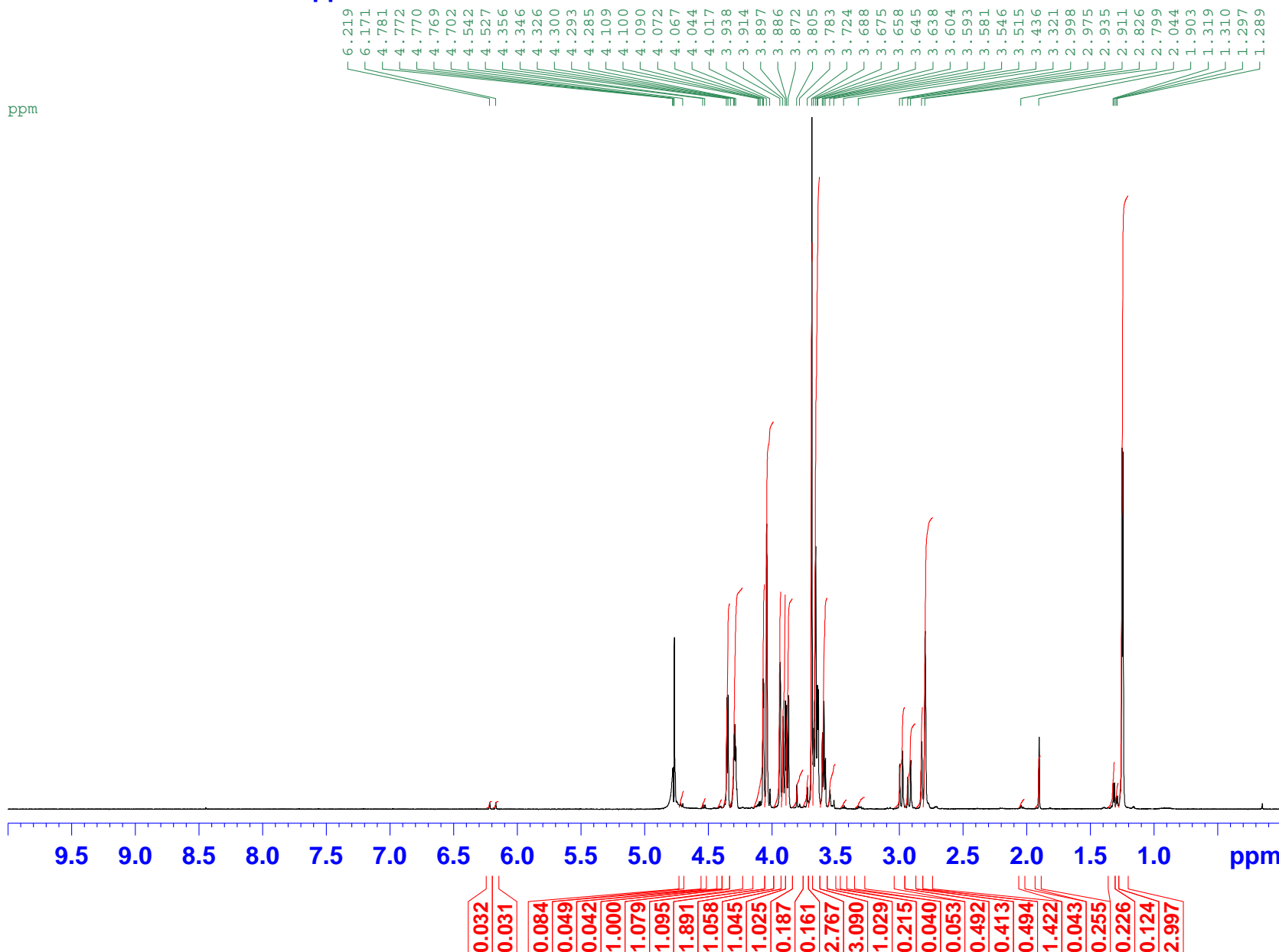
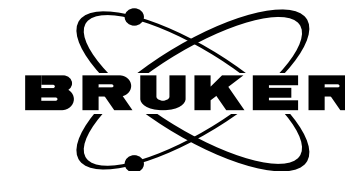


# Novel glycosylated mycosporine-like amino acids with radical scavenging activity from the cyanobacterium *Nostoc commune*

メタデータ	言語: eng 出版者: 公開日: 2017-10-03 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
URL	<a href="http://hdl.handle.net/2297/29302">http://hdl.handle.net/2297/29302</a>

sakamoto750\_01.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



```

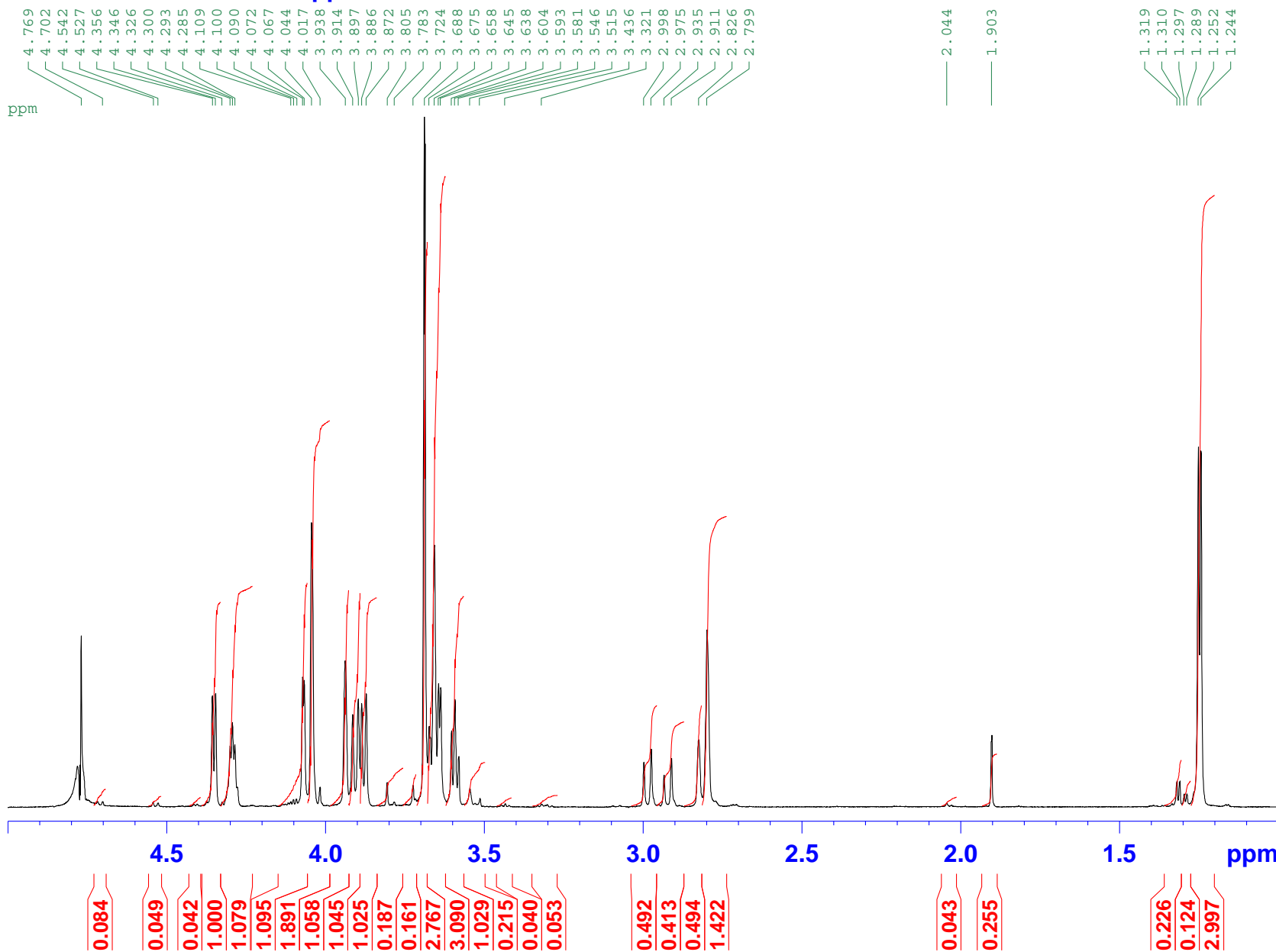
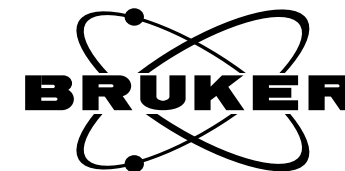
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NAME      sakamoto750_01
EXPNO     1
PROCNO    1

F2 - Acquisition Parameters
Date_     20101025
Time      14.59
INSTRUM   spect
PROBHD    5 mm CPTCI 1H-
PULPROG   zg0pr
TD         65536
SOLVENT   D2O
NS         16
DS         4
SWH        11261.262 Hz
FIDRES     0.171833 Hz
AQ         2.9098485 sec
RG         128
DW         44.400 usec
DE         6.00 usec
TE         300.6 K
D1         2.00000000 sec
d12        0.00002000 sec
TDO        1

===== CHANNEL f1 =====
NUC1       1H
P0         3.96 usec
PL1        -3.00 dB
PL9        65.00 dB
SFO1       750.1335267 MHz

F2 - Processing parameters
SI         32768
SF         750.1299484 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.00
  
```

sakamoto750\_01.1.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



```

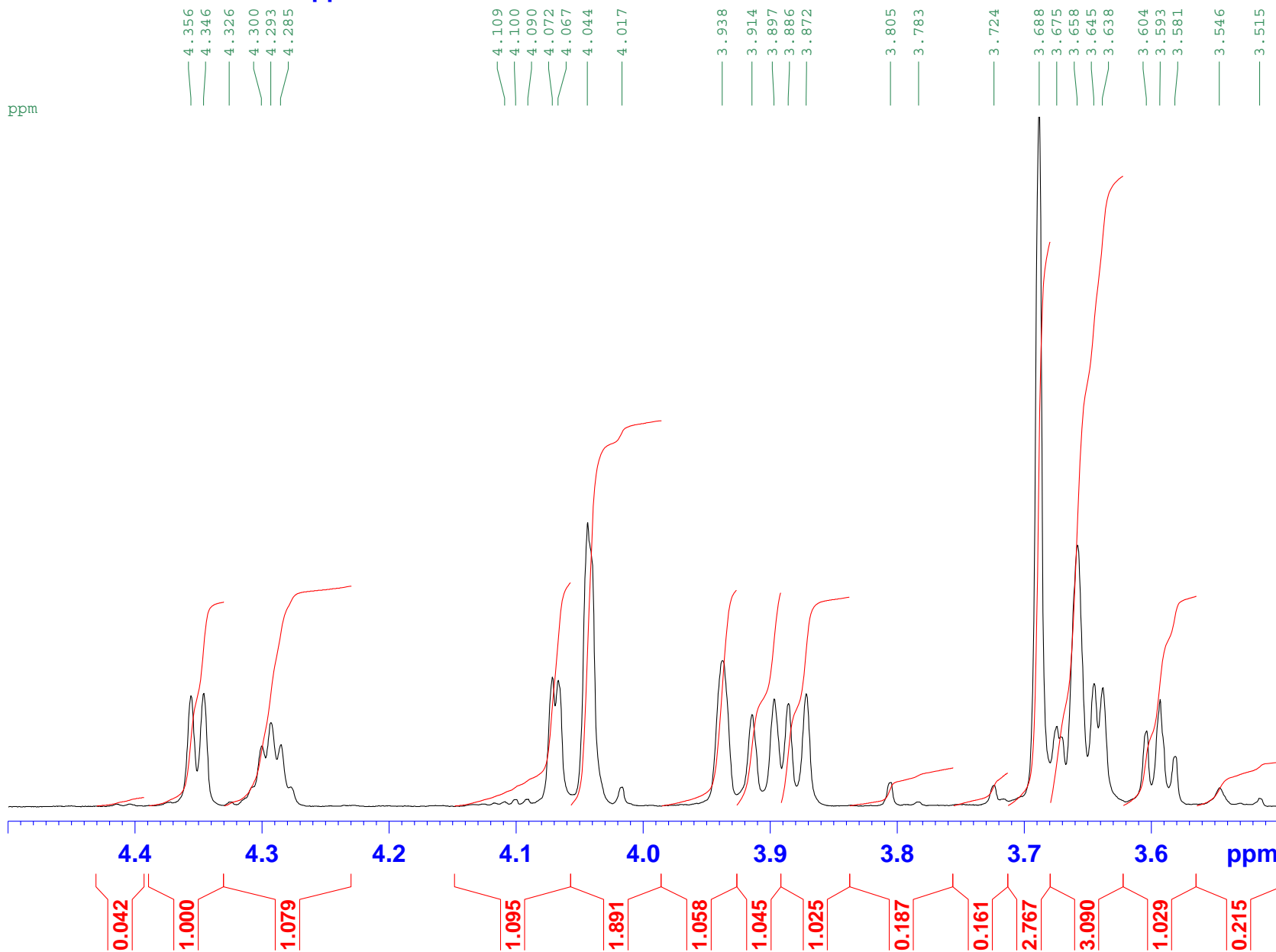
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EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20101025
Time     14.59
INSTRUM  spect
PROBHD   5 mm CPTCI 1H-
PULPROG  zg0pr
TD       65536
SOLVENT  D2O
NS       16
DS       4
SWH      11261.262 Hz
FIDRES   0.171833 Hz
AQ       2.9098485 sec
RG       128
DW       44.400 usec
DE       6.00 usec
TE       300.6 K
D1       2.00000000 sec
d12      0.00002000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P0       3.96 usec
PL1      -3.00 dB
PL9      65.00 dB
SFO1     750.1335267 MHz

F2 - Processing parameters
SI       32768
SF       750.1299484 MHz
WDW      EM
SSB      0
LB       0.30 Hz
GB       0
PC       1.00
  
```

sakamoto750\_01.1.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



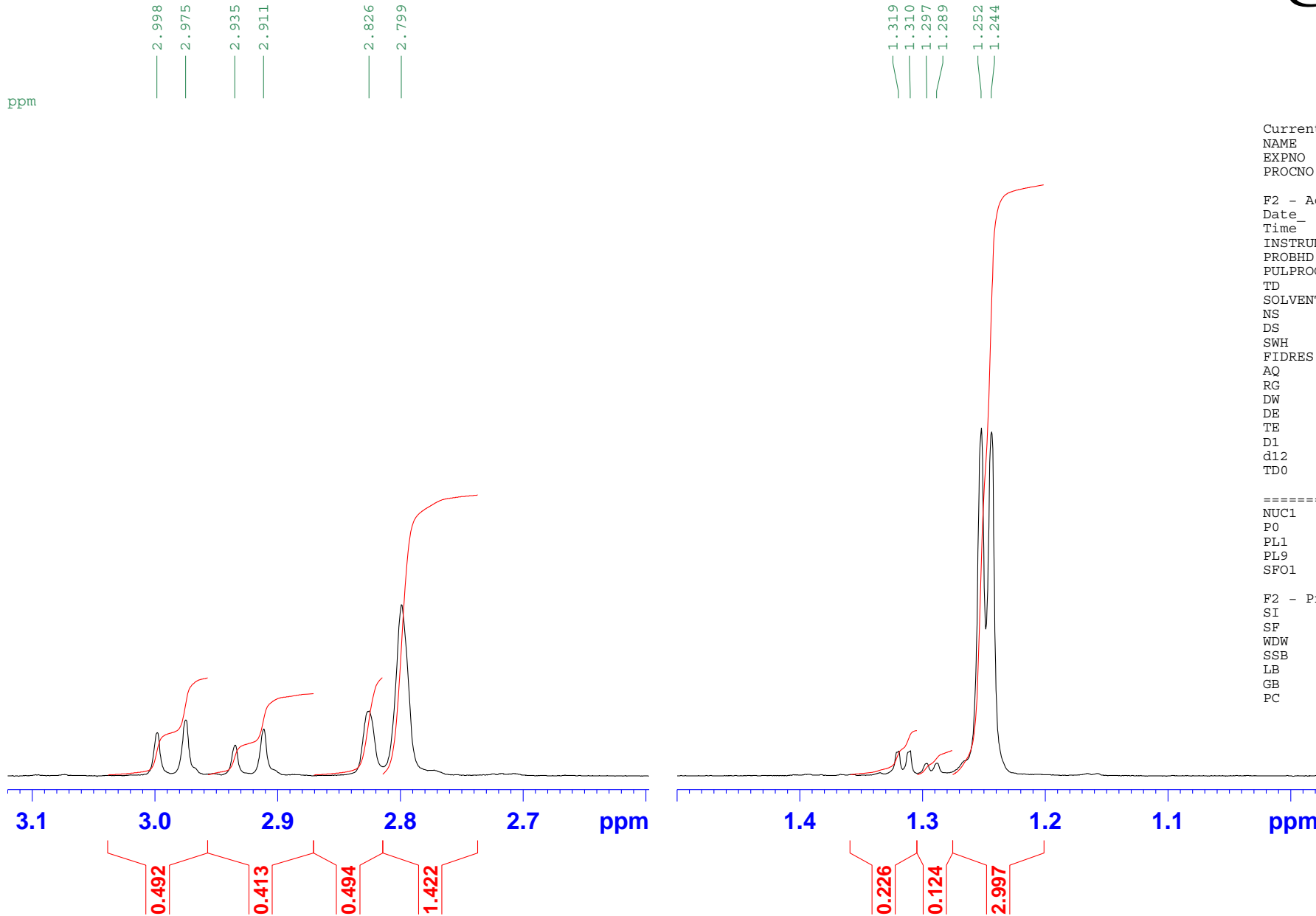
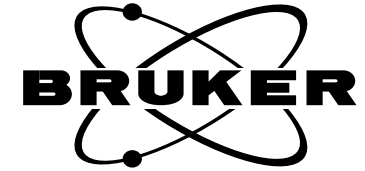
Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 14.59  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zg0pr  
 TD 65536  
 SOLVENT D2O  
 NS 16  
 DS 4  
 SWH 11261.262 Hz  
 FIDRES 0.171833 Hz  
 AQ 2.9098485 sec  
 RG 128  
 DW 44.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 2.00000000 sec  
 d12 0.00002000 sec  
 TDO 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P0 3.96 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F2 - Processing parameters  
 SI 32768  
 SF 750.1299484 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

sakamoto750\_01.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 14.59  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zg0pr  
 TD 65536  
 SOLVENT D2O  
 NS 16  
 DS 4  
 SWH 11261.262 Hz  
 FIDRES 0.171833 Hz  
 AQ 2.9098485 sec  
 RG 128  
 DW 44.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 2.00000000 sec  
 d12 0.00002000 sec  
 TDO 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P0 3.96 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F2 - Processing parameters  
 SI 32768  
 SF 750.1299484 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

sakamoto750\_01.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



Hz

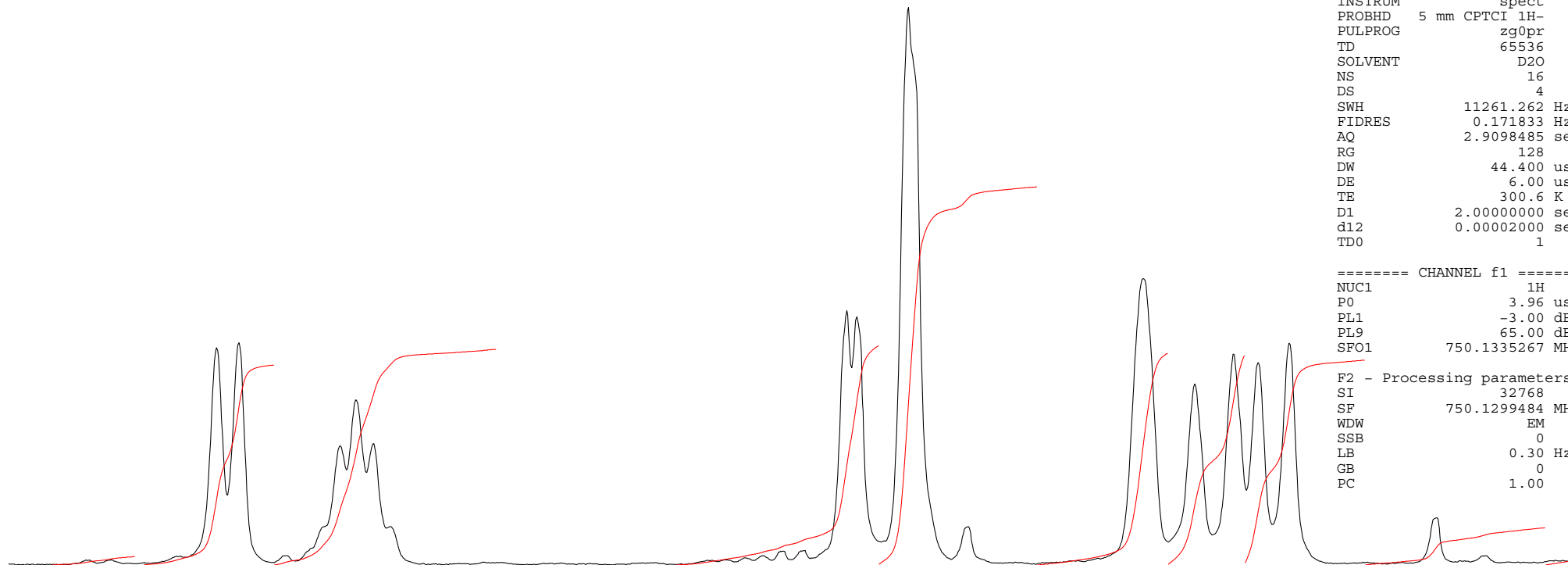
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 3260.08  
 3244.89  
 3225.75  
 3220.39  
 3214.48  
 3082.22  
 3075.82  
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 3054.15  
 3050.78  
 3033.36  
 3013.06  
 2953.76  
 2936.26  
 2923.13  
 2914.81  
 2904.27

Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 14.59  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zg0pr  
 TD 65536  
 SOLVENT D2O  
 NS 16  
 DS 4  
 SWH 11261.262 Hz  
 FIDRES 0.171833 Hz  
 AQ 2.9098485 sec  
 RG 128  
 DW 44.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 2.00000000 sec  
 d12 0.00002000 sec  
 TDO 1

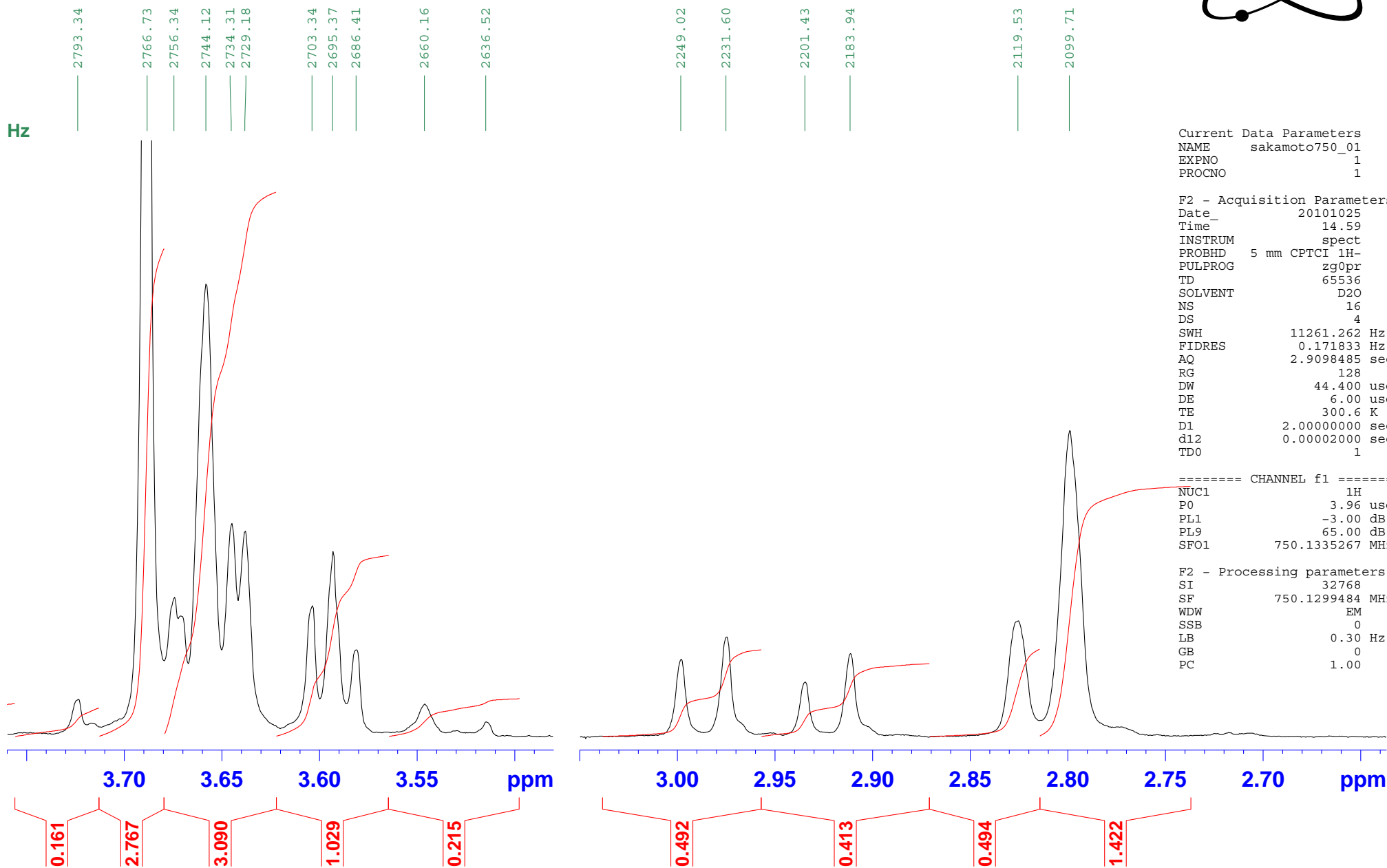
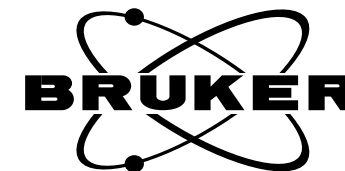
==== CHANNEL f1 =====  
 NUC1 1H  
 P0 3.96 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F2 - Processing parameters  
 SI 32768  
 SF 750.1299484 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

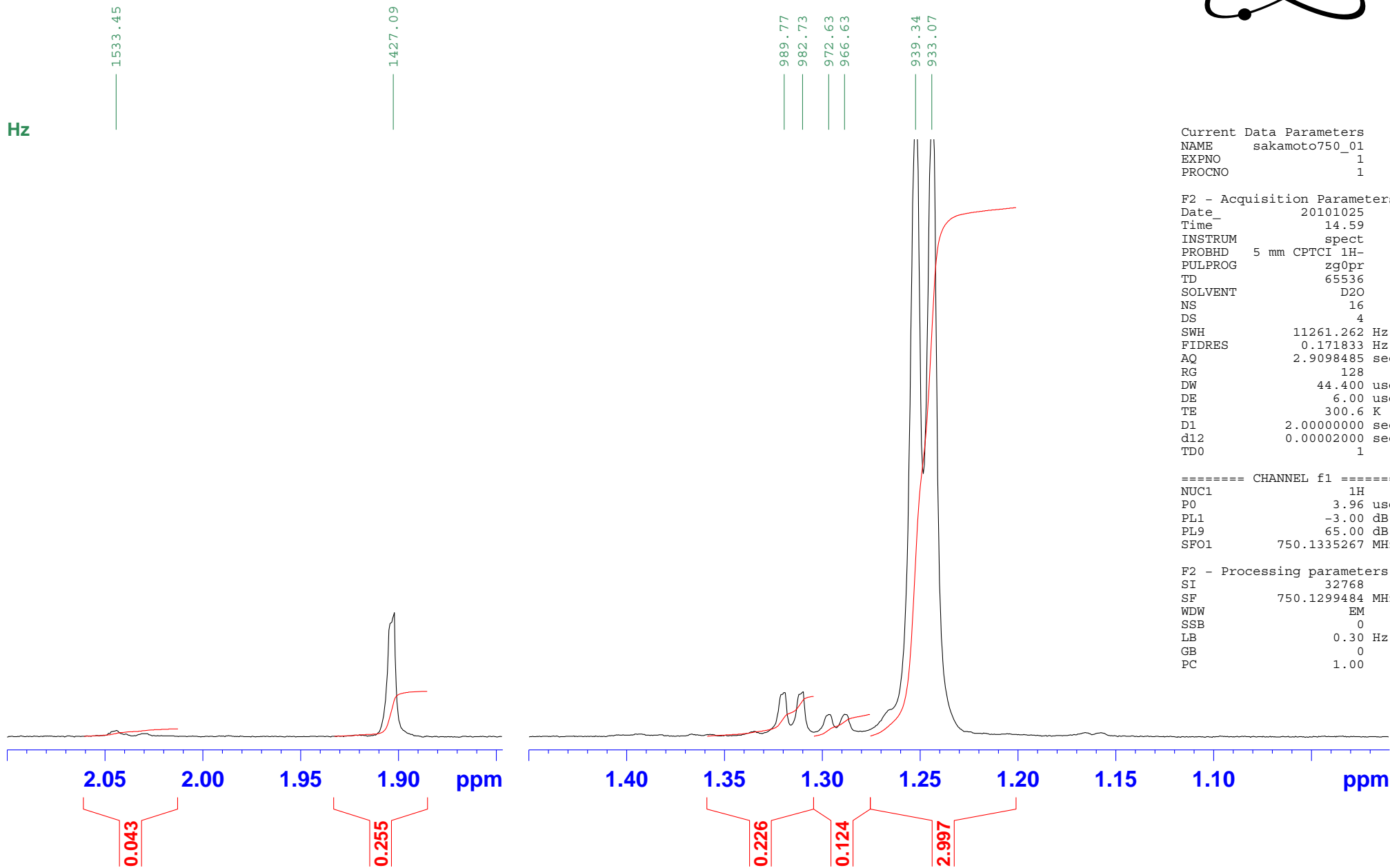


0.042  
 1.000  
 1.079  
 1.095  
 1.891  
 1.058  
 1.045  
 1.025  
 0.187

sakamoto750\_01.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



sakamoto750\_01.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm



```

Current Data Parameters
NAME      sakamoto750_01
EXPNO    1
PROCNO   1

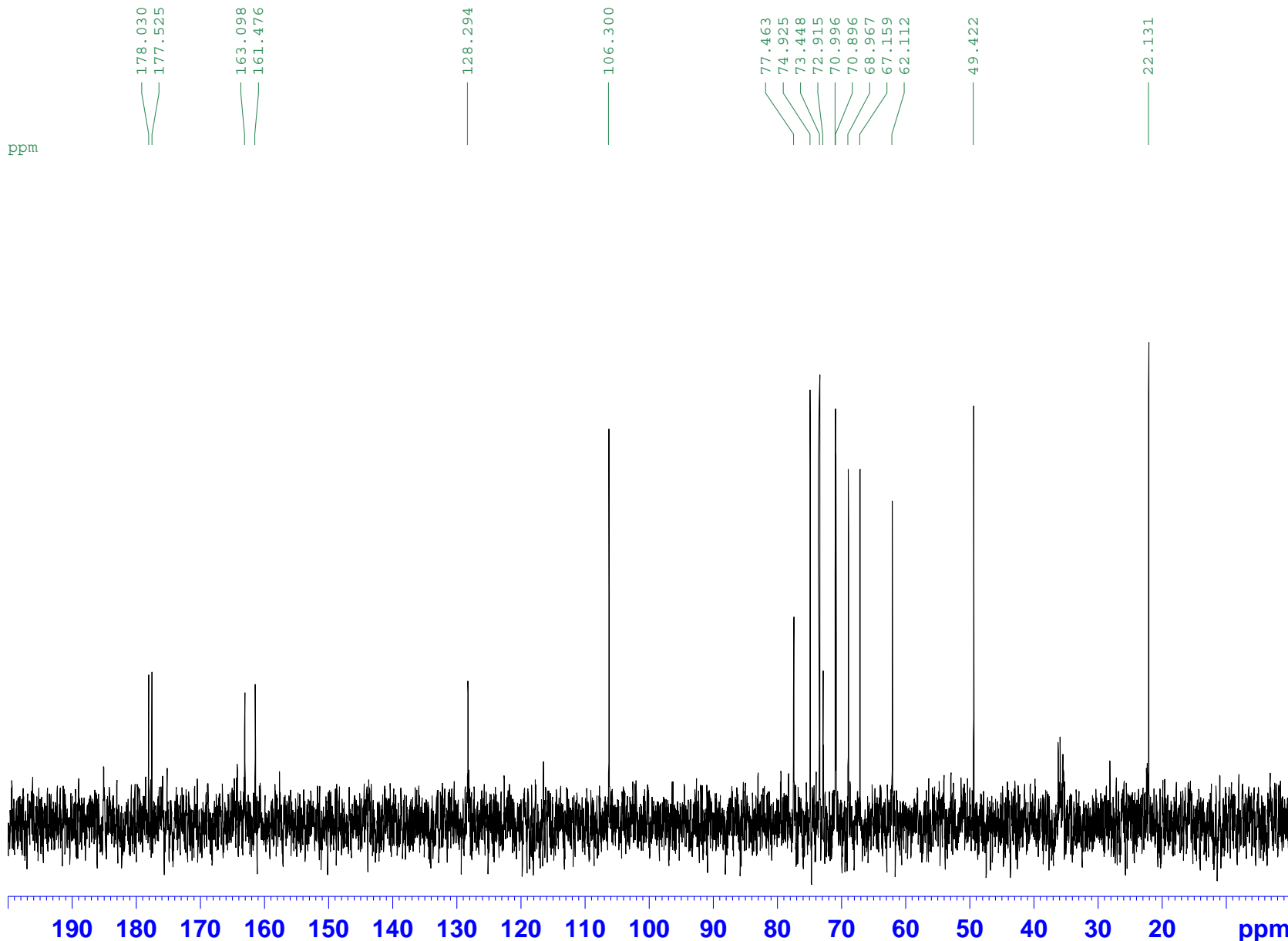
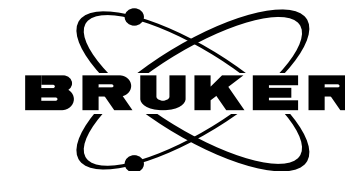
F2 - Acquisition Parameters
Date_    20101025
Time     14.59
INSTRUM  spect
PROBHD   5 mm CPTCI 1H-
PULPROG  zg0pr
TD       65536
SOLVENT  D2O
NS       16
DS       4
SWH      11261.262 Hz
FIDRES   0.171833 Hz
AQ       2.9098485 sec
RG       128
DW       44.400 usec
DE       6.00 usec
TE       300.6 K
D1       2.00000000 sec
d12      0.00002000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P0       3.96 usec
PL1      -3.00 dB
PL9      65.00 dB
SFO1     750.1335267 MHz

F2 - Processing parameters
SI       32768
SF       750.1299484 MHz
WDW      EM
SSB      0
LB       0.30 Hz
GB       0
PC       1.00
  
```



sakamoto750\_01.1000.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 13C{1H} 1Pulse with CPD (zgpg30):CPTCI-Z  
 reference:external DSS=0 ppm



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1000  
 PROCNO 1

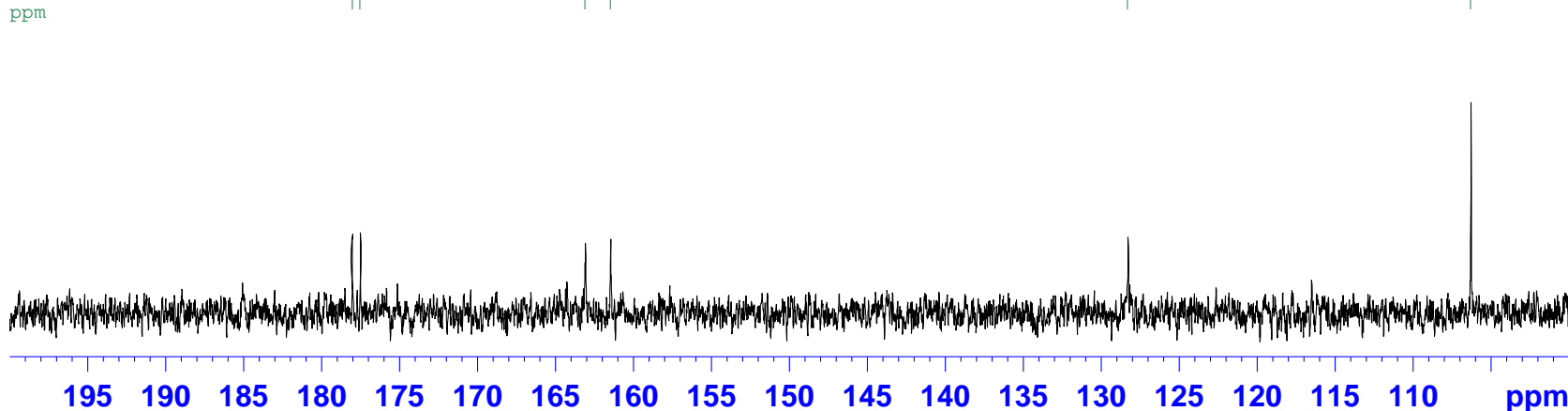
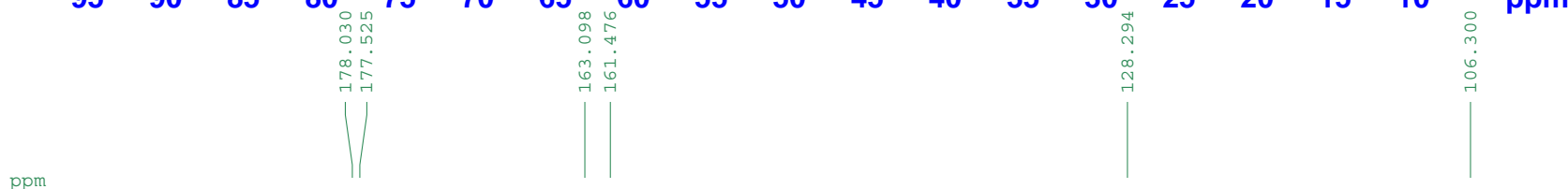
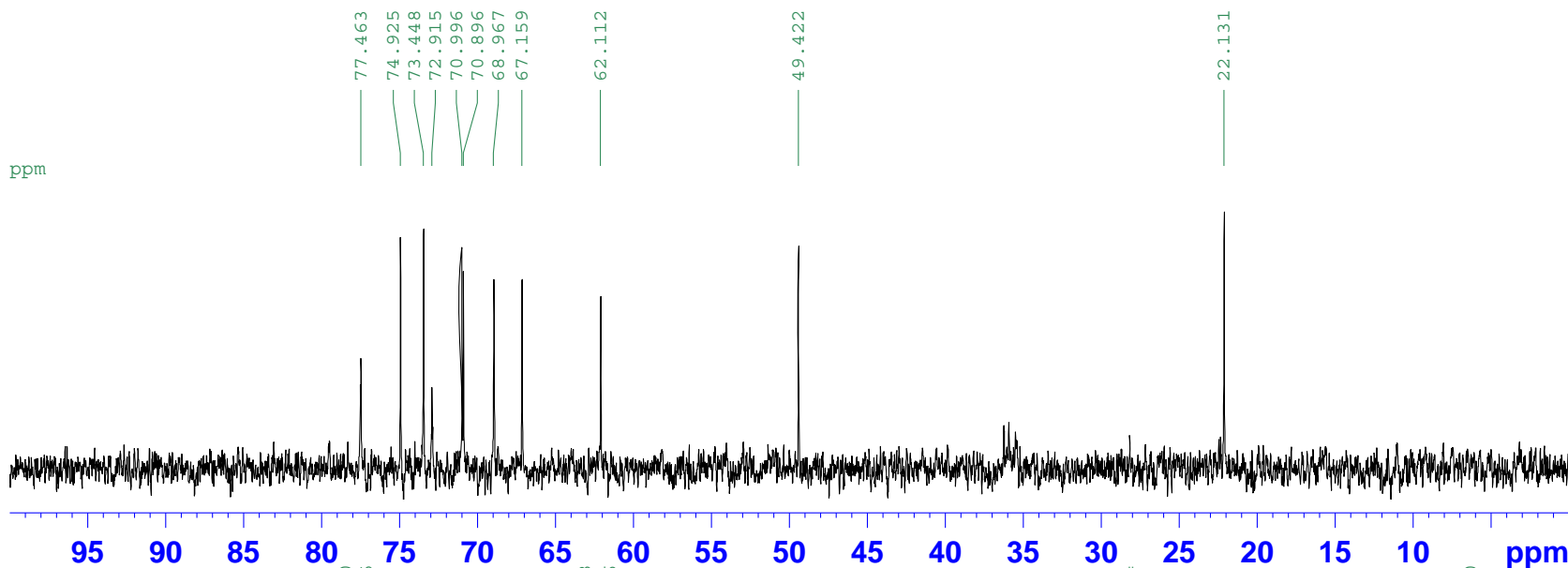
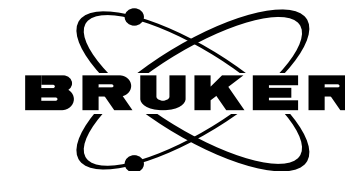
F2 - Acquisition Parameters  
 Date\_ 20101026  
 Time\_ 1.53  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT D2O  
 NS 4096  
 DS 4  
 SWH 45045.047 Hz  
 FIDRES 0.687333 Hz  
 AQ 0.7274996 sec  
 RG 16384  
 DW 11.100 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 0.30000001 sec  
 d11 0.03000000 sec  
 DELTA 0.20000002 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1 13C  
 P1 15.20 usec  
 PL1 -4.90 dB  
 SFO1 188.6410872 MHz

===== CHANNEL f2 =====  
 CPDPRG2 garp4  
 NUC2 1H  
 PCPD2 100.00 usec  
 PL2 120.00 dB  
 PL12 16.45 dB  
 PL13 16.45 dB  
 SFO2 750.1339007 MHz

F2 - Processing parameters  
 SI 32768  
 SF 188.6198149 MHz  
 WDW EM  
 SSB 0  
 LB 5.00 Hz  
 GB 0  
 PC 2.00

sakamoto750\_01.1000.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 $^{13}\text{C}\{^1\text{H}\}$  1Pulse with CPD (zgpg30):CPTCI-Z  
 reference:external DSS=0 ppm



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1000  
 PROCNO 1

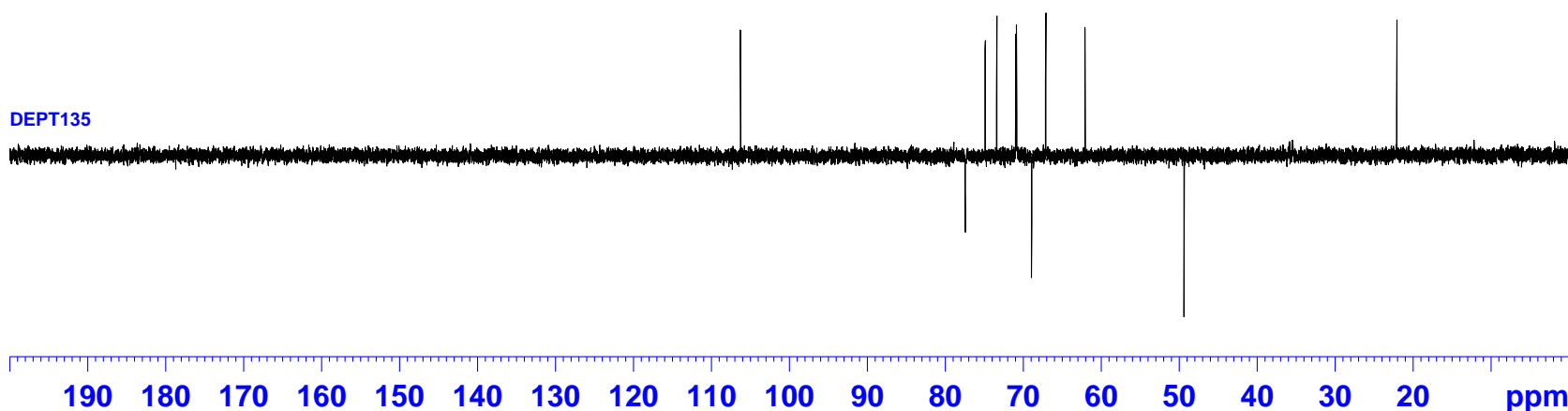
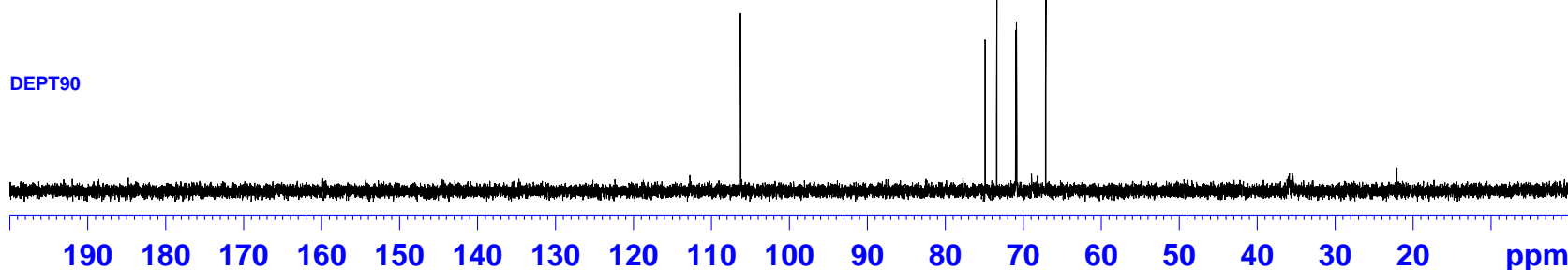
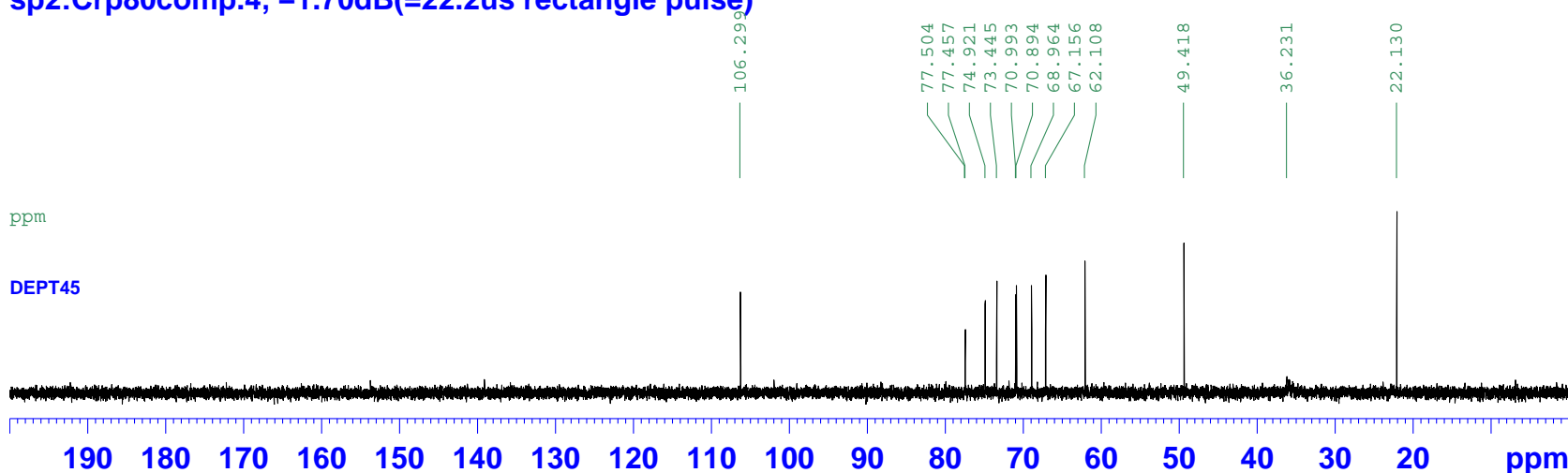
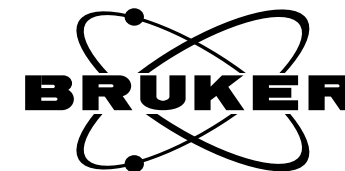
F2 - Acquisition Parameters  
 Date\_ 20101026  
 Time\_ 1.53  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT D2O  
 NS 4096  
 DS 4  
 SWH 45045.047 Hz  
 FIDRES 0.687333 Hz  
 AQ 0.7274996 sec  
 RG 16384  
 DW 11.100 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 0.30000001 sec  
 d11 0.03000000 sec  
 DELTA 0.20000002 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1  $^{13}\text{C}$   
 P1 15.20 usec  
 PL1 -4.90 dB  
 SFO1 188.6410872 MHz

===== CHANNEL f2 =====  
 CPDPRG2 garp4  
 NUC2  $^1\text{H}$   
 PCPD2 100.00 usec  
 PL2 120.00 dB  
 PL12 16.45 dB  
 PL13 16.45 dB  
 SFO2 750.1339007 MHz

F2 - Processing parameters  
 SI 32768  
 SF 188.6198149 MHz  
 WDW EM  
 SSB 0  
 LB 5.00 Hz  
 GB 0  
 PC 2.00

sakamoto750\_01.1001.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 13C{1H} DEPT45 (deptsp45):CPTCI-Z  
 sp2:Crp80comp.4, -1.70dB(=22.2us rectangle pulse)



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1001  
 PROCNO 1

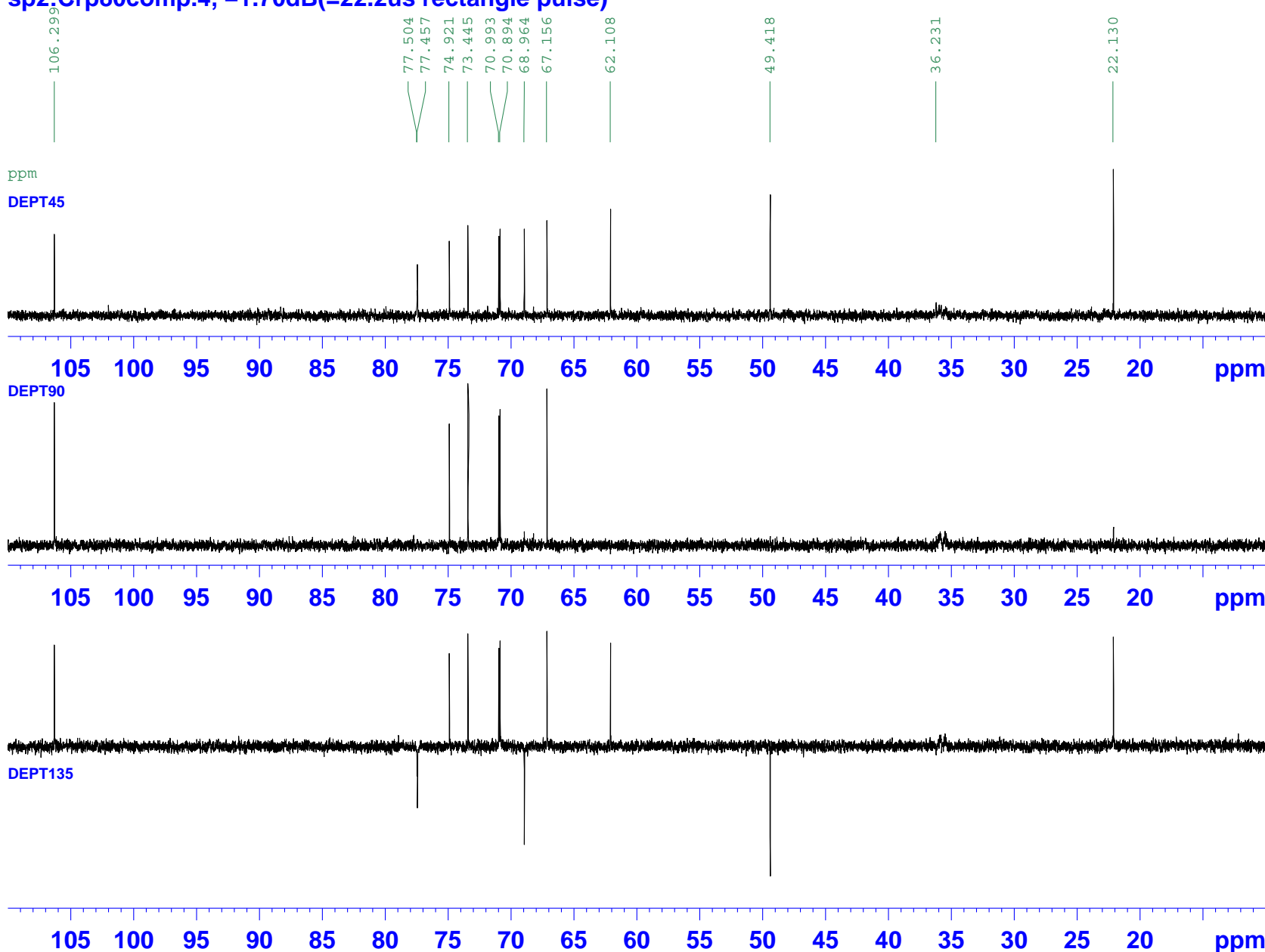
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 Date\_ 20101026  
 Time 3.28  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG deptsp45  
 TD 65536  
 SOLVENT D2O  
 NS 2048  
 DS 4  
 SWH 45045.047 Hz  
 FIDRES 0.687333 Hz  
 AQ 0.7274996 sec  
 RG 32768  
 DW 11.100 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST2 145.0000000  
 D1 2.0000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001935 sec  
 TD0 1

===== CHANNEL f1 =====  
 NUC1 13C  
 P1 15.20 usec  
 P12 2000.00 usec  
 PL0 120.00 dB  
 PL1 -4.90 dB  
 SFO1 188.6410872 MHz  
 SP2 -1.65 dB  
 SPNAM2 Crp80comp.4  
 SPOAL2 0.500  
 SPOFFS2 0.00 Hz

===== CHANNEL f2 =====  
 CPDPRG2 garp4  
 NUC2 1H  
 P3 12.00 usec  
 p4 24.00 usec  
 PCPD2 100.00 usec  
 PL2 -3.00 dB  
 PL12 16.45 dB  
 SFO2 750.1339007 MHz

F2 - Processing parameters  
 SI 32768  
 SF 188.6198149 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

sakamoto750\_01.1001.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 13C{1H} DEPT45 (deptsp45):CPTCI-Z  
 sp2:Crp80comp.4, -1.70dB(=22.2us rectangle pulse)



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 1001  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101026  
 Time 3.28  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG deptsp45  
 TD 65536  
 SOLVENT D2O  
 NS 2048  
 DS 4  
 SWH 45045.047 Hz  
 FIDRES 0.687333 Hz  
 AQ 0.7274996 sec  
 RG 32768  
 DW 11.100 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST2 145.0000000  
 D1 2.00000000 sec  
 d2 0.00344828 sec  
 d12 0.00002000 sec  
 DELTA 0.00001935 sec  
 TD0 1

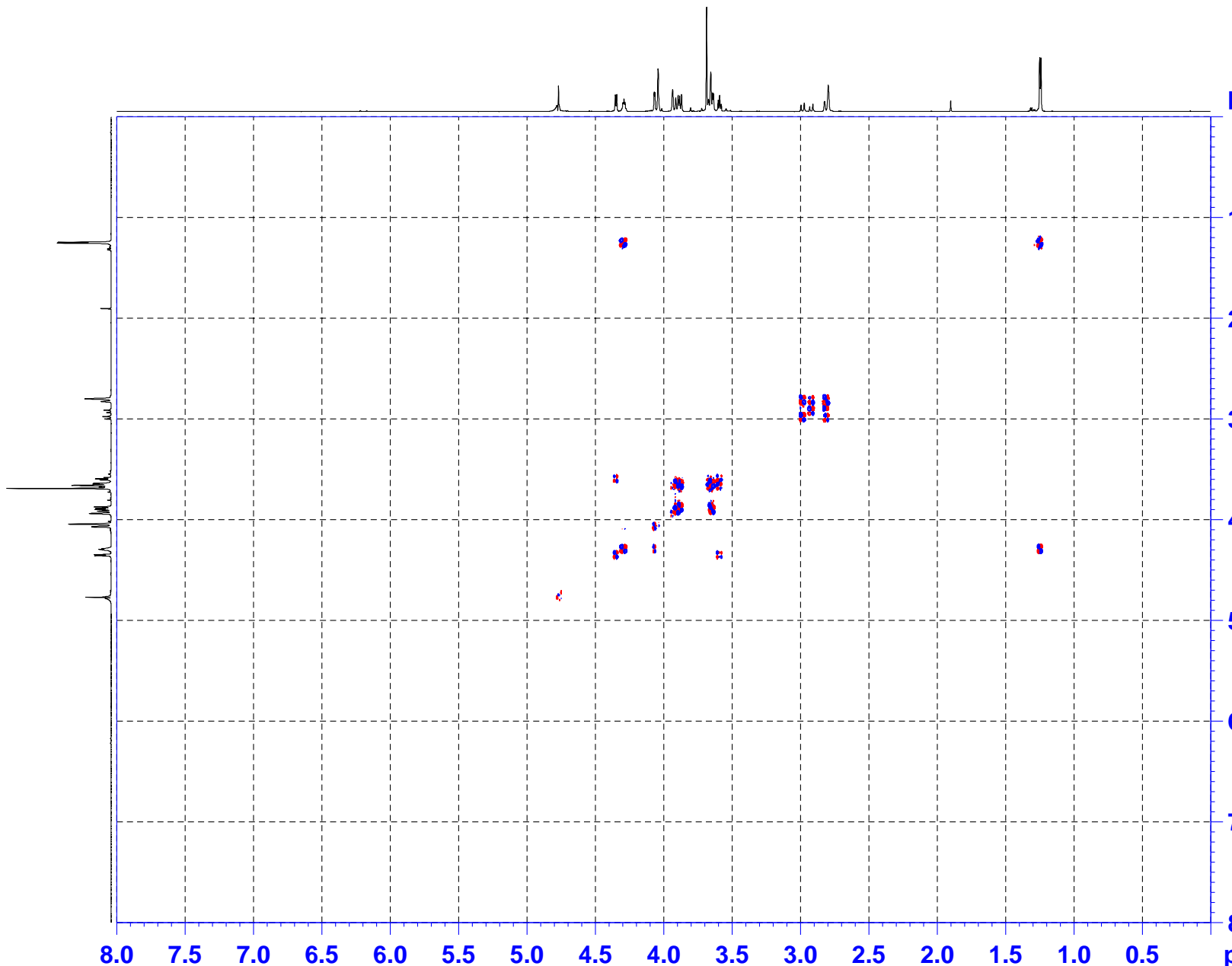
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 15.20 usec  
 P12 2000.00 usec  
 PL0 120.00 dB  
 PL1 -4.90 dB  
 SFO1 188.6410872 MHz  
 SP2 -1.65 dB  
 SPNAM2 Crp80comp.4  
 SPOAL2 0.500  
 SPOFFS2 0.00 Hz

===== CHANNEL f2 =====  
 CPDPRG2 garp4  
 NUC2 1H  
 P3 12.00 usec  
 p4 24.00 usec  
 PCPD2 100.00 usec  
 PL2 -3.00 dB  
 PL12 16.45 dB  
 SFO2 750.1339007 MHz

F2 - Processing parameters  
 SI 32768  
 SF 188.6198149 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

sakamoto750\_01.101.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygpmpfphp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygpmpfphp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
IN0 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

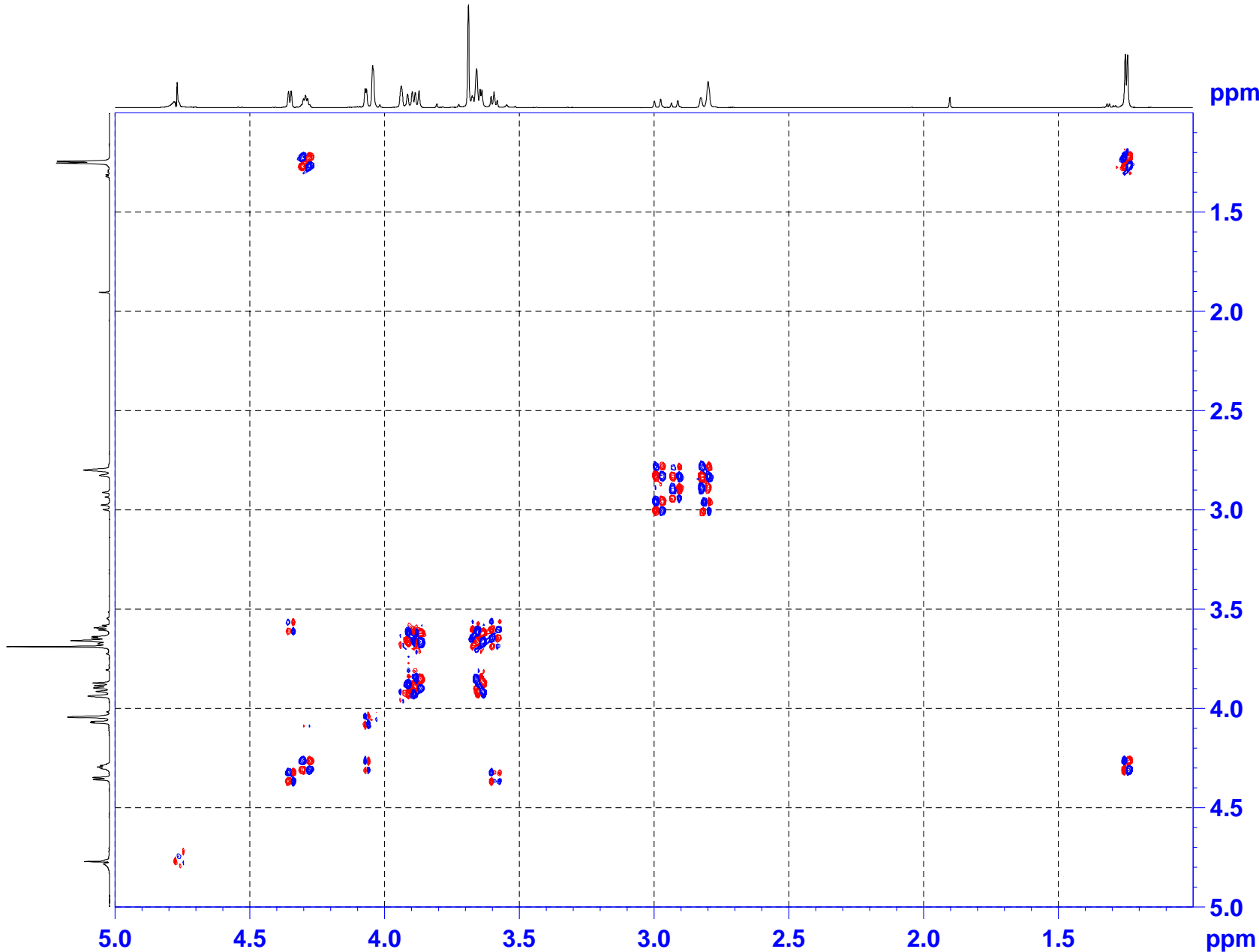
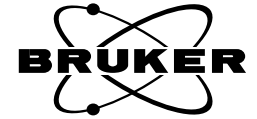
===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
IN0 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

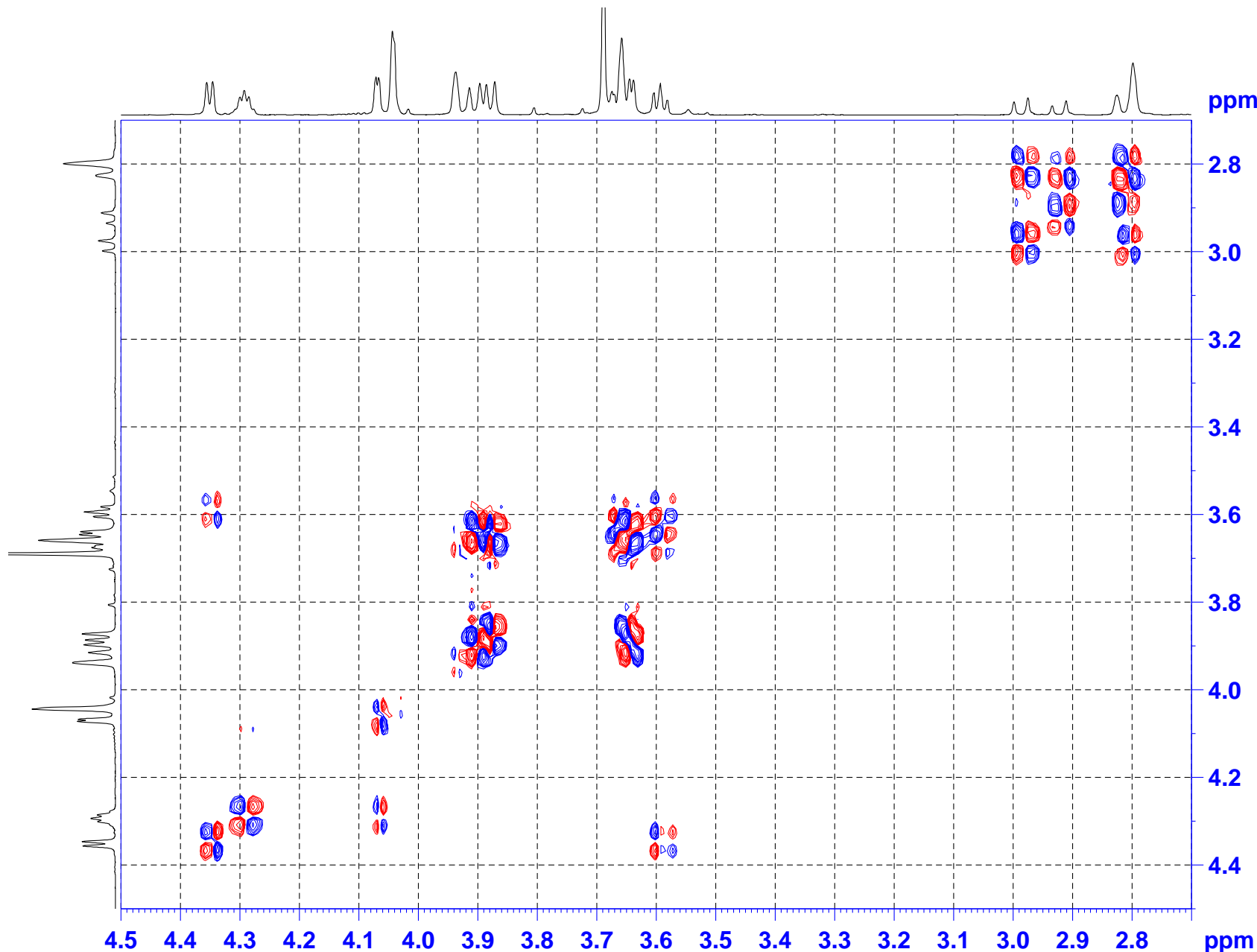
===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
IN0 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

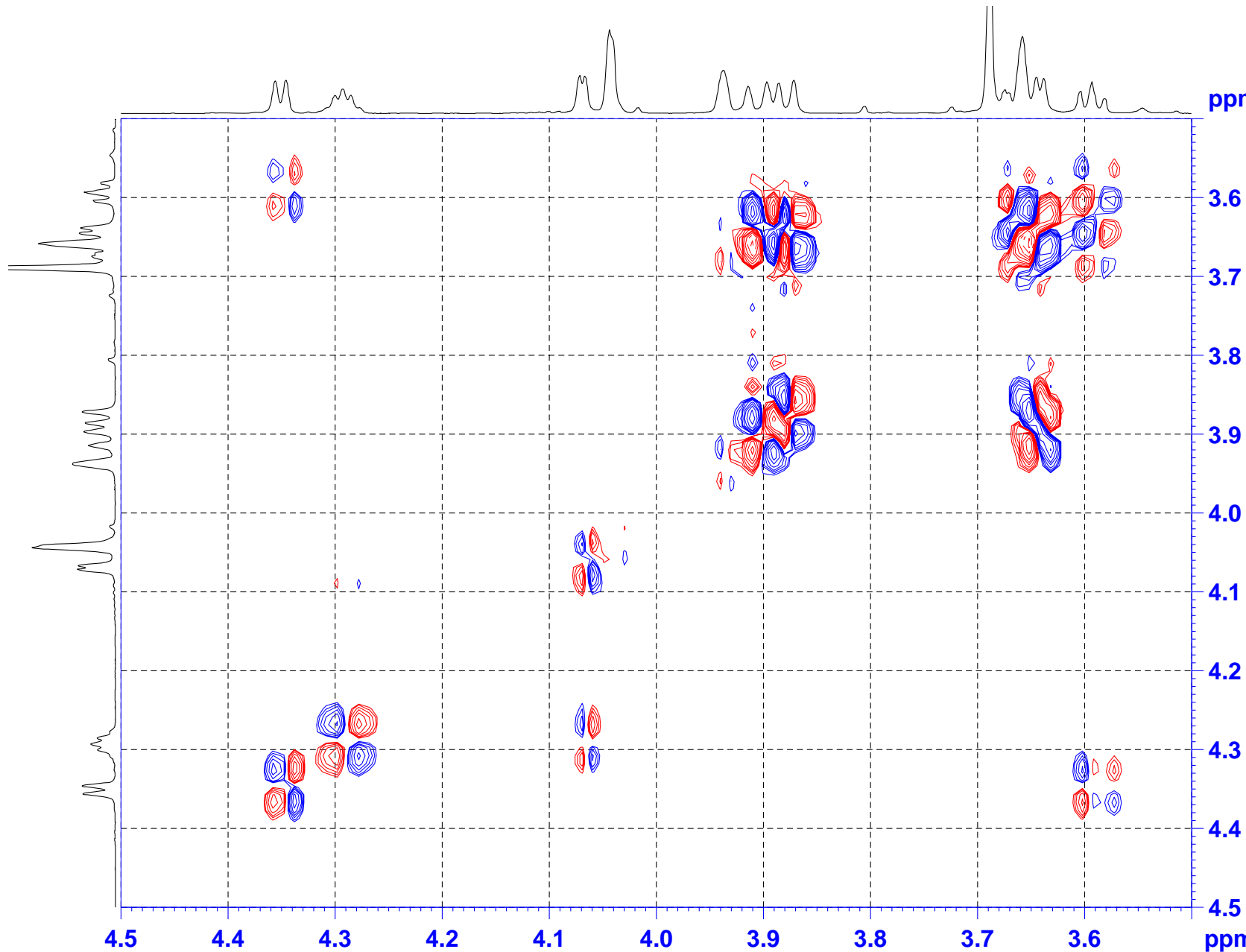
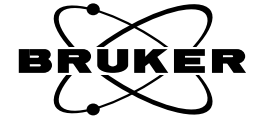
F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
INO 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

ppm

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.0005012 sec  
d1 2.0000000 sec  
d11 0.0300000 sec  
d12 0.0000200 sec  
d13 0.0000040 sec  
d16 0.0002000 sec  
d20 0.0012040 sec  
INO 0.00013080 sec  
ST1CNT 128

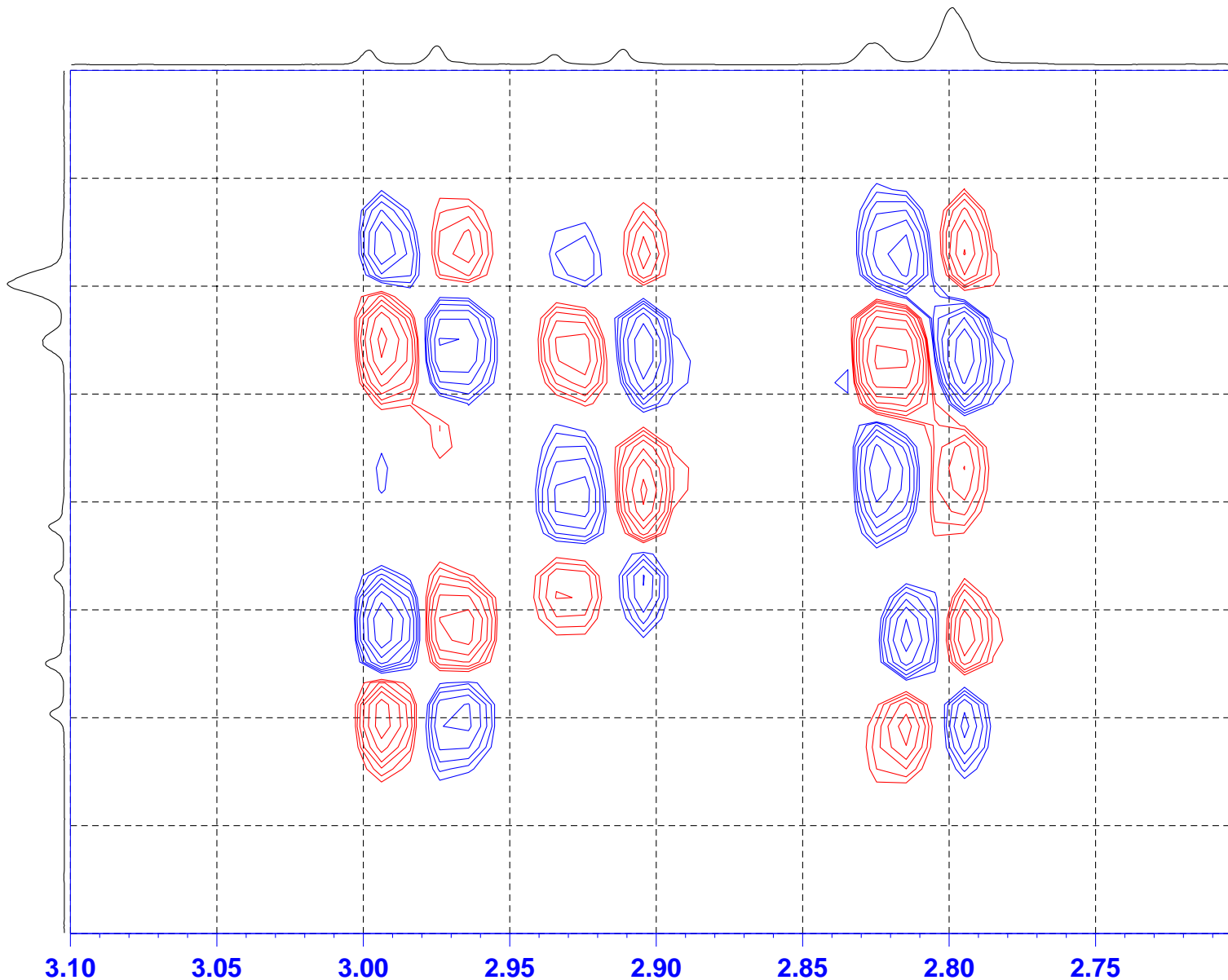
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

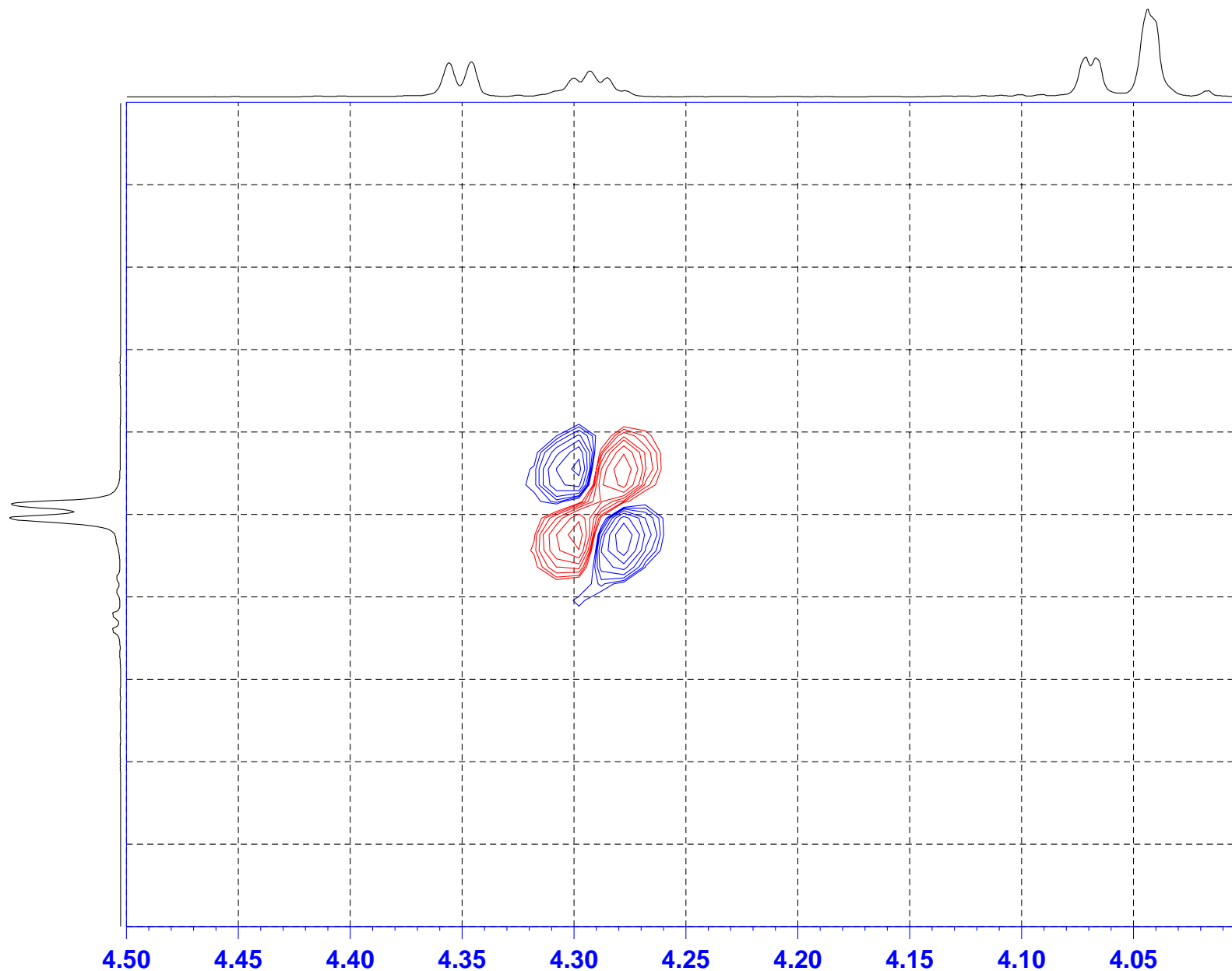
F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

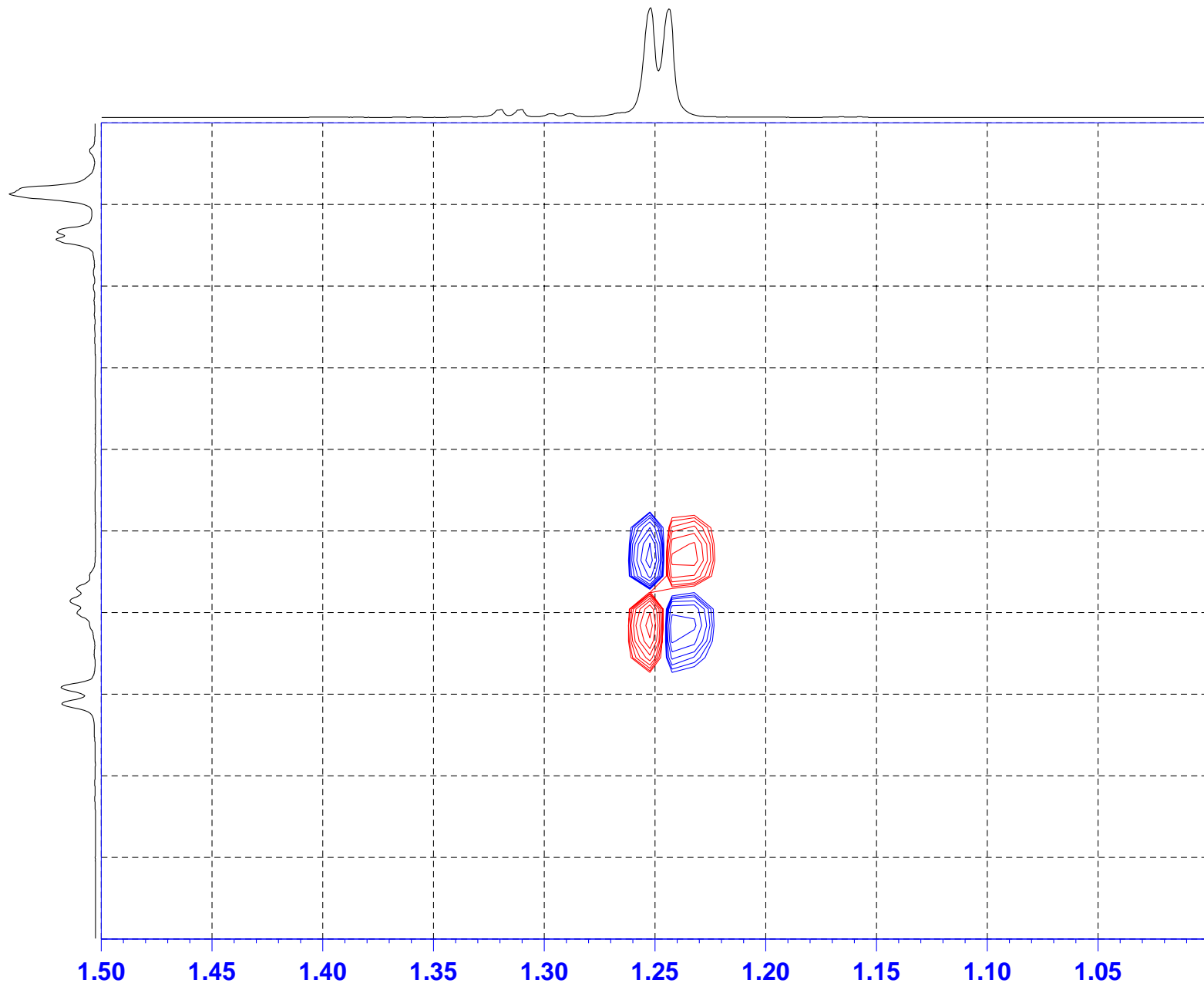
==== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

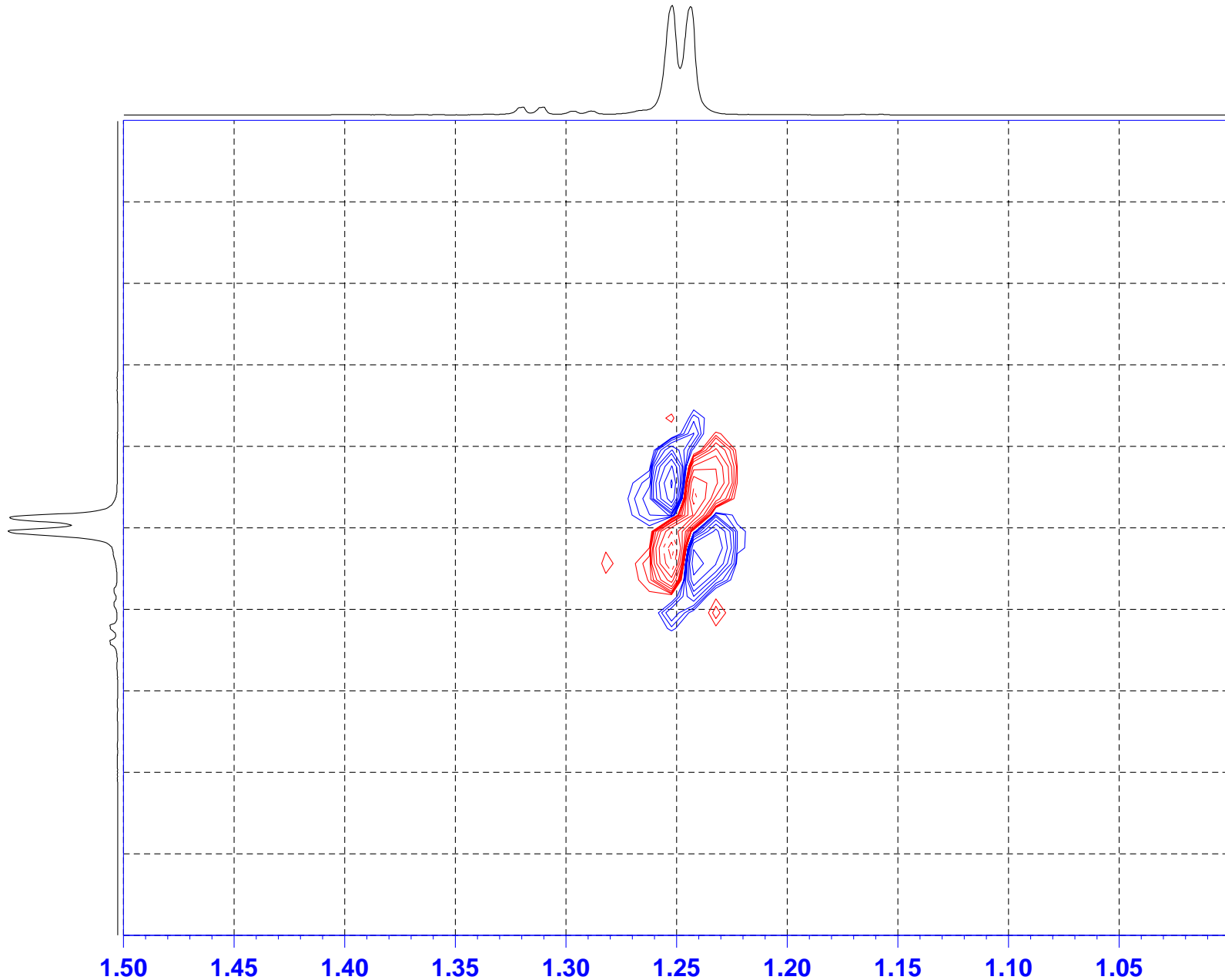
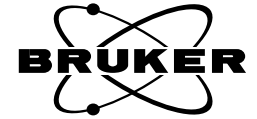
==== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
INO 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

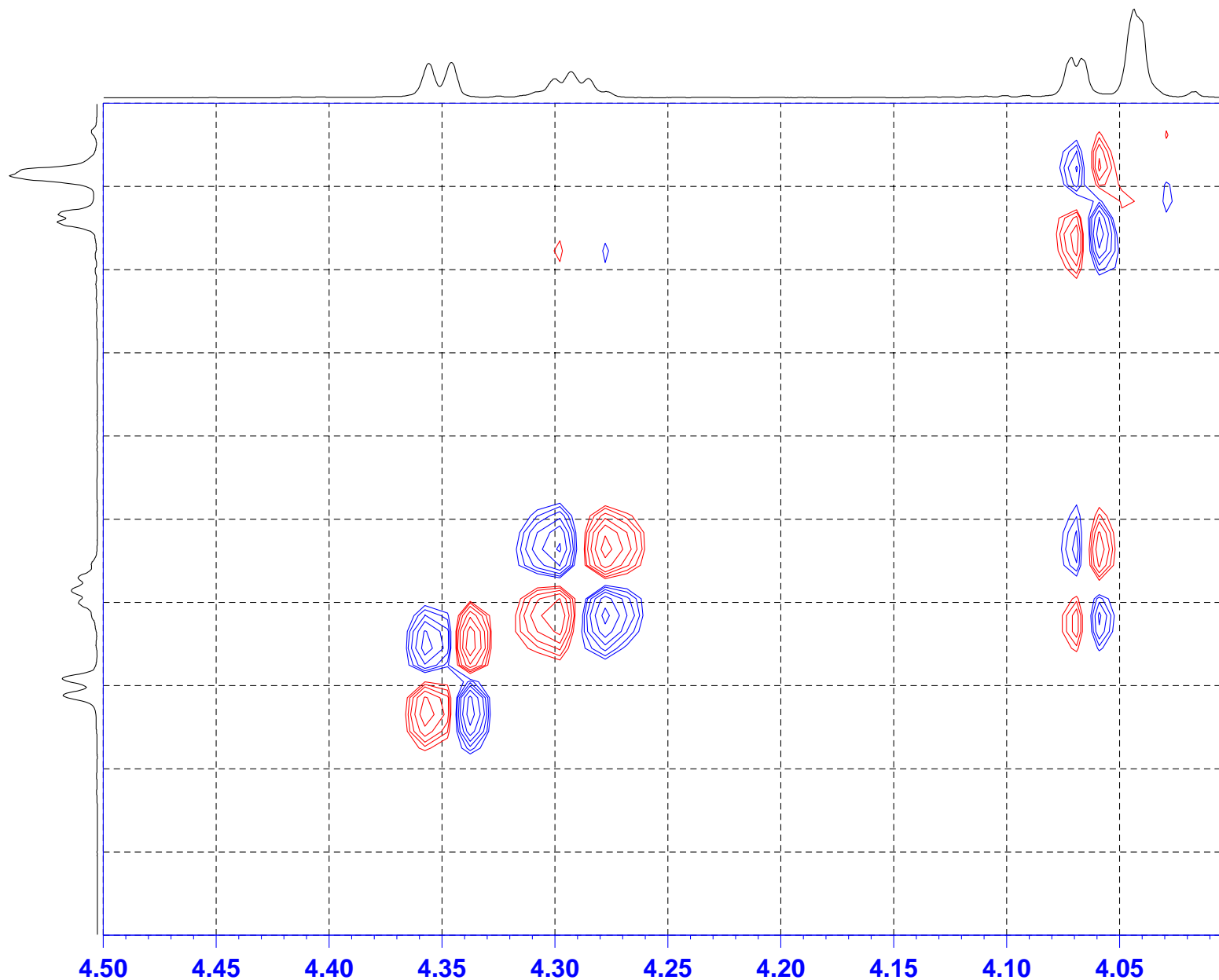
===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.101.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DQF-COSY (cosygmfphpp.rak):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 101  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 16.05  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG cosygmfphpp.rak  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 8192  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
D16 0.00020000 sec  
d20 0.00120400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
P17 10000.00 usec  
PL1 -3.00 dB  
PL10 9.00 dB  
SFO1 750.1335267 MHz

==== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 10.00 %  
GPZ2 20.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 1024  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

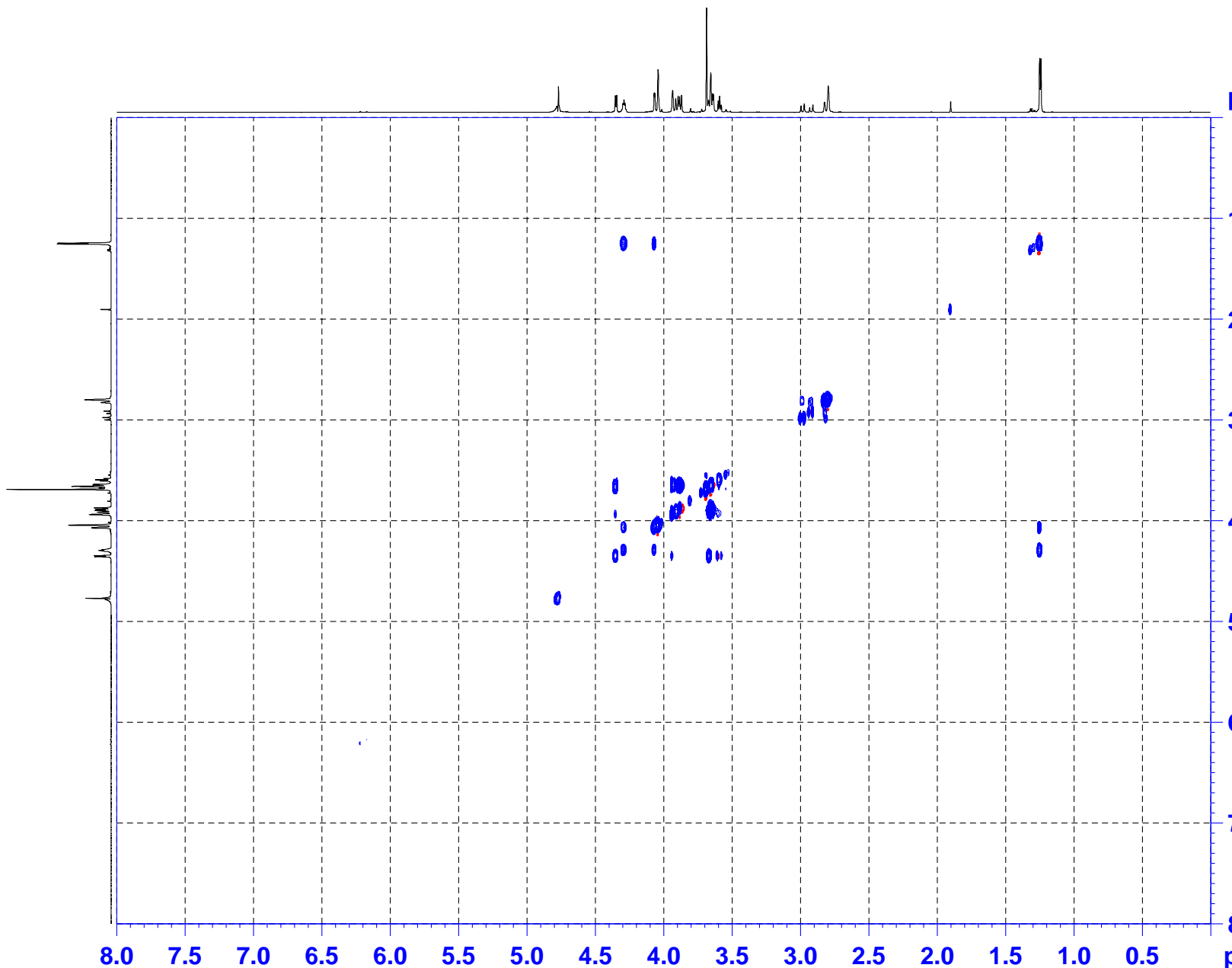
F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.102.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 102  
 PROCNO 1

ppm



F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 17.21  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG mlevphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 512  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 D1 2.00000000 sec  
 D9 0.06000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 FACTOR1 5  
 INO 0.00013080 sec  
 l1 30  
 SCALEF 6  
 STICNT 128

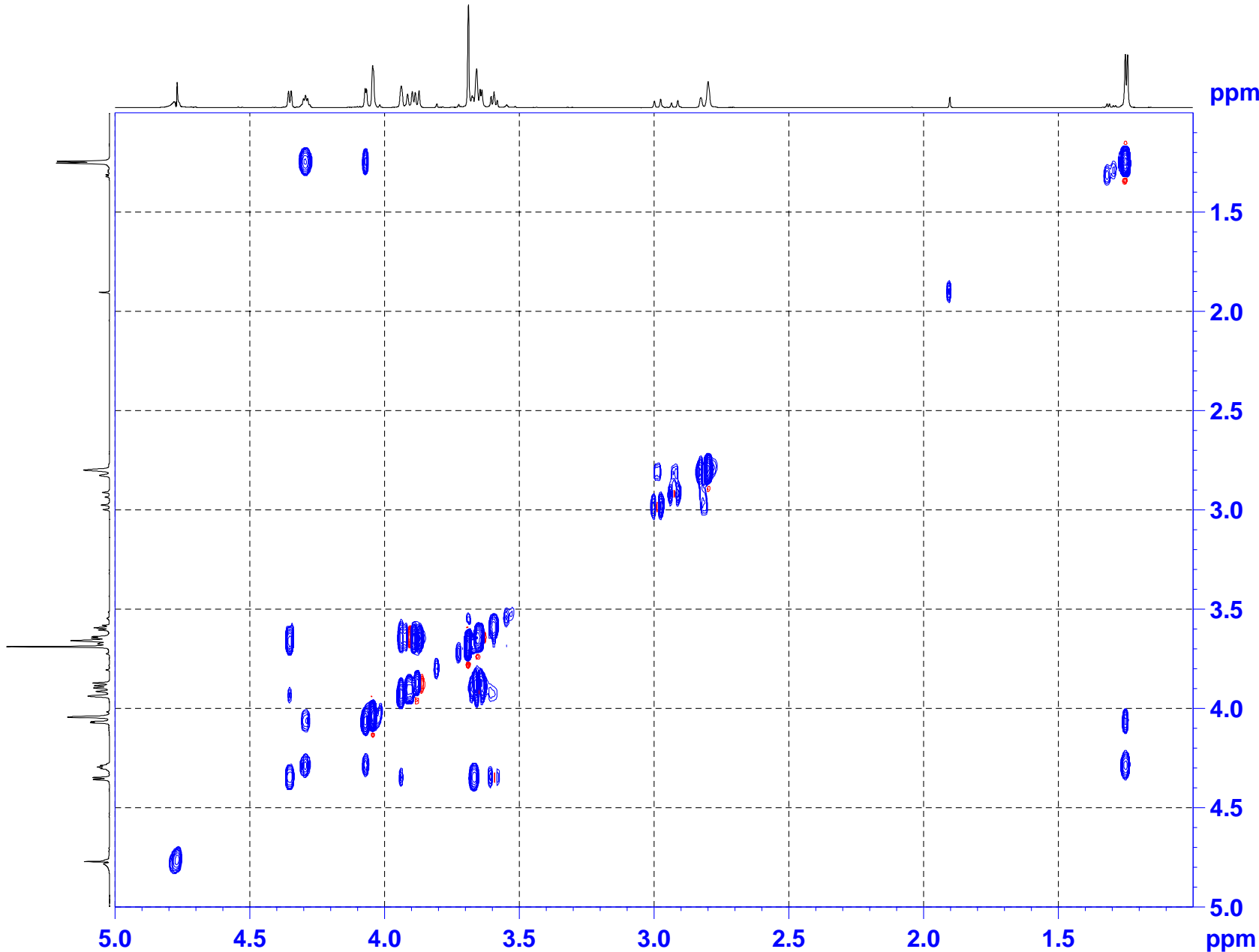
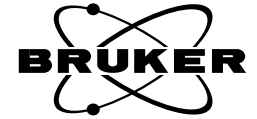
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 p5 20.01 usec  
 P6 30.00 usec  
 p7 60.00 usec  
 P17 2500.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL10 5.00 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 NDO 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FhMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
IN0 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

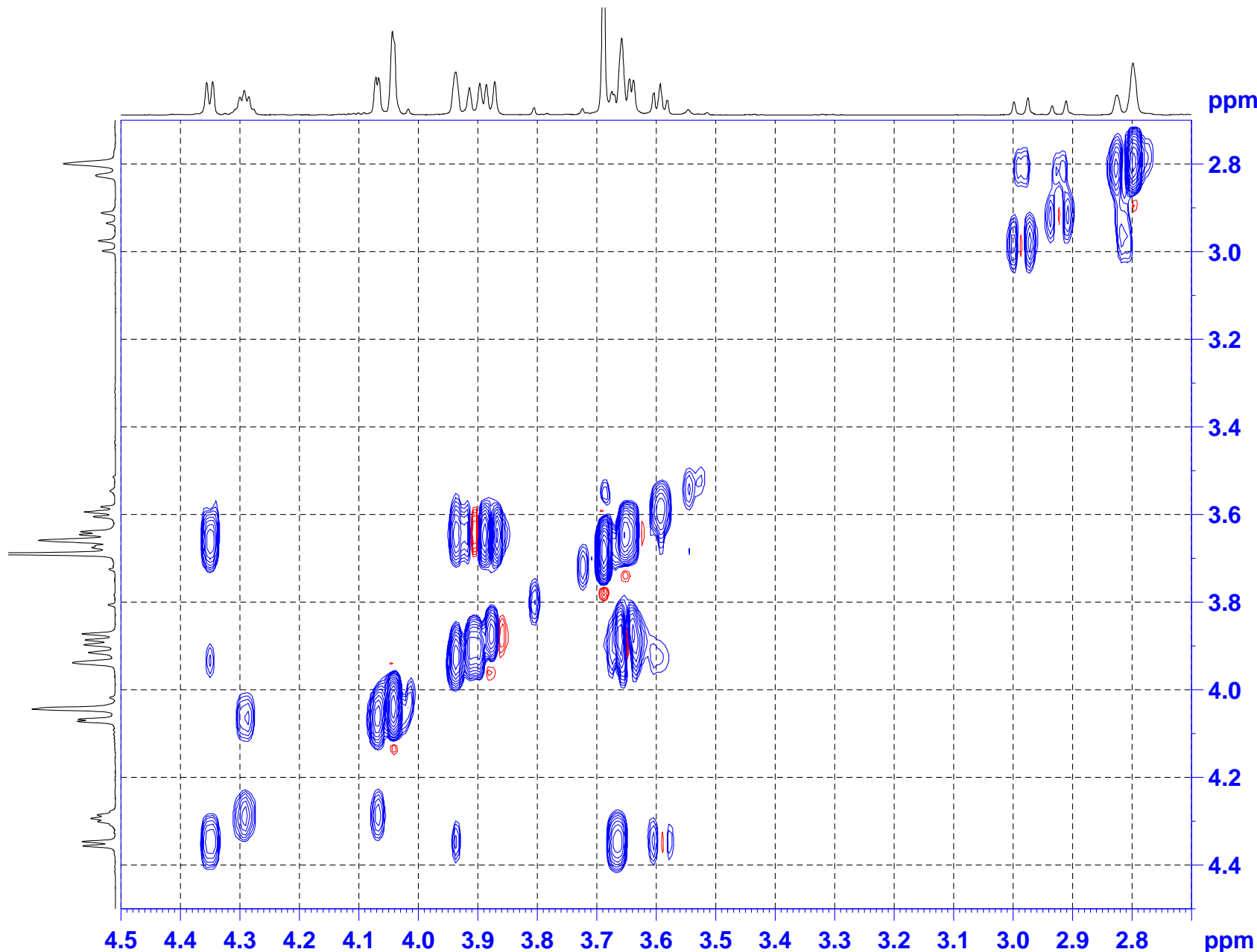
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.102.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 102  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 17.21  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG mlevphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 512  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 D1 2.00000000 sec  
 D9 0.06000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 FACTOR1 5  
 INO 0.00013080 sec  
 l1 30  
 SCALEF 6  
 STICNT 128

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 p5 20.01 usec  
 P6 30.00 usec  
 p7 60.00 usec  
 P17 2500.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL10 5.00 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 NDO 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FhMODE States-TPPI

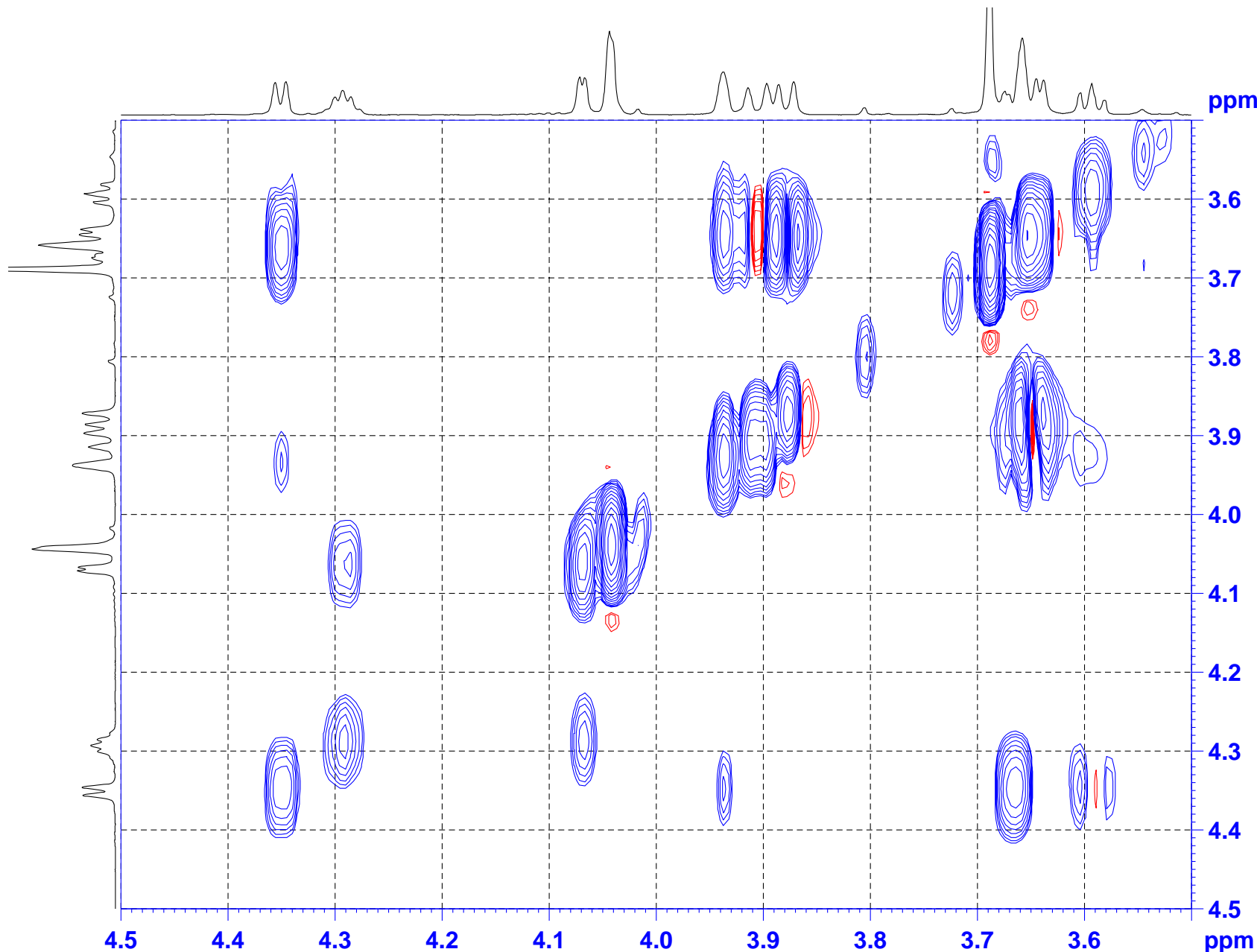
F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.102.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
IN0 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

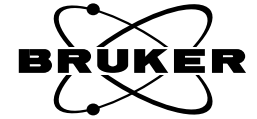
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

ppm

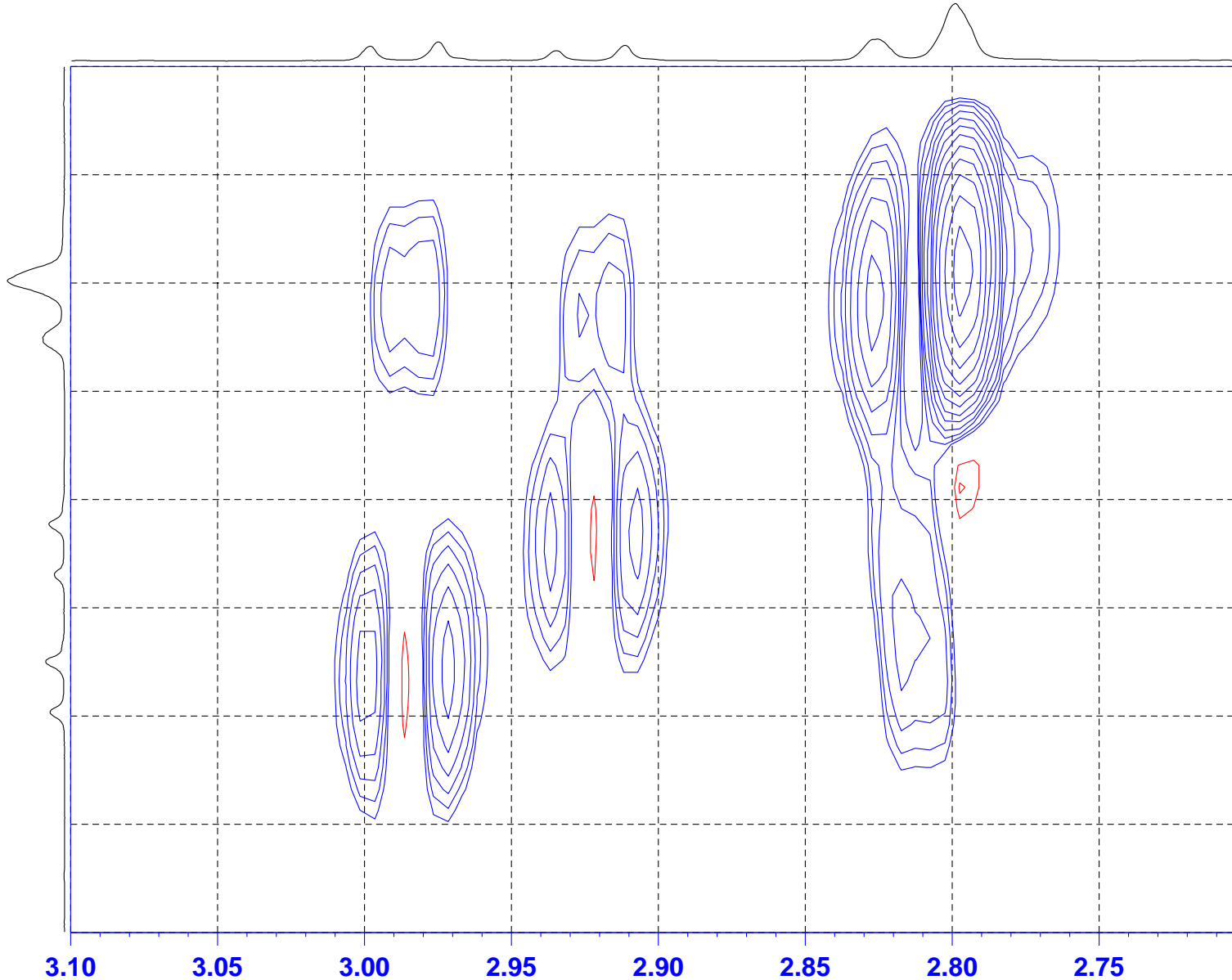
F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
INO 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

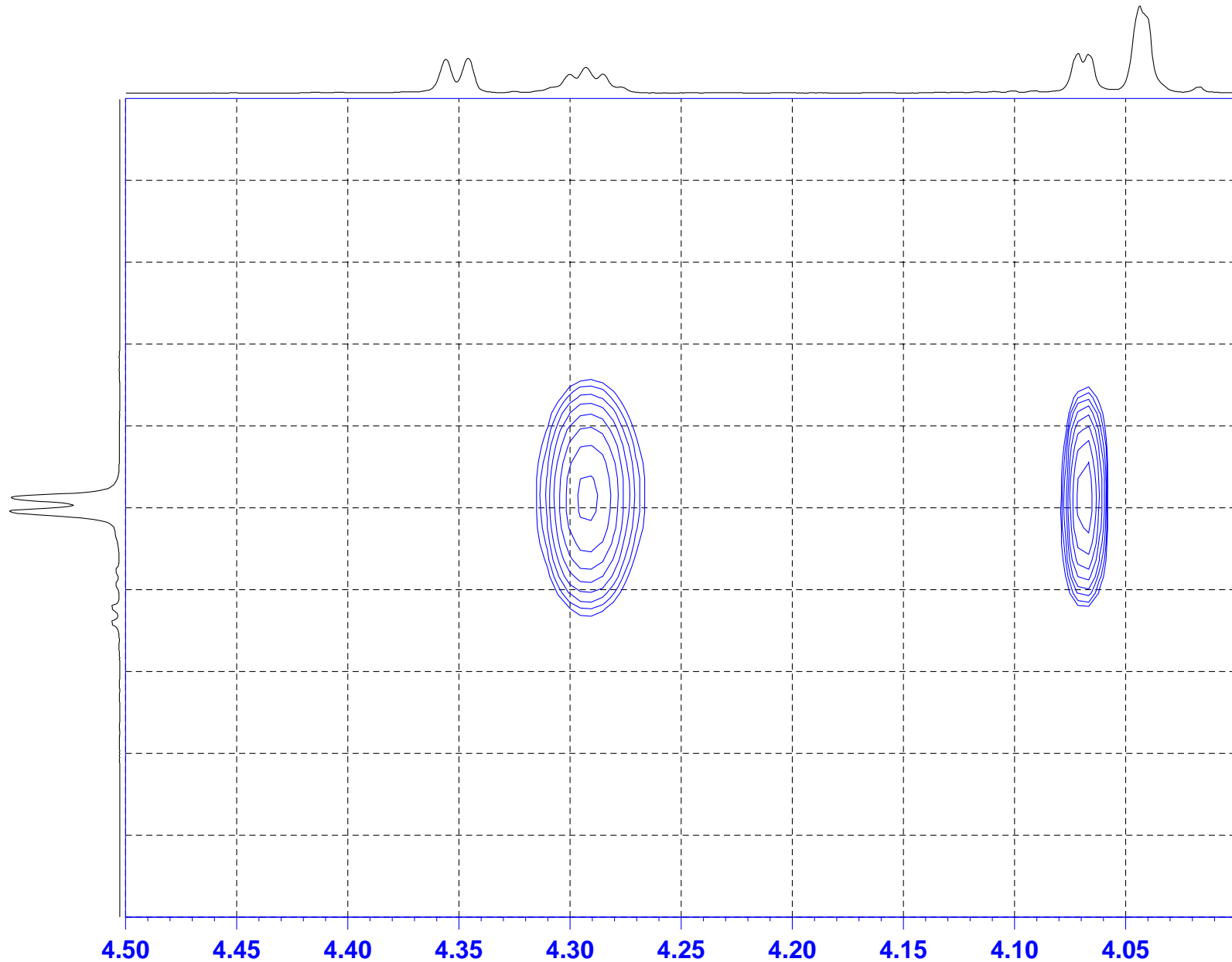
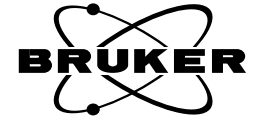
F1 - Acquisition parameters  
NDO 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
INO 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

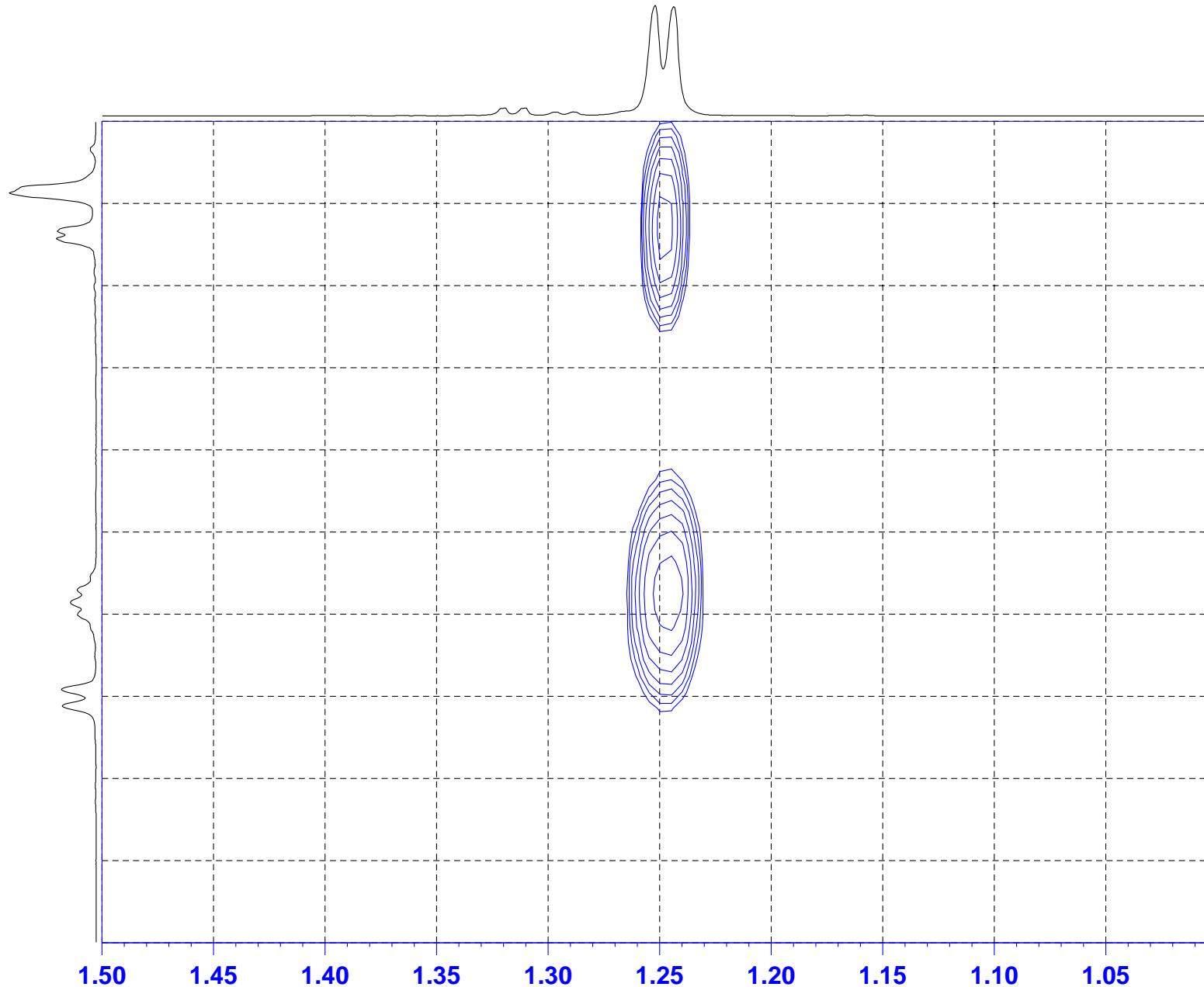
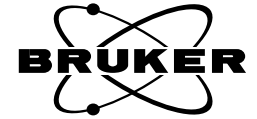
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
NDO 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
IN0 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

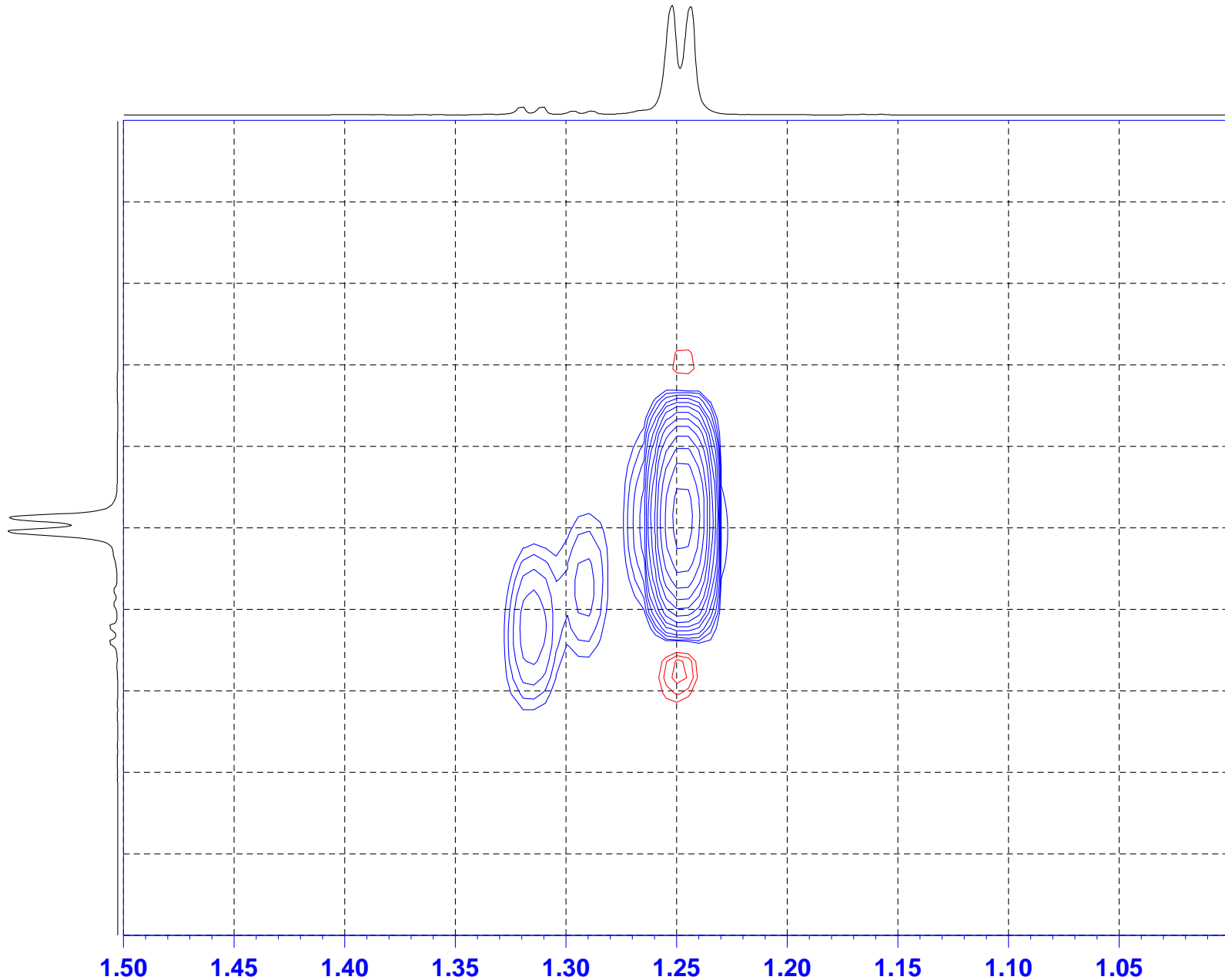
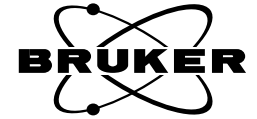
F1 - Acquisition parameters  
NDO 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

4.05  
4.10  
4.15  
4.20  
4.25  
4.30  
4.35  
4.40  
4.45  
4.50 ppm

sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
IN0 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

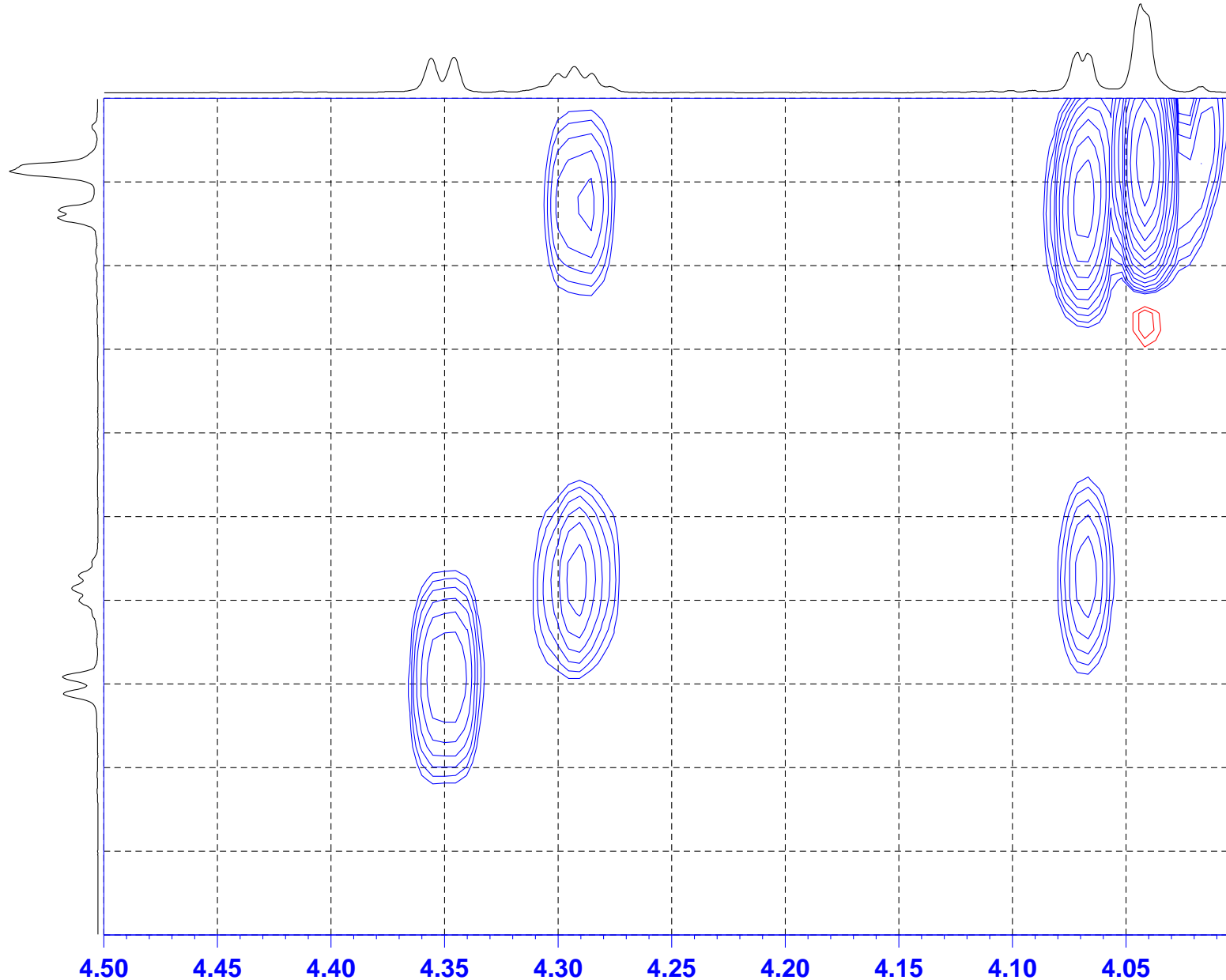
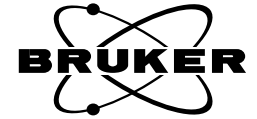
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
NDO 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.102.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H TOCSY with presat. (mlevphpr):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 102  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 17.21  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG mlevphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 512  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
D1 2.00000000 sec  
D9 0.06000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
FACTOR1 5  
IN0 0.00013080 sec  
l1 30  
SCALEF 6  
STICNT 128

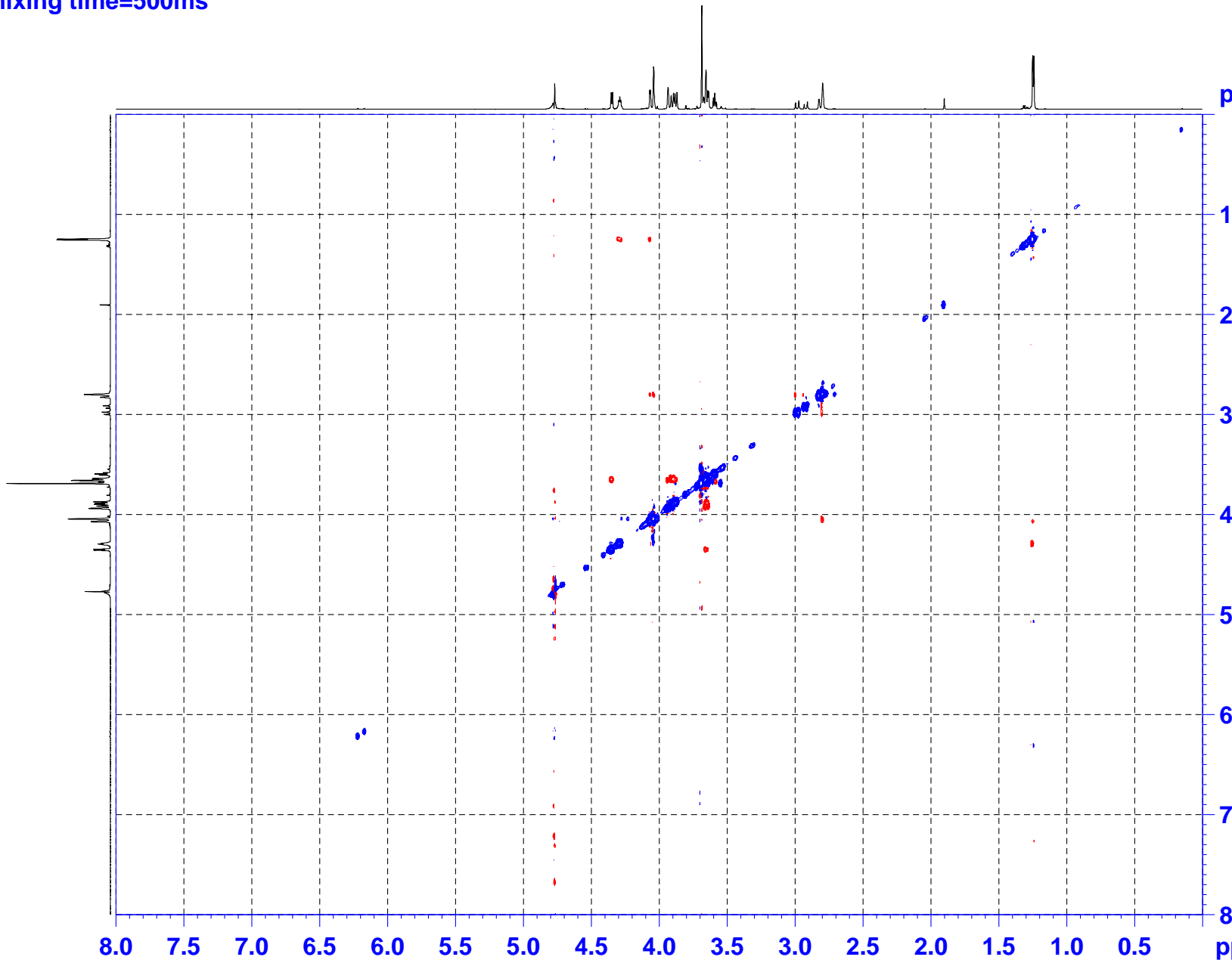
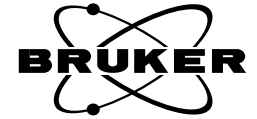
===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p5 20.01 usec  
P6 30.00 usec  
p7 60.00 usec  
P17 2500.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL10 5.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
NDO 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

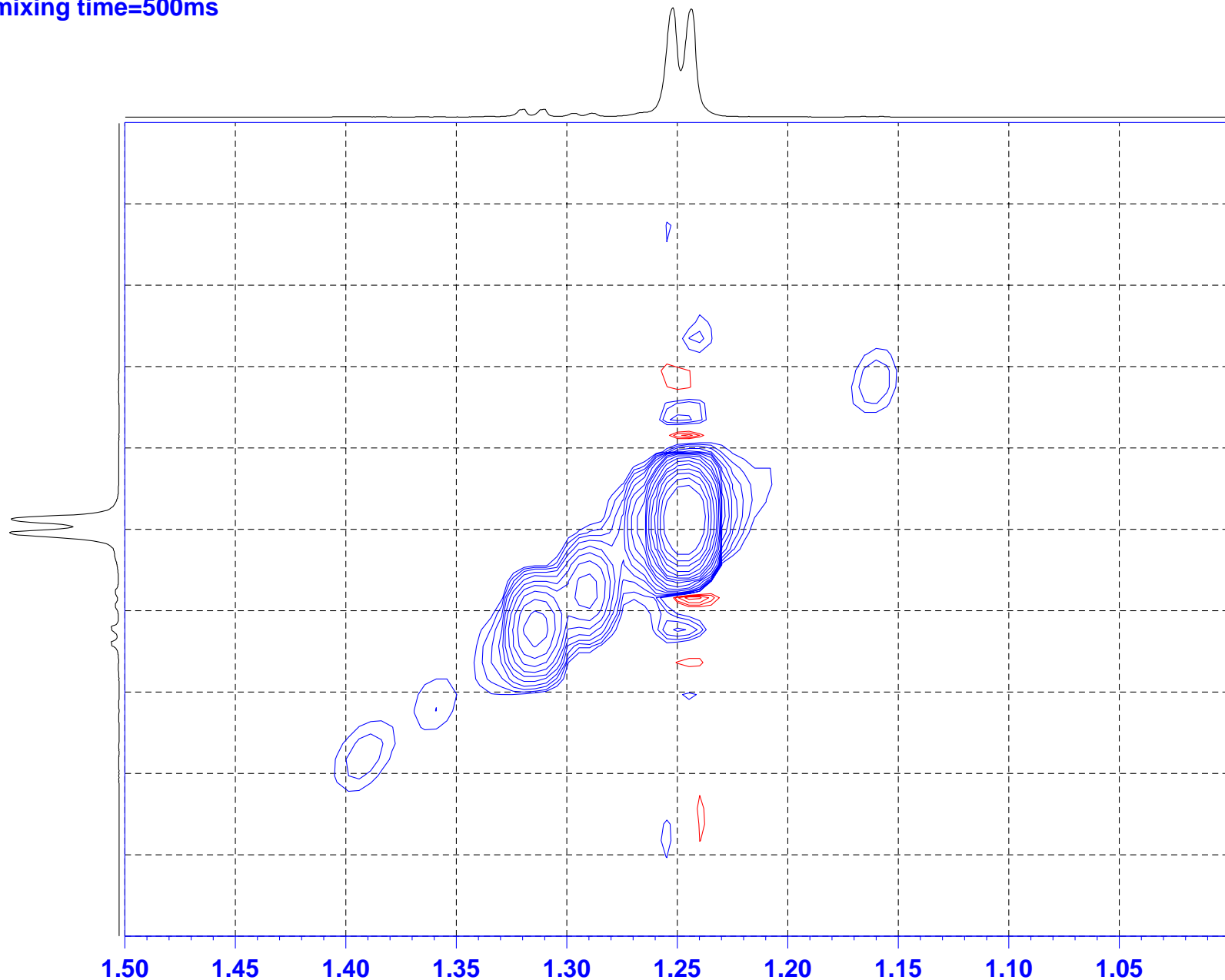
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FnmODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 IN0 0.00013080 sec  
 ST1CNT 128

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

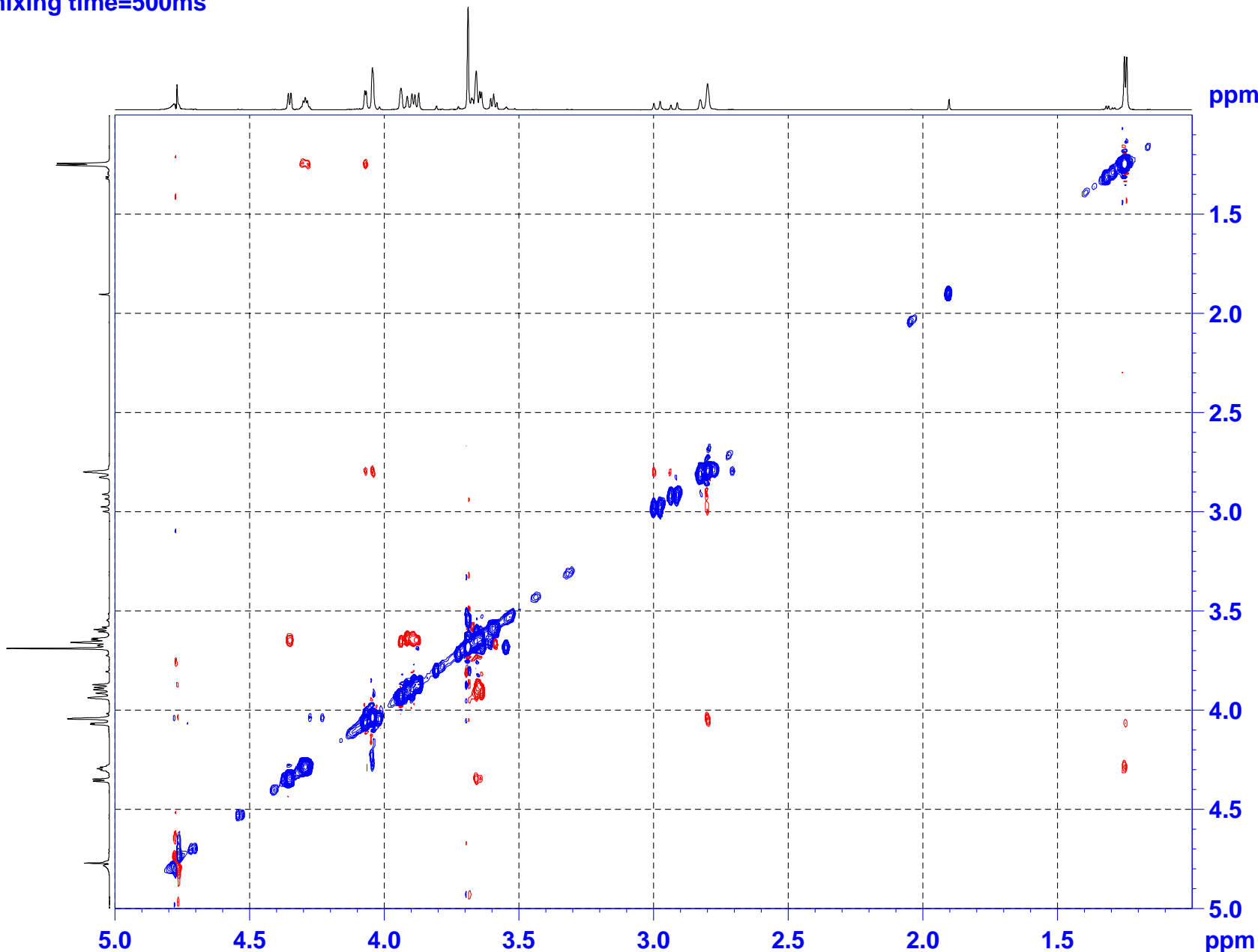
F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FnmODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.103.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H NOESY with presat. (noesyphpr):CPTCI-Z  
mixing time=500ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 103  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 18.38  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG noesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 128  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
D8 0.50000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

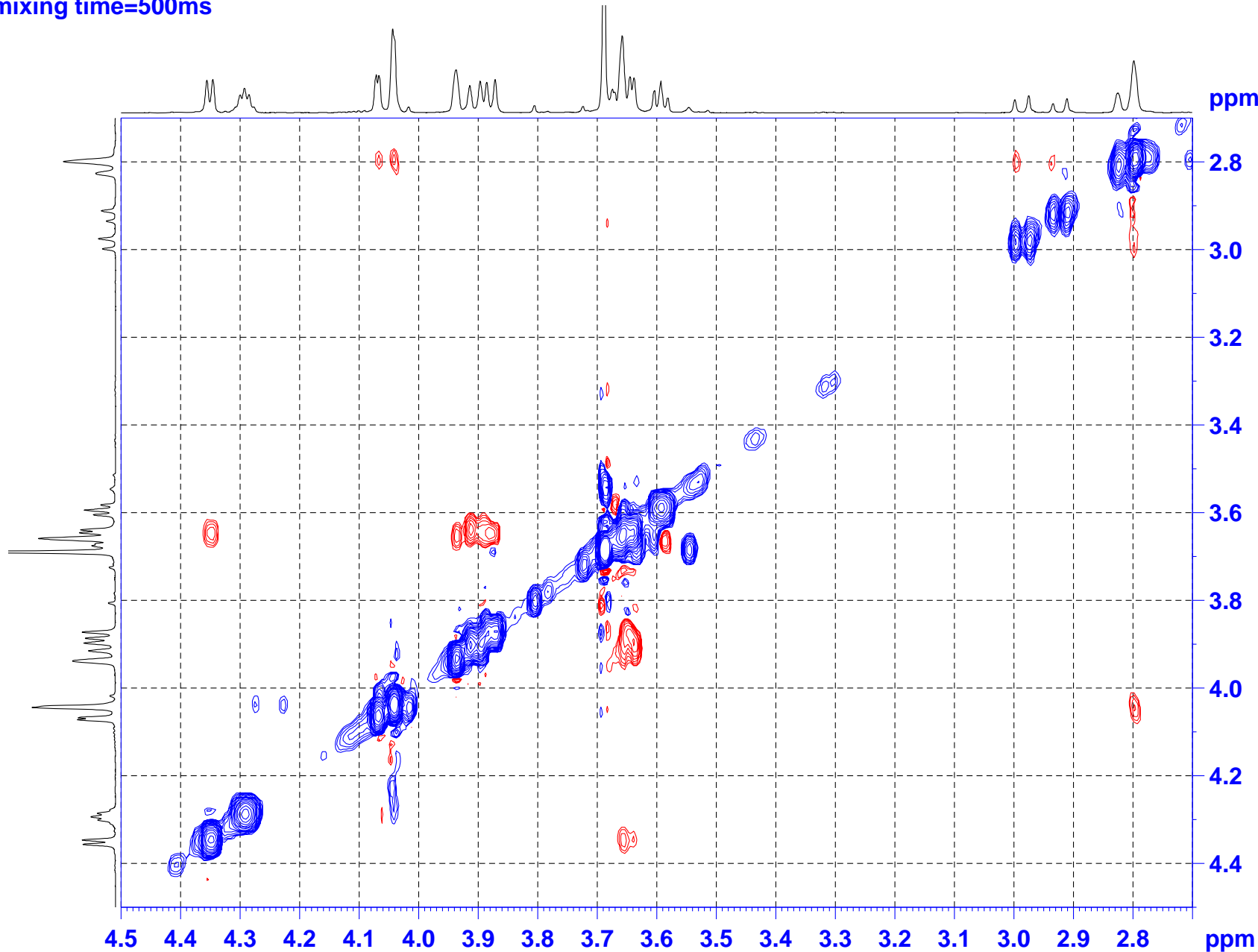
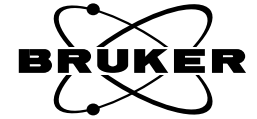
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SF01 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SF01 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

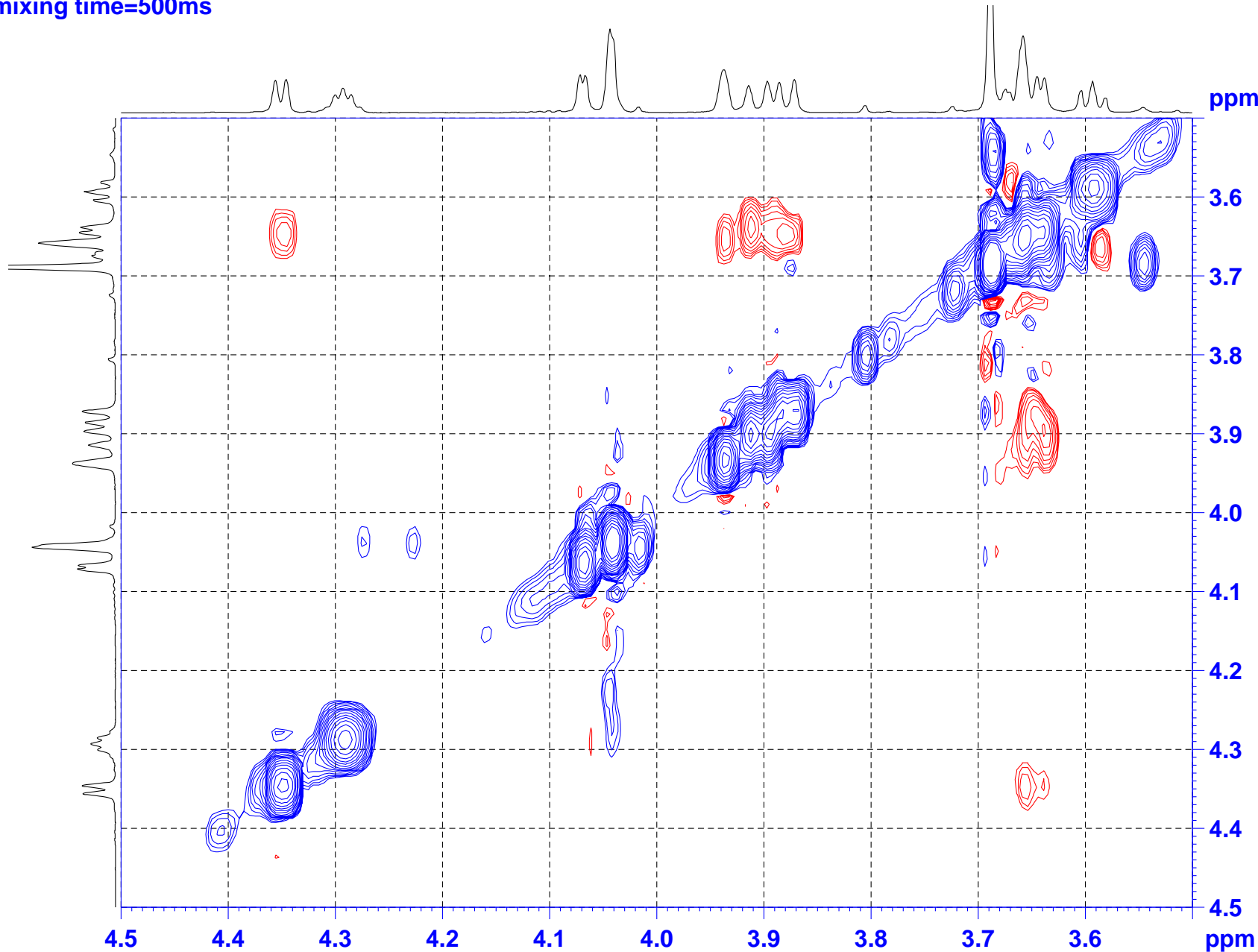
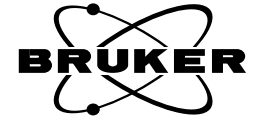
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FnmODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

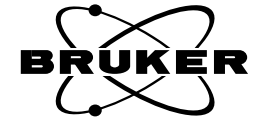
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FnmODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

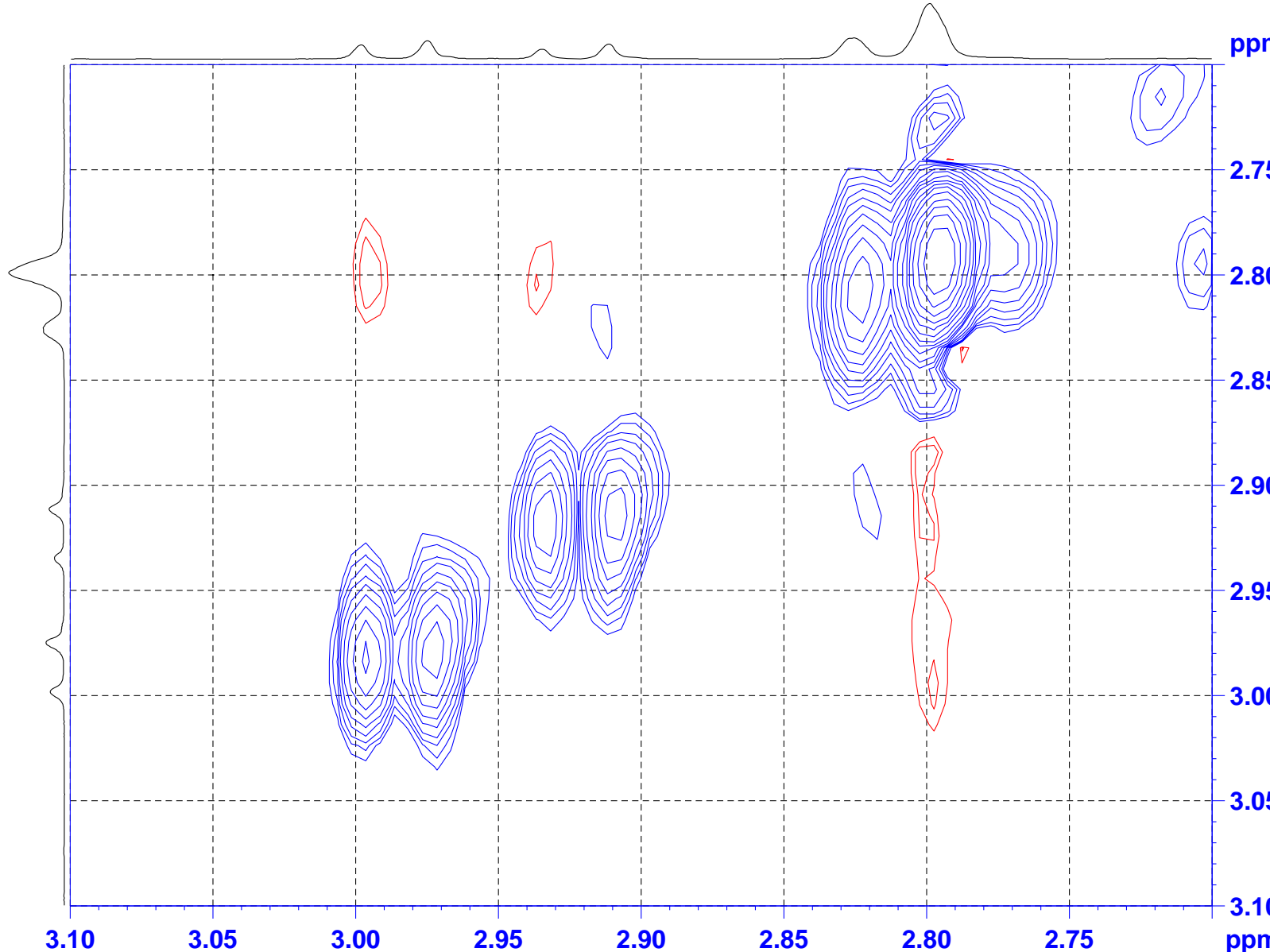
F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

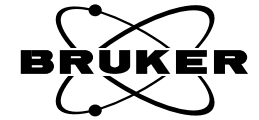
F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FnmODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.103.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H NOESY with presat. (noesyphpr):CPTCI-Z  
mixing time=500ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 103  
PROCNO 1

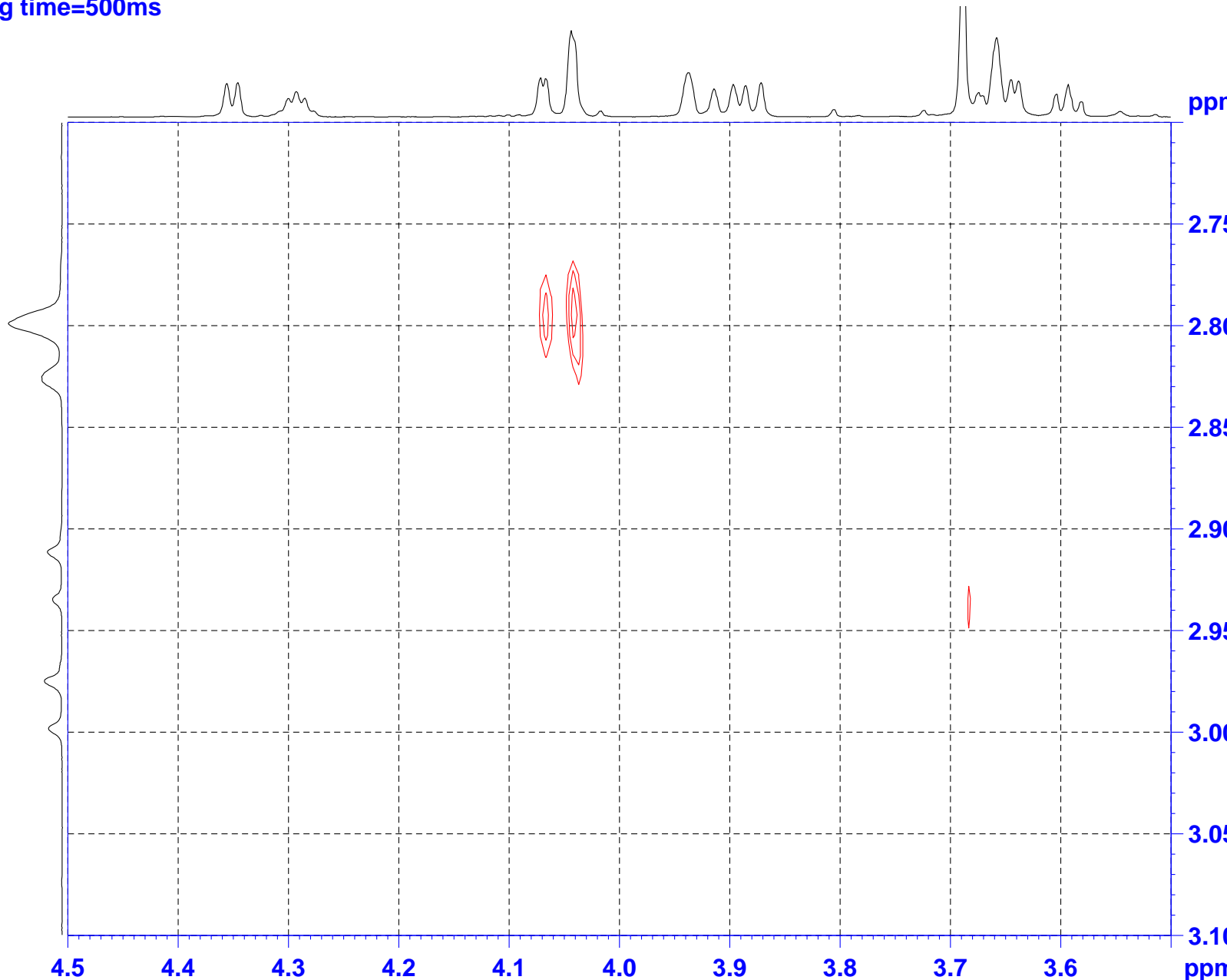
F2 - Acquisition Parameters  
Date\_ 20101025  
Time\_ 18.38  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG noesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 128  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
D8 0.50000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

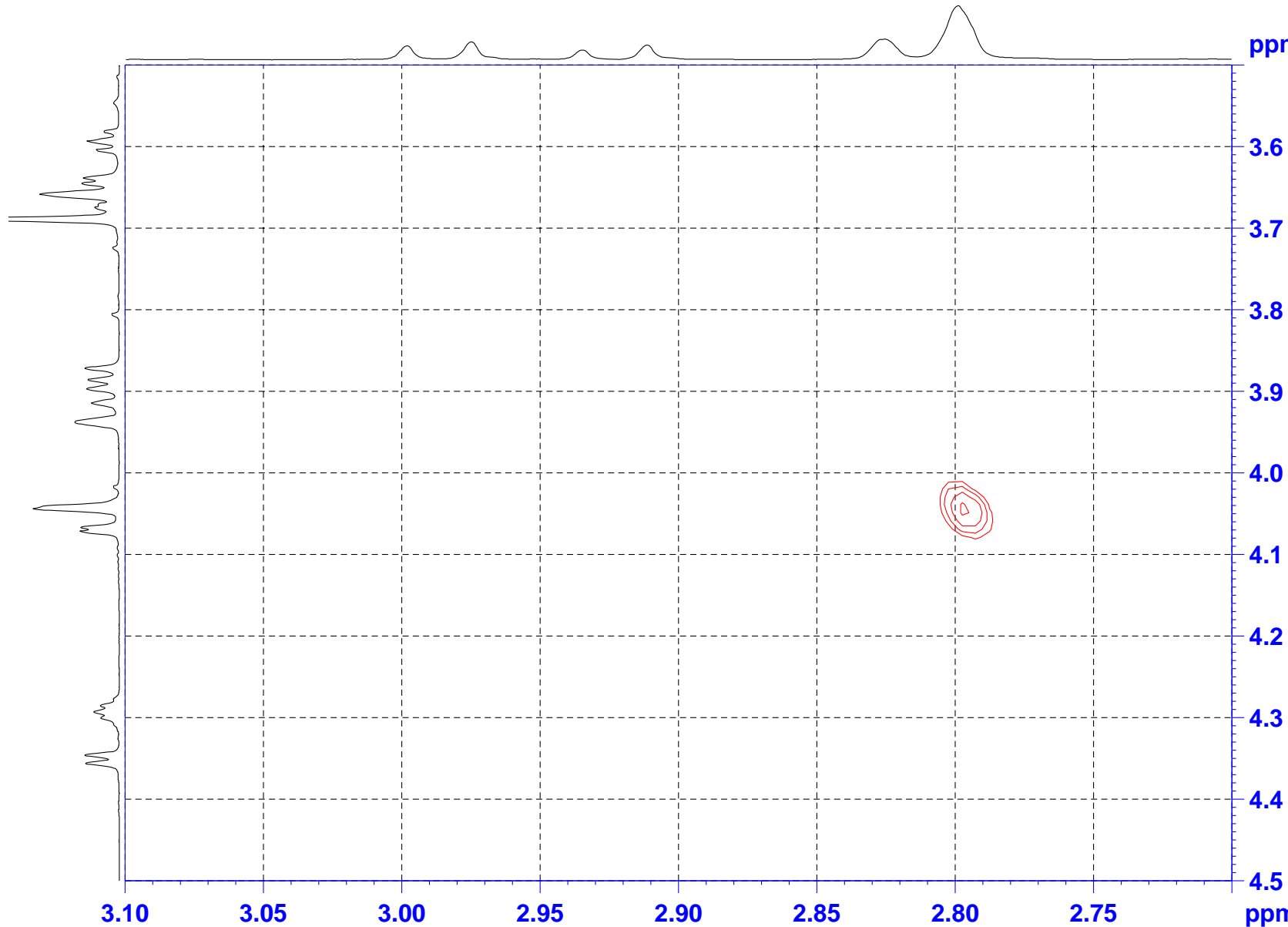
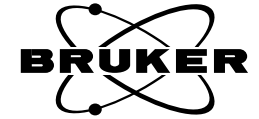
F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.103.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H NOESY with presat. (noesyphpr):CPTCI-Z  
mixing time=500ms



ppm

3.6

3.7

3.8

3.9

4.0

4.1

4.2

4.3

4.4

4.5

ppm

Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 103  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time\_ 18.38  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG noesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 128  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
D8 0.50000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

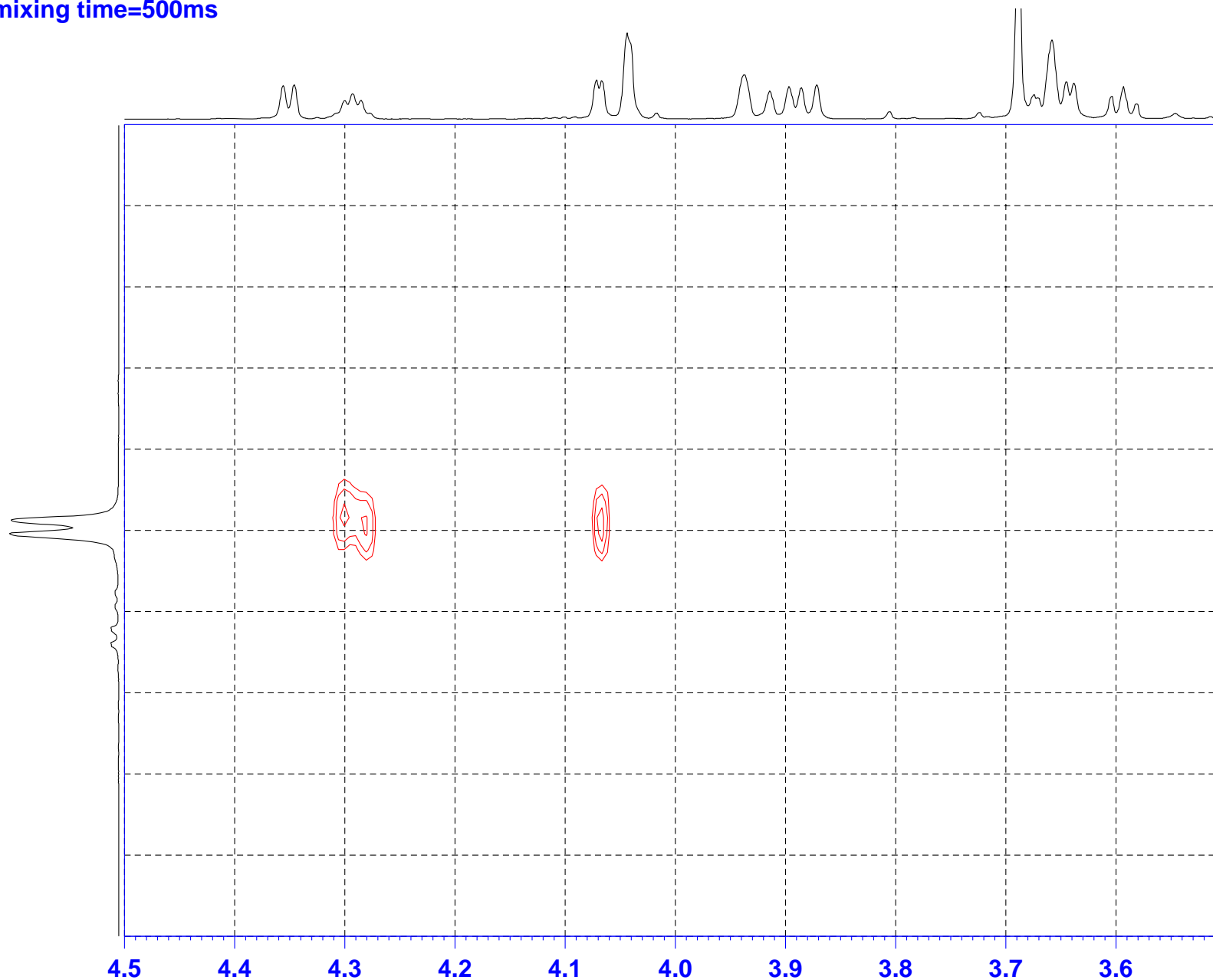
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.103.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H NOESY with presat. (noesyphpr):CPTCI-Z  
mixing time=500ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 103  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 18.38  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG noesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 128  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005012 sec  
D1 2.00000000 sec  
D8 0.50000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

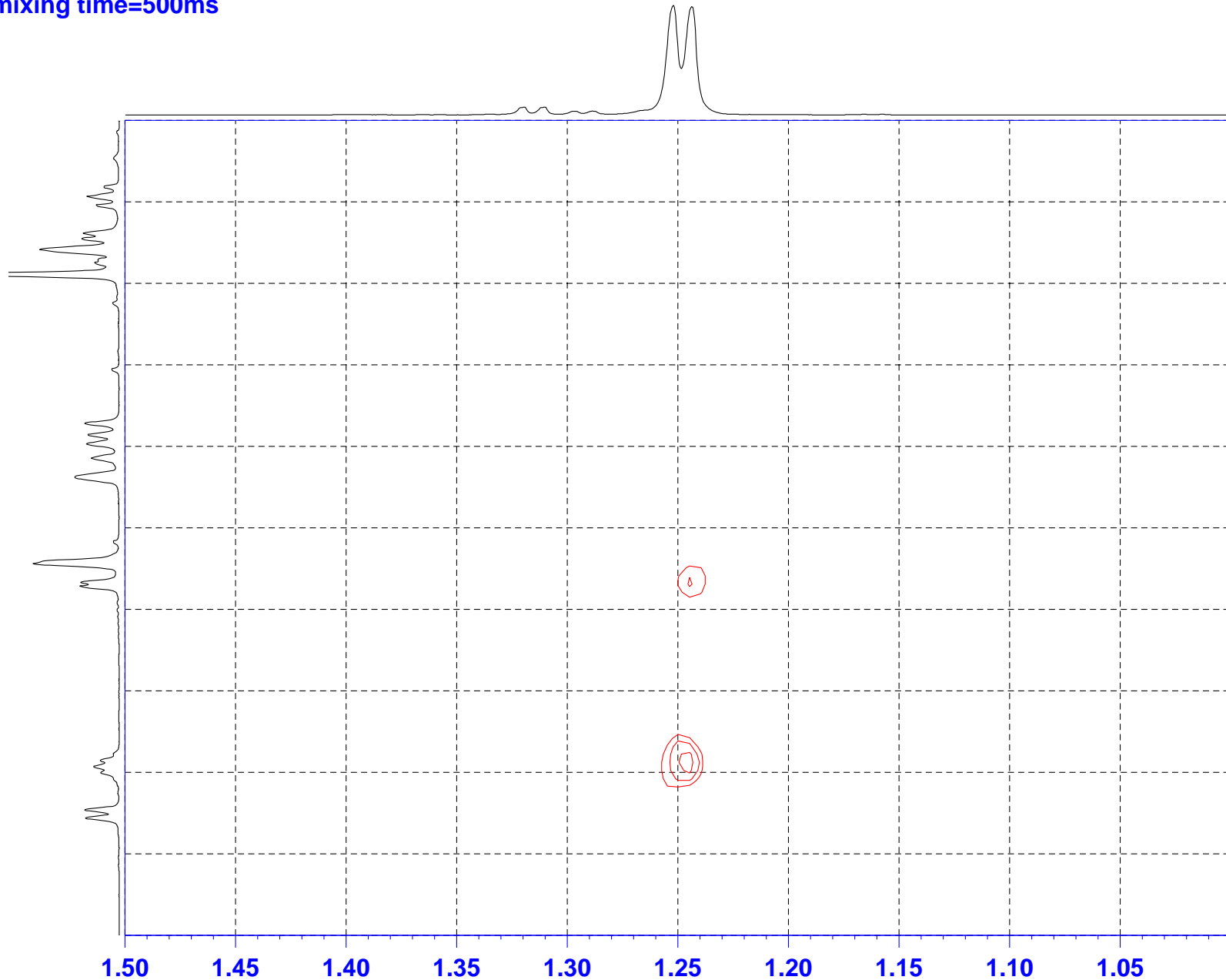
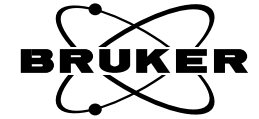
===== CHANNEL f1 =====  
1.25 NUC1 1H  
P1 12.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
1.30 ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
1.35 SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
1.40 SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
1.45 SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
1.50 SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.103.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H NOESY with presat. (noesyphpr):CPTCI-Z  
 mixing time=500ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 103  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 18.38  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG noesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 128  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005012 sec  
 D1 2.00000000 sec  
 D8 0.50000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

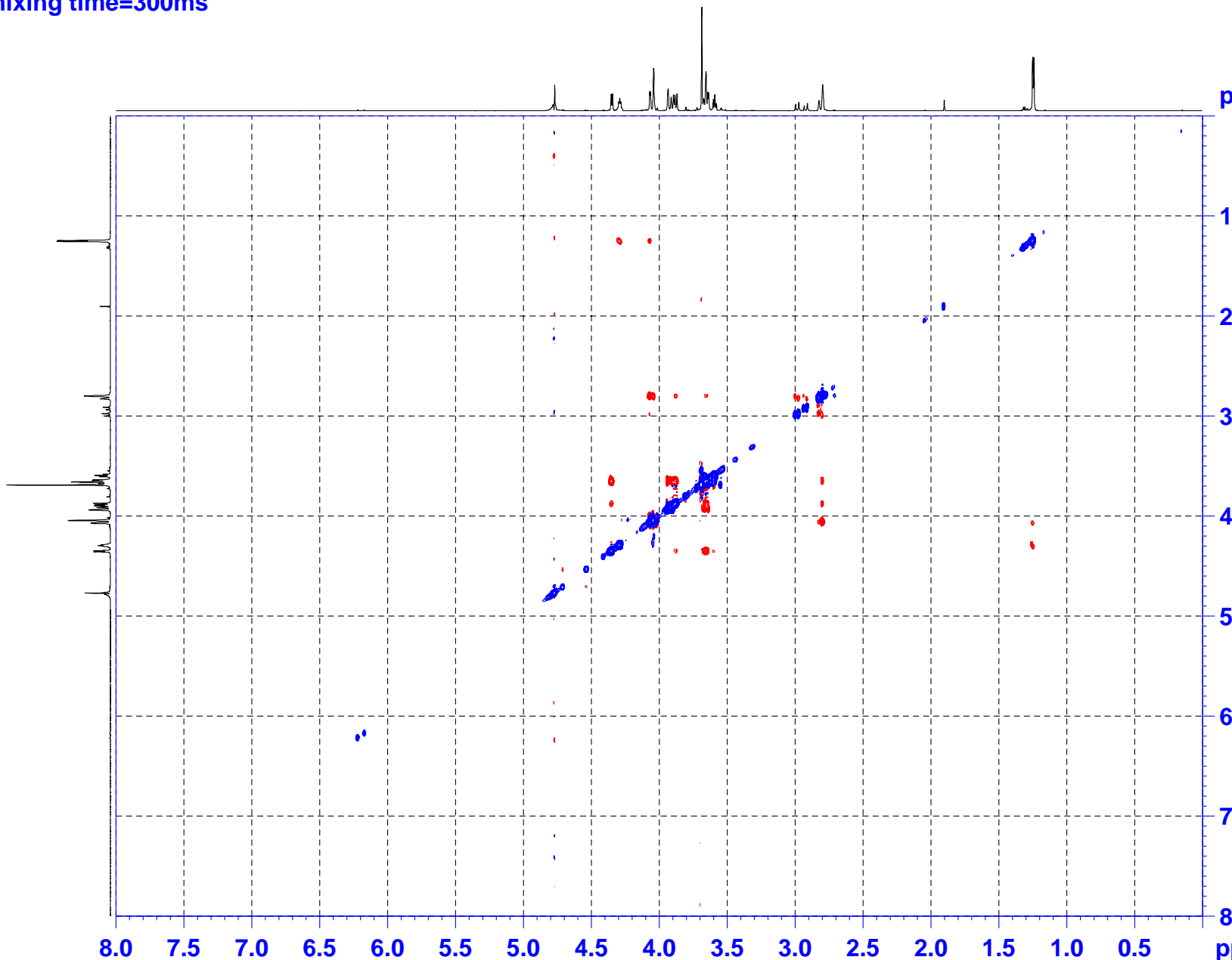
F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FmMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.104.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H ROESY with presat. (roesyphpr):CPTCI-Z  
 mixing time=300ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 104  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 20.10  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG roesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 4096  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 d1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

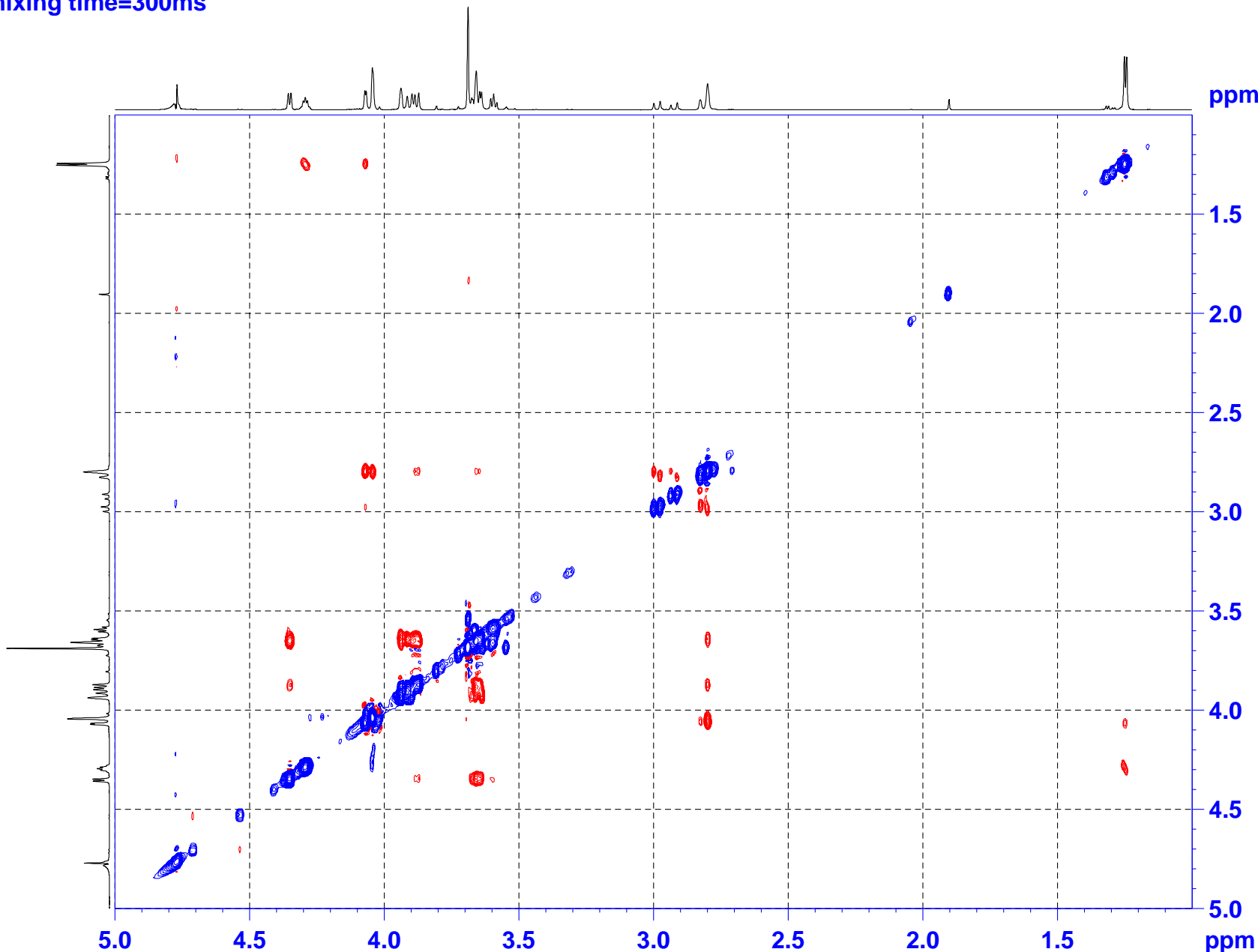
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P15 300000.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL11 16.45 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FmMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

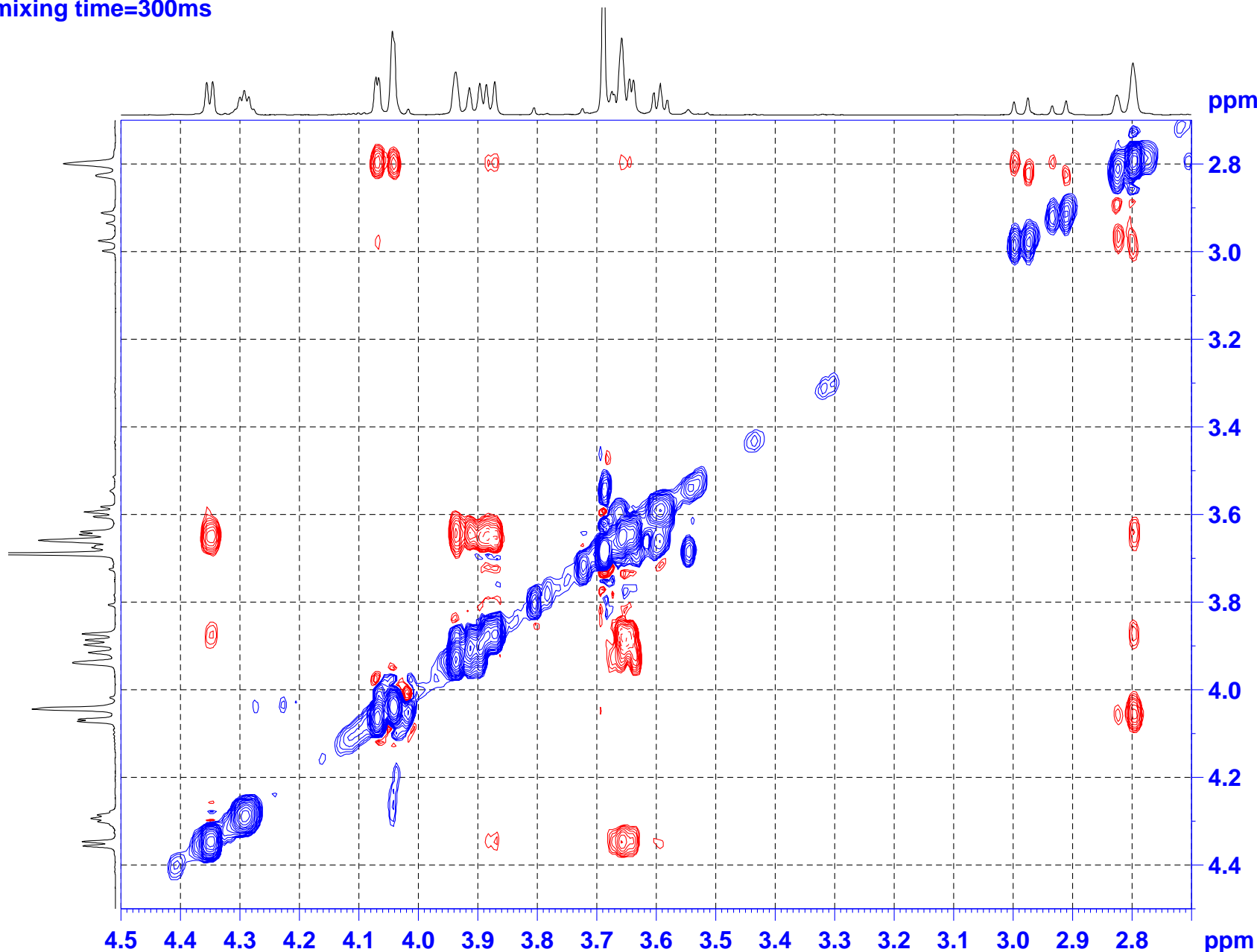
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.104.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H ROESY with presat. (roesyphpr):CPTCI-Z  
 mixing time=300ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 104  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time\_ 20.10  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG roesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 4096  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 d1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

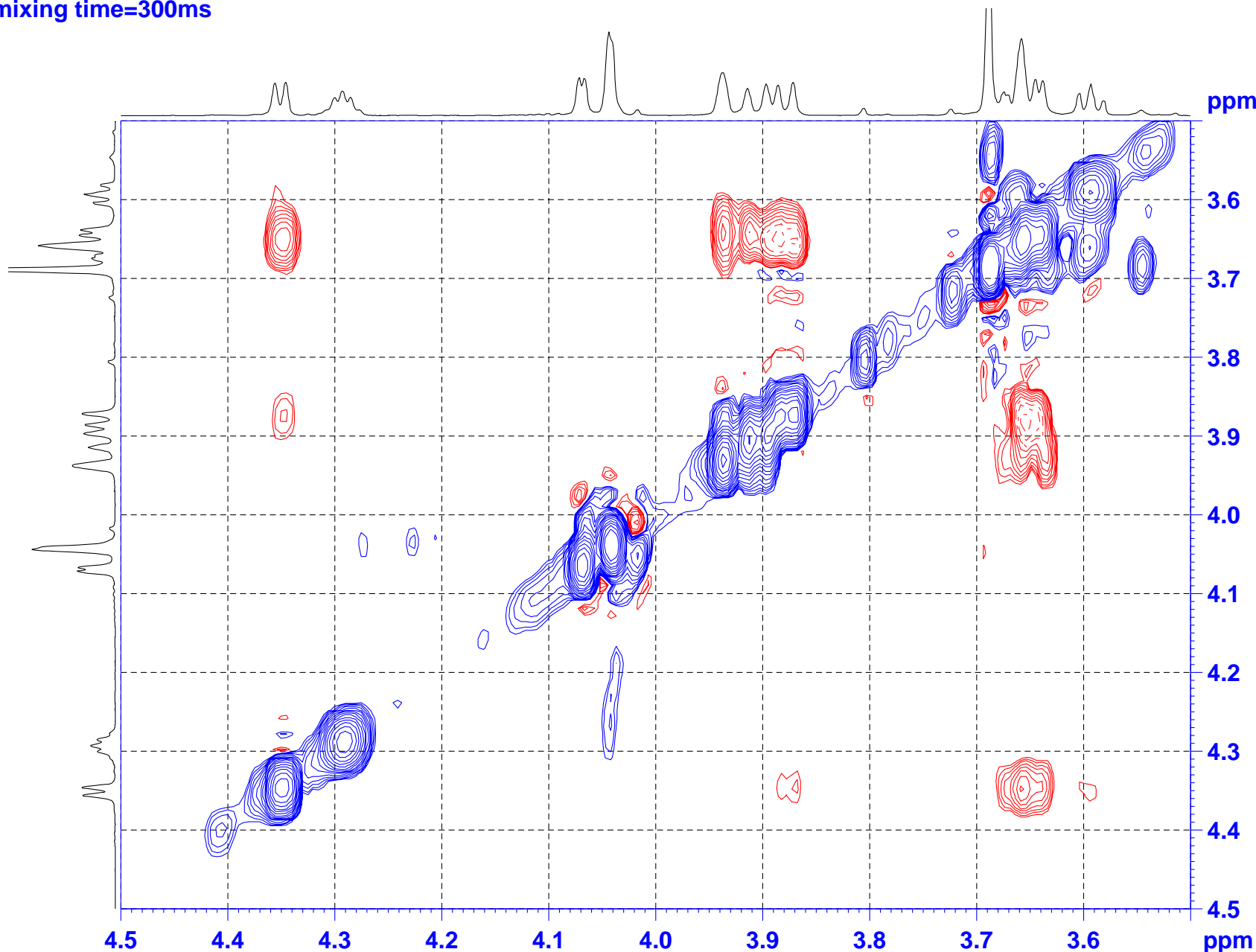
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P15 300000.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL11 16.45 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FmMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0

sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



ppm

3.6

3.7

3.8

3.9

4.0

4.1

4.2

4.3

4.4

4.5

ppm

Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FmMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.104.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H ROESY with presat. (roesyphpr):CPTCI-Z  
 mixing time=300ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 104  
 PROCNO 1

ppm

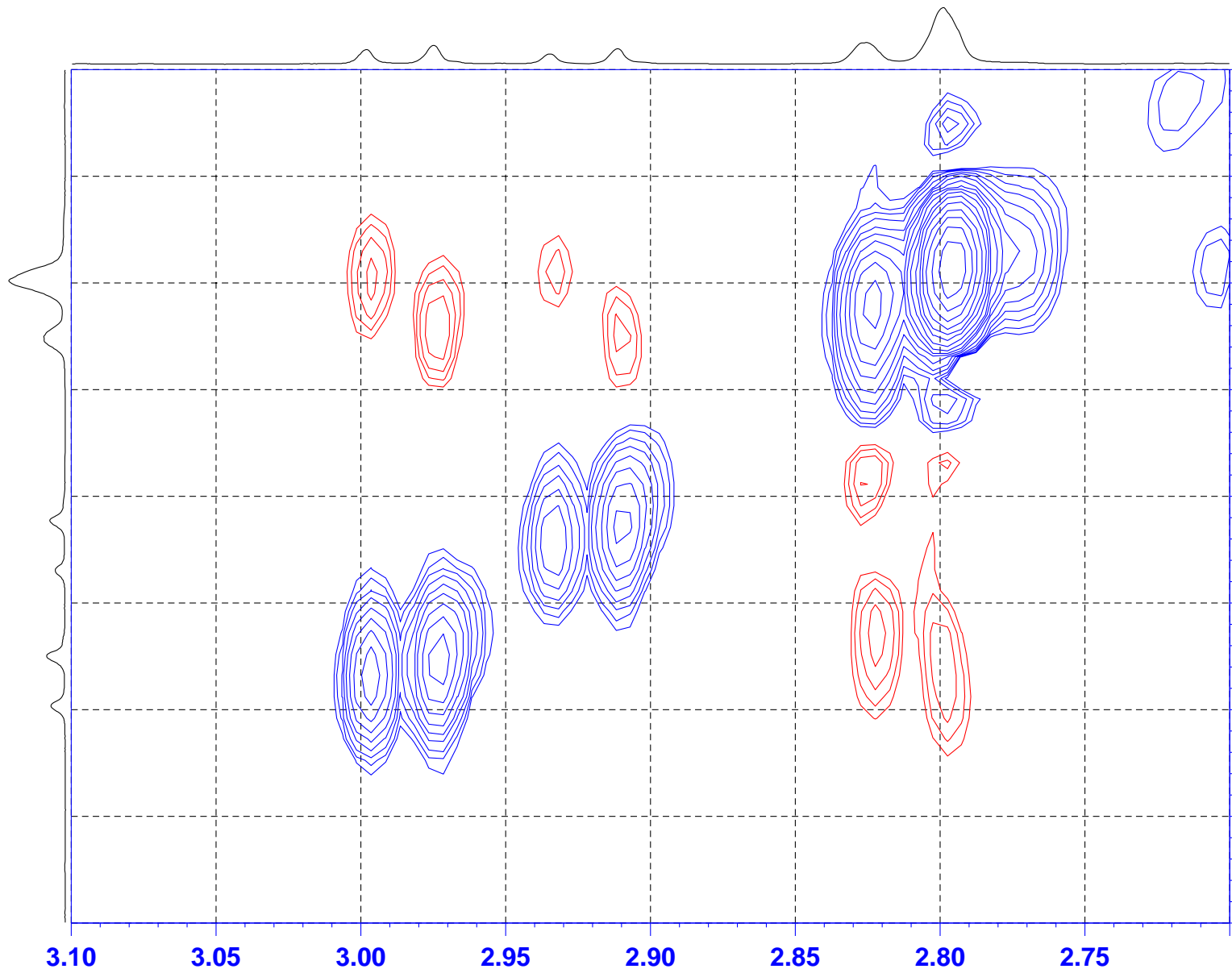
F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 20.10  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG roesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 4096  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 d1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P15 300000.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL11 16.45 dB  
 SFO1 750.1335267 MHz

F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FmMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



3.10

3.05

3.00

2.95

2.90

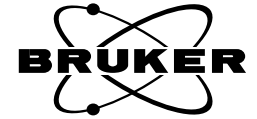
2.85

2.80

2.75

ppm

sakamoto750\_01.104.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H ROESY with presat. (roesyphpr):CPTCI-Z  
 mixing time=300ms



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 104  
 PROCNO 1

ppm

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 20.10  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG roesyphpr  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 4096  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 d0 0.00005376 sec  
 d1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec  
 d13 0.00000400 sec  
 INO 0.00013080 sec  
 ST1CNT 128

2.75

2.80

2.85

2.90

2.95

3.00

3.05

3.10

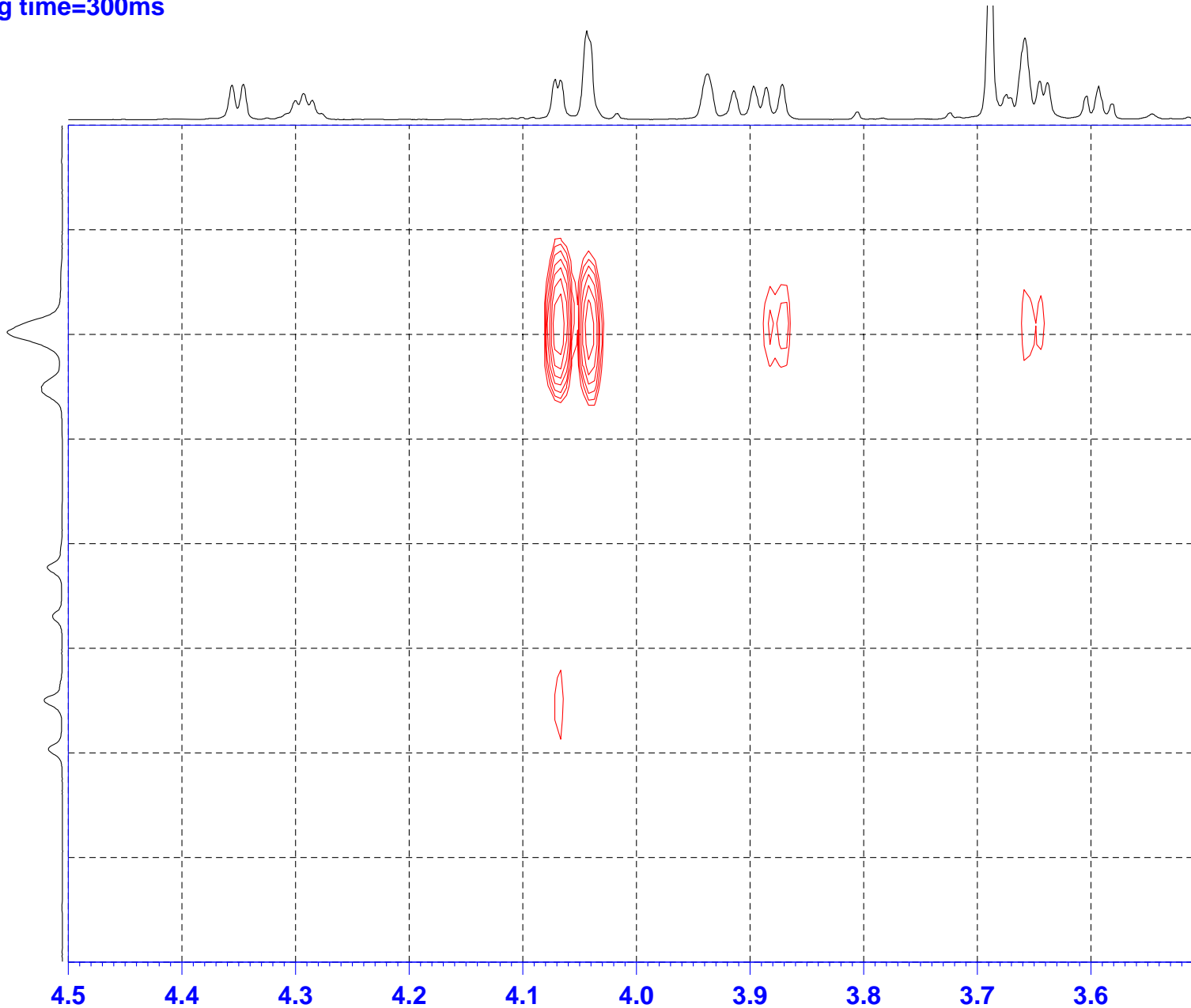
ppm

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P15 300000.00 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 PL11 16.45 dB  
 SFO1 750.1335267 MHz

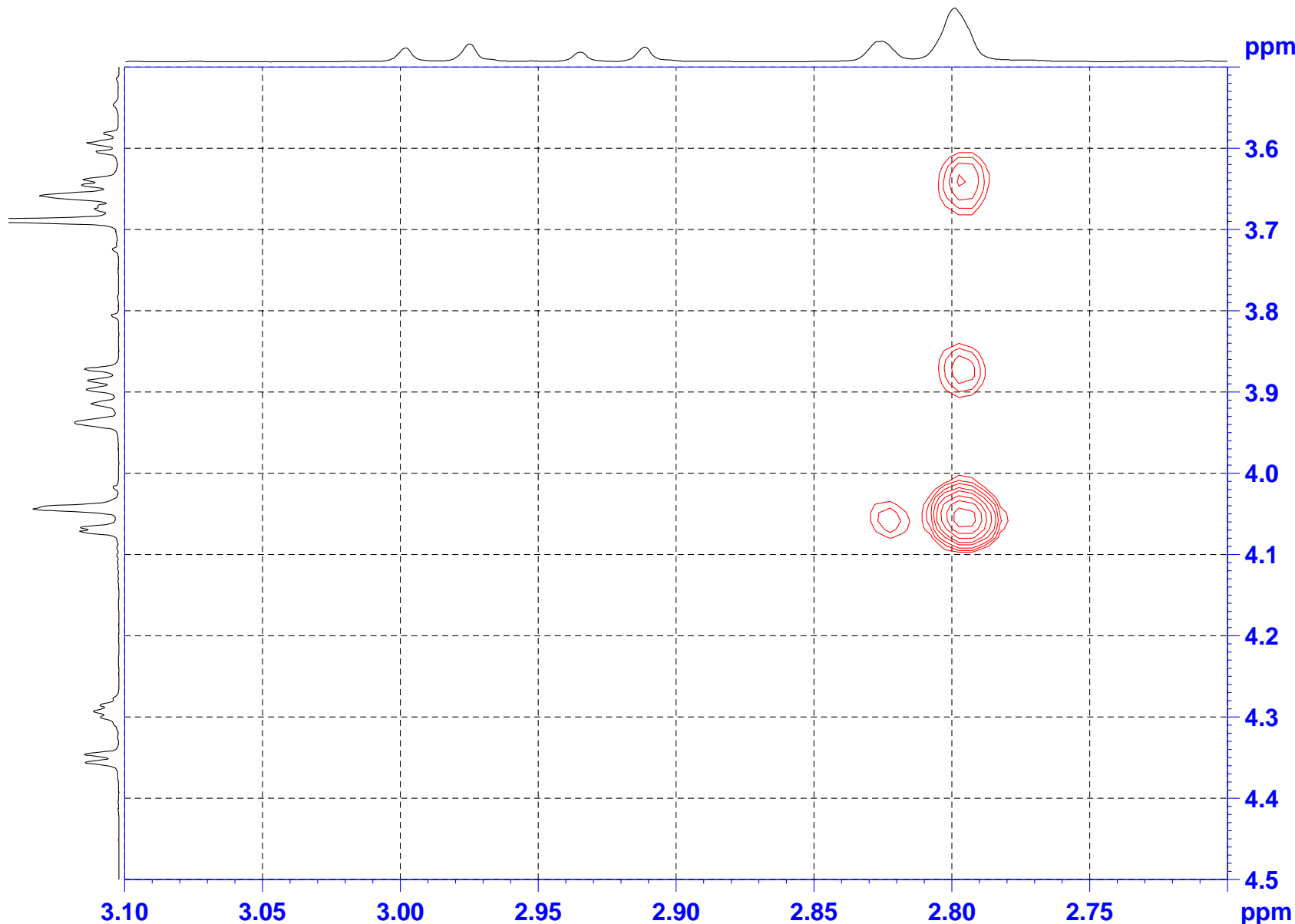
F1 - Acquisition parameters  
 ND0 1  
 TD 256  
 SFO1 750.1335 MHz  
 FIDRES 29.864296 Hz  
 SW 10.192 ppm  
 FmMODE States-TPPI

F2 - Processing parameters  
 SI 2048  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

F1 - Processing parameters  
 SI 1024  
 MC2 States-TPPI  
 SF 750.1299484 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

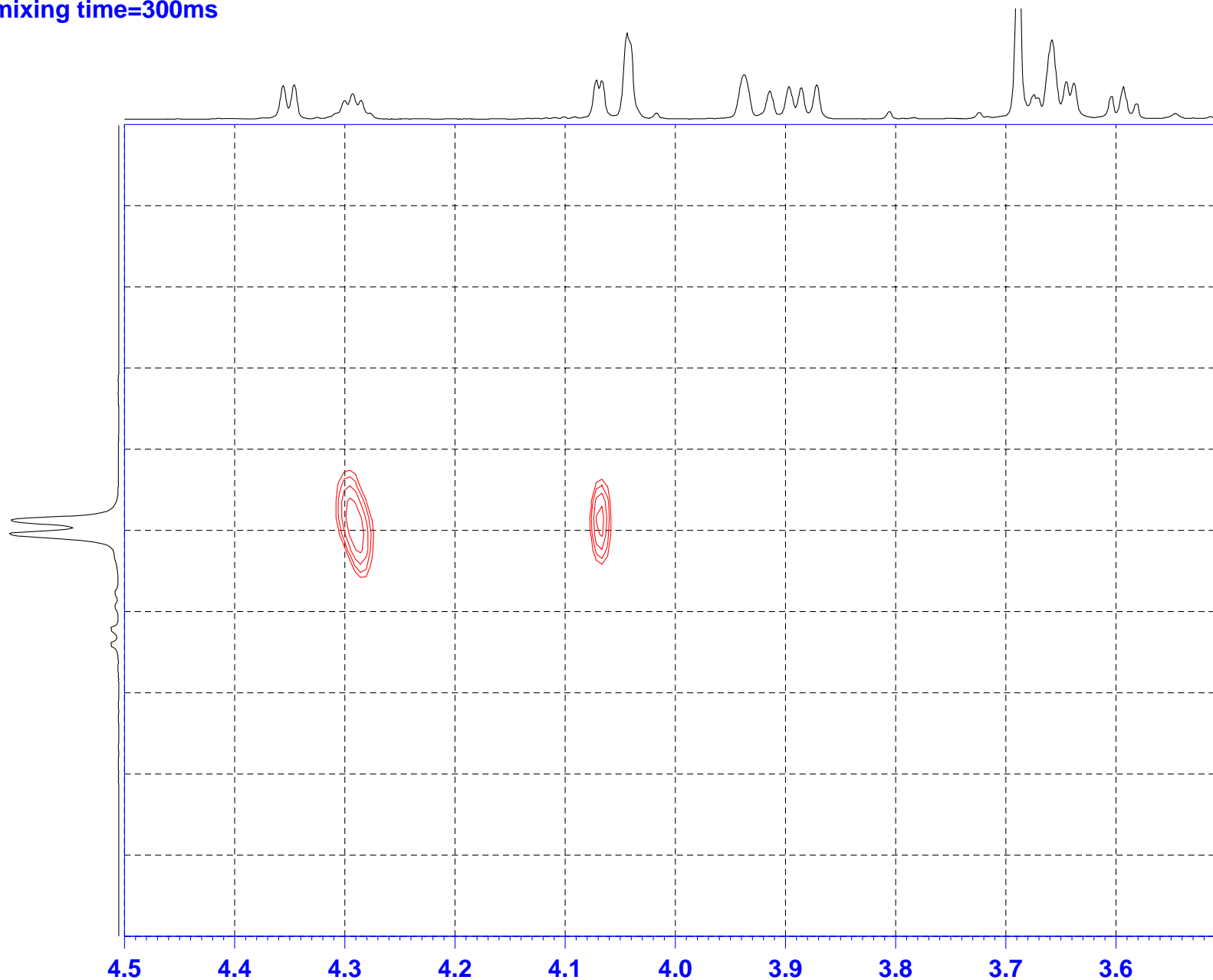
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FnMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

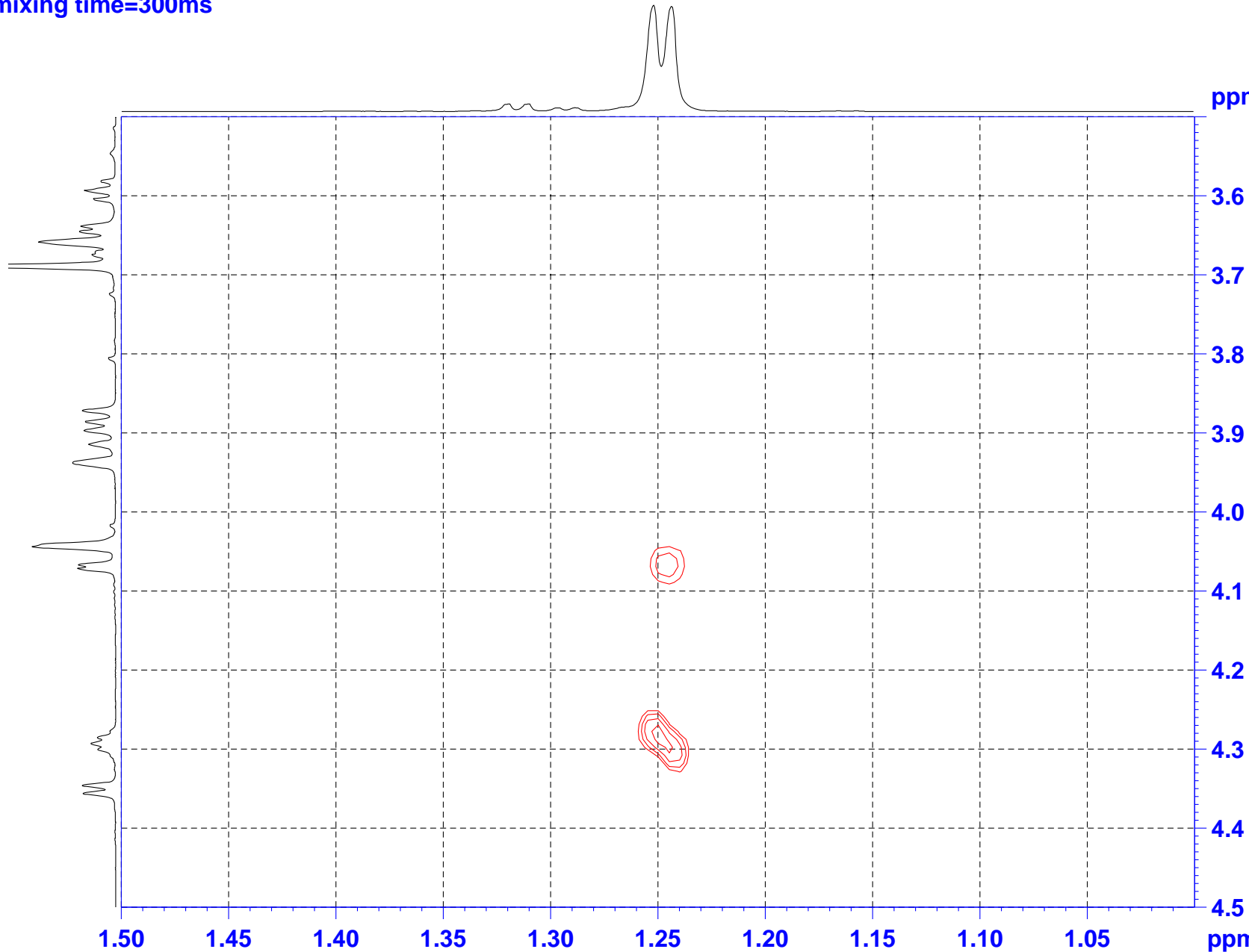
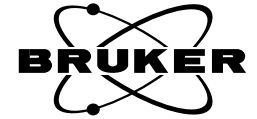
F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FmMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

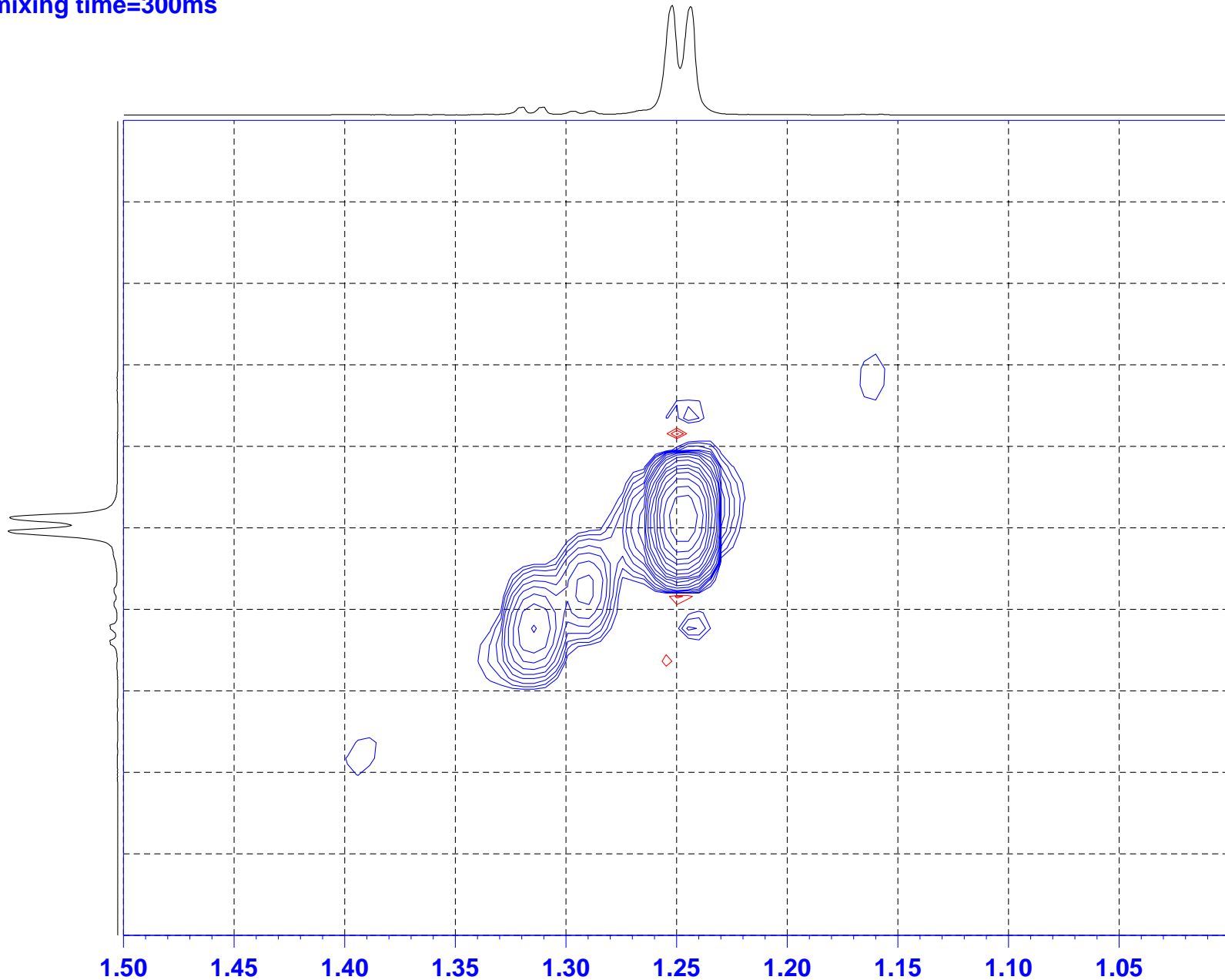
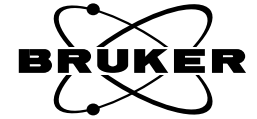
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FmMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.104.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H ROESY with presat. (roesyphpr):CPTCI-Z  
mixing time=300ms



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 104  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 20.10  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG roesyphpr  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 4096  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
d0 0.00005376 sec  
d1 2.00000000 sec  
d11 0.03000000 sec  
d12 0.00002000 sec  
d13 0.00000400 sec  
INO 0.00013080 sec  
ST1CNT 128

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P15 300000.00 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
PL11 16.45 dB  
SFO1 750.1335267 MHz

F1 - Acquisition parameters  
ND0 1  
TD 256  
SFO1 750.1335 MHz  
FIDRES 29.864296 Hz  
SW 10.192 ppm  
FmMODE States-TPPI

F2 - Processing parameters  
SI 2048  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.00

F1 - Processing parameters  
SI 1024  
MC2 States-TPPI  
SF 750.1299484 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.105.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K

$1H\{^{13}C\}$  HSQC (hsqcetgpsisp.2):CPTCI-Z

p28:0.1us

sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)

sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)

Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)

CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 105  
PROCNO 1

F2 - Acquisition Parameter:  
Date\_ 2011025  
Time 21.35  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hsqcetgpsisp.2  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST2 145.0000000  
CNST17 -0.5000000  
d0 0.0000300 sec  
D1 1.5000000 sec  
d4 0.00172414 sec  
d11 0.03000000 sec  
D16 0.00020000 sec  
D24 0.00086207 sec  
DELTA 0.00122600 sec  
DELTA1 0.00120800 sec  
DELTA2 0.00147014 sec  
DELTA3 0.00135807 sec  
IN0 0.00001600 sec  
STICNT 128

ppm

20

40

60

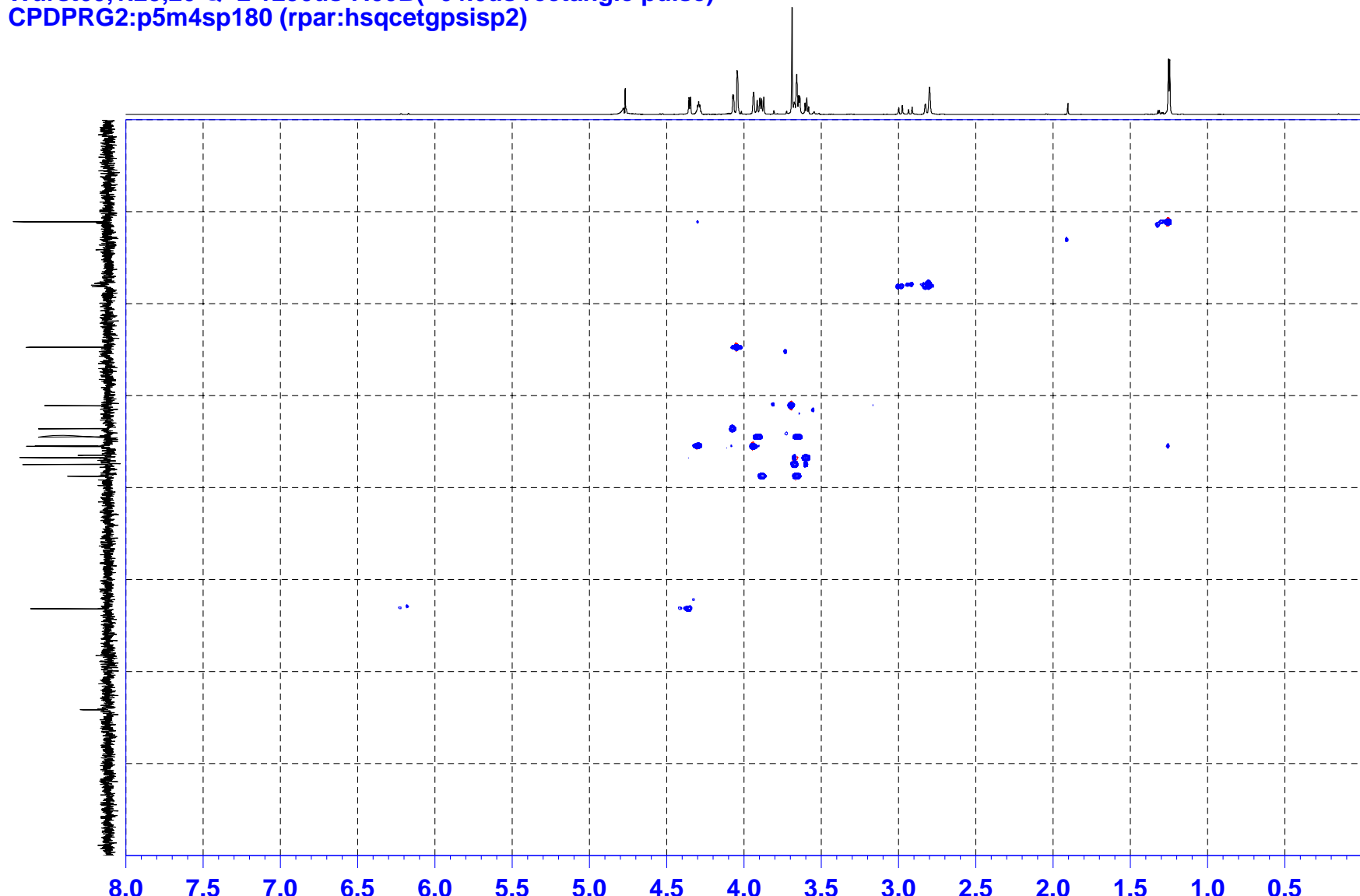
80

100

120

140

ppm



==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P2 24.00 usec  
P28 0.10 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

==== CHANNEL f2 =====  
CPDPRG2 p5m4sp180  
NUC2 13C  
P3 15.20 usec  
P14 500.00 usec  
P24 2000.00 usec  
PCPD2 1250.00 usec  
PL0 120.00 dB  
PL2 -4.90 dB  
PL12 7.20 dB  
SFO2 188.6344855 MHz  
SP3 -1.65 dB  
SP7 -1.65 dB  
SPNAM3 Crp80,0.5,20.1  
SPNAM7 Crp80comp.4  
SPNAM15 Wurst60,1.25,20  
SPOAL3 0.500  
SPOAL7 0.500  
SPOAL15 0.500  
SPOFFS3 0.00 Hz  
SPOFFS7 0.00 Hz  
SPOFFS15 0.00 Hz

==== GRADIENT CHANNEL ===  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 80.00 %  
GPZ2 20.10 %  
P16 1000.00 usec

F1 - Acquisition parameter:  
ND 256  
TD 256  
SFO1 188.6345 MHz  
FIDRES 122.070312 Hz  
SW 165.664 ppt  
FMODE Echo-Antiecho

F2 - Processing parameters  
SI 1024  
SF 750.1299425 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 echo-antiecho  
SF 188.6198149 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.105.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H{13C} HSQC (hsqcetgpsisp.2):CPTCI-Z  
 p28:0.1us  
 sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)  
 sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)  
 Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)  
 CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 105  
 PROCNO 1

F2 - Acquisition Parameter:  
 Date\_ 20101025  
 Time 21.35  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hsqcetgpsisp.2  
 TD 2048  
 SOLVENT D2O

NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST2 145.0000000  
 CNST17 -0.5000000  
 d0 0.00000300 sec  
 D1 1.50000000 sec  
 d4 0.00172414 sec  
 d11 0.030000000 sec  
 D16 0.00020000 sec  
 D24 0.00086207 sec  
 DELTA 0.00122600 sec  
 DELTA1 0.00120800 sec  
 DELTA2 0.00147014 sec  
 DELTA3 0.00135807 sec  
 INO 0.00001600 sec  
 STICNT 128

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P2 24.00 usec  
 P28 0.10 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

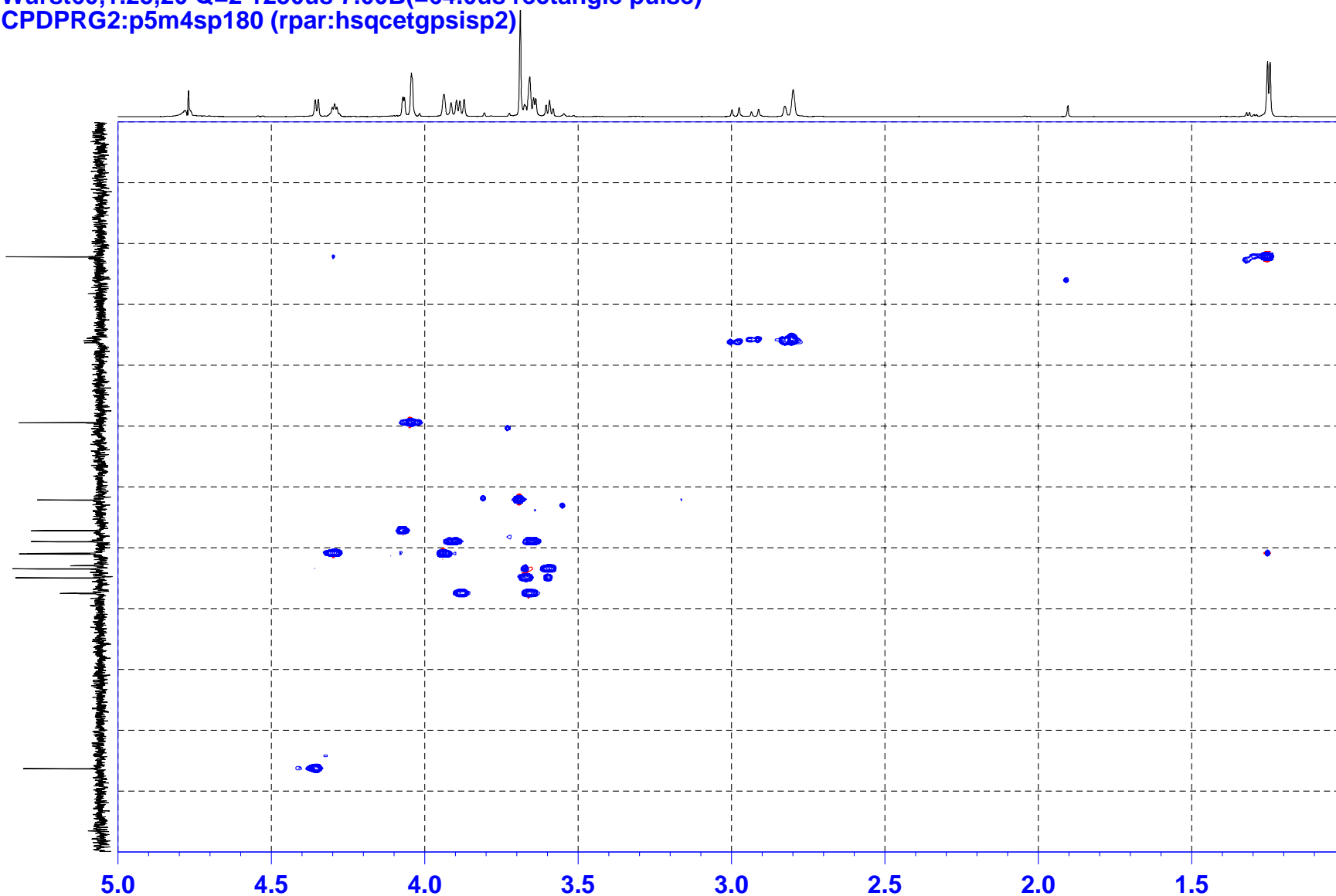
==== CHANNEL f2 =====  
 CPDPRG2 p5m4sp180  
 NUC2 13C  
 P3 15.20 usec  
 P14 500.00 usec  
 P24 2000.00 usec  
 PCPD2 1250.00 usec  
 PL0 120.00 dB  
 PL2 -4.90 dB  
 PL12 7.20 dB  
 SFO2 188.6344855 MHz  
 SP3 -1.65 dB  
 SP7 -1.65 dB  
 SPNAM3 Crp80,0.5,20.1  
 SPNAM7 Crp80comp.4  
 SPNAM15 Wurst60,1.25,20  
 SPOAL3 0.500  
 SPOAL7 0.500  
 SPOAL15 0.500  
 SPOFFS3 0.00 Hz  
 SPOFFS7 0.00 Hz  
 SPOFFS15 0.00 Hz

==== GRADIENT CHANNEL ===  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPZ1 80.00 %  
 GPZ2 20.10 %  
 P16 1000.00 usec

F1 - Acquisition parameter:  
 ND 256  
 TD 256  
 SFO1 188.6345 MHz  
 FIDRES 122.070312 Hz  
 SW 165.664 ppt  
 FMODE Echo-Antiecho

F2 - Processing parameters  
 SI 1024  
 SF 750.1299425 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 echo-antiecho  
 SF 188.6198149 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.105.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K

$1H\{13C\}$  HSQC (hsqcetgpsisp.2):CPTCI-Z

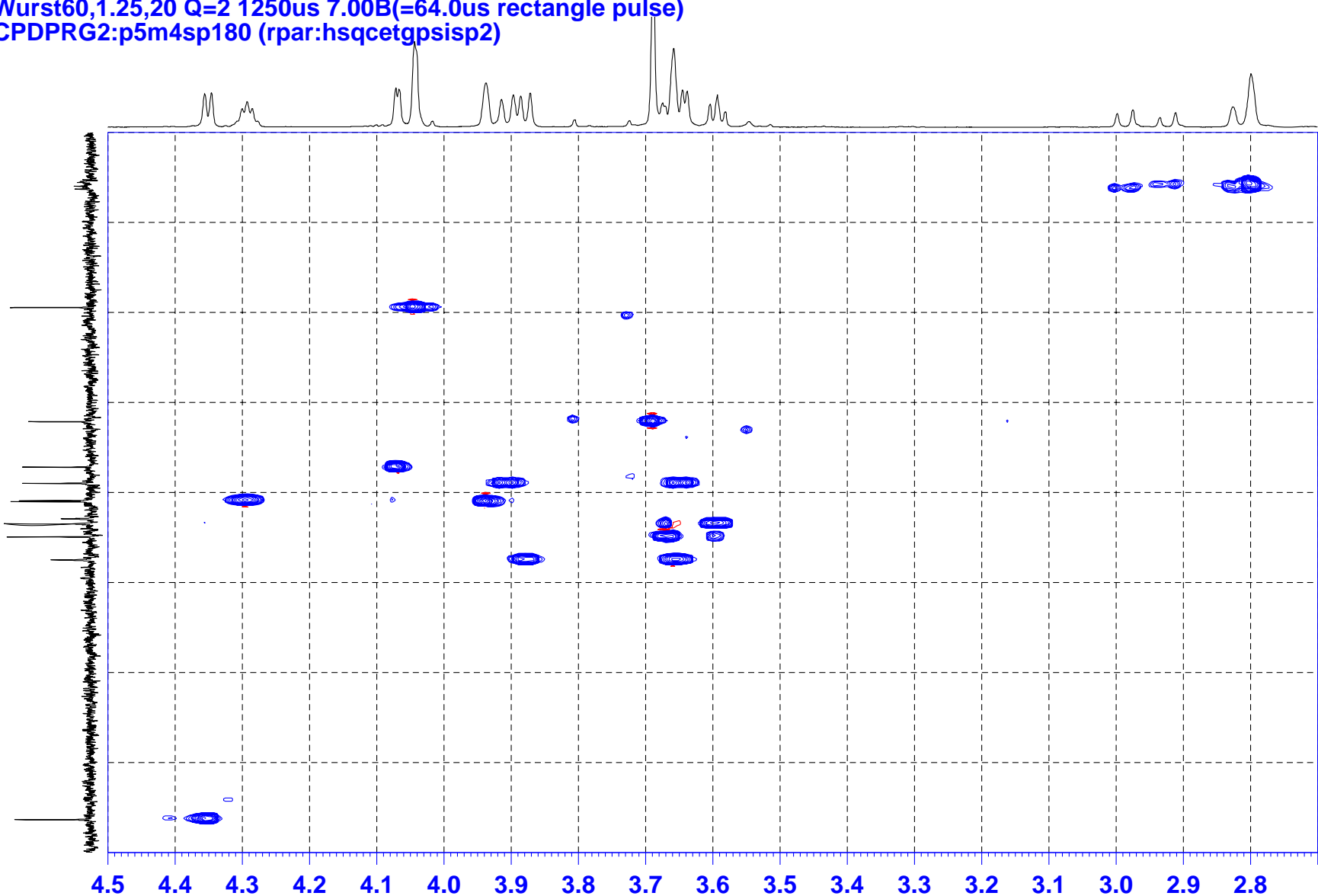
p28:0.1us

sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)

sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)

Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)

CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 105  
PROCNO 1

F2 - Acquisition Parameter:  
Date\_ 2011025  
Time 21.35  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hsqcetgpsisp.2  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST2 145.0000000  
CNST17 -0.5000000  
d0 0.0000300 sec  
D1 1.5000000 sec  
d4 0.00172414 sec  
d11 0.03000000 sec  
D16 0.00020000 sec  
D24 0.00086207 sec  
DELTA 0.00122600 sec  
DELTA1 0.00120800 sec  
DELTA2 0.00147014 sec  
DELTA3 0.00135807 sec  
IN0 0.00001600 sec  
STICNT 128

==== CHANNEL F1 =====  
NUC1 1H  
P1 12.00 usec  
P2 24.00 usec  
P28 0.10 usec  
PL1 -3.00 dB  
SFO1 750.135267 MHz

==== CHANNEL F2 =====  
CPDPRG2 p5m4sp180  
NUC2 13C  
P3 15.20 usec  
P14 500.00 usec  
P24 2000.00 usec  
PCPD2 1250.00 usec  
PL0 120.00 dB  
PL2 -4.90 dB  
PL12 7.20 dB  
SFO2 188.6344855 MHz  
SP3 -1.65 dB  
SP7 -1.65 dB  
SPNAM3 Crp80,0.5,20.1  
SPNAM7 Crp80comp.4  
SPNAM15 Wurst60,1.25,20  
SPOAL3 0.500  
SPOAL7 0.500  
SPOAL15 0.500  
SPOFFS3 0.00 Hz  
SPOFFS7 0.00 Hz  
SPOFFS15 0.00 Hz

==== GRADIENT CHANNEL ===  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 80.00 %  
GPZ2 20.10 %  
P16 1000.00 usec

F1 - Acquisition parameter:  
ND 256  
TD 256  
SFO1 188.6345 MHz  
FIDRES 122.070312 Hz  
SW 165.664 ppt  
FNMODE Echo-Antiecho

F2 - Processing parameters  
SI 1024  
SF 750.1299425 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 echo-antiecho  
SF 188.6198149 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0

sakamoto750\_01.105.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H{13C} HSQC (hsqcetgpsisp.2):CPTCI-Z  
 p28:0.1us  
 sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)  
 sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)  
 Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)  
 CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 105  
 PROCNO 1

F2 - Acquisition Parameter:  
 Date\_ 2011025  
 Time 21.35  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hsqcetgpsisp.2  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST2 145.0000000  
 CNST17 -0.5000000  
 d0 0.0000300 sec  
 D1 1.5000000 sec  
 d4 0.00172414 sec  
 d11 0.03000000 sec  
 D16 0.00020000 sec  
 D24 0.00086207 sec  
 DELTA 0.00122600 sec  
 DELTA1 0.00120800 sec  
 DELTA2 0.00147014 sec  
 DELTA3 0.00135807 sec  
 INO 0.00001600 sec  
 STICNT 128

ppm

102

104

106

108

110

112

114

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P2 24.00 usec  
 P28 0.10 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

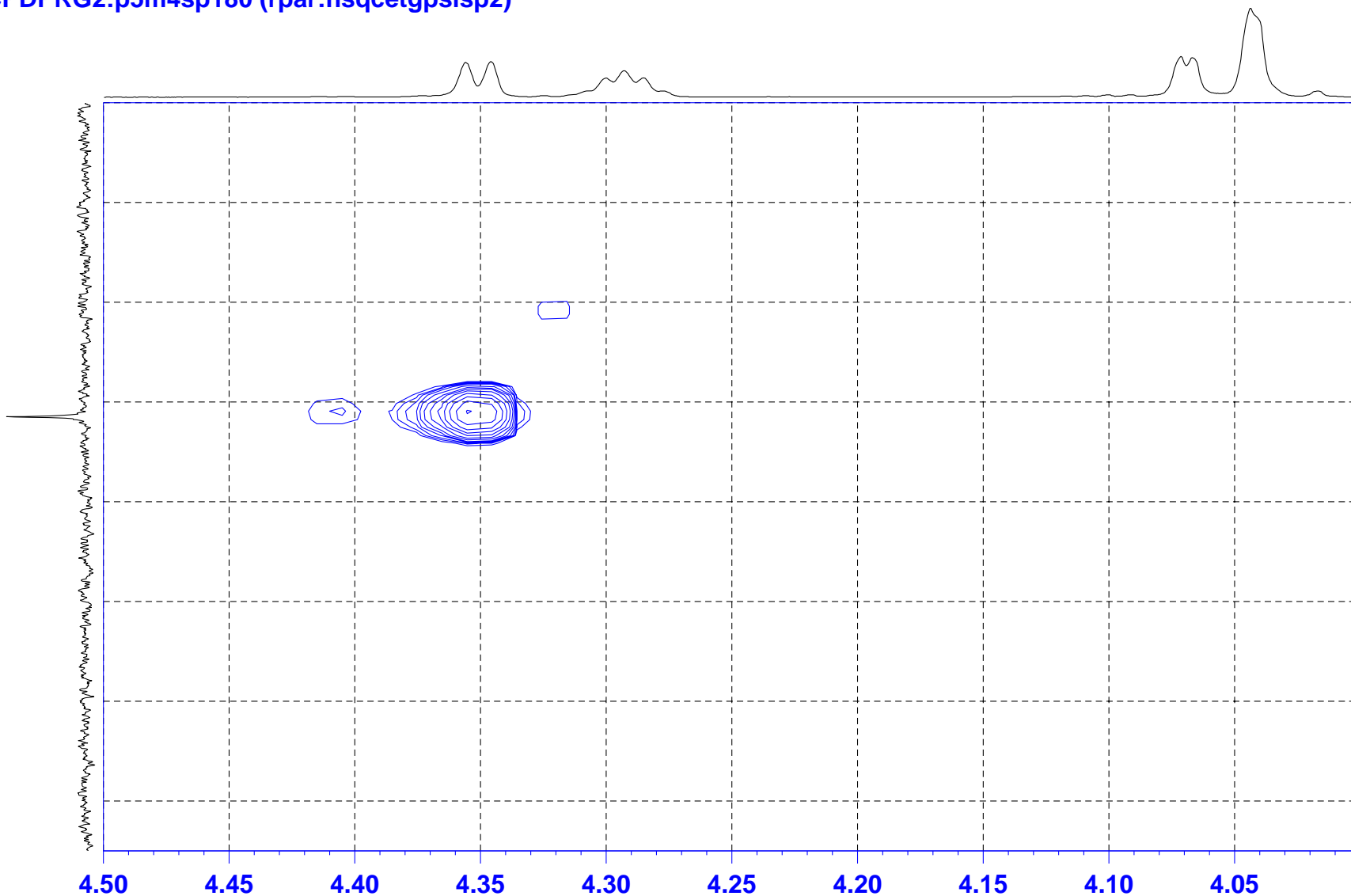
==== CHANNEL f2 =====  
 CPDPRG2 p5m4sp180  
 NUC2 13C  
 P3 15.20 usec  
 P14 500.00 usec  
 P24 2000.00 usec  
 PCPD2 1250.00 usec  
 PL0 120.00 dB  
 PL2 -4.90 dB  
 PL12 7.20 dB  
 SFO2 188.6344855 MHz  
 SP3 -1.65 dB  
 SP7 -1.65 dB  
 SPNAM3 Crp80,0.5,20.1  
 SPNAM7 Crp80comp.4  
 SPNAM15 Wurst60,1.25,20  
 SPOAL3 0.500  
 SPOAL7 0.500  
 SPOAL15 0.500  
 SPOFFS3 0.00 Hz  
 SPOFFS7 0.00 Hz  
 SPOFFS15 0.00 Hz

==== GRADIENT CHANNEL ===  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPZ1 80.00 %  
 GPZ2 20.10 %  
 P16 1000.00 usec

F1 - Acquisition parameter:  
 NDO 2  
 TD 256  
 SFO1 188.6345 MHz  
 FIDRES 122.070312 Hz  
 SW 165.664 ppt  
 FMODE Echo-Antiecho

F2 - Processing parameters  
 SI 1024  
 SF 750.1299425 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 echo-antiecho  
 SF 188.6198149 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.105.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K

$1H\{^{13}C\}$  HSQC (hsqcetgpsisp.2):CPTCI-Z

p28:0.1us

sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)

sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)

Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)

CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 105  
PROCNO 1

F2 - Acquisition Parameter:  
Date\_ 20101025  
Time 21.35  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hsqcetgpsisp.2  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST2 145.0000000  
CNST17 -0.5000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d4 0.00172414 sec  
d11 0.03000000 sec  
D16 0.00020000 sec  
D24 0.00086207 sec  
DELTA 0.00122600 sec  
DELTA1 0.00120800 sec  
DELTA2 0.00147014 sec  
DELTA3 0.00135807 sec  
IN0 0.00001600 sec  
STICNT 128

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
NUC1 1H  
P1 12.00 usec  
P2 24.00 usec  
P28 0.10 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

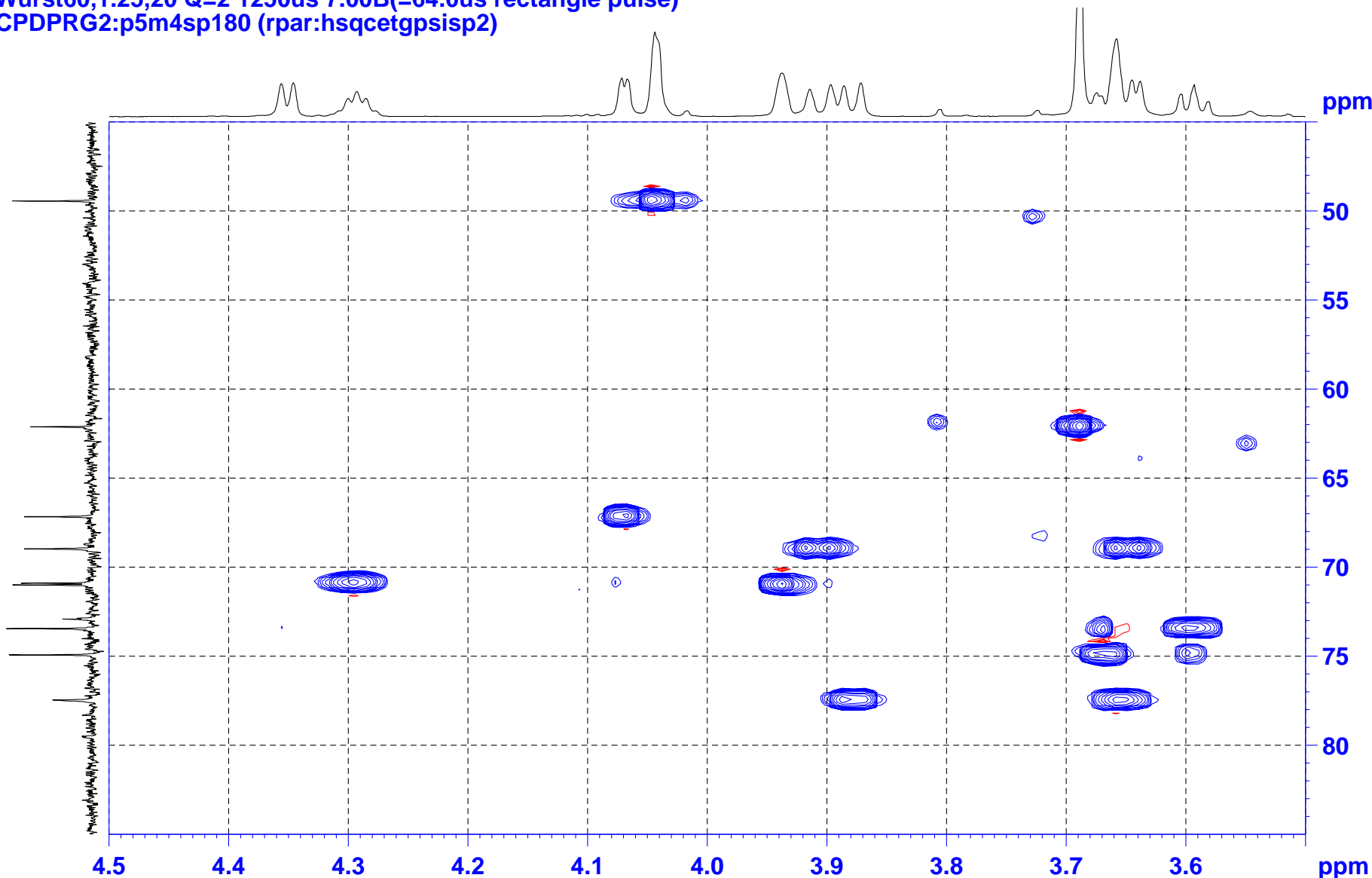
\*\*\*\*\* CHANNEL f2 \*\*\*\*\*  
CPDPRG2 p5m4sp180  
NUC2  $^{13}C$   
P3 15.20 usec  
P14 500.00 usec  
P24 2000.00 usec  
PCPD2 1250.00 usec  
PL0 120.00 dB  
PL2 -4.90 dB  
PL12 7.20 dB  
SFO2 188.6344855 MHz  
SP3 -1.65 dB  
SP7 -1.65 dB  
SPNAM3 Crp80,0.5,20.1  
SPNAM7 Crp80comp.4  
SPNAM15 Wurst60,1.25,20  
SPOAL3 0.500  
SPOAL7 0.500  
SPOAL15 0.500  
SPOFFS3 0.00 Hz  
SPOFFS7 0.00 Hz  
SPOFFS15 0.00 Hz

\*\*\*\*\* GRADIENT CHANNEL \*\*\*  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 80.00 %  
GPZ2 20.10 %  
P16 1000.00 usec

F1 - Acquisition parameter:  
ND 256  
TD 256  
SFO1 188.6345 MHz  
FIDRES 122.070312 Hz  
SW 165.664 ppt  
FNMODE Echo-Antiecho

F2 - Processing parameters  
SI 1024  
SF 750.1299425 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 echo-antiecho  
SF 188.6198149 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0



sakamoto750\_01.105.1

Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K

$1\text{H}\{^{13}\text{C}\}$  HSQC (hsqcetgpsisp.2):CPTCI-Z

p28:0.1us

sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)

sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)

Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)

CPDPRG2:p5m4sp180 (rpar:hsqcetgpsisp2)



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 105  
PROCNO 1

F2 - Acquisition Parameter:  
Date\_ 20110225  
Time 21.35  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hsqcetgpsisp.2  
TD 2048  
SOLVENT D2O  
NS 8  
DS 16  
SWH 7645.260 Hz  
FIDRES 3.733037 Hz  
AQ 0.1339892 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST2 145.0000000  
CNST17 -0.5000000  
d0 0.0000300 sec  
D1 1.5000000 sec  
d4 0.00172414 sec  
d11 0.03000000 sec  
d16 0.00020000 sec  
D24 0.00086207 sec  
DELTA 0.00122600 sec  
DELTA1 0.00120800 sec  
DELTA2 0.00147014 sec  
DELTA3 0.00135807 sec  
INO 0.00001600 sec  
STICNT 128

ppm

32

34

36

38

40

42

44

==== CHANNEL F1 =====  
NUC1 1H  
P1 12.00 usec  
P2 24.00 usec  
P28 0.10 usec  
PL1 -3.00 dB  
SFO1 750.135267 MHz

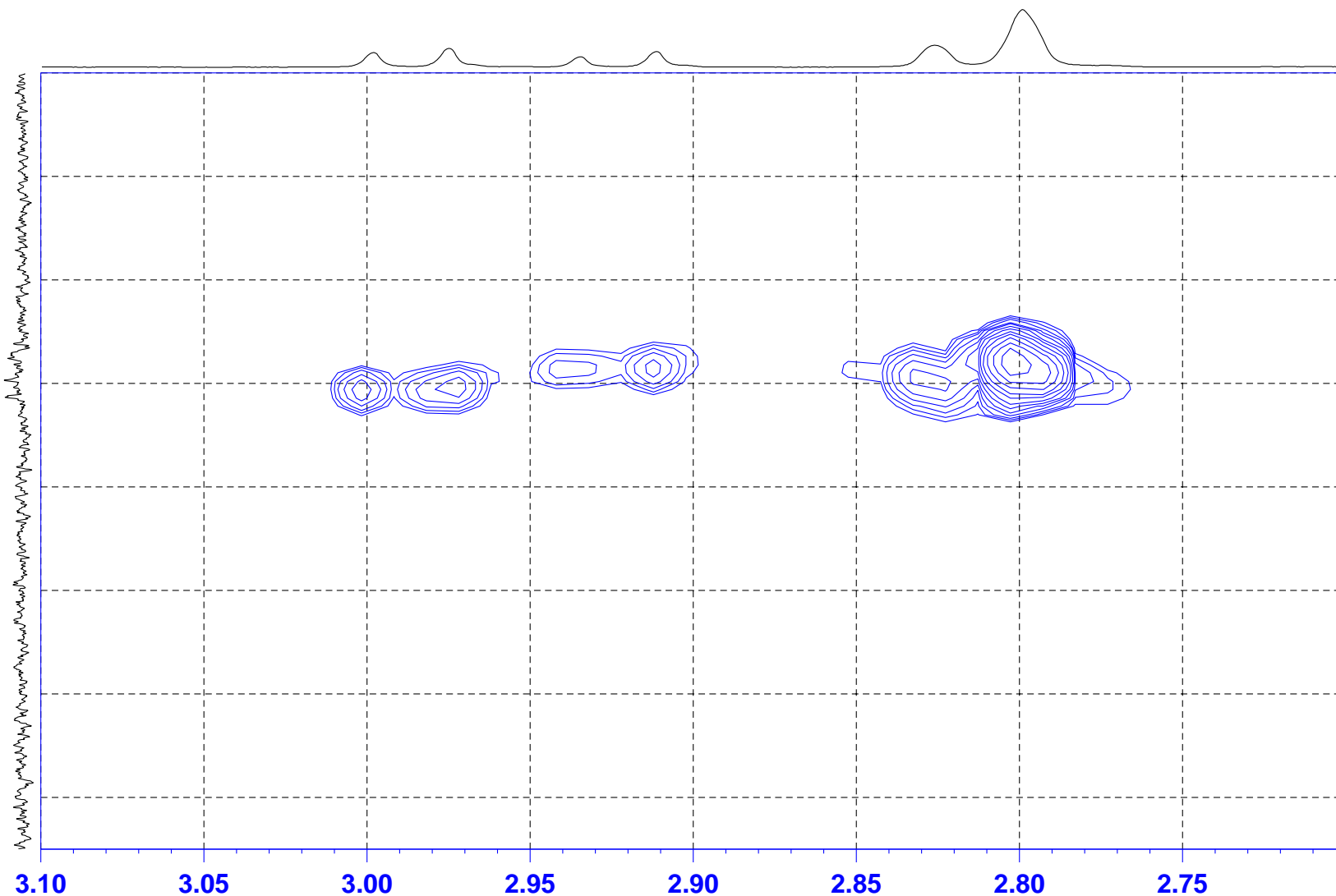
==== CHANNEL F2 =====  
CPDPRG2 p5m4sp180  
NUC2  $^{13}\text{C}$   
P3 15.20 usec  
P4 500.00 usec  
P24 2000.00 usec  
PCPD2 1250.00 usec  
PL0 120.00 dB  
PL2 -4.90 dB  
PL12 7.20 dB  
SFO2 188.6344855 MHz  
SP3 -1.65 dB  
SP7 -1.65 dB  
SPNAM3 Crp80,0.5,20.1  
SPNAM7 Crp80comp.4  
SPNAM15 Wurst60,1.25,20  
SPOAL3 0.500  
SPOAL7 0.500  
SPOAL15 0.500  
SPOFFS3 0.00 Hz  
SPOFFS7 0.00 Hz  
SPOFFS15 0.00 Hz

==== GRADIENT CHANNEL ===  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPZ1 80.00 %  
GPZ2 20.10 %  
P16 1000.00 usec

F1 - Acquisition parameter:  
ND0 2  
TD 256  
SFO1 188.6345 MHz  
FIDRES 122.070312 Hz  
SW 165.664 ppt  
FMODE Echo-Antiecho

F2 - Processing parameters  
SI 1024  
SF 750.1299425 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 echo-antiecho  
SF 188.6198149 MHz  
WDW QSINE  
SSB 2  
LB 0.00 Hz  
GB 0





sakamoto750\_01.105.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 $1H\{13C\}$  HSQC (hsqctgpsisp.2):CPTCI-Z  
 p28:0.1us  
 sp3:Crp80,0.5,20.1 -1.77dB(=22.2us rectangle pulse)  
 sp7:Crp80comp.4 -1.77dB(=22.2us rectangle pulse)  
 Wurst60,1.25,20 Q=2 1250us 7.00B(=64.0us rectangle pulse)  
 CPDPRG2:p5m4sp180 (rpar:hsqctgpsisp2)



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 105  
 PROCNO 1

F2 - Acquisition Parameter:  
 Date\_ 20101025  
 Time 21.35  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hsqctgpsisp.2  
 TD 2048  
 SOLVENT D2O  
 NS 8  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 3.733037 Hz  
 AQ 0.1339892 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST2 145.0000000  
 CNST17 -0.5000000  
 d0 0.0000300 sec  
 D1 1.5000000 sec  
 d4 0.00172414 sec  
 d11 0.03000000 sec  
 D16 0.00020000 sec  
 D24 0.00086207 sec  
 DELTA 0.00122600 sec  
 DELTA1 0.00120800 sec  
 DELTA2 0.00147014 sec  
 DELTA3 0.00135807 sec  
 INO 0.00001600 sec  
 STICNT 128

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 1H  
 P1 12.00 usec  
 P2 24.00 usec  
 P28 0.10 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

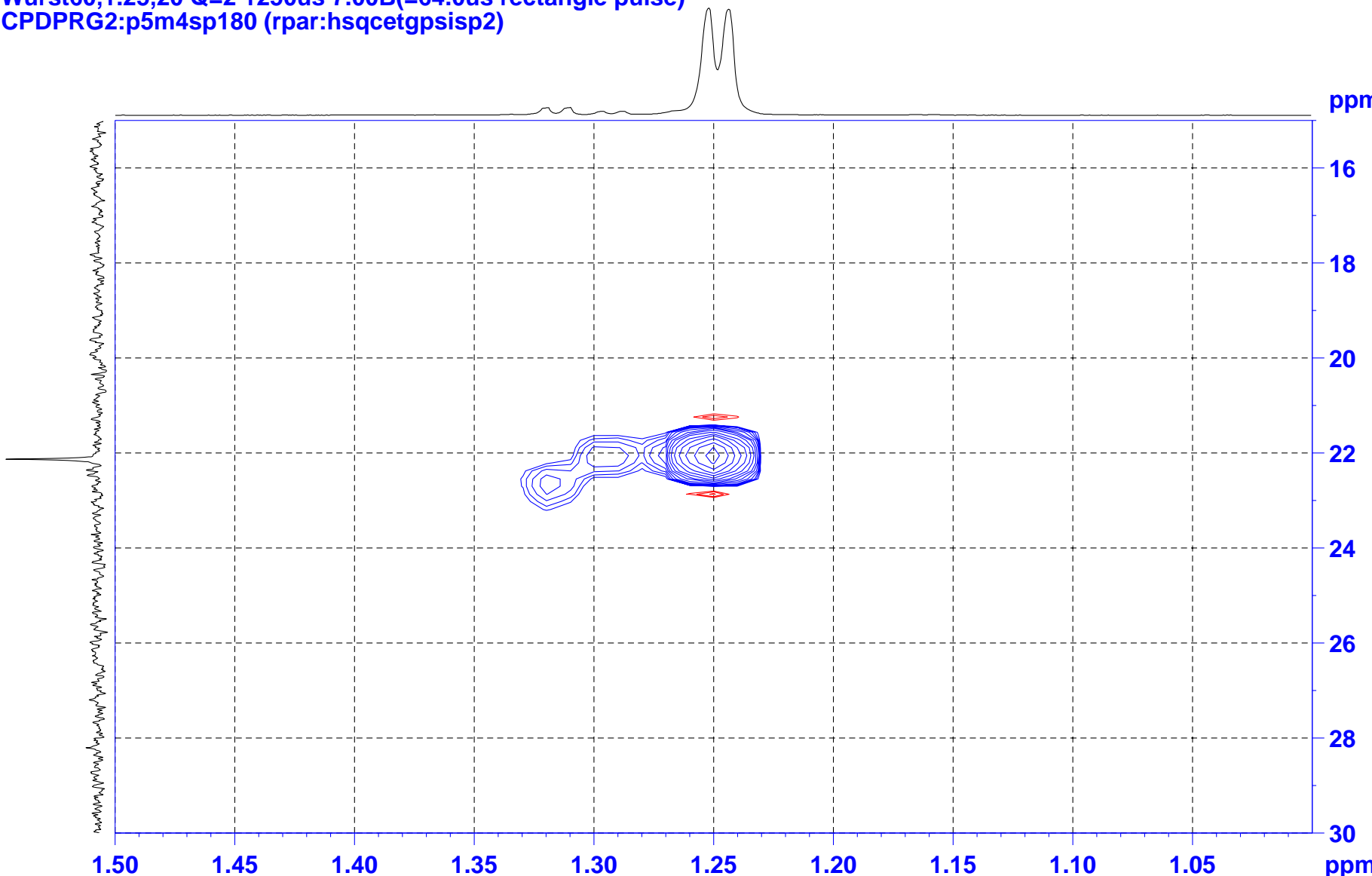
\*\*\*\*\* CHANNEL f2 \*\*\*\*\*  
 CPDPRG2 p5m4sp180  
 NUC2 13C  
 P3 15.20 usec  
 P14 500.00 usec  
 P24 2000.00 usec  
 PCPD2 1250.00 usec  
 PL0 120.00 dB  
 PL2 -4.90 dB  
 PL12 7.20 dB  
 SFO2 188.6344855 MHz  
 SP3 -1.65 dB  
 SP7 -1.65 dB  
 SPNAM3 Crp80,0.5,20.1  
 SPNAM7 Crp80comp.4  
 SPNAM15 Wurst60,1.25,20  
 SPOAL3 0.500  
 SPOAL7 0.500  
 SPOAL15 0.500  
 SPOFFS3 0.00 Hz  
 SPOFFS7 0.00 Hz  
 SPOFFS15 0.00 Hz

\*\*\*\*\* GRADIENT CHANNEL \*\*\*  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPZ1 80.00 %  
 GPZ2 20.10 %  
 P16 1000.00 usec

F1 - Acquisition parameter:  
 NDO 2  
 TD 256  
 SFO1 188.6345 MHz  
 FIDRES 122.070312 Hz  
 SW 165.664 ppt  
 FMODE Echo-Antiecho

F2 - Processing parameters  
 SI 1024  
 SF 750.1299425 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 echo-antiecho  
 SF 188.6198149 MHz  
 WDW QSINE  
 SSB 2  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.106.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 106  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 22.33  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hmbcgp12ndqf  
TD 4096  
SOLVENT D2O  
NS 16  
DS 16  
SWH 7645.260 Hz  
FIDRES 1.866518 Hz  
AQ 0.2679284 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST6 120.0000000  
CNST7 200.0000000  
CNST13 8.0000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d6 0.06250000 sec  
D16 0.00020000 sec  
DELTA1 0.00296667 sec  
DELTA2 0.00130000 sec  
DELTA3 0.06129600 sec  
IN0 0.0001190 sec

ppm

20

40

60

80

100

120

140

160

180

==== CHANNEL f1 =====

NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

==== CHANNEL f2 =====

NUC2 13C  
P3 15.20 usec  
PL2 -4.90 dB  
SFO2 188.6392010 MHz

==== GRADIENT CHANNEL =====

GPZ1 50.00 %  
GPZ2 30.00 %  
GPZ3 40.10 %  
GPZ4 15.00 %  
GPZ5 -10.00 %  
GPZ6 -5.00 %  
P16 1000.00 usec

F1 - Acquisition parameters

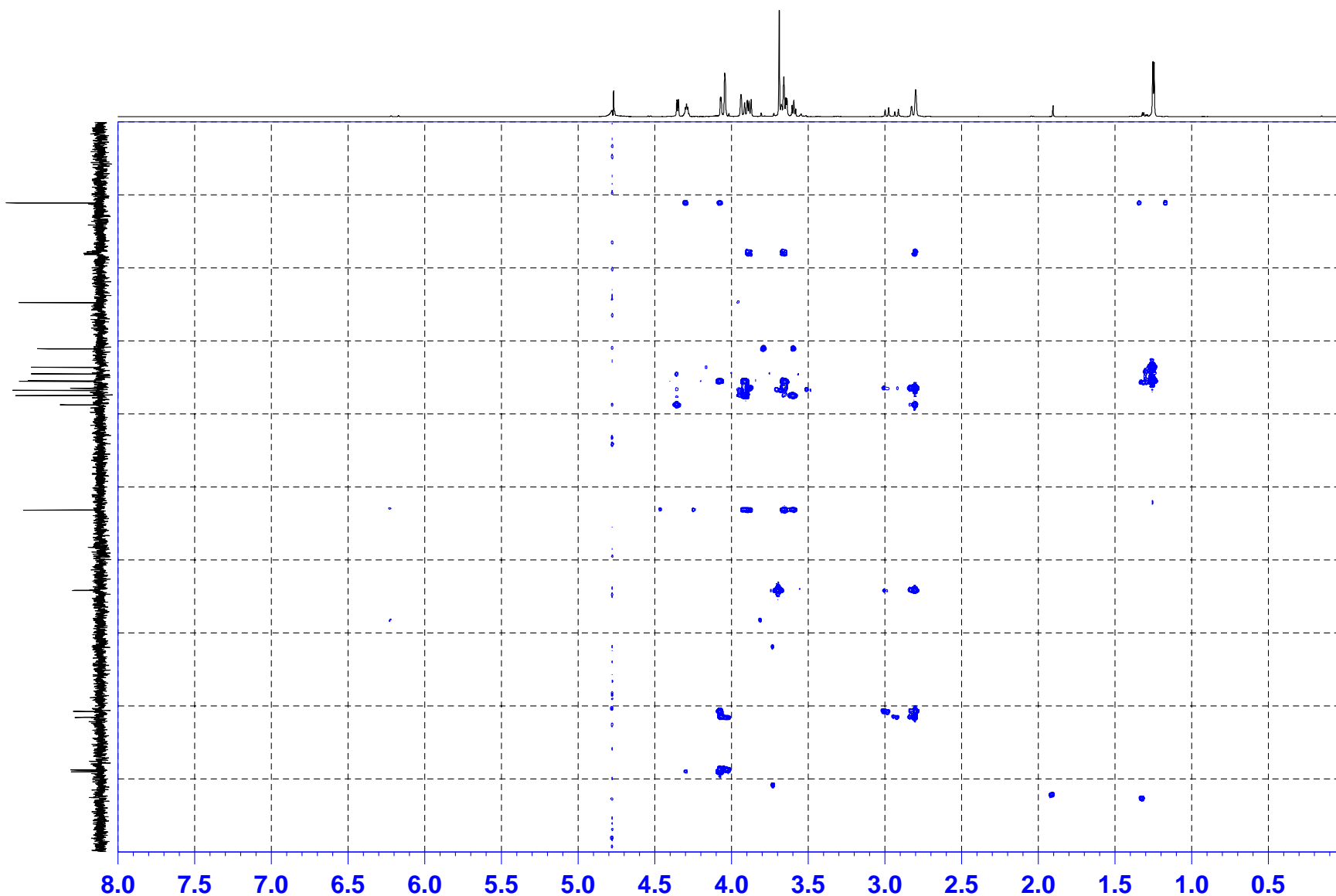
ND0 2  
TD 256  
SFO1 188.6392 MHz  
FIDRES 164.128159 Hz  
SW 222.736 ppr  
PRMODE QF

F2 - Processing parameters

SF 1024  
SF 750.129425 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters

SF 1024  
MC2 QF  
SF 188.6198149 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0



8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 ppm

sakamoto750\_01.106.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 106  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 22.33  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hmbcgp12ndqf  
 TD 4096  
 SOLVENT D2O  
 NS 16  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 1.866518 Hz  
 AQ 0.2679284 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST6 120.0000000  
 CNST7 200.0000000  
 CNST13 8.0000000  
 d0 0.00000300 sec  
 D1 1.50000000 sec  
 d6 0.06250000 sec  
 D16 0.00020000 sec  
 DELTA1 0.00296667 sec  
 DELTA2 0.00130000 sec  
 DELTA3 0.06129600 sec  
 INO 0.00001190 sec

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 p2 24.00 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

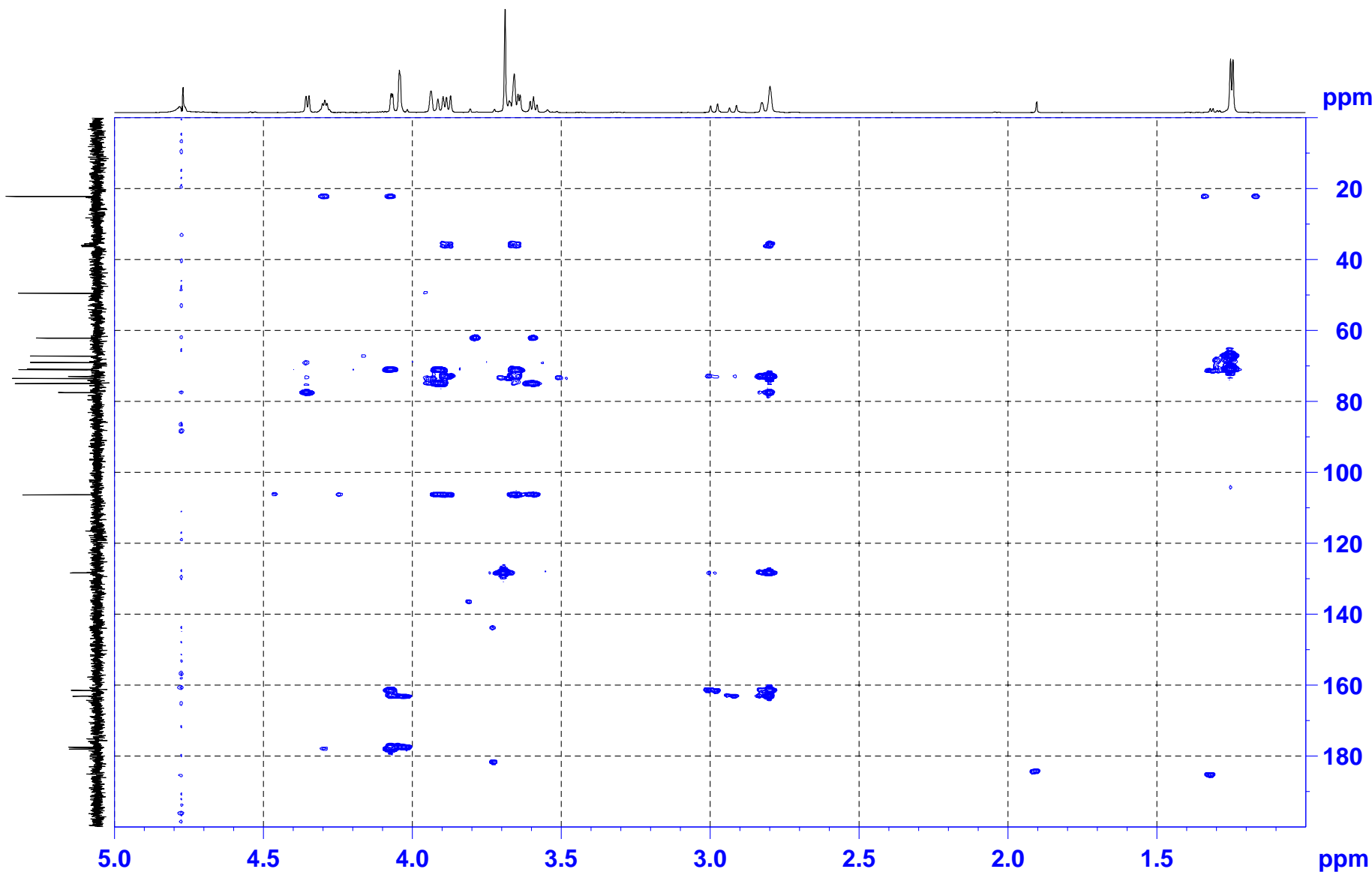
==== CHANNEL f2 =====  
 NUC2 13C  
 P3 15.20 usec  
 PL2 -4.90 dB  
 SFO2 188.6392010 MHz

==== GRADIENT CHANNEL ====  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPNAM3 SINE.100  
 GPNAM4 SINE.100  
 GPNAM5 SINE.100  
 GPNAM6 SINE.100  
 GPZ1 50.00 %  
 GPZ2 30.00 %  
 GPZ3 40.10 %  
 GPZ4 15.00 %  
 GPZ5 -10.00 %  
 GPZ6 -5.00 %  
 P16 1000.00 usec

F1 - Acquisition parameters  
 ND0 2  
 TD 256  
 SFO1 188.6392 MHz  
 FIDRES 164.128159 Hz  
 SW 222.736 ppr  
 FMODE QF

F2 - Processing parameters  
 SI 1024  
 SF 750.1299425 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 QF  
 SF 188.6198149 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.106.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 106  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 22.33  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hmbcgp12ndqf  
TD 4096  
SOLVENT D2O  
NS 16  
DS 16  
SWH 7645.260 Hz  
FIDRES 1.866518 Hz  
AQ 0.2679284 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST6 120.0000000  
CNST7 200.0000000  
CNST13 8.0000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d6 0.06250000 sec  
D16 0.00020000 sec  
DELTA1 0.00296667 sec  
DELTA2 0.00130000 sec  
DELTA3 0.06129600 sec  
IN0 0.00001190 sec

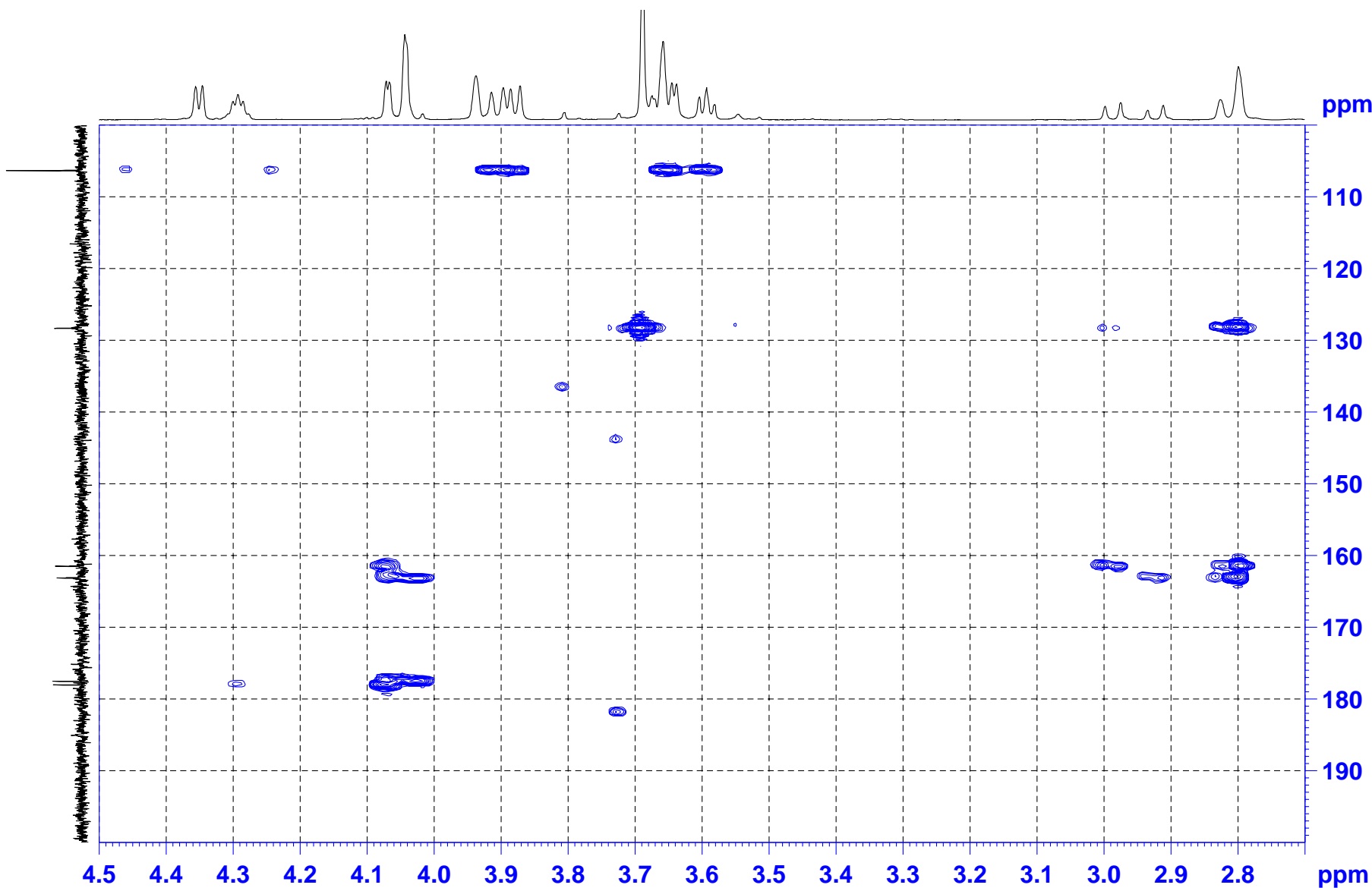
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
P2 24.00 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz  
==== CHANNEL f2 =====  
NUC2 13C  
P3 15.20 usec  
PL2 -4.90 dB  
SFO2 188.6392010 MHz

==== GRADIENT CHANNEL ===  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPNAM3 SINE.100  
GPNAM4 SINE.100  
GPNAM5 SINE.100  
GPNAM6 SINE.100  
GPZ1 50.00 %  
GPZ2 30.00 %  
GPZ3 40.10 %  
GPZ4 15.00 %  
GPZ5 -10.00 %  
GPZ6 -5.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 2  
TD 256  
SFO1 188.6392 MHz  
FIDRES 164.128159 Hz  
SW 222.736 ppr  
PRMODE QF

F2 - Processing parameters  
SI 1024  
SF 750.129425 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 QF  
SF 188.6198149 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0



sakamoto750\_01.106.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 106  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 22.33  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hmbcgp12ndqf  
TD 4096  
SOLVENT D2O  
NS 16  
DS 16  
SWH 7645.260 Hz  
FIDRES 1.866518 Hz  
AQ 0.2679284 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST6 120.0000000  
CNST7 200.0000000  
CNST13 8.0000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d6 0.06250000 sec  
D16 0.00020000 sec  
DELTA1 0.00296667 sec  
DELTA2 0.00130000 sec  
DELTA3 0.06129600 sec  
IN0 0.00001190 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

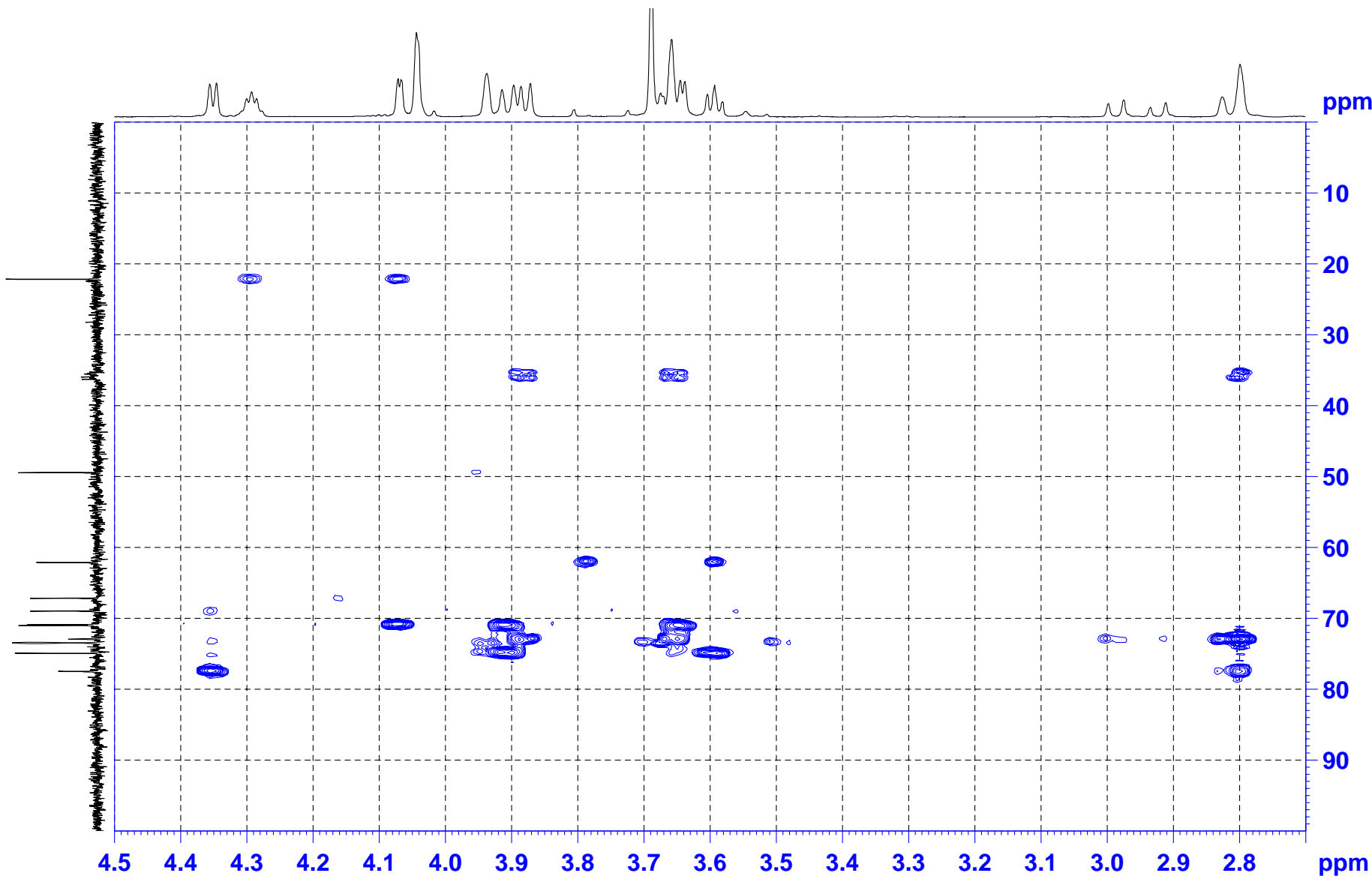
===== CHANNEL f2 =====  
NUC2 13C  
P3 15.20 usec  
PL2 -4.90 dB  
SFO2 188.6392010 MHz

===== GRADIENT CHANNEL =====  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPNAM3 SINE.100  
GPNAM4 SINE.100  
GPNAM5 SINE.100  
GPNAM6 SINE.100  
GPZ1 50.00 %  
GPZ2 30.00 %  
GPZ3 40.10 %  
GPZ4 15.00 %  
GPZ5 -10.00 %  
GPZ6 -5.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 2  
TD 256  
SFO1 188.6392 MHz  
FIDRES 164.128159 Hz  
SW 222.736 ppr  
P2MODE QF

F2 - Processing parameters  
SI 1024  
SF 750.129425 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 QF  
SF 188.6198149 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0



sakamoto750\_01.106.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 106  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 22.33  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hmbcgp12ndqf  
TD 4096  
SOLVENT D2O  
NS 16  
DS 16  
SWH 7645.260 Hz  
FIDRES 1.866518 Hz  
AQ 0.2679284 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST6 120.0000000  
CNST7 200.0000000  
CNST13 8.0000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d6 0.06250000 sec  
D16 0.00020000 sec  
DELTA1 0.00296667 sec  
DELTA2 0.00130000 sec  
DELTA3 0.06129600 sec  
IN0 0.00001190 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

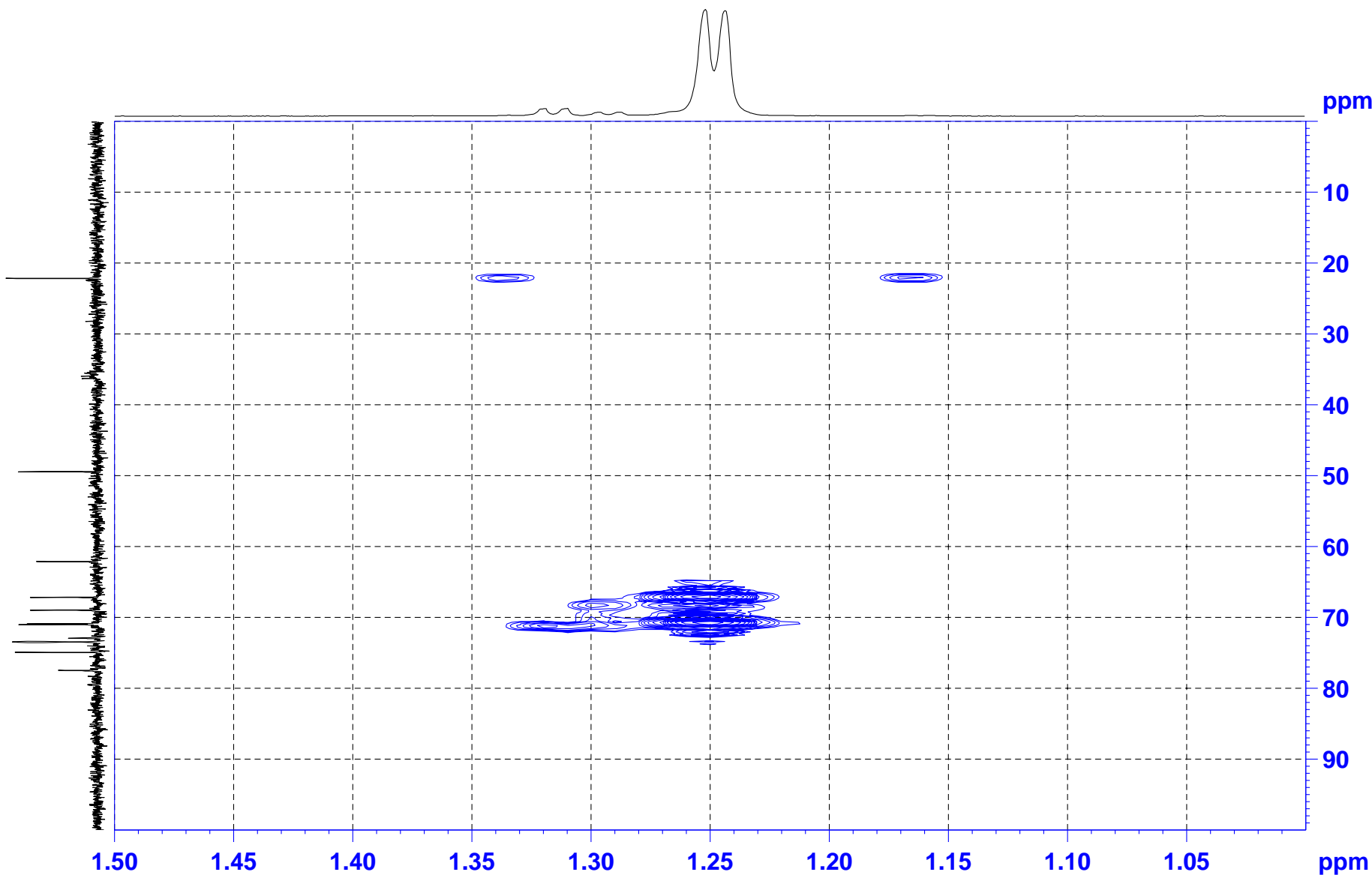
\*\*\*\*\* CHANNEL f2 \*\*\*\*\*  
NUC2 13C  
P3 15.20 usec  
PL2 -4.90 dB  
SFO2 188.6392010 MHz

\*\*\*\*\* GRADIENT CHANNEL \*\*\*  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPNAM3 SINE.100  
GPNAM4 SINE.100  
GPNAM5 SINE.100  
GPNAM6 SINE.100  
GPZ1 50.00 %  
GPZ2 30.00 %  
GPZ3 40.10 %  
GPZ4 15.00 %  
GPZ5 -10.00 %  
GPZ6 -5.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 2  
TD 256  
SFO1 188.6392 MHz  
FIDRES 164.128159 Hz  
SW 222.736 ppr  
PRMODE QF

F2 - Processing parameters  
SI 1024  
SF 750.129425 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 QF  
SF 188.6198149 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0



sakamoto750\_01.106.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 106  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101025  
Time 22.33  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG hmbcgp12ndqf  
TD 4096  
SOLVENT D2O  
NS 16  
DS 16  
SWH 7645.260 Hz  
FIDRES 1.866518 Hz  
AQ 0.2679284 sec  
RG 32768  
DW 65.400 usec  
DE 6.00 usec  
TE 300.6 K  
CNST6 120.0000000  
CNST7 200.0000000  
CNST13 8.0000000  
d0 0.00000300 sec  
D1 1.50000000 sec  
d6 0.06250000 sec  
D16 0.00020000 sec  
DELTA1 0.00296667 sec  
DELTA2 0.00130000 sec  
DELTA3 0.06129600 sec  
IN0 0.00001190 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
NUC1 1H  
P1 12.00 usec  
p2 24.00 usec  
PL1 -3.00 dB  
SFO1 750.1335267 MHz

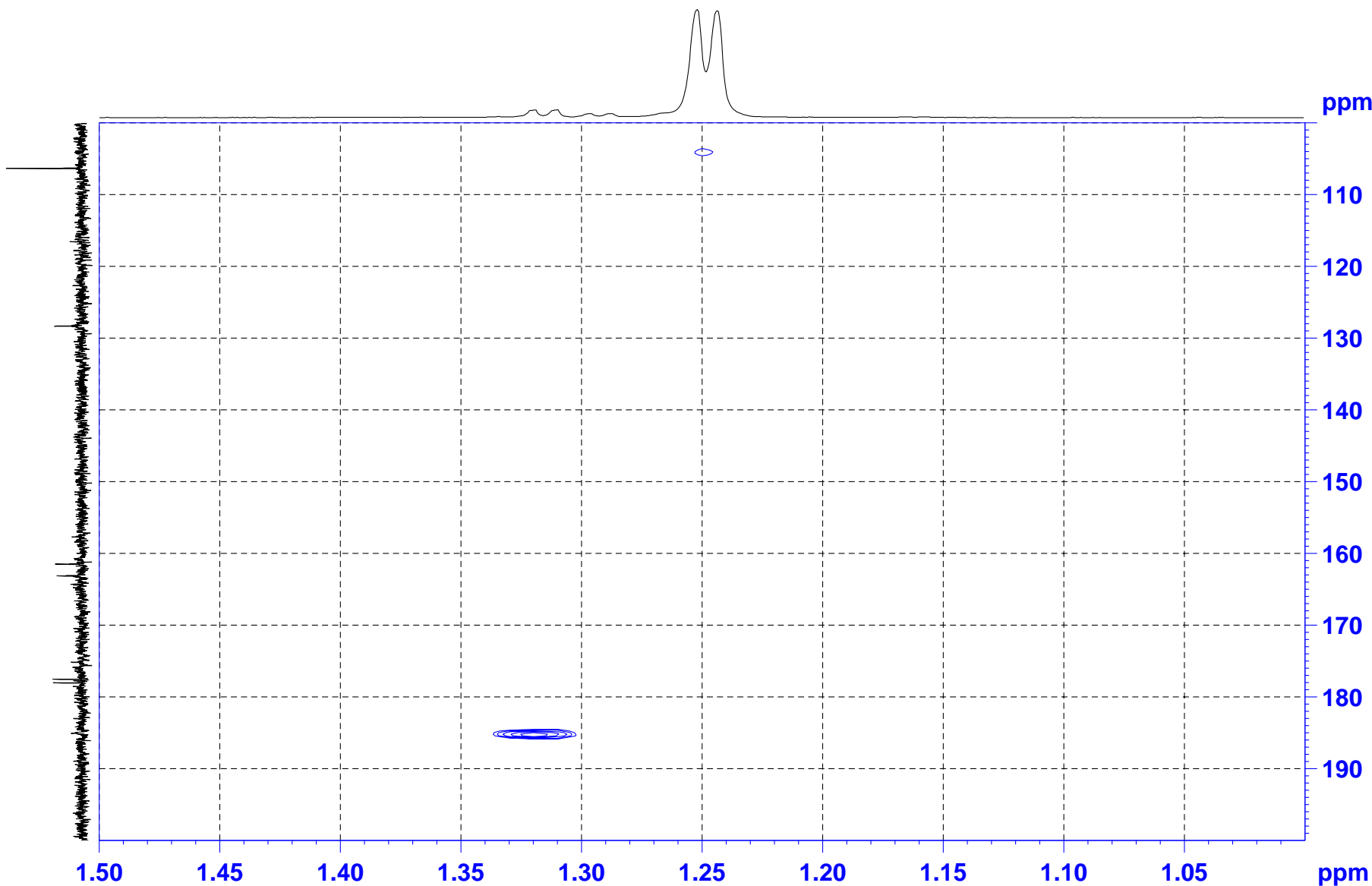
\*\*\*\*\* CHANNEL f2 \*\*\*\*\*  
NUC2 13C  
P3 15.20 usec  
PL2 -4.90 dB  
SFO2 188.6392010 MHz

\*\*\*\*\* GRADIENT CHANNEL \*\*\*  
GPNAM1 SINE.100  
GPNAM2 SINE.100  
GPNAM3 SINE.100  
GPNAM4 SINE.100  
GPNAM5 SINE.100  
GPNAM6 SINE.100  
GPZ1 50.00 %  
GPZ2 30.00 %  
GPZ3 40.10 %  
GPZ4 15.00 %  
GPZ5 -10.00 %  
GPZ6 -5.00 %  
P16 1000.00 usec

F1 - Acquisition parameters  
ND0 2  
TD 256  
SFO1 188.6392 MHz  
FIDRES 164.128159 Hz  
SW 222.736 ppr  
FMODE QF

F2 - Processing parameters  
SI 1024  
SF 750.129425 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.40

F1 - Processing parameters  
SI 1024  
MC2 QF  
SF 188.6198149 MHz  
WDW SINE  
SSB 0  
LB 0.00 Hz  
GB 0



sakamoto750\_01.106.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 106  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20101025  
 Time 22.33  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hmbcgp12ndqf  
 TD 4096  
 SOLVENT D2O  
 NS 16  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 1.866518 Hz  
 AQ 0.2679284 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST6 120.0000000  
 CNST7 200.0000000  
 CNST13 8.0000000  
 d0 0.00000300 sec  
 D1 1.50000000 sec  
 d6 0.06250000 sec  
 D16 0.00020000 sec  
 DELTA1 0.00296667 sec  
 DELTA2 0.00130000 sec  
 DELTA3 0.06129600 sec  
 INO 0.0001190 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 P2 24.00 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

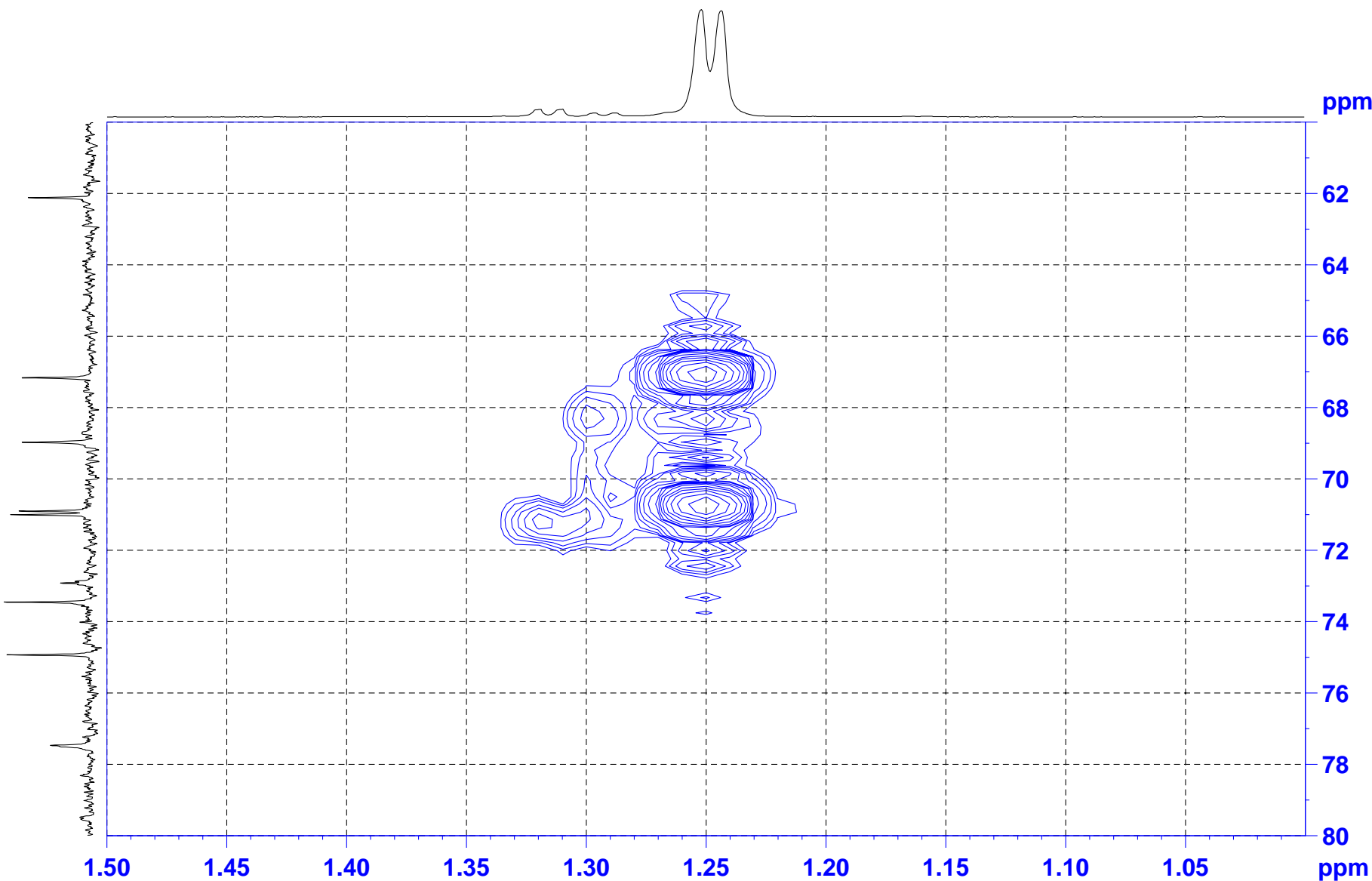
===== CHANNEL f2 =====  
 NUC2 13C  
 P3 15.20 usec  
 PL2 -4.90 dB  
 SFO2 188.6392010 MHz

===== GRADIENT CHANNEL =====  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPNAM3 SINE.100  
 GPNAM4 SINE.100  
 GPNAM5 SINE.100  
 GPNAM6 SINE.100  
 GPZ1 50.00 %  
 GPZ2 30.00 %  
 GPZ3 40.10 %  
 GPZ4 15.00 %  
 GPZ5 -10.00 %  
 GPZ6 -5.00 %  
 P16 1000.00 usec

F1 - Acquisition parameters  
 ND0 2  
 TD 256  
 SFO1 188.6392 MHz  
 FIDRES 164.128159 Hz  
 SW 222.736 ppr  
 FMODE QF

F2 - Processing parameters  
 SI 1024  
 SF 750.129425 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 QF  
 SF 188.6198149 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0





sakamoto750\_01.106.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H{13C} HMBC (hmbcgp12ndqf):CPTCI-Z



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 106  
 PROCNO 1

F2 - Acquisition Parameter:  
 Date\_ 20101025  
 Time 22.33  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG hmbcgp12ndqf  
 TD 4096  
 SOLVENT D2O  
 NS 16  
 DS 16  
 SWH 7645.260 Hz  
 FIDRES 1.866518 Hz  
 AQ 0.2679284 sec  
 RG 32768  
 DW 65.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 CNST6 120.0000000  
 CNST7 200.0000000  
 CNST13 8.0000000  
 d0 0.00000300 sec  
 D1 1.50000000 sec  
 d6 0.06250000 sec  
 D16 0.00020000 sec  
 DELTA1 0.00296667 sec  
 DELTA2 0.00130000 sec  
 DELTA3 0.06129600 sec  
 INO 0.00001190 sec

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 12.00 usec  
 p2 24.00 usec  
 PL1 -3.00 dB  
 SFO1 750.1335267 MHz

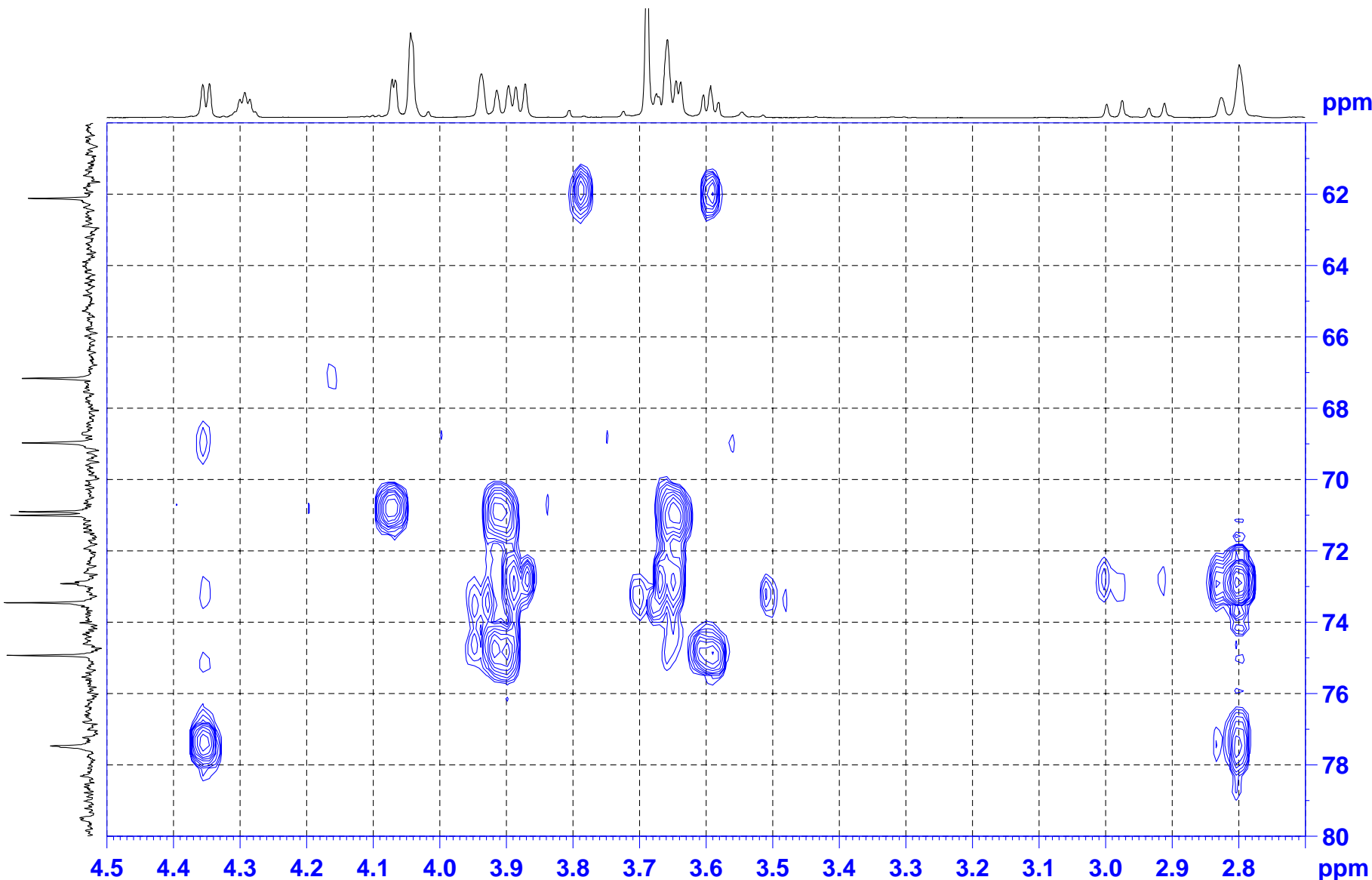
==== CHANNEL f2 =====  
 NUC2 13C  
 P3 15.20 usec  
 PL2 -4.90 dB  
 SFO2 188.6392010 MHz

==== GRADIENT CHANNEL =====  
 GPNAM1 SINE.100  
 GPNAM2 SINE.100  
 GPNAM3 SINE.100  
 GPNAM4 SINE.100  
 GPNAM5 SINE.100  
 GPNAM6 SINE.100  
 GPZ1 50.00 %  
 GPZ2 30.00 %  
 GPZ3 40.10 %  
 GPZ4 15.00 %  
 GPZ5 -10.00 %  
 GPZ6 -5.00 %  
 P16 1000.00 usec

F1 - Acquisition parameter:  
 ND0 2  
 TD 256  
 SFO1 188.6392 MHz  
 FIDRES 164.128159 Hz  
 SW 222.736 ppr  
 PRMODE QF

F2 - Processing parameters  
 SI 1024  
 SF 750.129425 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

F1 - Processing parameters  
 SI 1024  
 MC2 QF  
 SF 188.6198149 MHz  
 WDW SINE  
 SSB 0  
 LB 0.00 Hz  
 GB 0



sakamoto750\_01.201.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DOSY with presat. (ledbpgppr2s):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 201  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101026  
Time 10.59  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG ledbpgppr2s  
TD 16384  
SOLVENT D2O  
NS 8  
DS 4  
SWH 11261.262 Hz  
FIDRES 0.687333 Hz  
AQ 0.7274996 sec  
RG 32  
DW 44.400 usec  
DE 6.00 usec  
TE 300.6 K  
D1 4.00000000 sec  
d11 0.03000000 sec  
d12 0.00020000 sec  
D16 0.00020000 sec  
D20 0.04000000 sec  
D21 0.00500000 sec  
DELTA1 0.03032720 sec  
DELTA2 0.00177200 sec

[m/s]

-10.5

-10.0

-9.5

-9.0

-8.5

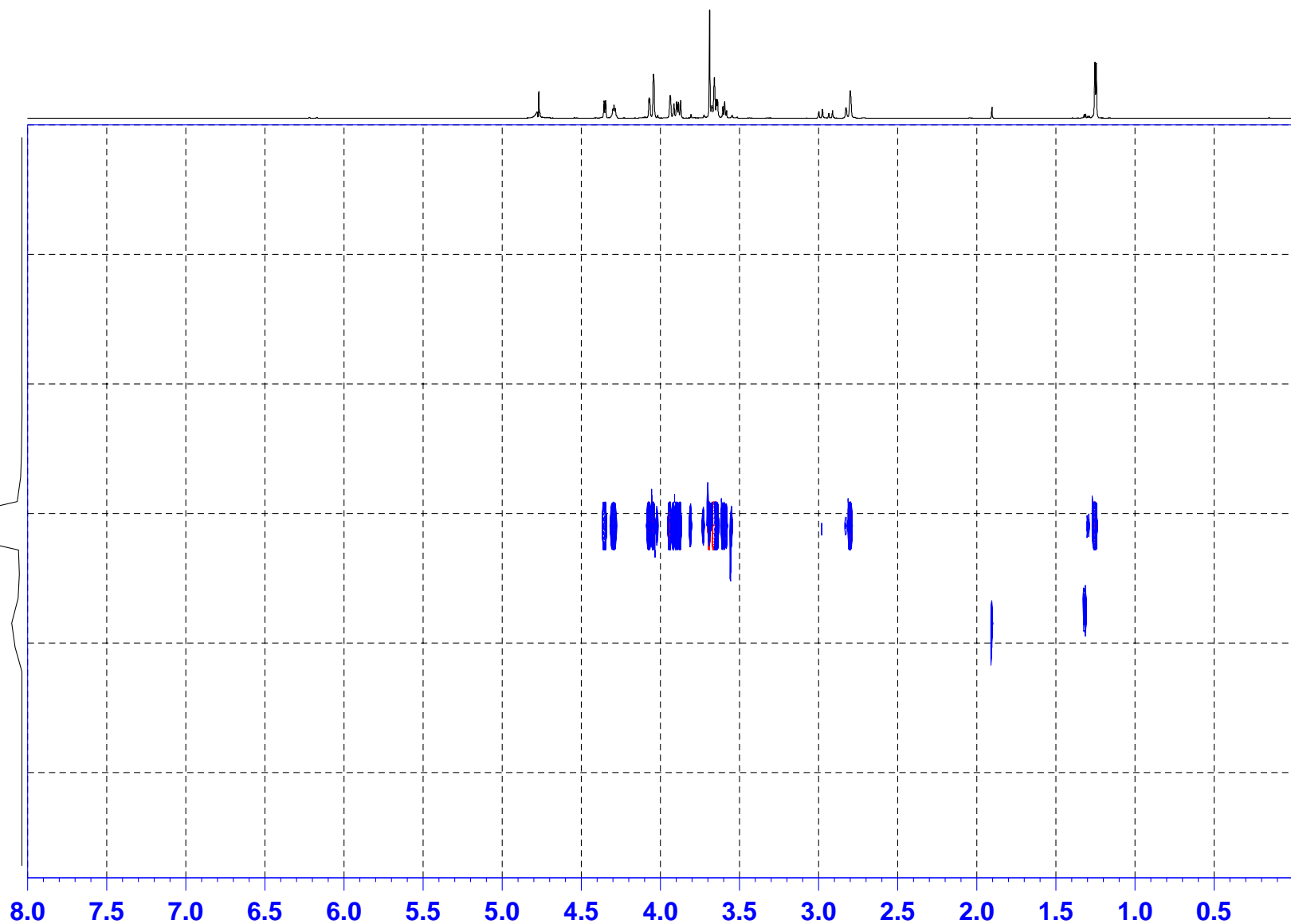
==== CHANNEL f1 =====  
NUC1 1H  
P1 12.20 usec  
P2 24.40 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

==== GRADIENT CHANNEL =====  
GPNAM6 SINE.100  
GPNAM7 SINE.100  
GPNAM8 SINE.100  
GPZ6 100.00 %  
GPZ7 -17.13 %  
GPZ8 -13.17 %  
P19 3000.00 usec  
P30 3000.00 usec

F1 - Acquisition parameters  
ND0 1  
TD 32  
SFO1 750.1346 MHz  
FIDRES 31.250000 Hz  
SW 1.333 ppr  
FhMODE QF

F1 - Processing parameters  
SI 32768  
SF 750.1299484 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 0.10

F1 - Processing parameters  
SI 32  
MC2 QF  
SF 750.1300000 MHz  
WDW no  
LB 0  
GB 0.00 Hz



sakamoto750\_01.201.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H DOSY with presat. (ledbpgppr2s):CPTCI-Z



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 201  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101026  
Time 10.59  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG ledbpgppr2s  
TD 16384  
SOLVENT D2O  
NS 8  
DSH 4  
SWH 11261.262 Hz  
FIDRES 0.687333 Hz  
AQ 0.7274996 sec  
RG 32  
DW 44.400 usec  
DE 6.00 usec  
TE 300.6 K  
D1 4.0000000 sec  
d11 0.0300000 sec  
d12 0.0002000 sec  
D16 0.0002000 sec  
D20 0.0400000 sec  
D21 0.0050000 sec  
DELTA1 0.03032720 sec  
DELTA2 0.00177200 sec

[m/s]

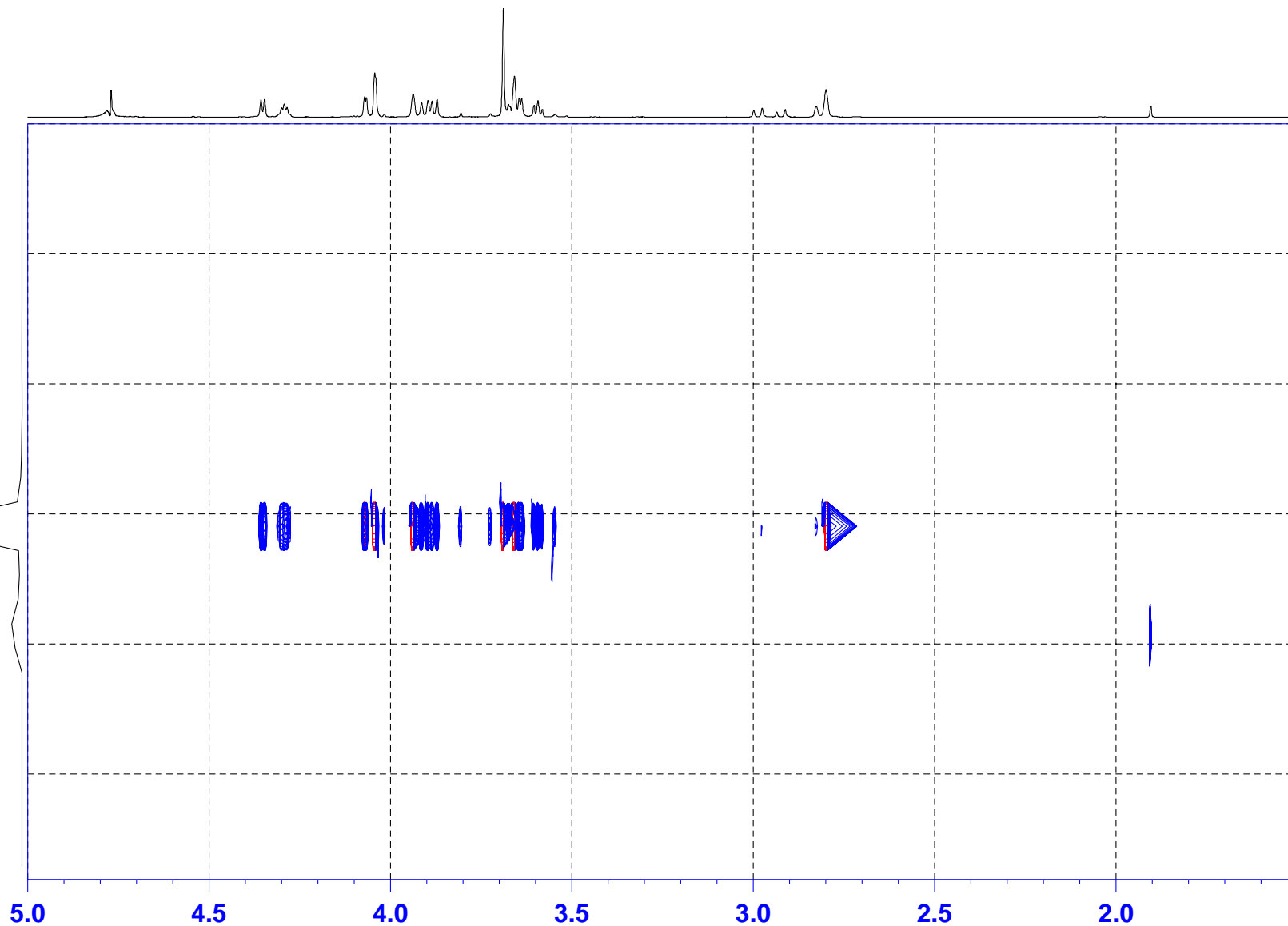
-10.5

-10.0

-9.5

-9.0

-8.5



==== CHANNEL f1 =====  
NUC1 1H  
P1 12.20 usec  
P2 24.40 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

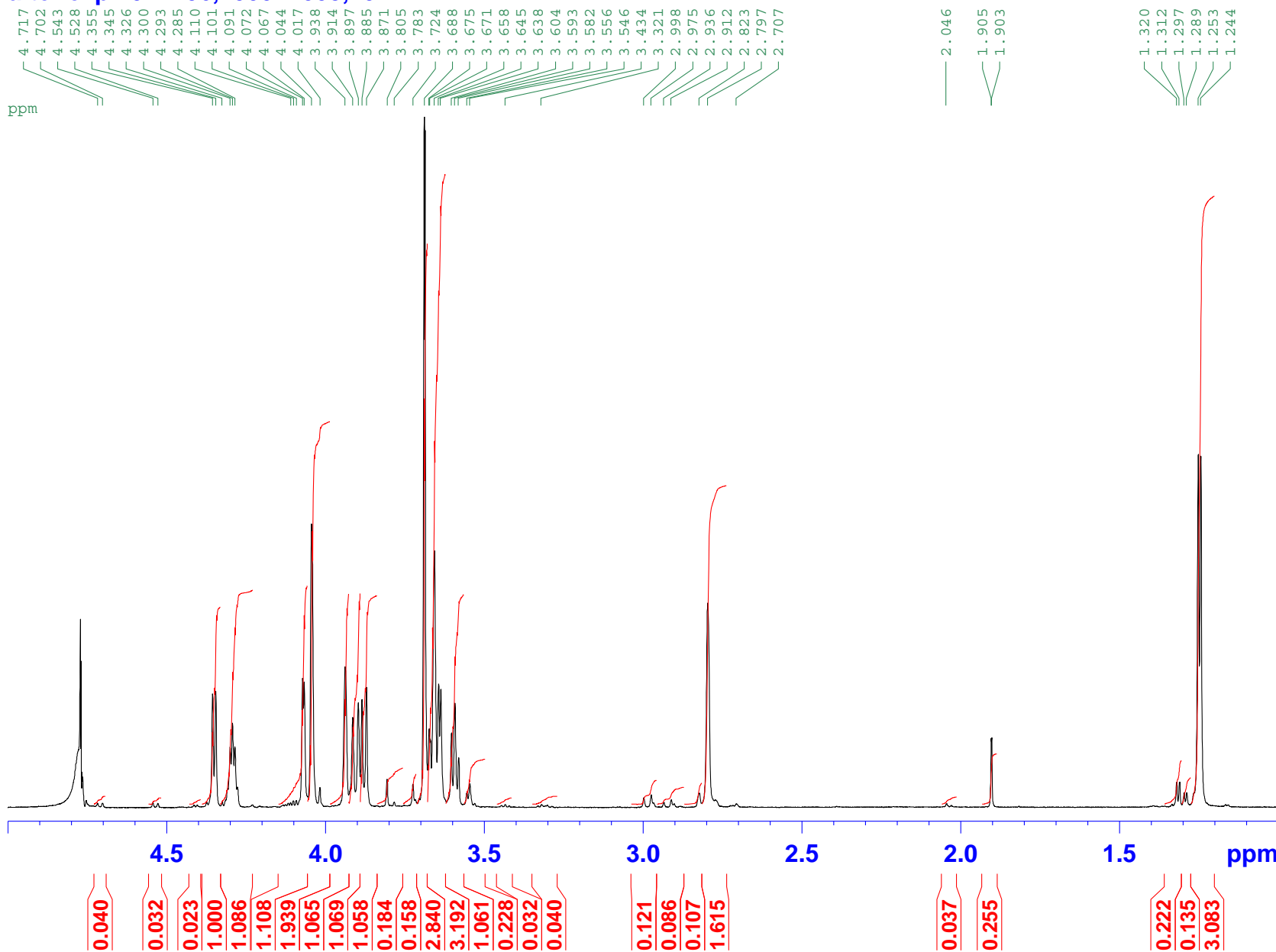
==== GRADIENT CHANNEL ===  
GPNAM6 SINE.100  
GPNAM7 SINE.100  
GPNAM8 SINE.100  
GPZ6 100.00 %  
GPZ7 -17.13 %  
GPZ8 -13.17 %  
P19 3000.00 usec  
P30 3000.00 usec

F1 - Acquisition parameters  
NDO 1  
TD 32  
SFO1 750.1346 MHz  
FIDRES 31.250000 Hz  
SW 1.333 ppr  
FhMODE QF

F1 - Processing parameters  
SI 32768  
SF 750.1299484 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 0.10

F1 - Processing parameters  
SI 32  
MC2 QF  
SF 750.1300000 MHz  
WDW no  
LB 0  
GB 0.00 Hz

sakamoto750\_01.2.1  
 Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
 1H 1Pulse (zg0pr):CPTCI-Z  
 reference:external DSS=0 ppm  
 after exp.101-106,1000-1003,201



Current Data Parameters  
 NAME sakamoto750\_01  
 EXPNO 2  
 PROCNO 1

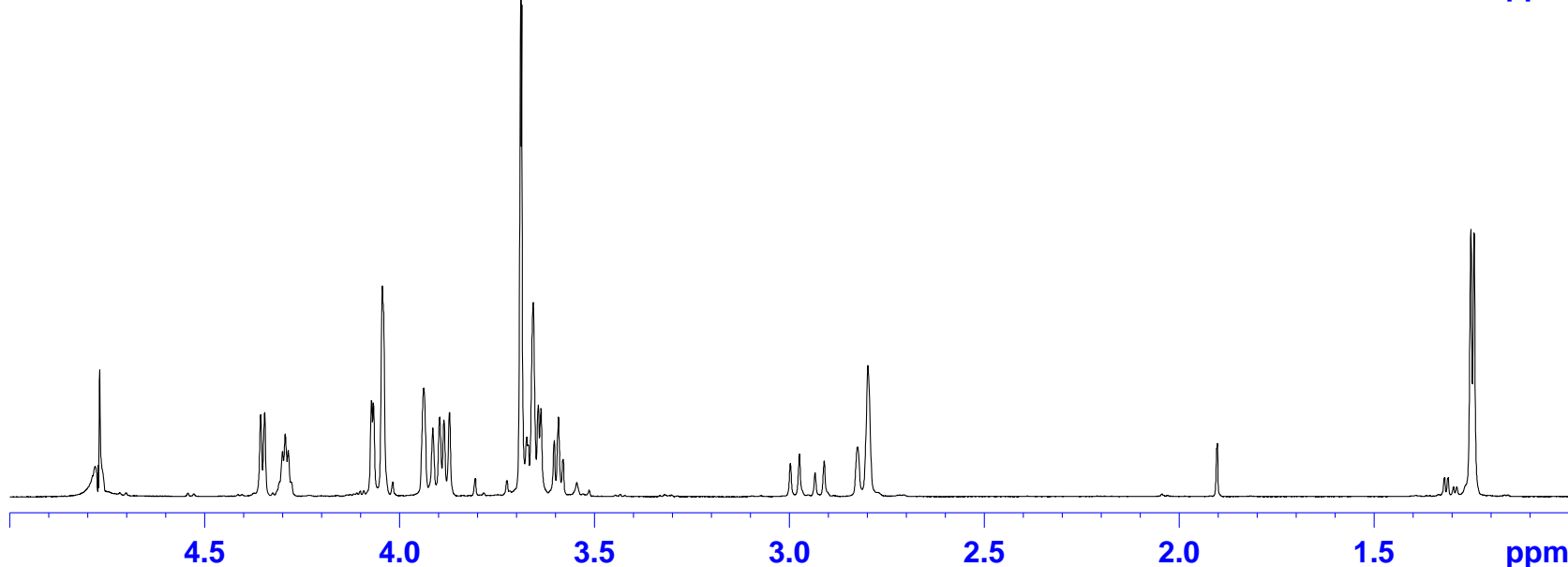
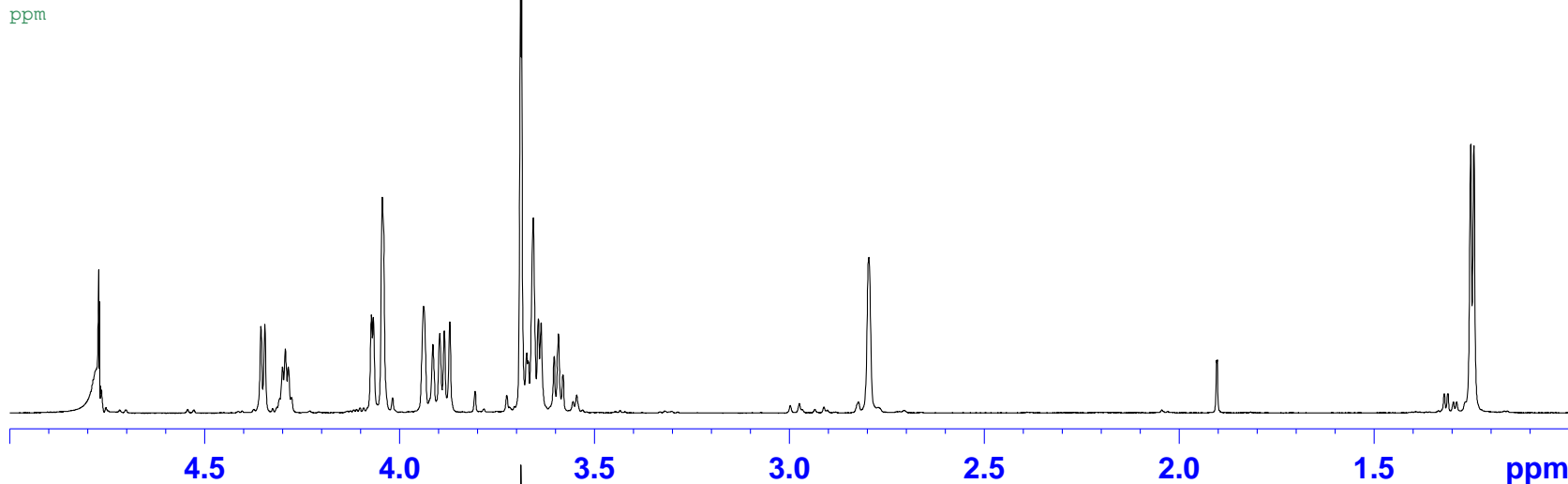
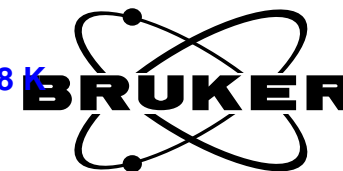
F2 - Acquisition Parameters  
 Date\_ 20101026  
 Time 14.52  
 INSTRUM spect  
 PROBHD 5 mm CPTCI 1H-  
 PULPROG zg0pr  
 TD 65536  
 SOLVENT D2O  
 NS 16  
 DS 4  
 SWH 11261.262 Hz  
 FIDRES 0.171833 Hz  
 AQ 2.9098485 sec  
 RG 128  
 DW 44.400 usec  
 DE 6.00 usec  
 TE 300.6 K  
 D1 2.00000000 sec  
 d12 0.00002000 sec  
 TDO 1

===== CHANNEL f1 =====  
 NUC1 1H  
 P0 3.96 usec  
 PL1 -3.00 dB  
 PL9 65.00 dB  
 SFO1 750.1335267 MHz

F2 - Processing parameters  
 SI 32768  
 SF 750.1299484 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

Bottom: sakamoto750\_01.1.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H 1Pulse (zg0pr):CPTCI-Z  
reference:external DSS=0 ppm

Top: sakamoto750\_01.2.1  
Nostoc commune MAA (Ox. 1.2 mg/0.5 ml) /D2O /298 K  
1H 1Pulse (zg0pr):CPTCI-Z  
reference:external DSS=0 ppm  
after exp.101-106,1000-1003,201



Current Data Parameters  
NAME sakamoto750\_01  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20101026  
Time\_ 14.52  
INSTRUM spect  
PROBHD 5 mm CPTCI 1H-  
PULPROG zg0pr  
TD 65536  
SOLVENT D2O  
NS 16  
DS 4  
SWH 11261.262 Hz  
FIDRES 0.171833 Hz  
AQ 2.9098485 sec  
RG 128  
DW 44.400 usec  
DE 6.00 usec  
TE 300.6 K  
D1 2.0000000 sec  
d12 0.00002000 sec  
TDO 1

==== CHANNEL f1 =====  
NUC1 1H  
P0 3.96 usec  
PL1 -3.00 dB  
PL9 65.00 dB  
SFO1 750.1335267 MHz

F2 - Processing parameters  
SI 32768  
SF 750.1299484 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00