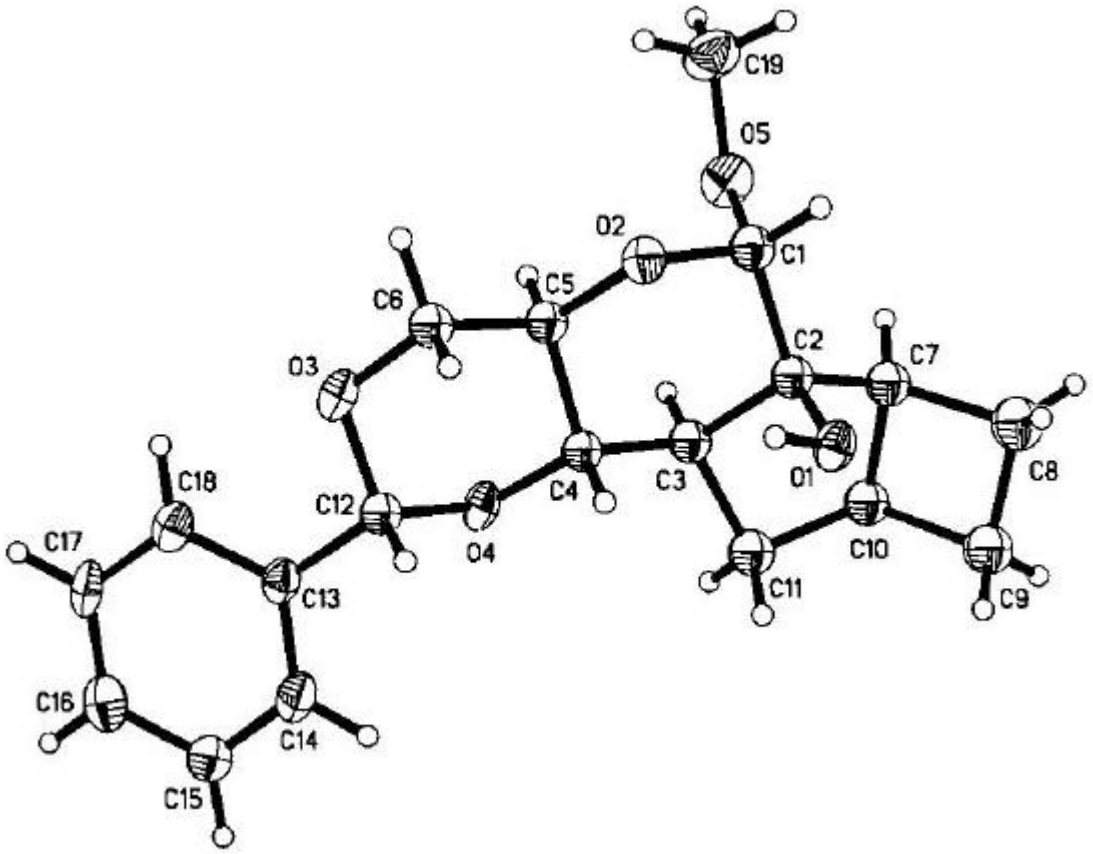
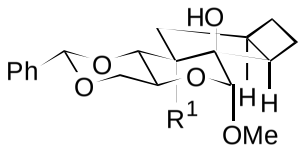
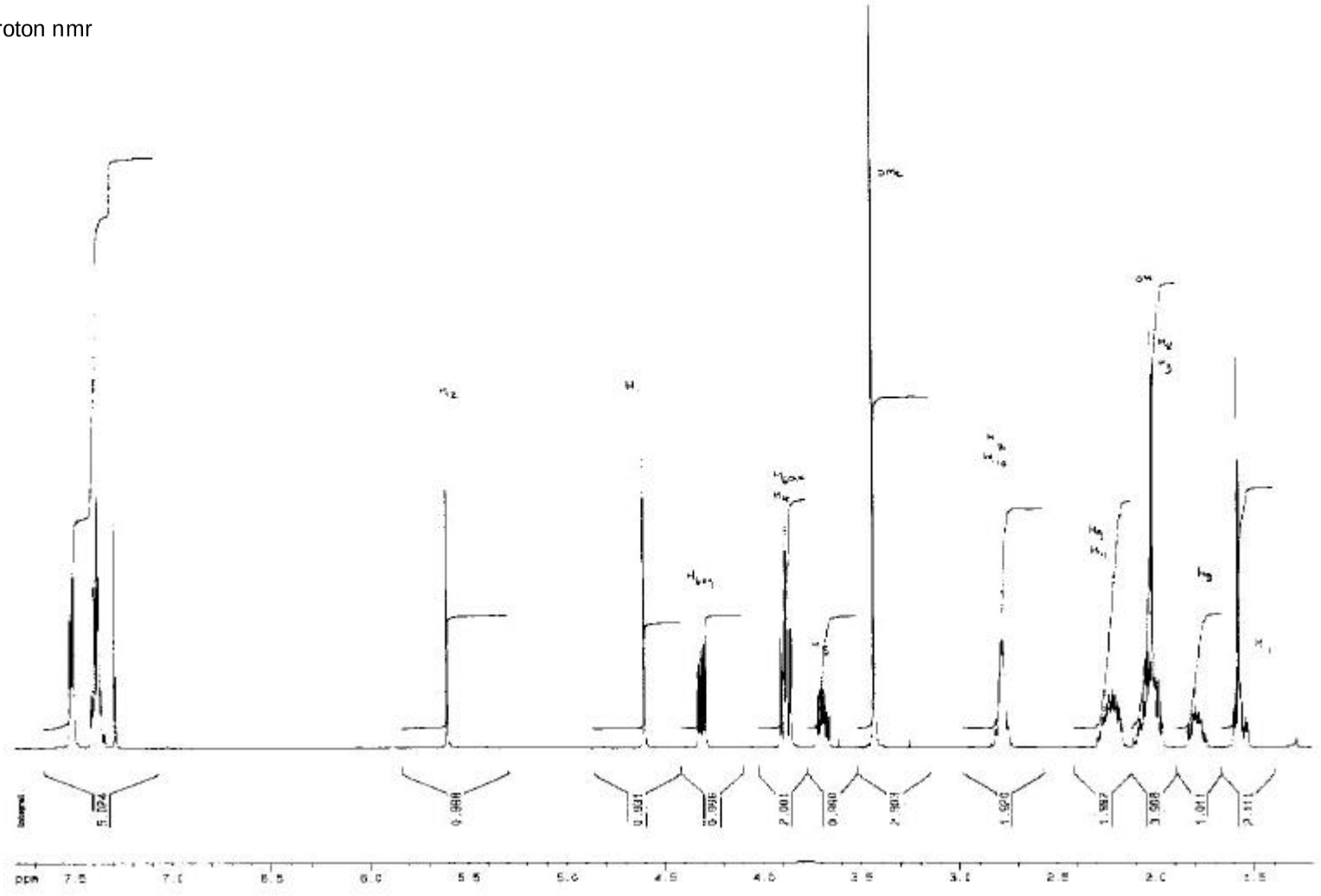
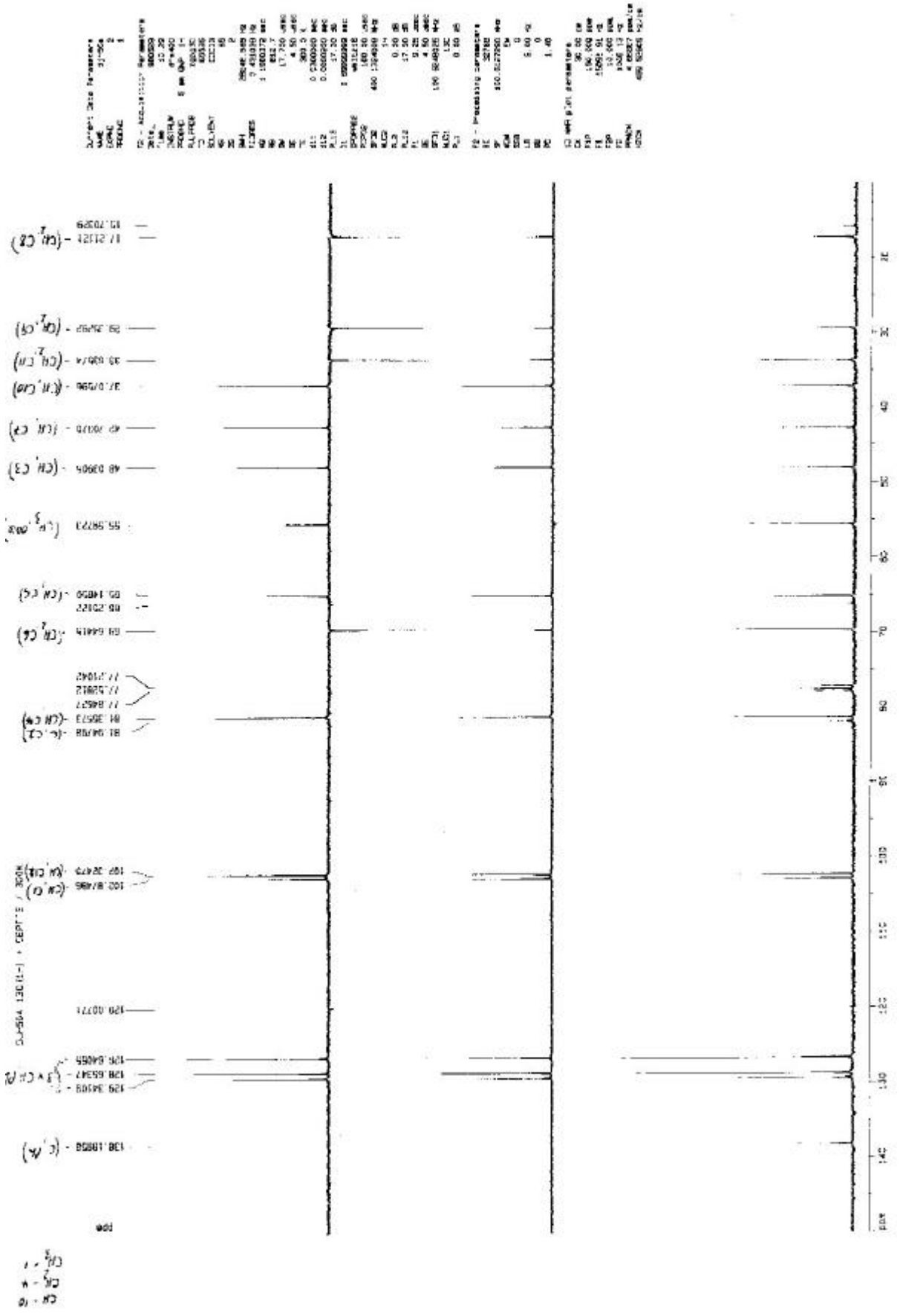


3a X-ray crystal structure – for full details see Ref. 15.

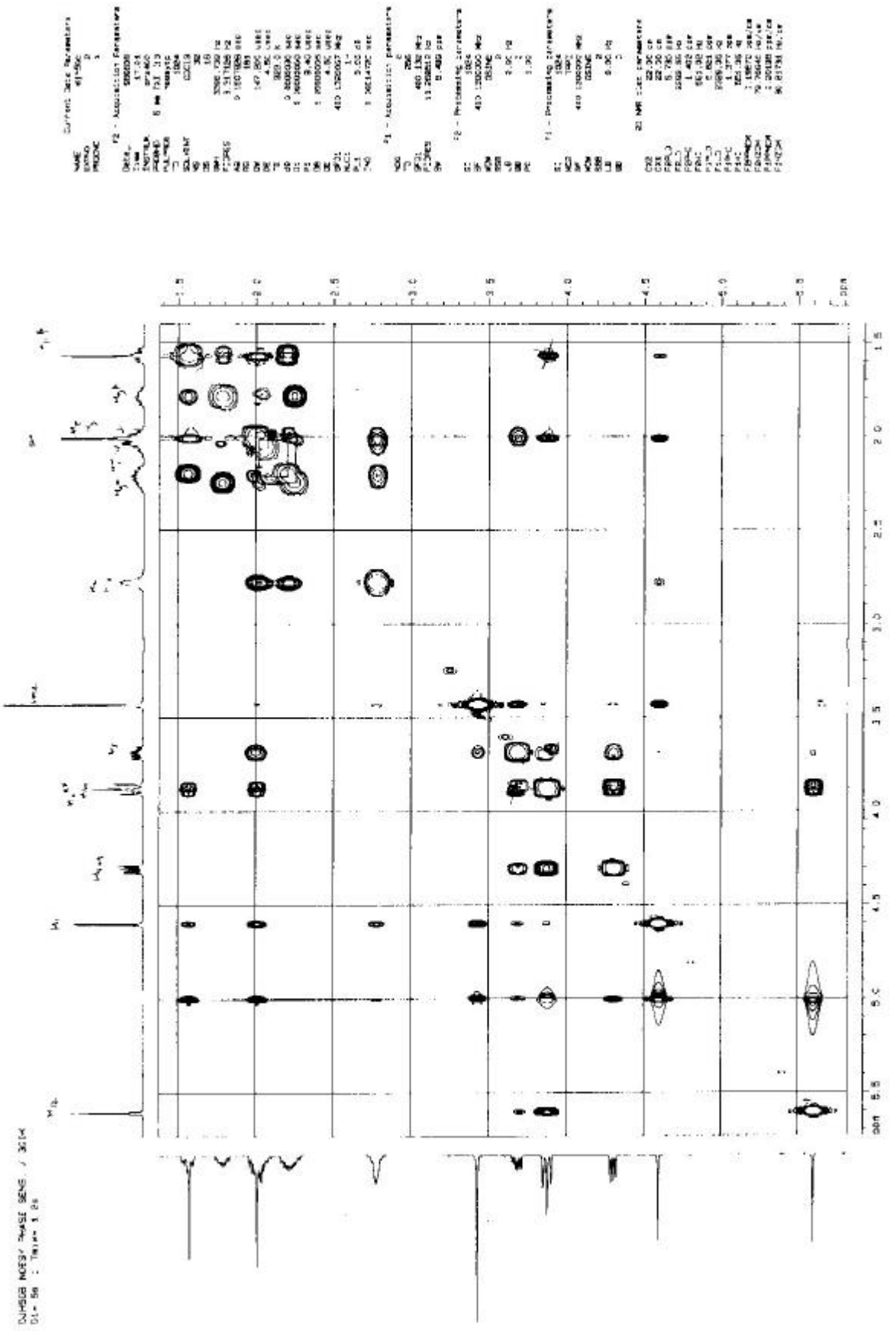


3a proton nmr

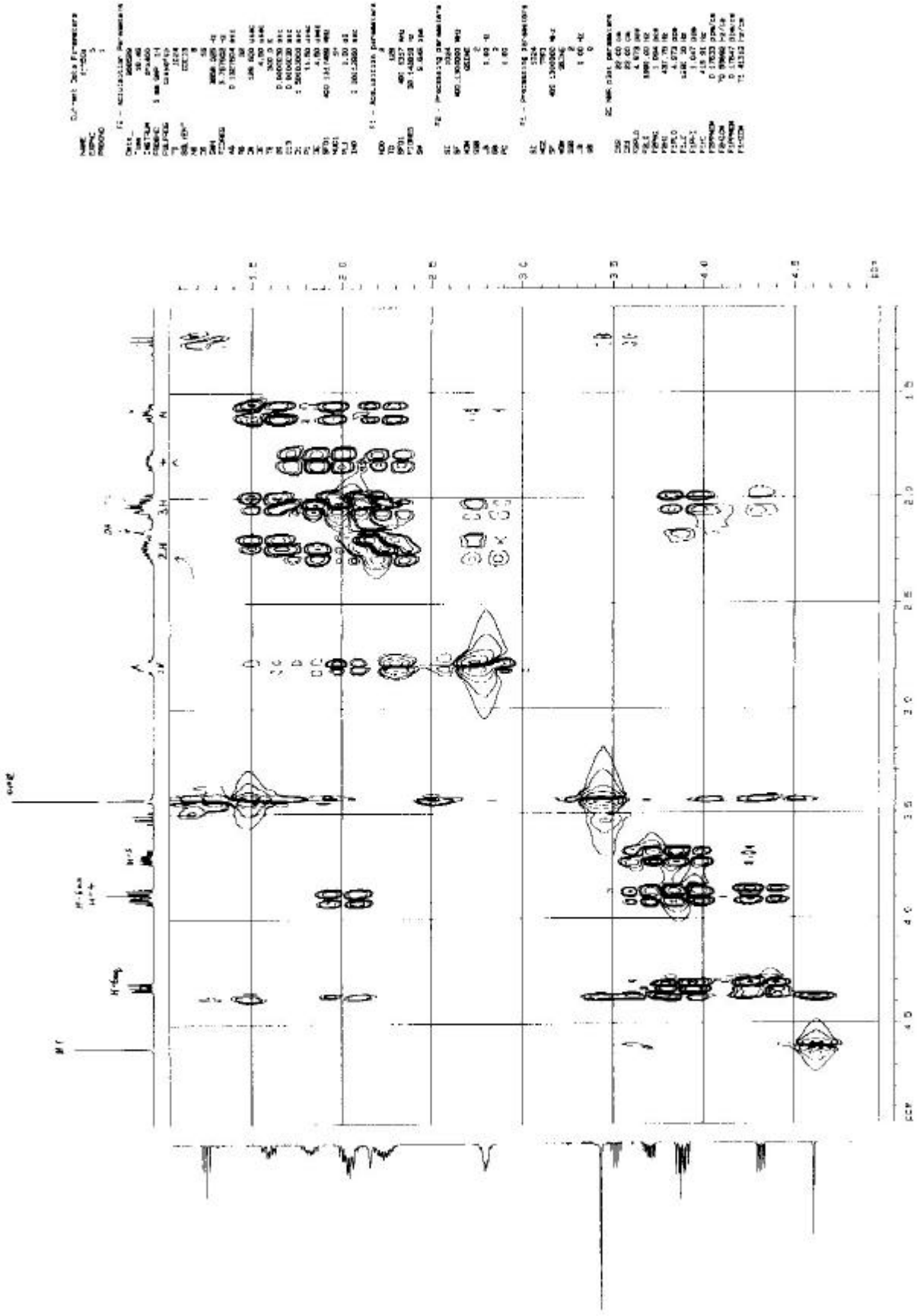




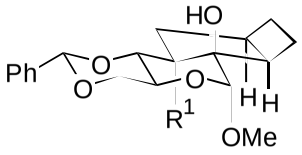
3a ^{13}C and DEPT



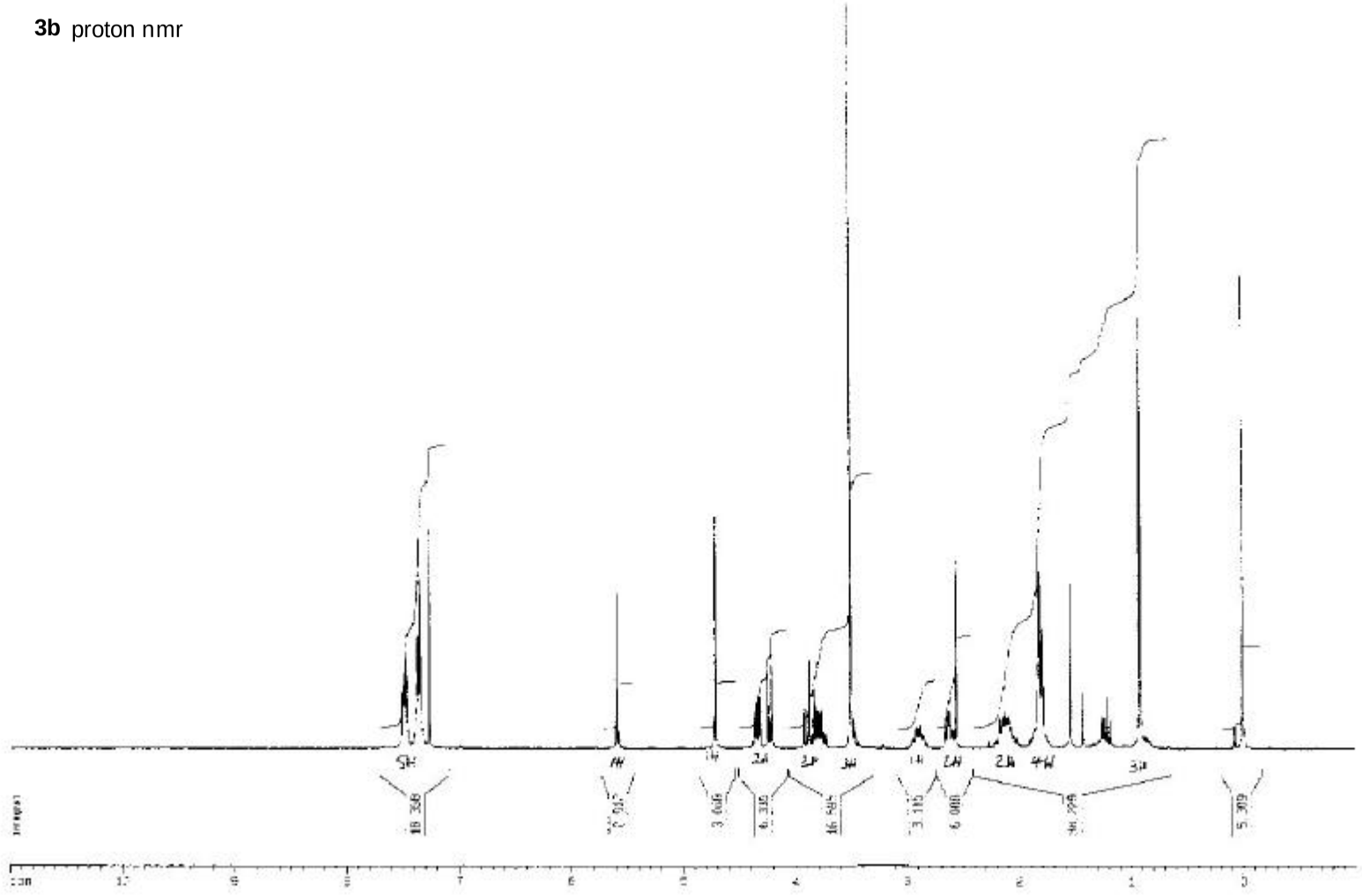
3a NOESY

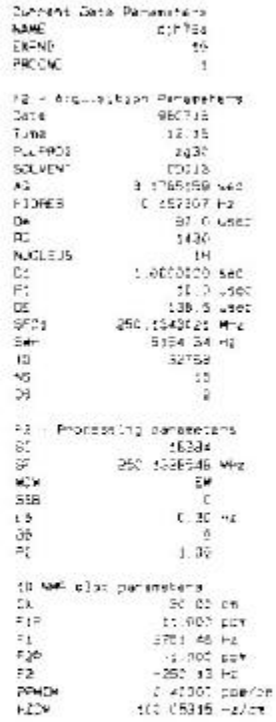


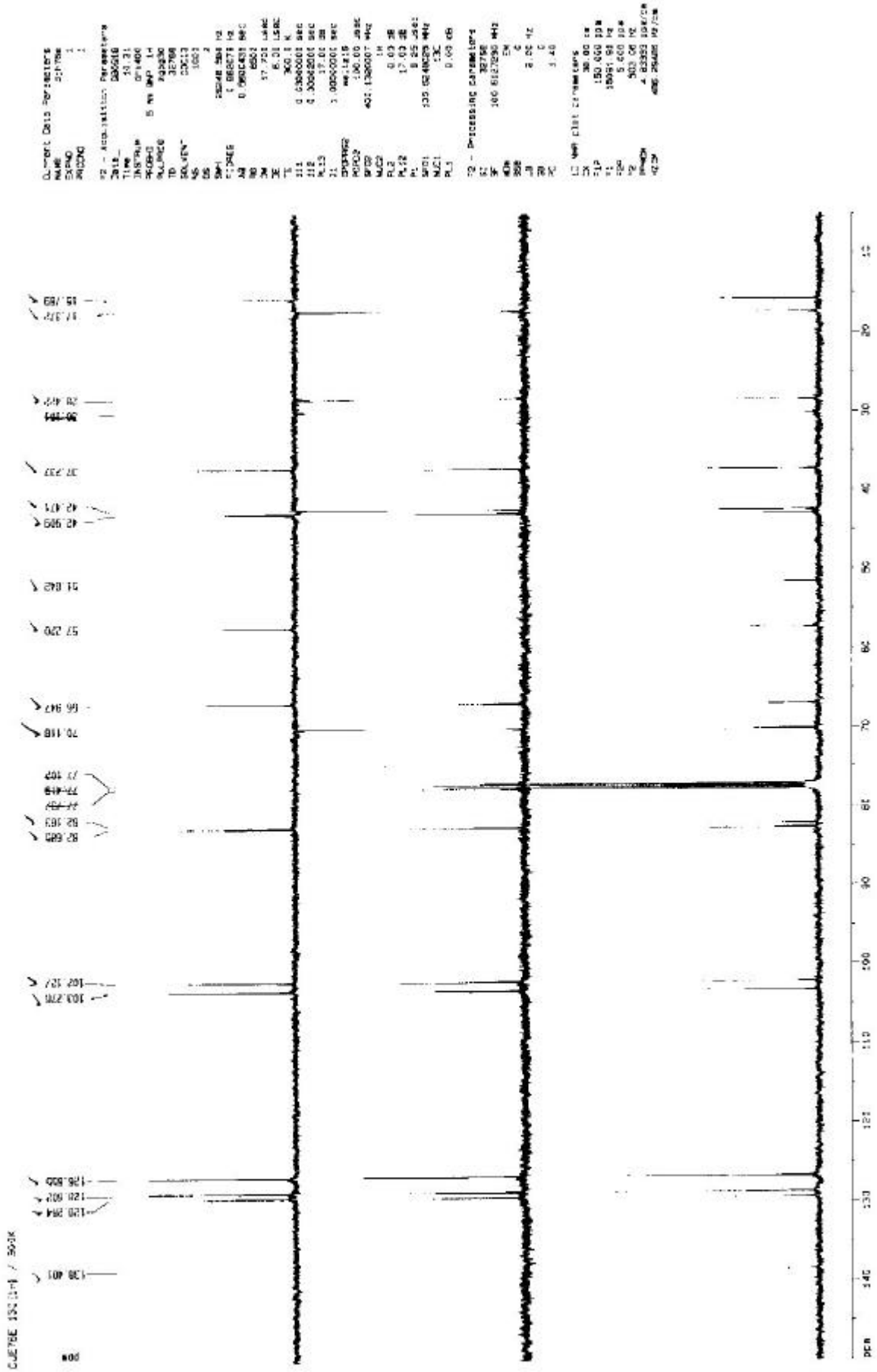
3a COSY



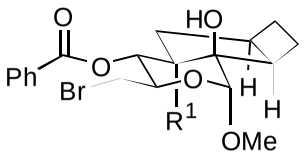
3b proton nmr



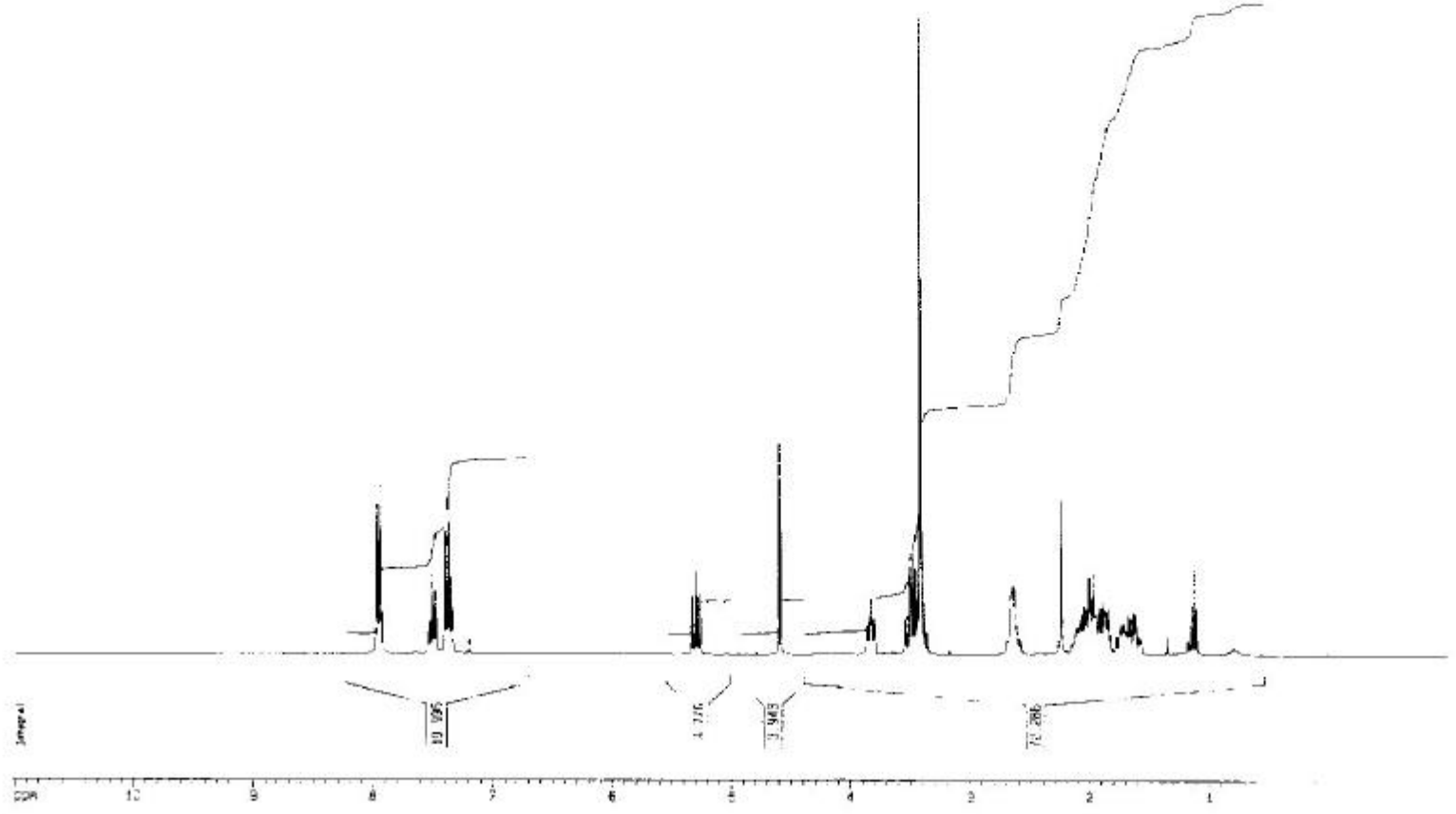




3b ^{13}C and DEPT



4, proton nmr



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Current Data Parameters
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EXPNO                     20
PROCNO                     1

F2 - Acquisition Parameters
Date_              990114
Time                   14 54
INSTRUM                 dmx300
PROBHD     5 mm BNP  1H
PULPROG                 zg30
TD                      32768
SOLVENT                 CDCl3
NS                         16
DS                          4
SWH                 4789.272 Hz
FIDRES              0.146157 Hz
AQ                  3.4210201 sec
RG                        64
DW                  104.404 usec
DE                    6.50 usec
TE                   301.1 K
D1                  1.00000000 sec
P1                    9.75 usec
SFO1             301.5018015 MHz
NUC1                      1H
PL1                  -6.00 dB

F2 - Processing parameters
SI                     16384
SF               301.5000315 MHz
WDW                       EM
SSB                        0
LB                    0.30 Hz
GB                         0
PC                    1.00

1D NMR plot parameters
CX                   20.00 cm
F1P                  11.000 ppm
F1                 3318.50 Hz
F2P                  -1.000 ppm
F2                 -306.50 Hz
PPMCM                0.40000 ppm/cm
HZCM               120.59201 Hz/cm
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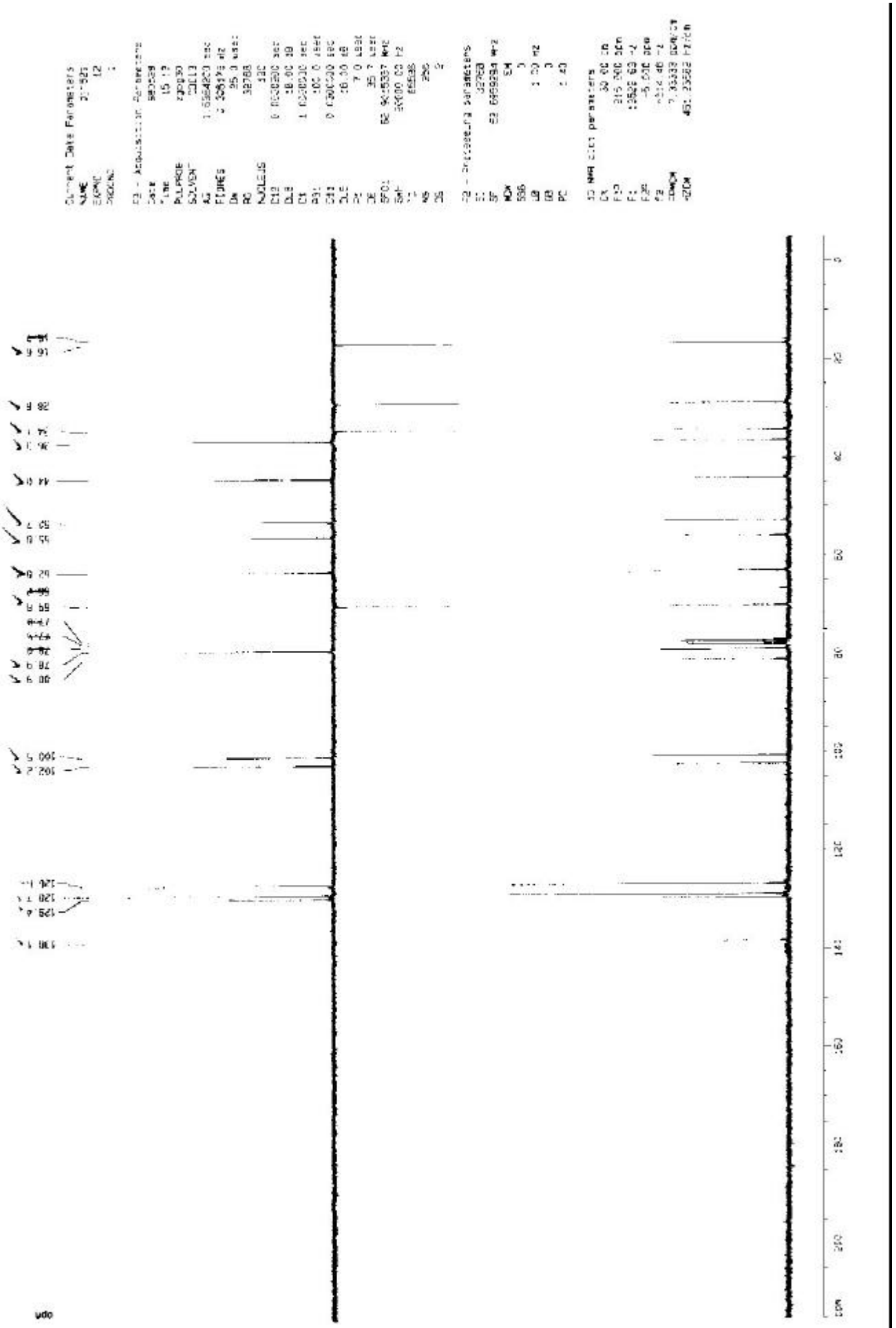
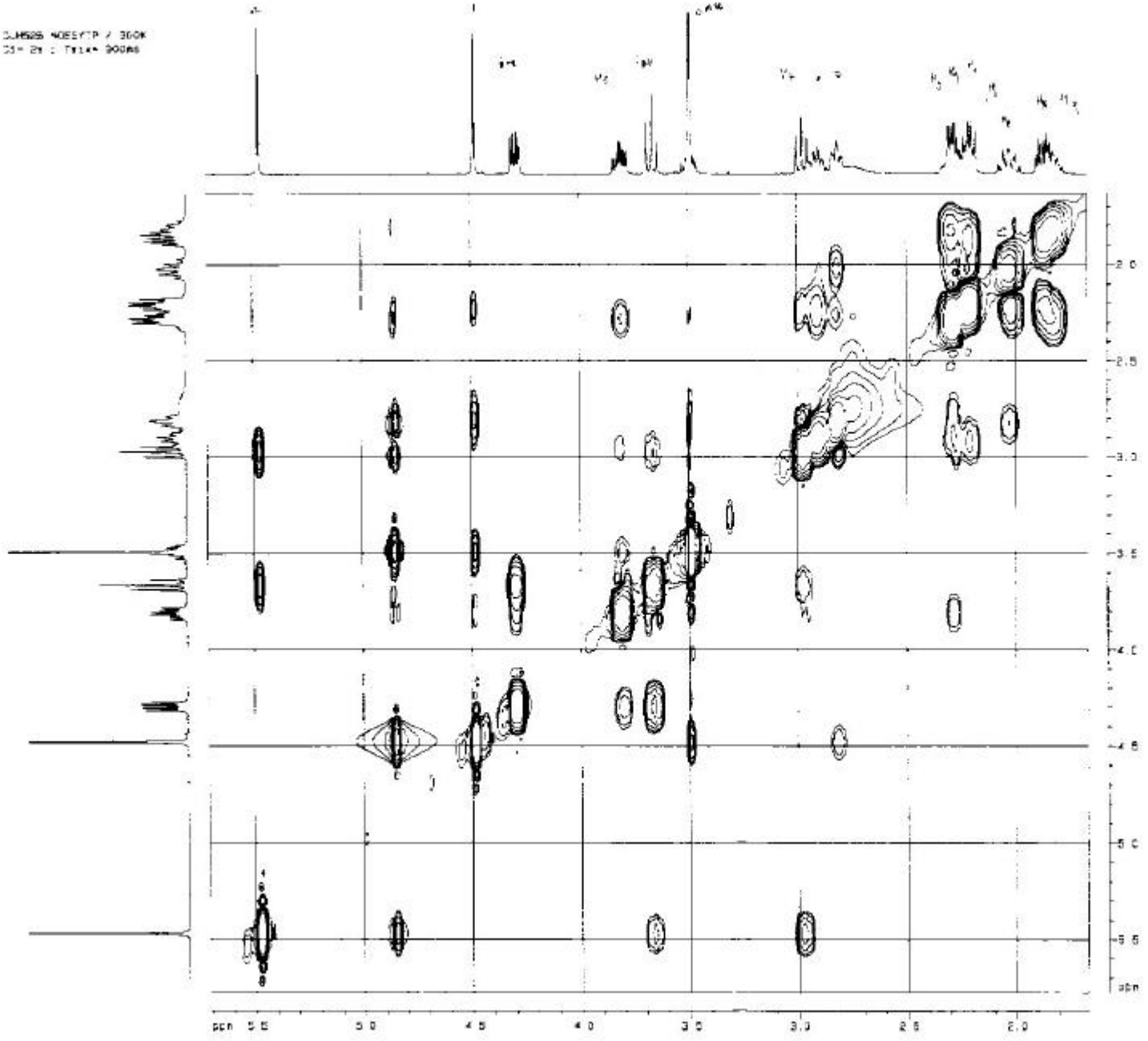
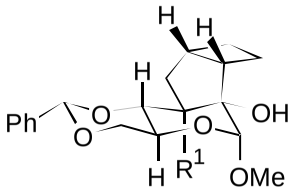


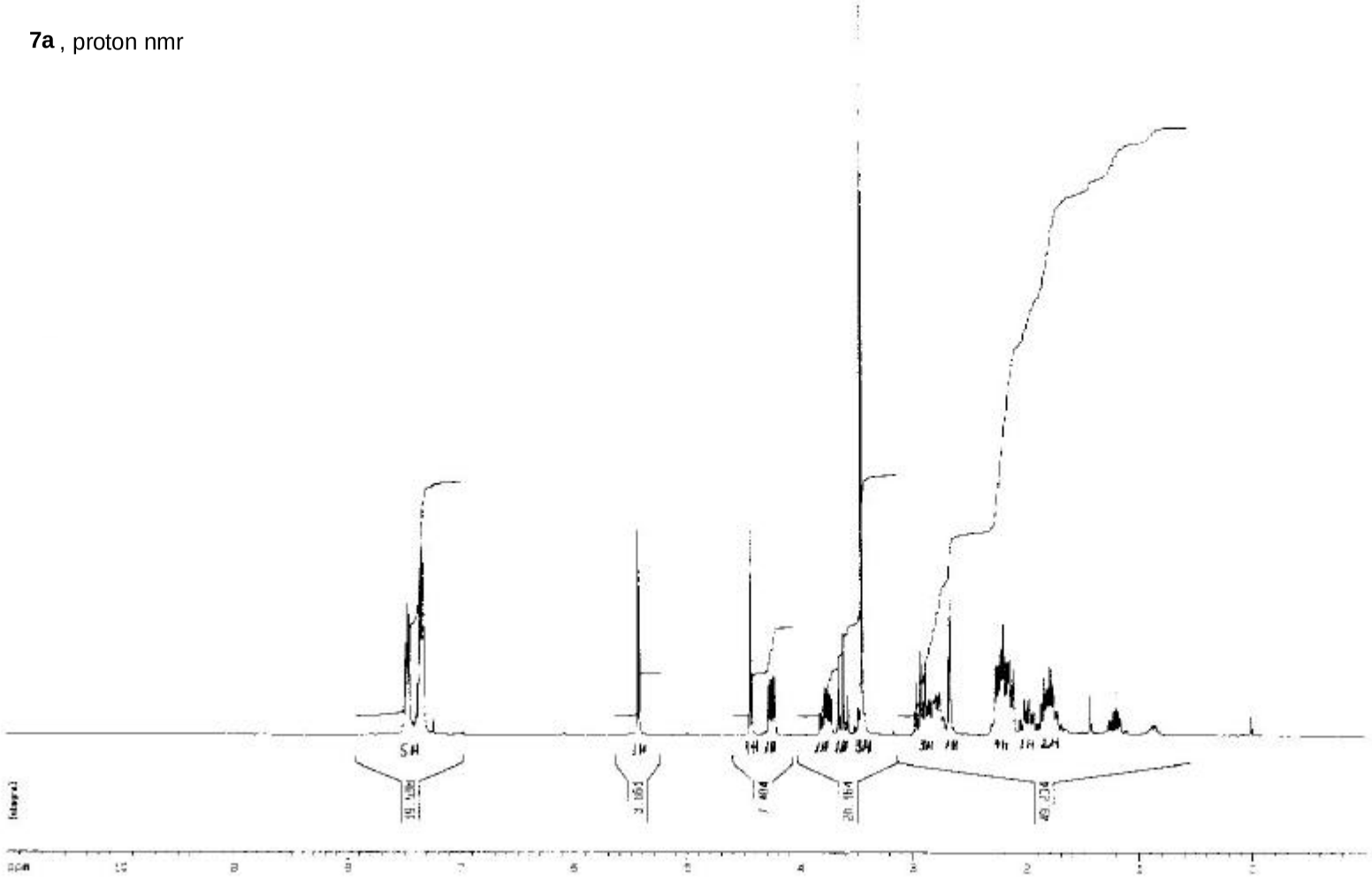
4 ^{13}C and DEPT

4 NOESY





7a , proton nmr



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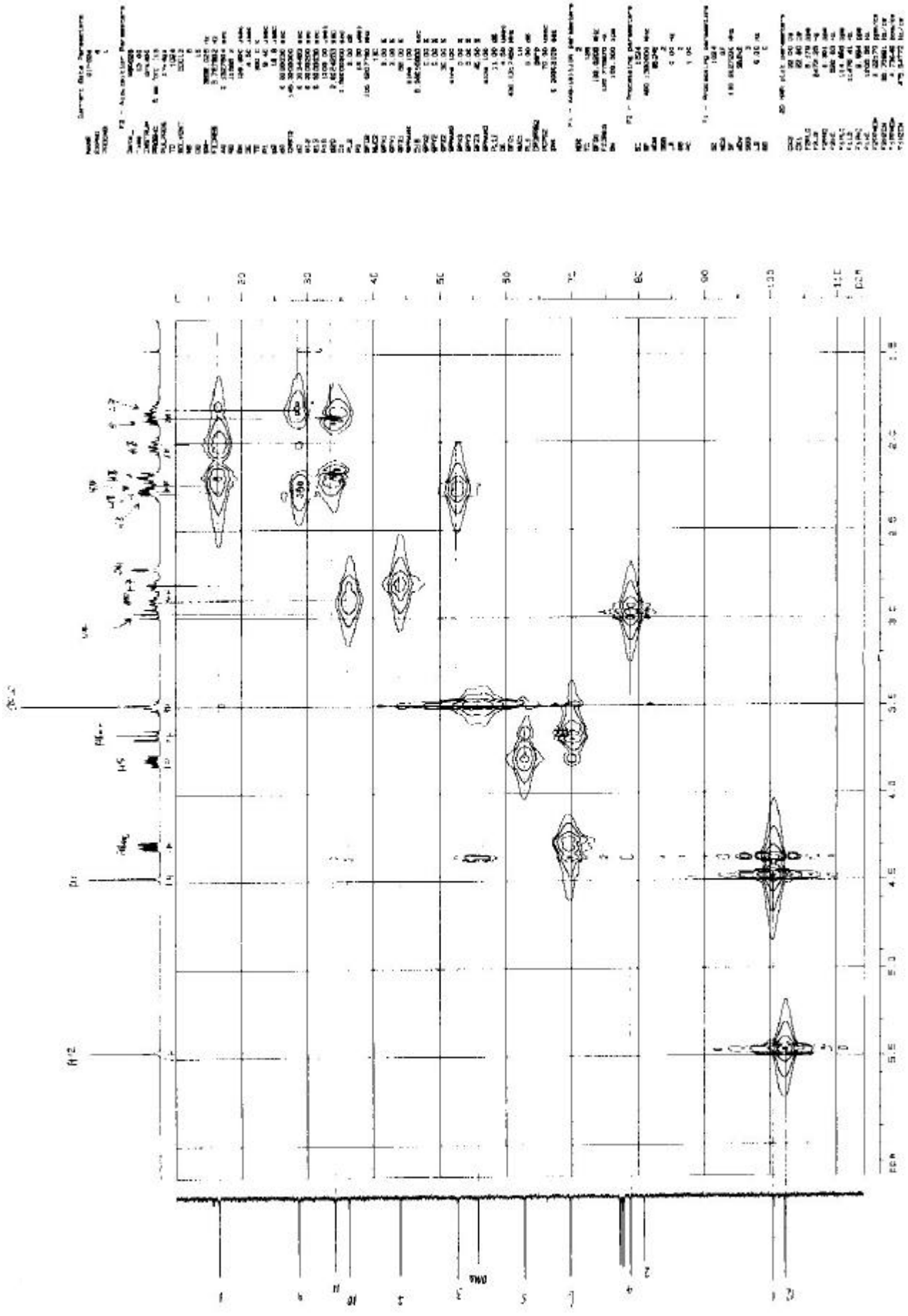
Current Data Parameters
NAME                  dm08a
EXPNO                     11
PROCNO                     1

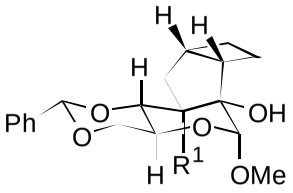
F2 - Acquisition Parameters
Date                 080508
Time                  15.00
PULPROG               zg30
SOLVENT               CDCl3
AQ                 3.1785359 sec
FIDRES             0.157537 Hz
DW                    80.0 usec
RG                     256
NUCLEUS                1H
O1                 1.3000020 ppm
P1                    10.0 usec
DE                   136.0 usec
SFO1             250.1343021 MHz
SWH                5154.54 Hz
TD                     32768
NS                        16
DS                         2

F2 - Processing parameters
SI                     16384
SF               250.1338605 MHz
WDW                       EM
SSB                        0
LB                      0.30 Hz
GB                         0
PC                      1.00

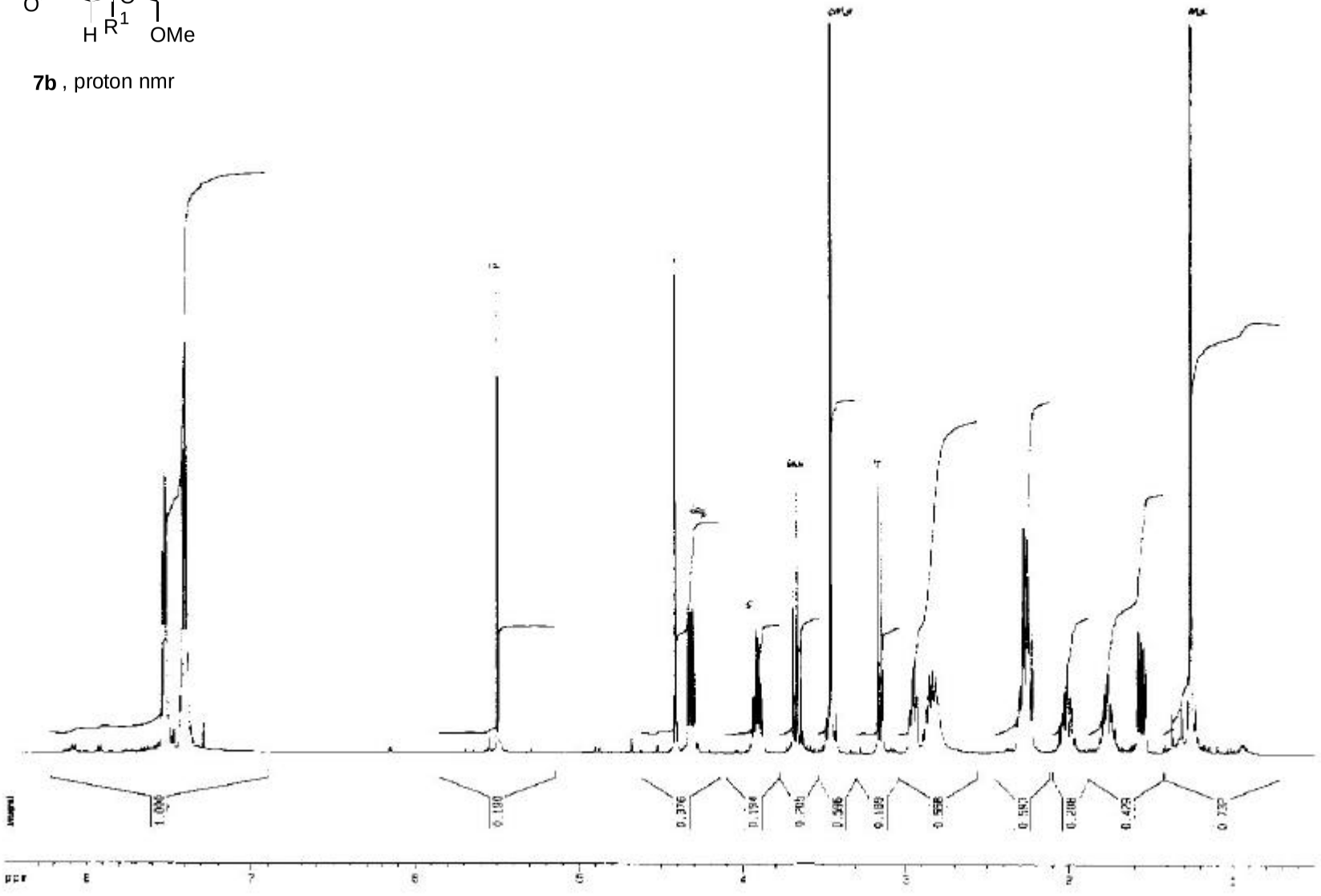
1D NMR plot parameters
CX                     30.00 cm
F1P                   10.000 ppm
F1                  2751.46 Hz
F2P                   -1.000 ppm
F2                  -250.13 Hz
PPMCM                0.40000 ppm/cm
HZCM               100.05315 Hz/cm
```

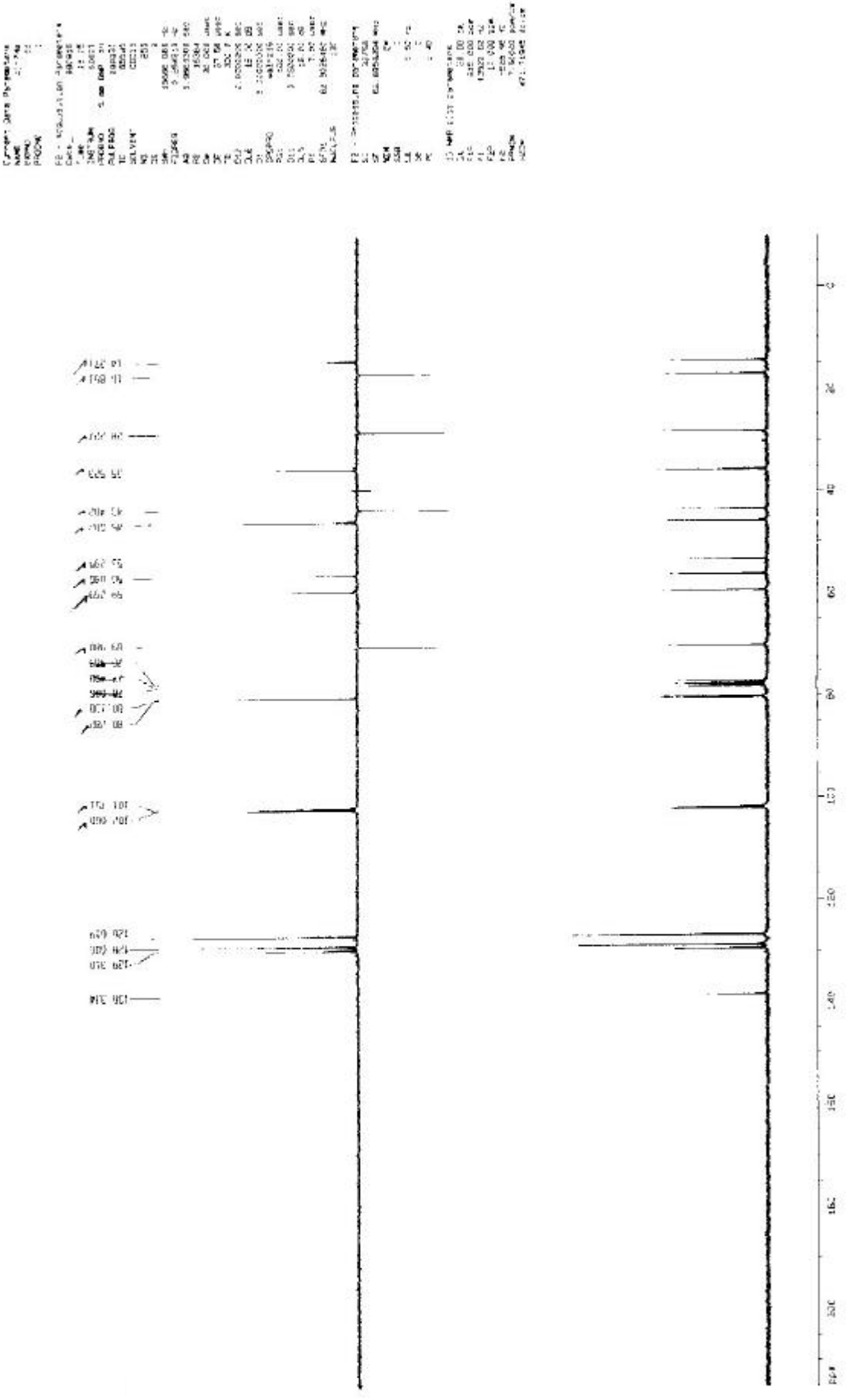


7a $^{13}C/^{1}H$ correlation



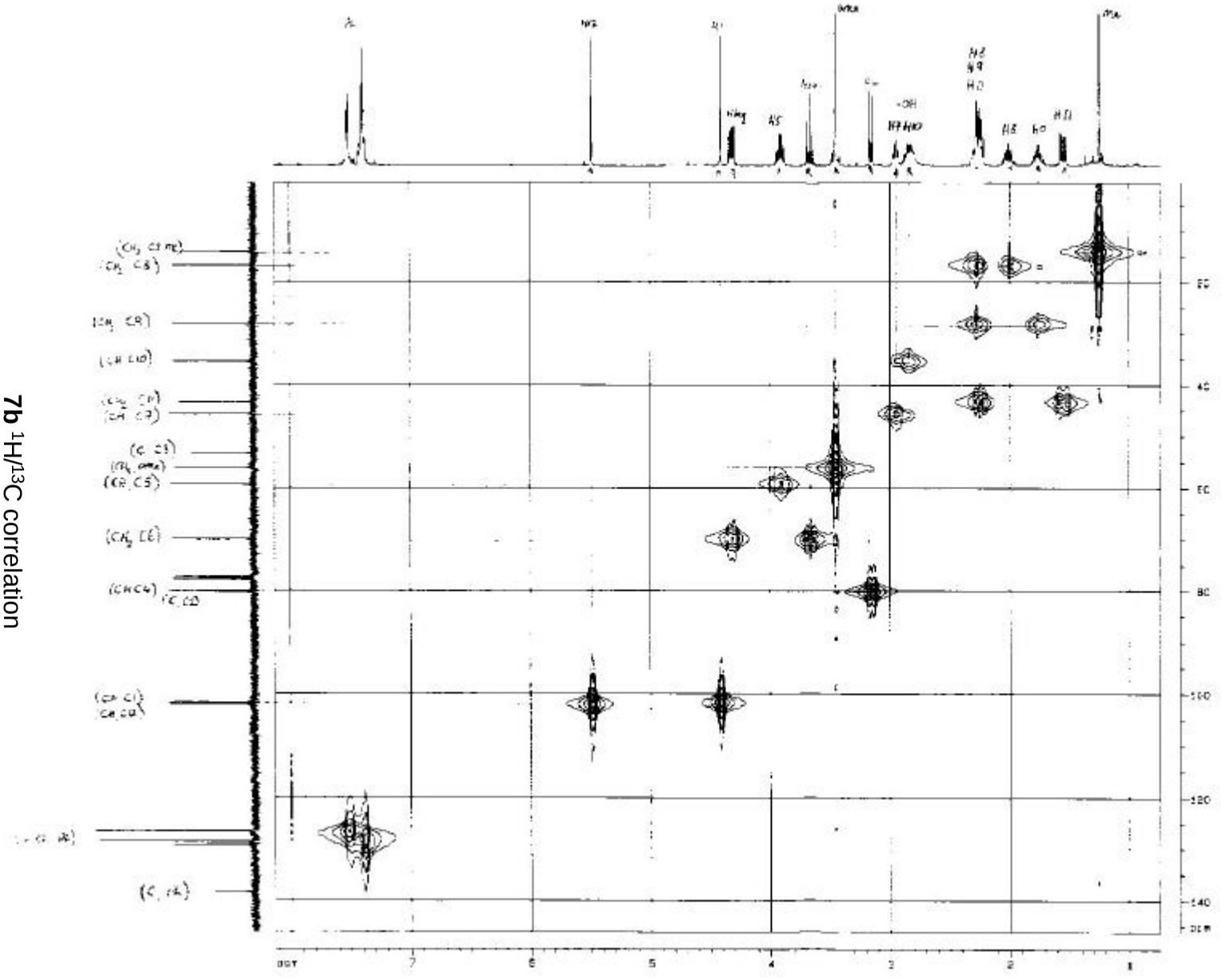
7b , proton nmr



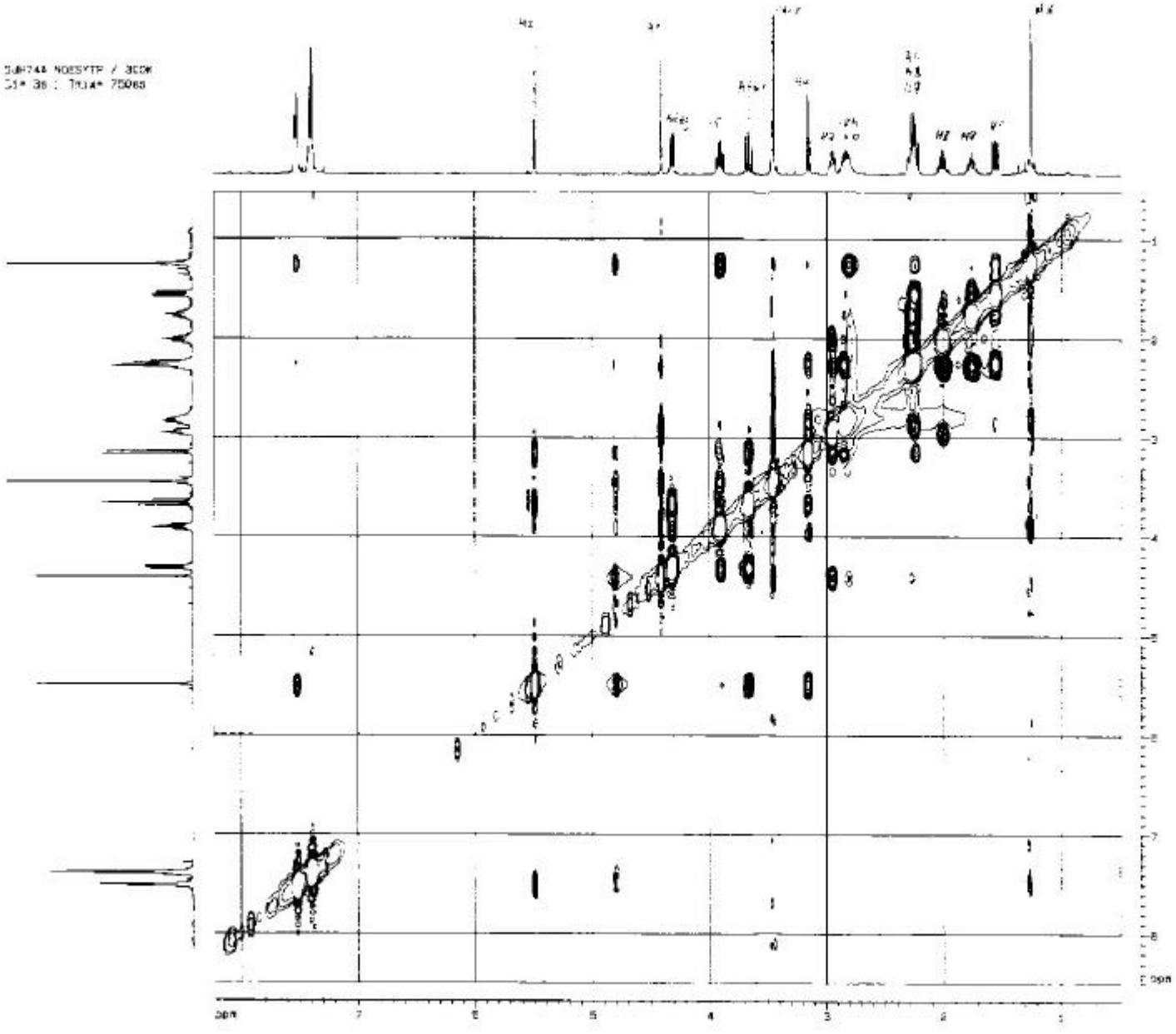


7b ^{13}C and DEPT

7b $^{1}H/^{13}C$ correlation



7b NOESY

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                    Current Data Parameters
NAME                  SUH744
EXPNO                      2
PROCNO                     1

                F2 - Acquisition Parameters
Date_               980918
Time                  14.46
INSTRUM             dru400
PROBHD     5 mm Tkl /13
PULPROG             noesytp
TD                      1024
SOLVENT               CDCl3
NS                         16
DS                         16
SWH                 3810.976 Hz
FIDRES              3.721656 Hz
AQ                  0.1343488 sec
RG                        58
DW                   131.200 usec
DE                     4.50 usec
TE                    300.0 K
D0                  0.00000300 sec
D1                  3.00000000 sec
P1                     P 00 usec
SFO1                400.1316006 MHz
NUC1                    1H
PL1                    1.00 dB
DB                  0.75000000 sec
DW                  0.00013100 sec

                F1 - Acquisition parameters
NDO                        2
TD                       128
SFO1                400.1318 MHz
FIDRES              29.773247 Hz
DW                   8.524 DEN

                F2 - Processing parameters
SI                       1024
SF                  400.1300000 MHz
WDW                      SINE
SSB                         2
LB                     1.00 Hz
GB                          0
PC                     1.00

                F1 - Processing parameters
SI                       1024
MC2                      TPPI
SF                  400.1300000 MHz
WDW                      SINE
SSB                         2
LB                     1.00 Hz
GB                          0

                2D NMR plot parameters
CX                     22.00 cm
CY                     22.00 cm
F2PLO                  8.323 ppm
F2LO                3298.19 Hz
F2PPM                  3.494 ppm
F2HZ                 197.50 Hz
F1PLO                  8.502 ppm
F1LO                3401.84 Hz
F1PPM                  3.631 ppm
F1HZ                 212.38 Hz
F2PPMCM             0.38133 ppm/cm
F2HZCM              148.57705 Hz/cm
F1PPMCM             0.36232 ppm/cm
F1HZCM              144.37542 Hz/cm
```
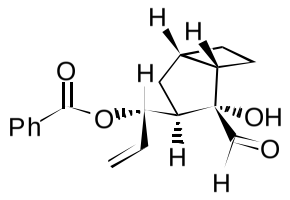
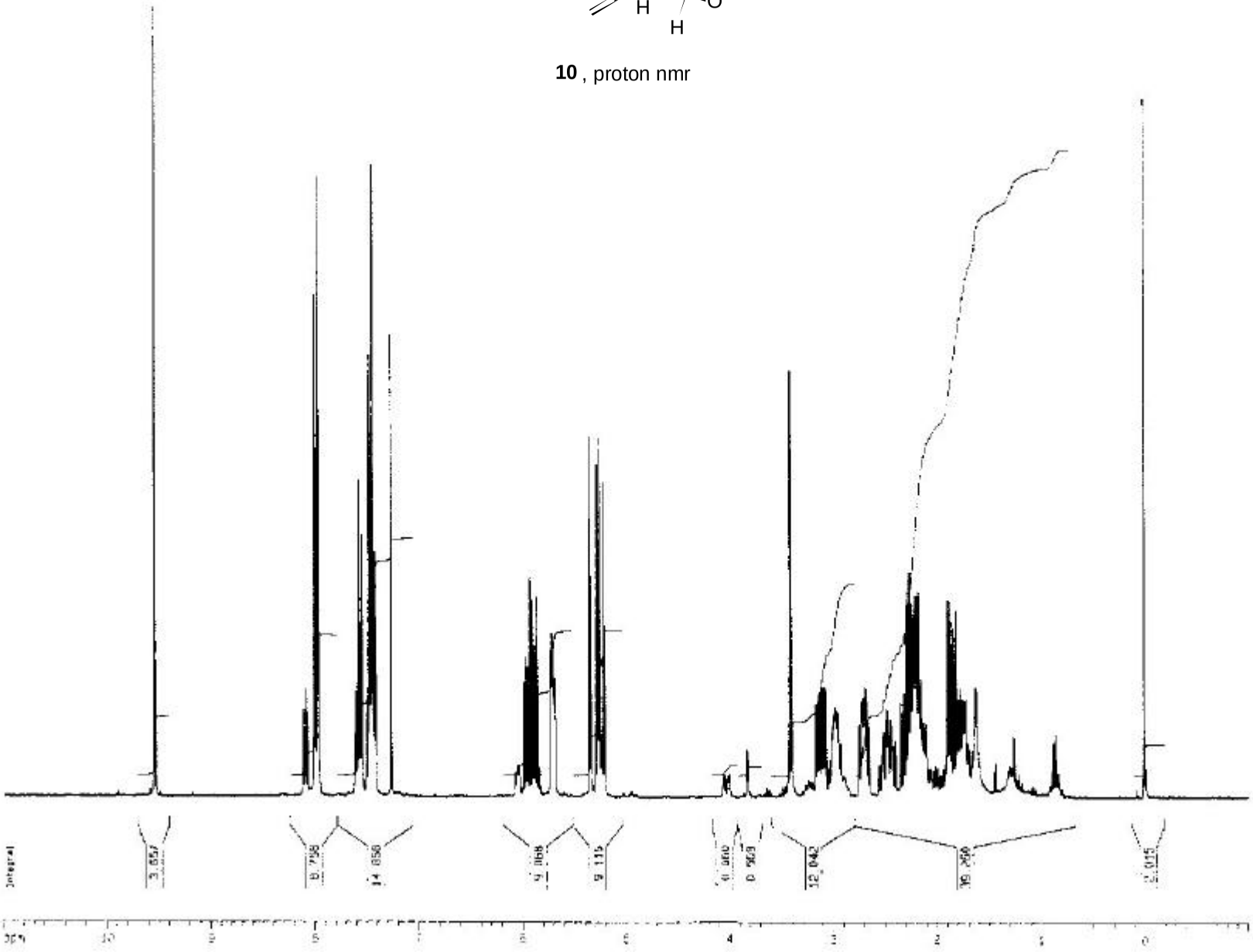
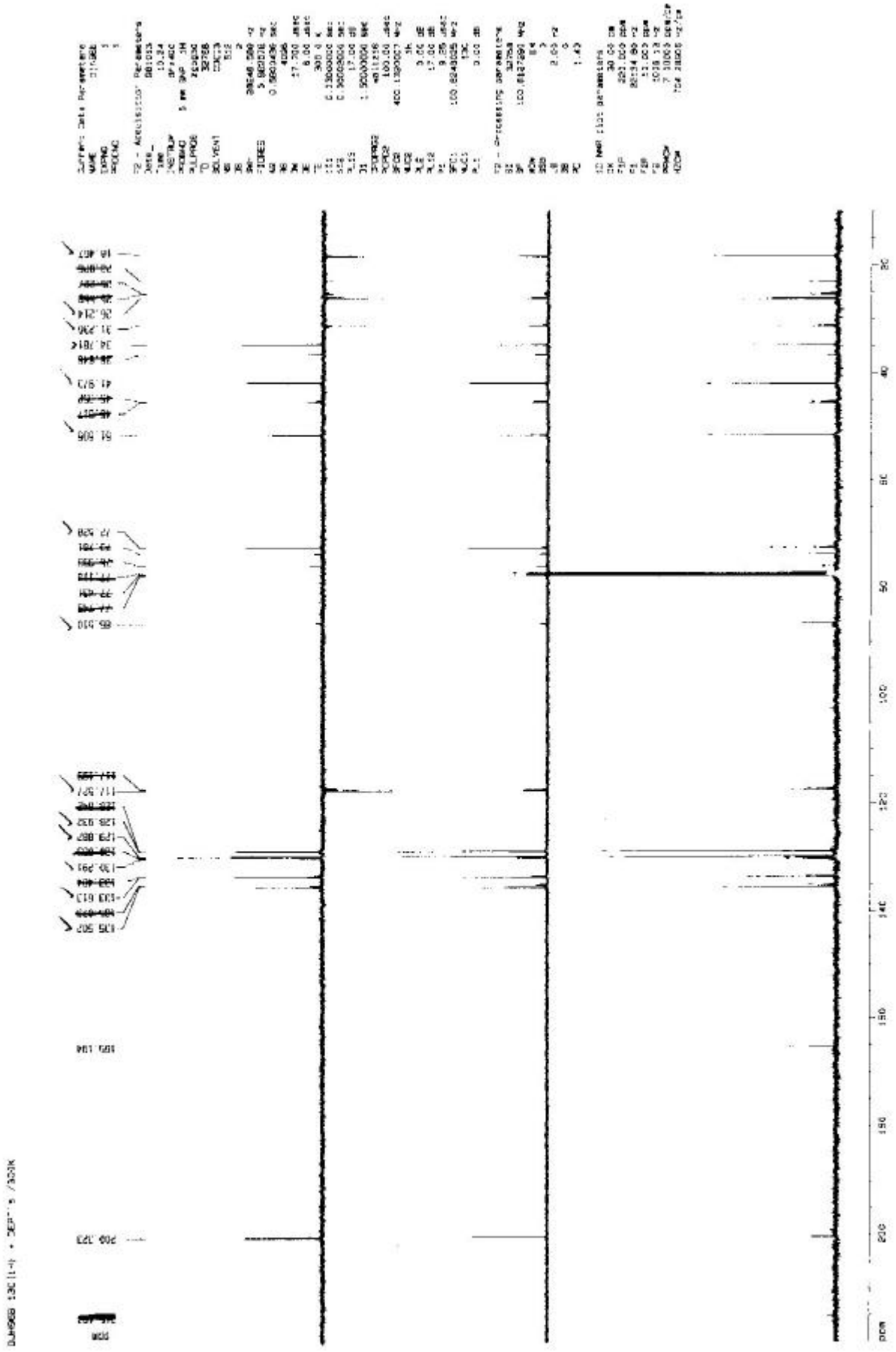
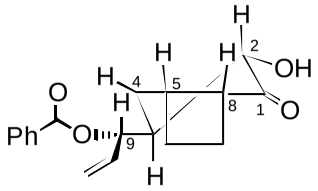



10 , proton nmr

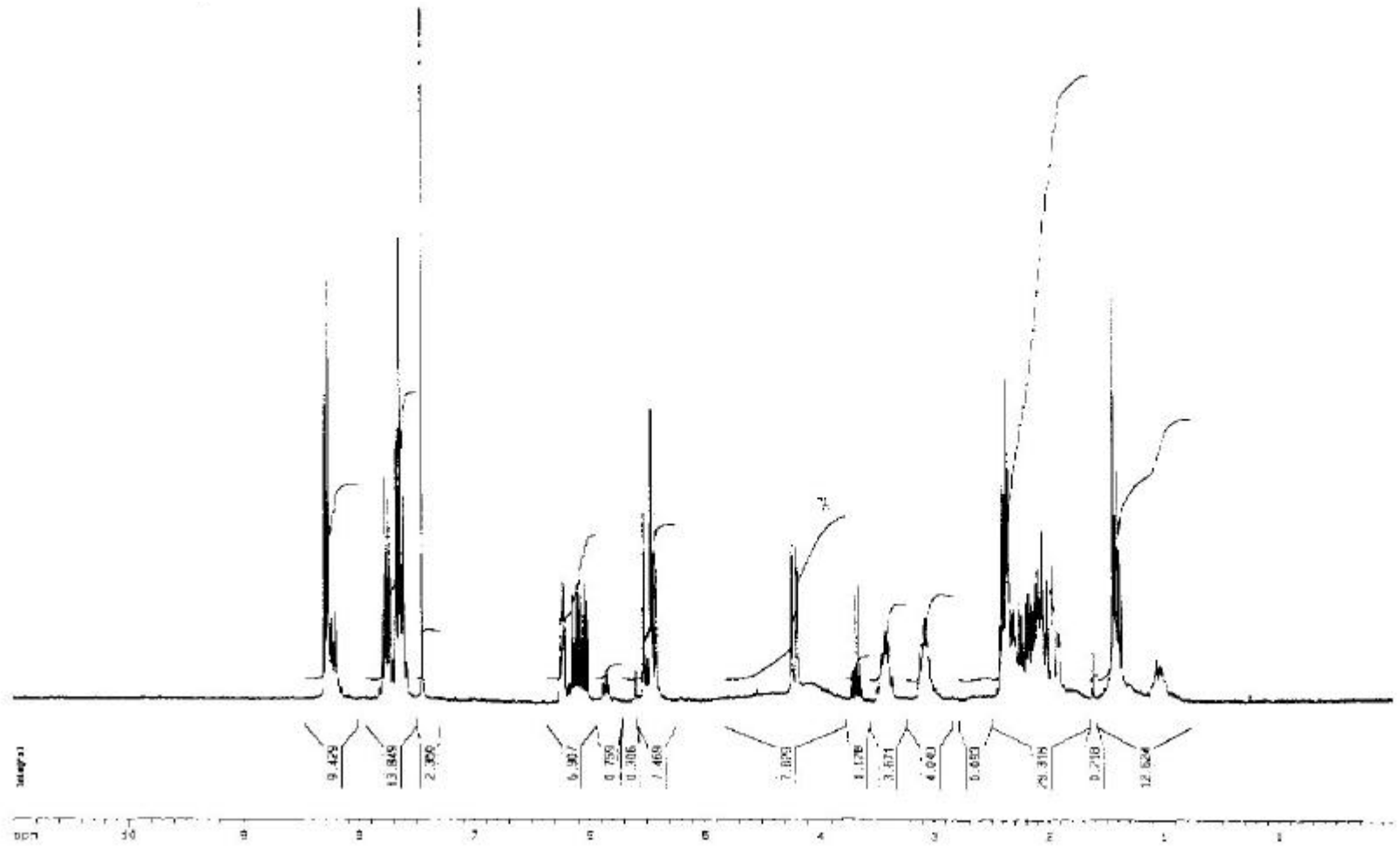


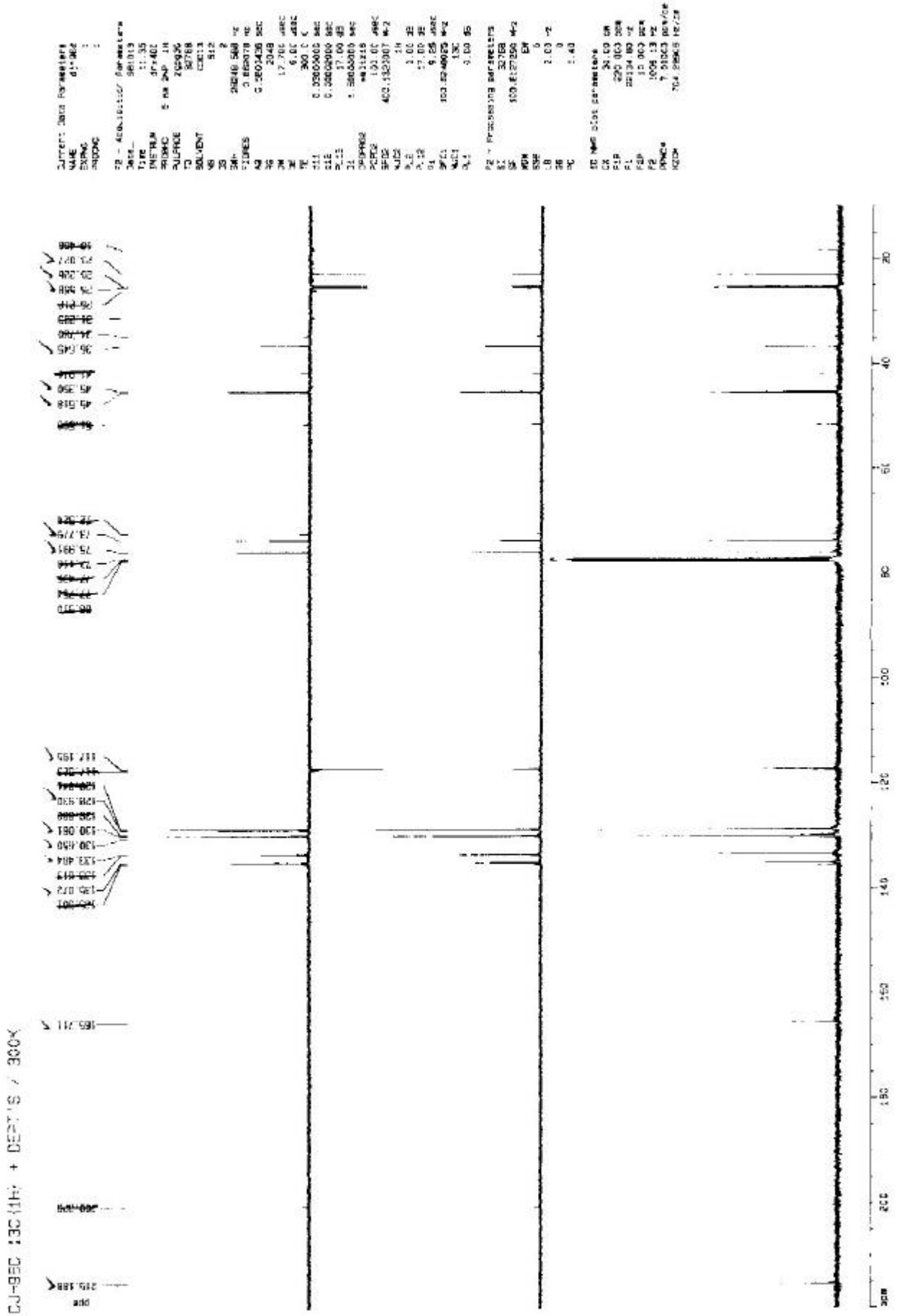


10, ^{13}C and DEPT

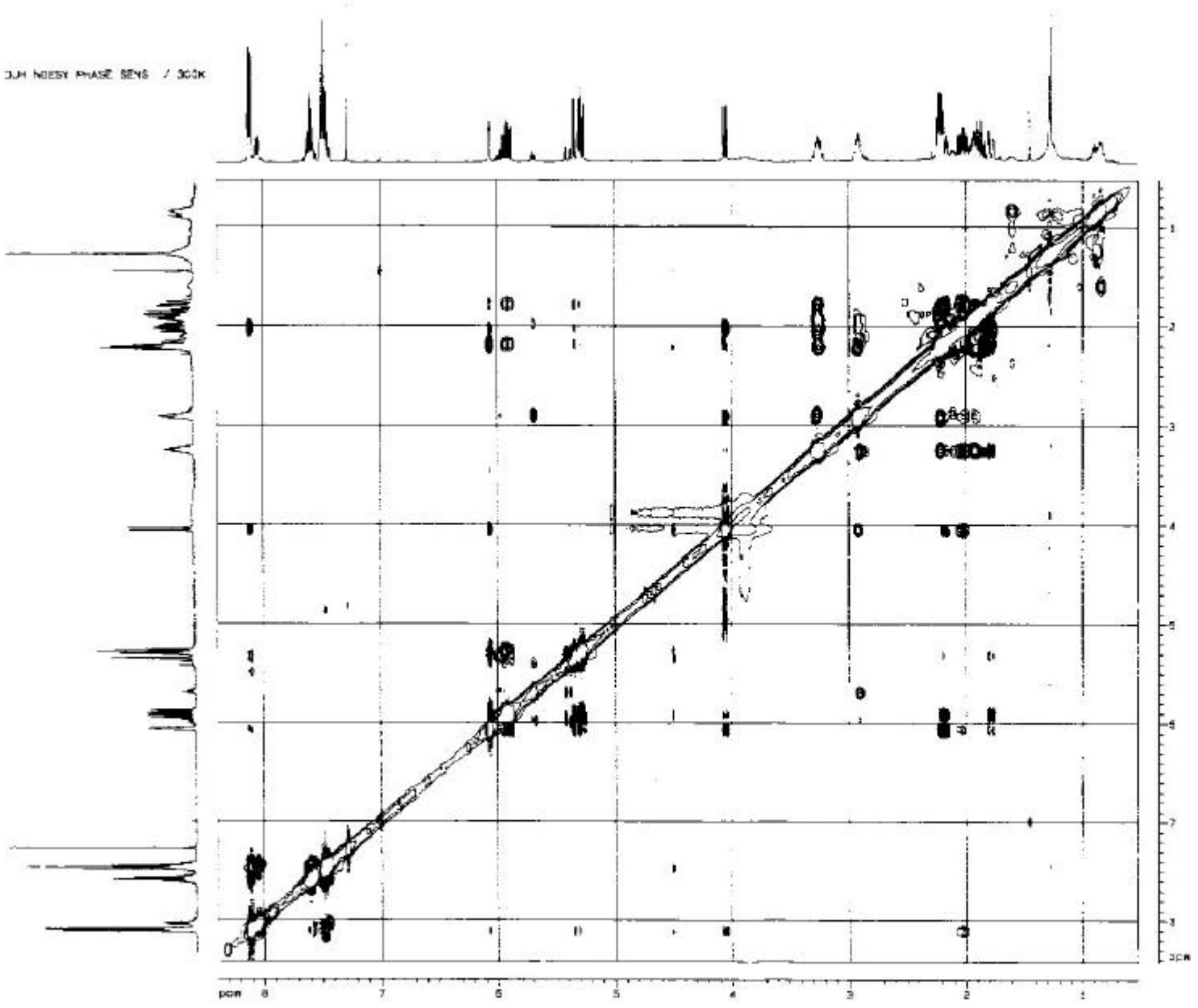


12 , proton nmr





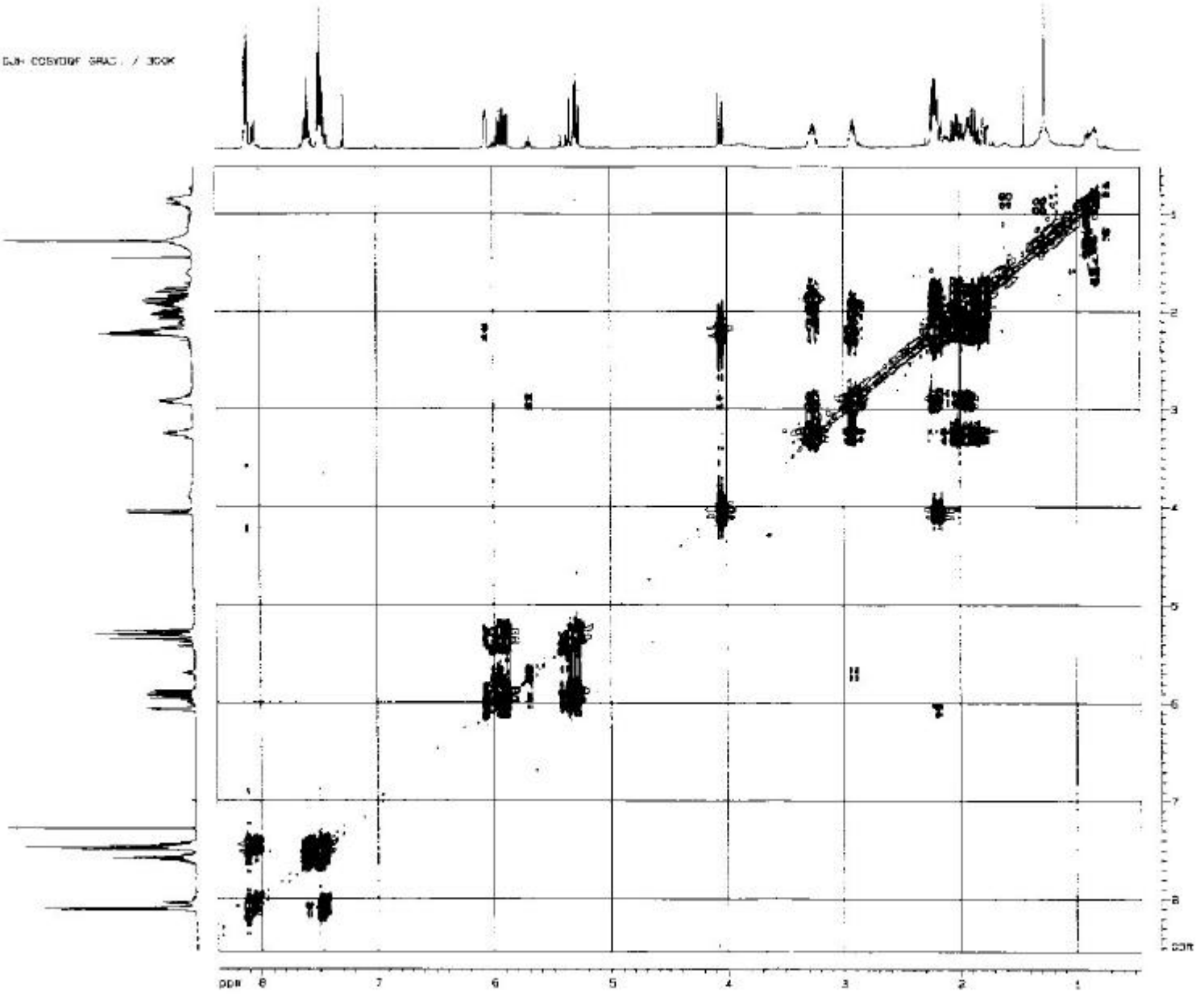
12, ^{13}C and DEPT


3JH NOESY PHASE SENS / 303K
ppm
8
7
6
5
4
3
2
1


Current Data Parameters
NAME
EXPNO 5
PROCNO 1
F2 - Acquisition Parameters
Date_ 050320
Time 16.34
INSTRUM spect400
PROBHD 5 mm TXI 1H
PULPROG noesyph
TD 2048
SOLVENT CDCl3
NS 16
DS 16
SWH 4194.631 Hz
FIDRES 2.048260 Hz
AQ 0.2441716 sec
RG 96.5
DW 119.200 usec
DE 4.50 usec
TE 299.0 K
D0 0.00000300 sec
D1 4.00000000 sec
P1 5.60 usec
SFO1 400.1324005 MHz
NUC1 1H
PL1 0.00 dB
SB 0.00000001 sec
IN0 0.00011980 sec
F1 - Acquisition parameters
NDO 2
TD 256
SFO1 400.1313 MHz
FIDRES 16.385277 Hz
SW 10.483 ppm
F2 - Processing parameters
SI 1024
SF 400.1300000 MHz
SR 0.00 Hz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 3
PC 1.00
F1 - Processing parameters
SI 1024
MC2 TPPI
SF 400.1300000 MHz
SR 0.00 Hz
WDW QSINE
SSB 2
LB 0.00 Hz
GB 0
2D NMR plot parameters
CX 20.00 cm
CY 20.00 cm
F2PPM 8.369 ppm
F2HZ 3347.15 Hz
F2PPM 0.528 ppm
F2HZ 211.21 Hz
F1PPM 8.401 ppm
F1HZ 3359.48 Hz
F1PPM 0.528 ppm
F1HZ 211.21 Hz
F2PPMCM 1.85738 ppm/cm
F2HZCM 742.95676 Hz/cm
F1PPMCM 1.85676 ppm/cm
F1HZCM 743.06707 Hz/cm

12, NOESY

12, COSY



Current Data Parameters
NAME 01F 960
EXPNO 3
PROCNO 1

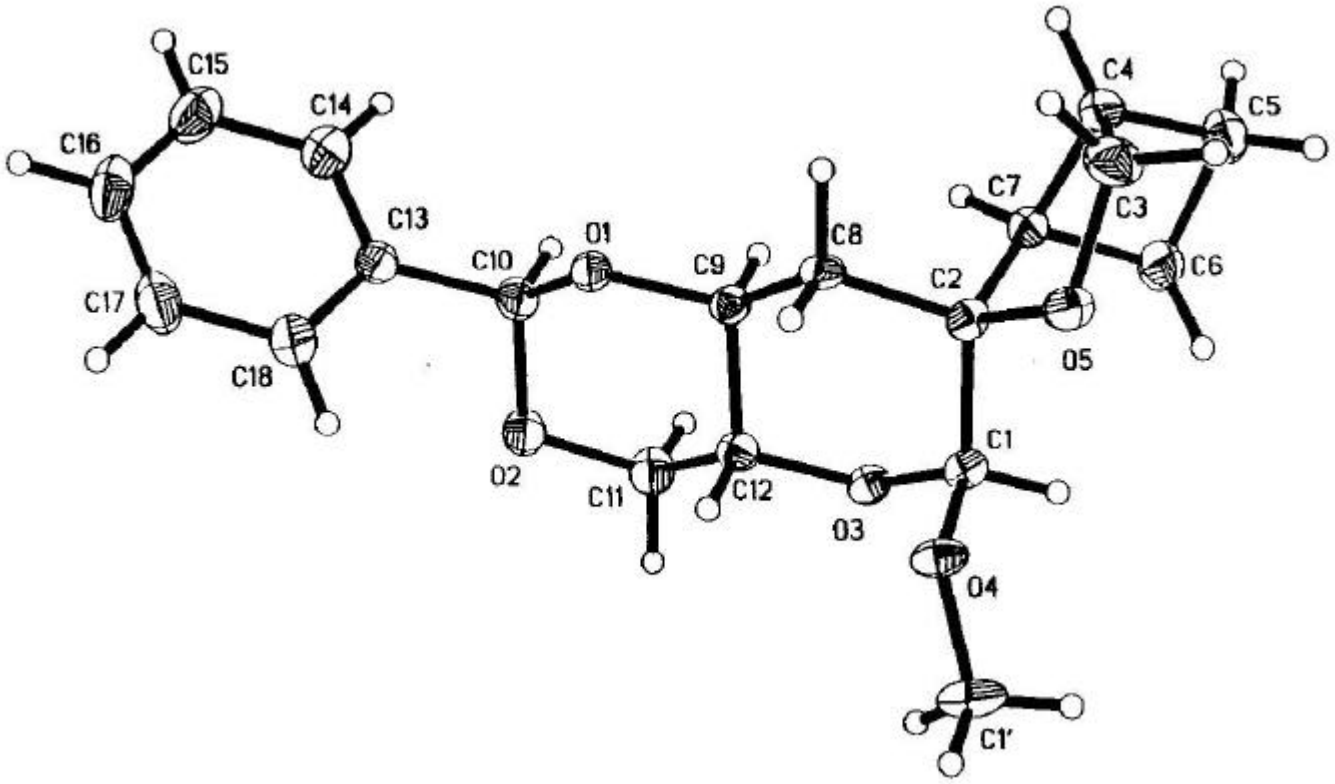
F2 - Acquisition Parameters
Date_ 980980
Time 15:14
INSTRUM cms400
PROBHD 5 mm TXI 1H
PULPROG cosydqf.te
TD 2048
SOLVENT 3DCl3
NS 4
DS 16
SWH 4184.631 Hz
FIDRES 2.046160 Hz
AQ 0.2446716 sec
RG 20642.6
DW 119.250 usec
DE 4.50 usec
TE 300.0 K
D0 0.00003000 sec
D13 0.00000700 sec
D16 0.00010000 sec
P16 1000.00 usec
d20 0.00113000 sec
D1 4.00000000 sec
P1 9.80 usec
SFO1 400.1316006 MHz
NUC1 1H
PL1 0.00 dB
PL2 18.20 usec
SPW2 2.00 W
SPW3 0.00 W
SFO2 13.00 W
SPNAM1 alt4.100
SPW2 3.00 W
SPW3 0.00 W
SFO2 25.00 W
SPNAM2 alt4.100
IN0 0.00011000 sec

F1 - Acquisition parameters
NDO 2
TD 256
SFO1 400.1315 MHz
FIDRES 16.385277 Hz
SW 10.483 ppm

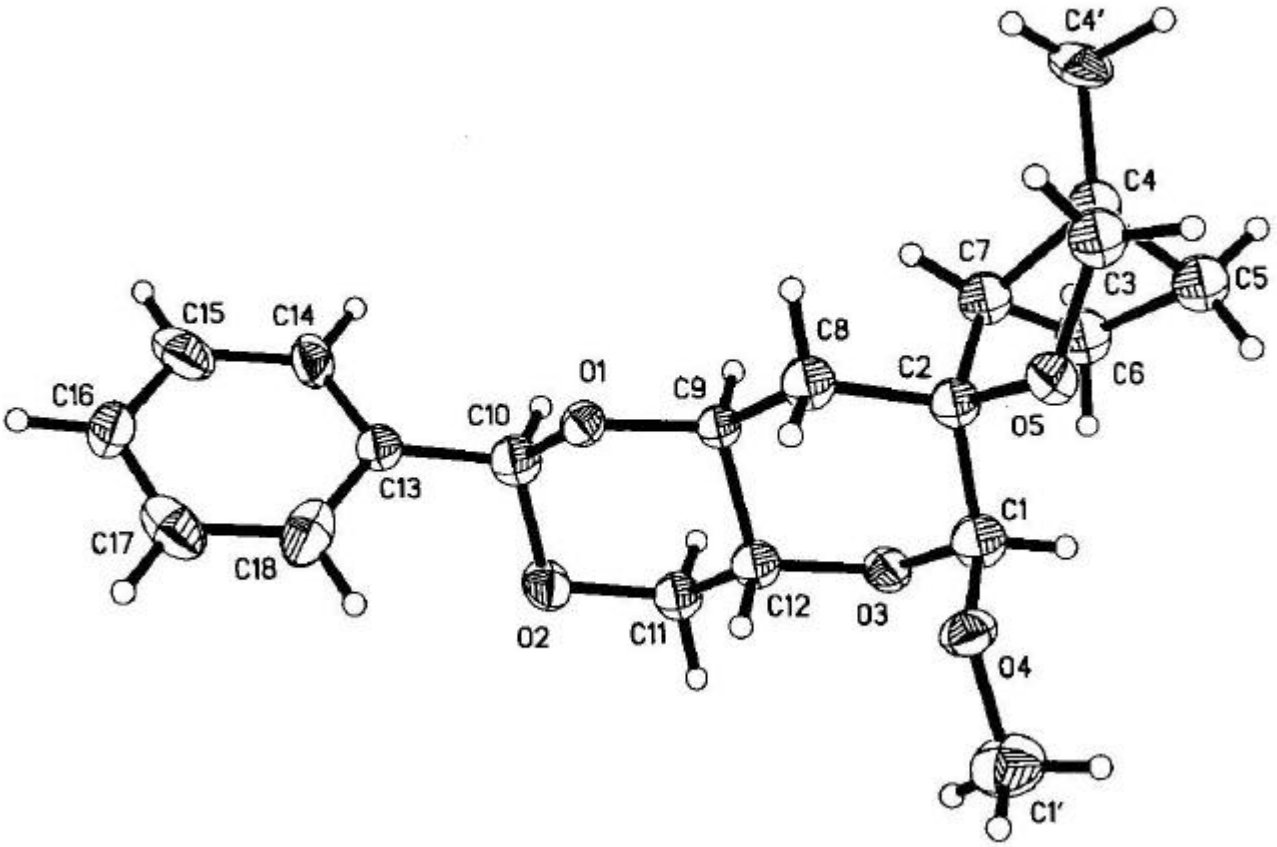
F2 - Processing parameters
SI 1024
SF 400.1300000 MHz
WDW 0.00 Hz
MDW SINE
SSB 2
LB 0.00 Hz
GB 0
PC 1.00

F1 - Processing parameters
SI 1024
MC2 TPPI
SF 400.1300000 MHz
WDW 0.00 Hz
MDW SINE
SSB 0
LB 0.00 Hz
GB 0

2D NMR plot parameters
CX0 20.00 cm
CY0 20.00 cm
F2PU_0 8.371 ppm
F2PU_0 3348.99 Hz
F2PU_1 0.456 ppm
F2PU_1 182.54 Hz
F1PU_0 8.644 ppm
F1PU_0 3458.83 Hz
F1PU_1 0.858 ppm
F1PU_1 343.42 Hz
F2PPMCM 0.05971 ppm/cm
F2HZCM 143.58578 Hz/cm
F1PPMCM 0.36403 ppm/cm
F1HZCM 145.67792 Hz/cm



18a, X-ray crystal structure – for full details see Ref. 15



18b, X-ray crystal structure – for full details see Ref. 15