.15           C
ANISOU 2640  CB  TYR E  78     6755  12382   7517  -2410   1031    321       C
ATOM   2641  CG  TYR E  78      72.757  22.459   8.715  1.00 76.84           C
ANISOU 2641  CG  TYR E  78     7655  13182   8358  -2402   1032    376       C
ATOM   2642  CD1 TYR E  78      73.496  23.638   8.834  1.00 84.72           C
ANISOU 2642  CD1 TYR E  78     8652  14157   9382  -2382    976    483       C
ATOM   2643  CE1 TYR E  78      74.852  23.607   9.191  1.00 91.45           C
ANISOU 2643  CE1 TYR E  78     9551  14971  10226  -2374    977    535       C
ATOM   2644  CZ  TYR E  78      75.461  22.383   9.433  1.00 90.59           C
ANISOU 2644  CZ  TYR E  78     9490  14847  10083  -2386   1033    479       C
ATOM   2645  OH  TYR E  78      76.795  22.314   9.745  1.00 88.21           O
ANISOU 2645  OH  TYR E  78     9234  14511   9771  -2379   1035    528       O
ATOM   2646  CE2 TYR E  78      74.740  21.201   9.329  1.00 87.02           C
ANISOU 2646  CE2 TYR E  78     9040  14417   9605  -2406   1090    373       C
ATOM   2647  CD2 TYR E  78      73.399  21.245   8.972  1.00 81.58           C
ANISOU 2647  CD2 TYR E  78     8305  13766   8925  -2413   1089    322       C
ATOM   2648  C   TYR E  78      69.060  23.475   8.408  1.00 77.11           C
ANISOU 2648  C   TYR E  78     7579  13251   8467  -2411   1000    278       C
ATOM   2649  O   TYR E  78      68.832  24.483   7.762  1.00 71.47           O
ANISOU 2649  O   TYR E  78     6808  12587   7759  -2400    943    344       O
ATOM   2650  N   GLY E  79      68.250  22.443   8.497  1.00 79.54           N
ANISOU 2650  N   GLY E  79     7895  13562   8763  -2428   1054    173       N
ATOM   2651  CA  GLY E  79      66.988  22.398   7.810  1.00 79.45           C
ANISOU 2651  CA  GLY E  79     7825  13618   8746  -2435   1051    124       C
ATOM   2652  C   GLY E  79      66.874  21.555   6.567  1.00 76.87           C
ANISOU 2652  C   GLY E  79     7449  13409   8349  -2446   1068     86       C
ATOM   2653  O   GLY E  79      65.852  21.599   5.943  1.00 77.06           O
ANISOU 2653  O   GLY E  79     7420  13492   8366  -2451   1061     52       O
ATOM   2654  N   ASP E  80      67.893  20.801   6.188  1.00 83.83           N
ANISOU 2654  N   ASP E  80     8345  14327   9179  -2450   1091     91       N
ATOM   2655  CA  ASP E  80      67.775  19.945   5.021  1.00 69.92           C
ANISOU 2655  CA  ASP E  80     6538  12678   7351  -2461   1110     51       C
ATOM   2656  CB  ASP E  80      69.114  19.466   4.486  1.00 72.52           C
ANISOU 2656  CB  ASP E  80     6875  13053   7625  -2460   1115     92       C
ATOM   2657  CG  ASP E  80      69.966  18.844   5.517  1.00 78.29           C
ANISOU 2657  CG  ASP E  80     7688  13694   8366  -2463   1157     73       C
ATOM   2658  OD1 ASP E  80      69.783  19.122   6.692  1.00 79.95           O
ANISOU 2658  OD1 ASP E  80     7949  13797   8632  -2460   1167     62       O
ATOM   2659  OD2 ASP E  80      70.848  18.076   5.148  1.00 66.88           O
ANISOU 2659  OD2 ASP E  80     6255  12285   6872  -2469   1181     71       O
ATOM   2660  C   ASP E  80      66.885  18.768   5.303  1.00 70.48           C
ANISOU 2660  C   ASP E  80     6626  12736   7416  -2479   1176    -71       C
ATOM   2661  O   ASP E  80      66.368  18.153   4.396  1.00 69.49           O
ANISOU 2661  O   ASP E  80     6455  12700   7249  -2488   1191   -119       O
ATOM   2662  N   LEU E  81      66.739  18.445   6.583  1.00 84.34           N
ANISOU 2662  N   LEU E  81     8450  14379   9215  -2483   1215   -121       N
ATOM   2663  CA  LEU E  81      65.963  17.292   7.040  1.00 78.92           C
ANISOU 2663  CA  LEU E  81     7792  13665   8529  -2500   1283   -239       C
ATOM   2664  CB  LEU E  81      66.878  16.090   7.274  1.00 70.98           C
ANISOU 2664  CB  LEU E  81     6838  12645   7485  -2510   1338   -278       C
ATOM   2665  CG  LEU E  81      67.674  15.504   6.119  1.00 72.79           C
ANISOU 2665  CG  LEU E  81     7034  12981   7642  -2514   1339   -258       C
ATOM   2666  CD1 LEU E  81      68.880  14.842   6.710  1.00 75.19           C
ANISOU 2666  CD1 LEU E  81     7405  13233   7932  -2516   1373   -255       C
ATOM   2667  CD2 LEU E  81      66.870  14.534   5.290  1.00 86.98           C
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ANISOU 2667  CD2 LEU E  81     8789  14864   9396  -2529   1375   -344       C
ATOM   2668  C   LEU E  81      65.230  17.623   8.341  1.00 74.87           C
ANISOU 2668  C   LEU E  81     7326  13034   8087  -2500   1296   -275       C
ATOM   2669  O   LEU E  81      65.783  18.311   9.204  1.00 79.18           O
ANISOU 2669  O   LEU E  81     7914  13495   8675  -2489   1276   -220       O
ATOM   2670  N   TYR E  82      64.013  17.103   8.490  1.00 73.76           N
ANISOU 2670  N   TYR E  82     7178  12888   7959  -2512   1331   -369       N
ATOM   2671  CA  TYR E  82      63.214  17.297   9.698  1.00 74.39           C
ANISOU 2671  CA  TYR E  82     7301  12860   8104  -2514   1349   -416       C
ATOM   2672  CB  TYR E  82      62.880  18.784   9.889  1.00 76.15           C
ANISOU 2672  CB  TYR E  82     7499  13054   8379  -2499   1284   -339       C
ATOM   2673  CG  TYR E  82      62.200  19.453   8.704  1.00 88.44           C
ANISOU 2673  CG  TYR E  82     8970  14714   9919  -2495   1234   -308       C
ATOM   2674  CD1 TYR E  82      60.826  19.374   8.534  1.00 82.67           C
ANISOU 2674  CD1 TYR E  82     8205  14002   9203  -2503   1243   -377       C
ATOM   2675  CE1 TYR E  82      60.209  19.981   7.476  1.00 87.26           C
ANISOU 2675  CE1 TYR E  82     8709  14675   9770  -2499   1199   -350       C
ATOM   2676  CZ  TYR E  82      60.956  20.674   6.551  1.00 88.86           C
ANISOU 2676  CZ  TYR E  82     8867  14954   9943  -2486   1144   -252       C
ATOM   2677  OH  TYR E  82      60.319  21.274   5.484  1.00102.08           O
ANISOU 2677  OH  TYR E  82    10463  16721  11601  -2482   1100   -226       O
ATOM   2678  CE2 TYR E  82      62.322  20.764   6.688  1.00 83.00           C
ANISOU 2678  CE2 TYR E  82     8157  14196   9185  -2479   1135   -183       C
ATOM   2679  CD2 TYR E  82      62.935  20.154   7.756  1.00 88.02           C
ANISOU 2679  CD2 TYR E  82     8870  14739   9836  -2483   1179   -211       C
ATOM   2680  C   TYR E  82      61.933  16.465   9.644  1.00 82.27           C
ANISOU 2680  C   TYR E  82     8286  13873   9100  -2529   1396   -530       C
ATOM   2681  O   TYR E  82      61.455  16.120   8.570  1.00 87.66           O
ANISOU 2681  O   TYR E  82     8910  14656   9740  -2535   1396   -557       O
ATOM   2682  N   PRO E  83      61.376  16.125  10.815  1.00 85.71           N
ANISOU 2682  N   PRO E  83     8777  14206   9581  -2536   1437   -599       N
ATOM   2683  CA  PRO E  83      60.129  15.359  10.901  1.00 93.15           C
ANISOU 2683  CA  PRO E  83     9715  15150  10529  -2551   1484   -711       C
ATOM   2684  CB  PRO E  83      60.126  14.930  12.367  1.00 90.34           C
ANISOU 2684  CB  PRO E  83     9442  14665  10218  -2556   1532   -764       C
ATOM   2685  CG  PRO E  83      60.728  16.105  13.040  1.00 85.95           C
ANISOU 2685  CG  PRO E  83     8911  14037   9708  -2541   1483   -671       C
ATOM   2686  CD  PRO E  83      61.933  16.340  12.159  1.00 83.80           C
ANISOU 2686  CD  PRO E  83     8612  13840   9387  -2532   1448   -582       C
ATOM   2687  C   PRO E  83      58.872  16.172  10.569  1.00 94.02           C
ANISOU 2687  C   PRO E  83     9768  15285  10669  -2548   1447   -714       C
ATOM   2688  O   PRO E  83      58.784  17.349  10.917  1.00102.07           O
ANISOU 2688  O   PRO E  83    10782  16264  11734  -2537   1397   -649       O
ATOM   2689  N   VAL E  84      57.901  15.565   9.899  1.00 97.58           N
ANISOU 2689  N   VAL E  84    10177  15804  11095  -2559   1471   -790       N
ATOM   2690  CA  VAL E  84      56.645  16.244   9.599  1.00106.28           C
ANISOU 2690  CA  VAL E  84    11227  16929  12226  -2558   1440   -803       C
ATOM   2691  CB  VAL E  84      56.367  16.332   8.118  1.00 96.90           C
ANISOU 2691  CB  VAL E  84     9956  15875  10987  -2556   1411   -786       C
ATOM   2692  CG1 VAL E  84      57.371  17.228   7.438  1.00 96.68           C
ANISOU 2692  CG1 VAL E  84     9895  15900  10938  -2542   1348   -667       C
ATOM   2693  CG2 VAL E  84      56.358  14.954   7.528  1.00 94.08           C
ANISOU 2693  CG2 VAL E  84     9592  15583  10572  -2570   1467   -866       C
ATOM   2694  C   VAL E  84      55.473  15.489  10.188  1.00106.12           C
ANISOU 2694  C   VAL E  84    11229  16863  12229  -2572   1496   -921       C
ATOM   2695  O   VAL E  84      54.378  16.009  10.297  1.00106.78           O
ANISOU 2695  O   VAL E  84    11288  16934  12350  -2572   1480   -944       O
ATOM   2696  N   THR E  85      55.709  14.242  10.537  1.00107.66           N
ANISOU 2696  N   THR E  85    11468  17036  12400  -2584   1562   -996       N
ATOM   2697  CA  THR E  85      54.692  13.419  11.136  1.00115.16           C
ANISOU 2697  CA  THR E  85    12446  17940  13370  -2597   1620  -1111       C
ATOM   2698  CB  THR E  85      55.192  11.993  11.260  1.00114.17           C
ANISOU 2698  CB  THR E  85    12360  17814  13203  -2609   1689  -1180       C
ANISOU 2698  CB  THR E  85    12360  17814  13203  -2609   1689  -1180       C
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ATOM   2699  OG1 THR E  85      56.401  12.005  12.011  1.00112.45           O
ANISOU 2699  OG1 THR E  85    12205  17527  12993  -2604   1694  -1131       O
ATOM   2700  CG2 THR E  85      55.497  11.431   9.921  1.00105.33           C
ANISOU 2700  CG2 THR E  85    11186  16821  12013  -2612   1690  -1178       C
ATOM   2701  C   THR E  85      54.566  13.914  12.536  1.00117.69           C
ANISOU 2701  C   THR E  85    12827  18128  13759  -2595   1622  -1109       C
ATOM   2702  O   THR E  85      55.569  14.233  13.133  1.00111.07           O
ANISOU 2702  O   THR E  85    12033  17232  12934  -2587   1611  -1048       O
ATOM   2703  N   LEU E  86      53.366  13.951  13.089  1.00128.64           N
ANISOU 2703  N   LEU E  86    15883  16137  16859  -4465  -1969   2160       N
ATOM   2704  CA  LEU E  86      53.233  14.408  14.457  1.00127.24           C
ANISOU 2704  CA  LEU E  86    15565  16220  16559  -4348  -1914   2264       C
ATOM   2705  CB  LEU E  86      51.798  14.489  14.915  1.00129.39           C
ANISOU 2705  CB  LEU E  86    15692  16695  16776  -4396  -1907   2491       C
ATOM   2706  CG  LEU E  86      51.783  14.904  16.376  1.00130.36           C
ANISOU 2706  CG  LEU E  86    15690  17073  16768  -4246  -1838   2583       C
ATOM   2707  CD1 LEU E  86      52.385  16.294  16.529  1.00132.23           C
ANISOU 2707  CD1 LEU E  86    15936  17421  16885  -4087  -1751   2369       C
ATOM   2708  CD2 LEU E  86      50.375  14.826  16.944  1.00127.82           C
ANISOU 2708  CD2 LEU E  86    15219  16947  16400  -4292  -1830   2838       C
ATOM   2709  C   LEU E  86      54.010  13.470  15.320  1.00122.04           C
ANISOU 2709  C   LEU E  86    14914  15525  15933  -4304  -1931   2345       C
ATOM   2710  O   LEU E  86      54.584  13.874  16.298  1.00118.86           O
ANISOU 2710  O   LEU E  86    14462  15260  15439  -4162  -1879   2321       O
ATOM   2711  N   TRP E  87      53.991  12.199  14.987  1.00125.94           N
ANISOU 2711  N   TRP E  87    15466  15835  16552  -4432  -2001   2453       N
ATOM   2712  CA  TRP E  87      54.737  11.236  15.767  1.00120.30           C
ANISOU 2712  CA  TRP E  87    14759  15070  15878  -4396  -2017   2537       C
ATOM   2713  CB  TRP E  87      54.293   9.822  15.438  1.00136.53           C
ANISOU 2713  CB  TRP E  87    16853  16961  18062  -4561  -2093   2713       C
ATOM   2714  CG  TRP E  87      53.343   9.325  16.442  1.00141.79           C
ANISOU 2714  CG  TRP E  87    17377  17811  18687  -4585  -2104   2980       C
ATOM   2715  CD1 TRP E  87      52.104   9.808  16.708  1.00148.82           C
ANISOU 2715  CD1 TRP E  87    18143  18902  19500  -4608  -2092   3111       C
ATOM   2716  NE1 TRP E  87      51.535   9.105  17.722  1.00144.11           N
ANISOU 2716  NE1 TRP E  87    17435  18434  18888  -4619  -2106   3354       N
ATOM   2717  CE2 TRP E  87      52.419   8.147  18.135  1.00146.14           C
ANISOU 2717  CE2 TRP E  87    17743  18573  19210  -4603  -2128   3380       C
ATOM   2718  CD2 TRP E  87      53.566   8.266  17.349  1.00141.11           C
ANISOU 2718  CD2 TRP E  87    17252  17728  18633  -4579  -2125   3151       C
ATOM   2719  CE3 TRP E  87      54.636   7.401  17.574  1.00144.51           C
ANISOU 2719  CE3 TRP E  87    17757  18007  19142  -4555  -2139   3136       C
ATOM   2720  CZ3 TRP E  87      54.525   6.464  18.559  1.00157.99           C
ANISOU 2720  CZ3 TRP E  87    19390  19775  20863  -4556  -2158   3344       C
ATOM   2721  CH2 TRP E  87      53.362   6.364  19.328  1.00160.29           C
ANISOU 2721  CH2 TRP E  87    19537  20274  21091  -4583  -2164   3566       C
ATOM   2722  CZ2 TRP E  87      52.301   7.198  19.130  1.00158.40           C
ANISOU 2722  CZ2 TRP E  87    19223  20186  20775  -4605  -2148   3588       C
ATOM   2723  C   TRP E  87      56.253  11.367  15.721  1.00112.25           C
ANISOU 2723  C   TRP E  87    13842  13929  14880  -4288  -1994   2336       C
ATOM   2724  O   TRP E  87      56.903  11.250  16.735  1.00109.19           O
ANISOU 2724  O   TRP E  87    13409  13630  14448  -4180  -1969   2372       O
ATOM   2725  N   GLY E  88      56.810  11.621  14.546  1.00118.78           N
ANISOU 2725  N   GLY E  88    14803  14554  15772  -4320  -2003   2130       N
ATOM   2726  CA  GLY E  88      58.249  11.740  14.367  1.00105.36           C
ANISOU 2726  CA  GLY E  88    13210  12719  14105  -4227  -1984   1935       C
ATOM   2727  C   GLY E  88      58.835  12.881  15.147  1.00 93.90           C
ANISOU 2727  C   GLY E  88    11698  11466  12516  -4049  -1916   1819       C
ATOM   2728  O   GLY E  88      59.915  12.810  15.682  1.00 99.28           O
ANISOU 2728  O   GLY E  88    12399  11837  13188  -3947  -1898   1764       O
ATOM   2729  N   ARG E  89      58.109  13.888  15.288  1.00 95.33           N
ANISOU 2729  N   ARG E  89    11800  11837  12584  -4013  -1878   1802       N
ATOM   2730  CA  ARG E  89      58.478  15.114  15.915  1.00100.21           C
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ANISOU 2730  CA  ARG E  89    12367  12651  13056  -3858  -1807   1686       C
ATOM   2731  CB  ARG E  89      57.358  16.132  15.762  1.00 98.52           C
ANISOU 2731  CB  ARG E  89    12077  12611  12744  -3862  -1768   1687       C
ATOM   2732  CG  ARG E  89      57.104  16.566  14.329  1.00 94.71           C
ANISOU 2732  CG  ARG E  89    11683  11981  12321  -3946  -1786   1531       C
ATOM   2733  CD  ARG E  89      56.278  17.842  14.282  1.00 98.84           C
ANISOU 2733  CD  ARG E  89    12131  12698  12724  -3903  -1726   1487       C
ATOM   2734  NE  ARG E  89      55.951  18.257  12.918  1.00101.48           N
ANISOU 2734  NE  ARG E  89    12540  12903  13116  -3992  -1745   1352       N
ATOM   2735  CZ  ARG E  89      54.966  19.087  12.602  1.00104.76           C
ANISOU 2735  CZ  ARG E  89    12892  13441  13470  -4011  -1713   1359       C
ATOM   2736  NH1 ARG E  89      54.165  19.551  13.548  1.00114.98           N
ANISOU 2736  NH1 ARG E  89    14050  14989  14651  -3950  -1658   1504       N
ATOM   2737  NH2 ARG E  89      54.798  19.463  11.350  1.00 97.14           N
ANISOU 2737  NH2 ARG E  89    12002  12348  12560  -4088  -1733   1222       N
ATOM   2738  C   ARG E  89      58.707  14.827  17.358  1.00 98.73           C
ANISOU 2738  C   ARG E  89    12083  12634  12795  -3769  -1786   1834       C
ATOM   2739  O   ARG E  89      59.600  15.370  17.970  1.00 86.20           O
ANISOU 2739  O   ARG E  89    10497  11127  11128  -3641  -1746   1736       O
ATOM   2740  N   CYS E  90      58.013  13.840  17.877  1.00104.31           N
ANISOU 2740  N   CYS E  90    12719  13371  13544  -3845  -1822   2071       N
ATOM   2741  CA  CYS E  90      58.214  13.495  19.290  1.00 94.71           C
ANISOU 2741  CA  CYS E  90    11407  12316  12261  -3766  -1805   2225       C
ATOM   2742  CB  CYS E  90      57.231  12.437  19.801  1.00 90.79           C
ANISOU 2742  CB  CYS E  90    10822  11864  11808  -3863  -1846   2501       C
ATOM   2743  SG  CYS E  90      55.585  13.064  20.213  1.00104.99           S
ANISOU 2743  SG  CYS E  90    12476  13918  13495  -3885  -1812   2660       S
ATOM   2744  C   CYS E  90      59.635  13.008  19.464  1.00 89.12           C
ANISOU 2744  C   CYS E  90    10775  11475  11611  -3707  -1817   2146       C
ATOM   2745  O   CYS E  90      60.338  13.495  20.350  1.00 97.45           O
ANISOU 2745  O   CYS E  90    11797  12663  12568  -3582  -1777   2107       O
ATOM   2746  N   VAL E  91      60.045  12.042  18.636  1.00 79.83           N
ANISOU 2746  N   VAL E  91     9703  10038  10591  -3799  -1871   2130       N
ATOM   2747  CA  VAL E  91      61.416  11.525  18.665  1.00 82.46           C
ANISOU 2747  CA  VAL E  91    10117  10214  10999  -3748  -1880   2056       C
ATOM   2748  CB  VAL E  91      61.712  10.579  17.485  1.00 87.48           C
ANISOU 2748  CB  VAL E  91    10888  10537  11811  -3865  -1928   2016       C
ATOM   2749  CG1 VAL E  91      63.154  10.088  17.527  1.00 81.74           C
ANISOU 2749  CG1 VAL E  91    10243   9651  11163  -3800  -1927   1942       C
ATOM   2750  CG2 VAL E  91      60.753   9.407  17.498  1.00 90.73           C
ANISOU 2750  CG2 VAL E  91    11270  10897  12306  -4004  -1978   2244       C
ATOM   2751  C   VAL E  91      62.405  12.691  18.648  1.00 87.57           C
ANISOU 2751  C   VAL E  91    10804  10909  11558  -3614  -1831   1826       C
ATOM   2752  O   VAL E  91      63.400  12.691  19.390  1.00 86.81           O
ANISOU 2752  O   VAL E  91    10697  10856  11429  -3514  -1815   1810       O
ATOM   2753  N   ALA E  92      62.095  13.702  17.835  1.00 91.55           N
ANISOU 2753  N   ALA E  92    11347  11418  12018  -3615  -1809   1658       N
ATOM   2754  CA  ALA E  92      62.938  14.888  17.723  1.00 92.38           C
ANISOU 2754  CA  ALA E  92    11495  11570  12035  -3495  -1763   1429       C
ATOM   2755  CB  ALA E  92      62.345  15.858  16.702  1.00 80.71           C
ANISOU 2755  CB  ALA E  92    10056  10081  10528  -3526  -1745   1272       C
ATOM   2756  C   ALA E  92      63.113  15.573  19.083  1.00 86.73           C
ANISOU 2756  C   ALA E  92    10676  11124  11152  -3367  -1712   1472       C
ATOM   2757  O   ALA E  92      64.238  15.852  19.497  1.00 79.07           O
ANISOU 2757  O   ALA E  92     9732  10167  10143  -3267  -1695   1379       O
ATOM   2758  N   VAL E  93      62.000  15.833  19.767  1.00 85.91           N
ANISOU 2758  N   VAL E  93    10460  11232  10951  -3374  -1688   1618       N
ATOM   2759  CA  VAL E  93      62.027  16.494  21.062  1.00 76.49           C
ANISOU 2759  CA  VAL E  93     9173  10299   9590  -3262  -1633   1670       C
ATOM   2760  CB  VAL E  93      60.634  16.625  21.686  1.00 77.52           C
ANISOU 2760  CB  VAL E  93     9183  10634   9638  -3290  -1607   1856       C
ATOM   2761  CG1 VAL E  93      60.725  17.484  22.927  1.00 82.13           C
ANISOU 2761  CG1 VAL E  93     9692  11477  10035  -3168  -1538   1872       C
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ATOM   2762  CG2 VAL E  93      59.680  17.268  20.729  1.00 89.09           C
ANISOU 2762  CG2 VAL E  93    10658  12091  11103  -3347  -1592   1787       C
ATOM   2763  C   VAL E  93      62.890  15.706  22.020  1.00 83.52           C
ANISOU 2763  C   VAL E  93    10041  11195  10499  -3220  -1654   1777       C
ATOM   2764  O   VAL E  93      63.639  16.278  22.808  1.00 92.24           O
ANISOU 2764  O   VAL E  93    11130  12424  11492  -3113  -1619   1723       O
ATOM   2765  N   VAL E  94      62.787  14.386  21.952  1.00 85.46           N
ANISOU 2765  N   VAL E  94    10285  11303  10882  -3309  -1711   1932       N
ATOM   2766  CA  VAL E  94      63.570  13.545  22.844  1.00 84.88           C
ANISOU 2766  CA  VAL E  94    10185  11227  10840  -3276  -1732   2050       C
ATOM   2767  CB  VAL E  94      63.120  12.072  22.775  1.00 83.51           C
ANISOU 2767  CB  VAL E  94     9996  10922  10813  -3390  -1789   2253       C
ATOM   2768  CG1 VAL E  94      64.150  11.156  23.448  1.00 73.29           C
ANISOU 2768  CG1 VAL E  94     8699   9566   9581  -3356  -1812   2341       C
ATOM   2769  CG2 VAL E  94      61.735  11.913  23.426  1.00 81.27           C
ANISOU 2769  CG2 VAL E  94     9592  10820  10468  -3439  -1787   2462       C
ATOM   2770  C   VAL E  94      65.050  13.684  22.490  1.00 86.33           C
ANISOU 2770  C   VAL E  94    10466  11269  11066  -3209  -1733   1872       C
ATOM   2771  O   VAL E  94      65.897  13.837  23.383  1.00 84.86           O
ANISOU 2771  O   VAL E  94    10252  11181  10810  -3118  -1718   1879       O
ATOM   2772  N   VAL E  95      65.347  13.678  21.190  1.00 83.71           N
ANISOU 2772  N   VAL E  95    10249  10713  10843  -3254  -1751   1713       N
ATOM   2773  CA  VAL E  95      66.720  13.853  20.700  1.00 84.56           C
ANISOU 2773  CA  VAL E  95    10459  10669  11001  -3193  -1750   1531       C
ATOM   2774  CB  VAL E  95      66.810  13.649  19.171  1.00 83.41           C
ANISOU 2774  CB  VAL E  95    10443  10252  10998  -3271  -1773   1388       C
ATOM   2775  CG1 VAL E  95      68.196  14.008  18.639  1.00 73.51           C
ANISOU 2775  CG1 VAL E  95     9293   8856   9782  -3197  -1764   1182       C
ATOM   2776  CG2 VAL E  95      66.458  12.217  18.821  1.00 83.83           C
ANISOU 2776  CG2 VAL E  95    10521  10117  11214  -3392  -1821   1548       C
ATOM   2777  C   VAL E  95      67.297  15.227  21.080  1.00 83.55           C
ANISOU 2777  C   VAL E  95    10326  10707  10711  -3069  -1701   1364       C
ATOM   2778  O   VAL E  95      68.453  15.325  21.504  1.00 79.66           O
ANISOU 2778  O   VAL E  95     9852  10217  10199  -2987  -1696   1311       O
ATOM   2779  N   MET E  96      66.509  16.281  20.882  1.00 85.40           N
ANISOU 2779  N   MET E  96    10542  11073  10833  -3059  -1664   1280       N
ATOM   2780  CA  MET E  96      66.953  17.628  21.213  1.00 83.98           C
ANISOU 2780  CA  MET E  96    10364  11053  10490  -2947  -1611   1119       C
ATOM   2781  CB  MET E  96      65.876  18.670  20.889  1.00 83.43           C
ANISOU 2781  CB  MET E  96    10272  11110  10316  -2953  -1566   1051       C
ATOM   2782  CG  MET E  96      65.446  18.748  19.425  1.00 80.76           C
ANISOU 2782  CG  MET E  96    10014  10586  10086  -3035  -1584    926       C
ATOM   2783  SD  MET E  96      63.994  19.814  19.216  1.00 96.55           S
ANISOU 2783  SD  MET E  96    11955  12760  11968  -3052  -1531    912       S
ATOM   2784  CE  MET E  96      63.673  19.667  17.465  1.00 96.18           C
ANISOU 2784  CE  MET E  96    12011  12459  12076  -3165  -1571    781       C
ATOM   2785  C   MET E  96      67.322  17.718  22.686  1.00 86.47           C
ANISOU 2785  C   MET E  96    10597  11581  10679  -2867  -1589   1235       C
ATOM   2786  O   MET E  96      68.438  18.118  23.029  1.00 85.81           O
ANISOU 2786  O   MET E  96    10543  11521  10540  -2783  -1580   1139       O
ATOM   2787  N   VAL E  97      66.404  17.310  23.557  1.00 89.66           N
ANISOU 2787  N   VAL E  97    10896  12135  11037  -2897  -1585   1446       N
ATOM   2788  CA  VAL E  97      66.646  17.401  24.995  1.00 88.69           C
ANISOU 2788  CA  VAL E  97    10691  12223  10785  -2828  -1563   1567       C
ATOM   2789  CB  VAL E  97      65.392  16.963  25.806  1.00 87.63           C
ANISOU 2789  CB  VAL E  97    10441  12245  10610  -2874  -1555   1803       C
ATOM   2790  CG1 VAL E  97      65.760  16.648  27.245  1.00 85.02           C
ANISOU 2790  CG1 VAL E  97    10033  12077  10195  -2826  -1552   1960       C
ATOM   2791  CG2 VAL E  97      64.314  18.052  25.761  1.00 83.51           C
ANISOU 2791  CG2 VAL E  97     9887  11886   9955  -2860  -1492   1760       C
ATOM   2792  C   VAL E  97      67.867  16.563  25.398  1.00 84.70           C
ANISOU 2792  C   VAL E  97    10200  11623  10359  -2807  -1605   1619       C
ATOM   2793  O   VAL E  97      68.666  16.991  26.232  1.00 91.09           O
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ANISOU 2793  O   VAL E  97    10995  12555  11061  -2727  -1587   1600       O
ATOM   2794  N   ALA E  98      68.051  15.419  24.740  1.00 79.76           N
ANISOU 2794  N   ALA E  98     9612  10771   9923  -2880  -1657   1673       N
ATOM   2795  CA  ALA E  98      69.182  14.541  25.031  1.00 78.88           C
ANISOU 2795  CA  ALA E  98     9516  10548   9908  -2863  -1692   1732       C
ATOM   2796  CB  ALA E  98      69.113  13.286  24.184  1.00 74.25           C
ANISOU 2796  CB  ALA E  98     8978   9702   9530  -2958  -1738   1797       C
ATOM   2797  C   ALA E  98      70.513  15.256  24.800  1.00 82.46           C
ANISOU 2797  C   ALA E  98    10043  10958  10328  -2775  -1680   1535       C
ATOM   2798  O   ALA E  98      71.436  15.126  25.593  1.00 92.37           O
ANISOU 2798  O   ALA E  98    11274  12273  11551  -2717  -1685   1582       O
ATOM   2799  N   GLY E  99      70.606  16.006  23.711  1.00 84.95           N
ANISOU 2799  N   GLY E  99    10450  11174  10654  -2769  -1665   1320       N
ATOM   2800  CA  GLY E  99      71.806  16.762  23.397  1.00 82.88           C
ANISOU 2800  CA  GLY E  99    10263  10869  10359  -2688  -1653   1119       C
ATOM   2801  C   GLY E  99      71.991  17.976  24.290  1.00 80.82           C
ANISOU 2801  C   GLY E  99     9964  10862   9880  -2598  -1610   1056       C
ATOM   2802  O   GLY E  99      73.085  18.213  24.805  1.00 80.28           O
ANISOU 2802  O   GLY E  99     9905  10839   9761  -2529  -1611   1021       O
ATOM   2803  N   ILE E 100      70.921  18.748  24.470  1.00 76.52           N
ANISOU 2803  N   ILE E 100     9382  10483   9208  -2602  -1568   1047       N
ATOM   2804  CA  ILE E 100      70.969  19.949  25.302  1.00 81.28           C
ANISOU 2804  CA  ILE E 100     9959  11329   9594  -2521  -1515    987       C
ATOM   2805  CB  ILE E 100      69.619  20.719  25.310  1.00 90.33           C
ANISOU 2805  CB  ILE E 100    11069  12626  10627  -2535  -1461    984       C
ATOM   2806  CG1 ILE E 100      69.167  21.020  23.878  1.00 82.08           C
ANISOU 2806  CG1 ILE E 100    10095  11421   9672  -2577  -1460    827       C
ATOM   2807  CD1 ILE E 100      67.801  21.671  23.782  1.00 80.52           C
ANISOU 2807  CD1 ILE E 100     9854  11350   9388  -2599  -1410    841       C
ATOM   2808  CG2 ILE E 100      69.736  22.014  26.132  1.00 78.08           C
ANISOU 2808  CG2 ILE E 100     9510  11313   8845  -2447  -1395    907       C
ATOM   2809  C   ILE E 100      71.403  19.576  26.732  1.00 84.63           C
ANISOU 2809  C   ILE E 100    10307  11912   9938  -2489  -1522   1161       C
ATOM   2810  O   ILE E 100      71.951  20.410  27.459  1.00 88.57           O
ANISOU 2810  O   ILE E 100    10806  12572  10275  -2418  -1493   1105       O
ATOM   2811  N   THR E 101      71.012  18.386  27.187  1.00 88.02           N
ANISOU 2811  N   THR E 101    10665  12316  10461  -2546  -1557   1381       N
ATOM   2812  CA  THR E 101      71.430  17.893  28.503  1.00 81.05           C
ANISOU 2812  CA  THR E 101     9706  11565   9524  -2525  -1571   1560       C
ATOM   2813  CB  THR E 101      70.509  16.773  28.974  1.00 79.80           C
ANISOU 2813  CB  THR E 101     9459  11421   9442  -2596  -1594   1802       C
ATOM   2814  OG1 THR E 101      69.201  17.312  29.186  1.00 78.02           O
ANISOU 2814  OG1 THR E 101     9186  11348   9110  -2612  -1549   1841       O
ATOM   2815  CG2 THR E 101      71.024  16.171  30.271  1.00100.67           C
ANISOU 2815  CG2 THR E 101    12025  14178  12048  -2577  -1614   1987       C
ATOM   2816  C   THR E 101      72.874  17.385  28.600  1.00 78.59           C
ANISOU 2816  C   THR E 101     9423  11146   9293  -2494  -1612   1554       C
ATOM   2817  O   THR E 101      73.636  17.842  29.447  1.00 86.38           O
ANISOU 2817  O   THR E 101    10394  12269  10157  -2435  -1604   1552       O
ATOM   2818  N   SER E 102      73.247  16.452  27.726  1.00 74.24           N
ANISOU 2818  N   SER E 102     8916  10348   8945  -2535  -1652   1554       N
ATOM   2819  CA  SER E 102      74.590  15.865  27.759  1.00 82.35           C
ANISOU 2819  CA  SER E 102     9966  11252  10071  -2506  -1687   1566       C
ATOM   2820  CB  SER E 102      74.759  14.851  26.627  1.00 83.00           C
ANISOU 2820  CB  SER E 102    10112  11041  10385  -2561  -1717   1559       C
ATOM   2821  OG  SER E 102      73.840  13.784  26.770  1.00 91.20           O
ANISOU 2821  OG  SER E 102    11095  12041  11515  -2641  -1736   1751       O
ATOM   2822  C   SER E 102      75.705  16.906  27.684  1.00 84.01           C
ANISOU 2822  C   SER E 102    10237  11498  10184  -2425  -1673   1378       C
ATOM   2823  O   SER E 102      76.615  16.909  28.515  1.00 84.53           O
ANISOU 2823  O   SER E 102    10272  11653  10192  -2380  -1685   1435       O
ATOM   2824  N   PHE E 103      75.637  17.778  26.681  1.00 86.04           N
ANISOU 2824  N   PHE E 103    10579  11687  10425  -2409  -1650   1157       N
ANISOU 2824  N   PHE E 103    10579  11687  10425  -2409  -1650   1157       N
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ATOM   2825  CA  PHE E 103      76.627  18.838  26.535  1.00 84.06           C
ANISOU 2825  CA  PHE E 103    10392  11470  10076  -2334  -1635    964       C
ATOM   2826  CB  PHE E 103      76.439  19.602  25.220  1.00 80.09           C
ANISOU 2826  CB  PHE E 103     9988  10845   9599  -2331  -1614    726       C
ATOM   2827  CG  PHE E 103      76.993  18.900  24.011  1.00 74.01           C
ANISOU 2827  CG  PHE E 103     9297   9781   9042  -2356  -1644    654       C
ATOM   2828  CD1 PHE E 103      78.350  18.945  23.732  1.00 73.65           C
ANISOU 2828  CD1 PHE E 103     9307   9627   9051  -2303  -1660    561       C
ATOM   2829  CE1 PHE E 103      78.869  18.322  22.614  1.00 75.20           C
ANISOU 2829  CE1 PHE E 103     9583   9547   9442  -2322  -1679    493       C
ATOM   2830  CZ  PHE E 103      78.027  17.657  21.746  1.00 91.86           C
ANISOU 2830  CZ  PHE E 103    11726  11486  11690  -2403  -1684    511       C
ATOM   2831  CE2 PHE E 103      76.663  17.615  22.002  1.00 88.64           C
ANISOU 2831  CE2 PHE E 103    11261  11190  11228  -2463  -1674    603       C
ATOM   2832  CD2 PHE E 103      76.154  18.240  23.129  1.00 83.94           C
ANISOU 2832  CD2 PHE E 103    10579  10871  10442  -2436  -1653    675       C
ATOM   2833  C   PHE E 103      76.548  19.813  27.703  1.00 79.95           C
ANISOU 2833  C   PHE E 103     9826  11235   9317  -2286  -1602    976       C
ATOM   2834  O   PHE E 103      77.547  20.432  28.076  1.00 79.12           O
ANISOU 2834  O   PHE E 103     9744  11202   9115  -2227  -1602    899       O
ATOM   2835  N   GLY E 104      75.355  19.945  28.272  1.00 79.88           N
ANISOU 2835  N   GLY E 104     9755  11384   9212  -2313  -1572   1075       N
ATOM   2836  CA  GLY E 104      75.146  20.828  29.403  1.00 85.90           C
ANISOU 2836  CA  GLY E 104    10479  12414   9746  -2274  -1530   1100       C
ATOM   2837  C   GLY E 104      75.880  20.314  30.618  1.00 87.17           C
ANISOU 2837  C   GLY E 104    10577  12680   9865  -2262  -1559   1269       C
ATOM   2838  O   GLY E 104      76.473  21.072  31.384  1.00 80.80           O
ANISOU 2838  O   GLY E 104     9776  12034   8889  -2216  -1544   1235       O
ATOM   2839  N   LEU E 105      75.853  19.000  30.777  1.00 88.41           N
ANISOU 2839  N   LEU E 105    10675  12739  10178  -2308  -1603   1455       N
ATOM   2840  CA  LEU E 105      76.501  18.353  31.898  1.00 80.60           C
ANISOU 2840  CA  LEU E 105     9615  11833   9175  -2305  -1636   1639       C
ATOM   2841  CB  LEU E 105      75.972  16.919  32.034  1.00 77.67           C
ANISOU 2841  CB  LEU E 105     9172  11371   8969  -2368  -1670   1857       C
ATOM   2842  CG  LEU E 105      76.335  16.046  33.234  1.00 98.77           C
ANISOU 2842  CG  LEU E 105    11751  14133  11646  -2379  -1702   2091       C
ATOM   2843  CD1 LEU E 105      75.188  15.114  33.589  1.00 98.24           C
ANISOU 2843  CD1 LEU E 105    11602  14082  11642  -2442  -1708   2291       C
ATOM   2844  CD2 LEU E 105      77.579  15.271  32.940  1.00 95.20           C
ANISOU 2844  CD2 LEU E 105    11313  13506  11353  -2368  -1747   2116       C
ATOM   2845  C   LEU E 105      78.026  18.394  31.716  1.00 84.79           C
ANISOU 2845  C   LEU E 105    10193  12275   9750  -2261  -1668   1560       C
ATOM   2846  O   LEU E 105      78.756  18.592  32.679  1.00 96.83           O
ANISOU 2846  O   LEU E 105    11686  13939  11165  -2234  -1680   1624       O
ATOM   2847  N   VAL E 106      78.504  18.214  30.485  1.00 81.35           N
ANISOU 2847  N   VAL E 106     9831  11607   9471  -2257  -1683   1427       N
ATOM   2848  CA  VAL E 106      79.943  18.280  30.205  1.00 79.83           C
ANISOU 2848  CA  VAL E 106     9685  11315   9330  -2211  -1710   1345       C
ATOM   2849  CB  VAL E 106      80.284  18.029  28.717  1.00 84.18           C
ANISOU 2849  CB  VAL E 106    10327  11587  10071  -2212  -1717   1195       C
ATOM   2850  CG1 VAL E 106      81.765  18.308  28.452  1.00 67.83           C
ANISOU 2850  CG1 VAL E 106     8307   9438   8027  -2154  -1736   1092       C
ATOM   2851  CG2 VAL E 106      79.937  16.603  28.309  1.00 86.01           C
ANISOU 2851  CG2 VAL E 106    10535  11622  10521  -2271  -1740   1342       C
ATOM   2852  C   VAL E 106      80.437  19.664  30.595  1.00 81.61           C
ANISOU 2852  C   VAL E 106     9950  11718   9340  -2155  -1686   1197       C
ATOM   2853  O   VAL E 106      81.554  19.831  31.081  1.00 82.32           O
ANISOU 2853  O   VAL E 106    10038  11858   9382  -2121  -1709   1206       O
ATOM   2854  N   THR E 107      79.590  20.664  30.378  1.00 80.70           N
ANISOU 2854  N   THR E 107     9871  11699   9093  -2149  -1638   1065       N
ATOM   2855  CA  THR E 107      79.913  22.029  30.766  1.00 81.94           C
ANISOU 2855  CA  THR E 107    10072  12033   9028  -2100  -1605    923       C
ATOM   2856  CB  THR E 107      78.889  23.033  30.238  1.00 88.77           C
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ANISOU 2856  CB  THR E 107    10986  12951   9793  -2094  -1545    763       C
ATOM   2857  OG1 THR E 107      79.095  23.215  28.830  1.00 88.81           O
ANISOU 2857  OG1 THR E 107    11072  12747   9923  -2084  -1549    571       O
ATOM   2858  CG2 THR E 107      79.040  24.371  30.960  1.00 79.11           C
ANISOU 2858  CG2 THR E 107     9794  11955   8309  -2050  -1499    668       C
ATOM   2859  C   THR E 107      79.981  22.127  32.276  1.00 86.52           C
ANISOU 2859  C   THR E 107    10583  12853   9436  -2101  -1603   1083       C
ATOM   2860  O   THR E 107      80.864  22.786  32.826  1.00 91.17           O
ANISOU 2860  O   THR E 107    11195  13555   9888  -2068  -1608   1038       O
ATOM   2861  N   ALA E 108      79.056  21.448  32.943  1.00 88.86           N
ANISOU 2861  N   ALA E 108    10798  13225   9741  -2144  -1598   1275       N
ATOM   2862  CA  ALA E 108      79.014  21.458  34.399  1.00 93.80           C
ANISOU 2862  CA  ALA E 108    11355  14075  10208  -2152  -1594   1443       C
ATOM   2863  CB  ALA E 108      77.806  20.669  34.902  1.00 98.53           C
ANISOU 2863  CB  ALA E 108    11867  14725  10845  -2201  -1584   1639       C
ATOM   2864  C   ALA E 108      80.304  20.878  34.977  1.00 95.36           C
ANISOU 2864  C   ALA E 108    11519  14263  10449  -2148  -1653   1553       C
ATOM   2865  O   ALA E 108      80.926  21.473  35.856  1.00 97.83           O
ANISOU 2865  O   ALA E 108    11835  14744  10592  -2131  -1655   1564       O
ATOM   2866  N   ALA E 109      80.733  19.762  34.425  1.00 90.52           N
ANISOU 2866  N   ALA E 109    10883  13448  10062  -2163  -1699   1625       N
ATOM   2867  CA  ALA E 109      81.933  19.132  34.911  1.00 97.05           C
ANISOU 2867  CA  ALA E 109    11671  14251  10952  -2157  -1752   1743       C
ATOM   2868  CB  ALA E 109      82.223  17.889  34.105  1.00 91.37           C
ANISOU 2868  CB  ALA E 109    10939  13277  10502  -2171  -1786   1808       C
ATOM   2869  C   ALA E 109      83.075  20.101  34.781  1.00 98.72           C
ANISOU 2869  C   ALA E 109    11952  14494  11062  -2109  -1758   1583       C
ATOM   2870  O   ALA E 109      83.879  20.223  35.681  1.00105.63           O
ANISOU 2870  O   ALA E 109    12798  15498  11839  -2104  -1784   1665       O
ATOM   2871  N   LEU E 110      83.184  20.749  33.633  1.00101.22           N
ANISOU 2871  N   LEU E 110    12361  14686  11412  -2078  -1739   1358       N
ATOM   2872  CA  LEU E 110      84.258  21.695  33.437  1.00101.78           C
ANISOU 2872  CA  LEU E 110    12502  14779  11389  -2032  -1746   1195       C
ATOM   2873  CB  LEU E 110      84.220  22.312  32.049  1.00 98.34           C
ANISOU 2873  CB  LEU E 110    12167  14184  11016  -2001  -1722    946       C
ATOM   2874  CG  LEU E 110      84.872  21.544  30.910  1.00 87.48           C
ANISOU 2874  CG  LEU E 110    10821  12529   9888  -1989  -1752    905       C
ATOM   2875  CD1 LEU E 110      85.074  22.466  29.732  1.00 85.74           C
ANISOU 2875  CD1 LEU E 110    10709  12202   9667  -1951  -1730    637       C
ATOM   2876  CD2 LEU E 110      86.211  21.009  31.351  1.00 99.09           C
ANISOU 2876  CD2 LEU E 110    12255  13975  11422  -1972  -1801   1020       C
ATOM   2877  C   LEU E 110      84.140  22.766  34.479  1.00 97.93           C
ANISOU 2877  C   LEU E 110    12024  14560  10627  -2028  -1718   1178       C
ATOM   2878  O   LEU E 110      85.130  23.230  34.983  1.00 99.79           O
ANISOU 2878  O   LEU E 110    12273  14886  10756  -2011  -1742   1166       O
ATOM   2879  N   ALA E 111      82.926  23.149  34.833  1.00 97.28           N
ANISOU 2879  N   ALA E 111    11932  14603  10425  -2046  -1667   1185       N
ATOM   2880  CA  ALA E 111      82.758  24.186  35.830  1.00100.09           C
ANISOU 2880  CA  ALA E 111    12434  15336  10639  -2042  -1628   1168       C
ATOM   2881  CB  ALA E 111      81.294  24.530  35.994  1.00 99.30           C
ANISOU 2881  CB  ALA E 111    12201  15208  10321  -2055  -1560   1170       C
ATOM   2882  C   ALA E 111      83.326  23.723  37.142  1.00110.96           C
ANISOU 2882  C   ALA E 111    13612  16728  11817  -2070  -1668   1377       C
ATOM   2883  O   ALA E 111      84.017  24.454  37.815  1.00112.74           O
ANISOU 2883  O   ALA E 111    13870  17102  11865  -2064  -1673   1352       O
ATOM   2884  N   THR E 112      83.035  22.492  37.512  1.00111.78           N
ANISOU 2884  N   THR E 112    13621  16791  12060  -2105  -1699   1589       N
ATOM   2885  CA  THR E 112      83.544  21.955  38.756  1.00108.03           C
ANISOU 2885  CA  THR E 112    13068  16445  11533  -2136  -1739   1804       C
ATOM   2886  CB  THR E 112      82.798  20.689  39.176  1.00111.98           C
ANISOU 2886  CB  THR E 112    13463  16920  12164  -2177  -1753   2030       C
ATOM   2887  OG1 THR E 112      81.422  21.021  39.367  1.00121.68           O
ANISOU 2887  OG1 THR E 112    14691  18246  13297  -2190  -1693   2026       O
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ATOM   2888  CG2 THR E 112      83.361  20.111  40.457  1.00121.71           C
ANISOU 2888  CG2 THR E 112    14612  18285  13349  -2209  -1798   2255       C
ATOM   2889  C   THR E 112      85.059  21.809  38.796  1.00109.84           C
ANISOU 2889  C   THR E 112    13299  16629  11808  -2123  -1801   1819       C
ATOM   2890  O   THR E 112      85.663  22.070  39.800  1.00120.17           O
ANISOU 2890  O   THR E 112    14588  18100  12970  -2140  -1823   1903       O
ATOM   2891  N   TRP E 113      85.684  21.418  37.698  1.00114.90           N
ANISOU 2891  N   TRP E 113    13963  17047  12646  -2094  -1827   1737       N
ATOM   2892  CA  TRP E 113      87.131  21.251  37.680  1.00110.29           C
ANISOU 2892  CA  TRP E 113    13376  16408  12121  -2077  -1882   1759       C
ATOM   2893  CB  TRP E 113      87.547  20.792  36.294  1.00119.83           C
ANISOU 2893  CB  TRP E 113    14621  17342  13567  -2042  -1892   1653       C
ATOM   2894  CG  TRP E 113      89.005  20.697  35.999  1.00119.43           C
ANISOU 2894  CG  TRP E 113    14581  17197  13600  -2010  -1937   1639       C
ATOM   2895  CD1 TRP E 113      89.979  20.206  36.799  1.00114.91           C
ANISOU 2895  CD1 TRP E 113    13937  16685  13037  -2022  -1987   1818       C
ATOM   2896  NE1 TRP E 113      91.180  20.241  36.153  1.00110.10           N
ANISOU 2896  NE1 TRP E 113    13359  15945  12529  -1981  -2015   1750       N
ATOM   2897  CE2 TRP E 113      90.988  20.744  34.899  1.00119.71           C
ANISOU 2897  CE2 TRP E 113    14673  17007  13806  -1943  -1983   1519       C
ATOM   2898  CD2 TRP E 113      89.632  21.026  34.764  1.00125.59           C
ANISOU 2898  CD2 TRP E 113    15443  17791  14486  -1963  -1935   1446       C
ATOM   2899  CE3 TRP E 113      89.172  21.553  33.560  1.00117.48           C
ANISOU 2899  CE3 TRP E 113    14508  16629  13502  -1935  -1898   1219       C
ATOM   2900  CZ3 TRP E 113      90.058  21.771  32.561  1.00109.58           C
ANISOU 2900  CZ3 TRP E 113    13572  15460  12602  -1890  -1908   1071       C
ATOM   2901  CH2 TRP E 113      91.401  21.481  32.723  1.00121.02           C
ANISOU 2901  CH2 TRP E 113    14996  16872  14115  -1868  -1953   1147       C
ATOM   2902  CZ2 TRP E 113      91.887  20.966  33.887  1.00124.07           C
ANISOU 2902  CZ2 TRP E 113    15289  17390  14463  -1895  -1991   1374       C
ATOM   2903  C   TRP E 113      87.790  22.562  37.985  1.00110.10           C
ANISOU 2903  C   TRP E 113    13426  16535  11873  -2060  -1878   1619       C
ATOM   2904  O   TRP E 113      88.695  22.621  38.777  1.00115.32           O
ANISOU 2904  O   TRP E 113    14059  17306  12450  -2074  -1919   1715       O
ATOM   2905  N   PHE E 114      87.322  23.632  37.375  1.00115.01           N
ANISOU 2905  N   PHE E 114    14142  17167  12389  -2033  -1827   1396       N
ATOM   2906  CA  PHE E 114      87.874  24.929  37.658  1.00117.88           C
ANISOU 2906  CA  PHE E 114    14586  17677  12526  -2019  -1816   1254       C
ATOM   2907  CB  PHE E 114      87.304  25.972  36.713  1.00116.64           C
ANISOU 2907  CB  PHE E 114    14533  17478  12307  -1981  -1756    995       C
ATOM   2908  CG  PHE E 114      87.768  25.803  35.312  1.00111.74           C
ANISOU 2908  CG  PHE E 114    13955  16614  11888  -1940  -1772    846       C
ATOM   2909  CD1 PHE E 114      88.991  25.255  35.061  1.00117.49           C
ANISOU 2909  CD1 PHE E 114    14662  17224  12755  -1925  -1832    893       C
ATOM   2910  CE1 PHE E 114      89.440  25.082  33.781  1.00113.33           C
ANISOU 2910  CE1 PHE E 114    14179  16466  12414  -1886  -1841    760       C
ATOM   2911  CZ  PHE E 114      88.657  25.465  32.733  1.00112.52           C
ANISOU 2911  CZ  PHE E 114    14142  16252  12358  -1866  -1795    575       C
ATOM   2912  CE2 PHE E 114      87.428  26.018  32.976  1.00112.13           C
ANISOU 2912  CE2 PHE E 114    14108  16325  12171  -1882  -1738    531       C
ATOM   2913  CD2 PHE E 114      86.990  26.182  34.263  1.00111.93           C
ANISOU 2913  CD2 PHE E 114    14039  16528  11962  -1916  -1724    667       C
ATOM   2914  C   PHE E 114      87.603  25.289  39.106  1.00115.84           C
ANISOU 2914  C   PHE E 114    14302  17679  12031  -2062  -1804   1382       C
ATOM   2915  O   PHE E 114      88.459  25.824  39.775  1.00121.70           O
ANISOU 2915  O   PHE E 114    15067  18553  12621  -2076  -1832   1394       O
ATOM   2916  N   VAL E 115      86.398  25.016  39.585  1.00115.84           N
ANISOU 2916  N   VAL E 115    14262  17754  11997  -2088  -1763   1476       N
ATOM   2917  CA  VAL E 115      86.071  25.310  40.966  1.00123.55           C
ANISOU 2917  CA  VAL E 115    15217  18971  12755  -2130  -1745   1604       C
ATOM   2918  CB  VAL E 115      84.568  25.247  41.250  1.00118.61           C
ANISOU 2918  CB  VAL E 115    14569  18414  12084  -2143  -1678   1652       C
ATOM   2919  CG1 VAL E 115      84.310  25.442  42.729  1.00119.95           C
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ANISOU 2919  CG1 VAL E 115    14714  18822  12038  -2189  -1661   1804       C
ATOM   2920  CG2 VAL E 115      83.846  26.316  40.459  1.00112.44           C
ANISOU 2920  CG2 VAL E 115    13885  17617  11220  -2104  -1601   1419       C
ATOM   2921  C   VAL E 115      86.869  24.456  41.939  1.00127.22           C
ANISOU 2921  C   VAL E 115    15590  19497  13250  -2173  -1816   1840       C
ATOM   2922  O   VAL E 115      87.235  24.911  42.998  1.00127.26           O
ANISOU 2922  O   VAL E 115    15604  19693  13057  -2208  -1825   1908       O
ATOM   2923  N   GLY E 116      87.088  23.199  41.591  1.00125.18           N
ANISOU 2923  N   GLY E 116    15245  19076  13240  -2173  -1863   1970       N
ATOM   2924  CA  GLY E 116      87.816  22.263  42.428  1.00124.02           C
ANISOU 2924  CA  GLY E 116    15000  18966  13156  -2209  -1929   2207       C
ATOM   2925  C   GLY E 116      89.267  22.577  42.694  1.00137.05           C
ANISOU 2925  C   GLY E 116    16662  20659  14751  -2212  -1986   2213       C
ATOM   2926  O   GLY E 116      89.726  22.425  43.811  1.00157.15           O
ANISOU 2926  O   GLY E 116    19158  23359  17194  -2258  -2024   2381       O
ATOM   2927  N   ARG E 117      90.007  22.990  41.677  1.00131.48           N
ANISOU 2927  N   ARG E 117    16022  19817  14117  -2166  -1997   2040       N
ATOM   2928  CA  ARG E 117      91.399  23.349  41.892  1.00138.83           C
ANISOU 2928  CA  ARG E 117    16968  20792  14991  -2168  -2052   2042       C
ATOM   2929  C   ARG E 117      91.537  24.793  42.387  1.00142.09           C
ANISOU 2929  C   ARG E 117    17480  21402  15103  -2183  -2030   1904       C
ATOM   2930  O   ARG E 117      92.582  25.207  42.842  1.00152.44           O
ANISOU 2930  O   ARG E 117    18806  22807  16307  -2204  -2076   1926       O
ATOM   2931  CB  ARG E 117      92.220  23.131  40.637  1.00140.53           C
ANISOU 2931  CB  ARG E 117    17205  20775  15414  -2111  -2075   1932       C
ATOM   2932  CG  ARG E 117      93.697  23.322  40.875  1.00149.78           C
ANISOU 2932  CG  ARG E 117    18371  21981  16559  -2113  -2138   1972       C
ATOM   2933  CD  ARG E 117      94.524  22.965  39.659  1.00156.48           C
ANISOU 2933  CD  ARG E 117    19231  22588  17637  -2054  -2157   1890       C
ATOM   2934  NE  ARG E 117      95.918  22.784  40.031  1.00172.08           N
ANISOU 2934  NE  ARG E 117    21160  24588  19633  -2060  -2224   2010       N
ATOM   2935  CZ  ARG E 117      96.881  22.476  39.176  1.00179.47           C
ANISOU 2935  CZ  ARG E 117    22096  25342  20753  -2012  -2248   1979       C
ATOM   2936  NH1 ARG E 117      96.602  22.318  37.891  1.00171.54           N
ANISOU 2936  NH1 ARG E 117    21143  24111  19923  -1955  -2211   1823       N
ATOM   2937  NH2 ARG E 117      98.124  22.323  39.610  1.00183.31           N
ANISOU 2937  NH2 ARG E 117    22531  25871  21246  -2021  -2308   2109       N
ATOM   2938  N   GLU E 118      90.480  25.575  42.265  1.00140.69           N
ANISOU 2938  N   GLU E 118    17377  21287  14792  -2174  -1957   1760       N
ATOM   2939  CA  GLU E 118      90.486  26.943  42.734  1.00142.18           C
ANISOU 2939  CA  GLU E 118    17672  21660  14692  -2188  -1921   1627       C
ATOM   2940  CB  GLU E 118      89.242  27.691  42.272  1.00138.52           C
ANISOU 2940  CB  GLU E 118    17285  21203  14142  -2159  -1828   1450       C
ATOM   2941  CG  GLU E 118      89.170  29.132  42.740  1.00138.99           C
ANISOU 2941  CG  GLU E 118    17464  21448  13899  -2170  -1776   1307       C
ATOM   2942  CD  GLU E 118      90.332  29.952  42.250  1.00144.35           C
ANISOU 2942  CD  GLU E 118    18226  22104  14516  -2149  -1808   1144       C
ATOM   2943  OE1 GLU E 118      91.213  29.398  41.573  1.00138.16           O
ANISOU 2943  OE1 GLU E 118    17404  21165  13927  -2125  -1872   1148       O
ATOM   2944  OE2 GLU E 118      90.361  31.152  42.546  1.00153.13           O
ANISOU 2944  OE2 GLU E 118    19446  23354  15385  -2157  -1767   1013       O
ATOM   2945  C   GLU E 118      90.596  27.005  44.243  1.00155.54           C
ANISOU 2945  C   GLU E 118    19334  23584  16180  -2260  -1939   1809       C
ATOM   2946  O   GLU E 118      91.188  27.930  44.774  1.00163.54           O
ANISOU 2946  O   GLU E 118    20420  24744  16974  -2288  -1946   1756       O
ATOM   2947  N   GLN E 119      90.024  26.018  44.924  1.00159.21           N
ANISOU 2947  N   GLN E 119    19697  24080  16718  -2294  -1946   2023       N
ATOM   2948  CA  GLN E 119      90.064  25.968  46.381  1.00156.72           C
ANISOU 2948  CA  GLN E 119    19346  23979  16223  -2366  -1964   2212       C
ATOM   2949  CB  GLN E 119      89.177  24.837  46.903  1.00151.41           C
ANISOU 2949  CB  GLN E 119    18561  23305  15663  -2389  -1958   2420       C
ATOM   2950  CG  GLN E 119      87.713  24.966  46.516  1.00152.62           C
ANISOU 2950  CG  GLN E 119    18738  23428  15824  -2359  -1872   2336       C
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ATOM   2951  CD  GLN E 119      87.083  26.244  47.035  1.00153.82           C
ANISOU 2951  CD  GLN E 119    18999  23761  15686  -2370  -1792   2218       C
ATOM   2952  OE1 GLN E 119      87.740  27.049  47.696  1.00144.03           O
ANISOU 2952  OE1 GLN E 119    17826  22669  14229  -2405  -1801   2193       O
ATOM   2953  NE2 GLN E 119      85.804  26.437  46.737  1.00160.29           N
ANISOU 2953  NE2 GLN E 119    19838  24567  16497  -2343  -1711   2149       N
ATOM   2954  C   GLN E 119      91.491  25.792  46.888  1.00162.94           C
ANISOU 2954  C   GLN E 119    20098  24817  16996  -2405  -2053   2329       C
ATOM   2955  O   GLN E 119      91.817  26.193  48.005  1.00168.06           O
ANISOU 2955  O   GLN E 119    20762  25662  17432  -2471  -2072   2421       O
ATOM   2956  N   GLU E 120      92.338  25.189  46.059  1.00164.44           N
ANISOU 2956  N   GLU E 120    20242  24826  17412  -2367  -2107   2331       N
ATOM   2957  CA  GLU E 120      93.731  24.959  46.422  1.00160.43           C
ANISOU 2957  CA  GLU E 120    19690  24345  16923  -2396  -2193   2450       C
ATOM   2958  CB  GLU E 120      94.436  24.132  45.344  1.00159.71           C
ANISOU 2958  CB  GLU E 120    19541  24012  17130  -2338  -2231   2453       C
ATOM   2959  C   GLU E 120      94.469  26.276  46.638  1.00164.34           C
ANISOU 2959  C   GLU E 120    20297  24974  17169  -2419  -2202   2312       C
ATOM   2960  O   GLU E 120      95.272  26.405  47.562  1.00173.94           O
ANISOU 2960  O   GLU E 120    21496  26339  18253  -2484  -2259   2441       O
ATOM   2961  N   ARG E 121      94.172  27.249  45.790  1.00169.49           N
ANISOU 2961  N   ARG E 121    21066  25575  17757  -2370  -2147   2055       N
ATOM   2962  CA  ARG E 121      94.787  28.567  45.842  1.00173.10           C
ANISOU 2962  CA  ARG E 121    21645  26141  17982  -2383  -2146   1891       C
ATOM   2963  CB  ARG E 121      94.282  29.410  44.655  1.00172.06           C
ANISOU 2963  CB  ARG E 121    21623  25898  17853  -2310  -2076   1603       C
ATOM   2964  CG  ARG E 121      95.209  30.510  44.163  1.00169.62           C
ANISOU 2964  CG  ARG E 121    21422  25596  17428  -2293  -2093   1409       C
ATOM   2965  CD  ARG E 121      94.473  31.481  43.256  1.00160.51           C
ANISOU 2965  CD  ARG E 121    20383  24351  16252  -2217  -1989   1123       C
ATOM   2966  NE  ARG E 121      93.512  32.288  44.001  1.00166.26           N
ANISOU 2966  NE  ARG E 121    21179  25151  16841  -2198  -1857   1055       N
ATOM   2967  CZ  ARG E 121      92.729  33.222  43.470  1.00166.32           C
ANISOU 2967  CZ  ARG E 121    21282  25089  16824  -2124  -1741    832       C
ATOM   2968  NH1 ARG E 121      92.774  33.484  42.172  1.00163.93           N
ANISOU 2968  NH1 ARG E 121    21021  24642  16621  -2063  -1738    644       N
ATOM   2969  NH2 ARG E 121      91.890  33.890  44.243  1.00162.38           N
ANISOU 2969  NH2 ARG E 121    20834  24657  16207  -2109  -1629    804       N
ATOM   2970  C   ARG E 121      94.450  29.263  47.157  1.00173.49           C
ANISOU 2970  C   ARG E 121    21749  26424  17747  -2453  -2110   1941       C
ATOM   2971  O   ARG E 121      95.293  29.903  47.768  1.00179.03           O
ANISOU 2971  O   ARG E 121    22491  27150  18381  -2459  -2088   1909       O
ATOM   2972  N   ARG E 122      93.207  29.133  47.587  1.00172.35           N
ANISOU 2972  N   ARG E 122    21598  26350  17536  -2467  -2049   1983       N
ATOM   2973  CA  ARG E 122      92.734  29.747  48.821  1.00171.85           C
ANISOU 2973  CA  ARG E 122    21580  26394  17320  -2486  -1949   1990       C
ATOM   2974  CB  ARG E 122      91.437  30.521  48.572  1.00176.03           C
ANISOU 2974  CB  ARG E 122    22200  26914  17770  -2434  -1821   1811       C
ATOM   2975  C   ARG E 122      92.519  28.701  49.911  1.00168.60           C
ANISOU 2975  C   ARG E 122    21052  26101  16907  -2563  -2001   2281       C
ATOM   2976  O   ARG E 122      93.390  27.869  50.166  1.00164.88           O
ANISOU 2976  O   ARG E 122    20483  25644  16521  -2608  -2107   2472       O
TER
HETATM 2977  O   HOH E1001      68.021  19.935   9.746  1.00 90.00           O
HETATM 2978  O   HOH E1002      73.746  24.014  27.142  1.00 67.41           O
HETATM 2979  O   HOH E1003      74.003  24.104  22.914  1.00 65.57           O
TER
HETATM 2980  K     K A   1      67.945  26.564   9.372  0.50 85.90           K
HETATM 2981  K     K A   2      69.184  26.541  12.538  0.50 85.90           K
HETATM 2982  K     K A   3      70.343  26.530  15.531  0.50 85.90           K
HETATM 2983  K     K A   4      71.572  26.515  18.640  0.50 85.90           K
HETATM 2984  K     K A   5      74.349  26.623  24.987  1.00 97.49           K
HETATM 2985  K     K A   6      65.872  26.493   4.377  1.00106.03           K
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TER
END