

**Pinene-driven iminodiacetic acid (PIDA):
A powerful ligand for stereoselective synthesis and iterative cross-coupling of Csp³ boronate
building blocks**

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Supporting Information

Part B

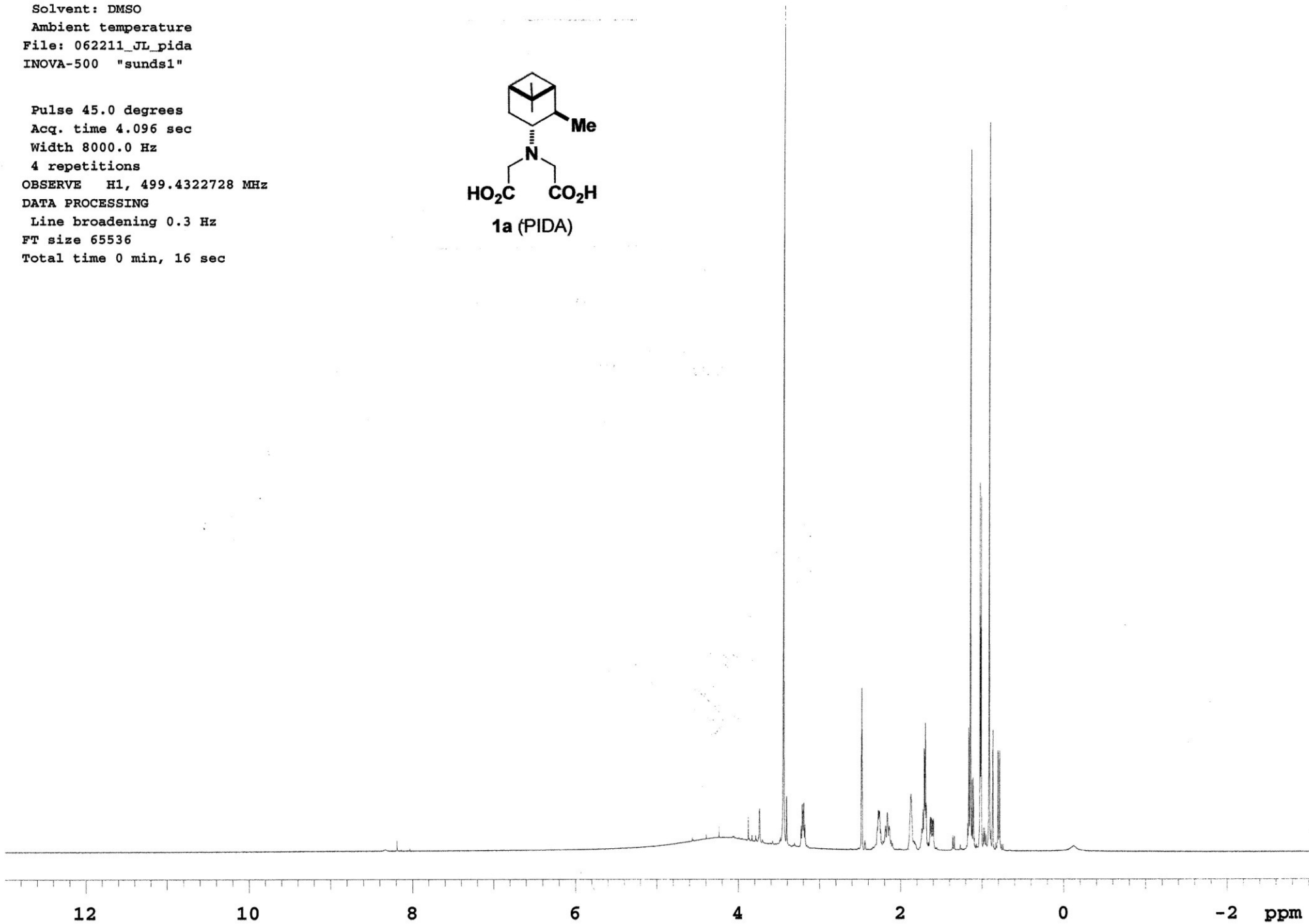
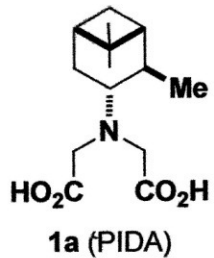
IV. NMR Spectra

S54

Pulse Sequence: s2pul

Solvent: DMSO
Ambient temperature
File: 062211_JL_pida
INOVA-500 "sunds1"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
4 repetitions
OBSERVE H1, 499.4322728 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 16 sec



Pulse Sequence: s2pul

Solvent: DMSO

Ambient temperature

User: 1-14-87

INOVA-500 "vxxr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

3056 repetitions

OBSERVE C13, 125.5823132 MHz

DECOUPLE H1, 499.4339361 MHz

Power 48 dB

continuously on

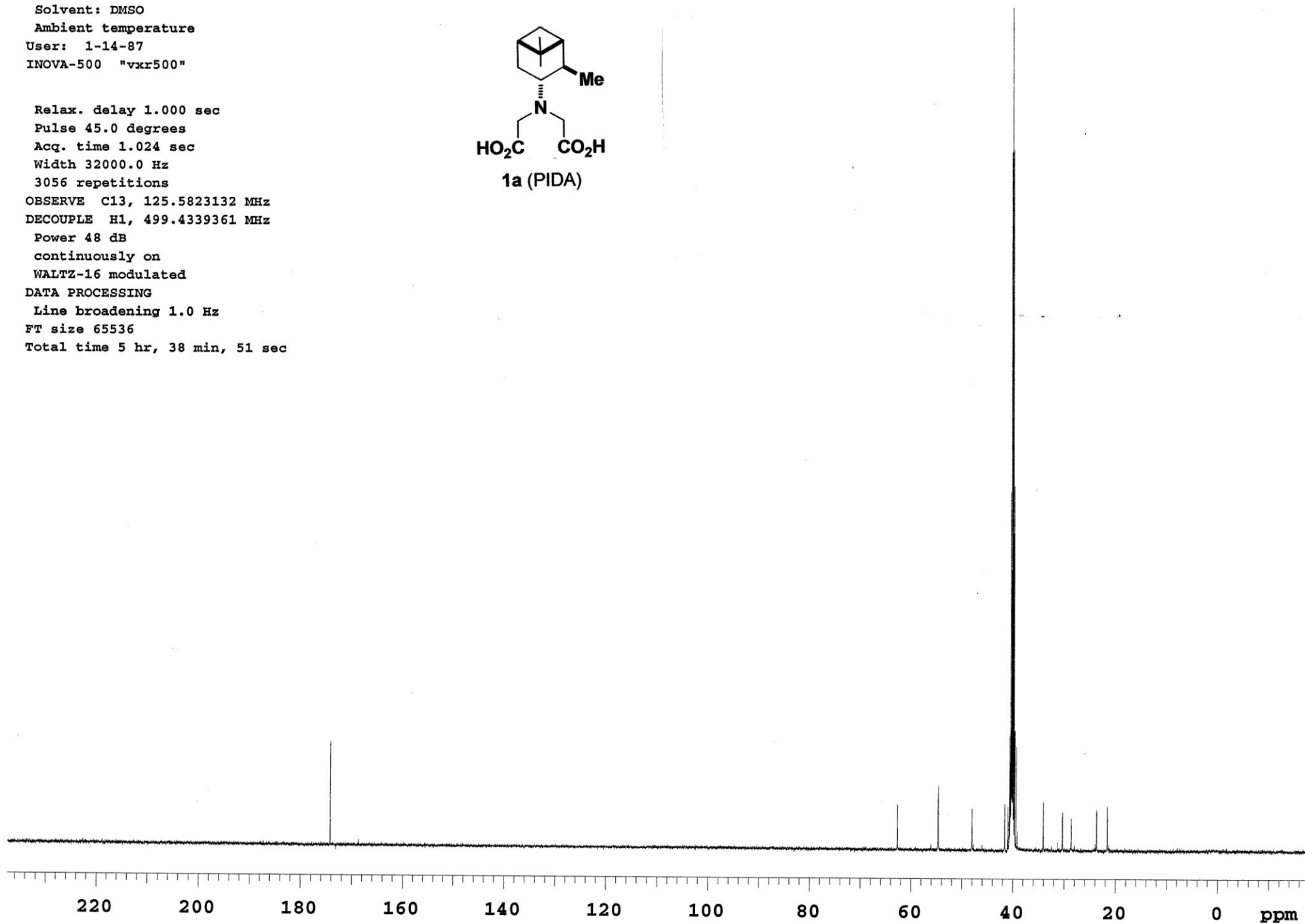
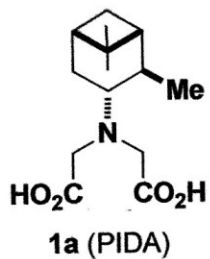
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

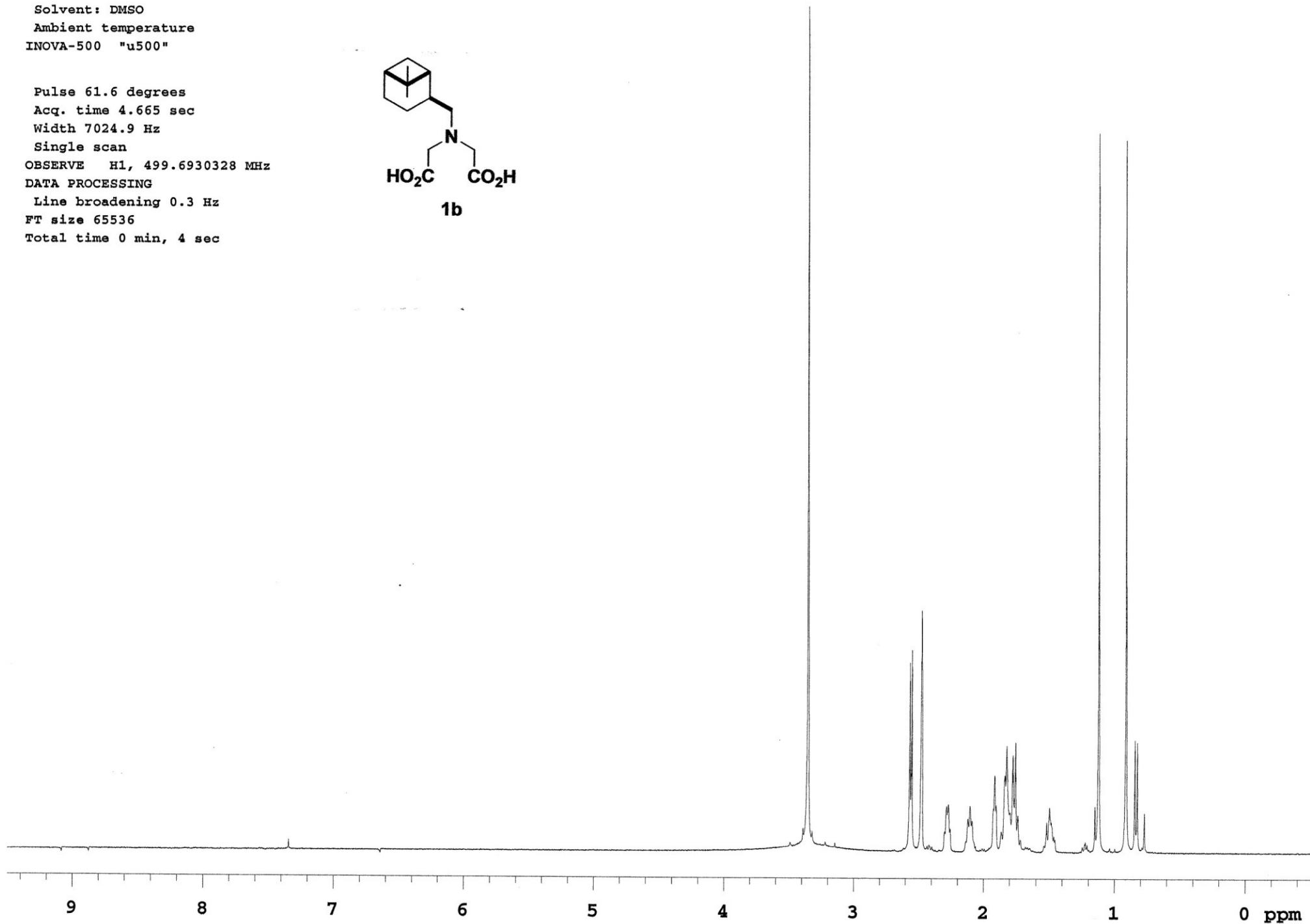
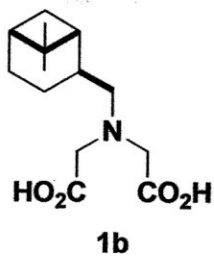
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: DMSO
Ambient temperature
INOVA-500 "u500"

Pulse 61.6 degrees
Acq. time 4.665 sec
Width 7024.9 Hz
Single scan
OBSERVE H1, 499.6930328 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 4 sec



Pulse Sequence: #2pul

Solvent: DMSO

Ambient temperature

User: 1-14-87

INOVA-500 "vkr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

2992 repetitions

OBSERVE C13, 125.5824038 MHz

DECOUPLE H1, 499.4339361 MHz

Power 48 dB

continuously on

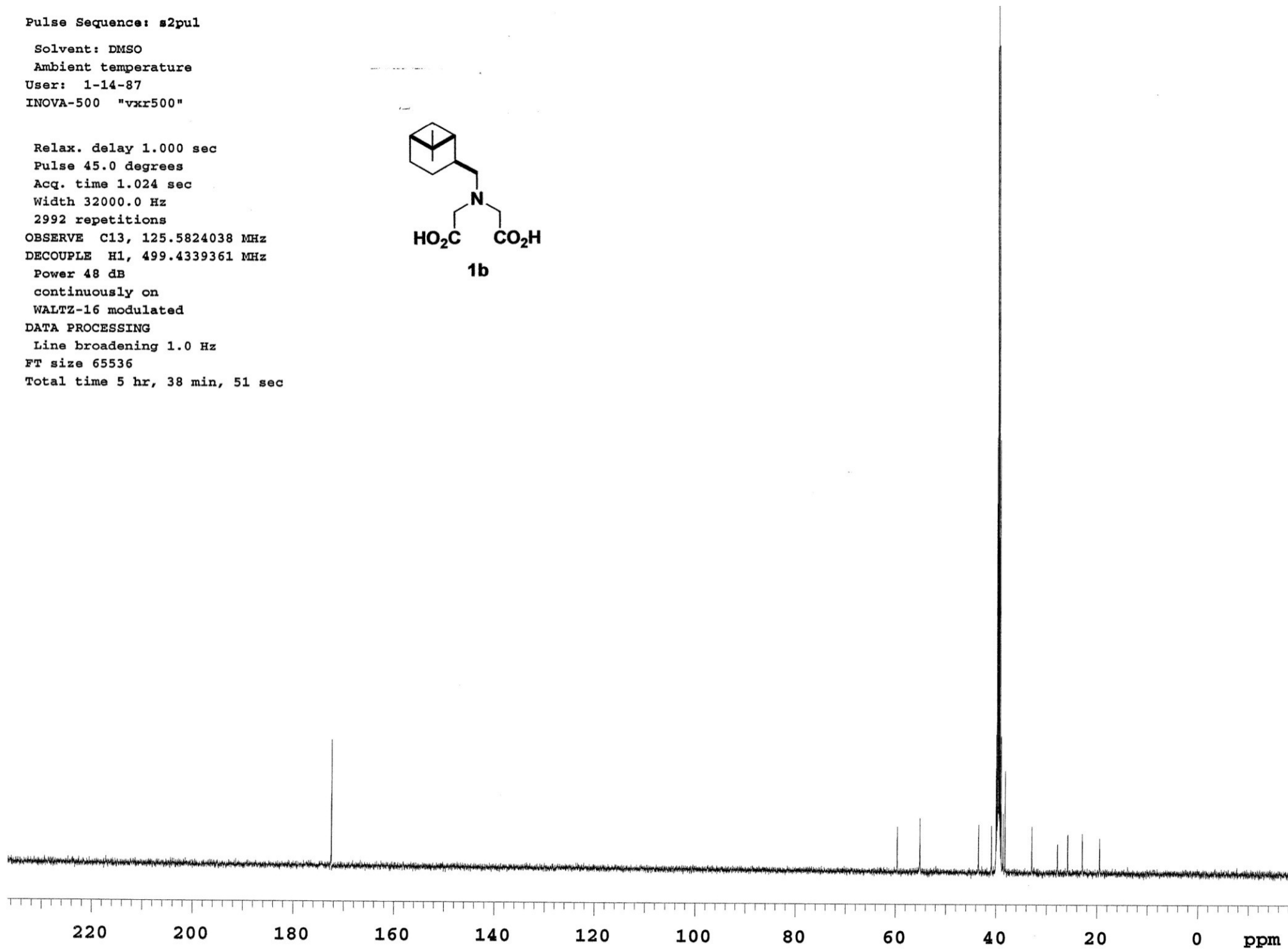
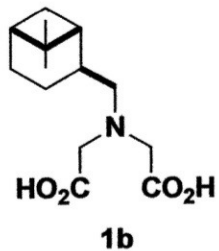
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: DMSO

Ambient temperature

INOVA-500 "vxr500"

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

8 repetitions

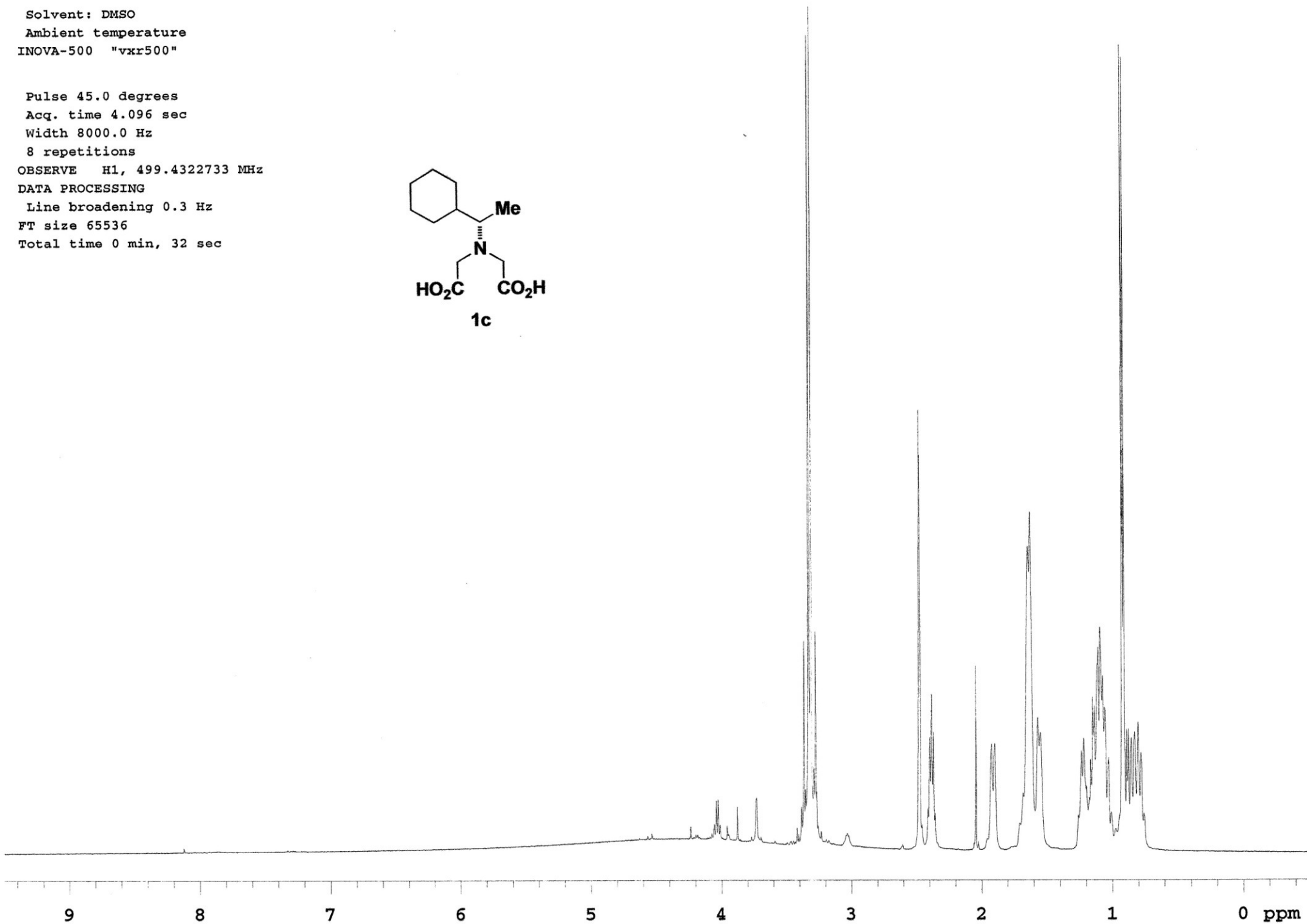
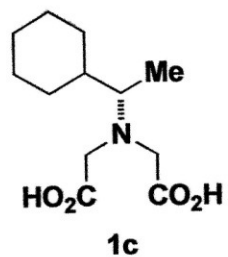
OBSERVE H1, 499.4322733 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

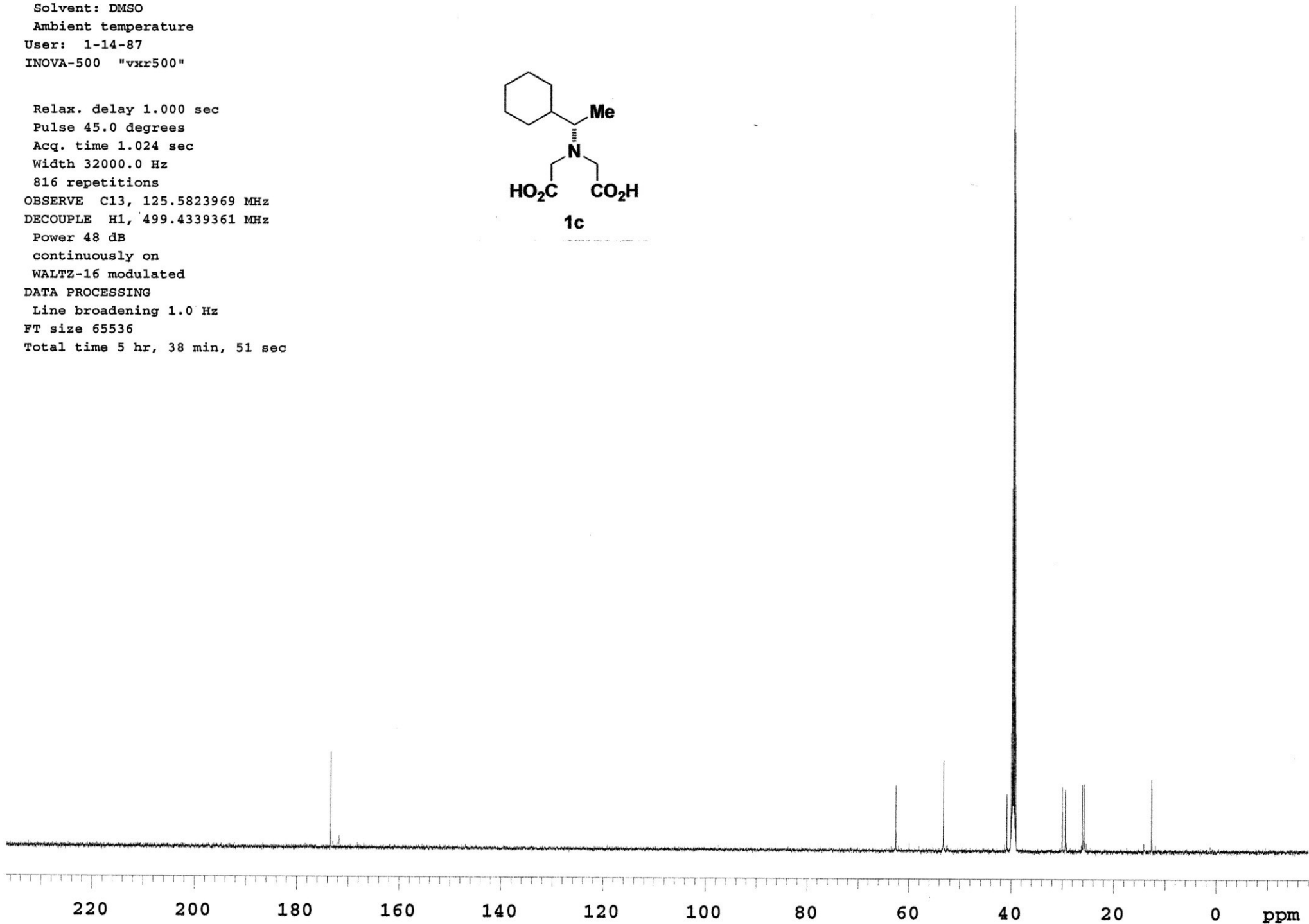
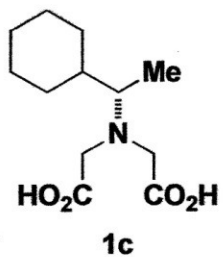
Total time 0 min, 32 sec



Pulse Sequence: s2pul

Solvent: DMSO
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"

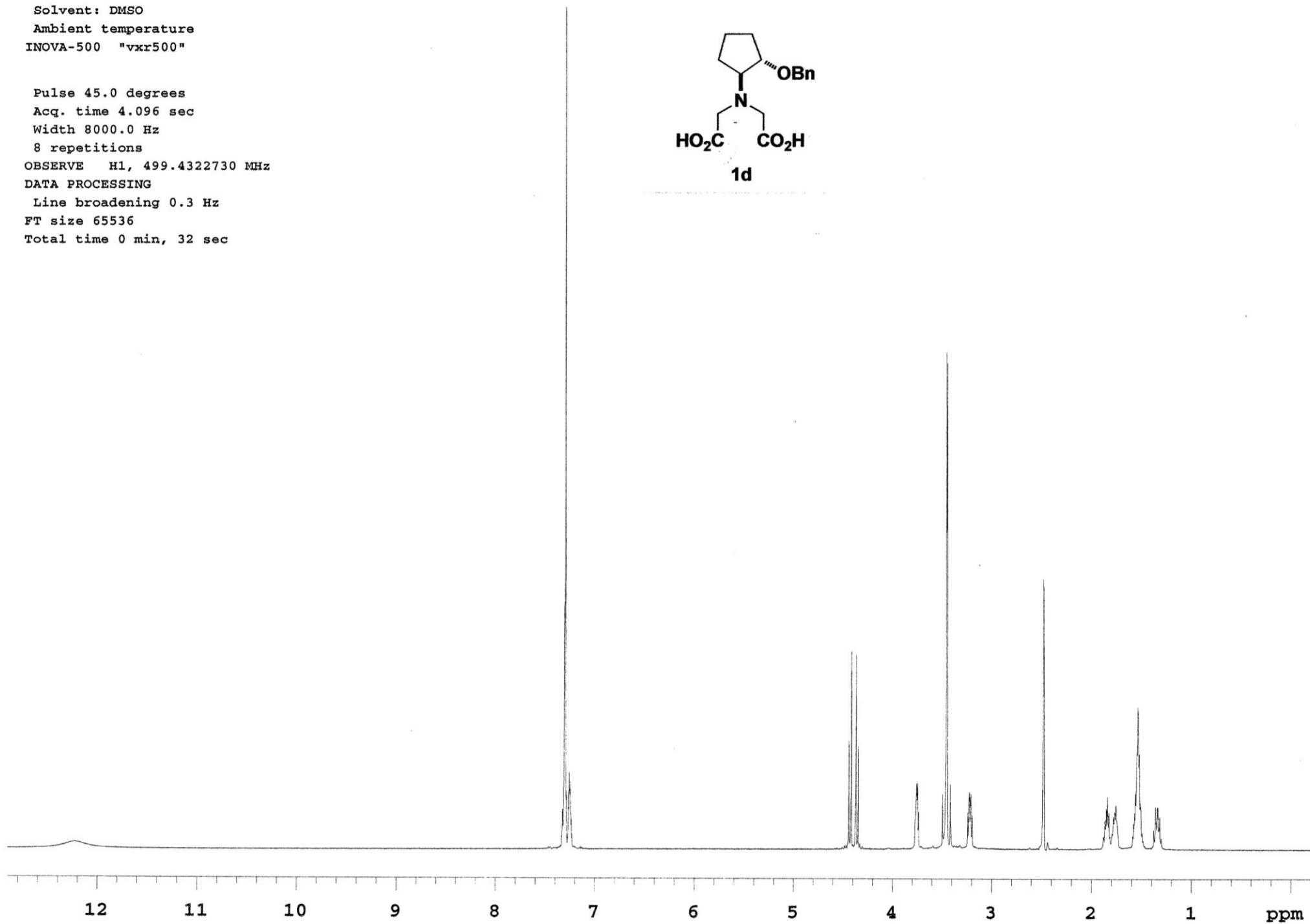
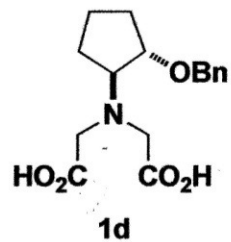
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
816 repetitions
OBSERVE C13, 125.5823969 MHz
DECOUPLE H1, 499.4339361 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: DMSO
Ambient temperature
INOVA-500 "vxr500"

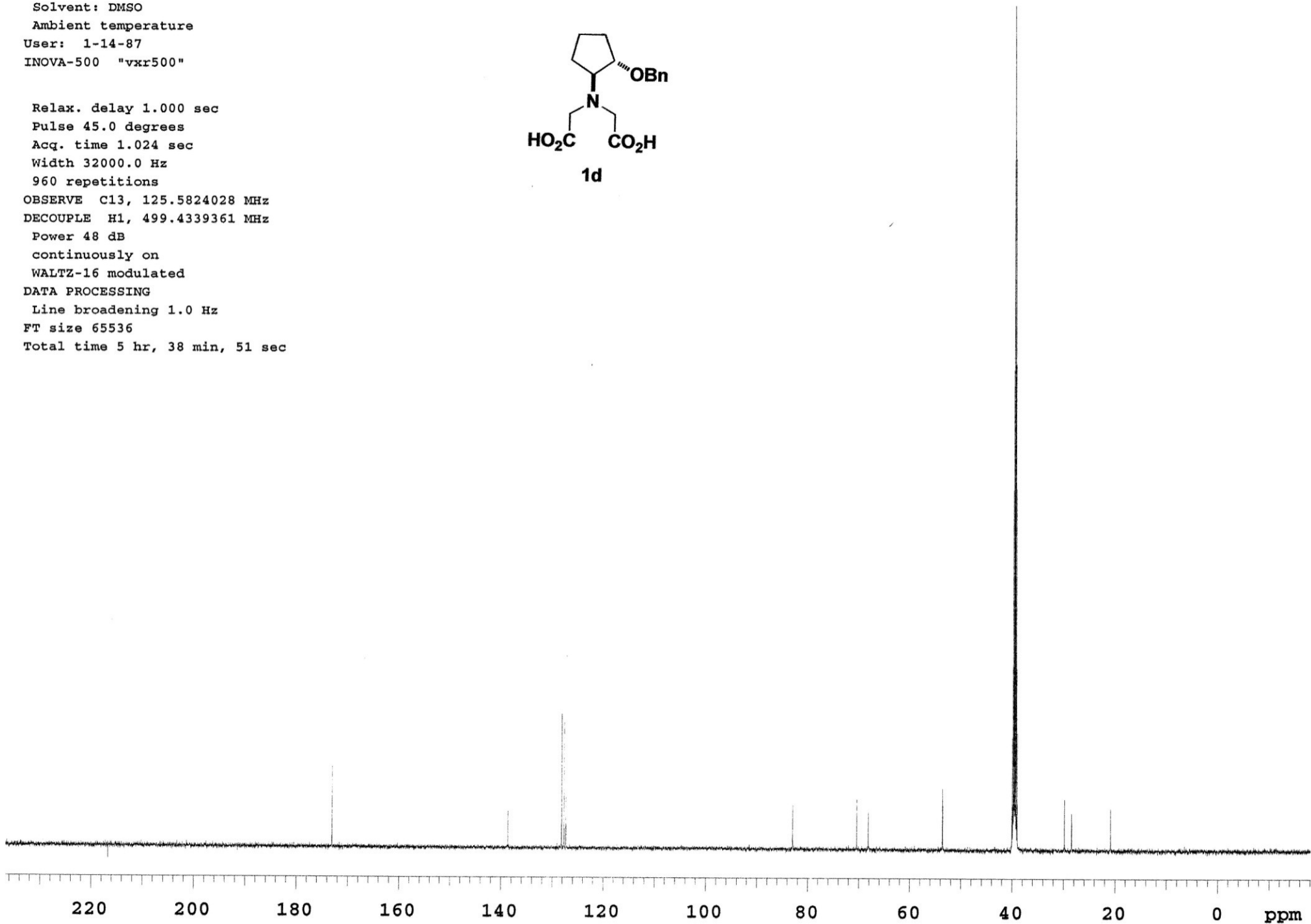
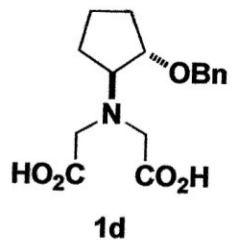
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 499.4322730 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 32 sec



Pulse Sequence: s2pul

Solvent: DMSO
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
960 repetitions
OBSERVE C13, 125.5824028 MHz
DECOUPLE H1, 499.4339361 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
INOVA-500 "vnr500"



Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
Single scan

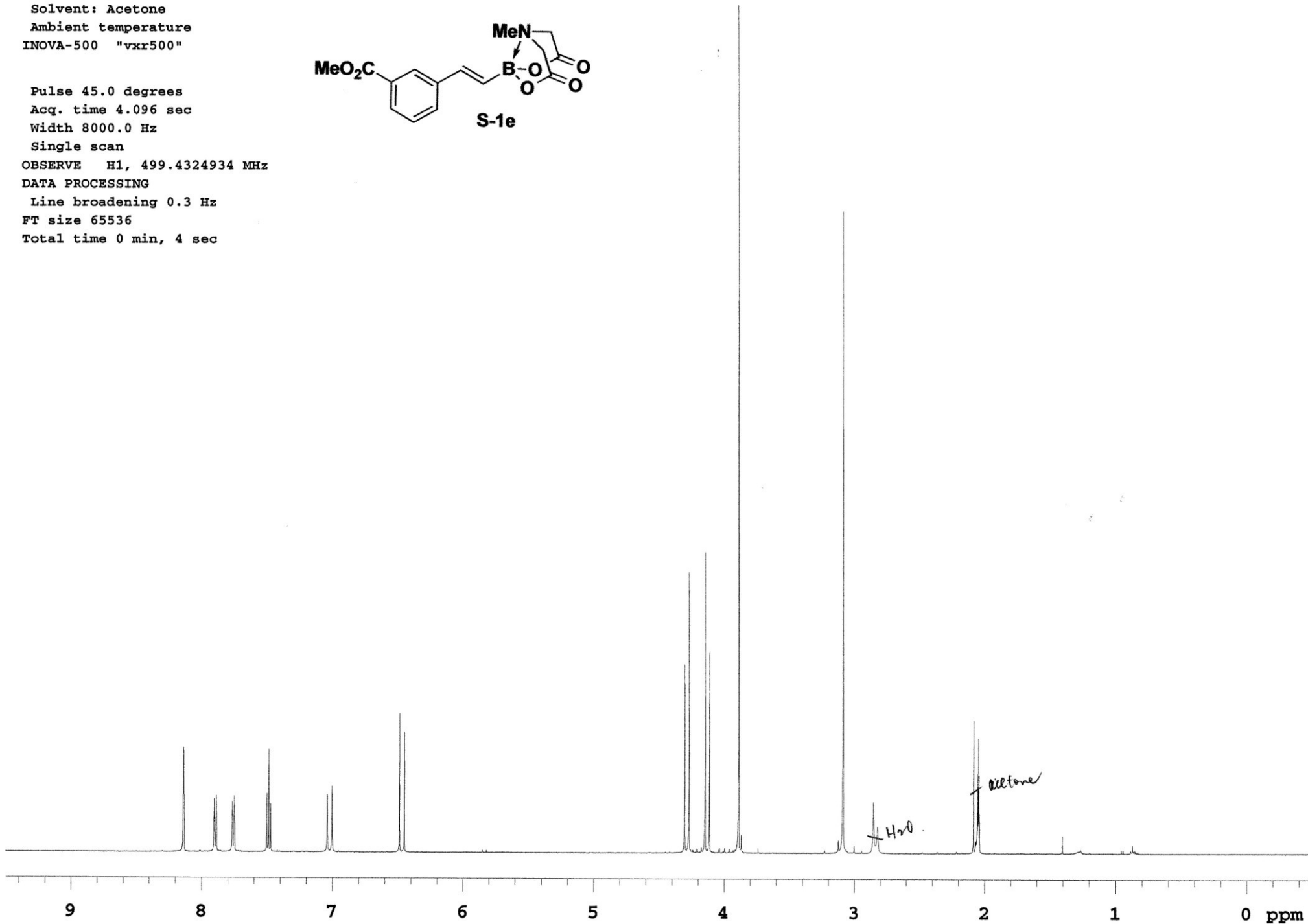
OBSERVE H1, 499.4324934 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 0 min, 4 sec

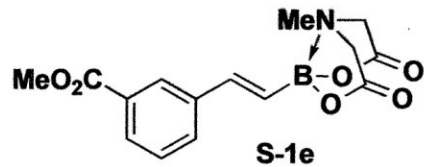


S-62

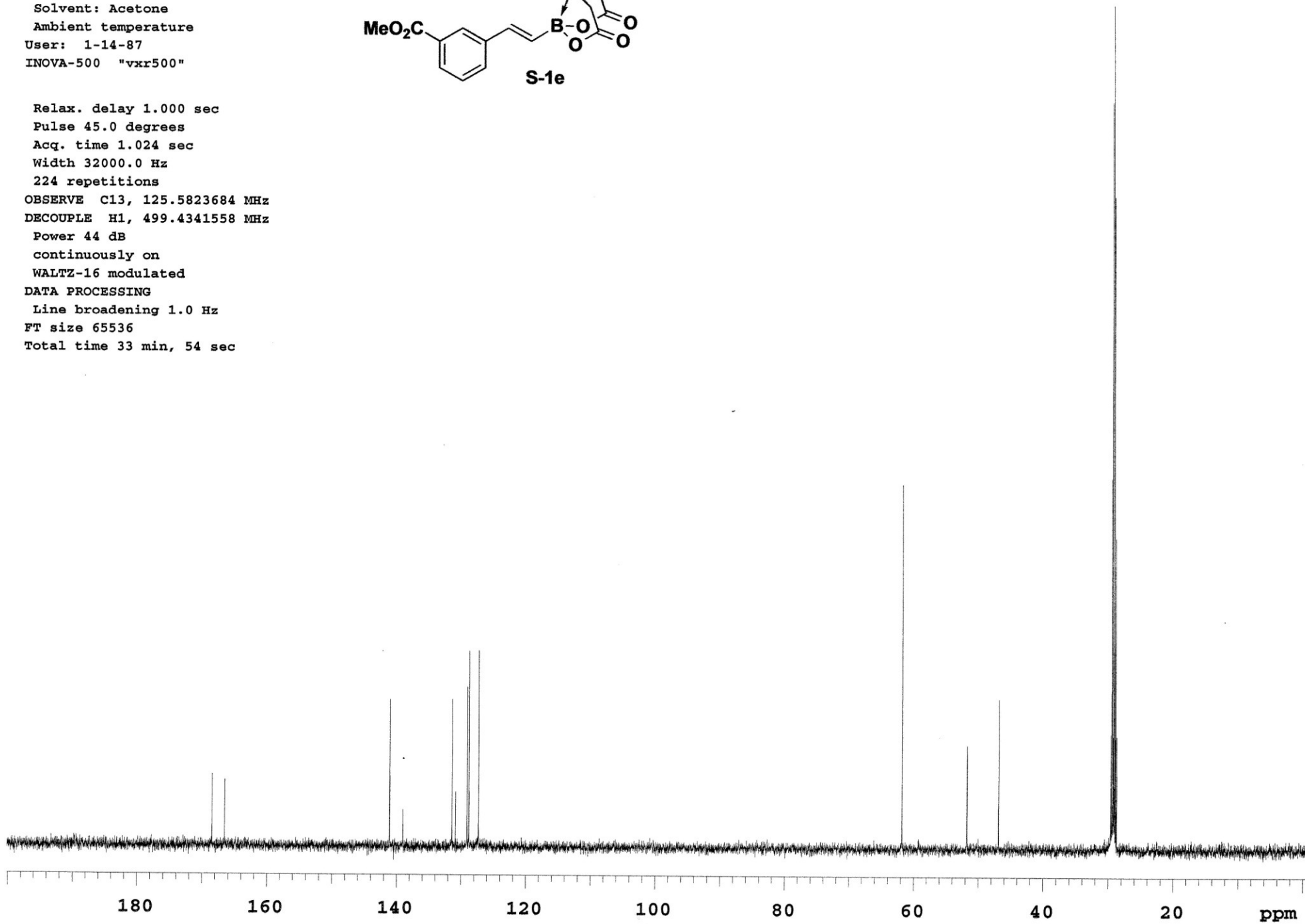
0 ppm

Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "vxr500"



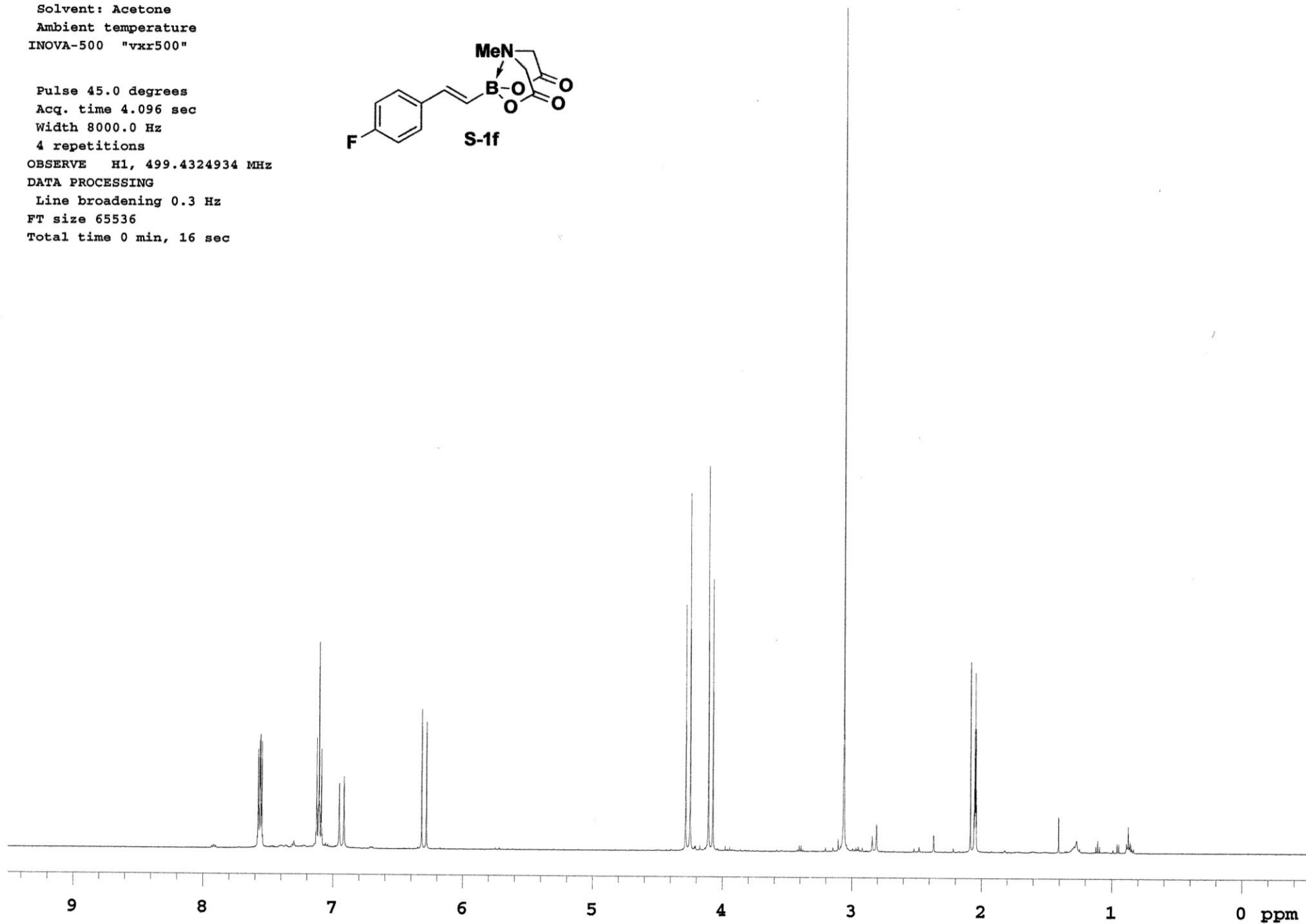
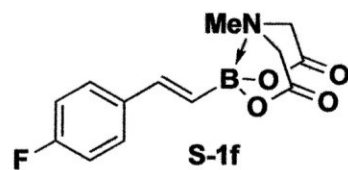
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
224 repetitions
OBSERVE C13, 125.5823684 MHz
DECOUPLE H1, 499.4341558 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul

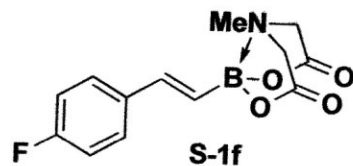
Solvent: Acetone
Ambient temperature
INNOVA-500 "vkr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
4 repetitions
OBSERVE H1, 499.4324934 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 16 sec

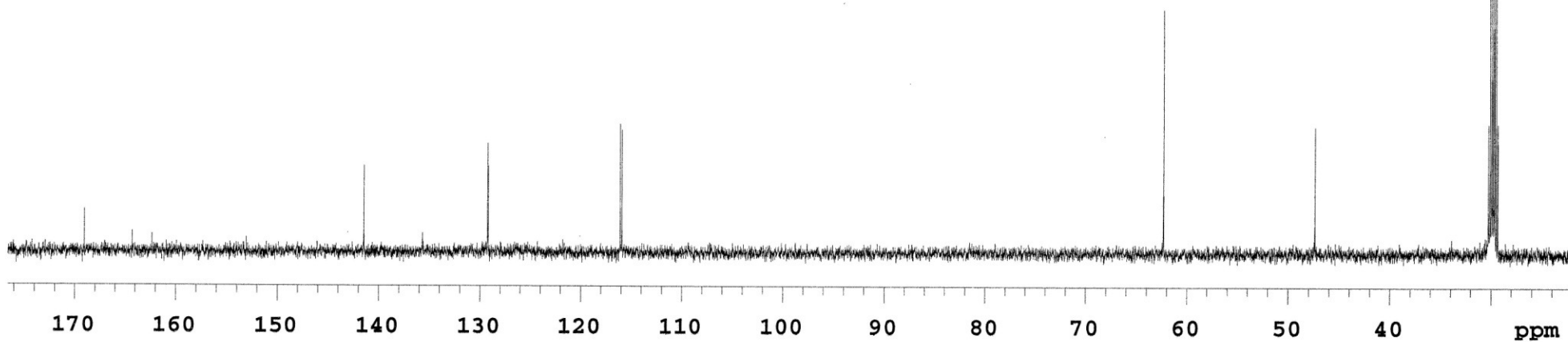


Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"



Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
208 repetitions
OBSERVE C13, 125.5822943 MHz
DECOUPLE H1, 499.4341558 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

File: 060811_JL_2a

INOVA-500 "sunds1"

Relax. delay 10.000 sec

Pulse 61.6 degrees

Acq. time 4.665 sec

Width 7024.9 Hz

Single scan

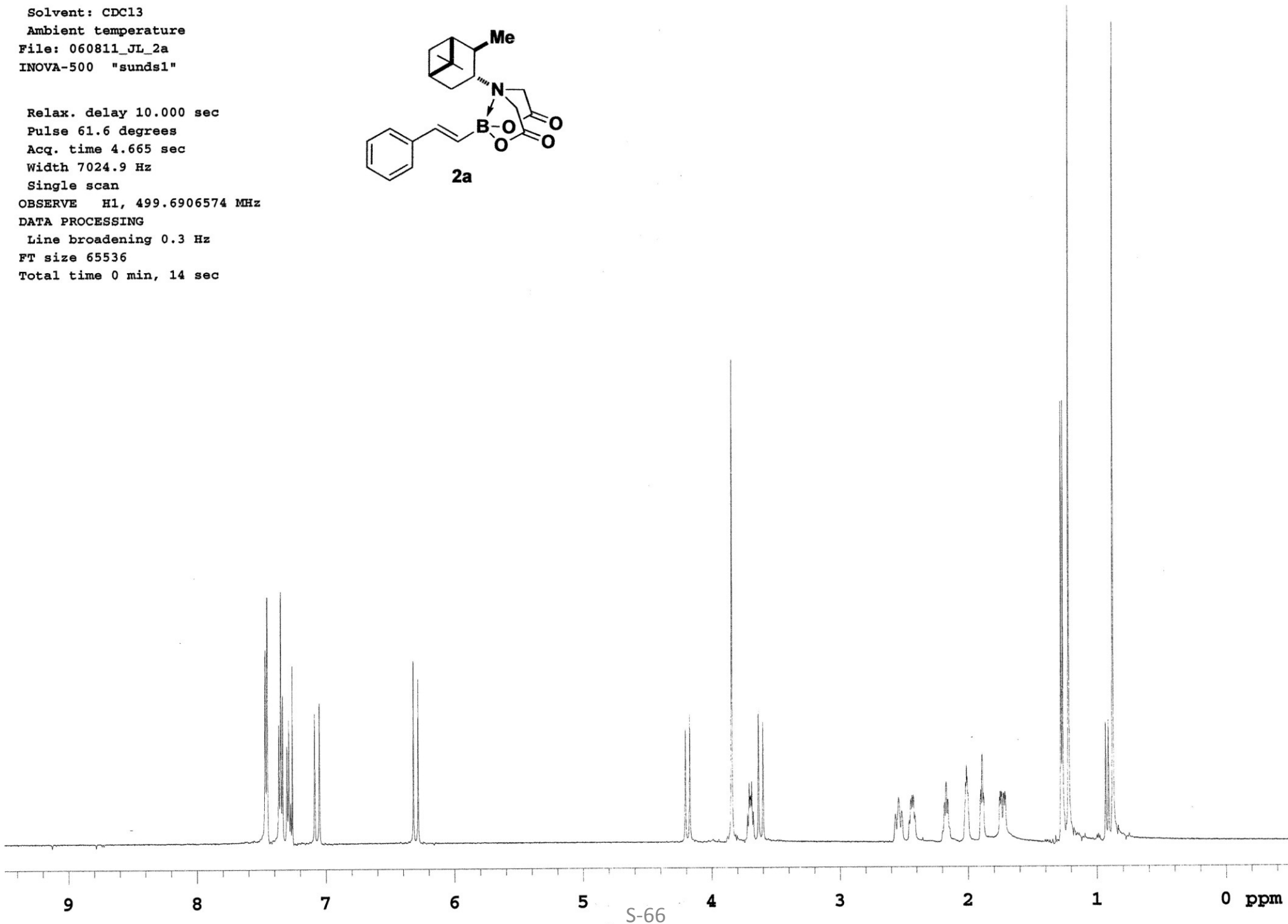
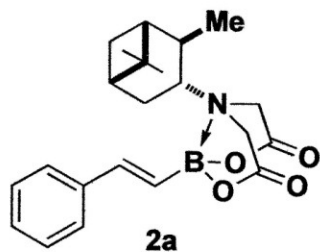
OBSERVE H1, 499.6906574 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 0 min, 14 sec



Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INNOVA-500 "u500"

Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

160 repetitions

OBSERVE C13, 125.6473184 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

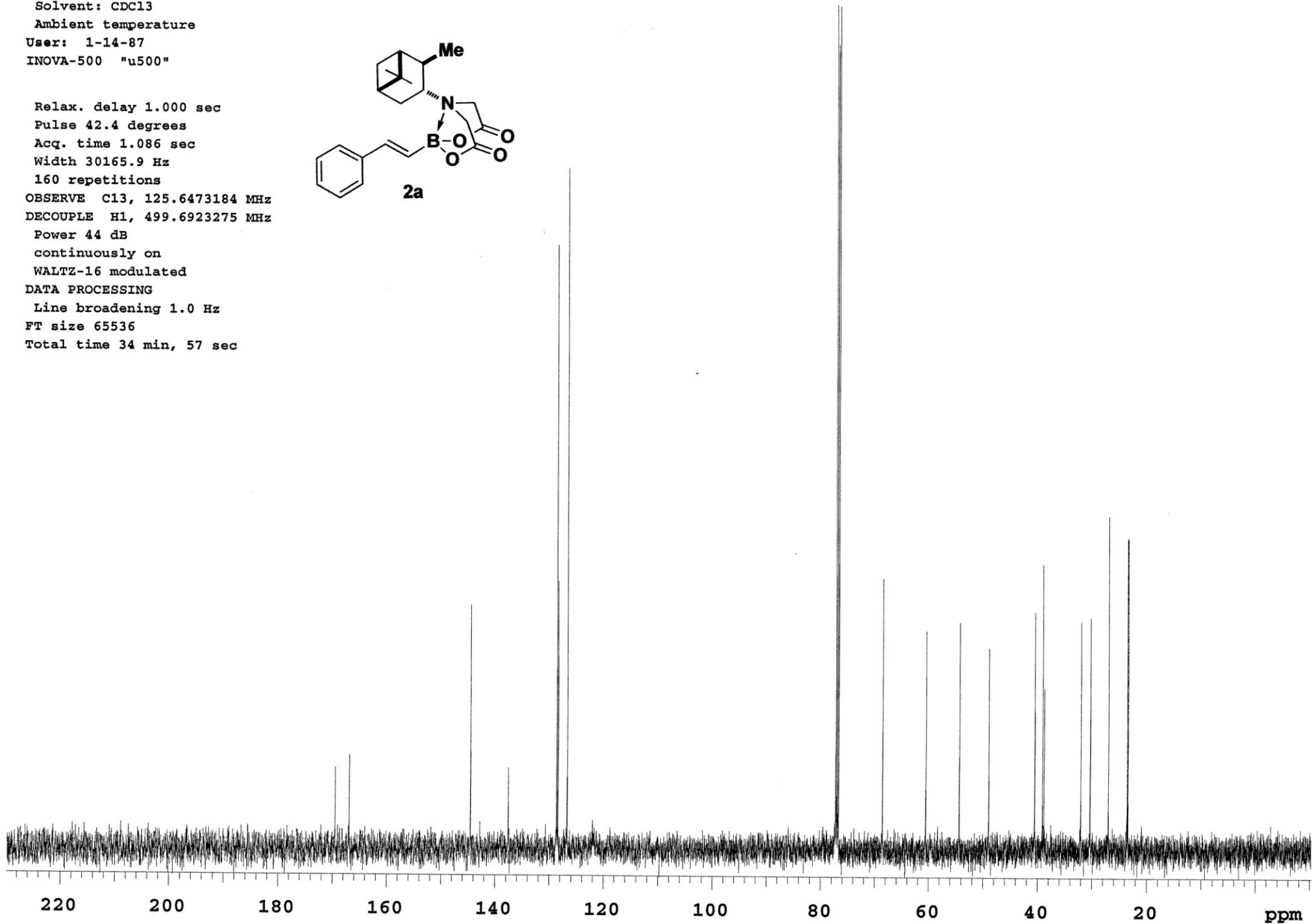
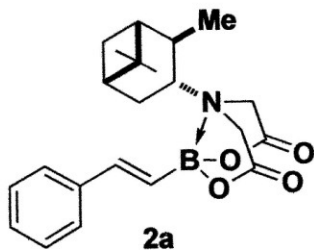
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 34 min, 57 sec



Pulse Sequence: s2pul

Solvent: Acetone

Ambient temperature

File: 011711_JL_199A

INOVA-500 "sunds1"

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

4 repetitions

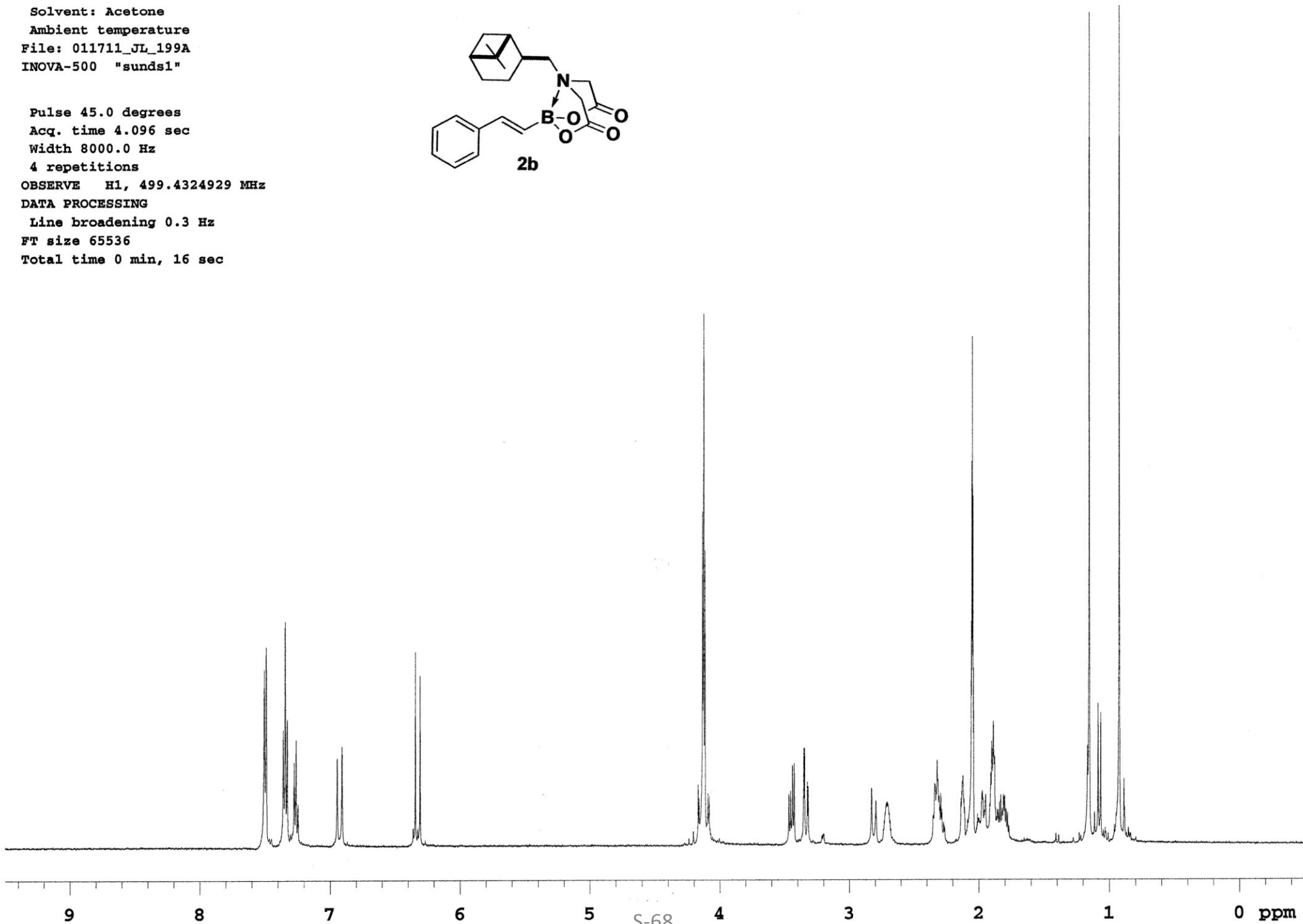
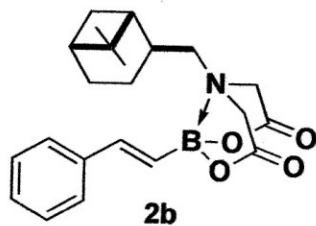
OBSERVE H1, 499.4324929 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

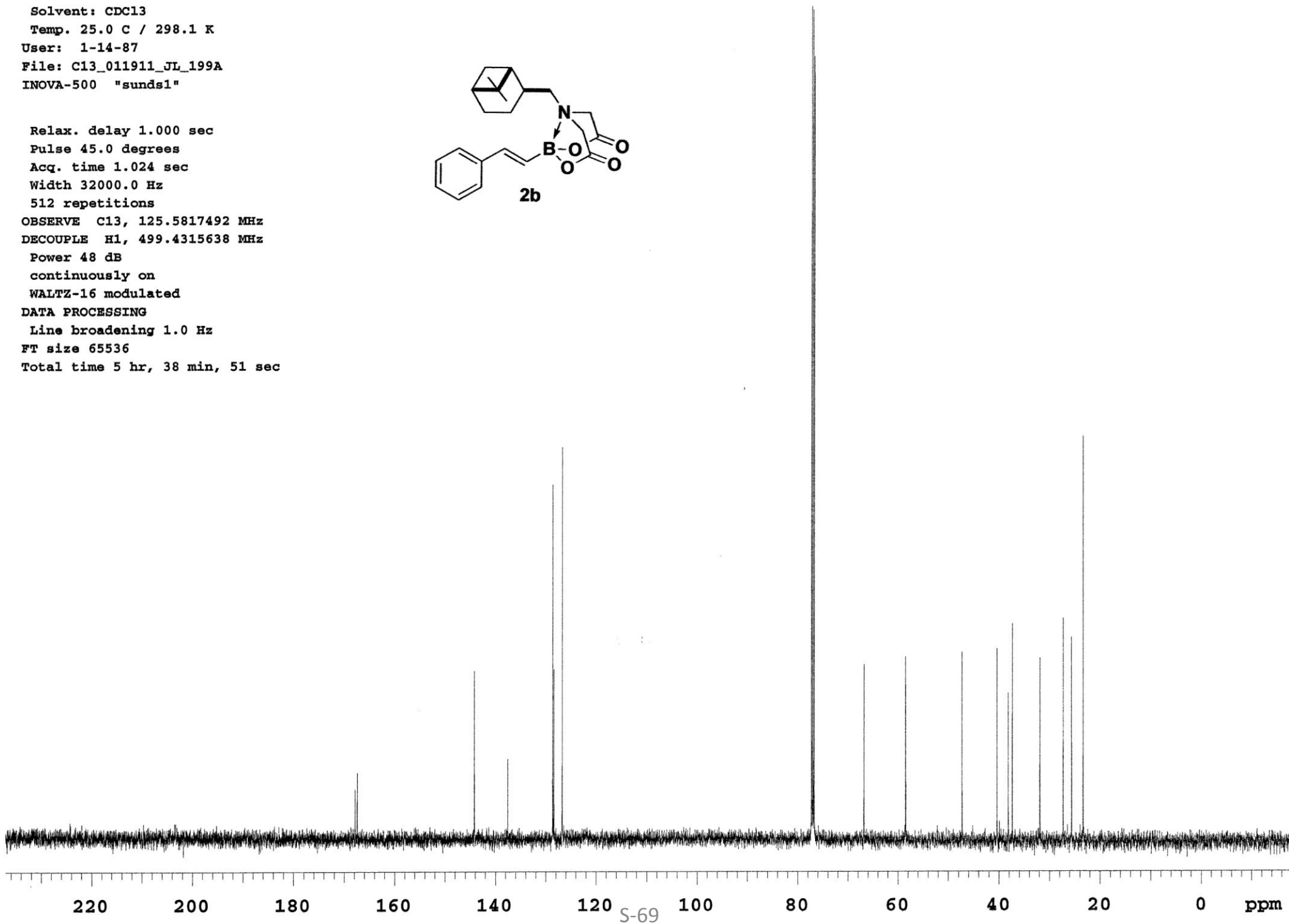
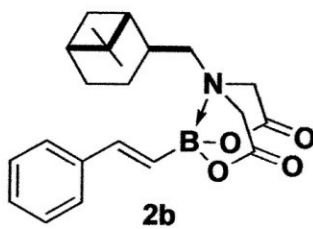
Total time 0 min, 16 sec



Pulse Sequence: s2pul

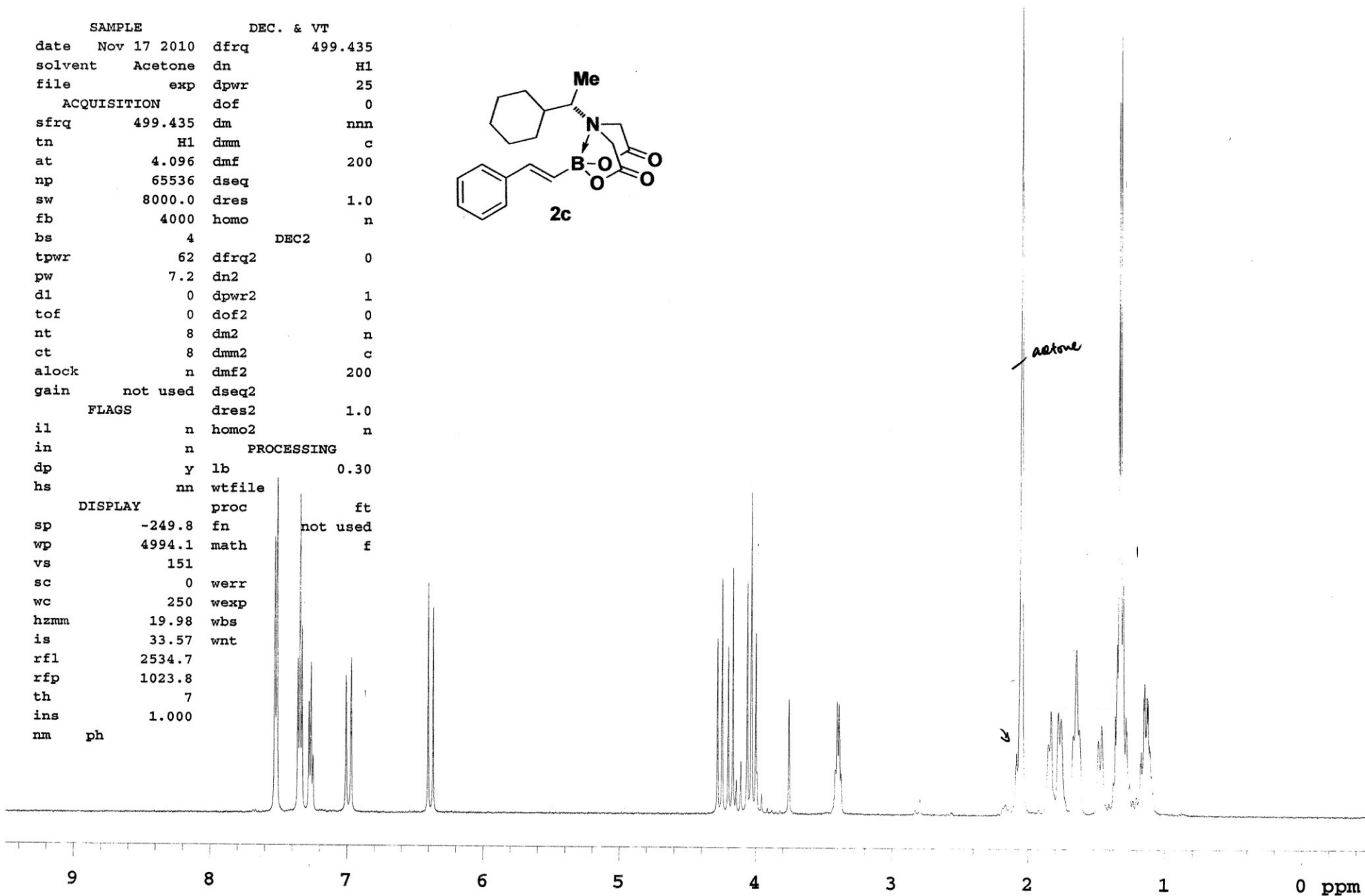
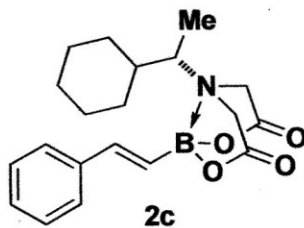
Solvent: CDCl3
Temp. 25.0 C / 298.1 K
User: 1-14-87
File: C13_011911_JL_199A
INOVA-500 "sunds1"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
512 repetitions
OBSERVE C13, 125.5817492 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul
exp1 s2pul

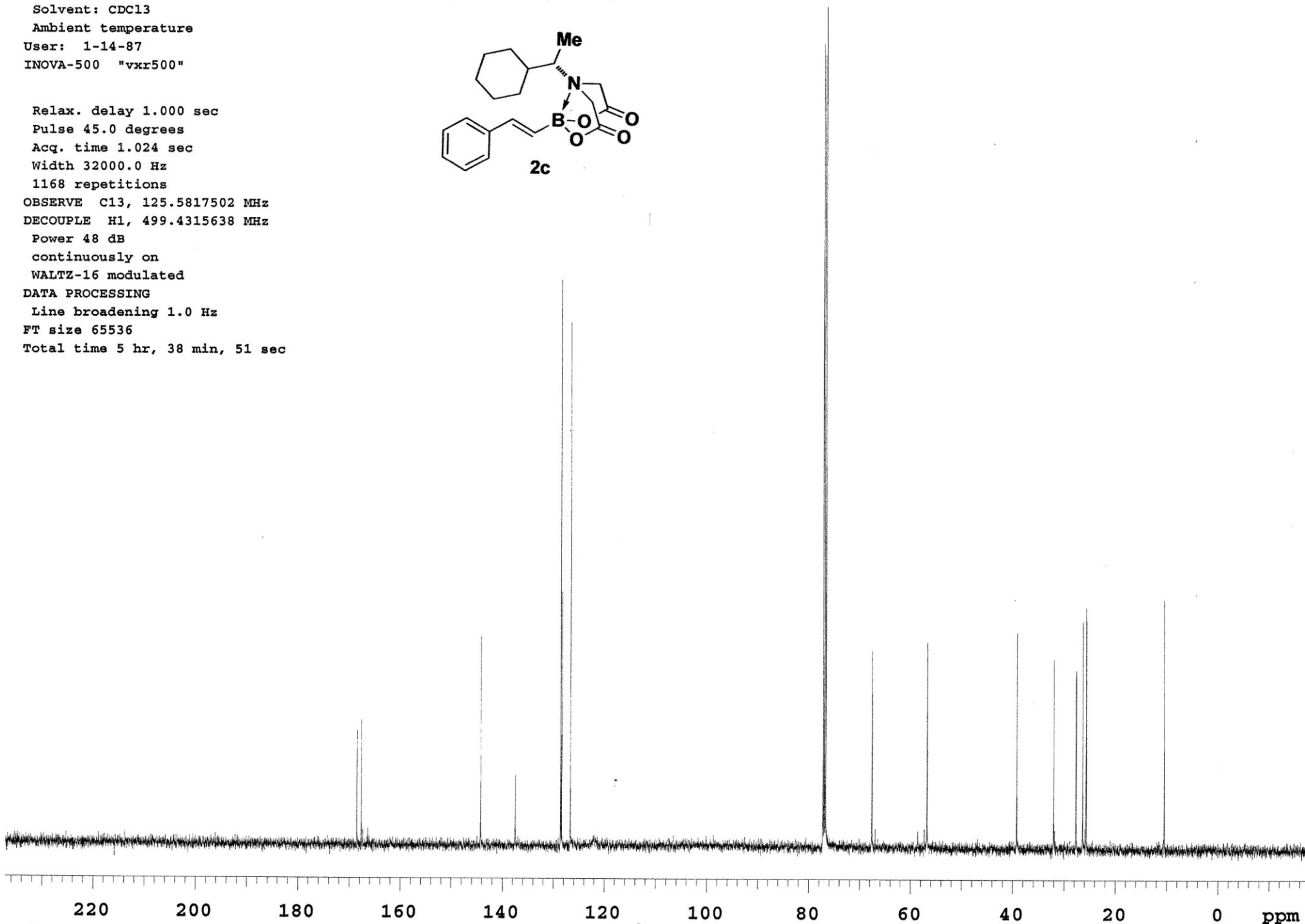
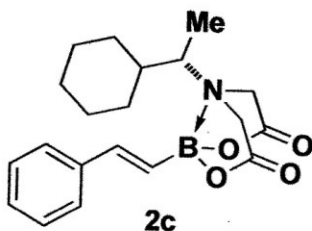
SAMPLE		DEC. & VT	
date	Nov 17 2010	dfrq	499.435
solvent	Acetone	dn	H1
file	exp	dpwr	25
ACQUISITION		dof	0
sfrq	499.435	dm	nnn
tn	H1	dmm	c
at	4.096	dmf	200
np	65536	dseq	
sw	8000.0	dres	1.0
fb	4000	homo	n
bs	4	DEC2	
tpwr	62	dfrq2	0
pw	7.2	dn2	
d1	0	dpwr2	1
tof	0	dof2	0
nt	8	dm2	n
ct	8	dmm2	c
alock	n	dmf2	200
gain	not used	dseq2	
FLAGS		dres2	1.0
il	n	homo2	n
in	n	PROCESSING	
dp	y	lb	0.30
hs	nn	wtfile	
DISPLAY		proc	ft
sp	-249.8	fn	not used
wp	4994.1	math	f
vs	151	werr	
sc	0	wexp	
wc	250	wbs	
hzmm	19.98	wnt	
is	33.57		
rfl	2534.7		
rfp	1023.8		
th	7		
ins	1.000		
nm	ph		

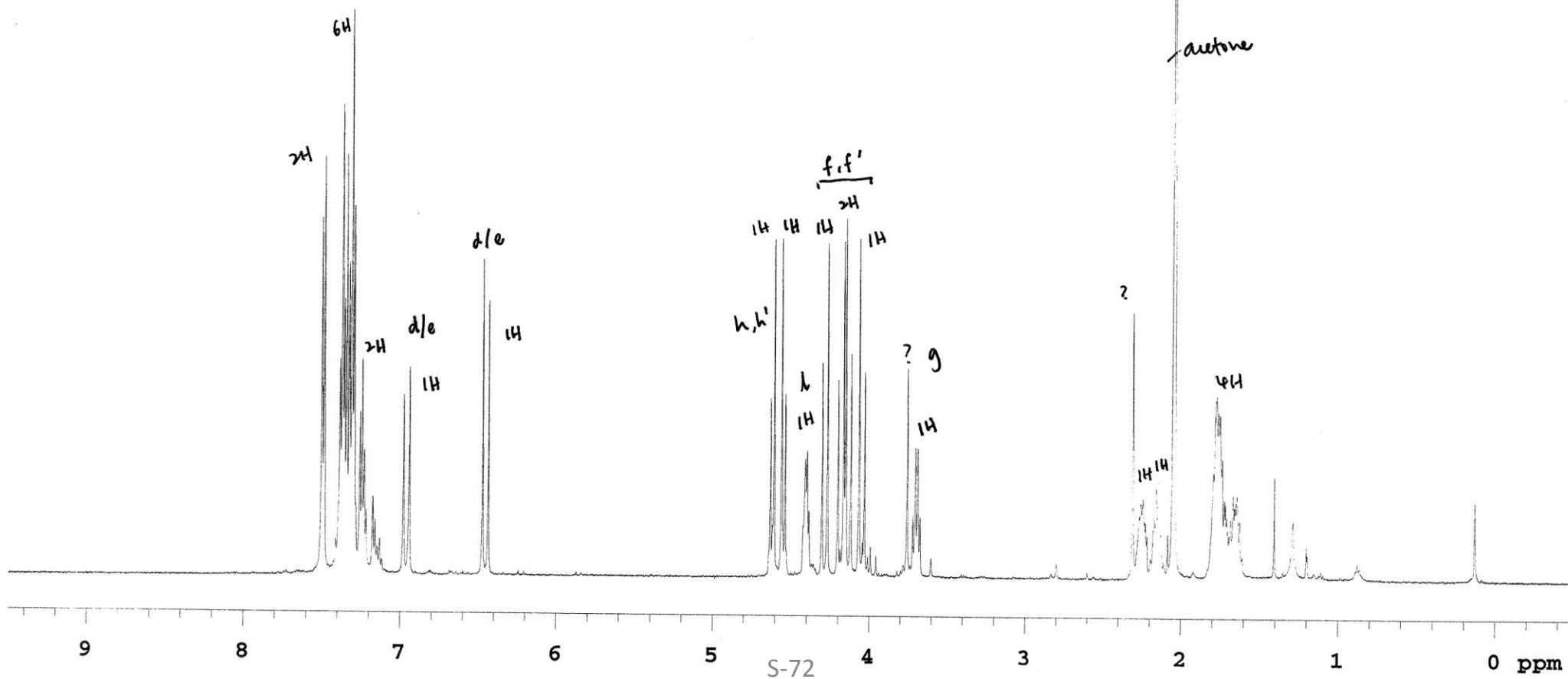
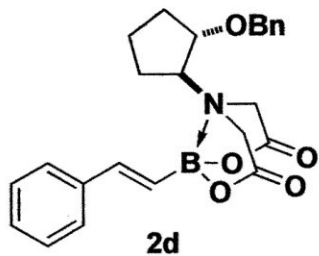


Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
1168 repetitions
OBSERVE C13, 125.5817502 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec





Pulse Sequence: s2pul

Solvent: CDC13

Temp. 25.0 C / 298.1 K

User: 1-14-87

File: C13_011911_JL_165A

INOVA-500 "sunds1"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

624 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

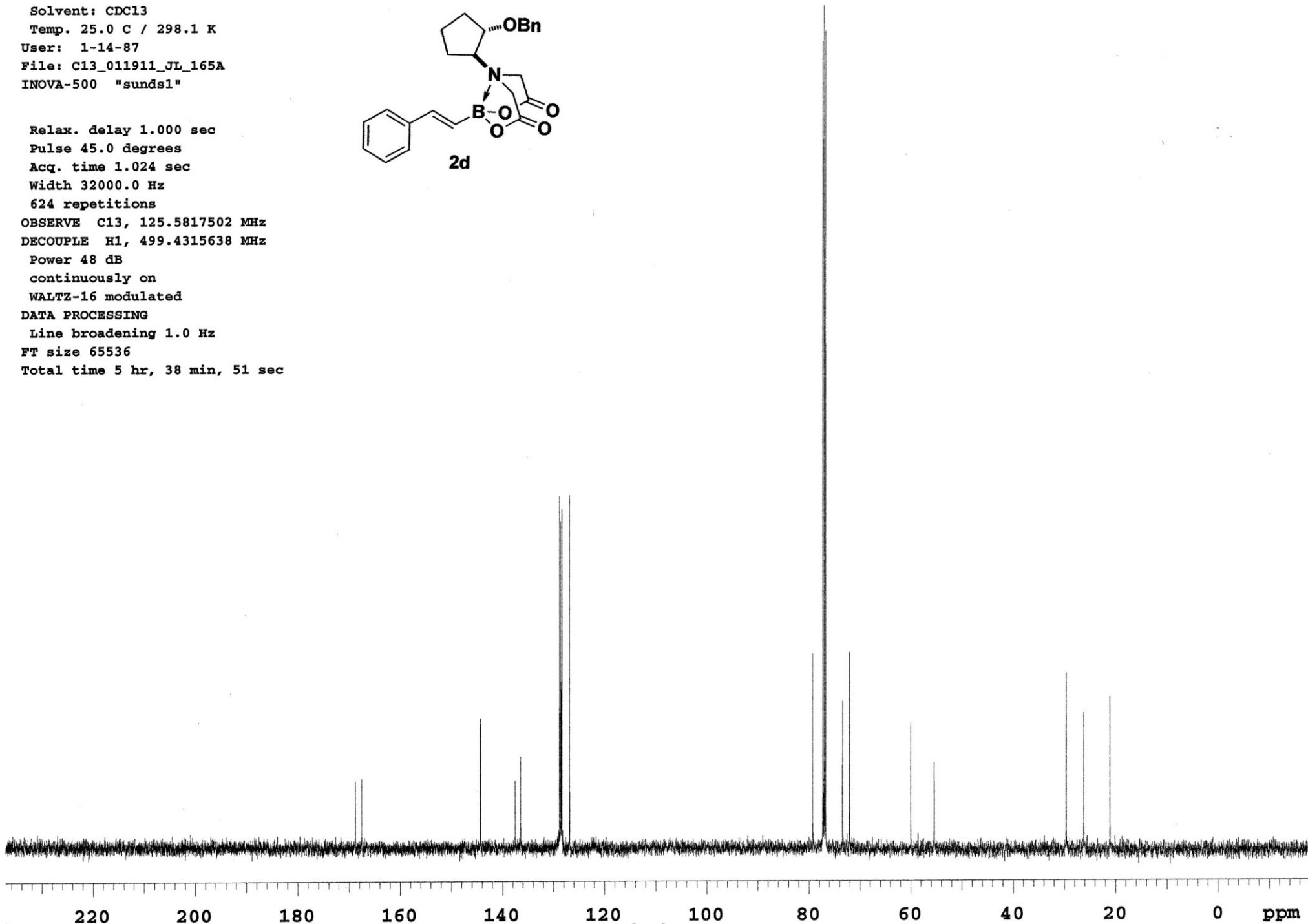
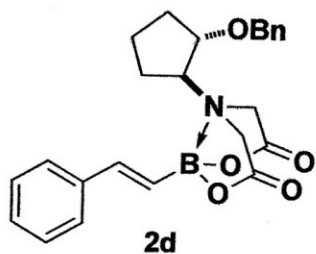
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "u500"

Pulse 61.6 degrees

Acq. time 4.665 sec

Width 7024.9 Hz

16 repetitions

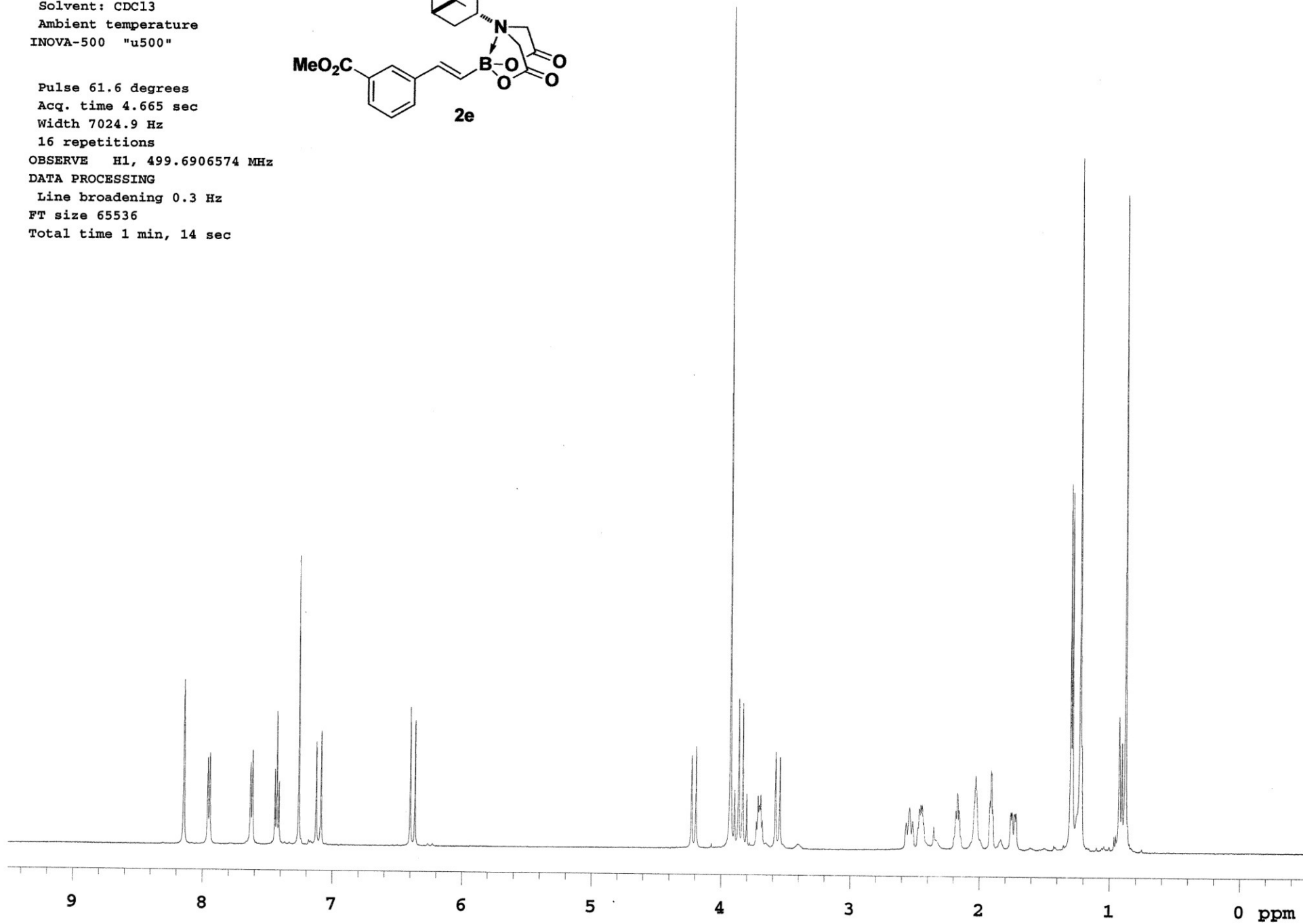
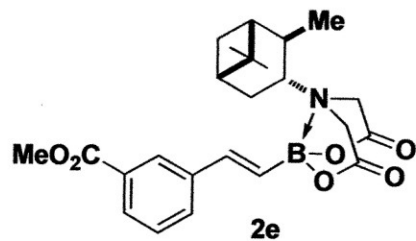
OBSERVE H1, 499.6906574 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 1 min, 14 sec



Pulse Sequence: s2pul

Solvent: CDCl₃

Ambient temperature

User: 1-14-87

INOVA-500 "vvr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

352 repetitions

OBSERVE C13, 125.5817522 MHz

DECOUPLE H1, 499.4315638 MHz

Power 44 dB

continuously on

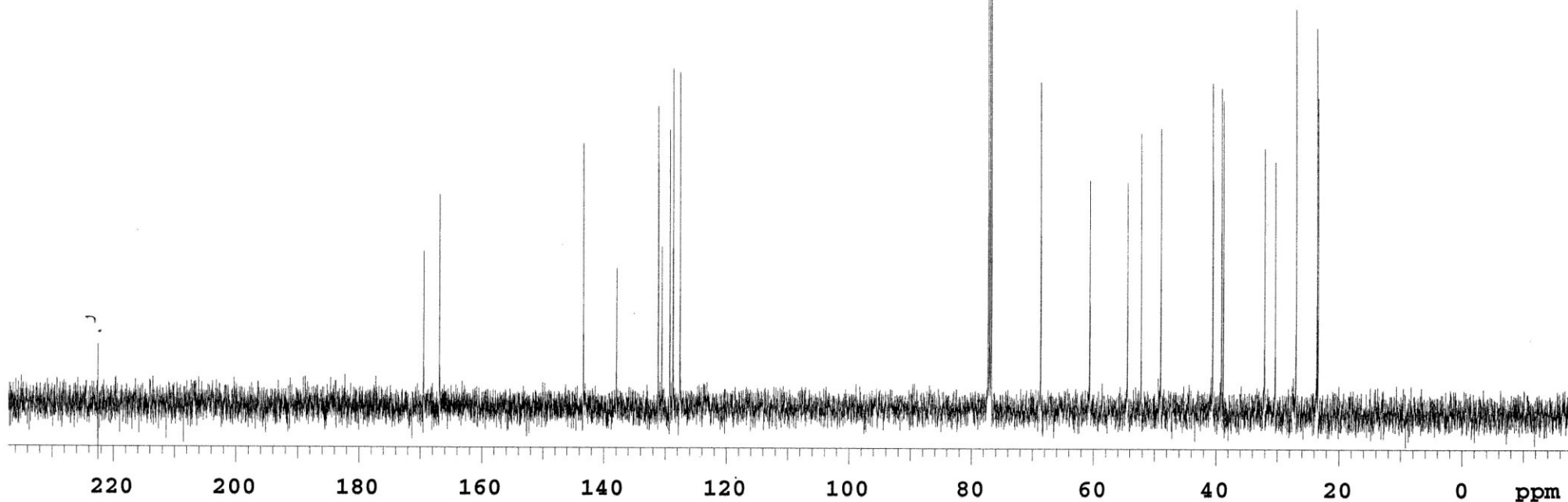
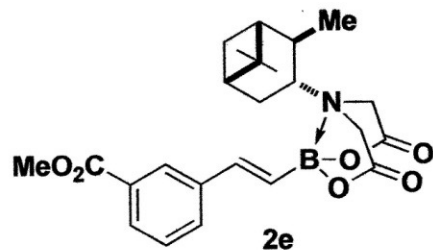
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

File: 040411_JL_243A

INOVA-500 "sunds1"

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

4 repetitions

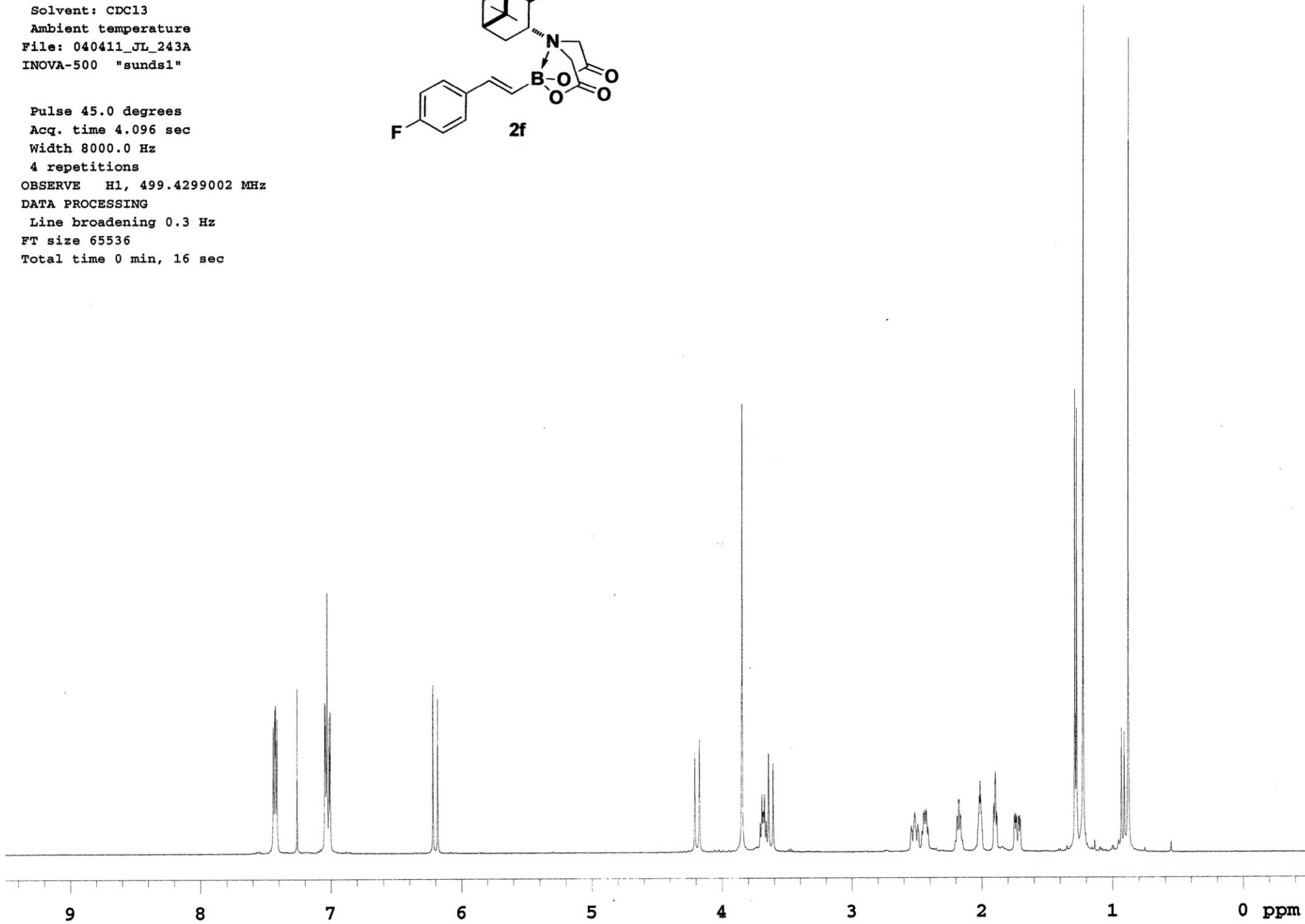
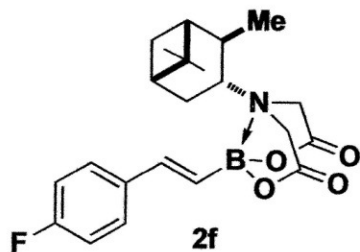
OBSERVE H1, 499.4299002 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

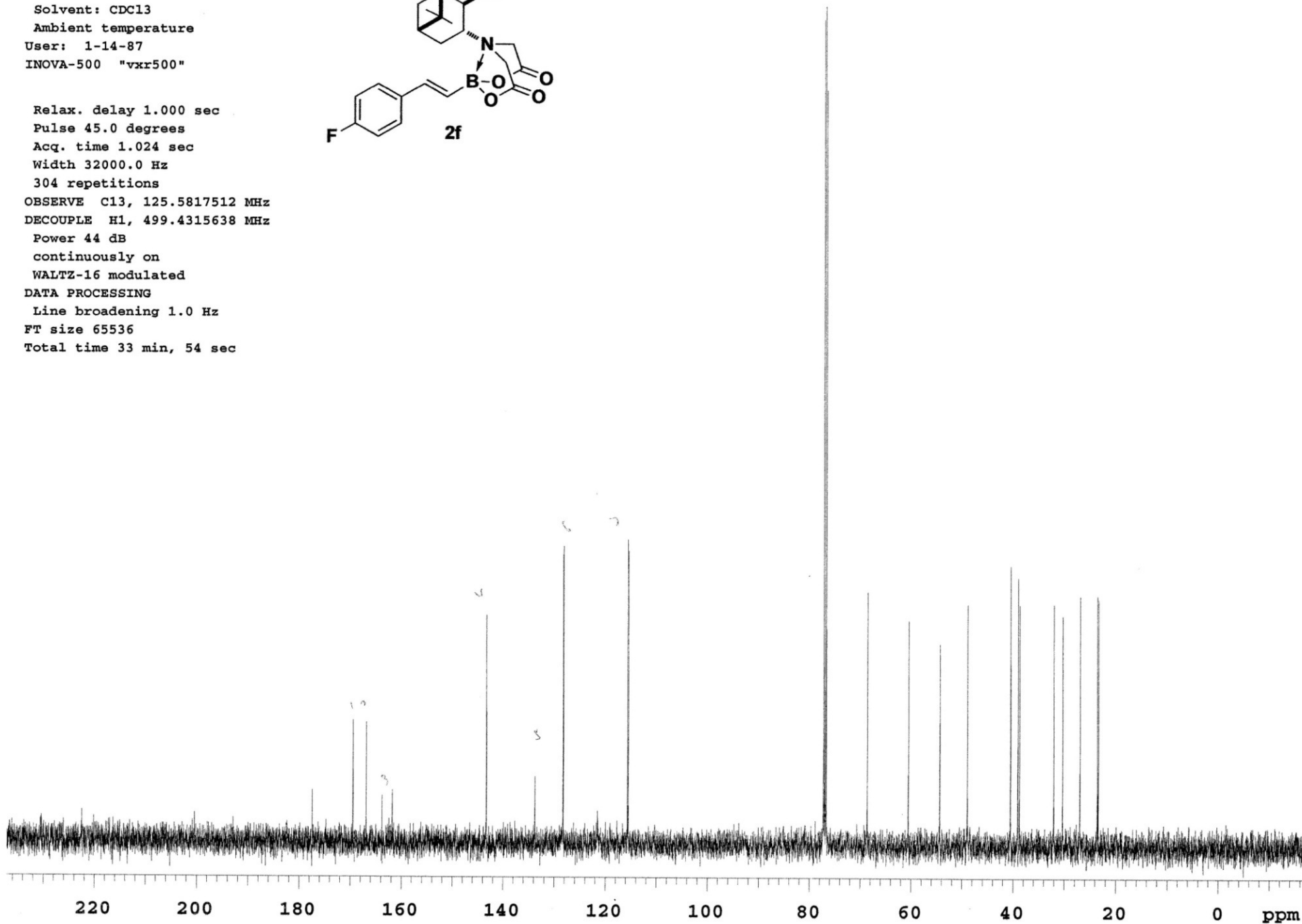
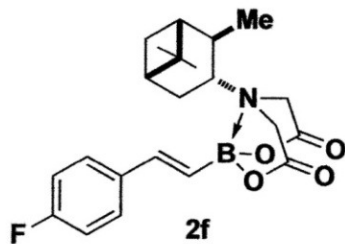
Total time 0 min, 16 sec



Pulse Sequence: s2pul

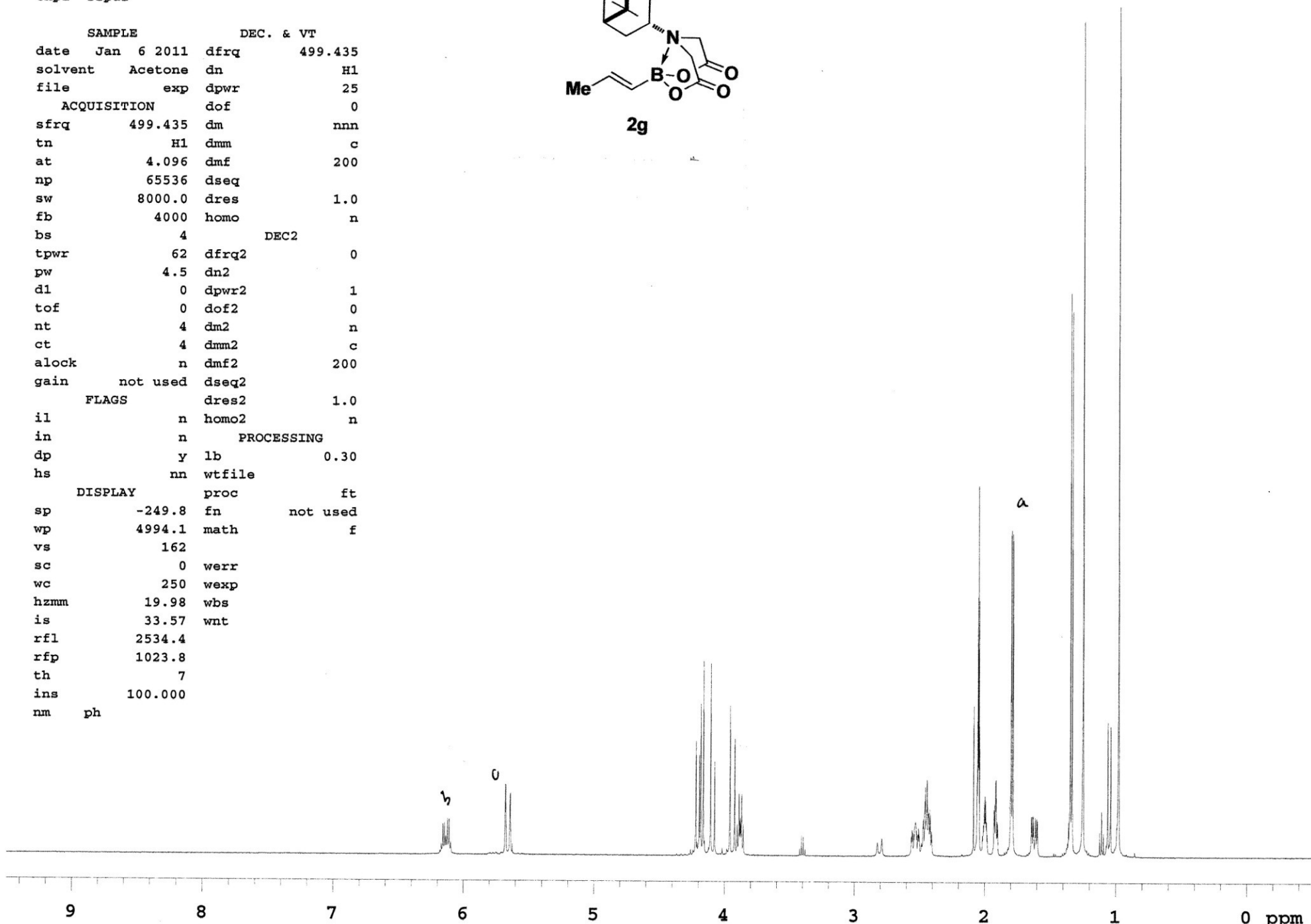
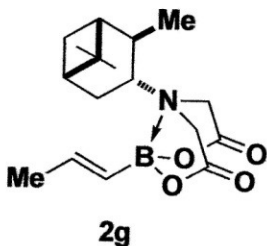
Solvent: CDCl3
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
304 repetitions
OBSERVE C13, 125.5817512 MHz
DECOUPLE H1, 499.4315638 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul
 expl s2pul

SAMPLE		DEC. & VT	
date	Jan 6 2011	dfrq	499.435
solvent	Acetone	dn	H1
file	exp	dpwr	25
ACQUISITION		dof	0
sfrq	499.435	dm	nnn
tn	H1	dmm	c
at	4.096	dmf	200
np	65536	dseq	
sw	8000.0	dres	1.0
fb	4000	homo	n
bs	4	DEC2	
tpwr	62	dfrq2	0
pw	4.5	dn2	
d1	0	dpwr2	1
tof	0	dof2	0
nt	4	dm2	n
ct	4	dmm2	c
alock	n	dmf2	200
gain	not used	dseq2	
FLAGS		dres2	1.0
il	n	homo2	n
in	n	PROCESSING	
dp	y	lb	0.30
hs	nn	wtfile	
DISPLAY		proc	ft
sp	-249.8	fn	not used
wp	4994.1	math	f
vs	162		
sc	0	werr	
wc	250	wexp	
hzmm	19.98	wbs	
is	33.57	wnt	
rfl	2534.4		
rfp	1023.8		
th	7		
ins	100.000		
nm	ph		



Pulse Sequence: s2pul

Solvent: Acetone

Ambient temperature

User: 1-14-87

INOVA-500 "vxxr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

1248 repetitions

OBSERVE C13, 125.5823684 MHz

DECOUPLE H1, 499.4341558 MHz

Power 48 dB

continuously on

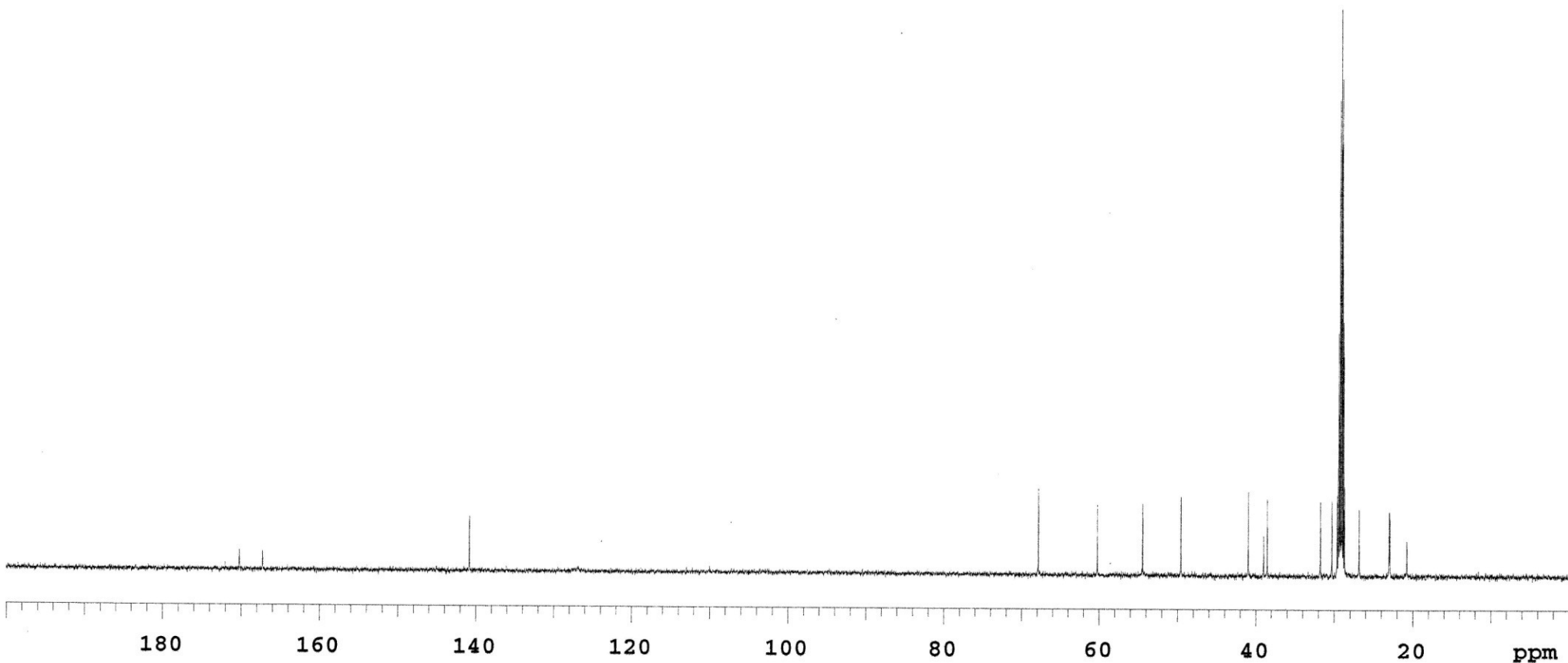
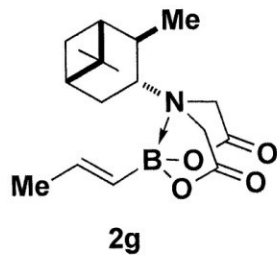
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

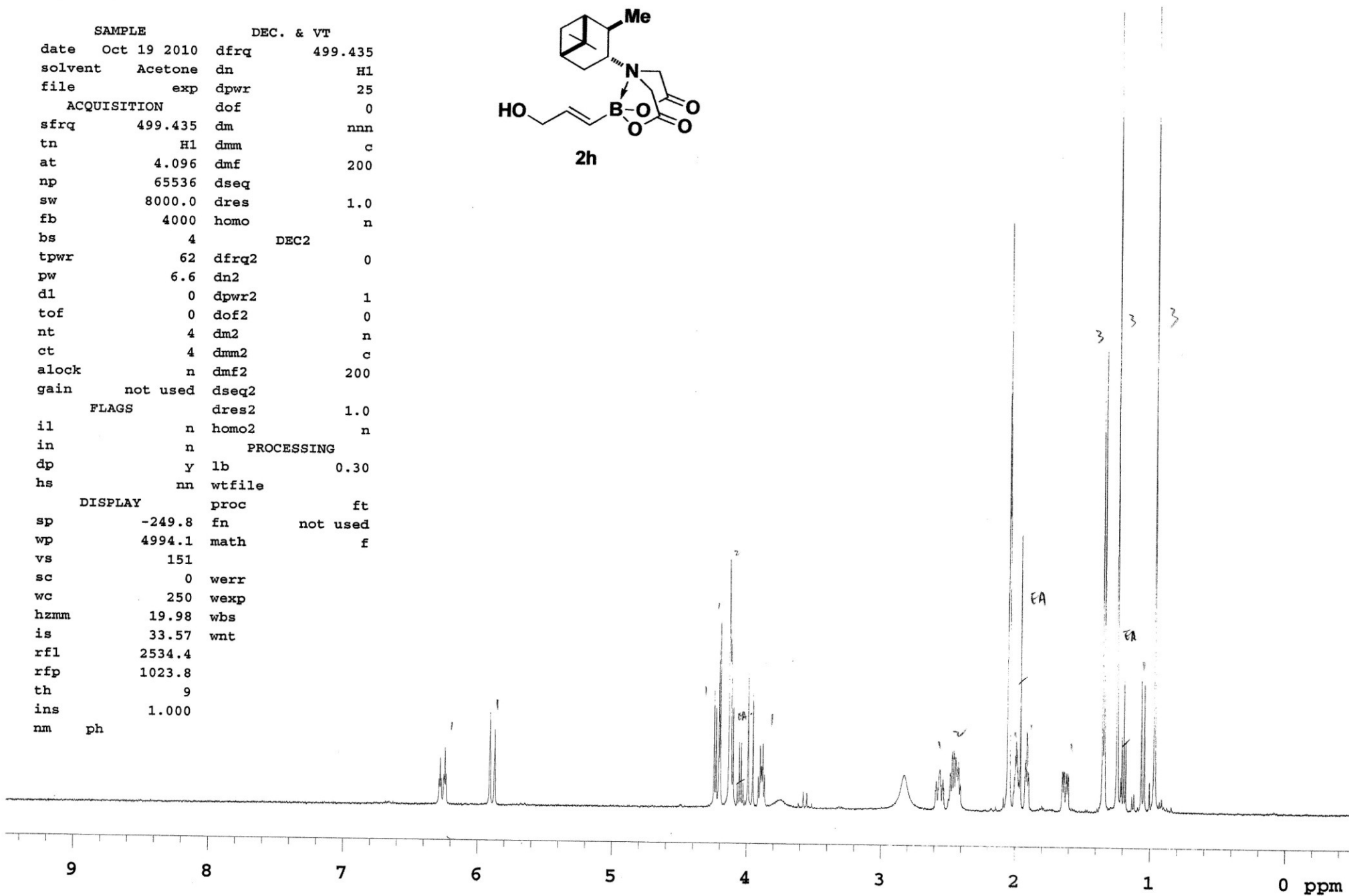
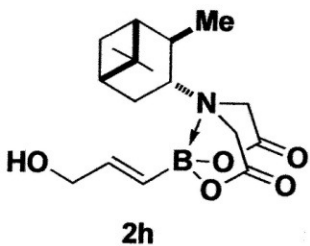
FT size 65536

Total time 5 hr, 38 min, 51 sec



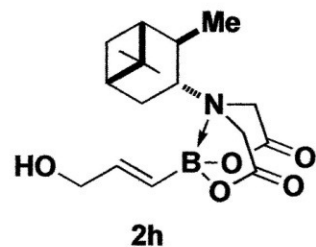
Pulse Sequence: s2pul
exp1 s2pul

SAMPLE		DEC. & VT	
date	Oct 19 2010	dfrq	499.435
solvent	Acetone	dn	H1
file	exp	dpwr	25
ACQUISITION		dof	
sfrq	499.435	dm	nnn
tn	H1	dmm	c
at	4.096	dmf	200
np	65536	dseq	
sw	8000.0	dres	1.0
fb	4000	homo	n
bs	4	DEC2	
tpwr	62	dfrq2	0
pw	6.6	dn2	
d1	0	dpwr2	1
tof	0	dof2	0
nt	4	dm2	n
ct	4	dmm2	c
alock		dmf2	200
gain	not used	dseq2	
FLAGS		dres2	
il	n	homo2	n
in	n	PROCESSING	
dp	y	lb	0.30
hs	nn	wtfile	
DISPLAY		proc	
sp	-249.8	fn	not used
wp	4994.1	math	f
vs	151		
sc	0	werr	
wc	250	wexp	
hzmm	19.98	wbs	
is	33.57	wnt	
rfl	2534.4		
rfp	1023.8		
th	9		
ins	1.000		
nm	ph		

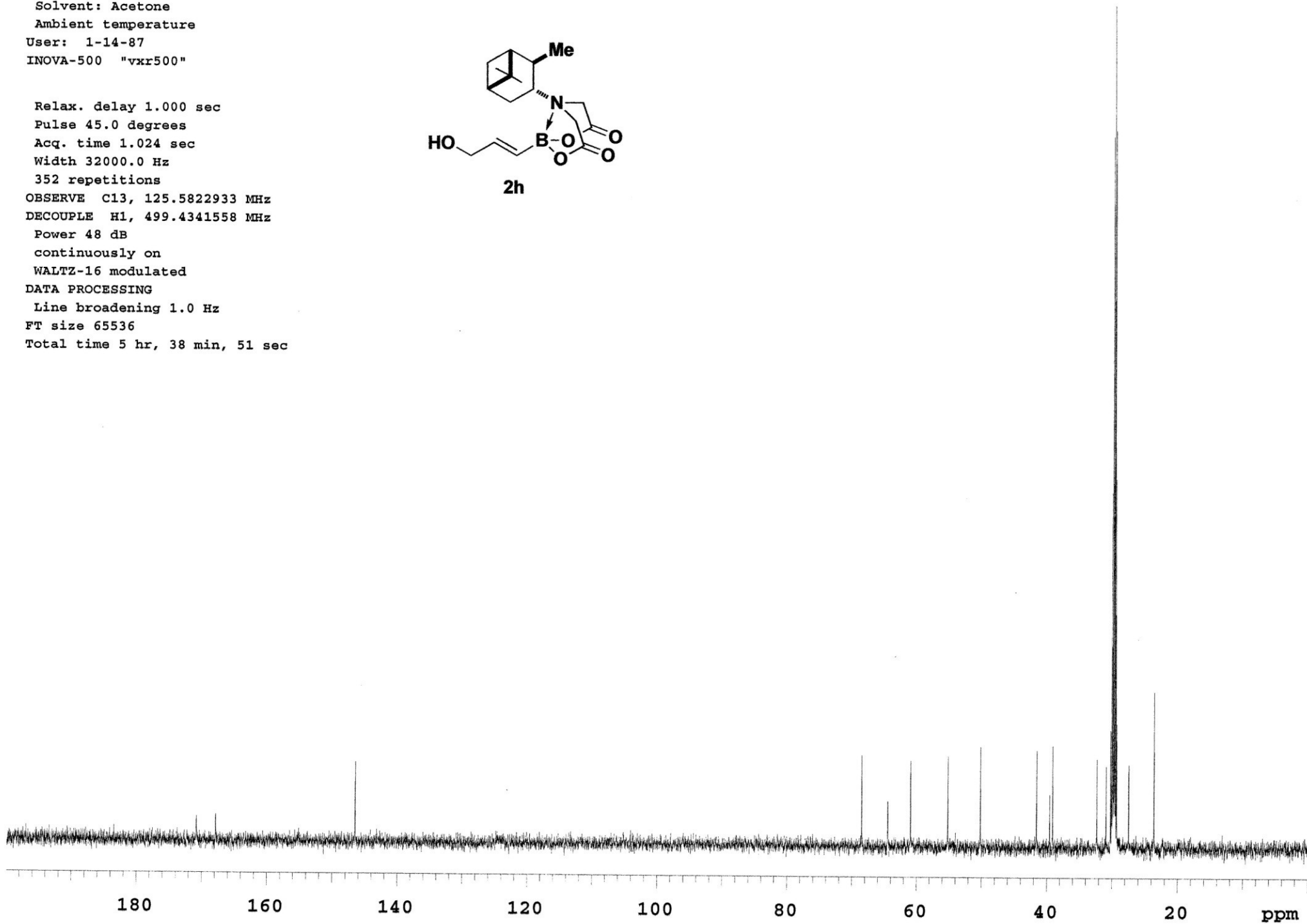


Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "vnr500"

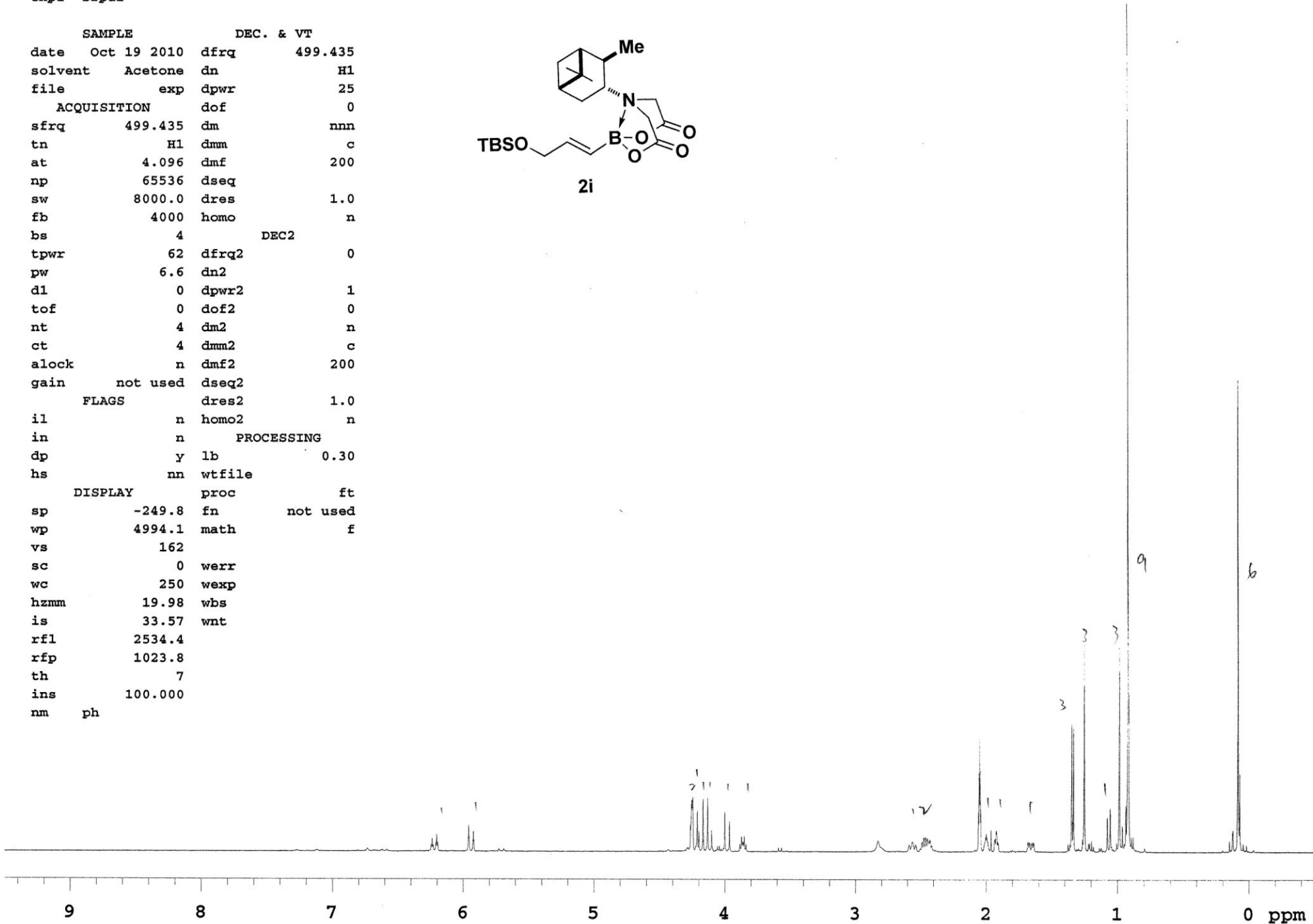
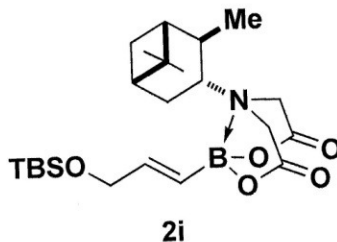


Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
352 repetitions
OBSERVE C13, 125.5822933 MHz
DECOUPLE H1, 499.4341558 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul
exp1 s2pul

SAMPLE		DEC. & VT	
date	Oct 19 2010	dfrq	499.435
solvent	Acetone	dn	H1
file	exp	dpwr	25
ACQUISITION		dof	0
sfrq	499.435	dm	nnn
tn	H1	dmm	c
at	4.096	dmf	200
np	65536	dseq	
sw	8000.0	dres	1.0
fb	4000	homo	n
bs	4	DEC2	
tpwr	62	dfrq2	0
pw	6.6	dn2	
d1	0	dpwr2	1
tof	0	dof2	0
nt	4	dm2	n
ct	4	dmm2	c
alock	n	dmf2	200
gain	not used	dseq2	
FLAGS		dres2	1.0
il	n	homo2	n
in	n	PROCESSING	
dp	y	lb	0.30
hs	nn	wfile	
DISPLAY		proc	ft
sp	-249.8	fn	not used
wp	4994.1	math	f
vs	162		
sc	0	werr	
wc	250	wexp	
hzmm	19.98	wbs	
is	33.57	wnt	
rfl	2534.4		
rfp	1023.8		
th	7		
ins	100.000		
nm	ph		



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "vvr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

656 repetitions

OBSERVE C13, 125.5817531 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

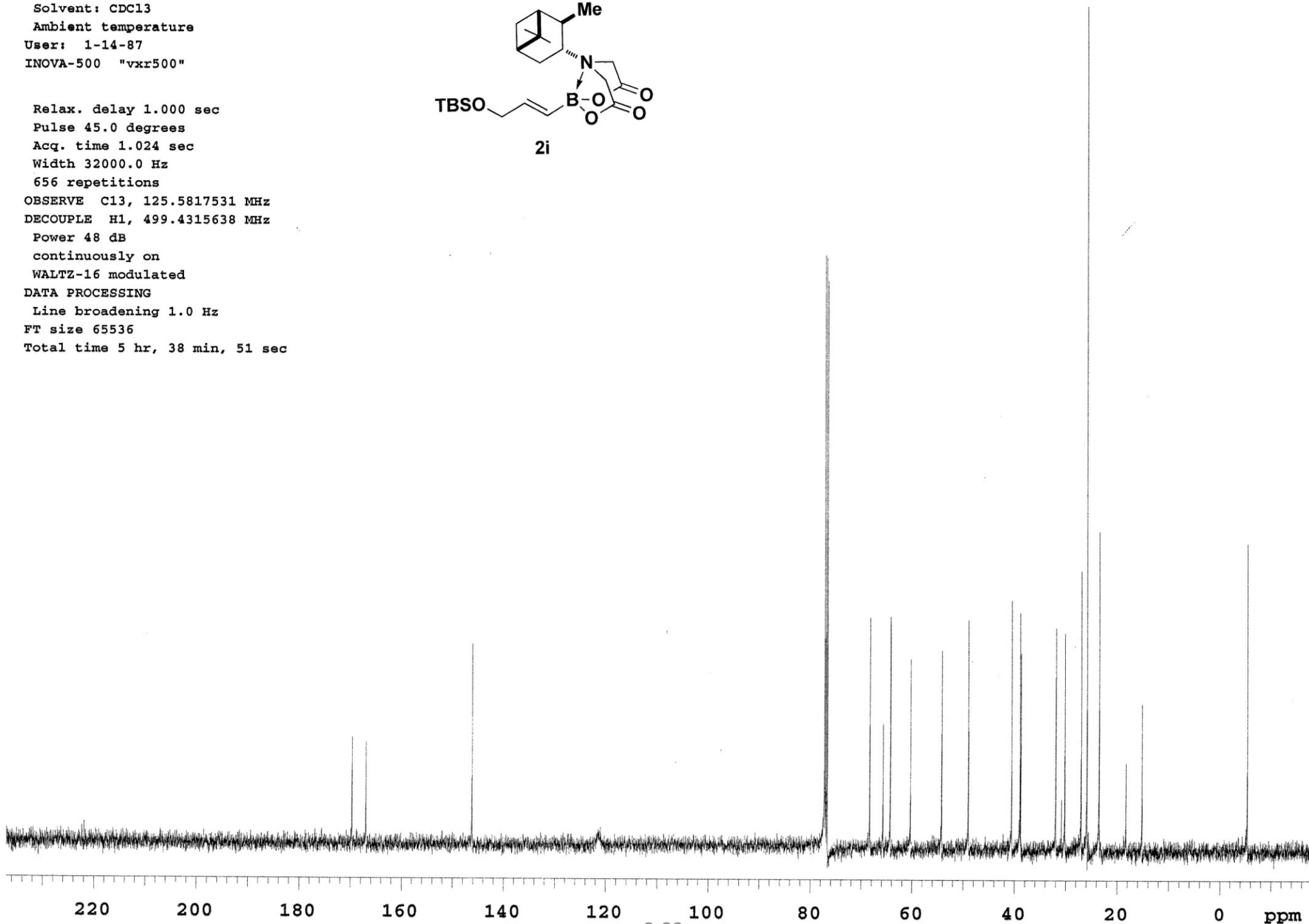
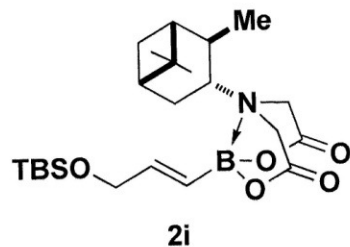
WALTZ-16 modulated

DATA PROCESSING

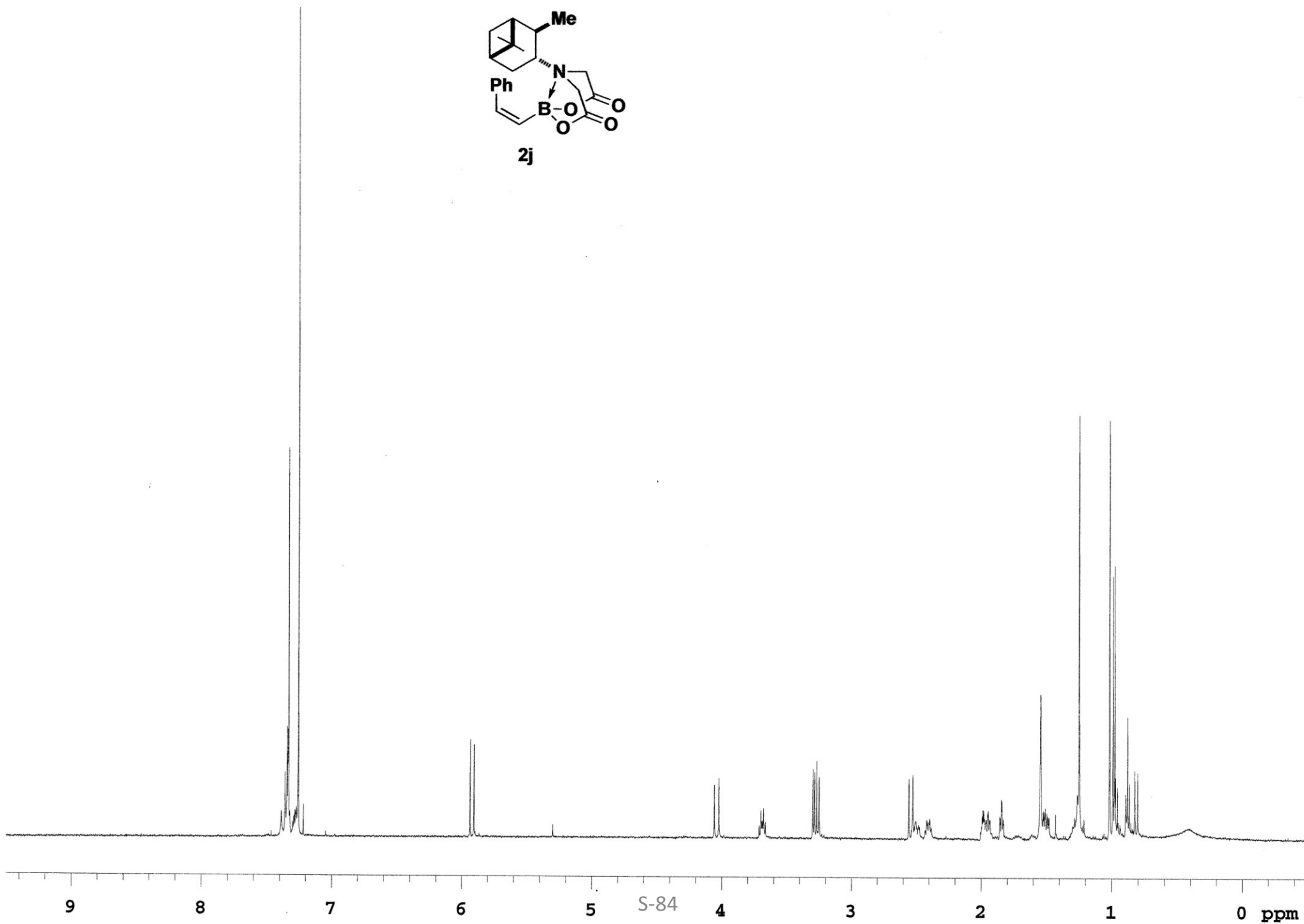
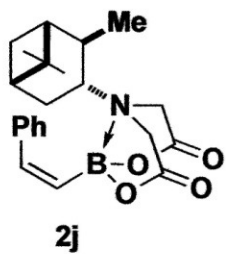
Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul



Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INOVA-500 "vxr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

272 repetitions

OBSERVE C13, 125.5817531 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

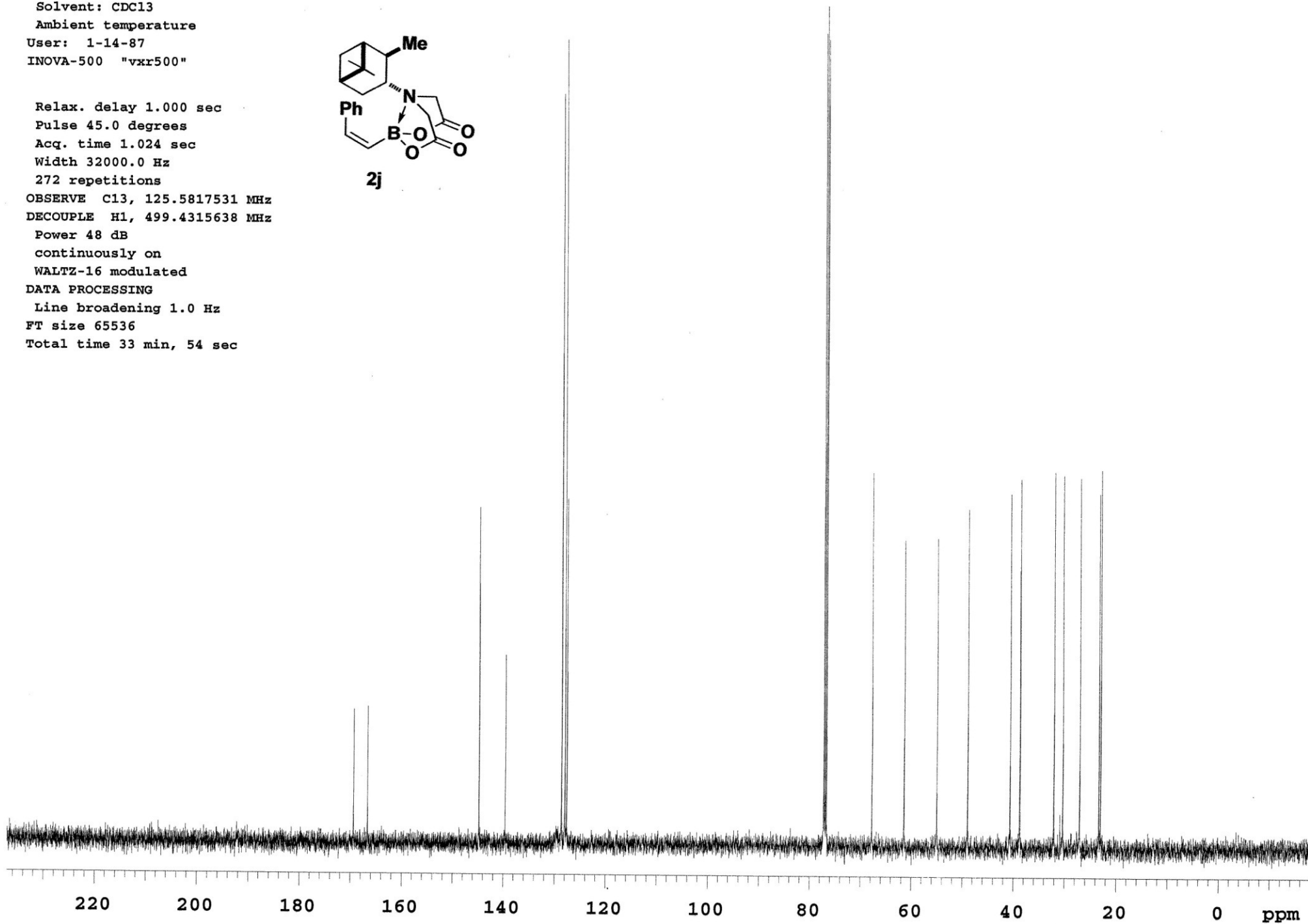
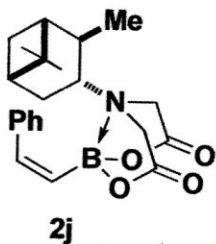
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "u500"

Pulse 61.6 degrees

Acq. time 4.665 sec

Width 7024.9 Hz

4 repetitions

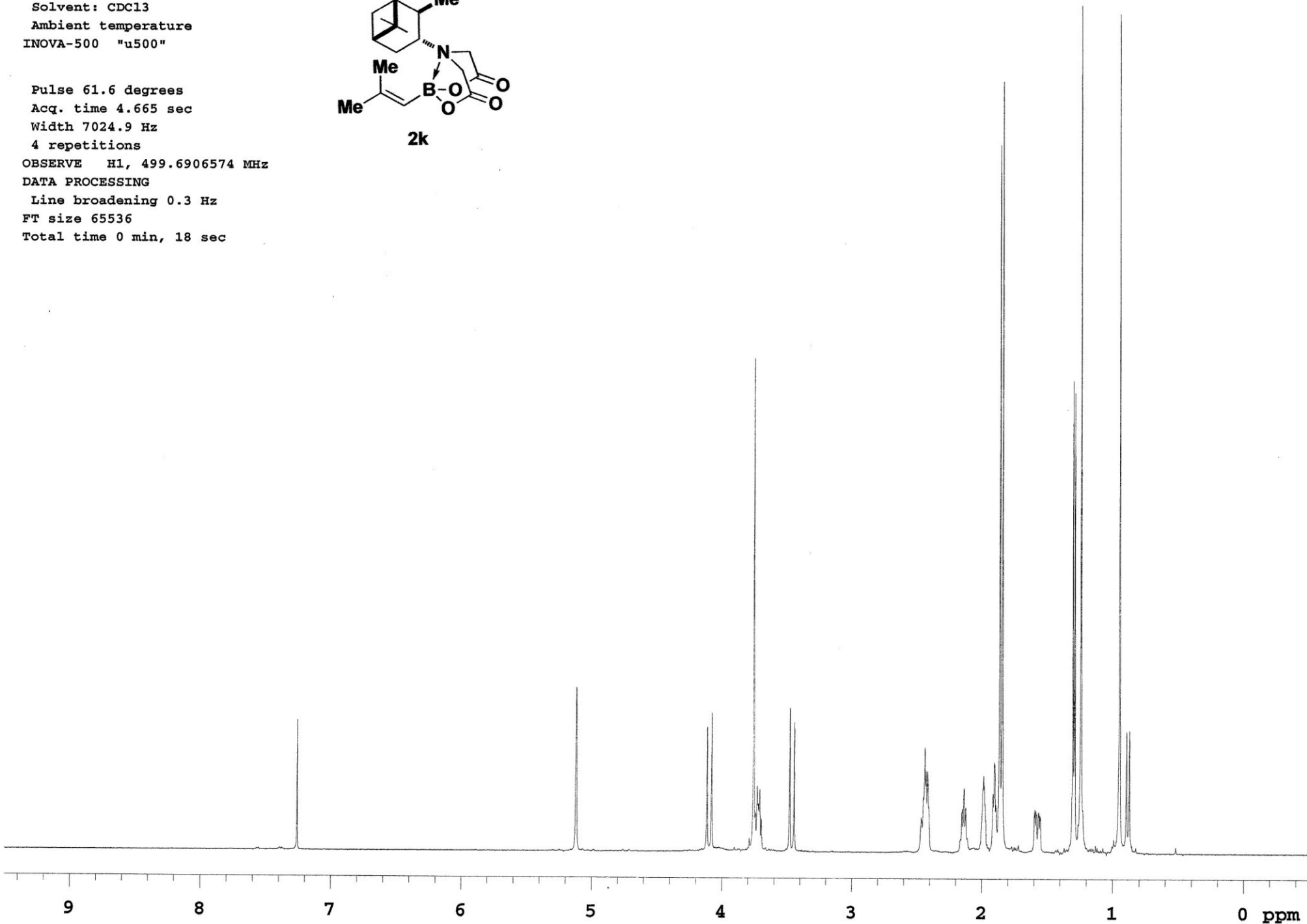
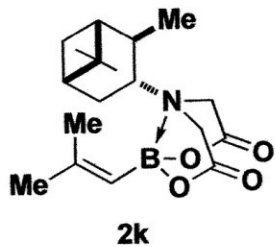
OBSERVE H1, 499.6906574 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 0 min, 18 sec



C13_041811_JL_234A

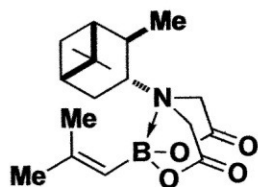
Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INOVA-500 "vkr500"



2k

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

192 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

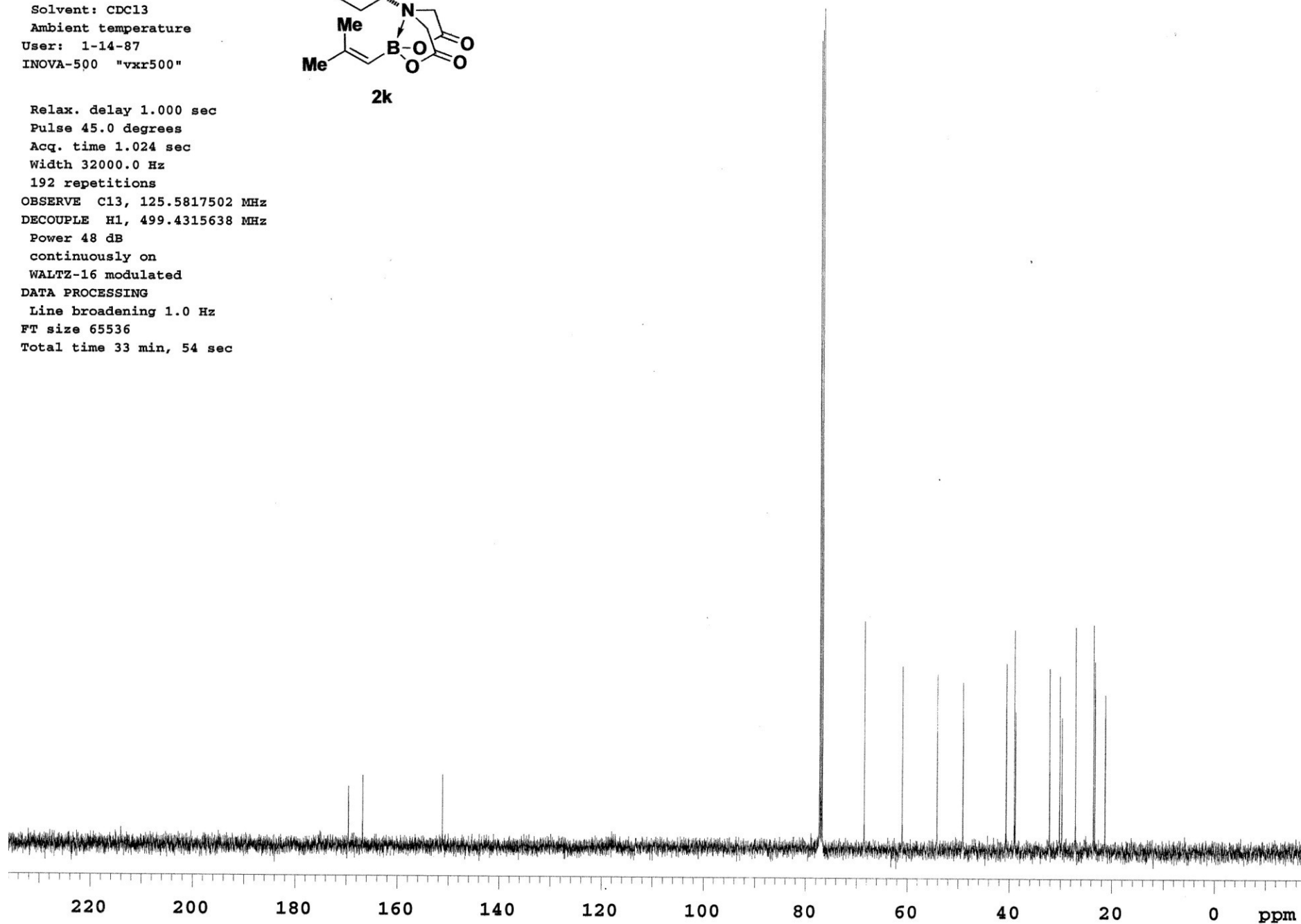
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

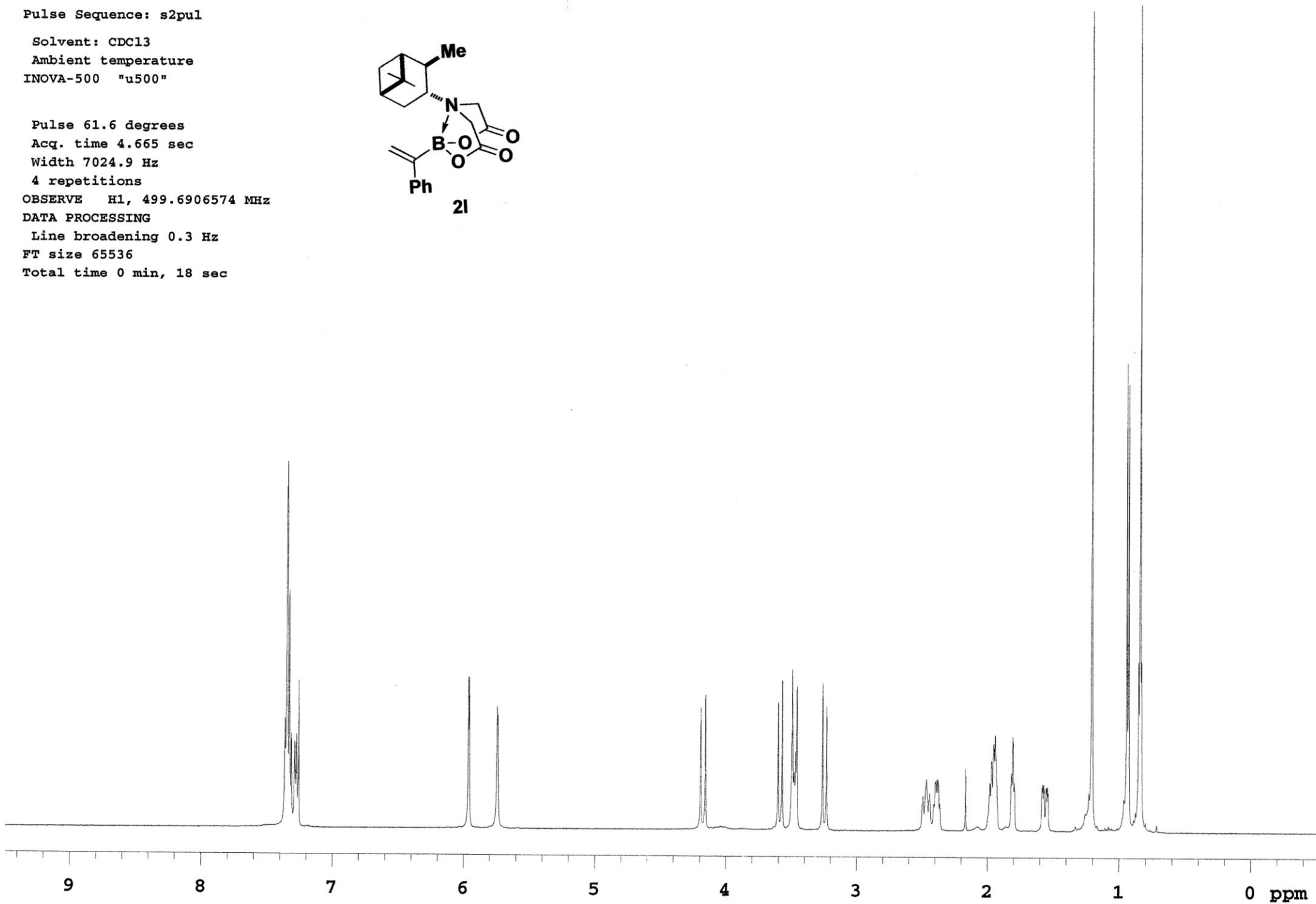
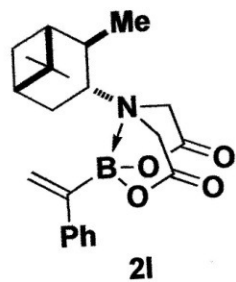
Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "u500"

Pulse 61.6 degrees
Acq. time 4.665 sec
Width 7024.9 Hz
4 repetitions
OBSERVE H1, 499.6906574 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 18 sec



C13_041811_JL_194B

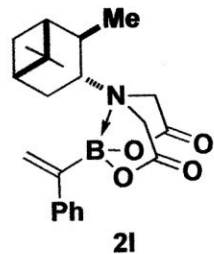
Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INOVA-500 "vvr500"



Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

416 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

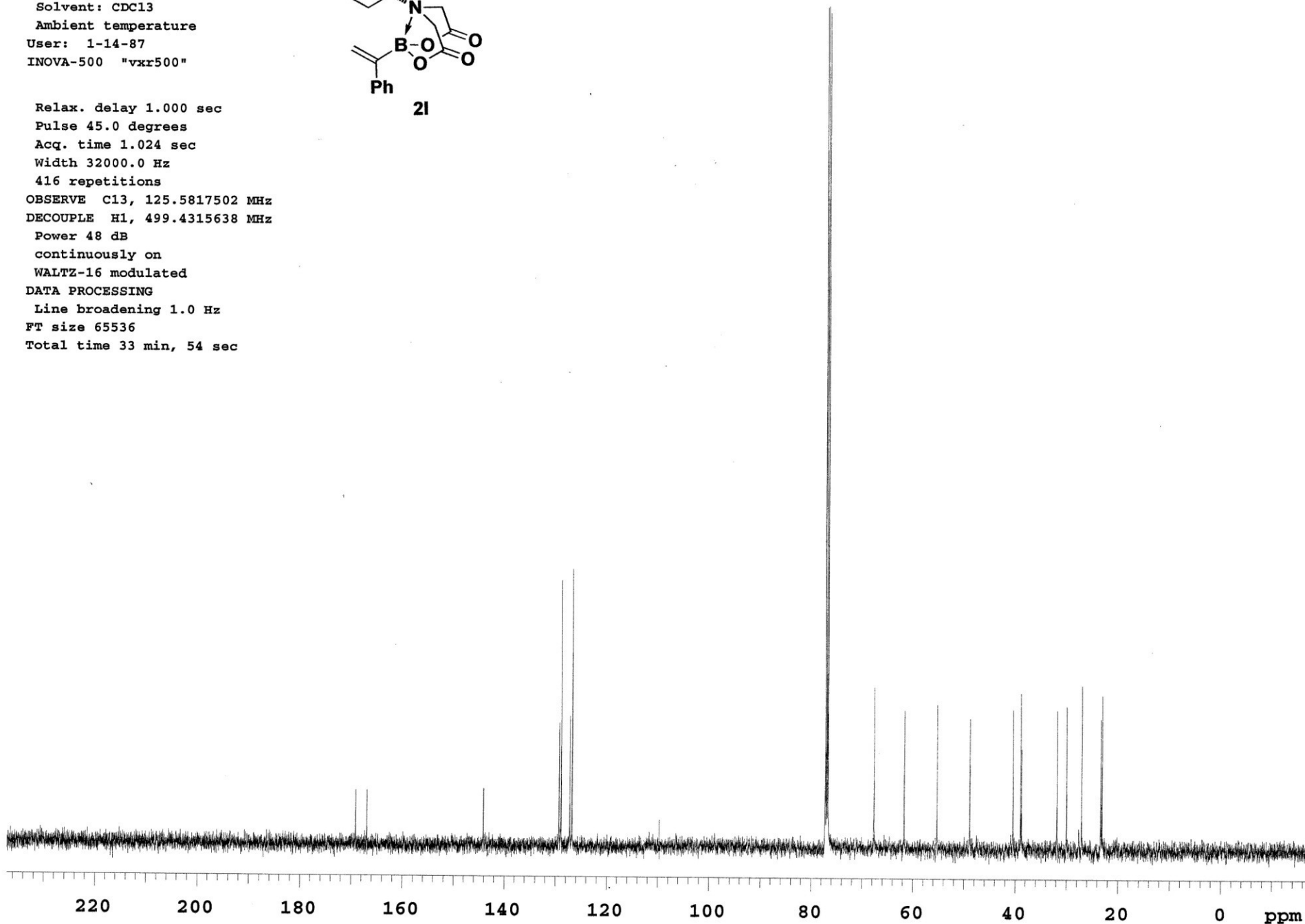
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "u500"

Pulse 61.6 degrees

Acq. time 4.665 sec

Width 7024.9 Hz

4 repetitions

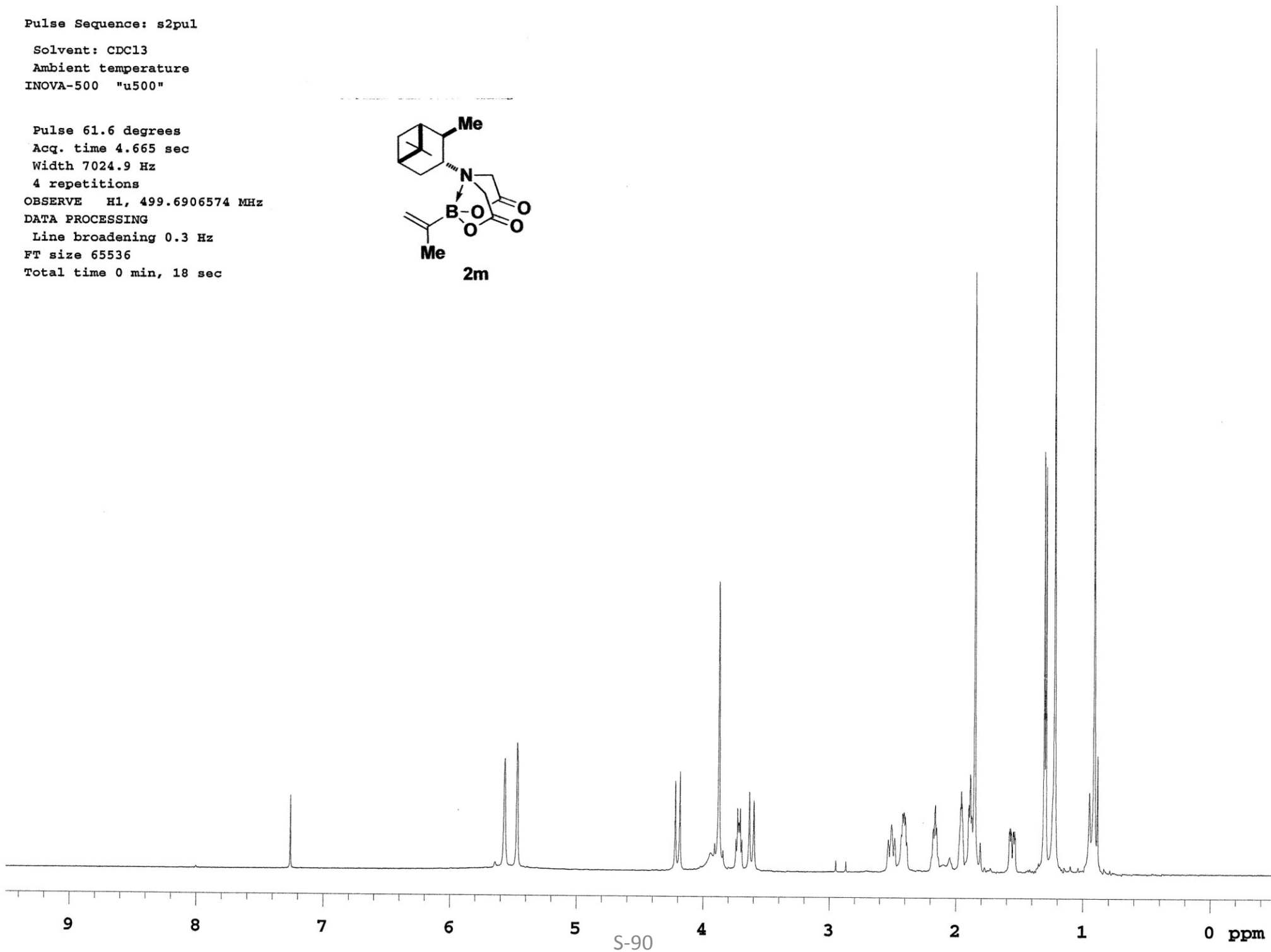
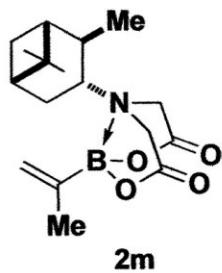
OBSERVE H1, 499.6906574 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 0 min, 18 sec



Pulse Sequence: s2pul

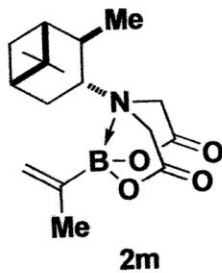
Solvent: CDC13

Ambient temperature

User: 1-14-87

File: C13_060811_JL_isoprenylPIDA

INOVA-500 "sunds1"



Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

144 repetitions

OBSERVE C13, 125.6473193 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

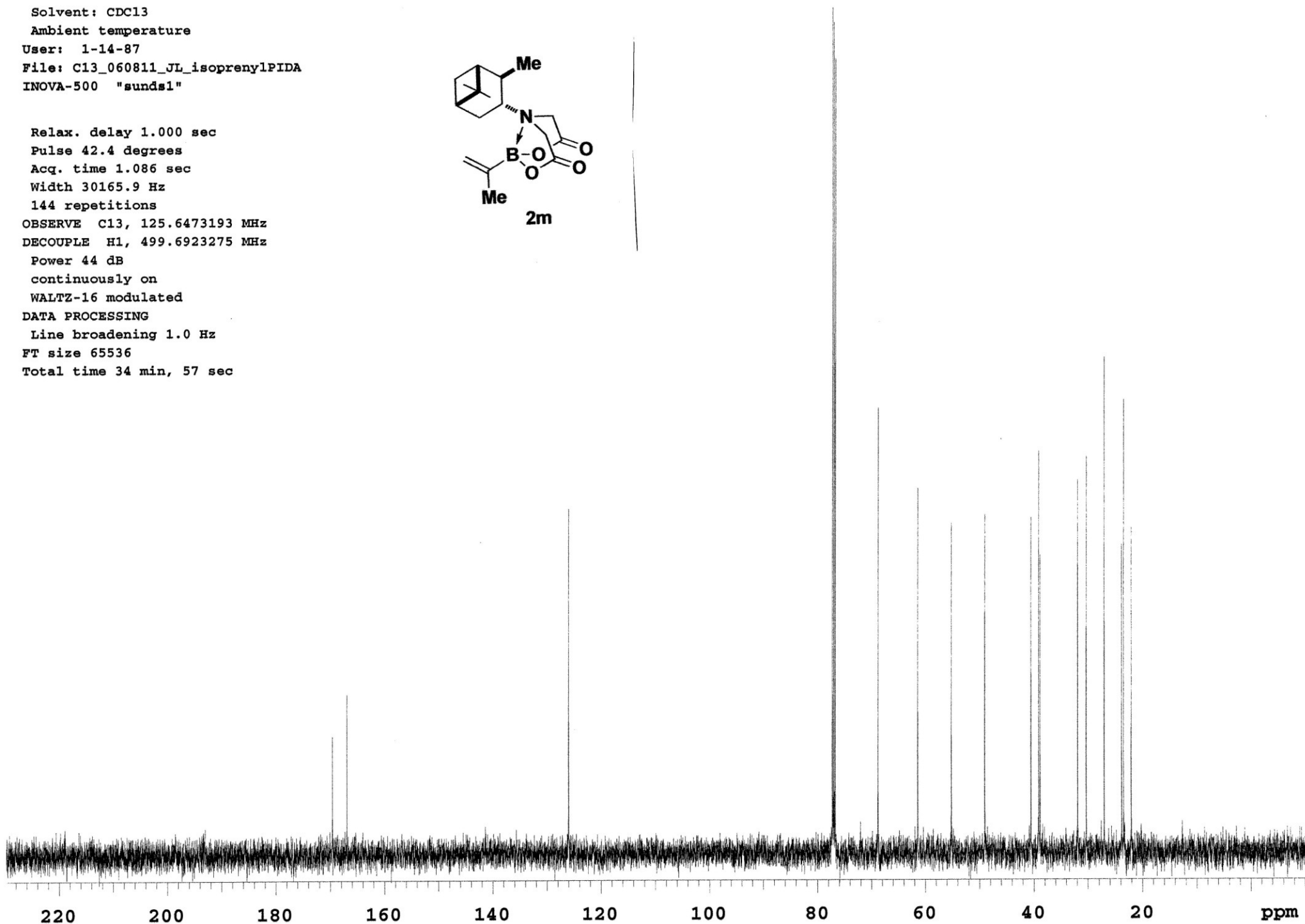
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 34 min, 57 sec



Pulse Sequence: s2pul

Solvent: CDCl₃

Ambient temperature

INOVA-500 "u500"

Pulse 61.6 degrees

Acq. time 4.665 sec

Width 7024.9 Hz

8 repetitions

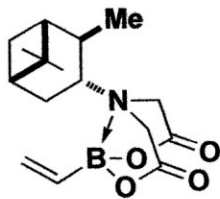
OBSERVE H1, 499.6906574 MHz

DATA PROCESSING

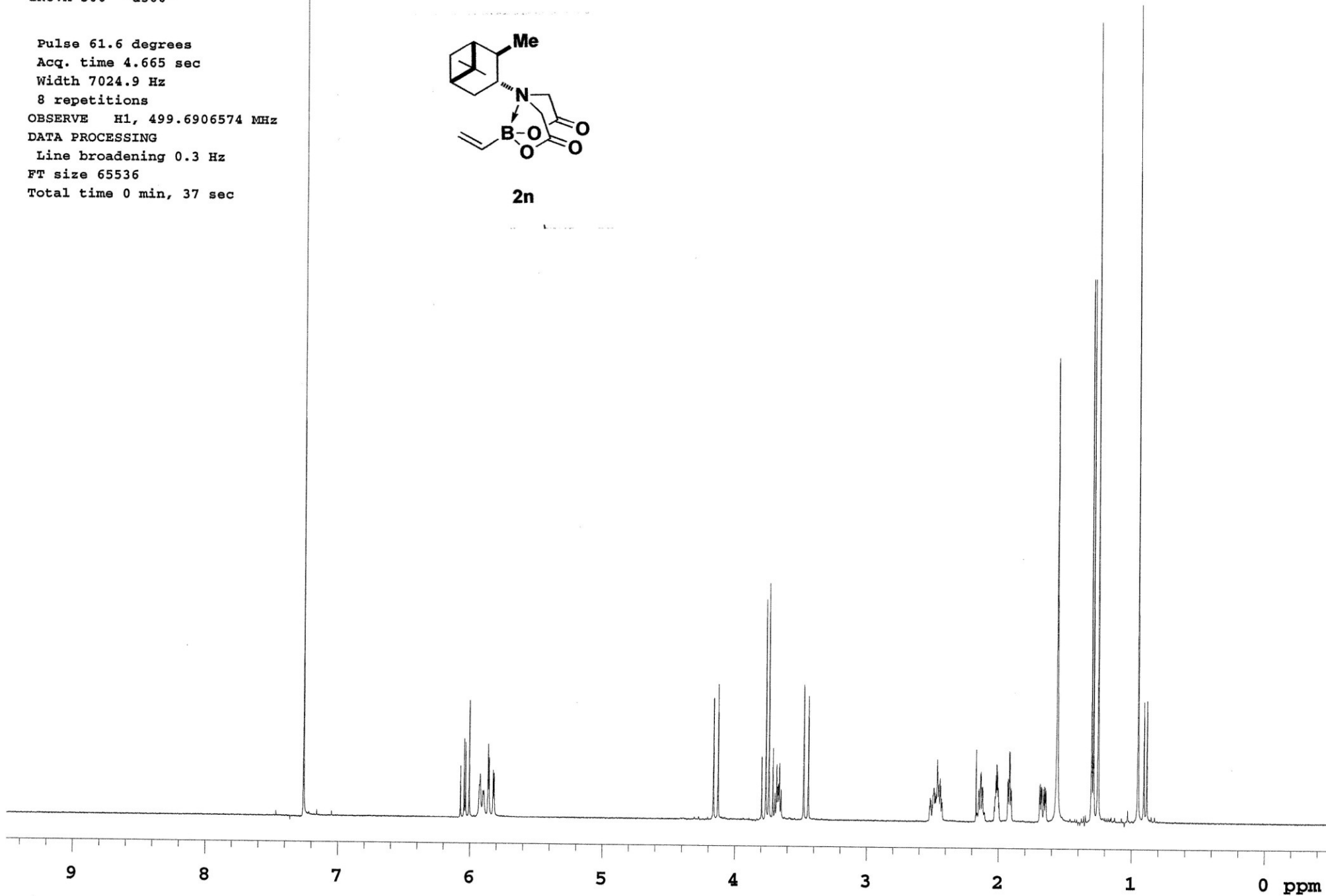
Line broadening 0.3 Hz

FT size 65536

Total time 0 min, 37 sec



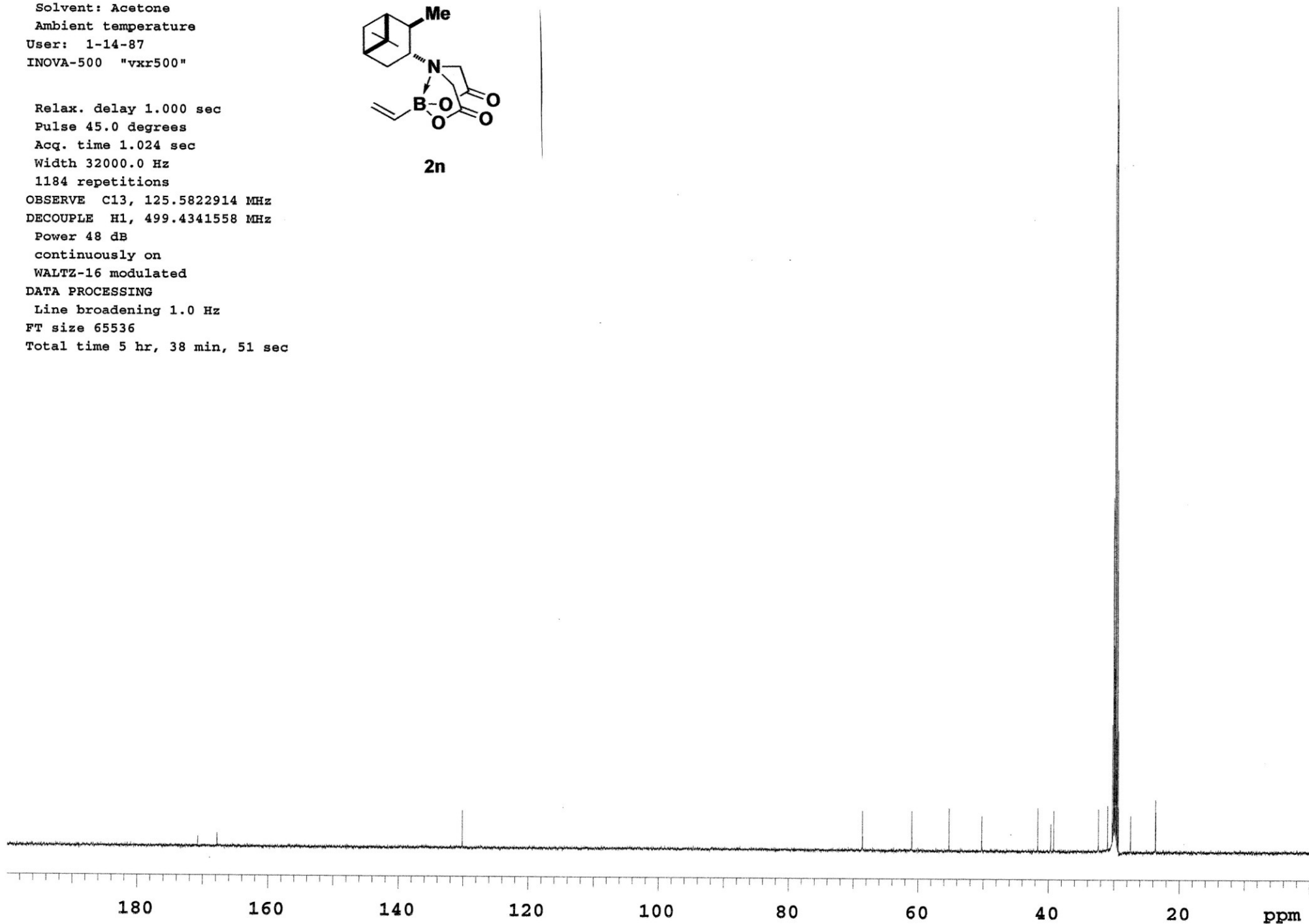
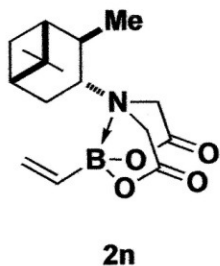
2n



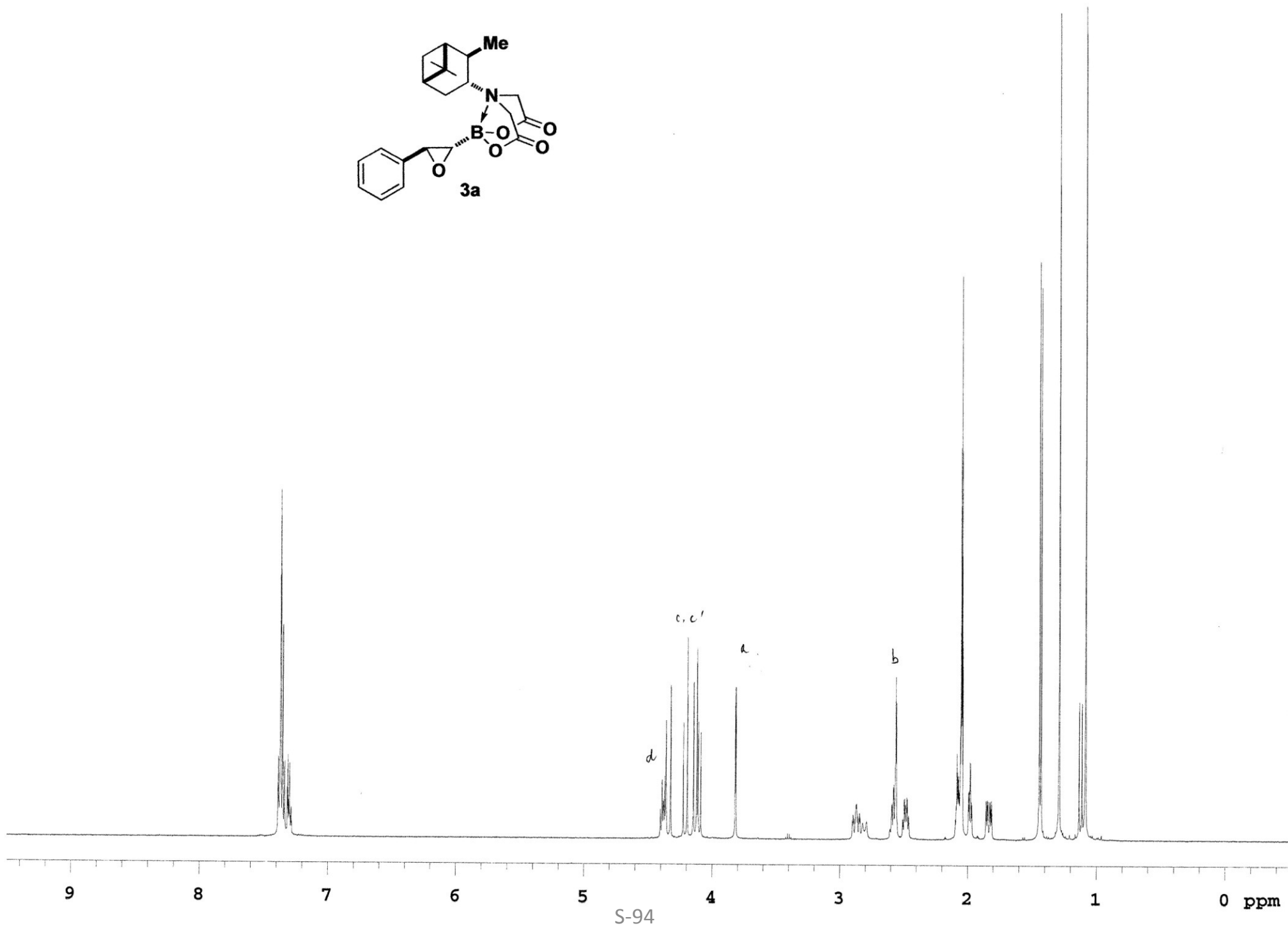
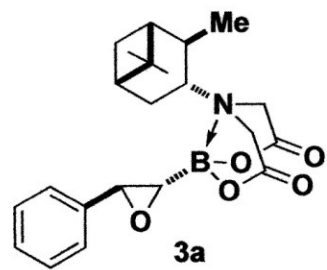
Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "vxr500"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
1184 repetitions
OBSERVE C13, 125.5822914 MHz
DECOUPLE H1, 499.4341558 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul



Pulse Sequence: s2pul

Solvent: CDCl₃

Temp. 20.0 C / 293.1 K

User: 1-14-87

INOVA-500 "vkr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

784 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

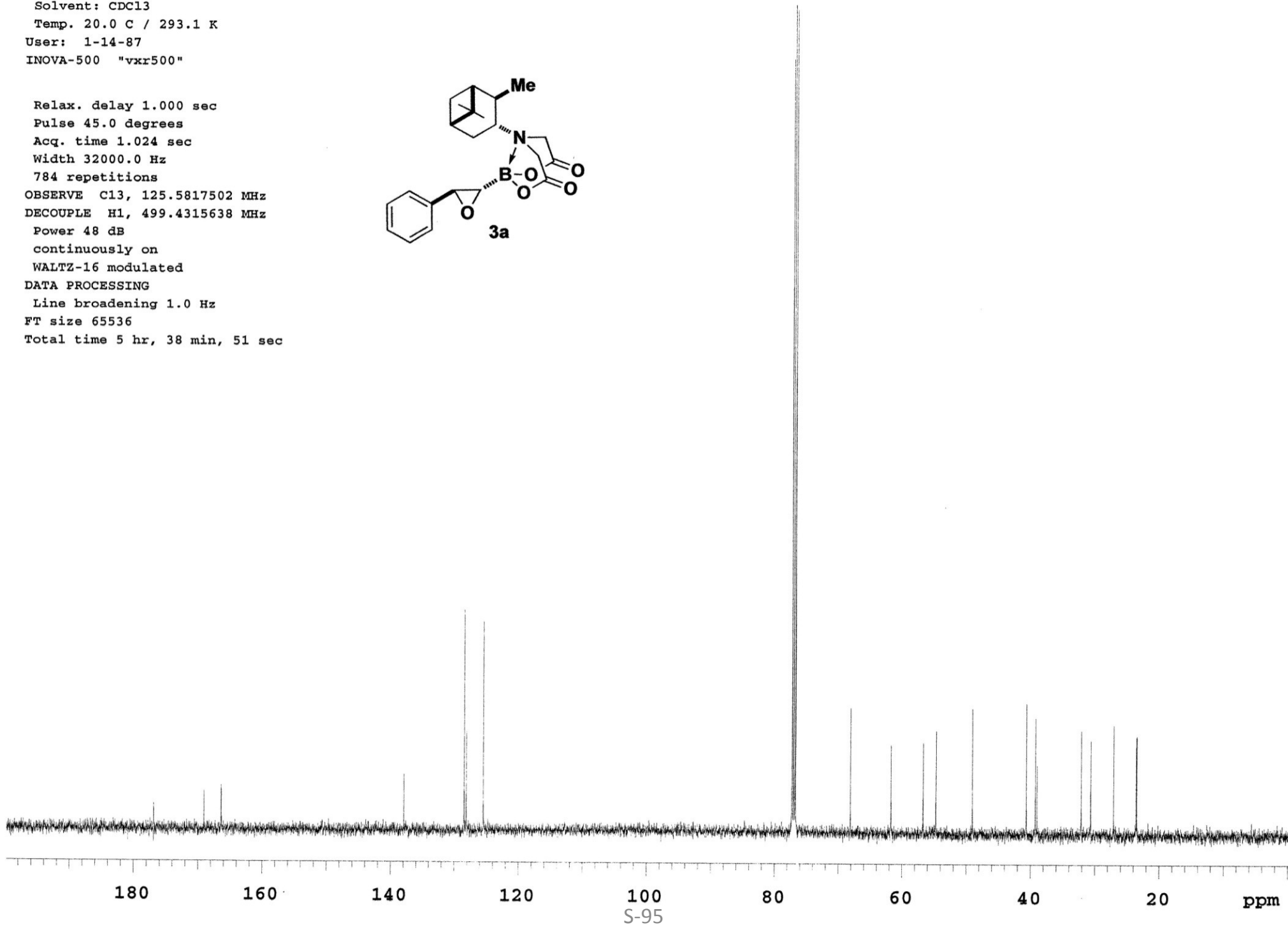
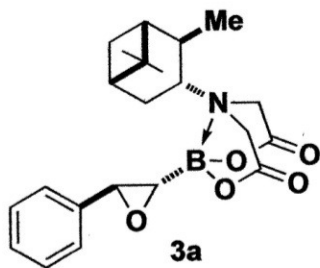
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "vkr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

32 repetitions

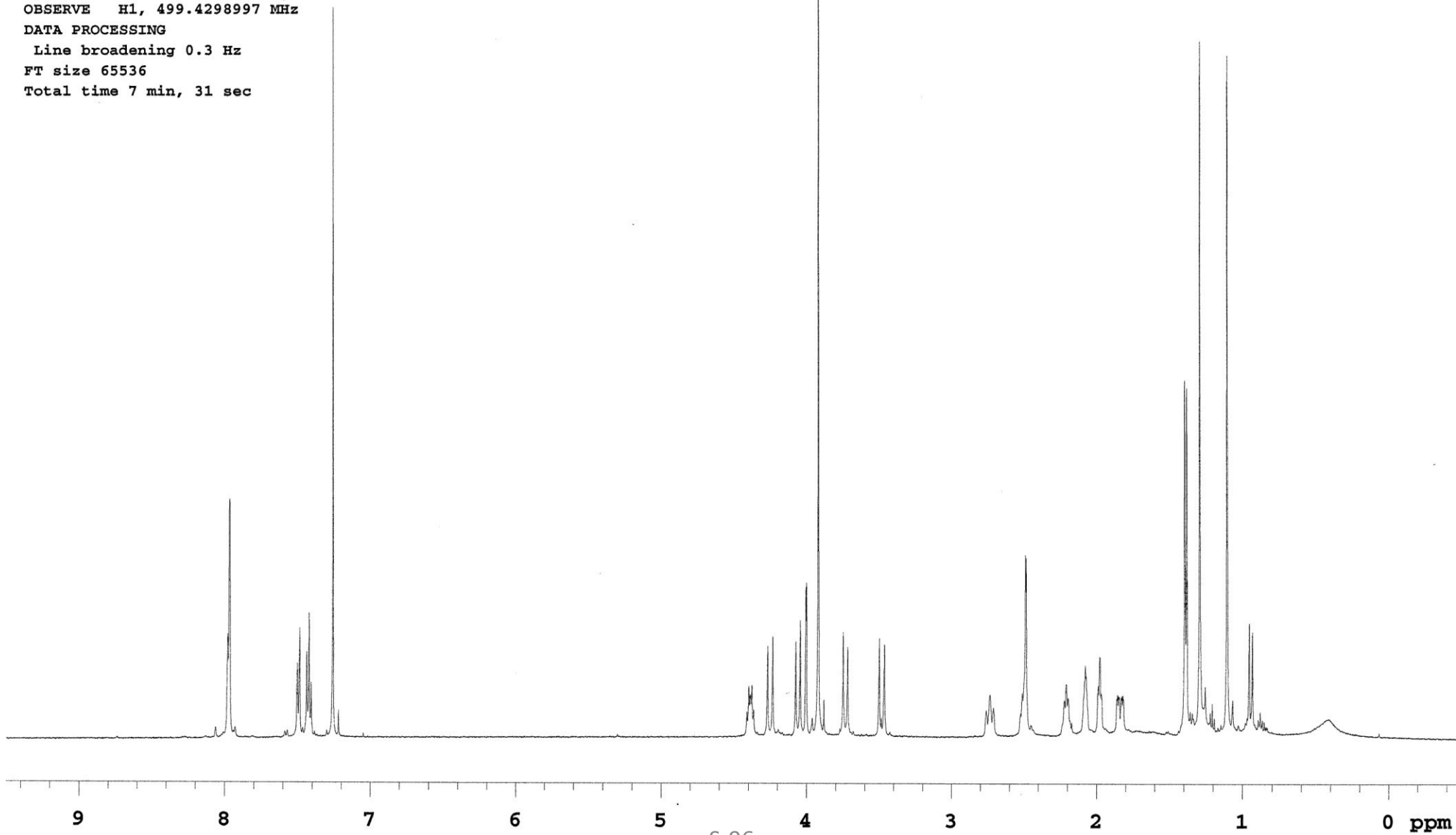
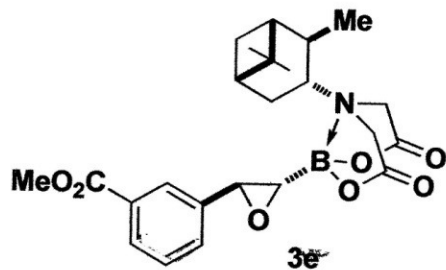
OBSERVE H1, 499.4298997 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 7 min, 31 sec



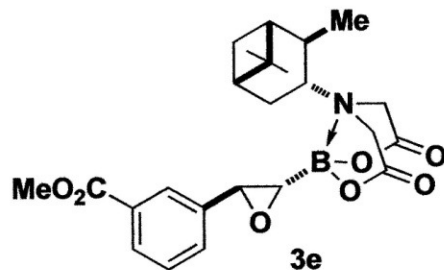
Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "vkr500"



Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

256 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

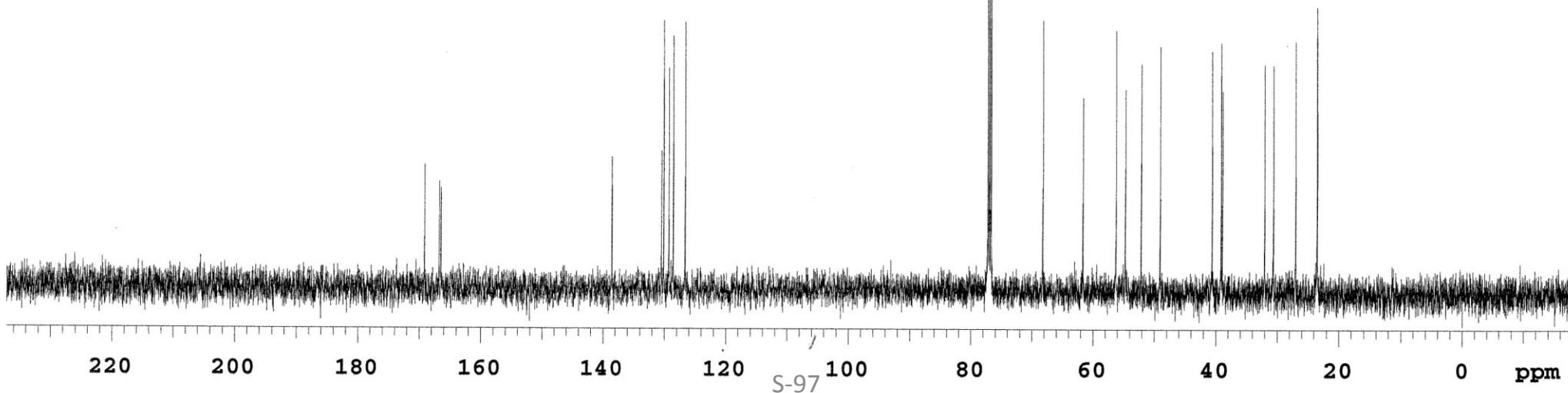
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

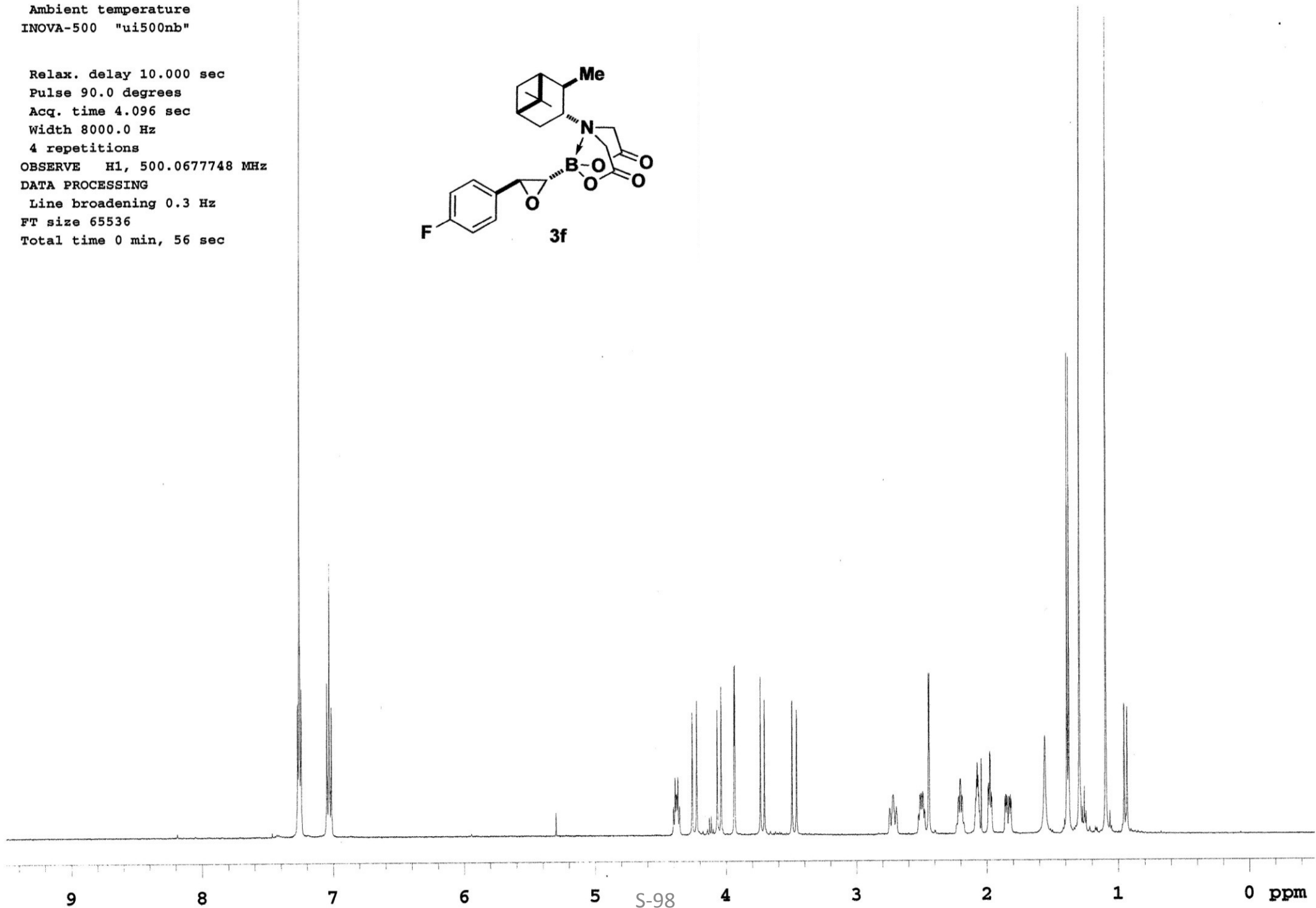
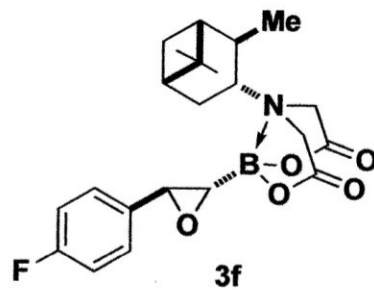
Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "ui500nb"

Relax. delay 10.000 sec
Pulse 90.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
4 repetitions
OBSERVE H1, 500.0677748 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 56 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "vvr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

416 repetitions

OBSERVE C13, 125.5817166 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

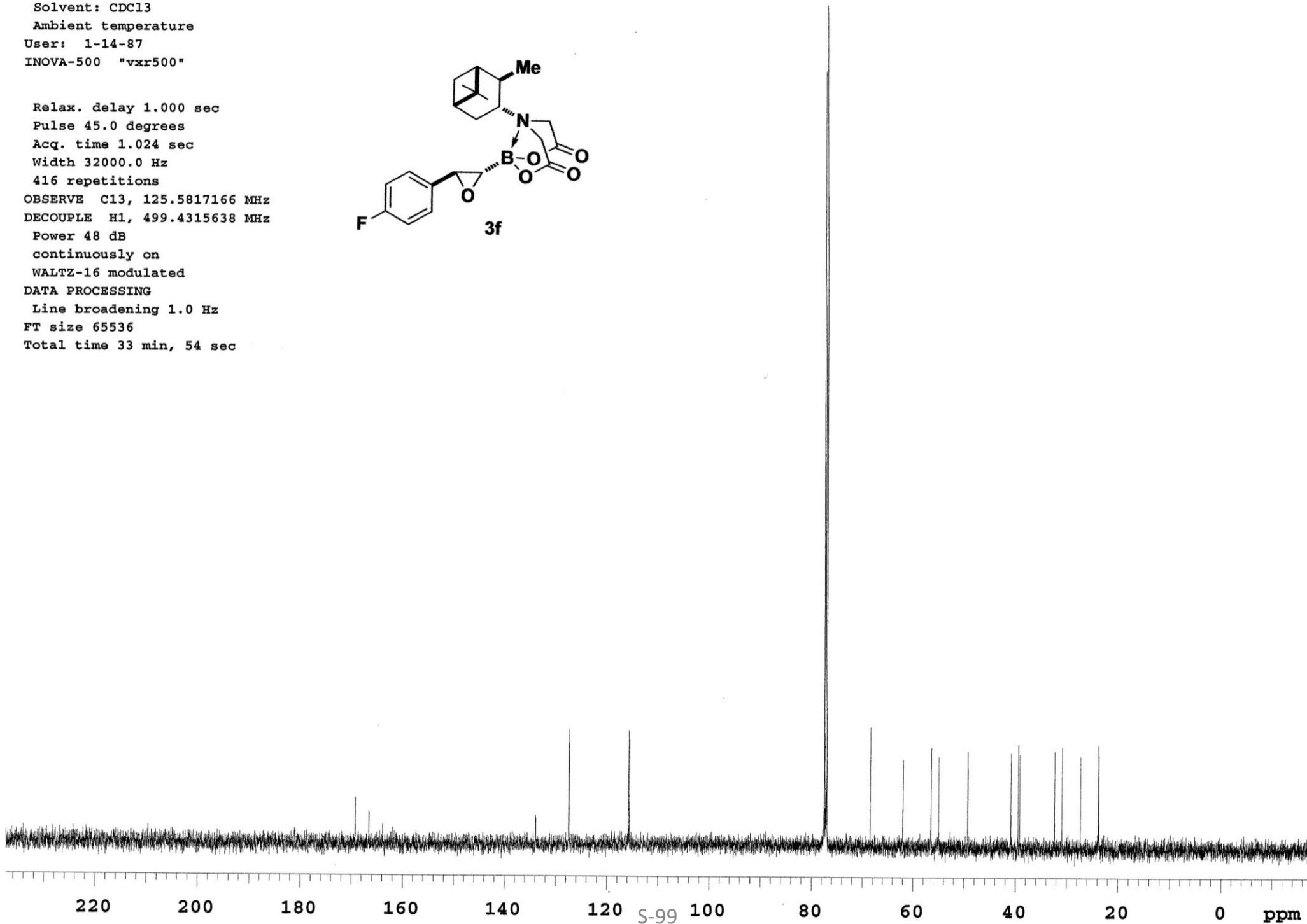
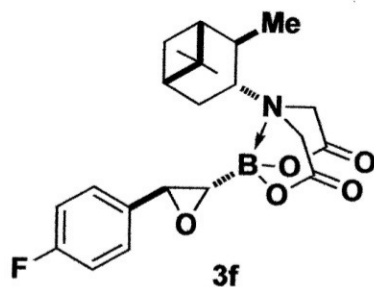
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 33 min, 54 sec



Pulse Sequencer: s2pul

Solvent: CDCl₃

Temp. 20.0 °C / 293.1 K

INOVA-500 "vkr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

32 repetitions

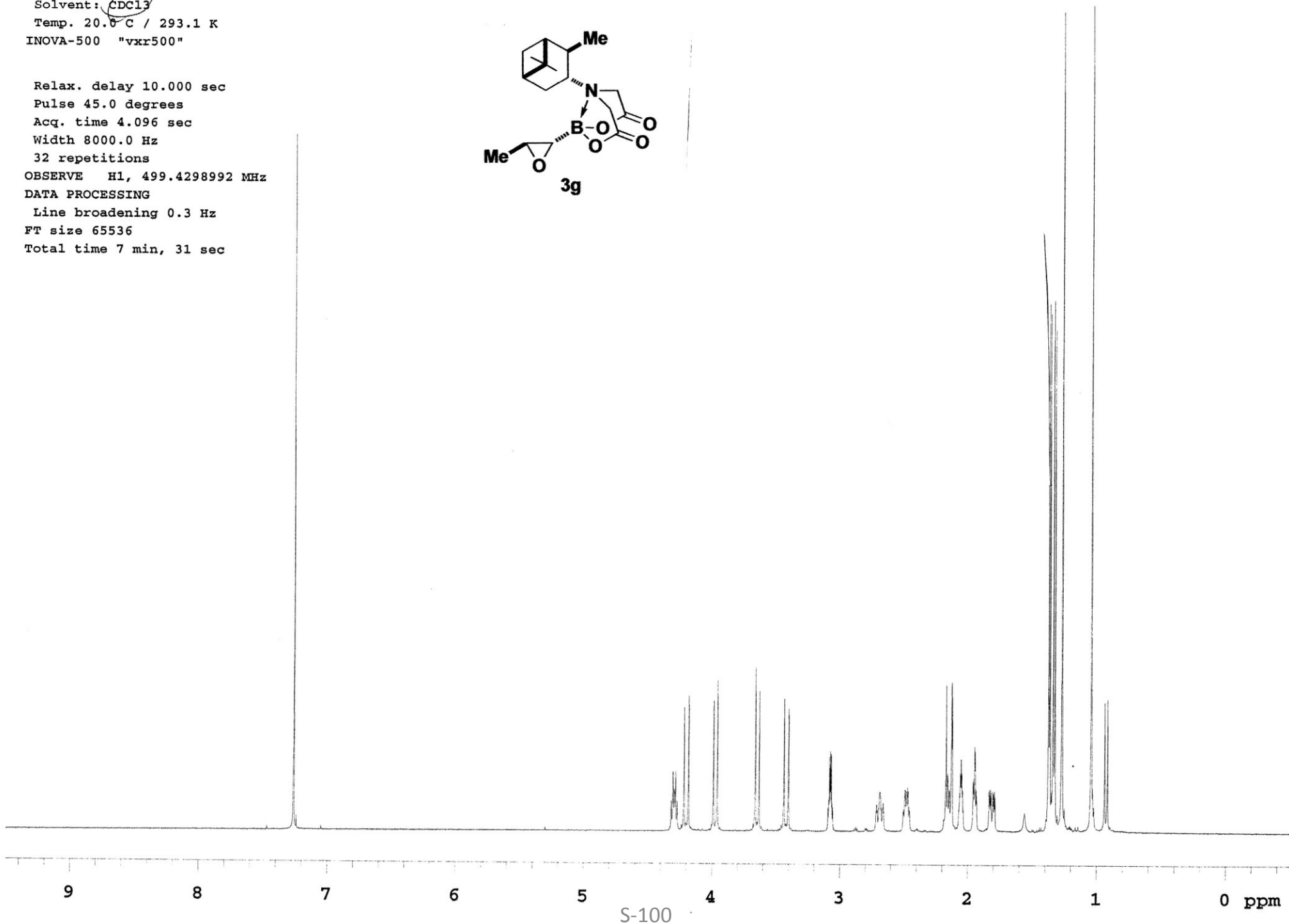
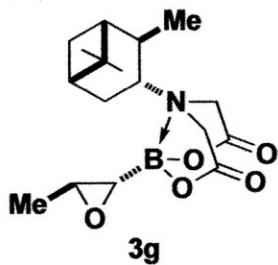
OBSERVE H1, 499.4298992 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

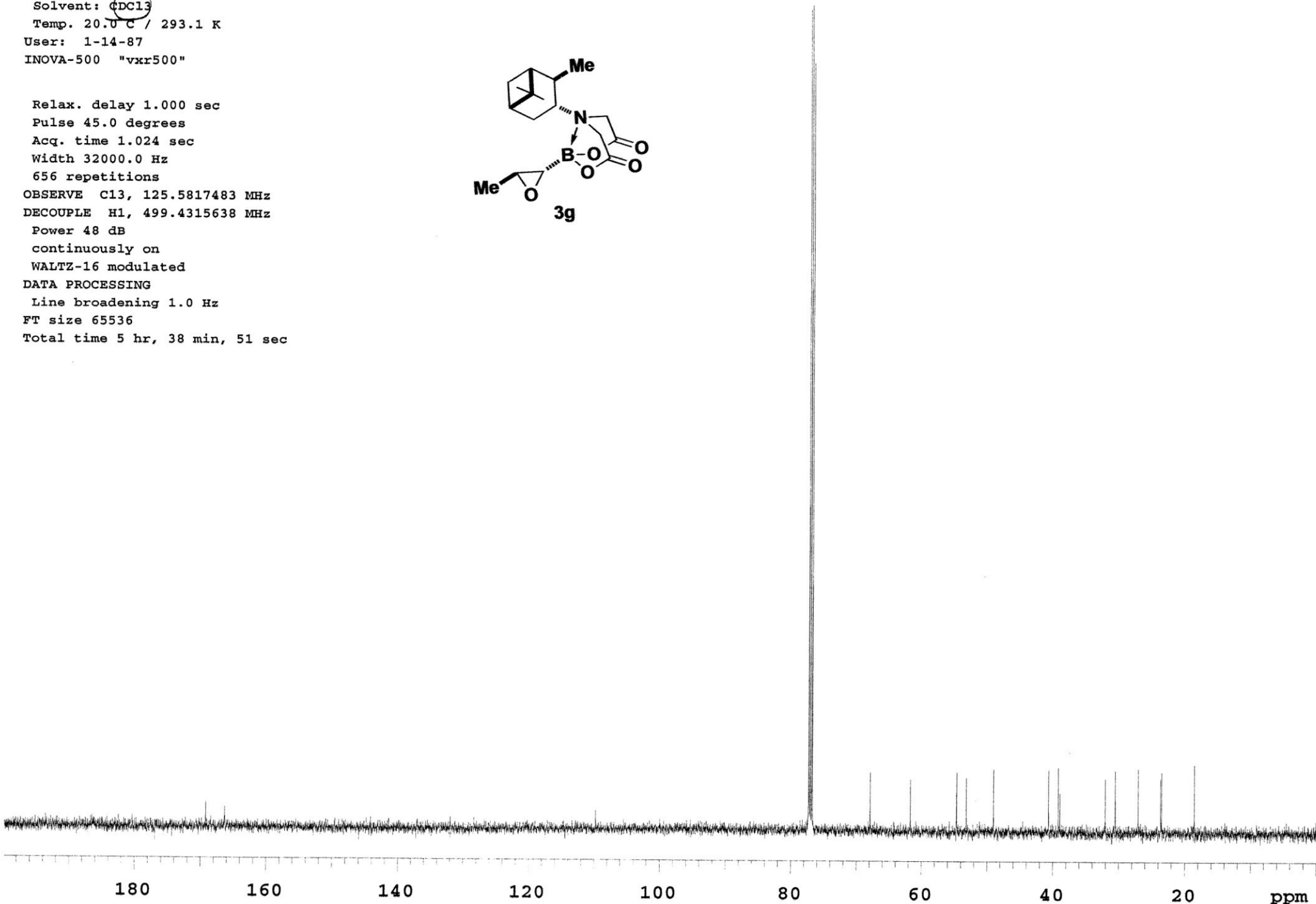
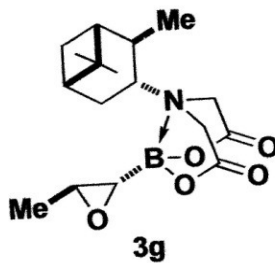
Total time 7 min, 31 sec



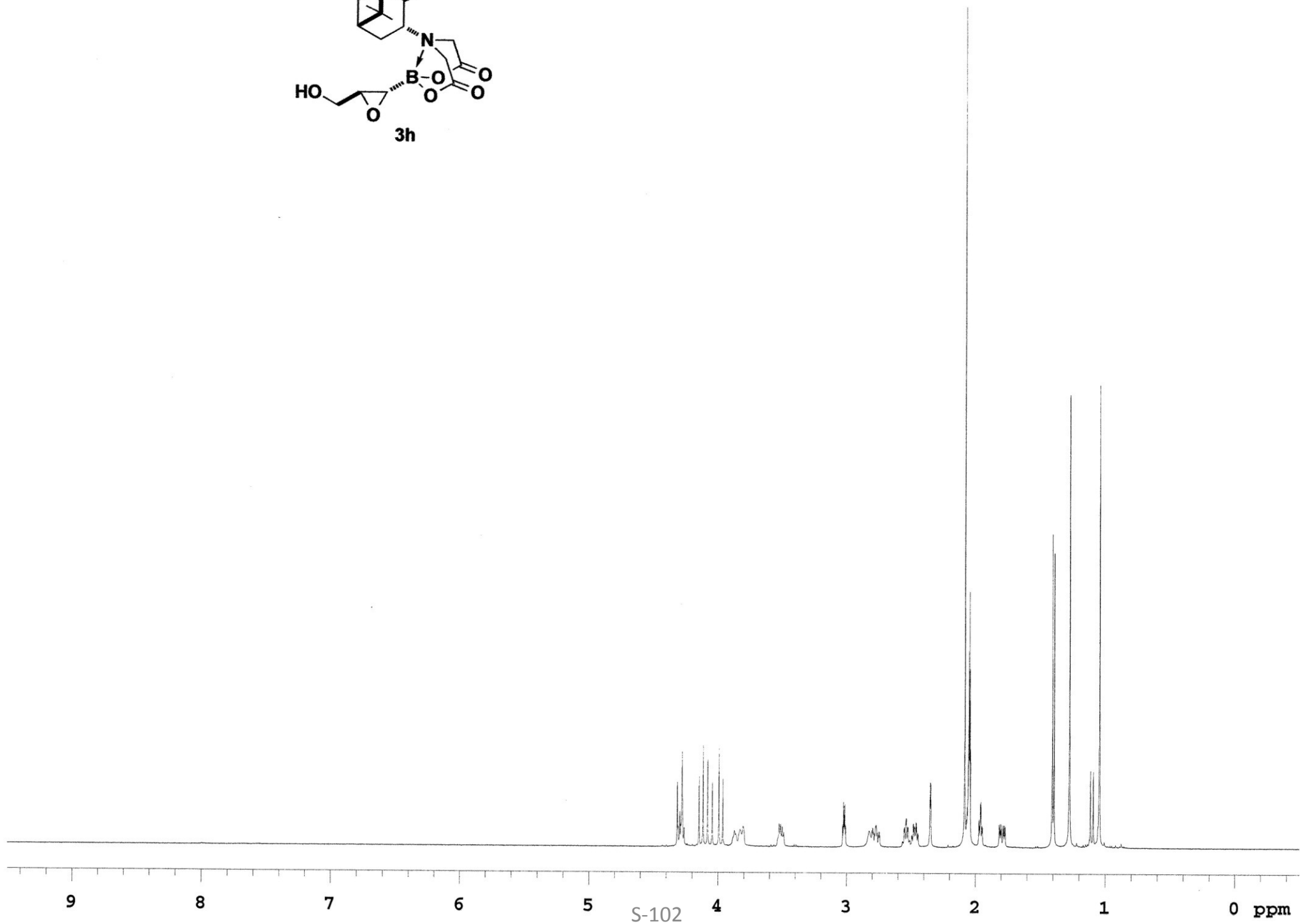
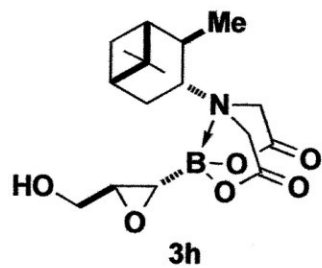
Pulse Sequence: s2pul

Solvent: CDCl₃
Temp. 20.0 °C / 293.1 K
User: 1-14-87
INOVA-500 "vvr500"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
656 repetitions
OBSERVE C13, 125.5817483 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "u500"

Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

592 repetitions

OBSERVE C13, 125.6473166 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

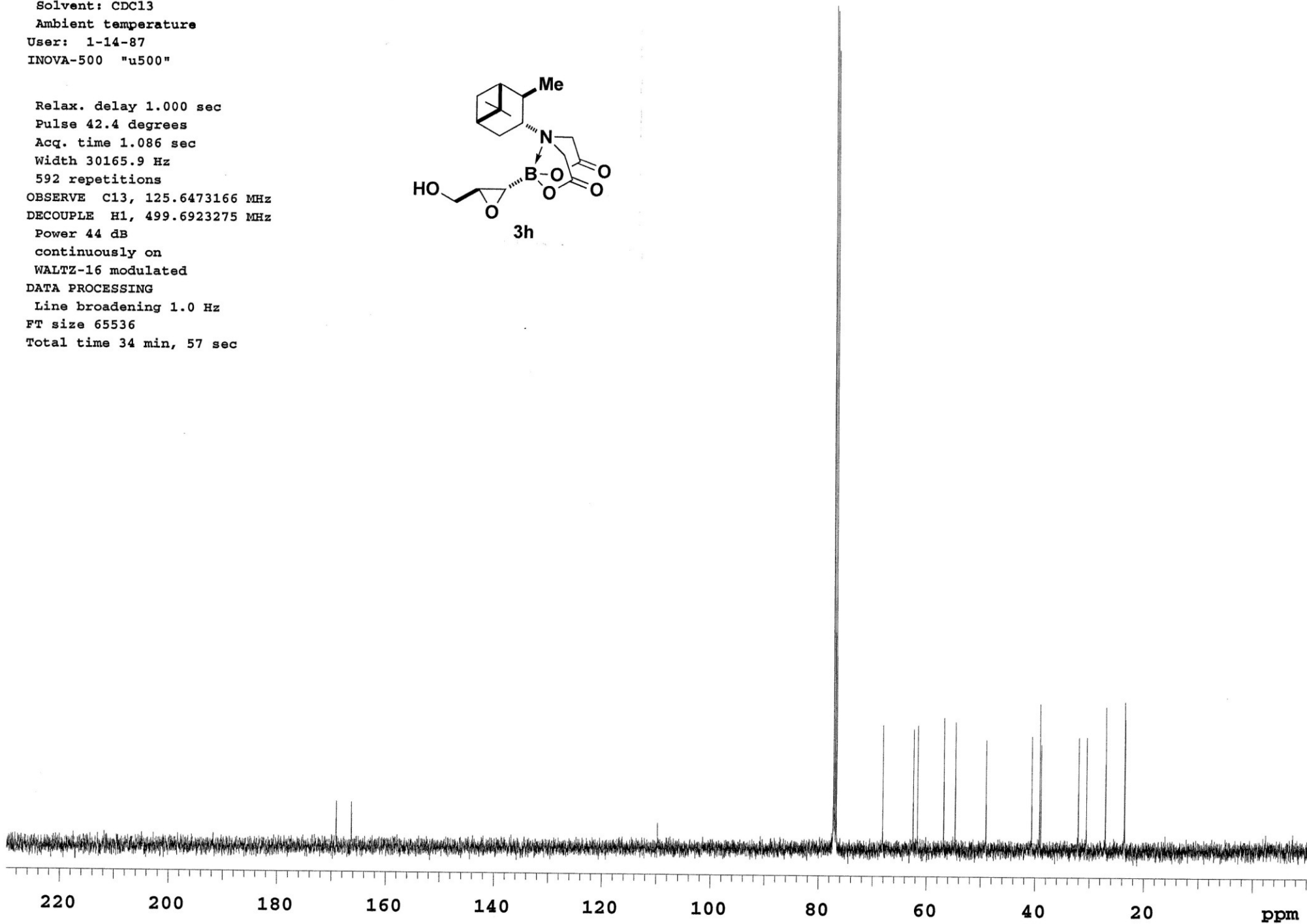
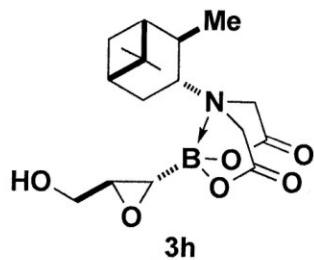
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 34 min, 57 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Temp. 20.0 C / 293.1 K

INOVA-500 "vxr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

32 repetitions

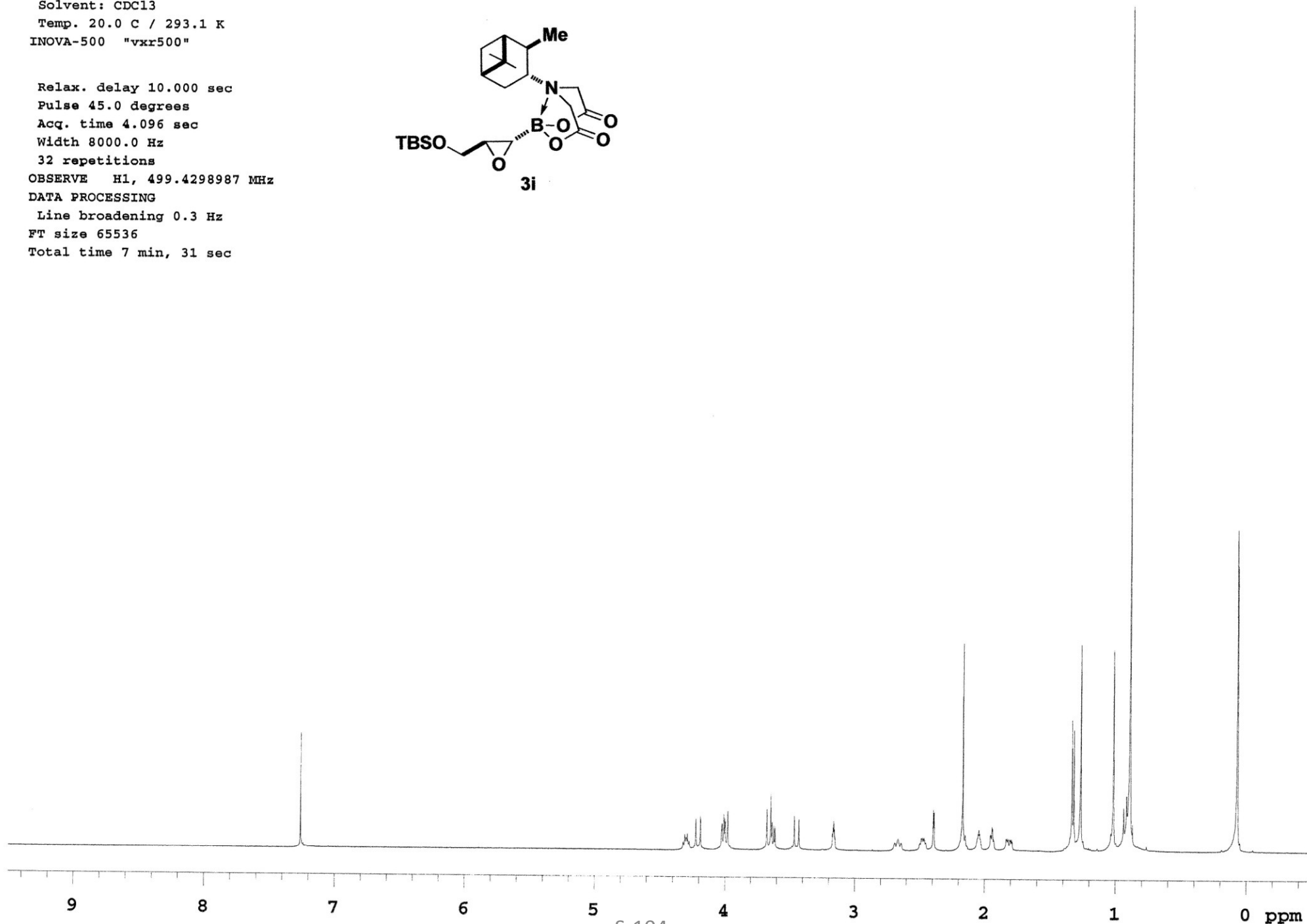
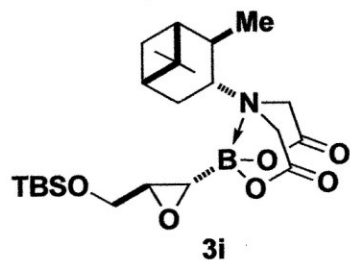
OBSERVE H1, 499.4298987 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

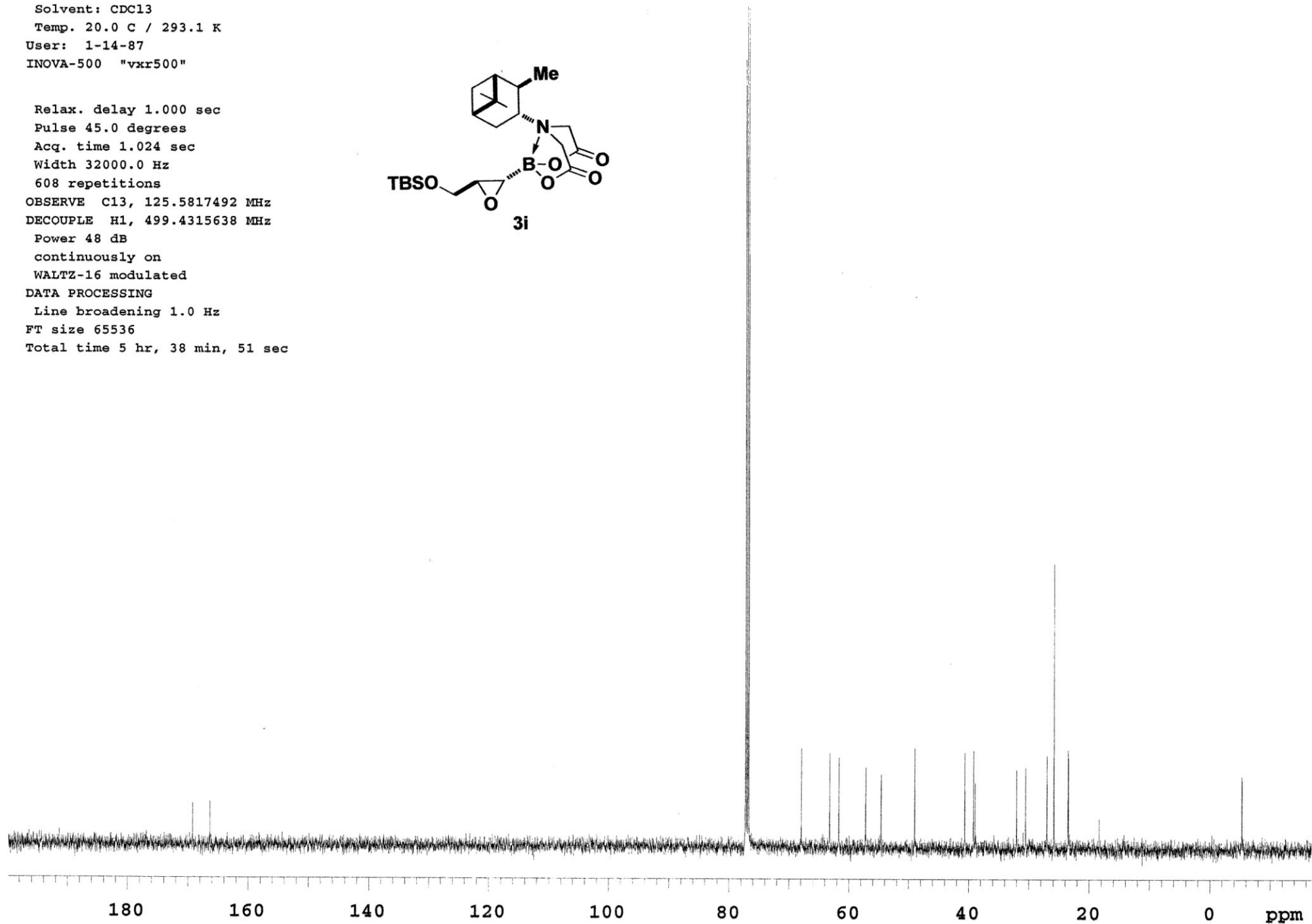
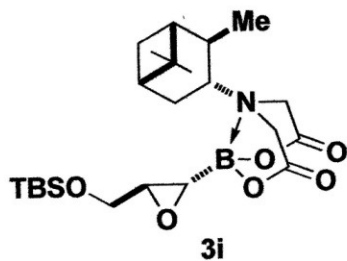
Total time 7 min, 31 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Temp. 20.0 C / 293.1 K
User: 1-14-87
INOVA-500 "vvr500"

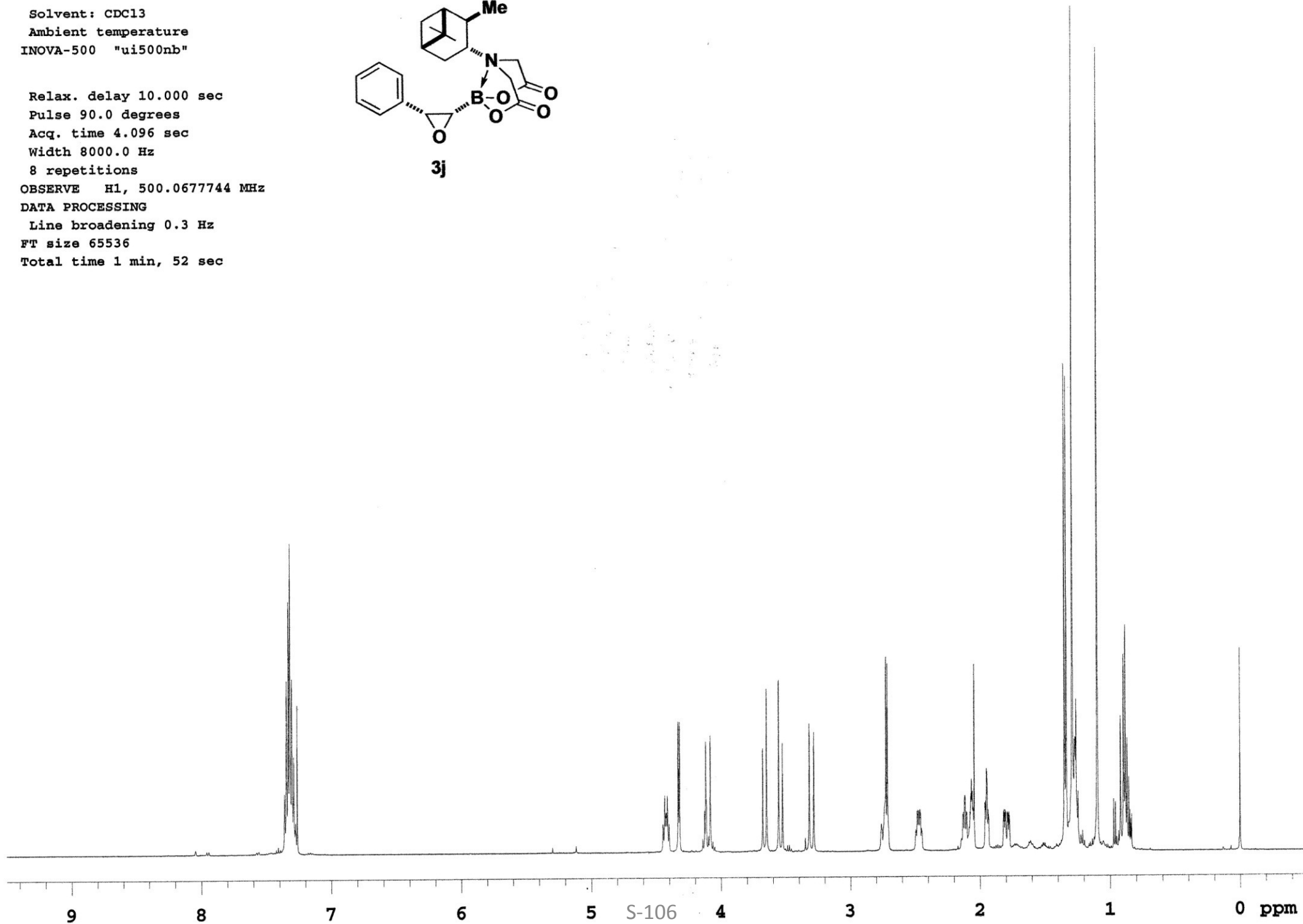
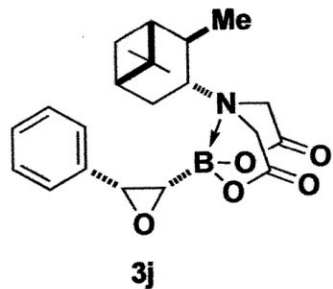
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
608 repetitions
OBSERVE C13, 125.5817492 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "ui500nb"

Relax. delay 10.000 sec
Pulse 90.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 500.0677744 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 1 min, 52 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INNOVA-500 "u500"

Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

624 repetitions

OBSERVE C13, 125.6473193 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

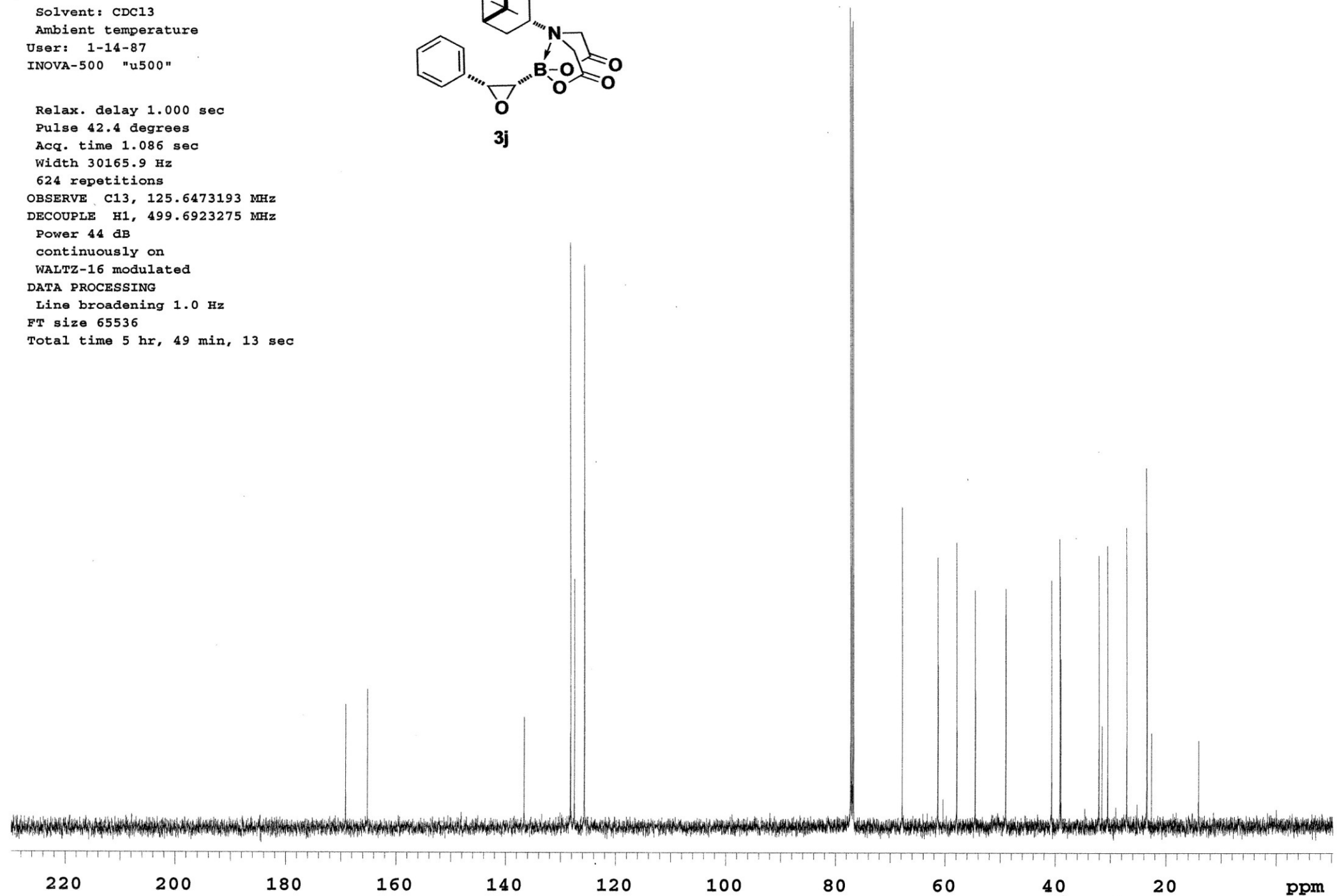
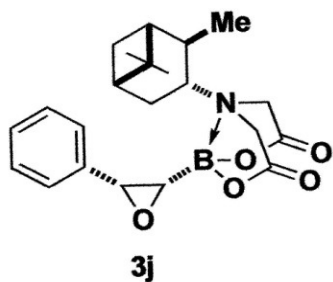
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 49 min, 13 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "vvr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

8 repetitions

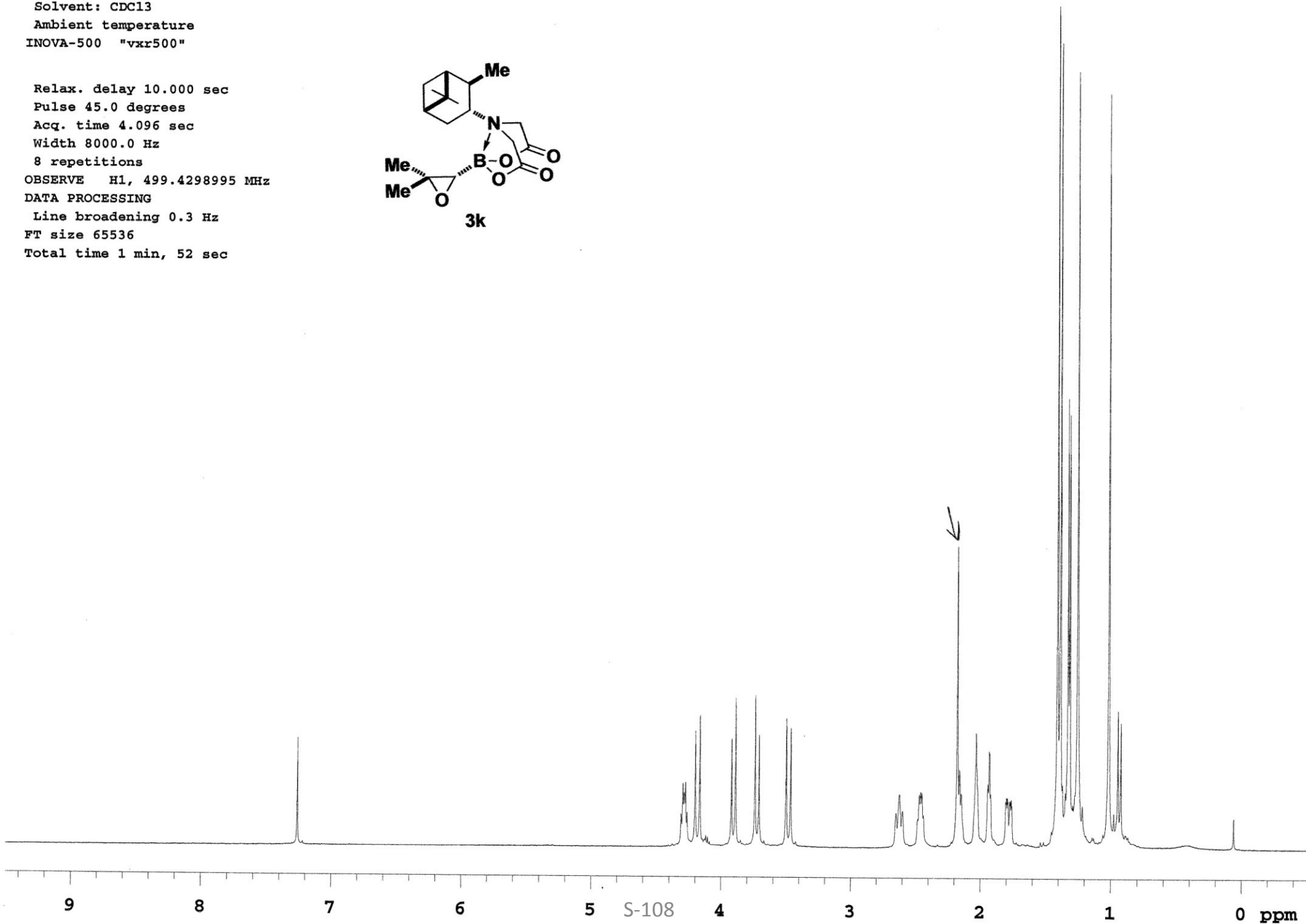
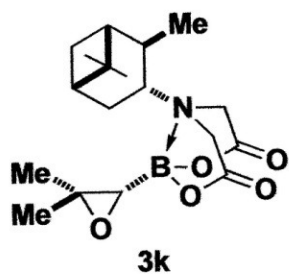
OBSERVE H1, 499.429895 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 1 min, 52 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "vkr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

384 repetitions

OBSERVE C13, 125.5817166 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

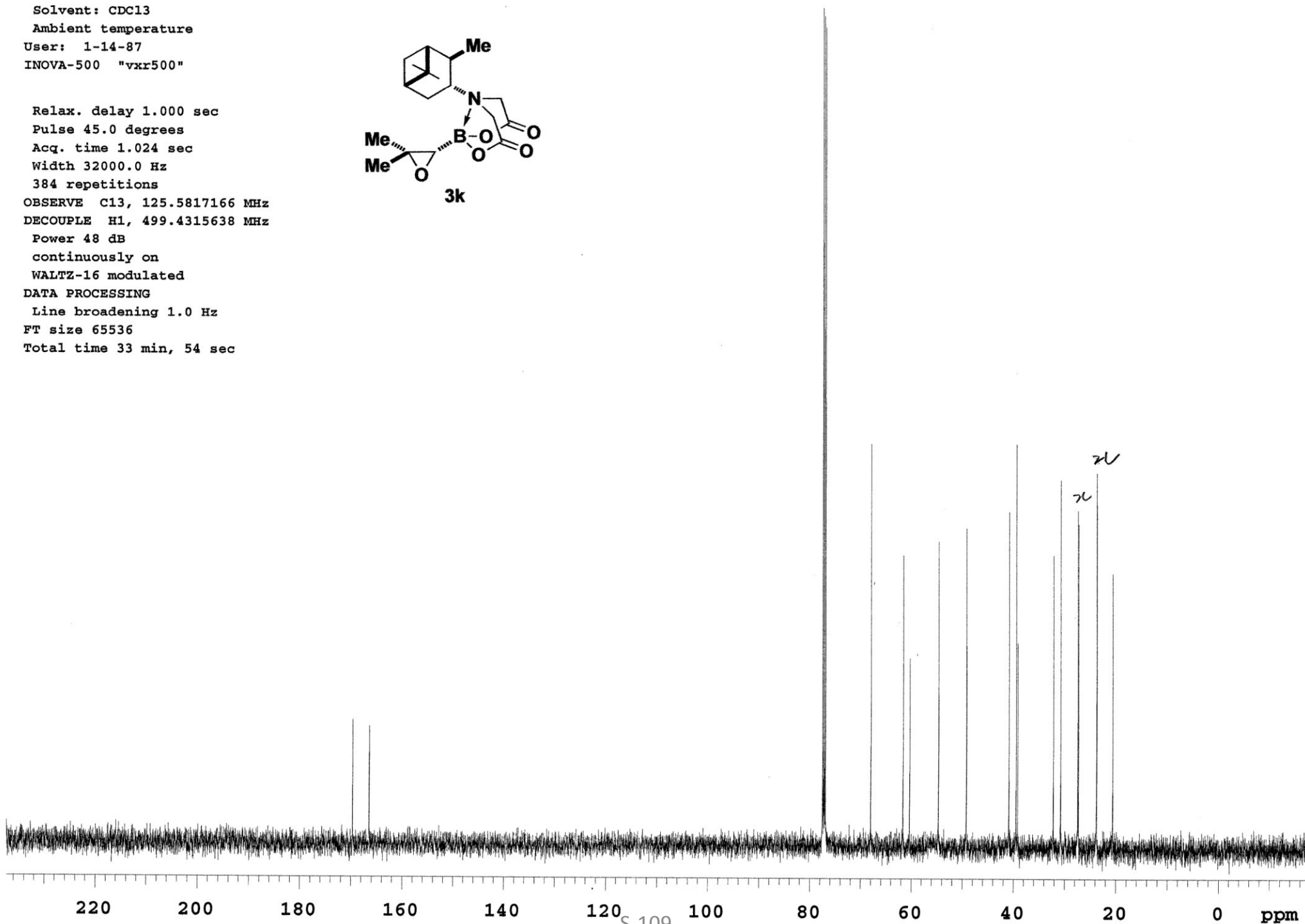
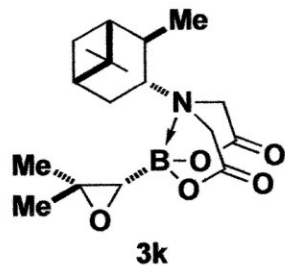
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "ui500nb"

Relax. delay 10.000 sec

Pulse 90.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

8 repetitions

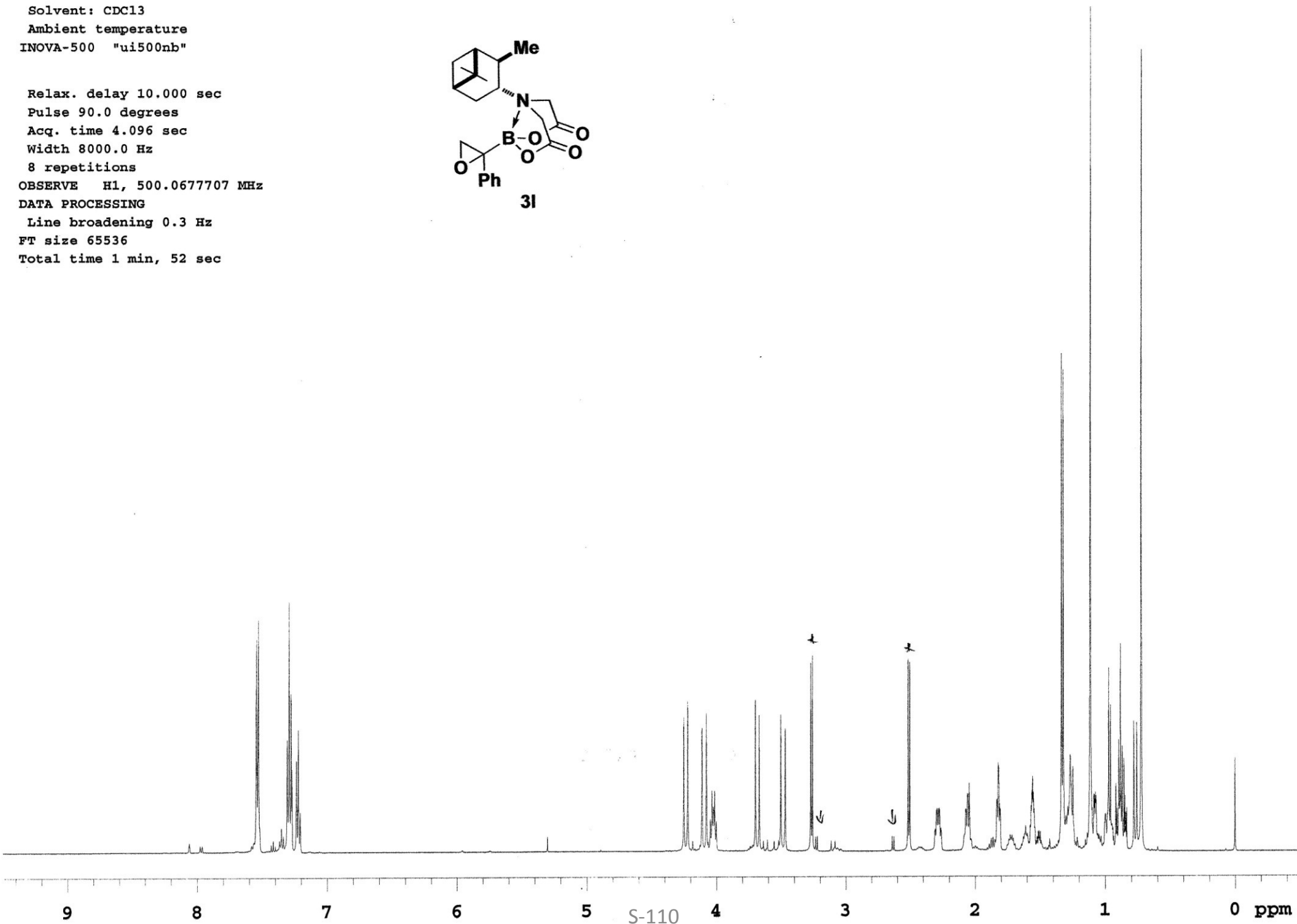
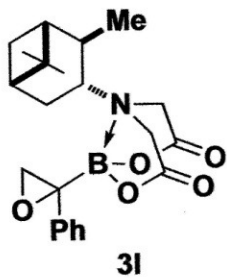
OBSERVE H1, 500.0677707 MHz

DATA PROCESSING

Line broadening 0.3 Hz

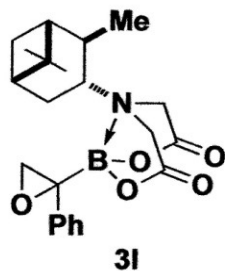
FT size 65536

Total time 1 min, 52 sec

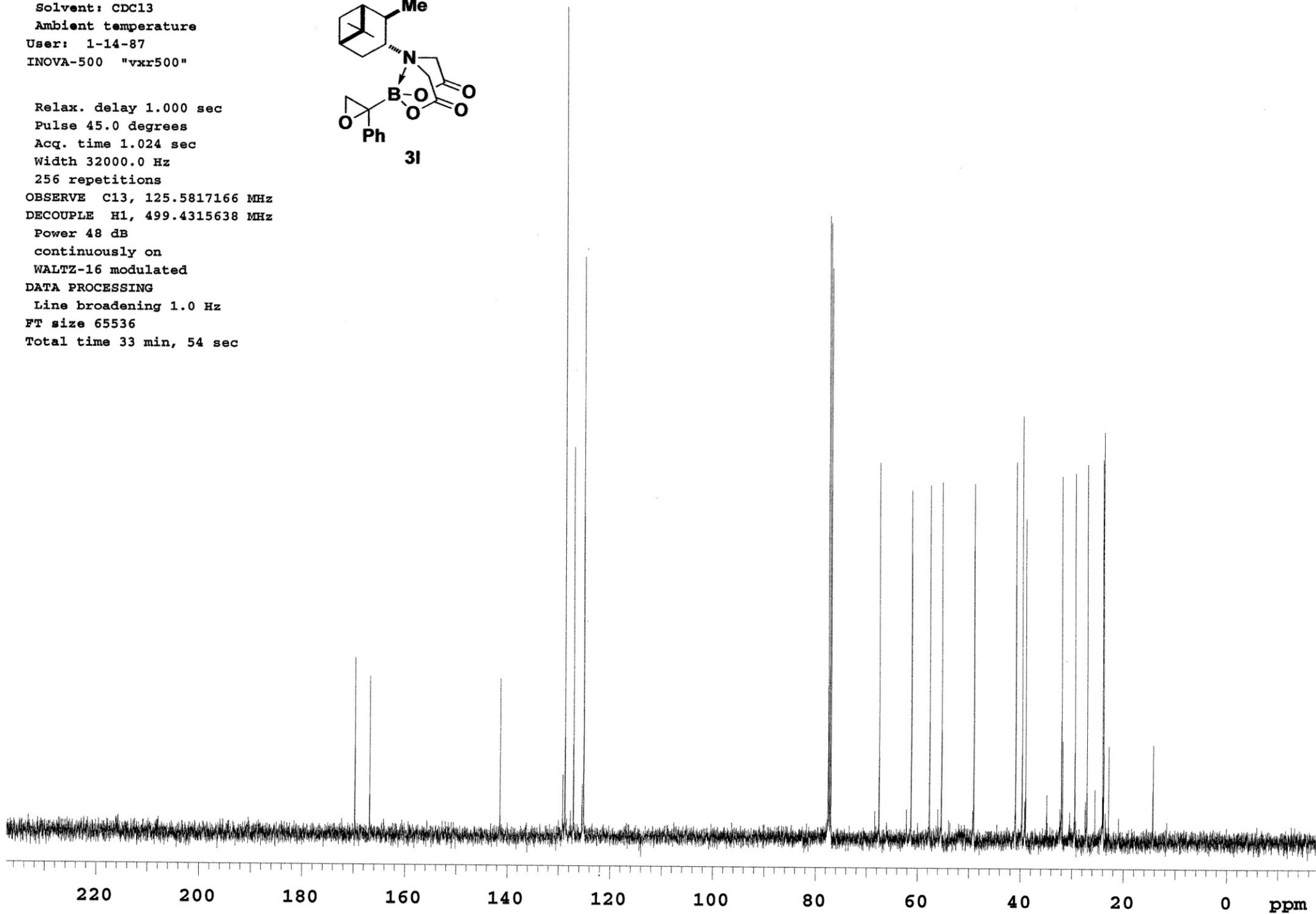


Pulse Sequence: s2pul

Solvent: CDC13
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"



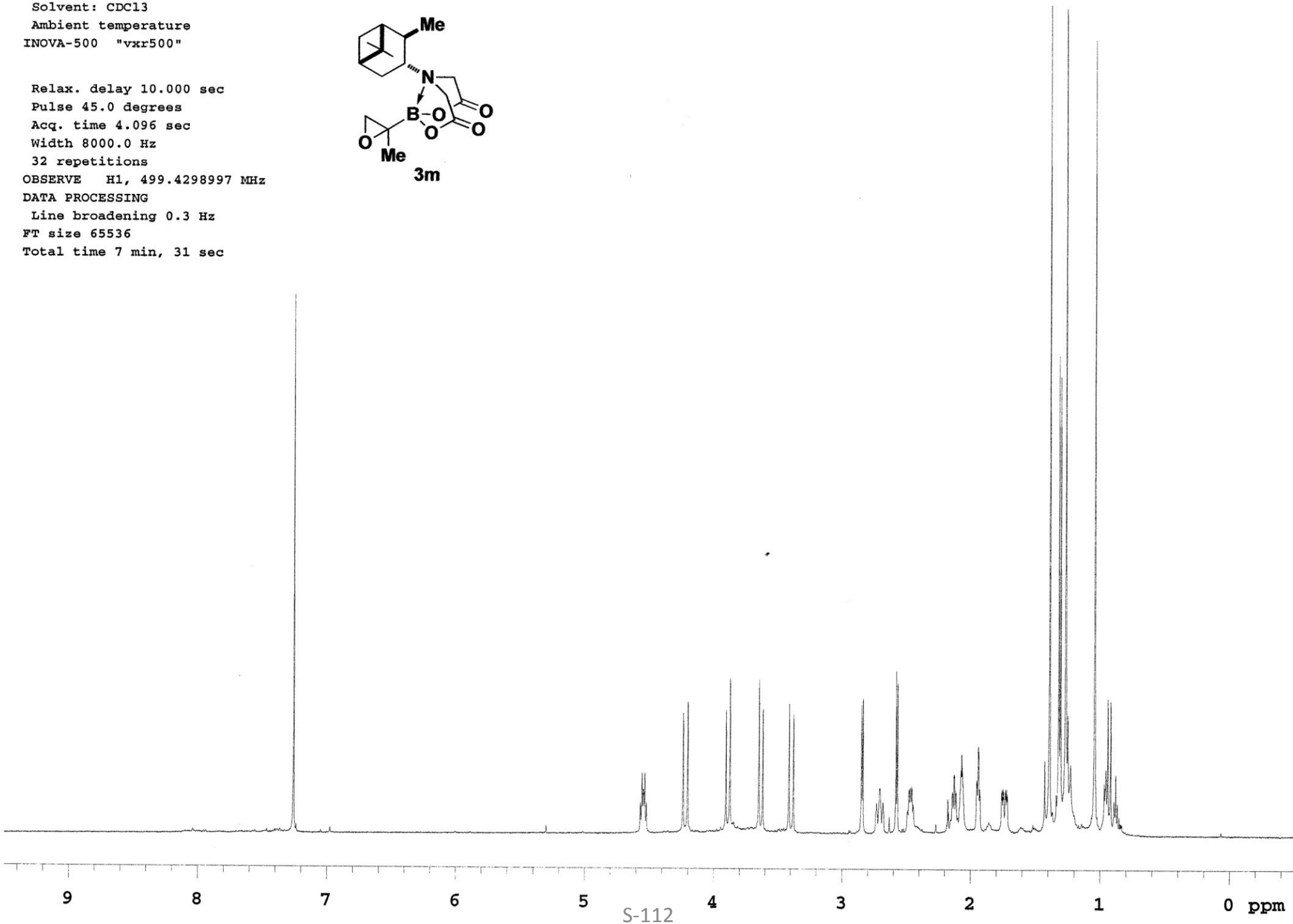
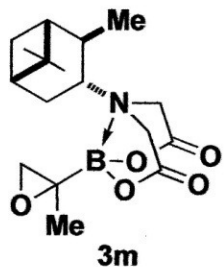
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
256 repetitions
OBSERVE C13, 125.5817166 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "vxr500"

Relax. delay 10.000 sec
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
32 repetitions
OBSERVE H1, 499.4298997 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 7 min, 31 sec



Pulse Sequence: s2pul

Solvent: CDCl₃

Ambient temperature

User: 1-14-87

INOVA-500 "u500"

Relax. delay 1.000 sec

Pulse 65.9 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

1120 repetitions

OBSERVE C13, 125.6473175 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

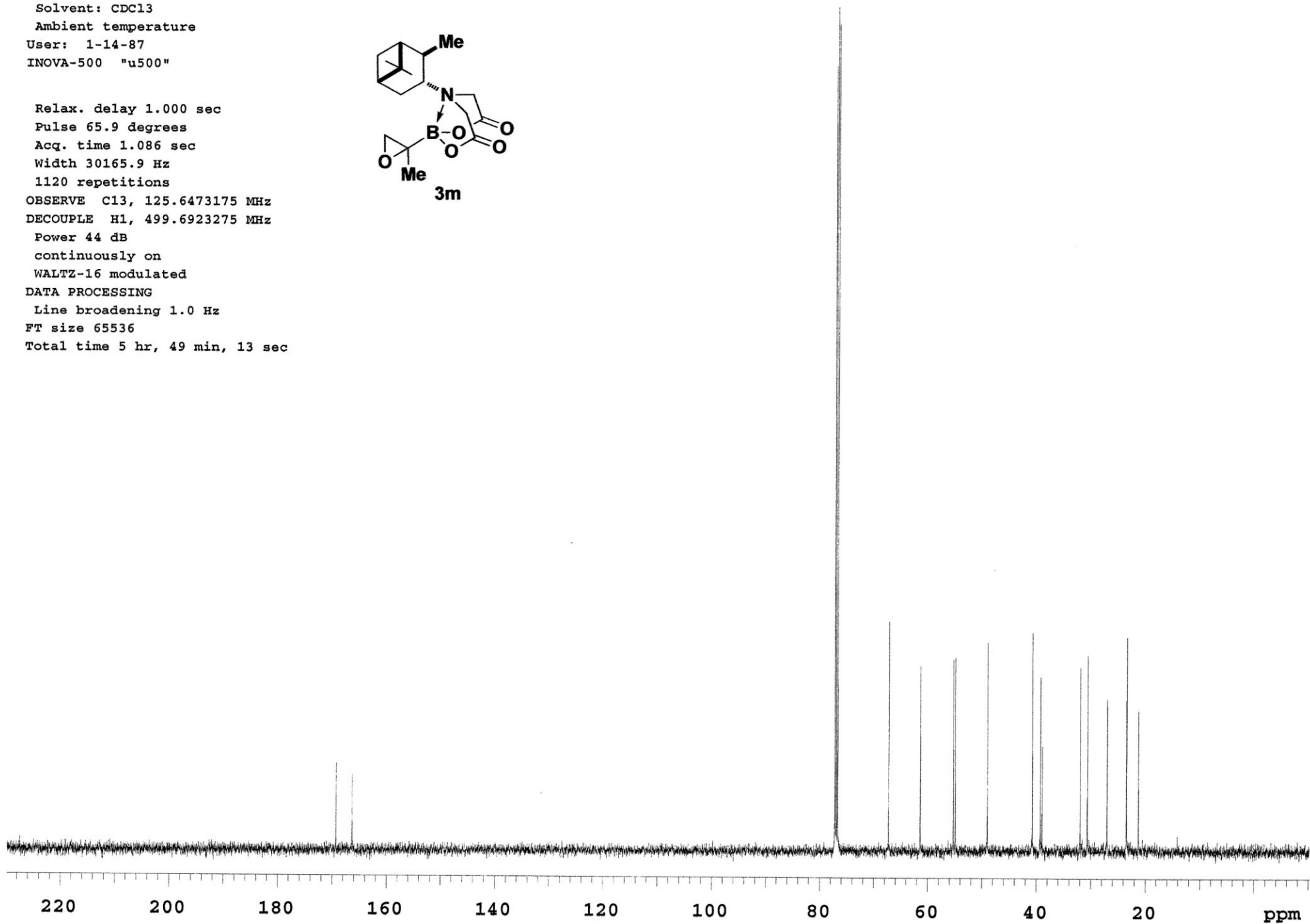
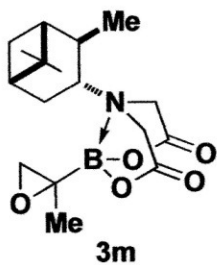
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

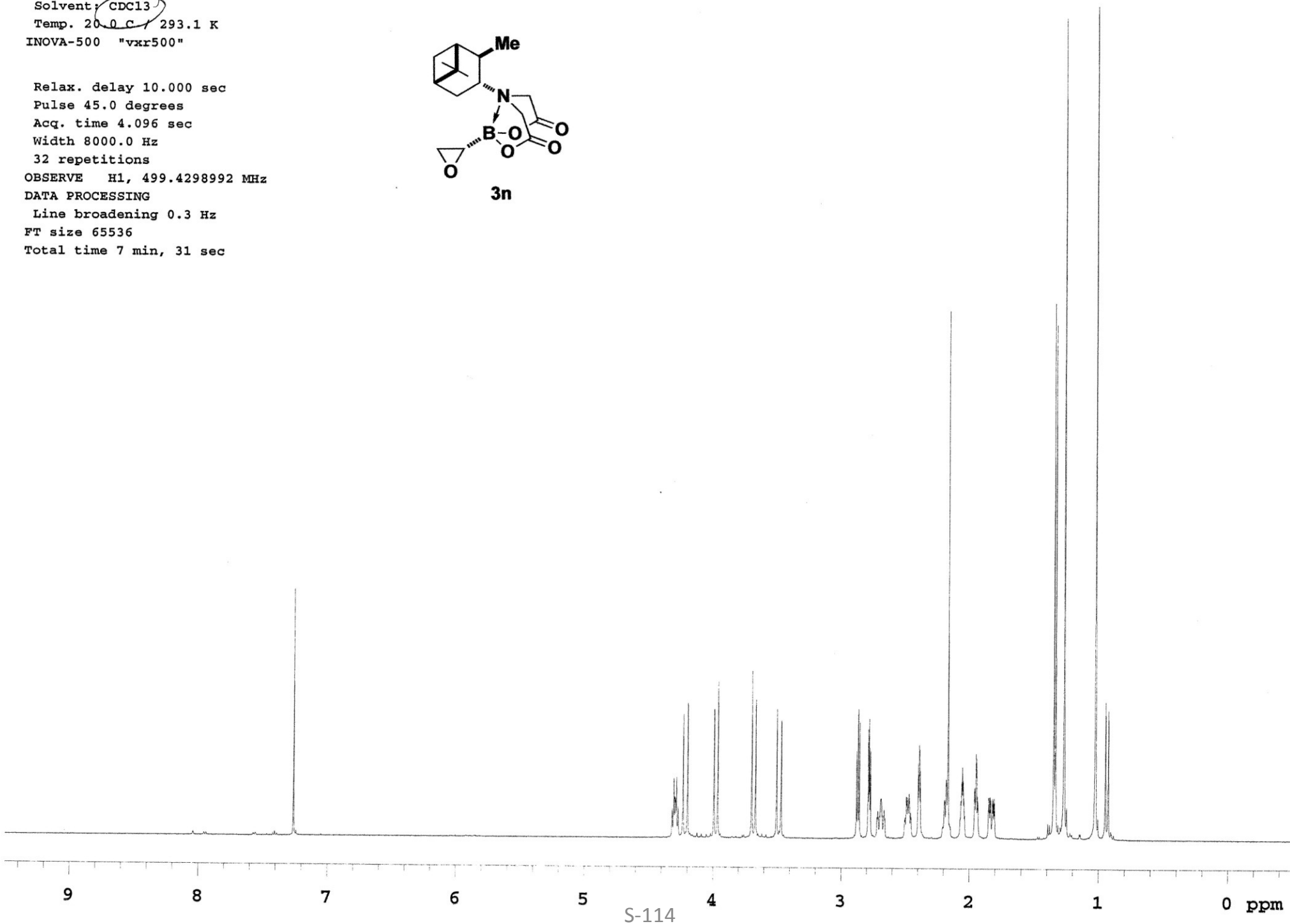
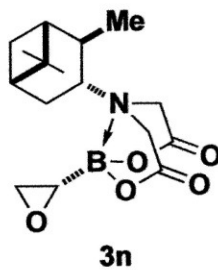
Total time 5 hr, 49 min, 13 sec



Pulse Sequence: s2pul

Solvent: CDCl₃
Temp. 20.0 C / 293.1 K
INOVA-500 "vnr500"

Relax. delay 10.000 sec
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
32 repetitions
OBSERVE H1, 499.429892 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 7 min, 31 sec



Pulse Sequence: s2pul

Solvent: CDCl₃

Temp. 20.0 C / 293.1 K

User: 1-14-87

INOVA-500 "vkr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

416 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

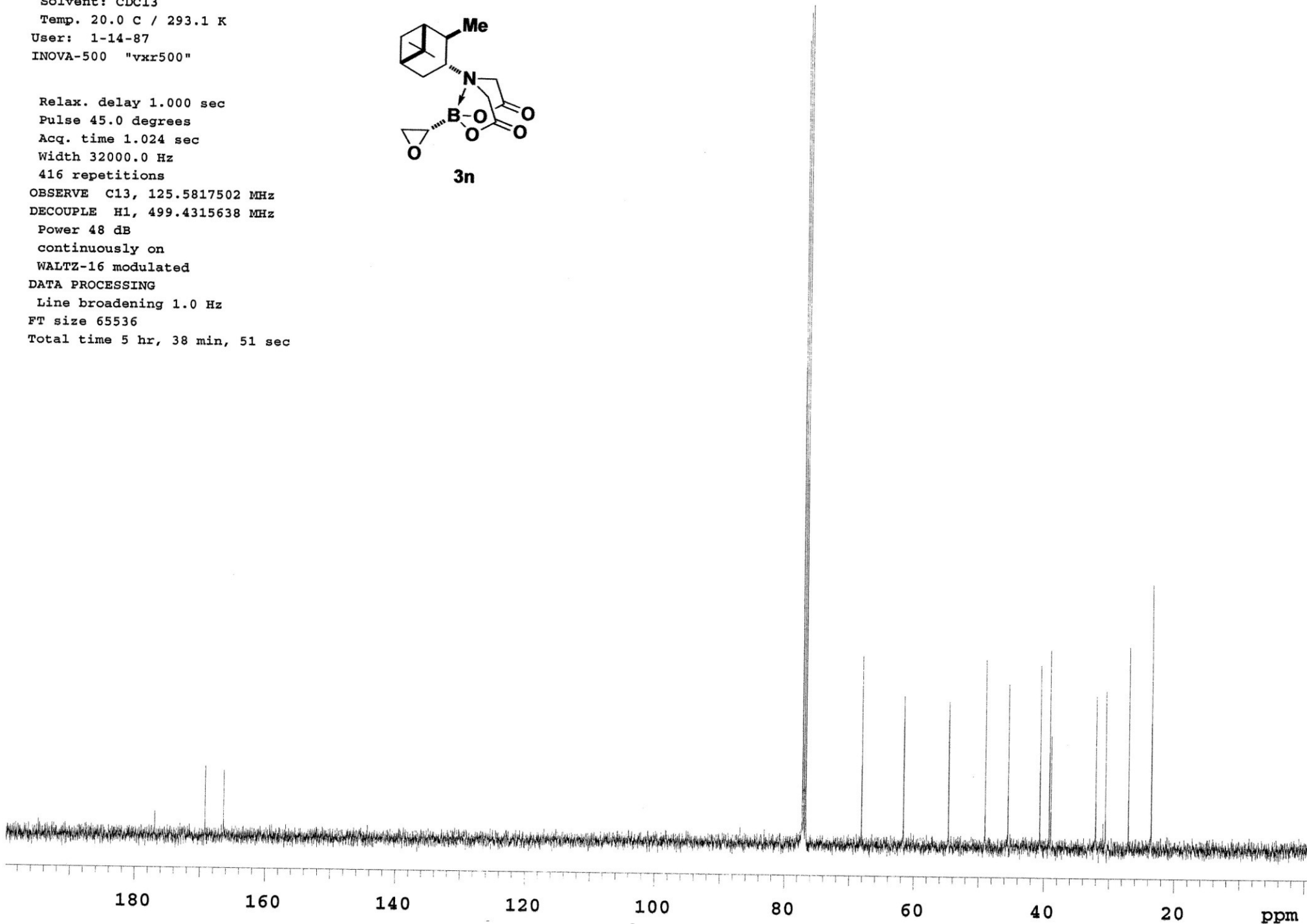
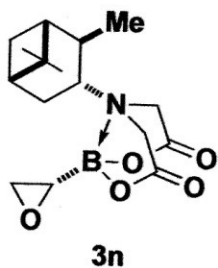
WALTZ-16 modulated

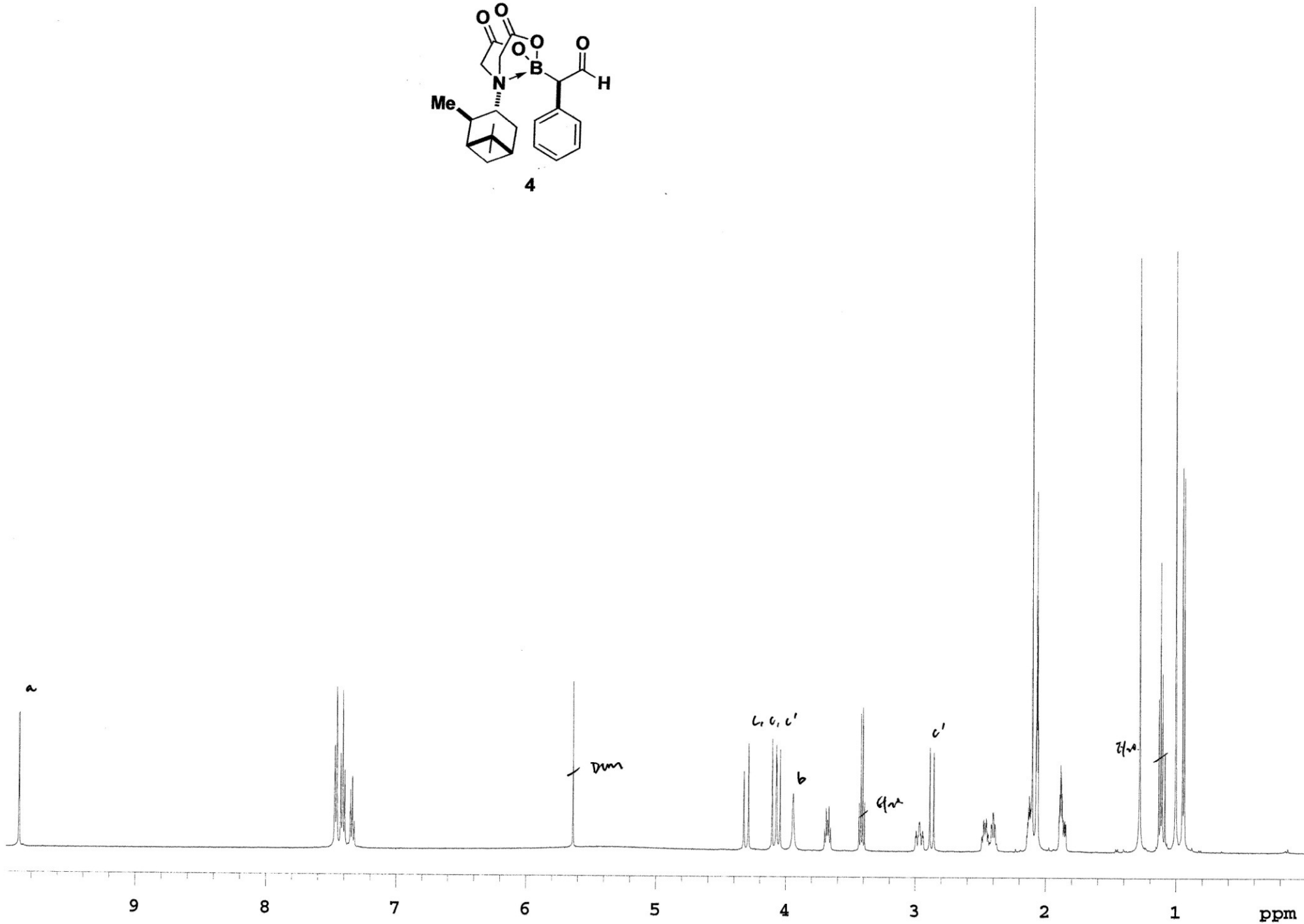
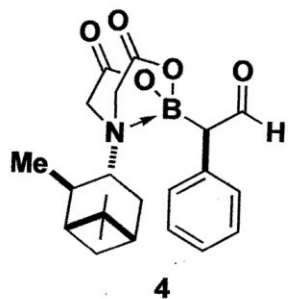
DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

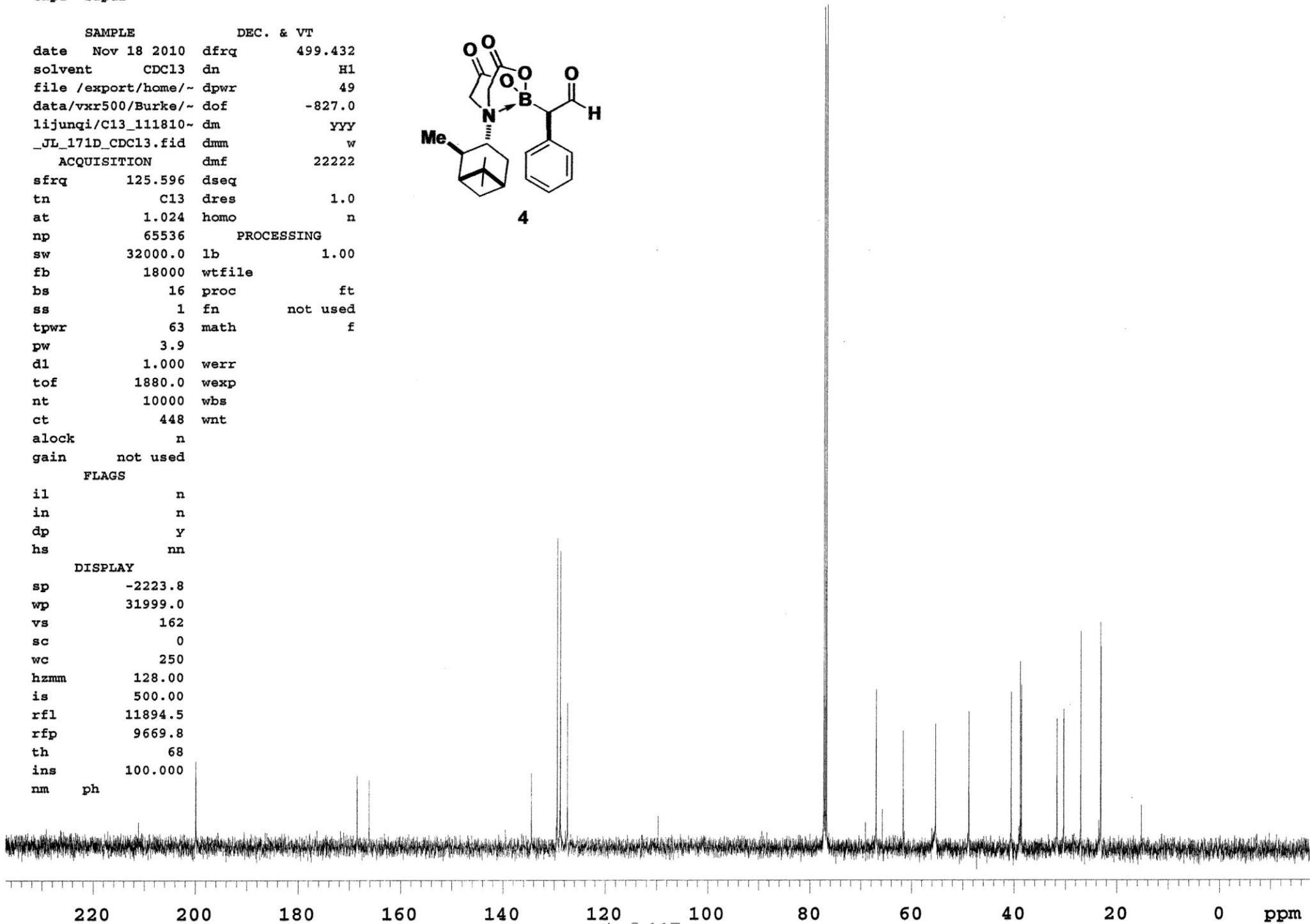
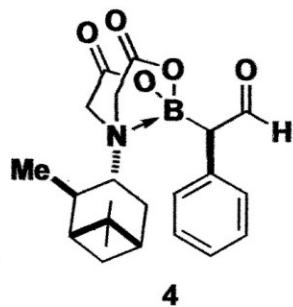
Total time 5 hr, 38 min, 51 sec





Pulse Sequence: s2pul
exp1 s2pul

SAMPLE		DEC. & VT	
date	Nov 18 2010	dfrq	499.432
solvent	CDC13	dn	H1
file	/export/home/~	dpwr	49
data/vxr500/Burke/~		dof	-827.0
lijunqi/C13_111810~		dm	YYY
_JL_171D_CDC13.fid		dmm	w
ACQUISITION		dmf	22222
sfrq	125.596	dseq	
tn	C13	dres	1.0
at	1.024	homo	n
np	65536	PROCESSING	
sw	32000.0	lb	1.00
fb	18000	wtfile	
bs	16	proc	ft
ss	1	fn	not used
tpwr	63	math	f
pw	3.9		
d1	1.000	werr	
tof	1880.0	wexp	
nt	10000	wbs	
ct	448	wnt	
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2223.8		
wp	31999.0		
vs	162		
sc	0		
wc	250		
hzmm	128.00		
is	500.00		
rfl	11894.5		
rfp	9669.8		
th	68		
ins	100.000		
nm	ph		



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "vkr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

32 repetitions

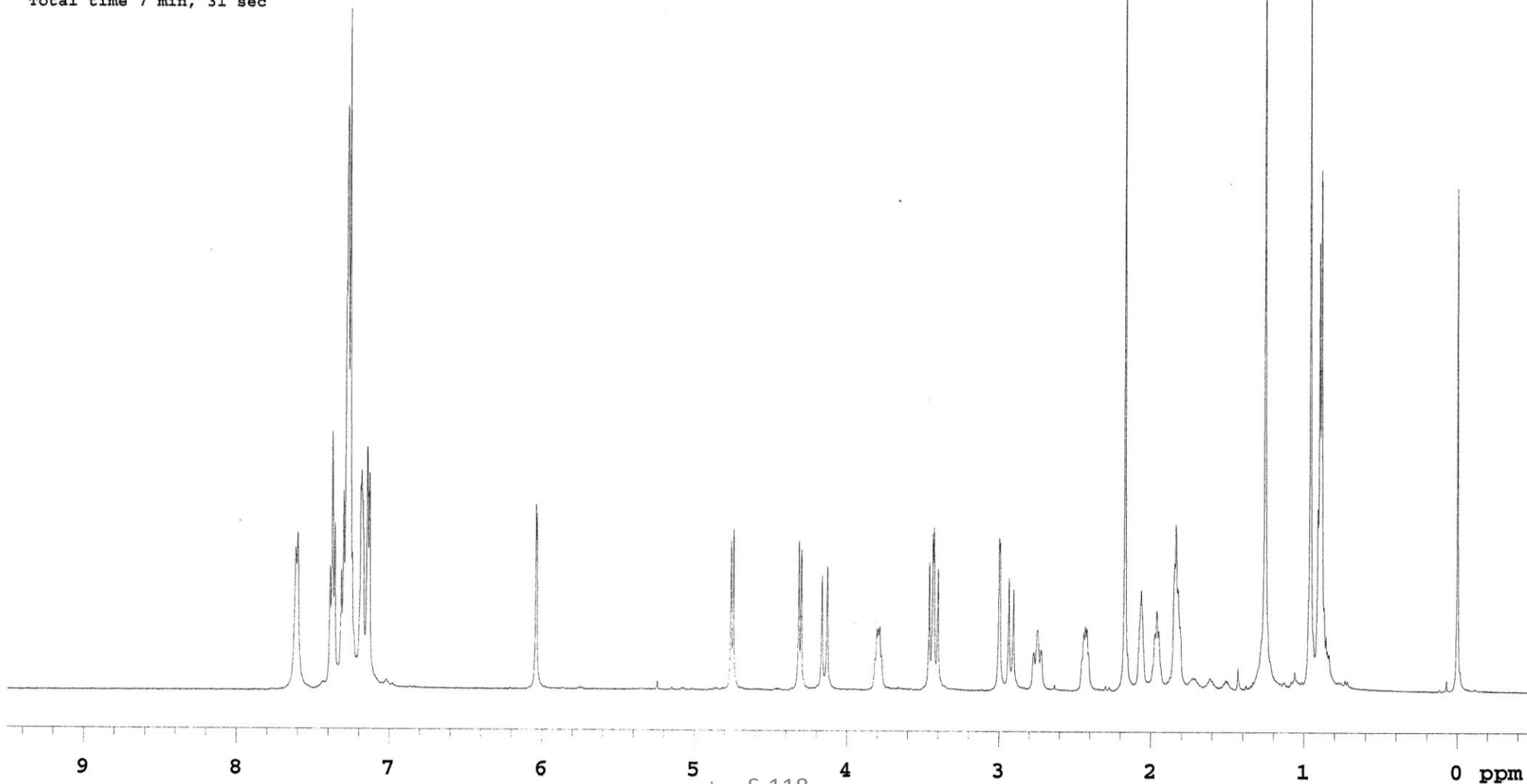
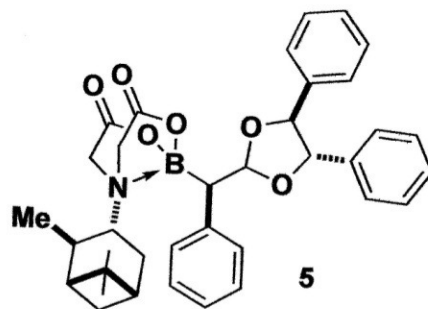
OBSERVE H1, 499.4298984 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 7 min, 31 sec



Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INOVA-500 "vvr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

752 repetitions

OBSERVE C13, 125.5817502 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

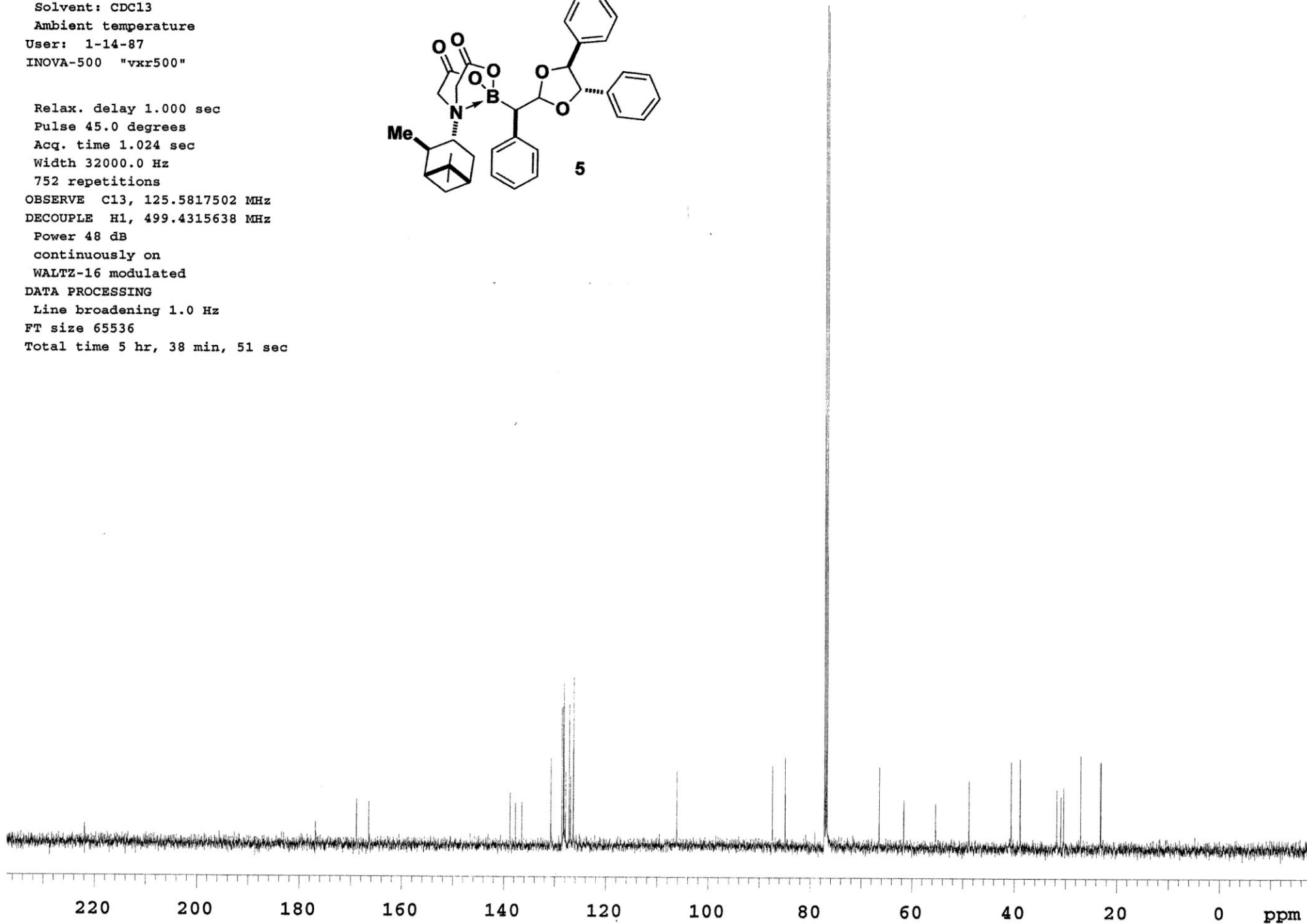
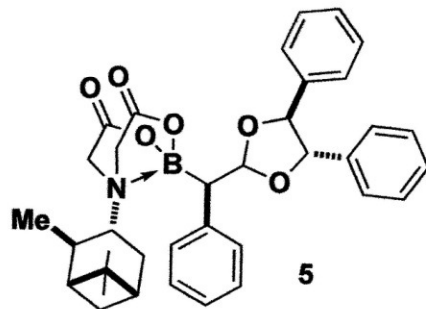
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-500 "vvr500"

Relax. delay 10.000 sec

Pulse 45.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

8 repetitions

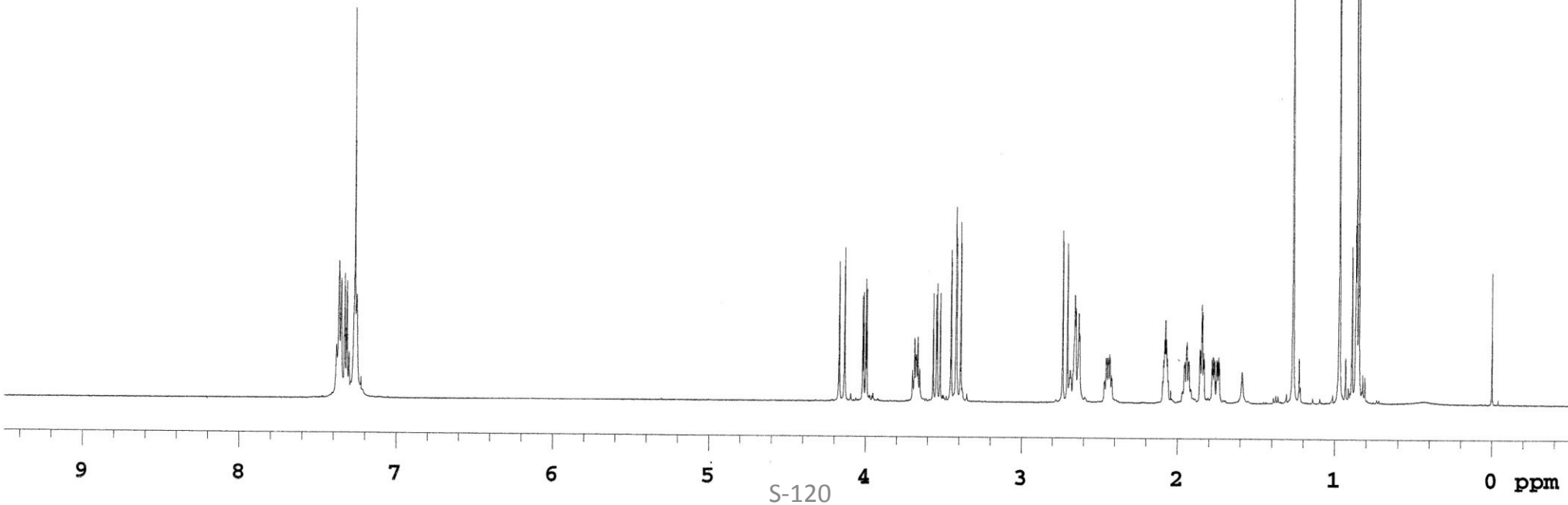
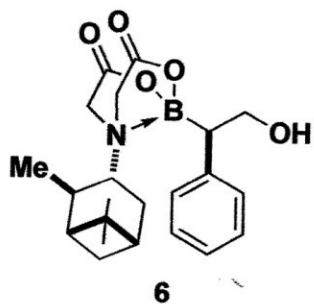
OBSERVE H1, 499.4298971 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

Total time 1 min, 52 sec



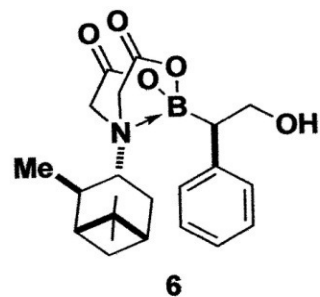
Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

INOVA-500 "vkr500"



Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

544 repetitions

OBSERVE C13, 125.5817166 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

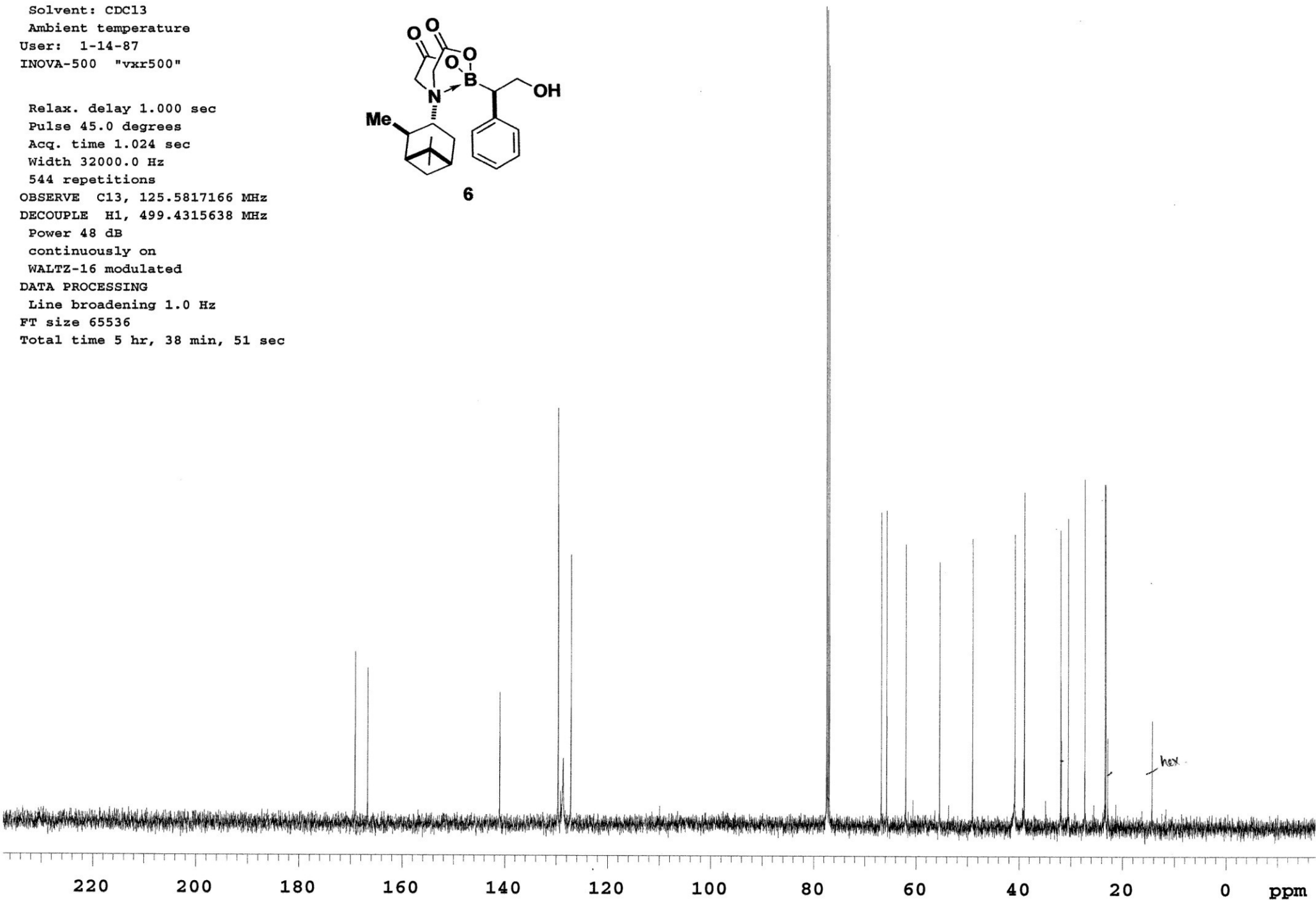
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

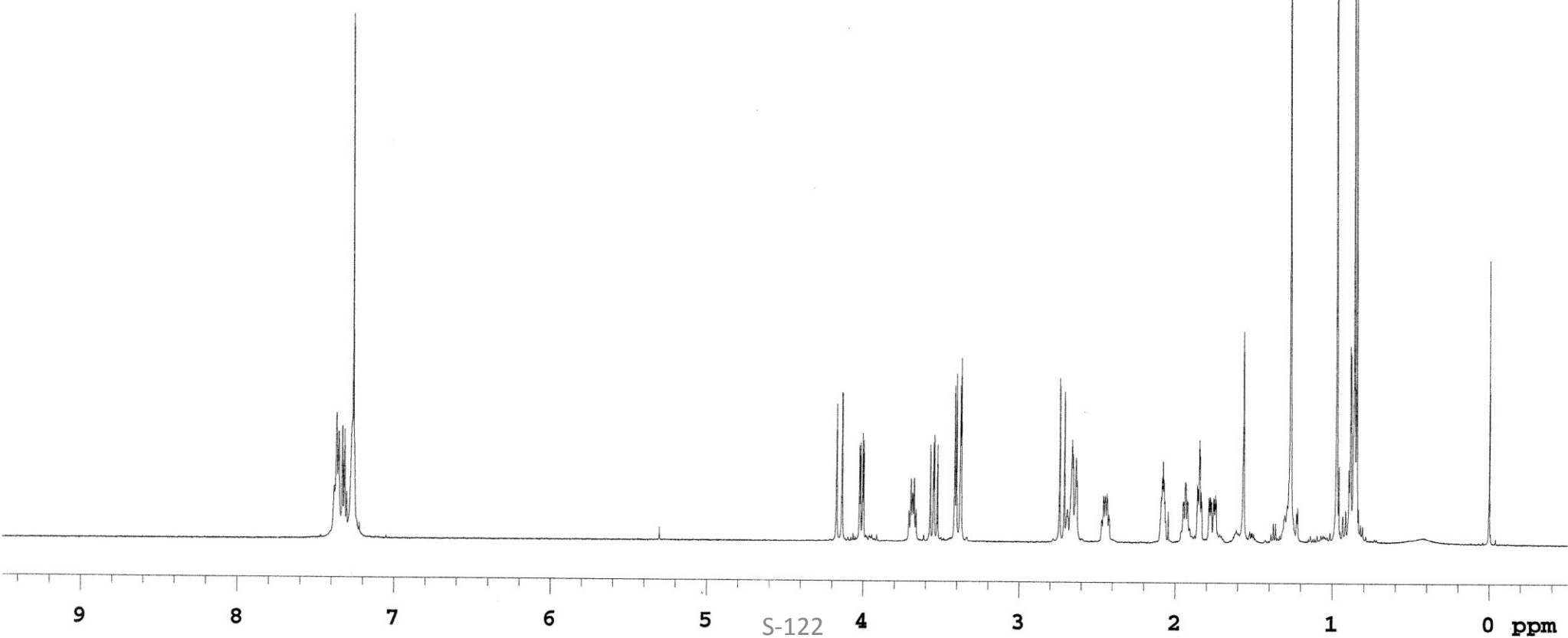
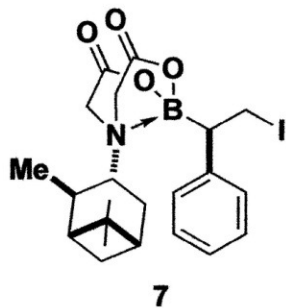
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "vnr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
16 repetitions
OBSERVE H1, 499.4298986 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 1 min, 5 sec



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INNOVA-500 "vvr500"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

656 repetitions

OBSERVE C13, 125.5817492 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

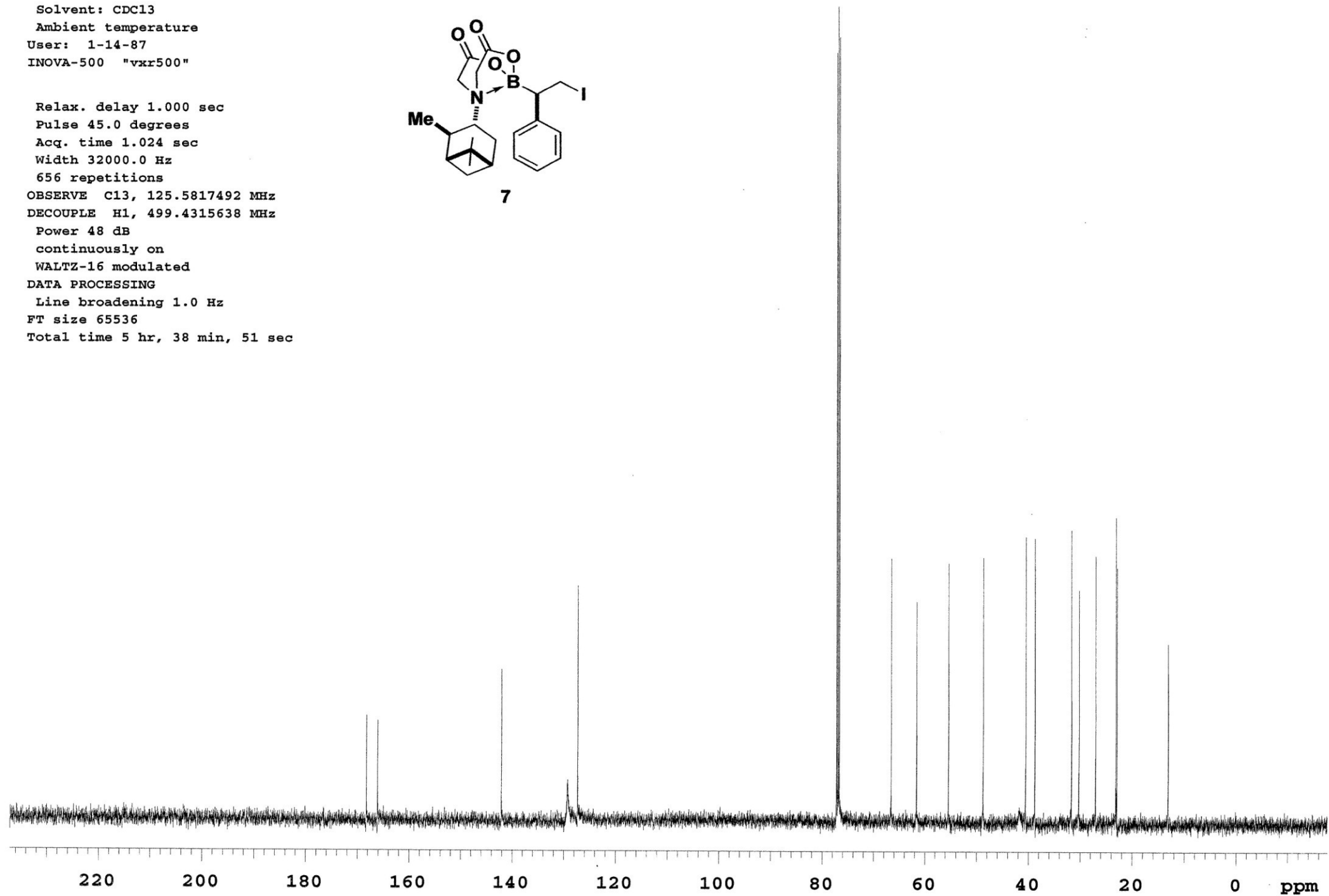
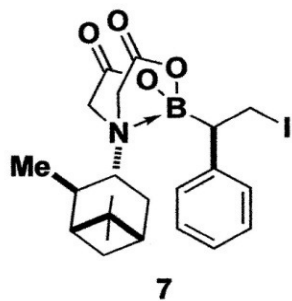
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

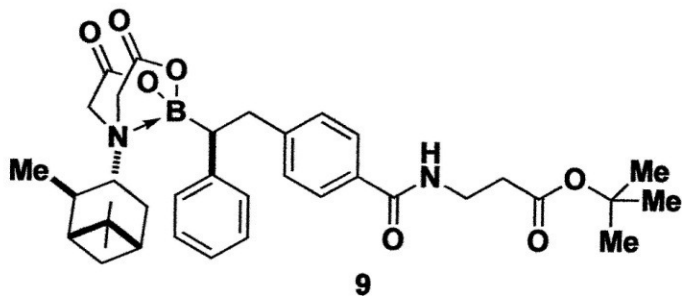
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "vnr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
4 repetitions
OBSERVE H1, 499.4298969 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 16 sec



9

9

8

7

6

5

S-124

4

3

2

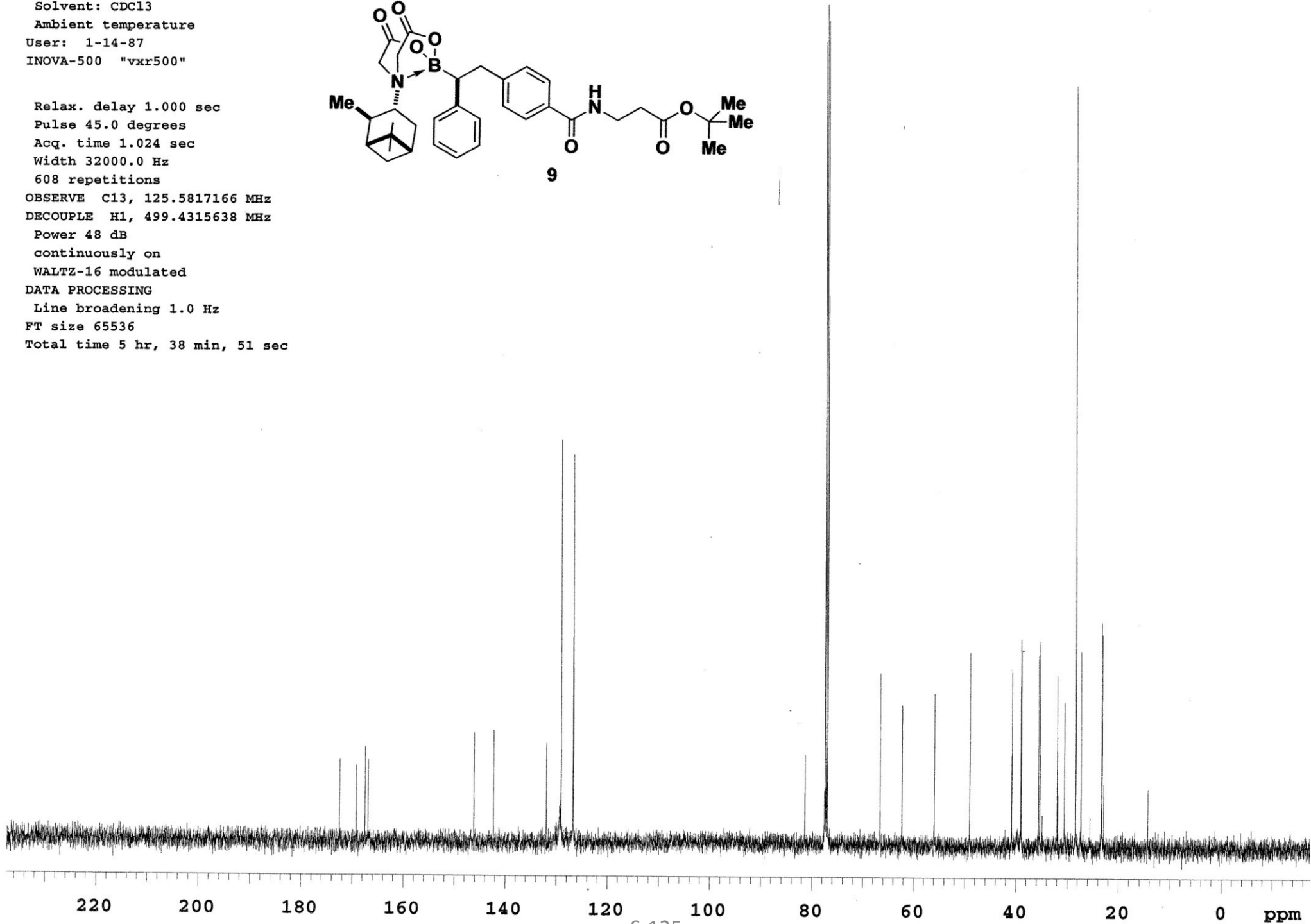
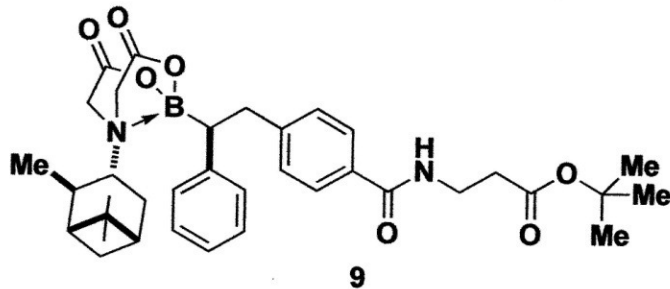
1

0 ppm

Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
User: 1-14-87
INOVA-500 "vvr500"

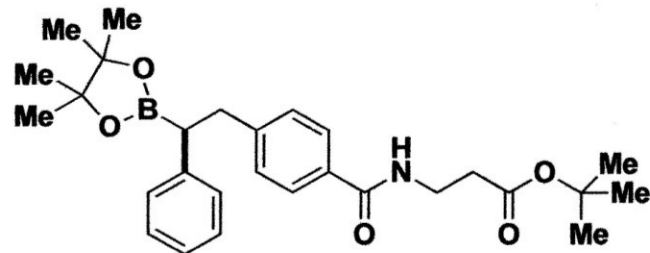
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
608 repetitions
OBSERVE C13, 125.5817166 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



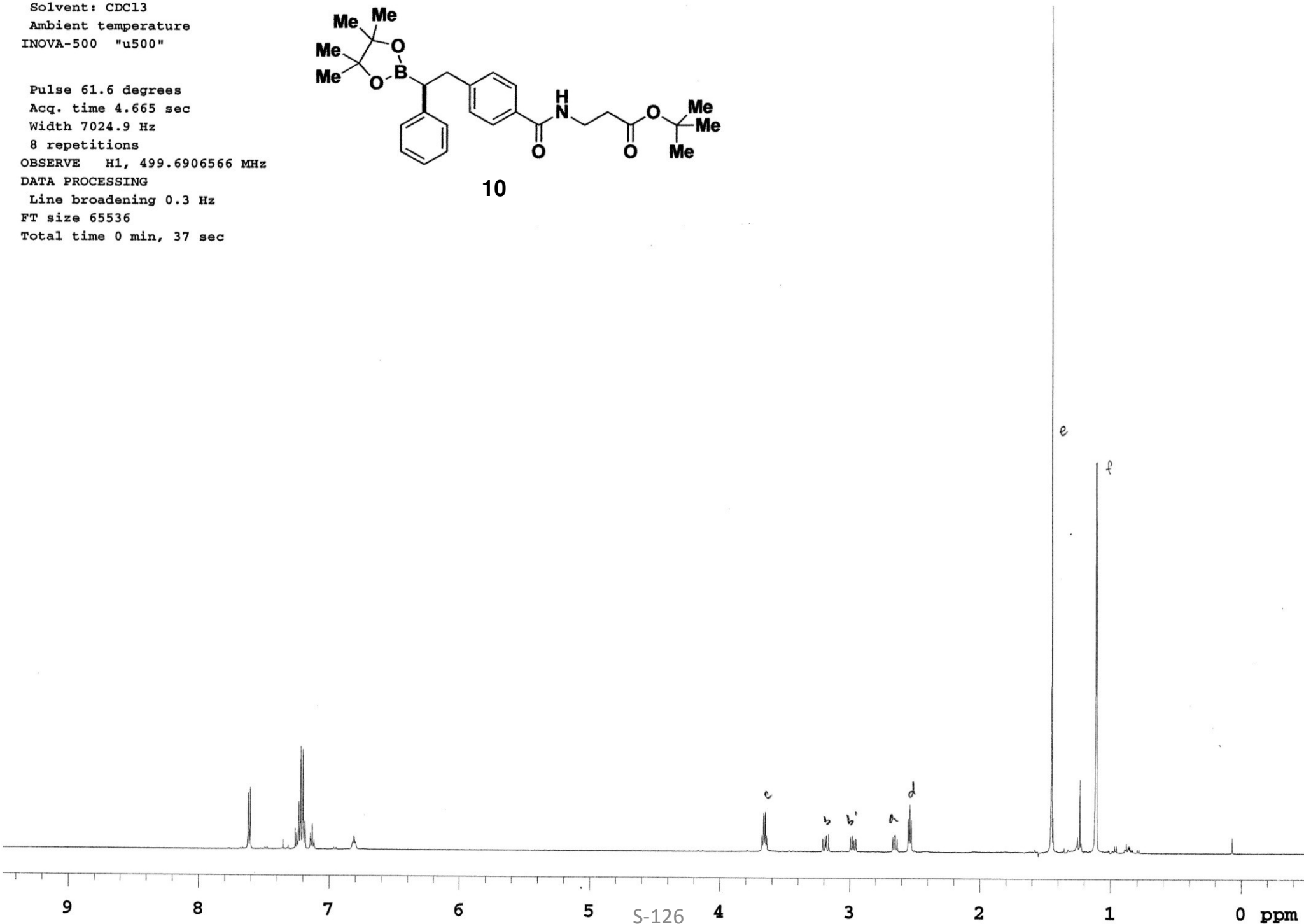
Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "u500"

Pulse 61.6 degrees
Acq. time 4.665 sec
Width 7024.9 Hz
8 repetitions
OBSERVE H1, 499.6906566 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 37 sec



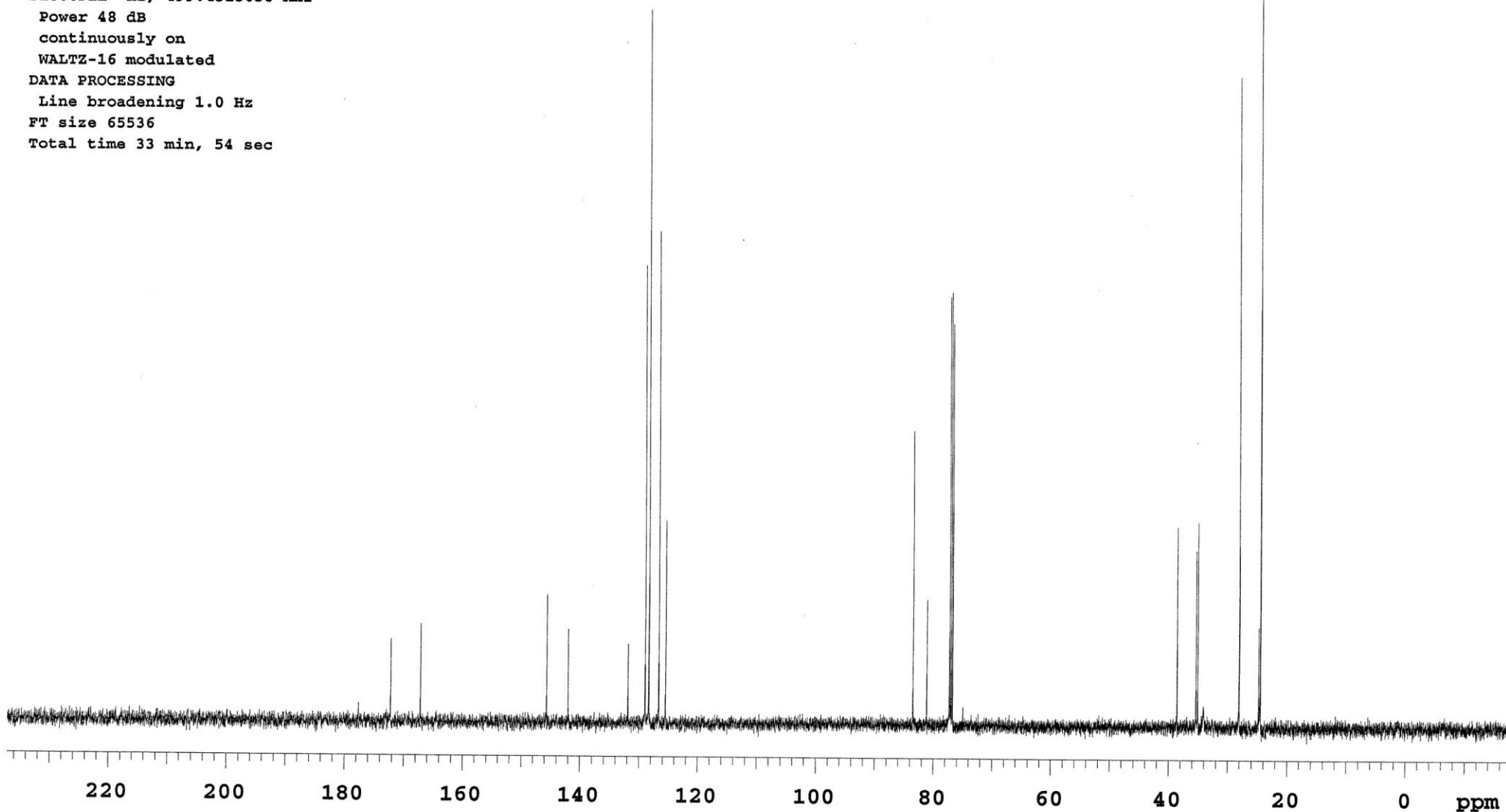
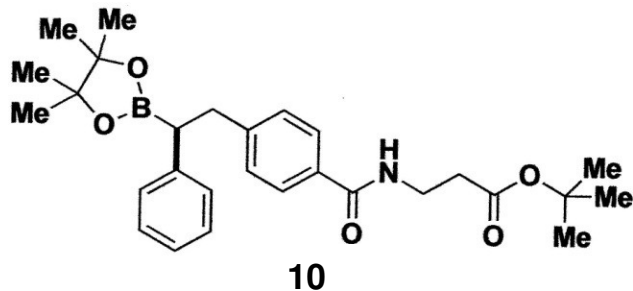
10



Pulse Sequence: s2pul

Solvent: CDC13
Ambient temperature
User: 1-14-87
INOVA-500 "vxr500"

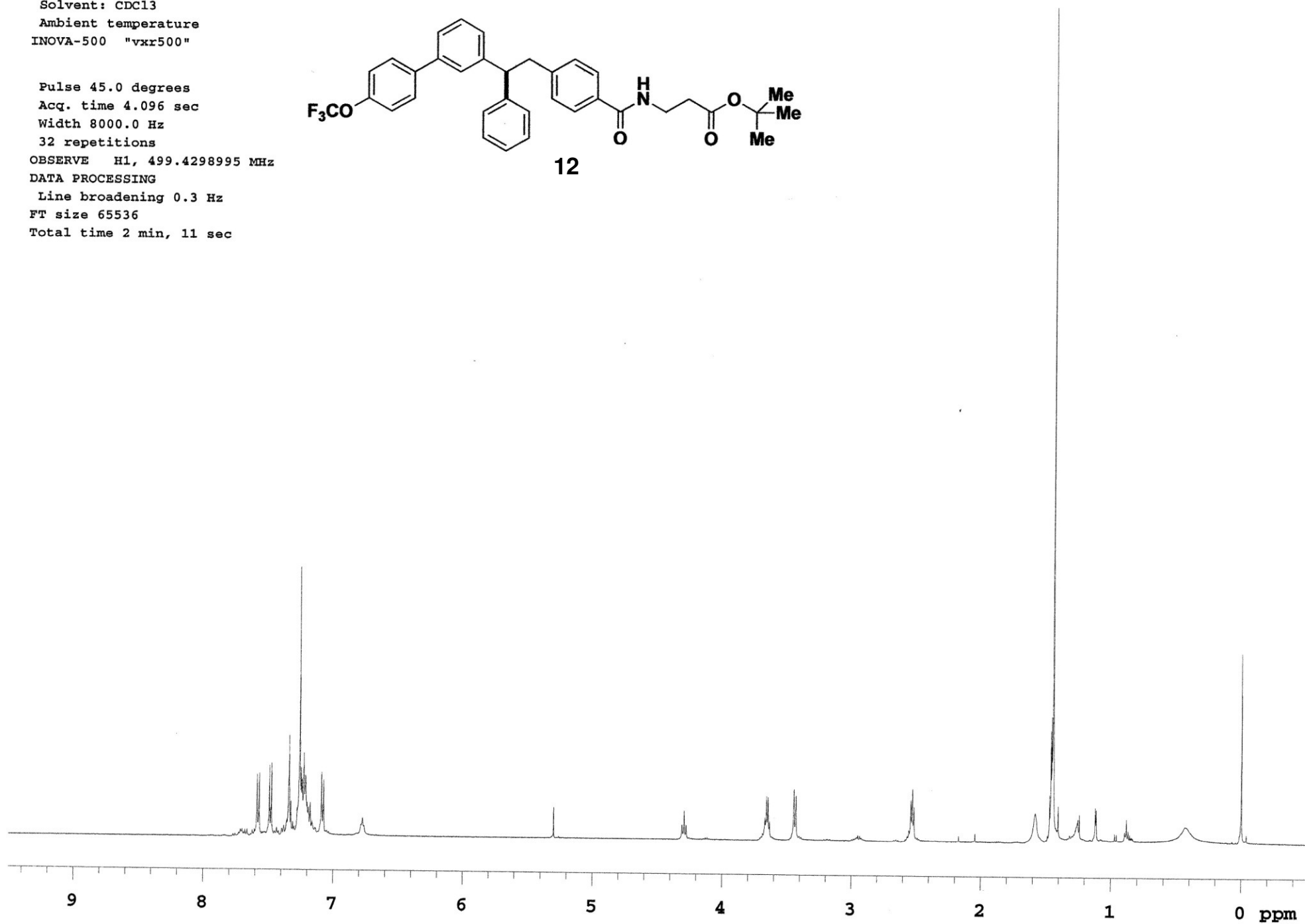
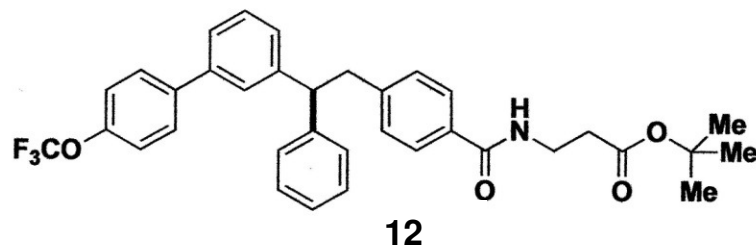
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
160 repetitions
OBSERVE C13, 125.5817522 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "vkr500"

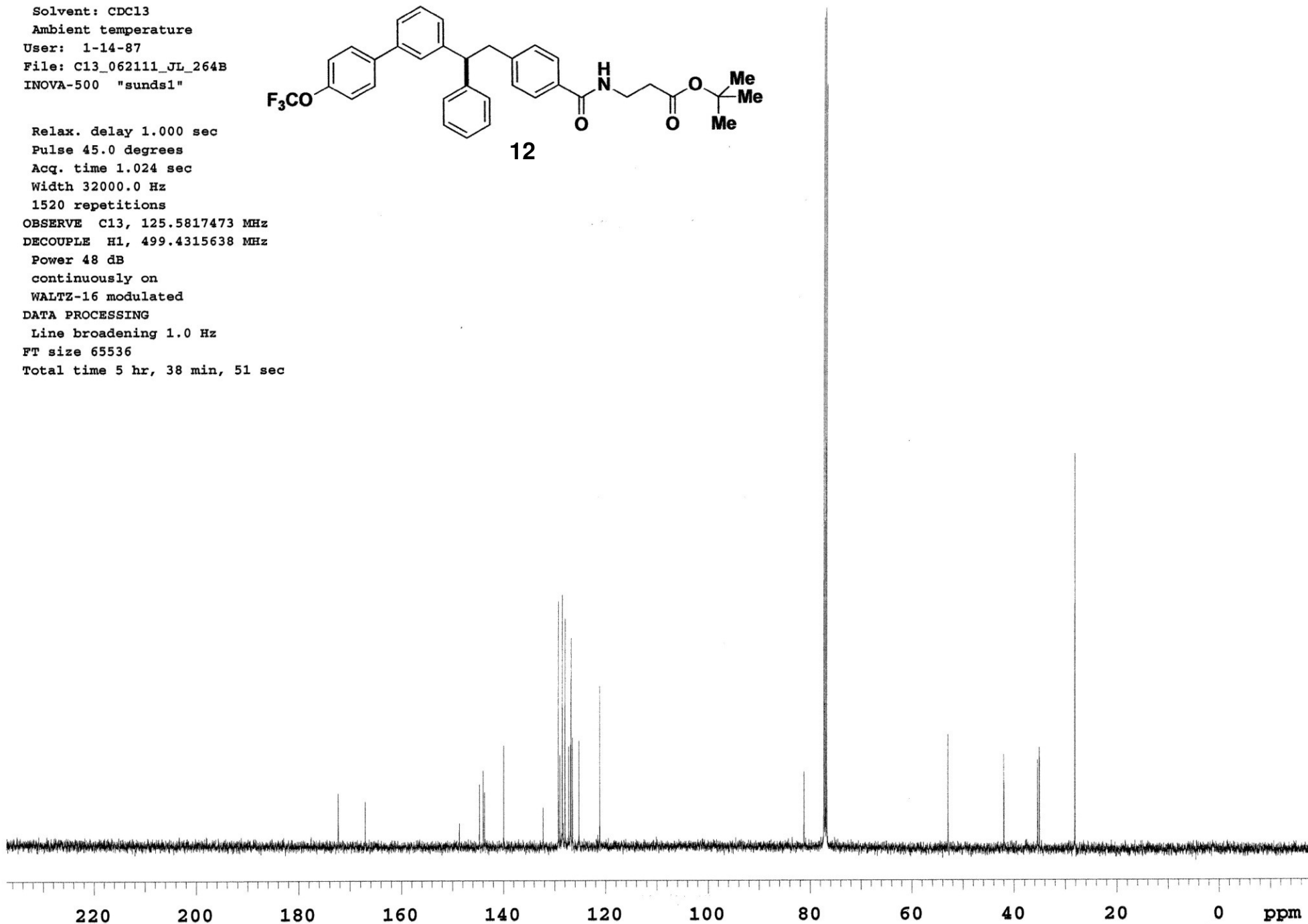
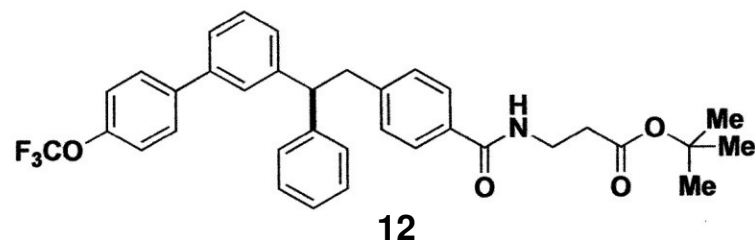
Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
32 repetitions
OBSERVE H1, 499.4298995 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 2 min, 11 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
User: 1-14-87
File: C13_062111_JL_264B
INOVA-500 "sunds1"

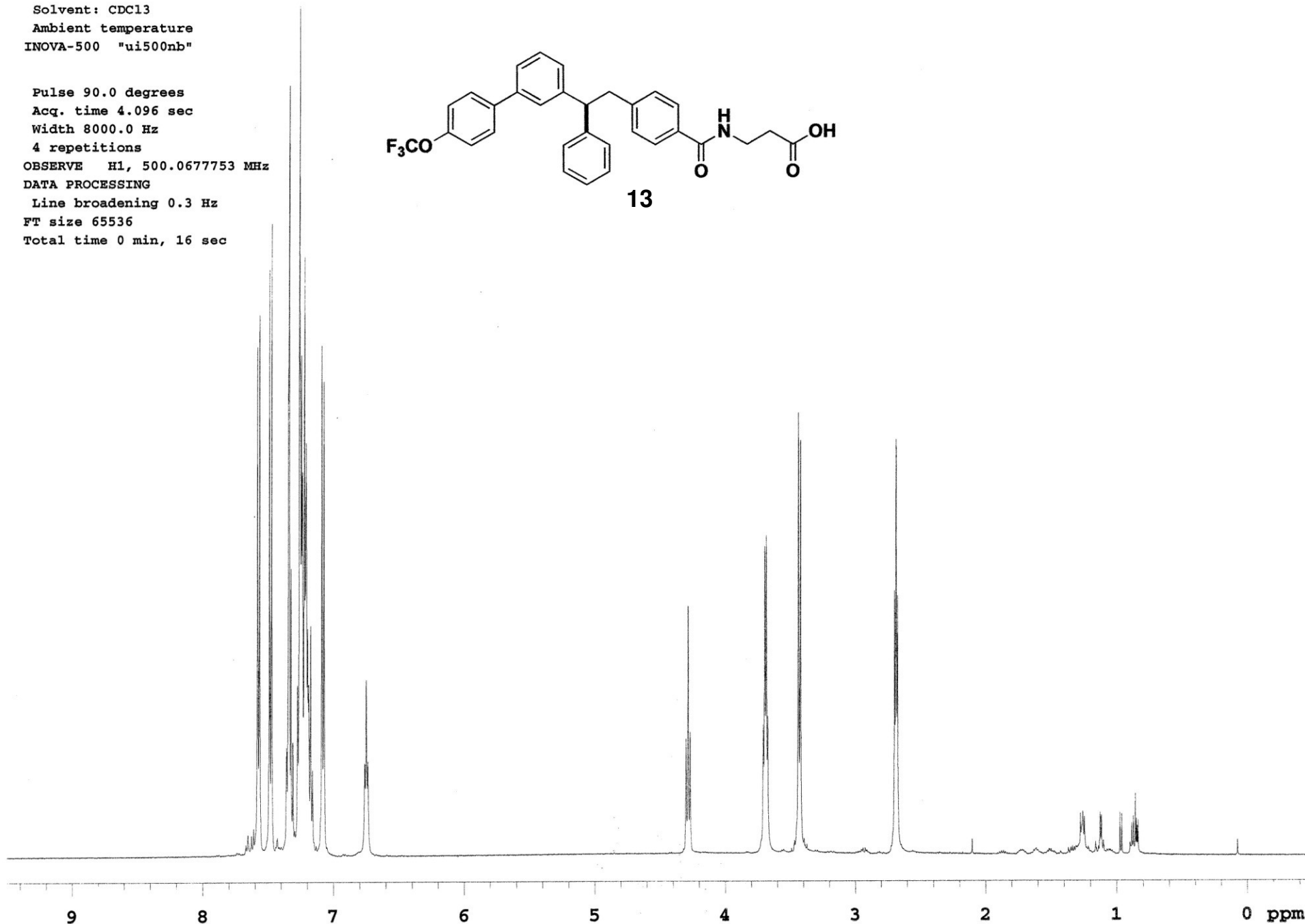
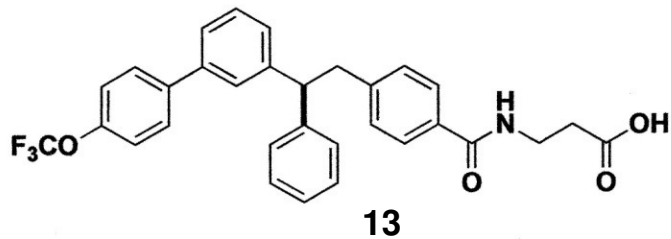
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
1520 repetitions
OBSERVE C13, 125.5817473 MHz
DECOUPLE H1, 499.4315638 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: CDCl3
Ambient temperature
INOVA-500 "ui500nb"

Pulse 90.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
4 repetitions
OBSERVE H1, 500.0677753 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 16 sec



Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

User: 1-14-87

File: C13_062211_JL_265A

INOVA-500 "sunds1"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.024 sec

Width 32000.0 Hz

2704 repetitions

OBSERVE C13, 125.5817483 MHz

DECOUPLE H1, 499.4315638 MHz

Power 48 dB

continuously on

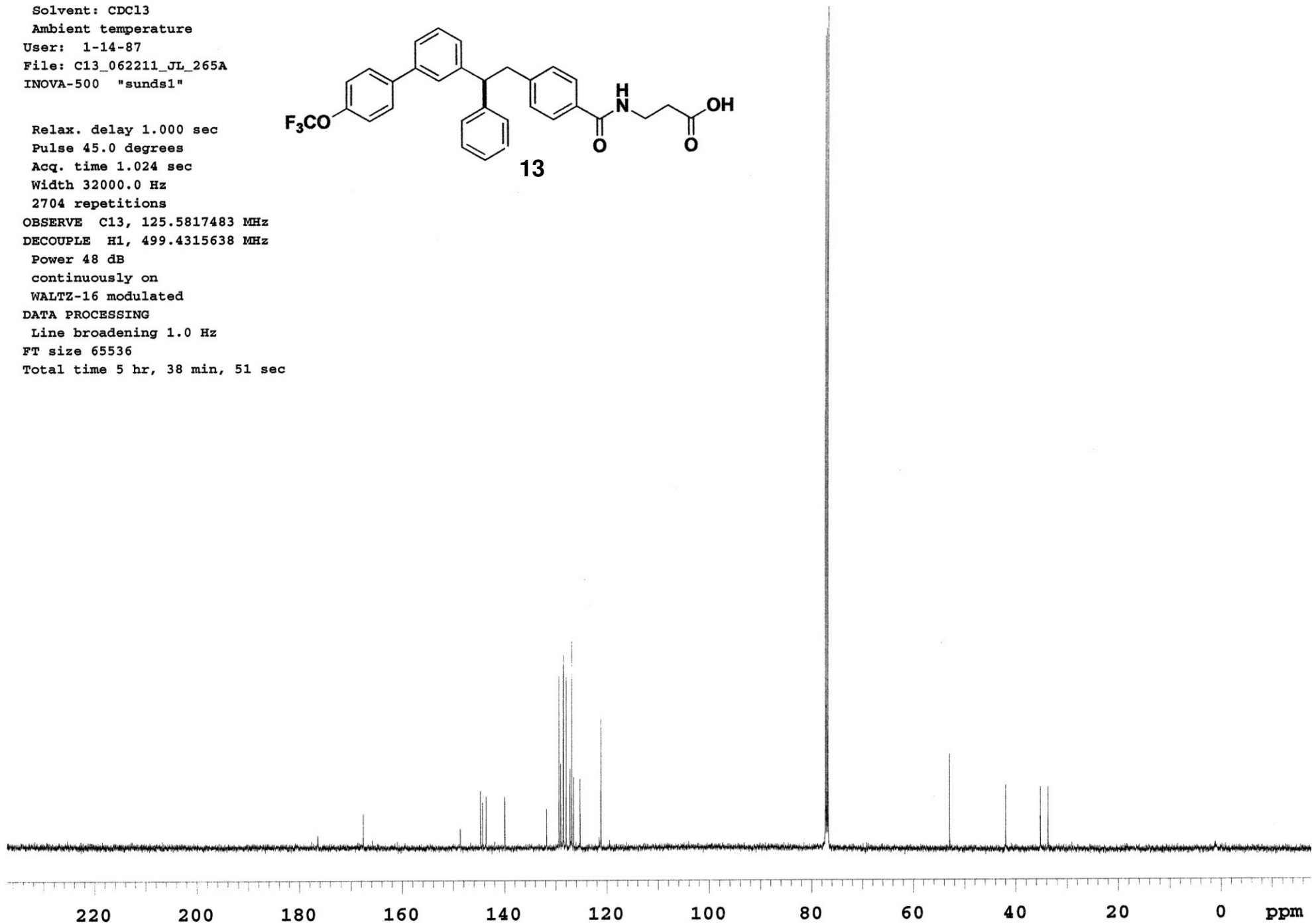
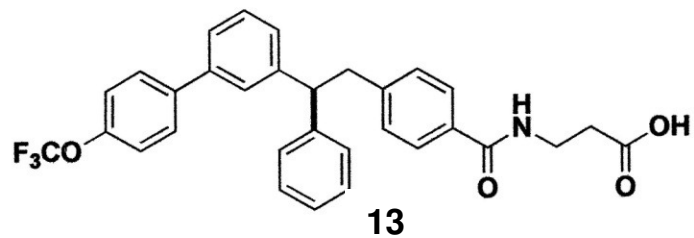
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

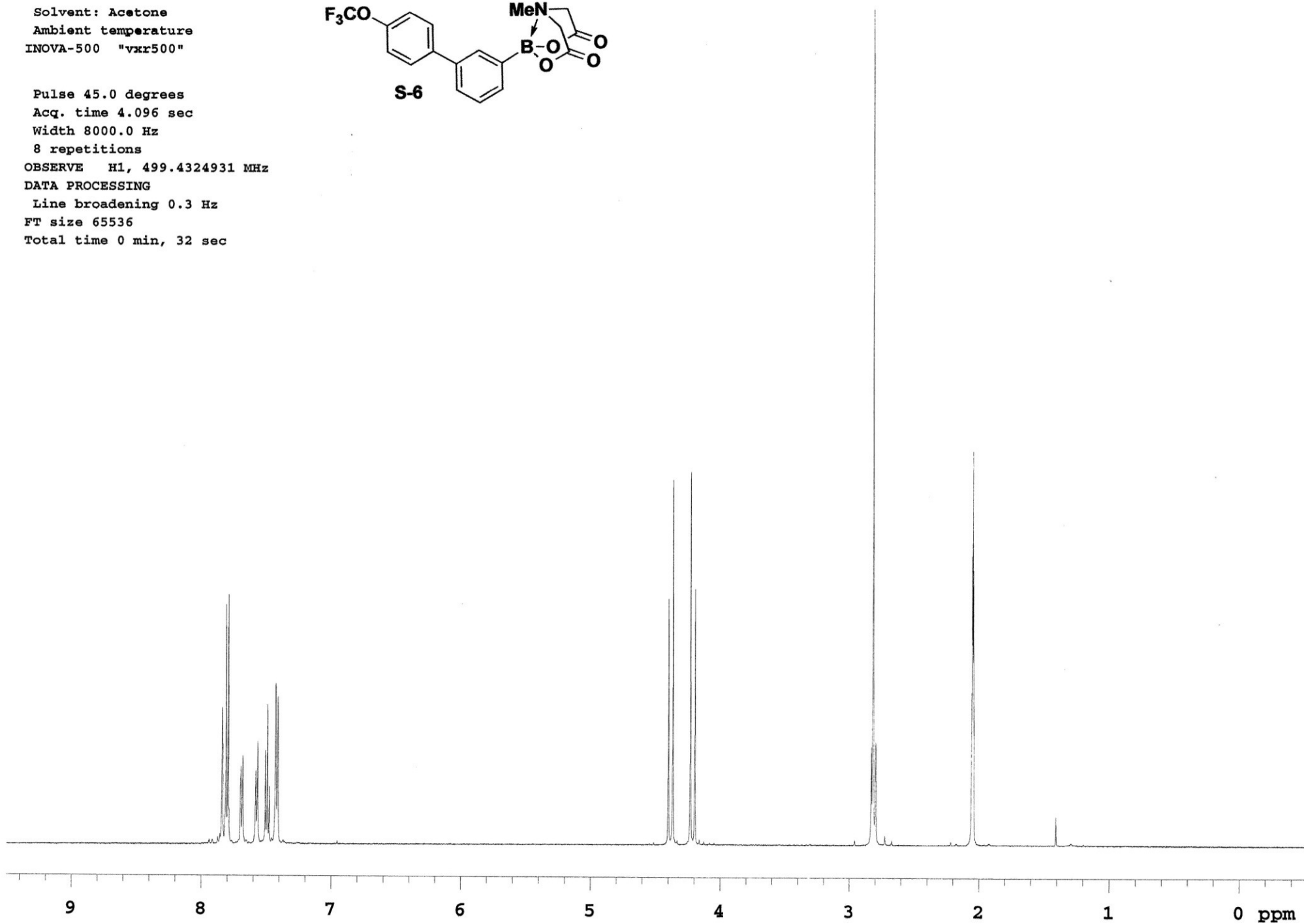
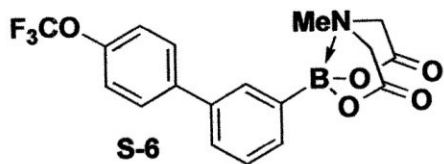
Total time 5 hr, 38 min, 51 sec



Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
INOVA-500 "vvr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 499.4324931 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 32 sec



S-132

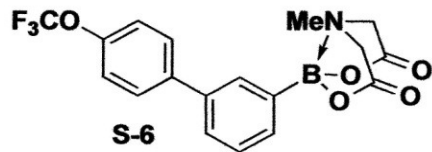
C13_041811_JL_245C

Pulse Sequence: s2pul

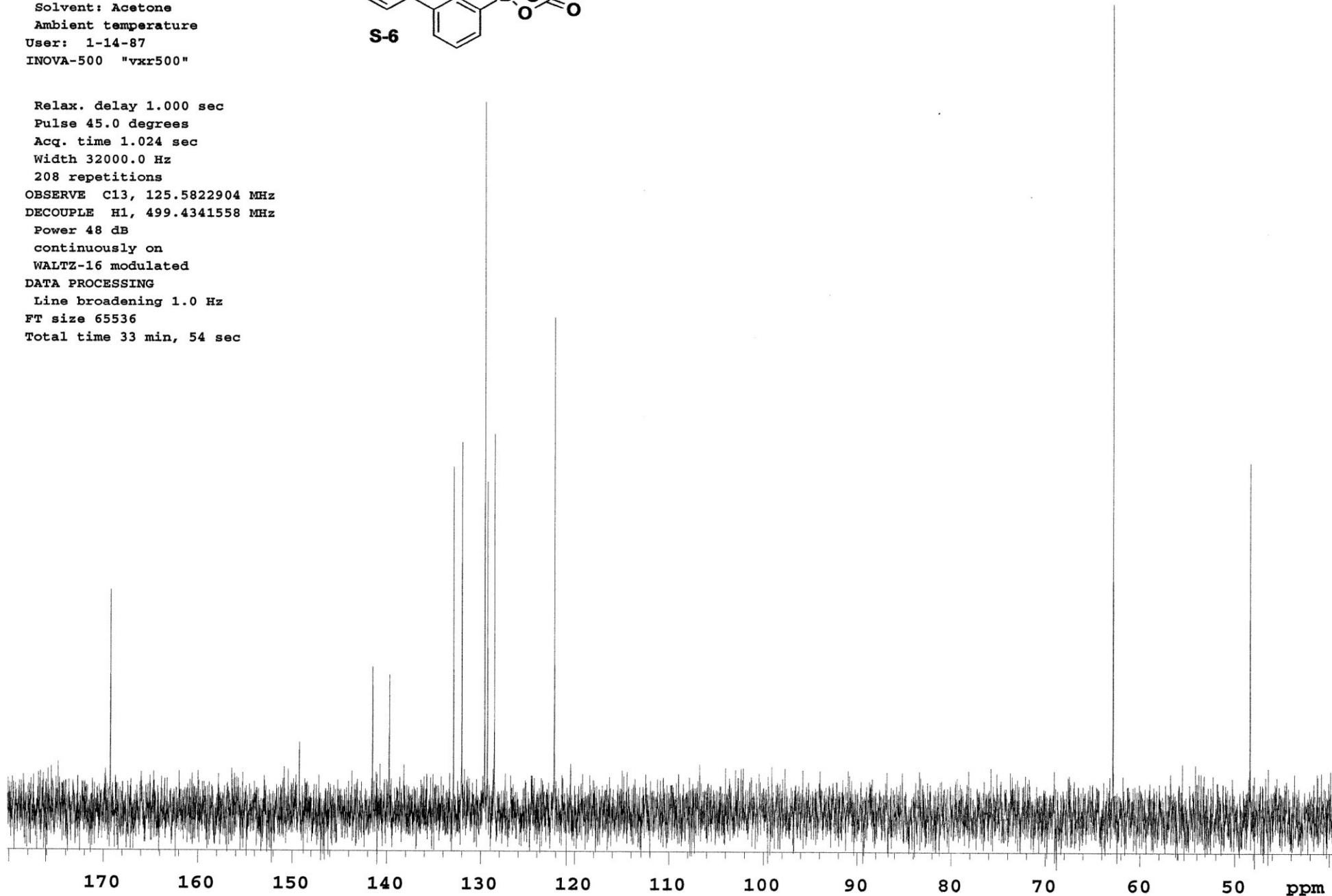
Solvent: Acetone
Ambient temperature

User: 1-14-87

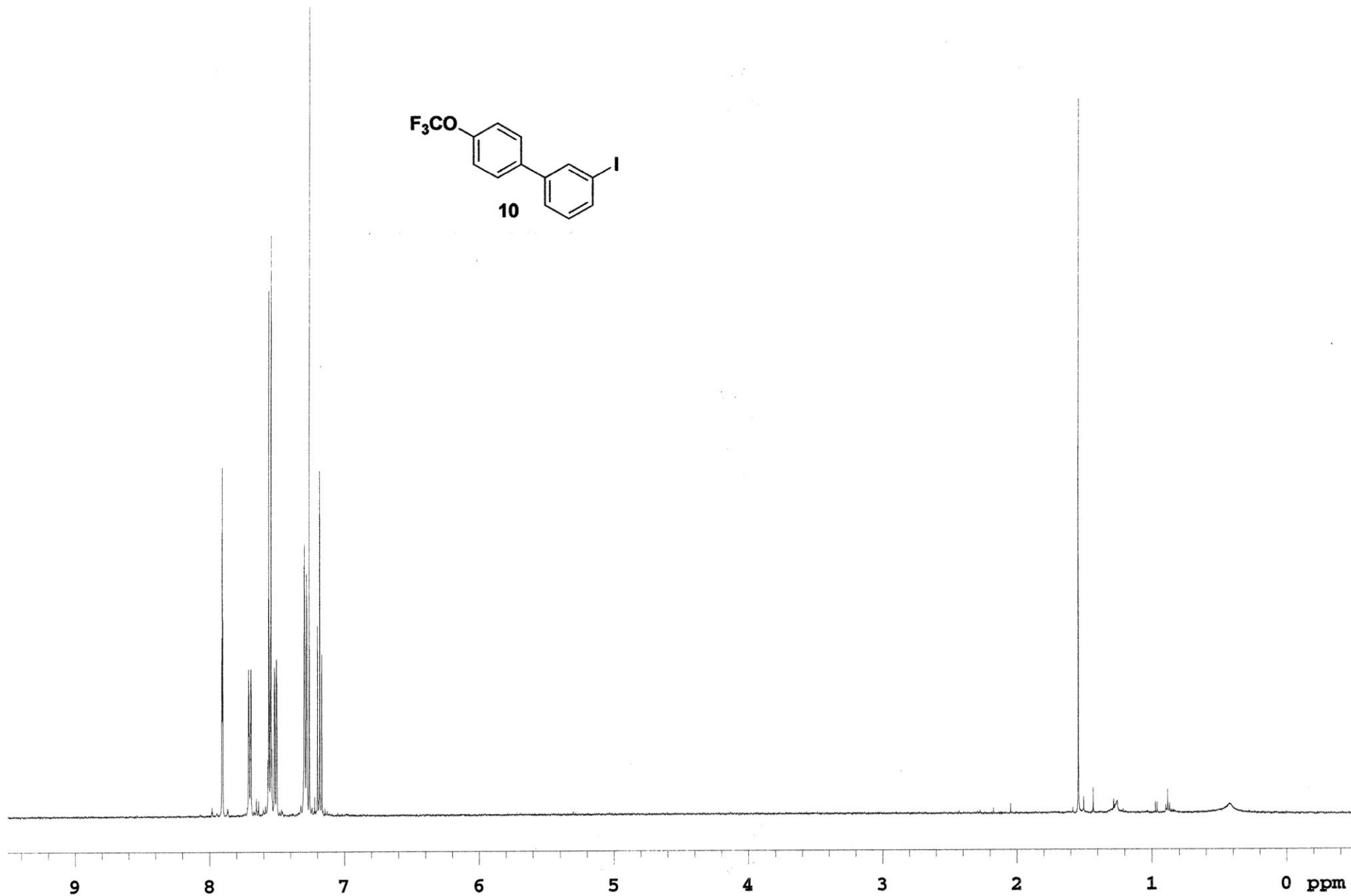
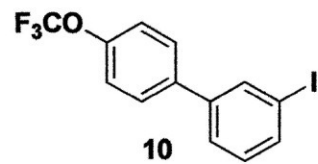
INOVA-500 "vkr500"



Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.024 sec
Width 32000.0 Hz
208 repetitions
OBSERVE C13, 125.5822904 MHz
DECOUPLE H1, 499.4341558 MHz
Power 48 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 33 min, 54 sec



Pulse Sequence: s2pul



Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

User: 1-14-87

INOVA-500 "u500"

Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

448 repetitions

OBSERVE C13, 125.6473175 MHz

DECOUPLE H1, 499.6923275 MHz

Power 44 dB

continuously on

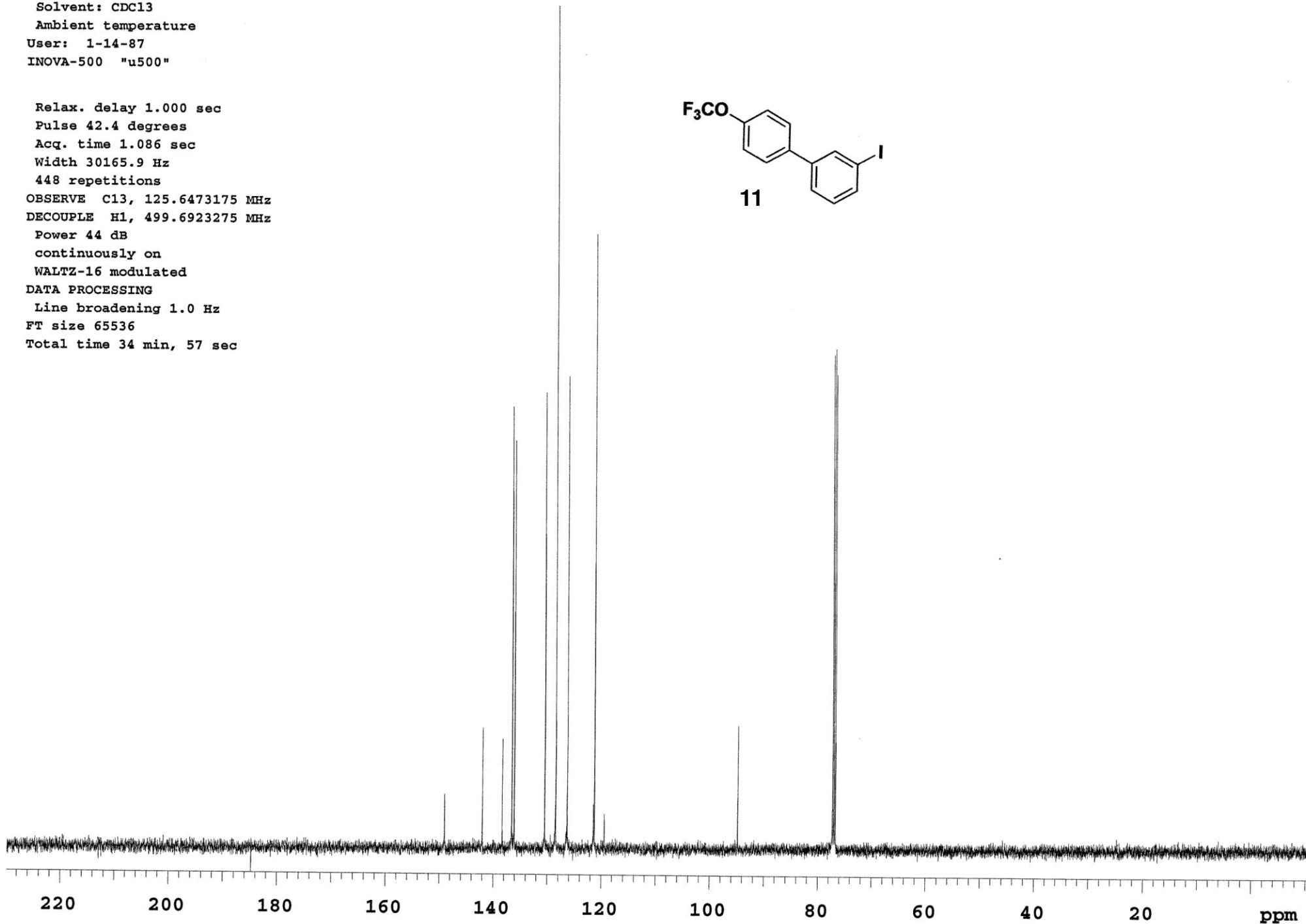
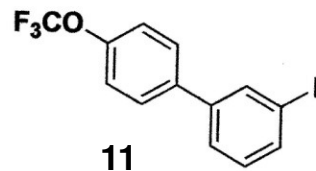
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

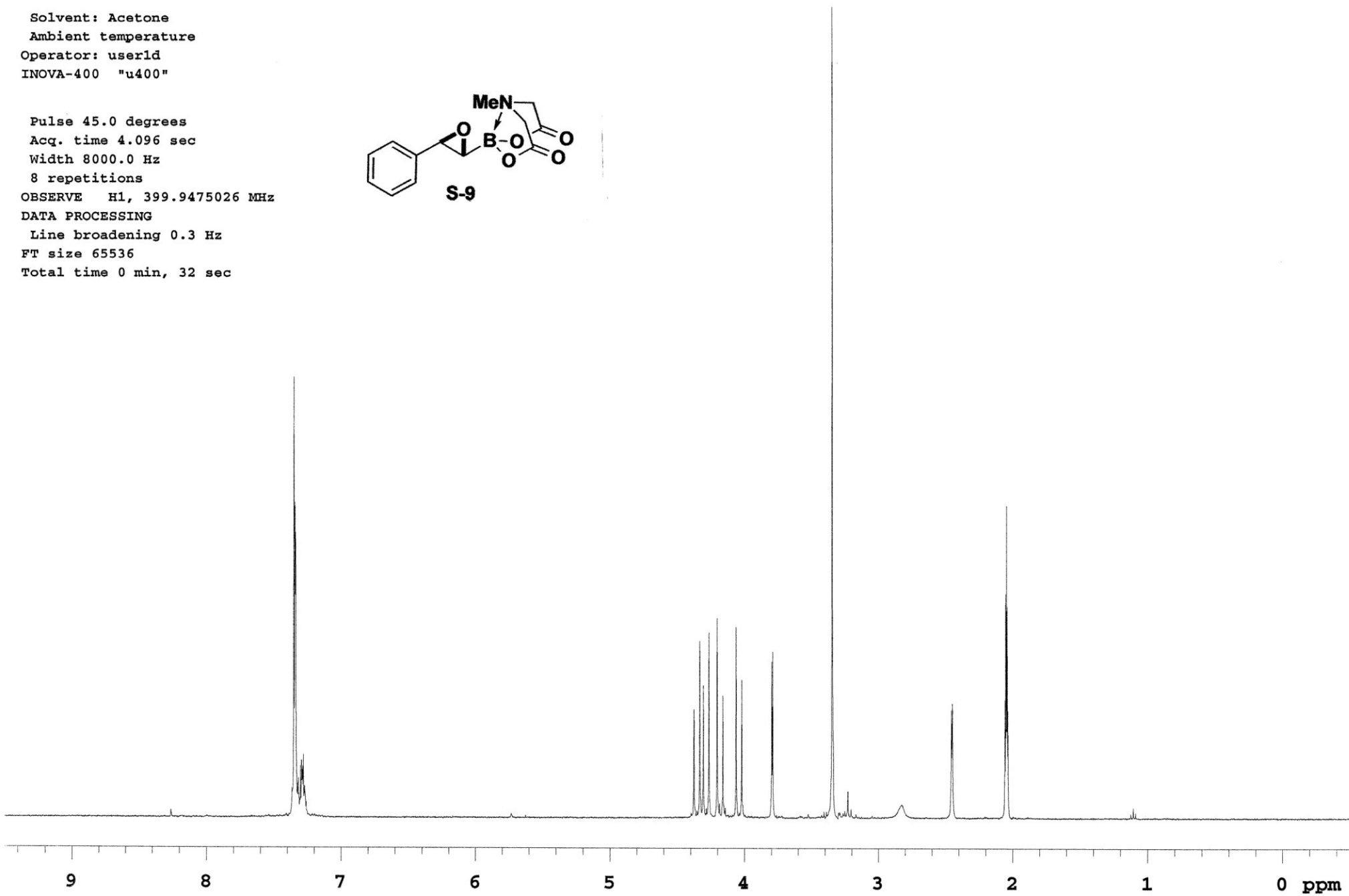
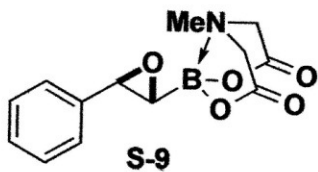
Total time 34 min, 57 sec



Pulse Sequence: s2pul

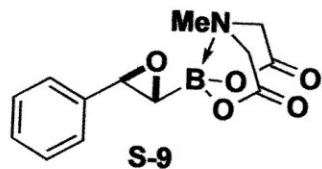
Solvent: Acetone
Ambient temperature
Operator: user1d
INOVA-400 "u400"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 399.9475026 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 32 sec

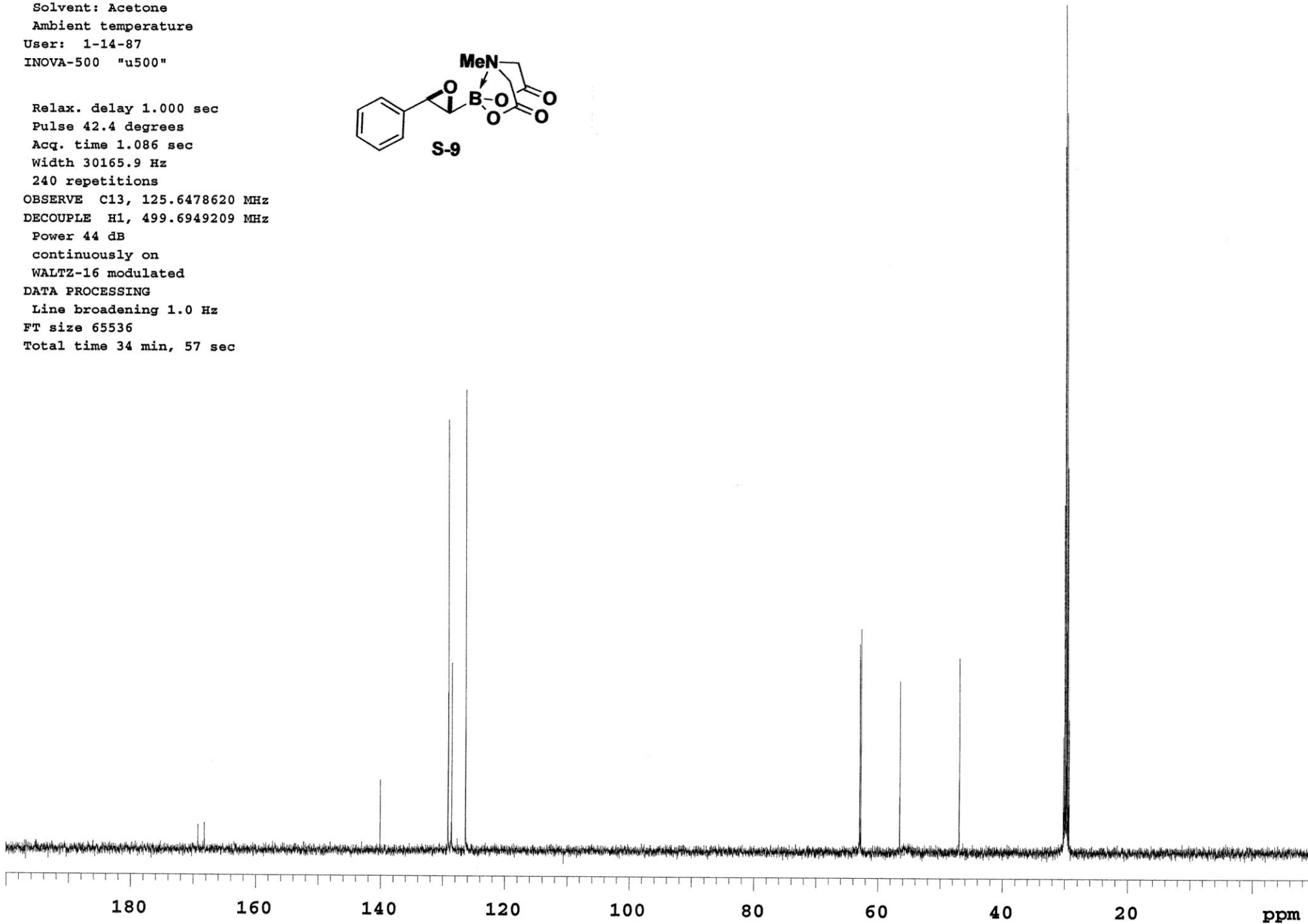


Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "u500"



Relax. delay 1.000 sec
Pulse 42.4 degrees
Acq. time 1.086 sec
Width 30165.9 Hz
240 repetitions
OBSERVE C13, 125.6478620 MHz
DECOUPLE H1, 499.6949209 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 34 min, 57 sec



S-137

Pulse Sequence: s2pul

Solvent: Acetone

Ambient temperature

INOVA-500 "ui500nb"

Pulse 90.0 degrees

Acq. time 4.096 sec

Width 8000.0 Hz

4 repetitions

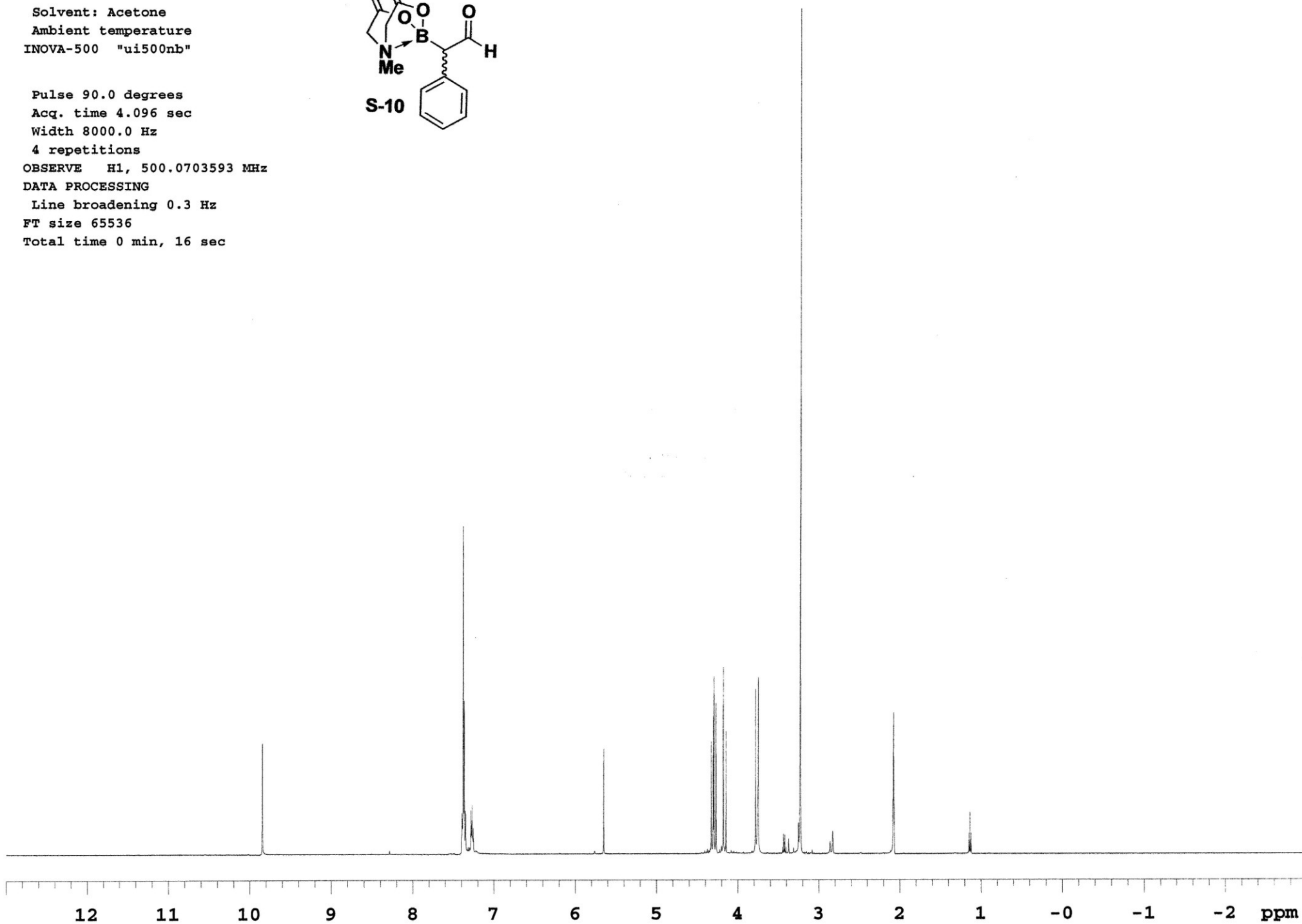
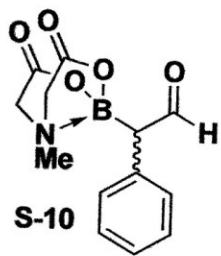
OBSERVE H1, 500.0703593 MHz

DATA PROCESSING

Line broadening 0.3 Hz

FT size 65536

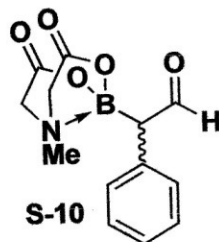
Total time 0 min, 16 sec



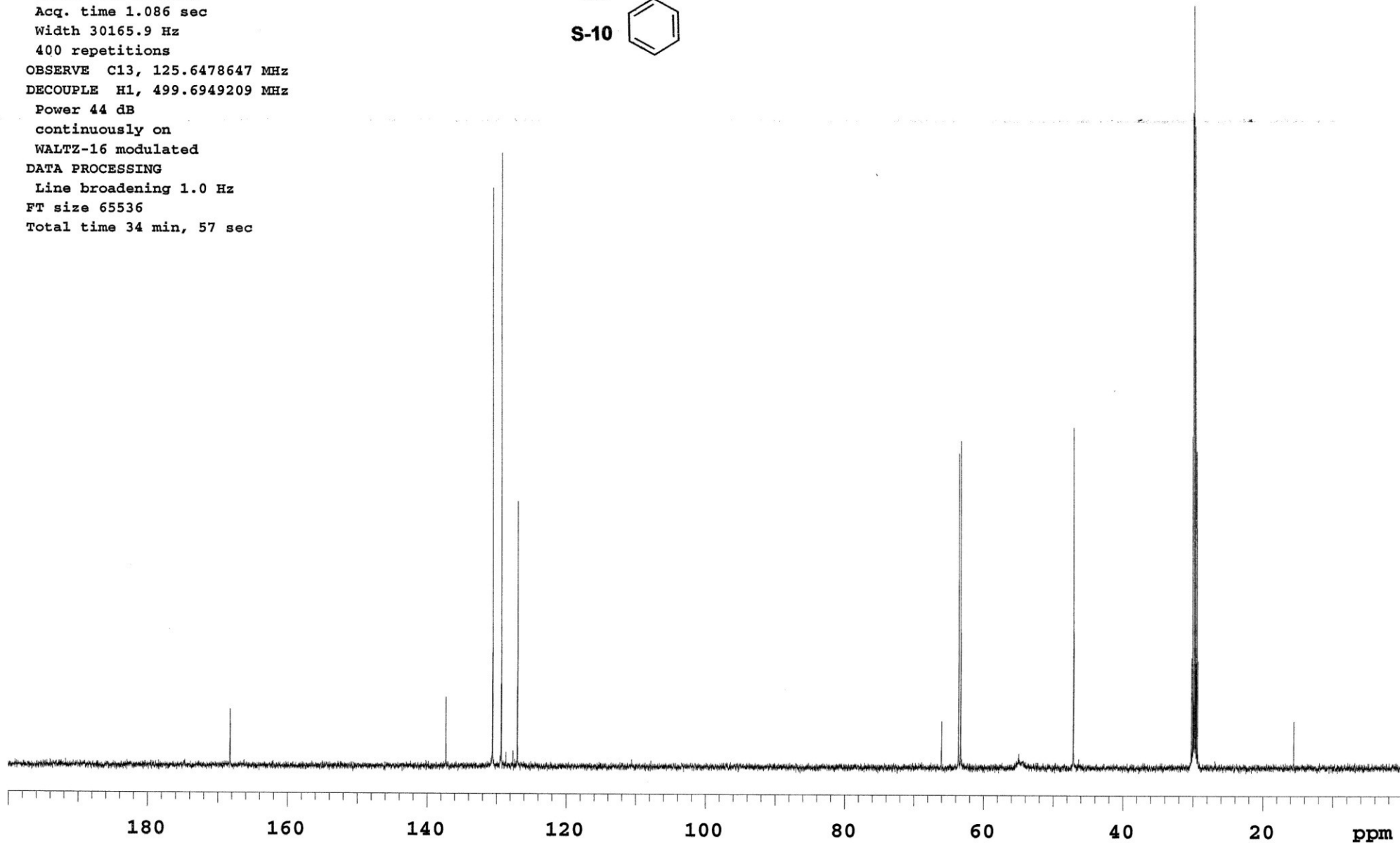
S-138

Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "u500"



Relax. delay 1.000 sec
Pulse 42.4 degrees
Acq. time 1.086 sec
Width 30165.9 Hz
400 repetitions
OBSERVE C13, 125.6478647 MHz
DECOUPLE H1, 499.6949209 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 34 min, 57 sec

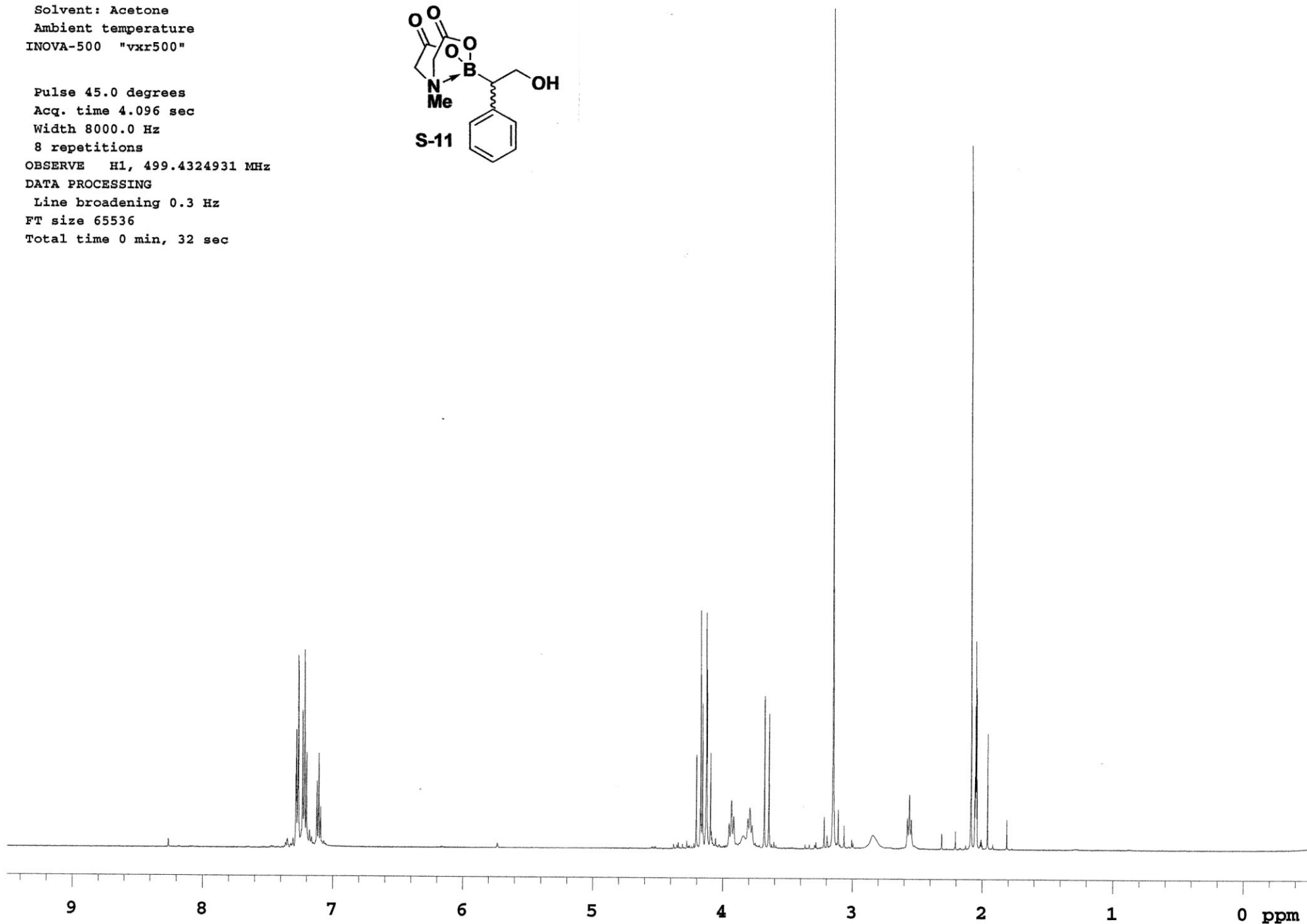
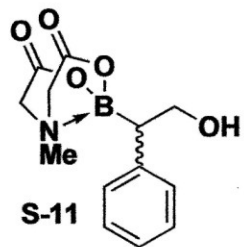


S-139

Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
INOVA-500 "vvr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 499.4324931 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 32 sec

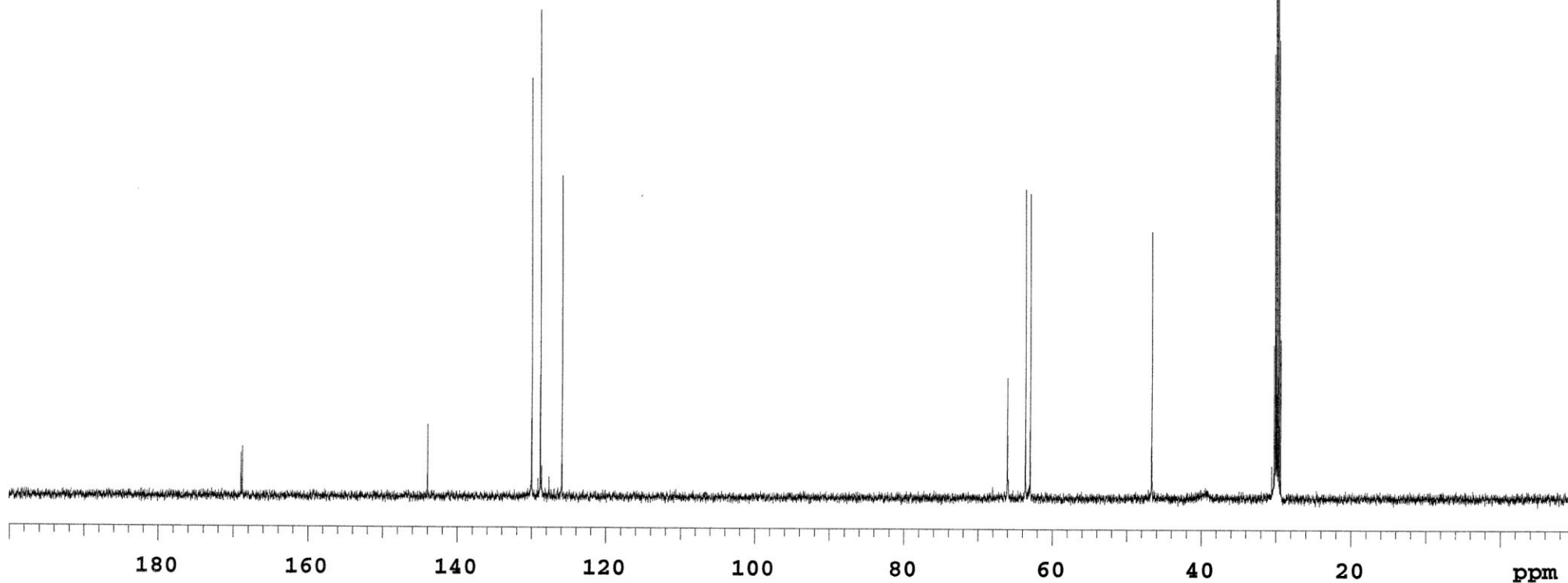
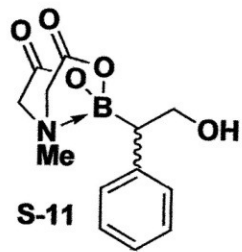


S-140

Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
User: 1-14-87
INOVA-500 "u500"

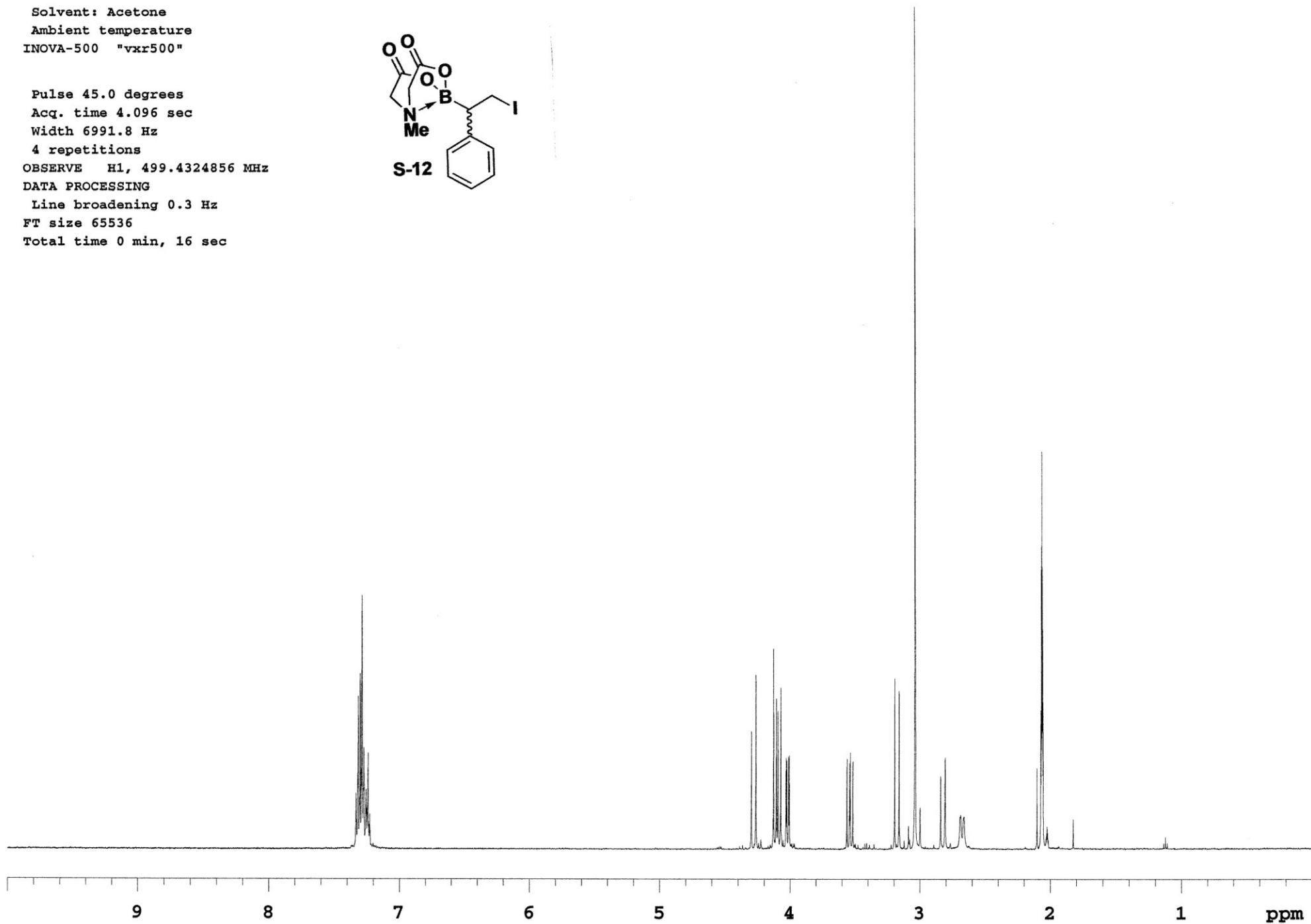
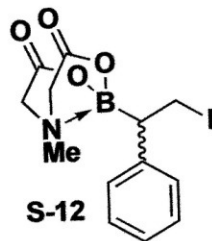
Relax. delay 1.000 sec
Pulse 42.4 degrees
Acq. time 1.086 sec
Width 30165.9 Hz
432 repetitions
OBSERVE C13, 125.6478620 MHz
DECOUPLE H1, 499.6949209 MHz
Power 44 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 34 min, 57 sec



Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
INOVA-500 "vkr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 6991.8 Hz
4 repetitions
OBSERVE H1, 499.4324856 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 16 sec



S-142

Pulse Sequence: s2pul

Solvent: Acetone

Ambient temperature

User: 1-14-87

File: C13_060811_JL_racemic-iodide

INOVA-500 "sunds1"

Relax. delay 1.000 sec

Pulse 42.4 degrees

Acq. time 1.086 sec

Width 30165.9 Hz

320 repetitions

OBSERVE C13, 125.6478629 MHz

DECOUPLE H1, 499.6949209 MHz

Power 44 dB

continuously on

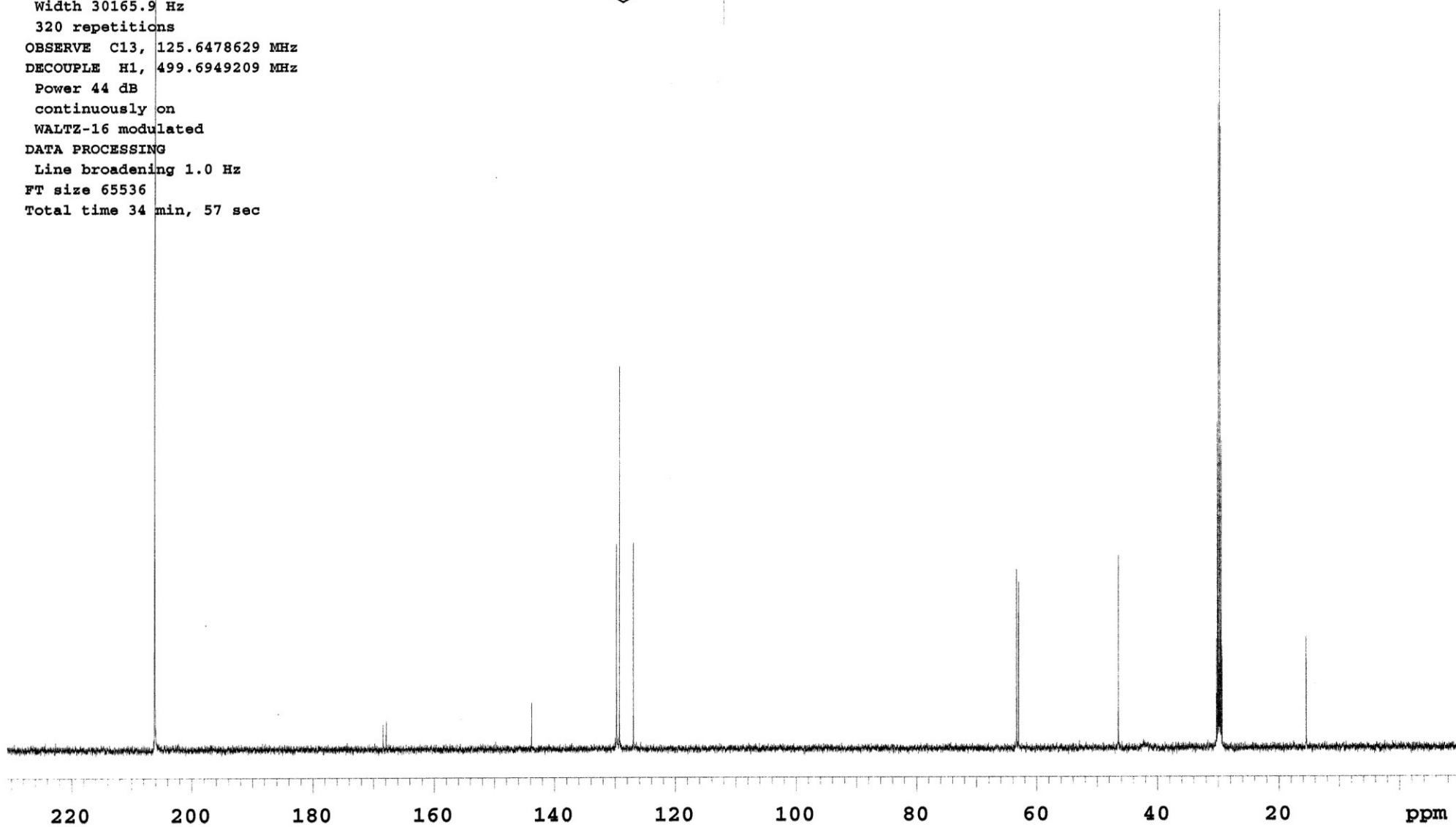
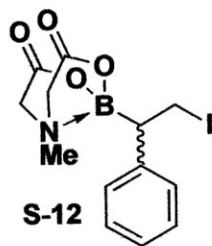
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

FT size 65536

Total time 34 min, 57 sec

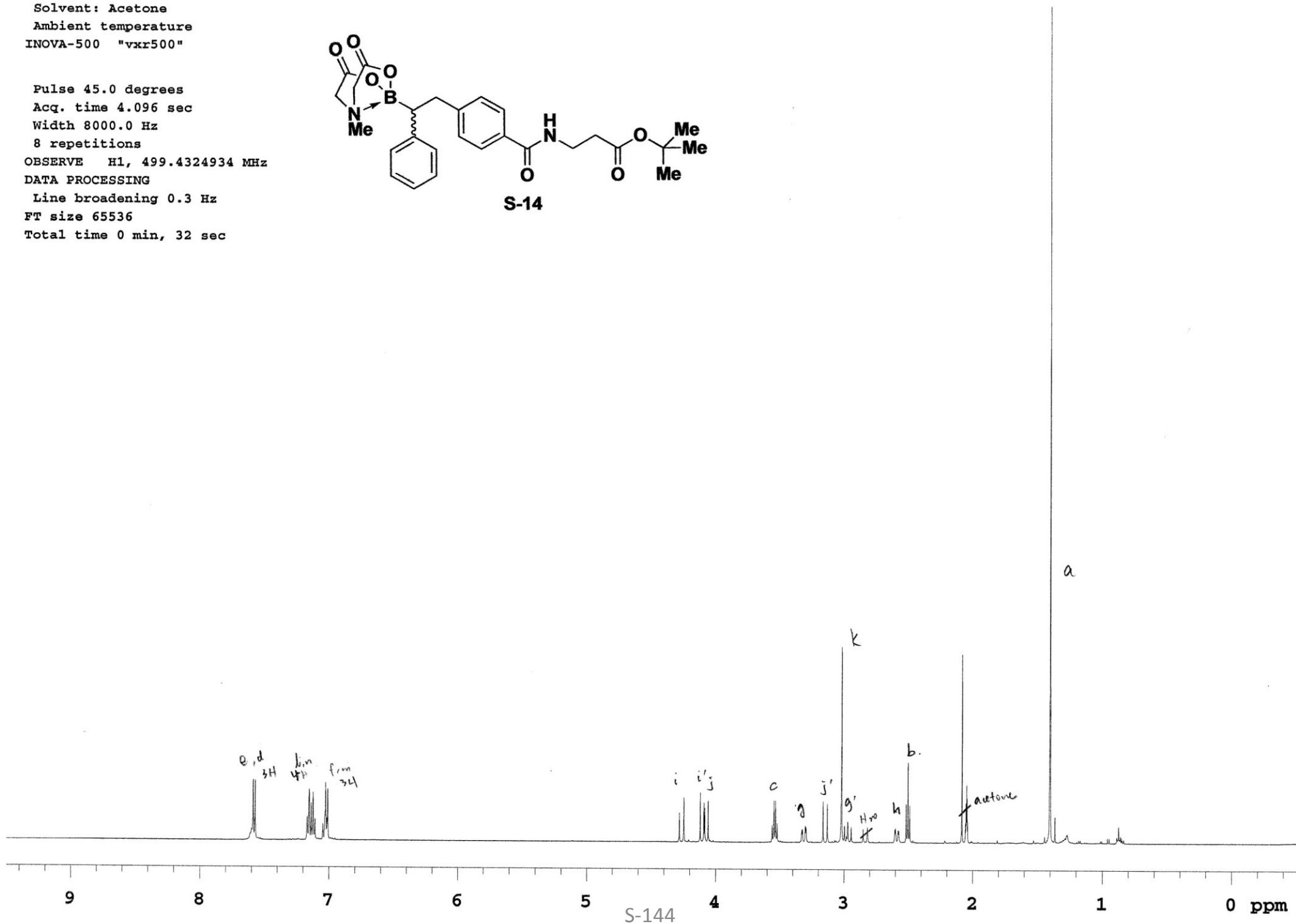
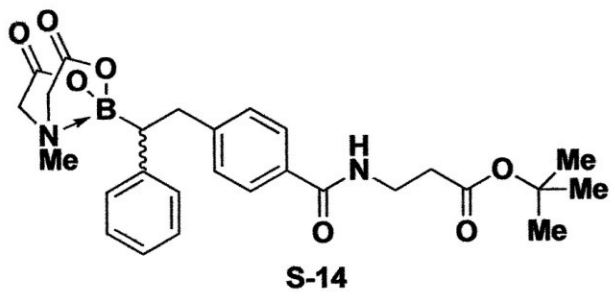


S-143

Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
INOVA-500 "vkr500"

Pulse 45.0 degrees
Acq. time 4.096 sec
Width 8000.0 Hz
8 repetitions
OBSERVE H1, 499.4324934 MHz
DATA PROCESSING
Line broadening 0.3 Hz
FT size 65536
Total time 0 min, 32 sec



Pulse Sequence: s2pul

Solvent: Acetone
Ambient temperature
Operator: user1d
INOVA-400 "u400"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.311 sec
Width 25000.0 Hz
864 repetitions
OBSERVE C13, 100.5667972 MHz
DECOUPLE H1, 399.9488299 MHz
Power 45 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 6 hr, 26 min, 35 sec

