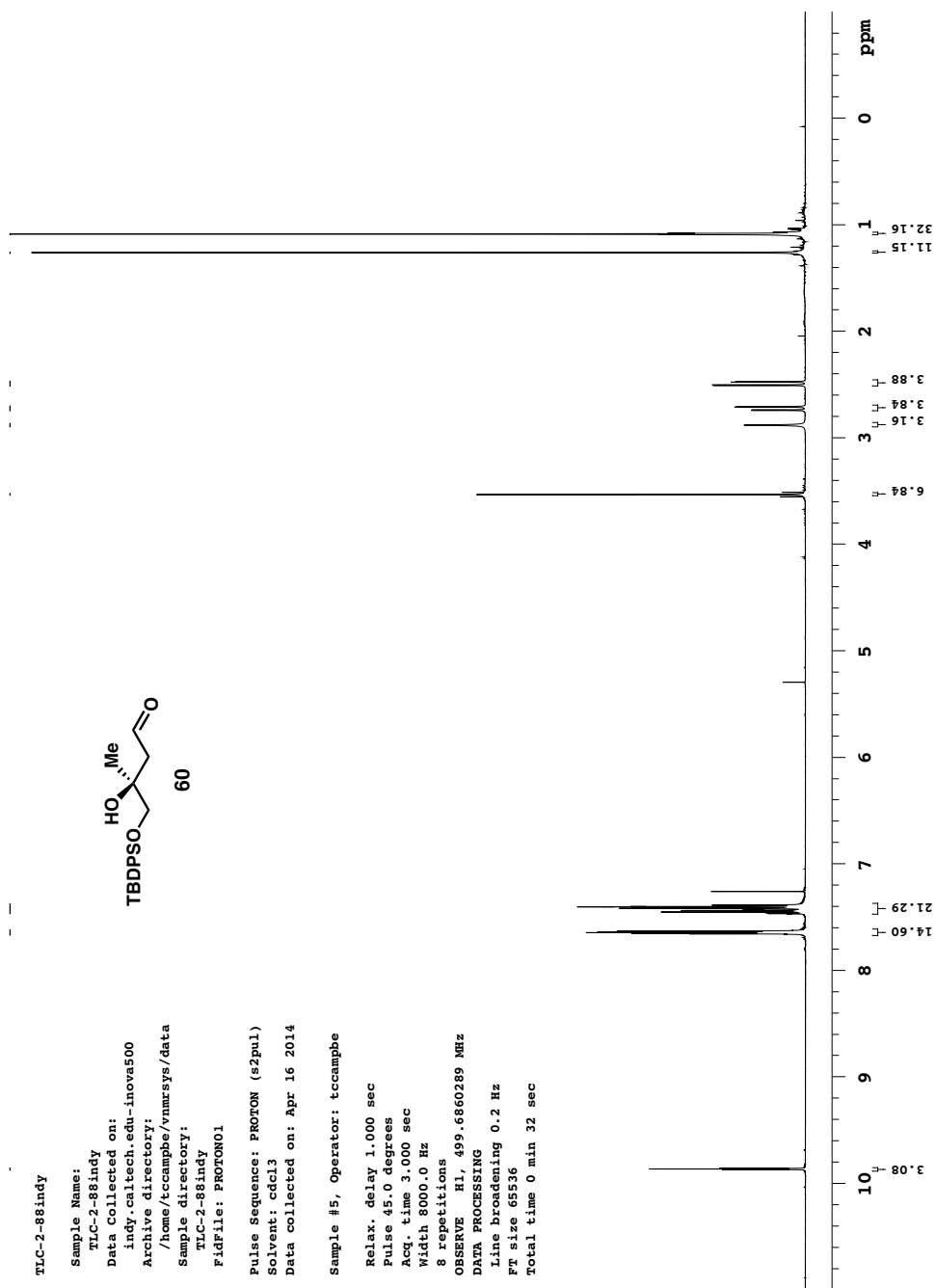
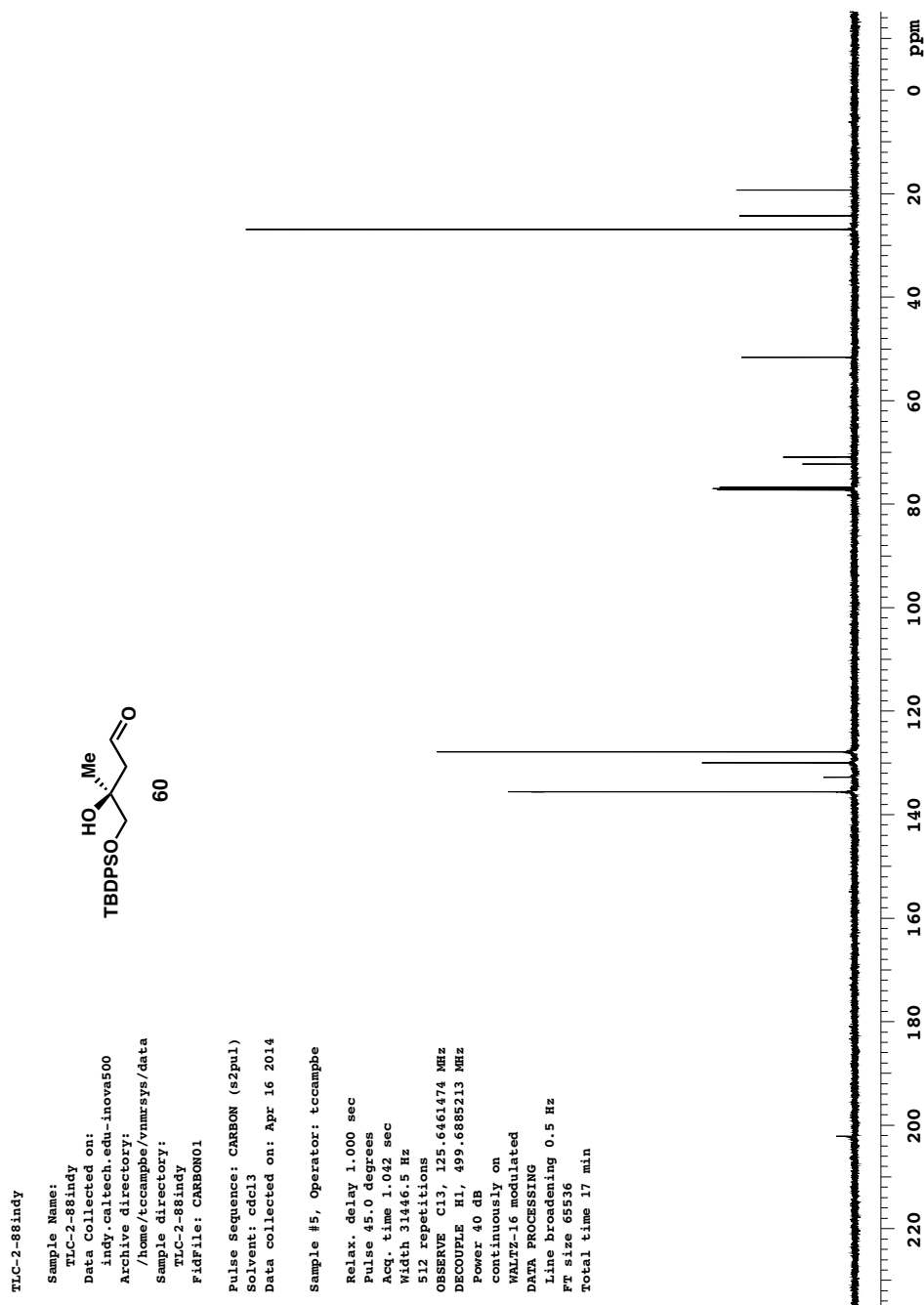
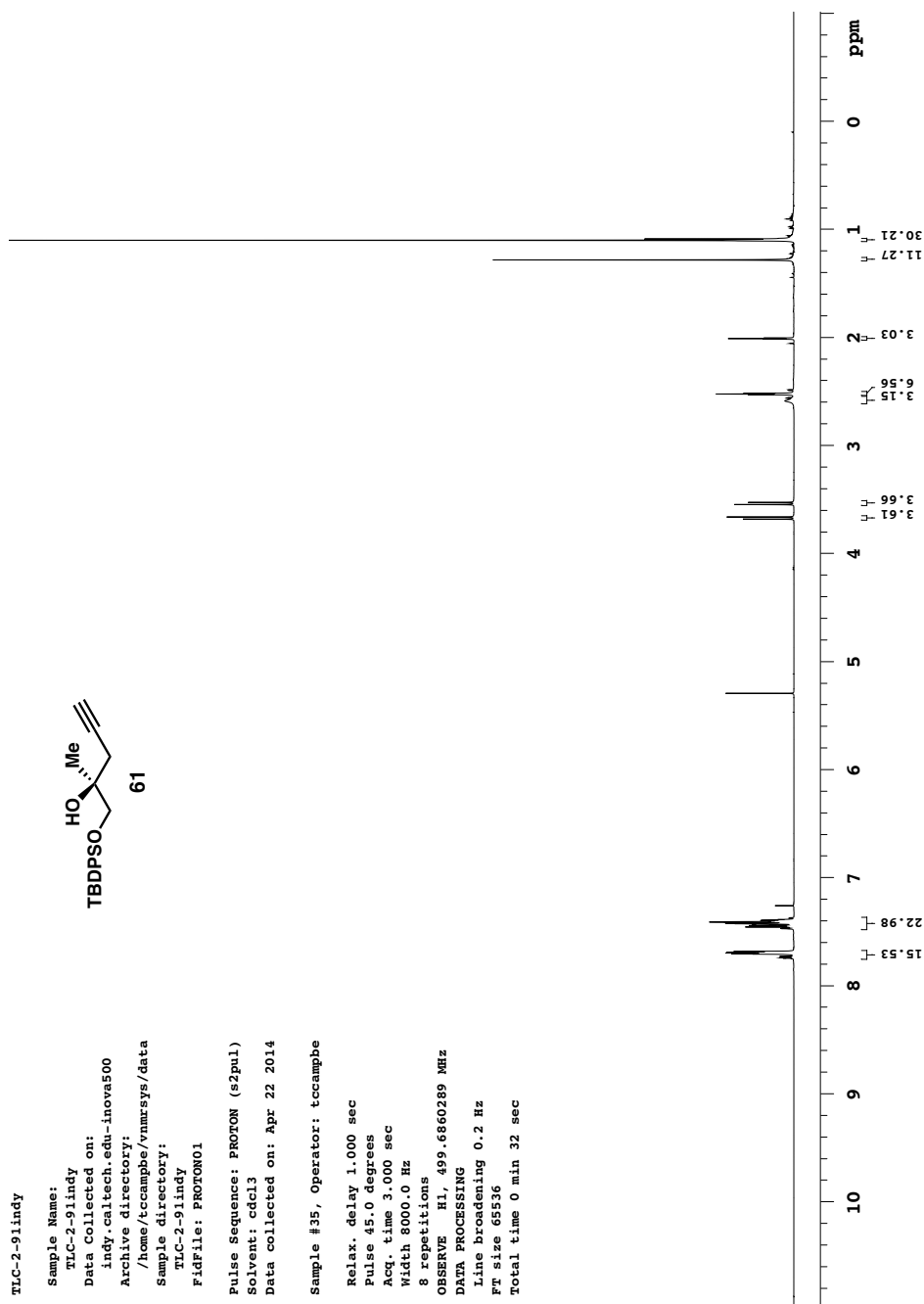


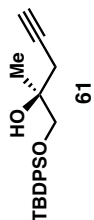
Appendix 1

Spectra Relevant to Chapter 2









```

TIC-2-91indy

Sample Name:
TIC-2-91indy
Data Collected on:
indy.catech.edu-inova500
Archive directory:
/home/tccampbe/vnmrsys/data
Sample directory:
TIC-2-91indy
FidFile: CARBON01

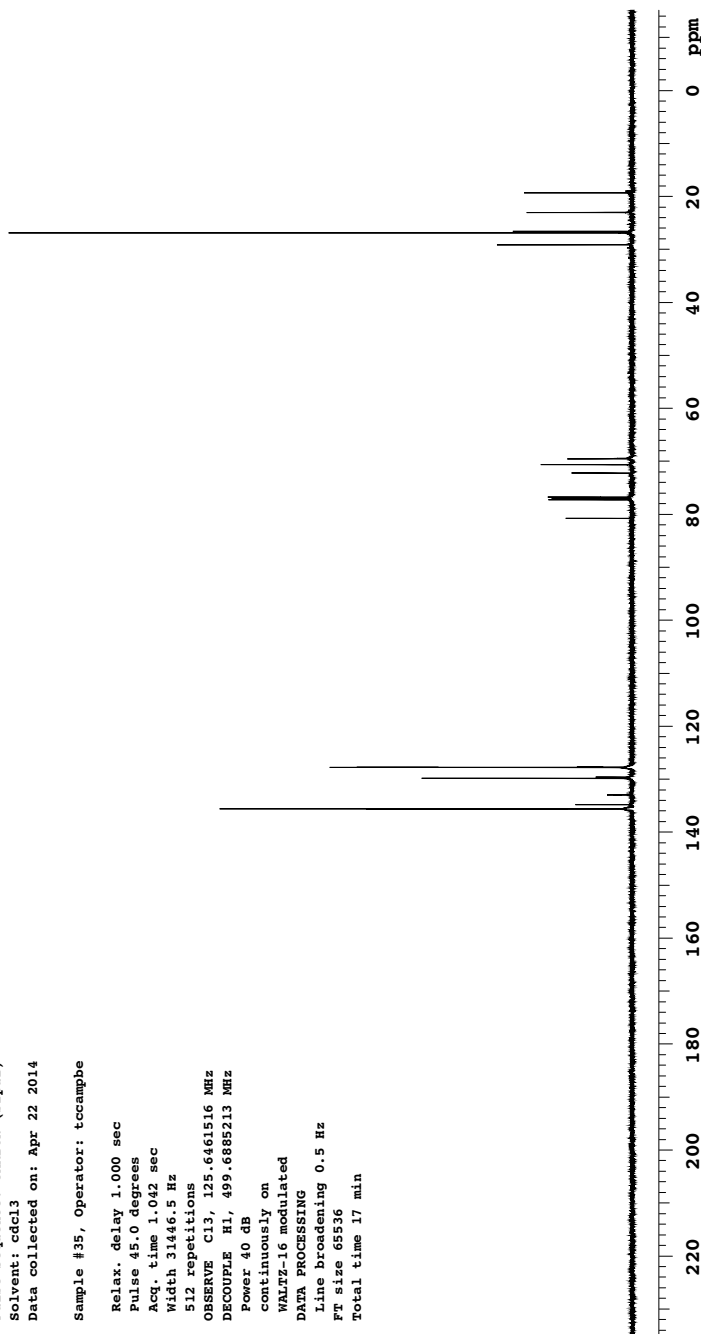
Pulse Sequence: CARBON (s2pul)
Solvent: cdcl3
Data collected on: Apr 22 2014

Sample #35, Operator: tccampbe

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.042 sec
Width 31446.5 Hz
512 repetitions
OBSERVE C13, 125.6461516 MHz
DECOUPLE H1, 499.6885213 MHz
Power 40 dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 0.5 Hz
F1 size 65336
Total time 17 min

```



TLC-2-94indy

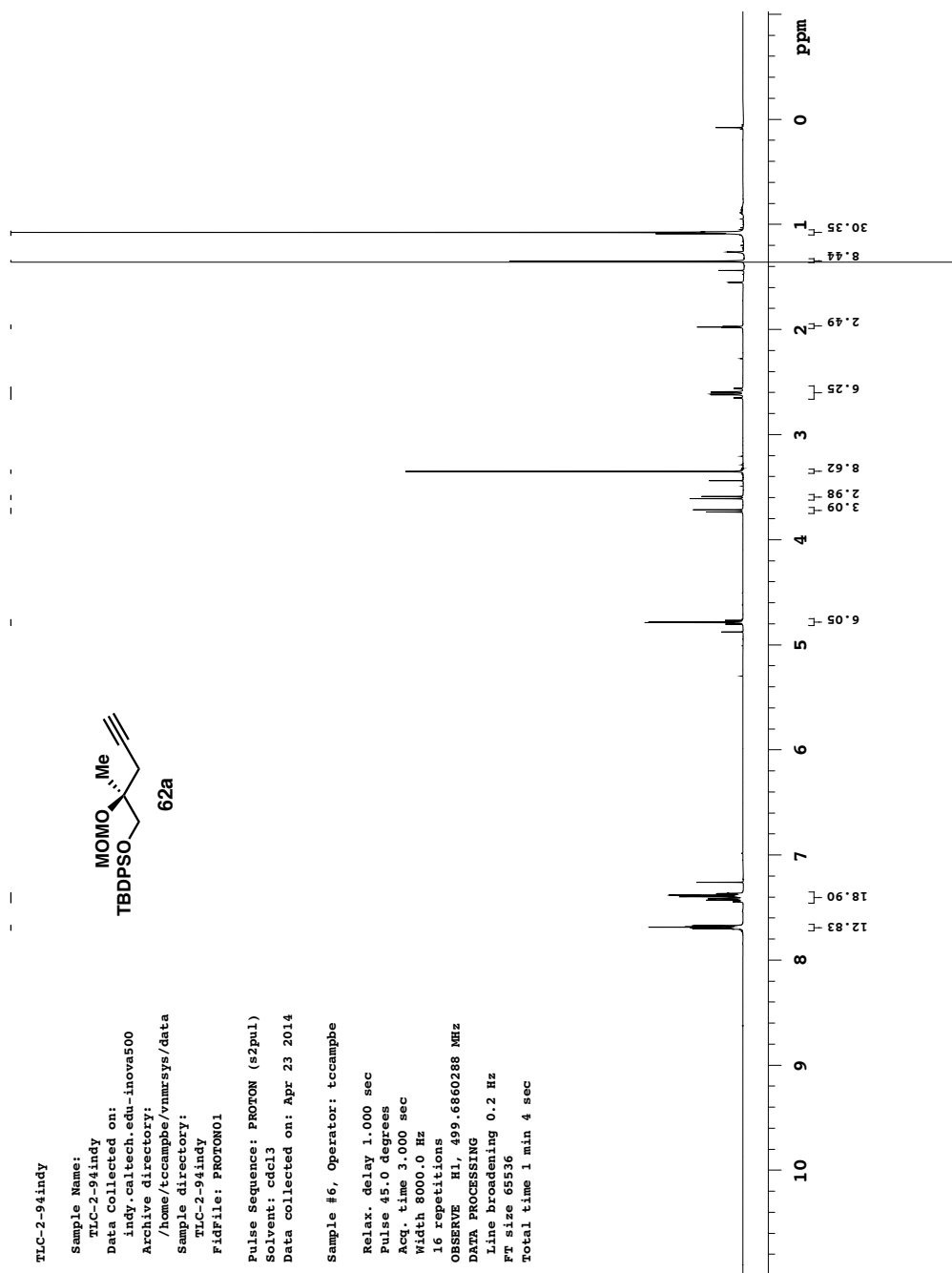
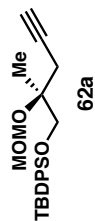
Sample Name:
TLC-2-94indy
Data Collected on:
indy.caltech.edu-inova500
Archive directory:
/home/tccampbe/vnmrsys/data
Sample directory:
TLC-2-94indy
FidFile: PROTON01

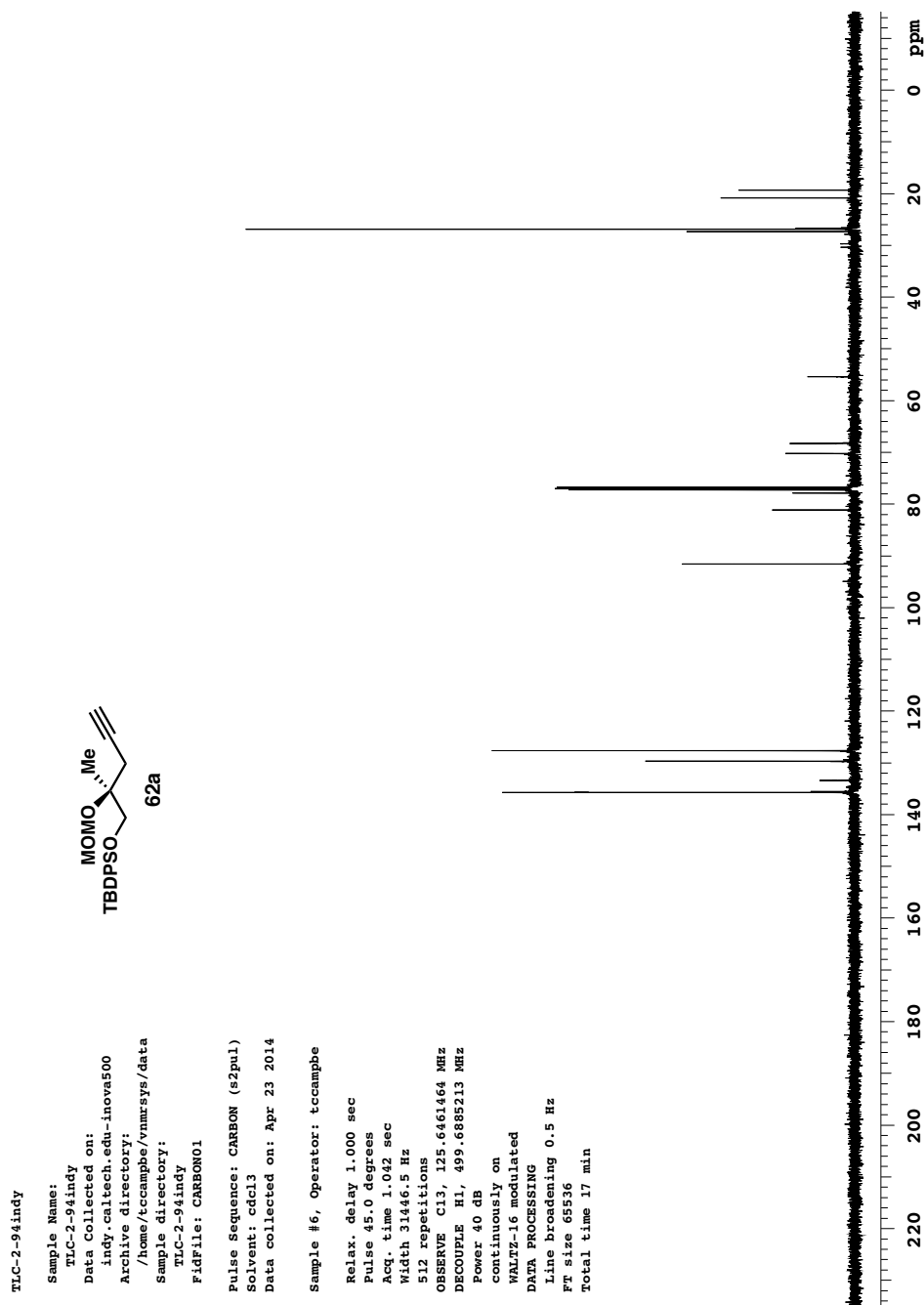
Pulse Sequence: PROTON (s2pul)
Solvent: cdcl3
Data collected on: Apr 23 2014

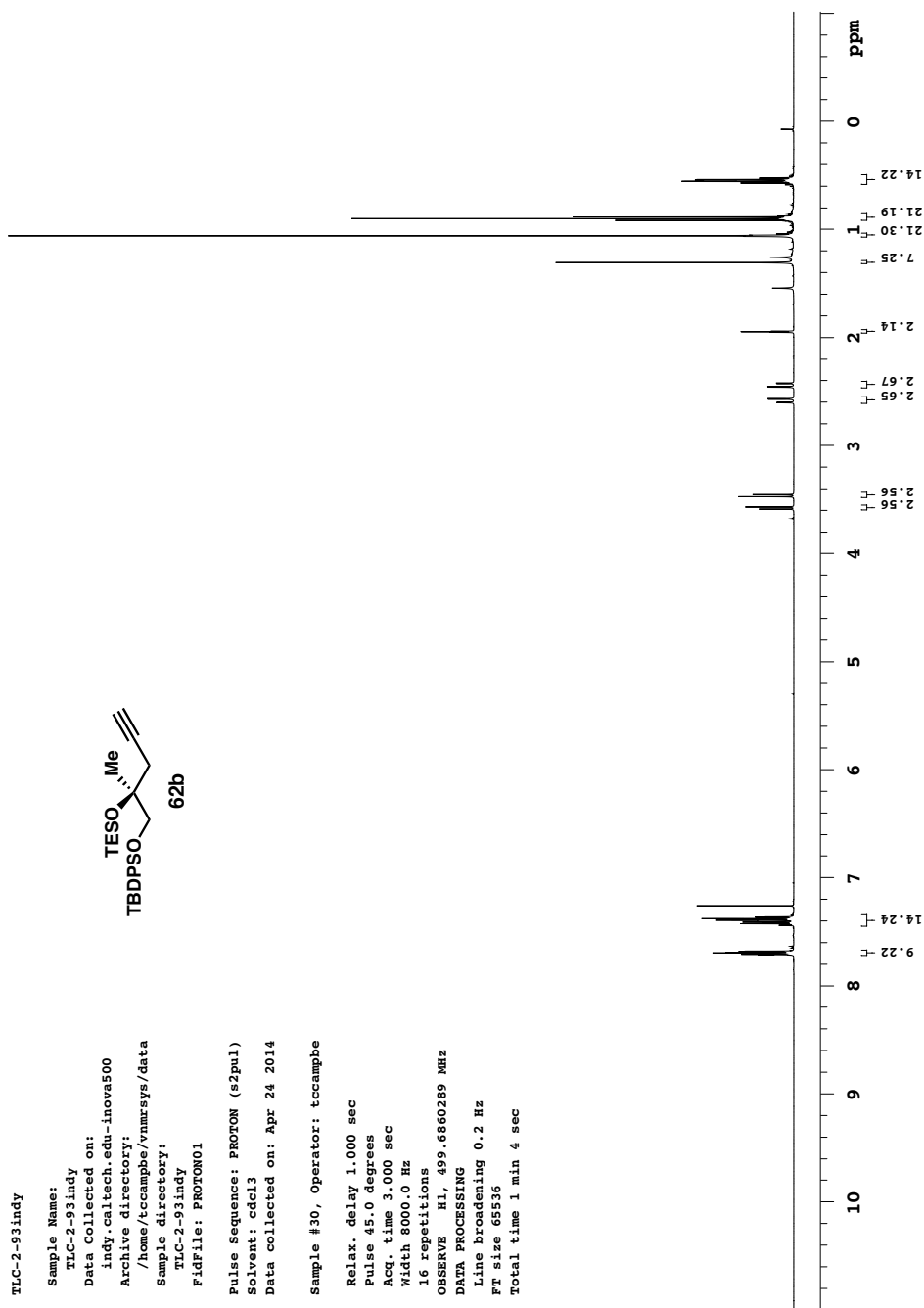
Sample #6, Operator: tccampbe

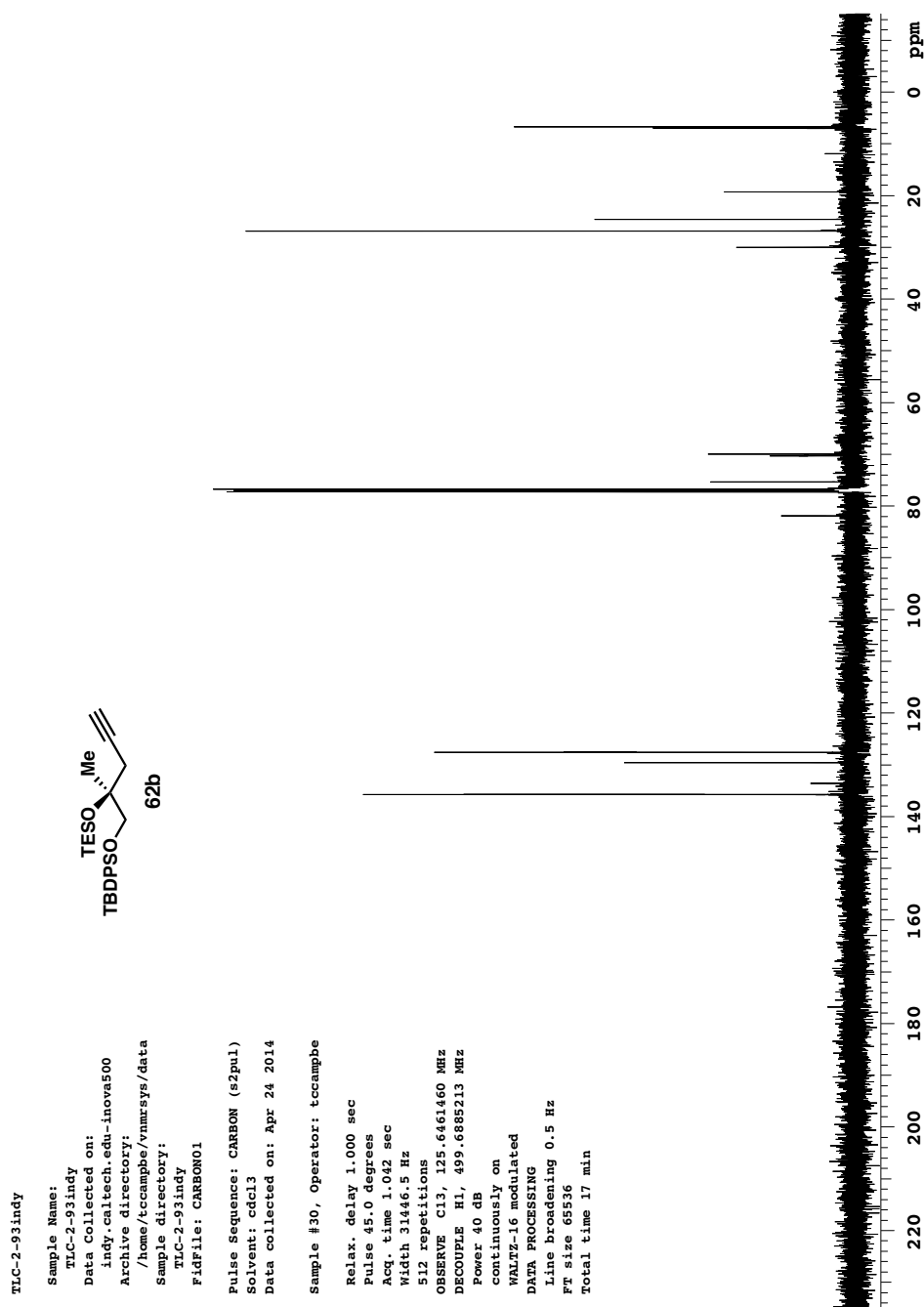
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 3.000 sec
Width 8000.0 Hz
16 repetitions

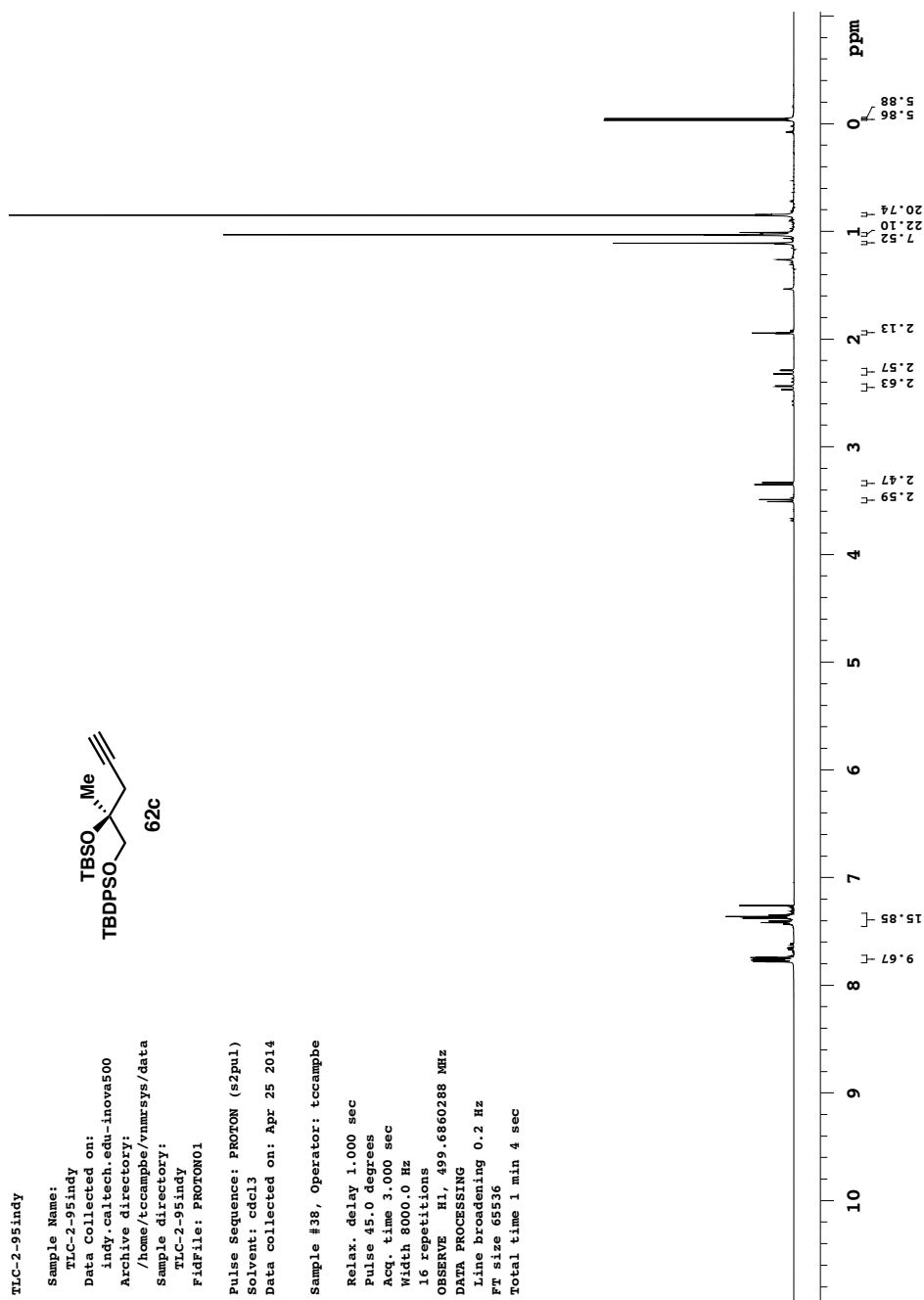
OBSERVE H1, 499.686028 MHz
DATA PROCESSING
Line broadening 0.2 Hz
FT size 65536
Total time 1 min 4 sec

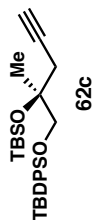


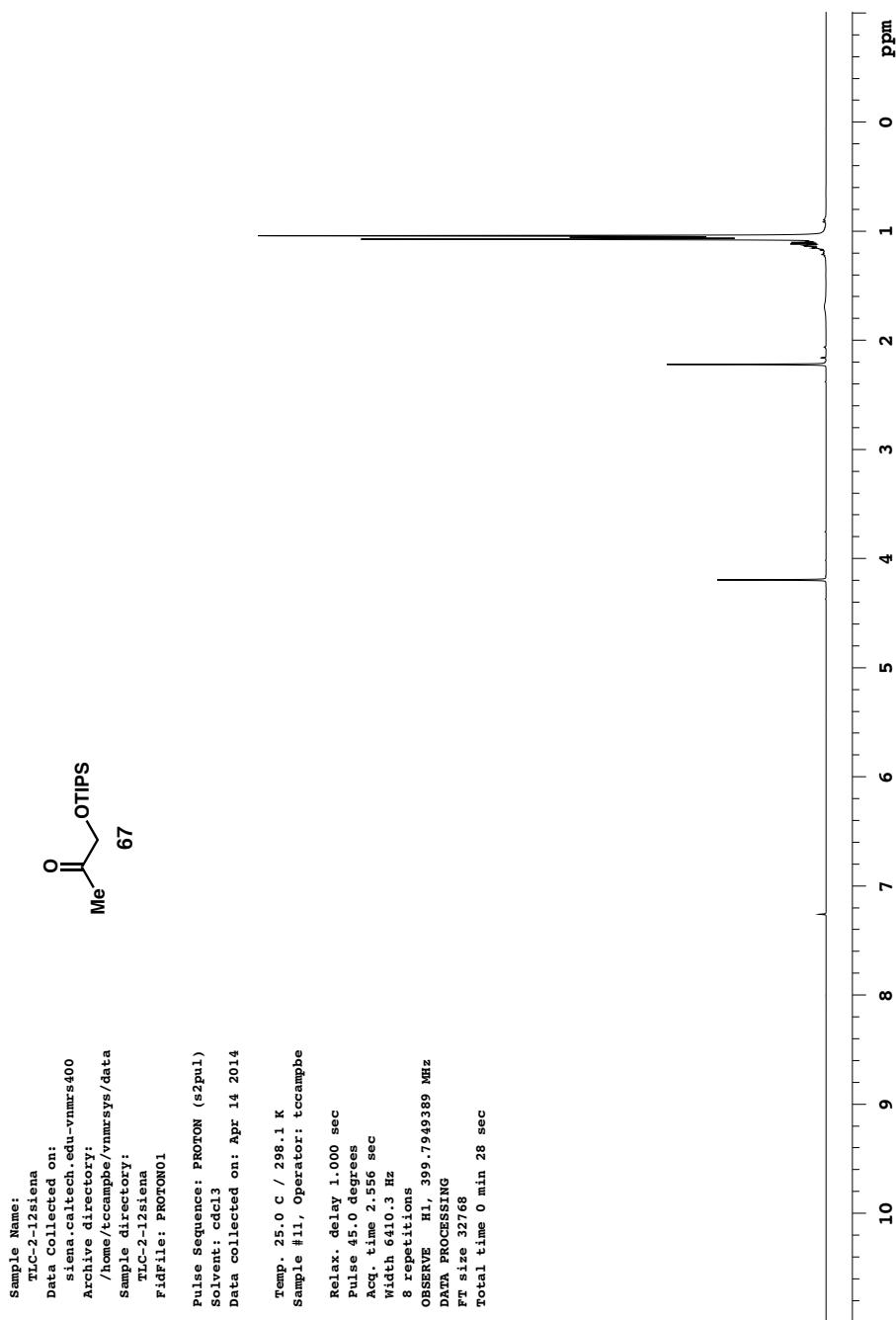


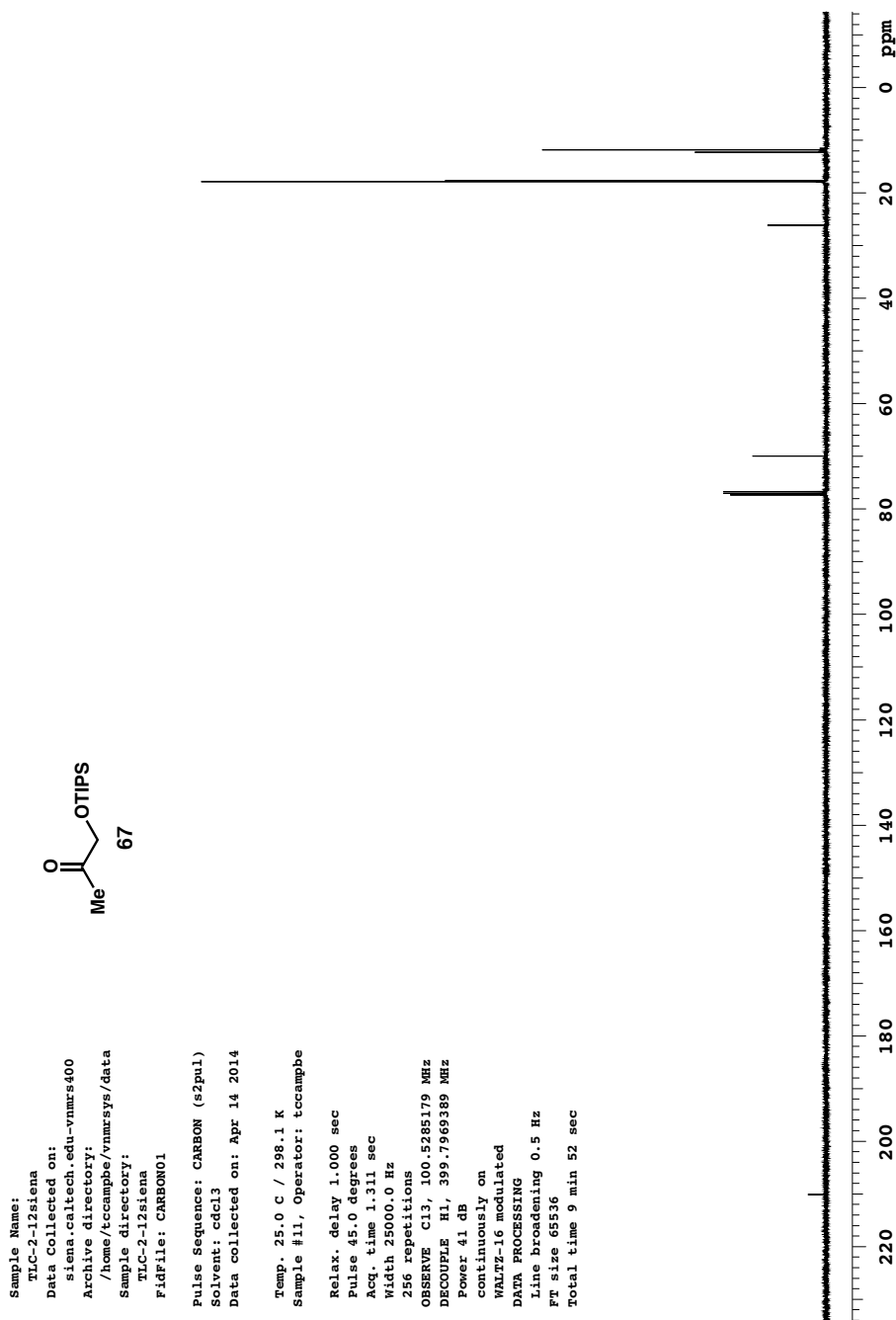


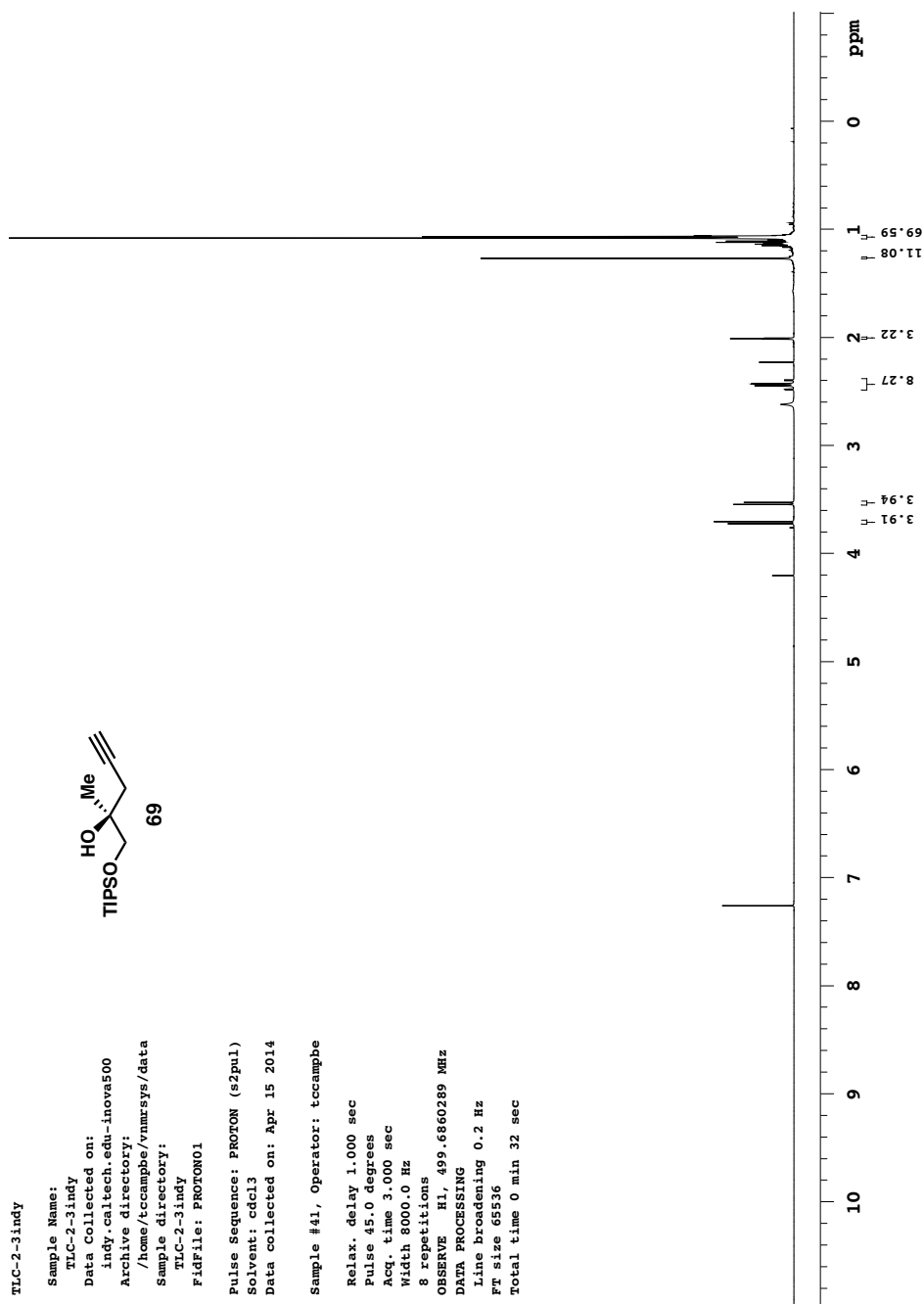


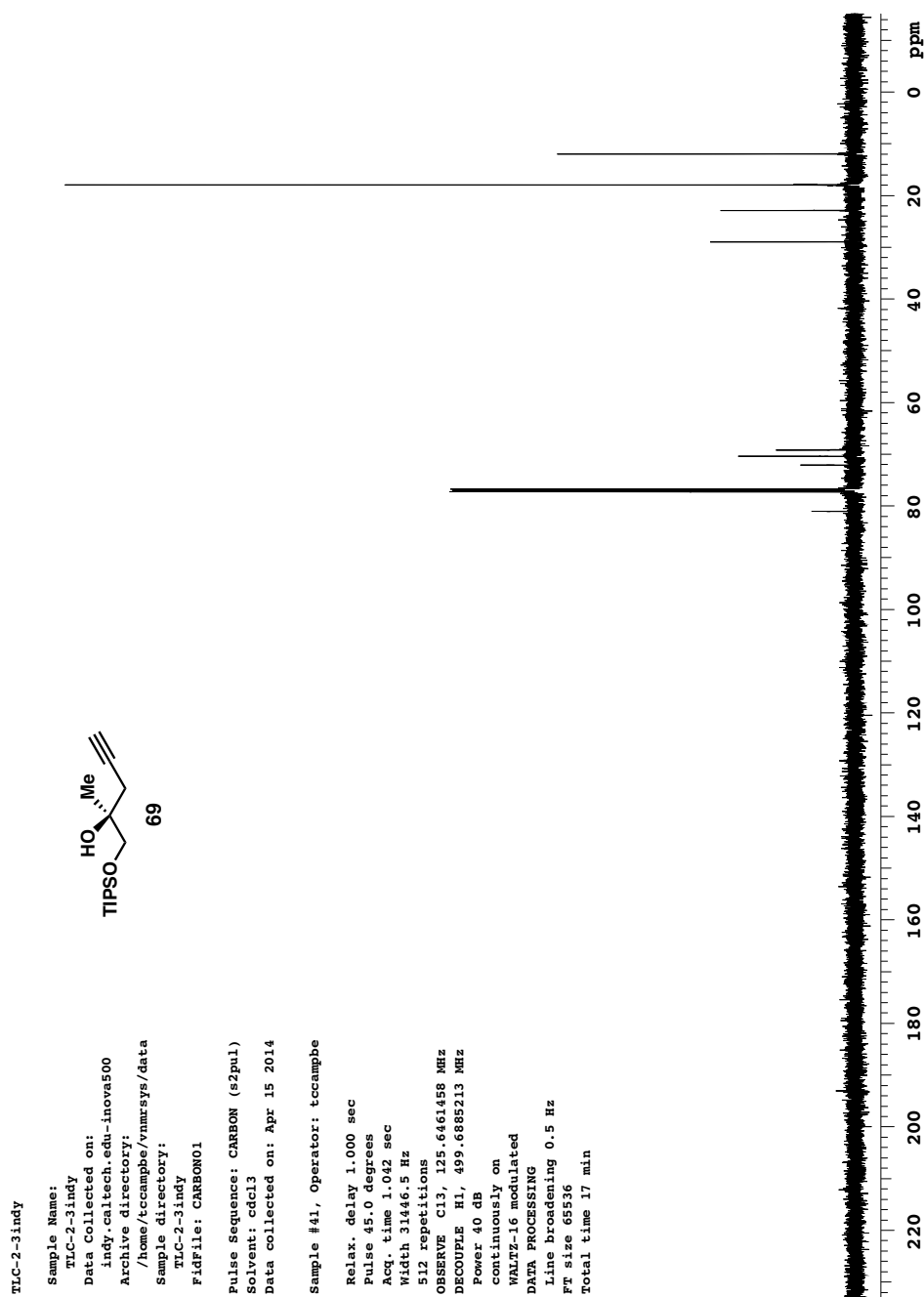


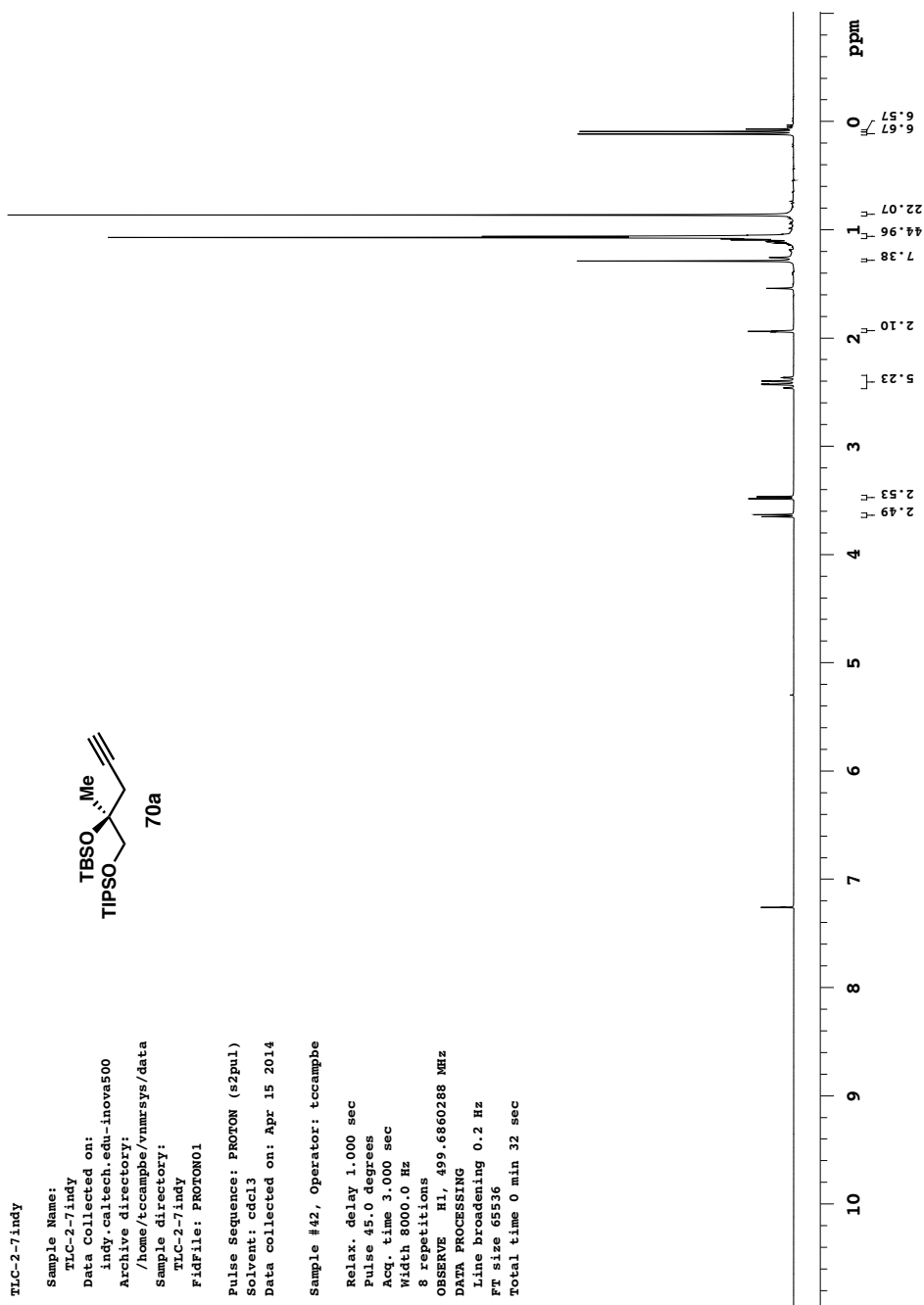


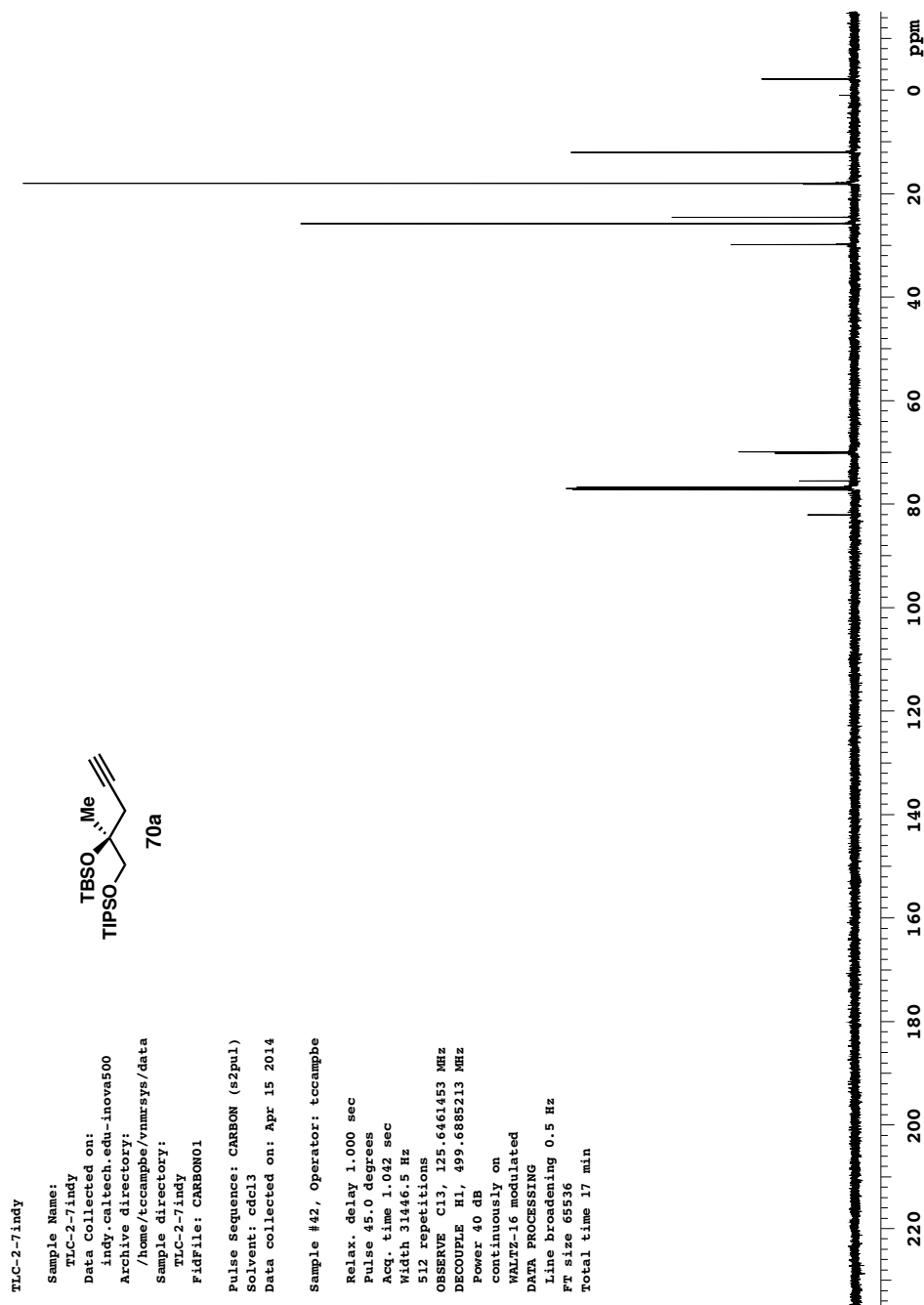


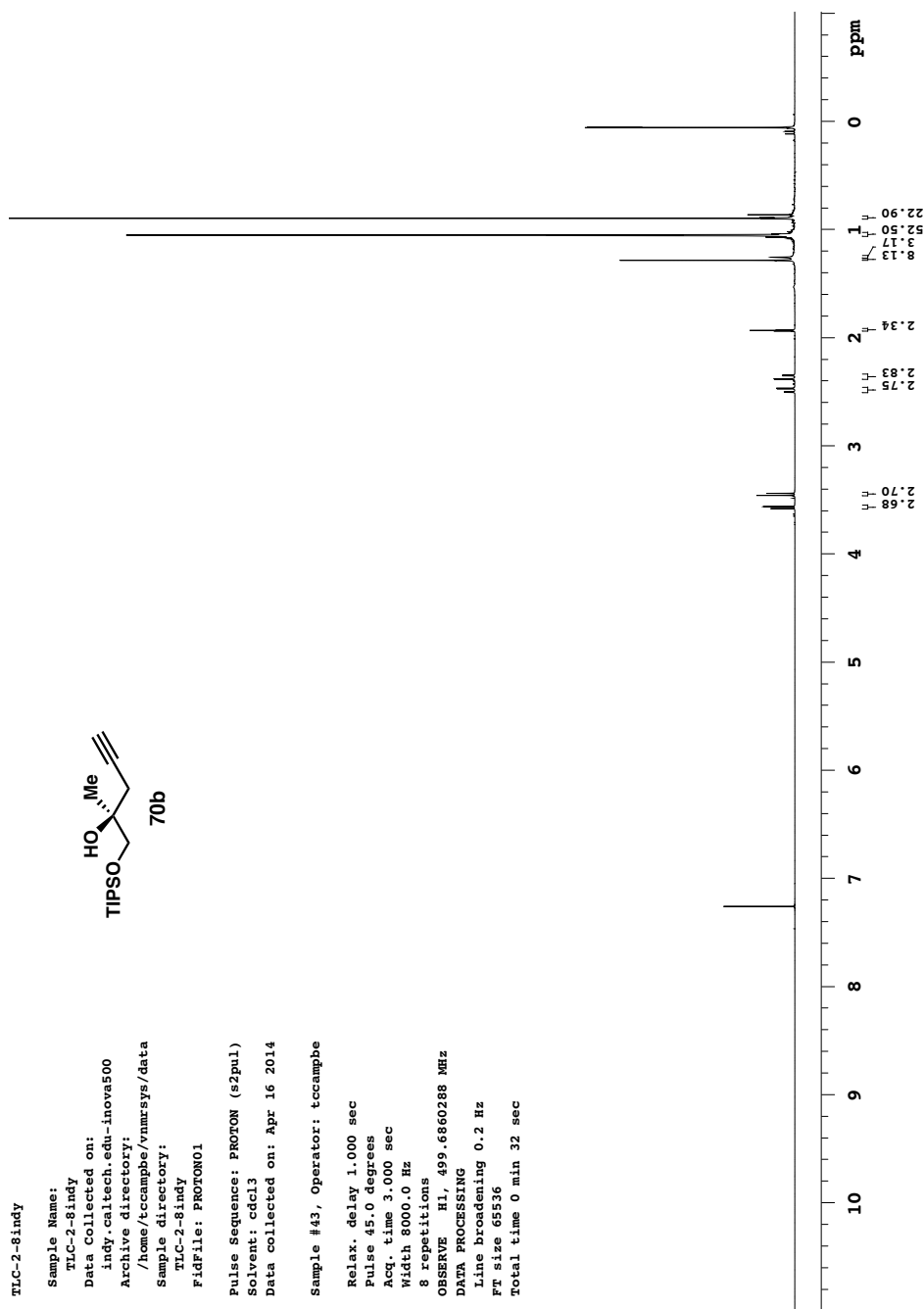


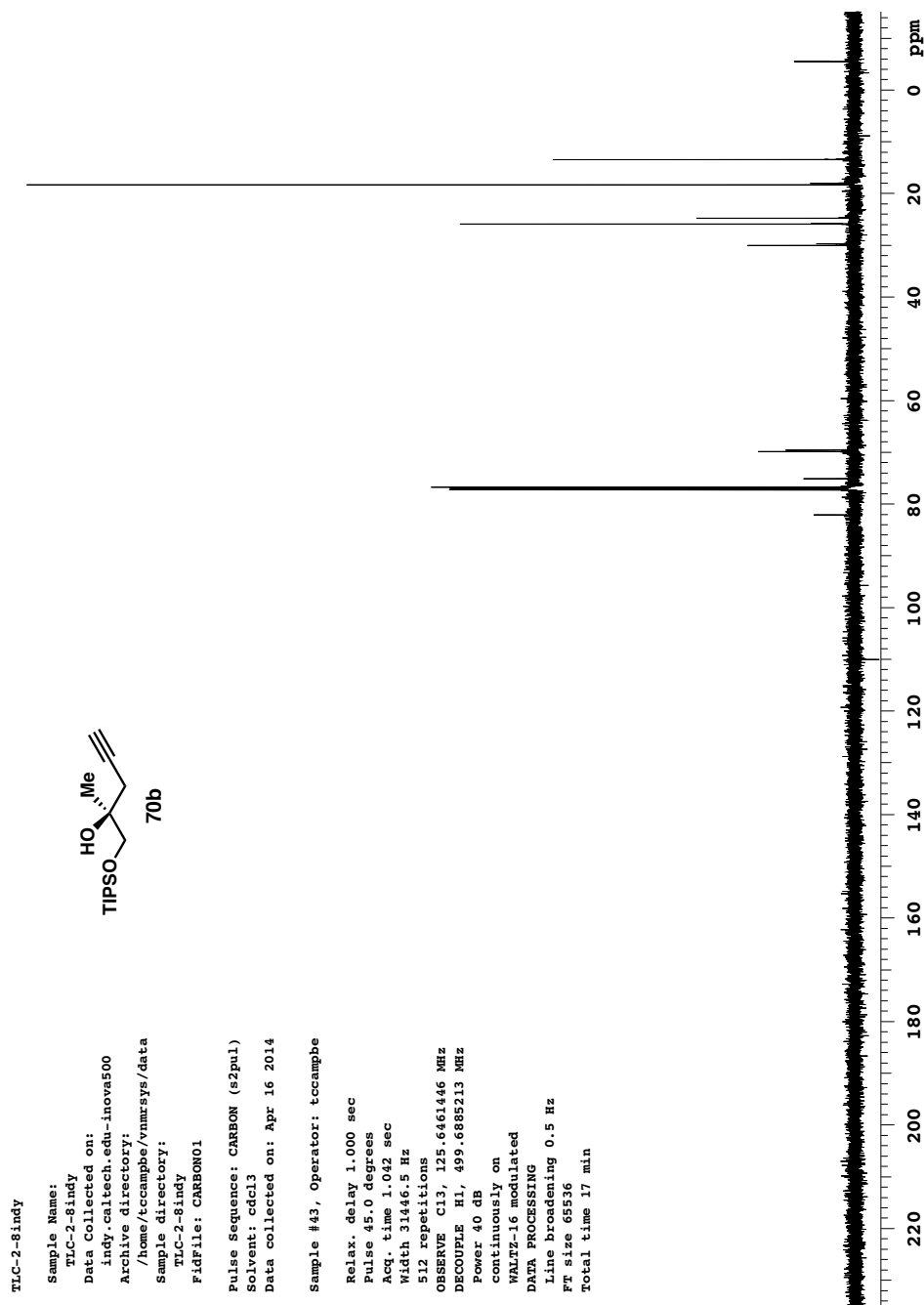












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TLC-2-92.indy

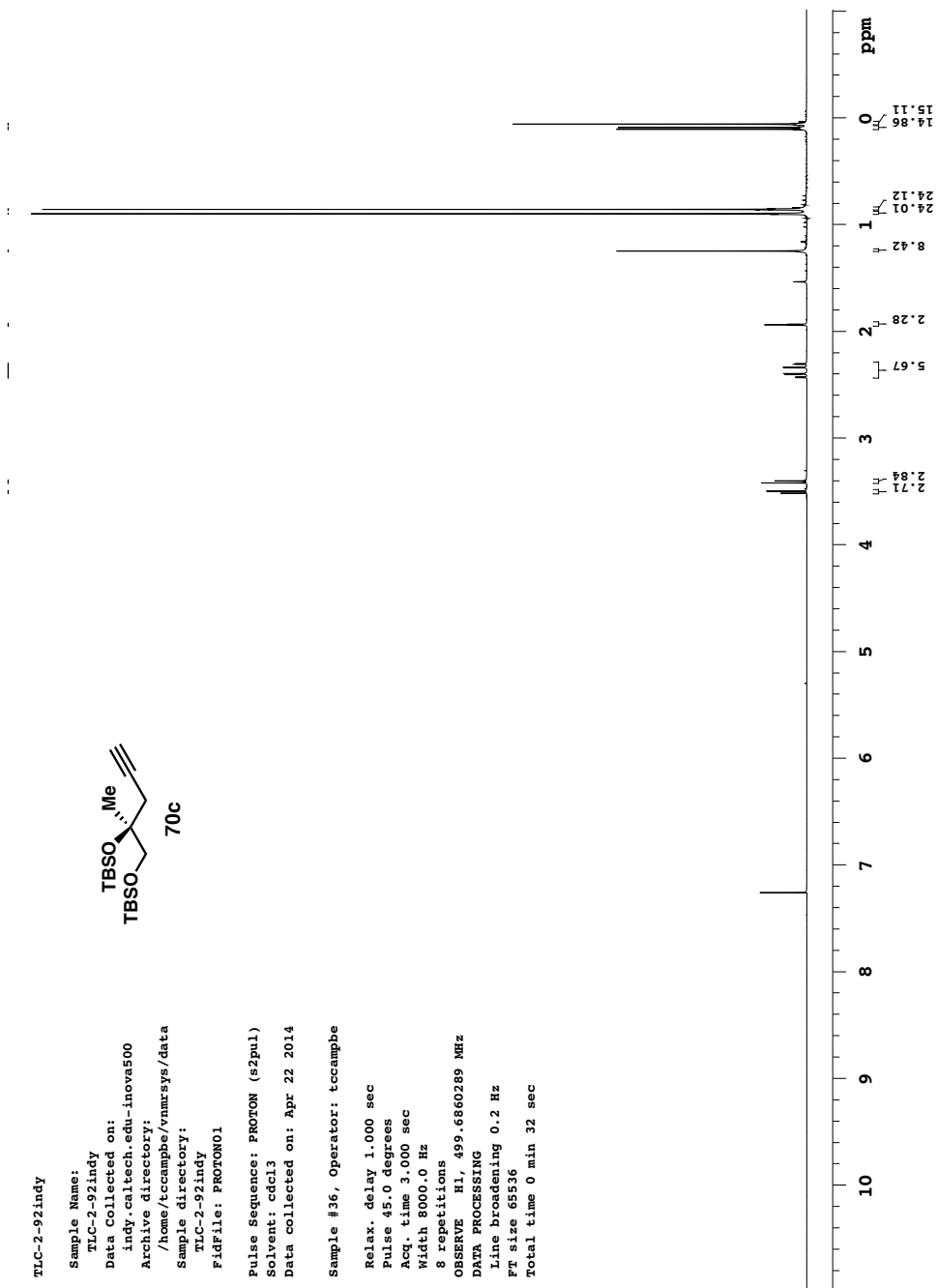
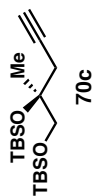
Sample Name:
TLC-2-92.indy
Data Collected on:
indy.caltch.edu~inova500
Archive directory:
/home/tccampbe/vnmrsys/data
Sample directory:
TLC-2-92.indy
FidFile: PROTON01

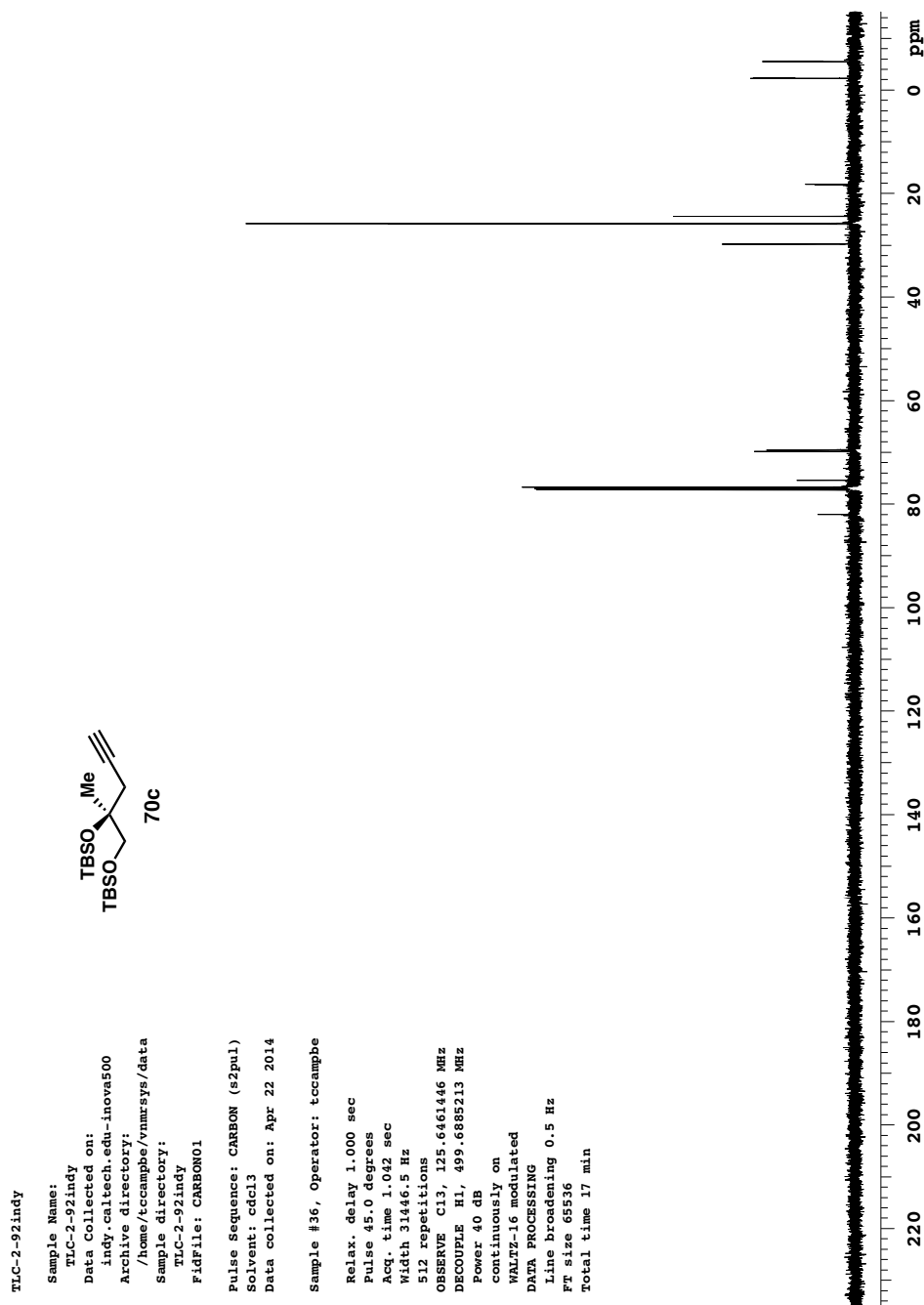
Pulse Sequence: PROTON (s2pul)
Solvent: cdc13
Data collected on: Apr 22 2014

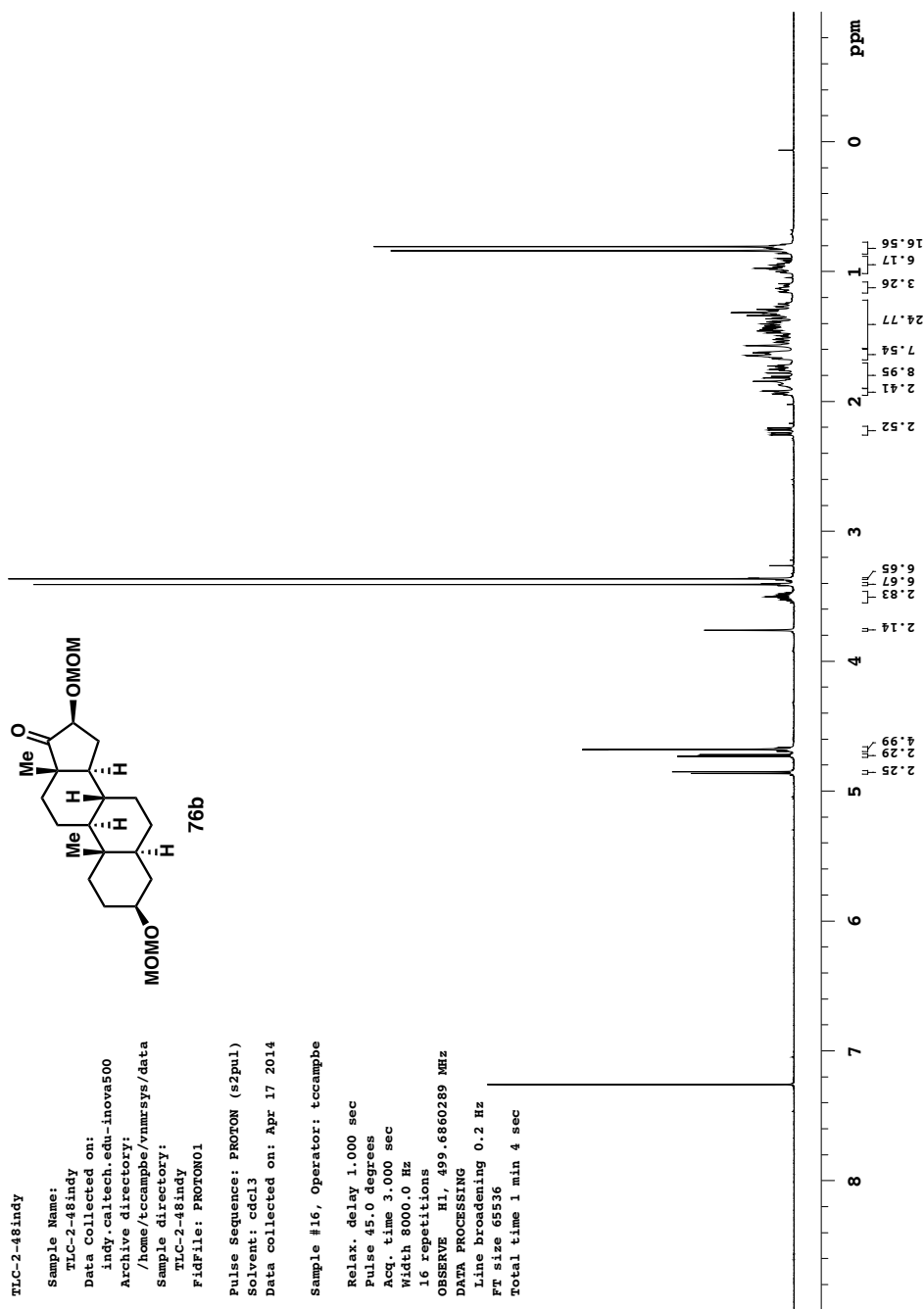
Sample #36, Operator: tccampbe

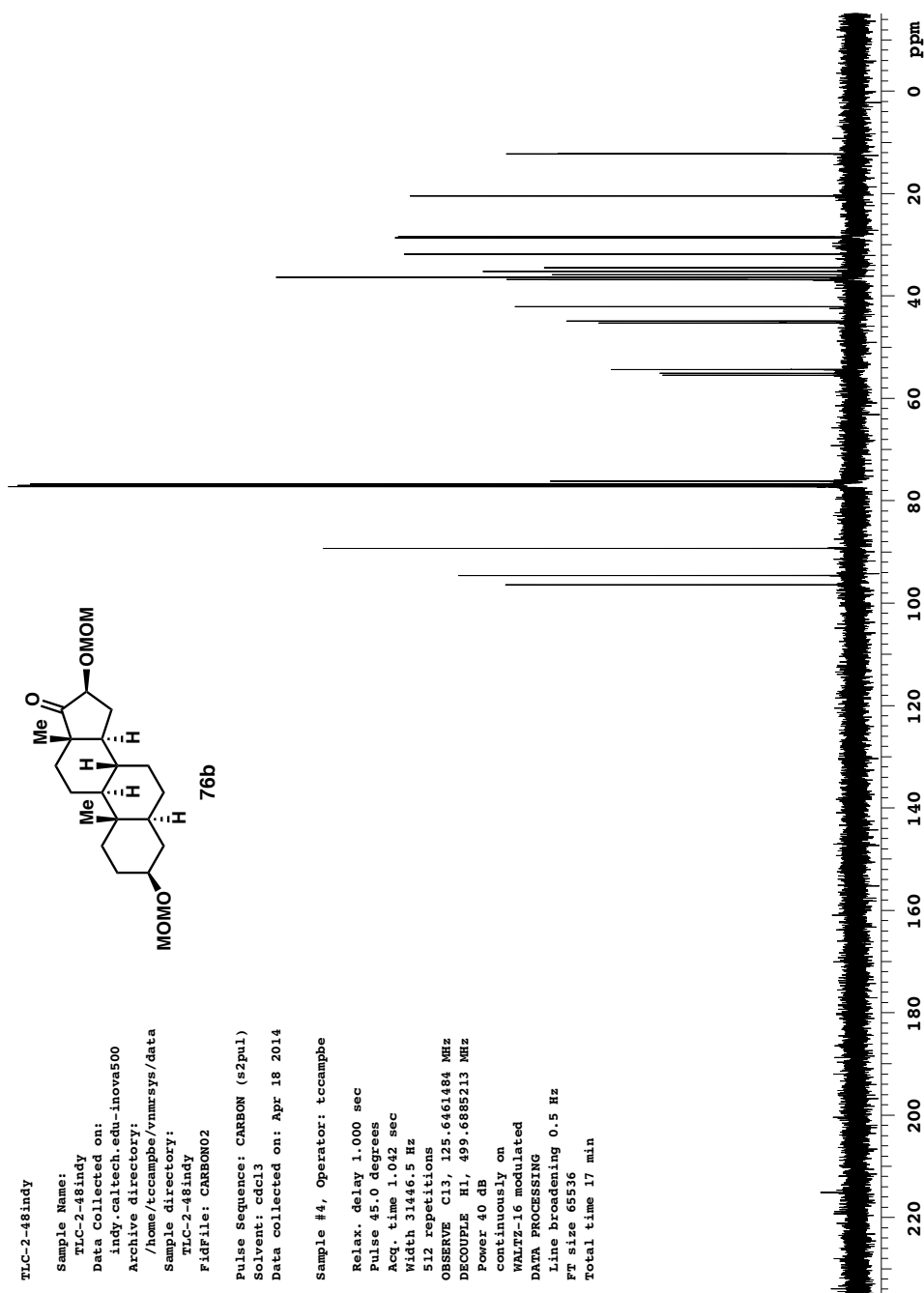
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 3.000 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 499.6860289 MHz
DATA PROCESSING
Line broadening 0.2 Hz
FT size 65536
Total time 0 min 32 sec

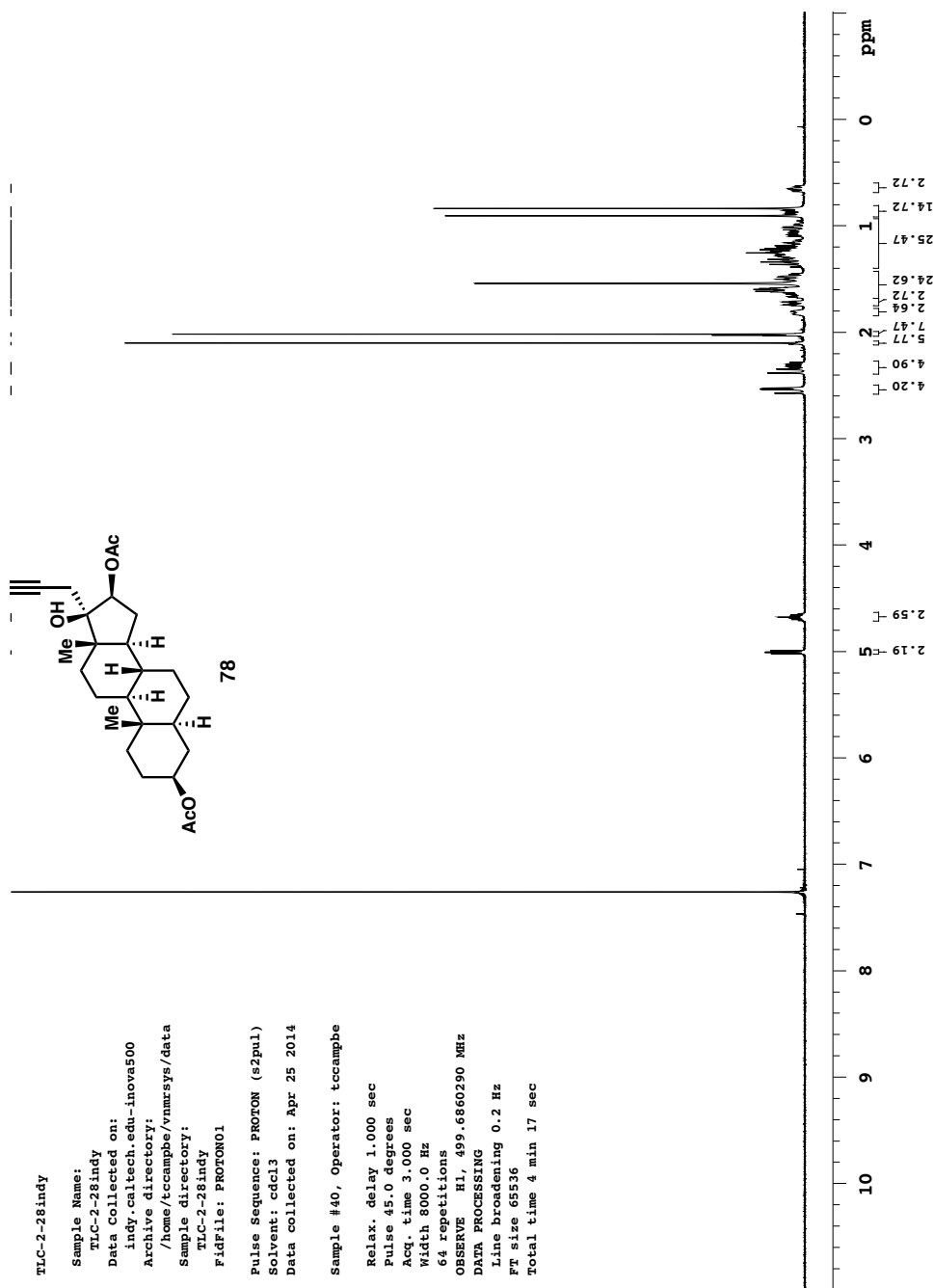
```

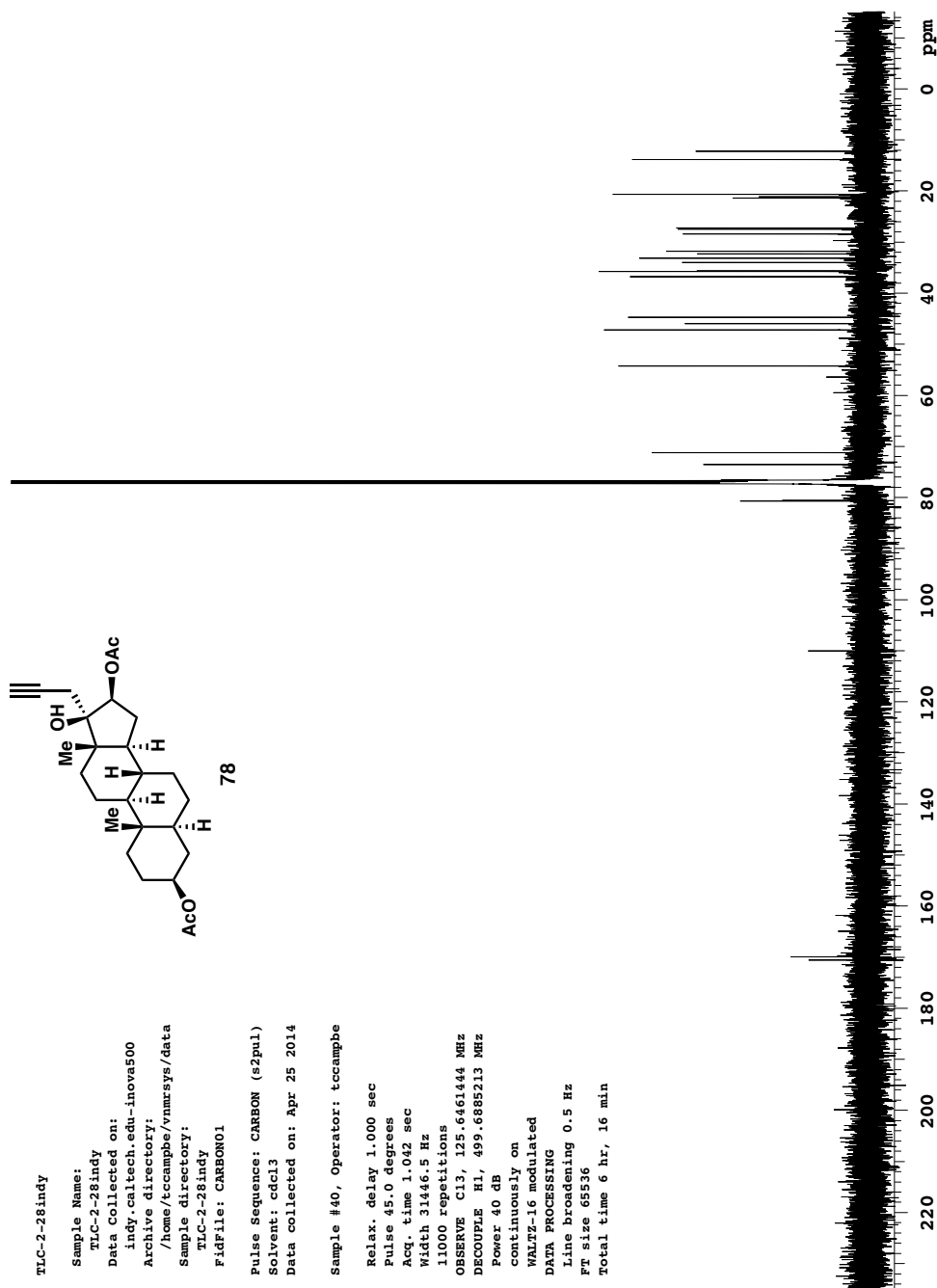


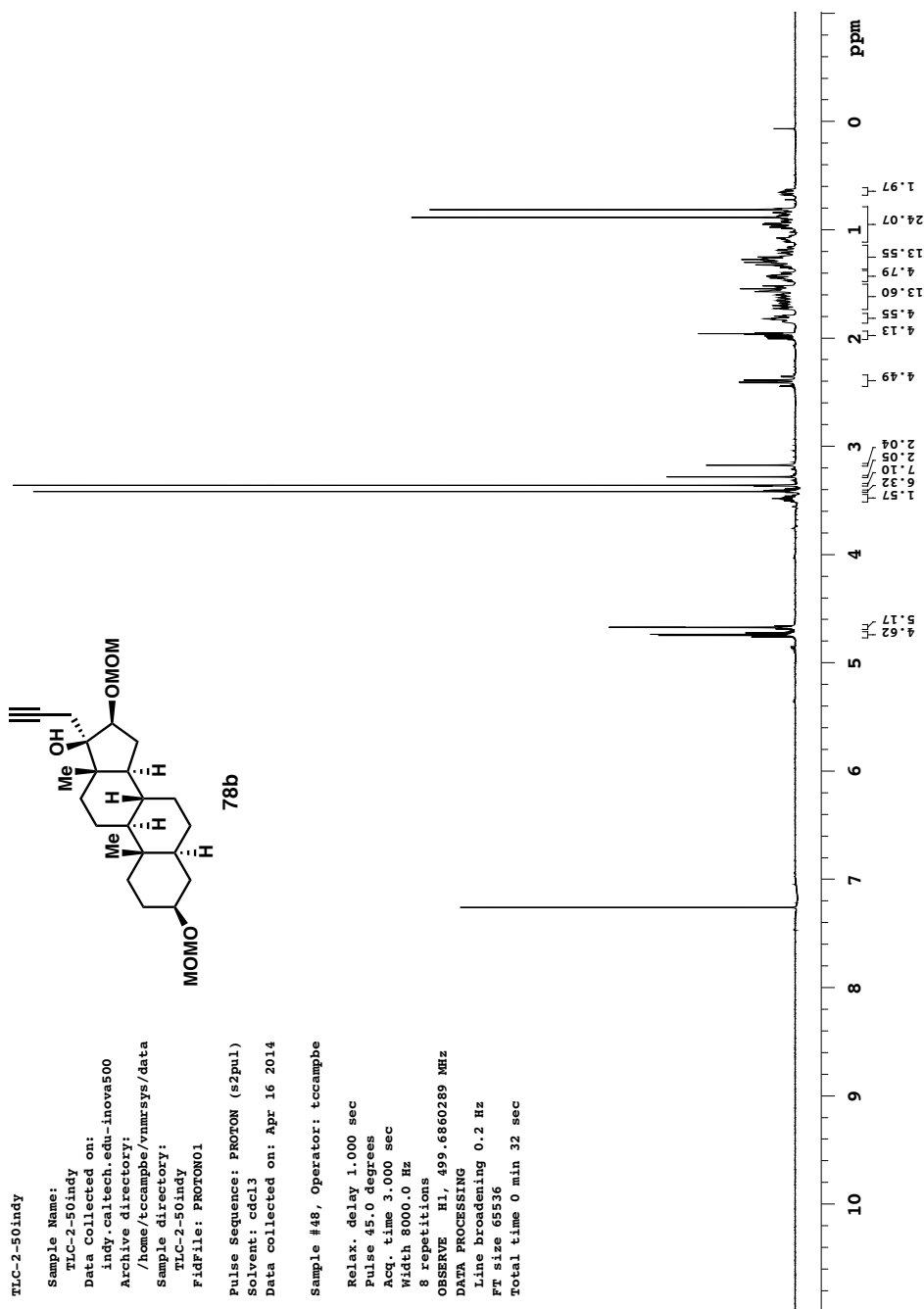


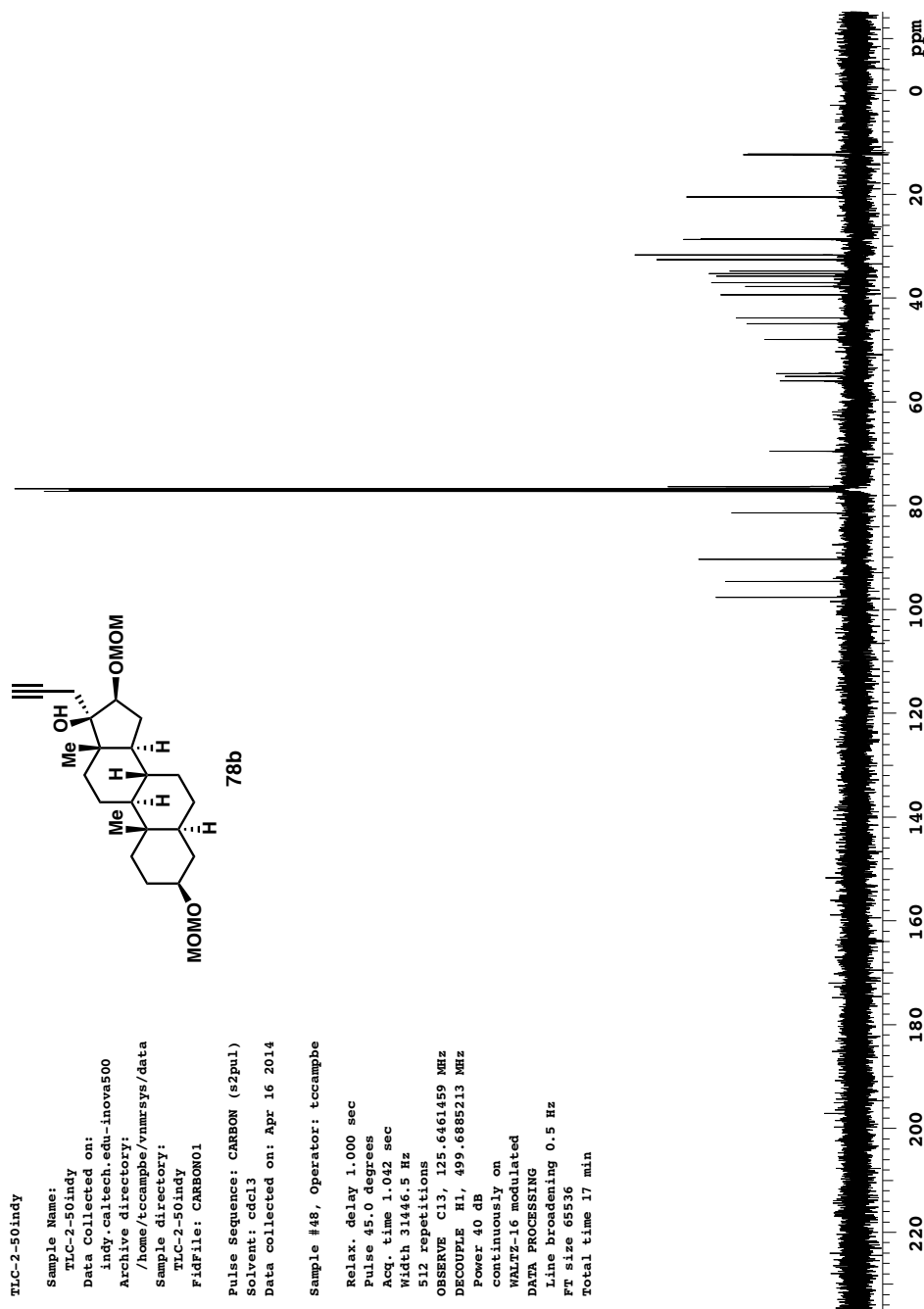


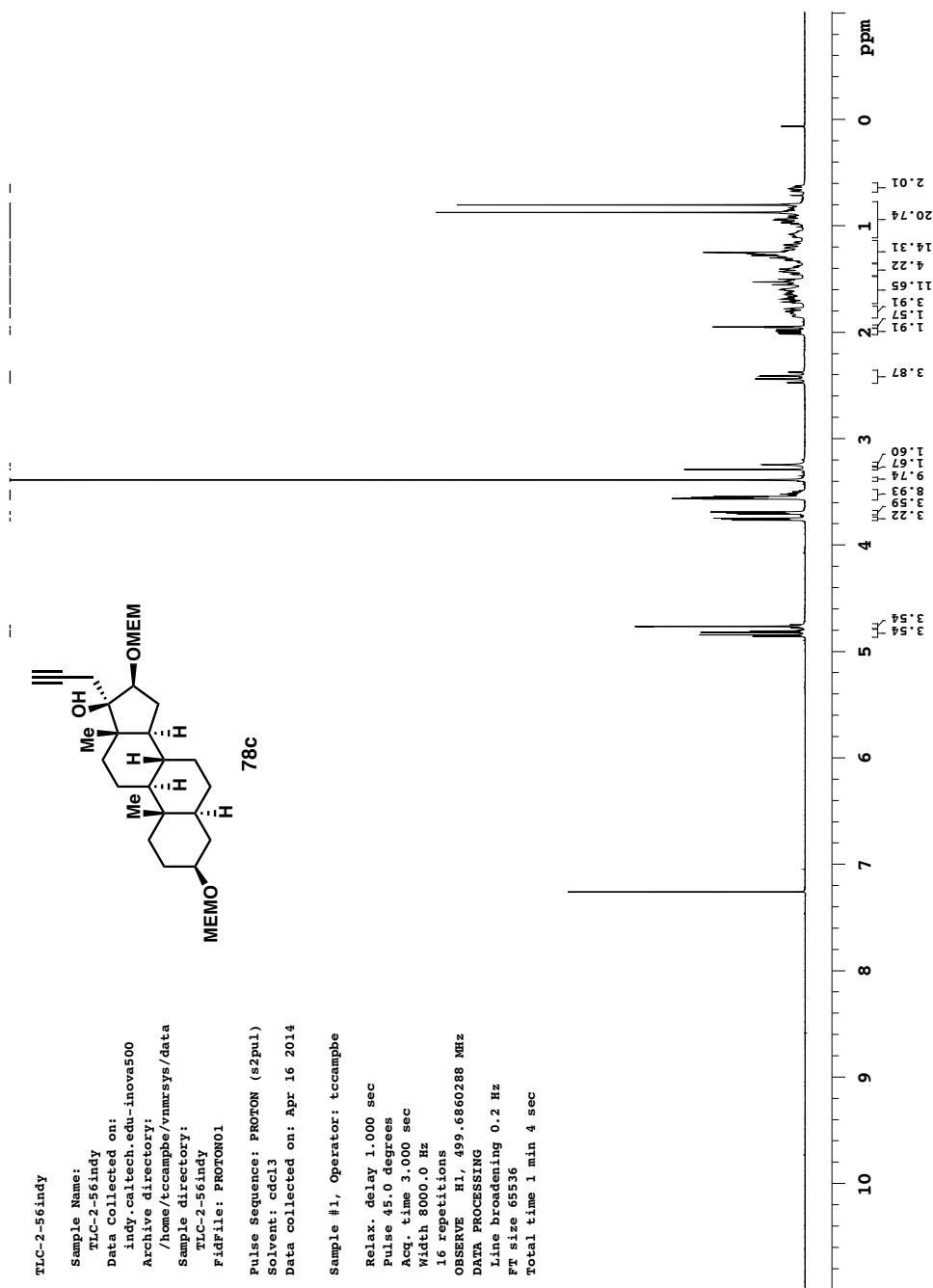


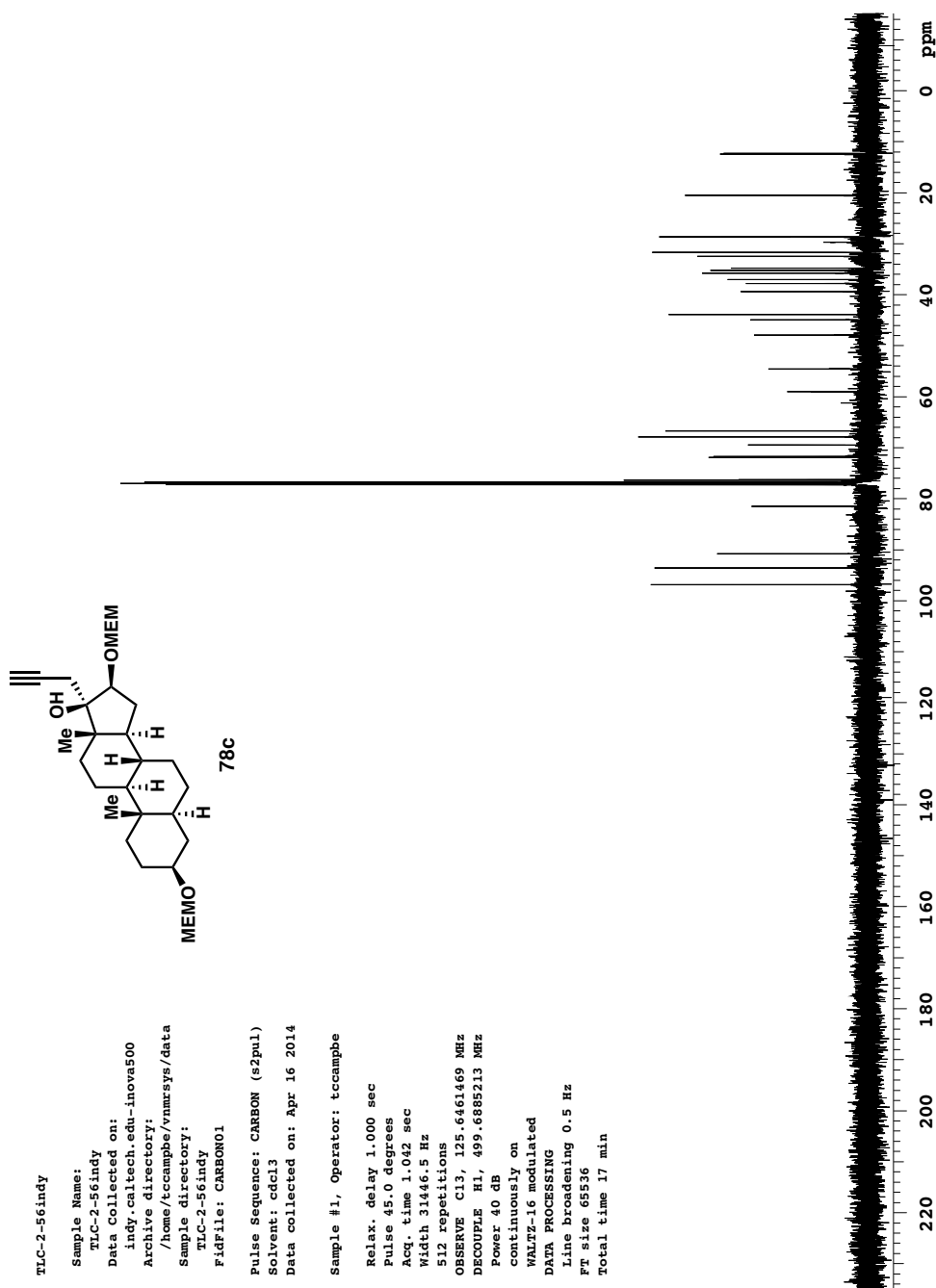


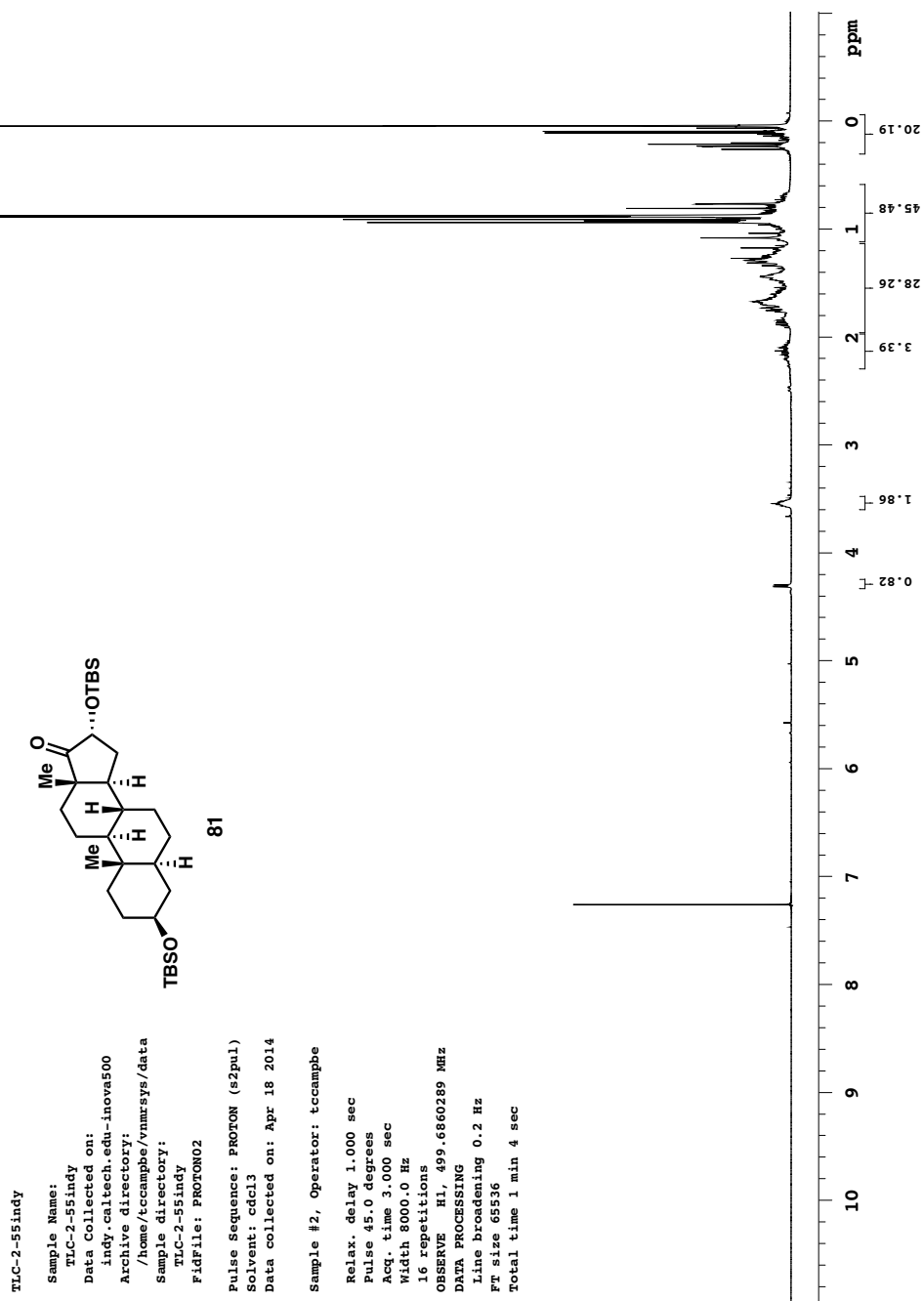


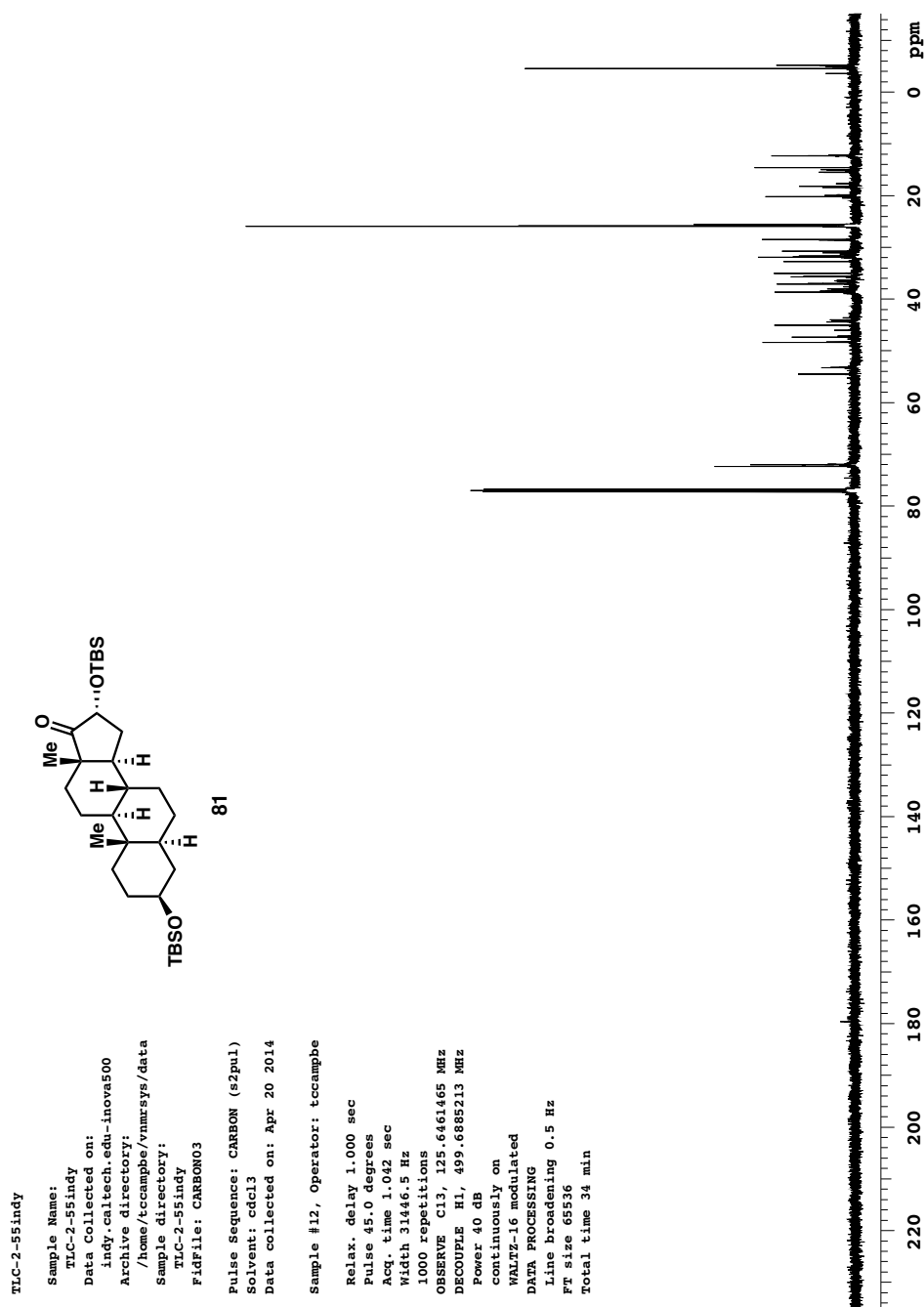


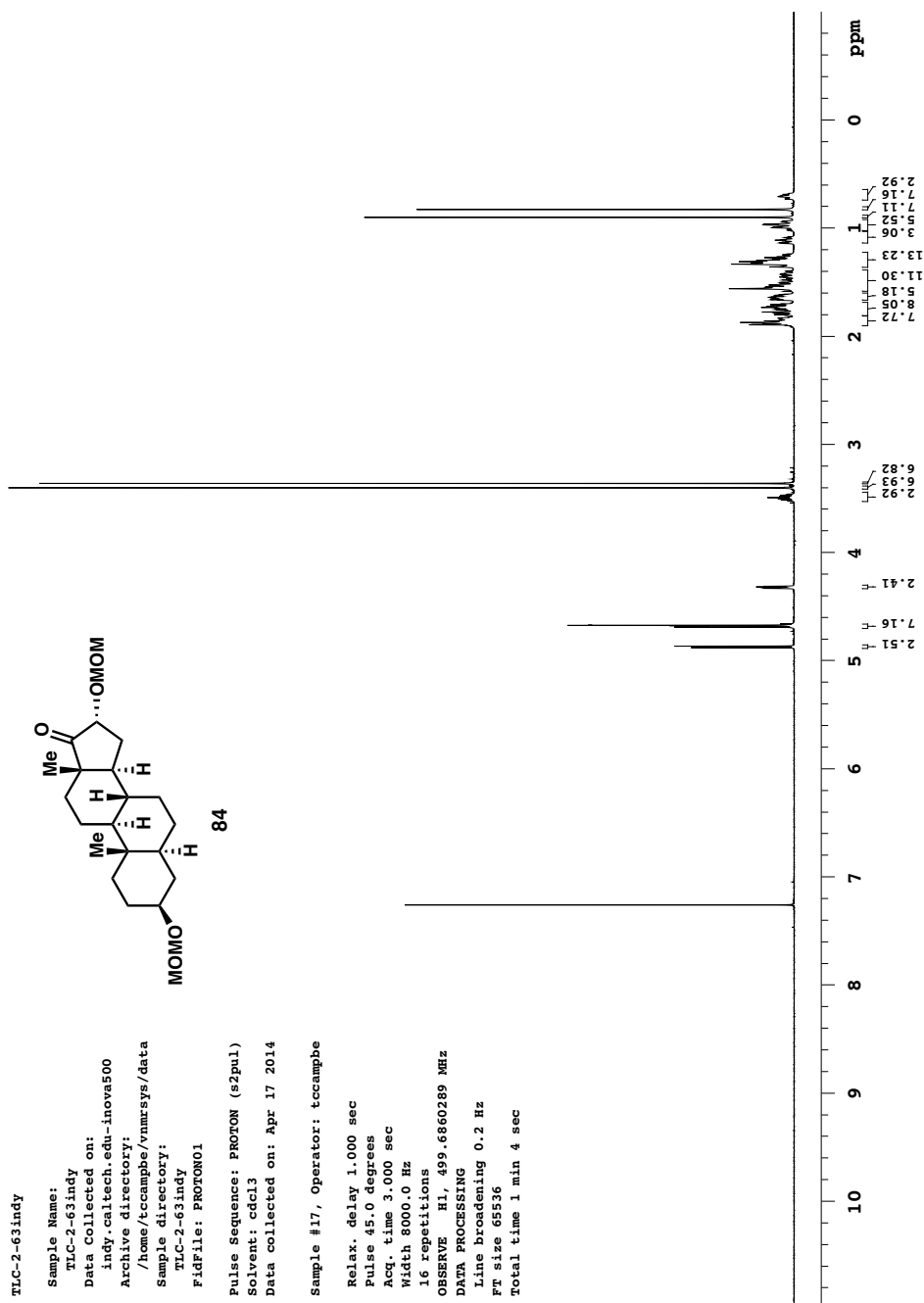












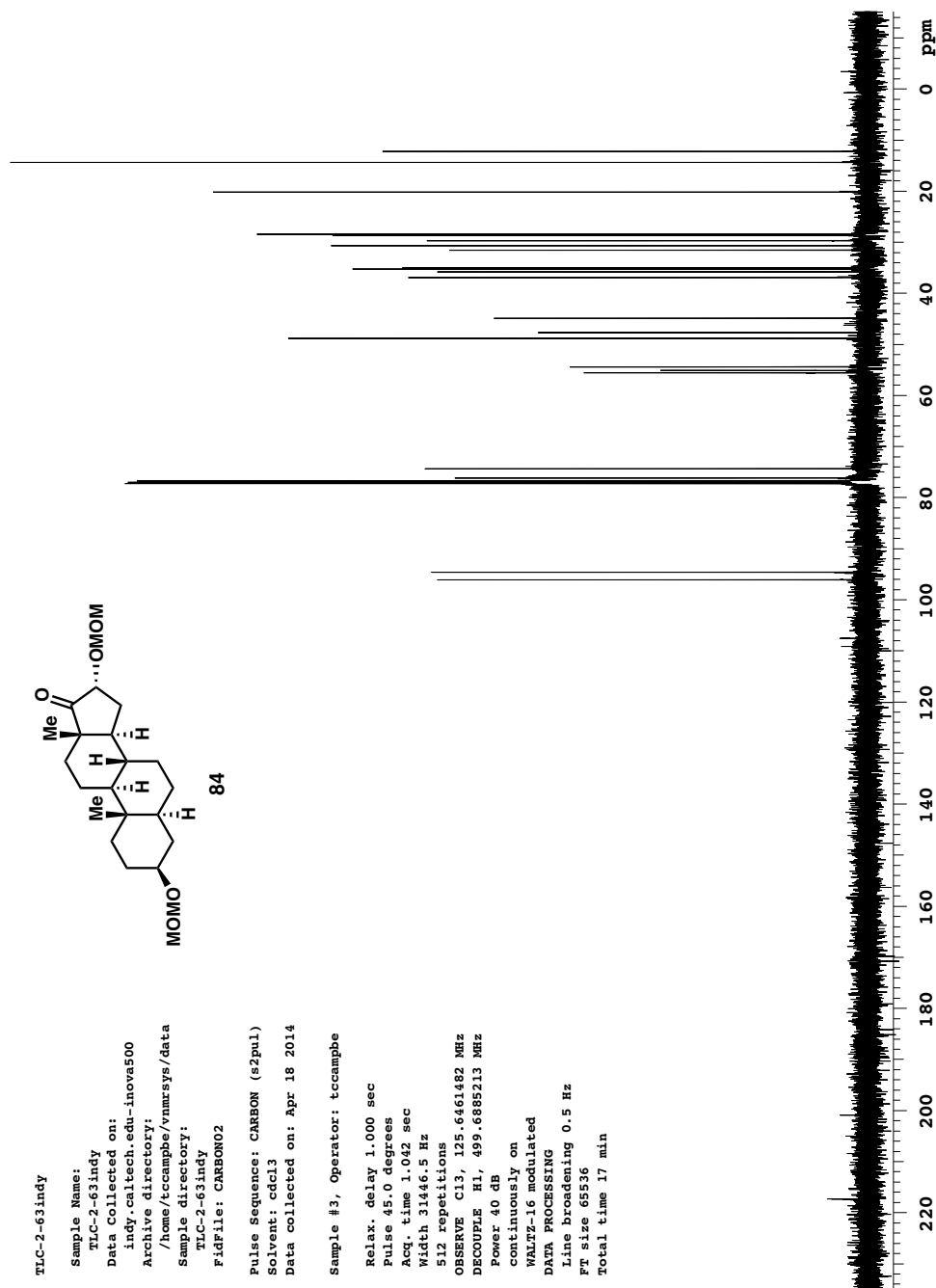
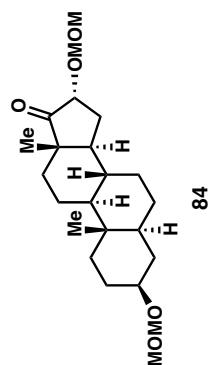
TLC-2-63indy

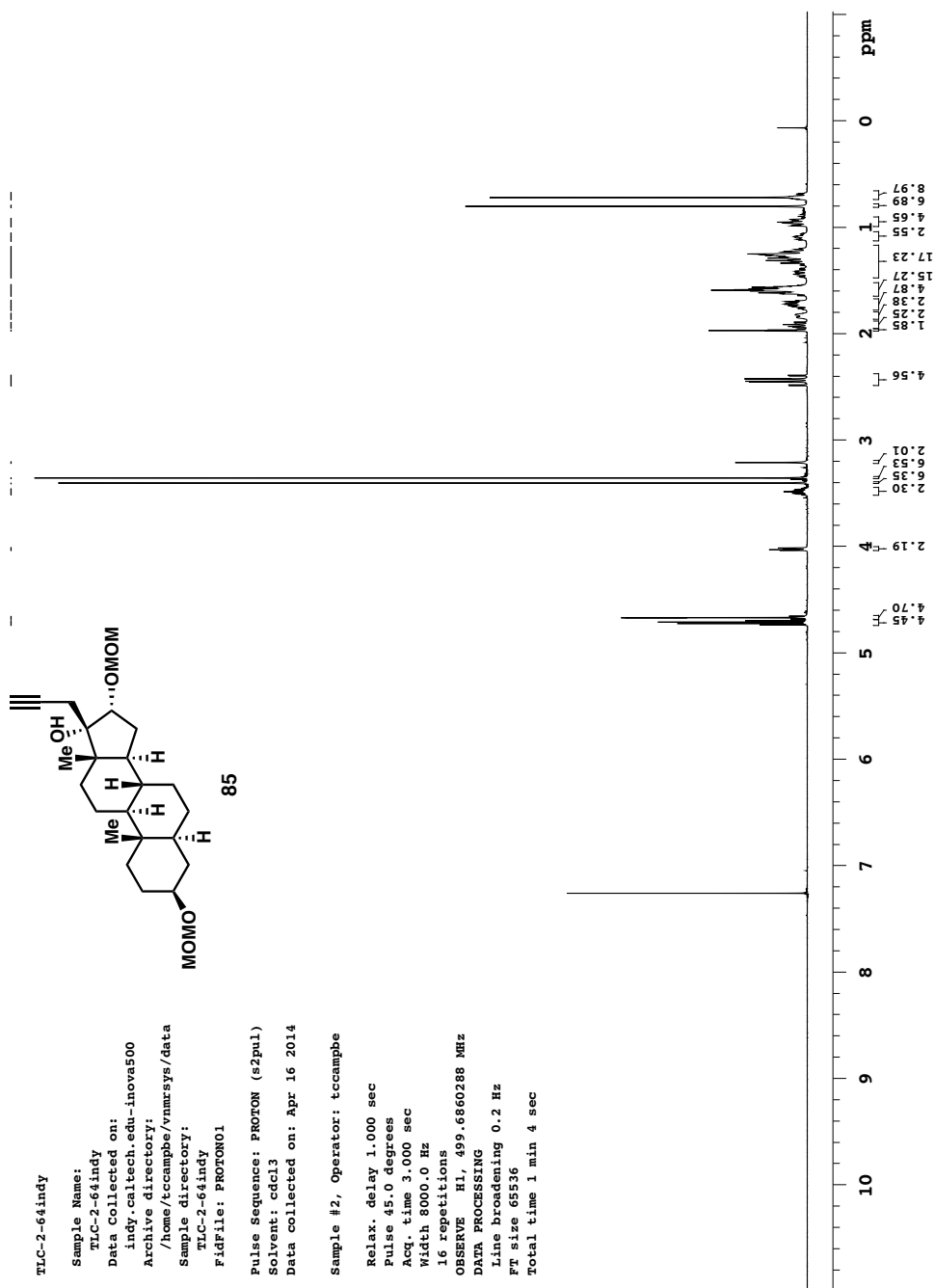
Sample Name:
TLC-2-63indy
Data Collected on:
indy.caltech.edu-inova500
Archive directory:
/home/tccampbe/vnmrsys/data
Sample directory:
TLC-2-63indy
FidFile: CAREON02

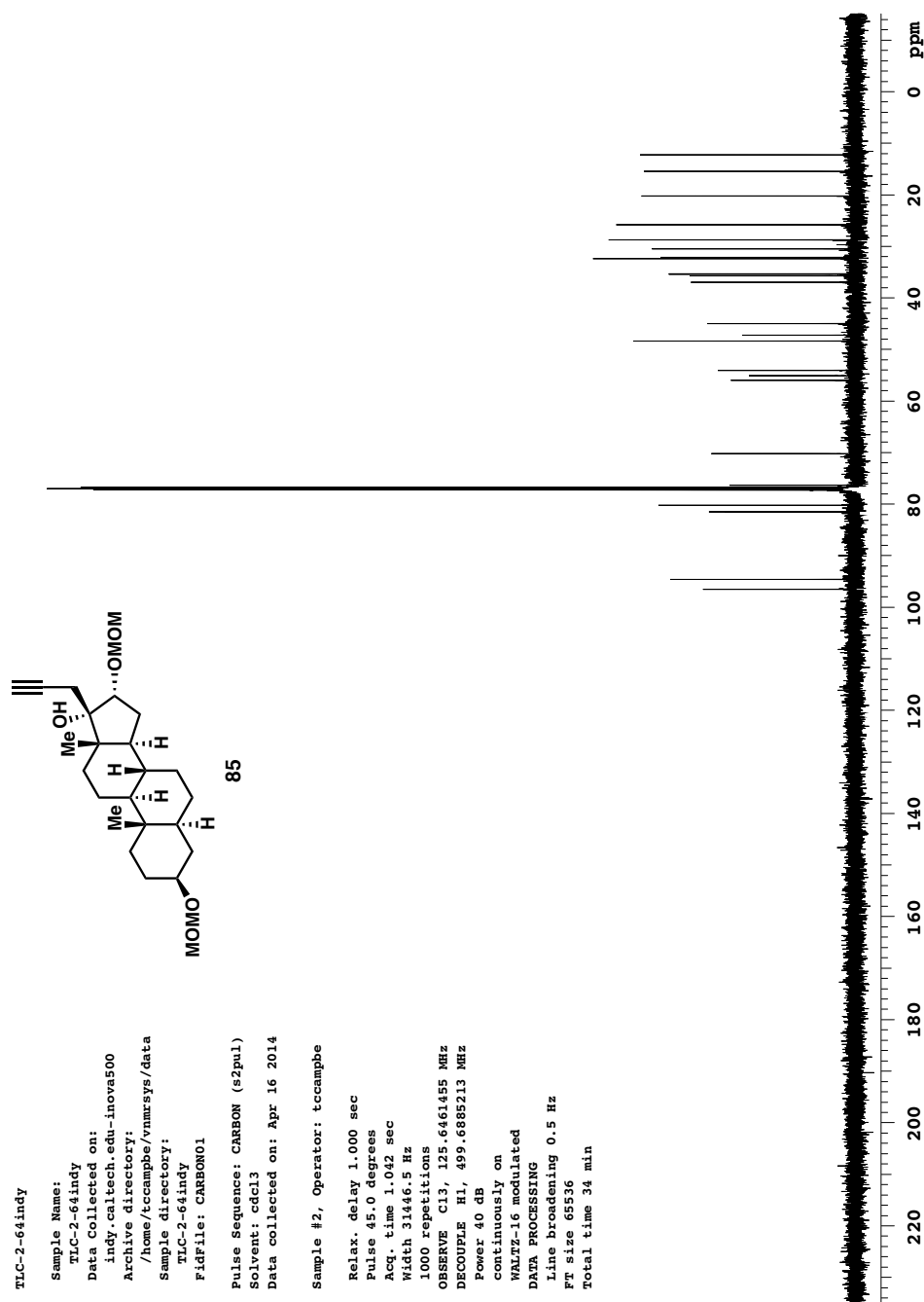
Pulse Sequence: CARBON (s2pul)
Solvent: cdcl3
Data collected on: Apr 18 2014

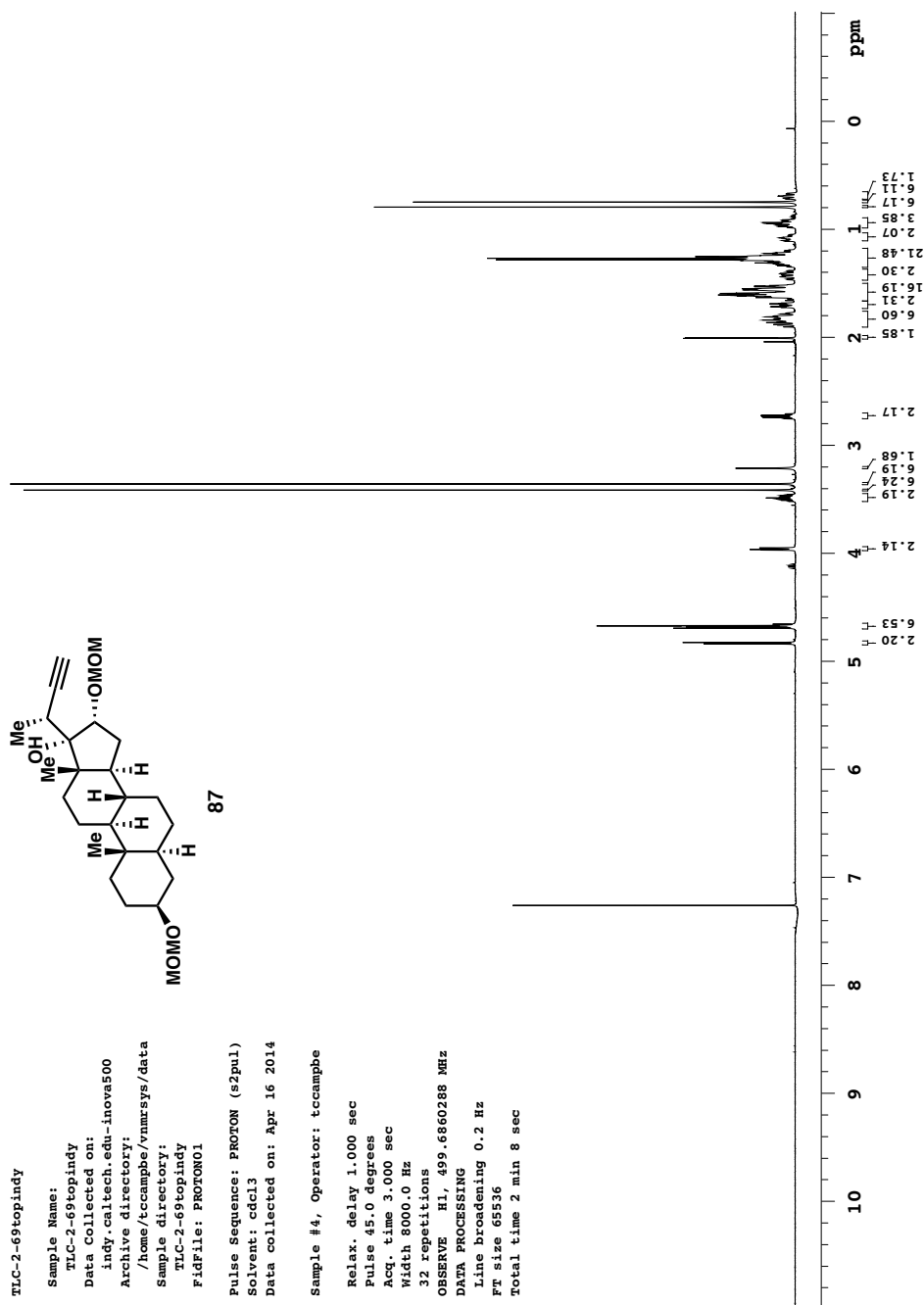
Sample #3, Operator: tccampbe

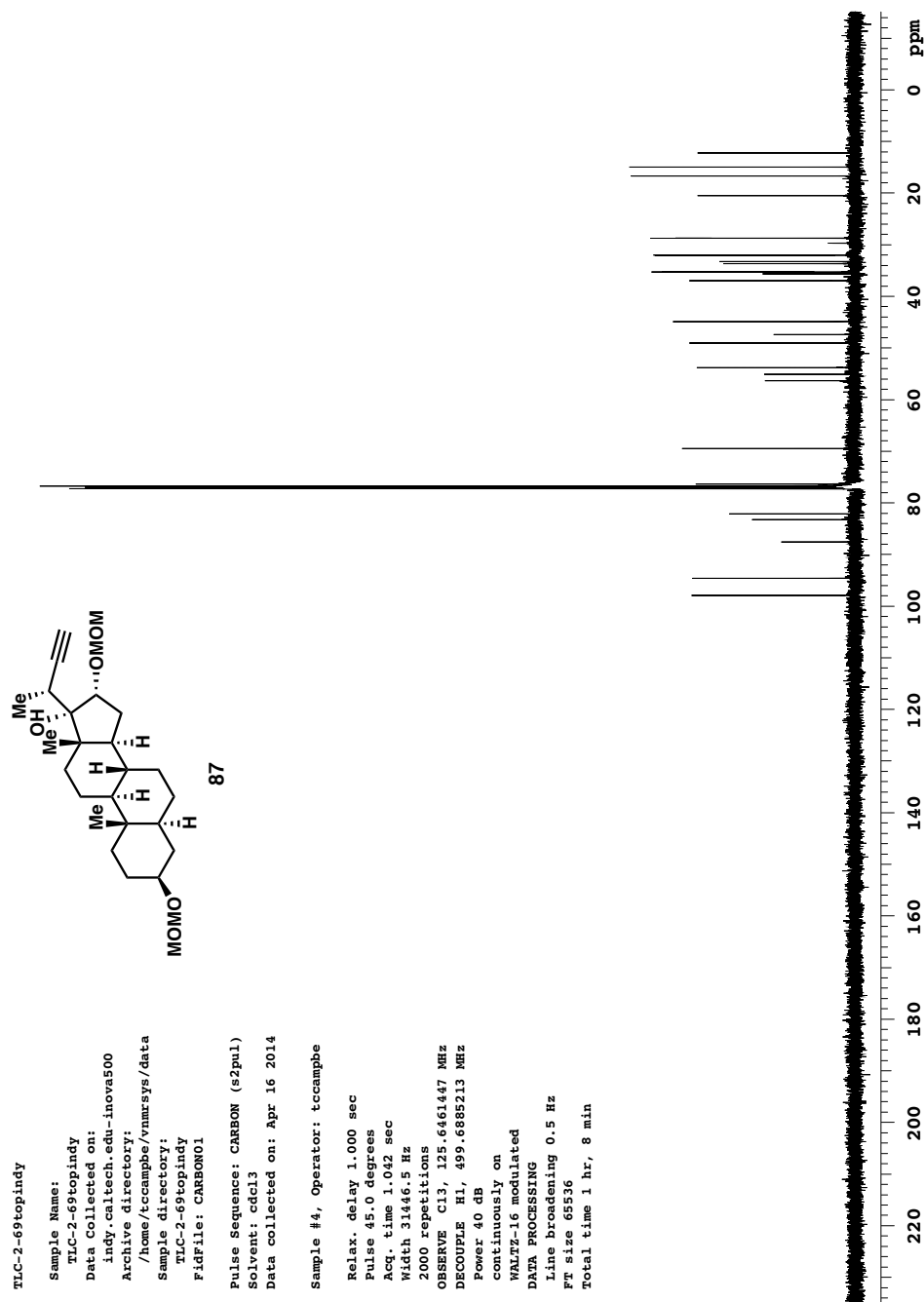
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.042 sec
Width 31446.5 Hz
512 repetitions
OBSERVE C13, 125.6461482 MHz
DECOUPLE H1, 499.6885213 MHz
Power 40 dB
continuous on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 0.5 Hz
FT size 65536
Total time 17 min

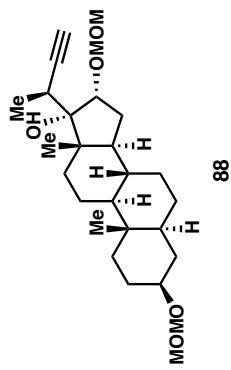












TLC-2-69bottom

Sample Name:
TLC-2-69bottom
Data Collected on:
indy.caltech.edu-inova500
Archive directory:
/home/tccampbe/vnmrsys/data
Sample directory:
TLC-2-69bottom
FidFile: CAREON01

Pulse Sequence: CARBON (s2pul)
Solvent: cdcl3
Data collected on: Apr 16 2014

Sample #3, Operator: tccampbe

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.042 sec
Width 31446.5 Hz
2000 repetitions
OBSERVE C13, 125.6461447 MHz
DECOUPLE H1, 499.6885213 MHz
Power 40 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 0.5 Hz
FT size 65536
Total time 1 hr, 8 min

