

## **Catalytic Asymmetric Synthesis of Highly Substituted Pyrrolizidines**

Andrew D. Lim, Julian A. Codelli, Sarah E. Reisman\*

*The Warren and Katharine Schlinger Laboratory of Chemistry and Chemical Engineering  
Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena,  
California 91125  
reisman@caltech.edu*

**Supporting Information 2 (Spectral Data):**

JAC10-67 CDC13 indy

Sample Name:

JAC10-67

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcodelli/vnmrsys/data

Sample directory:

JAC10-67

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 13 2012

Sample #7, Operator: jcodelli

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

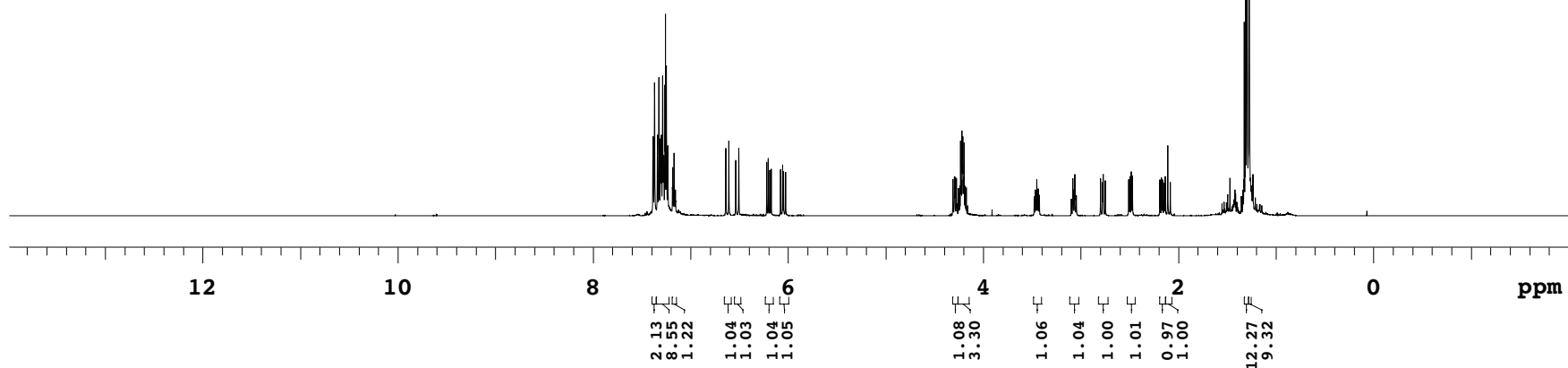
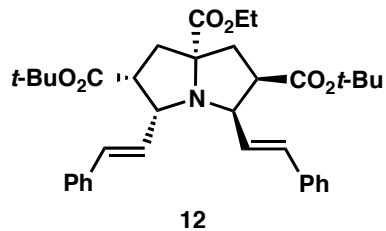
OBSERVE H1, 499.7127430 MHz

DATA PROCESSING

Line broadening 0.2 Hz

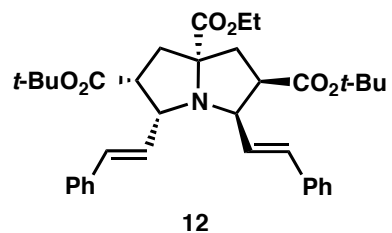
FT size 65536

Total time 1 min 12 sec



JAC10-67 CDC13 indy

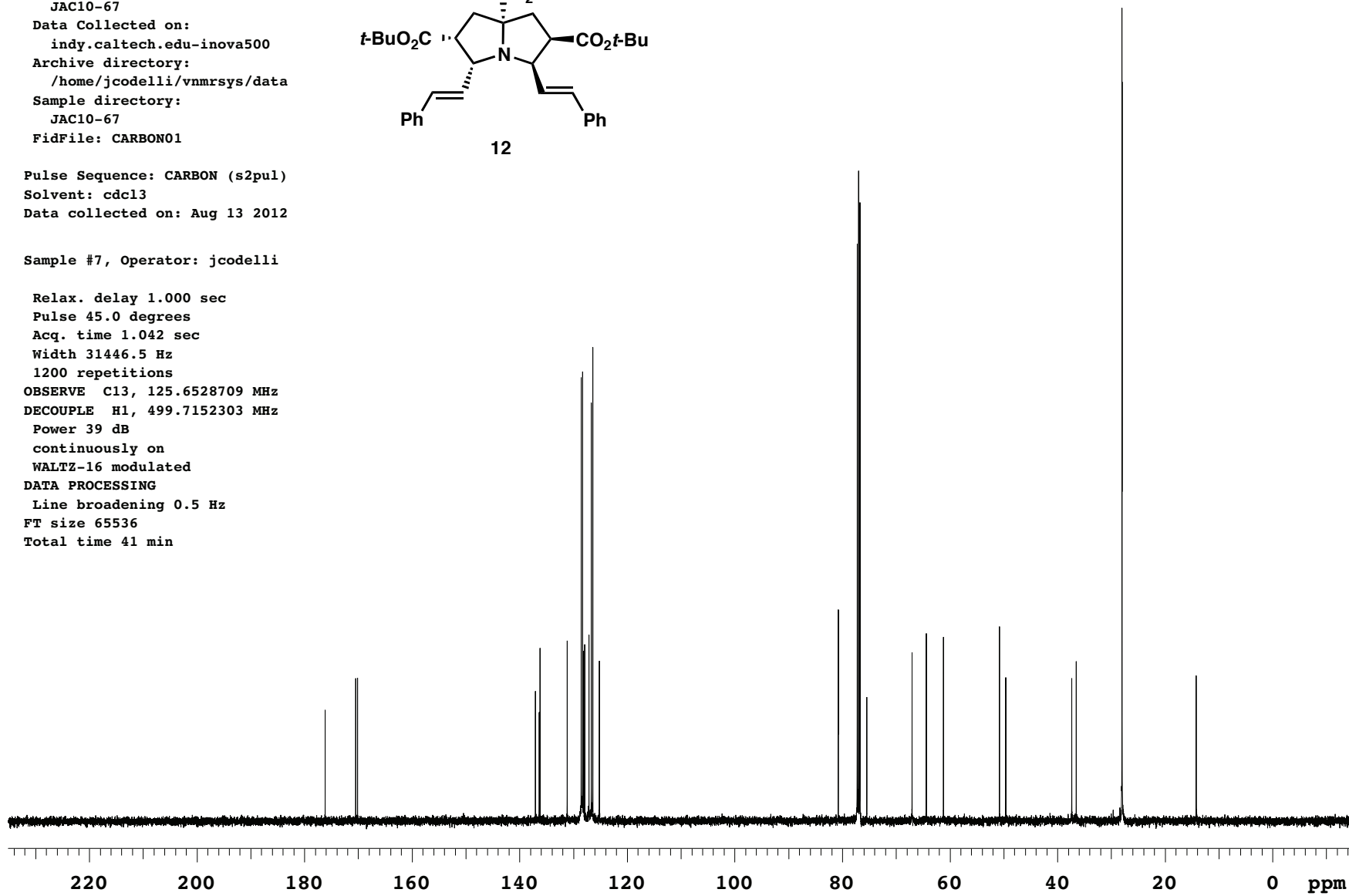
Sample Name:  
JAC10-67  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/jcodelli/vnmrsys/data  
Sample directory:  
JAC10-67  
FidFile: CARBON01



Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Aug 13 2012

Sample #7, Operator: jcodelli

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
1200 repetitions  
OBSERVE C13, 125.6528709 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 41 min



ADL-II-238B

Sample Name:

ADL-II-238B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-II-238B

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 12 2011

Sample #20, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

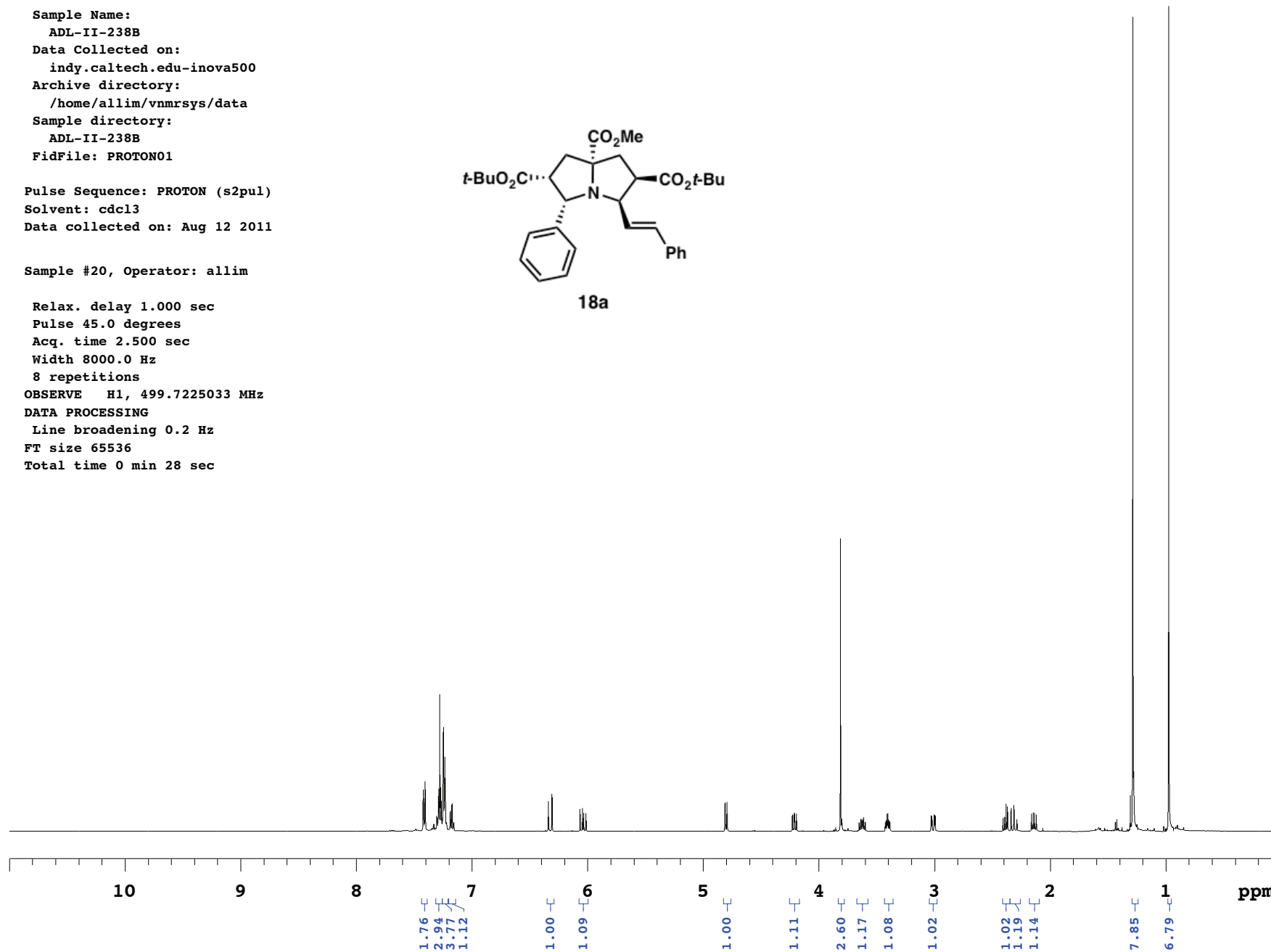
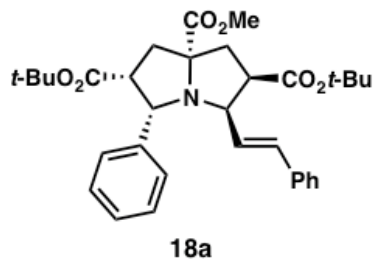
OBSERVE H1, 499.7225033 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 28 sec



ADL-II-238B

Sample Name:

ADL-II-238B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-II-238B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Aug 12 2011

Sample #20, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

1500 repetitions

OBSERVE C13, 125.6553277 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

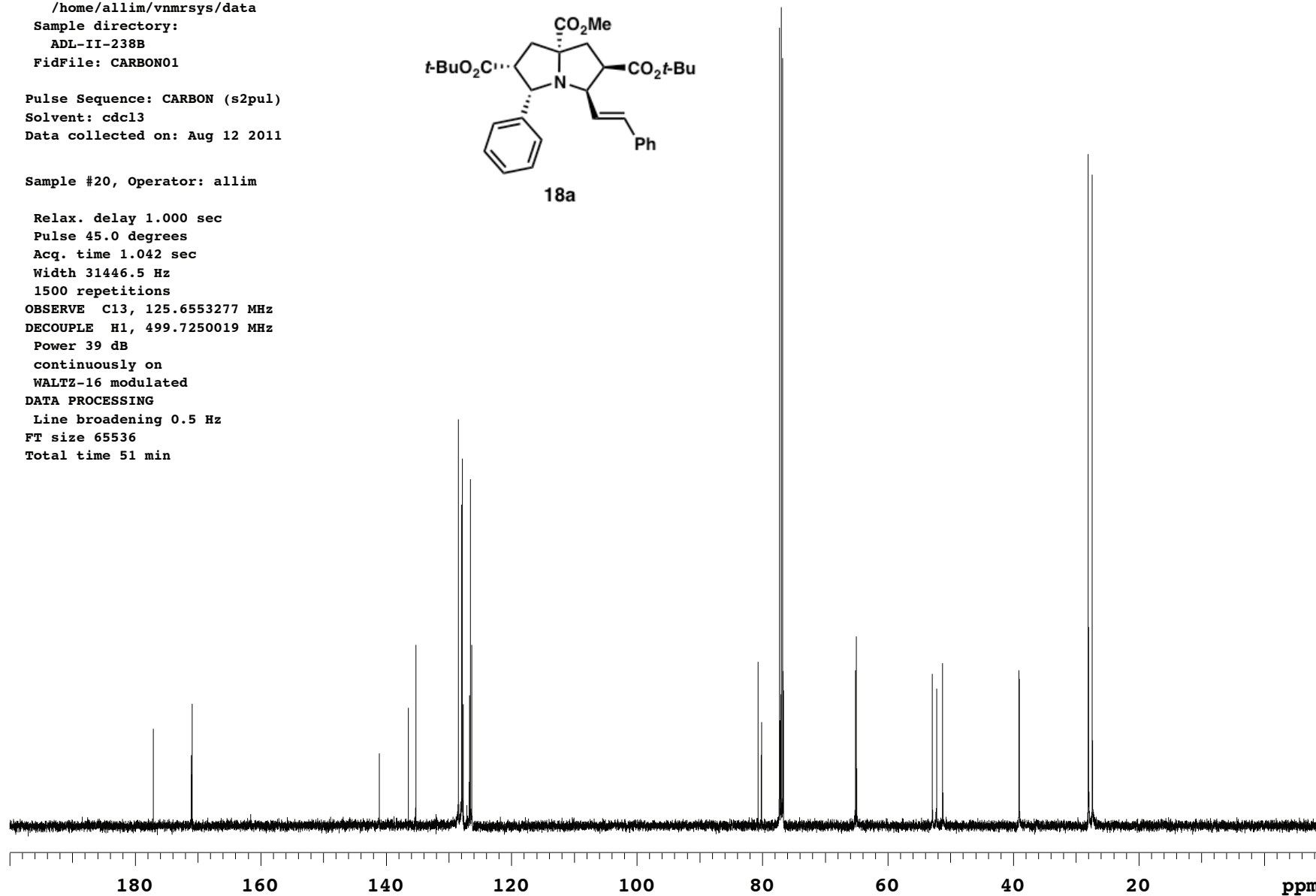
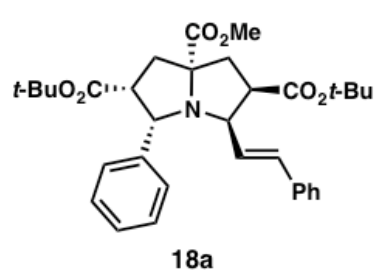
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 51 min

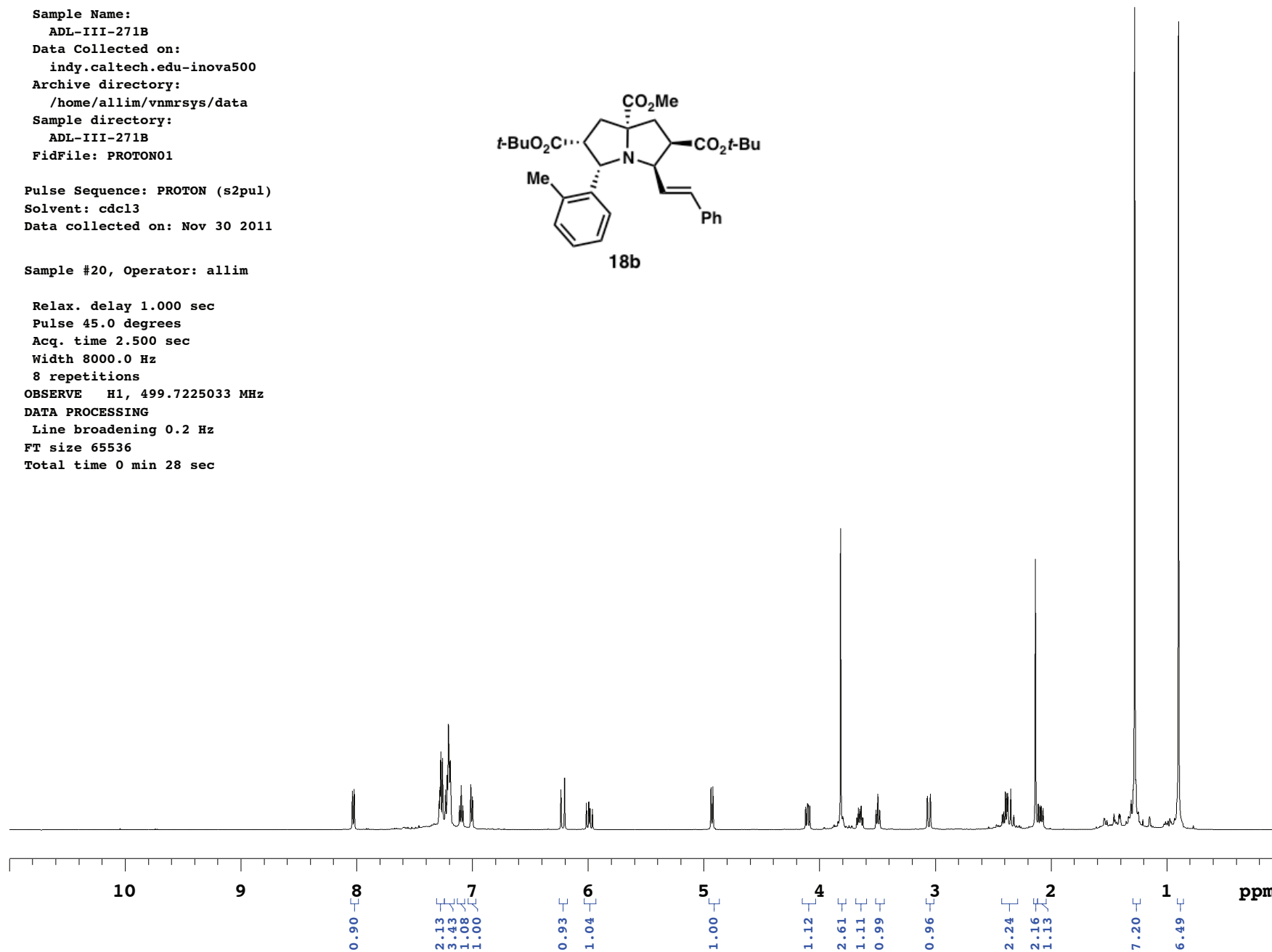
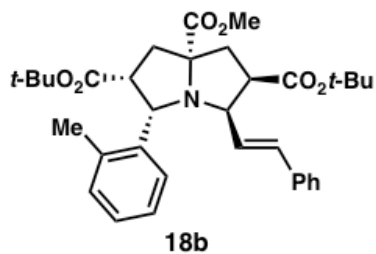


Sample Name:  
ADL-III-271B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-271B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 30 2011

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

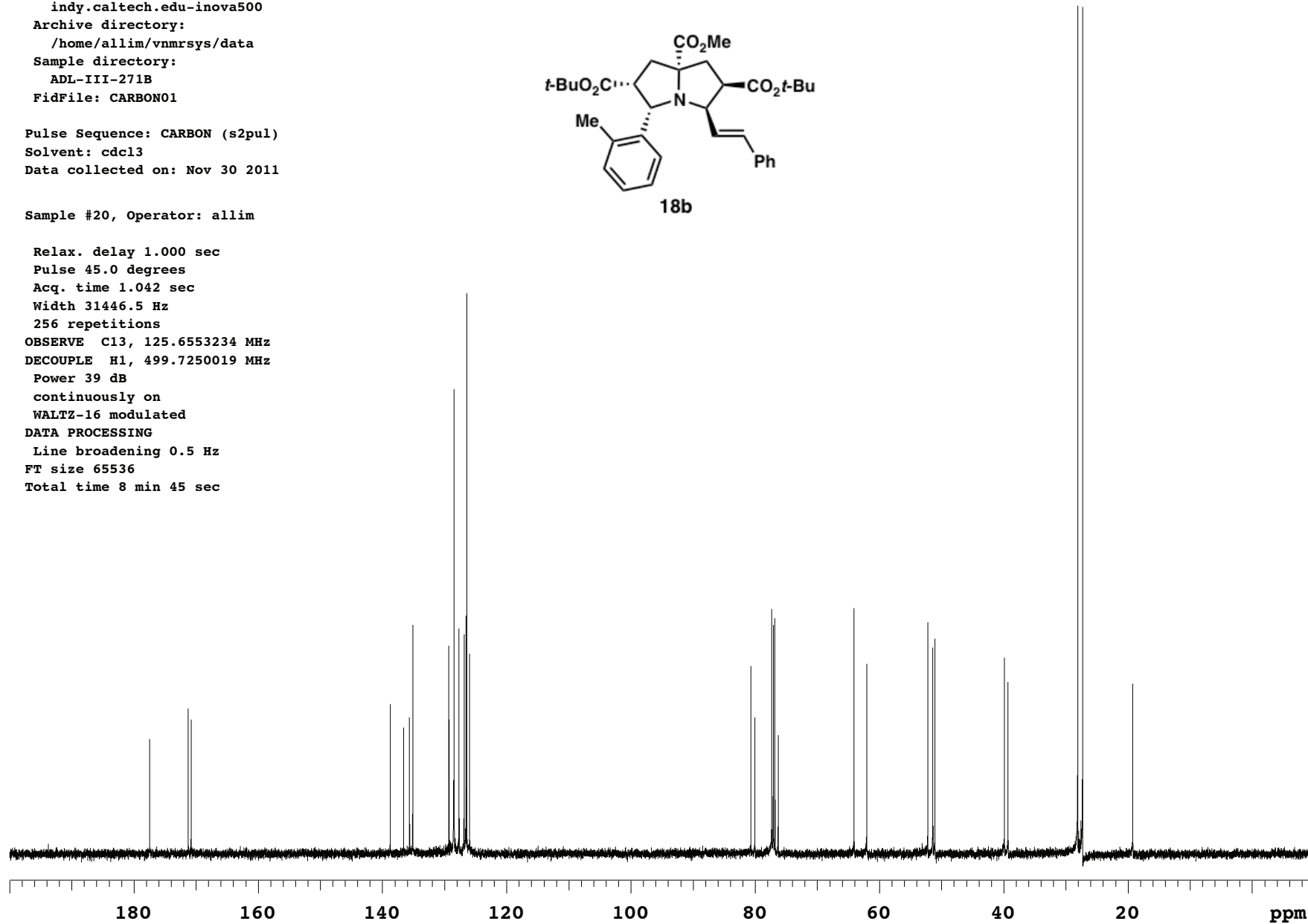
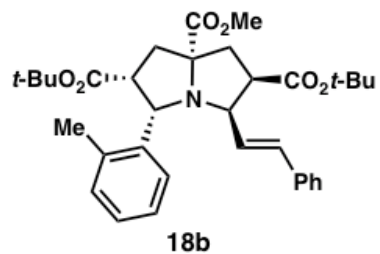


Sample Name:  
ADL-III-271B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-271B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 30 2011

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553234 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



jc-adl-300

Sample Name:

jc-adl-300

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcha/vnmrsys/data

Sample directory:

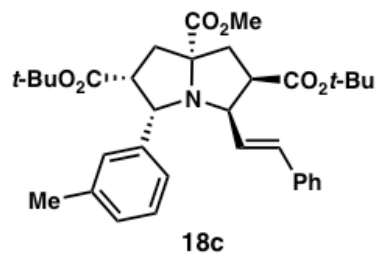
jc-adl-300

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 23 2011



Sample #47, Operator: jcha

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

32 repetitions

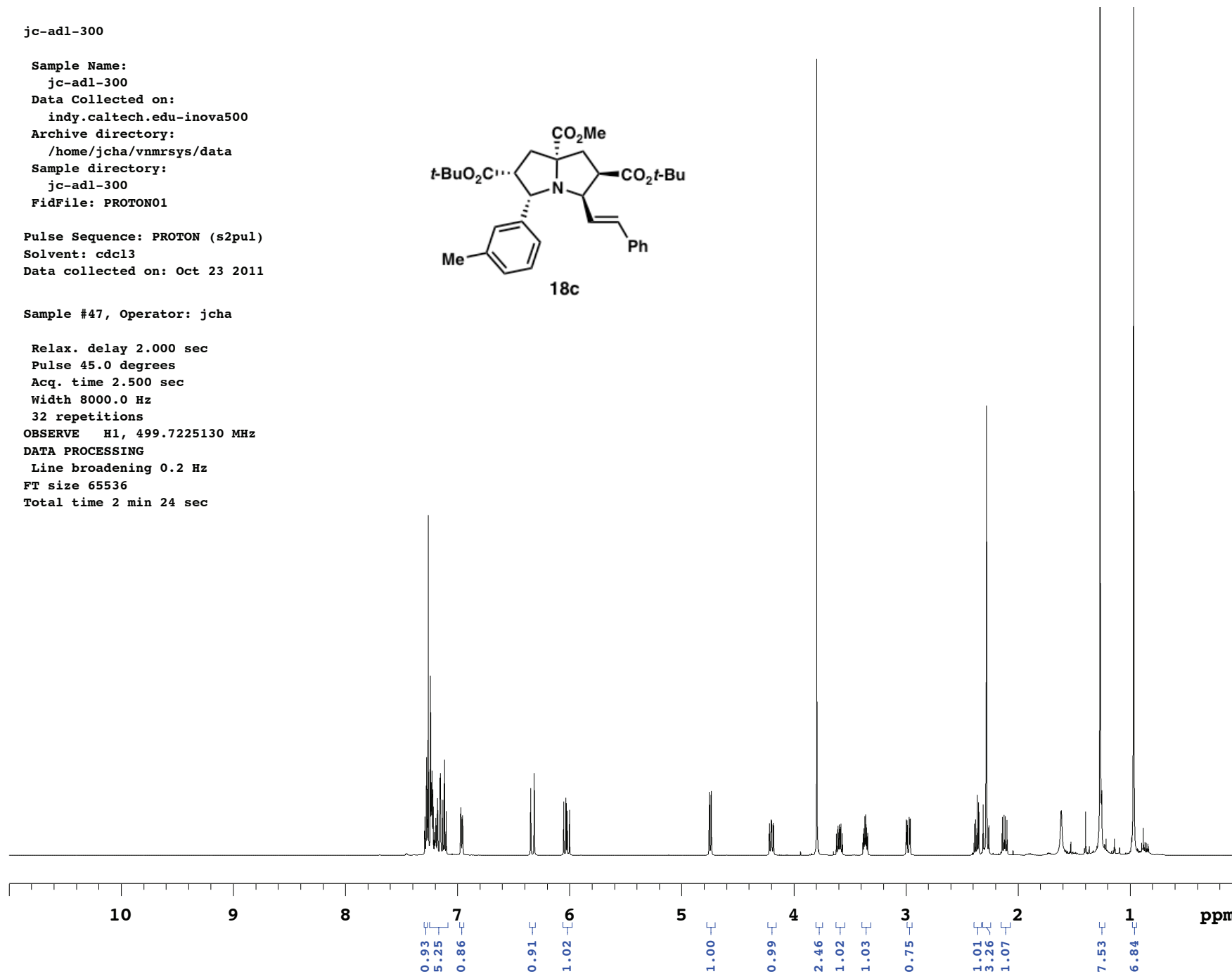
OBSERVE H1, 499.7225130 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 2 min 24 sec





jc-adl-300

Sample Name:

jc-adl-300

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcha/vnmrsys/data

Sample directory:

jc-adl-300

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 23 2011

Sample #47, Operator: jcha

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

512 repetitions

OBSERVE C13, 125.6553282 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

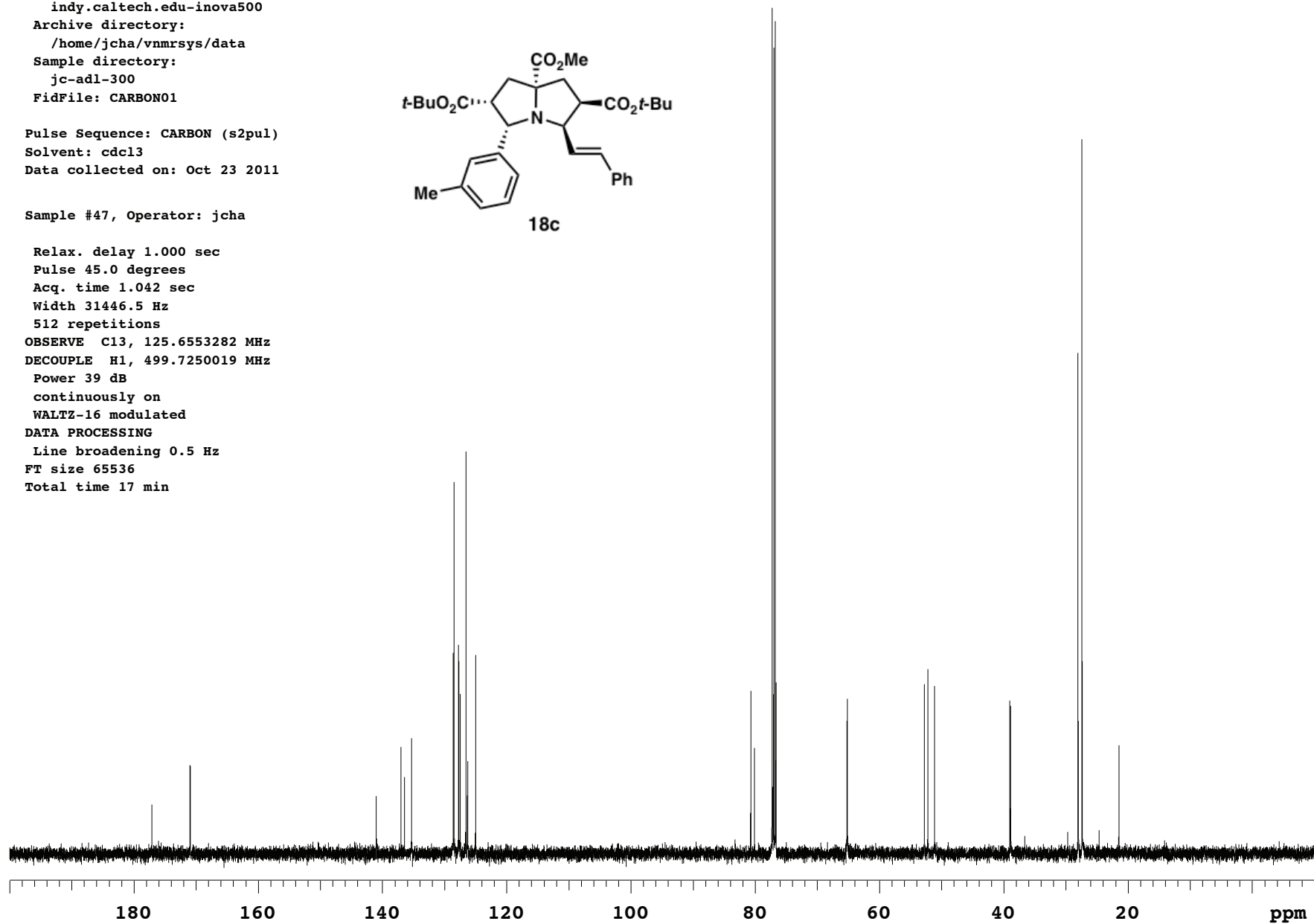
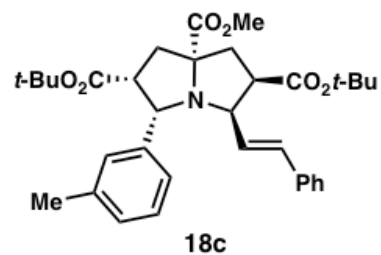
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 17 min



ADL-III-295B

Sample Name:

ADL-III-295B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-III-295B

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011

Sample #9, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

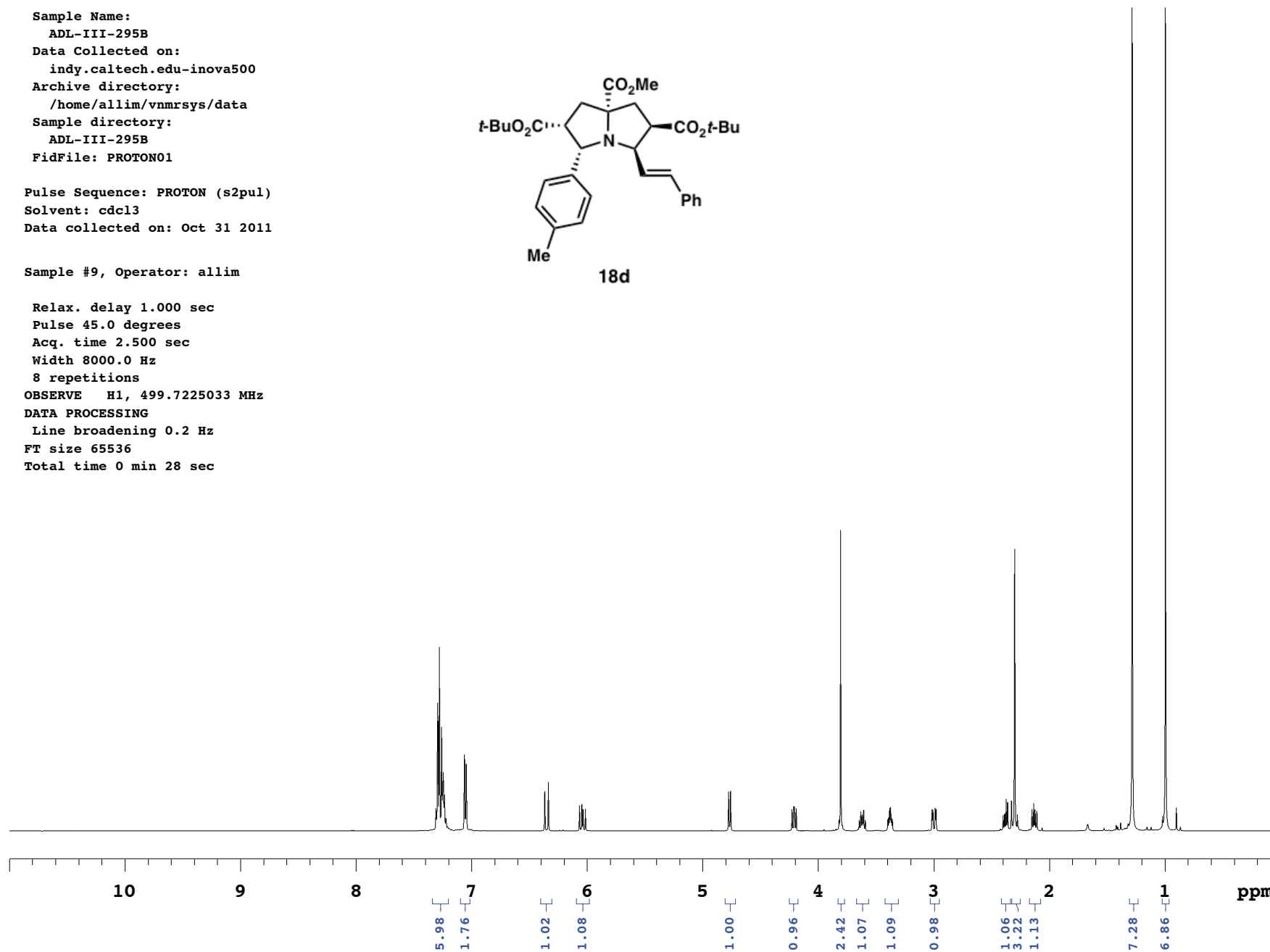
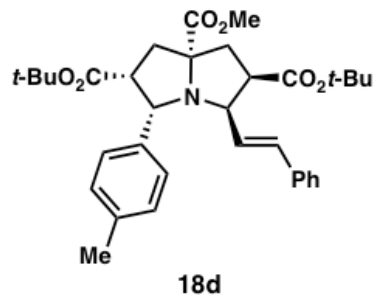
OBSERVE H1, 499.7225033 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 28 sec



ADL-III-295B

Sample Name:

ADL-III-295B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-III-295B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011

Sample #9, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6553294 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

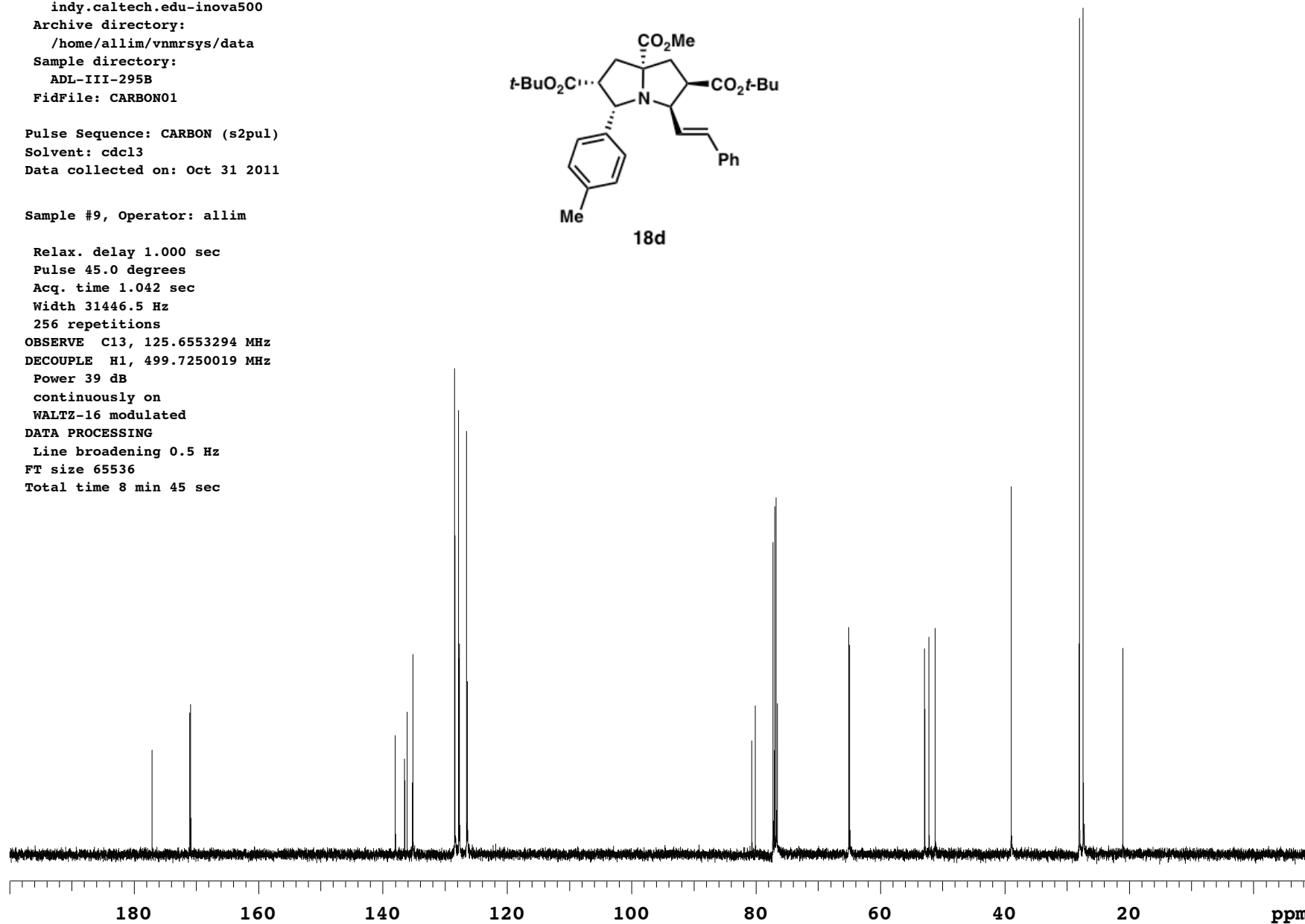
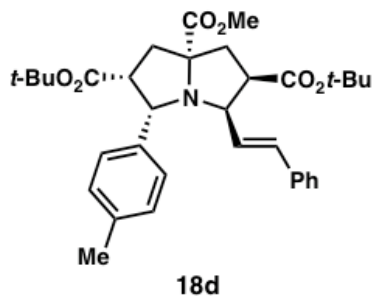
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec



ADL-III-301B

Sample Name:

ADL-III-301B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-III-301B

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Nov 1 2011

Sample #28, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

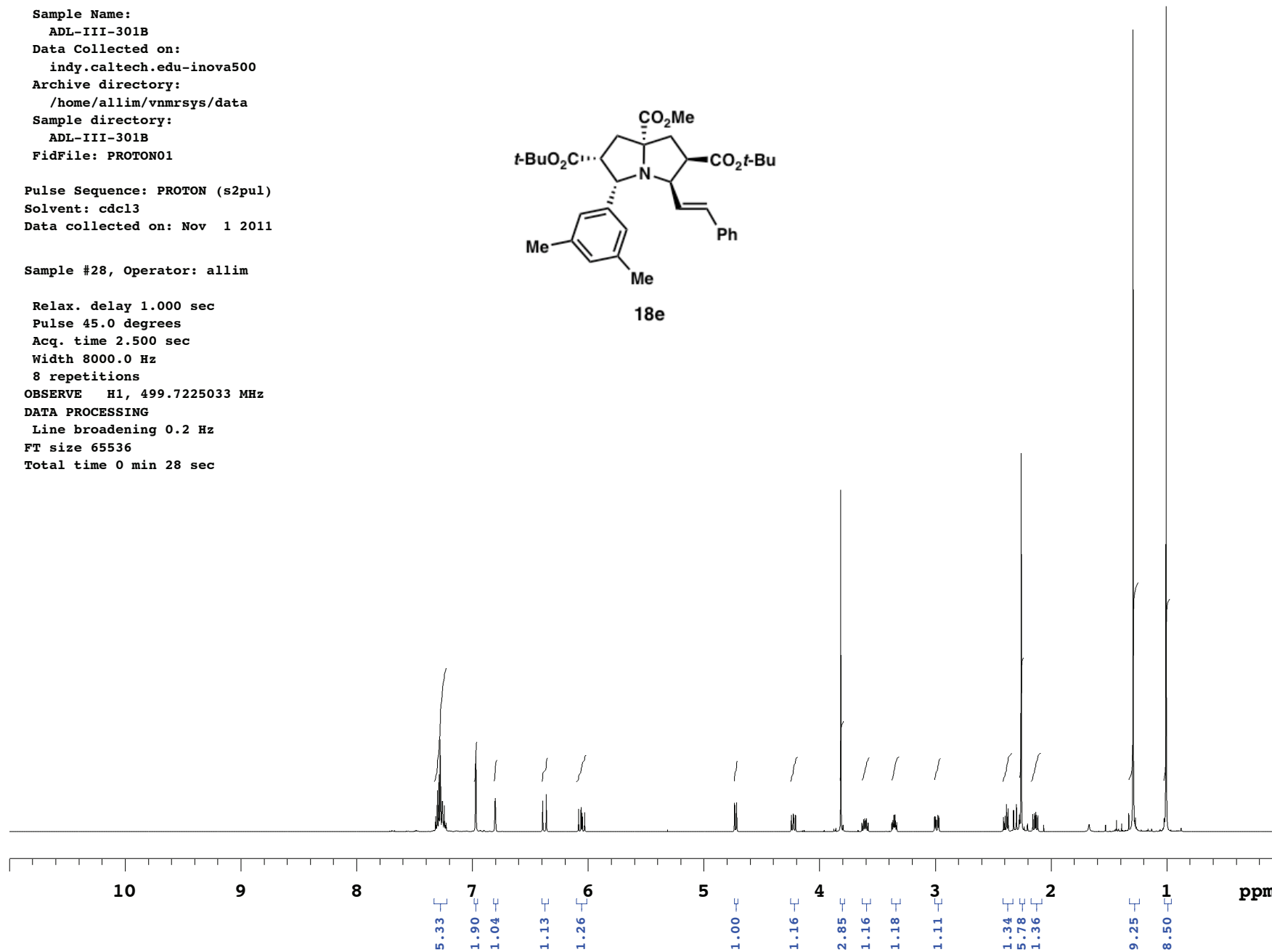
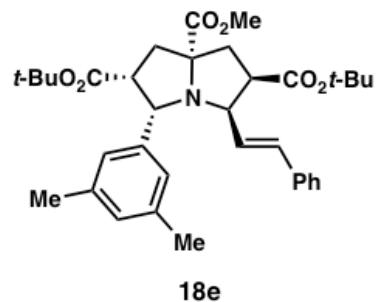
OBSERVE H1, 499.7225033 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 28 sec



ADL-III-301B

Sample Name:

ADL-III-301B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-III-301B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Nov 1 2011

Sample #28, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6553285 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

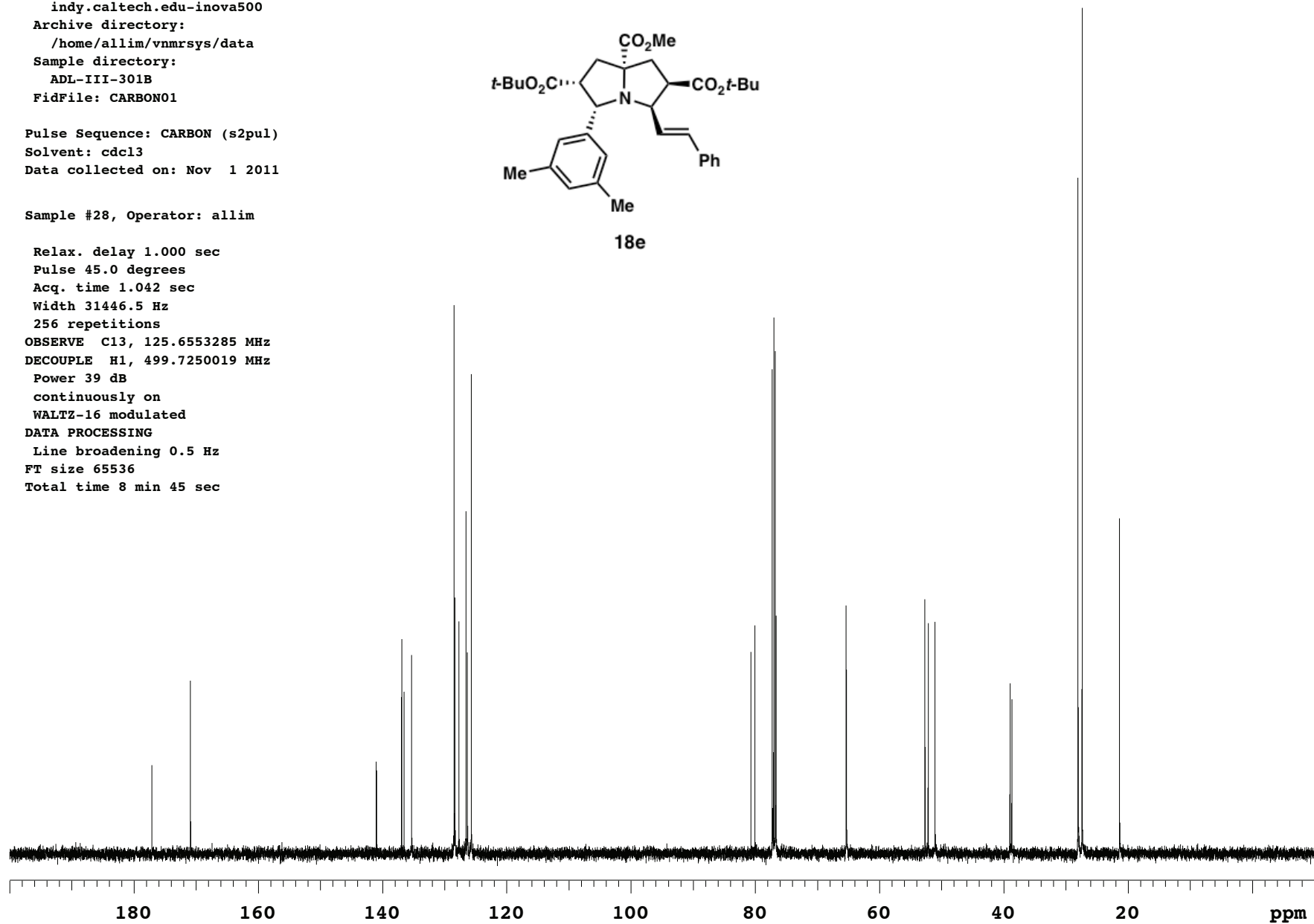
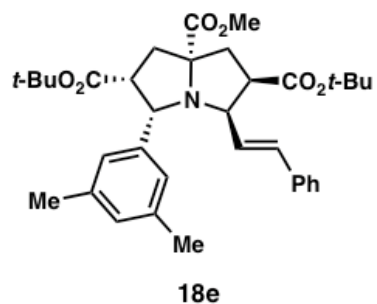
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec



jc-adl-281-B

Sample Name:

jc-adl-281-B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcha/vnmrsys/data

Sample directory:

jc-adl-281-B

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 4 2011

Sample #33, Operator: jcha

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

32 repetitions

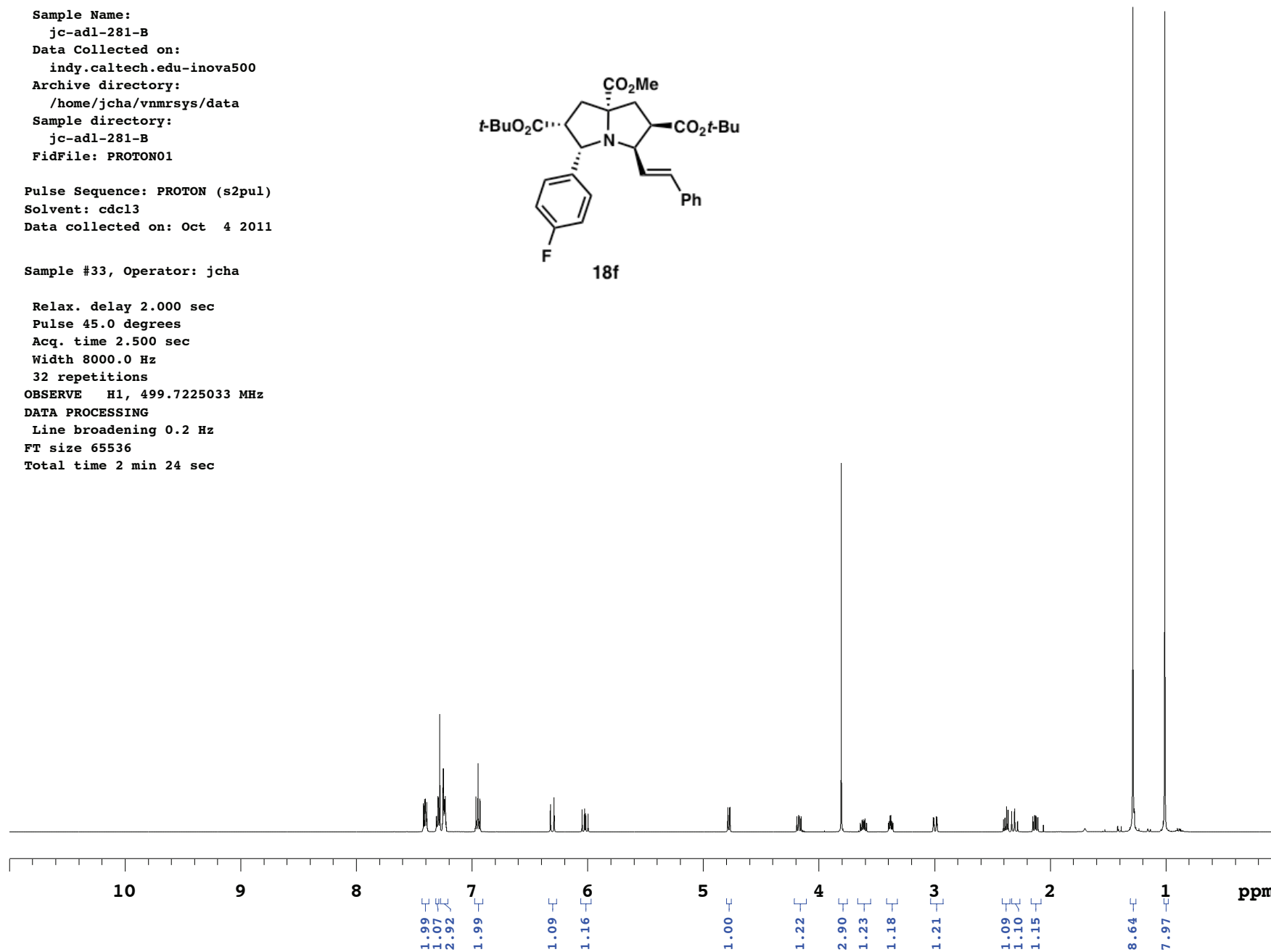
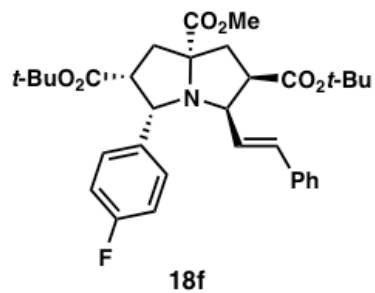
OBSERVE H1, 499.7225033 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 2 min 24 sec



jc-adl-281-B

Sample Name:

jc-adl-281-B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcha/vnmrsys/data

Sample directory:

jc-adl-281-B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 4 2011

Sample #33, Operator: jcha

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

512 repetitions

OBSERVE C13, 125.6553234 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

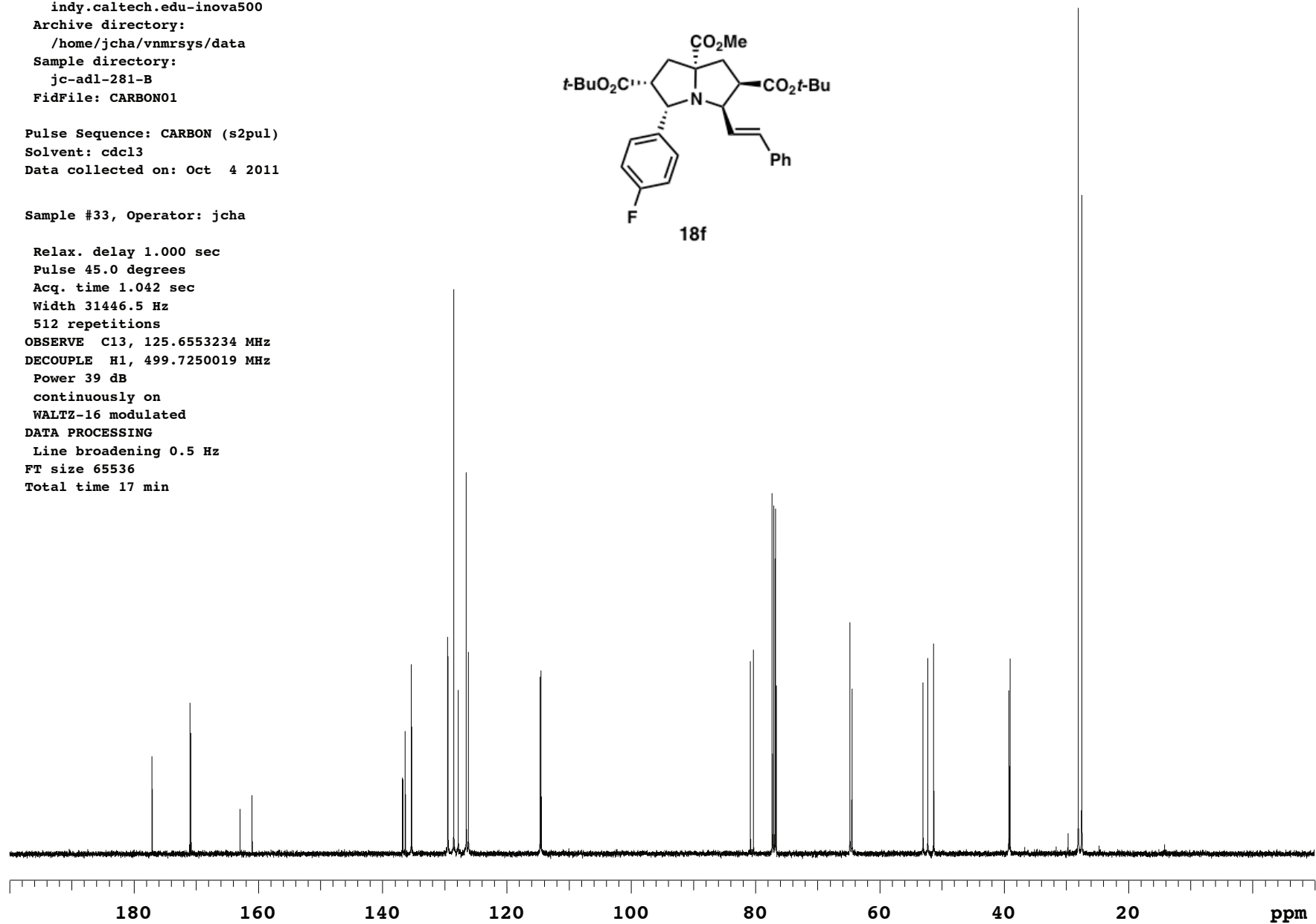
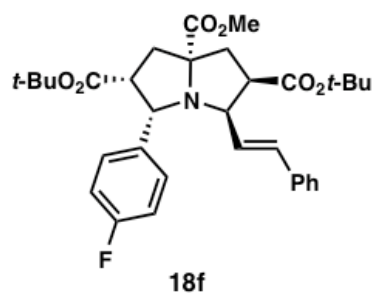
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 17 min

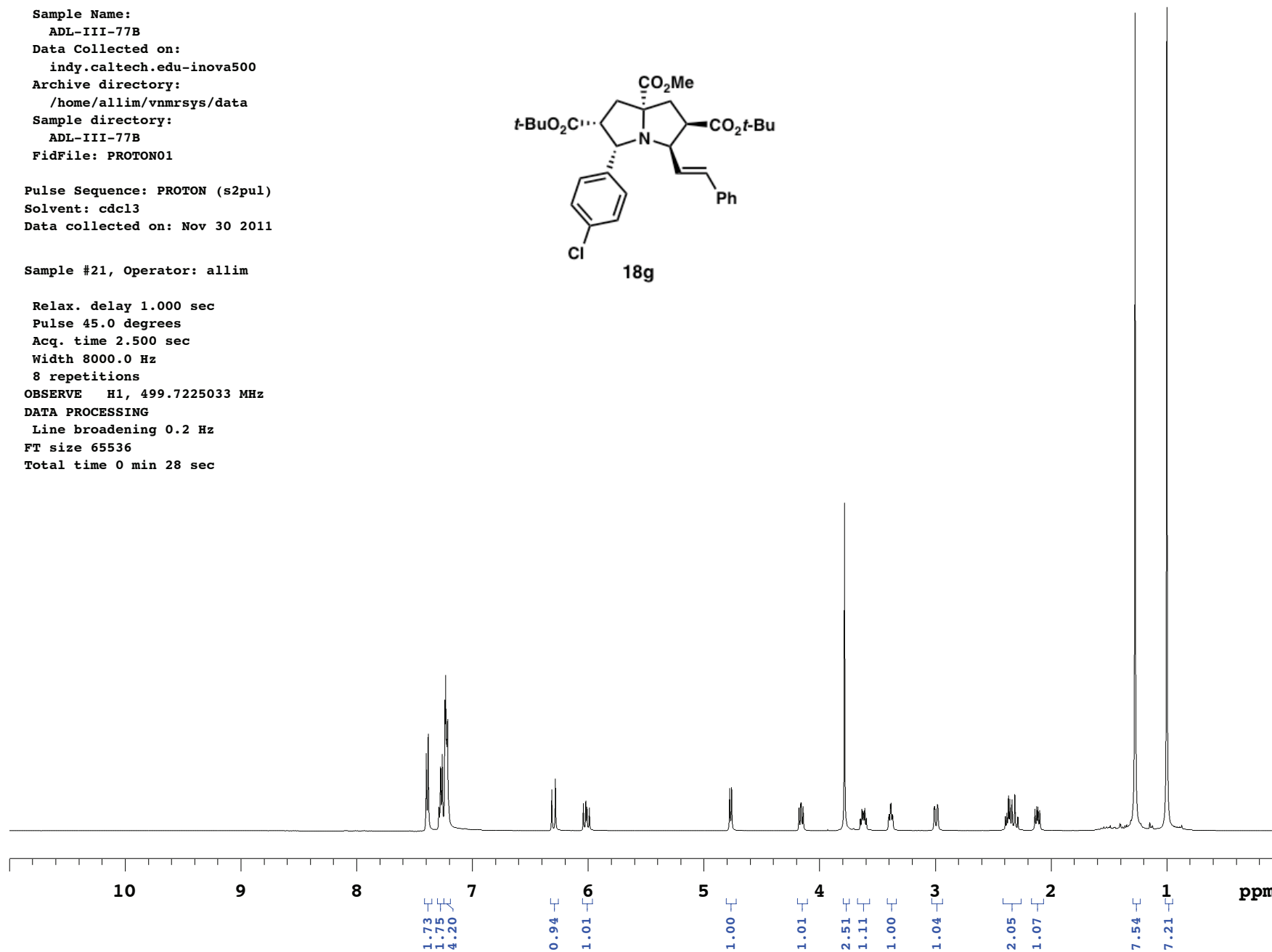
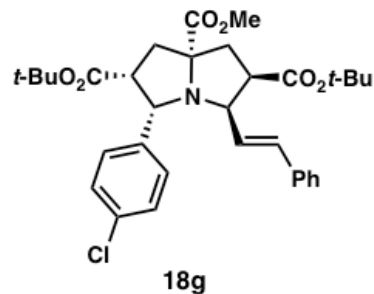


Sample Name:  
ADL-III-77B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-77B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pu1)  
Solvent: cdcl3  
Data collected on: Nov 30 2011

Sample #21, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



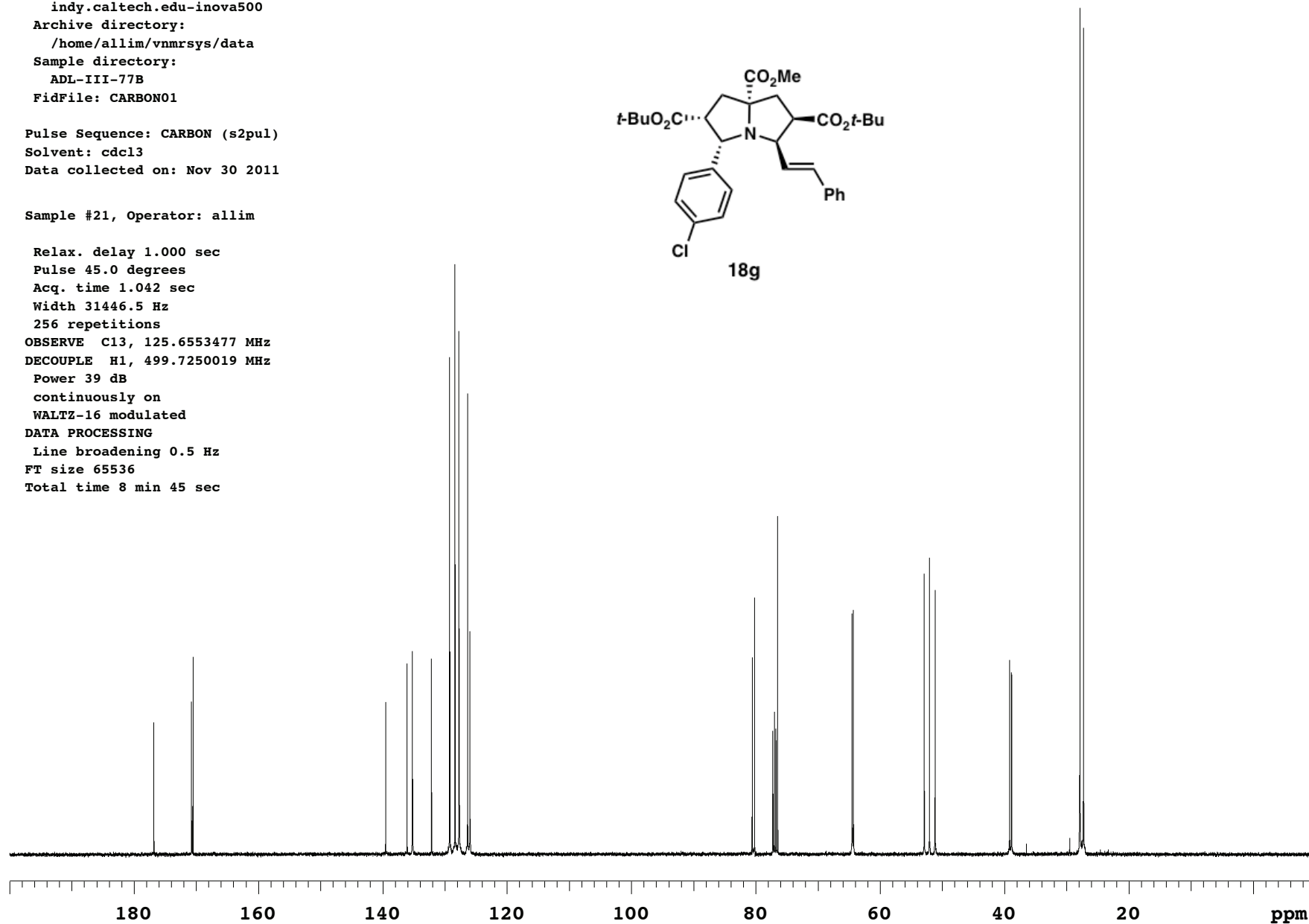
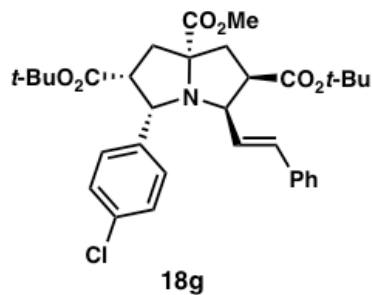


Sample Name:  
ADL-III-77B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-77B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 30 2011

Sample #21, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553477 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



ADL-III-253B

Sample Name:

ADL-III-267B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

ADL-III-267B

FidFile: PROTON02

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011

Sample #8, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

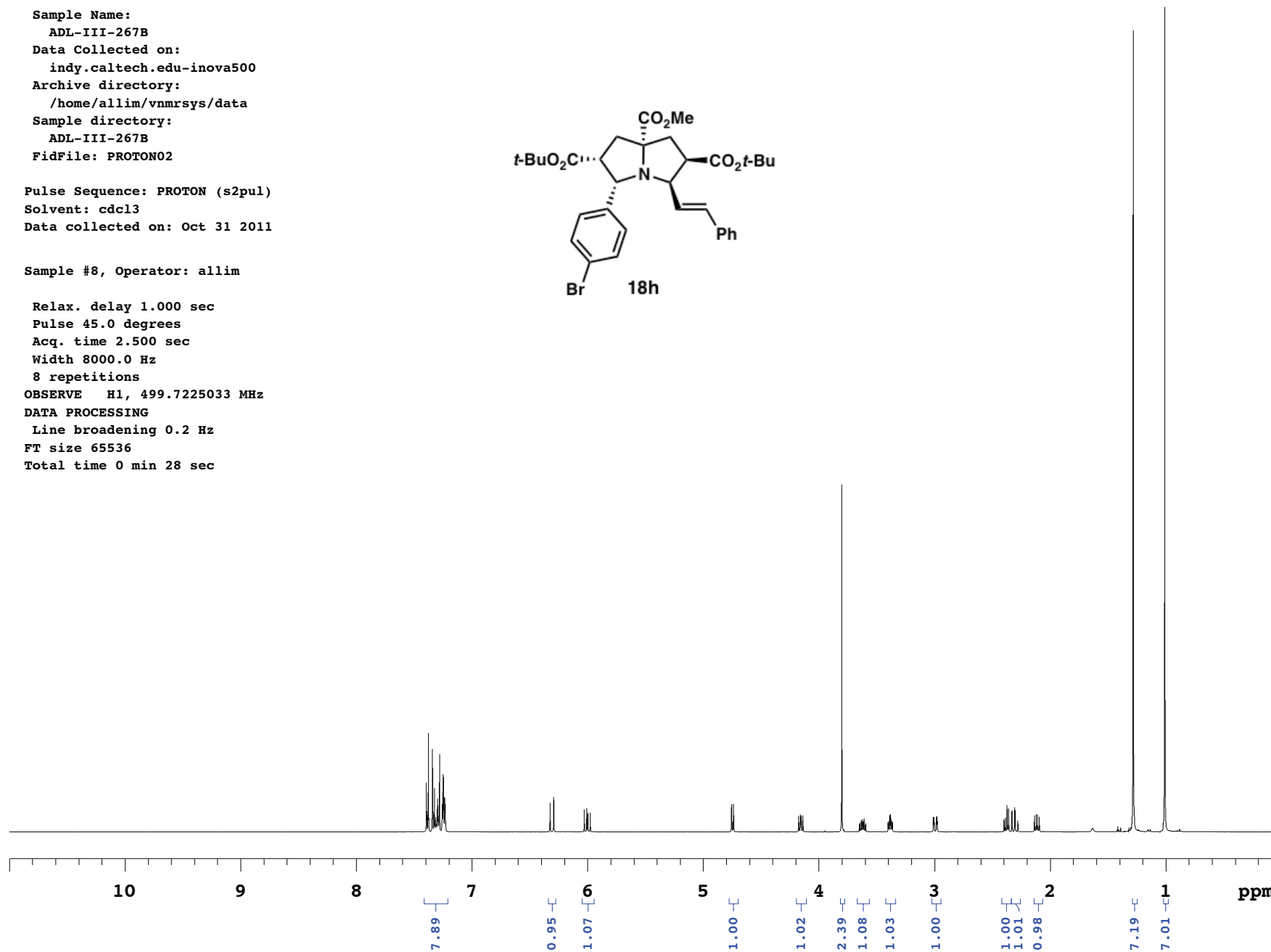
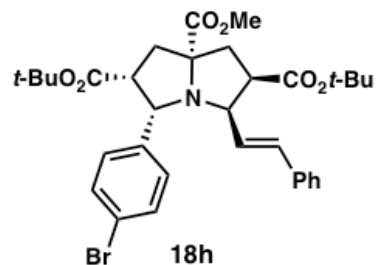
OBSERVE H1, 499.7225033 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 28 sec



ADL-III-253B

Sample Name:

ADL-III-267B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

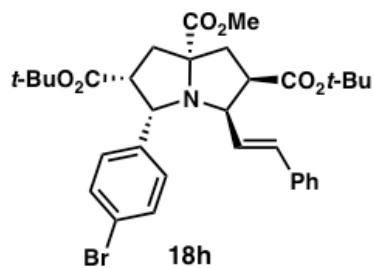
ADL-III-267B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011



Sample #8, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6553298 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

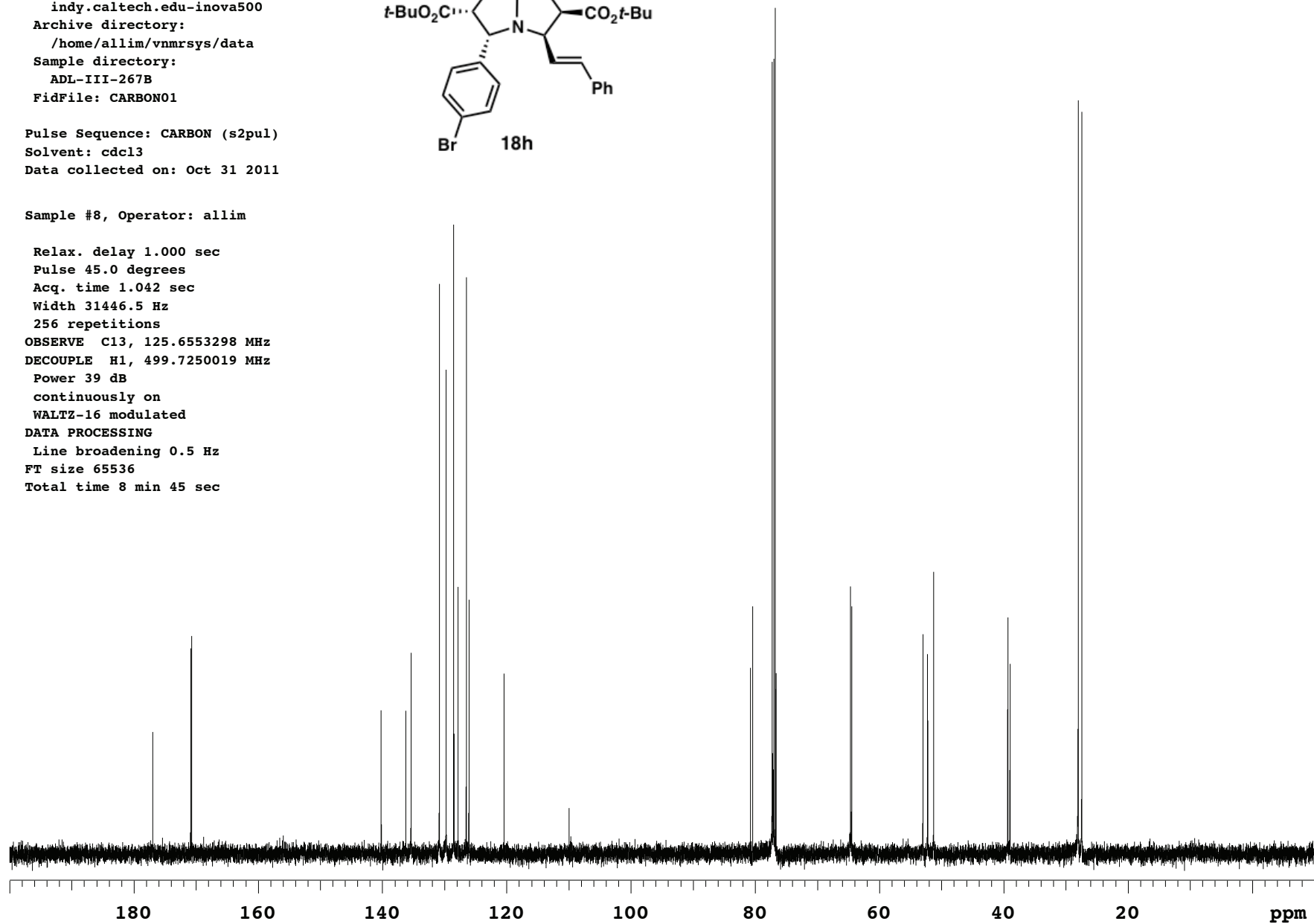
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec

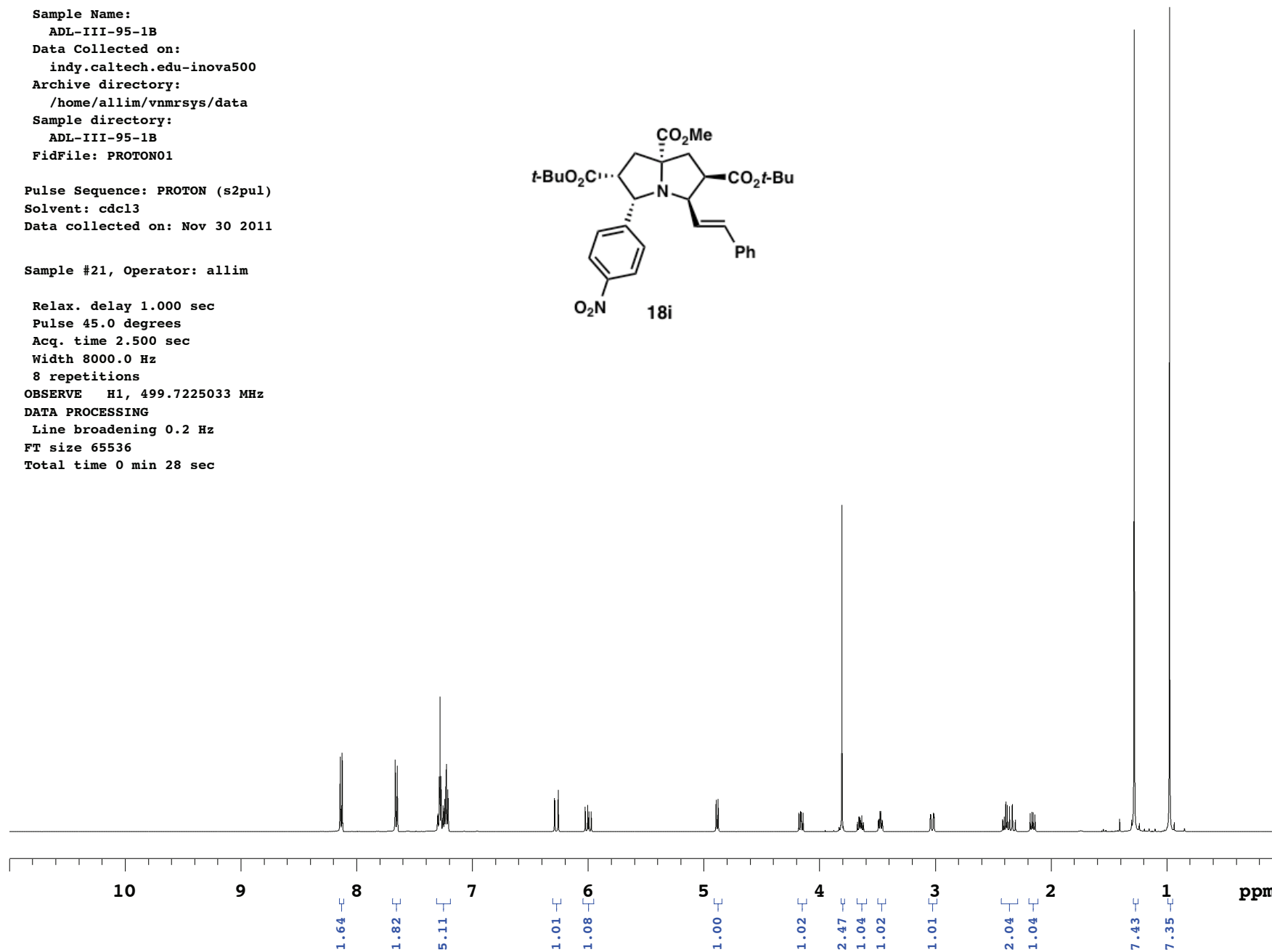
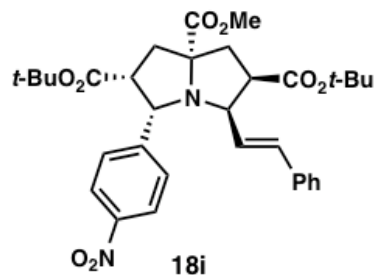


Sample Name:  
ADL-III-95-1B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-95-1B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 30 2011

Sample #21, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



ADL-III-253B

Sample Name:

ADL-III-267B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

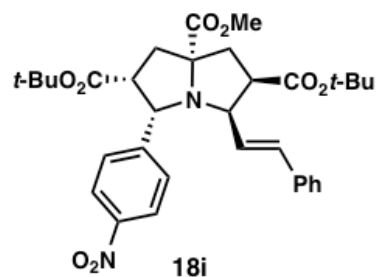
ADL-III-267B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011



Sample #8, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6553298 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

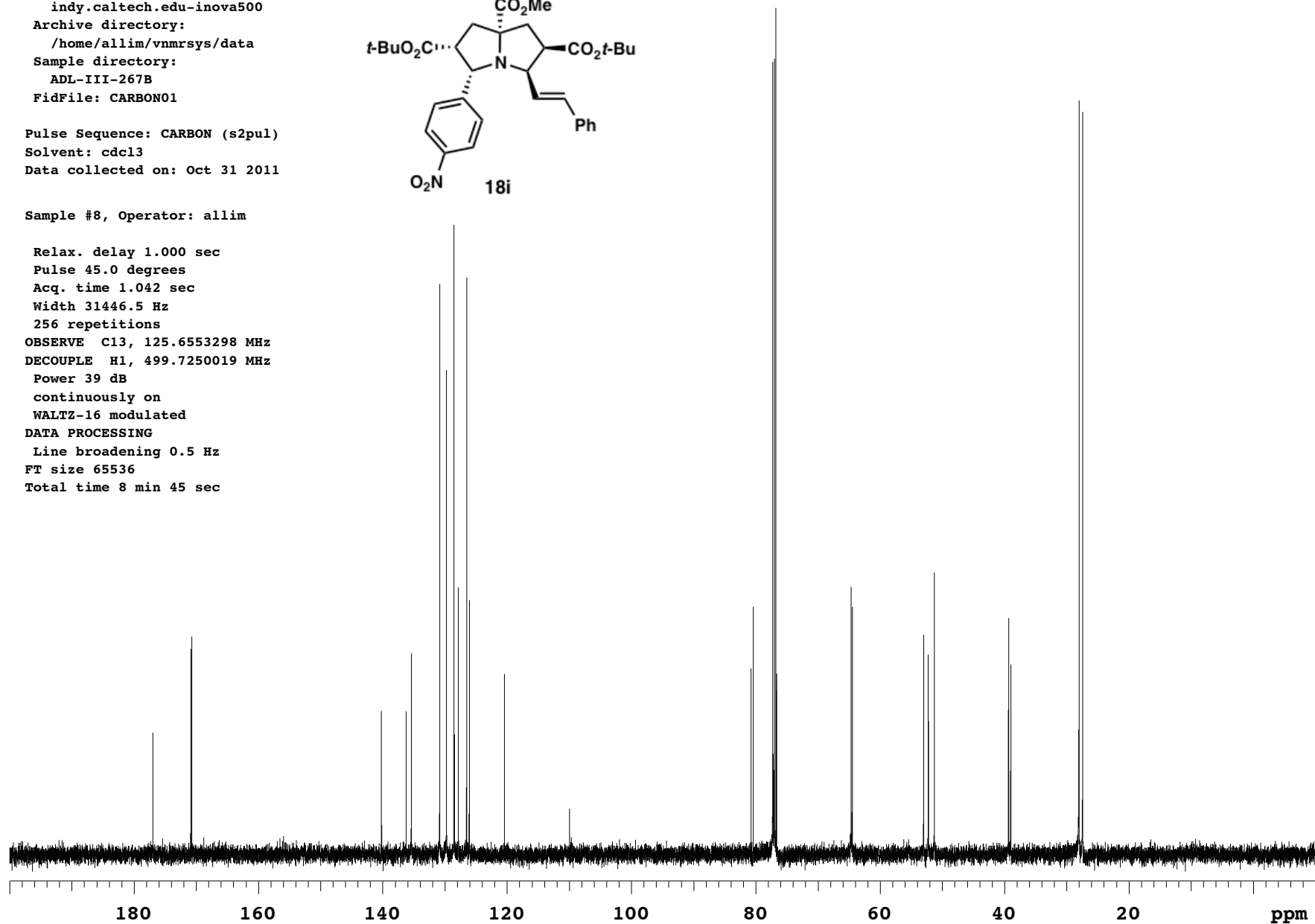
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec

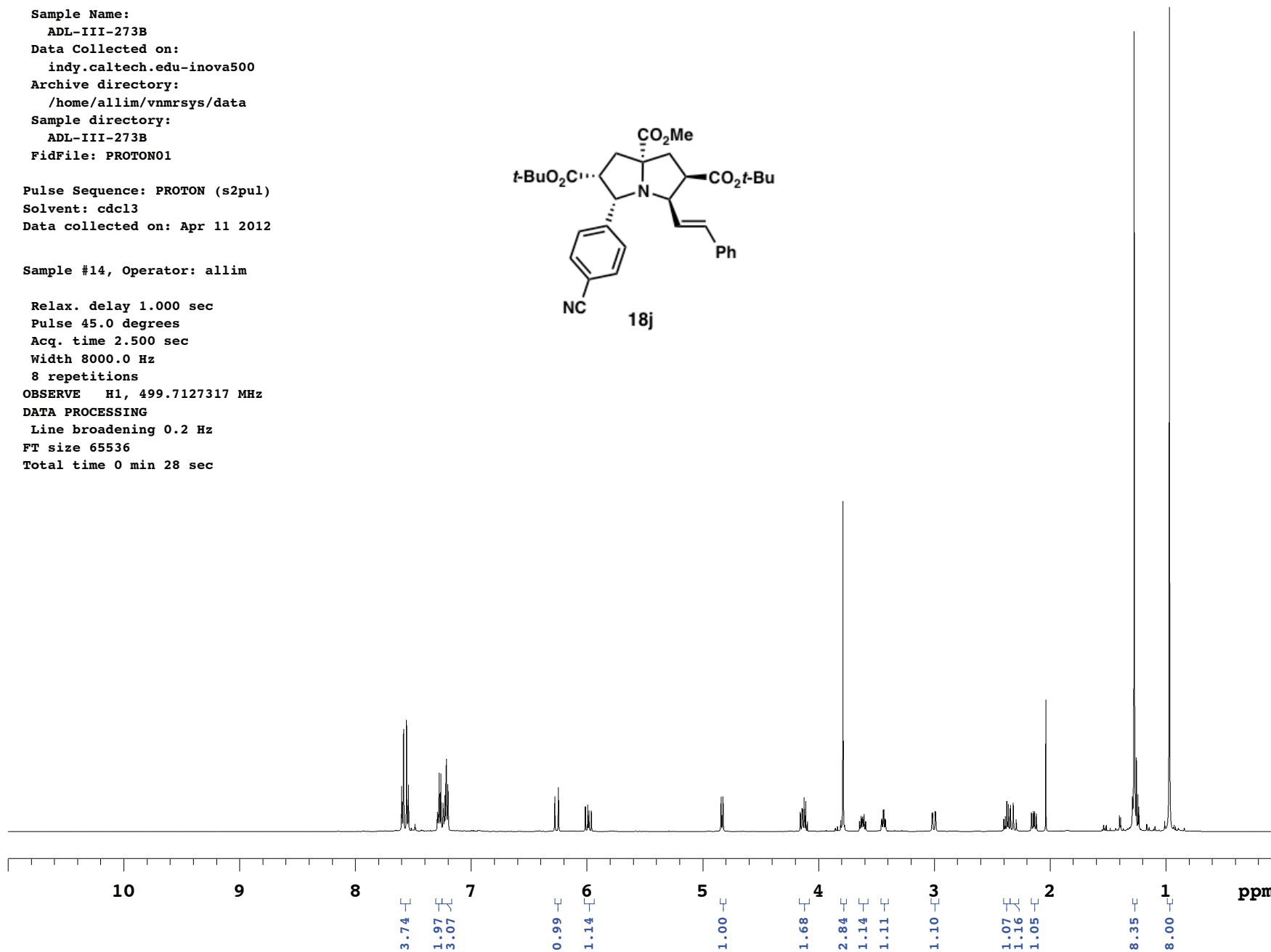
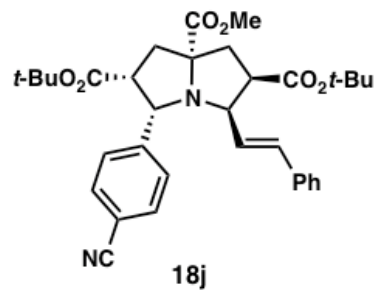


Sample Name:  
ADL-III-273B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-273B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 11 2012

Sample #14, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

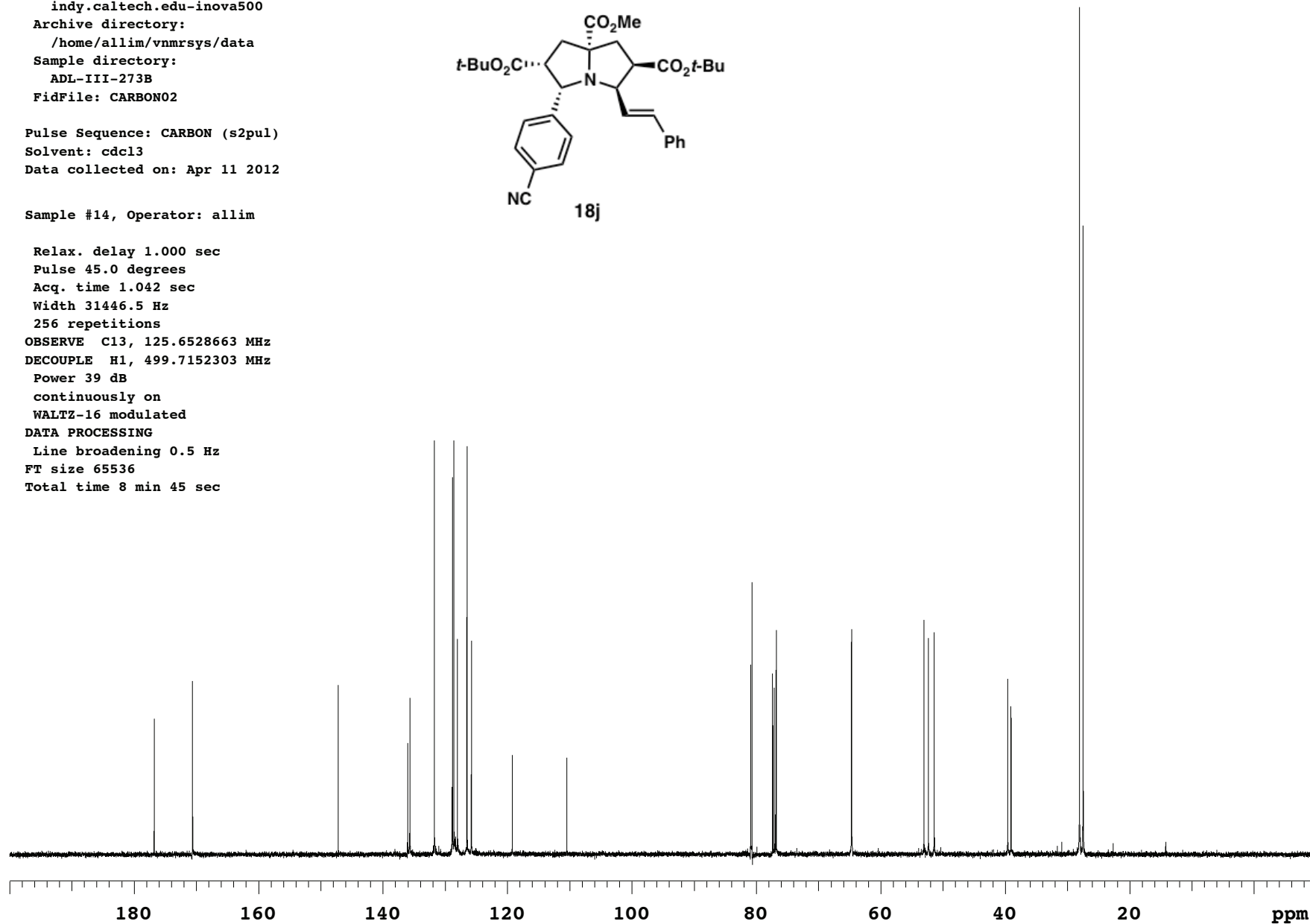
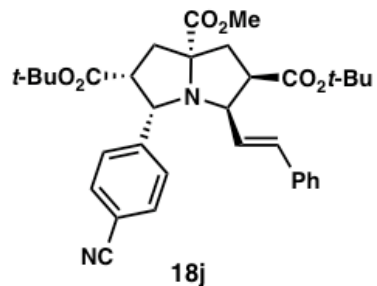


Sample Name:  
ADL-III-273B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-273B  
FidFile: CARBON02

Pulse Sequence: CARBON (s2pu1)  
Solvent: cdcl3  
Data collected on: Apr 11 2012

Sample #14, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

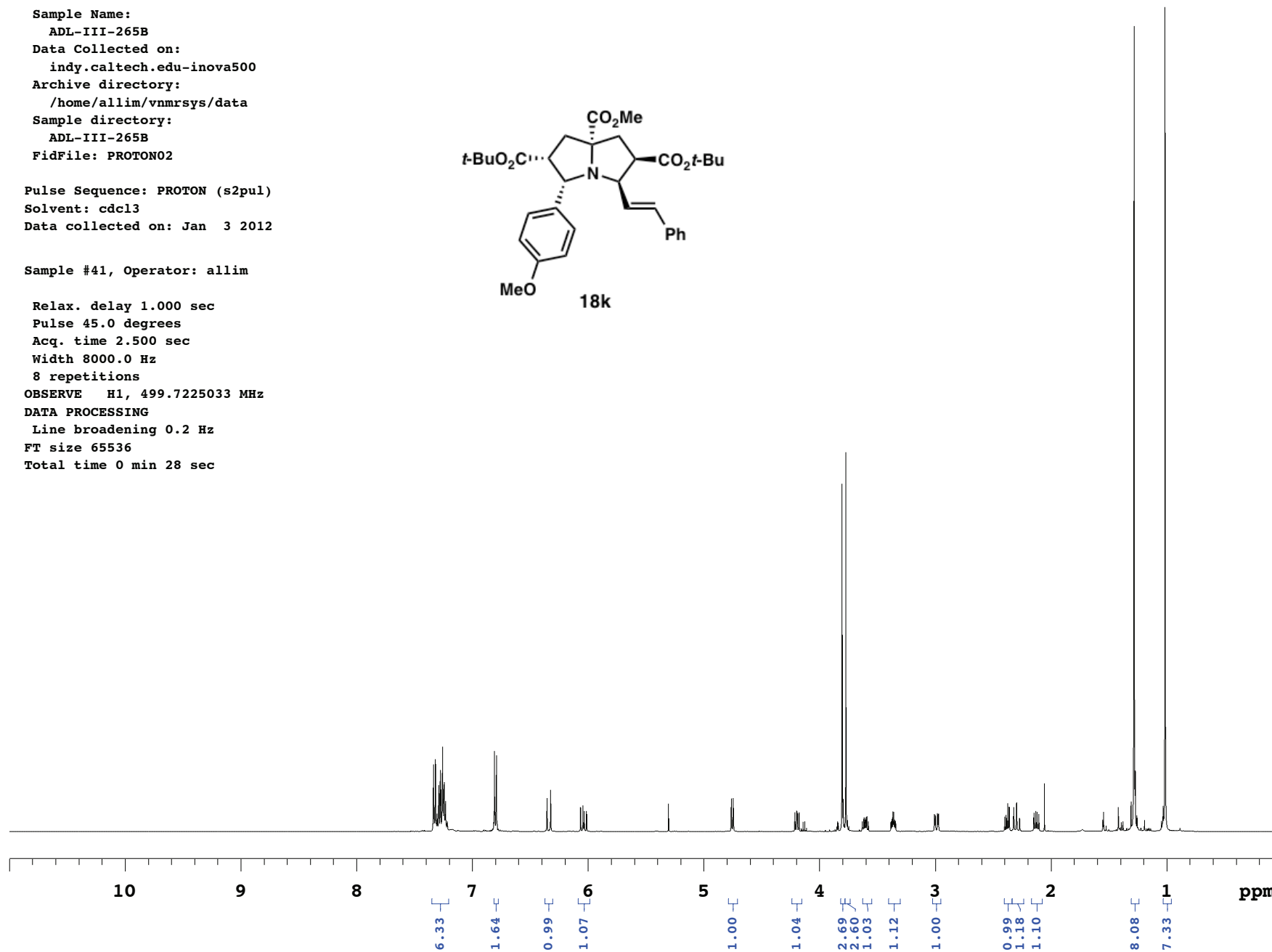
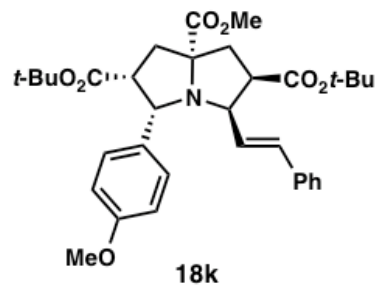


Sample Name:  
ADL-III-265B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-265B  
FidFile: PROTON02

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jan 3 2012

Sample #41, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



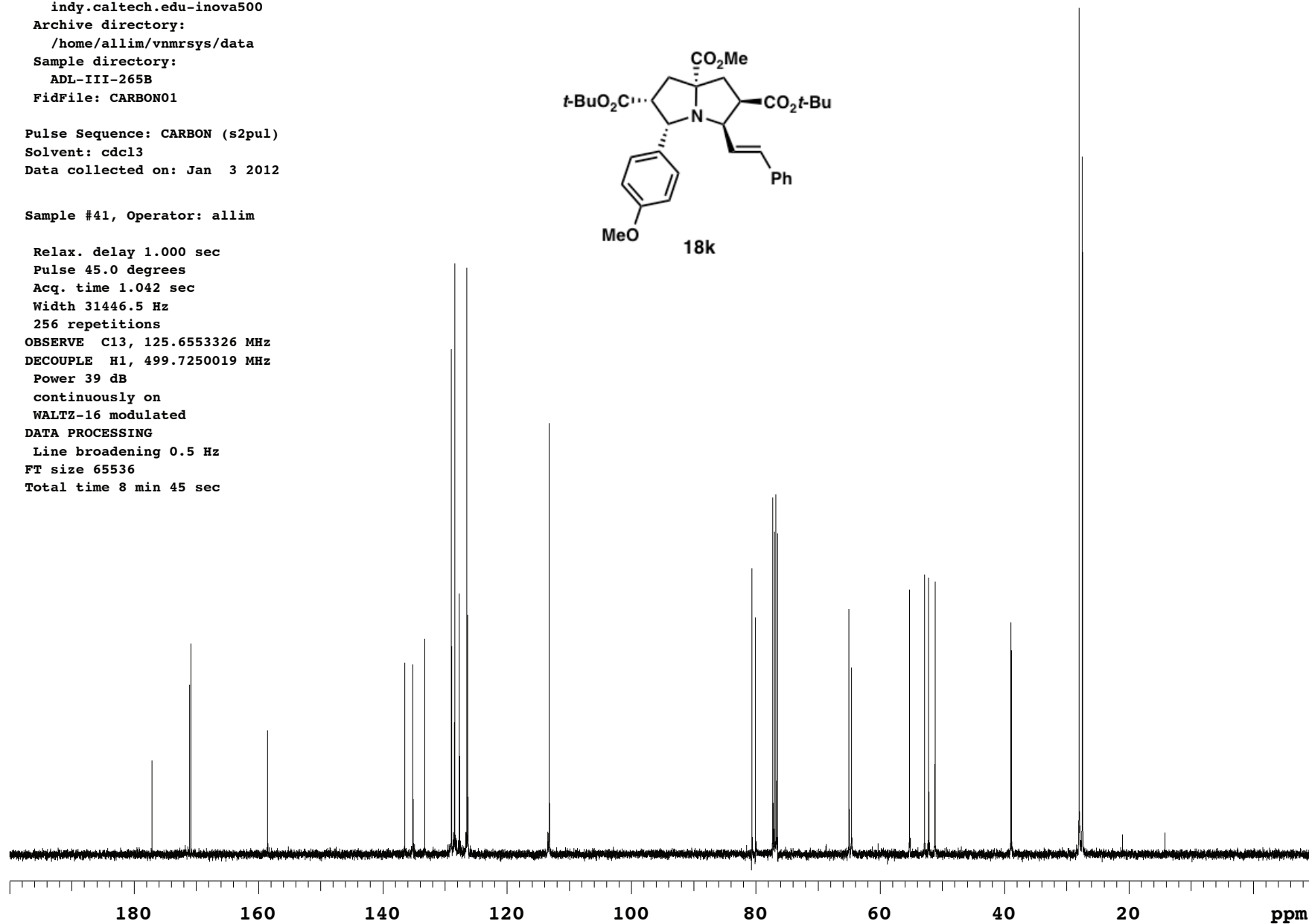
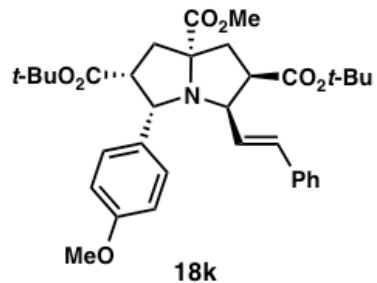


Sample Name:  
ADL-III-265B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-265B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Jan 3 2012

Sample #41, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553326 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

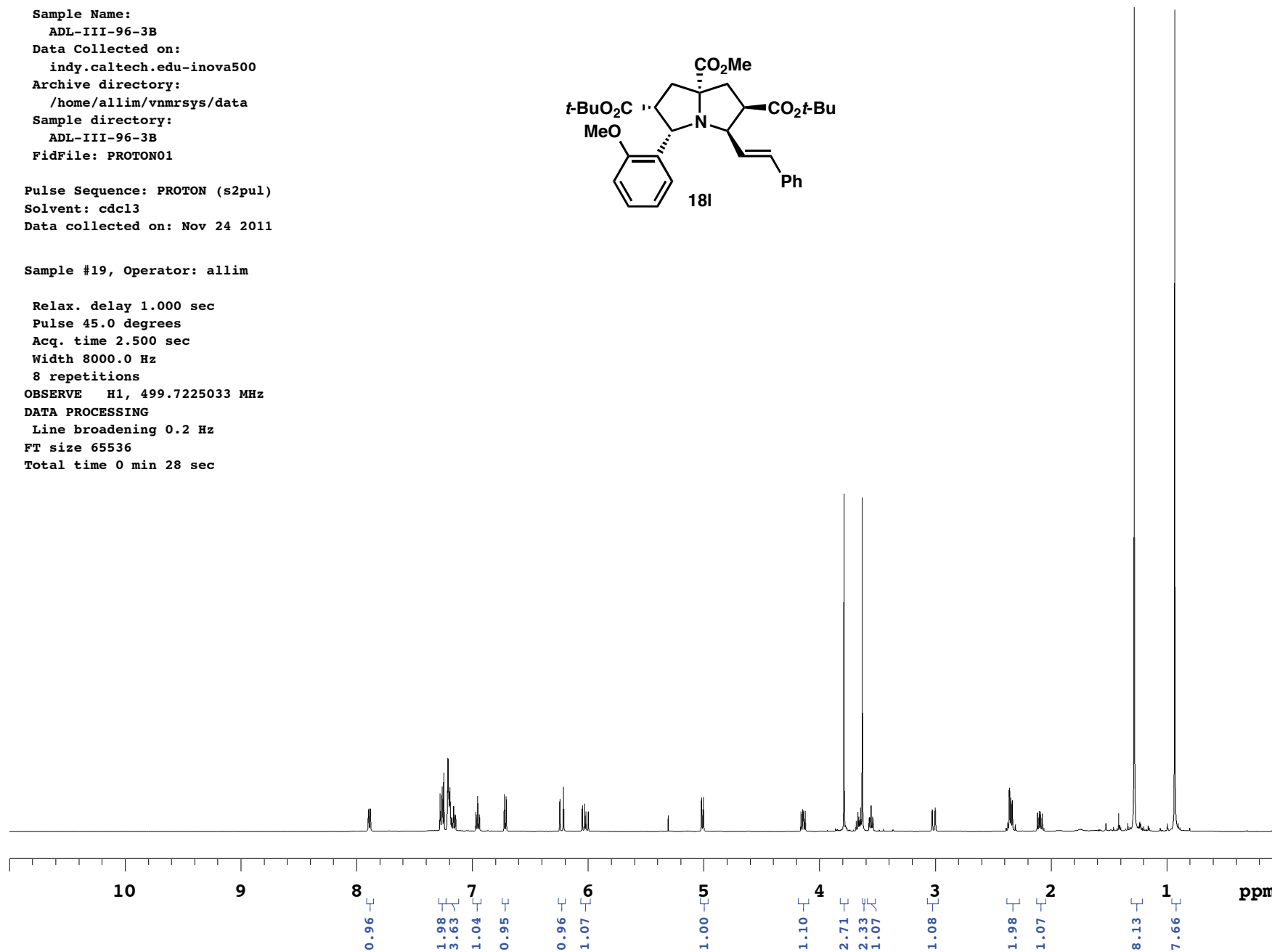
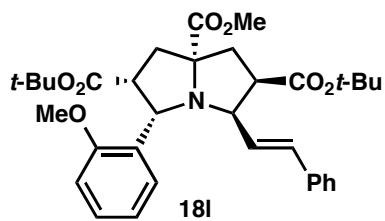


Sample Name:  
ADL-III-96-3B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-96-3B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011

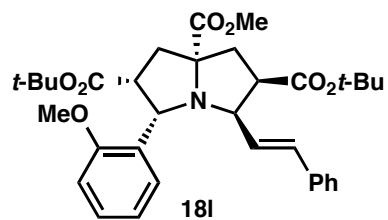
Sample #19, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



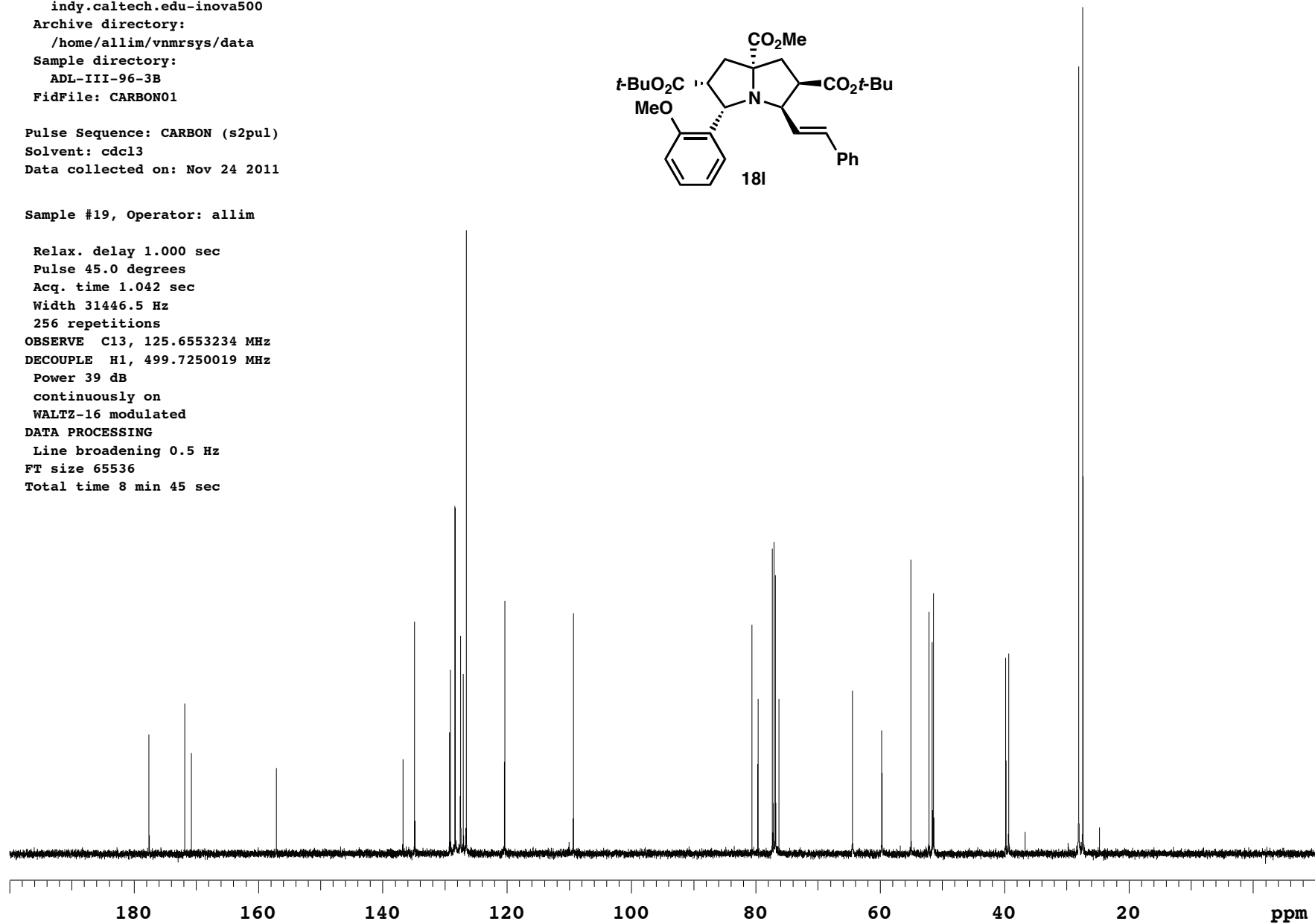
Sample Name:  
ADL-III-96-3B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-96-3B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011



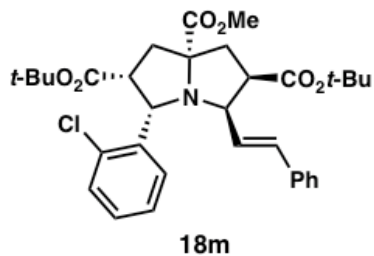
Sample #19, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553234 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



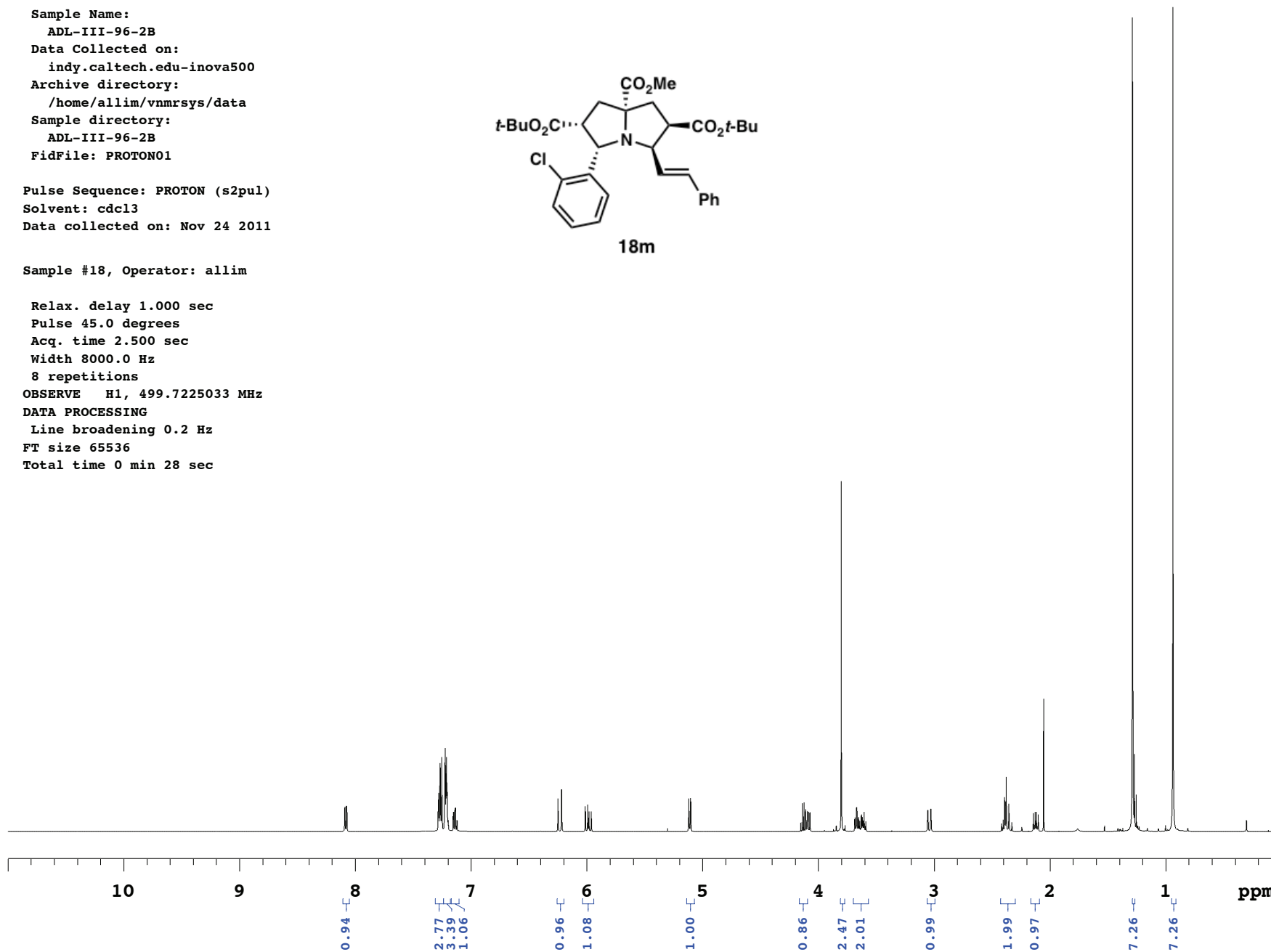
Sample Name:  
ADL-III-96-2B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-96-2B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011



Sample #18, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

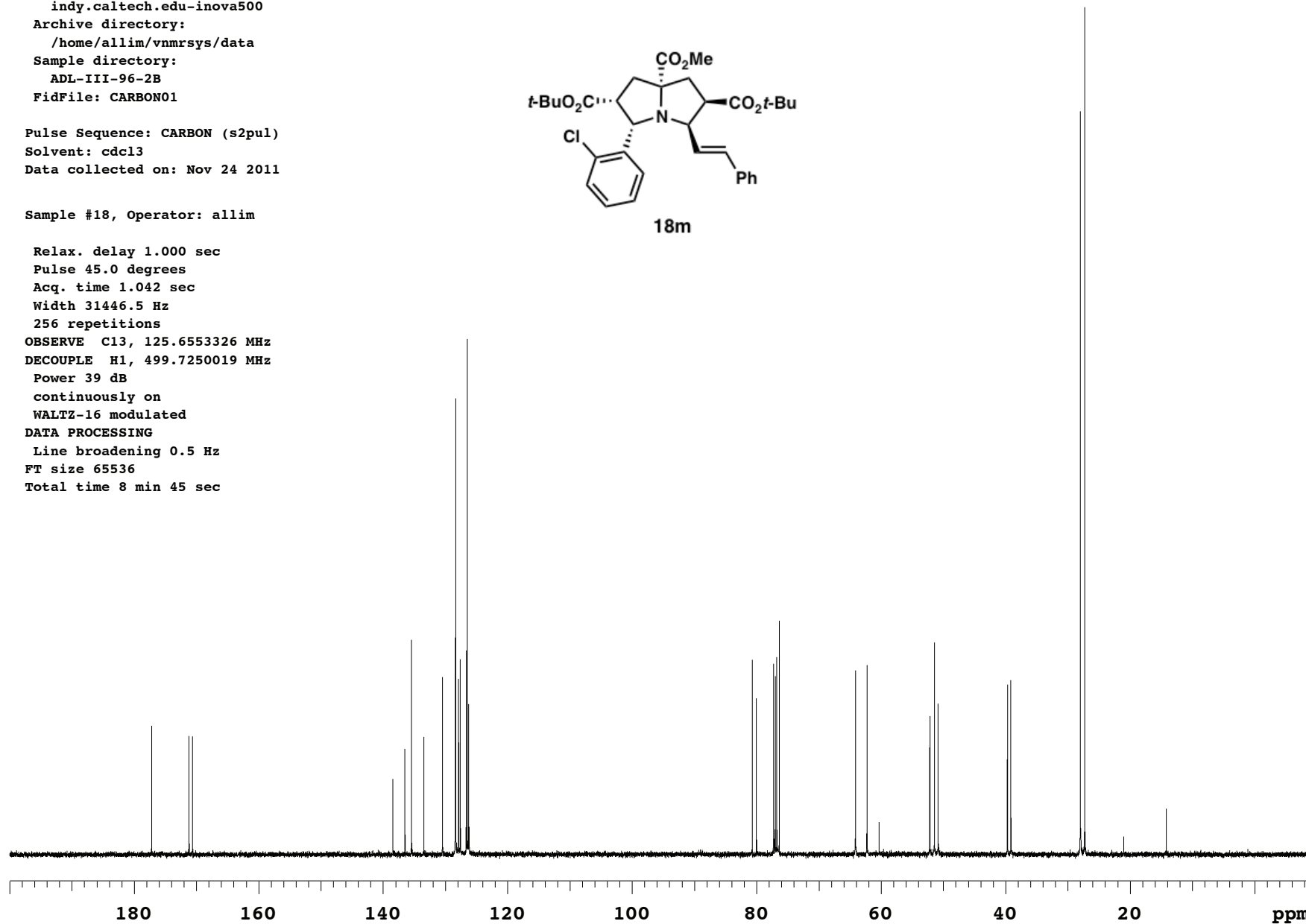
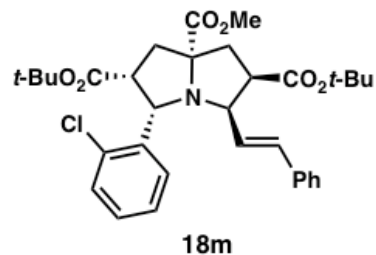


Sample Name:  
ADL-III-96-2B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-96-2B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011

Sample #18, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553326 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

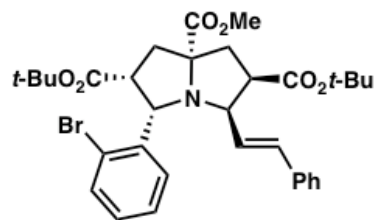


Sample Name:  
ADL-III-91-1B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-91-1B  
FidFile: PROTON01

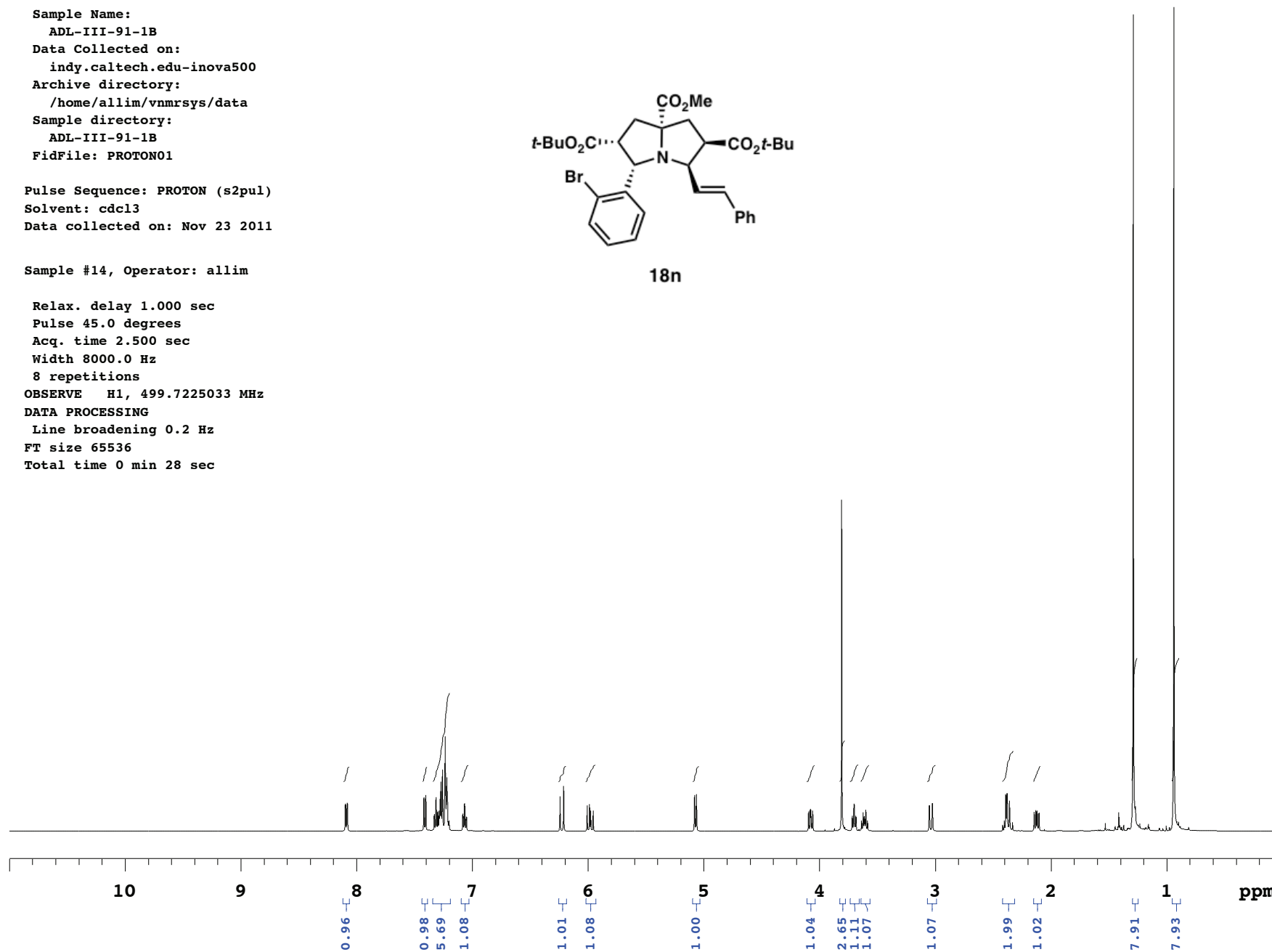
Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 23 2011

Sample #14, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



18n

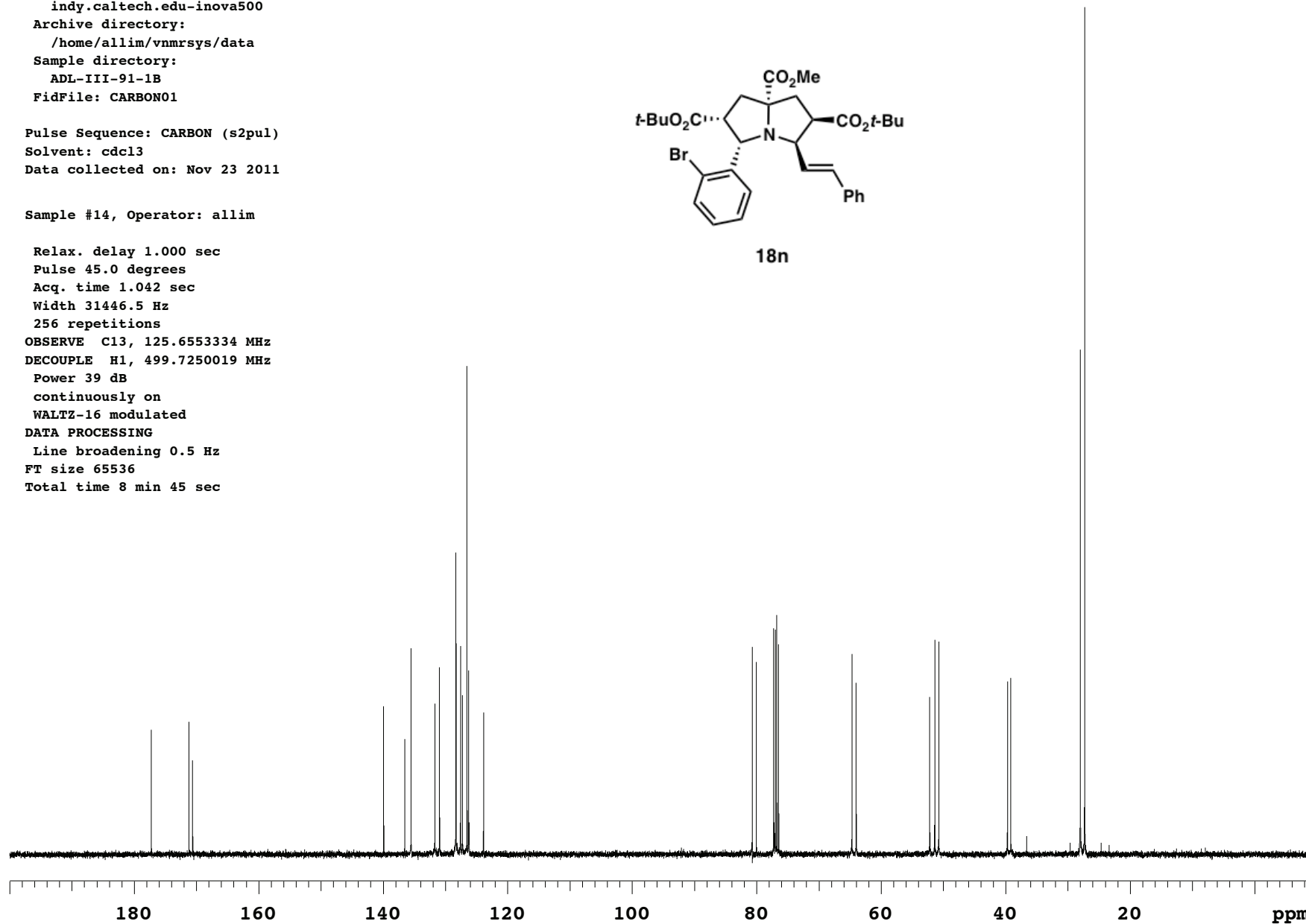
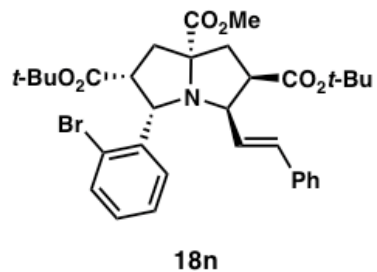


Sample Name:  
ADL-III-91-1B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-91-1B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 23 2011

Sample #14, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553334 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

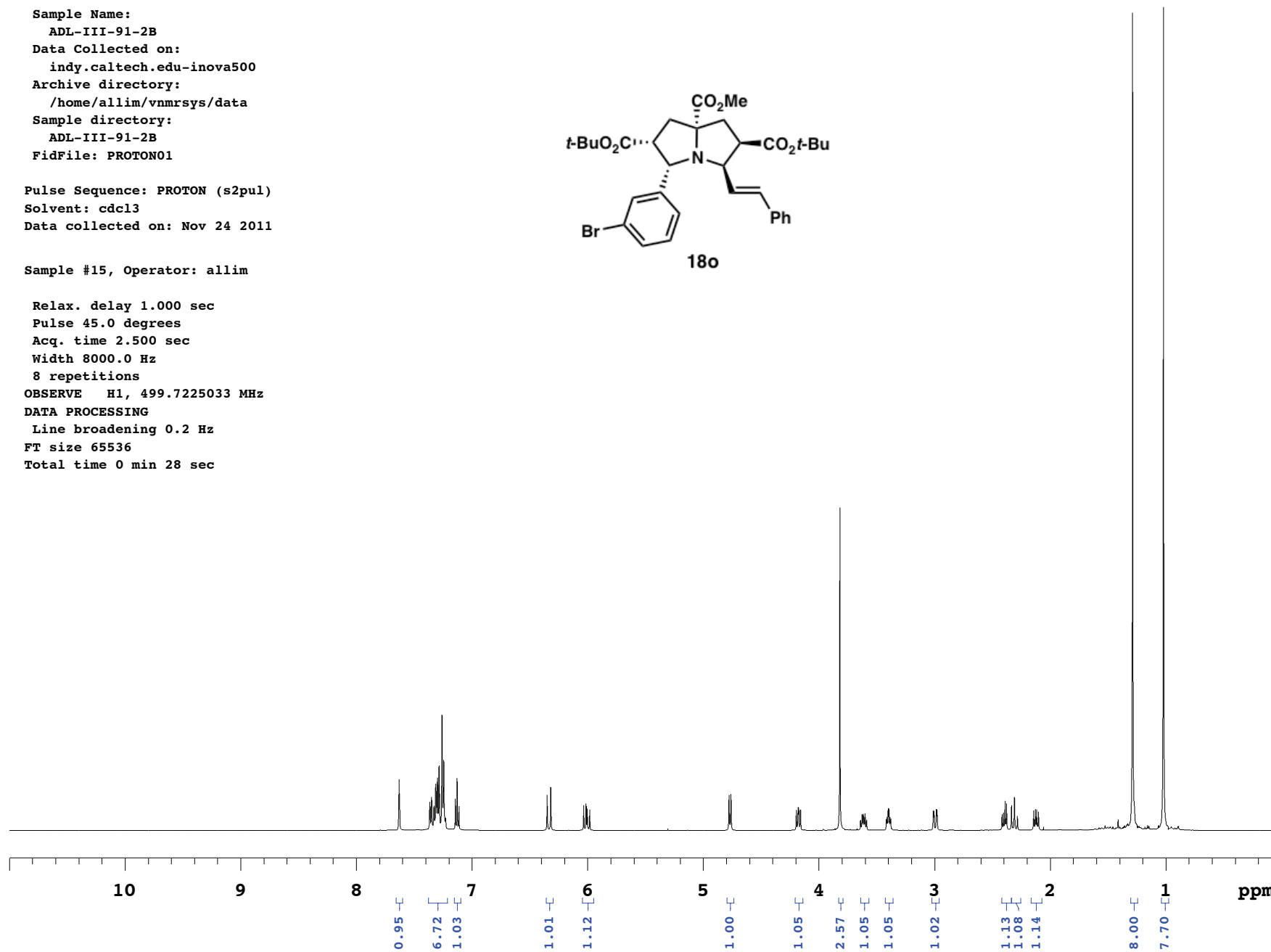
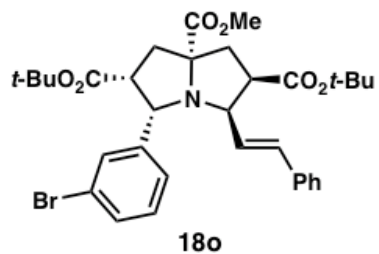


Sample Name:  
ADL-III-91-2B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-91-2B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011

Sample #15, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



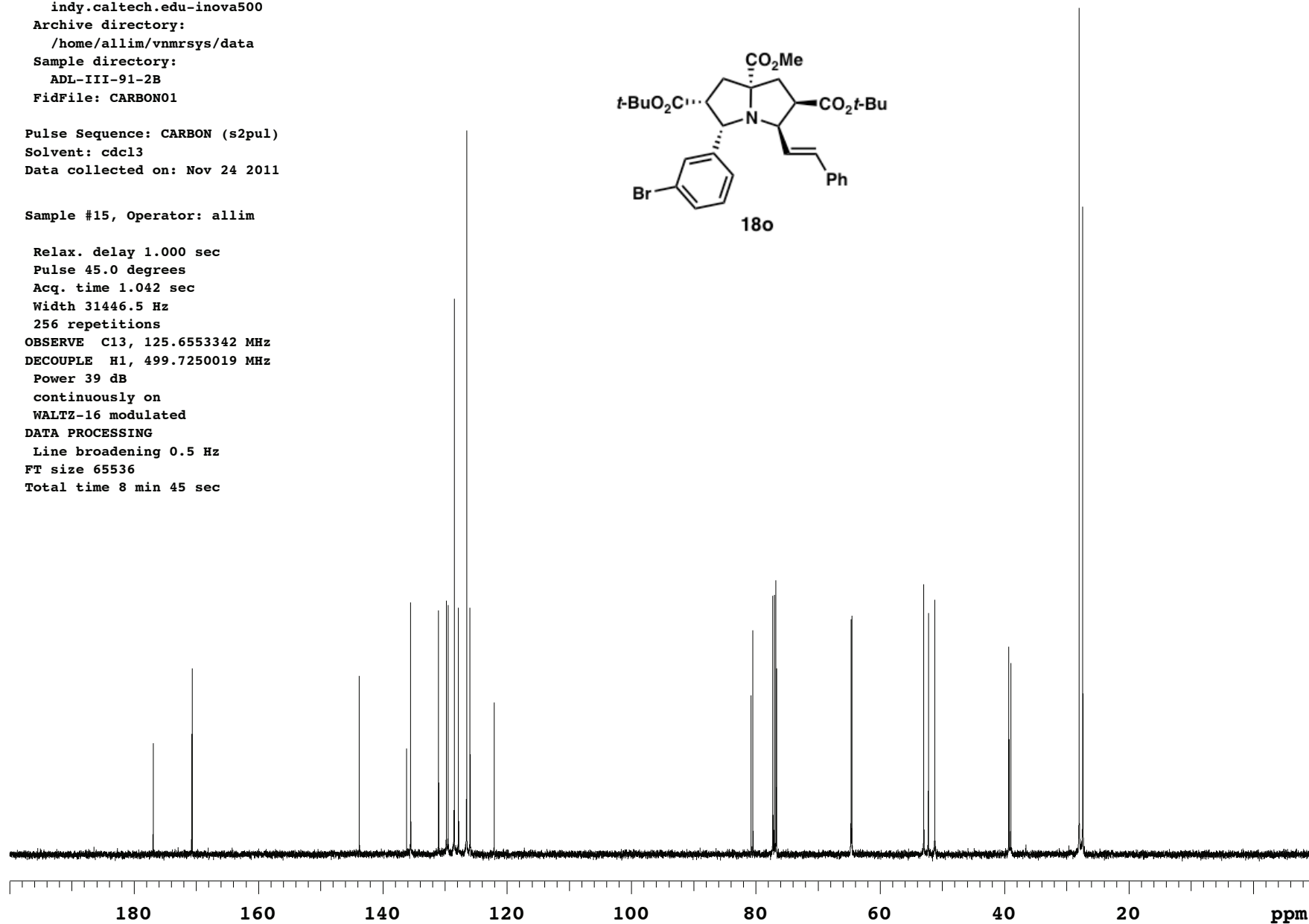
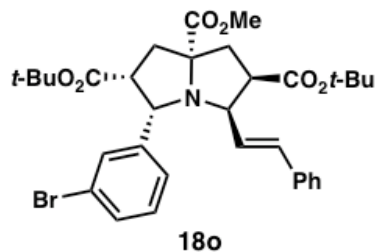


Sample Name:  
ADL-III-91-2B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-91-2B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Nov 24 2011

Sample #15, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553342 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

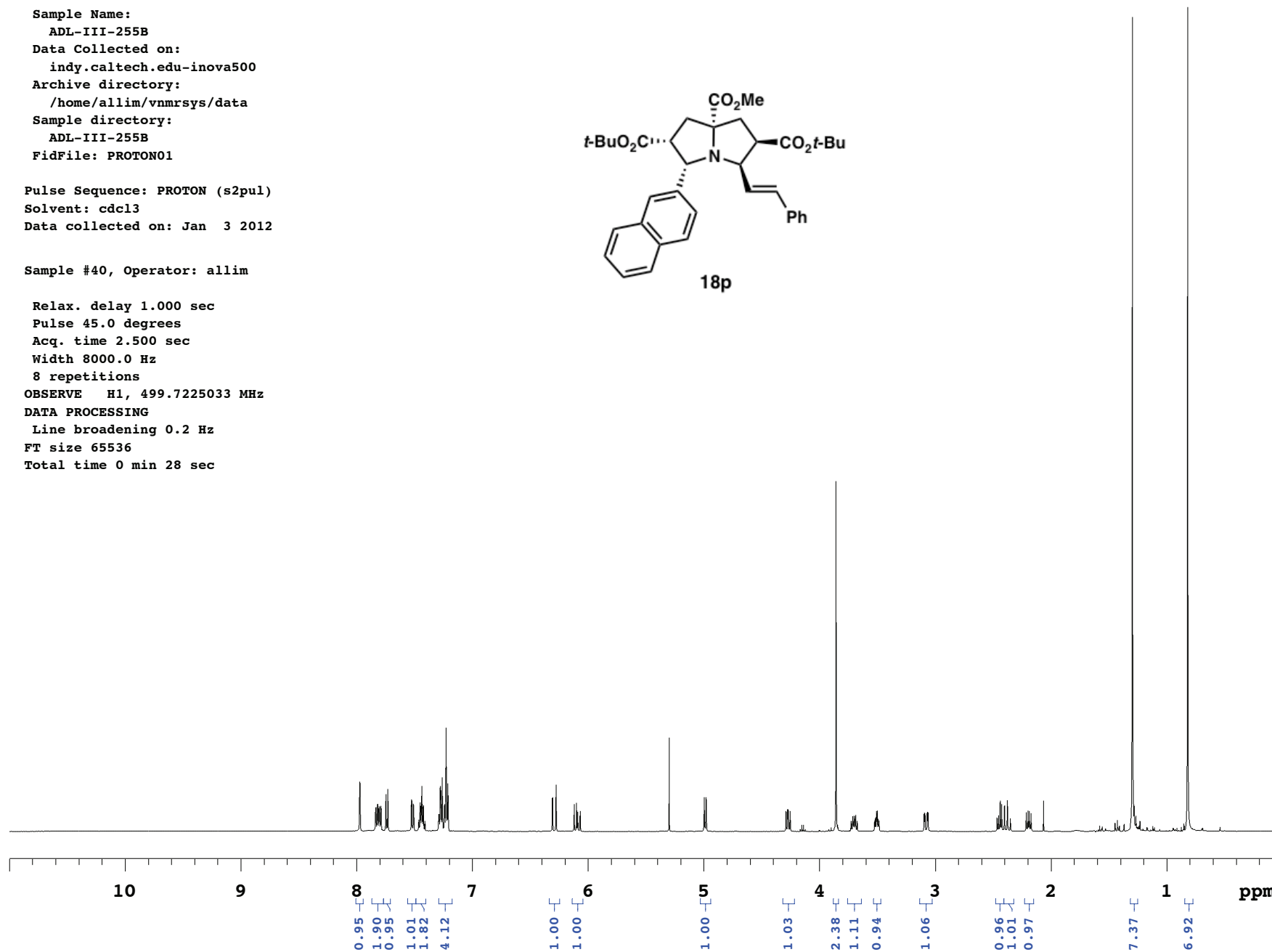
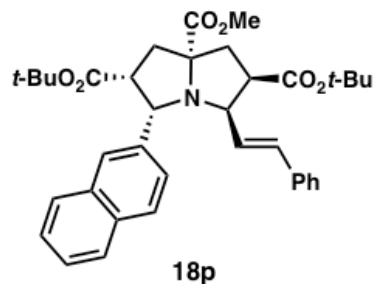


Sample Name:  
ADL-III-255B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-255B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jan 3 2012

Sample #40, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

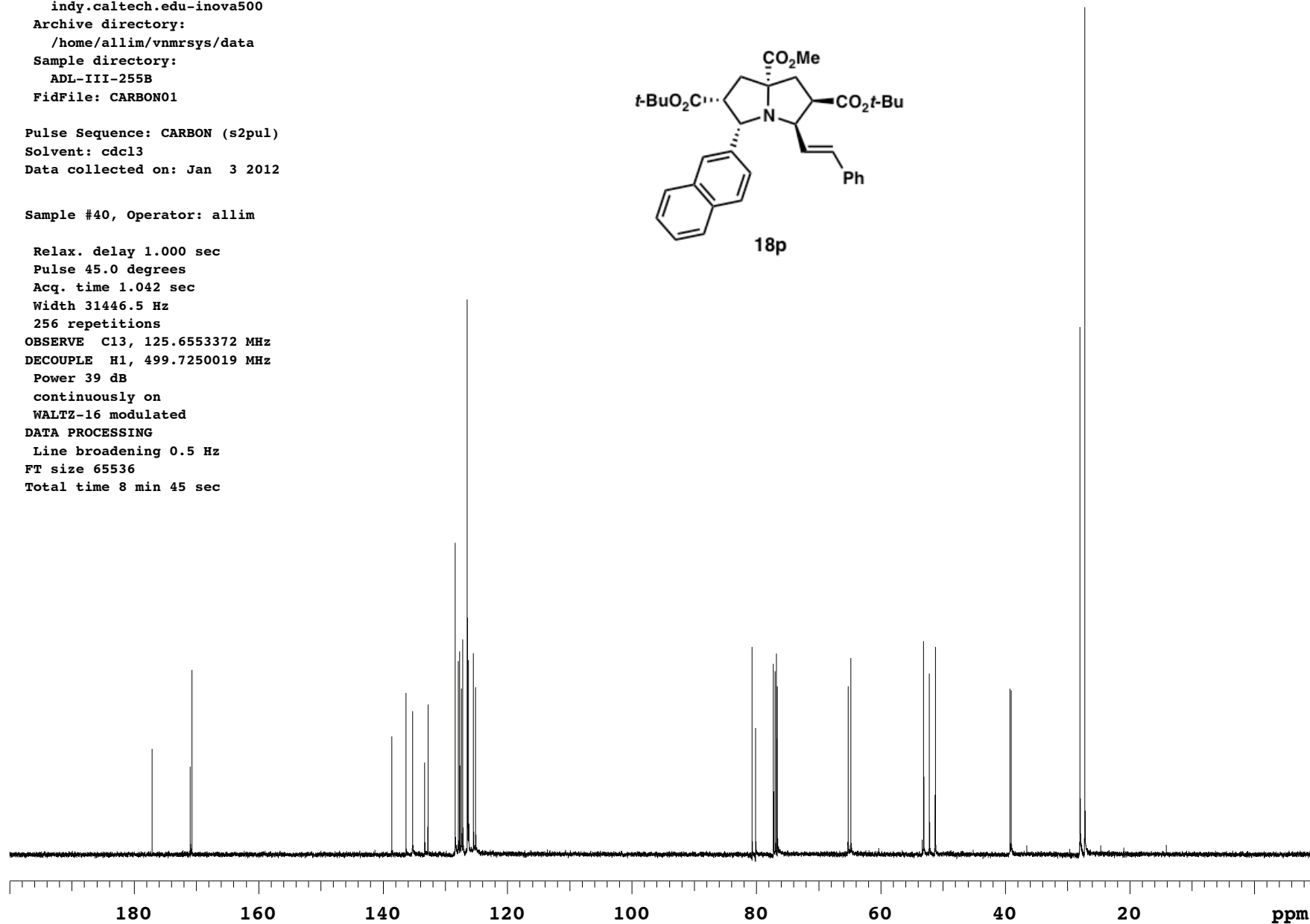
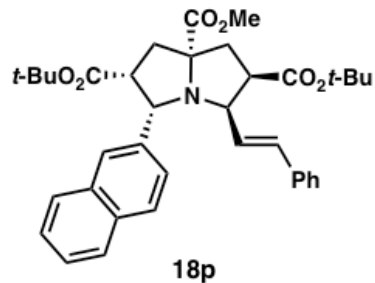


Sample Name:  
ADL-III-255B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-255B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Jan 3 2012

Sample #40, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553372 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



ADL-III-253B

Sample Name:

ADL-III-253B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

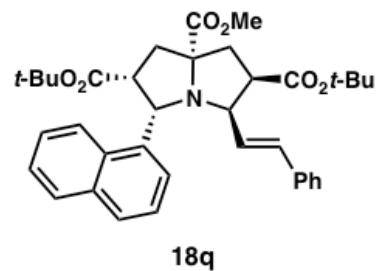
ADL-III-253B

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 31 2011



Sample #7, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

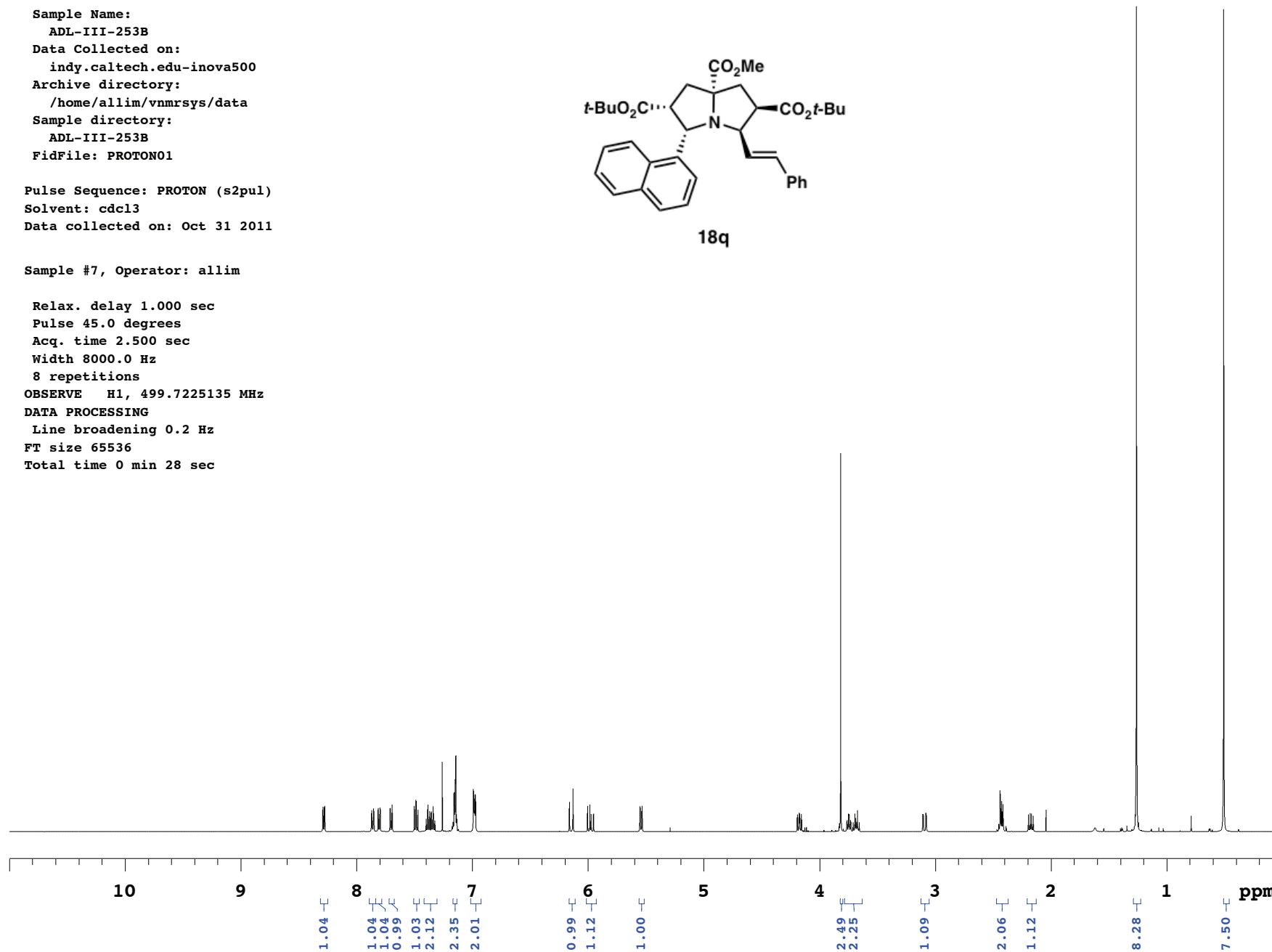
OBSERVE H1, 499.7225135 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 28 sec



ADL-III-253B

Sample Name:

ADL-III-253B

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/allim/vnmrsys/data

Sample directory:

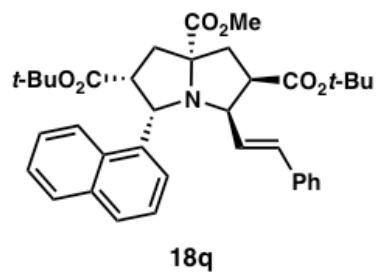
ADL-III-253B

FidFile: CARBON01

Pulse Sequence: CARBON (s2pu1)

Solvent: cdcl3

Data collected on: Oct 31 2011



Sample #7, Operator: allim

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6553276 MHz

DECOUPLE H1, 499.7250019 MHz

Power 39 dB

continuously on

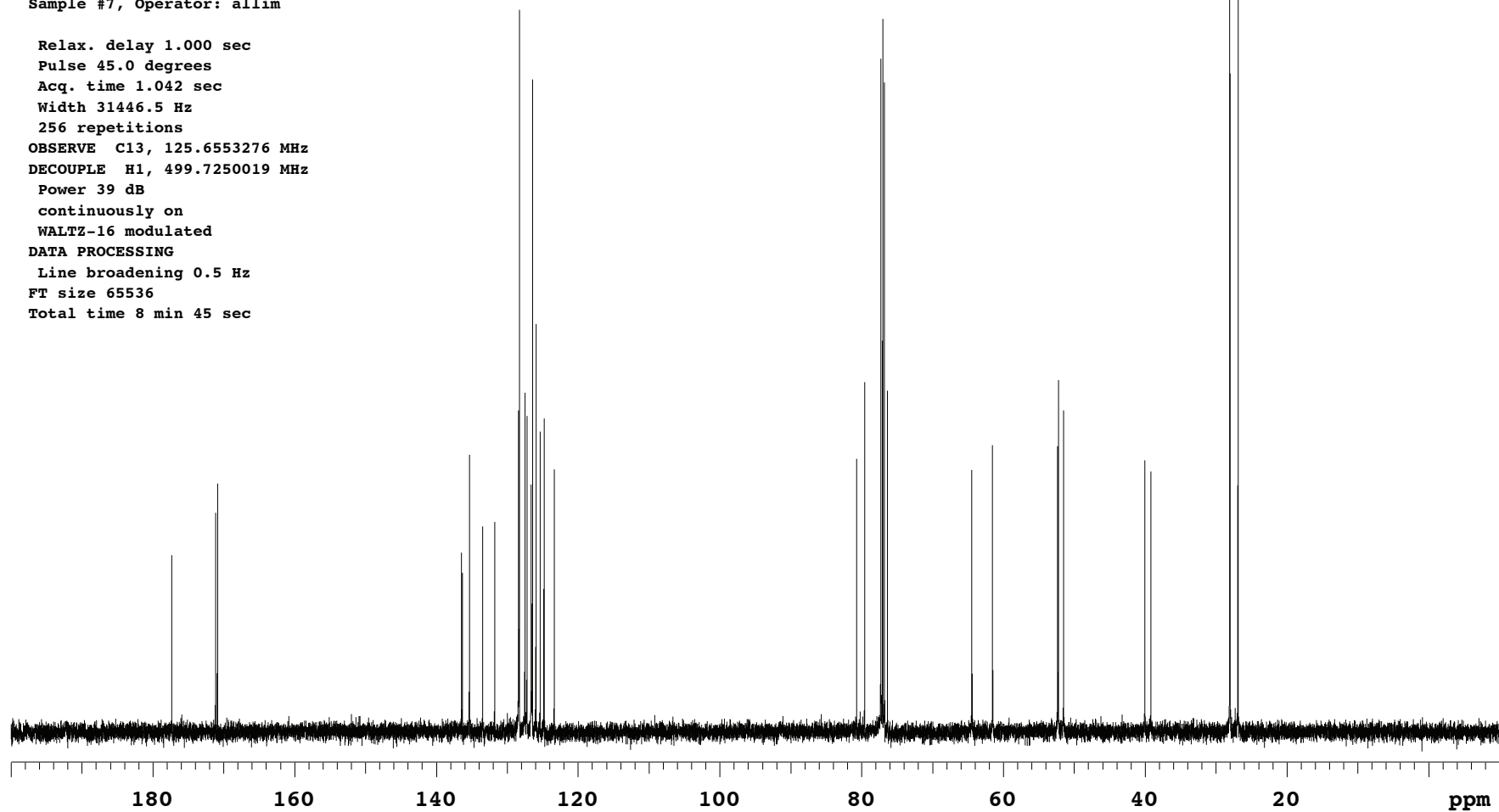
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec

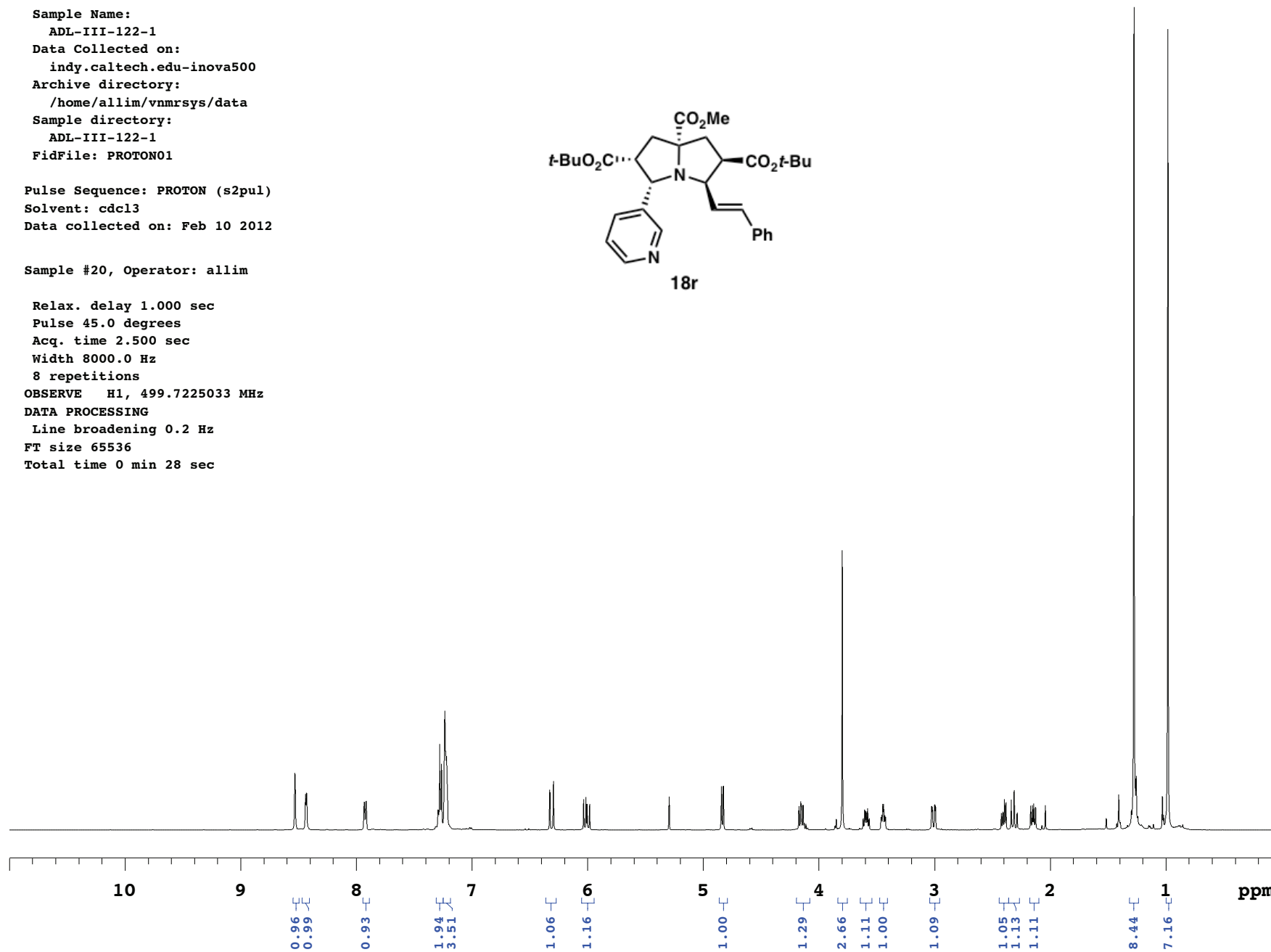
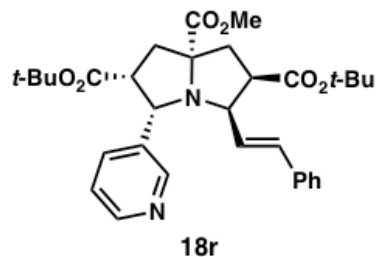


Sample Name:  
ADL-III-122-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-122-1  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Feb 10 2012

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

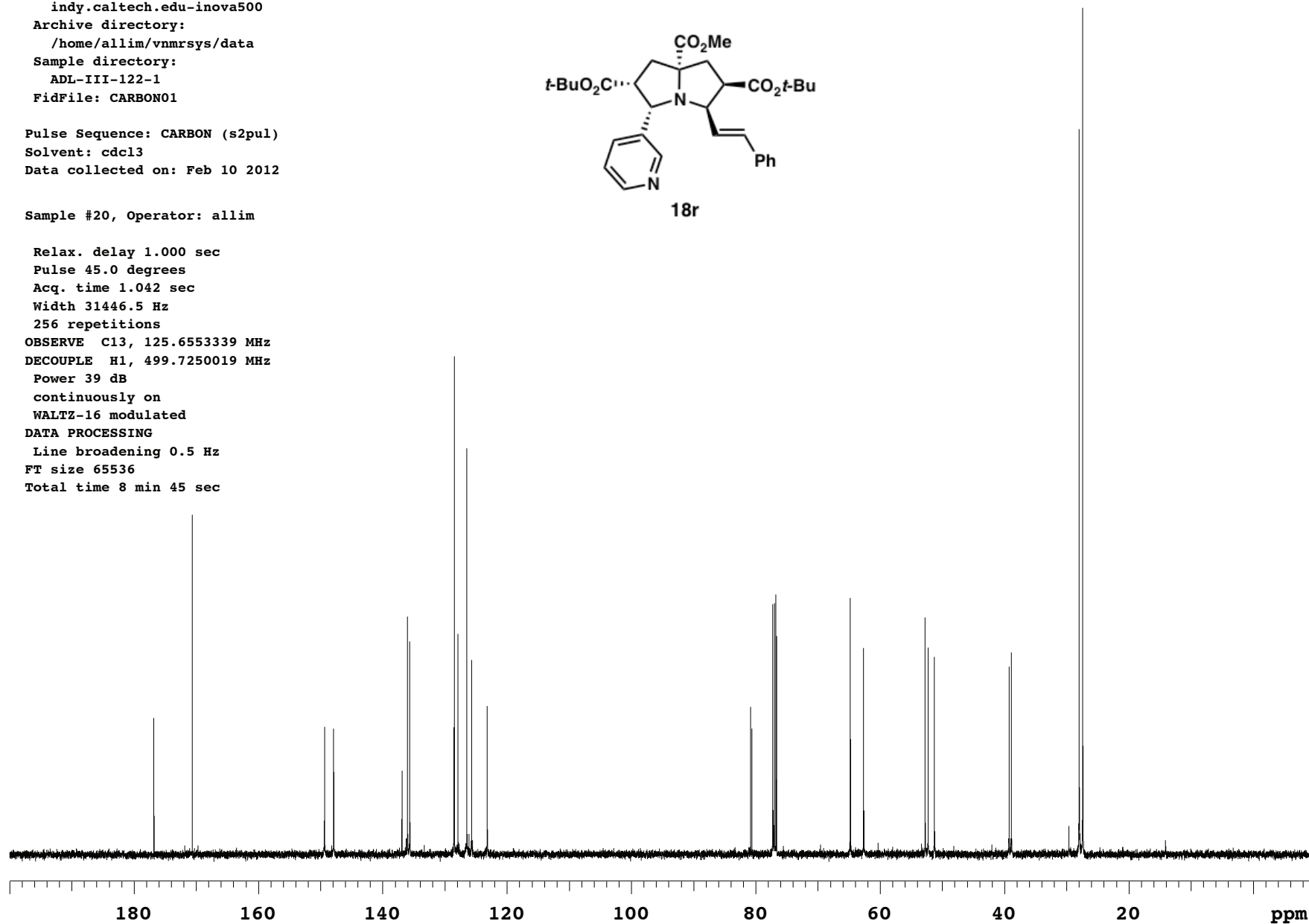
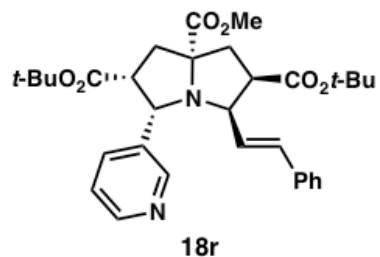


Sample Name:  
ADL-III-122-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-122-1  
FidFile: CARBON01

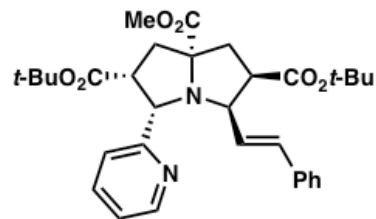
Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Feb 10 2012

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553339 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



Sample Name:  
 ADL-III-215B  
 Data Collected on:  
 indy.caltech.edu-inova500  
 Archive directory:  
 /home/allim/vnmrsys/data  
 Sample directory:  
 ADL-III-215B  
 FidFile: PROTON01

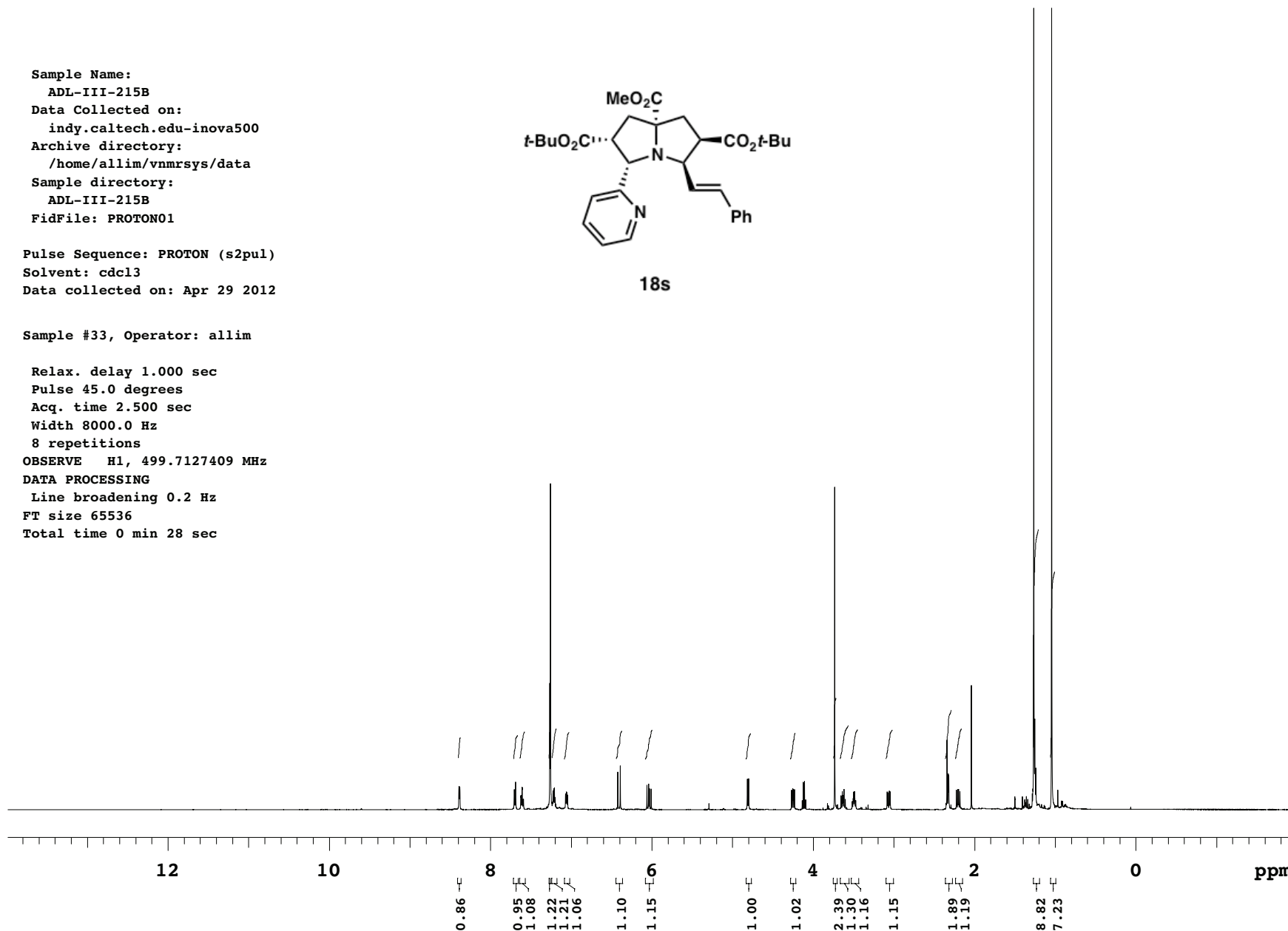


18s

Pulse Sequence: PROTON (s2pul)  
 Solvent: cdcl3  
 Data collected on: Apr 29 2012

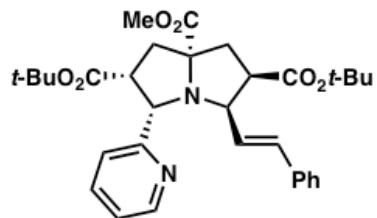
Sample #33, Operator: allim

Relax. delay 1.000 sec  
 Pulse 45.0 degrees  
 Acq. time 2.500 sec  
 Width 8000.0 Hz  
 8 repetitions  
 OBSERVE H1, 499.7127409 MHz  
 DATA PROCESSING  
 Line broadening 0.2 Hz  
 FT size 65536  
 Total time 0 min 28 sec





Sample Name:  
ADL-III-215B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-215B  
FidFile: CARBON01

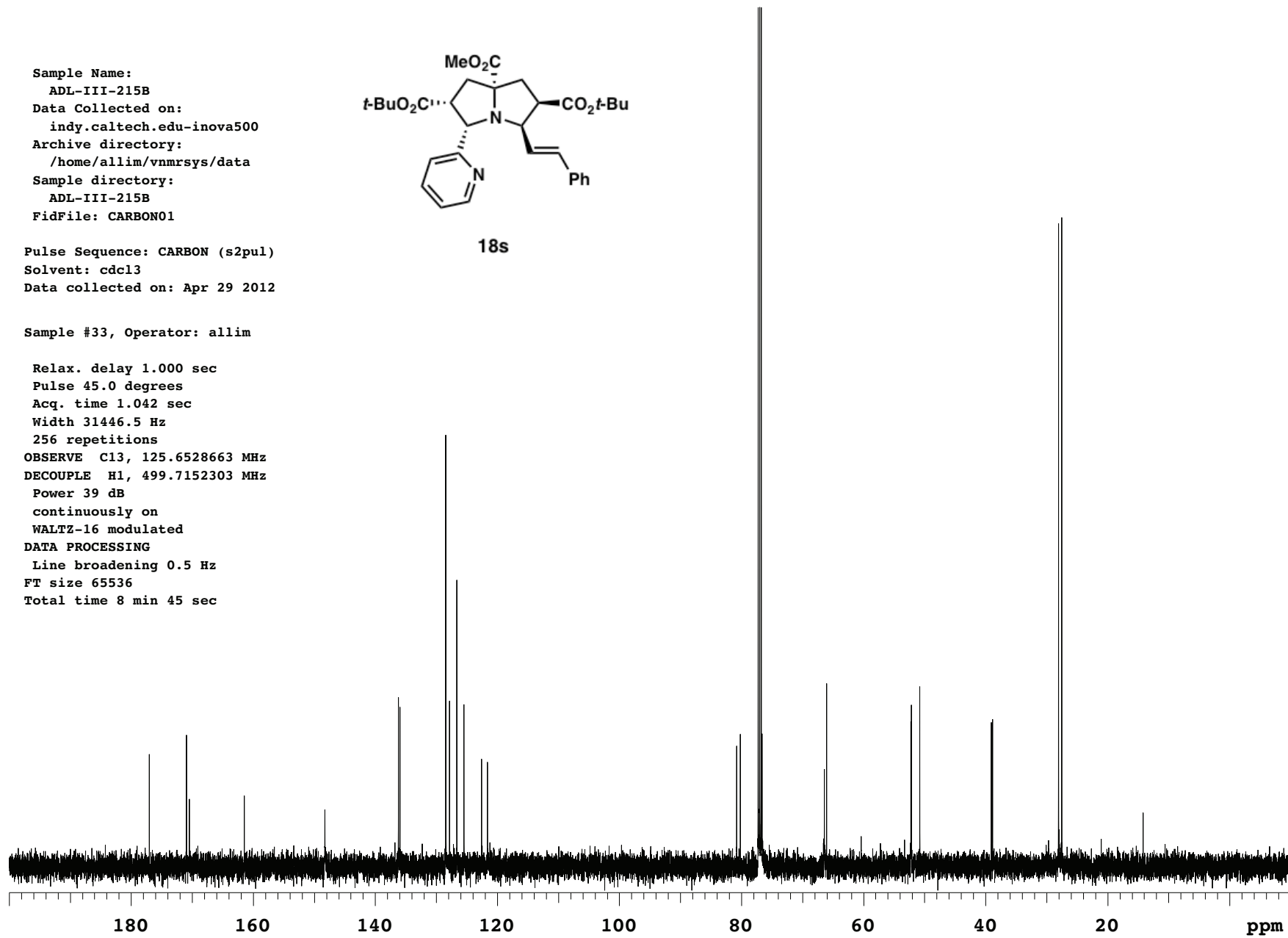


18s

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 29 2012

Sample #33, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

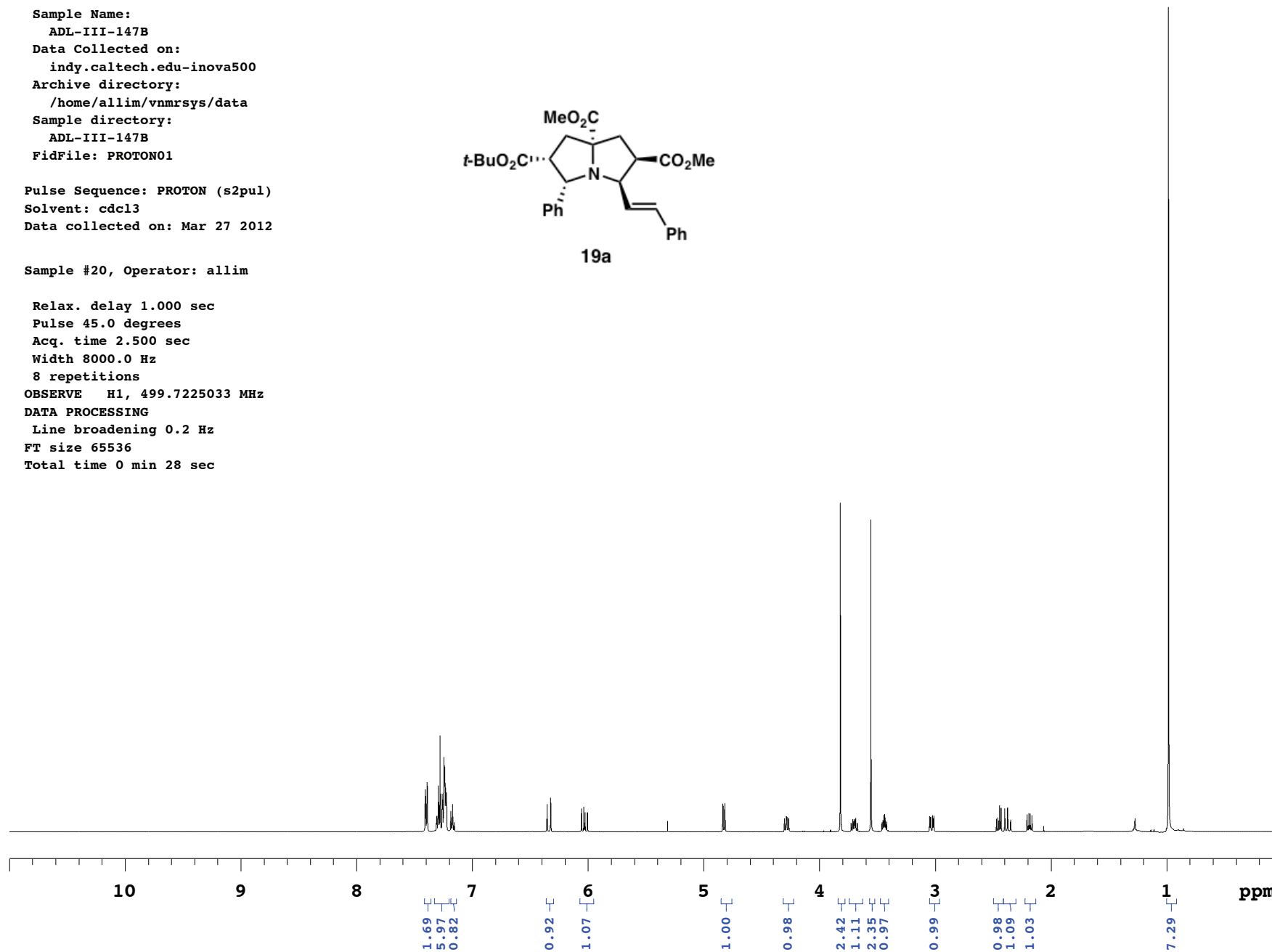
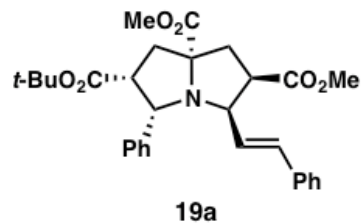


Sample Name:  
ADL-III-147B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-147B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Mar 27 2012

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

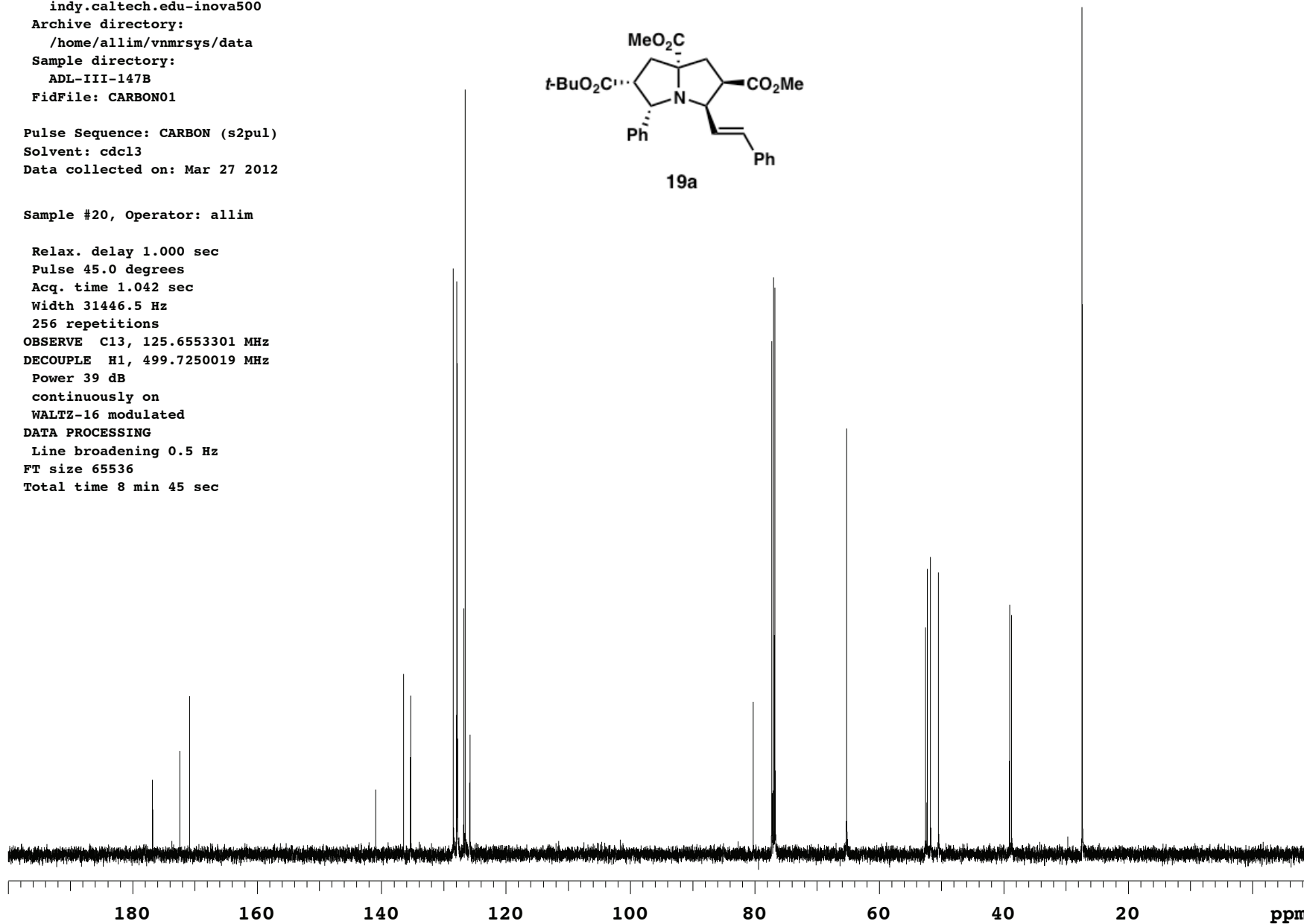
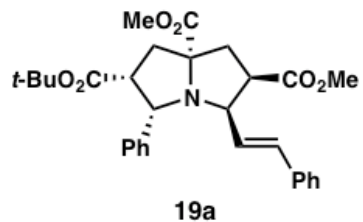


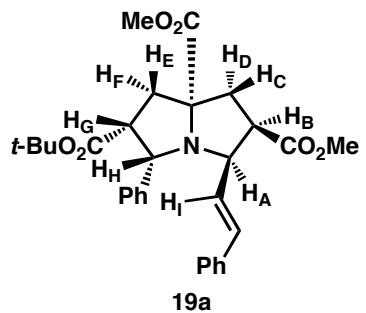
Sample Name:  
ADL-III-147B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-147B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Mar 27 2012

Sample #20, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6553301 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec





19a

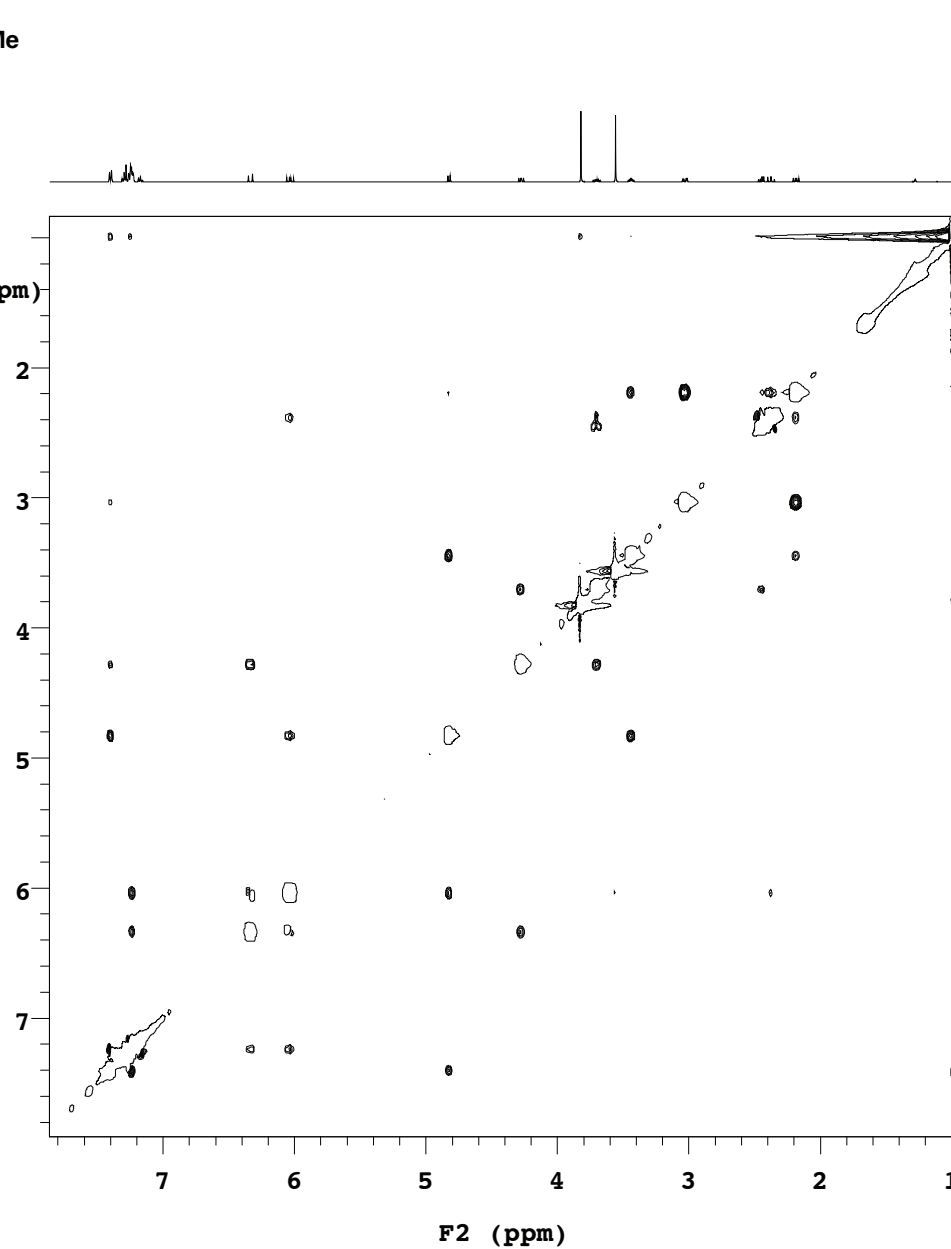
Sample Name:  
ADL-IV-147B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-147B  
FidFile: NOESY01

Pulse Sequence: NOESY  
Solvent: cdcl3  
Data collected on: Oct 11 2012

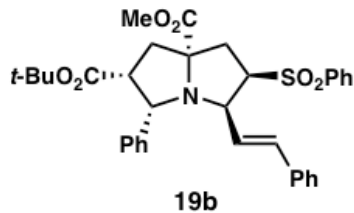
Sample #16, Operator: allim

Relax. delay 1.000 sec  
Acq. time 0.150 sec  
Width 8000.0 Hz  
2D Width 8000.0 Hz  
2 repetitions  
2 x 200 increments  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Gauss apodization 0.059 sec  
F1 DATA PROCESSING  
Gauss apodization 0.023 sec  
FT size 2048 x 2048  
Total time 23 min

F1  
(ppm)



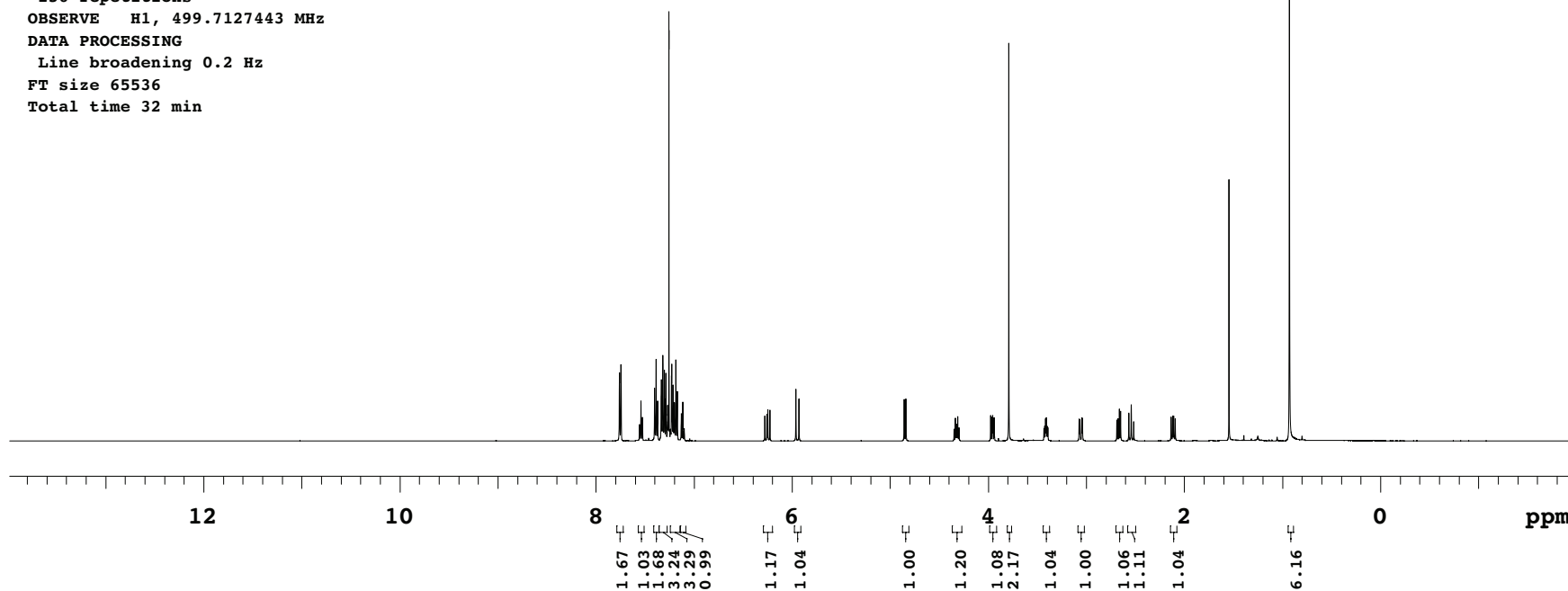
Sample Name:  
ADL-IV-91-2  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-91-2  
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Sep 18 2012

Sample #34, Operator: allim

Relax. delay 5.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
256 repetitions  
OBSERVE H1, 499.7127443 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 32 min

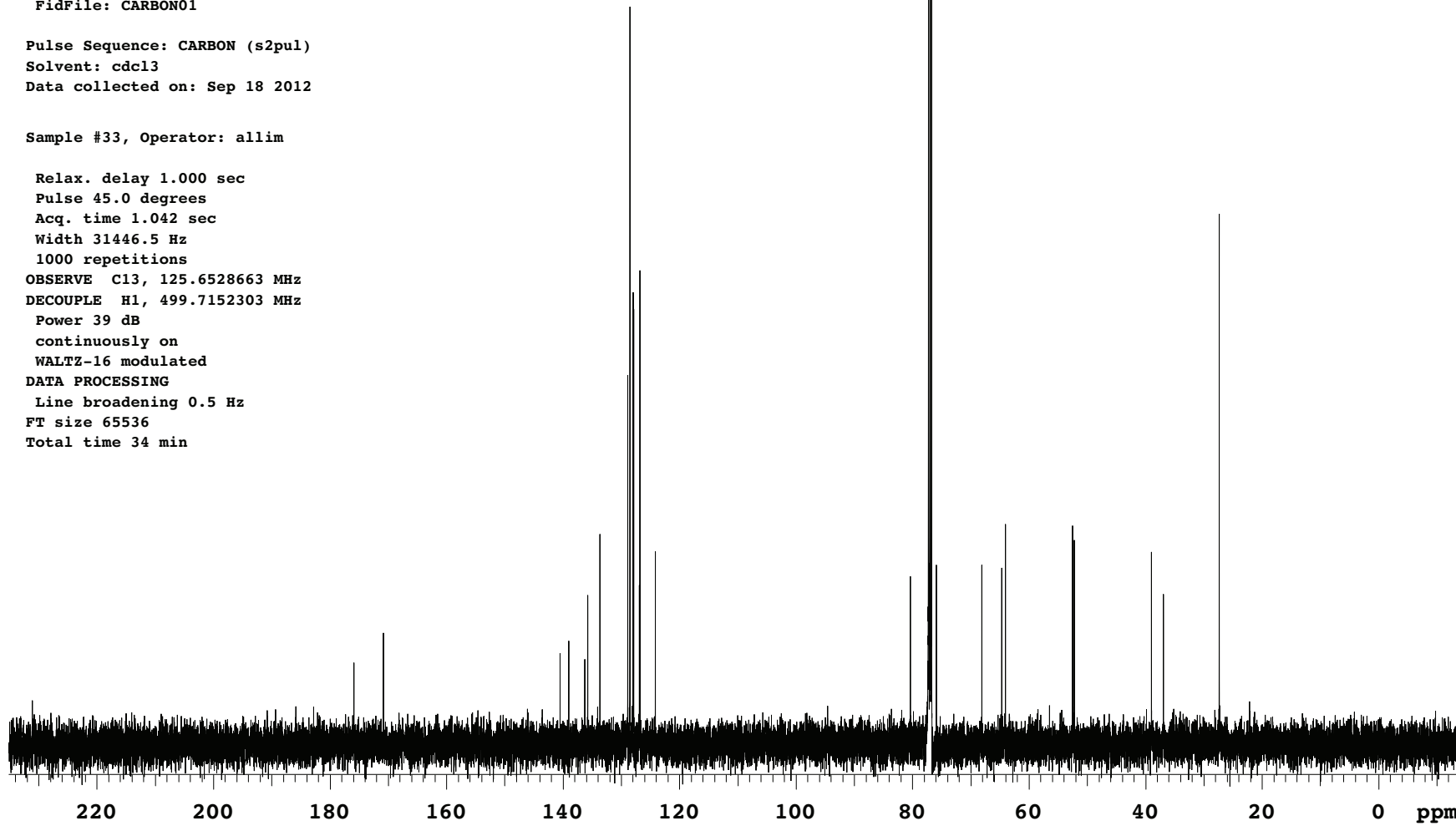
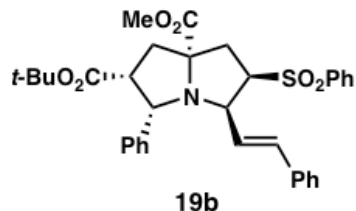


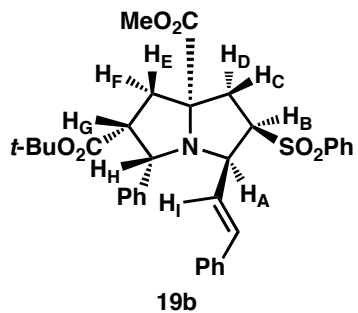
Sample Name:  
ADL-IV-91-2  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-91-2  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Sep 18 2012

Sample #33, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
1000 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 34 min





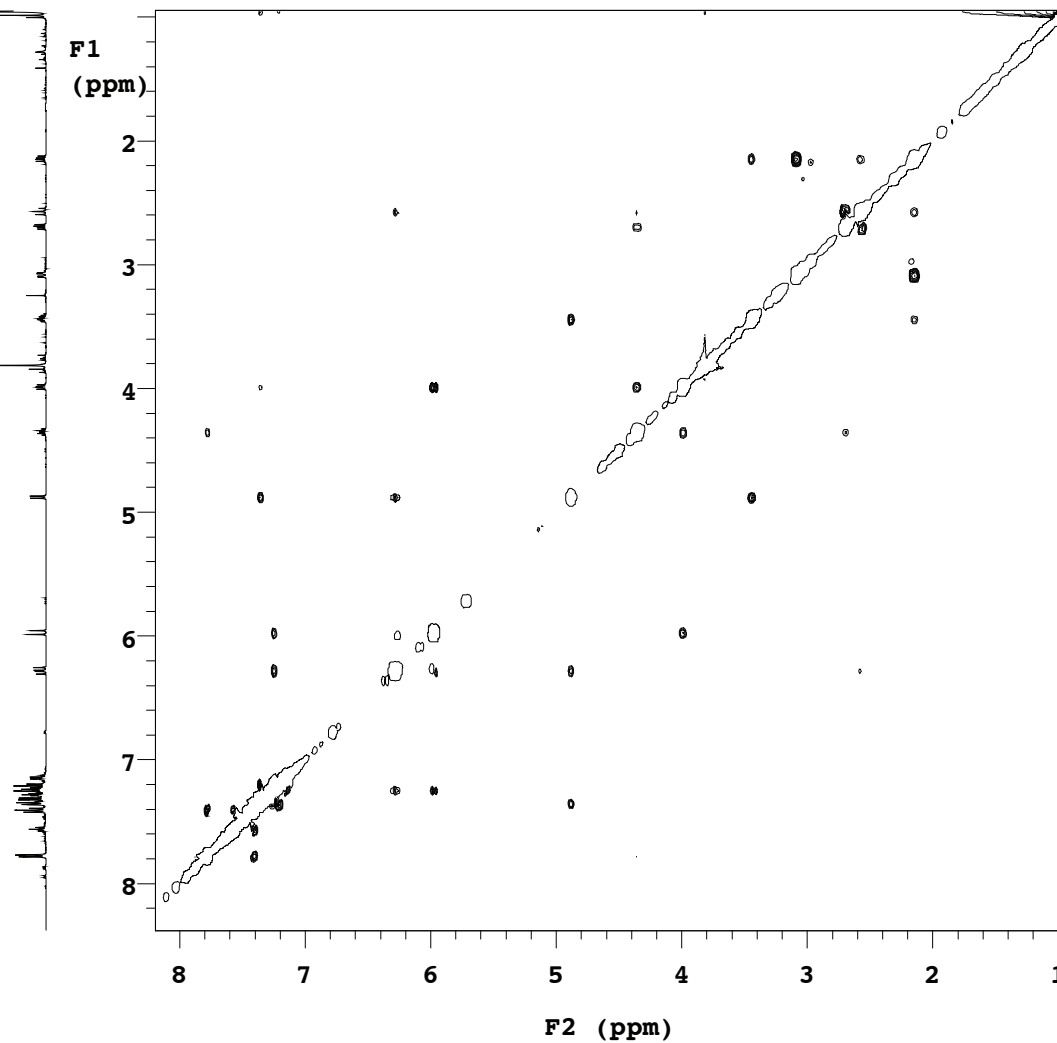
19b

Sample Name:  
ADL-IV-185-2B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-185-2B  
FidFile: NOESY01

Pulse Sequence: NOESY  
Solvent: cdcl3  
Data collected on: Oct 11 2012

Sample #15, Operator: allim

Relax. delay 1.000 sec  
Acq. time 0.150 sec  
Width 8000.0 Hz  
2D Width 8000.0 Hz  
2 repetitions  
2 x 200 increments  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Gauss apodization 0.059 sec  
F1 DATA PROCESSING  
Gauss apodization 0.023 sec  
FT size 2048 x 2048  
Total time 23 min

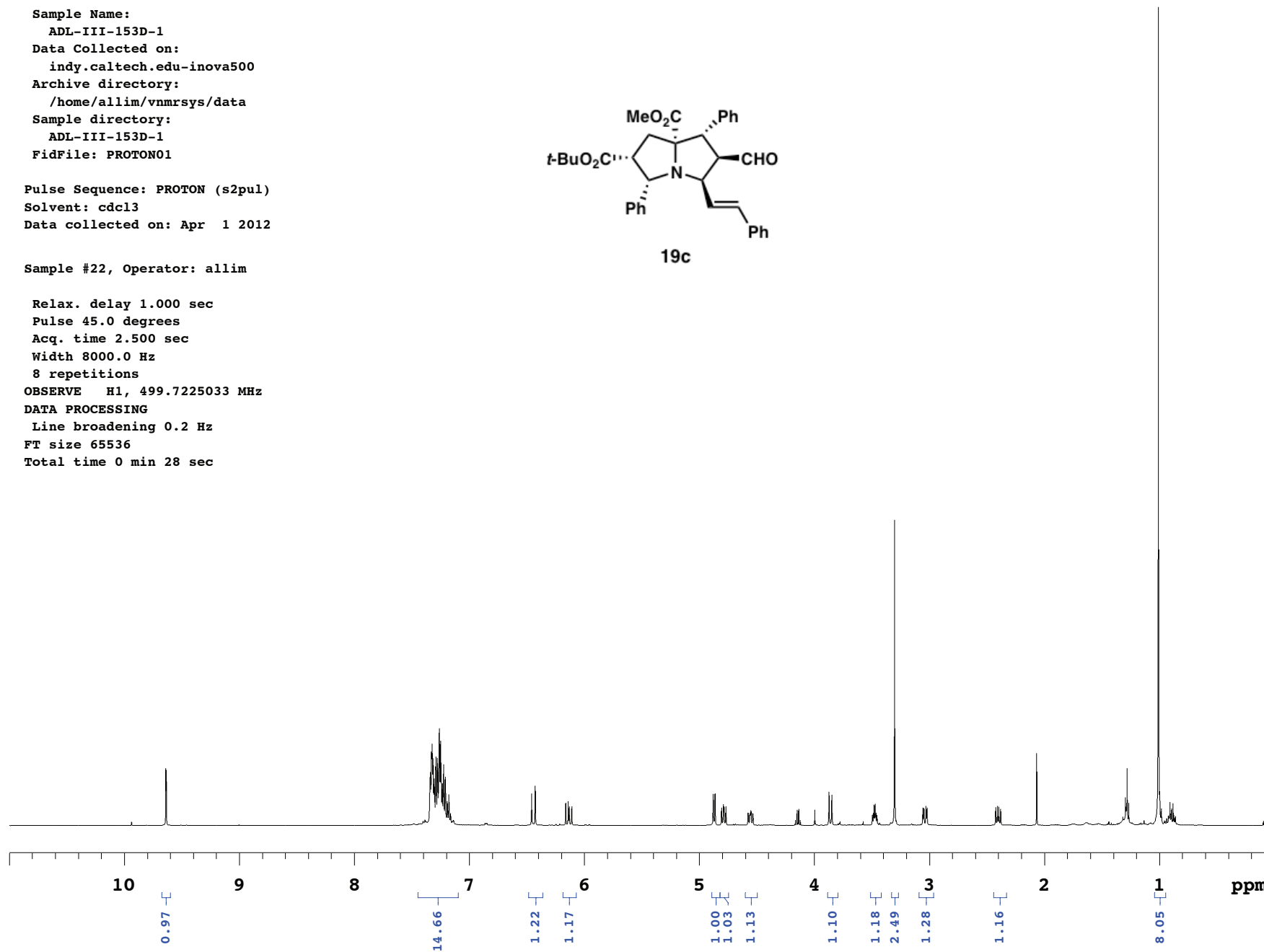
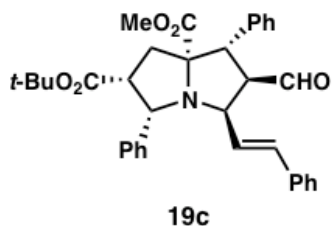


Sample Name:  
ADL-III-153D-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-153D-1  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 1 2012

Sample #22, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7225033 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



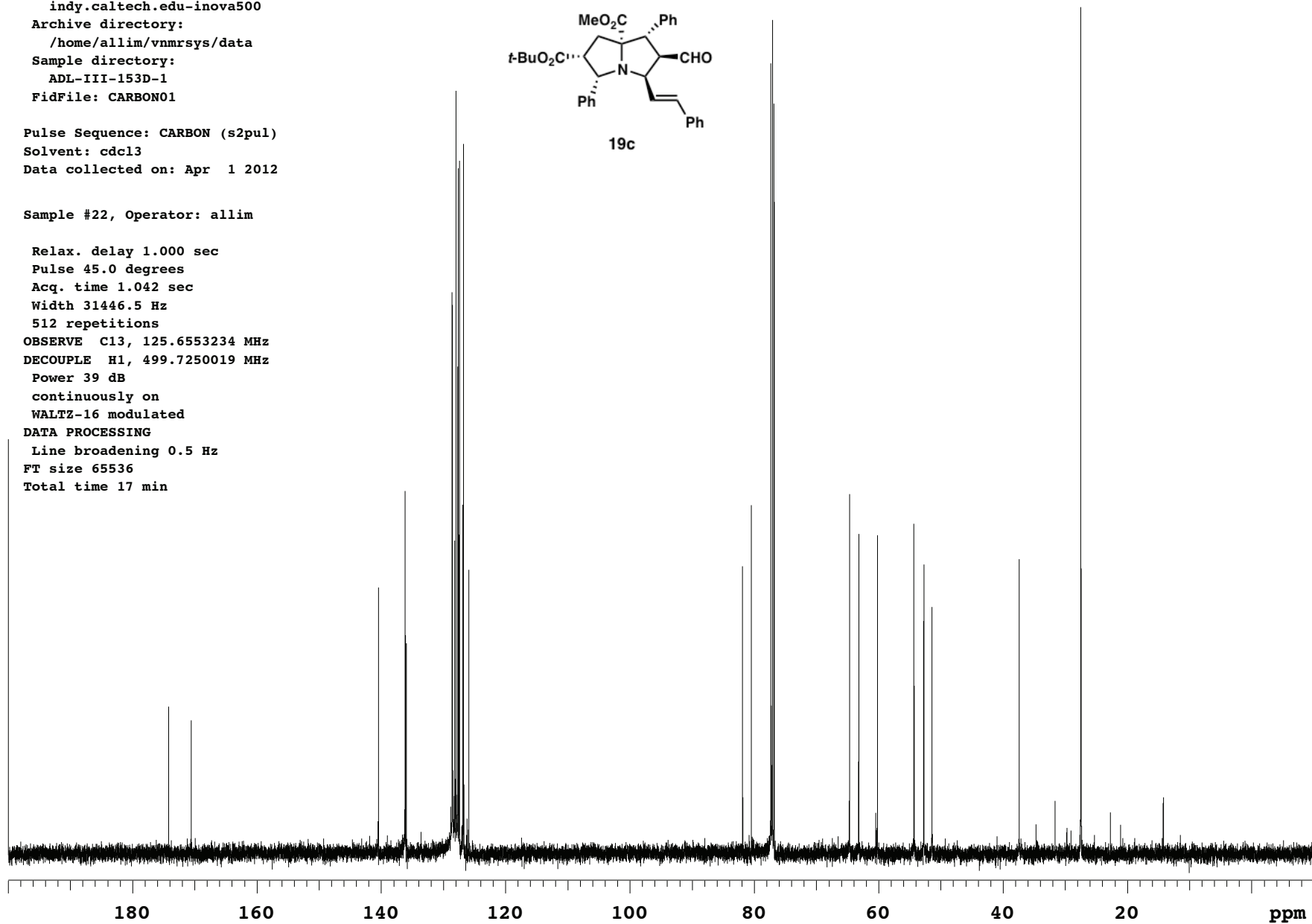
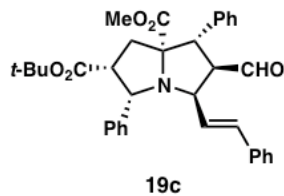


Sample Name:  
ADL-III-153D-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-153D-1  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pu1)  
Solvent: cdcl3  
Data collected on: Apr 1 2012

Sample #22, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
512 repetitions  
OBSERVE C13, 125.6553234 MHz  
DECOUPLE H1, 499.7250019 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 17 min



ADL-III-141B

Sample Name:  
ADL-III-141B

Data Collected on:  
fid.caltech.edu-inova600

Archive directory:  
/home/allim/vnmrsys/data

Sample directory:  
ADL-III-141B

FidFile: NOESY01

Pulse Sequence: NOESY

Solvent: CDCl3

Data collected on: Mar 30 2012

Temp. 25.0 C / 298.1 K

Operator: allim

Relax. delay 1.000 sec

Acq. time 0.150 sec

Width 7578.6 Hz

2D Width 7578.6 Hz

2 repetitions

2 x 200 increments

OBSERVE H1, 599.6494152 MHz

DATA PROCESSING

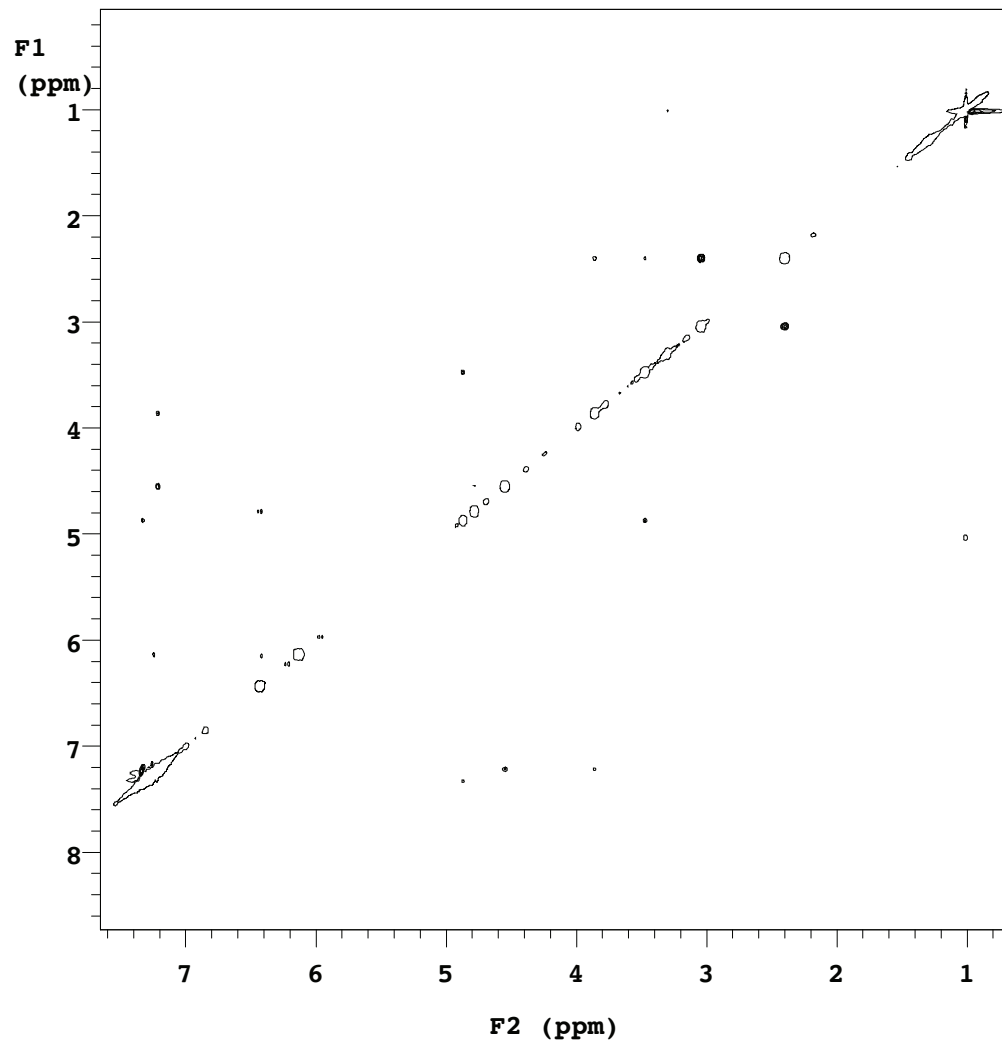
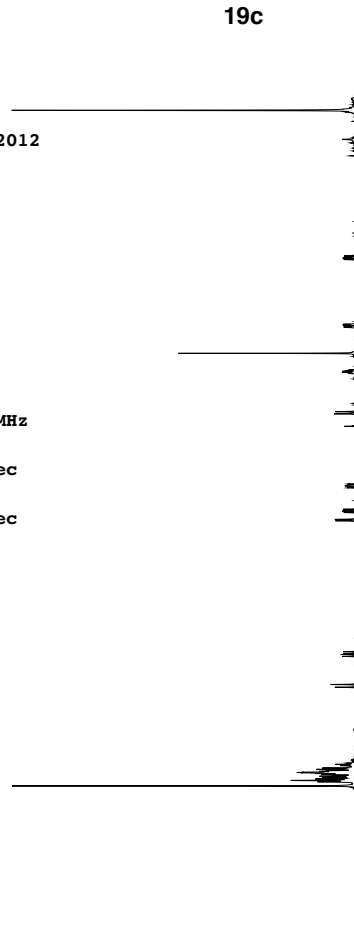
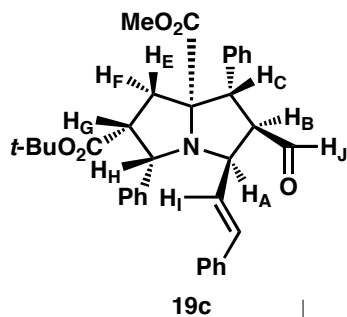
Gauss apodization 0.062 sec

F1 DATA PROCESSING

Gauss apodization 0.024 sec

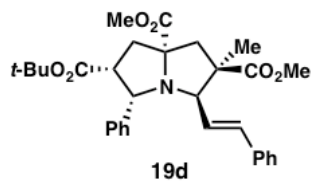
FT size 2048 x 2048

Total time 23 min



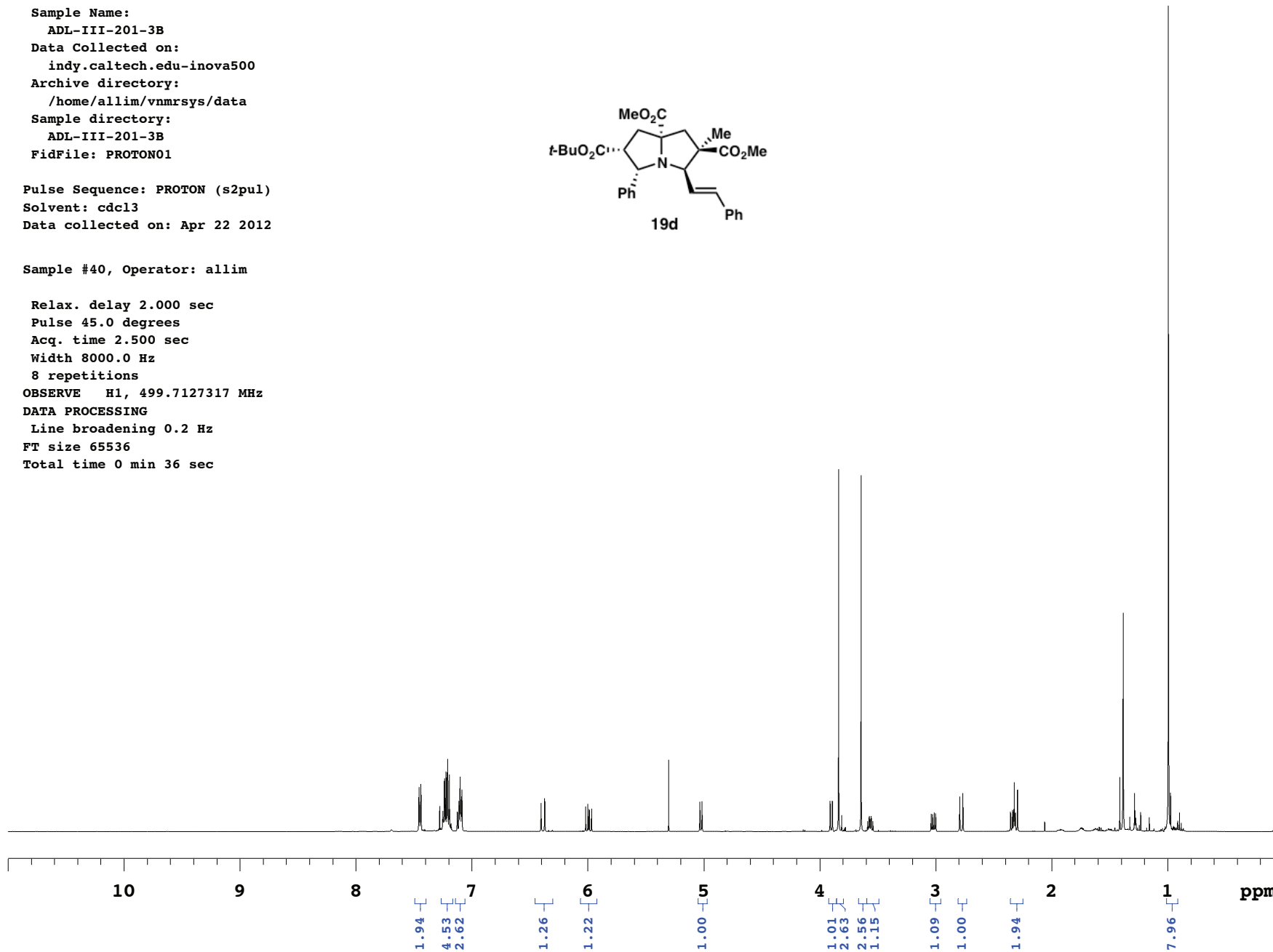
Sample Name:  
ADL-III-201-3B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-201-3B  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 22 2012



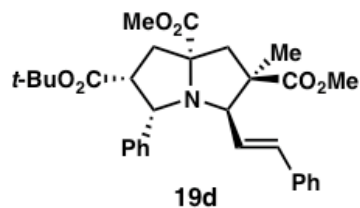
Sample #40, Operator: allim

Relax. delay 2.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 36 sec



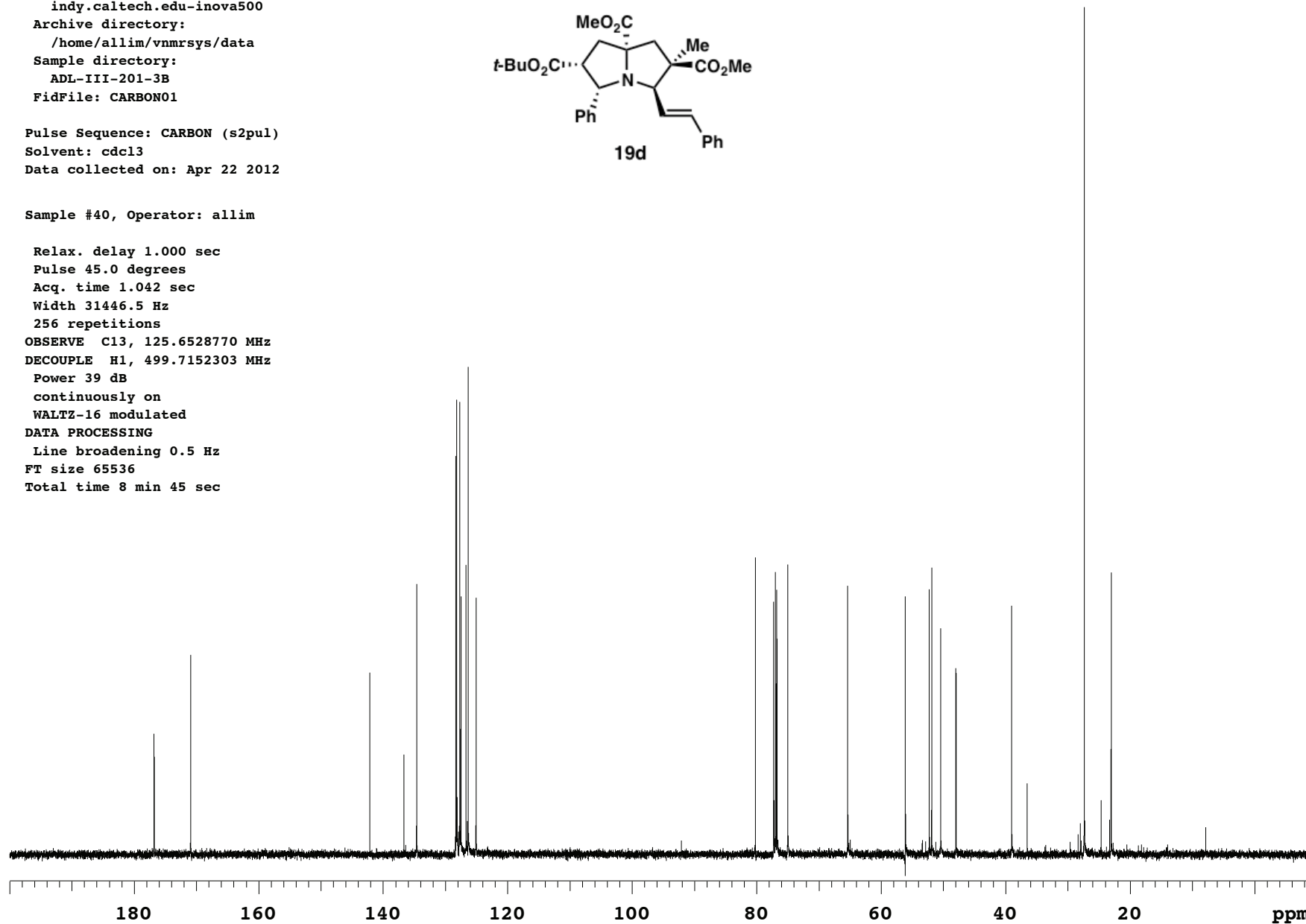
Sample Name:  
ADL-III-201-3B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-201-3B  
FidFile: CARBON01

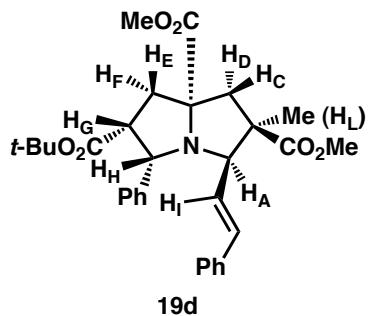
Pulse Sequence: CARBON (s2pu1)  
Solvent: cdcl3  
Data collected on: Apr 22 2012



Sample #40, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6528770 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec



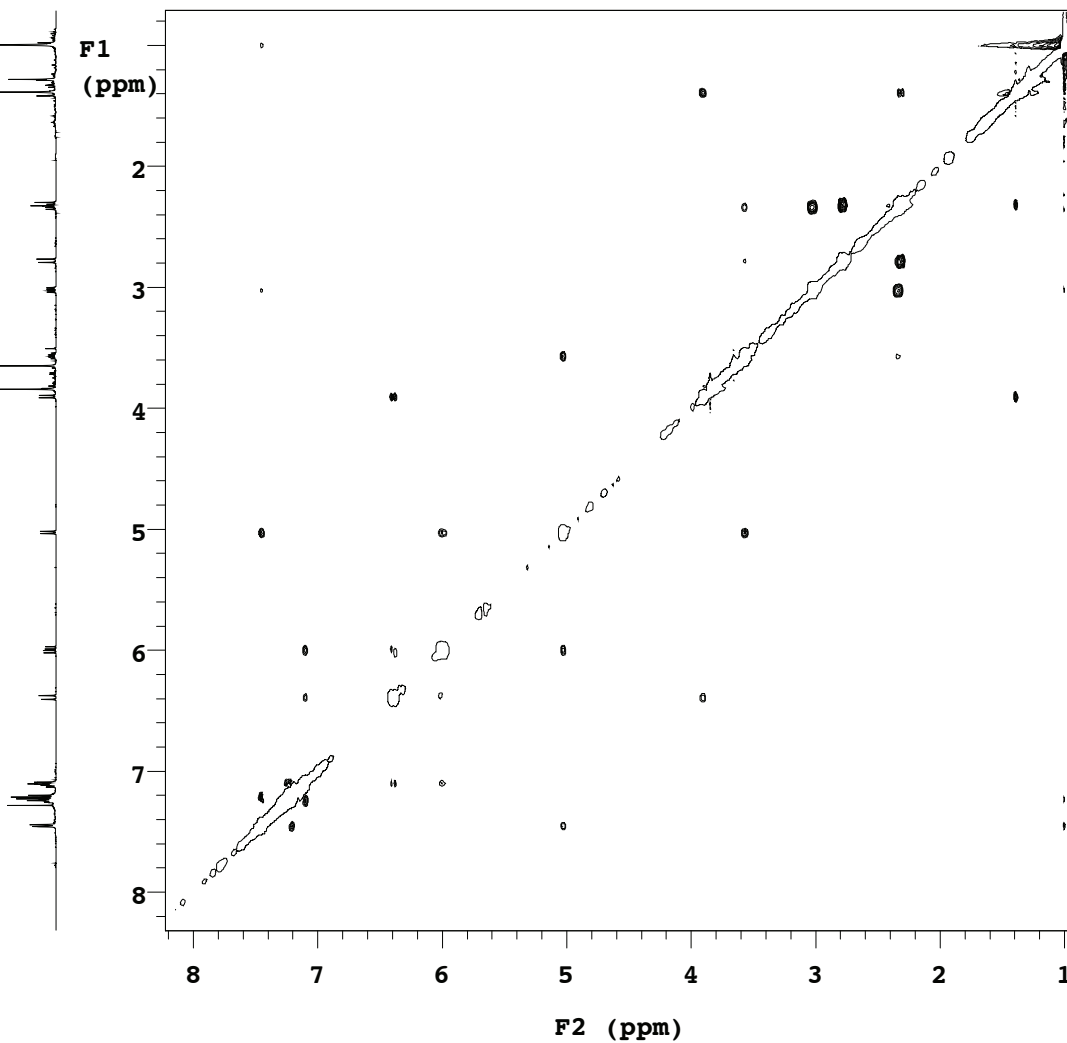


Sample Name:  
ADL-IV-201-3B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-201-3B  
FidFile: NOESY01

Pulse Sequence: NOESY  
Solvent: cdcl3  
Data collected on: Oct 11 2012

Sample #17, Operator: allim

Relax. delay 1.000 sec  
Acq. time 0.150 sec  
Width 8000.0 Hz  
2D Width 8000.0 Hz  
2 repetitions  
2 x 200 increments  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Gauss apodization 0.059 sec  
F1 DATA PROCESSING  
Gauss apodization 0.023 sec  
FT size 2048 x 2048  
Total time 23 min

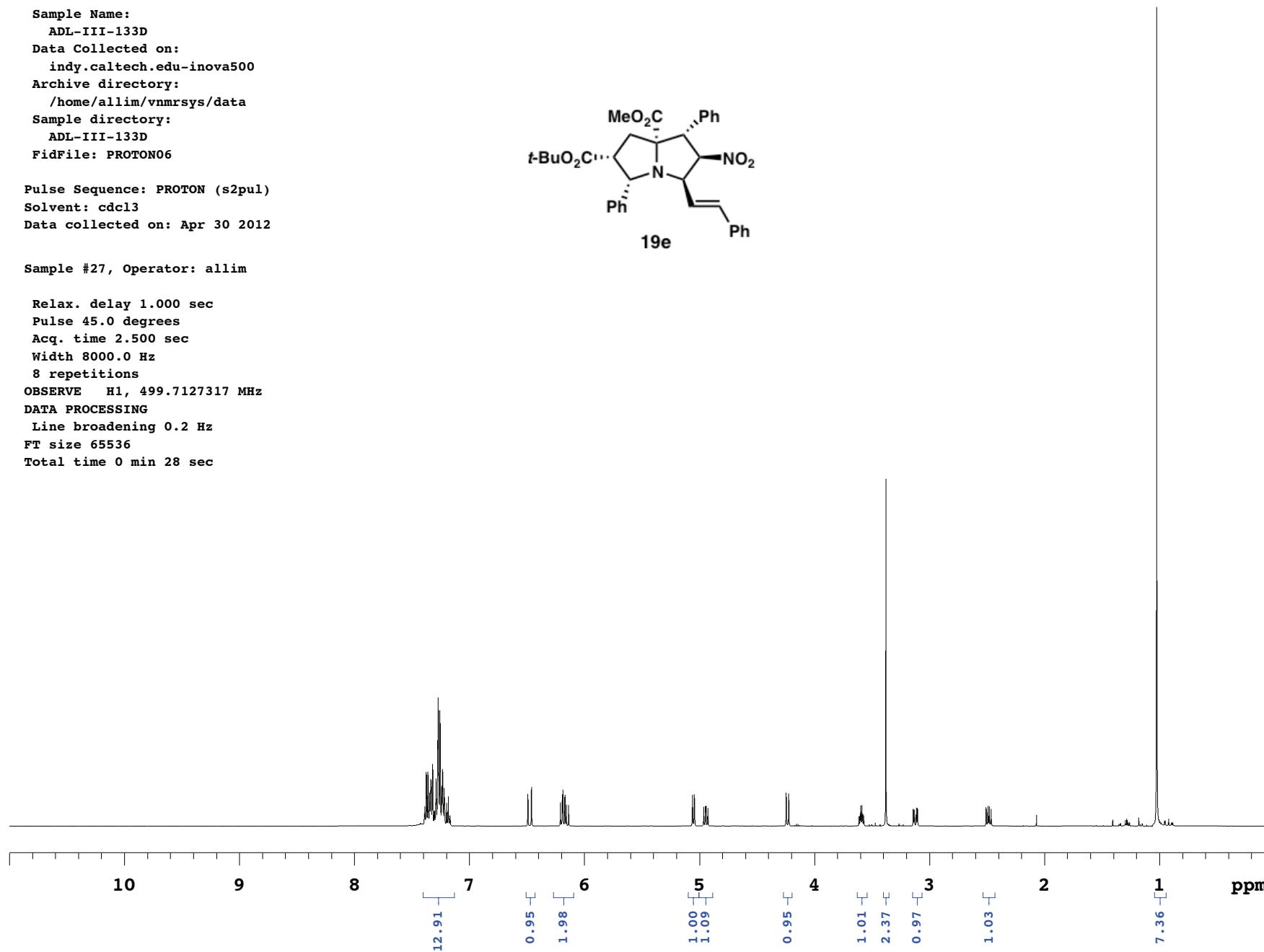
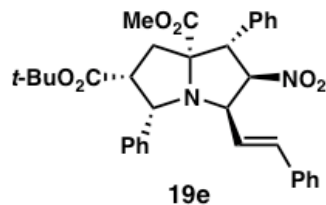


Sample Name:  
ADL-III-133D  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-133D  
FidFile: PROTON06

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 30 2012

Sample #27, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec

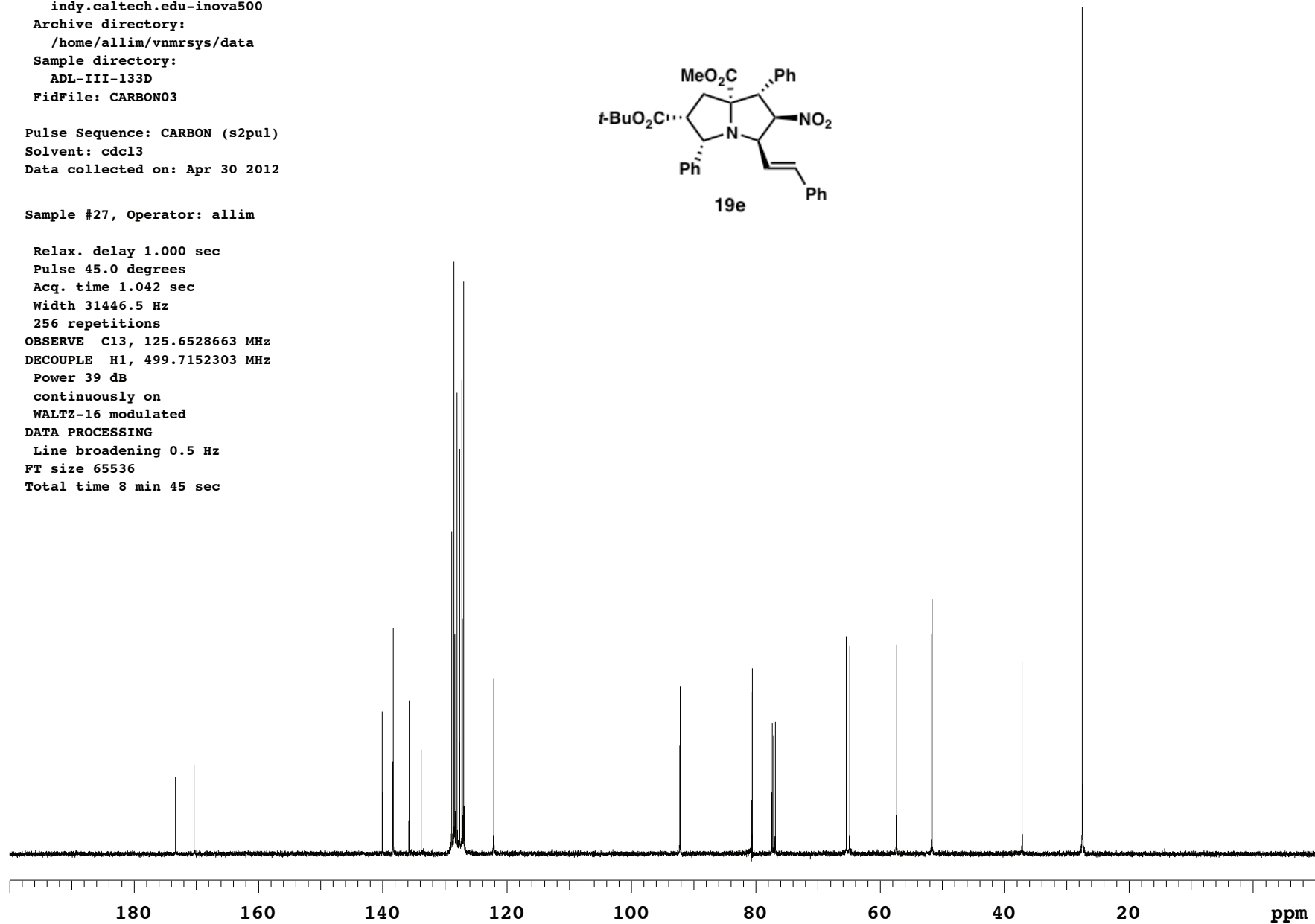
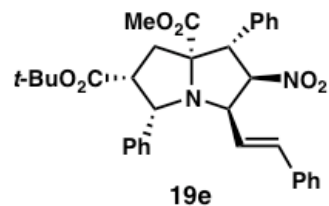


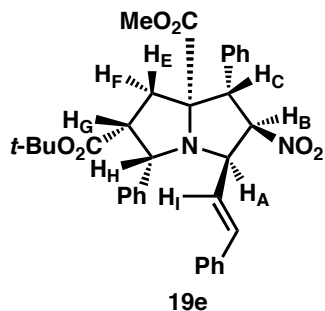
Sample Name:  
ADL-III-133D  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-133D  
FidFile: CARBON03

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Apr 30 2012

Sample #27, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec





19e

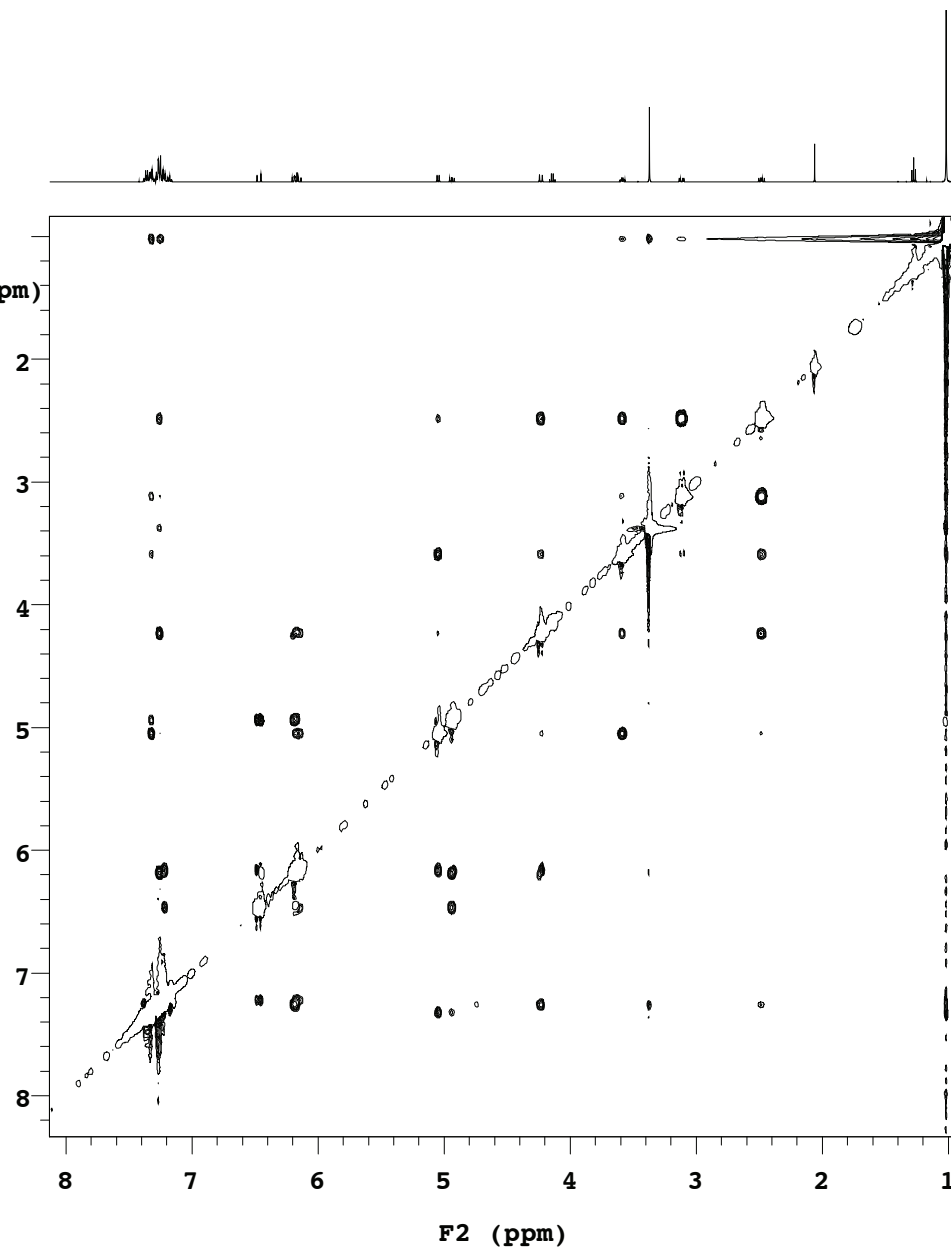
Sample Name:  
ADL-III-133D  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-133D  
FidFile: NOESY01

Pulse Sequence: NOESY  
Solvent: cdcl3  
Data collected on: Apr 30 2012

Sample #27, Operator: allim

Relax. delay 1.000 sec  
Acq. time 0.150 sec  
Width 8000.0 Hz  
2D Width 8000.0 Hz  
2 repetitions  
2 x 200 increments  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Gauss apodization 0.059 sec  
F1 DATA PROCESSING  
Gauss apodization 0.023 sec  
FT size 2048 x 2048  
Total time 23 min

F1  
(ppm)



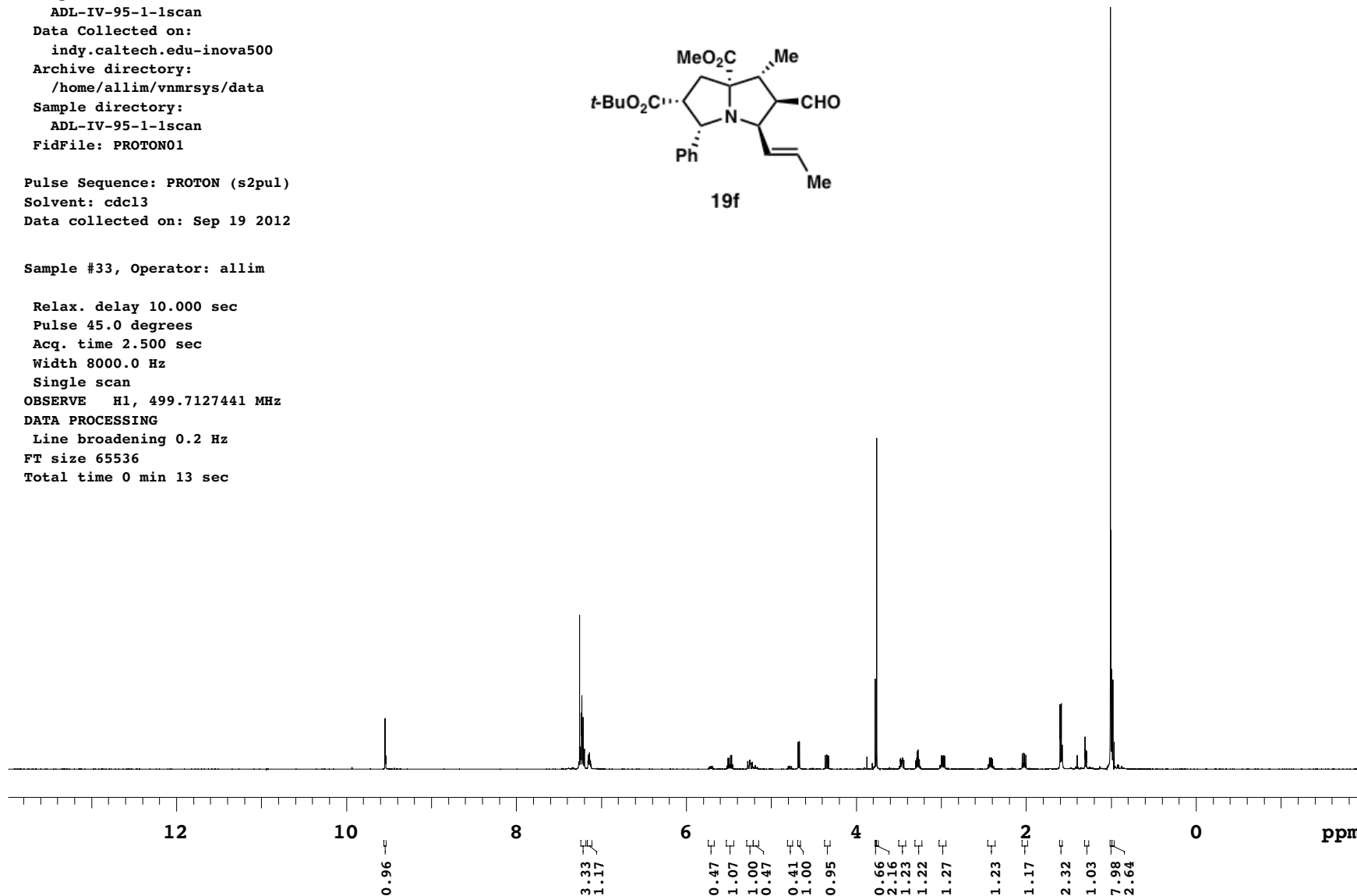
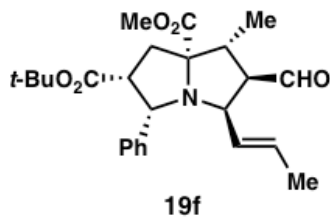


Sample Name:  
ADL-IV-95-1-1scan  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-95-1-1scan  
FidFile: PROTON01

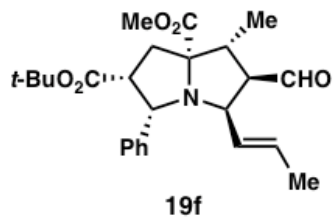
Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Sep 19 2012

Sample #33, Operator: allim

Relax. delay 10.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
Single scan  
OBSERVE H1, 499.7127441 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 13 sec



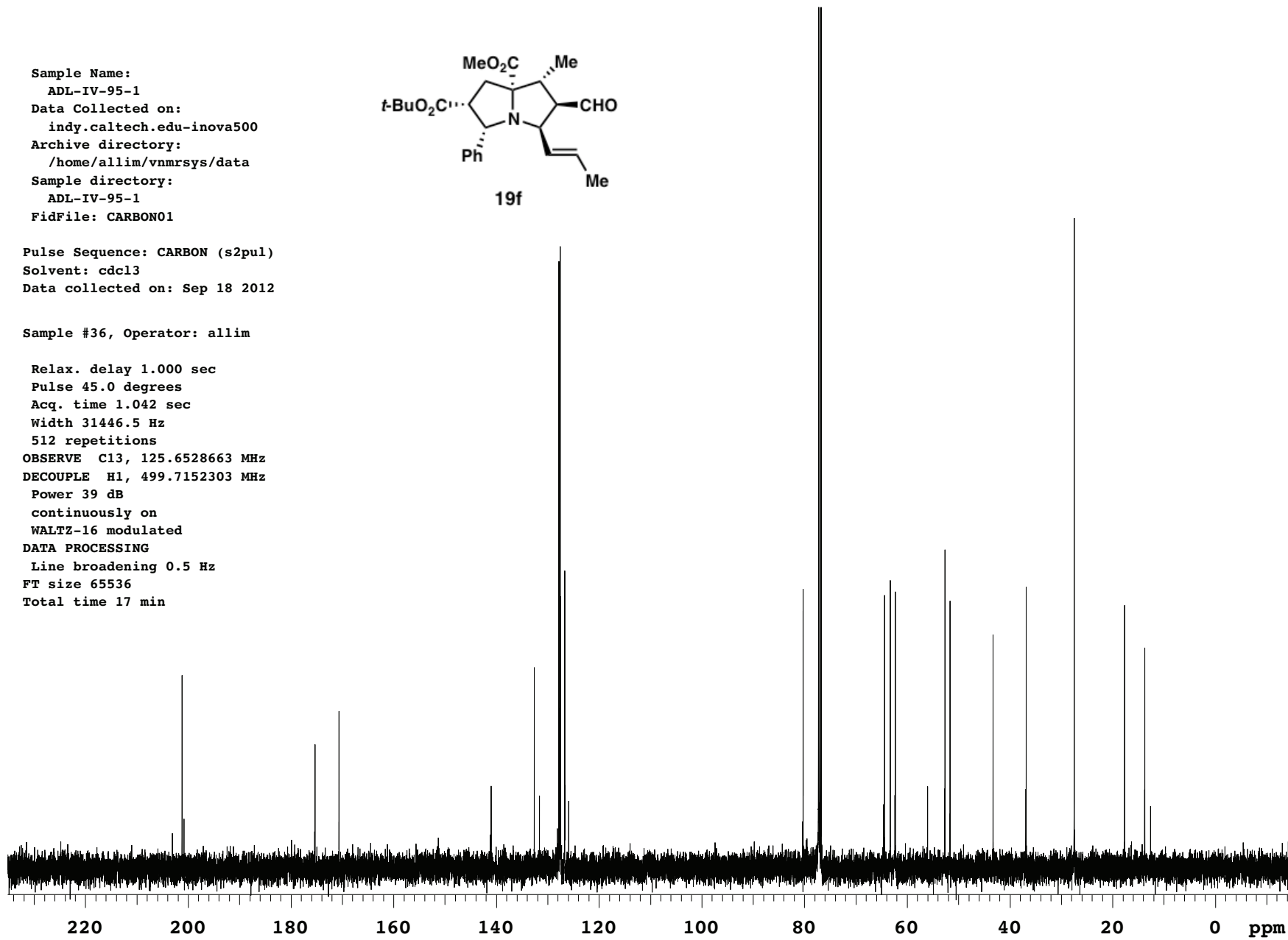
Sample Name:  
ADL-IV-95-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-95-1  
FidFile: CARBON01

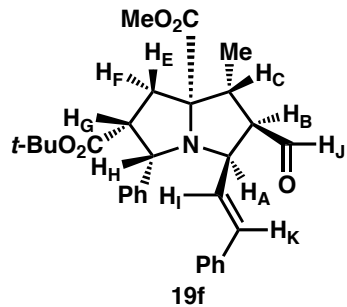


Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Sep 18 2012

Sample #36, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
512 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 17 min



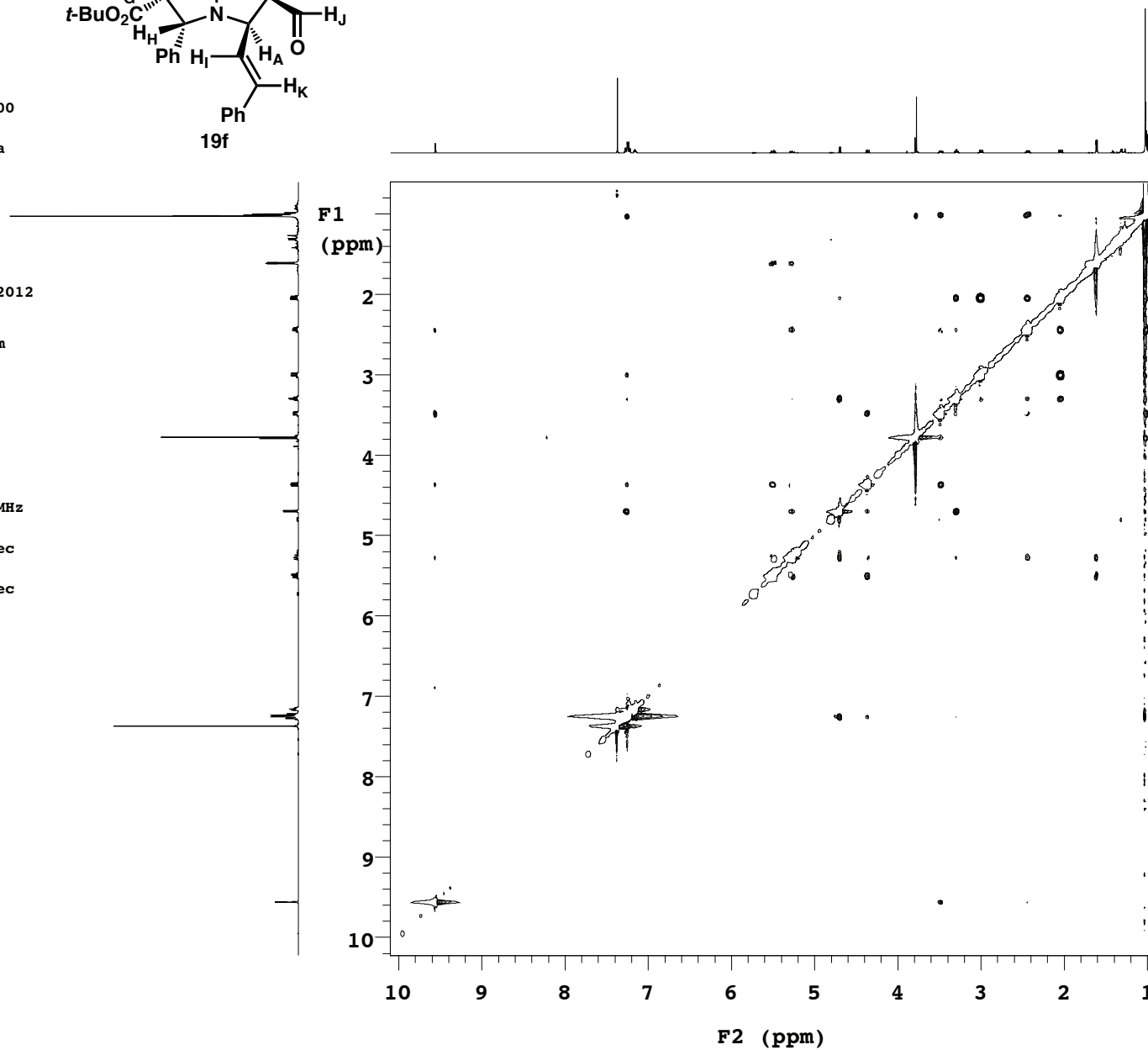


Sample Name:  
ADL-III-177C  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-177C  
FidFile: NOESY01

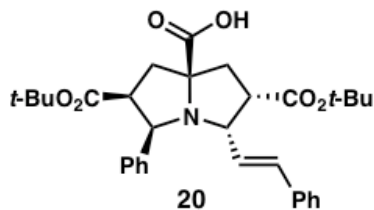
Pulse Sequence: NOESY  
Solvent: cdcl3  
Data collected on: Apr 30 2012

Sample #27, Operator: allim

Relax. delay 2.000 sec  
Acq. time 0.150 sec  
Width 8000.0 Hz  
2D Width 8000.0 Hz  
2 repetitions  
2 x 256 increments  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Gauss apodization 0.059 sec  
F1 DATA PROCESSING  
Gauss apodization 0.030 sec  
FT size 2048 x 2048  
Total time 47 min



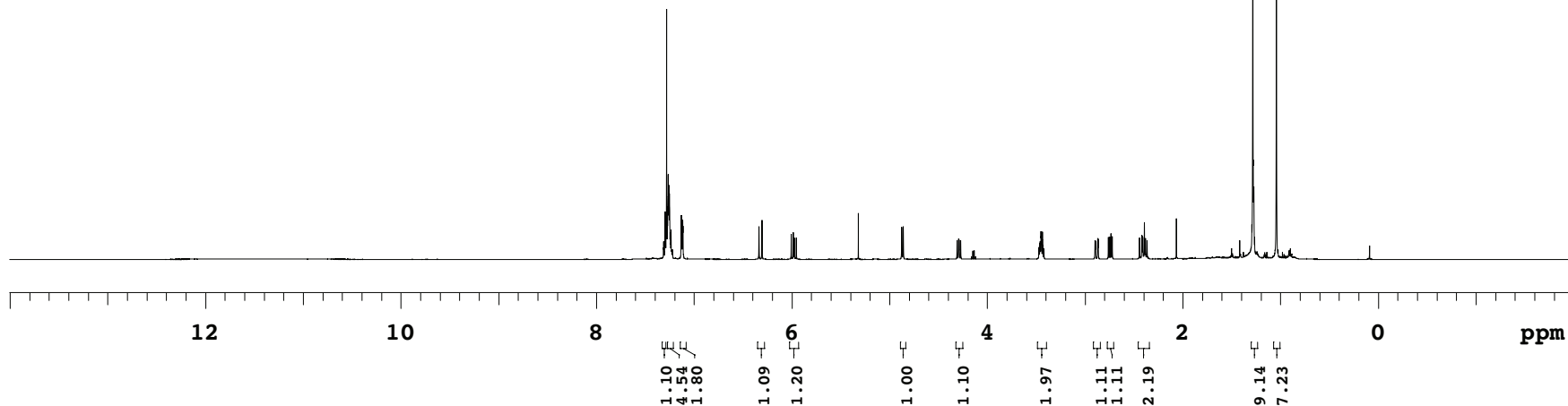
Sample Name:  
ADL-IV-53B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-53B  
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Aug 21 2012

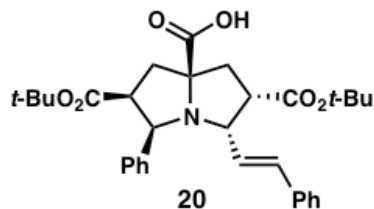
Sample #27, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
256 repetitions  
OBSERVE H1, 499.7127317 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 14 min



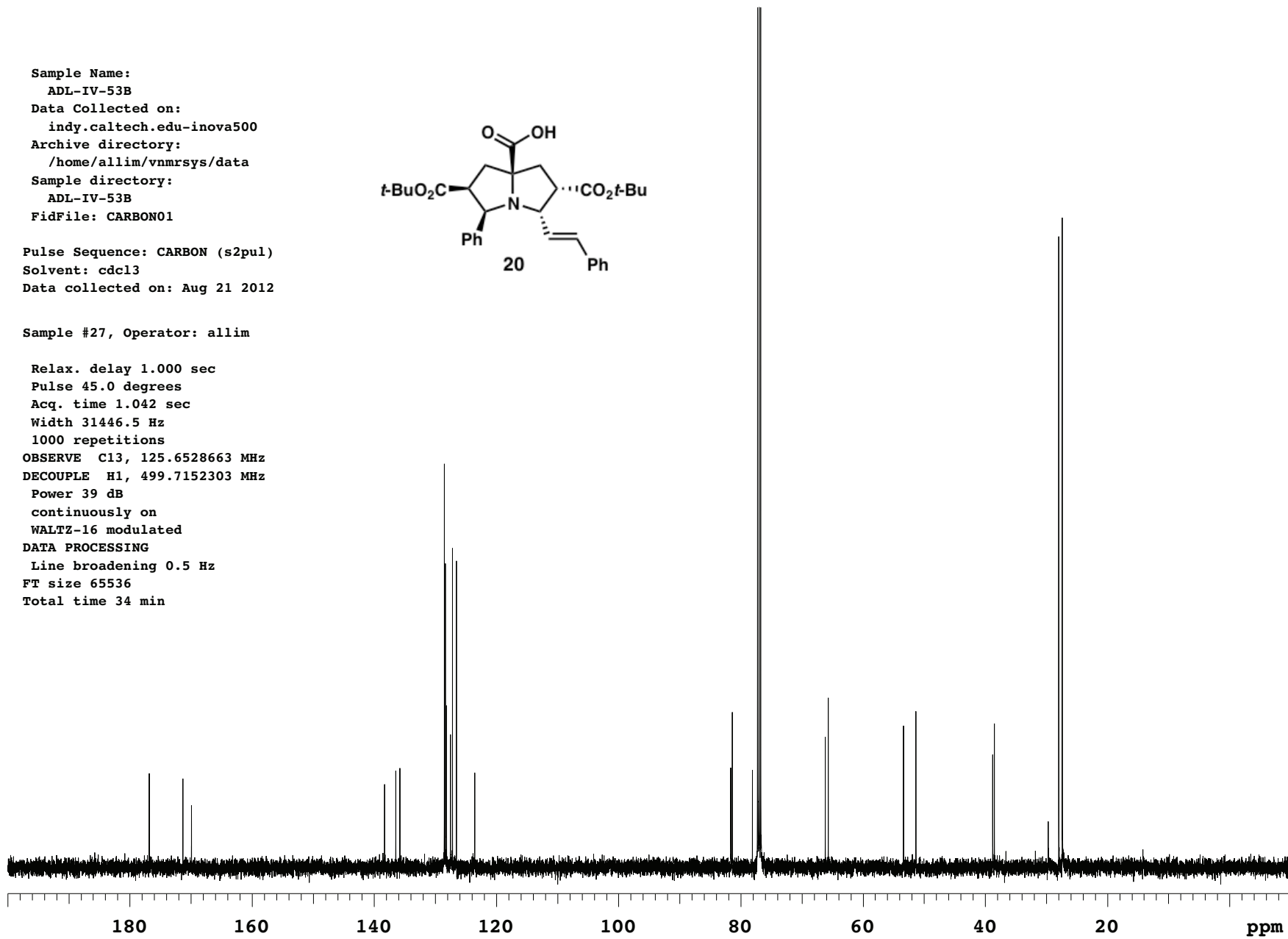
Sample Name:  
ADL-IV-53B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-53B  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Aug 21 2012



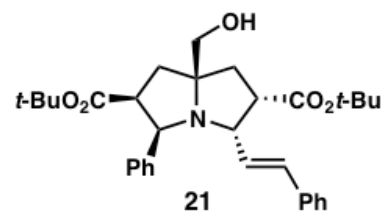
Sample #27, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
1000 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 34 min



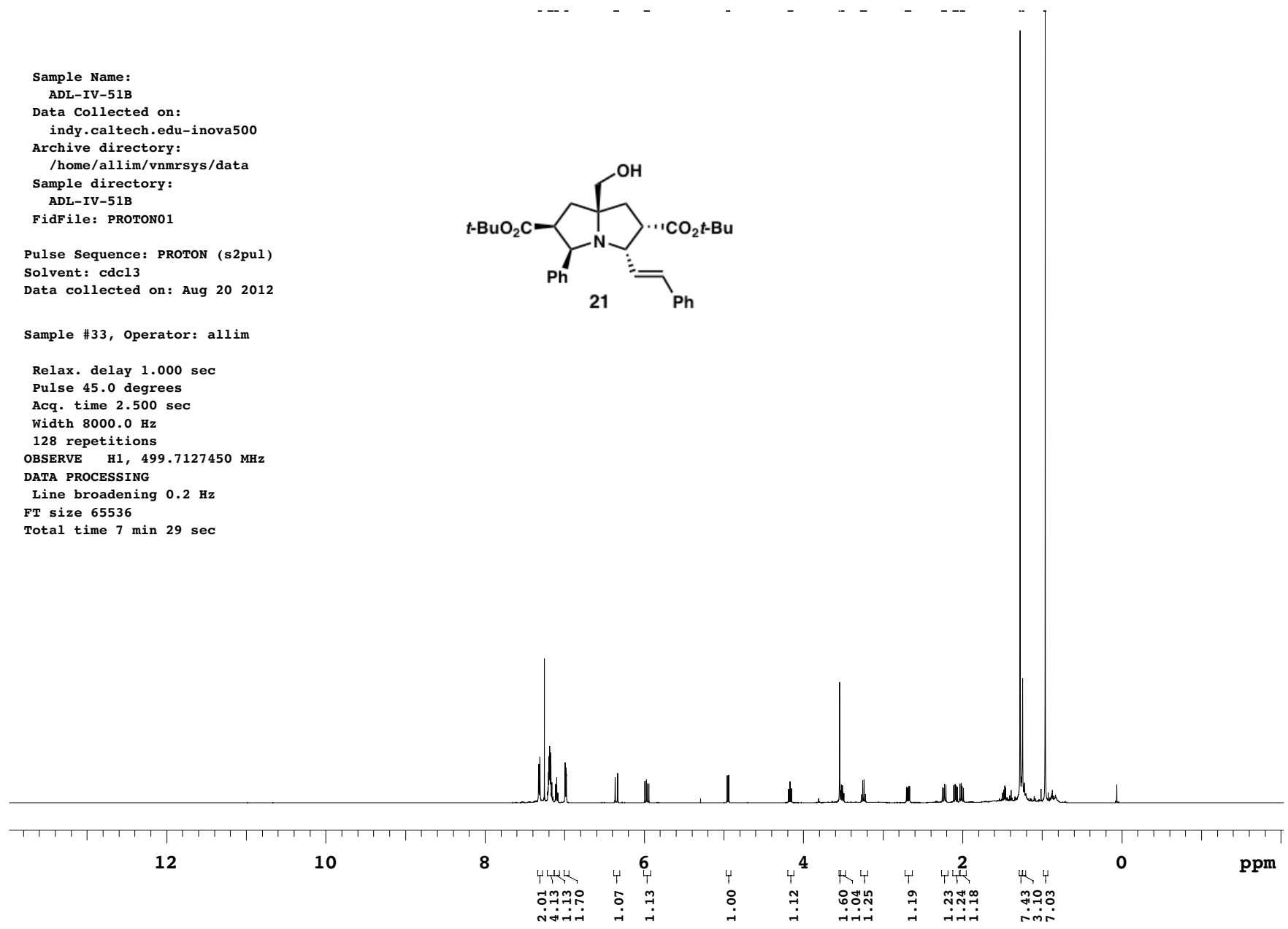
Sample Name:  
 ADL-IV-51B  
 Data Collected on:  
 indy.caltech.edu-inova500  
 Archive directory:  
 /home/allim/vnmrsys/data  
 Sample directory:  
 ADL-IV-51B  
 FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
 Solvent: cdcl3  
 Data collected on: Aug 20 2012

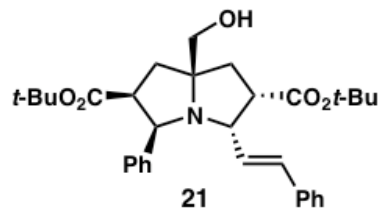


Sample #33, Operator: allim

Relax. delay 1.000 sec  
 Pulse 45.0 degrees  
 Acq. time 2.500 sec  
 Width 8000.0 Hz  
 128 repetitions  
 OBSERVE H1, 499.7127450 MHz  
 DATA PROCESSING  
 Line broadening 0.2 Hz  
 FT size 65536  
 Total time 7 min 29 sec



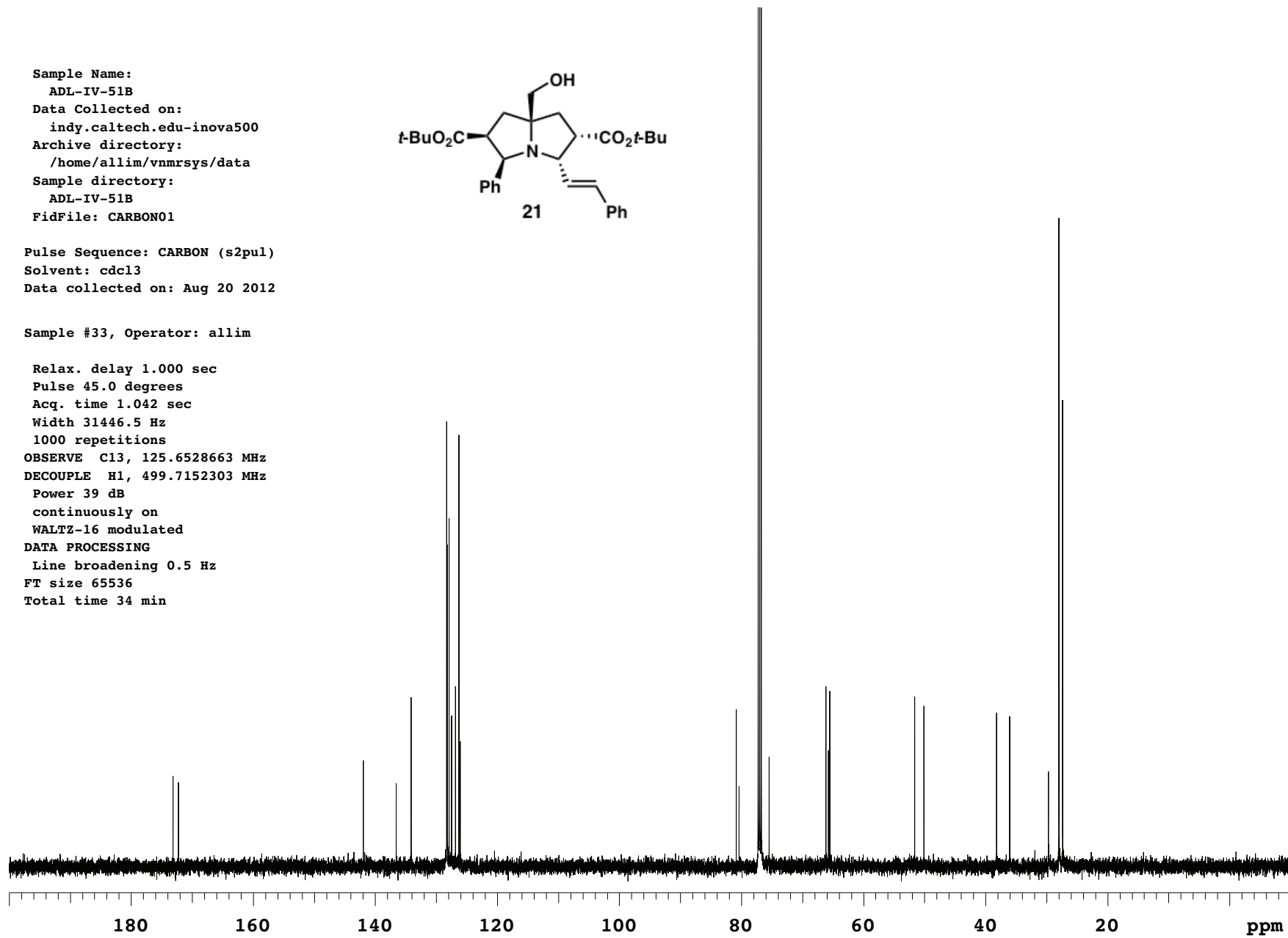
Sample Name:  
ADL-IV-51B  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-IV-51B  
FidFile: CARBON01



Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Aug 20 2012

Sample #33, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
1000 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 34 min



JAC10-83 CD3CN indy

Sample Name:

JAC10-83

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcodelli/vnmrsys/data

Sample directory:

JAC10-83

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cd3cn

Data collected on: Aug 26 2012

Sample #17, Operator: jcodelli

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

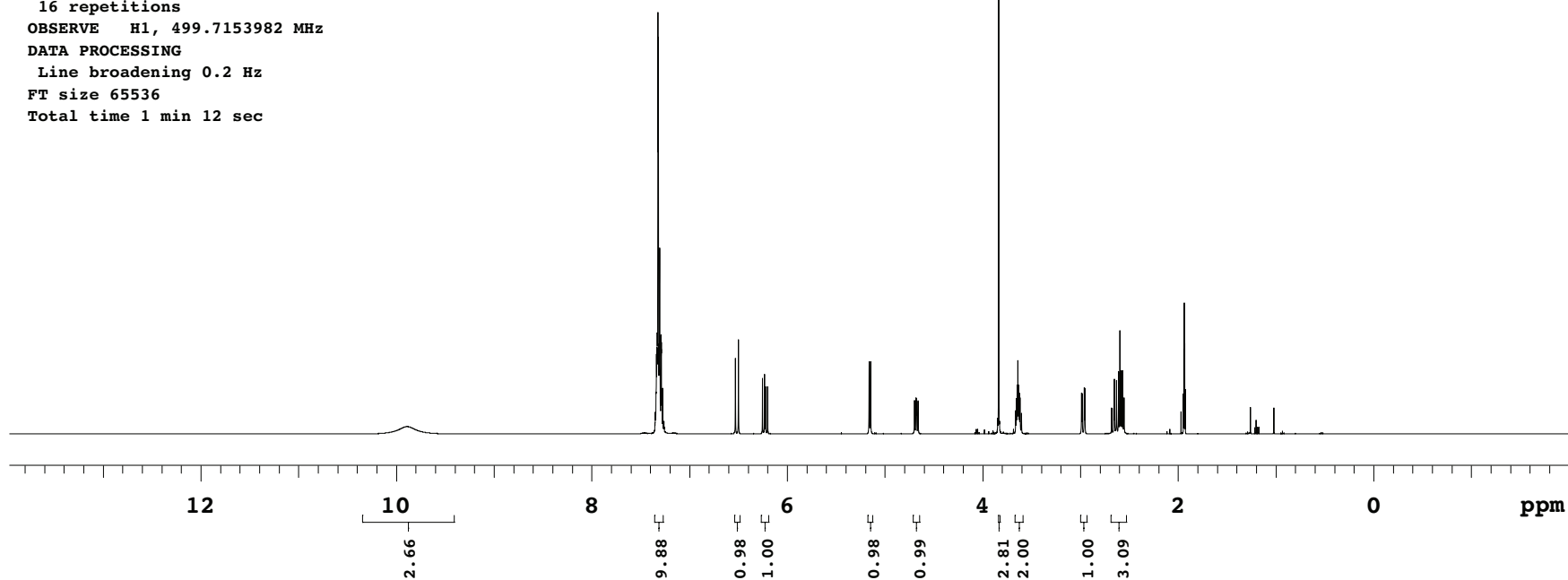
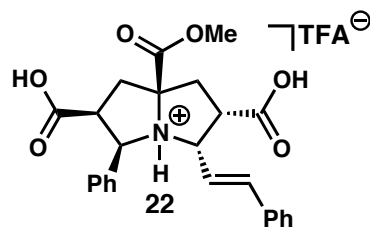
OBSERVE H1, 499.7153982 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 1 min 12 sec





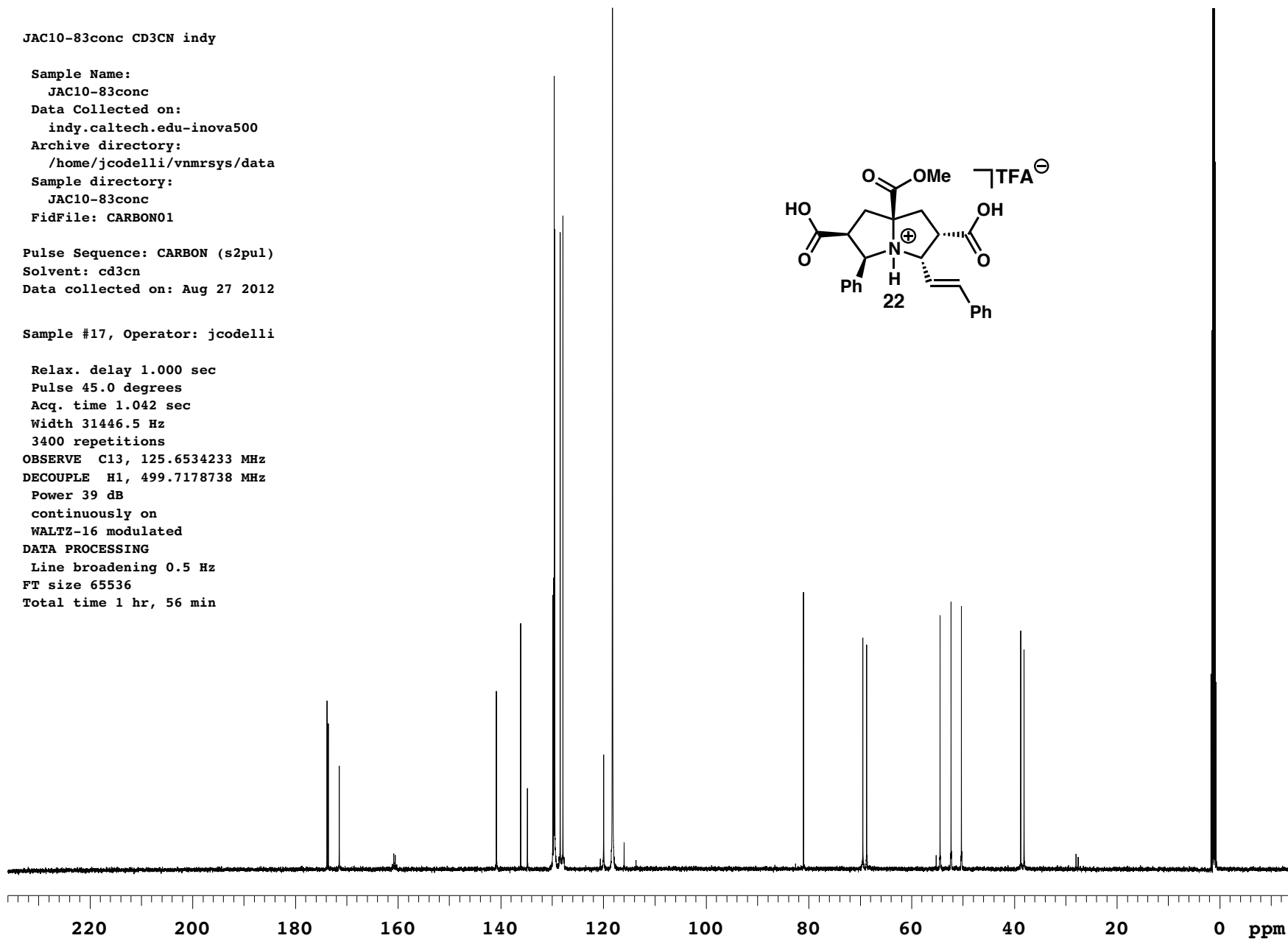
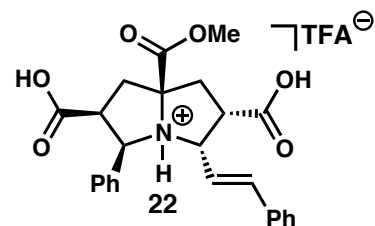
JAC10-83conc CD3CN indy

Sample Name:  
JAC10-83conc  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/jcodelli/vnmrsys/data  
Sample directory:  
JAC10-83conc  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cd3cn  
Data collected on: Aug 27 2012

Sample #17, Operator: jcodelli

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
3400 repetitions  
OBSERVE C13, 125.6534233 MHz  
DECOUPLE H1, 499.7178738 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 1 hr, 56 min



JAC10-167 CDCl3 indy

Sample Name:

JAC10-167

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcodelli/vnmrsys/data

Sample directory:

JAC10-167

FidFile: PROTON02

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Oct 22 2012

Sample #35, Operator: jcodelli

Relax. delay 5.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

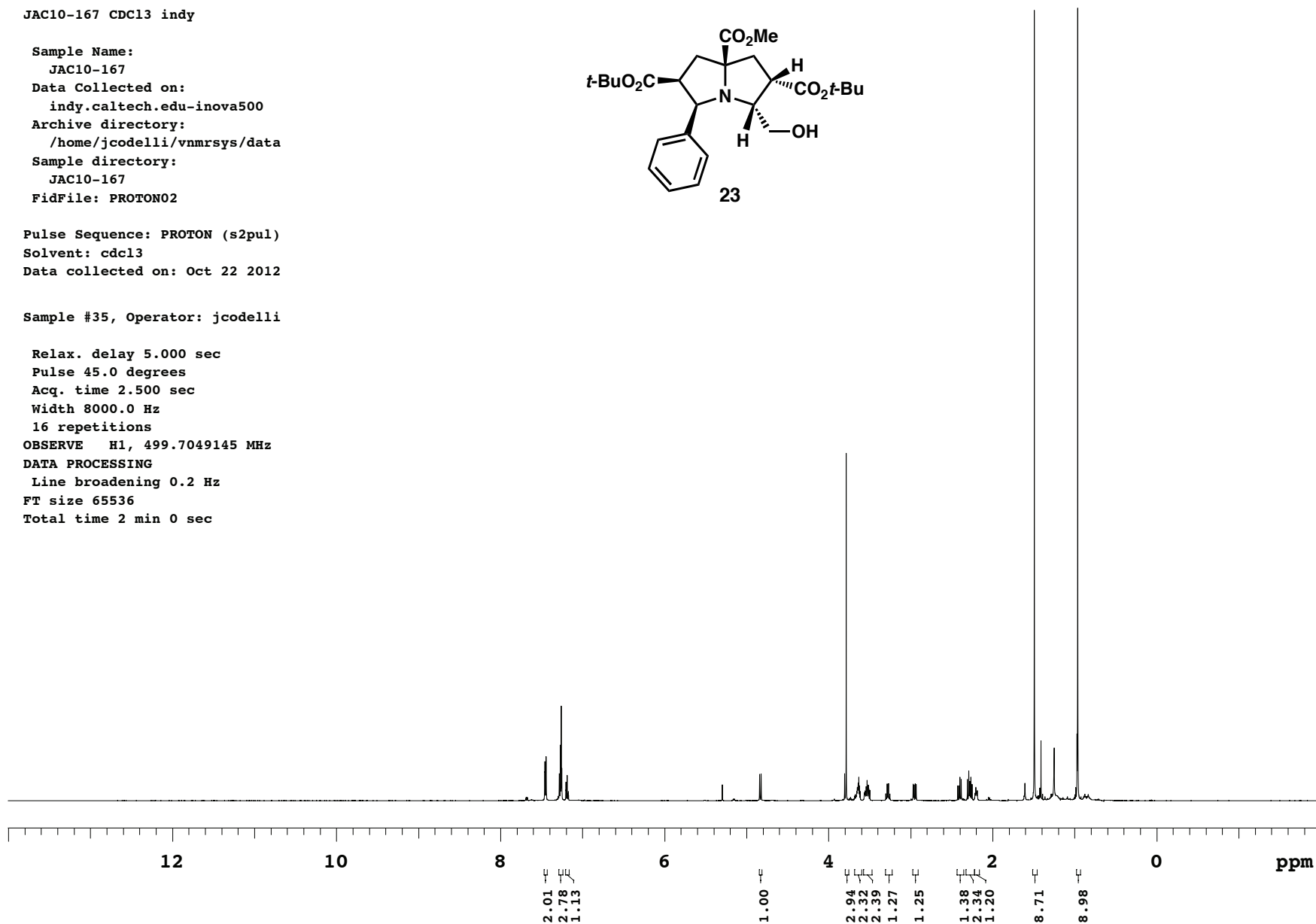
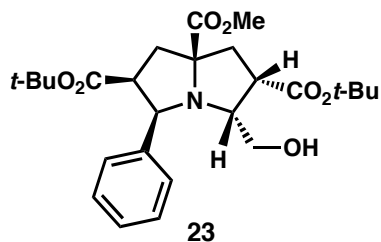
OBSERVE H1, 499.7049145 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 2 min 0 sec



JAC10-167 CDCl3 indy

Sample Name:

JAC10-167

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcodelli/vnmrsys/data

Sample directory:

JAC10-167

FidFile: CARBON02

Pulse Sequence: CARBON (s2pul)

Solvent: cdcl3

Data collected on: Oct 23 2012

Sample #8, Operator: jcodelli

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.042 sec

Width 31446.5 Hz

256 repetitions

OBSERVE C13, 125.6509007 MHz

DECOUPLE H1, 499.7074131 MHz

Power 39 dB

continuously on

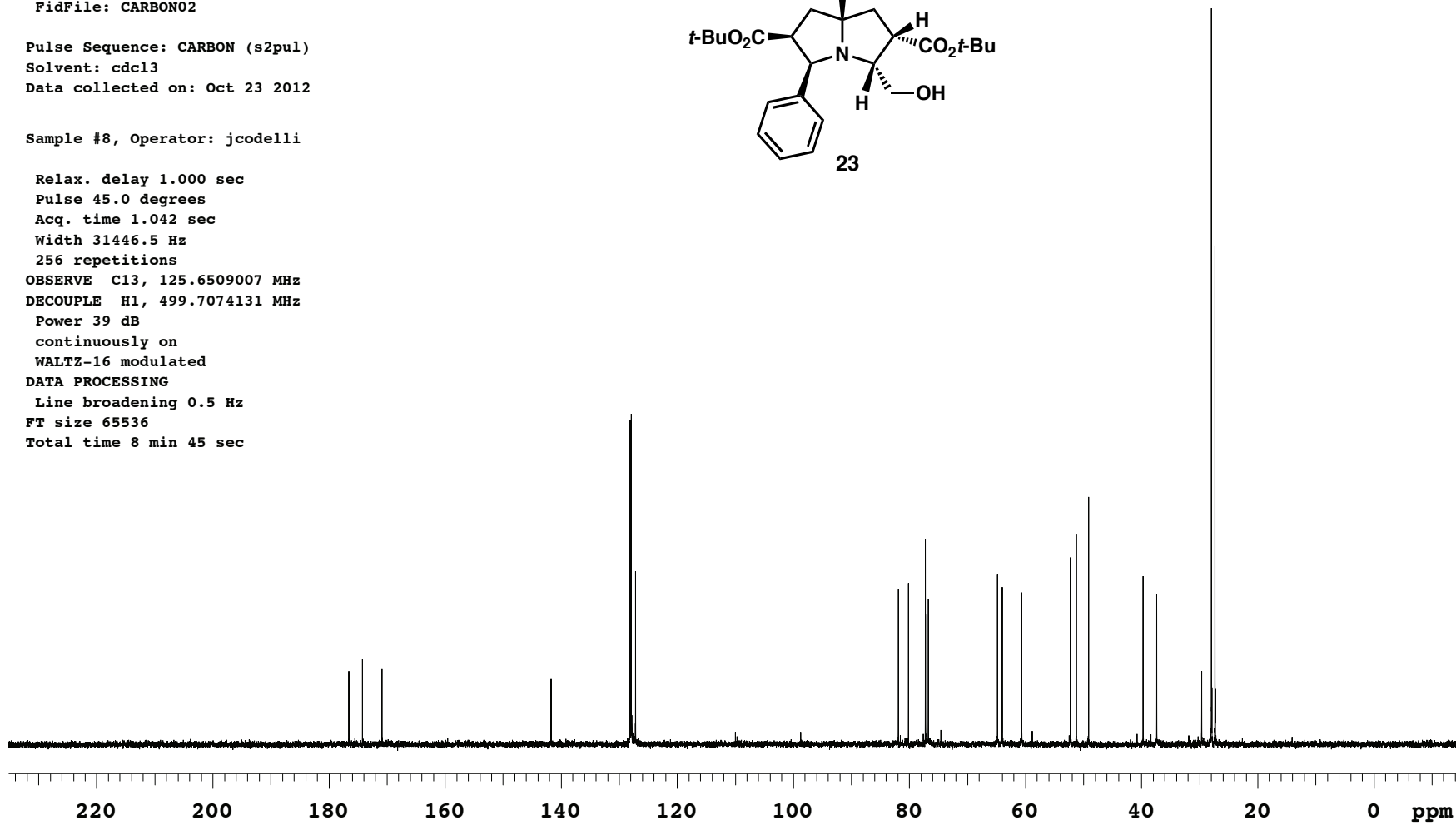
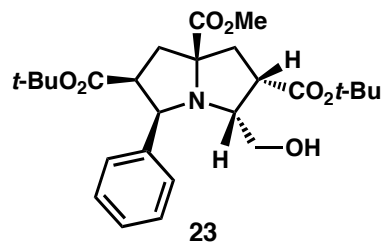
WALTZ-16 modulated

DATA PROCESSING

Line broadening 0.5 Hz

FT size 65536

Total time 8 min 45 sec



JAC10-91 acetone-d6 indy

Sample Name:

JAC10-91

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/jcodelli/vnmrsys/data

Sample directory:

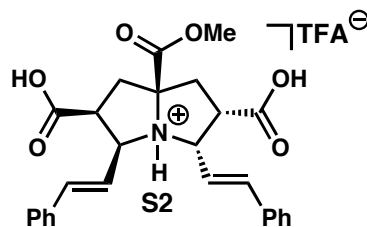
JAC10-91

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: acetone

Data collected on: Aug 30 2012



Sample #14, Operator: jcodelli

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

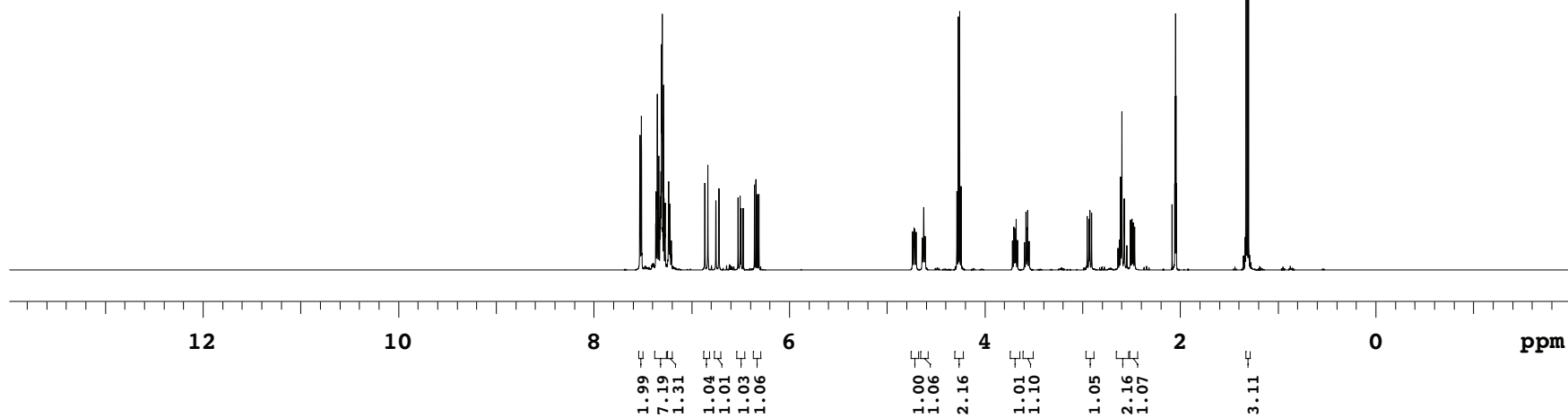
OBSERVE H1, 499.7153377 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 1 min 12 sec



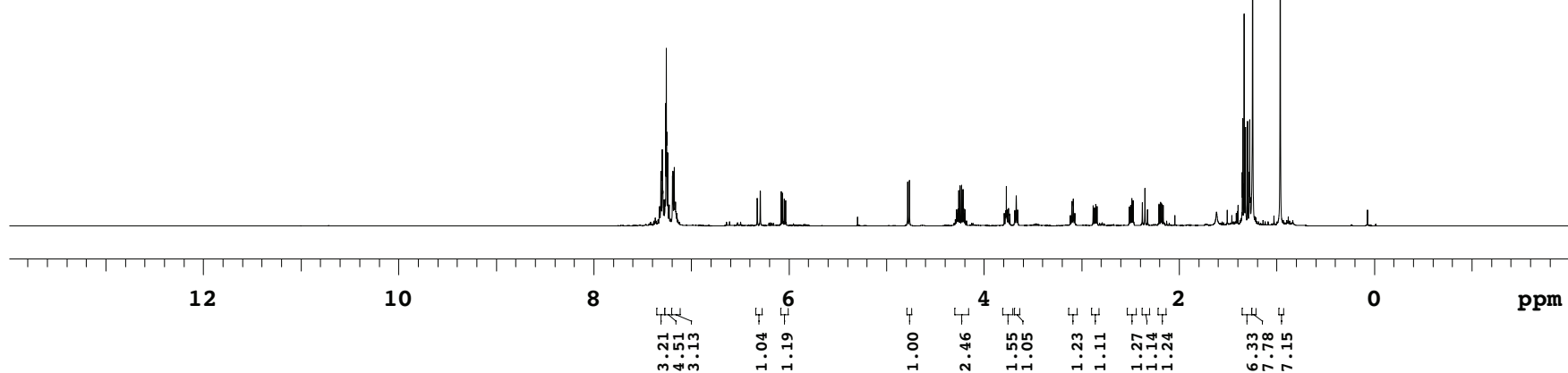
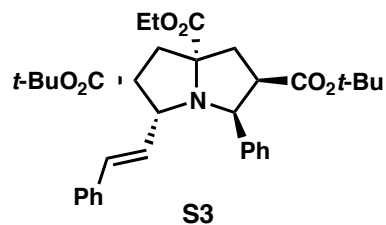


Sample Name:  
ADL-III-301-1D-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-301-1D-1  
FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 25 2012

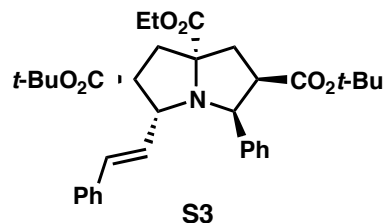
Sample #30, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7127400 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 0 min 28 sec



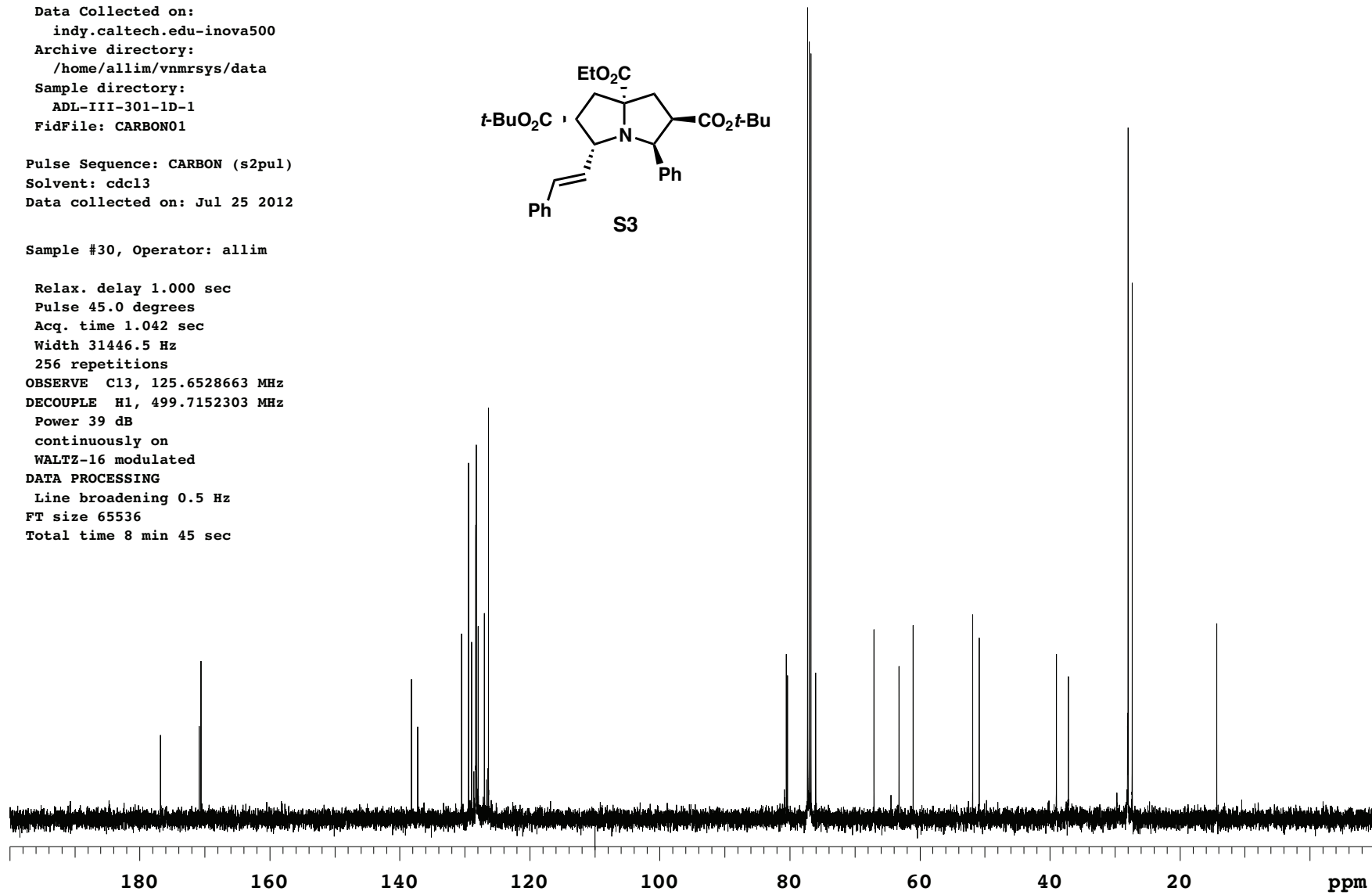
Sample Name:  
ADL-III-301-1D-1  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-301-1D-1  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 25 2012



Sample #30, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
256 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 8 min 45 sec

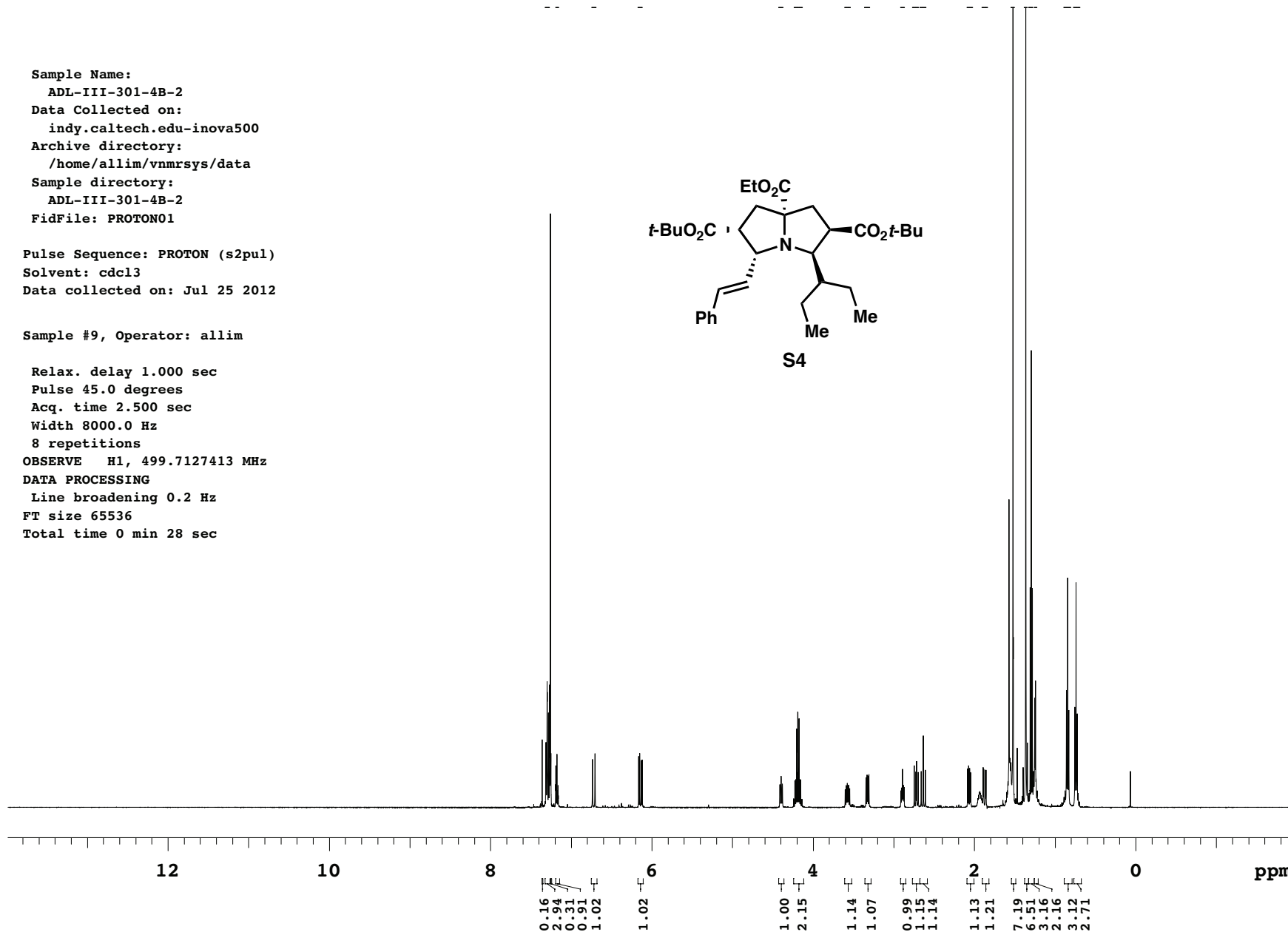
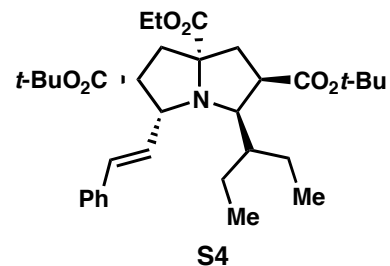


Sample Name:  
 ADL-III-301-4B-2  
 Data Collected on:  
 indy.caltech.edu-inova500  
 Archive directory:  
 /home/allim/vnmrsys/data  
 Sample directory:  
 ADL-III-301-4B-2  
 FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)  
 Solvent: cdcl3  
 Data collected on: Jul 25 2012

Sample #9, Operator: allim

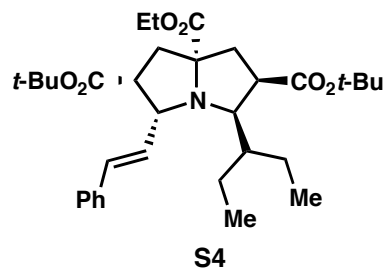
Relax. delay 1.000 sec  
 Pulse 45.0 degrees  
 Acq. time 2.500 sec  
 Width 8000.0 Hz  
 8 repetitions  
 OBSERVE H1, 499.7127413 MHz  
 DATA PROCESSING  
 Line broadening 0.2 Hz  
 FT size 65536  
 Total time 0 min 28 sec





Sample Name:  
ADL-III-301-4B-2  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/allim/vnmrsys/data  
Sample directory:  
ADL-III-301-4B-2  
FidFile: CARBON01

Pulse Sequence: CARBON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 25 2012



Sample #9, Operator: allim

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.042 sec  
Width 31446.5 Hz  
1000 repetitions  
OBSERVE C13, 125.6528663 MHz  
DECOUPLE H1, 499.7152303 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 0.5 Hz  
FT size 65536  
Total time 34 min

