

Supporting Information for:

**Nickel or Phenanthroline Mediated Intramolecular Arylation of sp^3 C–H
Bonds Using Aryl Halides**

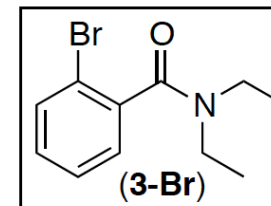
William C. Wertjes^{\$}, Lydia C. Wolfe^{\$}, Peter J. Waller and Dipannita Kalyani*

St Olaf College, Department of Chemistry, 1520 St. Olaf Avenue, Northfield, MN 55057

^1H NMR and ^{13}C NMR spectra

DK-IV-JY-45 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

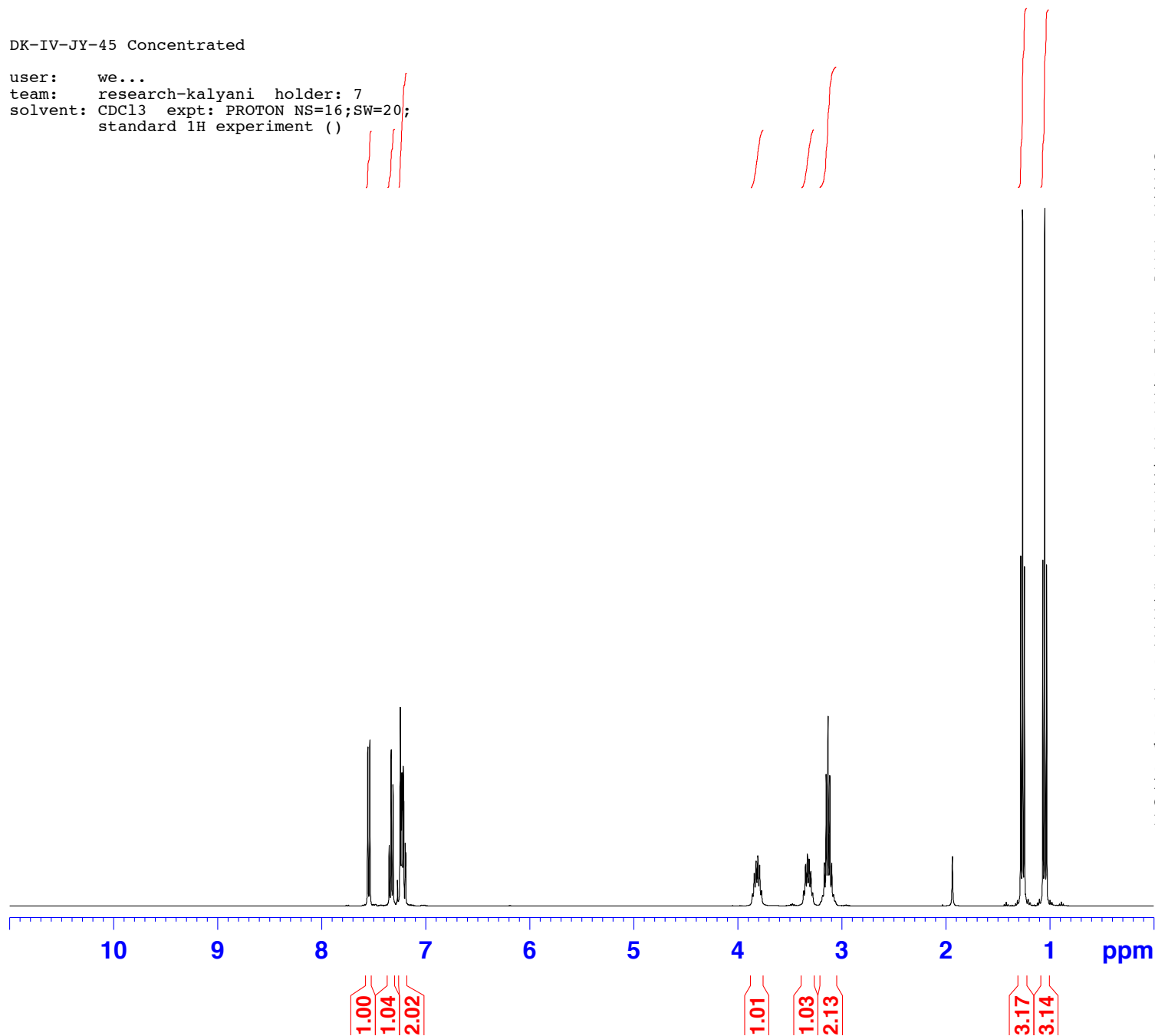


Current Data Parameters
NAME Jul23-2013
EXPNO 1563510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130723
Time 17.40
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 71.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

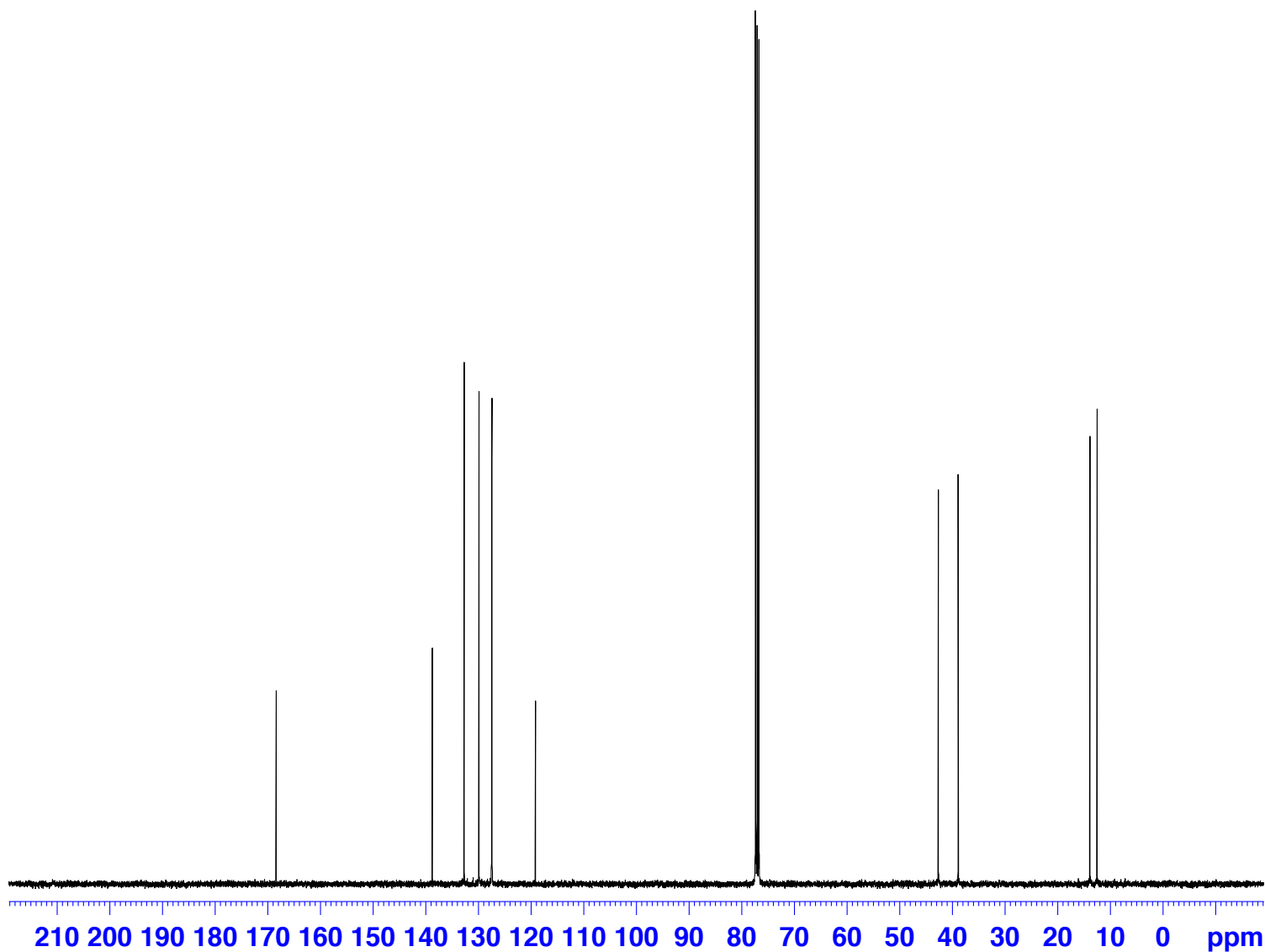
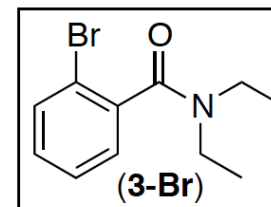
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-IV-JY-45 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



Current Data Parameters
NAME Jul23-2013
EXPNO 1563610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130723
Time 19.36
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 4096
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

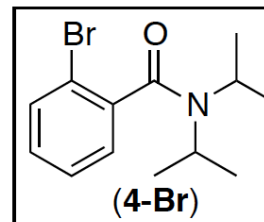
===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM

DK-XII-WW-25_concentrated

user: wo...
team: research-kalyani-wolfel holder: 7
solvent: CDCl3 expt: PROTON NS=128;SW=20;
standard 1H experiment ()

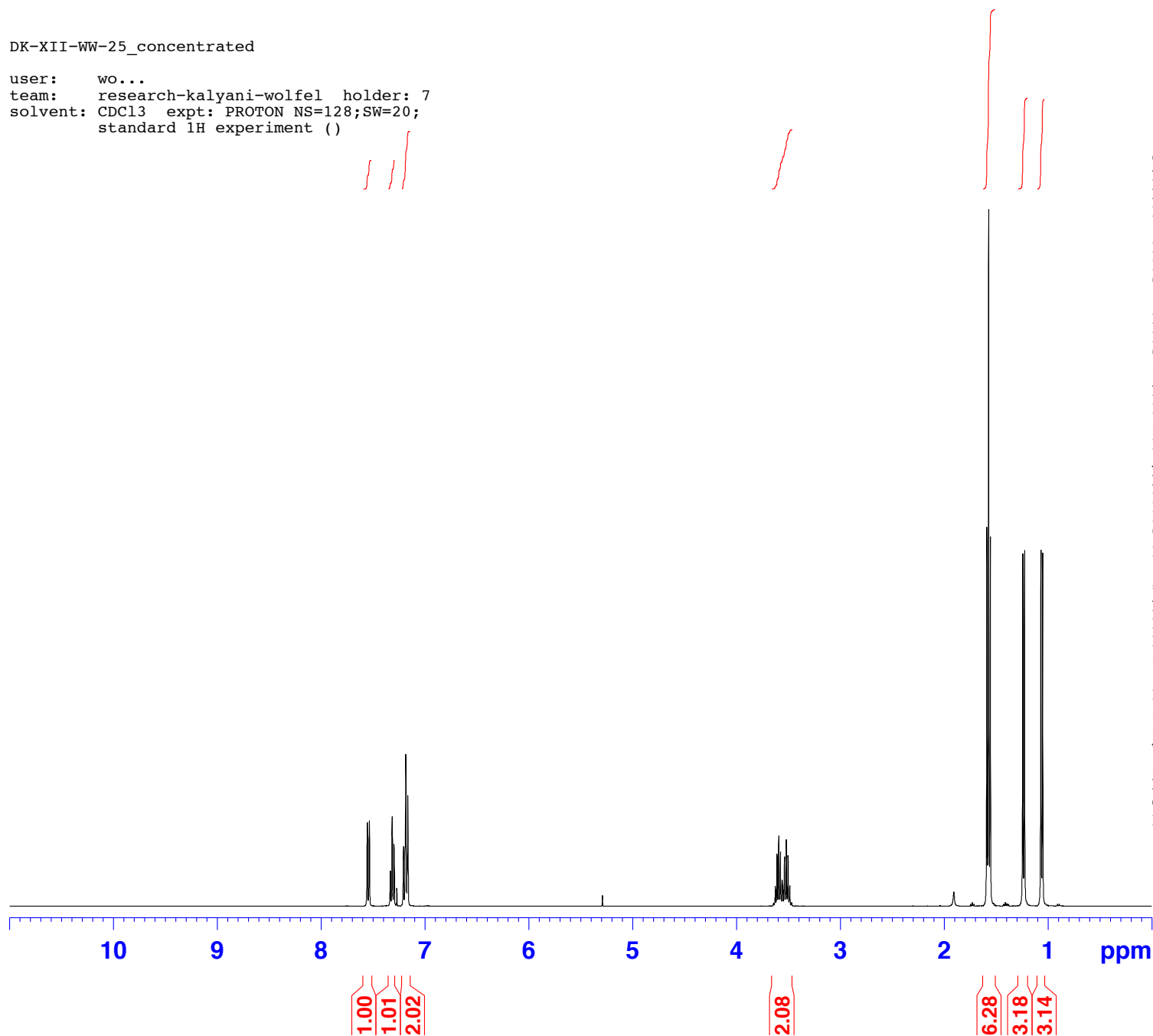


Current Data Parameters
NAME Jun19-2013
EXPNO 1490110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130619
Time 18.05
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 128
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 71.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

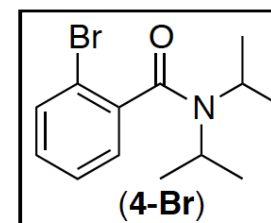
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-25_concentrated

user: WO...
team: research-kalyani-wolfel holder: 7
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



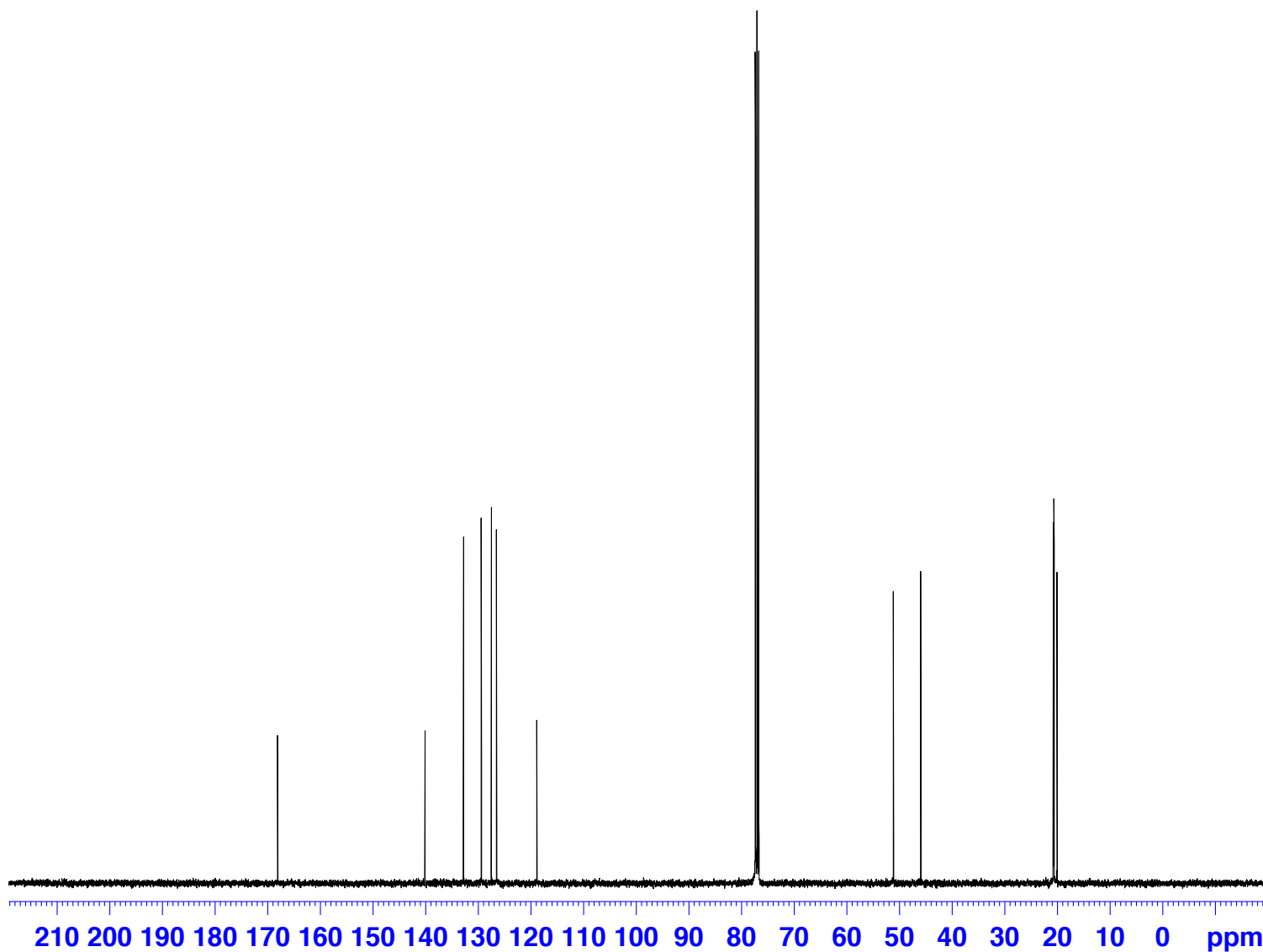
Current Data Parameters
NAME Jun19-2013
EXPNO 1490210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130619
Time 20.02
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1448.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

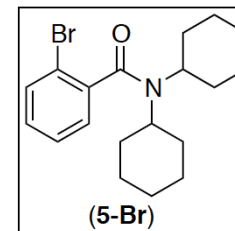
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XI-PW-28 Concentrated and Dried

user: we...
team: research-kalyani-wertjes holder: 5
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

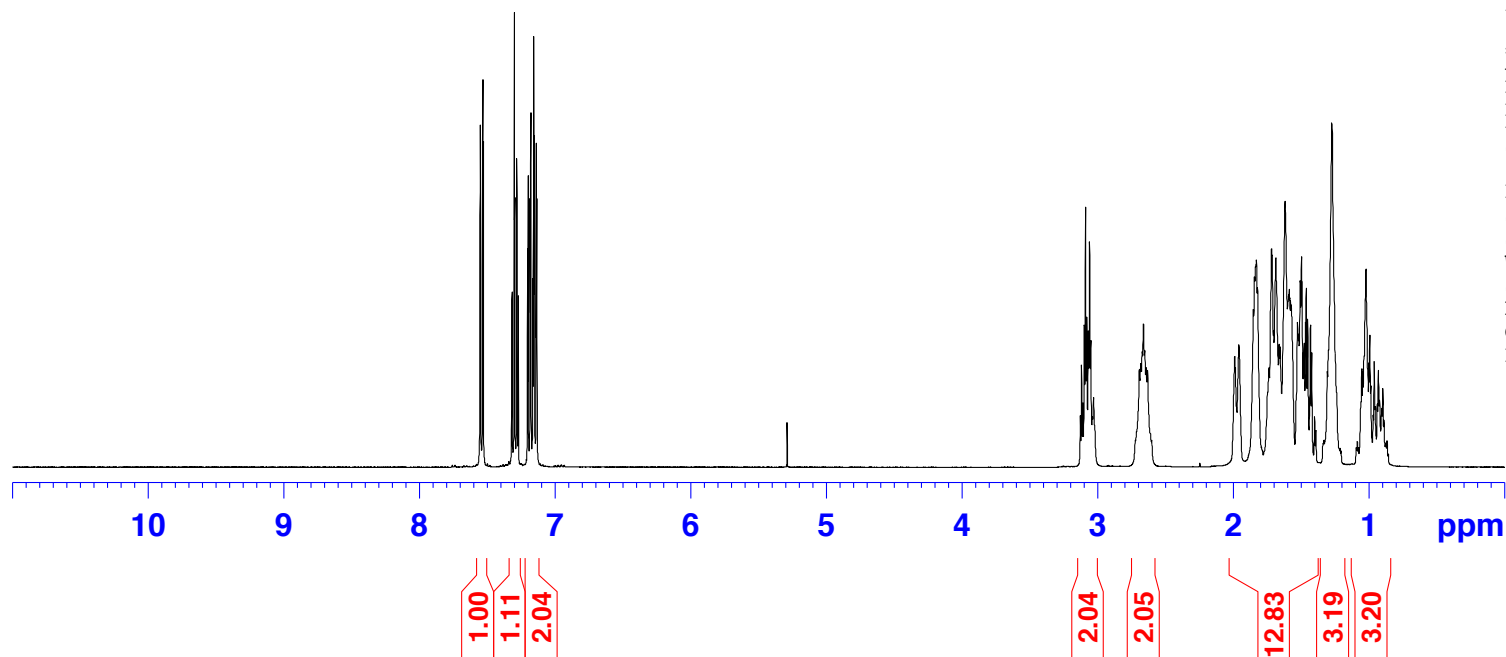


Current Data Parameters
NAME Jun22-2013
EXPNO 1496410
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130622
Time 17.09
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 50.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

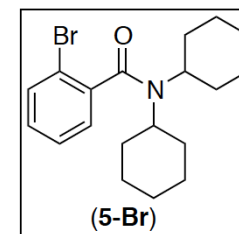
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XI-PW-28 Concentrated and Dried

user: we...
team: research-kalyani-wertjes holder: 5
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



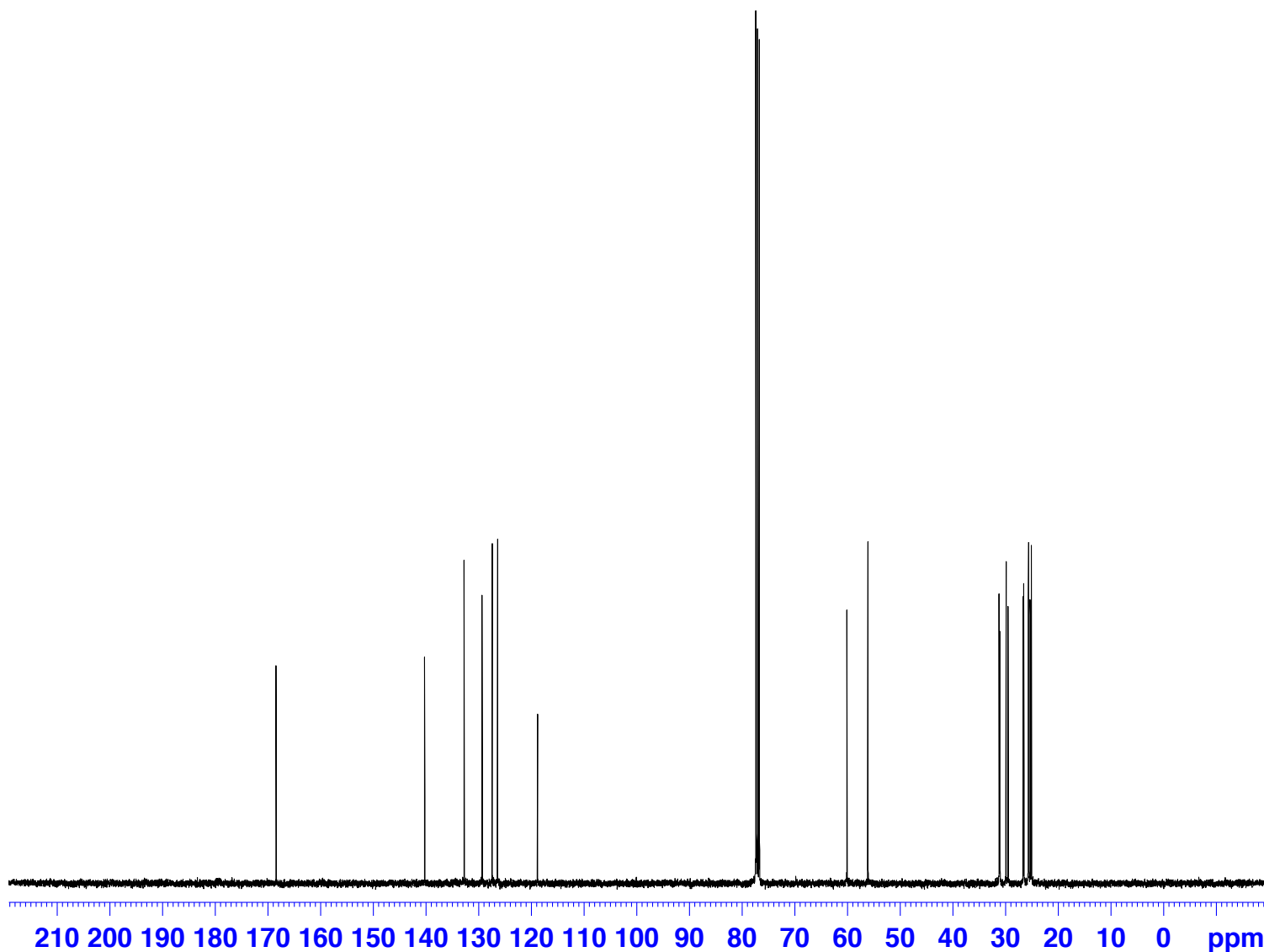
Current Data Parameters
NAME Jun22-2013
EXPNO 1496510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130622
Time 19.05
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1290.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

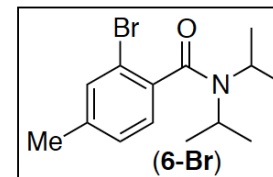
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-12-WW-55 Final Dried NMR

user: we...
team: research-kalyani-wertjes holder: 5
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

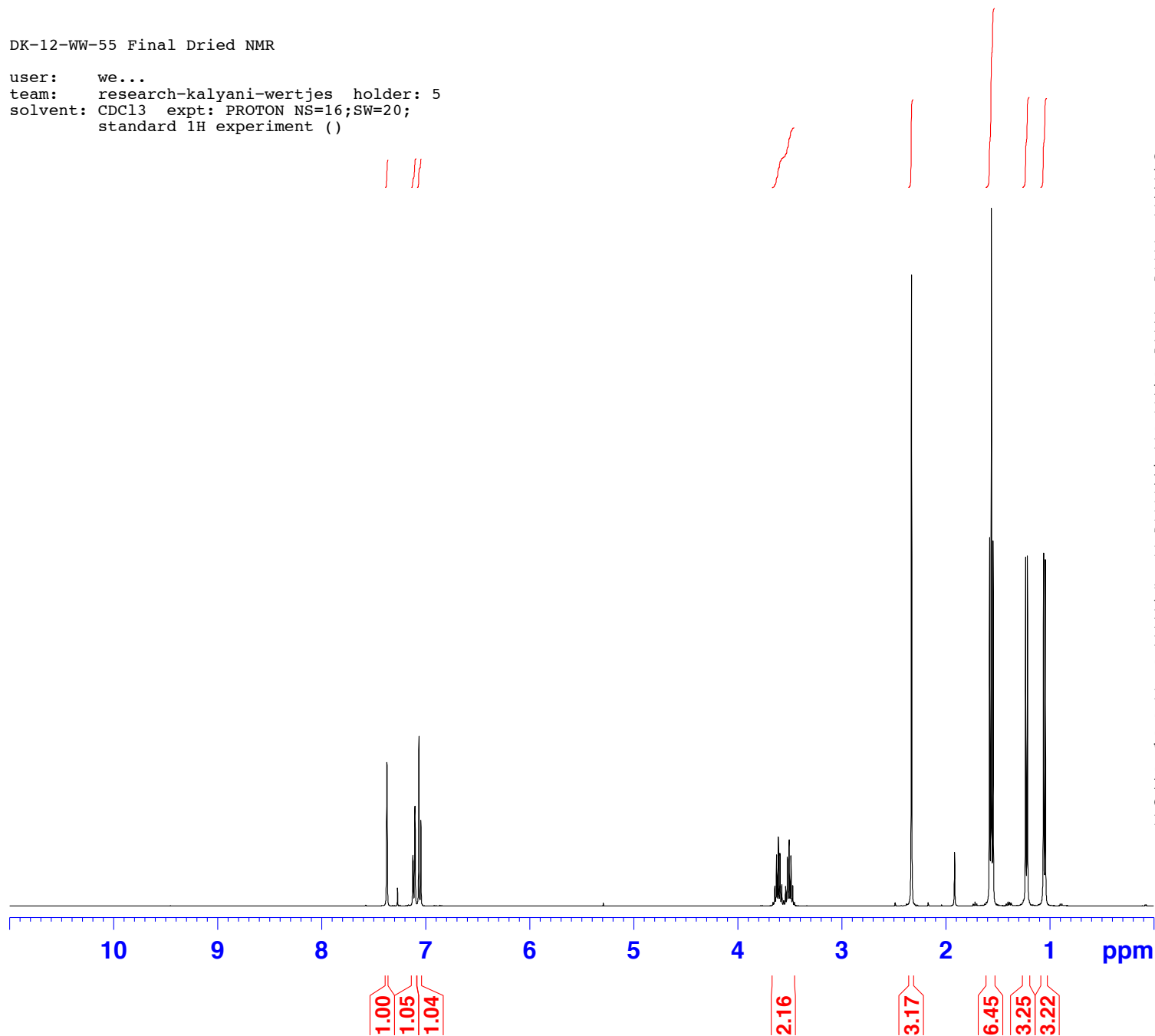


Current Data Parameters
NAME Jun20-2013
EXPNO 1493510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130620
Time 16.58
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 71.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

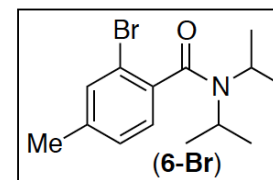
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-12-WW-55 Final Dried NMR

user: we...
 team: research-kalyani-wertjes holder: 5
 solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
 standard C13 experiment ()



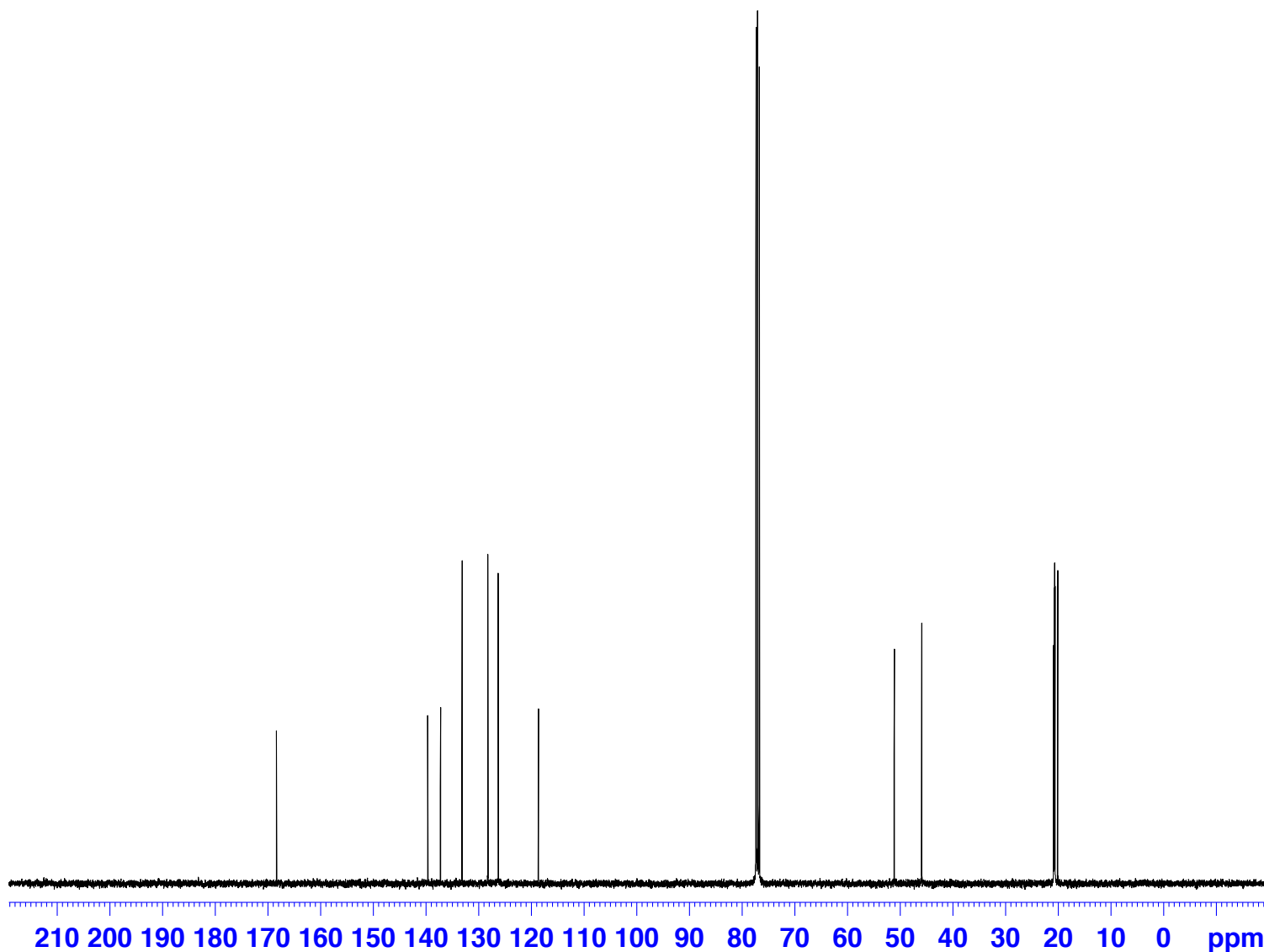
Current Data Parameters
 NAME Jun20-2013
 EXPNO 1493810
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130620
 Time 19.18
 INSTRUM spect
 PROBHD 5 mm BBO 1H/13
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 2048
 DS 2
 SWH 23980.814 Hz
 FIDRES 0.365918 Hz
 AQ 1.3664756 sec
 RG 1625.5
 DW 20.850 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 d12 0.00002000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.50 dB
 SFO1 100.6228298 MHz

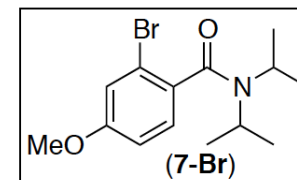
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 90.00 usec
 PL2 -4.00 dB
 PL12 13.68 dB
 PL13 17.24 dB
 SFO2 400.1316005 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6127690 MHz
 WDW EM



DK-XII-WW-100 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

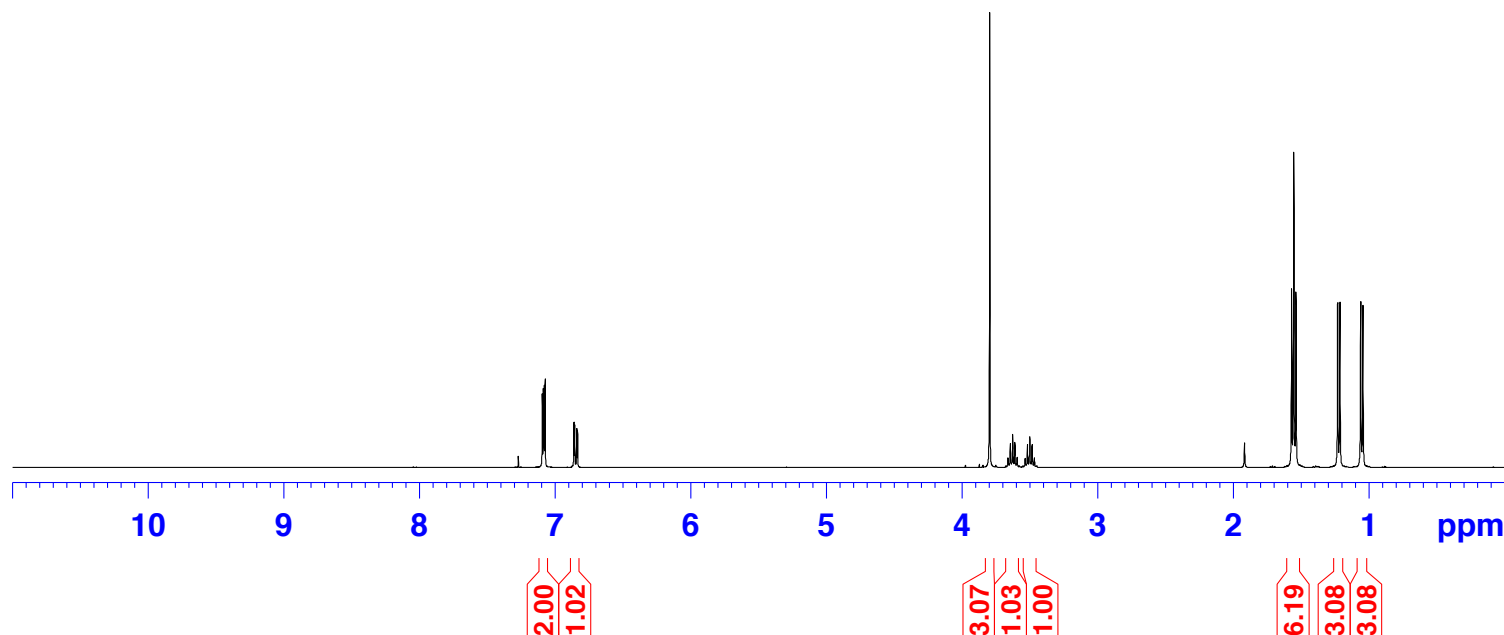


Current Data Parameters
NAME Jul18-2013
EXPNO 1552110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130718
Time 16.49
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 71.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

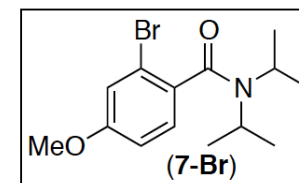
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-100 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



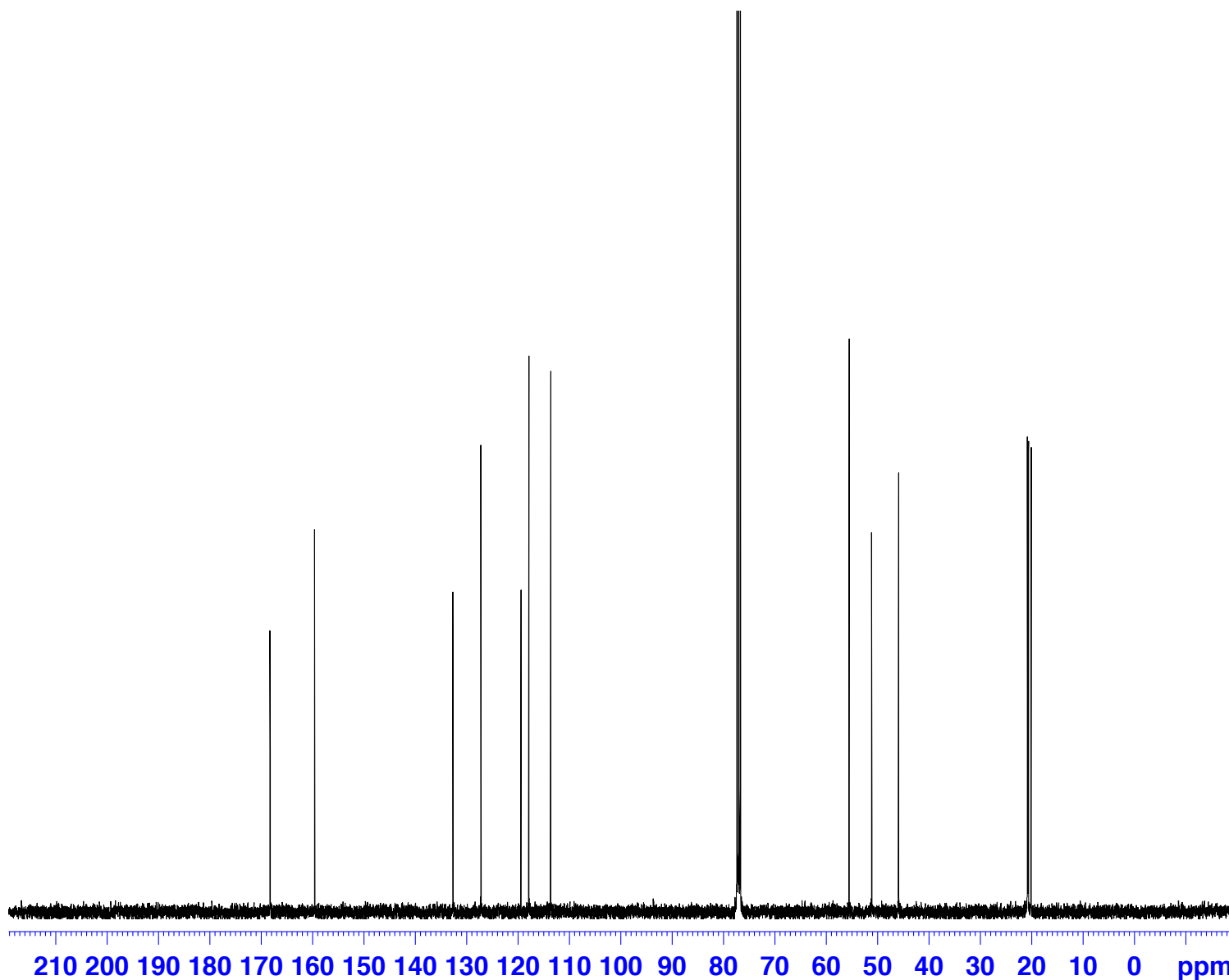
Current Data Parameters
NAME Jul18-2013
EXPNO 1552210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130718
Time 18.45
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1625.5
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

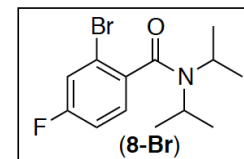
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-91 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

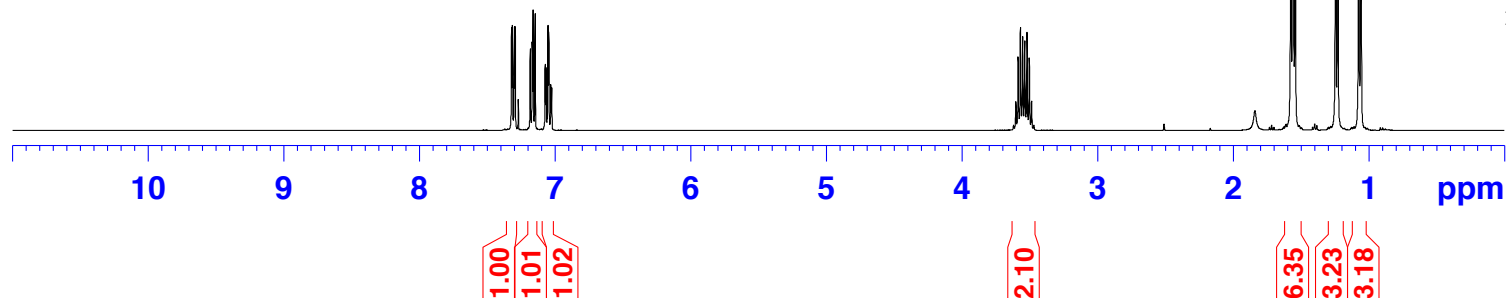


Current Data Parameters
NAME Jul17-2013
EXPNO 1550110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130717
Time 17.36
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 90.5
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

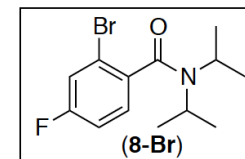
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-91 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



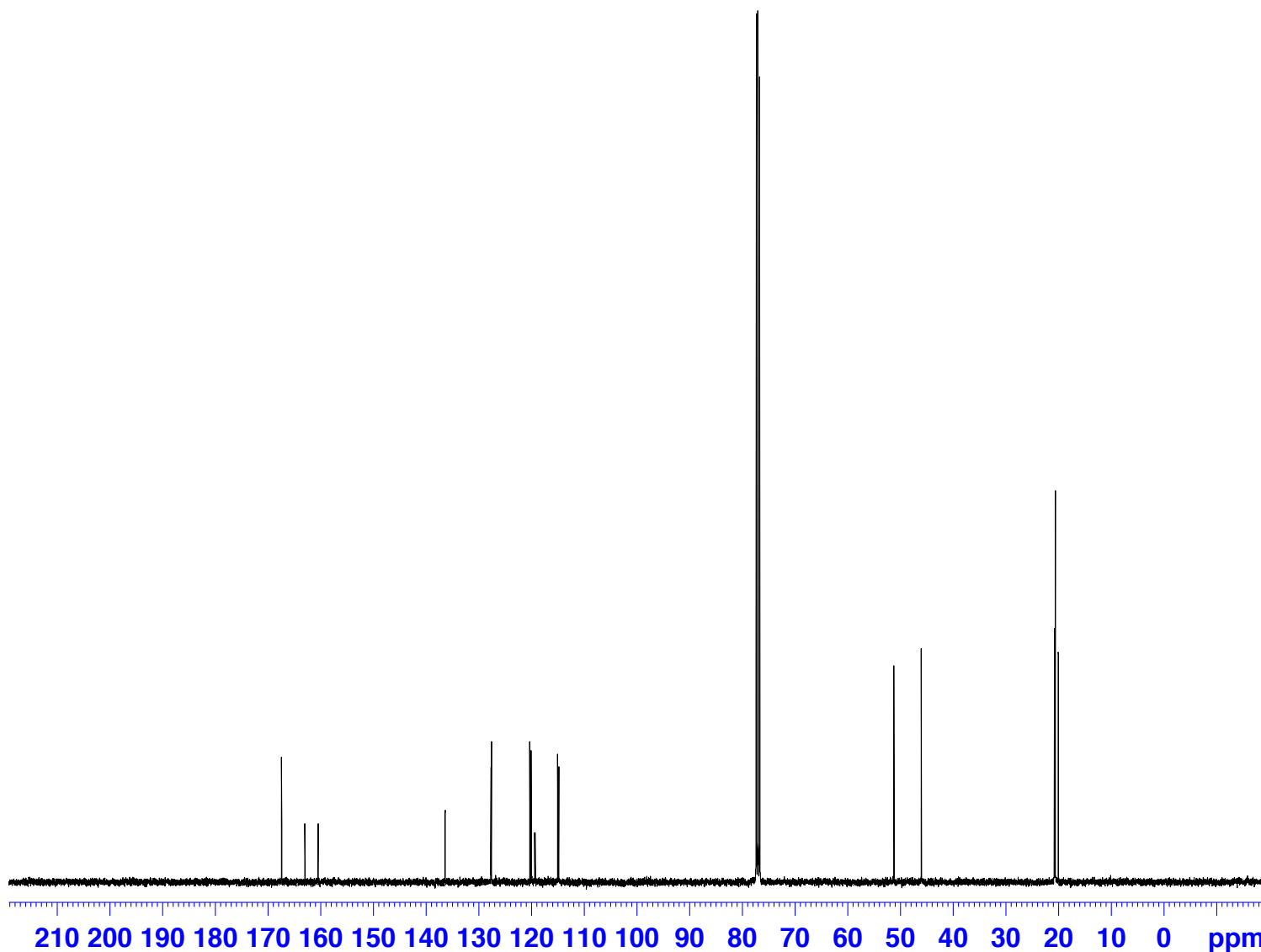
Current Data Parameters
NAME Jul17-2013
EXPNO 1550210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130717
Time 19.41
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1149.4
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

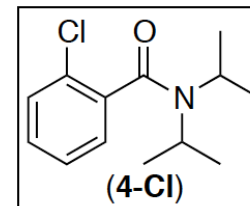
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-12-WW-60 Final Dried NMR

user: we...
team: research-kalyani-wertjes holder: 6
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

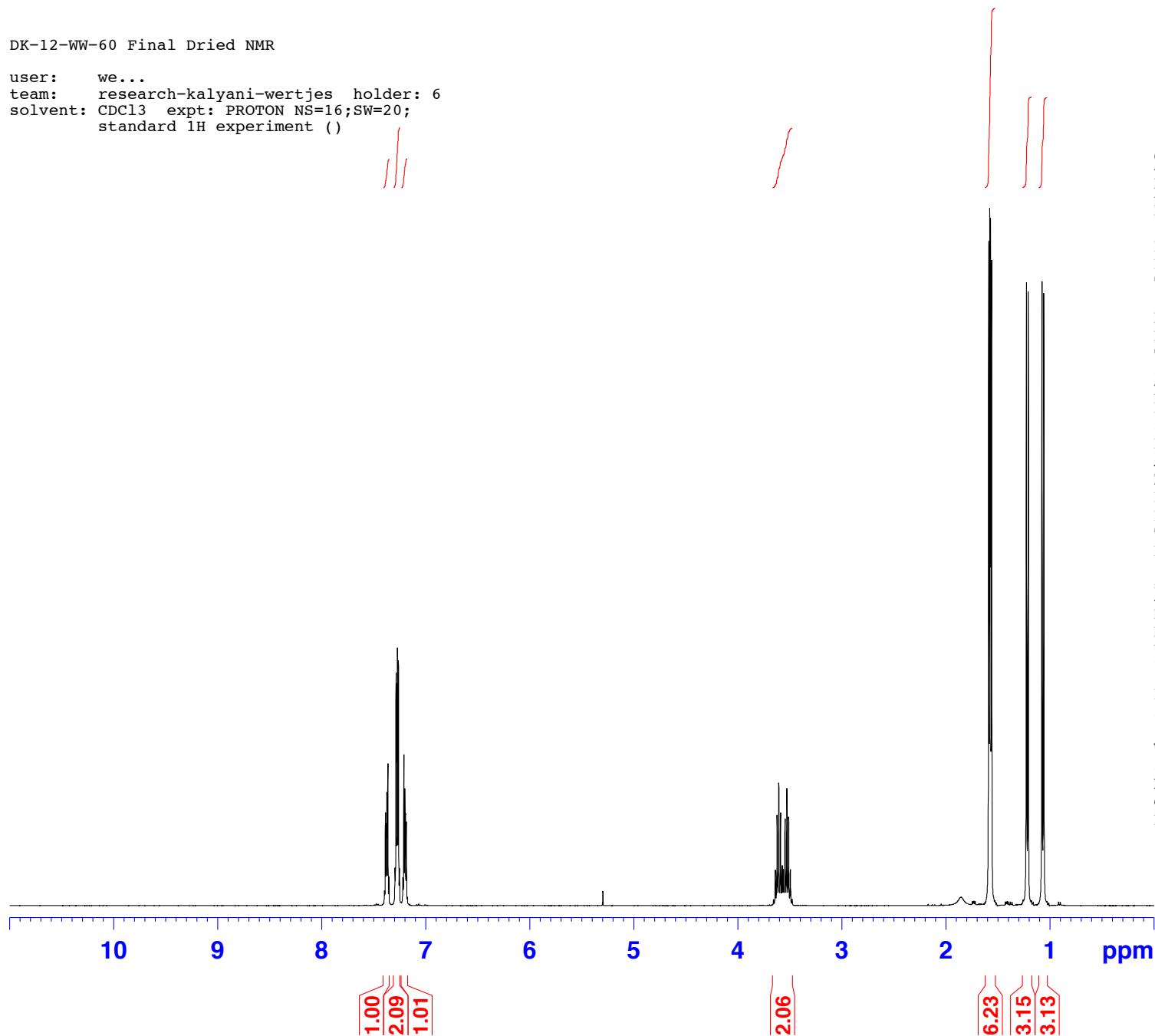


Current Data Parameters
NAME Jun20-2013
EXPNO 1493610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130620
Time 17.17
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 90.5
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

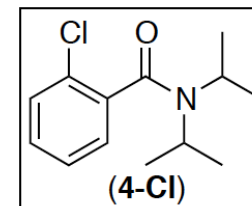
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-12-WW-60 Final Dried NMR

user: we...
 team: research-kalyani-wertjes holder: 6
 solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
 standard C13 experiment ()



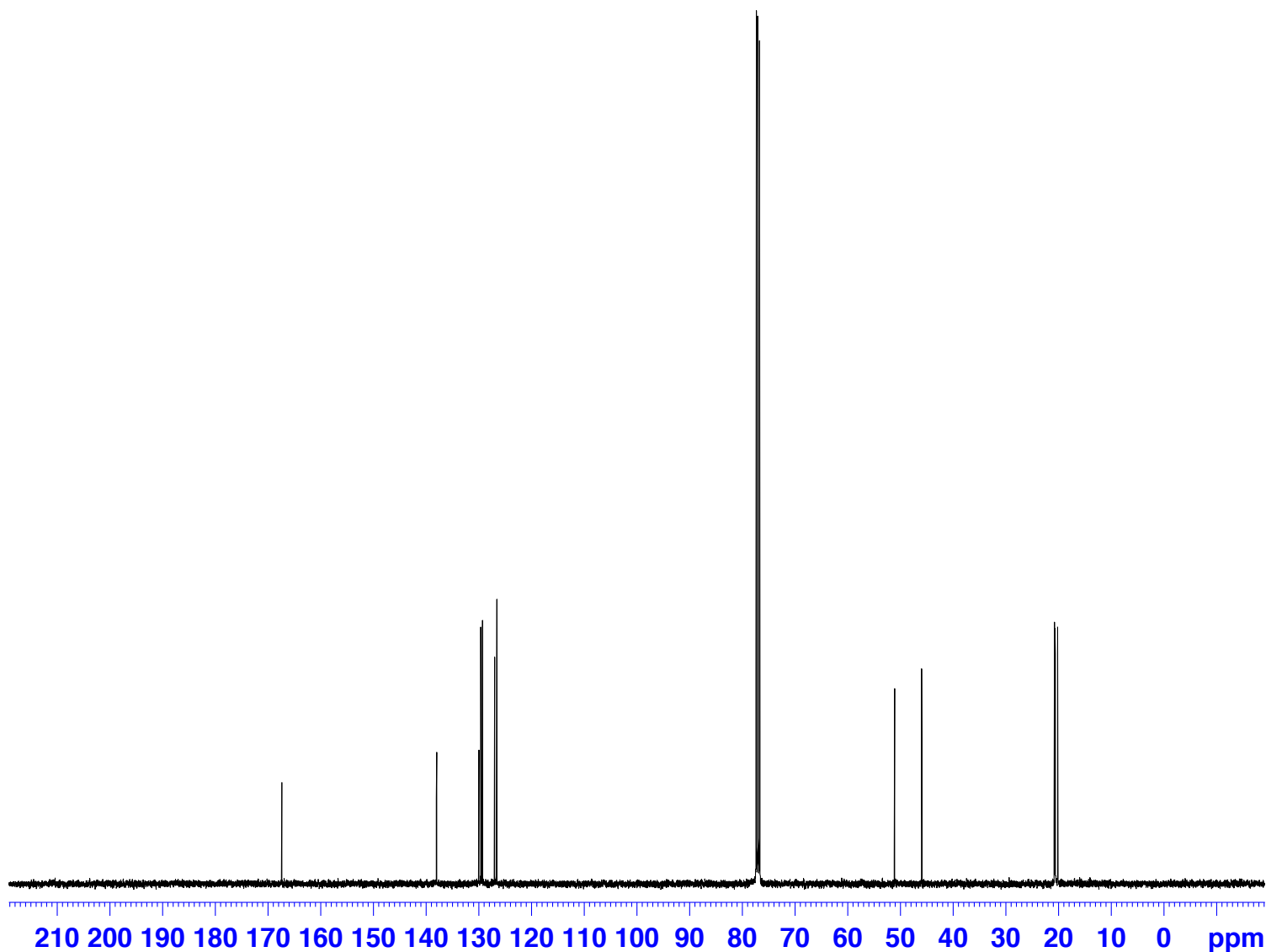
Current Data Parameters
 NAME Jun20-2013
 EXPNO 1493910
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130620
 Time 21.17
 INSTRUM spect
 PROBHD 5 mm BBO 1H/13
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 2048
 DS 2
 SWH 23980.814 Hz
 FIDRES 0.365918 Hz
 AQ 1.3664756 sec
 RG 1448.2
 DW 20.850 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 d12 0.00002000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.50 dB
 SFO1 100.6228298 MHz

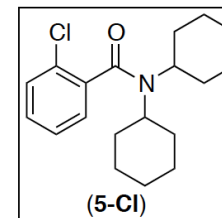
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 90.00 usec
 PL2 -4.00 dB
 PL12 13.68 dB
 PL13 17.24 dB
 SFO2 400.1316005 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6127690 MHz
 WDW EM



DK-XII-WW-90 CDCl3

user: we...
team: research-kalyani holder: 2
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

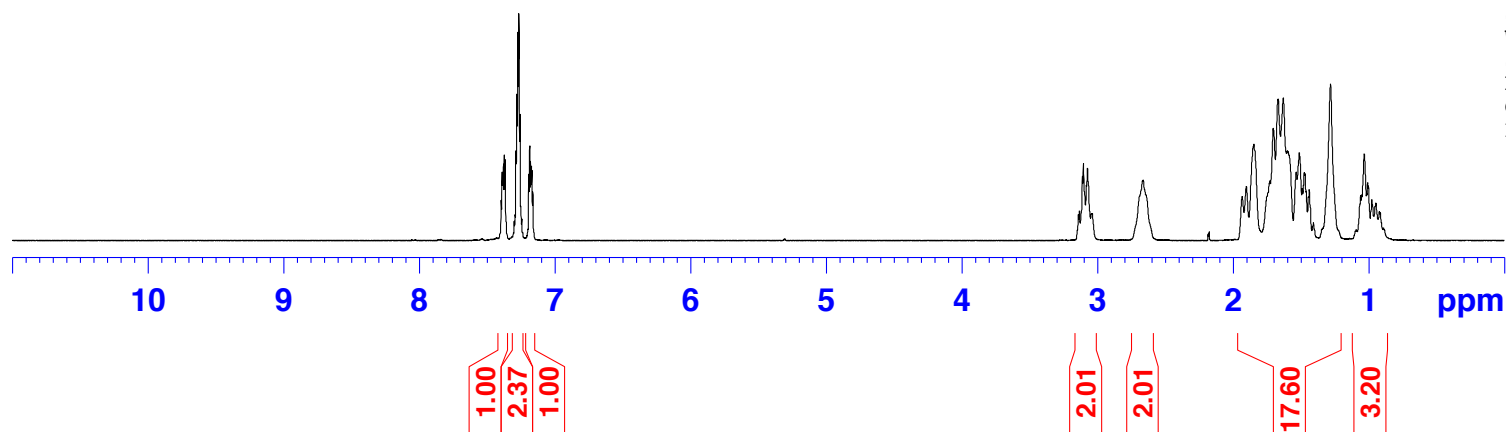


Current Data Parameters
NAME Jul23-2013
EXPNO 1561110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130723
Time 11.47
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 322.5
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

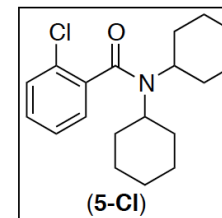
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-90 Concentrated

user: we...
team: research-kalyani holder: 9
solvent: CDCl3 expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



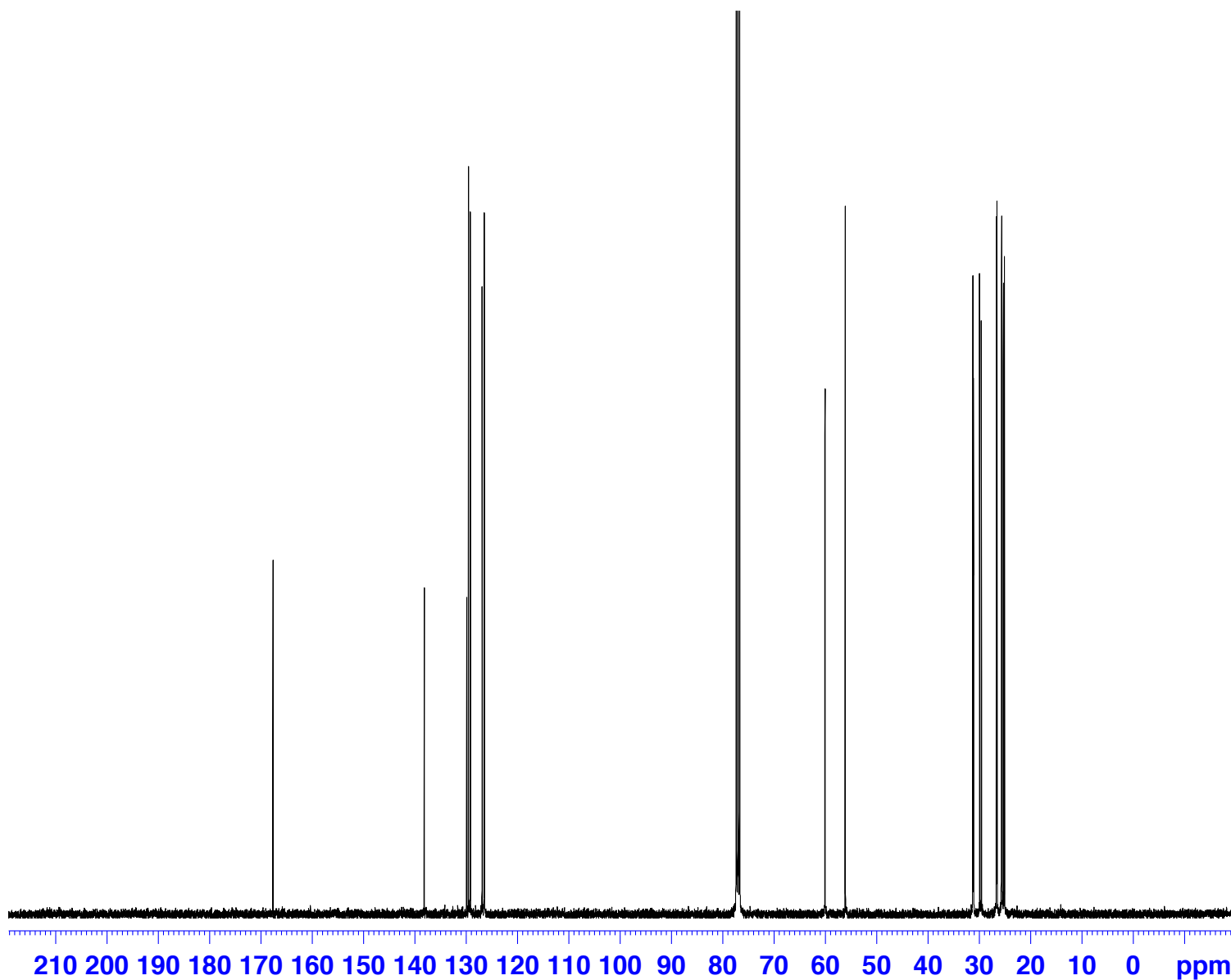
Current Data Parameters
NAME Jul05-2013
EXPNO 1529410
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130706
Time 4.49
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 7298.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

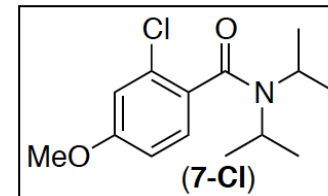
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-54 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

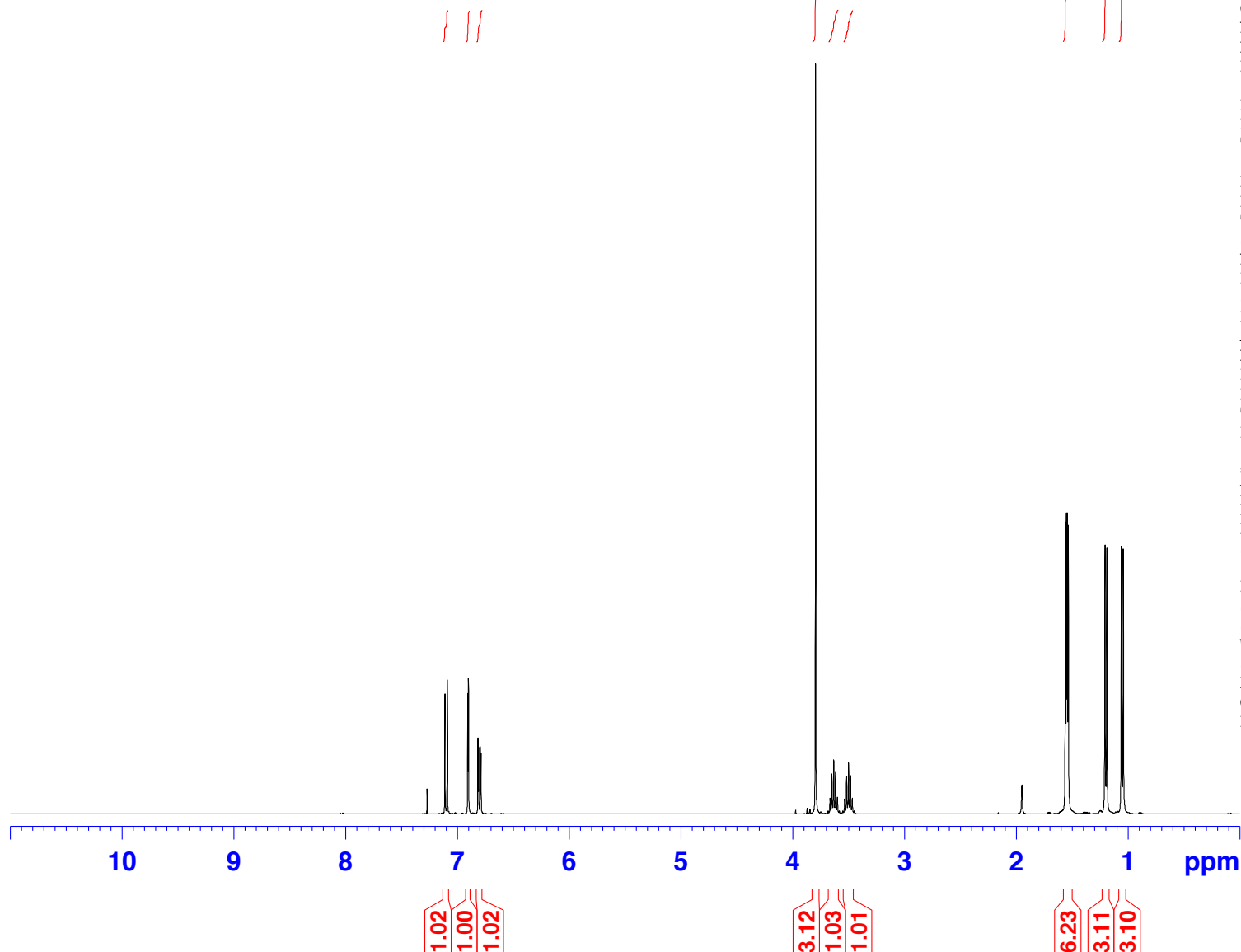


Current Data Parameters
NAME Jun29-2013
EXPNO 1516610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130629
Time 18.15
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 64
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

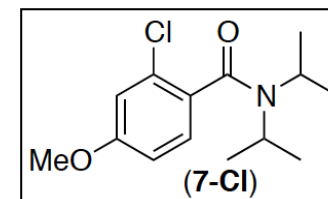
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-54 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



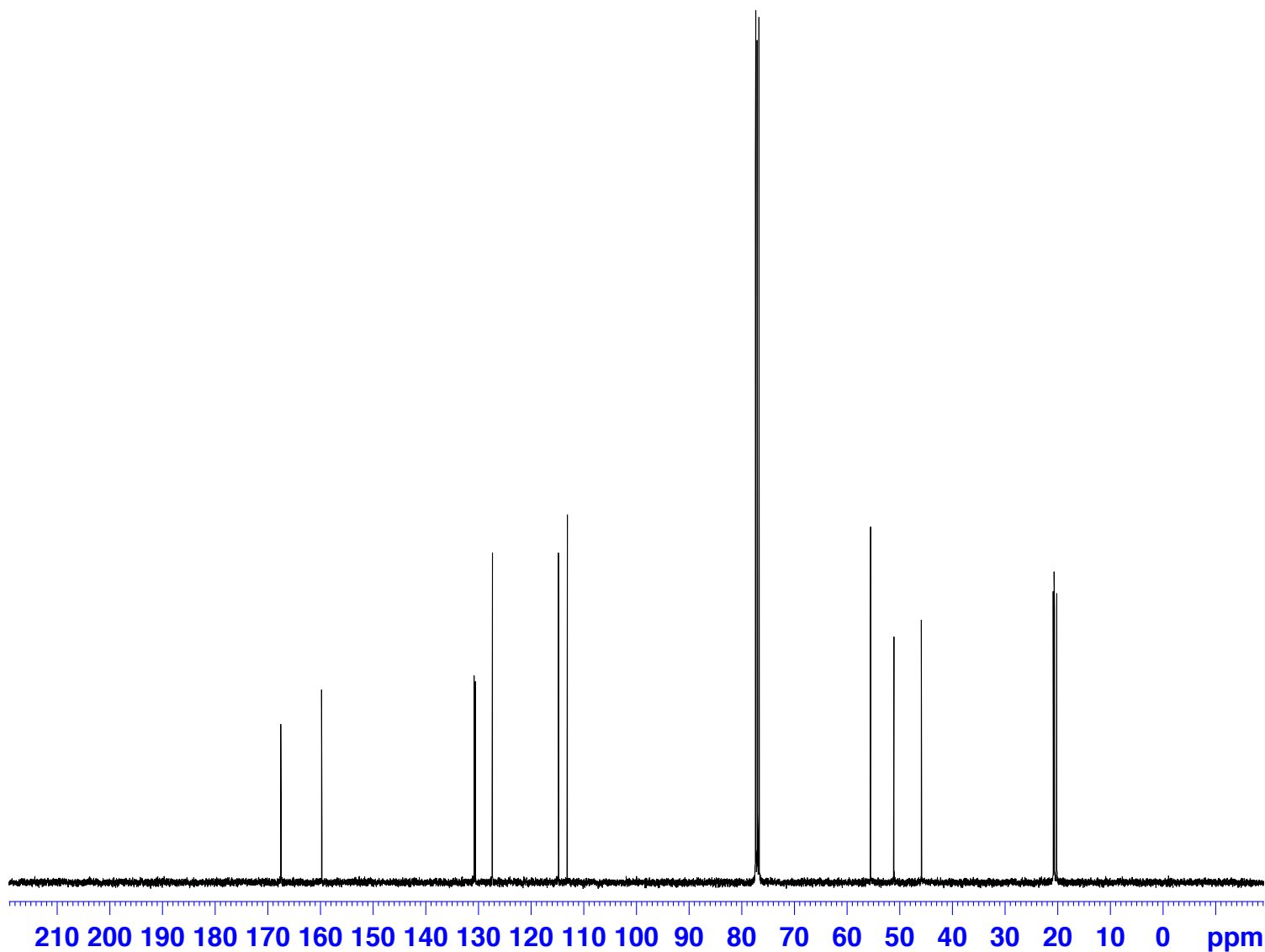
Current Data Parameters
NAME Jun29-2013
EXPNO 1516710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130629
Time 22.13
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

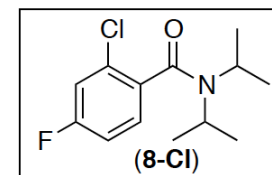
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-12-WW-66 Concentrated

user: we...
team: research-kalyani-wertjes holder: 4
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

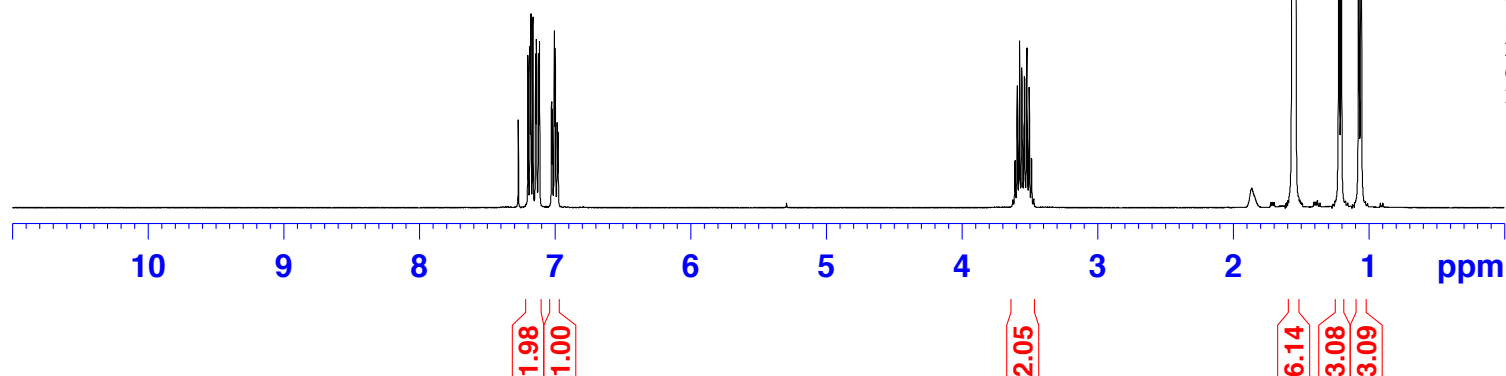


Current Data Parameters
NAME Jun23-2013
EXPNO 1496710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130623
Time 12.23
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 71.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

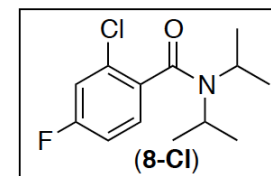
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-12-WW-66 Concentrated

user: we...
team: research-kalyani-wertjes holder: 4
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



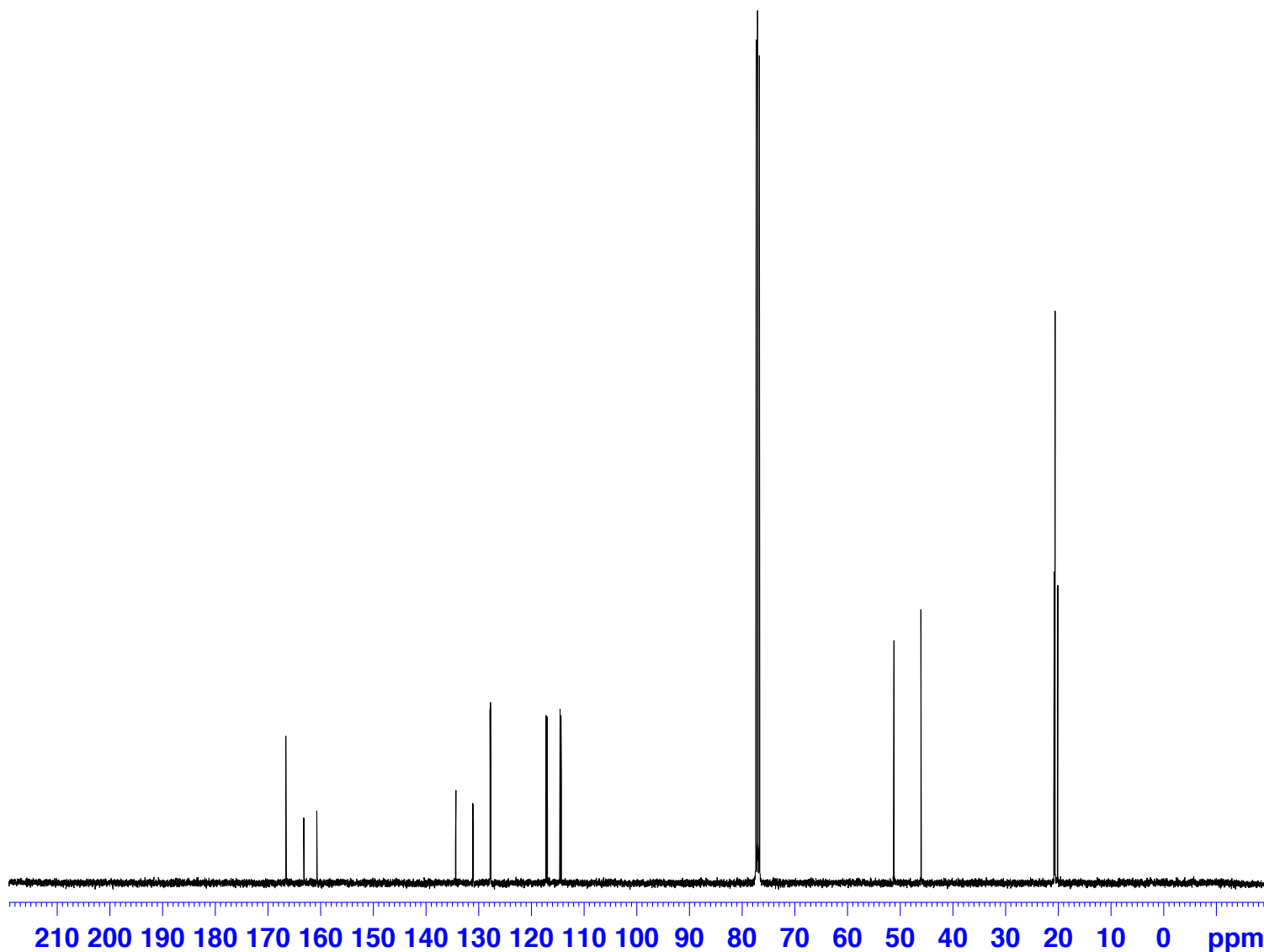
Current Data Parameters
NAME Jun23-2013
EXPNO 1496810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130623
Time 14.19
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1448.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

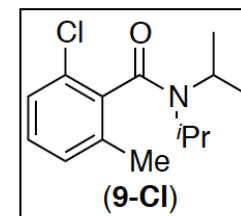
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-99_concentrated

user: we...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

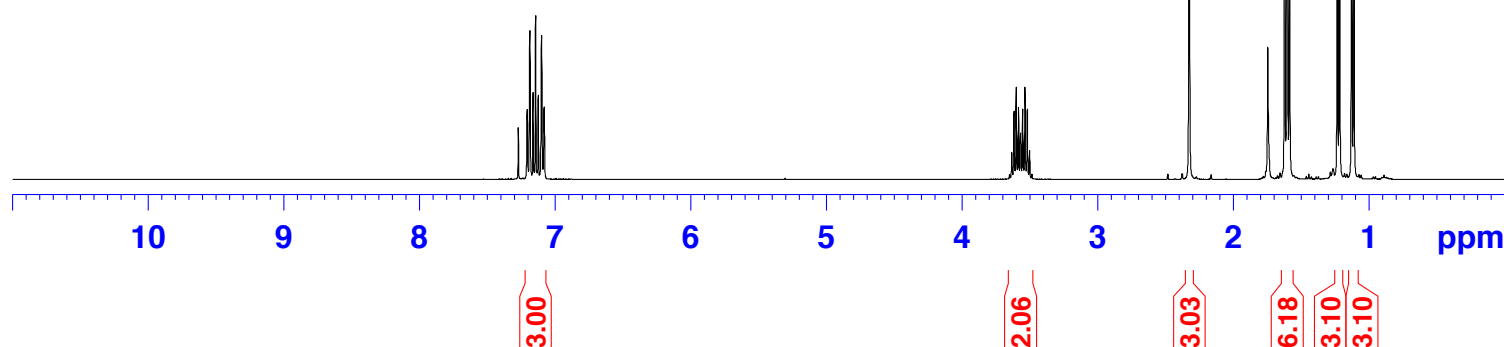


Current Data Parameters
NAME Jul18-2013
EXPNO 1552310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130718
Time 18.52
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 181
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

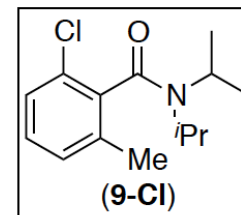
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-99_concentrated

user: we...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



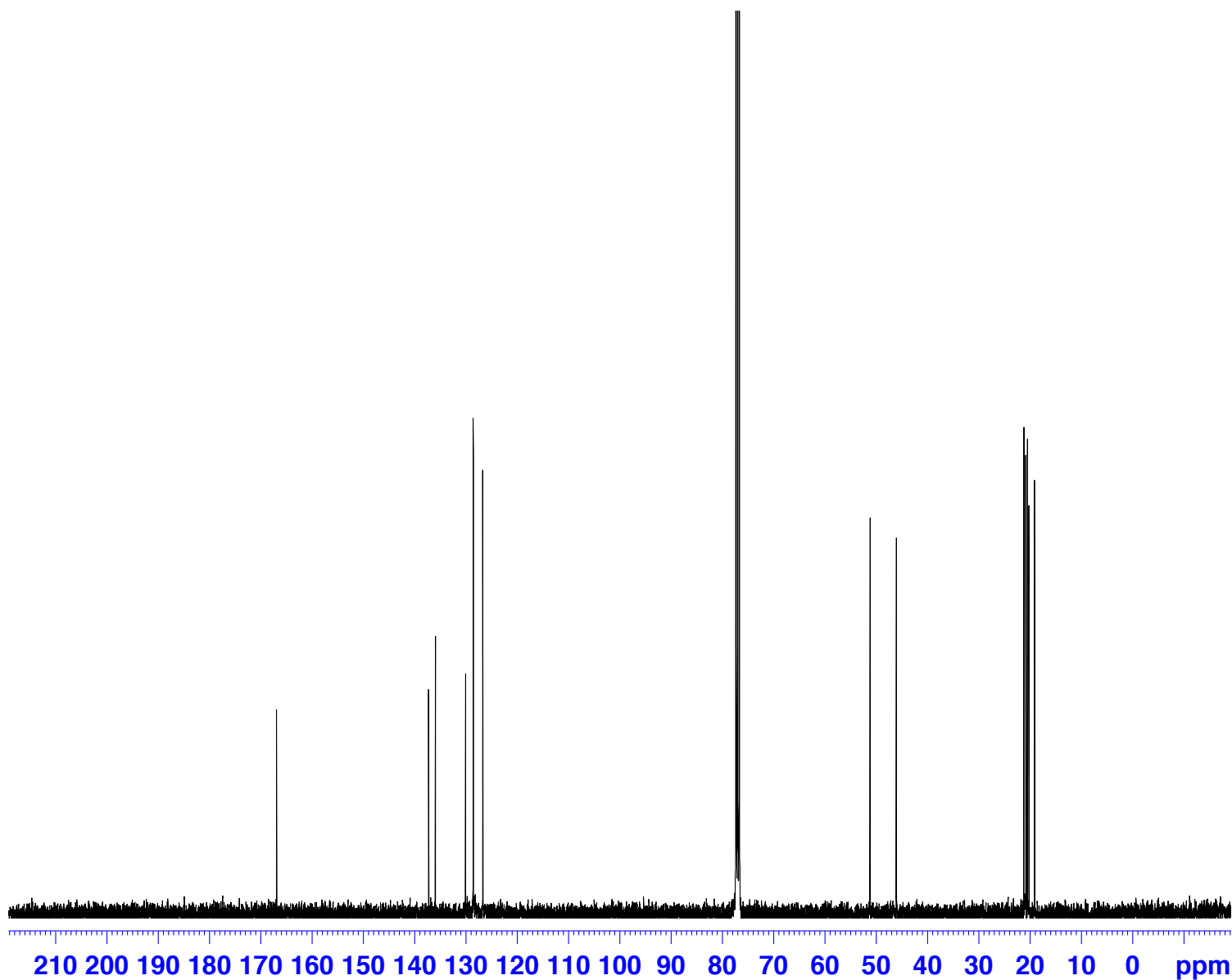
Current Data Parameters
NAME Jul18-2013
EXPNO 1552410
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130718
Time 22.43
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1024
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

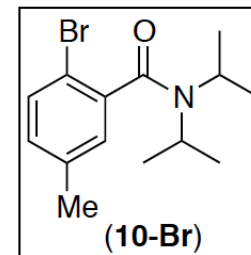
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-113 Concentrated

user: we...
team: research-kalyani holder: 14
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

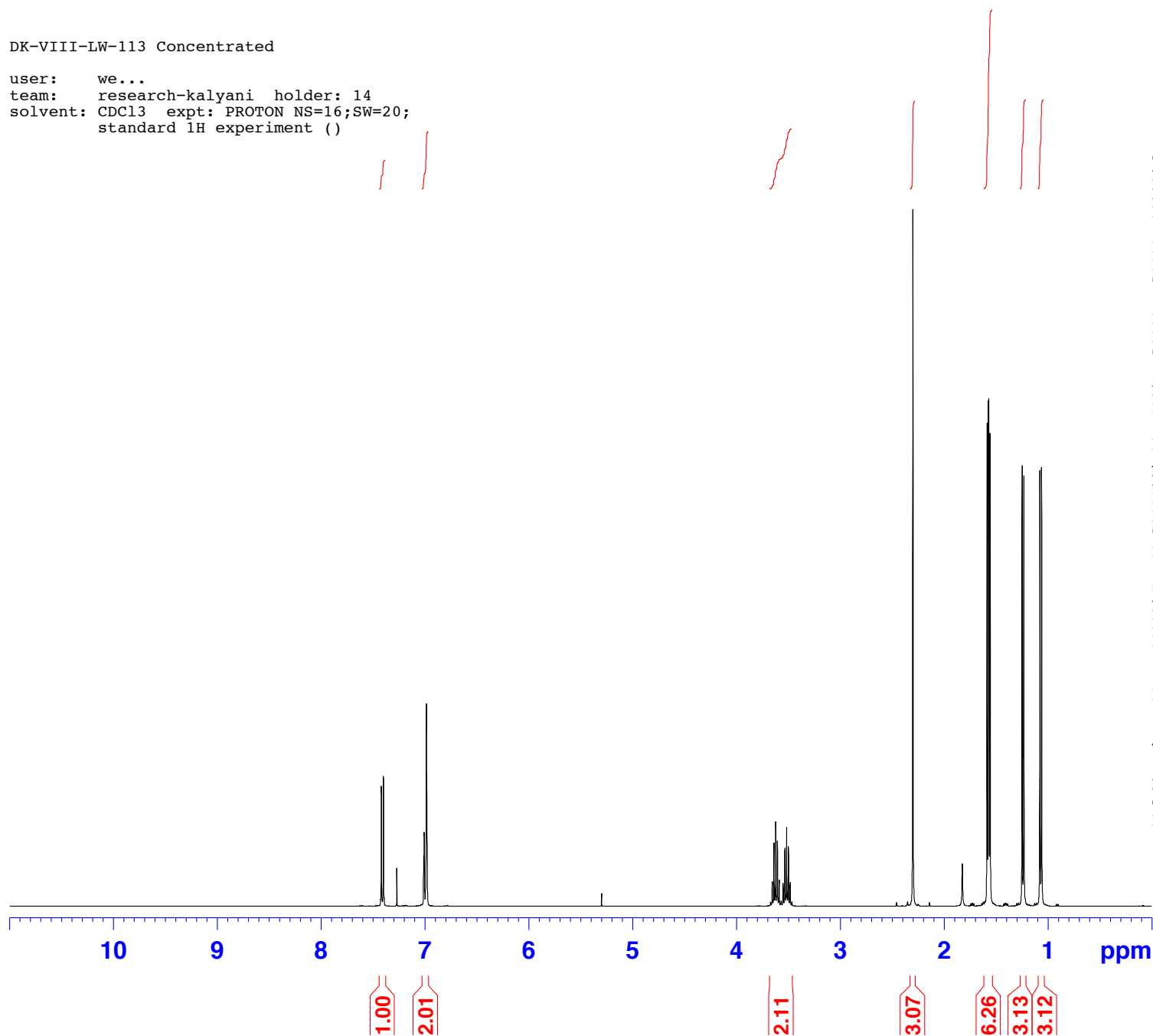


Current Data Parameters
NAME Jul20-2013
EXPNO 1556910
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130720
Time 21.23
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 114
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

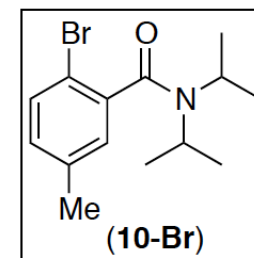
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-113 Concentrated

user: we...
team: research-kalyani holder: 14
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



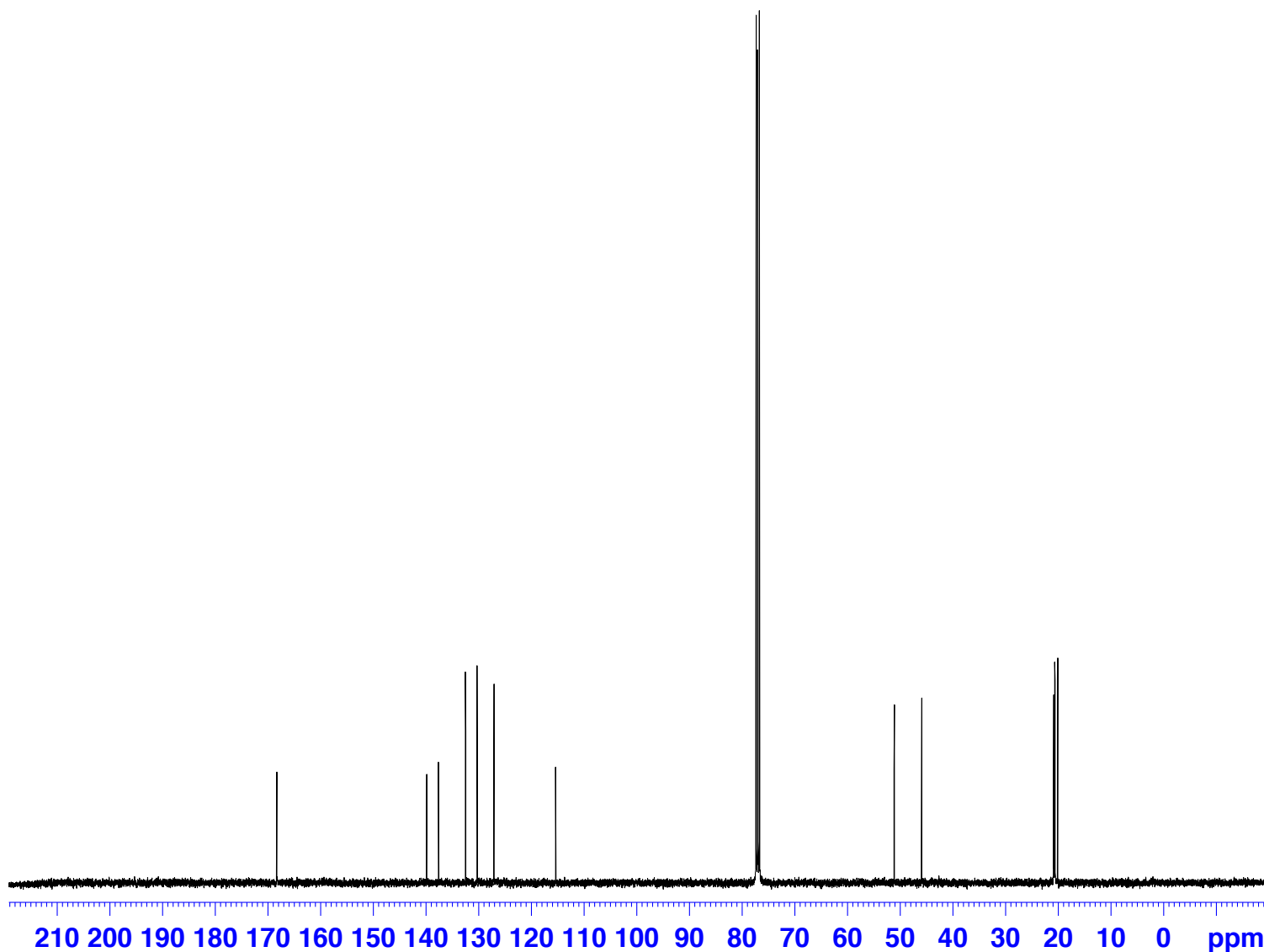
Current Data Parameters
NAME Jul20-2013
EXPNO 1557010
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130720
Time 23.28
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

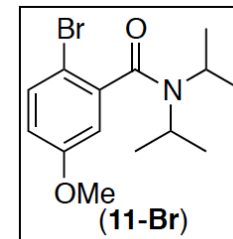
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-36 Concentrated

user: we...
team: research-kalyani holder: 8
solvent: CDCl3 expt: PROTON NS=128;SW=20;
standard 1H experiment ()

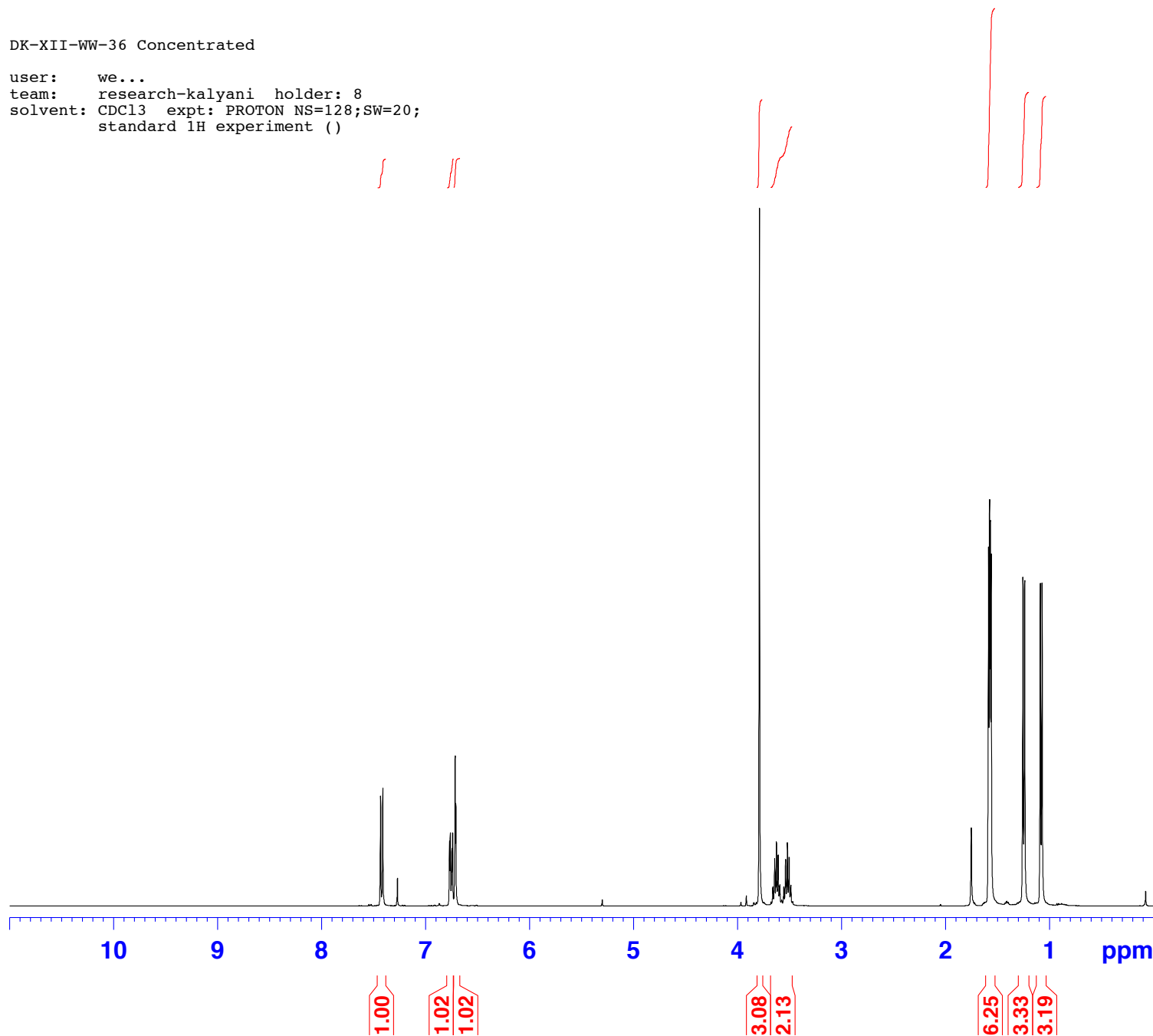


Current Data Parameters
NAME Jul05-2013
EXPNO 1529610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130706
Time 5.04
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 128
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 161.3
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

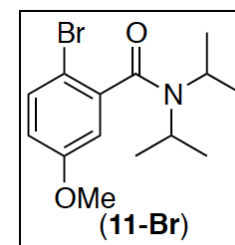
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-36 Concentrated

user: we...
team: research-kalyani holder: 8
solvent: CDCl3 expt: C13CPD32 NS=8000;D1=2;
standard C13 experiment ()



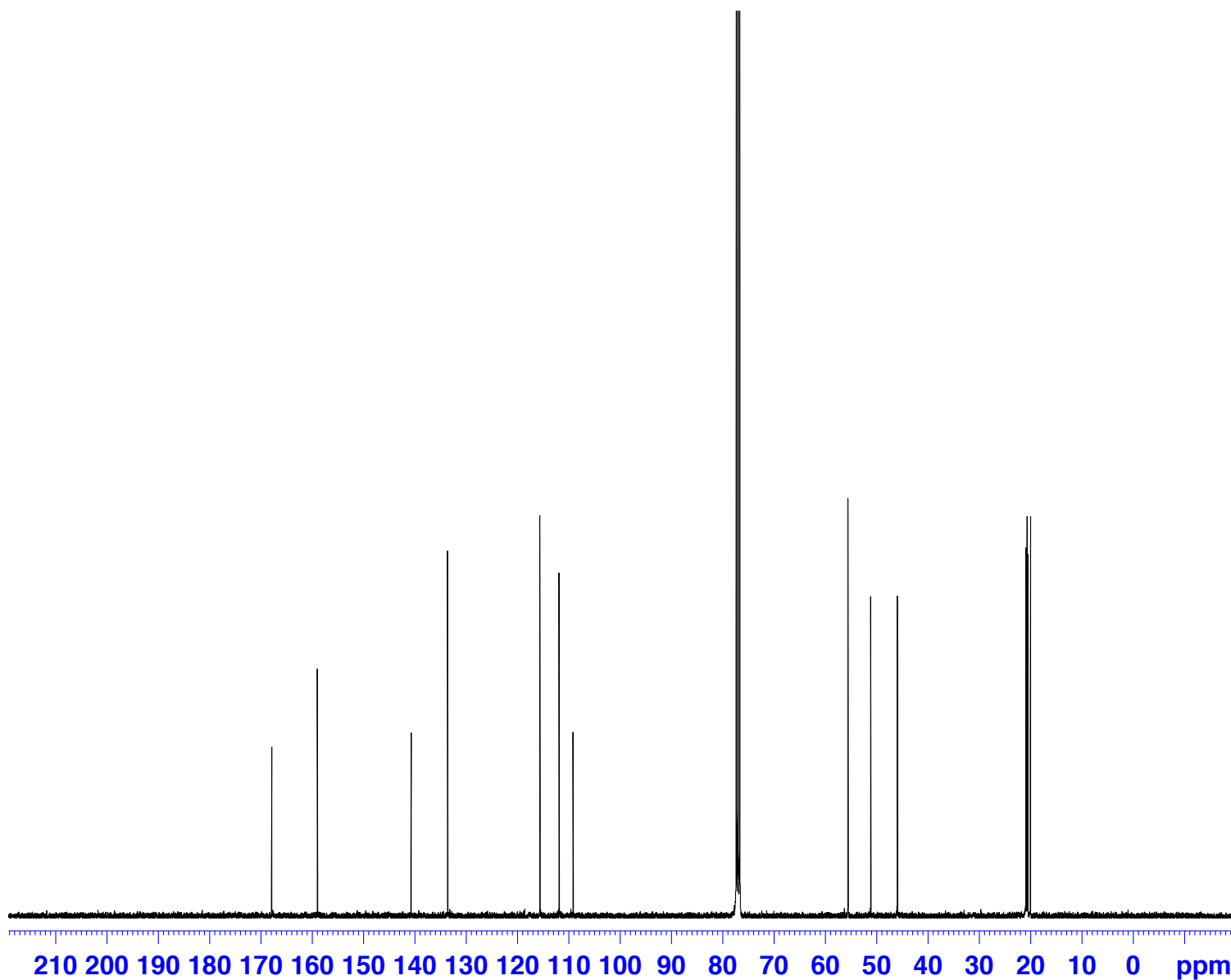
Current Data Parameters
NAME Jul05-2013
EXPNO 1529210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130706
Time 0.37
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 8000
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 13004
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

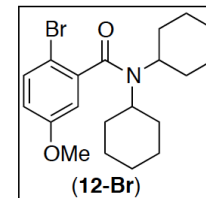
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-61 Concentrated and Dried

user: we...
team: research-kalyani-wertjes holder: 6
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

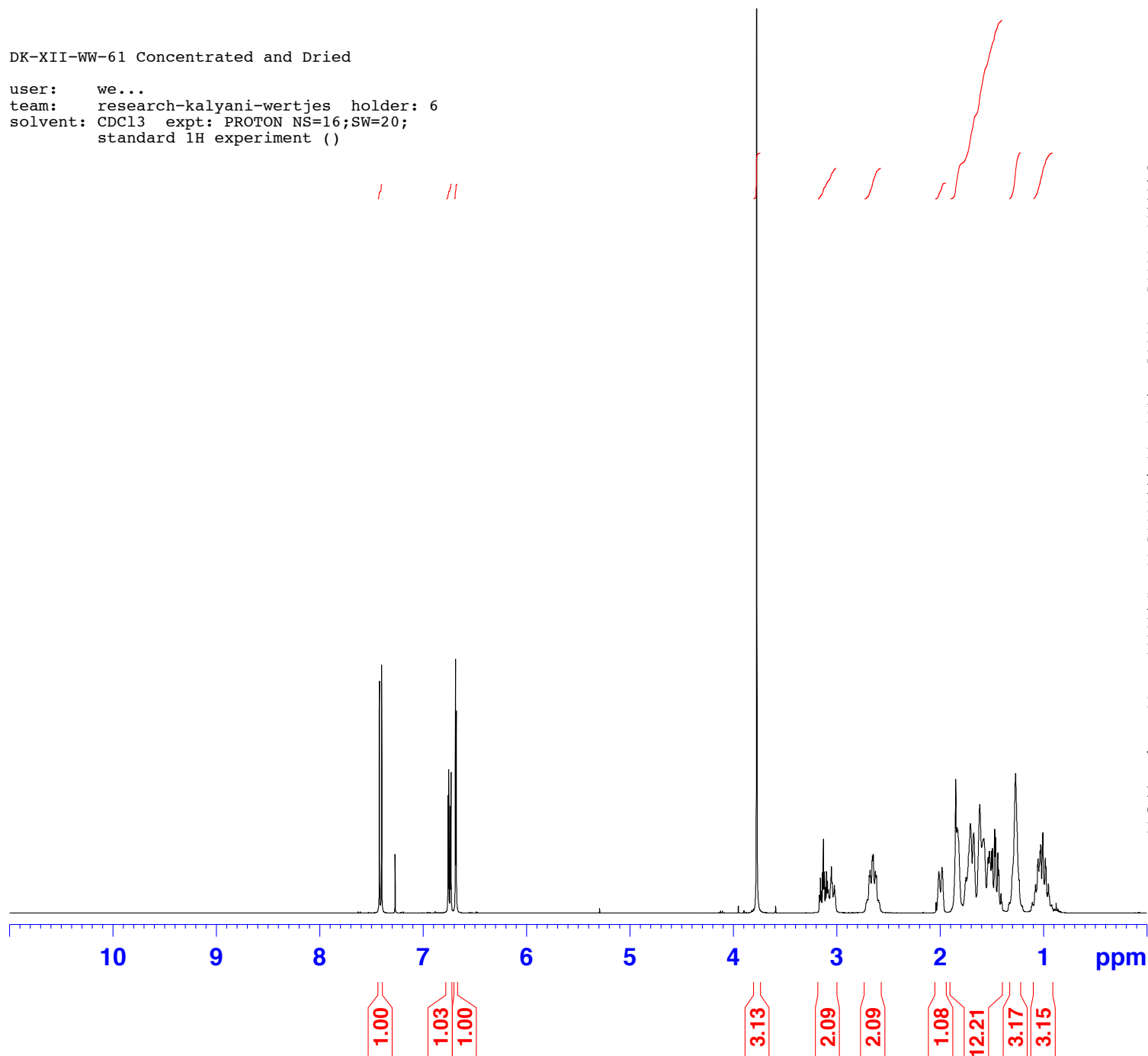


Current Data Parameters
NAME Jun22-2013
EXPNO 1496210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130622
Time 15.07
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 57
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

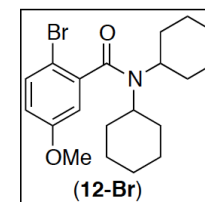
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-61 Concentrated and Dried

user: we...
team: research-kalyani-wertjes holder: 6
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



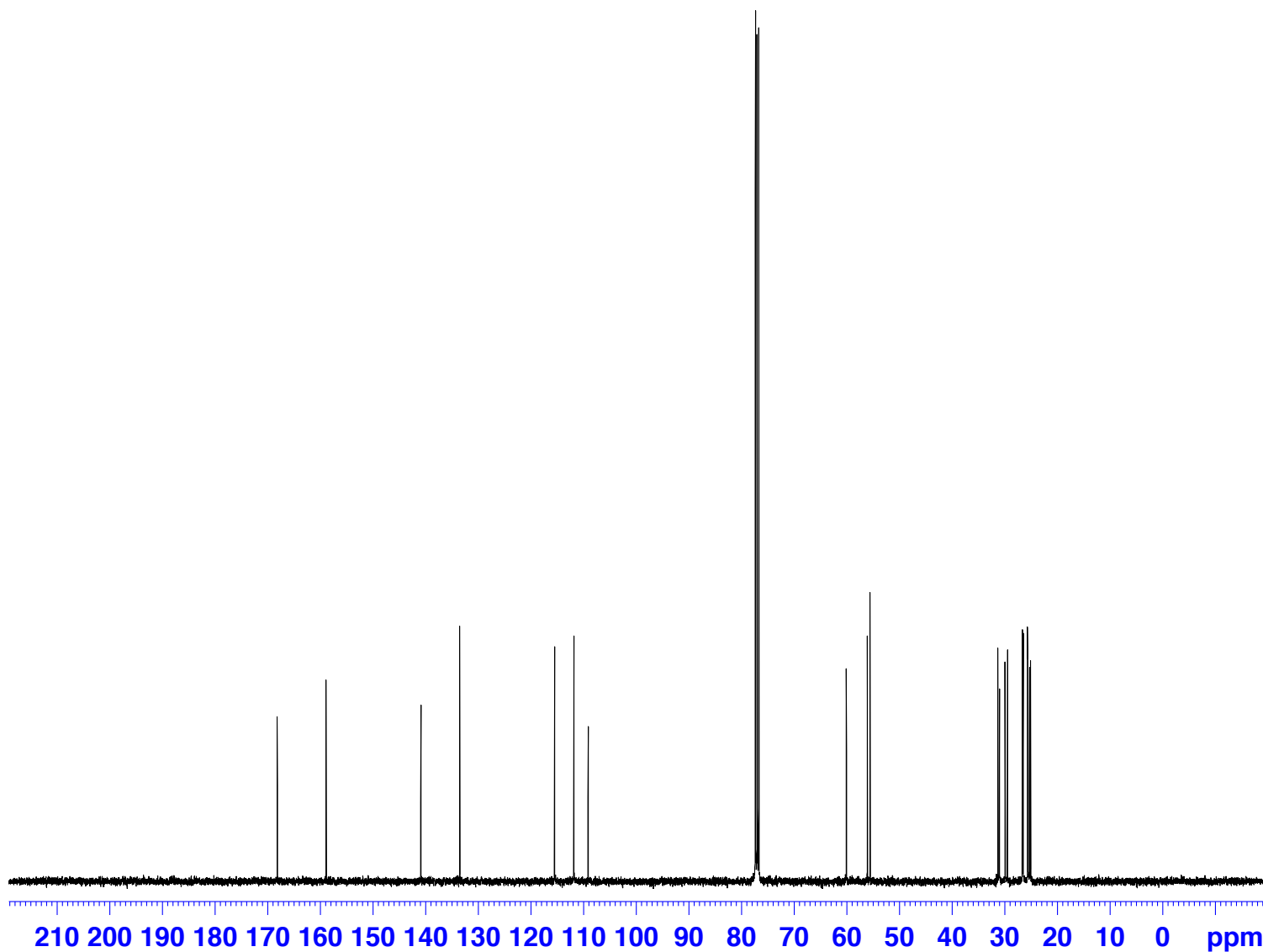
Current Data Parameters
NAME Jun22-2013
EXPNO 1496310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130622
Time 17.03
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1824.6
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

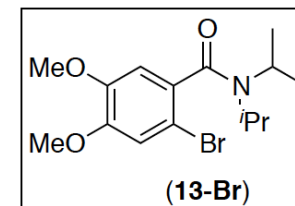
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-61 Column 2

user: we...
team: research-kalyani holder: 1
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

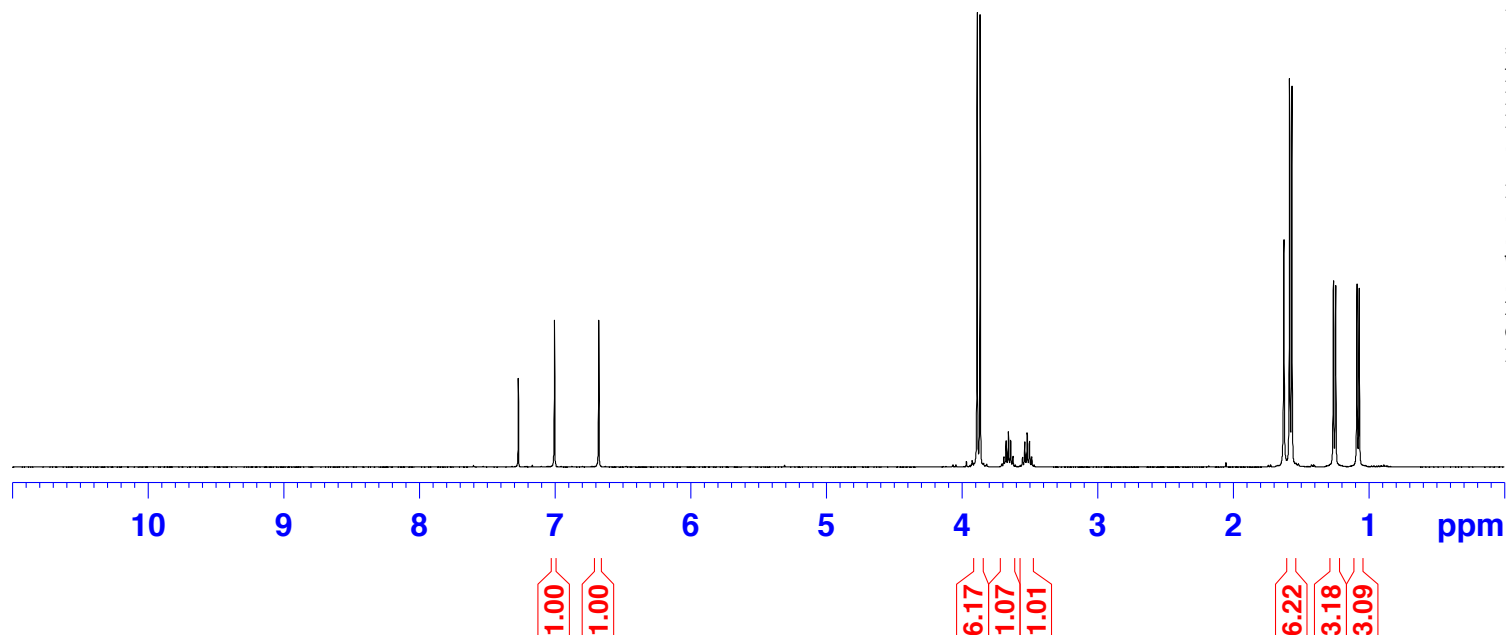


Current Data Parameters
NAME Jul23-2013
EXPNO 1561210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130723
Time 12.06
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 362
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

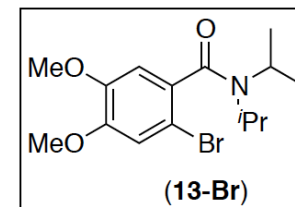
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-61 Concentrated

user: we...
team: research-kalyani holder: 8
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



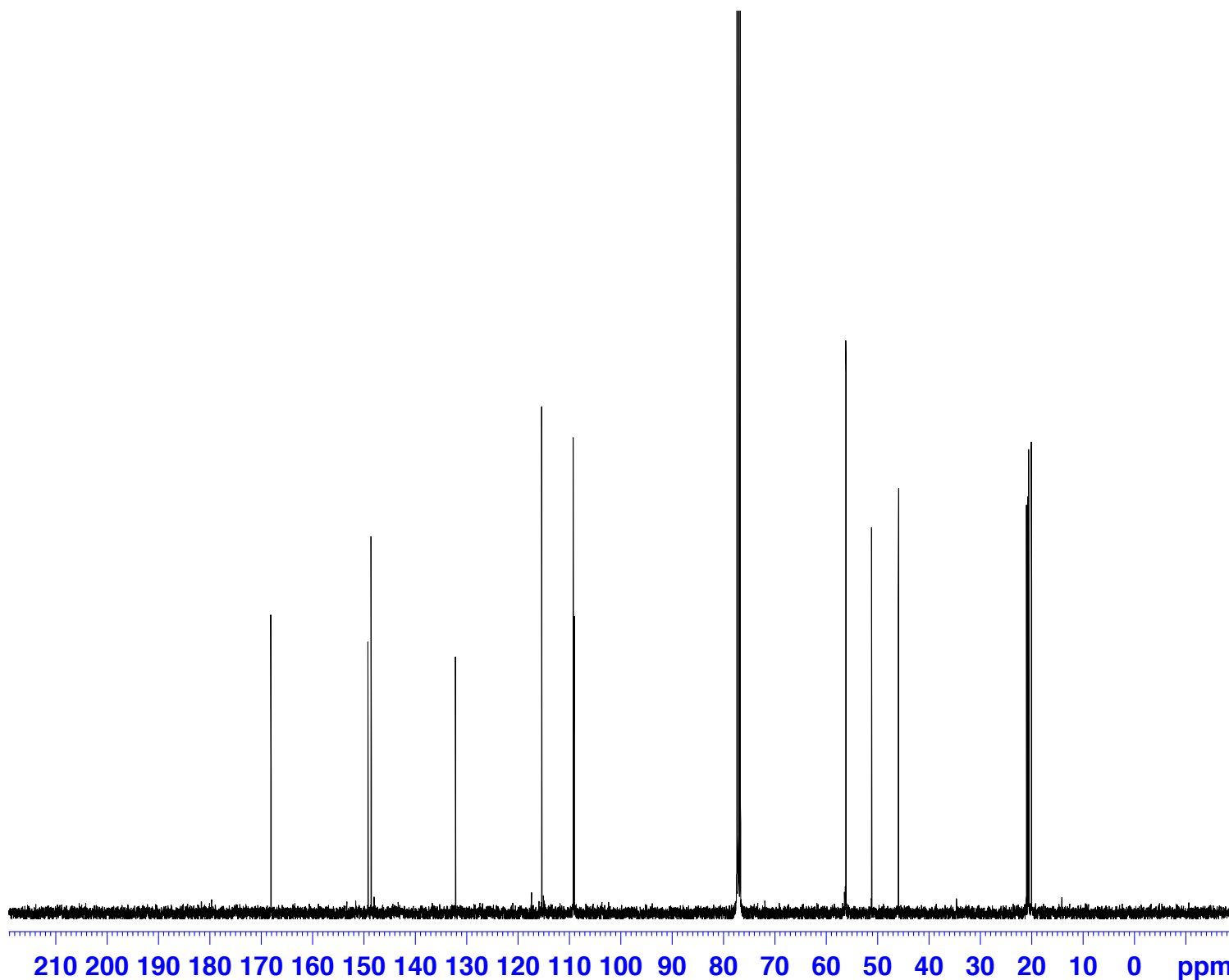
Current Data Parameters
NAME Jun29-2013
EXPNO 1516510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130629
Time 18.04
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2048
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

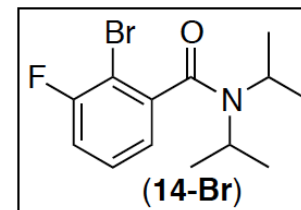
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-38 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

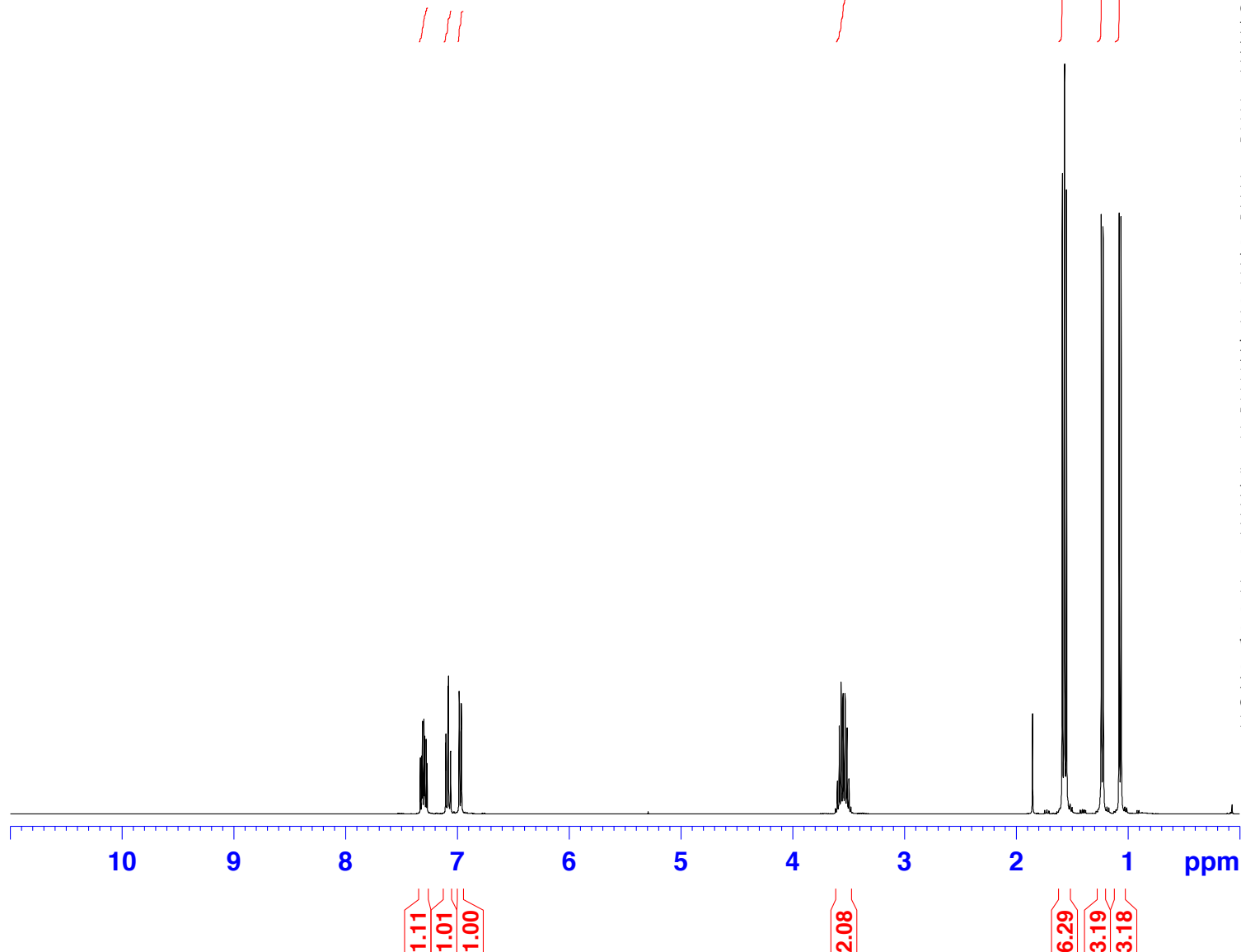


Current Data Parameters
NAME Jun28-2013
EXPNO 1515110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 17.16
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 64
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

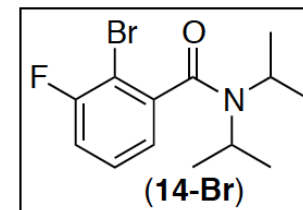
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-38 Concentrated

user: we...
team: research-kalyani holder: 7
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



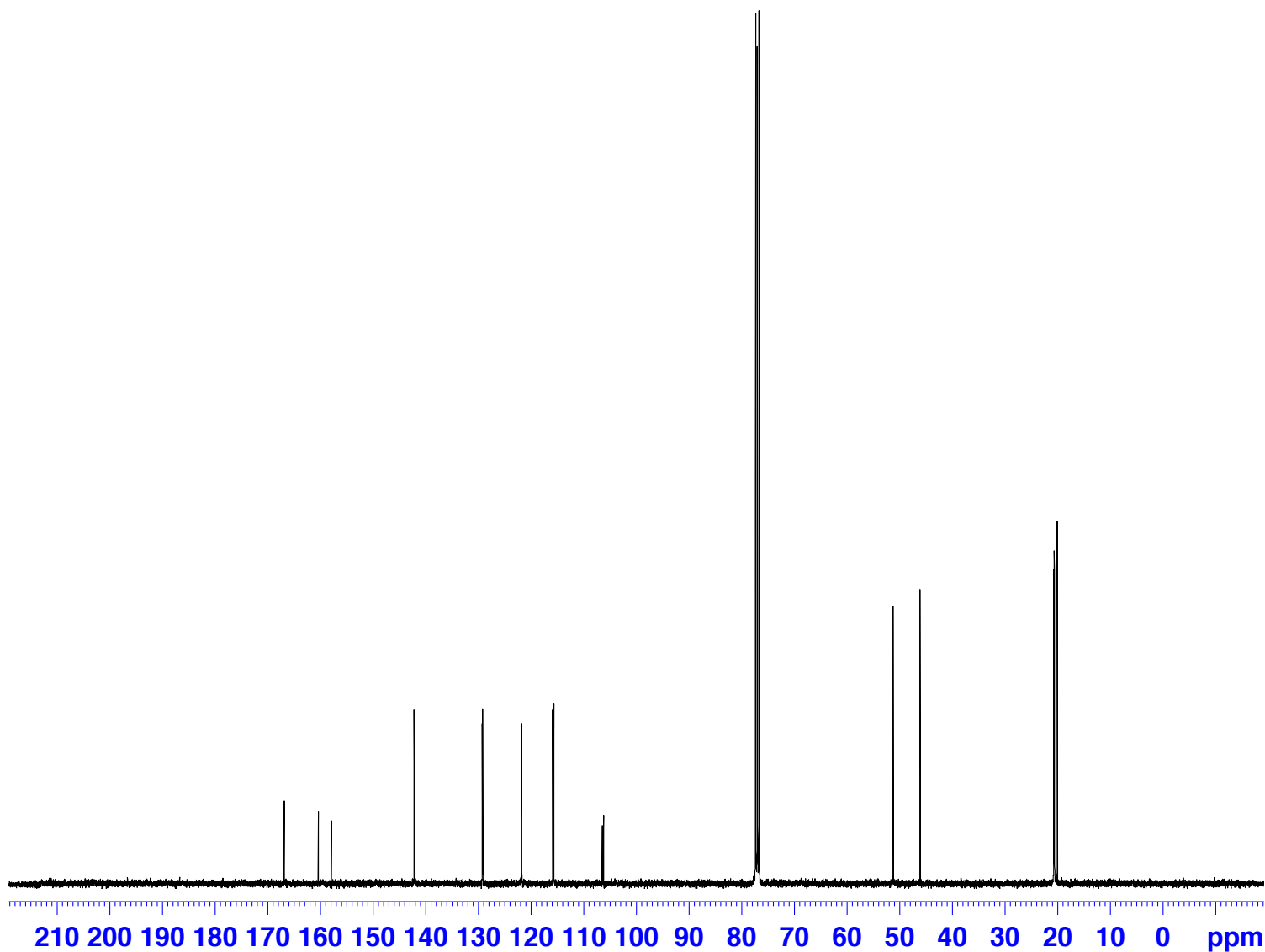
Current Data Parameters
NAME Jun28-2013
EXPNO 1515210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 21.14
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1824.6
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

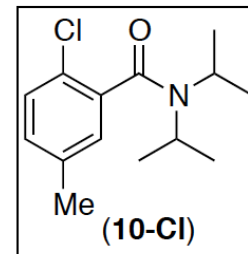
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-54_concentrated

user: ru...
team: research-kalyani-wolfel holder: 5
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

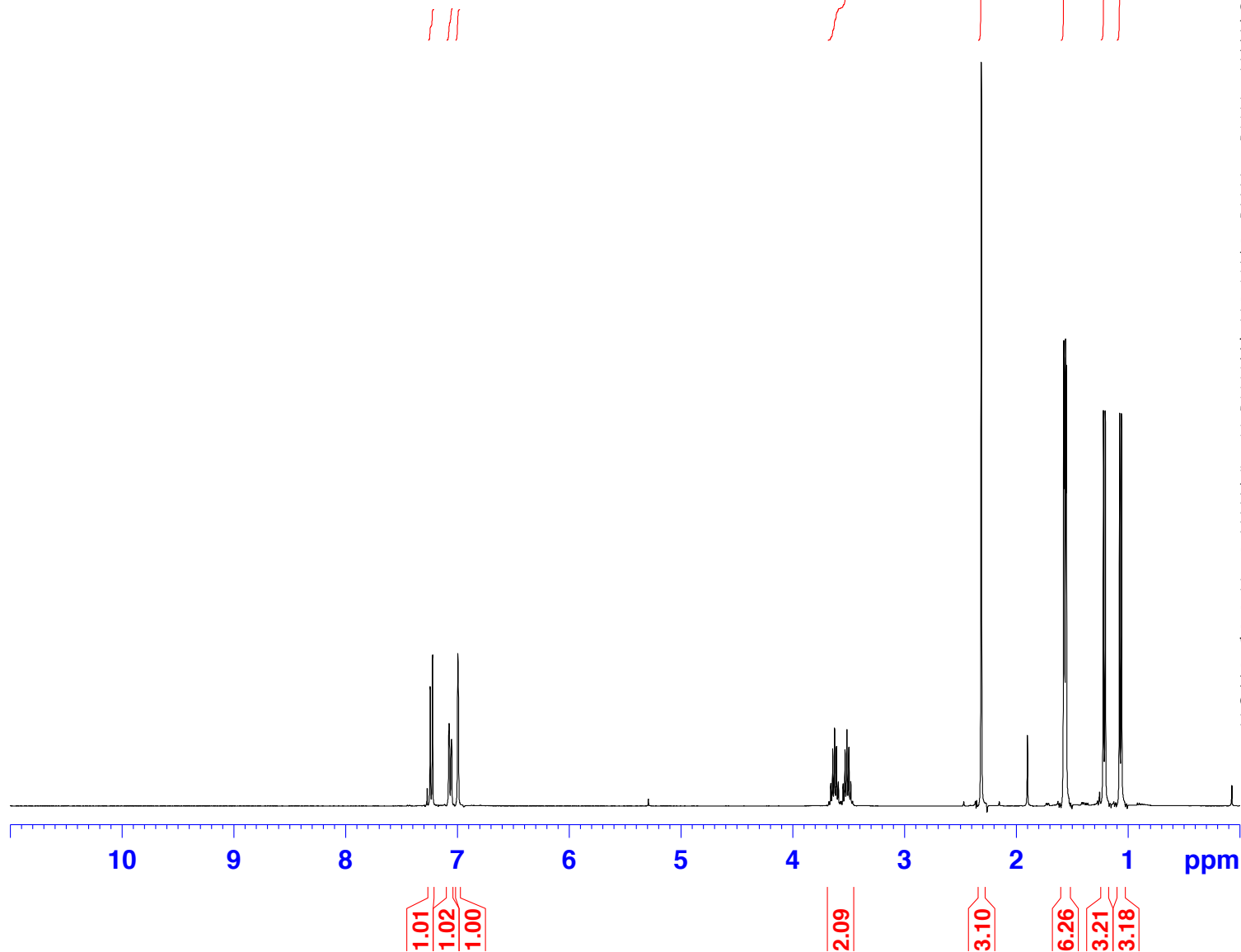


Current Data Parameters
NAME Jun21-2013
EXPNO 1495510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130621
Time 16.40
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 64
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

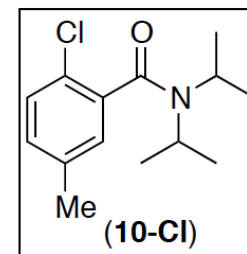
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-54_concentrated

user: ru...
team: research-kalyani-wolfel holder: 5
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment (1 Hr 55 Min 12 Sec)



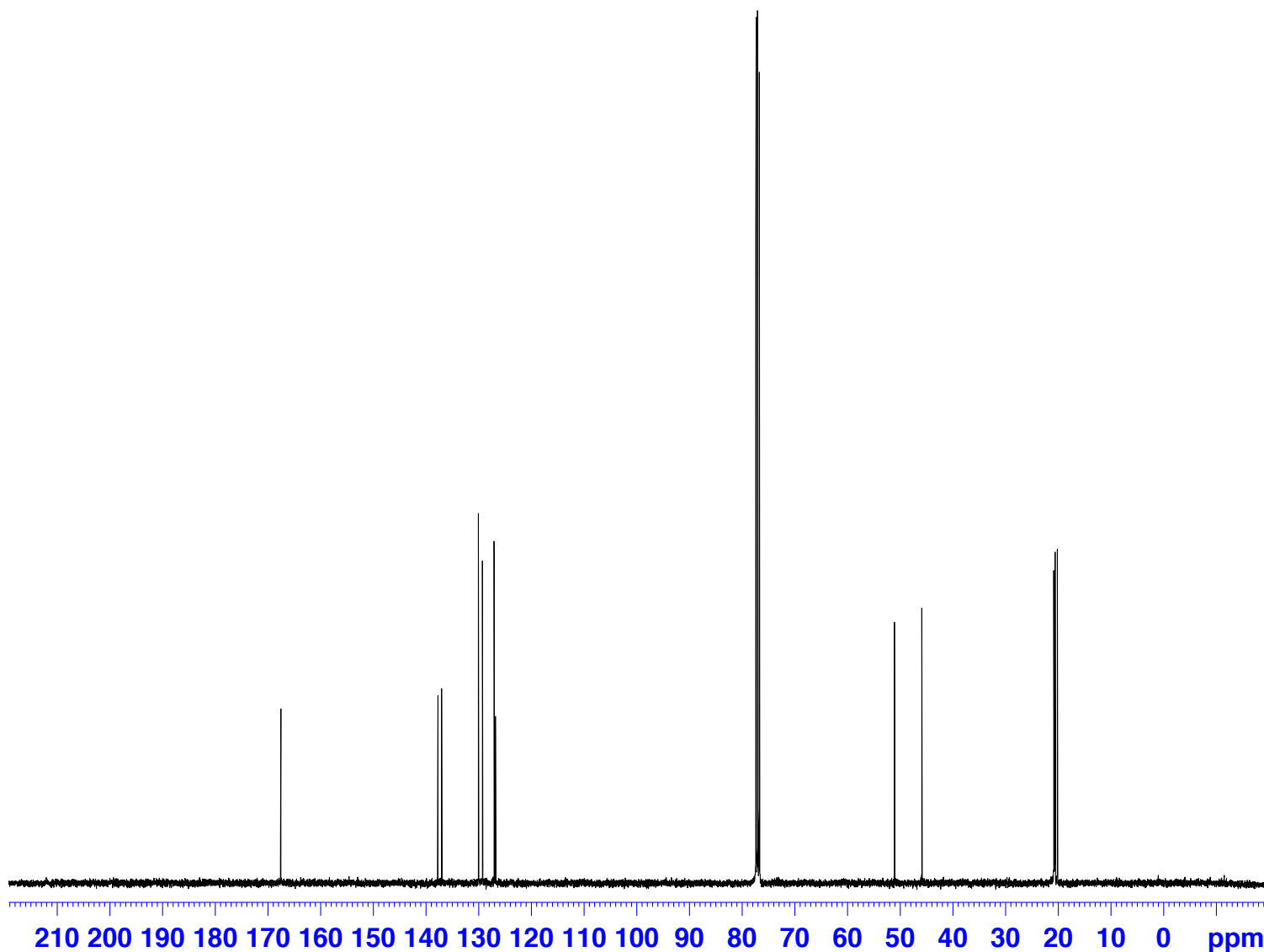
Current Data Parameters
NAME Jun21-2013
EXPNO 1495610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130621
Time 18.45
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1448.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

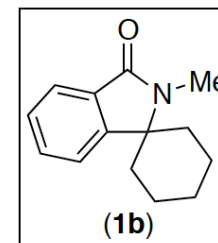
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-WW-49 Concentrated

user: we...
team: research-kalyani-wertjes holder: 11
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

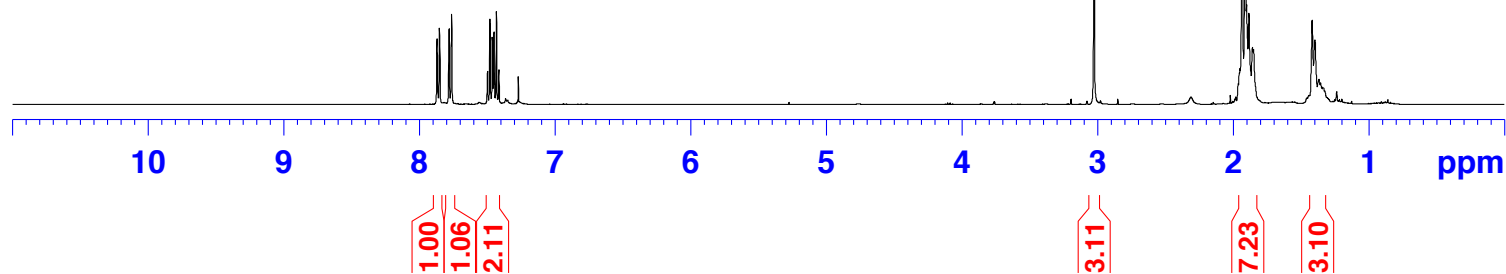


Current Data Parameters
NAME Jun28-2013
EXPNO 1515810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 23.27
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 50.8
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

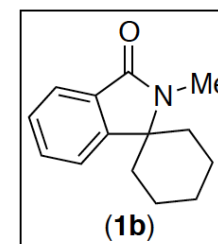
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-WW-49 Concentrated

user: we...
 team: research-kalyani-wertjes holder: 11
 solvent: CDCl₃ expt: C13CPD32 NS=2048;D1=2;
 standard C13 experiment ()



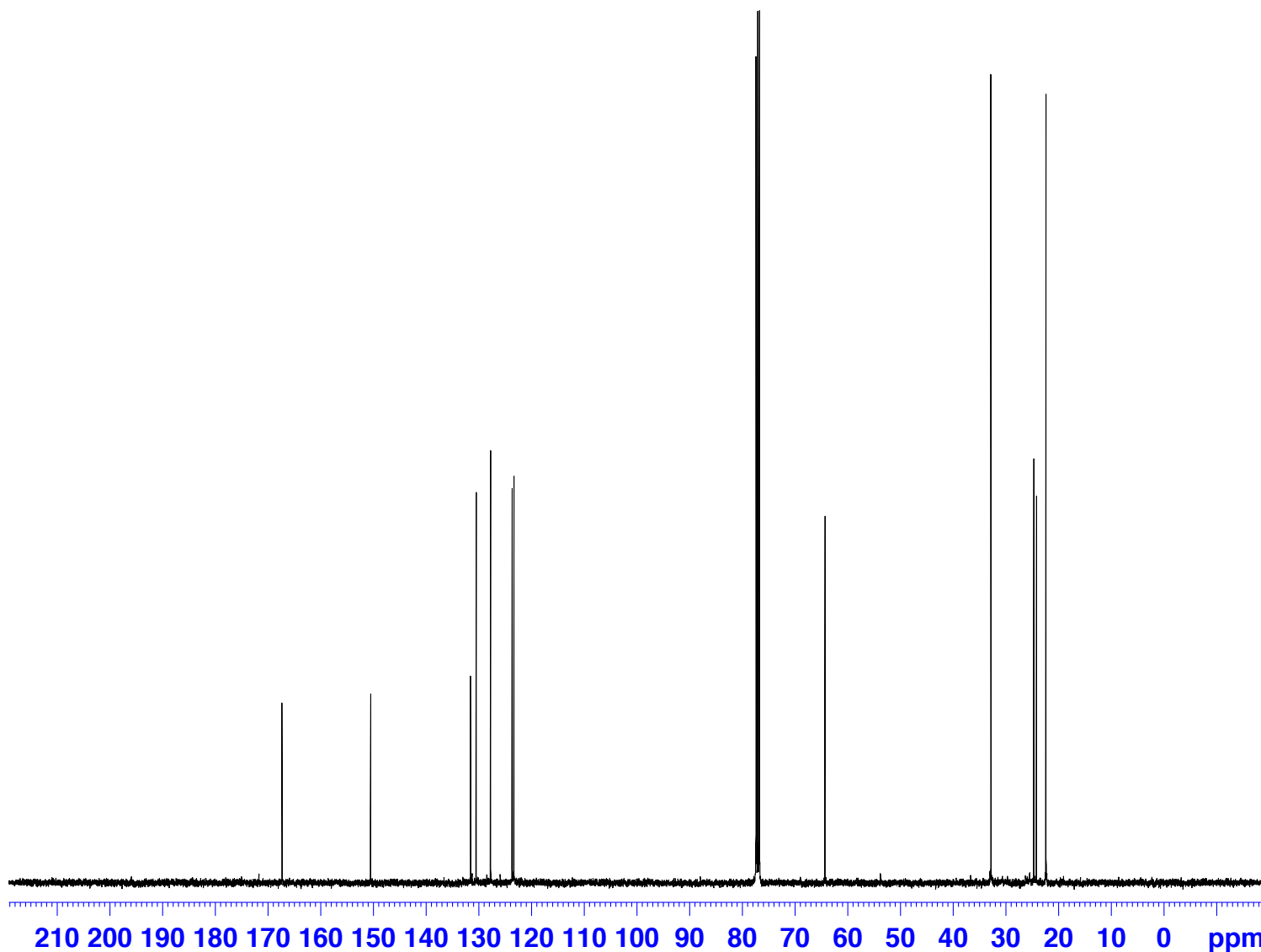
Current Data Parameters
 NAME Jun28-2013
 EXPNO 1515910
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130629
 Time 1.23
 INSTRUM spect
 PROBHD 5 mm BBO 1H/13
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl₃
 NS 2048
 DS 2
 SWH 23980.814 Hz
 FIDRES 0.365918 Hz
 AQ 1.3664756 sec
 RG 2580.3
 DW 20.850 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 d12 0.00002000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.50 dB
 SFO1 100.6228298 MHz

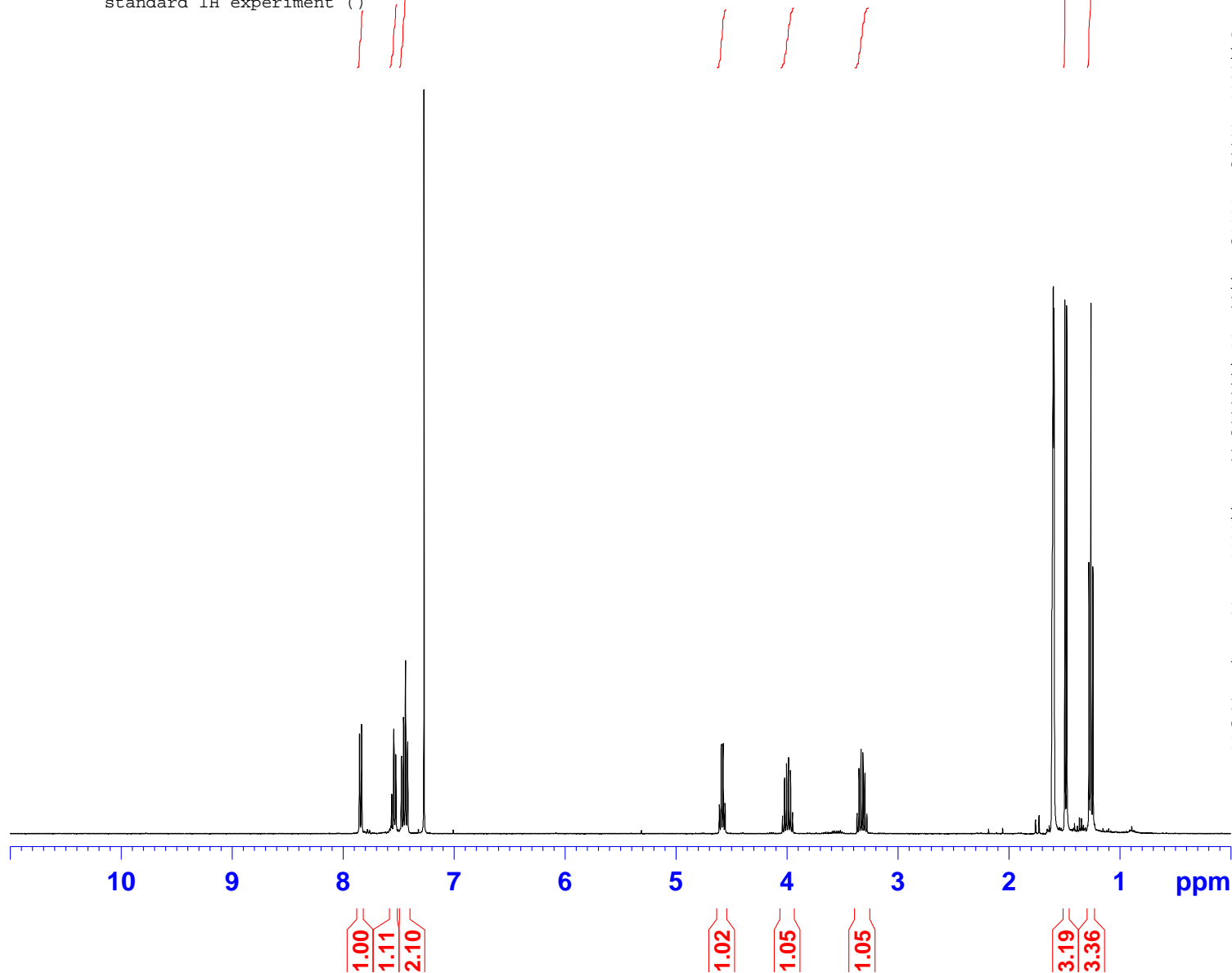
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 90.00 usec
 PL2 -4.00 dB
 PL12 13.68 dB
 PL13 17.24 dB
 SFO2 400.1316005 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6127690 MHz
 WDW EM



DK-VIII-LW-50c

user: wo...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: PROTON NS=128;SW=20;
standard 1H experiment ()



Current Data Parameters
NAME Jun04-2013
EXPNO 1469410
PROCNO 1

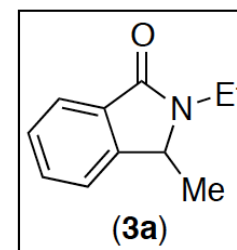
F2 - Acquisition Parameters
Date_ 20130604
Time 16.21
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 128
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 724.1
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

DK-VIII-LW-50 c.2 Concentrated

user: we...
team: research-kalyani holder: 14
solvent: CDCl3 expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



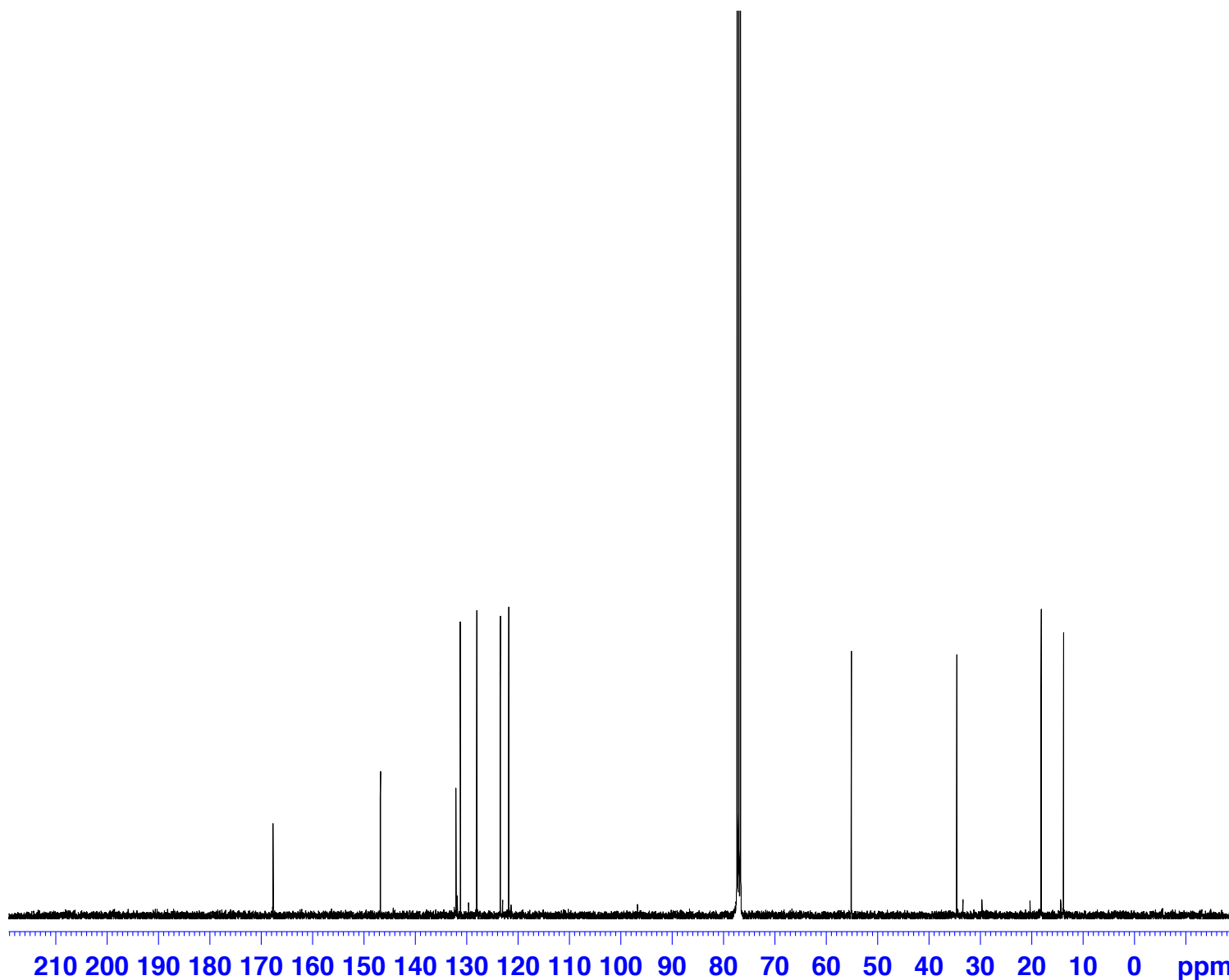
Current Data Parameters
NAME Jul26-2013
EXPNO 1570910
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130727
Time 1.47
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 6502
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

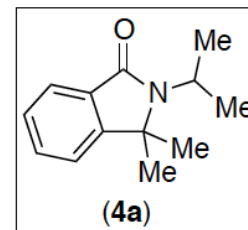
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-28-1 Concentrated

user: we...
team: research-kalyani holder: 5
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

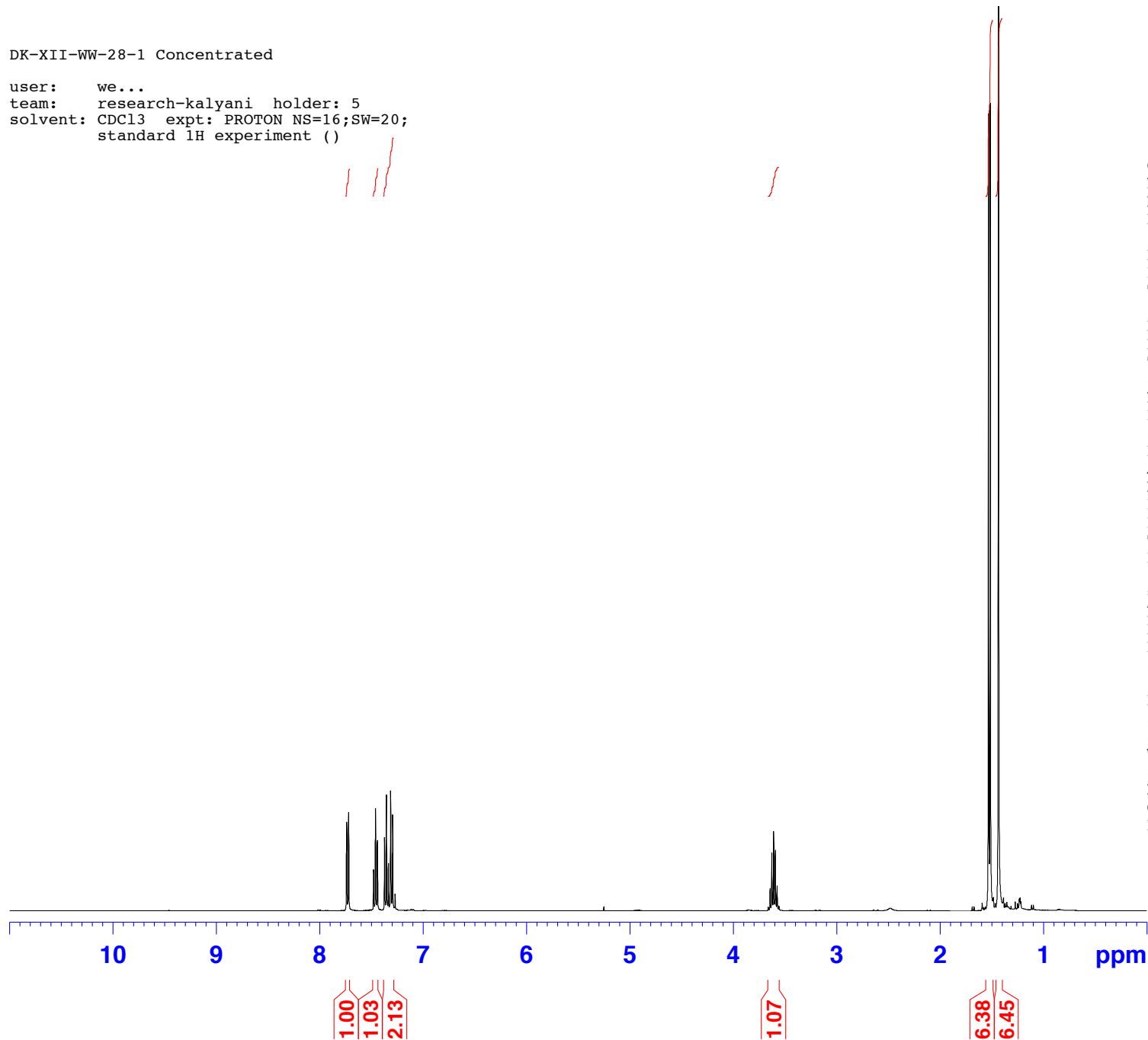


Current Data Parameters
NAME Jun27-2013
EXPNO 1512510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130627
Time 17.09
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 35.9
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

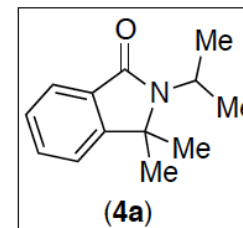
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-28-1 Concentrated

user: we...
team: research-kalyani holder: 5
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



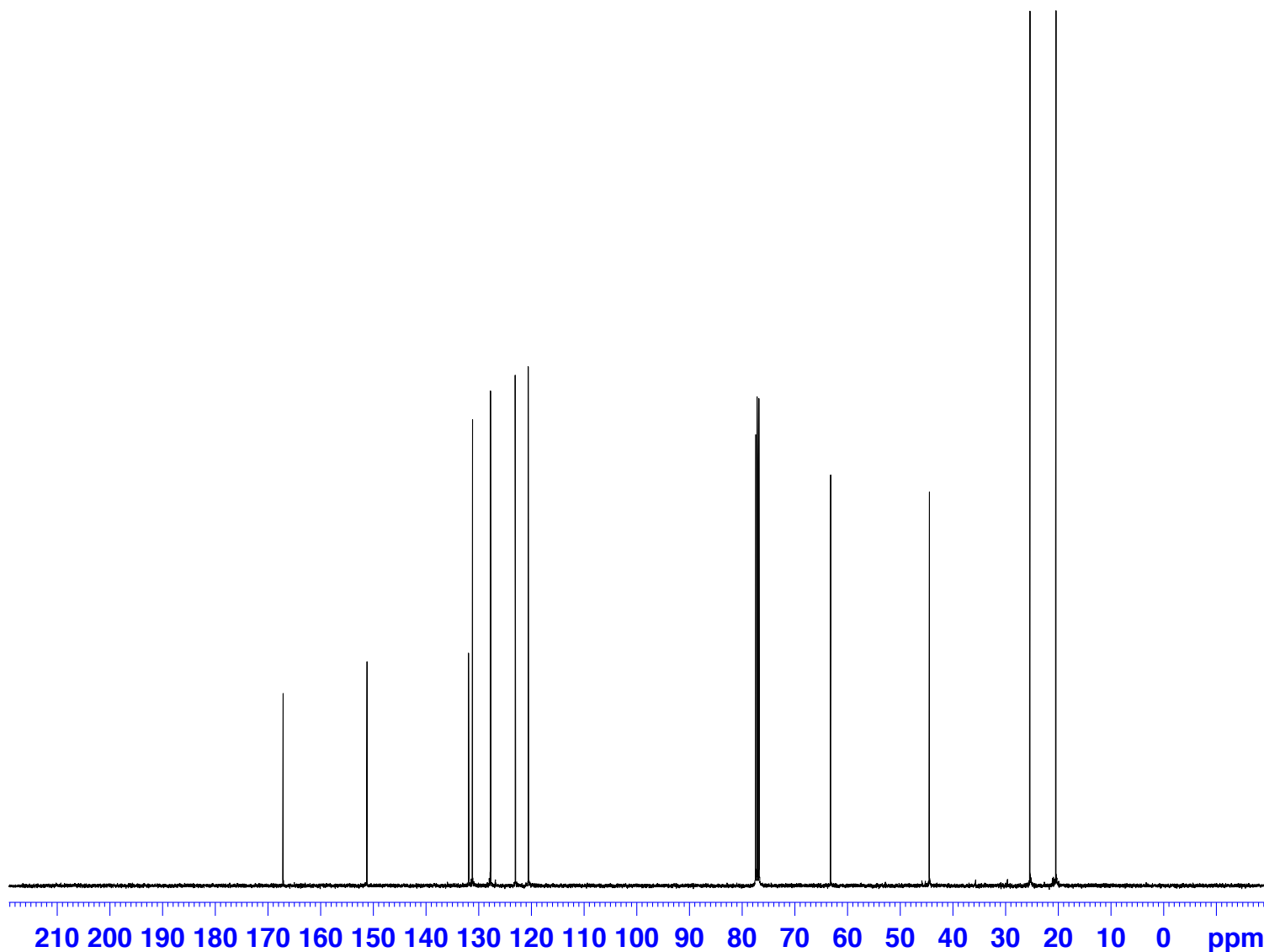
Current Data Parameters
NAME Jun27-2013
EXPNO 1512610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130627
Time 19.05
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

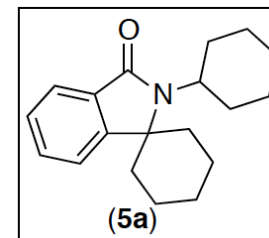
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-28-2 Concentrated Redo

user: we...
team: research-kalyani-wertjes holder: 10
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

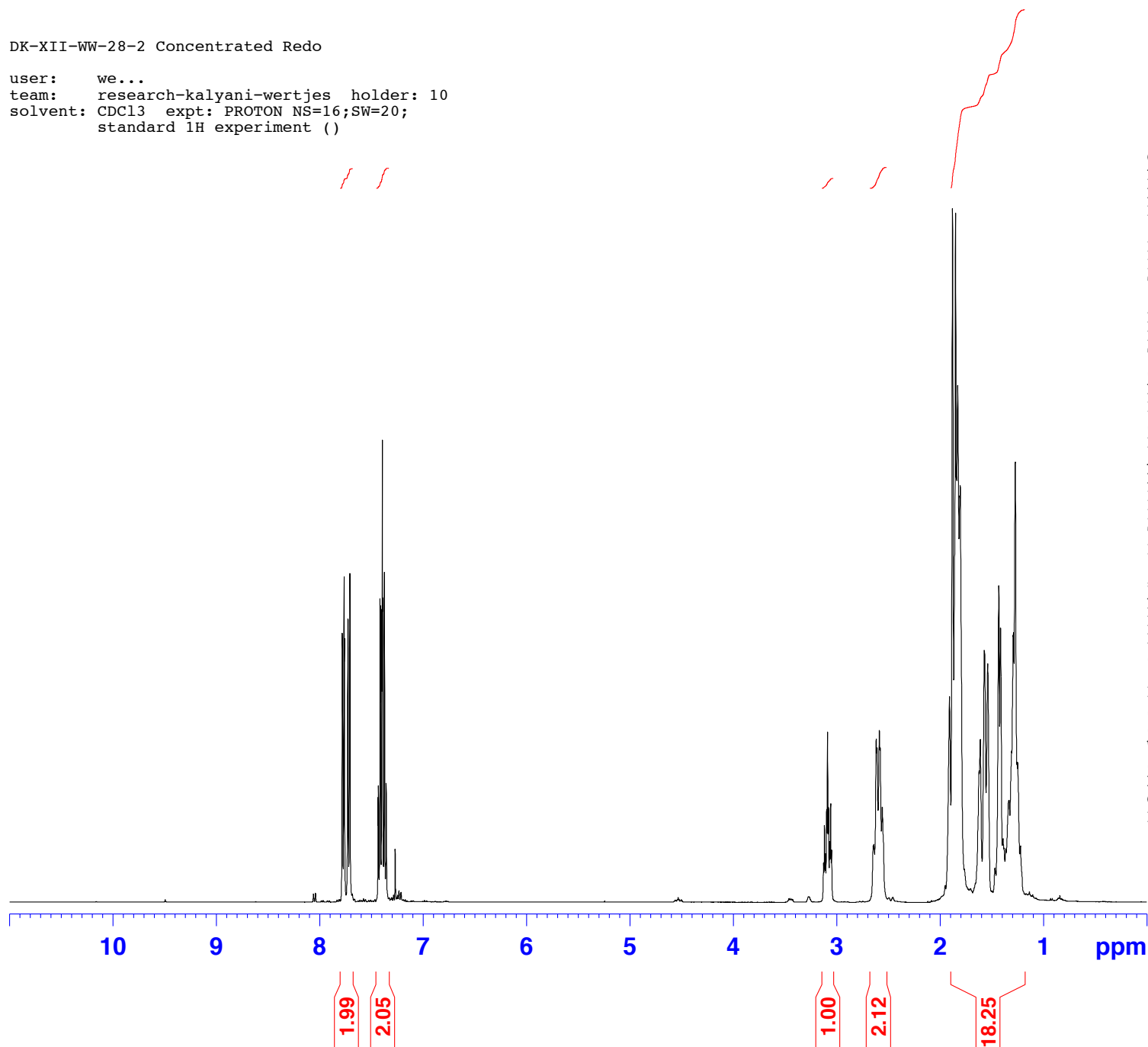


Current Data Parameters
NAME Jun28-2013
EXPNO 1515710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 23.21
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 25.4
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

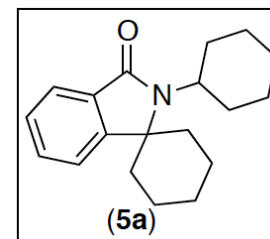
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-28-2 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



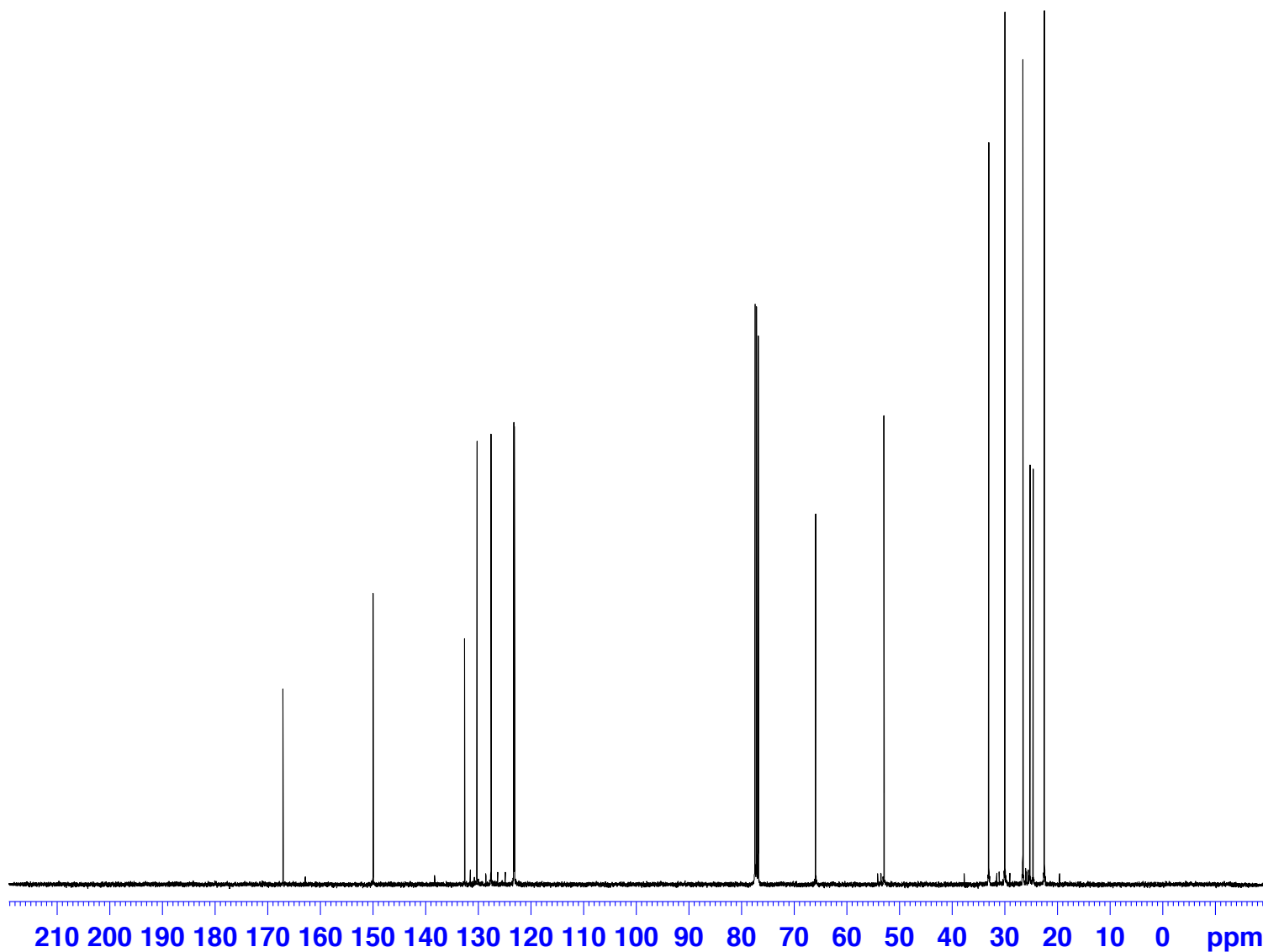
Current Data Parameters
NAME Jun27-2013
EXPNO 1512810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130627
Time 21.07
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

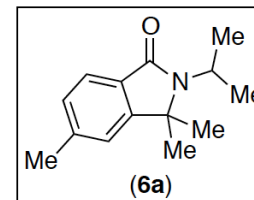
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-75 Concentrated

user: we...
team: research-kalyani holder: 9
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

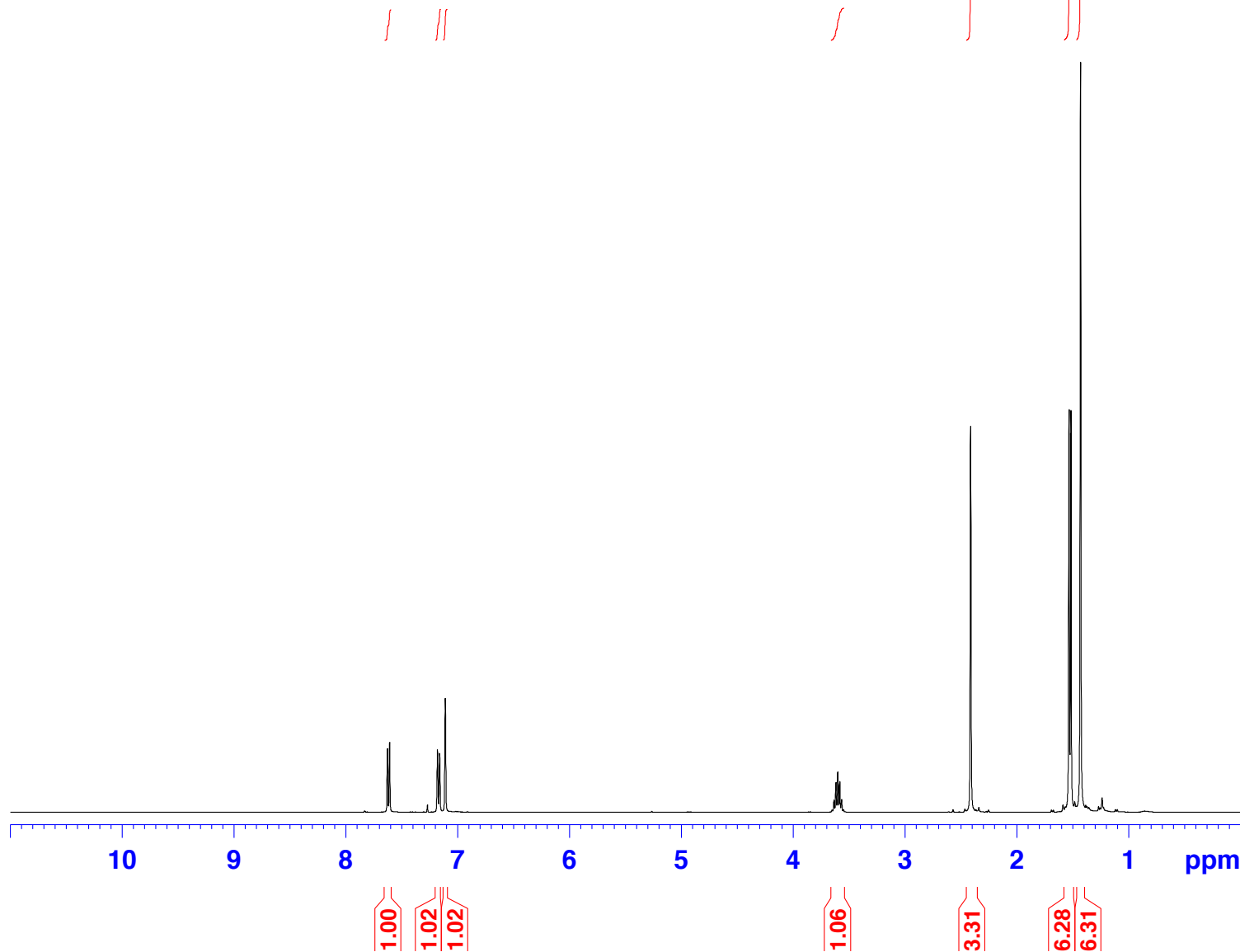


Current Data Parameters
NAME Jun27-2013
EXPNO 1513310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 1.16
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 40.3
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

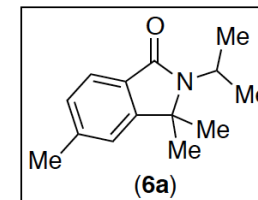
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-75 Concentrated

user: we...
 team: research-kalyani holder: 9
 solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
 standard C13 experiment ()



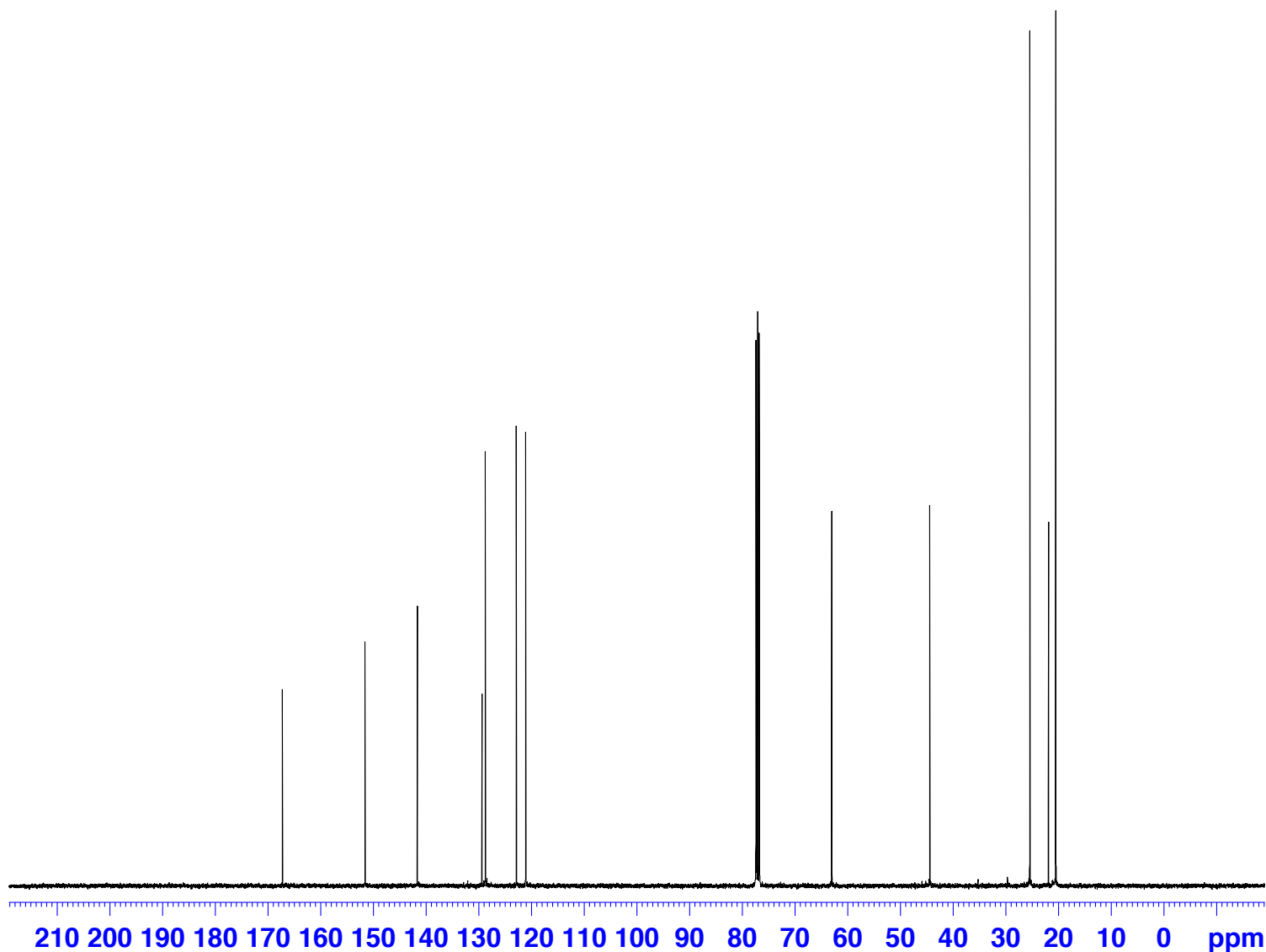
Current Data Parameters
 NAME Jun27-2013
 EXPNO 1513410
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20130628
 Time 3.21
 INSTRUM spect
 PROBHD 5 mm BBO 1H/13
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 2048
 DS 2
 SWH 23980.814 Hz
 FIDRES 0.365918 Hz
 AQ 1.3664756 sec
 RG 2580.3
 DW 20.850 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 d12 0.00002000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 9.00 usec
 PL1 -4.50 dB
 SFO1 100.6228298 MHz

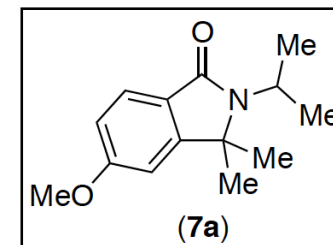
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 90.00 usec
 PL2 -4.00 dB
 PL12 13.68 dB
 PL13 17.24 dB
 SFO2 400.1316005 MHz

F2 - Processing parameters
 SI 32768
 SF 100.6127690 MHz
 WDW EM



DK-XII-WW-71 Fr. 51-61 Small Scale

user: we...
team: research-kalyani holder: 10
solvent: CDCl3 expt: PROTON NS=64;SW=20;
standard 1H experiment ()

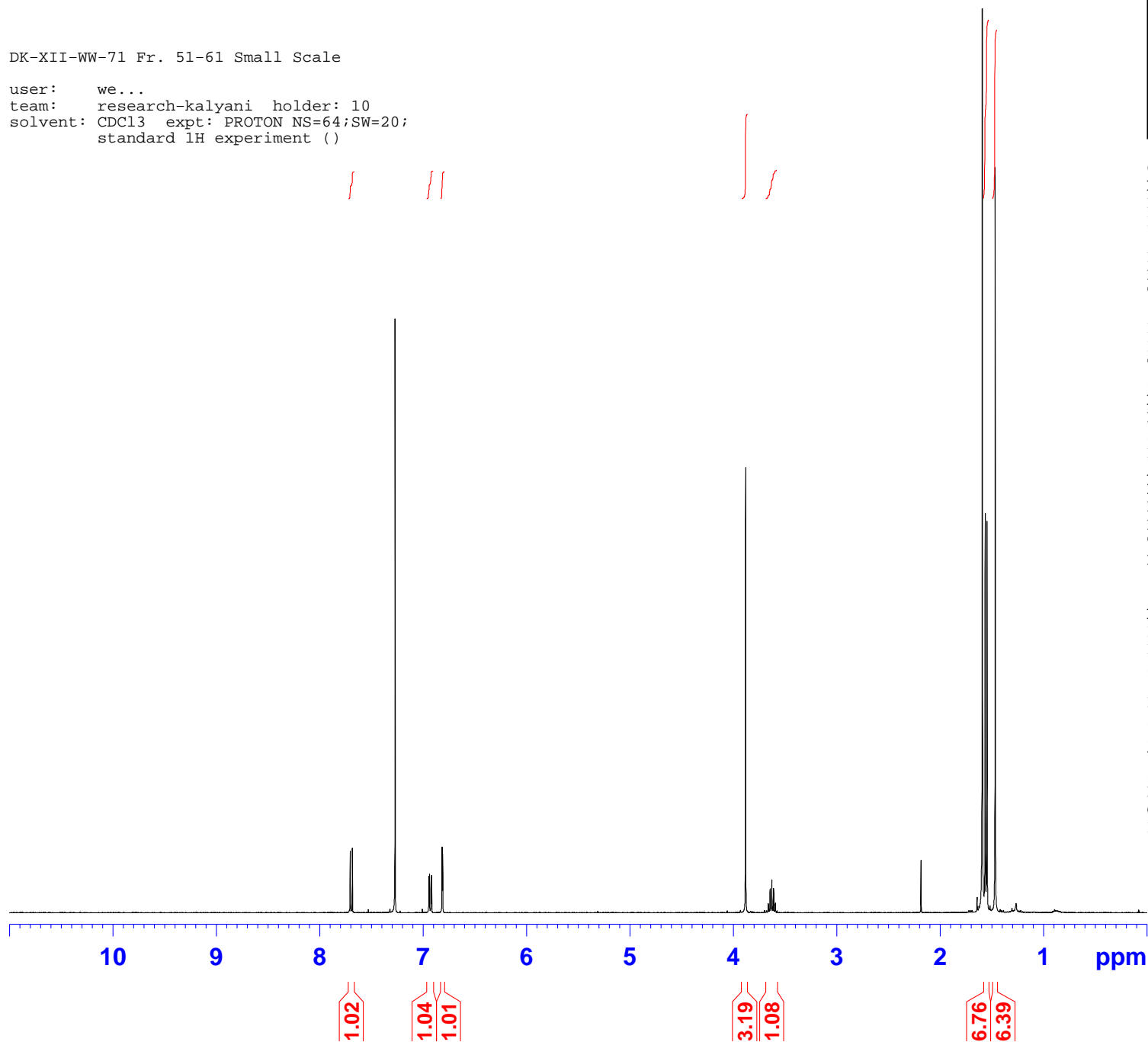


Current Data Parameters
NAME Jul04-2013
EXPNO 1525810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 14.24
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 64
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 724.1
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

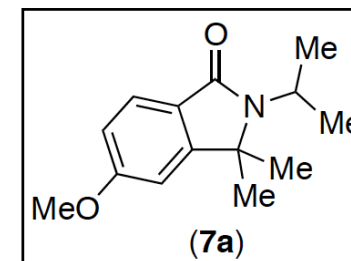
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-71 Fr. 51-61 Concentrated

user: we...
team: research-kalyani holder: 10
solvent: CDCl₃ expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



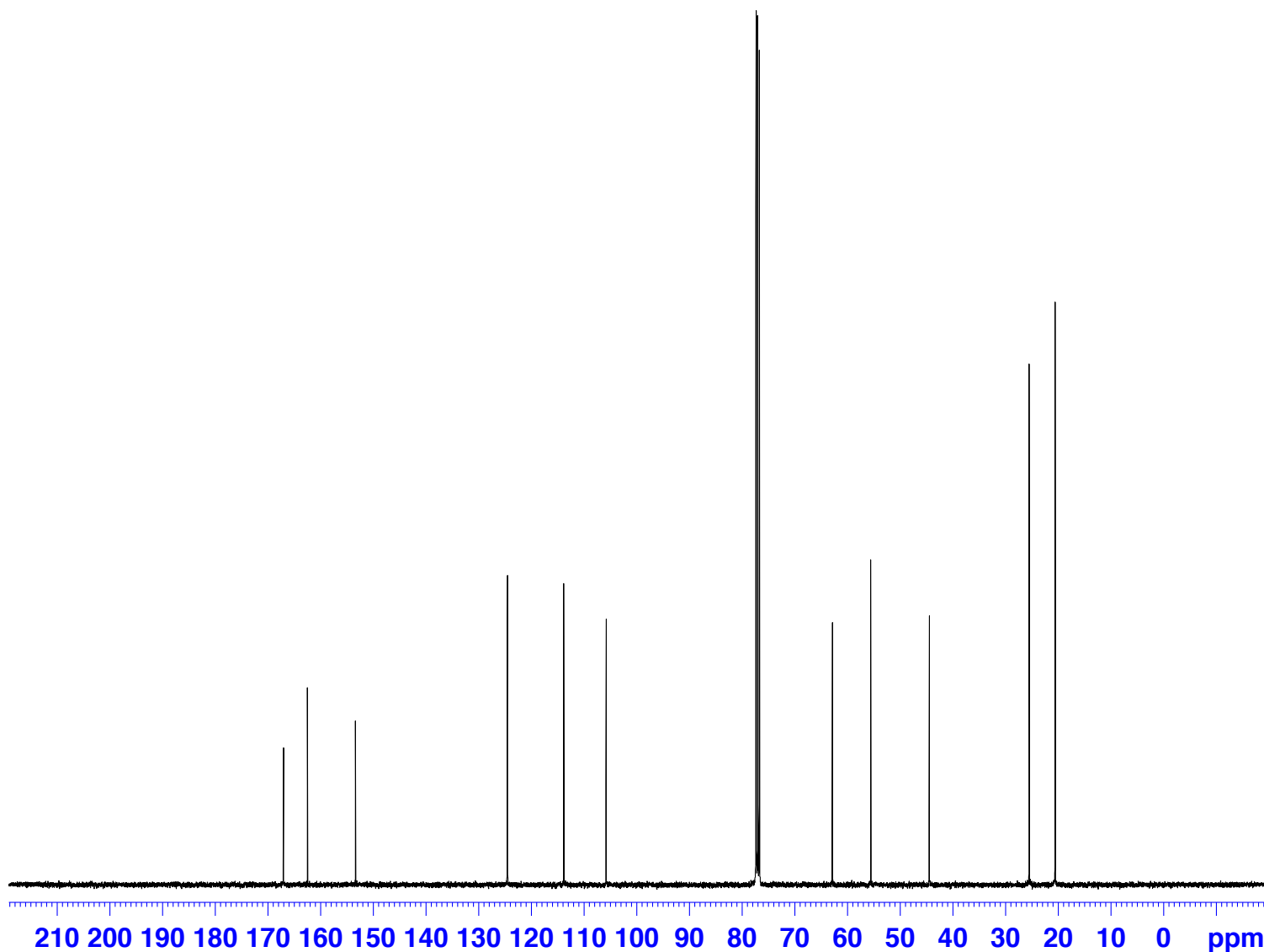
Current Data Parameters
NAME Jul04-2013
EXPNO 1526910
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 21.33
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1625.5
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

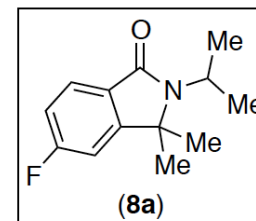
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-77 Fr. 43-52 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

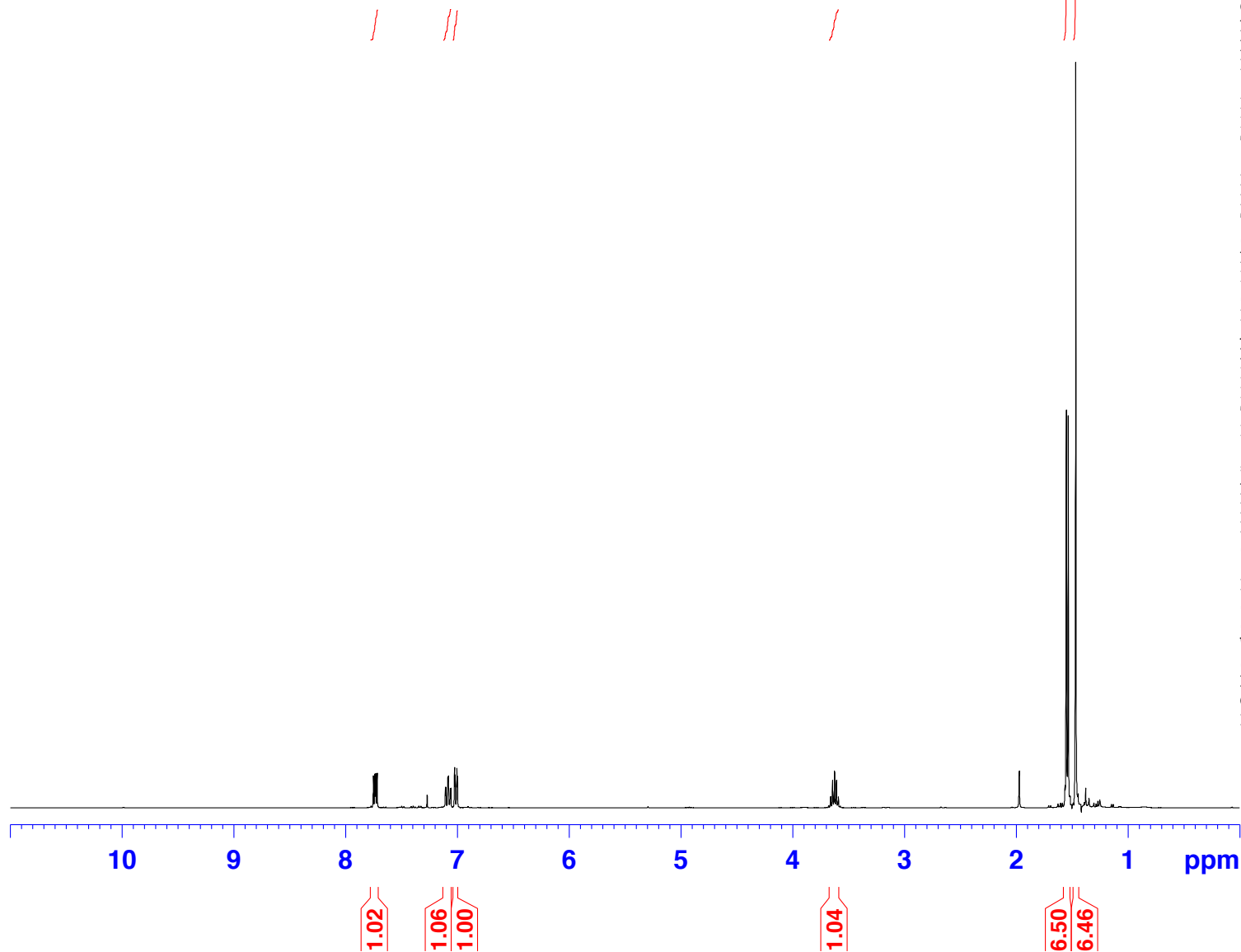


Current Data Parameters
NAME Jul04-2013
EXPNO 1527410
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130705
Time 5.33
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 128
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

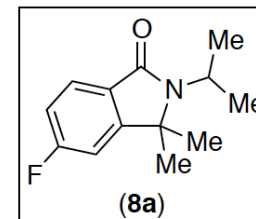
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-77 Fr. 43-52 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl₃ expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



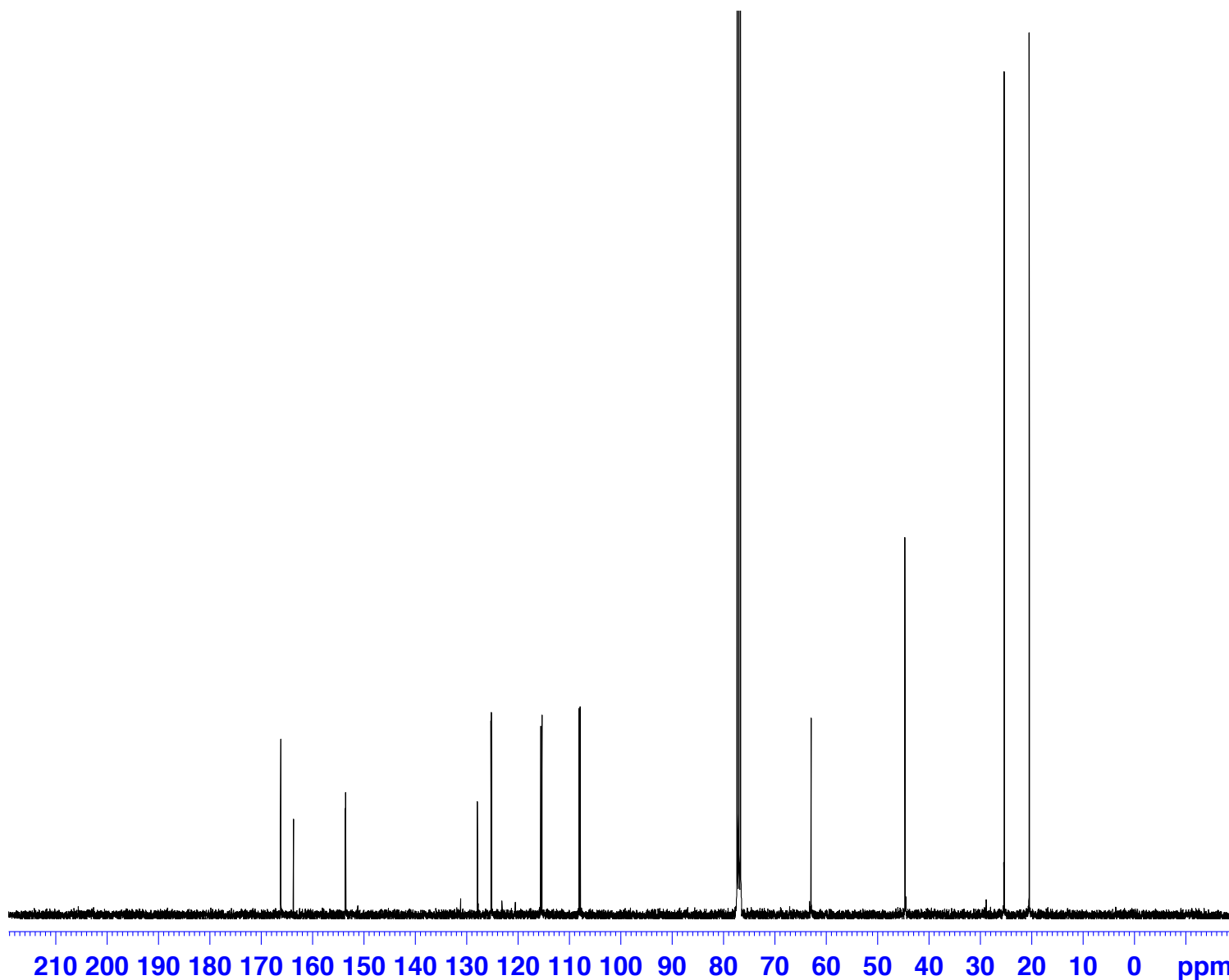
Current Data Parameters
NAME Jul04-2013
EXPNO 1527510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130705
Time 9.24
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2298.8
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

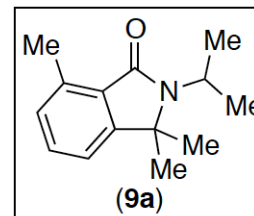
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-76 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

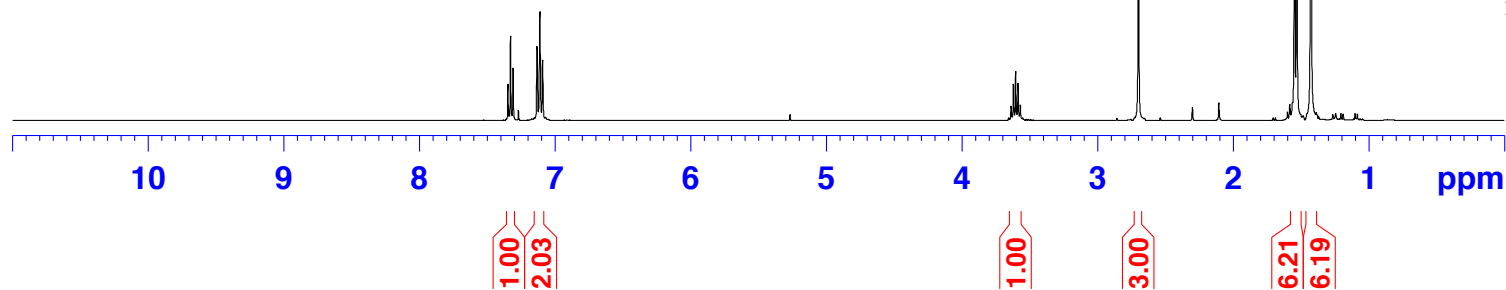


Current Data Parameters
NAME Jun26-2013
EXPNO 1509210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130626
Time 23.27
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 40.3
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

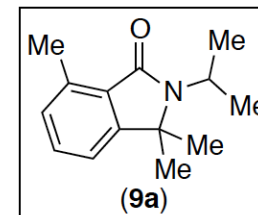
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-76 Concentrated

user: we...
team: research-kalyani holder: 6
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



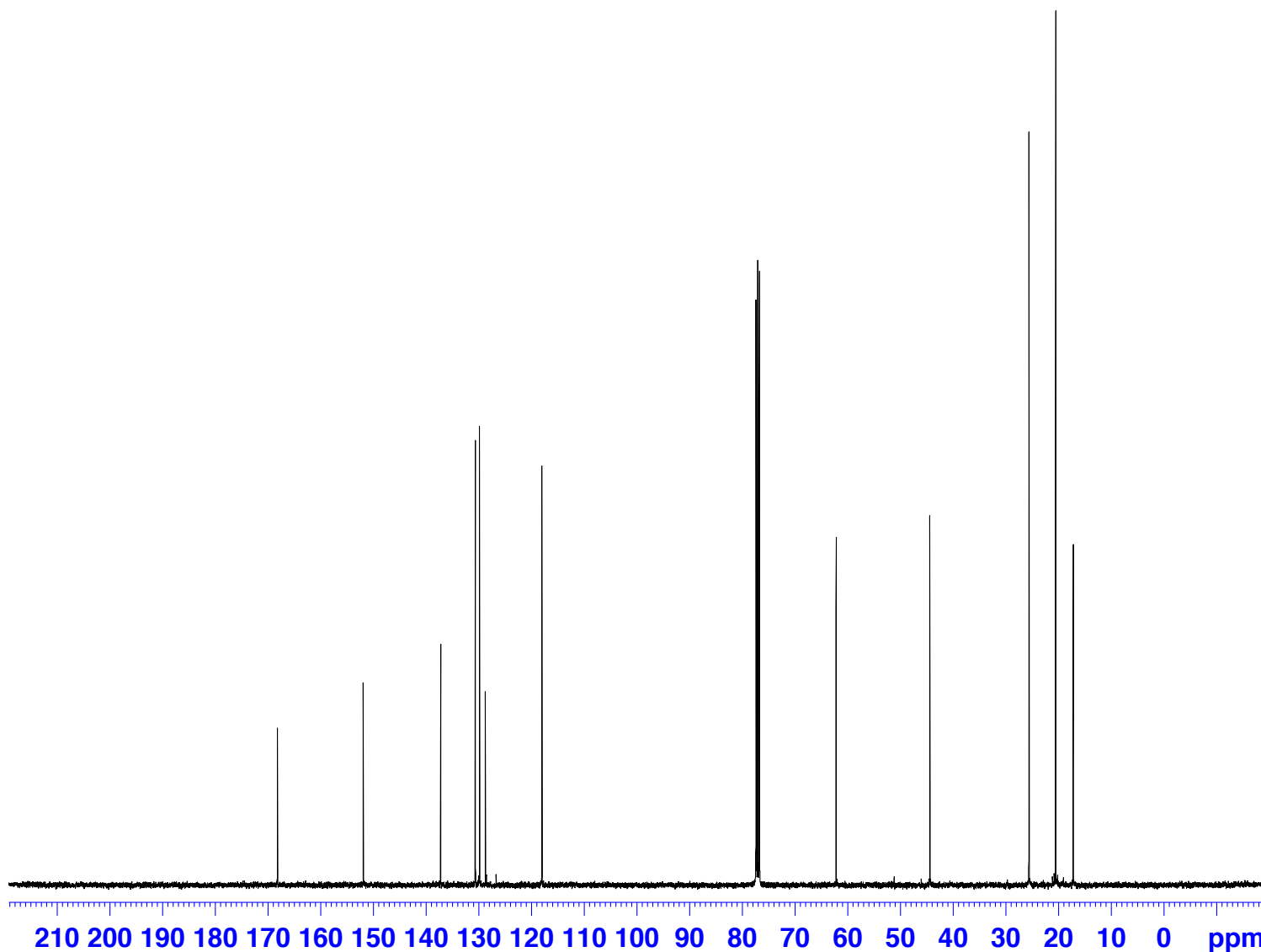
Current Data Parameters
NAME Jun26-2013
EXPNO 1509310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130627
Time 1.23
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1448.2
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

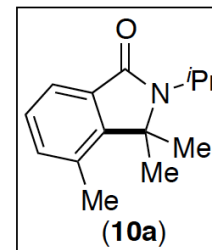
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-59_frac.65-91_concentrated2

user: wo...
team: research-kalyani-wolfel holder: 2
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

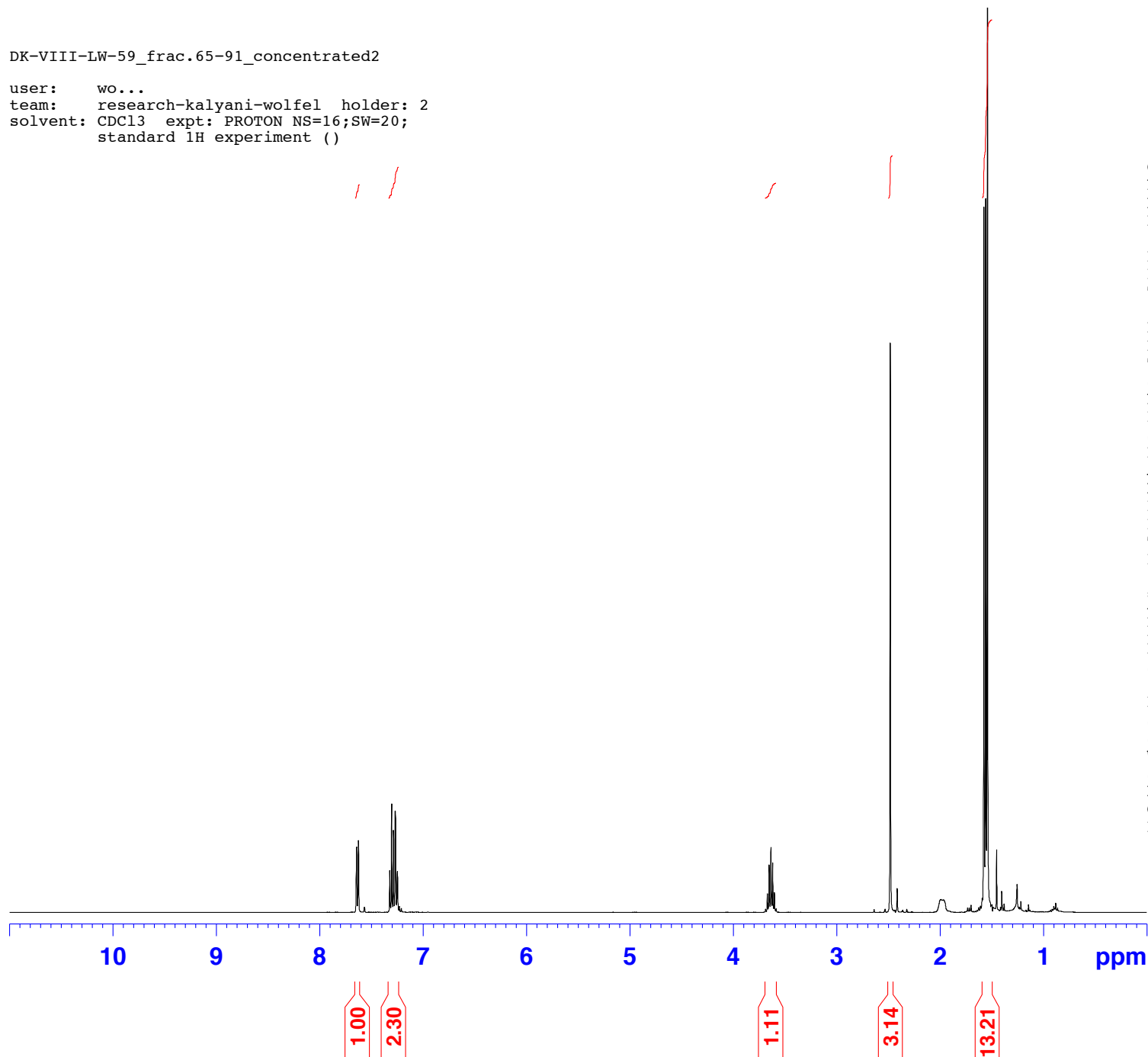


Current Data Parameters
NAME Jun26-2013
EXPNO 1508810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130626
Time 19.24
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 114
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

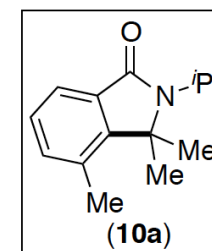
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-59_frac.65-91_concentrated2

user: wo...
team: research-kalyani-wolfel holder: 2
solvent: CDCl3 expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



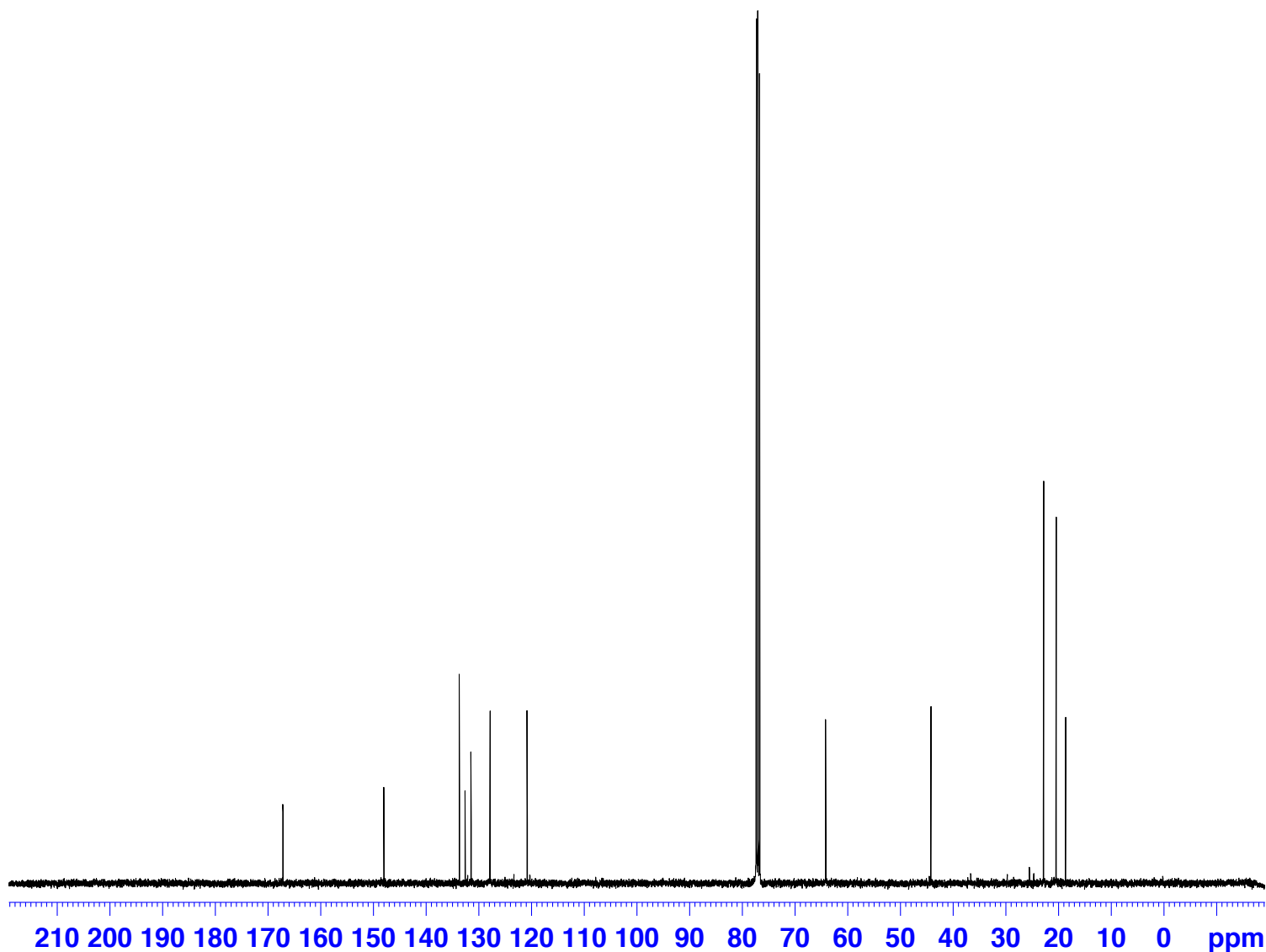
Current Data Parameters
NAME Jun26-2013
EXPNO 1508910
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130626
Time 23.21
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2048
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

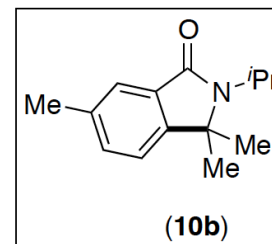
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-59_frac.47-58_concentrated

user: wo...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

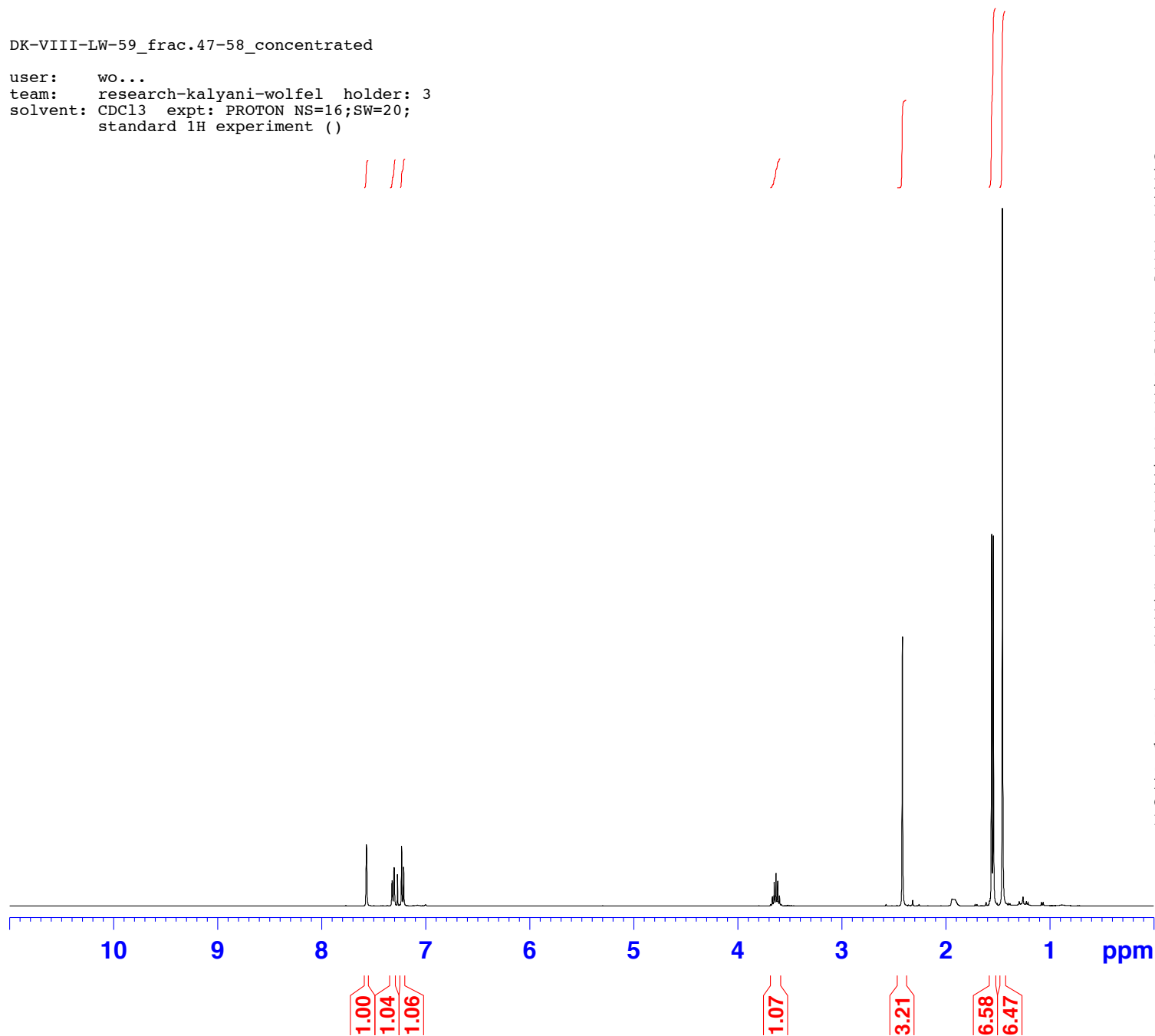


Current Data Parameters
NAME Jun25-2013
EXPNO 1504810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130625
Time 18.53
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 101.6
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

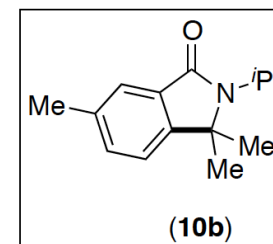
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-59_frac.47-58_concentrated_acetone

user: wo...
team: research-kalyani-wolfel holder: 1
solvent: Acetone expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



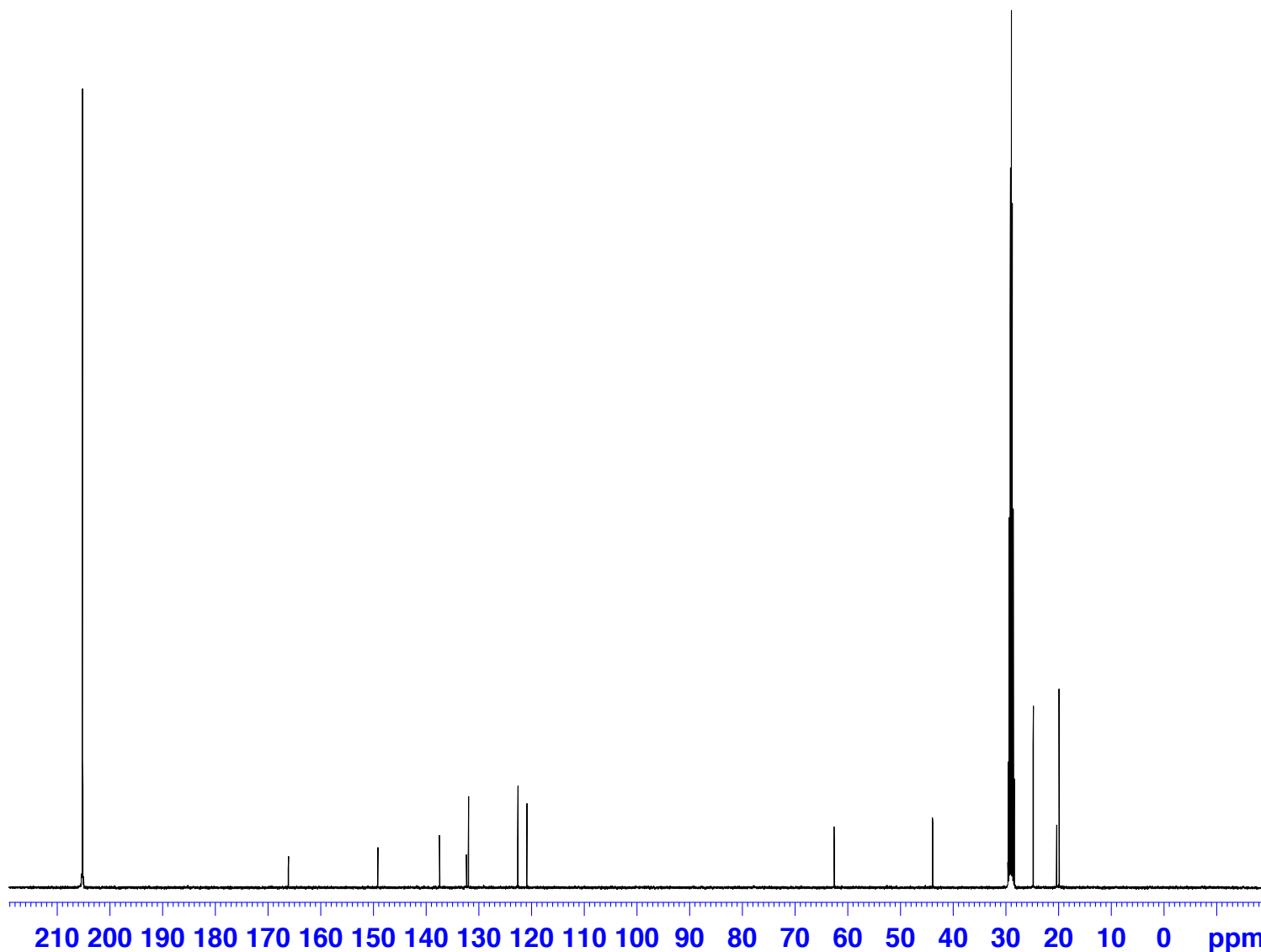
Current Data Parameters
NAME Jun26-2013
EXPNO 1508710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130626
Time 19.12
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT Acetone
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2580.3
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

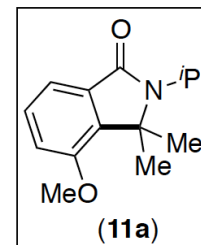
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-57 Fr. 46-59 Concentrated

user: we...
team: research-kalyani holder: 10
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

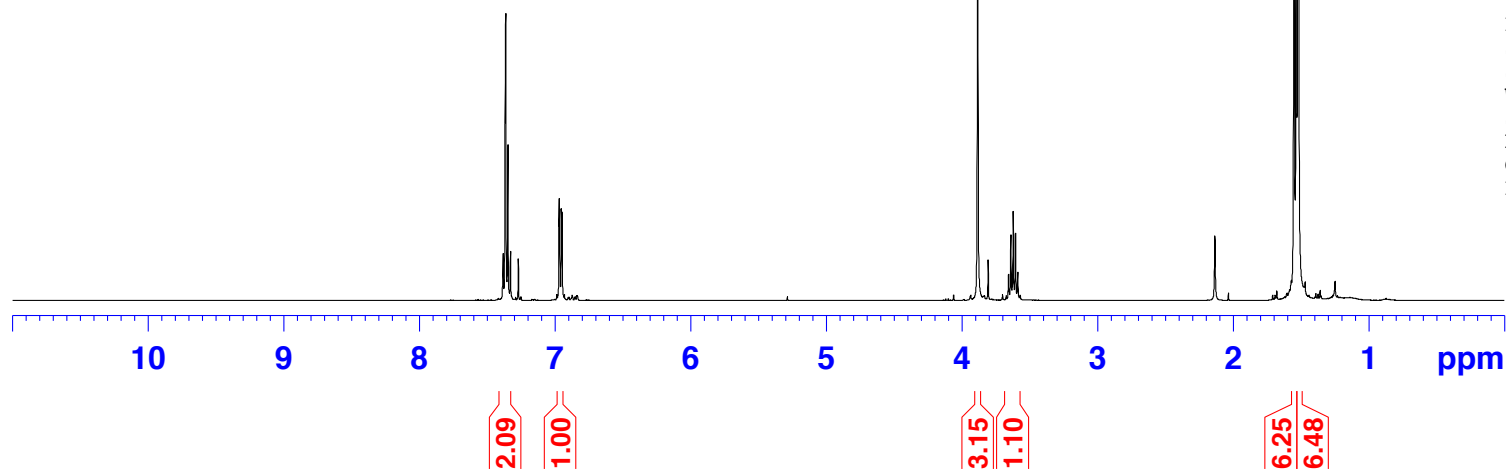


Current Data Parameters
NAME Jun27-2013
EXPNO 1513610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 3.33
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 64
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

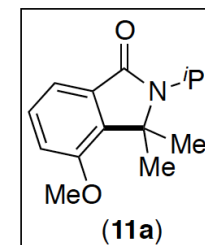
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-57 Fr. 46-59 Concentrated

user: we...
team: research-kalyani holder: 10
solvent: CDCl₃ expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



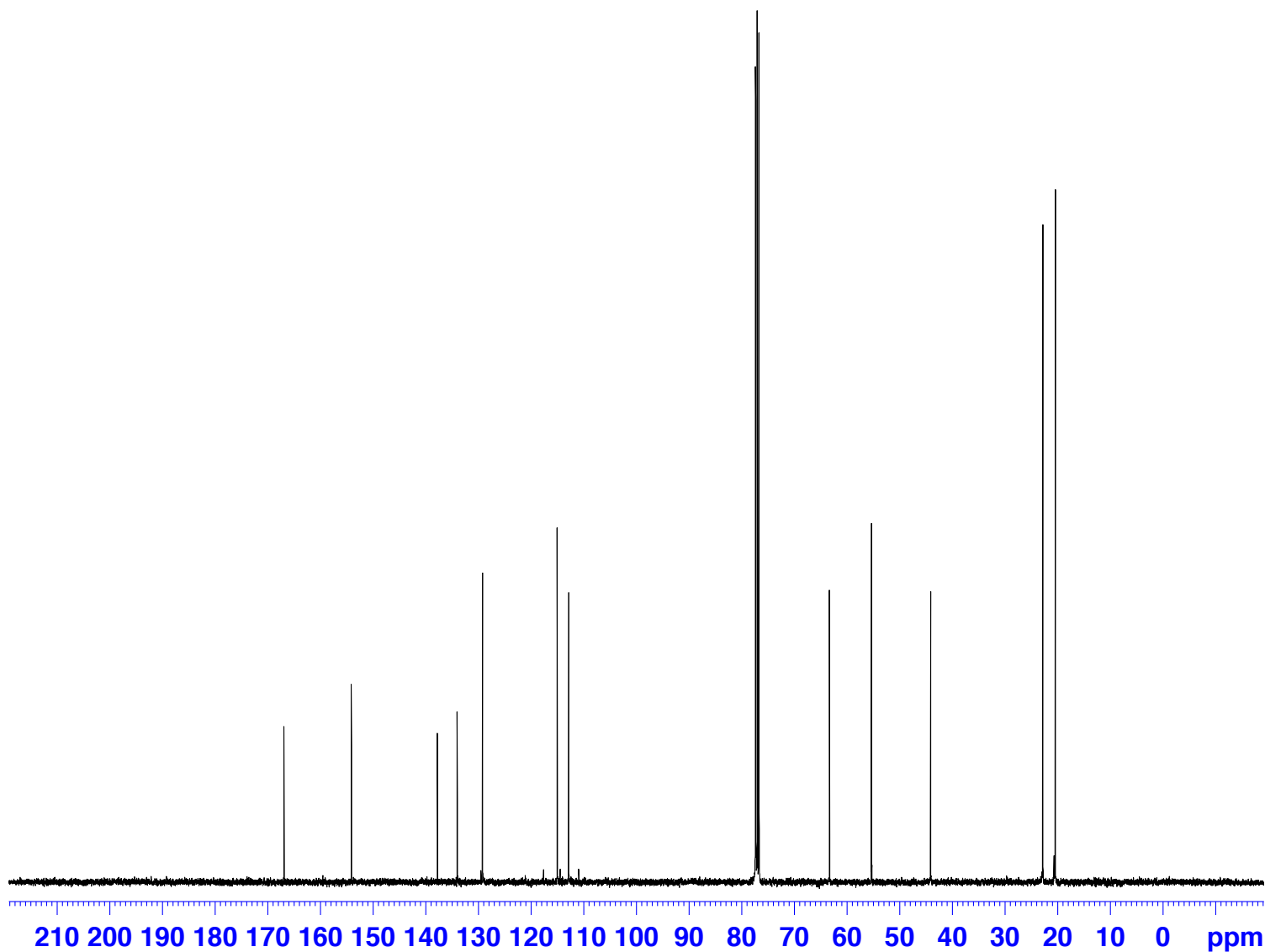
Current Data Parameters
NAME Jun27-2013
EXPNO 1513710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130628
Time 5.38
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

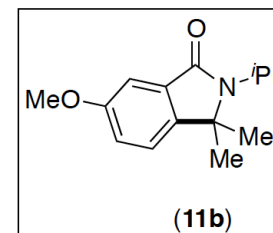
F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-LW-57c-fr67-86-cdcl3

user: ka...
team: research-kalyani holder: 14
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment (1 Min 34 Sec)

sample for this spectra contained a small amount of 11a

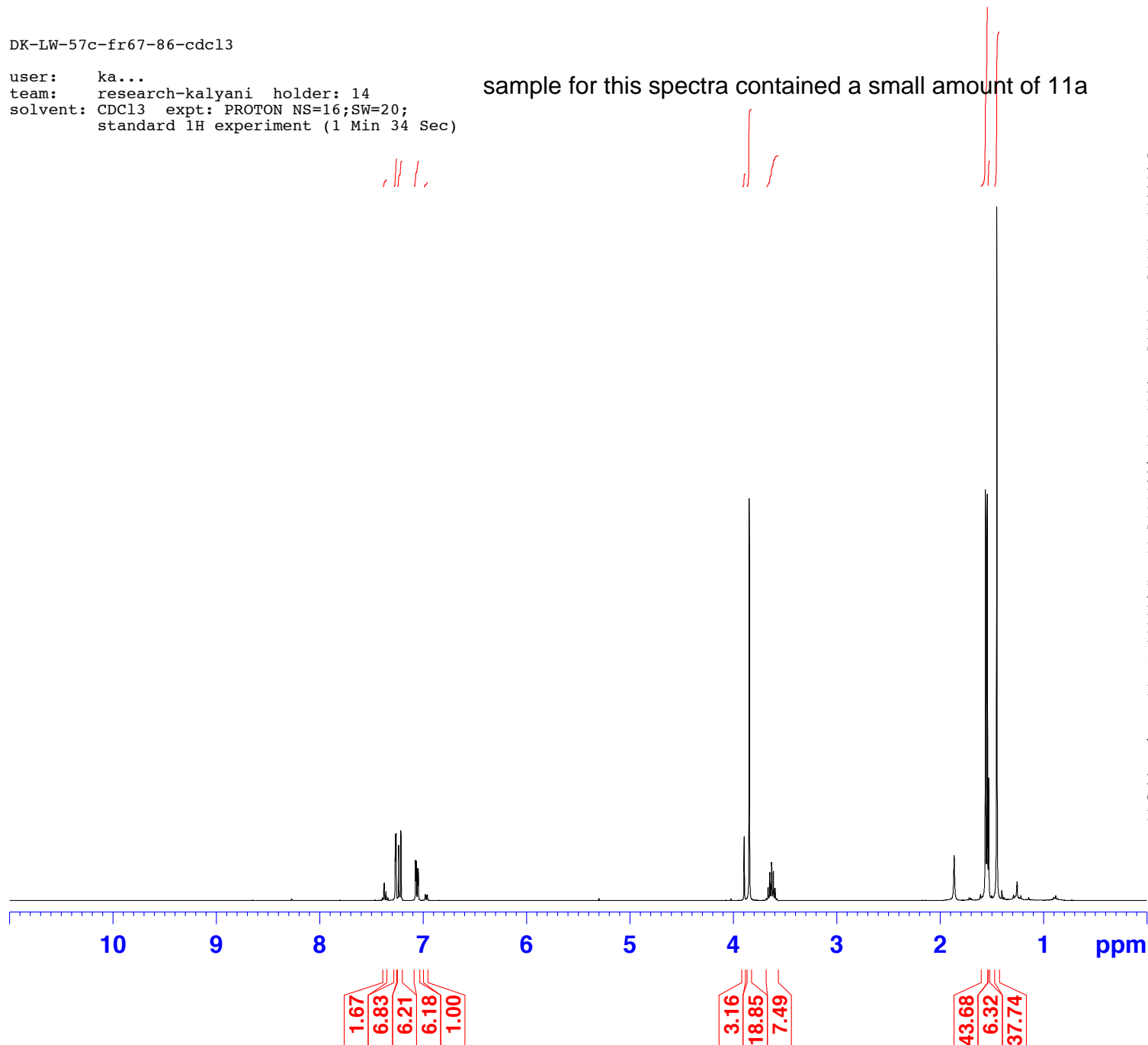


Current Data Parameters
NAME Jun08-2013
EXPNO 1472110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130608
Time 15.11
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 114
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

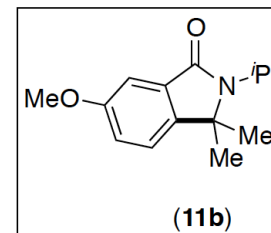
F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-12-LW-57c-68-76-carbon

user: ka...
team: research-kalyani holder: 14
solvent: CDCl₃ expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment (3 Hr 50 Min 13 Sec)

sample for this spectra contained a small amount of 11a



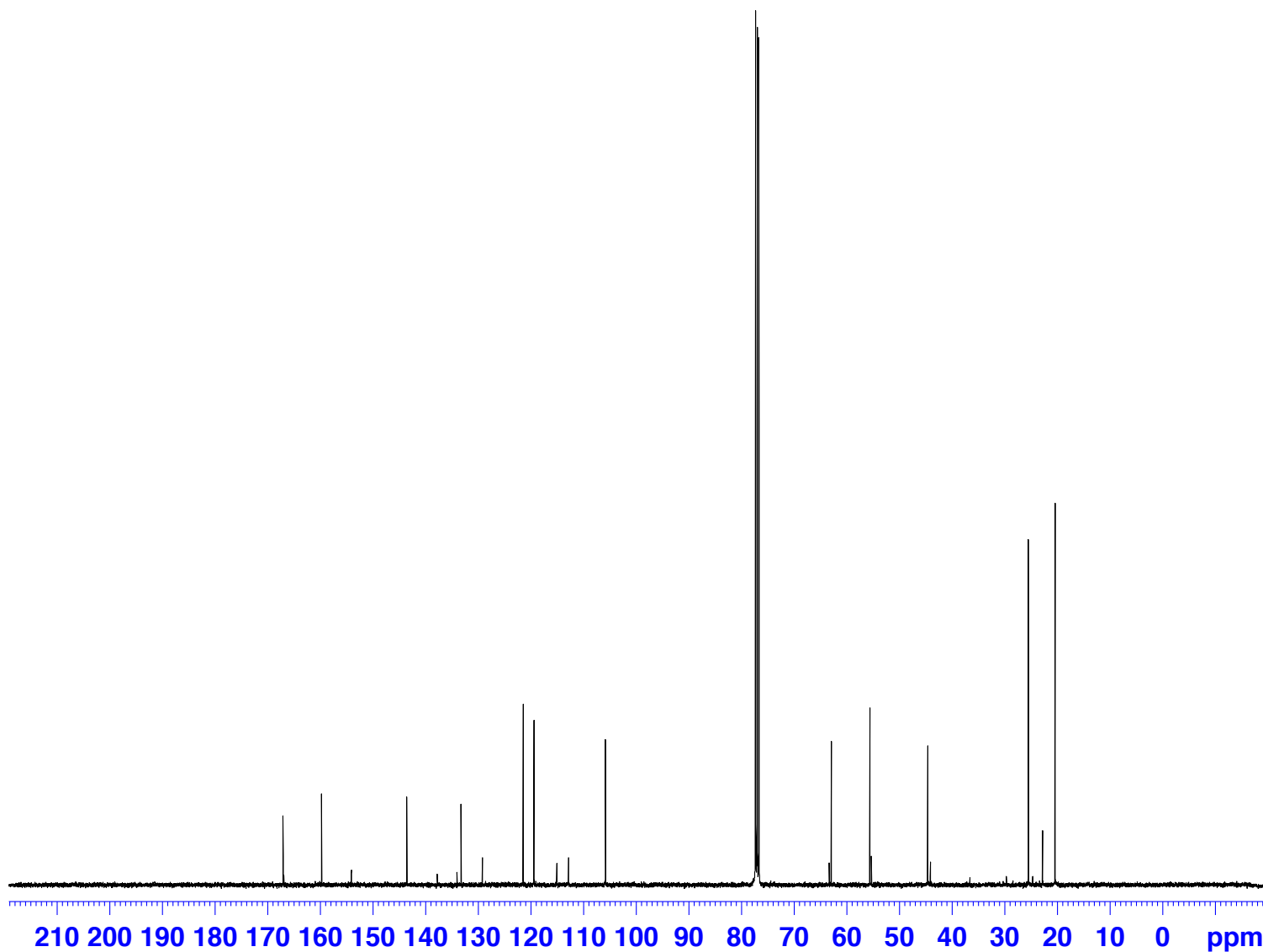
Current Data Parameters
NAME Jun08-2013
EXPNO 1472310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130608
Time 19.25
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 912.3
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

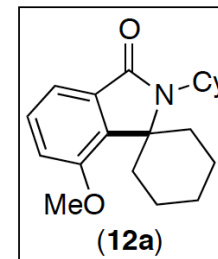
F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-77 Fr. 71-79 CDCl₃

user: we...
team: research-kalyani holder: 3
solvent: CDCl₃ expt: PROTON NS=16;SW=20;
standard 1H experiment ()

Sample for this NMR spectra contained a small
amount of 12b

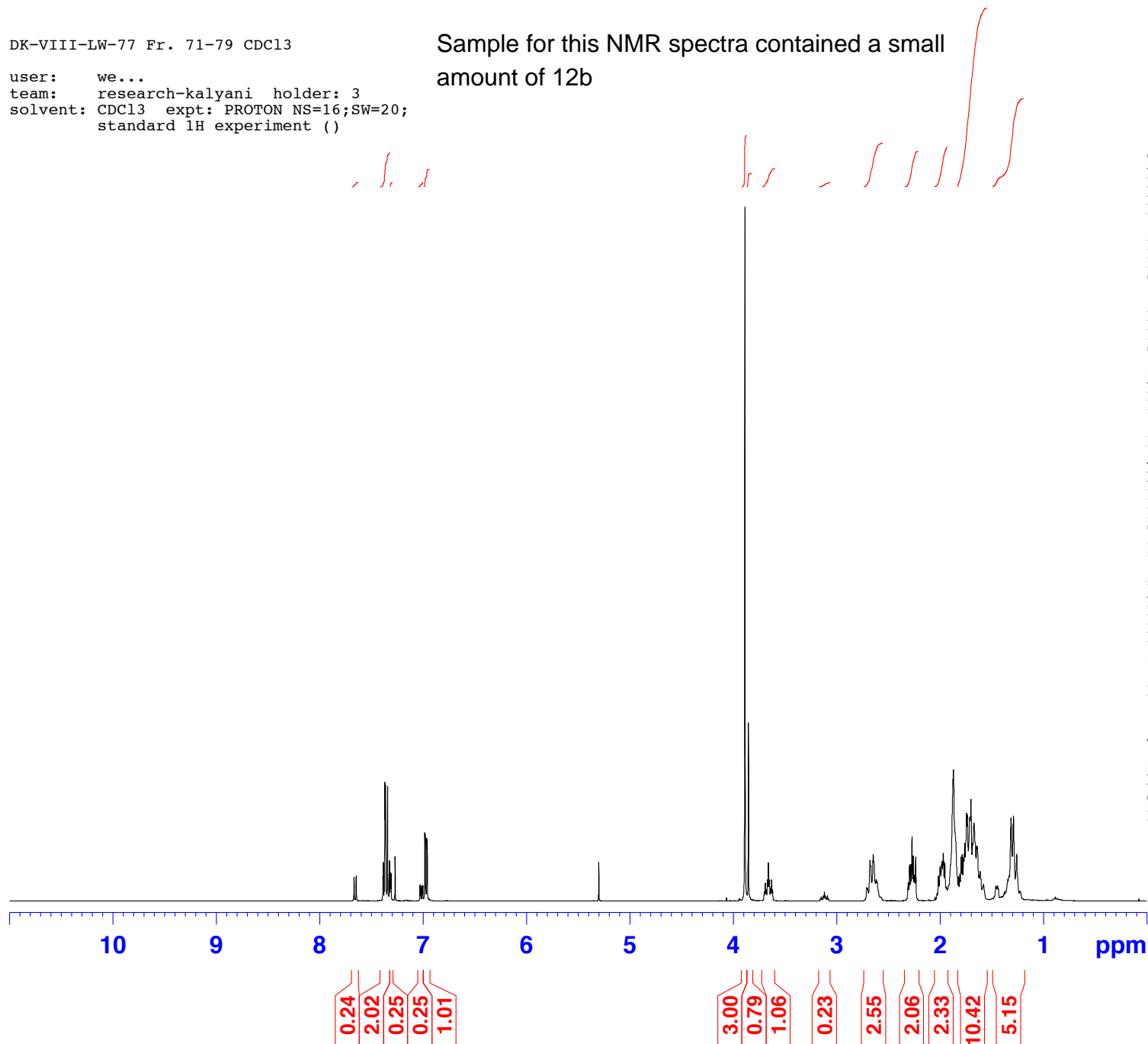


Current Data Parameters
NAME Jul04-2013
EXPNO 1526610
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 15.39
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 90.5
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

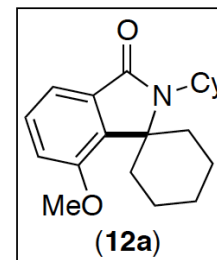
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

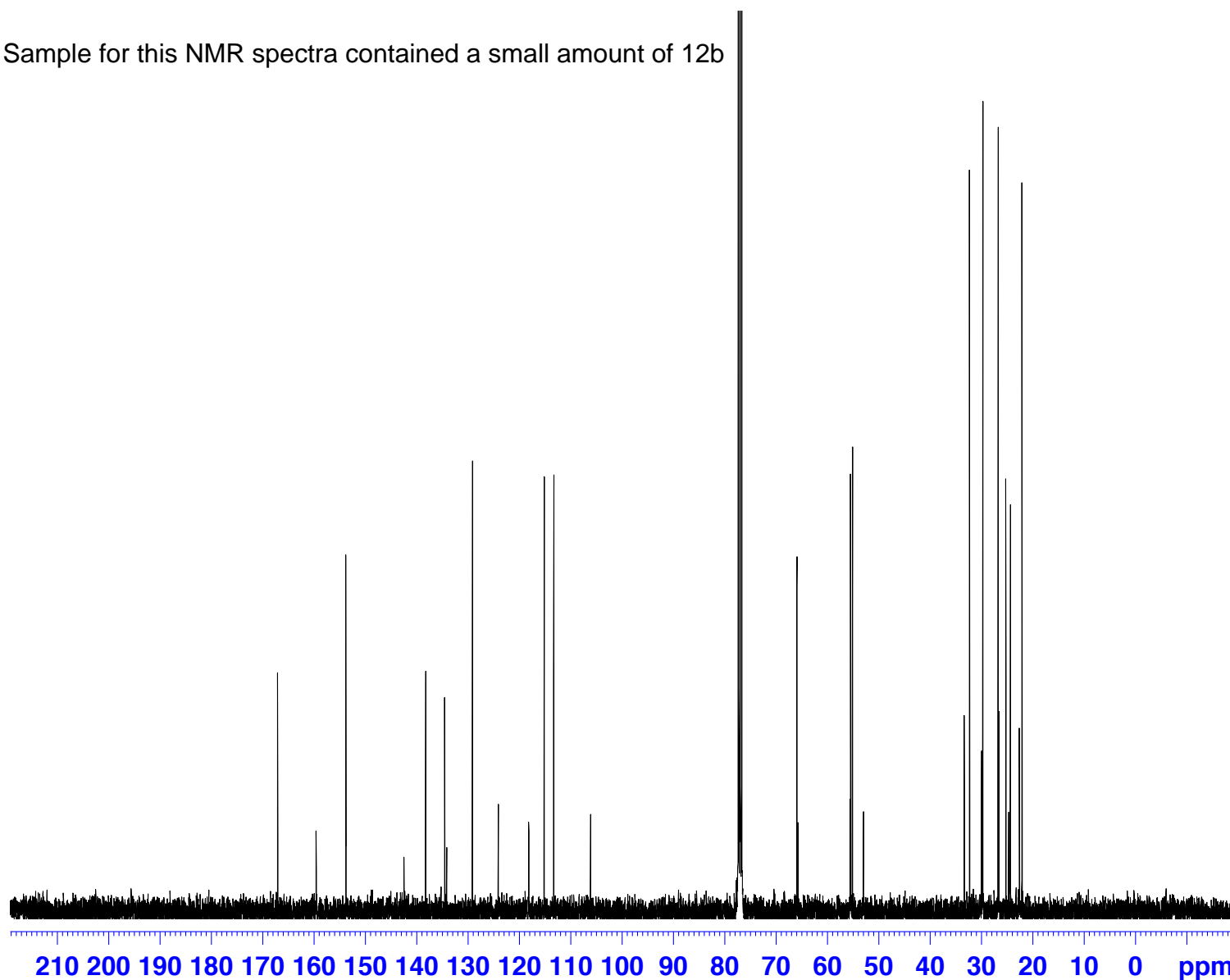


DK-VIII-LW-77 Fr. 71-79 CDCl₃

user: we...
team: research-kalyani holder: 3
solvent: CDCl₃ expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



Sample for this NMR spectra contained a small amount of 12b



Current Data Parameters
NAME Jul04-2013
EXPNO 1526710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 17.35
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2298.8
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

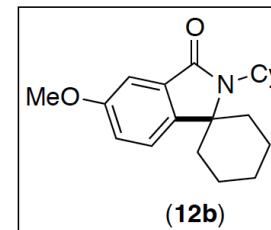
===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM

DK-VIII-LW-73-C2-fr55-61_concentrated

user: wo...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()



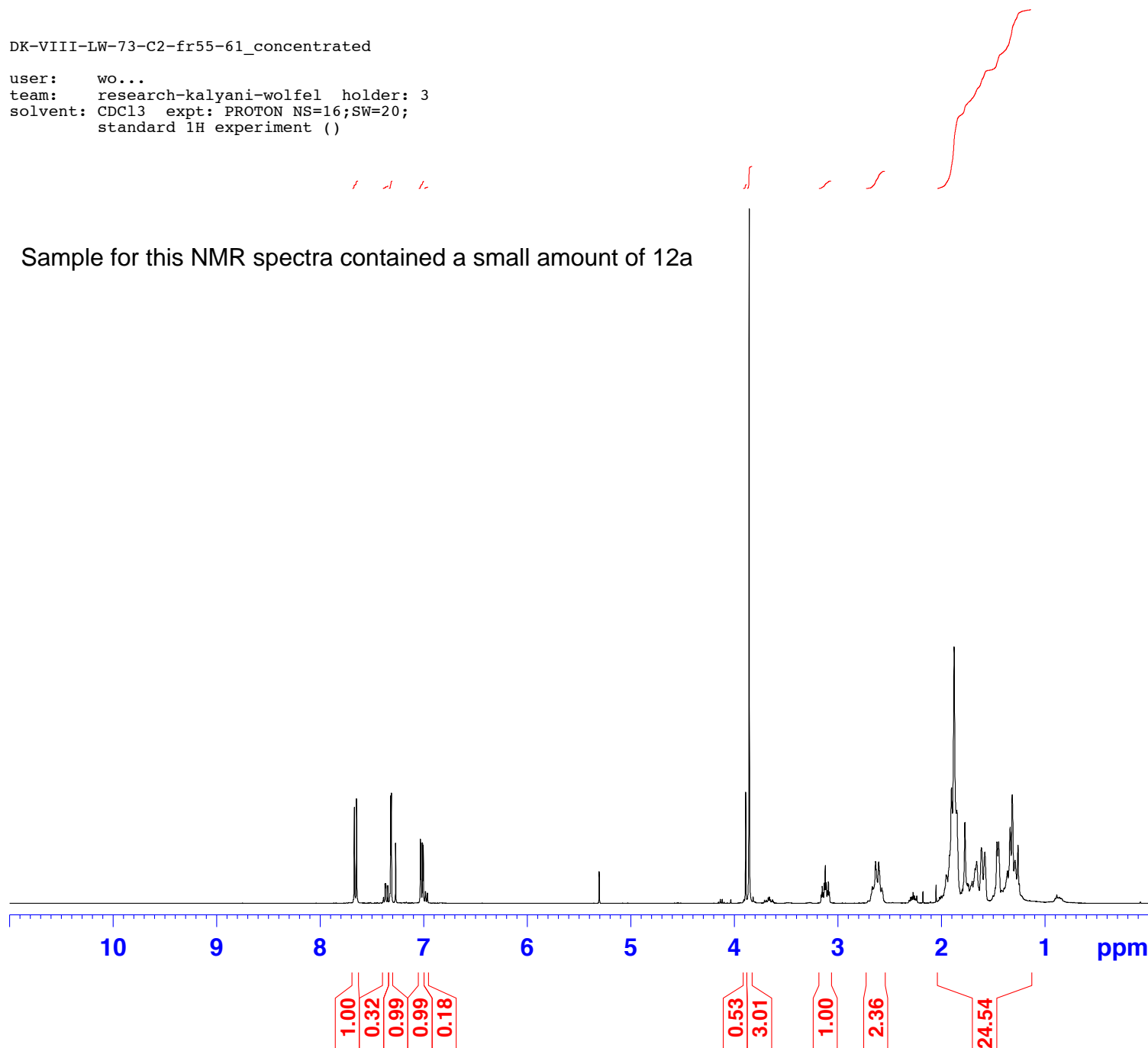
Current Data Parameters
NAME Jul03-2013
EXPNO 1524510
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130703
Time 17.17
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 161.3
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

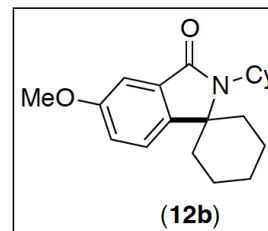
Sample for this NMR spectra contained a small amount of 12a



DK-VIII-LW-73-C2-fr.55-61_concentrated

user: wo...
team: research-kalyani-wolfel holder: 3
solvent: CDCl3 expt: C13CPD32 NS=8000;D1=2;
standard C13 experiment ()

Sample for this NMR spectra contained a small amount of 12a



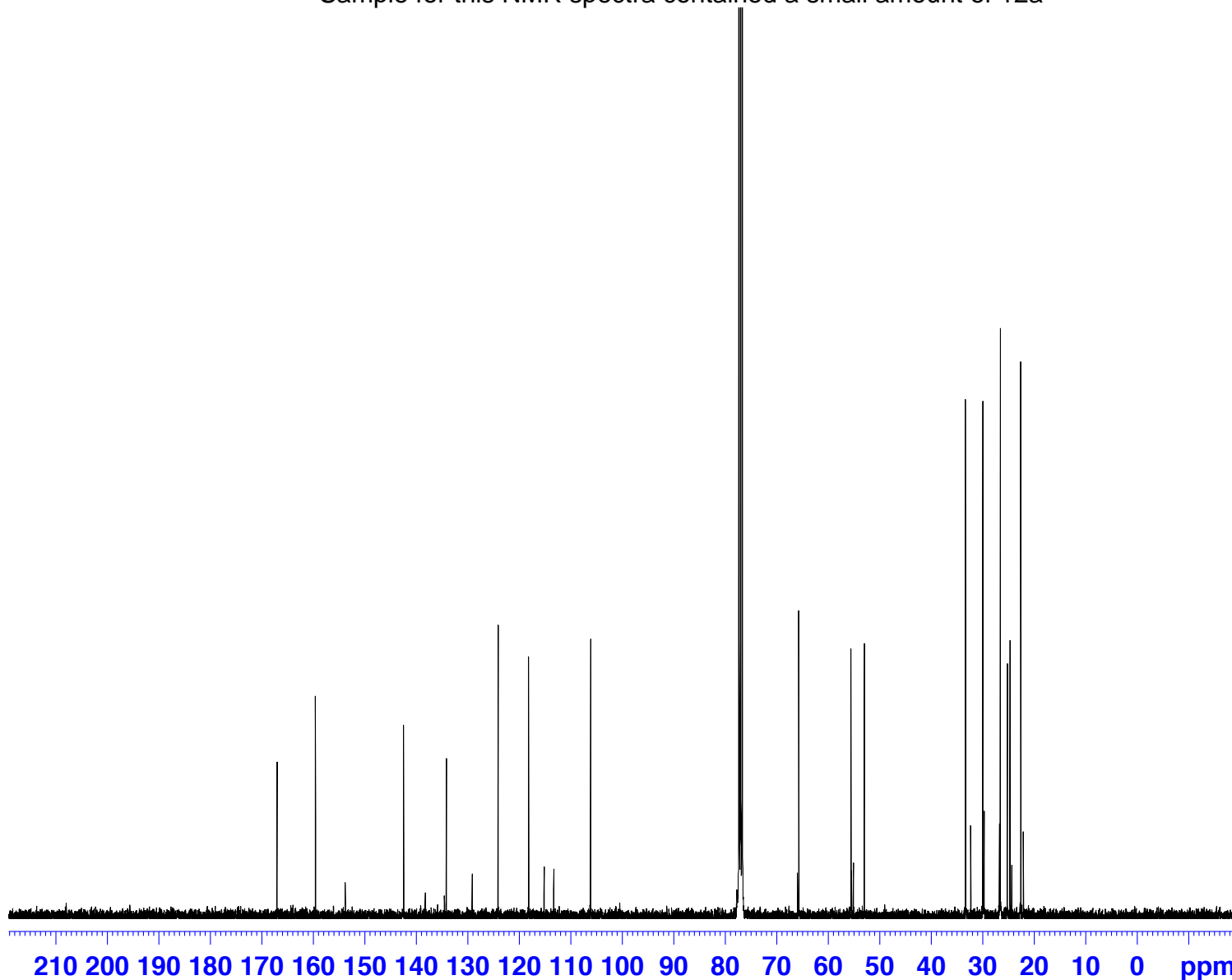
Current Data Parameters
NAME Jul03-2013
EXPNO 1524710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 0.57
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 8000
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1625.5
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

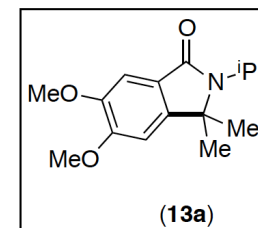
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-70 Fr. 41-65 Concentrated

user: we...
team: research-kalyani-wertjes holder: 7
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

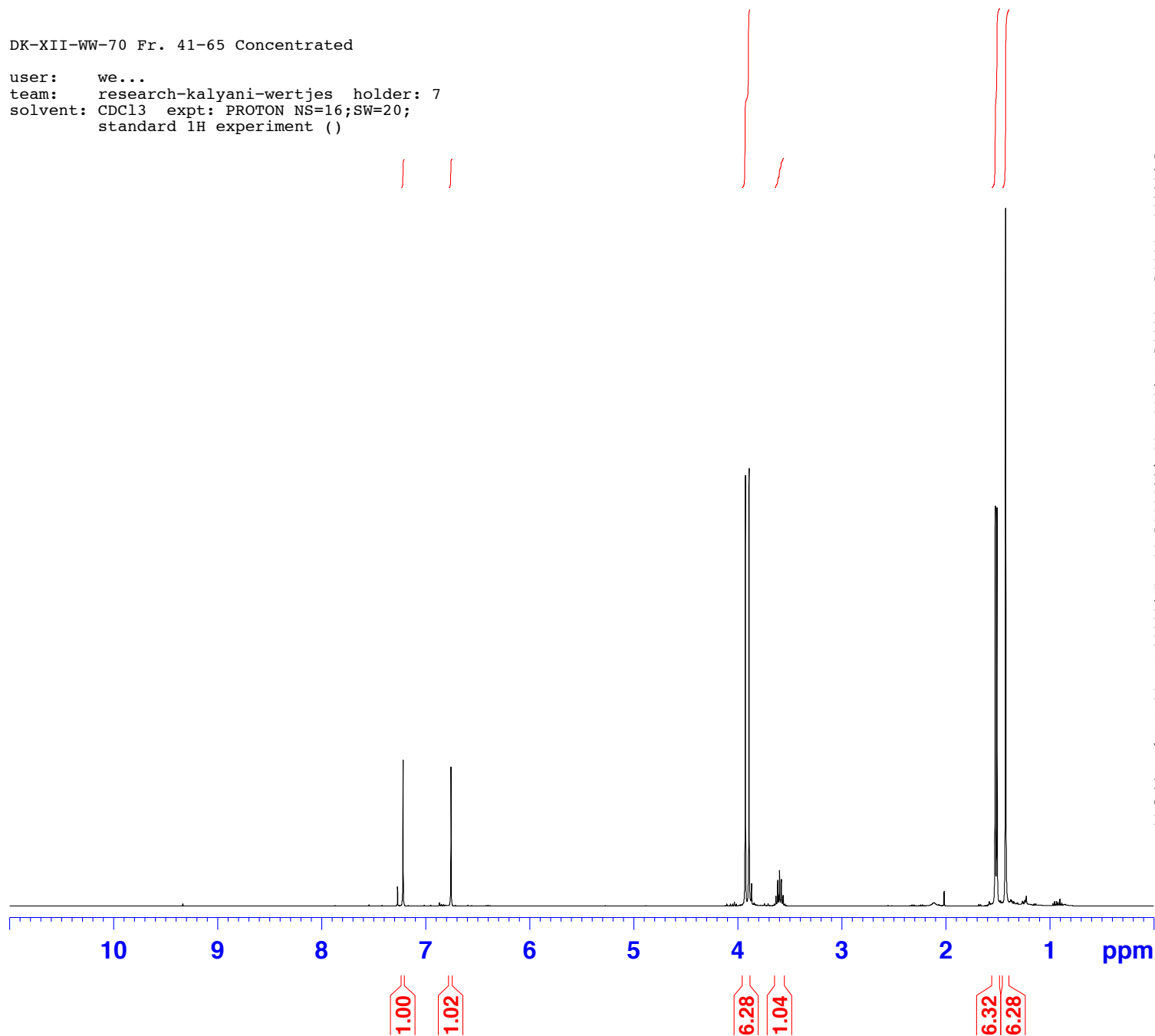


Current Data Parameters
NAME Jun29-2013
EXPNO 1517010
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130629
Time 22.19
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 57
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

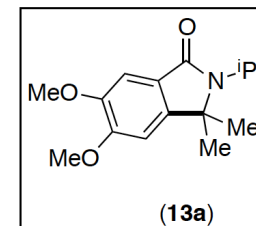
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-70 Fr. 41-65 Concentrated

user: we...
team: research-kalyani-wertjes holder: 7
solvent: CDCl₃ expt: C13CPD32 NS=2048;D1=2;
standard C13 experiment ()



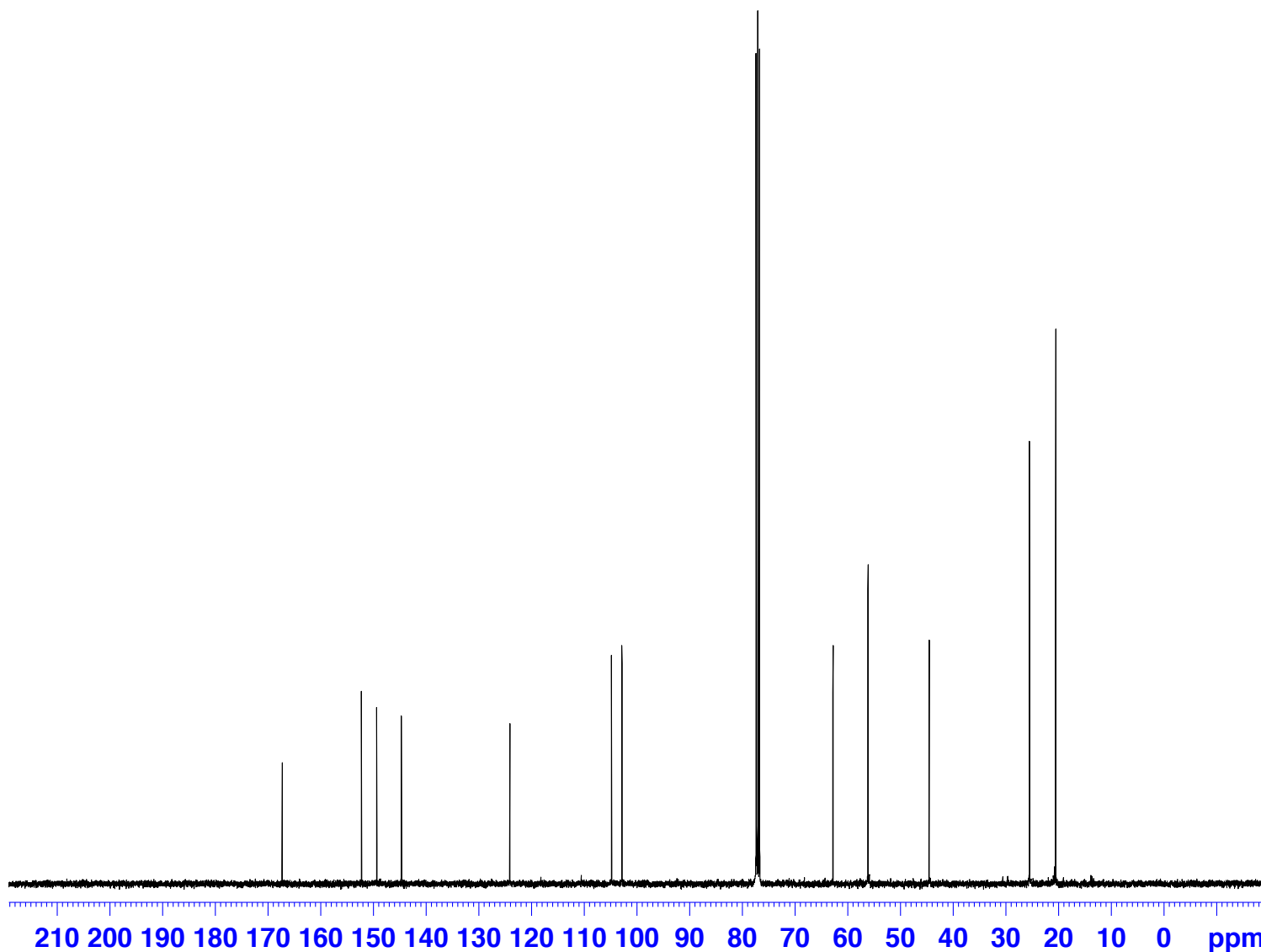
Current Data Parameters
NAME Jun29-2013
EXPNO 1517110
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130630
Time 0.15
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 2048
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 2896.3
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

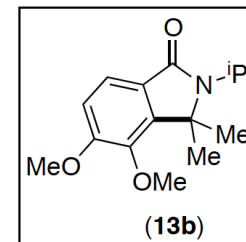
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-XII-WW-70 Fr. 102-107 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

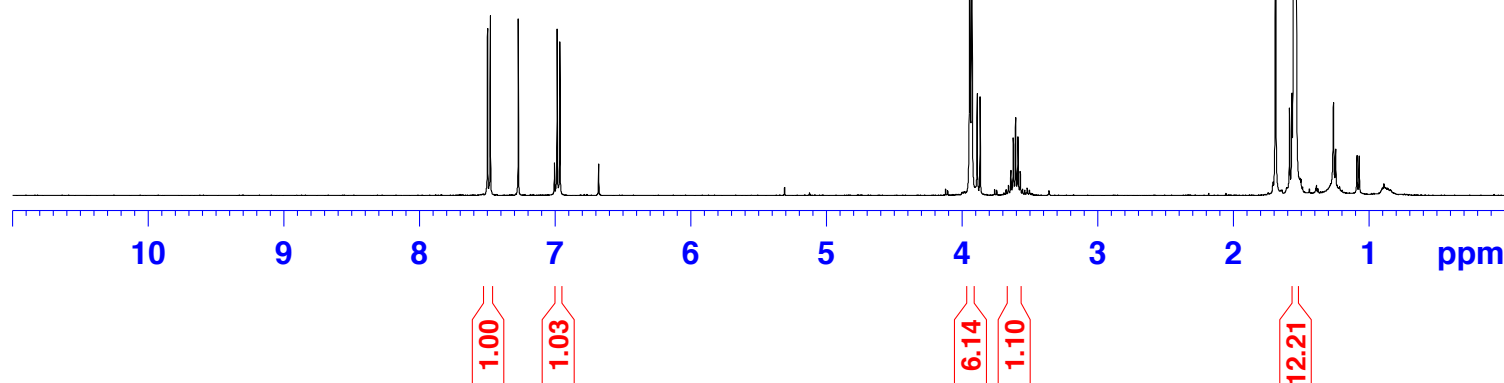


Current Data Parameters
NAME Jul26-2013
EXPNO 1570710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130726
Time 18.01
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 406.4
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

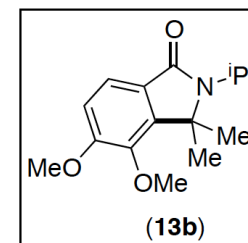
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-XII-WW-70 Fr. 102-107 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl₃ expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



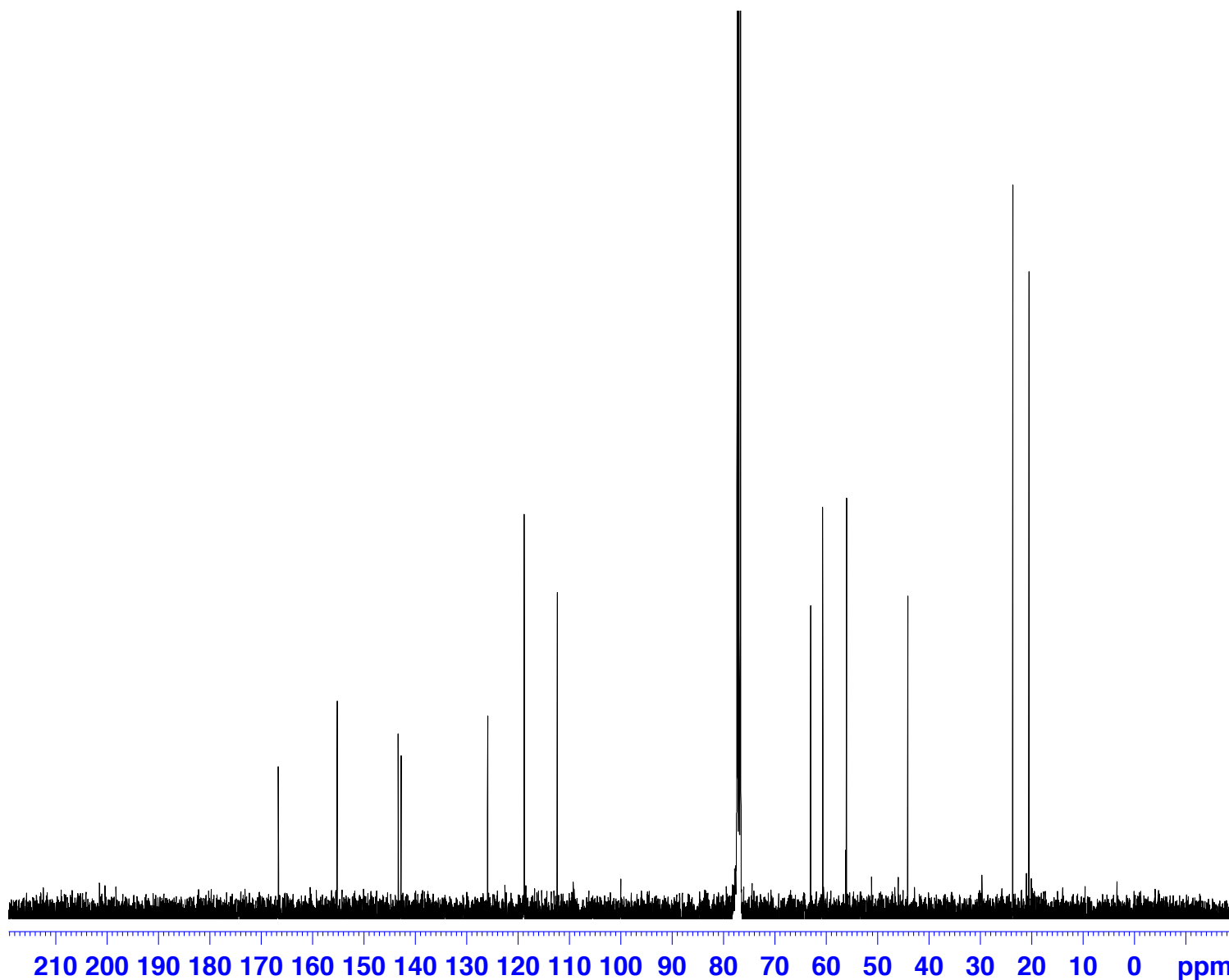
Current Data Parameters
NAME Jul26-2013
EXPNO 1570810
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130726
Time 21.53
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 5160.6
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

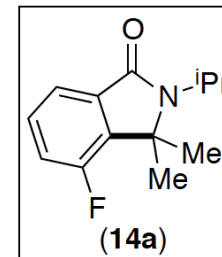
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-73 Fr. 61-78 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

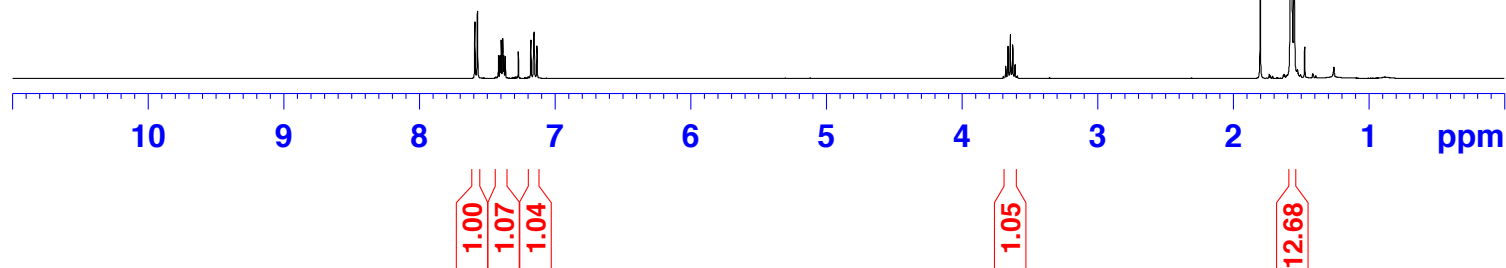


Current Data Parameters
NAME Jul04-2013
EXPNO 1527210
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130705
Time 1.36
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 203.2
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

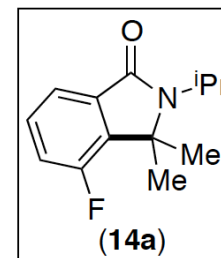
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-73 Fr. 61-78 Concentrated

user: we...
team: research-kalyani holder: 15
solvent: CDCl₃ expt: C13CPD32 NS=4096;D1=2;
standard C13 experiment ()



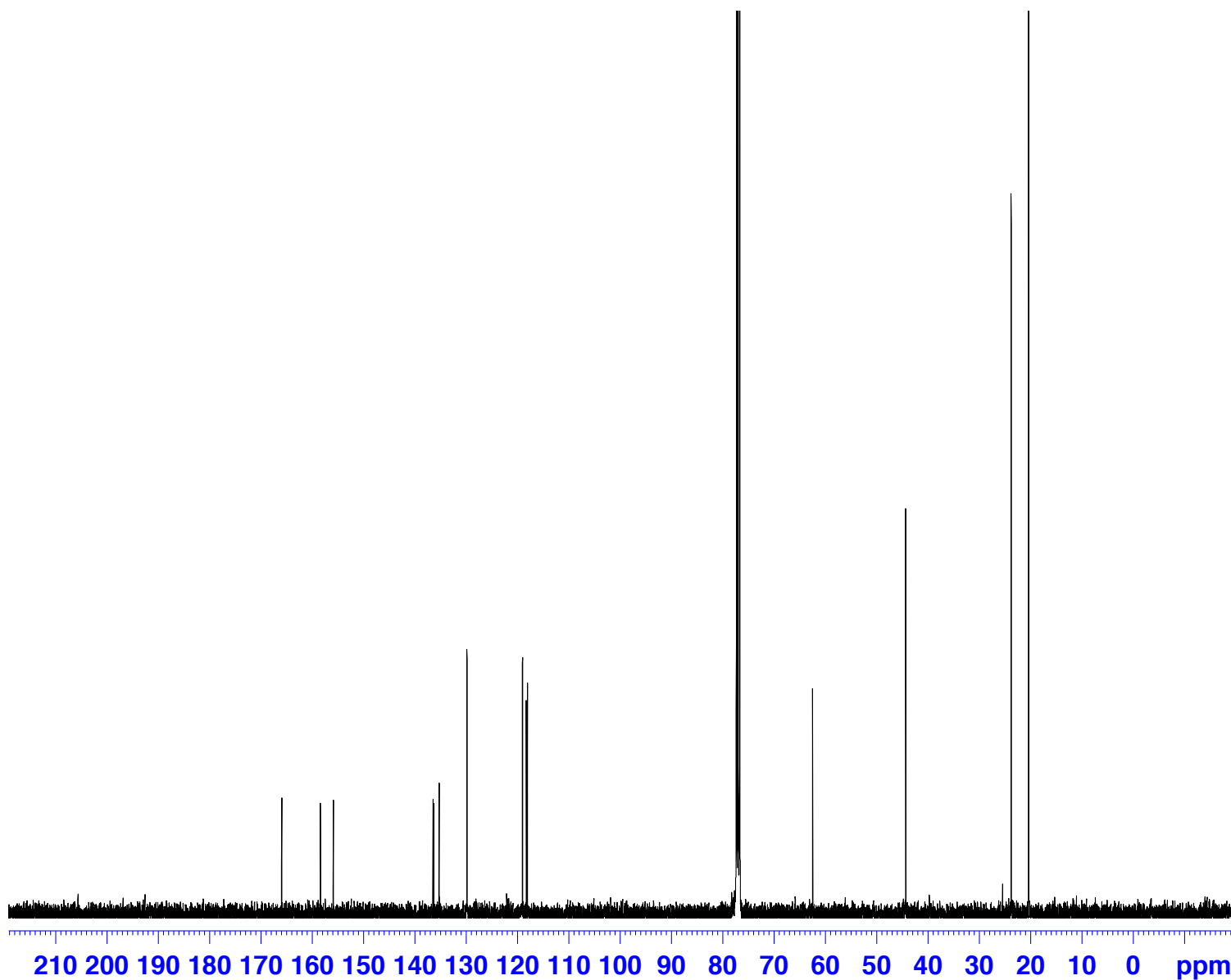
Current Data Parameters
NAME Jul04-2013
EXPNO 1527310
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130705
Time 5.27
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 4096
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 1824.6
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

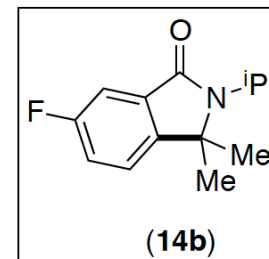
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM



DK-VIII-LW-73 Fr. 48-53 Concentrated

user: we...
team: research-kalyani holder: 13
solvent: CDCl3 expt: PROTON NS=16;SW=20;
standard 1H experiment ()

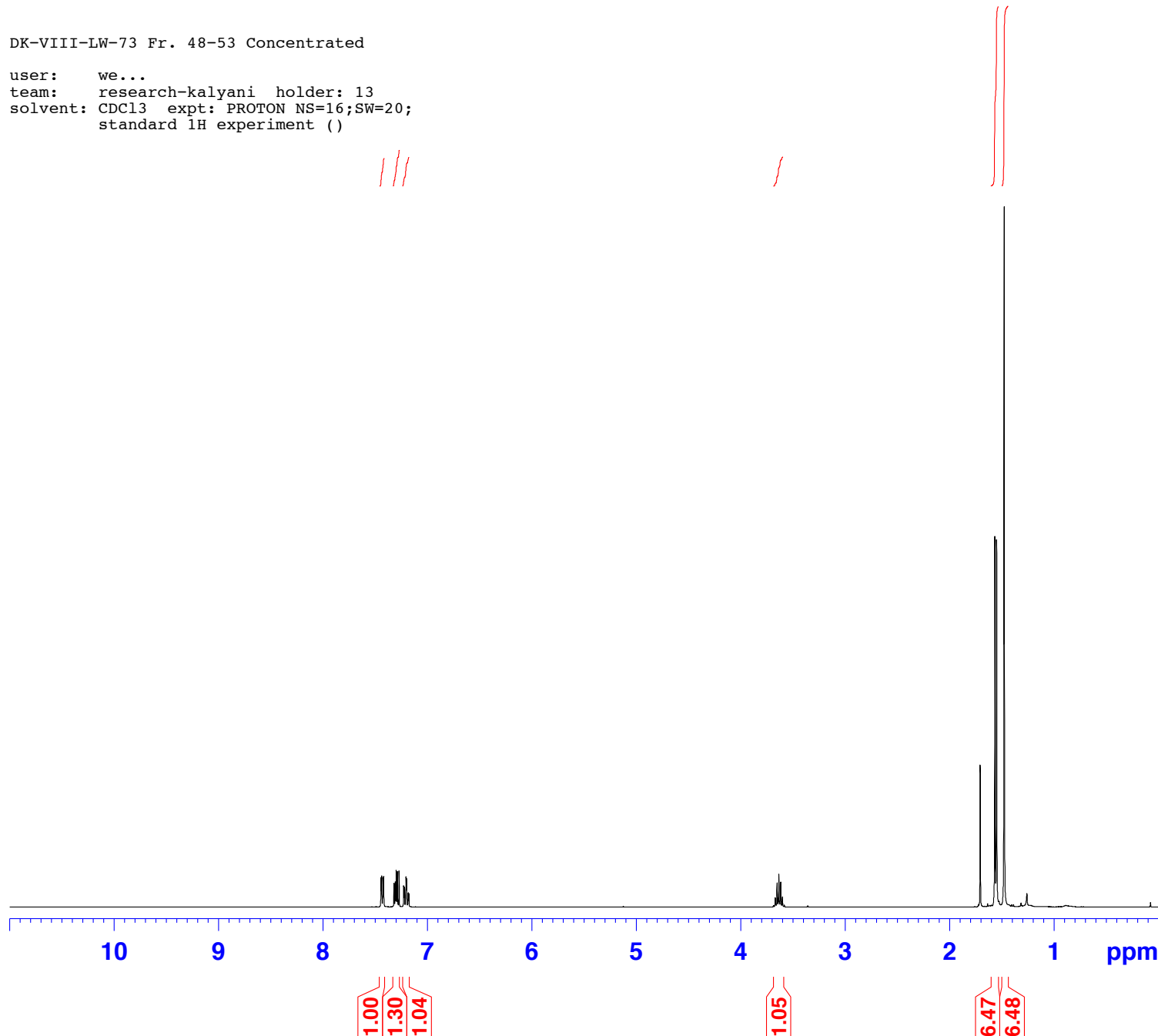


Current Data Parameters
NAME Jul04-2013
EXPNO 1527010
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130704
Time 21.39
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 362
DW 62.400 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

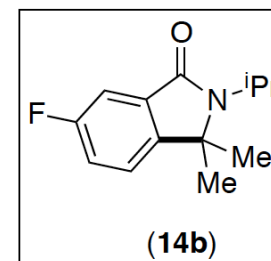
===== CHANNEL f1 =====
NUC1 1H
P1 11.75 usec
PL1 -4.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



DK-VIII-LW-73 Fr. 48-53 Concentrated

user: we...
team: research-kalyani holder: 10
solvent: CDCl₃ expt: C13CPD32 NS=5500;D1=2;
standard C13 experiment ()



Current Data Parameters
NAME Jul05-2013
EXPNO 1529710
PROCNO 1

F2 - Acquisition Parameters
Date_ 20130706
Time 10.17
INSTRUM spect
PROBHD 5 mm BBO 1H/13
PULPROG zgpg30
TD 65536
SOLVENT CDCl₃
NS 5500
DS 2
SWH 23980.814 Hz
FIDRES 0.365918 Hz
AQ 1.3664756 sec
RG 3251
DW 20.850 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 9.00 usec
PL1 -4.50 dB
SFO1 100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 90.00 usec
PL2 -4.00 dB
PL12 13.68 dB
PL13 17.24 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW EM

