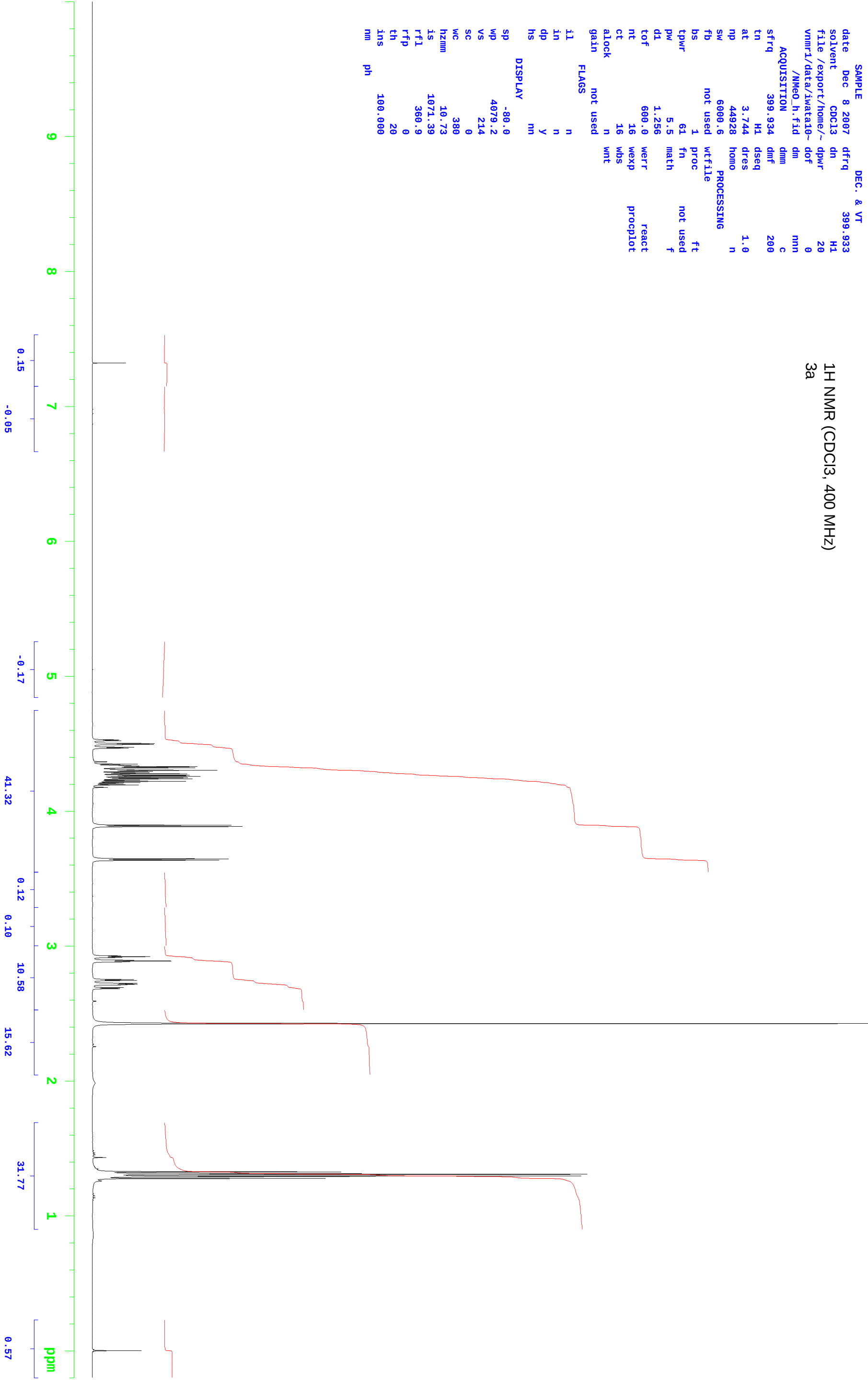


Iwata10/NMeO

exp10 std1h

SAMPLE		DEC. & VT	
date	Dec 8 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata10~	dof		0
/NMeO_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1071.39		
rfl	360.9		
rfp	0		
th	20		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
3a

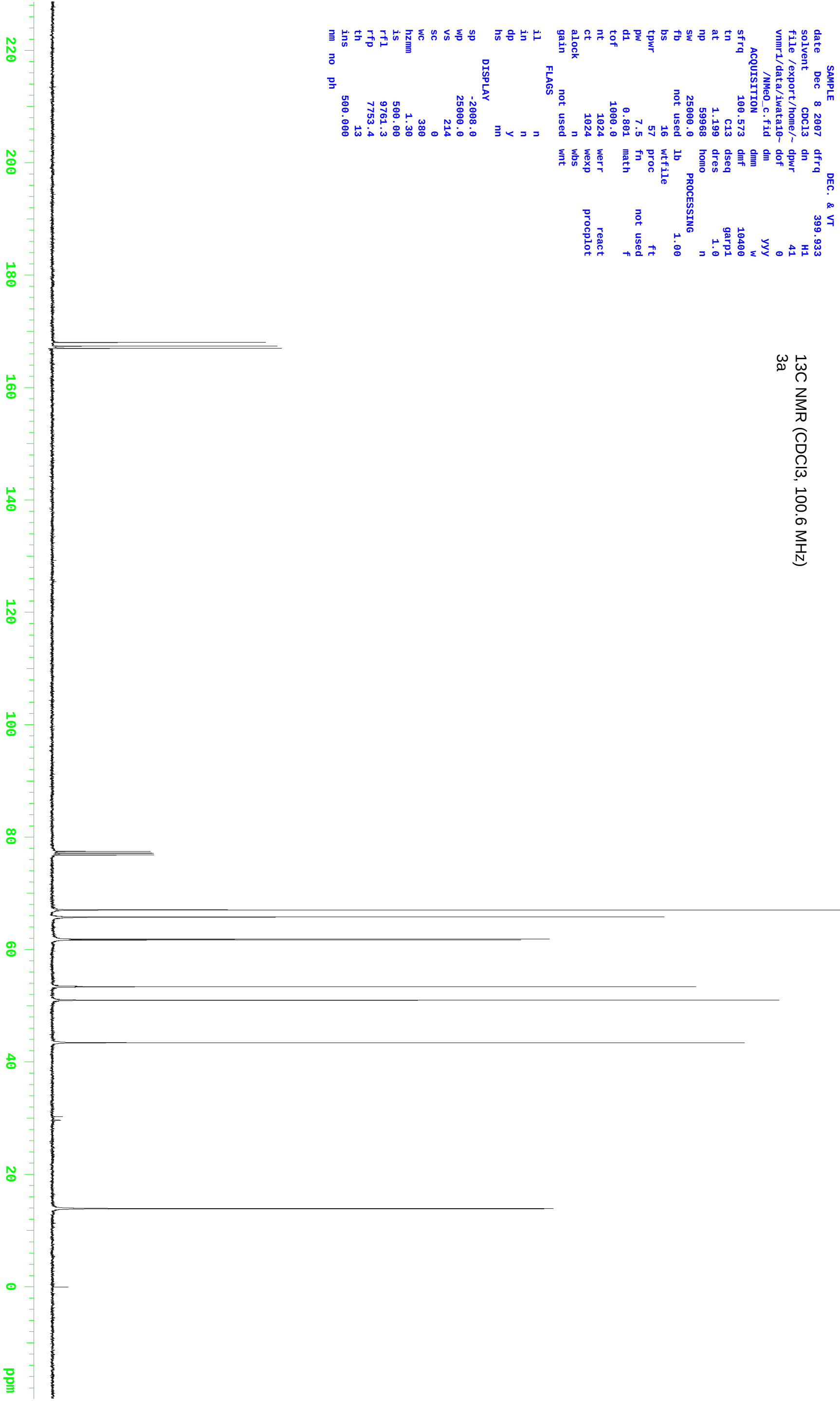


Iwata10/NMeO

exp11 std13c

SAMPLE		DEC. & VT	
date	Dec 8 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/Iwata10-	dof		0
/NMeO.c.fid	dm	yyv	w
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2008.0		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	1.30		
is	500.00		
rfl	9761.3		
rfp	7753.4		
th	13		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
3a

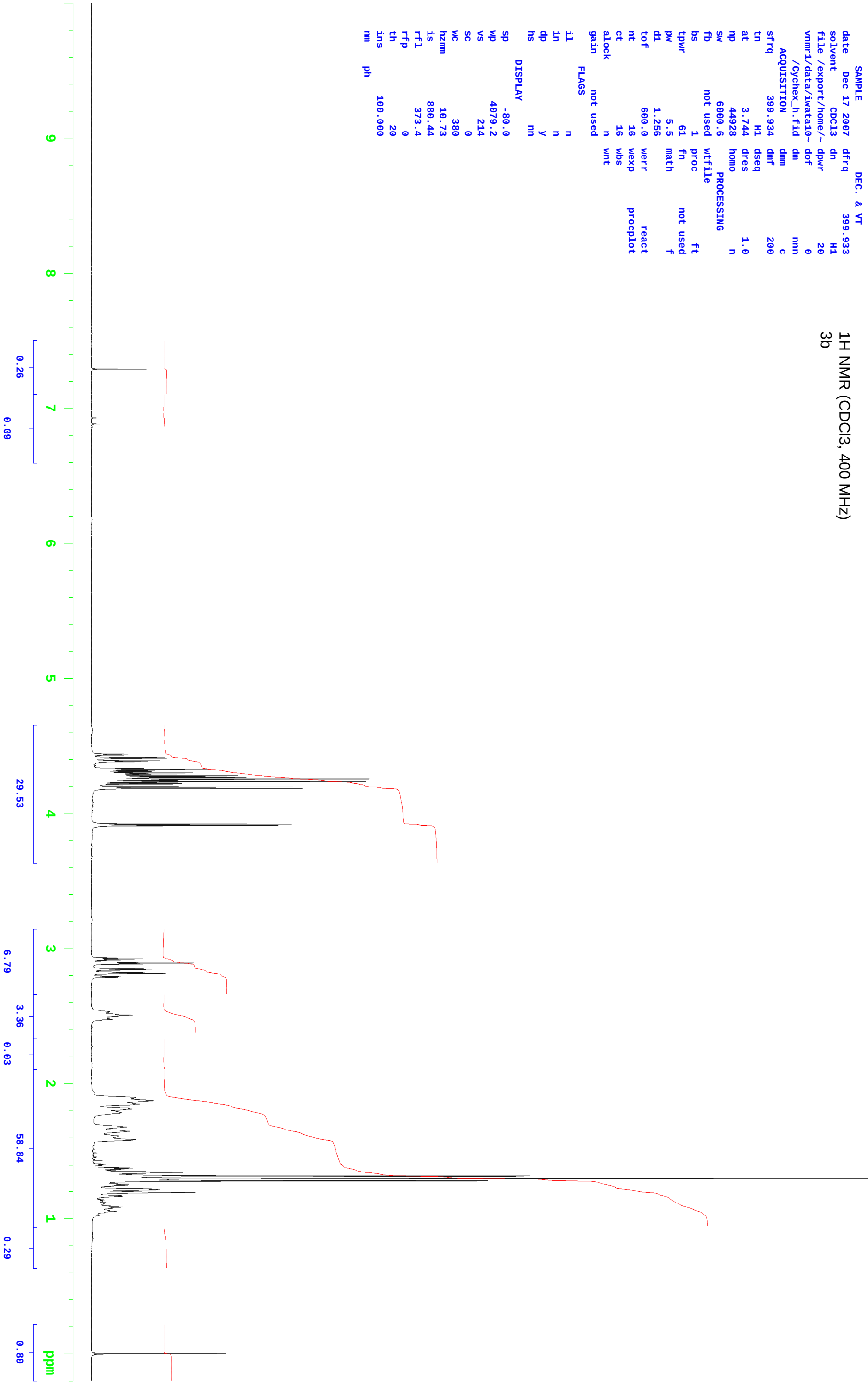


iwata10/cychem

exp11 std1h

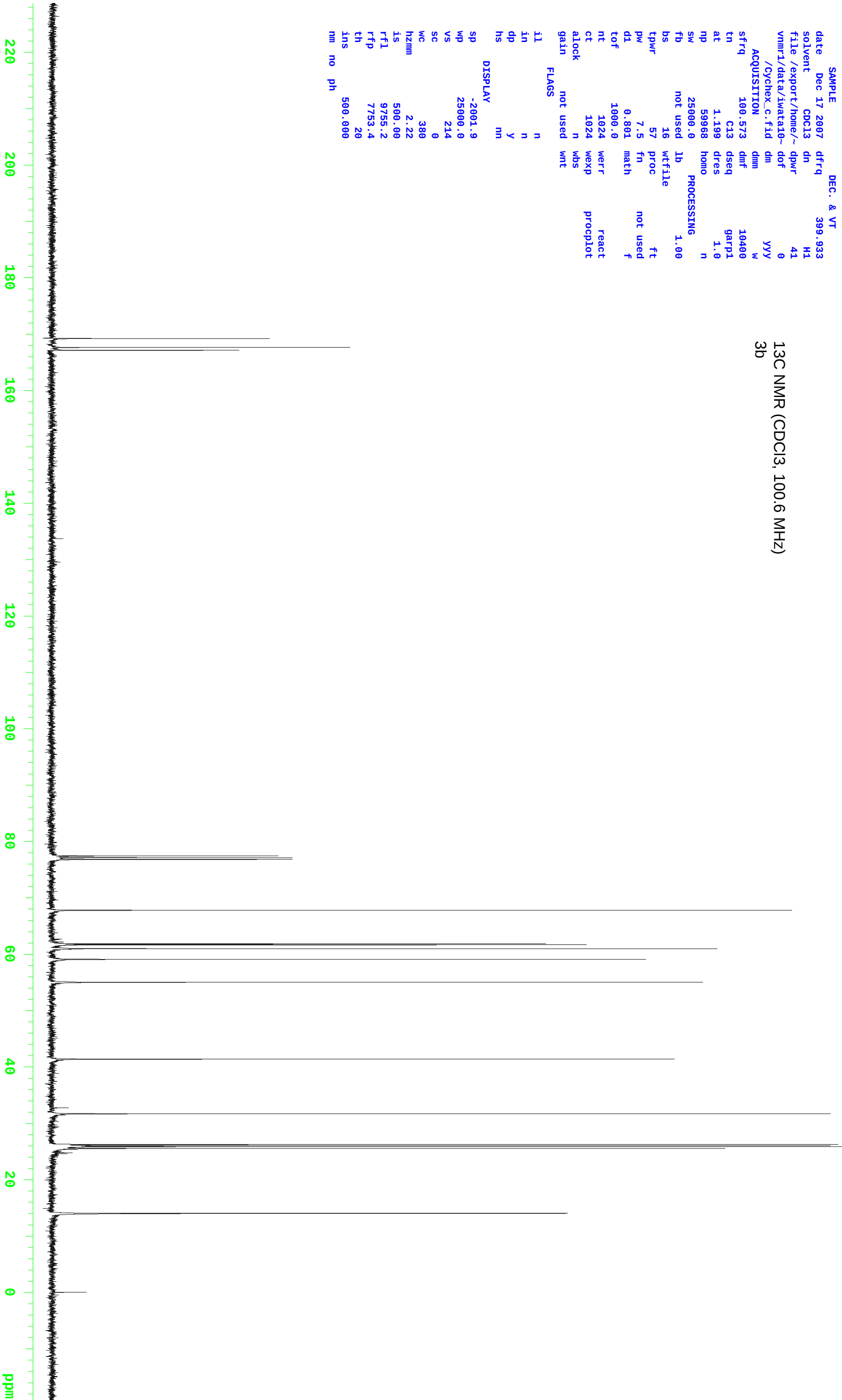
SAMPLE		DEC. & VT	
date	Dec 17 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata10-	dof		0
/Cychem_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	880.44		
rfl	373.4		
rfp	0		
th	20		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
3b



SAMPLE		DEC. & VT	
date	Dec 17 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
vmr1/data/iwatata0-	dof		0
/Cychem.c.fid	dm		yyv
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2001.9		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmh	2.22		
is	500.00		
rfl	9755.2		
rfp	7753.4		
th	20		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
3b



SAMPLE

DEC. & VT

date

Dec 25 2007

dfreq

399.933

solvent

CDCl3

dn

H1

file

/export/home/~

dpwr

20

nmr1/data/iwata10-

dof

0

/PhnCyc.h.fid

dm

nmn

ACQUISITION

dmf

c

sfrq

399.934

dmf

200

tn

H1

dseq

at

3.744

dres

1.0

np

44928

homo

n

sw

6000.6

PROCESSING

fb

not used

wfile

bs

1

proc

ft

tpwr

61

fn

not used

pw

5.5

math

f

dl

1.256

tof

600.0

werr

react

nt

16

wexp

procp1ot

ct

16

wbs

alock

n

wnt

gain

not used

FLAGS

il

n

in

n

dp

y

hs

nn

DISPLAY

sp

-80.0

wp

4079.2

vs

214

sc

0

wc

380

hzmm

10.73

is

1164.34

rfl

379.8

rfp

0

th

20

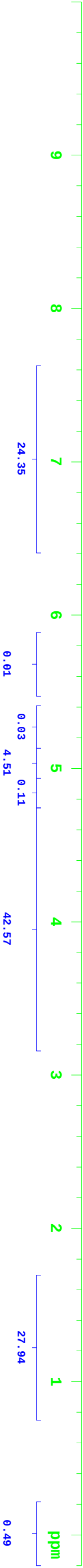
ins

100.000

nm

ph

1H NMR (CDCl3, 400 MHz)
3c



SAMPLE DEC. & VT 13C NMR (CDCl3, 100.6 MHz)
date Dec 25 2007 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata10~ dof 0
/PhnCyc.c.fid dm yyy
ACQUISITION dnm w

sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile

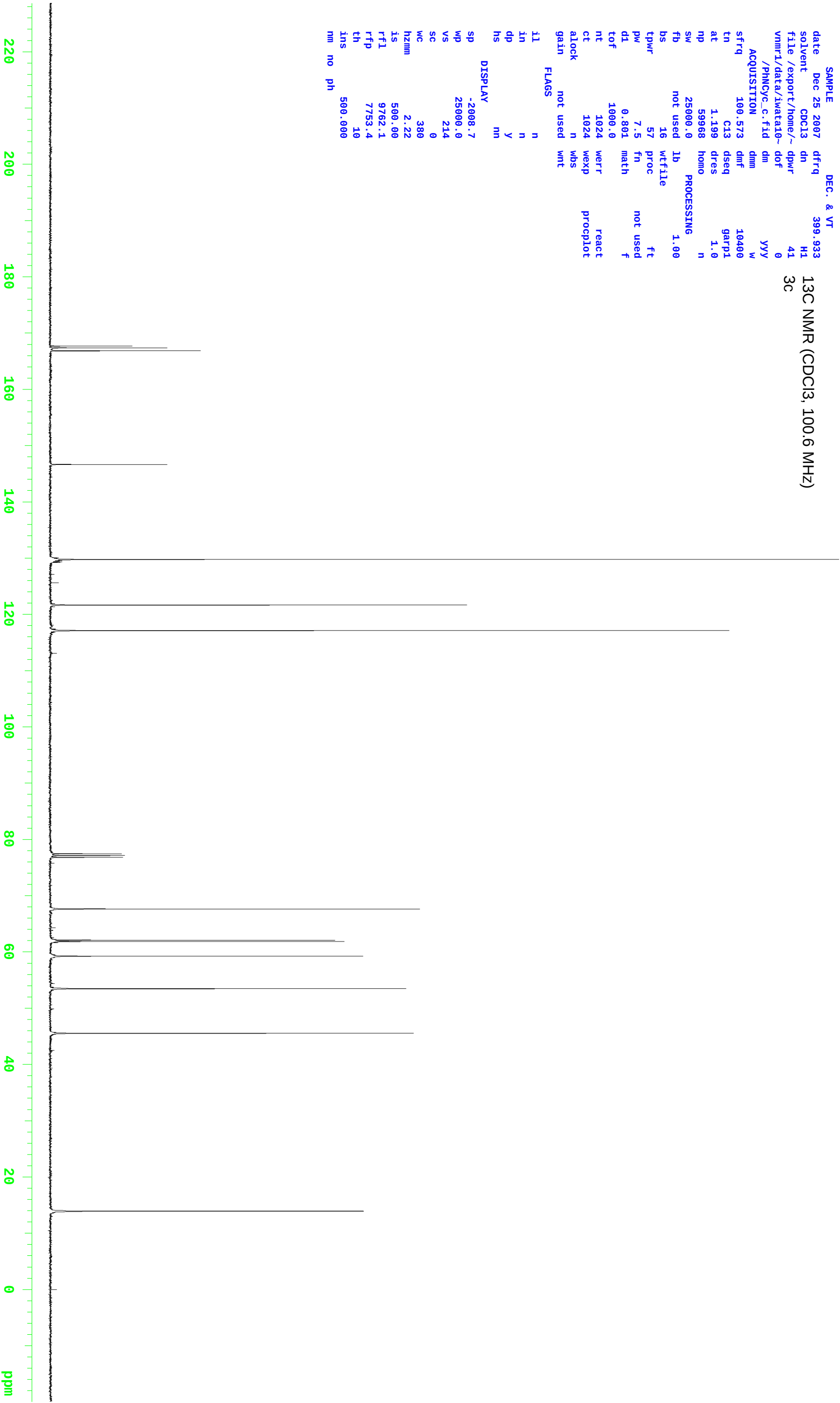
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 1024 werr react
ct 1024 wexp procp1ot
alock n wbs
gain not used wnt

FLAGS

il n
in n
dp y
hs nn

DISPLAY

sp -2008.7
wp 25000.0
vs 214
sc 0
wc 380
hzmhz 2.22
is 500.00
rfl 9762.1
rfp 7753.4
th 10
ins 500.000
nm no ph

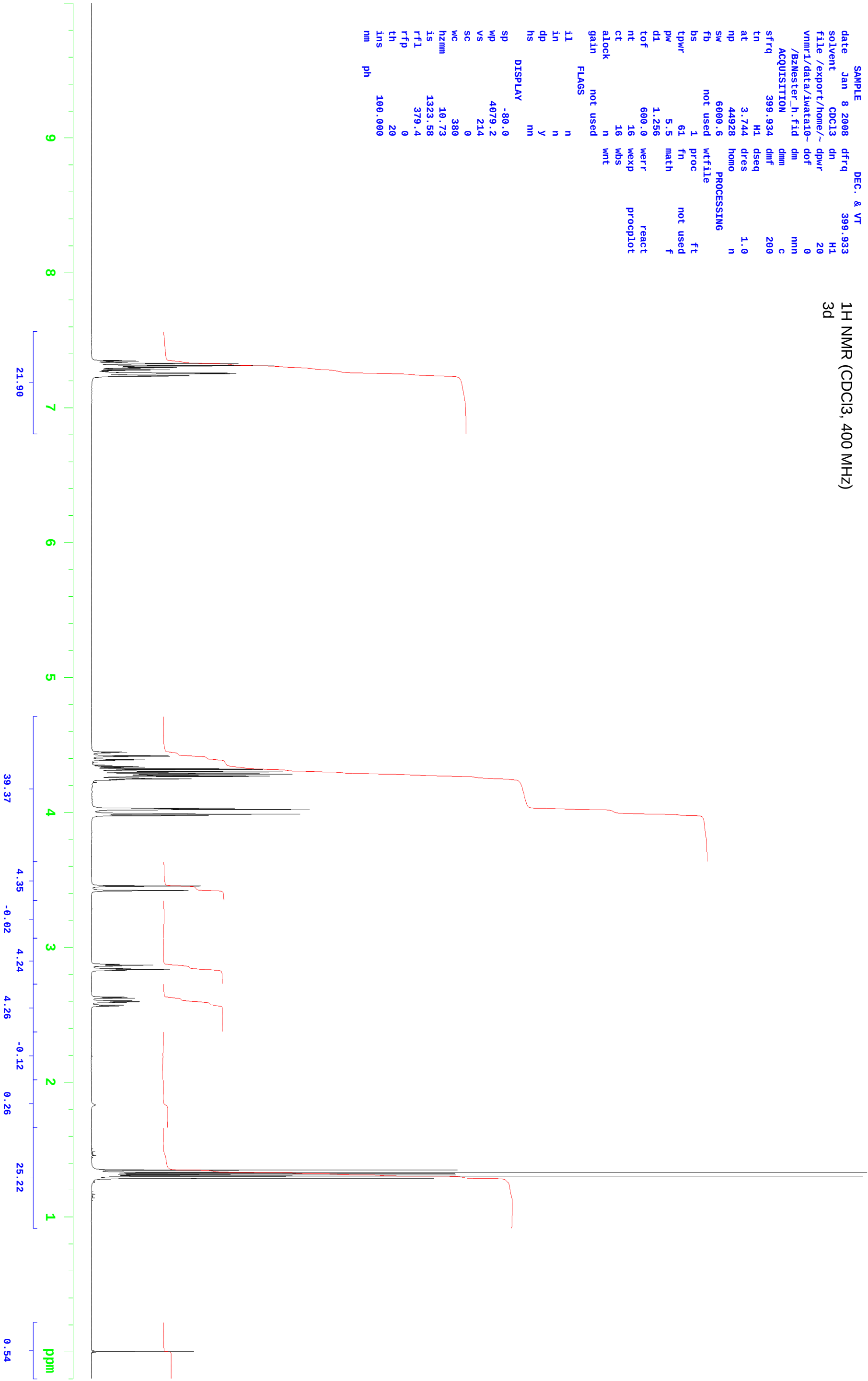


Iwata10/BzNester

exp11 std1h

SAMPLE		DEC. & VT	
date	Jan 8 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/Iwata10-	dof		0
/BzNester_h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1323.58		
rfl	379.4		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
3d



Iwata10/BzNester

exp11 std13c

SAMPLE		DEC. & VT	
date	Jan 8 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata10-	dof		0
/BzNester.c.fid	dm		YVY
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2007.2		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmhm	2.52		
is	500.00		
rfl	9760.6		
rfp	7753.4		
th	13		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
3d

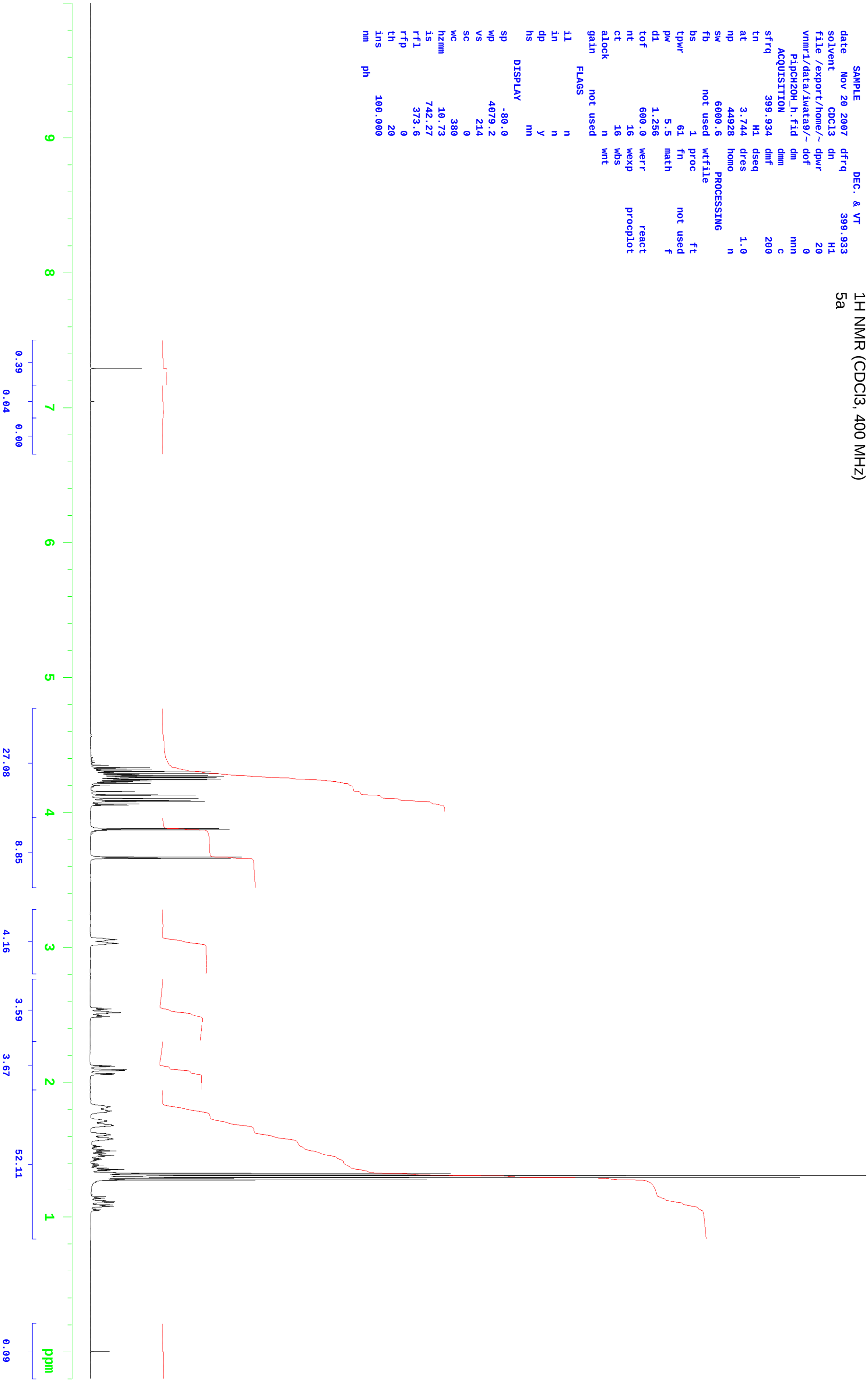


iwata9/PipCH2OH

exp11 std1h

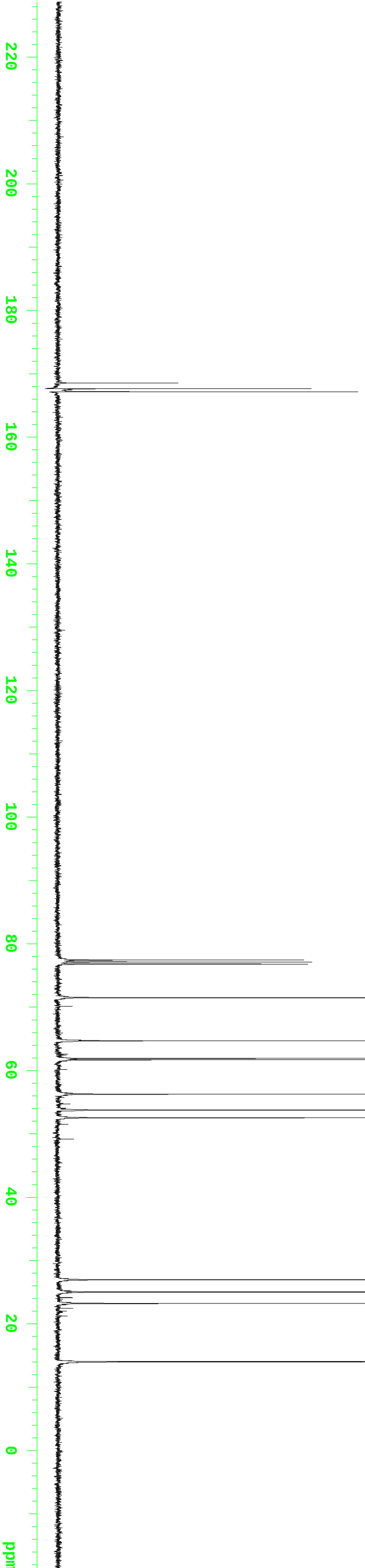
SAMPLE		DEC. & VT	
date	Nov 20 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata9/~	dof		0
PipCH2OH_h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	742.27		
rfl	373.6		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
5a



13C NMR (CDCl3, 100.6 MHz)
5a

SAMPLE DEC. & VT
date Nov 20 2007 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata9/~ dof 0
PipCH2OH.c.fid dm yyy
ACQUISITION dnm w
sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 2048 werr react
ct 2048 wexp procp1ot
alock n wbs
gain not used wnt
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -2001.1
wp 25000.0
vs 214
sc 0
wc 380
hzmm 17.29
is 500.00
rfl 9754.5
rfp 7753.4
th 15
ins 500.000
nm no ph

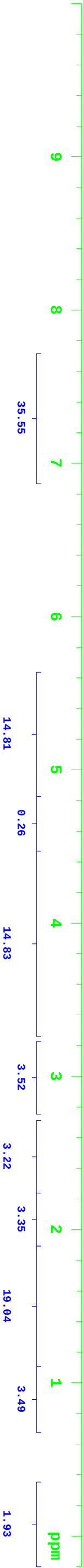


fukushima/BzP1pr

exp11 std1h

SAMPLE		DEC. & VT	
date	Jun 18 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
vmr1/data/fukushi-	dof		0
ma/BzP1pr.h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzm	10.73		
is	961.74		
rfl	389.9		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
5b



SAMPLE		DEC. & VT	
date	Jun 12 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
vnmr1/data/fukushi-	dof		0
ma/BzPip.c.fid	dm		yyv
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	2048	werr	react
ct	2048	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2008.7		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmm	65.79		
is	500.00		
rfl	9762.1		
rfp	7753.4		
th	17		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
5b

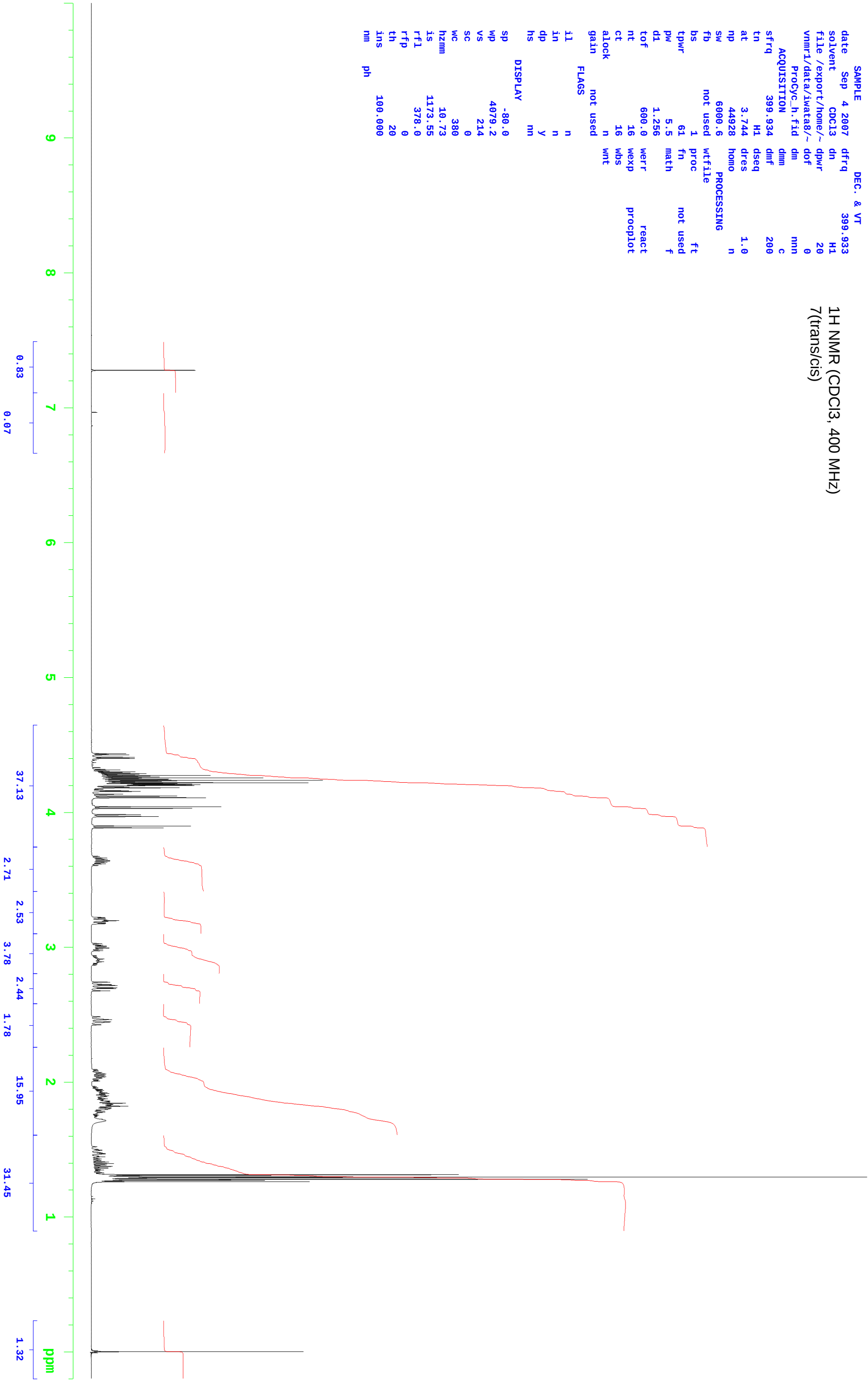


Iwata8/Procyc

exp11 std1h

SAMPLE		DEC. & VT	
date	Sep 4 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata8/~	dof		0
Procyc.h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1173.55		
rfl	378.0		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
7(trans/cis)



13C NMR (CDCl3, 100.6 MHz)
7(trans/cis)

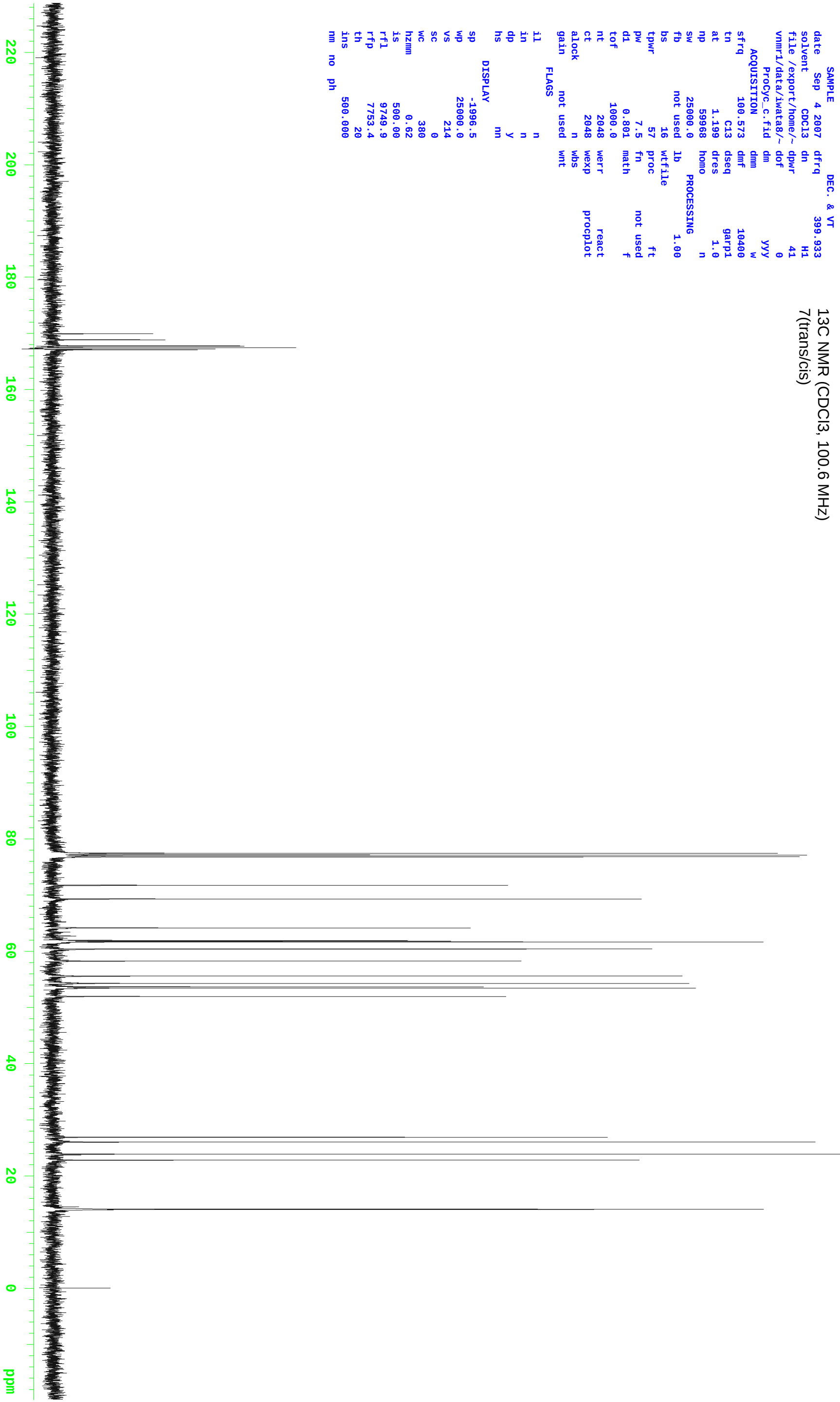
SAMPLE DEC. & VT
date Sep 4 2007 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata8/~ dof 0
Procyc.c.fid dm yyy
ACQUISITION
sfrq 100.573 dnm w
tn C13 dmf 10400
at 1.199 dres garp1
np 59968 homo 1.0
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 2048 werr react
ct 2048 wexp procp1ot
alock n wbs
gain not used wnt

FLAGS

il n
in n
dp y
hs nn

DISPLAY

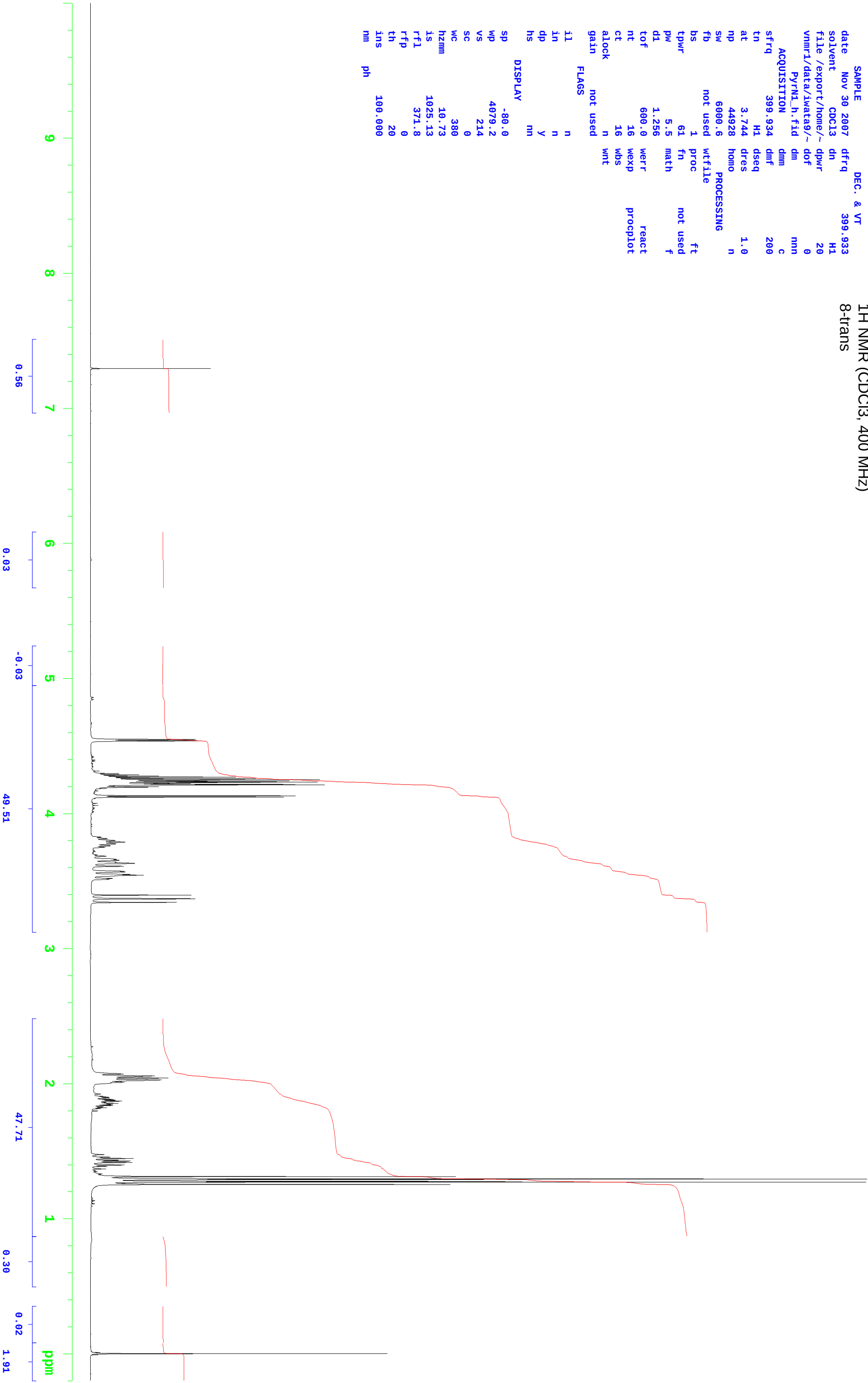
sp -1996.5
wp 25000.0
vs 214
sc 0
wc 380
hzmm 0.62
is 500.00
rfl 9749.9
rfp 7753.4
th 20
ins 500.000
nm no ph



iwata9/PyrN1
exp11 std1h

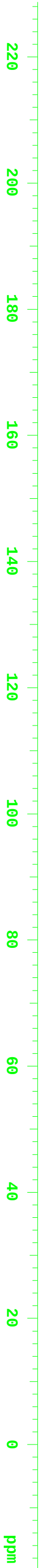
SAMPLE		DEC. & VT	
date	Nov 30 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata9/~	dof		0
PyrN1_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1025.13		
rfl	371.8		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
8-trans



13C NMR (CDCl3, 100.6 MHz)
8-trans

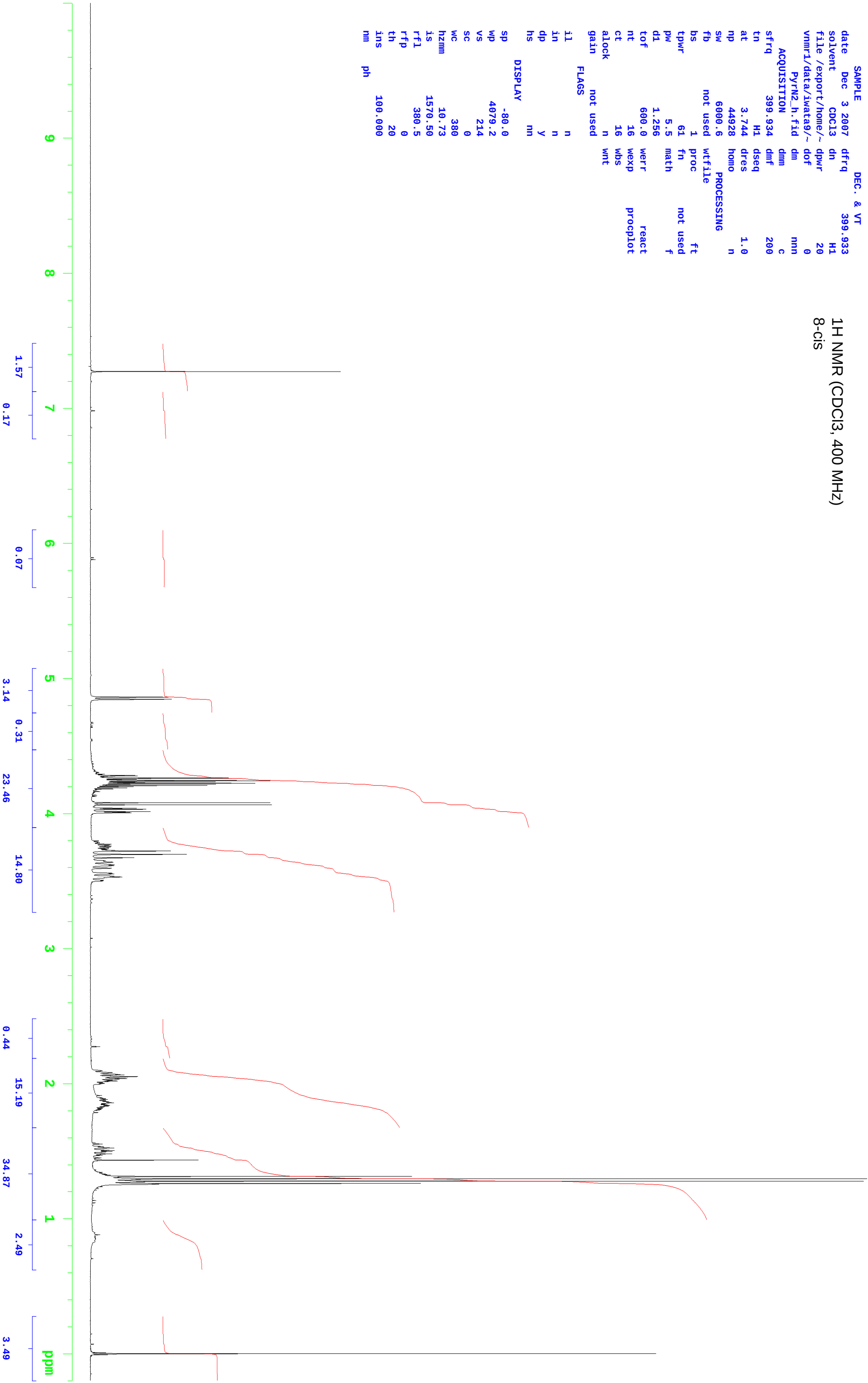
SAMPLE		DEC. & VT	
date	Nov 30 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata9/~	dof		0
PYrN1.c.fid		dm	yyy
ACQUISITION		dmm	w
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	2048	werr	react
ct	2048	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2000.3		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmh	3.44		
is	500.00		
rfl	9753.7		
rfp	7753.4		
th	20		
ins	500.000		
nm	no	ph	



iwata9/PyrN2
exp11 std1h

SAMPLE		DEC. & VT	
date	Dec 3 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
vmr1/data/iwata9/~	dof		0
PyrN2_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmm	10.73		
is	1570.50		
rfl	380.5		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
8-cis

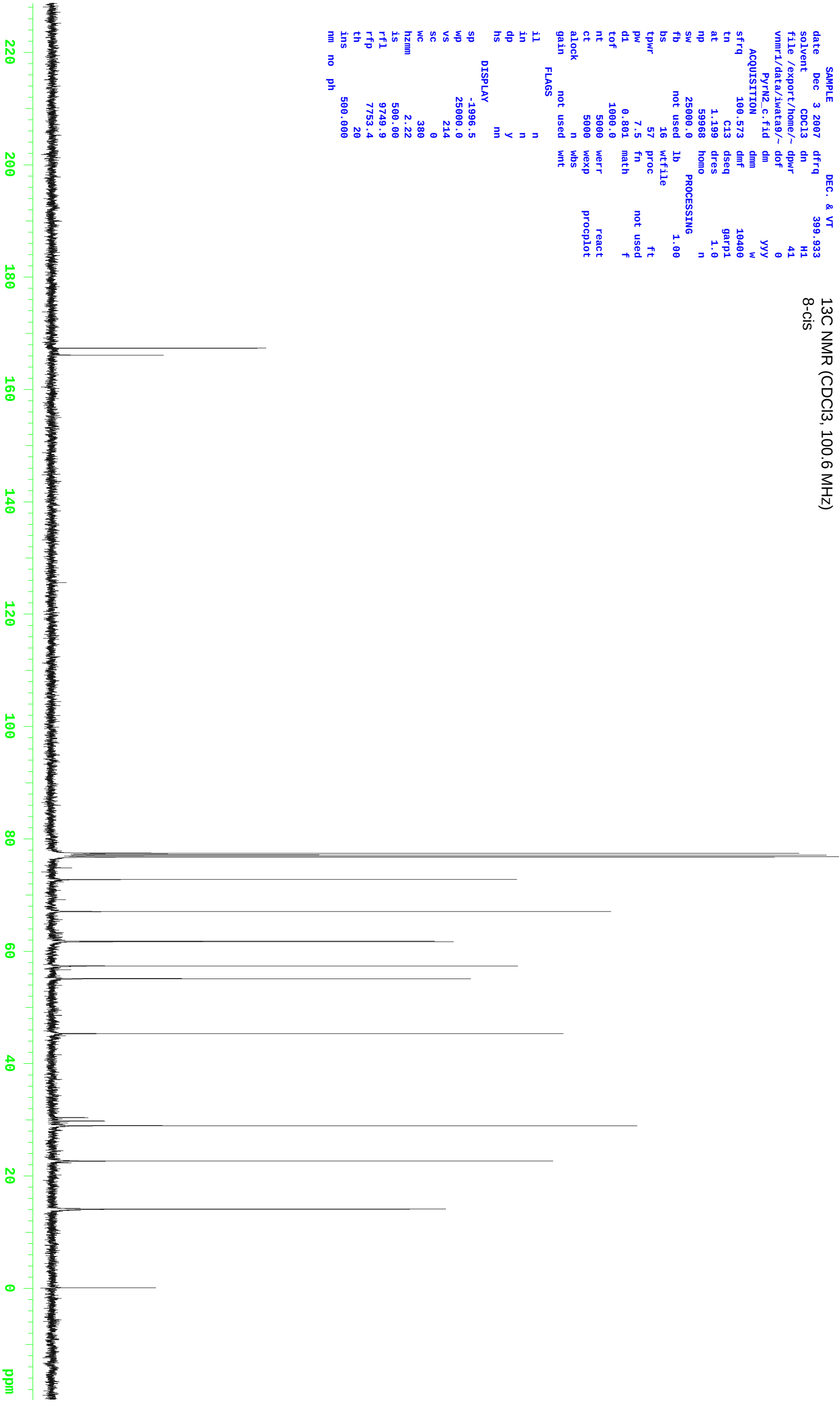


Iwata9/PYRN2

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
8-cis

SAMPLE		DEC. & VT	
date	Dec 3 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
vmr1/data/iwata9/~	dof		0
PYRN2.c.fid		dm	yyy
ACQUISITION		dmm	w
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	5000	werr	react
ct	5000	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1996.5		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmm	2.22		
is	500.00		
rfl	9749.9		
rfp	7753.4		
th	20		
ins	500.000		
nm	no	ph	



SAMPLE

date Jan 31 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 20

nmr1/data/iwata11-

dof 0

/d1bz_h.fid

dm nm

dmnm c

ACQUISITION

sfrq 399.934

dmf 200

tn H1

dseq

at 3.744

dres 1.0

np 44928

homo n

sw 6000.6

PROCESSING

fb not used

wfile

bs 1

proc ft

tpwr 61

fn not used

pw 5.5

math f

dl 1.256

tof 600.0

werr react

nt 16

wexp procp1ot

ct 16

wbs

alock n

wnt

gain not used

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -80.0

wp 4079.2

vs 214

sc 0

wc 380

hzmnm 10.73

is 1471.94

rfl 386.4

rfp 0

th 20

ins 100.000

nm ph

DEC. & VT

399.933

H1

20

0

nm

c

200

1.0

n

ft

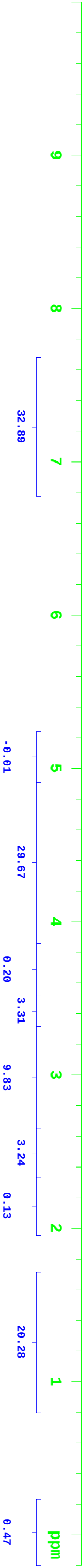
not used

f

react

procp1ot

1H NMR (CDCl3, 400 MHz)
10a



iwata11/d1bz

exp11 std13c

SAMPLE DEC. & VT
date Jan 31 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata11~ dof 0
/d1bz.c.fid dm yyy
w

ACQUISITION
sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile

tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 1024 werr react
ct 1024 wexp procp1ot
alock n wbs
gain not used wnt

FLAGS

il n
in n
dp y
hs nn

DISPLAY

sp -2008.0
wp 25000.0
vs 214
sc 0
wc 380
hzmm 1.66
is 500.00
rfl 9761.3
rfp 7753.4
th 20
ins 500.000
nm no ph

13C NMR (CDCl3, 100.6 MHz)
10a



expt1 std1h

SAMPLE DEC. & VT
date Feb 22 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 20
vnmr1/data/iwata11~ dof 0
/NCCCN_h.fid dm mnn
ACQUISITION dnm c
sfrq 399.934 dmf 200
tn H1 dseq
at 3.744 dres 1.0
np 44928 homo n
sw 6000.6 PROCESSING
fb not used wfile
bs 1 proc ft
tpwr 61 fn not used
pw 5.5 math f
dl 1.256
tof 600.0 werr react
nt 16 wexp procpilot
ct 16 wbs
alock n wnt
gain not used

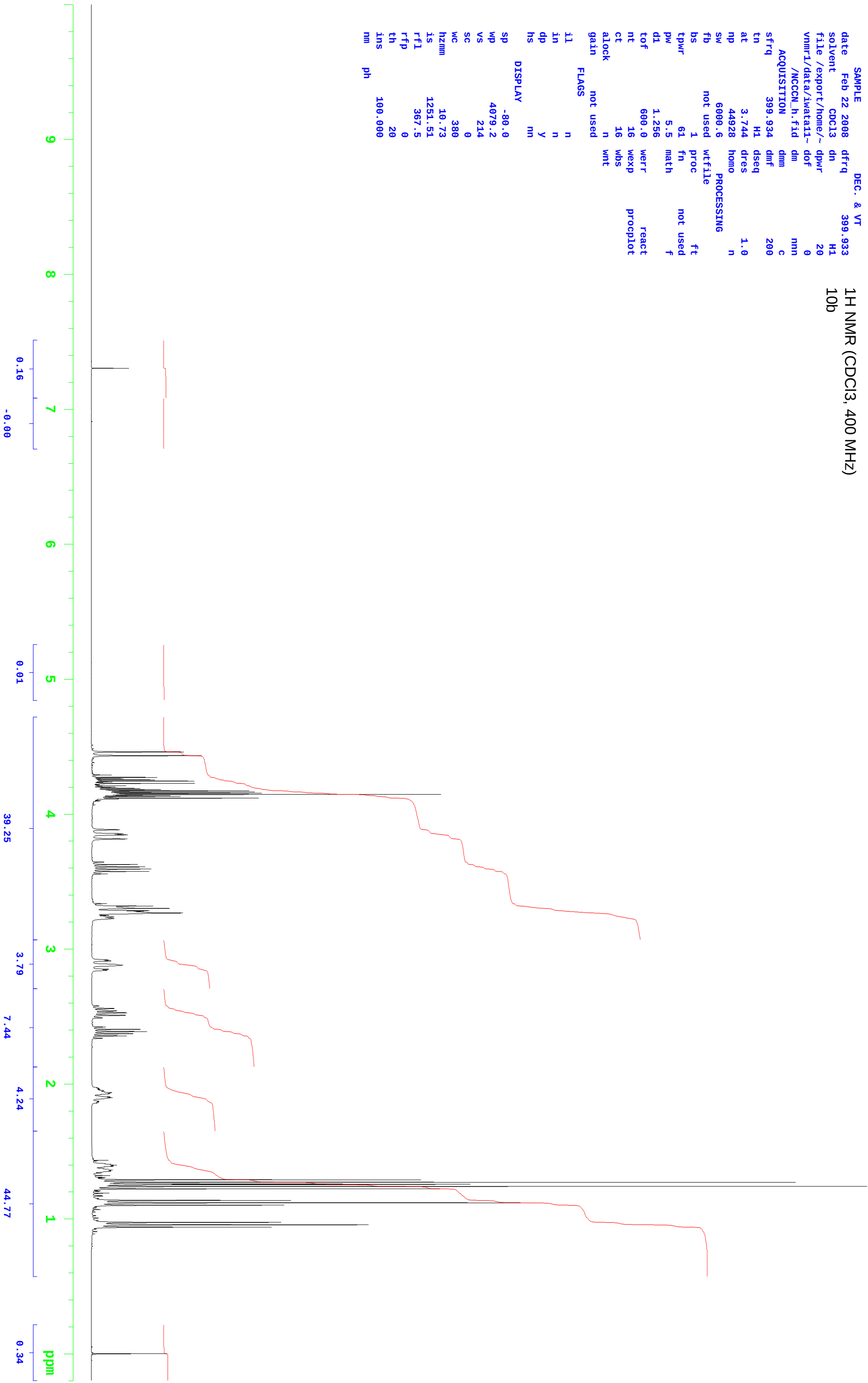
1H NMR (CDCl3, 400 MHz)
10b

FLAGS

il n
in n
dp y
hs nn

DISPLAY

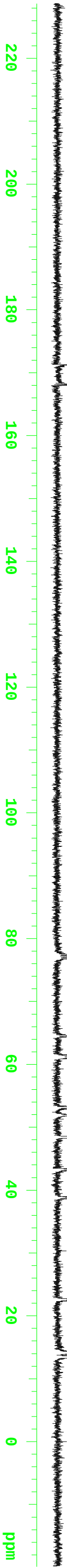
sp -80.0
wp 4079.2
vs 214
sc 0
wc 380
hzmm 10.73
is 1251.51
rfl 367.5
rfp 0
th 20
ins 100.000
nm ph



13C NMR (CDCl3, 100.6 MHz)

10b

SAMPLE		DEC. & VT	
date	Feb 22 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata11-	dof		0
/NCCCN.c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	dres	1.0
sw	25000.0	homo	n
PROCESSING			
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2001.1		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	2.14		
is	500.00		
rfl	9754.5		
rfp	7753.4		
th	15		
ins	500.000		
nm	no	ph	



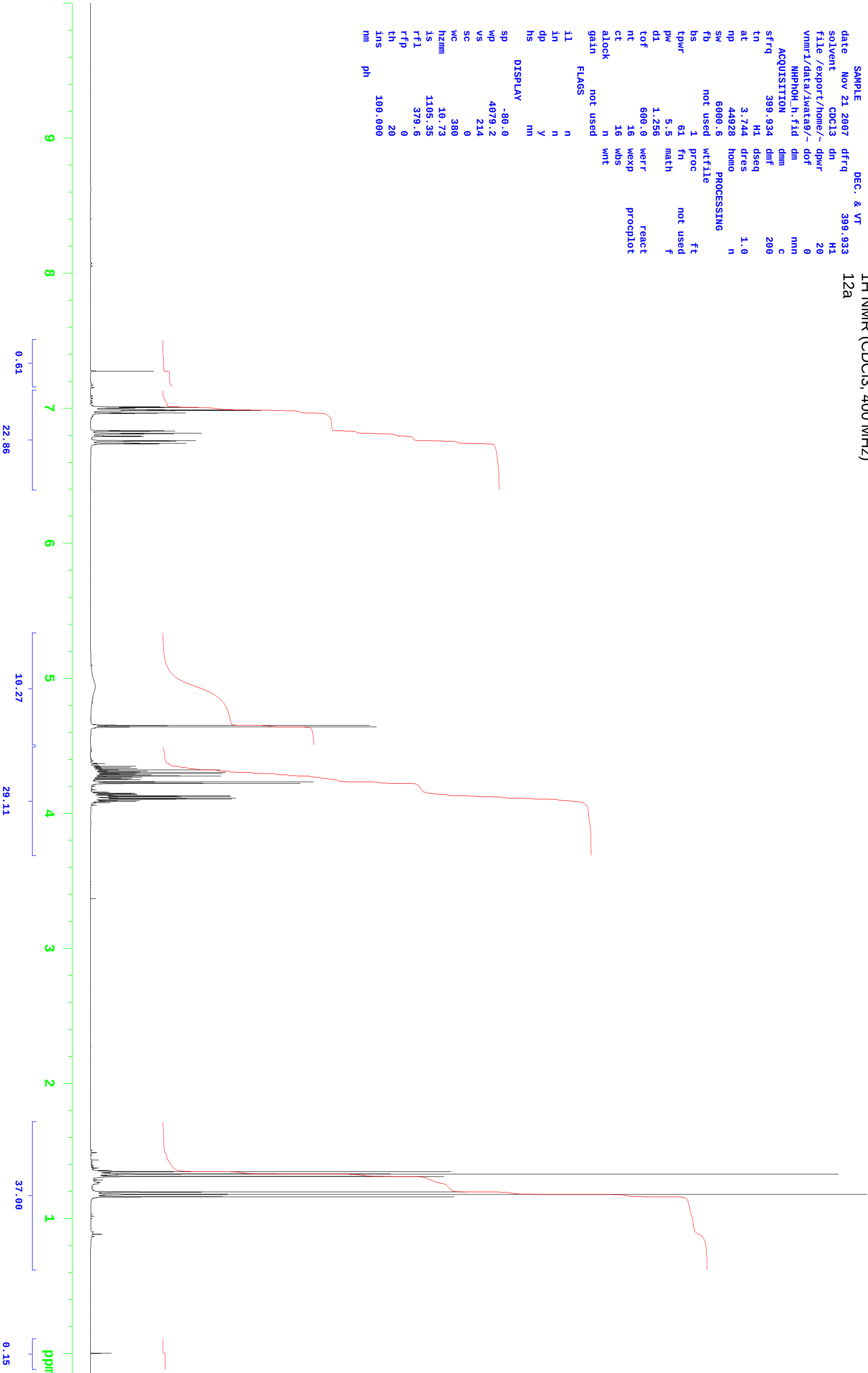
Iwata9/NHPhOH

exp11 std1h

¹H NMR (CDCl₃, 400 MHz)

12a

SAMPLE DEC. & VT
date Nov 21 2007 dfreq 399.933
solvent CDCl₃ dn H1
file /export/home/~ dpwr 20
vnmr1/data/iwata9/~ dof 0
NHPhOH_h.fid dm mnn
ACQUISITION dnm c
sfrq 399.934 dmf 200
tn H1 dseq
at 3.744 dres 1.0
np 44928 homo n
sw 6000.6 PROCESSING
fb not used wfile
bs 1 proc ft
tpwr 61 fn not used
pw 5.5 math f
dl 1.256
tof 600.0 werr react
nt 16 wexp procpilot
ct 16 wbs
alock n wnt
gain not used
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -80.0
wp 4079.2
vs 214
sc 0
wc 380
hzm 10.73
is 1105.35
rfl 379.6
rfp 0
th 20
ins 100.000
nm ph



SAMPLE

date Nov 21 2007

DEC. & VT

399.933

solvent CDCl3

dn

H1

file /export/home/~

dpwr

41

nmr1/data/iwata9/~

dof

0

NhPhOH.c.fid

dm

yyy

ACQUISITION

sfrq 100.573

dmf

10400

tn C13

dseq

garpl

at 1.199

dres

1.0

np 59968

homo

n

sw 25000.0

PROCESSING

fb not used

lb

1.00

bs 16

wfile

tpwr 57

proc

ft

pw 7.5

fn

not used

dl 0.801

math

f

tof 1000.0

nt 2048

werr

react

ct 2048

wexp

procplot

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -2001.1

wp 25000.0

vs 214

sc 0

wc 380

hzmm 2.06

is 500.00

rfl 9754.5

rfp 7753.4

th 20

ins 500.000

nm no ph

13C NMR (CDCl3, 100.6 MHz)
12a

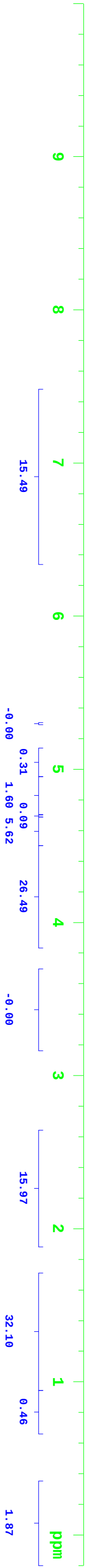


iwata10/NH2cresol

exp11 std1h

¹H NMR (CDCl₃, 400 MHz)
12b

SAMPLE		DEC. & VT	
date	Dec 10 2007	dfrq	399.933
solvent	CDCl ₃	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata10-	dof		0
/NH2cresol_h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1469.09		
rfl	380.5		
rfp	0		
th	20		
ins	100.000		
nm	ph		



iwata10/NH2cresol

exp11 std13c

SAMPLE

date Dec 10 2007

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 41

nmr1/data/iwata10-

dof 0

/NH2cresol.c.fid

dm

YYV

W

ACQUISITION

sfrq 100.573

dmf 10400

tn C13

dseq garp1

at 1.199

dres 1.0

np 59968

homo n

sw 25000.0

PROCESSING

fb not used

lb 1.00

bs 16

wfile

tpwr 57

proc

ft

pw 7.5

fn not used

dl 0.801

math f

tof 1000.0

nt 2048

werr react

ct 2048

wexp procplot

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -2000.3

wp 25000.0

vs 214

sc 0

wc 380

hzmhz 2.75

is 500.00

rfl 9753.7

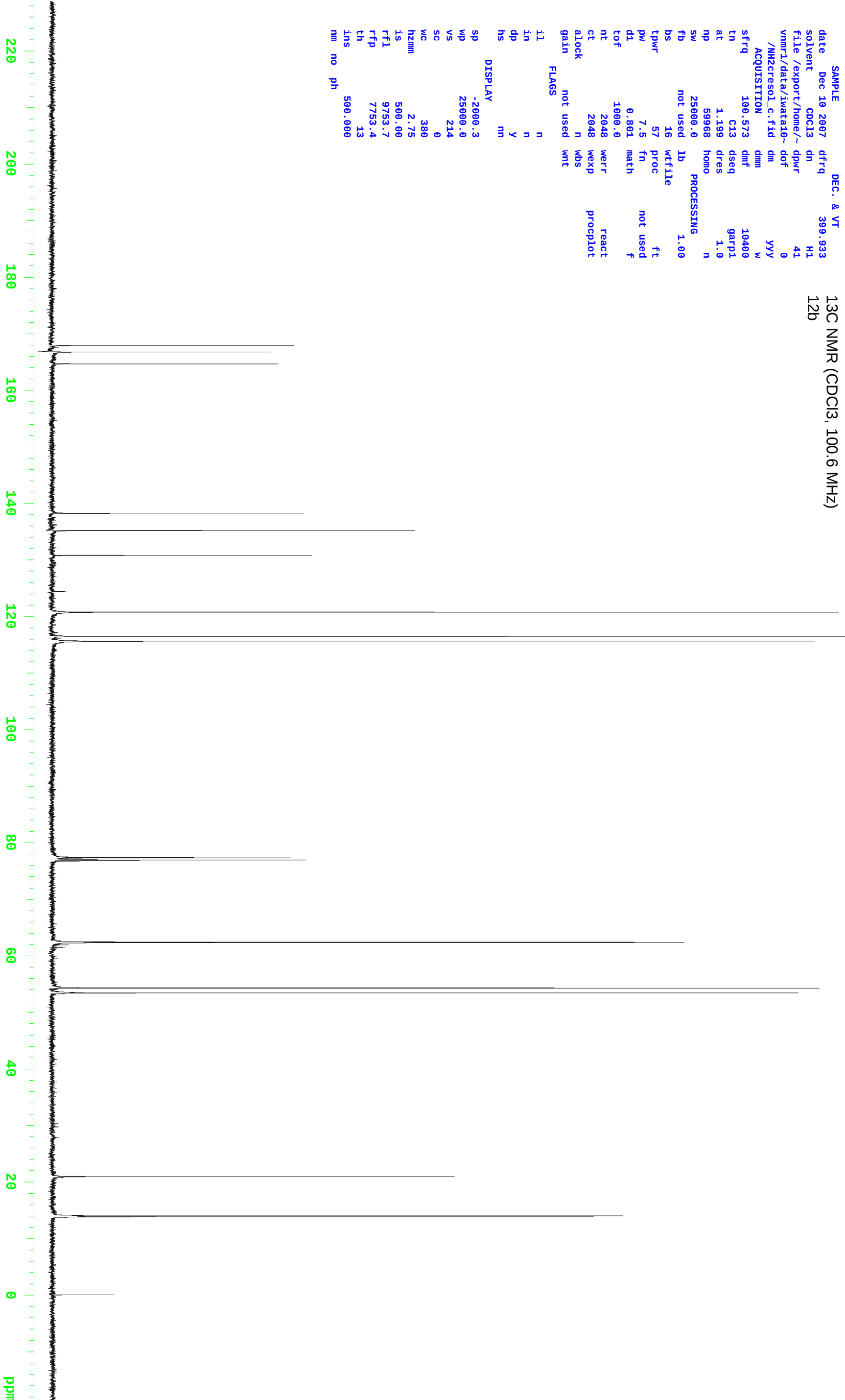
rfp 7753.4

th 13

ins 500.000

nm no ph

13C NMR (CDCl3, 100.6 MHz)
12b

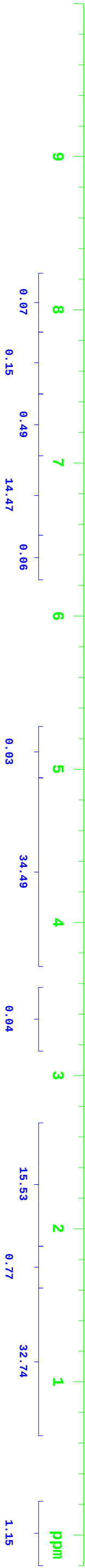


iwata10/m-cresol

exp11 std1h

1H NMR (CDCl3, 400 MHz)
12c

SAMPLE			DEC. & VT	
date	Jan 18 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata10-	dof		0	
/m-cresol_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	200
tn	H1	dseq		
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmnm	10.73			
is	1050.69			
rfl	379.4			
rfp	0			
th	20			
ins	100.000			
nm	ph			



iwata10/m-cresol

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
12c

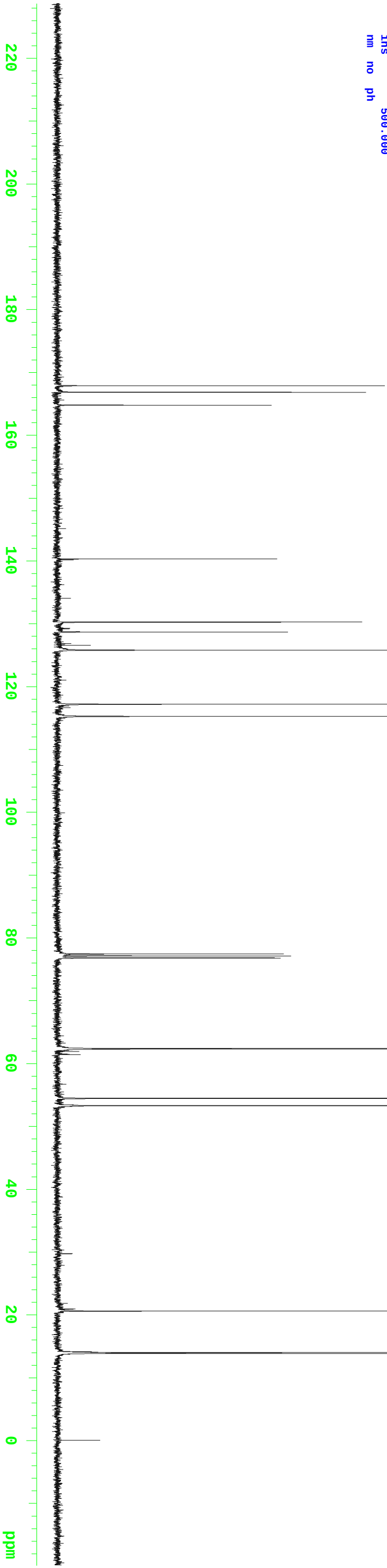
SAMPLE		DEC. & VT	
date	Jan 18 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata10-	dof		0
/m-cresol.c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	n
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	

FLAGS

il	n
in	n
dp	y
hs	nn

DISPLAY

sp	-2001.1
wp	25000.0
vs	214
sc	0
wc	380
hzm	2.29
is	500.00
rfl	9754.5
rfp	7753.4
th	20
ins	500.000
nm	no
ph	

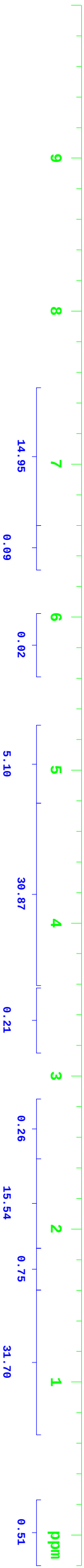


iwata11/OMeEster

exp11 std1h

1H NMR (CDCl3, 400 MHz)
12d

SAMPLE		DEC. & VT	
date	Feb 15 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata11-	dof		0
OMeEster_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmm	10.73		
is	1189.65		
rfl	380.2		
rfp	0		
th	20		
ins	100.000		
nm	ph		



iwata11/OMeEster

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)

12d

SAMPLE

date Feb 15 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 41

nmr1/data/iwata11~

dof 0

/OMeEster.c.fid

dm

YYY

W

ACQUISITION

sfrq 100.573

dmf 10400

tn C13

dseq garp1

at 1.199

dres 1.0

np 59968

homo n

sw 25000.0

PROCESSING

fb not used

lb 1.00

bs 16

wfile

tpwr 57

proc

ft

pw 7.5

fn not used

dl 0.801

math f

tof 1000.0

nt 1024

werr react

ct 1024

wexp procp1ot

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -2000.3

wp 25000.0

vs 214

sc 0

wc 380

hzm 2.76

is 500.00

rfl 9753.7

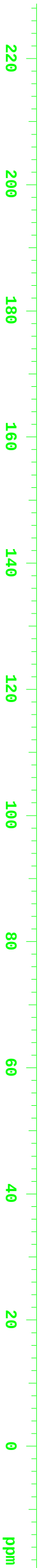
rfp 7753.4

th 15

ins 500.000

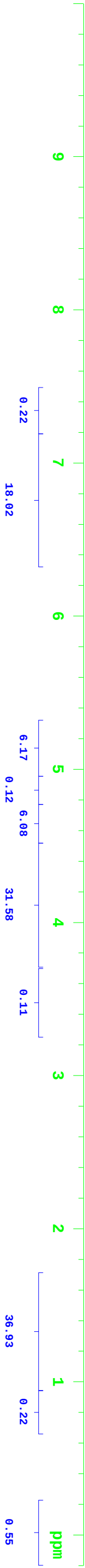
nm no

ph



1H NMR (CDCl3, 400 MHz)
12e

SAMPLE			DEC. & VT	
date	Jan 18 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata10-	dof		0	
/p-ClPh_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	
tn	H1	dseq	200	
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmnm	10.73			
is	1082.83			
rfl	377.1			
rfp	0			
th	20			
ins	100.000			
nm	ph			

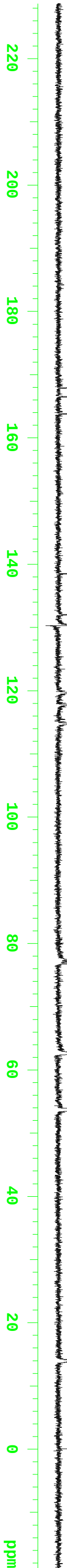


Iwata10/p-ClPh

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
12e

SAMPLE			DEC. & VT	
date	Jan 18 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	41	
nmr1/data/Iwata10-	dof		0	
/p-ClPh.c.fid	dm		yyv	
ACQUISITION				
sfrq	100.573	dmf	10400	
tn	C13	dseq	garpl	
at	1.199	dres	1.0	
np	59968	homo	n	
sw	25000.0	PROCESSING		
fb	not used	lb	1.00	
bs	16	wtfile		
tpwr	57	proc	ft	
pw	7.5	fn	not used	
dl	0.801	math	f	
tof	1000.0			
nt	1024	werr	react	
ct	1024	wexp	procp1ot	
alock	n	wbs		
gain	not used	wnt		
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-2001.1			
wp	25000.0			
vs	214			
sc	0			
wc	380			
hzm	0.44			
is	500.00			
rfl	9754.5			
rfp	7753.4			
th	23			
ins	500.000			
nm	no	ph		



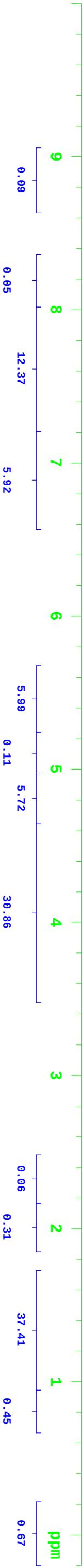
iwata11/NO2

exp11 std1h

1H NMR (CDCl3, 400 MHz)

12f

SAMPLE		DEC. & VT	
date	Jan 26 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata11-	dof		0
/NO2_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1135.58		
rfl	373.6		
rfp	0		
th	20		
ins	100.000		
nm	ph		

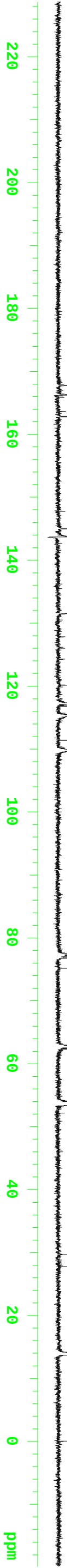


iwata11/NO2

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
12f

SAMPLE			DEC. & VT	
date	Jan 25 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	41	
nmr1/data/iwata11-	dof		0	
/NO2.c.fid	dm		yyy	
ACQUISITION				
sfrq	100.573	dmf	10400	
tn	C13	dseq	garpl	
at	1.199	dres	1.0	
np	59968	homo	n	
sw	25000.0	PROCESSING		
fb	not used	lb	1.00	
bs	16	wtfile		
tpwr	57	proc	ft	
pw	7.5	fn	not used	
dl	0.801	math	f	
tof	1000.0			
nt	2048	werr	react	
ct	2048	wexp	procplot	
alock	n	wbs		
gain	not used	wnt		
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-2001.9			
wp	25000.0			
vs	214			
sc	0			
wc	380			
hzmm	1.97			
is	500.00			
rfl	9755.2			
rfp	7753.4			
th	20			
ins	500.000			
nm	no	ph		



fukushima/BzNO

exp11 std1h

SAMPLE

date May 15 2008

solvent CDCl3

file /export/home/~

vmr1/data/fukushi-

ma/BzNO_h.fid

ACQUISITION

sfrq 399.934

tn H1

at 3.744

np 44928

sw 6000.6

fb not used

bs 1

tpwr 61

pw 5.5

dl 1.256

tof 600.0

nt 16

ct 16

alock n

gain not used

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -80.0

wp 4079.2

vs 214

sc 0

wc 380

hzmhz 10.73

is 917.04

rfl 403.4

rfp 0

th 20

ins 100.000

nm ph

DEC. & VT

dfreq 399.933

dn H1

dpwr 20

dof 0

dm nn

dmm c

dmf 200

dseq H1

dres 1.0

homo n

PROCESSING

wfile

proc ft

fn not used

math f

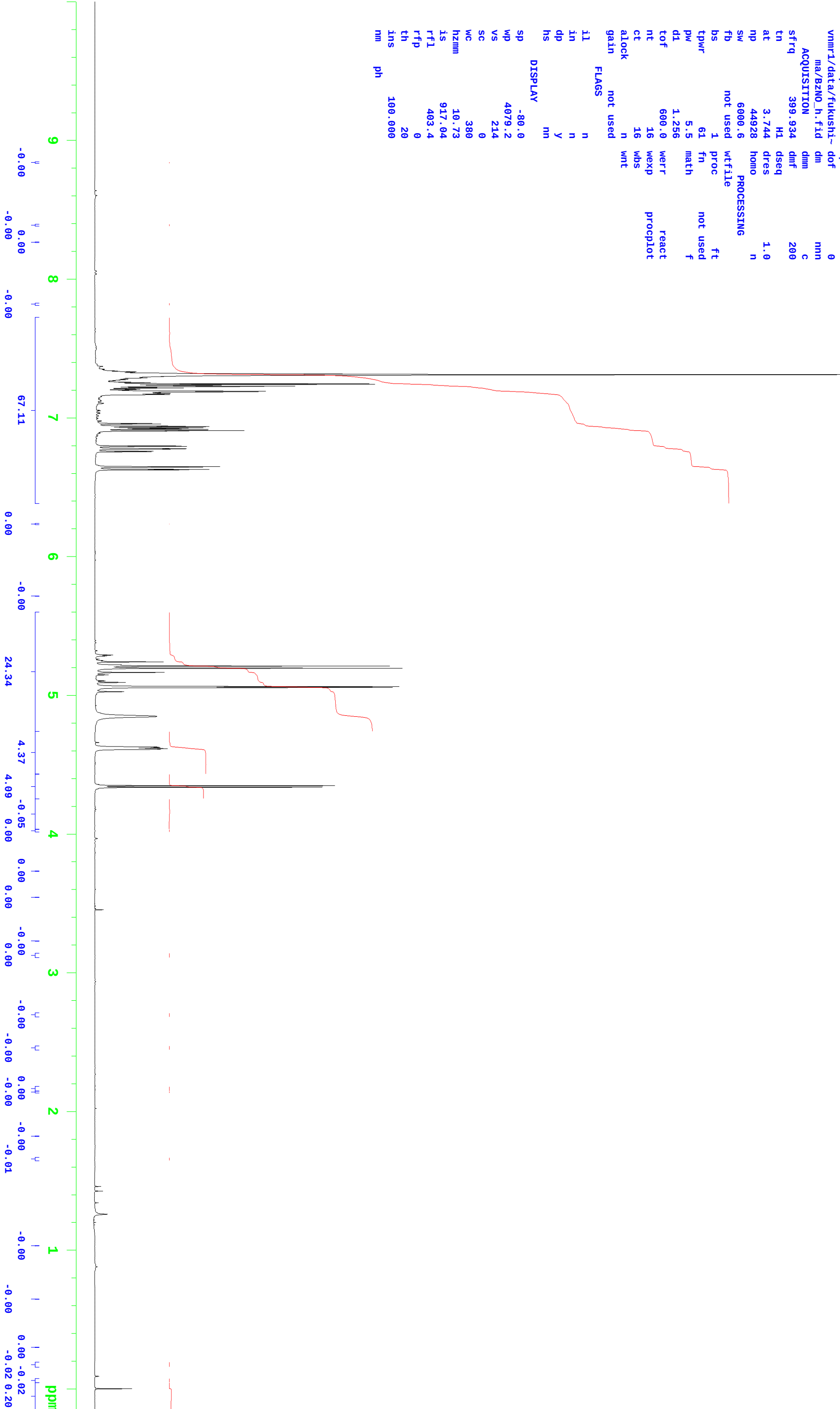
werr react

wexp procpilot

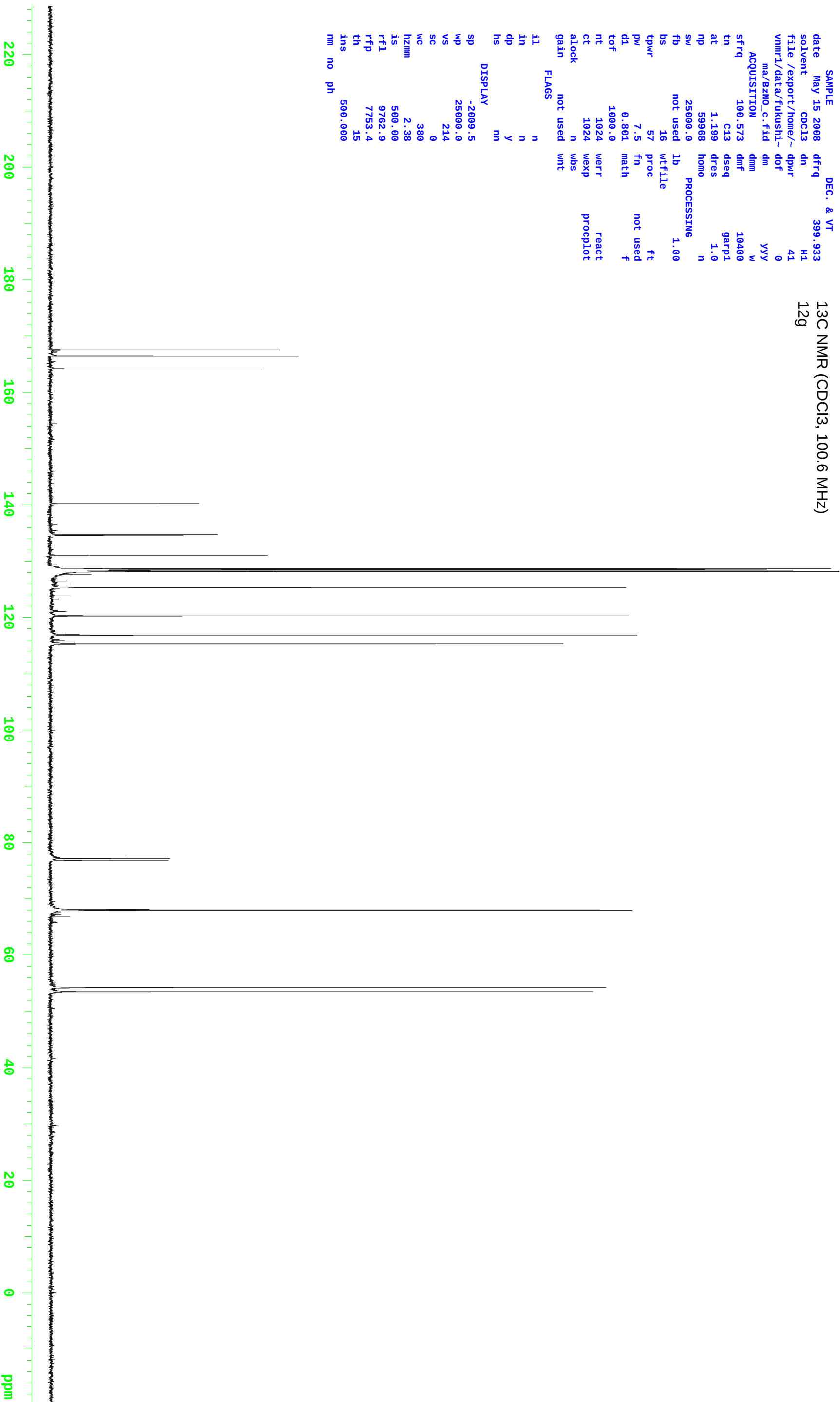
wbs

wnt

1H NMR (CDCl3, 400 MHz)
12g



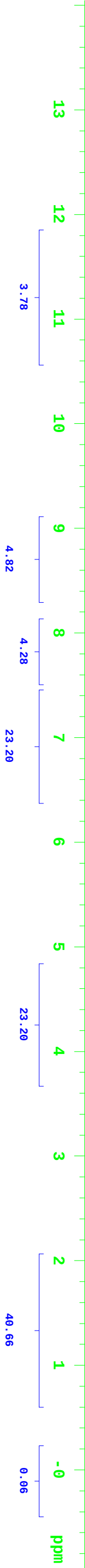
13C NMR (CDCl₃, 100.6 MHz)
129



1H NMR (CDCl3, 400 MHz)

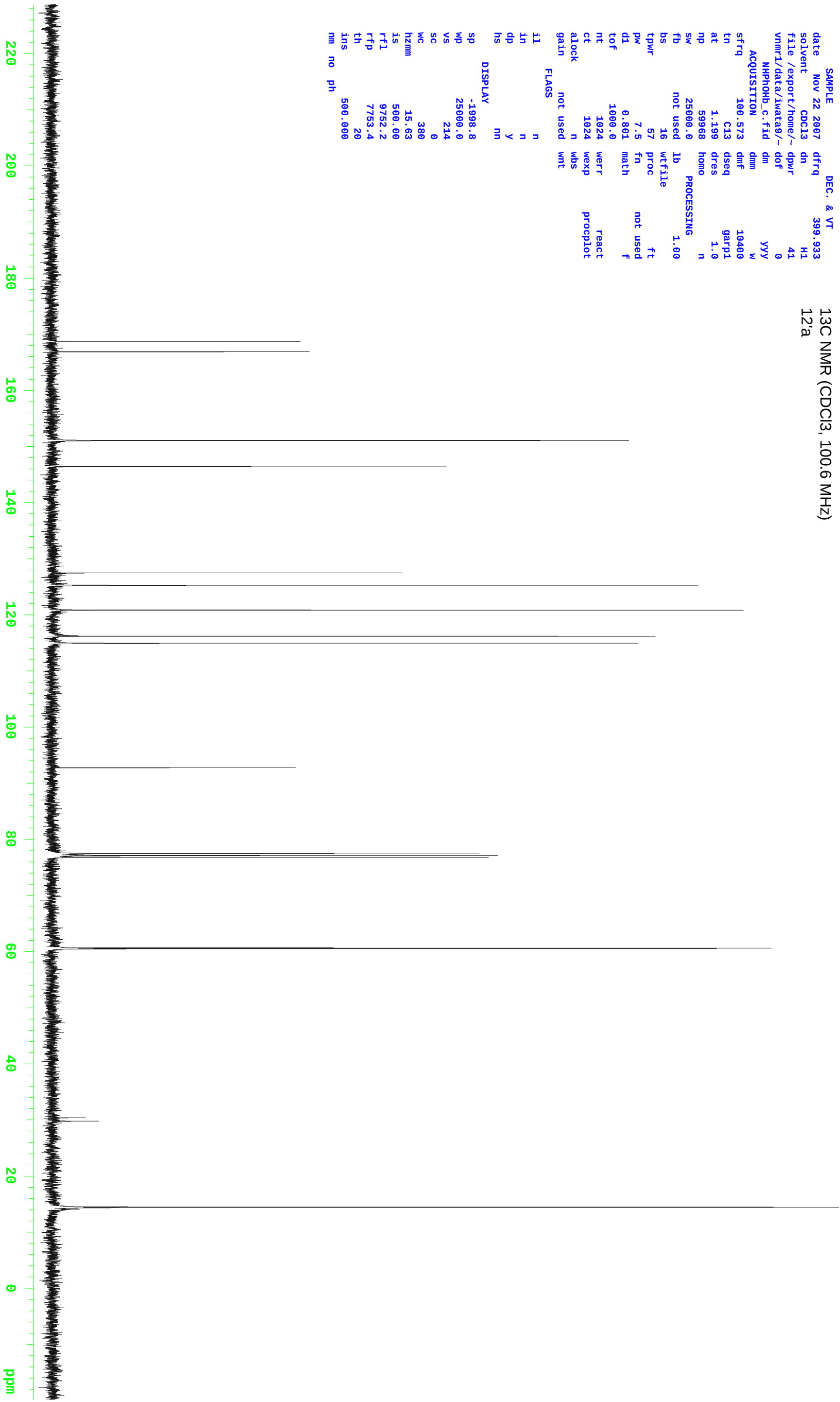
12'a

SAMPLE			DEC. & VT	
date	Nov 22 2007	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata9/~	dof		0	
NHPhOHb_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	
tn	H1	dseq	200	
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-382.7			
wp	6000.6			
vs	214			
sc	0			
wc	380			
hzmnm	0.06			
is	1320.59			
rfl	382.7			
rfp	0			
th	20			
ins	100.000			
nm	ph			



13C NMR (CDCl3, 100.6 MHz)
12'a

SAMPLE DEC. & VT
date Nov 22 2007 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata9/~ dof 0
NHPhOHb.c.fid dm yyy
ACQUISITION
sfrq 100.573 dnm w
tn C13 dmf 10400
at 1.199 dres garp1
np 59968 homo 1.0
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 1024 werr react
ct 1024 wexp procp1ot
alock n wbs
gain not used wnt
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -1998.8
wp 25000.0
vs 214
sc 0
wc 380
hzmm 15.63
is 500.00
rfl 9752.2
rfp 7753.4
th 20
ins 500.000
nm no ph



exp11 std1h

SAMPLE

date May 19 2008

solvent CDCl3

file /export/home/~

vmr1/data/fukushi-

ma/Bzby_h.fid

ACQUISITION

sfrq 399.934

tn H1

at 3.744

np 44928

sw 6000.6

fb not used

bs 1

tpwr 61

pw 5.5

d1 1.256

tof 600.0

nt 16

ct 16

alock n

gain not used

FLAGS

il n

in n

dp y

hs nm

DISPLAY

sp -391.9

wp 6000.6

vs 214

sc 0

wc 380

hzmm 0.06

is 768.98

rfl 391.9

rffp 0

th 20

ins 100.000

nm ph

DEC. & VT

dfrq 399.933

dn H1

dpwr 20

dof 0

dm nm

dmm c

dmf 200

dseq 1.0

dres n

homo

PROCESSING

wfile

proc ft

fn not used

math f

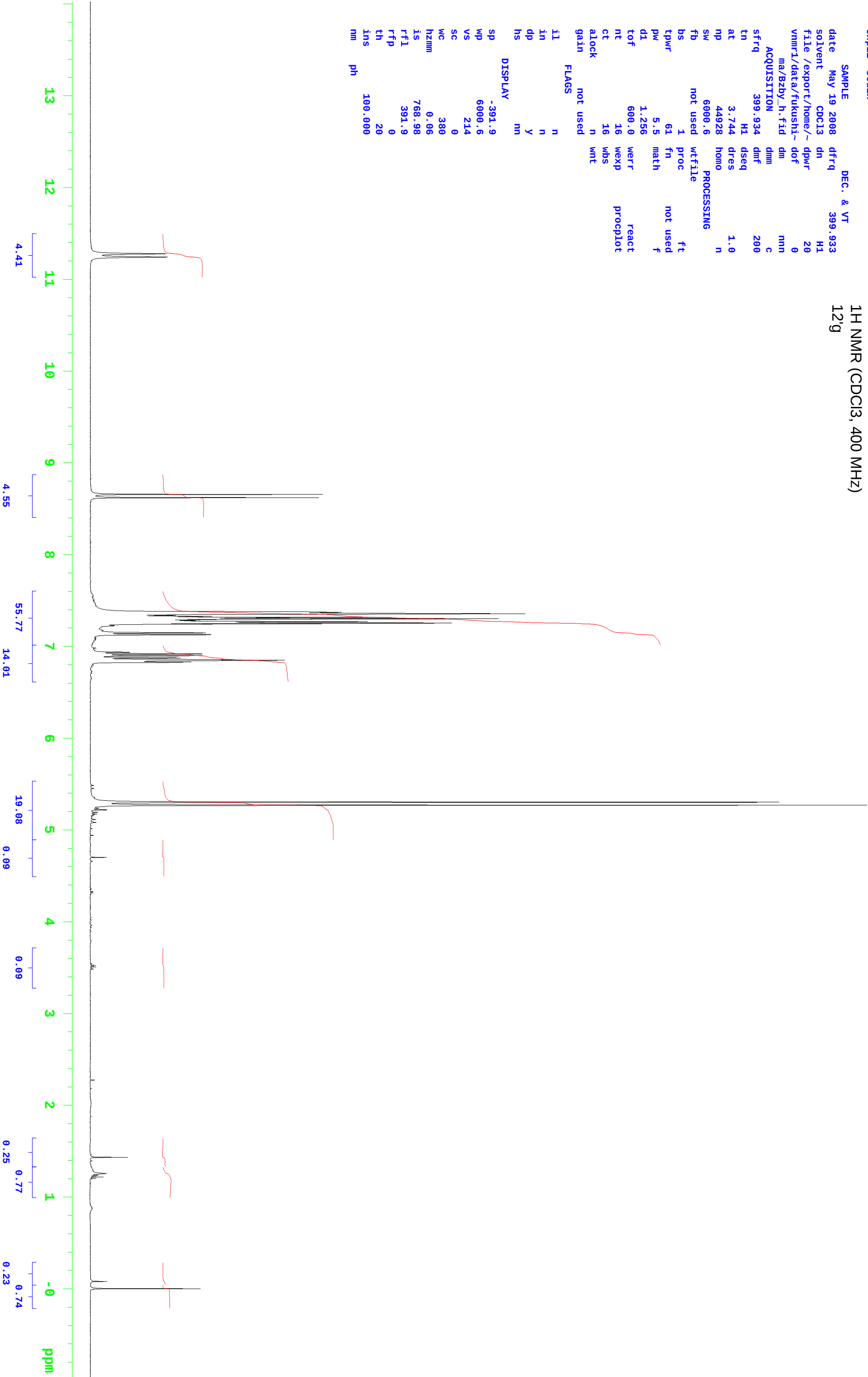
react

wexp procpilot

wbs

wnt

1H NMR (CDCl3, 400 MHz)
12'g

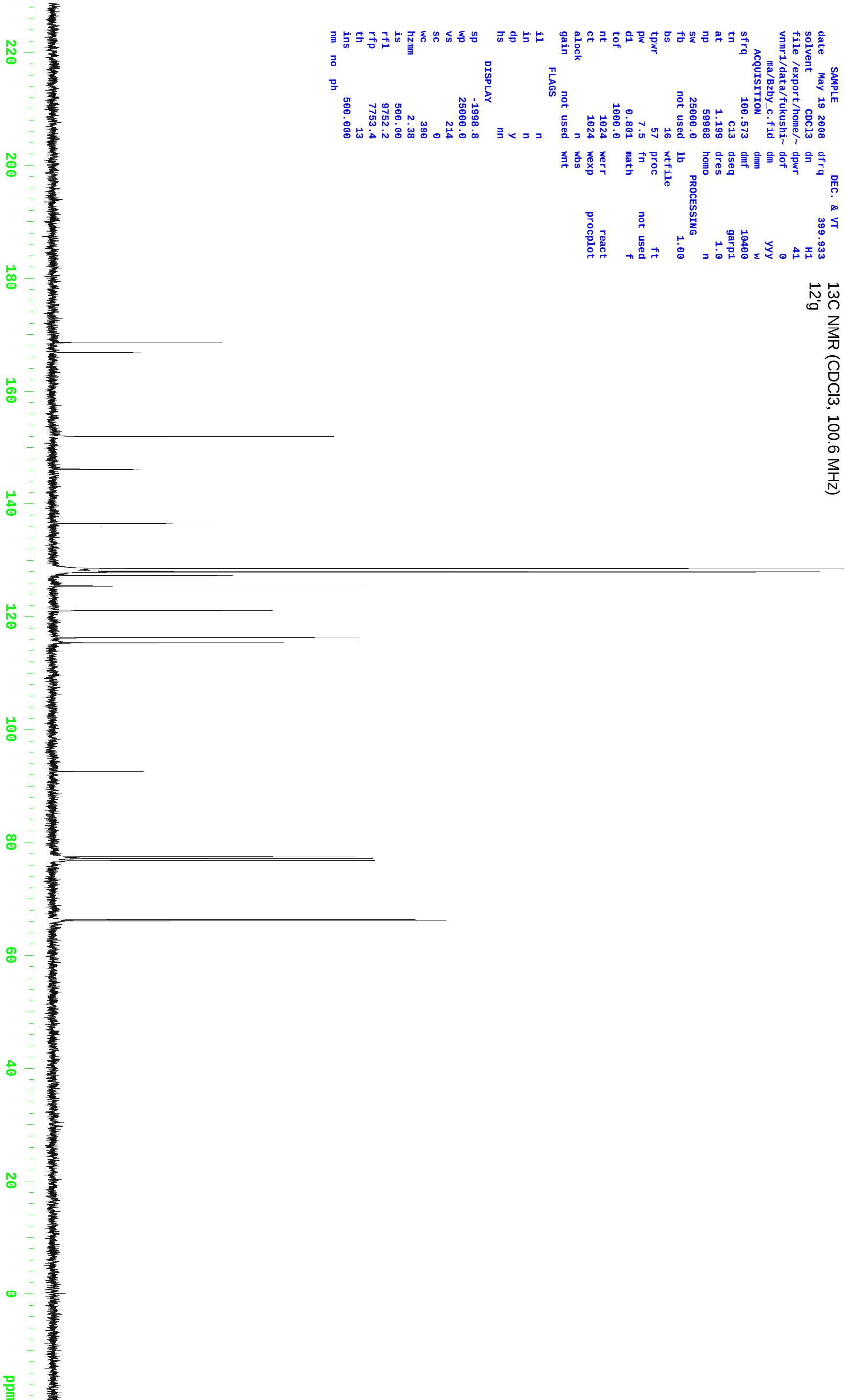


fukushima/Bzby

exp11 std13c

SAMPLE		DEC. & VT	
date	May 19 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
vnmr1/data/fukushi-	dof		0
ma/Bzby_c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1998.8		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	2.38		
is	500.00		
rfl	9752.2		
rfp	7753.4		
th	13		
ins	500.000		
nm	no	ph	

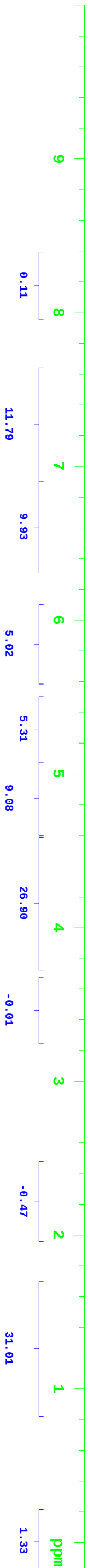
13C NMR (CDCl3, 100.6 MHz)
12'g



exp11 std1h

1H NMR (CDCl3, 400 MHz)
14

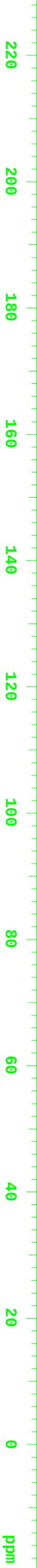
SAMPLE			DEC. & VT	
date	Jul 1 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata12-	dof		0	
/NC=CCor_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	
tn	H1	dseq	200	
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmm	10.73			
is	1682.96			
rfl	383.3			
rfp	0			
th	20			
ins	100.000			
nm	ph			



13C NMR (CDCl3, 100.6 MHz)

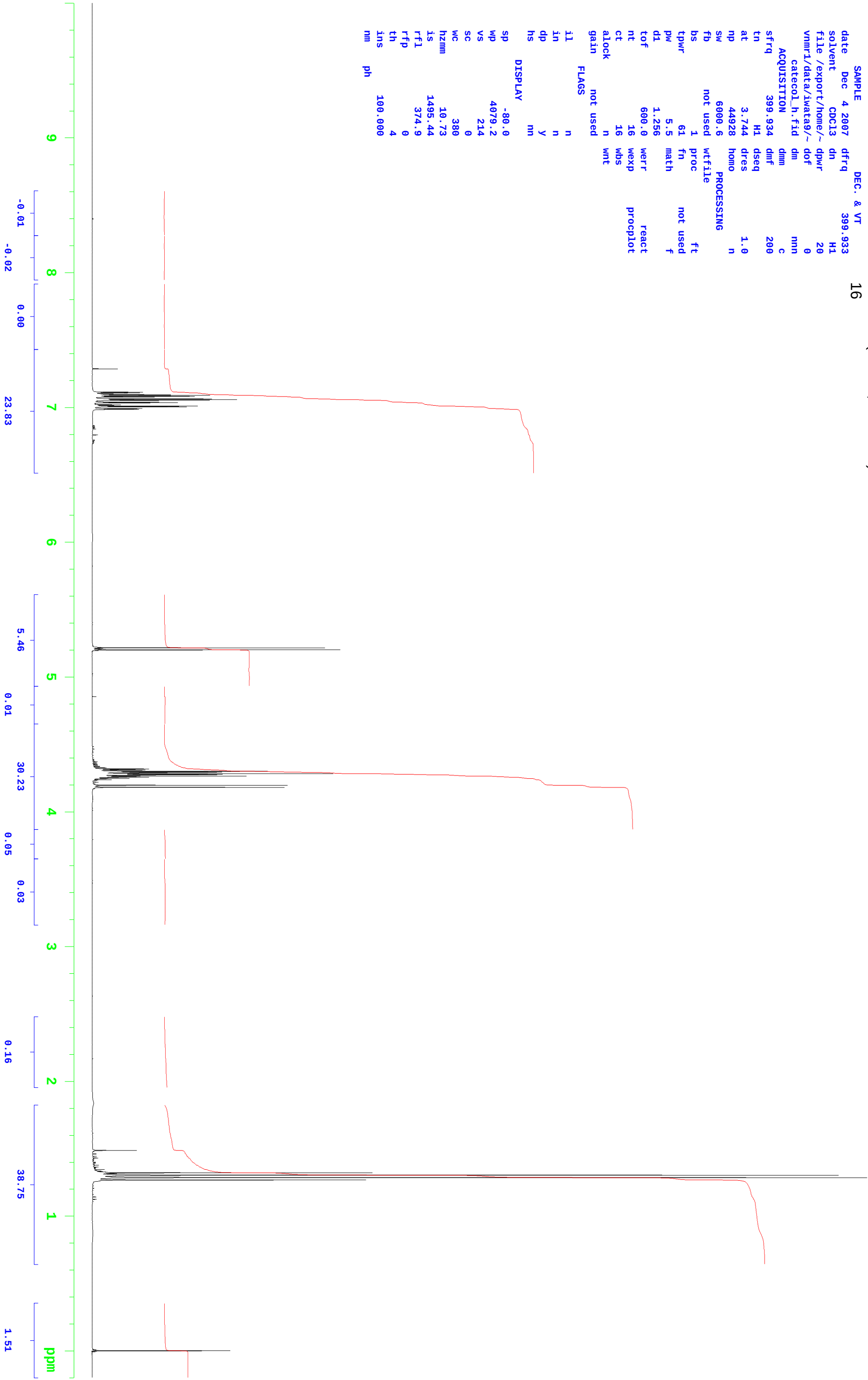
14

SAMPLE			DEC. & VT		
date	Jul 1 2008	dfreq	399.933		
solvent	CDCl3	dn	H1		
file	/export/home/~	dpwr	41		
nmr1/data/iwata12-	dof		0		
/NC=CCOR.c.fid	dm		yyy		
ACQUISITION					
sfrq	100.573	dmm		w	
tn	C13	dmf	10400		
at	1.199	dseq	garpl		
np	59968	homo	1.0		
sw	25000.0	PROCESSING			
fb	not used	lb	1.00		
bs	16	wfile			
tpwr	57	proc	ft		
pw	7.5	fn	not used		
dl	0.801	math	f		
tof	1000.0				
nt	4096	werr	react		
ct	3700	wexp	procplot		
alock	n	wbs			
gain	not used	wnt			
FLAGS					
il	n				
in	n				
dp	y				
hs	nn				
DISPLAY					
sp	-1998.8				
wp	25000.0				
vs	214				
sc	0				
wc	380				
hzm	2.07				
is	500.00				
rfl	9752.2				
rfp	7753.4				
th	20				
ins	500.000				
nm	no	ph			



1H NMR (CDCl3, 400 MHz)
16

SAMPLE		DEC. & VT	
date	Dec 4 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
vmr1/data/iwata9/~	dof	dm	0
catecol_h.fid	dm	dmn	nmn
ACQUISITION		dmf	c
sfrq	399.934	dseq	200
tn	H1	dres	1.0
at	3.744	homo	n
np	44928	proc	ft
sw	6000.6	wfile	not used
fb	not used	math	f
bs	1	werr	react
tpwr	61	wexp	procp1ot
pw	5.5	wbs	
dl	1.256	wnt	
tof	600.0		
nt	16		
ct	16		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nm		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmm	10.73		
is	1495.44		
rfl	374.9		
rfp	0		
th	4		
ins	100.000		
nm	ph		



SAMPLE

DEC. & VT

date

Dec 4 2007

dfrq

399.933

solvent

CDCl3

dn

H1

file

/export/home/~

dpwr

41

nmr1/data/iwata9/~

dof

0

catecol.c.fid

dm

yyv

ACQUISITION

dmw

w

sfrq

100.573

dmf

10400

tn

C13

dseq

garpl

at

1.199

dres

1.0

np

59968

homo

n

sw

25000.0

PROCESSING

fb

not used

lb

1.00

bs

16

wfile

tpwr

57

proc

ft

pw

7.5

fn

not used

dl

0.801

math

f

tof

1000.0

nt

2048

werr

react

ct

2048

wexp

procplot

alock

n

wbs

gain

not used

wnt

FLAGS

il

n

in

n

dp

y

hs

nn

DISPLAY

sp

-2004.9

wp

25000.0

vs

214

sc

0

wc

380

hzmm

1.07

is

500.00

rfl

9758.3

rfp

7753.4

th

14

ins

500.000

nm

no

ph

13C NMR (CDCl3, 100.6 MHz)
16



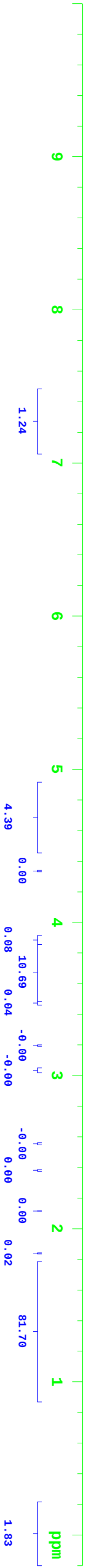
matsubara/BocMe2

exp11 std1h

¹H NMR (CDCl₃, 400 MHz)

¹³C

SAMPLE		DEC. & VT	
date	Dec 17 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
vmr1/data/matsuba-	dof	dm	0
ra/BocMe2_h.fid	dm	dmn	nmn
ACQUISITION		dmf	c
sfrq	399.934	dseq	200
tn	H1	dres	1.0
at	3.744	homo	n
np	44928	PROCESSING	
sw	6000.6	wfile	
fb	not used	proc	ft
bs	1	fn	not used
tpwr	61	math	f
pw	5.5	werr	react
dl	1.256	wexp	procplot
tof	600.0	wbs	
nt	16	wnt	
ct	16		
alock	n		
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nm		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	715.79		
rfl	380.7		
rfp	0		
th	20		
ins	100.000		
nm	ph		

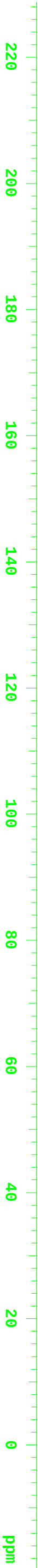


matsubara/BocMe2

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
17c

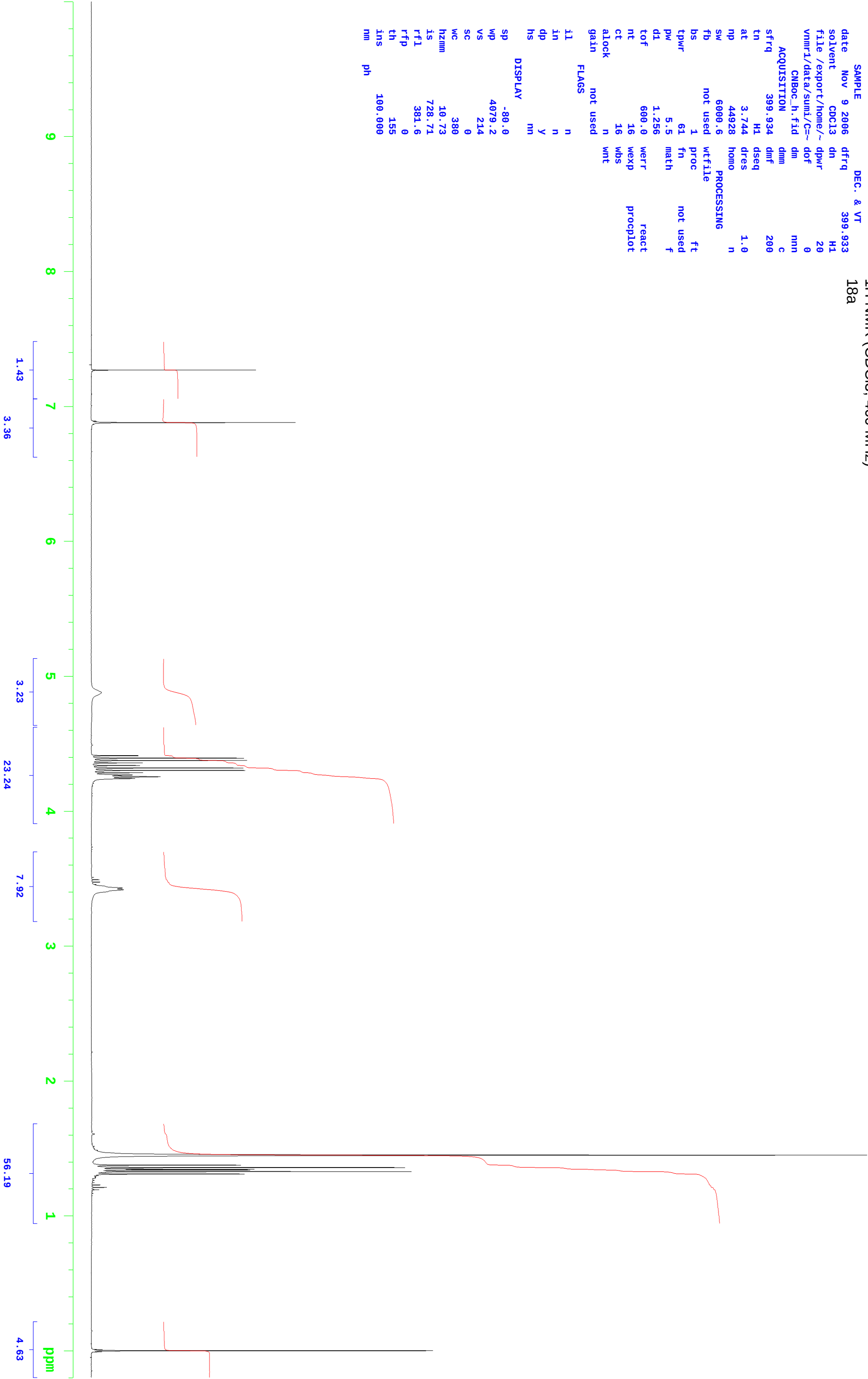
SAMPLE		DEC. & VT	
date	Dec 17 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/matsuba-	dof		0
ra/BocMe2.c.fid	dm		YYY
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	4000	werr	react
ct	4000	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1995.8		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmh	3.67		
is	500.00		
rfl	9749.1		
rfp	7753.4		
th	3		
ins	500.000		
nm	no	ph	



sumi/C=CNBoc
exp11 stdth
SAMPLE DEC. & VT
date Nov 9 2006 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 20
vnmr1/data/sumi/C= dof 0
CNBoc.h.fid dm mnn
ACQUISITION dnm c
sfrq 399.934 dmf 200
tn H1 dseq
at 3.744 dres 1.0
np 44928 homo n
sw 6000.6 PROCESSING
fb not used wfile
bs 1 proc ft
tpwr 61 fn not used
pw 5.5 math f
dl 1.256
tof 600.0 werr react
nt 16 wexp procpilot
ct 16 wbs
alock n wnt
gain not used
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -80.0
wp 4079.2
vs 214
sc 0
wc 380
hzm 10.73
is 728.71
rfl 381.6
rfp 0
th 155
ins 100.000
nm ph

¹H NMR (CDCl₃, 400 MHz)

18a



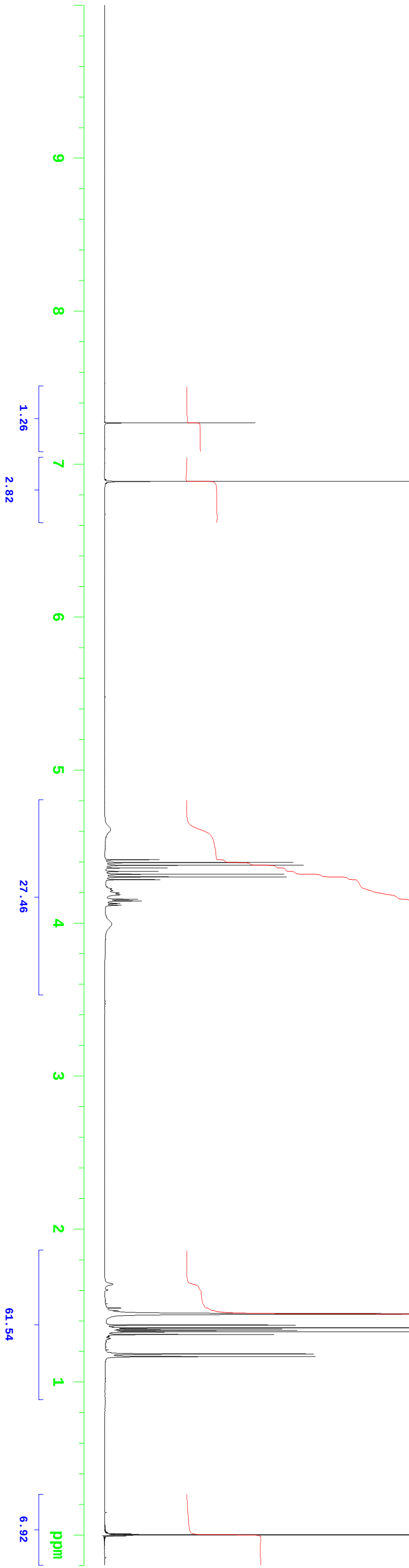
sumi/alac=c

exp11 std1h

¹H NMR (CDCl₃, 400 MHz)

18b

SAMPLE DEC. & VT
date May 22 2007 dfreq 399.933
solvent CDCl₃ dn H1
file /export/home/~ dpwr 20
vnmr1/data/sumi/al- dof 0
ac=c_h.fid dm mnn
ACQUISITION dnm c
sfrq 399.934 dmf 200
tn H1 dseq
at 3.744 dres 1.0
np 44928 homo n
sw 6000.6 PROCESSING
fb not used wfile
bs 1 proc ft
tpwr 61 fn not used
pw 5.5 math f
dl 1.256
tof 600.0 werr react
nt 16 wexp procp1ot
ct 16 wbs
alock n wnt
gain not used
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -80.0
wp 4079.2
vs 214
sc 0
wc 380
hzm 10.73
is 907.79
rfl 381.3
rfp 0
th 20
ins 100.000
nm ph



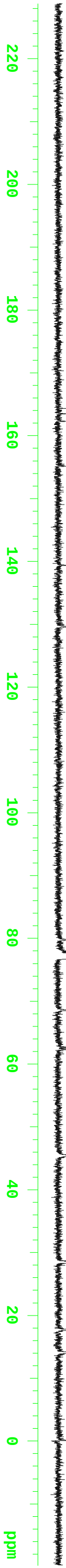
sumi/alac=c

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)

18b

SAMPLE			DEC. & VT		
date	May 21 2007	dfreq	399.933		
solvent	CDCl3	dn	H1		
file	/export/home/~	dpwr	41		
vmr1/data/sumi/al-	dof		0		
ac=C.c.fid	dm		yyy		
ACQUISITION					
sfrq	100.573	dmf	10400		
tn	C13	dseq	garpl		
at	1.199	dres	1.0		
np	59968	homo	n		
sw	25000.0	PROCESSING			
fb	not used	lb	1.00		
bs	16	wtfile			
tpwr	57	proc	ft		
pw	7.5	fn	not used		
dl	0.801	math	f		
tof	1000.0				
nt	4096	werr	react		
ct	4096	wexp	procplot		
alock	n	wbs			
gain	not used	wnt			
FLAGS					
il	n				
in	n				
dp	y				
hs	nn				
DISPLAY					
sp	-1994.2				
wp	25000.0				
vs	214				
sc	0				
wc	380				
hzmm	1.92				
is	500.00				
rfl	9747.6				
rfp	7753.4				
th	6				
ins	500.000				
nm	no	ph			

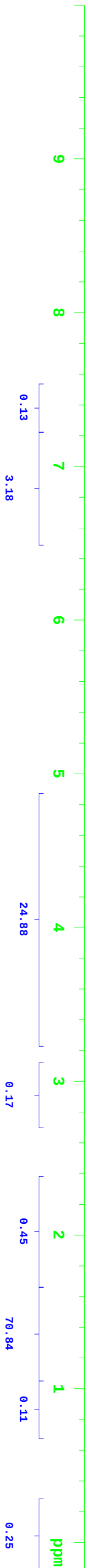


matsubara/NMe2Boc

exp11 std1h

1H NMR (CDCl3, 400 MHz)
18c

SAMPLE		DEC. & VT	
date	Dec 21 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/matsuba-	dof		0
ra/NMe2Boc.h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	716.11		
rfl	357.8		
rfp	0		
th	20		
ins	100.000		
nm	ph		

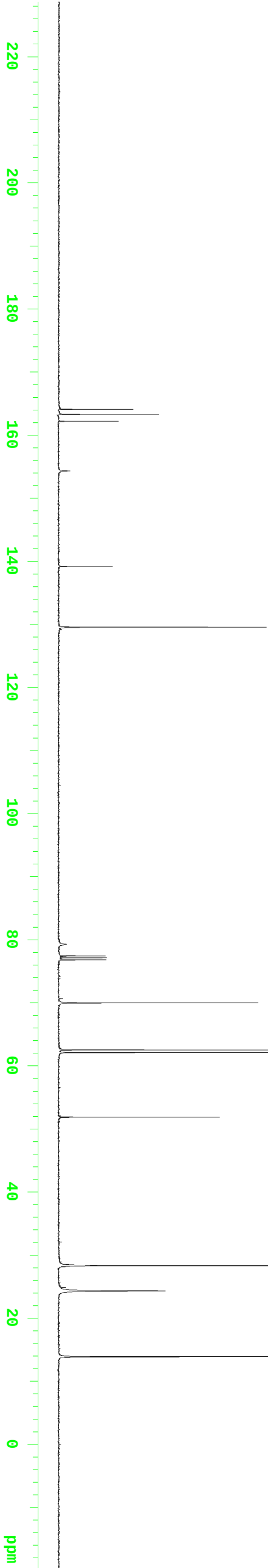


matsubara/Mez2Boc

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)
18c

SAMPLE		DEC. & VT	
date	Dec 20 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/matsuba-	dof		0
ra/Mez2Boc.c.fid	dm		yyv
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	n
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2003.4		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	1.45		
is	500.00		
rfl	9756.8		
rfp	7753.4		
th	7		
ins	500.000		
nm	no	ph	

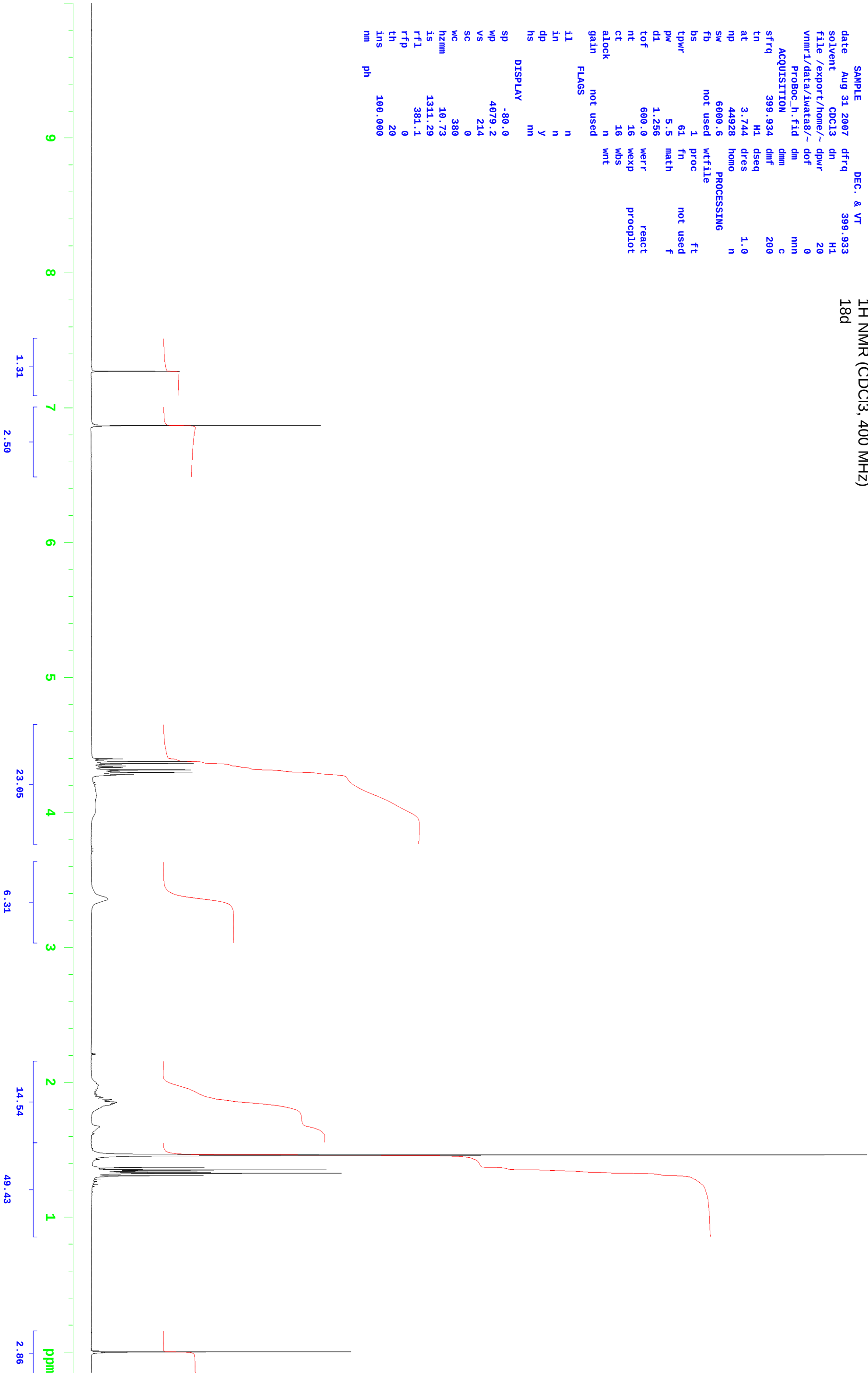


Iwata8/ProBoc

exp11 std1h

SAMPLE		DEC. & VT	
date	Aug 31 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata8/~	dof		0
ProBoc_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1311.29		
rfl	381.1		
rfp	0		
th	20		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
18d



SAMPLE

DEC. & VT

date

Aug 31 2007

dfrq

399.933

solvent

CDCl3

dn

H1

file

/export/home/~

dpwr

41

nmr1/data/iwata8/~

dof

0

ProBoc.c.fid

dm

yyy

ACQUISITION

dm

w

sfrq

100.573

dmf

10400

tn

C13

dseq

garpl

at

1.199

dres

1.0

np

59968

homo

n

sw

25000.0

PROCESSING

fb

not used

lb

1.00

bs

16

wfile

tpwr

57

proc

ft

pw

7.5

fn

not used

dl

0.801

math

f

tof

1000.0

nt

4096

werr

react

ct

4096

wexp

procplot

alock

n

wbs

gain

not used

wnt

FLAGS

il

n

in

n

dp

y

hs

nn

DISPLAY

sp

-1994.2

wp

25000.0

vs

214

sc

0

wc

380

hzmm

65.79

is

500.00

rfl

9747.6

rfp

7753.4

th

2

ins

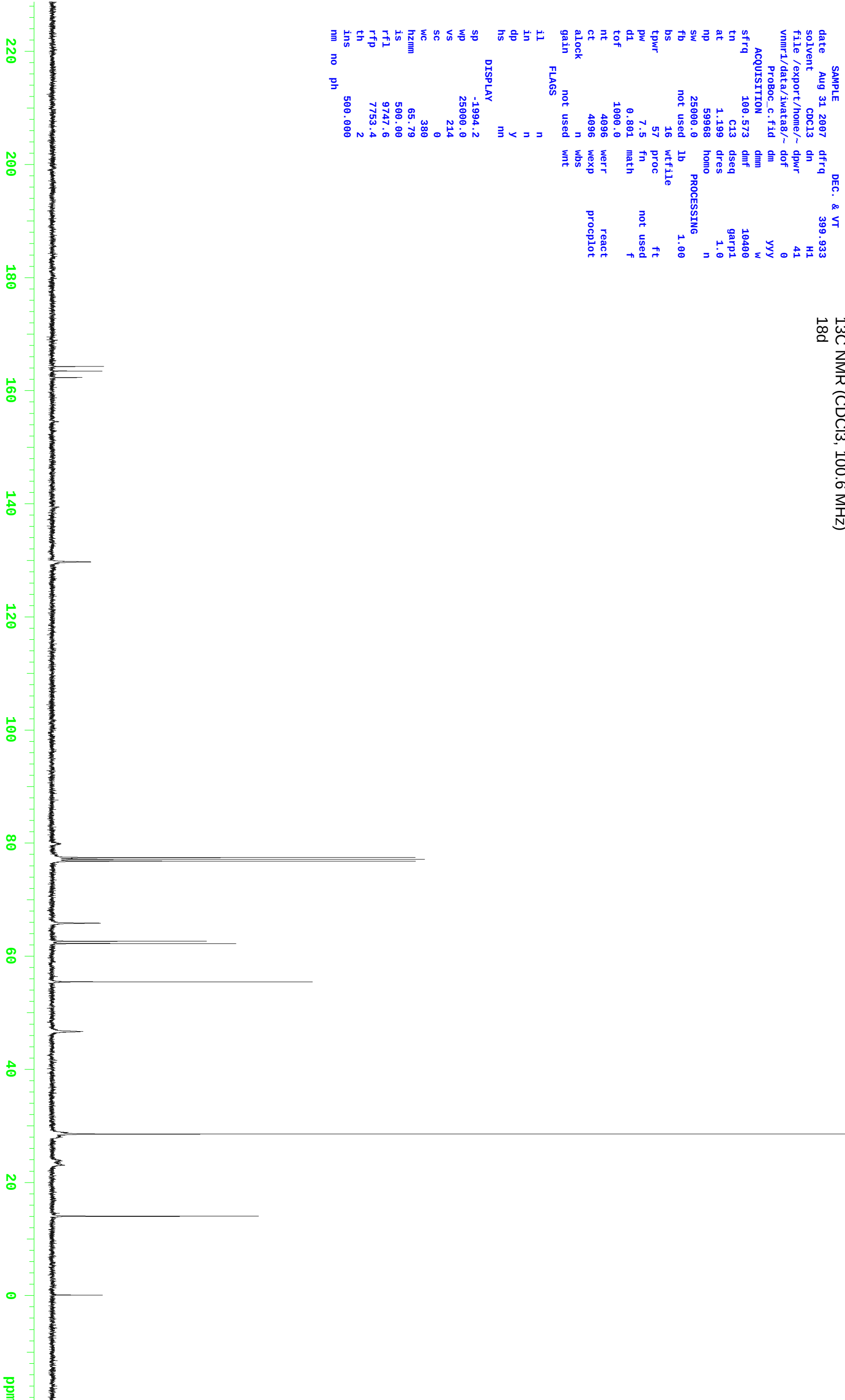
500.000

nm

no

ph

13C NMR (CDCl3, 100.6 MHz)
18d

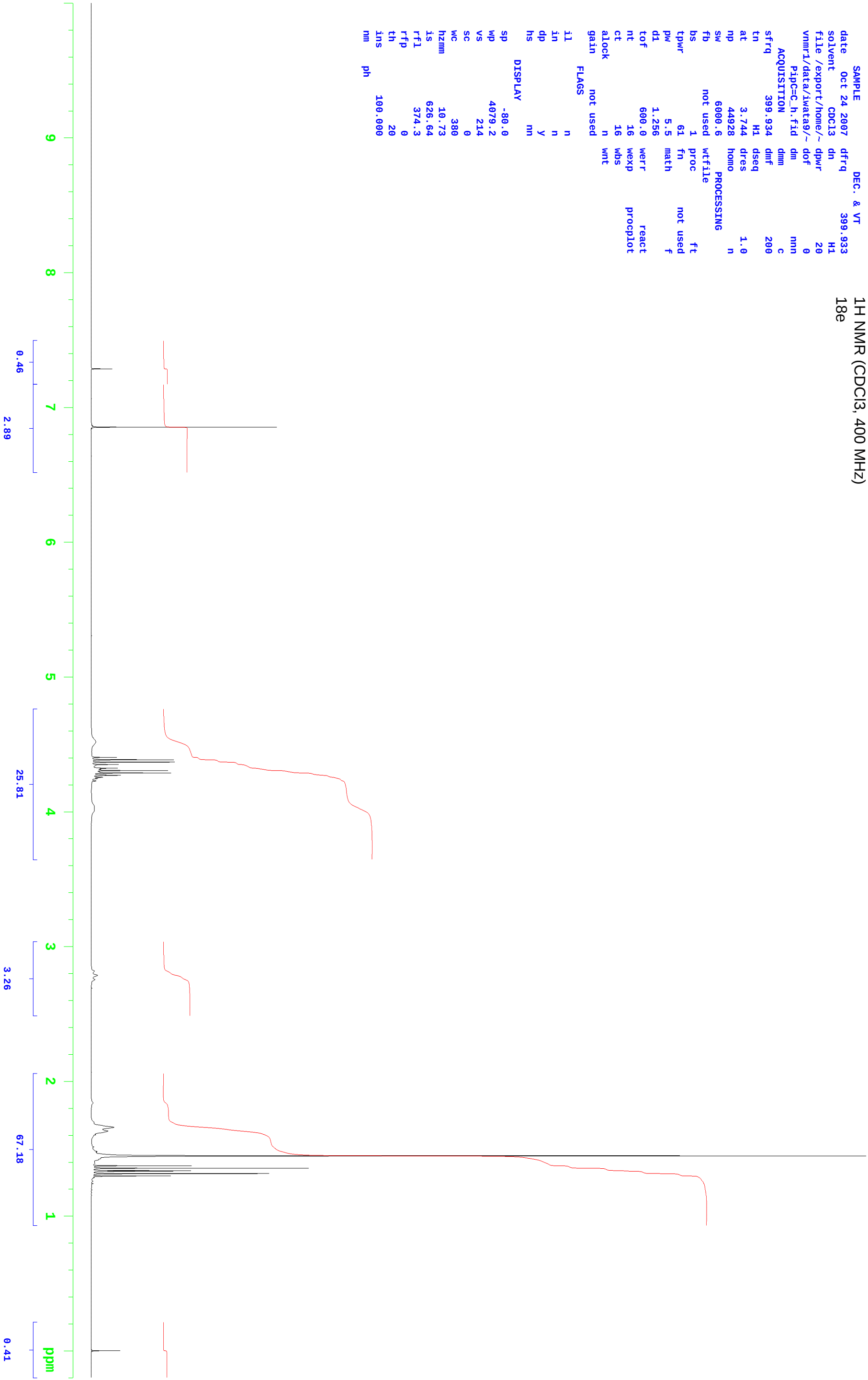


Iwata9/Pipc=C

exp11 std1h

SAMPLE		DEC. & VT	
date	Oct 24 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata9/~	Pipc=C_h.fid	dof	0
ACQUISITION		dmm	nmn
sfrq	399.934	dmf	C
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	626.64		
rfl	374.3		
rfp	0		
th	20		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
18e

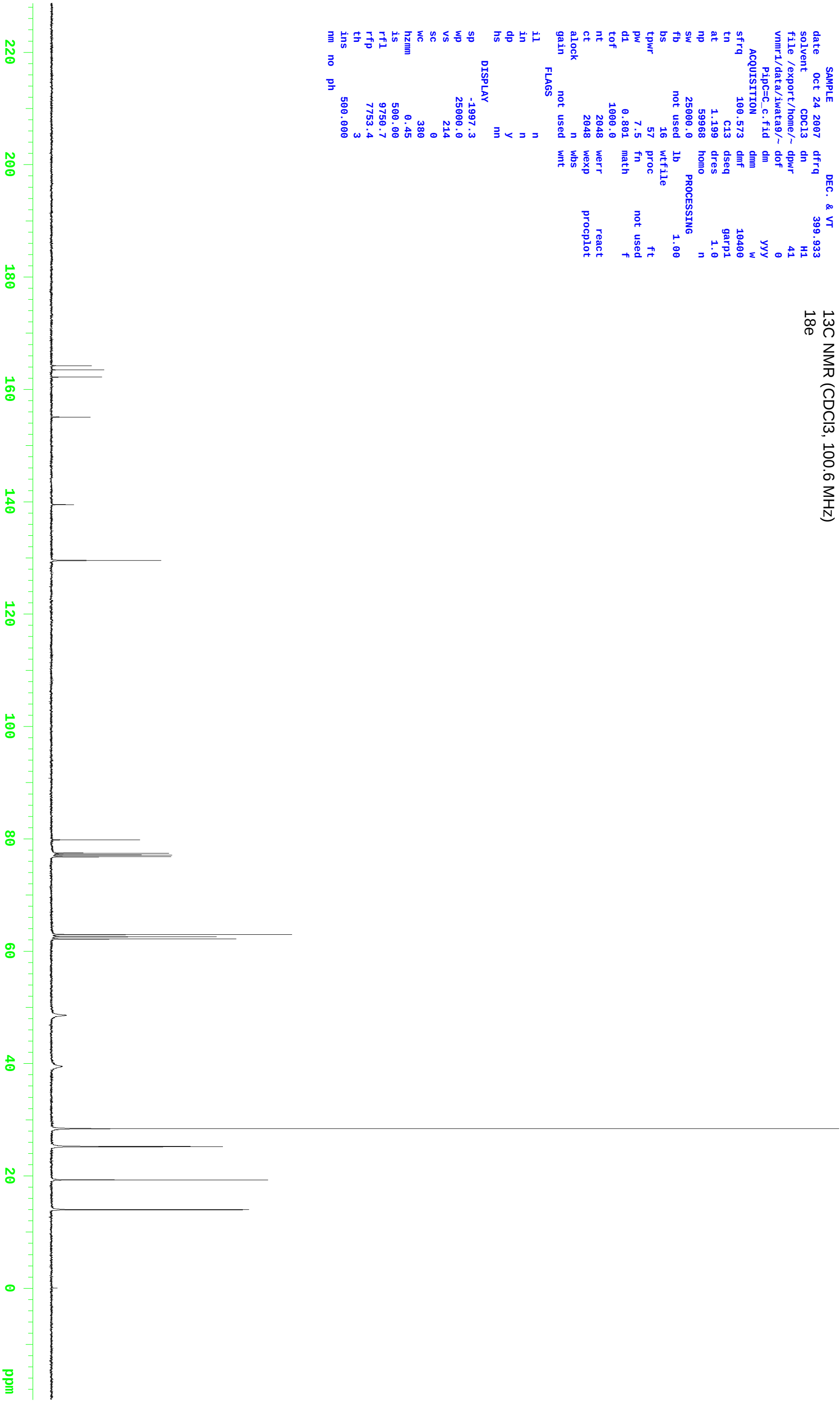


Iwata9/Pipc=C

exp11 std13c

SAMPLE		DEC. & VT	
date	Oct 24 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata9/~	dof		0
Pipc=C.c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	n
fb	not used	lb	1.00
bs	16	wffile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	2048	werr	react
ct	2048	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1997.3		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	0.45		
is	500.00		
rfl	9750.7		
rfp	7753.4		
th	3		
ins	500.000		
nm	no	ph	

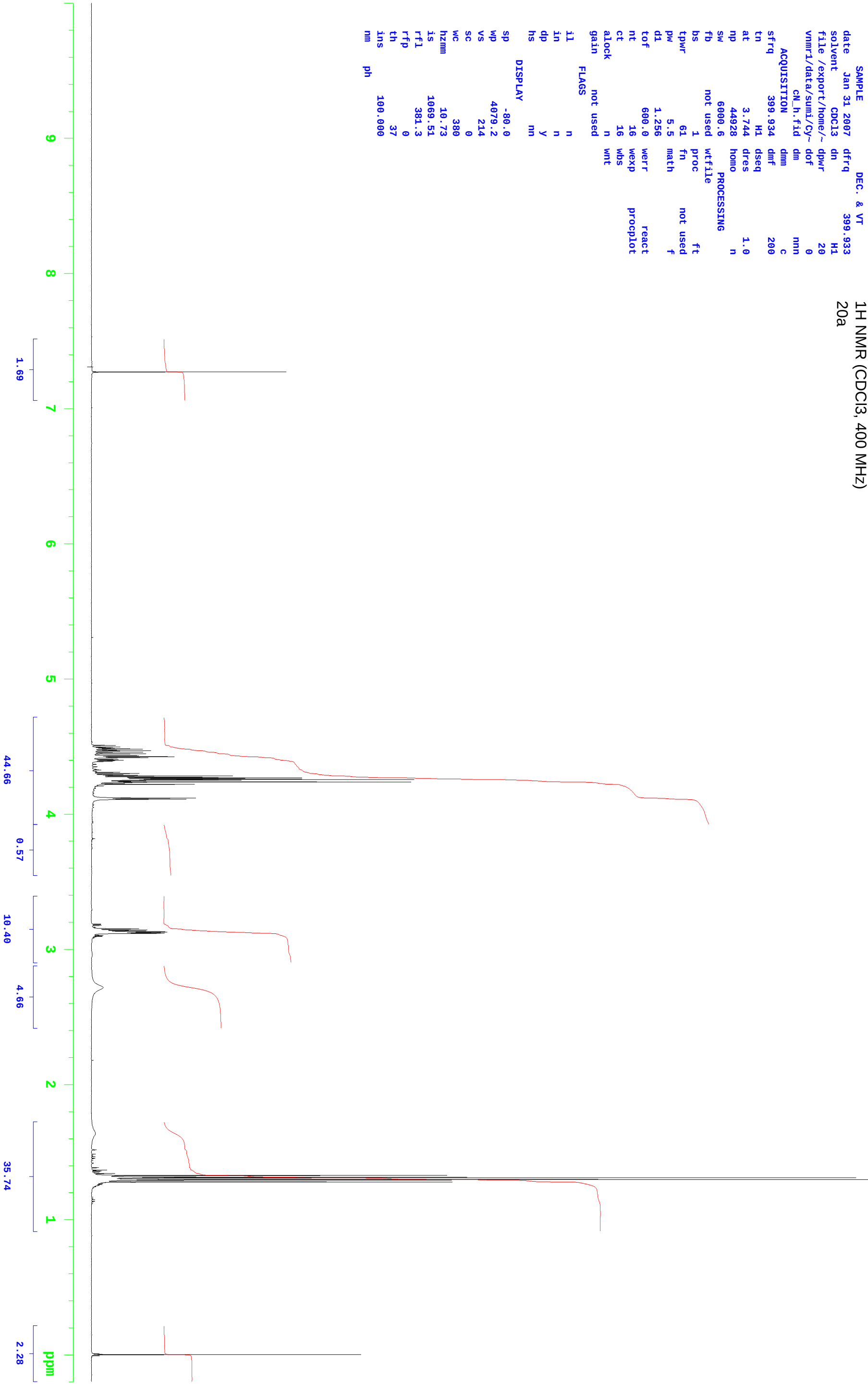
13C NMR (CDCl3, 100.6 MHz)
18e



sumi/CycN
exp11 std1h

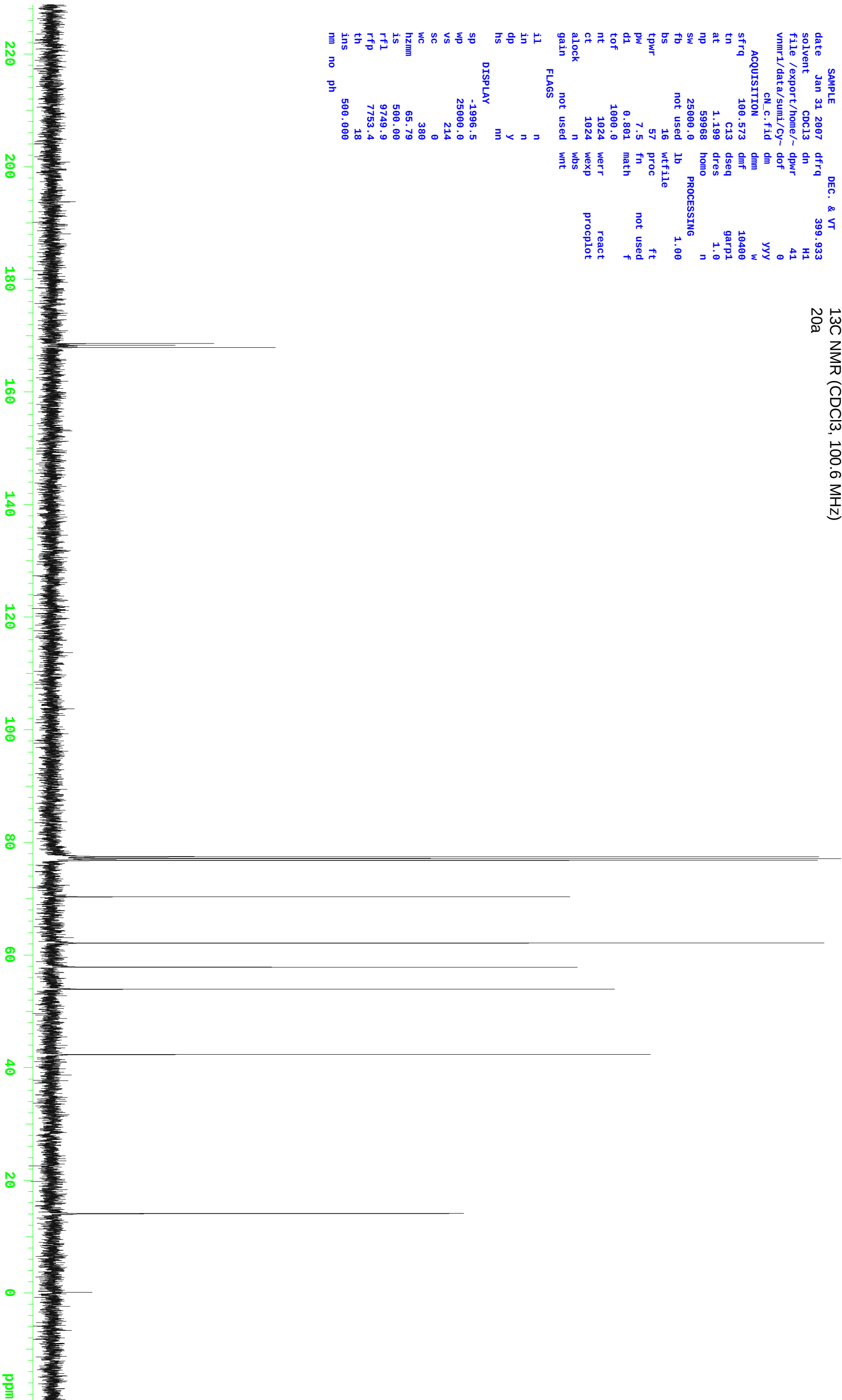
SAMPLE		DEC. & VT	
date	Jan 31 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/sumi/Cy~	dof		0
cn_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1069.51		
rfl	381.3		
rfp	0		
th	37		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
20a



SAMPLE		DEC. & VT	
date	Jan 31 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/sumi/Cy~	dof		0
cn.c.fid	dm		yyv
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	n
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1996.5		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	65.79		
is	500.00		
rfl	9749.9		
rfp	7753.4		
th	18		
ins	500.000		
nm	no	ph	

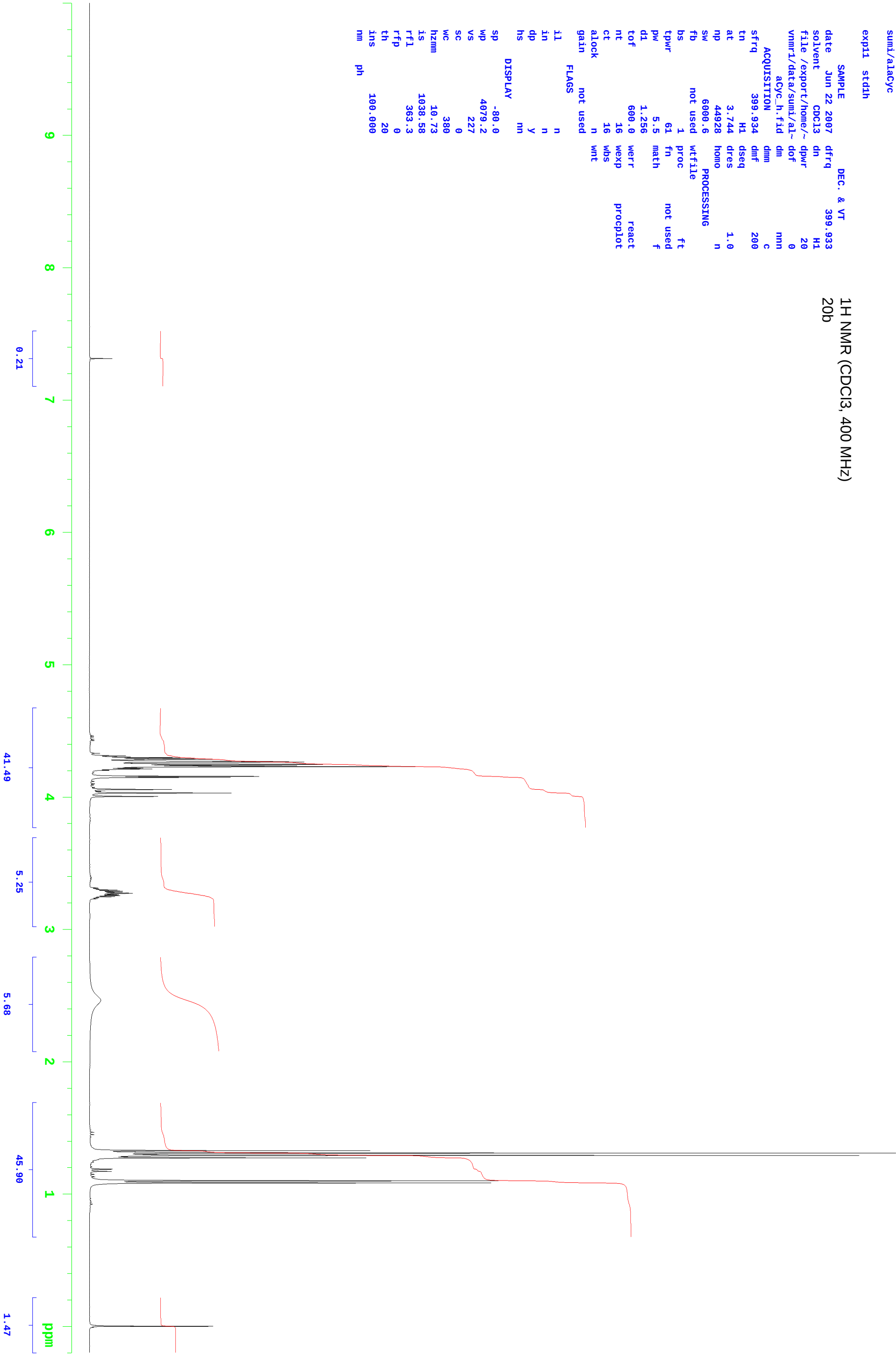
13C NMR (CDCl3, 100.6 MHz)
20a



sumi/alacYc
expt1 stdth

SAMPLE		DEC. & VT	
date	Jun 22 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/sumi/al-		dof	0
acYc.h.fid	dm	nmn	
ACQUISITION			
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	227		
sc	0		
wc	380		
hzmnm	10.73		
is	1038.58		
rfl	363.3		
rfp	0		
th	20		
ins	100.000		
nm	ph		

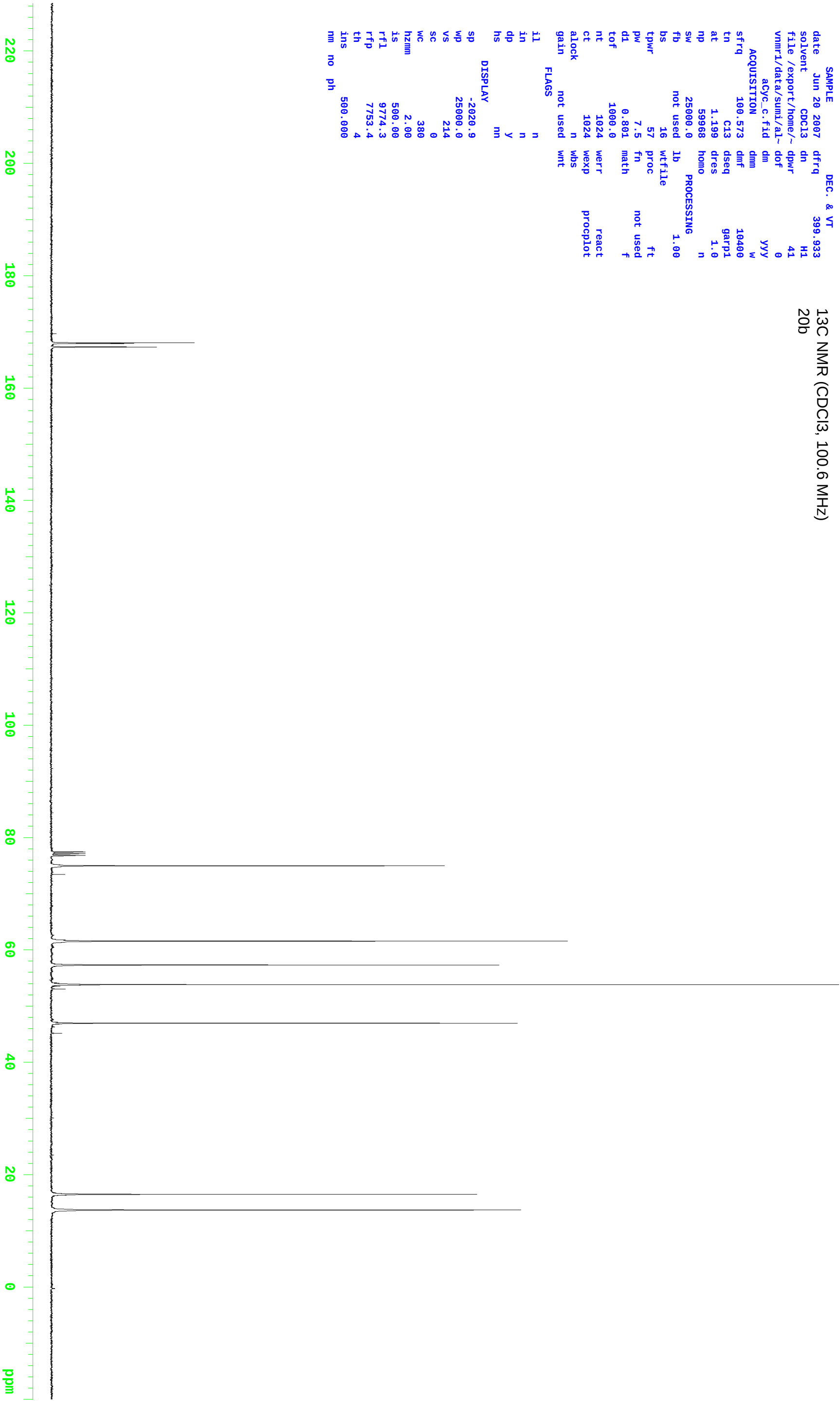
¹H NMR (CDCl₃, 400 MHz)
20b



sumi/alacYc
expt1 std13c

SAMPLE		DEC. & VT	
date	Jun 20 2007	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/sumi/al-	dof		0
acYc.c.fid	dm	yyY	w
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2020.9		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmh	2.00		
is	500.00		
rfl	9774.3		
rfp	7753.4		
th	4		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
20b

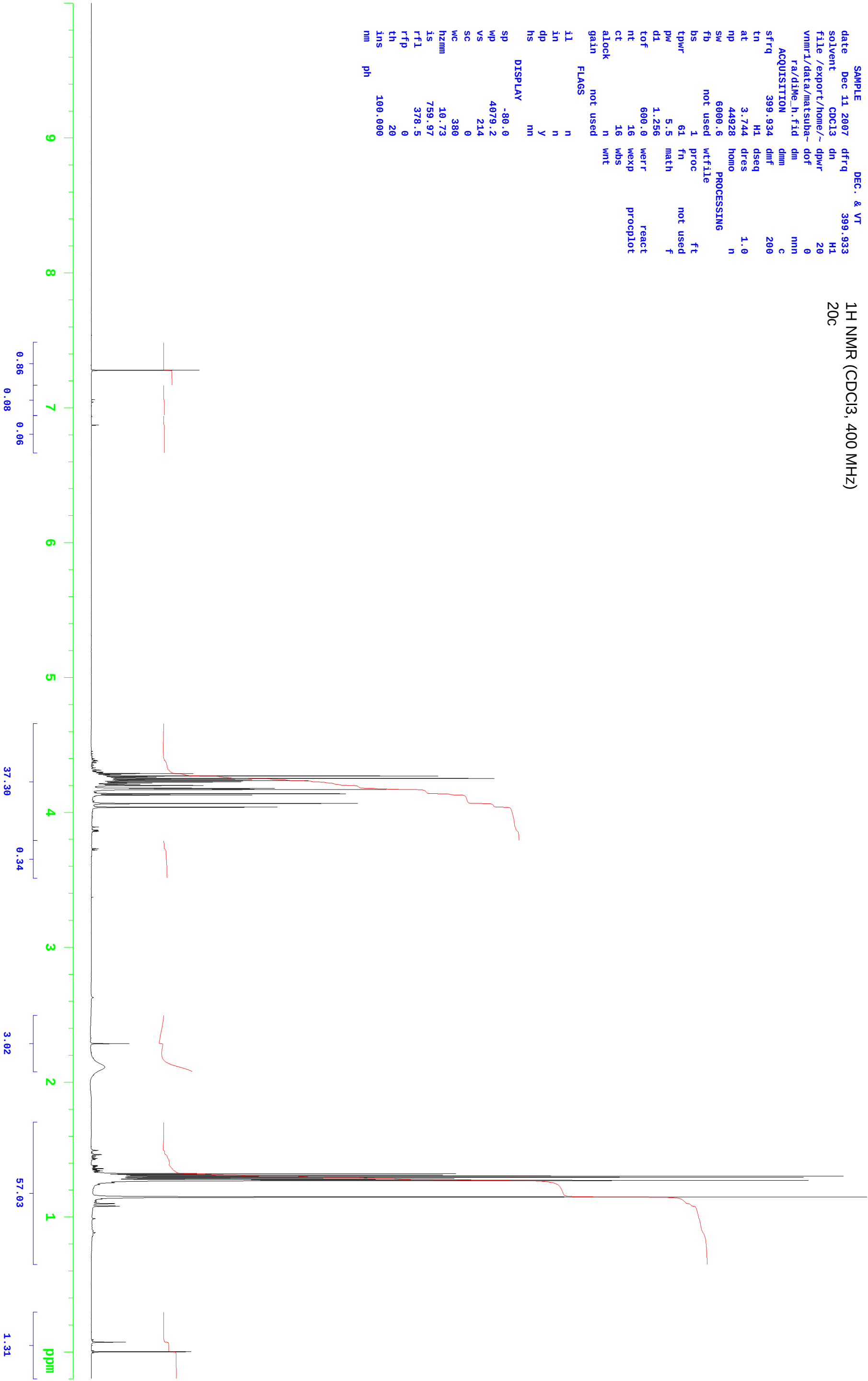


matsubara/dime

exp11 std1h

SAMPLE		DEC. & VT	
date	Dec 11 2007	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/matsuba-	dof		0
ra/dime_h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	759.97		
rfl	378.5		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
20C



SAMPLE

DEC. & VT

date Dec 11 2007 dfreq 399.933

solvent CDCl3 dn H1

file /export/home/~ dpwr 41

vnmr1/data/matsuba~ dof 0

ra/dime.c.fid dm YYY

ACQUISITION

sfrq 100.573 dnm dm w

tn C13 dseq 10400

at 1.199 dres garp1

np 59968 homo 1.0

sw 25000.0 PROCESSING

fb not used lb 1.00

bs 16 wfile

tpwr 57 proc ft

pw 7.5 fn not used

dl 0.801 math f

tof 1000.0

nt 1024 werr react

ct 1024 wexp procplot

alock n wbs

gain not used wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -1998.0

wp 25000.0

vs 214

sc 0

wc 380

hzm 3.44

is 500.00

rfl 9751.4

rfp 7753.4

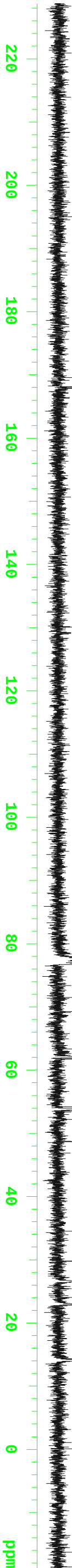
th 20

ins 500.000

nm no ph

13C NMR (CDCl3, 100.6 MHz)

20C

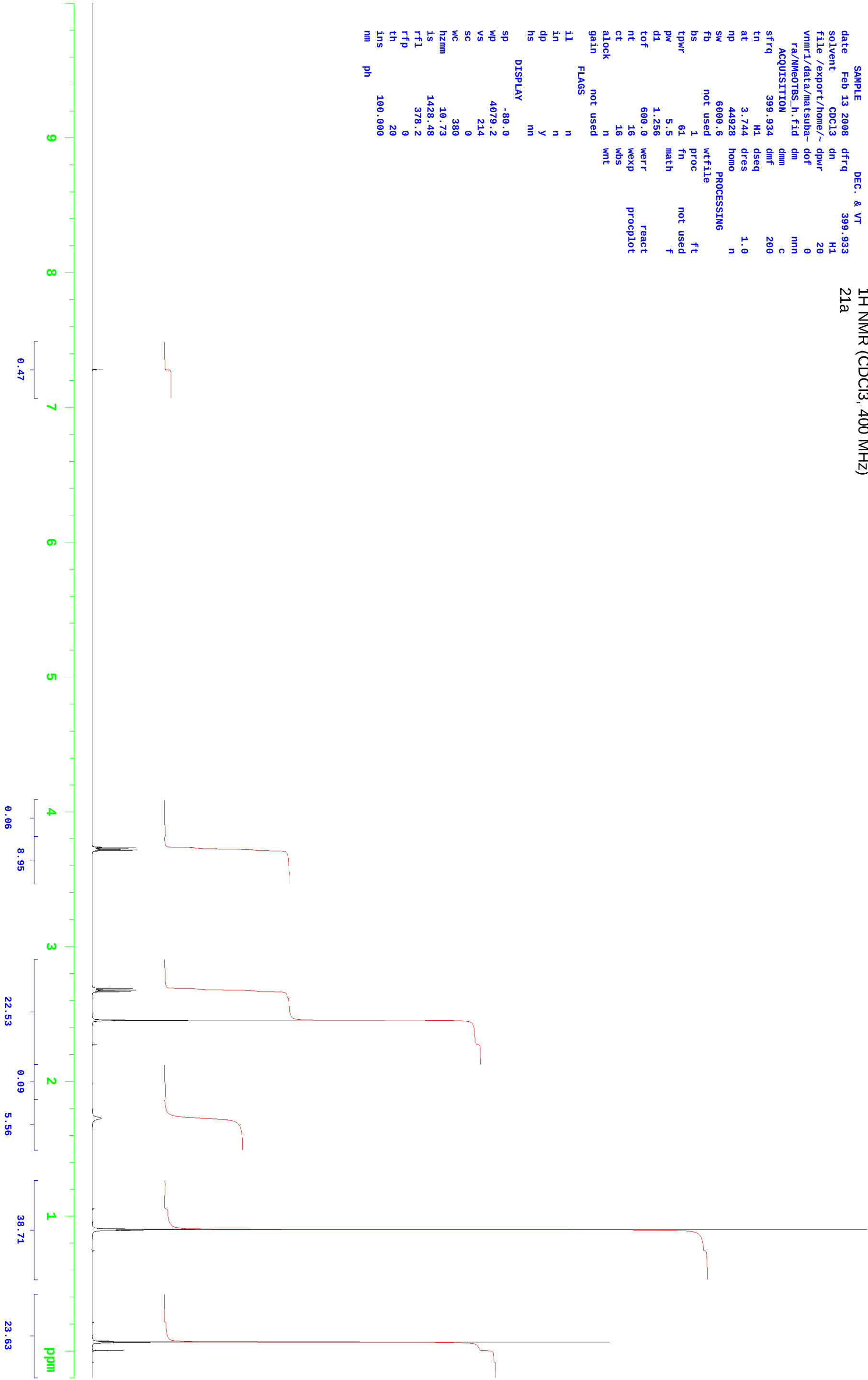


matsubara/MeOTBS

exp11 std1h

SAMPLE		DEC. & VT	
date	Feb 13 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/matsuba-	dof		0
ra/MeOTBS.h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1428.48		
rfl	378.2		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
21a



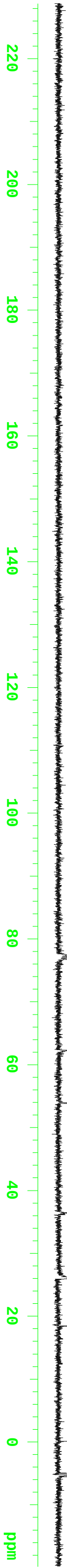
matsubara/MeOTBS

exp11 std13c

13C NMR (CDCl3, 100.6 MHz)

21a

SAMPLE DEC. & VT
date Feb 13 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/matsuba~ dof 0
ra/MeOTBS.c.fid dm yyy
ACQUISITION dnm w
sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 1024 werr react
ct 836 wexp procp1ot
alock n wbs
gain not used wnt
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -1995.8
wp 25000.0
vs 214
sc 0
wc 380
hzm 0.37
is 500.00
rfl 9749.1
rfp 7753.4
th 10
ins 500.000
nm no ph



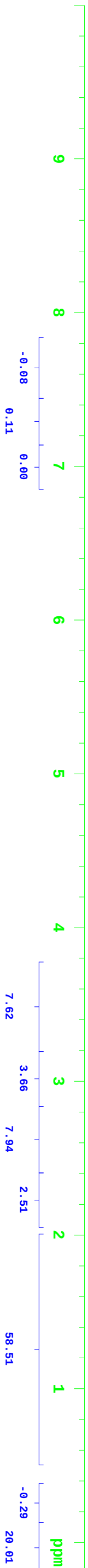
iwata11/PipOTBS

exp11 std1h

1H NMR (CDCl3, 400 MHz)

21b

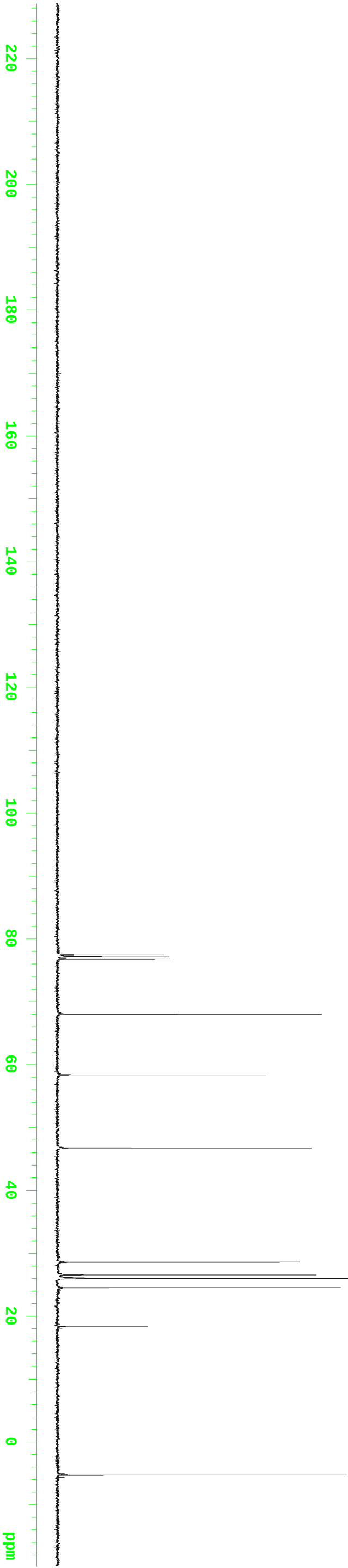
SAMPLE			DEC. & VT	
date	Feb 23 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata11-	dof		0	
/PipOTBS_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	
tn	H1	dseq	200	
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmnm	10.73			
is	784.53			
rfl	3289.2			
rfp	2903.5			
th	36			
ins	100.000			
nm	ph			



13C NMR (CDCl3, 100.6 MHz)

21b

SAMPLE DEC. & VT
date Feb 23 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata11~ dof 0
/PipOTBS.c.fid dm yyy
ACQUISITION
sfrq 100.573 dnm w
tn C13 dmf 10400
at 1.199 dres garp1
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 1024 werr react
ct 1024 wexp procp1ot
alock n wbs
gain not used wnt
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -1996.5
wp 25000.0
vs 214
sc 0
wc 380
h2mm 2.46
is 500.00
rfl 9749.9
rfp 7753.4
th 20
ins 500.000
nm no ph



SAMPLE

date Mar 11 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 20

vmr1/data/iwata12-

dof 0

/ephetBS_h.fid

dm mnn

ACQUISITION

dmm c

sfrq 399.934

dmf 200

tn H1

dseq

at 3.744

dres 1.0

np 44928

homo n

sw 6000.6

PROCESSING

fb not used

wfile

bs 1

proc ft

tpwr 61

fn not used

pw 5.5

math f

dl 1.256

tof 600.0

werr react

nt 16

wexp procp1ot

ct 16

wbs

alock n

wnt

gain not used

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -80.0

wp 4079.2

vs 214

sc 0

wc 380

hzmnm 10.73

is 1387.32

rfl 400.3

rfp 0

th 20

ins 100.000

nm ph

DEC. & VT

399.933

H1

20

0

mnn

c

200

1.0

n

ft

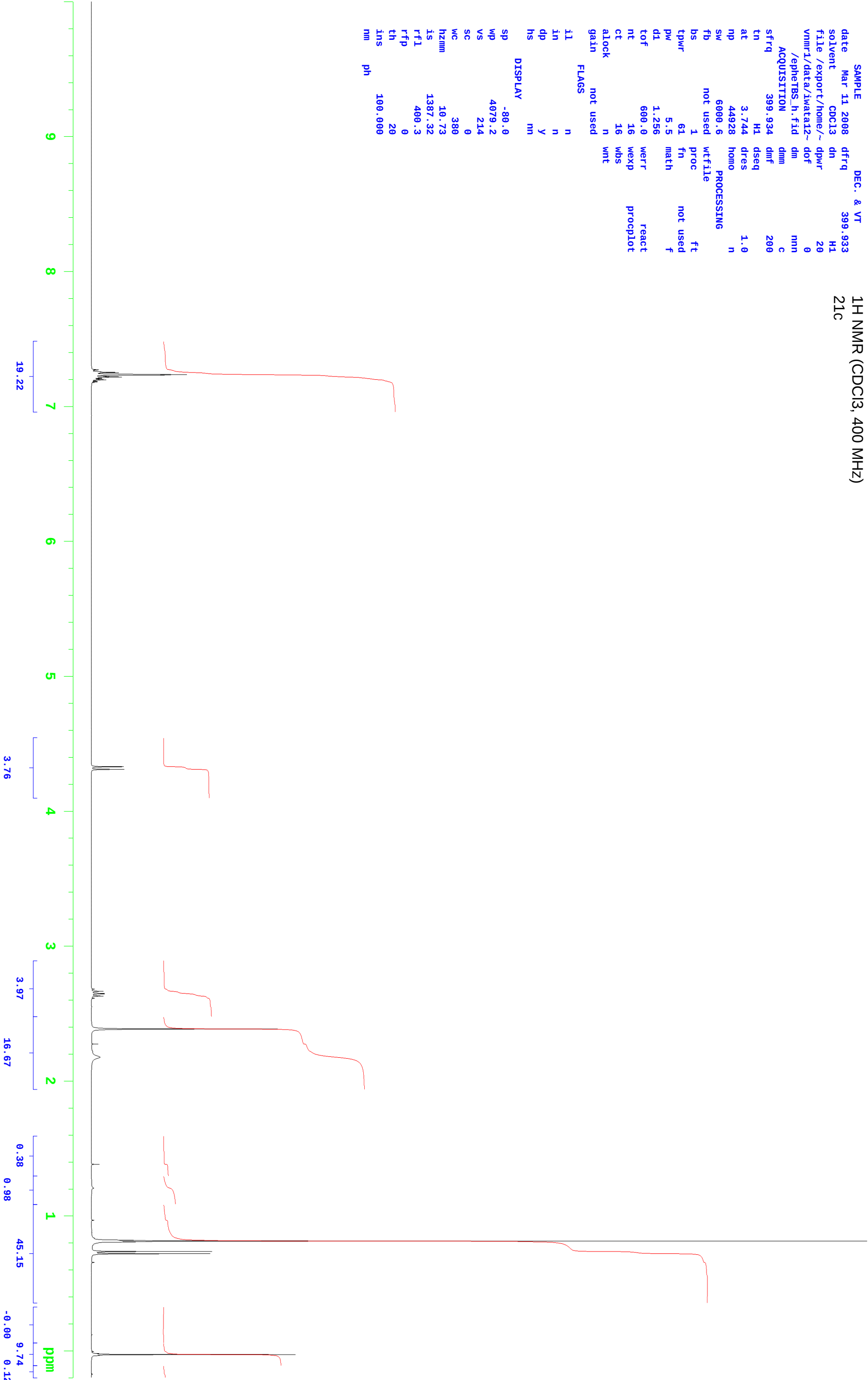
not used

f

react

procp1ot

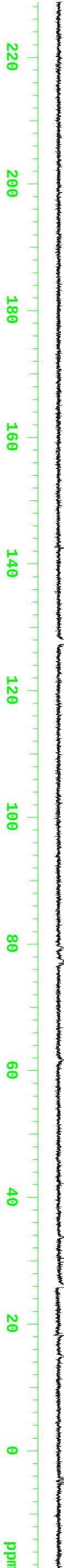
1H NMR (CDCl3, 400 MHz)
21c



13C NMR (CDCl3, 100.6 MHz)

21c

SAMPLE			DEC. & VT		
date	Mar 11 2008	dfreq	399.933		
solvent	CDCl3	dn	H1		
file	/export/home/~	dpwr	41		
nmr1/data/iwata12~	dof		0		
/ephetBS.c.fid	dm		yyy		
ACQUISITION					
sfrq	100.573	dmf	10400		
tn	C13	dseq	garpl		
at	1.199	dres	1.0		
np	59968	homo	n		
sw	25000.0	PROCESSING			
fb	not used	lb	1.00		
bs	16	wtfile			
tpwr	57	proc	ft		
pw	7.5	fn	not used		
dl	0.801	math	f		
tof	1000.0				
nt	1024	werr	react		
ct	510	wexp	procp1ot		
alock	n	wbs			
gain	not used	wnt			
FLAGS					
il	n				
in	n				
dp	y				
hs	nn				
DISPLAY					
sp	-1998.0				
wp	25000.0				
vs	214				
sc	0				
wc	380				
hzmm	0.62				
is	500.00				
rfl	9751.4				
rfp	7753.4				
th	6				
ins	500.000				
nm	no	ph			

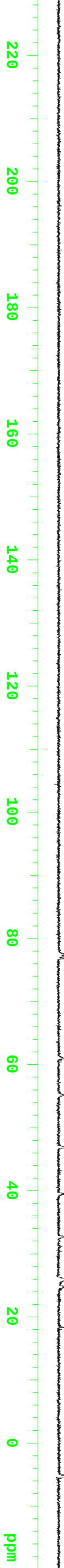


21d

nm
ph

13C NMR (CDCl3, 100.6 MHz)
21d

SAMPLE			DEC. & VT	
date	Mar 3 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	41	
nmr1/data/iwata12-	dof		0	
/p1pccotbs.c.fid	dm		yyy	
ACQUISITION				
sfrq	100.573	dmf	10400	
tn	C13	dseq	garpl	
at	1.199	dres	1.0	
np	59968	homo	n	
sw	25000.0	PROCESSING		
fb	not used	lb	1.00	
bs	16	wtfile		
tpwr	57	proc	ft	
pw	7.5	fn	not used	
dl	0.801	math	f	
tof	1000.0			
nt	1024	werr	react	
ct	1024	wexp	procp1ot	
alock	n	wbs		
gain	not used	wnt		
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-1998.0			
wp	25000.0			
vs	214			
sc	0			
wc	380			
hzmm	0.68			
is	500.00			
rfl	9751.4			
rfp	7753.4			
th	20			
ins	500.000			
nm	no	ph		

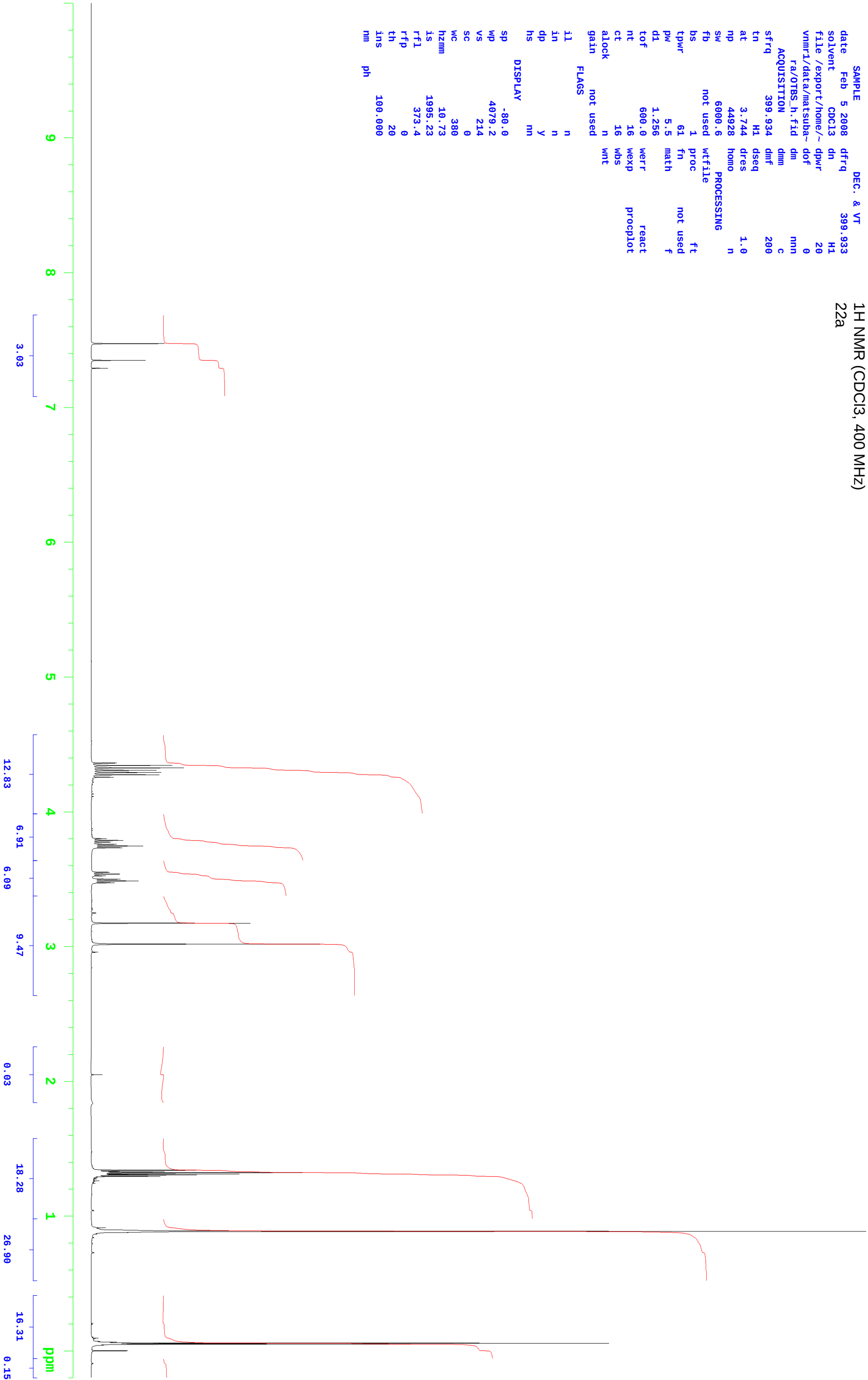


matsubara/OTBS

exp11 std1h

SAMPLE			DEC. & VT		
date	Feb 5 2008	dfreq	399.933		
solvent	CDCl3	dn	H1		
file	/export/home/~	dpwr	20		
nmr1/data/matsuba-	dof		0		
ra/OTBS_h.fid	dm		nmn		
ACQUISITION					
sfrq	399.934	dmf	c		
tn	H1	dseq	200		
at	3.744	dres	1.0		
np	44928	homo	n		
sw	6000.6	PROCESSING			
fb	not used	wfile			
bs	1	proc	ft		
tpwr	61	fn	not used		
pw	5.5	math	f		
dl	1.256				
tof	600.0	werr	react		
nt	16	wexp	procp1ot		
ct	16	wbs			
alock	n	wnt			
gain	not used				
FLAGS					
il	n				
in	n				
dp	y				
hs	nn				
DISPLAY					
sp	-80.0				
wp	4079.2				
vs	214				
sc	0				
wc	380				
hzmnm	10.73				
is	1995.23				
rfl	373.4				
rfp	0				
th	20				
ins	100.000				
nm	ph				

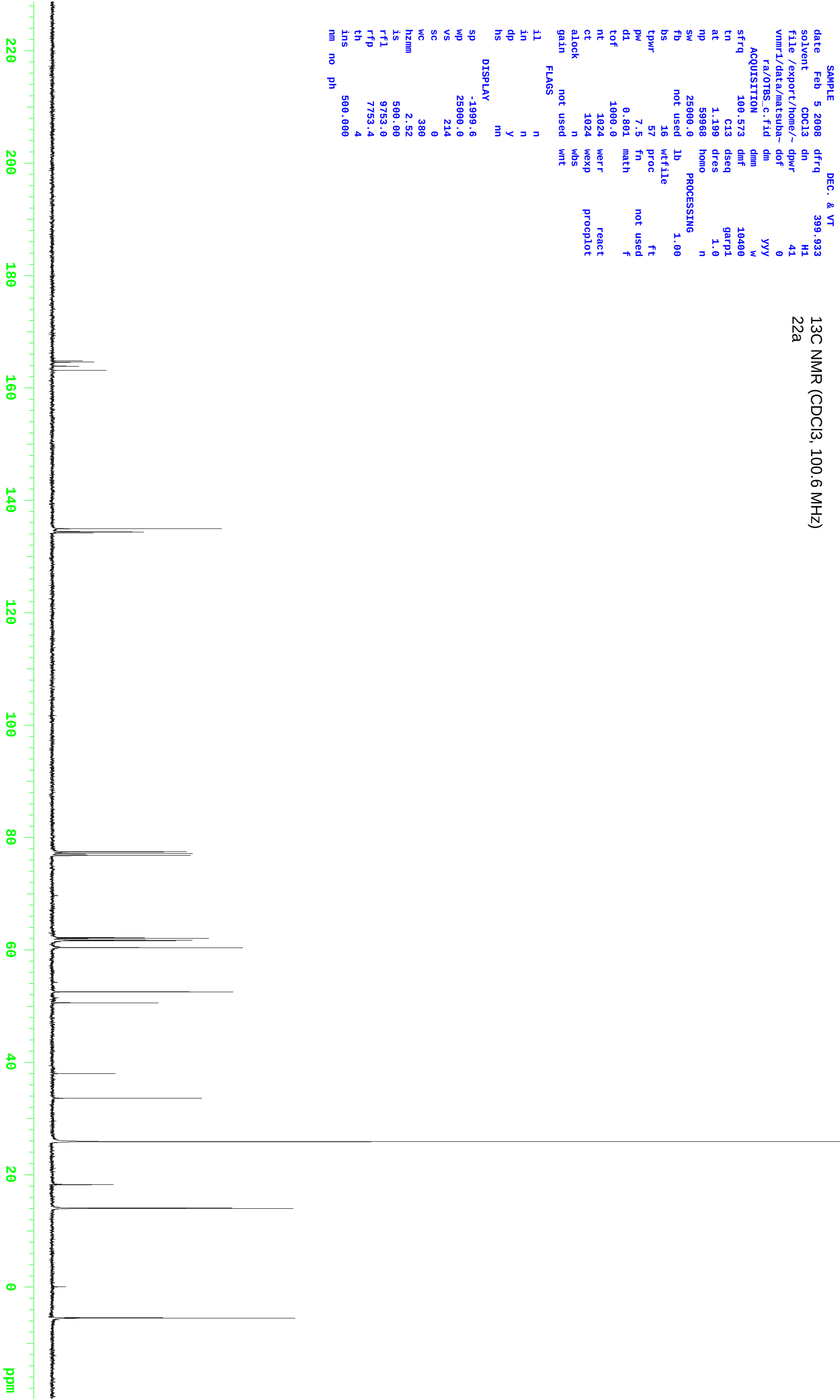
1H NMR (CDCl3, 400 MHz)
22a



matsubara/OTBS
exp11 std13c

SAMPLE		DEC. & VT	
date	Feb 5 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
vnmr1/data/matsuba-	dof		0
ra/OTBS.c.fid	dm		yyv
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1999.6		
wp	25000.0		
vs	214		
sc	0		
wc	380		
h2mm	2.52		
is	500.00		
rfl	9753.0		
rfp	7753.4		
th	4		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
22a

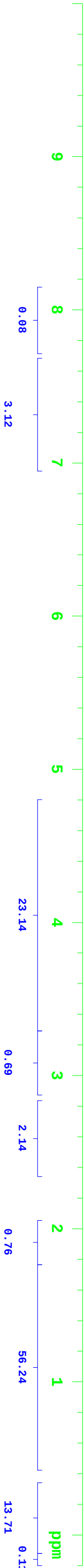


iwata11/TBSOPip

exp11 std1h

SAMPLE		DEC. & VT	
date	Feb 22 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata11-	dof		0
/TBSOPip_h.fid	dm		nmn
ACQUISITION		dmm	c
sfrq	399.934	dmf	200
tn	H1	dseq	
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	750.80		
rfl	3311.9		
rfp	2903.5		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
22b

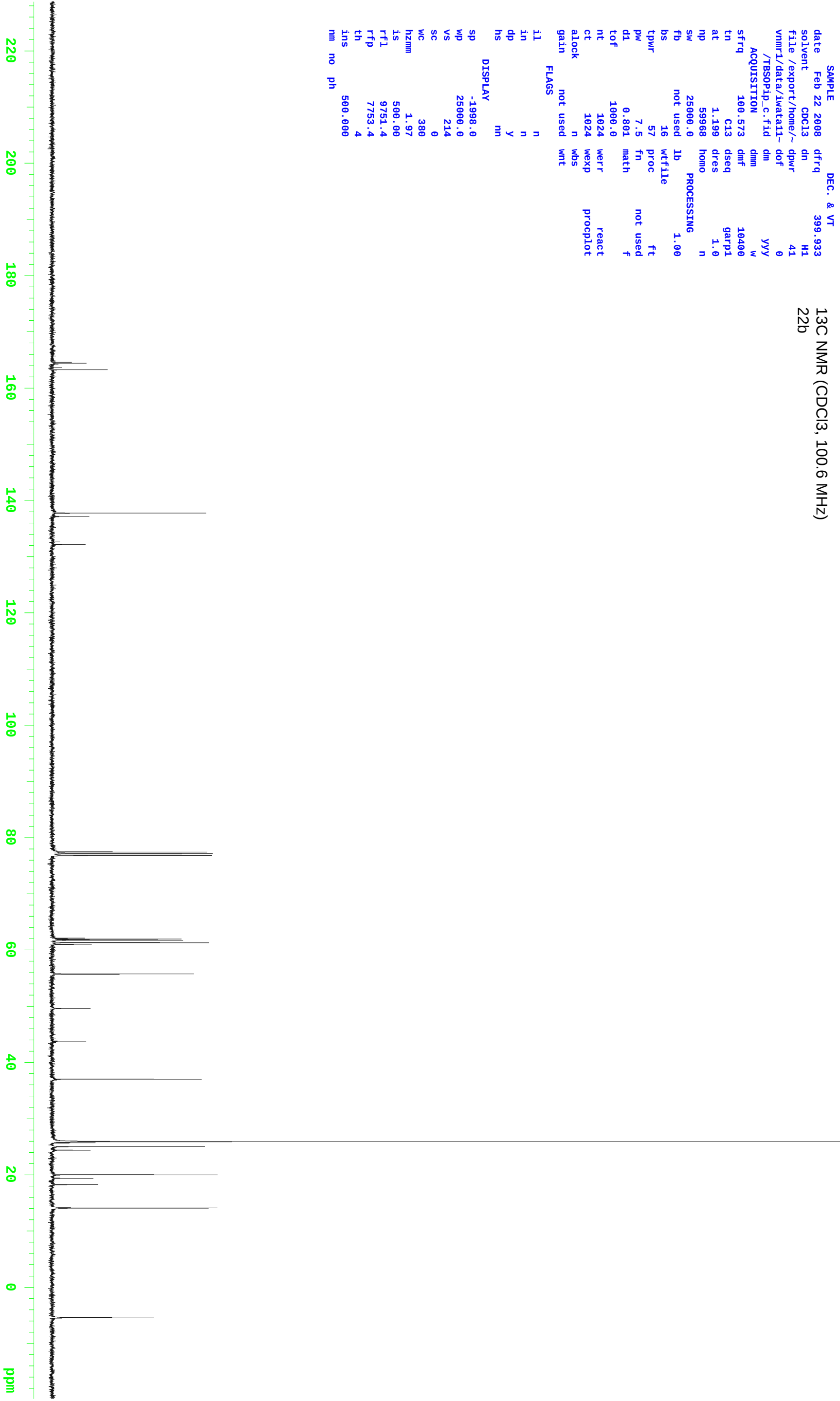


iwata11/TBSOPip

exp11 std13c

SAMPLE		DEC. & VT	
date	Feb 22 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata11~	dof		0
/TBSOPip.c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1998.0		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmh	1.97		
is	500.00		
rfl	9751.4		
rfp	7753.4		
th	4		
ins	500.000		
nm	no	ph	

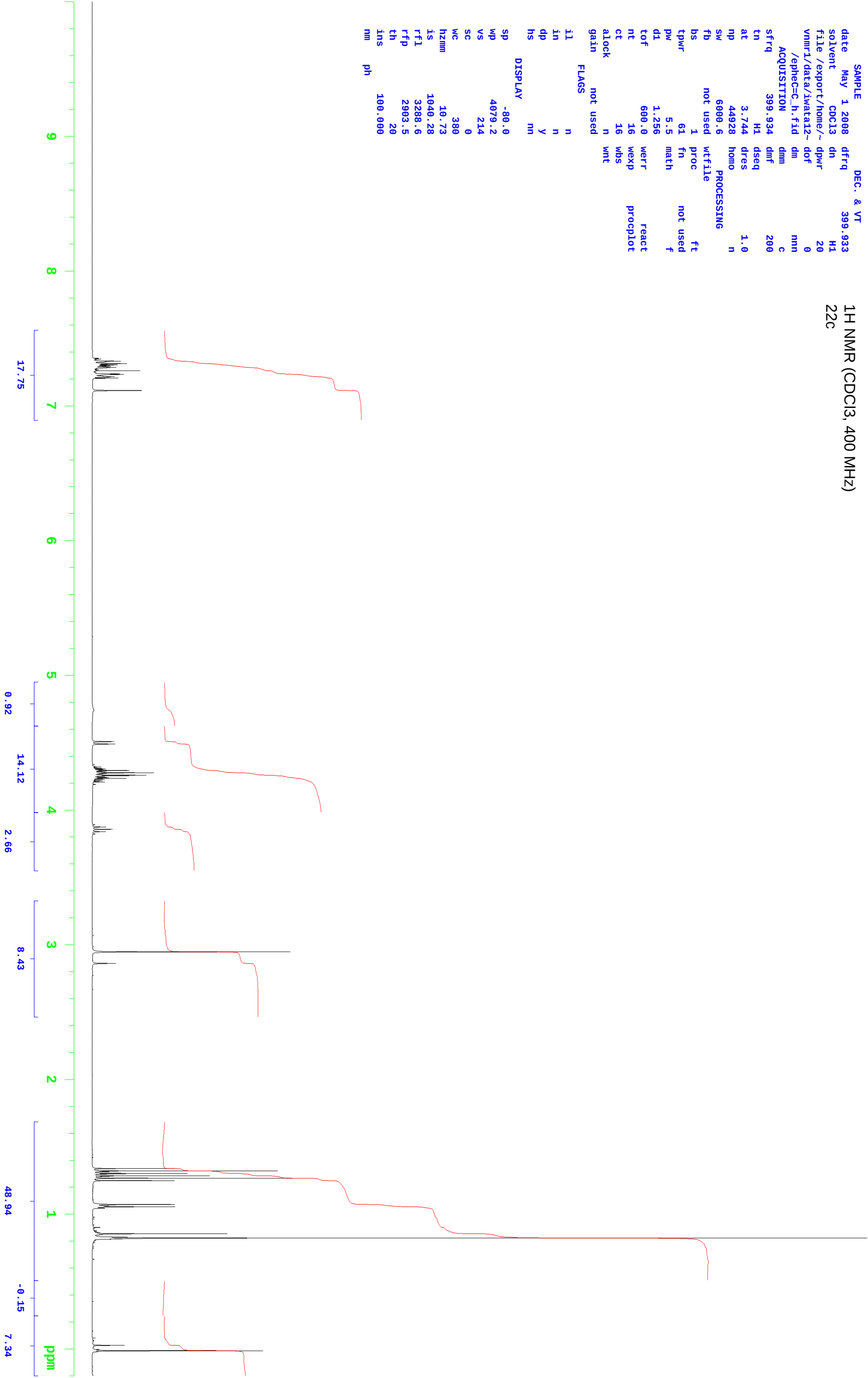
13C NMR (CDCl3, 100.6 MHz)
22b



exp11 std1h

SAMPLE			DEC. & VT	
date	May 1 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/Iwata12~	dof		0	
/ephec=C_h.fid	dm		nmn	
ACQUISITION				
sfrq	399.934	dmf	c	200
tn	H1	dseq		
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmm	10.73			
is	1040.28			
rfl	3288.6			
rfp	2903.5			
th	20			
ins	100.000			
nm	ph			

1H NMR (CDCl3, 400 MHz)
22c



iwata12/ephec=C

exp11 std13c

SAMPLE

date May 1 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 41

vmr1/data/iwata12~

dof 0

/ephec=C.c.fid

dm

yyy

dm

w

sfrq 100.573

dmf 10400

tn C13

dseq garp1

at 1.199

dres 1.0

np 59968

homo n

sw 25000.0

PROCESSING

lb 1.00

not used

wffile

bs 16

proc 57

ft

tpwr 7.5

fn not used

dl 0.801

math f

tof 1000.0

nt 1024

werr react

ct 1024

wexp

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -1997.3

wp 25000.0

vs 214

sc 0

wc 380

hzm 1.53

is 500.00

rfl 9753.0

rfp 7755.7

th 4

ins 500.000

nm no ph

DEC. & VT

399.933

H1

41

0

yyy

w

10400

garp1

1.0

n

PROCESSING

lb 1.00

not used

wffile

bs 16

proc 57

ft

tpwr 7.5

fn not used

dl 0.801

math f

tof 1000.0

nt 1024

werr react

ct 1024

wexp

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -1997.3

wp 25000.0

vs 214

sc 0

wc 380

hzm 1.53

is 500.00

rfl 9753.0

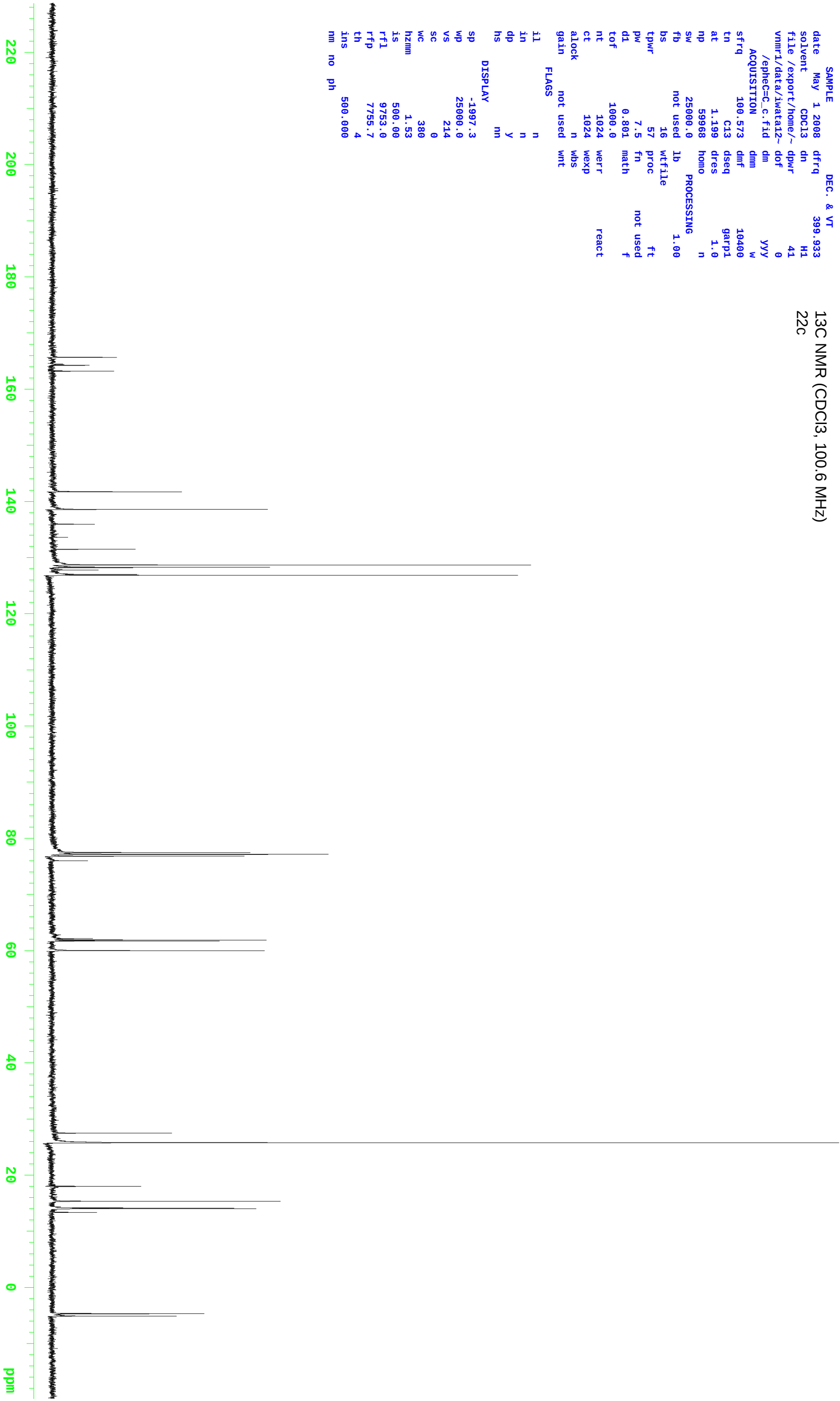
rfp 7755.7

th 4

ins 500.000

nm no ph

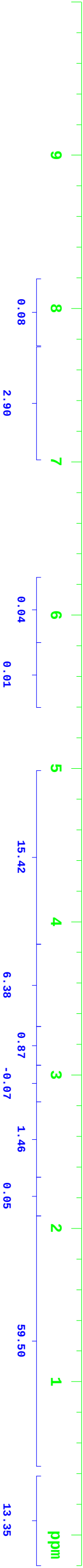
13C NMR (CDCl3, 100.6 MHz)
22c



1H NMR (CDCl3, 400 MHz)

22d

SAMPLE			DEC. & VT	
date	Mar 11 2008	dfreq	399.933	
solvent	CDCl3	dn	H1	
file	/export/home/~	dpwr	20	
nmr1/data/iwata12~		dof	0	
/CC1pccOTBS_h.fid	dm		nmn	
ACQUISITION		dmm	c	
sfrq	399.934	dmf	200	
tn	H1	dseq		
at	3.744	dres	1.0	
np	44928	homo	n	
sw	6000.6	PROCESSING		
fb	not used	wfile		
bs	1	proc	ft	
tpwr	61	fn	not used	
pw	5.5	math	f	
dl	1.256			
tof	600.0	werr	react	
nt	16	wexp	procp1ot	
ct	16	wbs		
alock	n	wnt		
gain	not used			
FLAGS				
il	n			
in	n			
dp	y			
hs	nn			
DISPLAY				
sp	-80.0			
wp	4079.2			
vs	214			
sc	0			
wc	380			
hzmnm	13.63			
is	955.07			
rfl	3288.6			
rfp	2903.5			
th	2			
ins	100.000			
nm	ph			



SAMPLE

DEC. & VT

date Mar 10 2008

dfrq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 41

vnmr1/data/iwata12-

dof 0

/CCPipCCOTBS.c.fid

dm

yyy

ACQUISITION

dmm

w

sfrq 100.573

dmf 10400

tn C13

dseq garp1

at 1.199

dres 1.0

np 59968

homo n

sw 25000.0

PROCESSING

lb 1.00

bs not used

wtfile

tpwr 16

proc

ft

pw 7.5

fn not used

dl 0.801

math f

tof 1000.0

nt 2000

werr react

ct 2000

wexp procp1ot

alock n

wbs

gain not used

wnt

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -2001.1

wp 25000.0

vs 214

sc 0

wc 380

hzmnm 0.58

is 500.00

rfl 9754.5

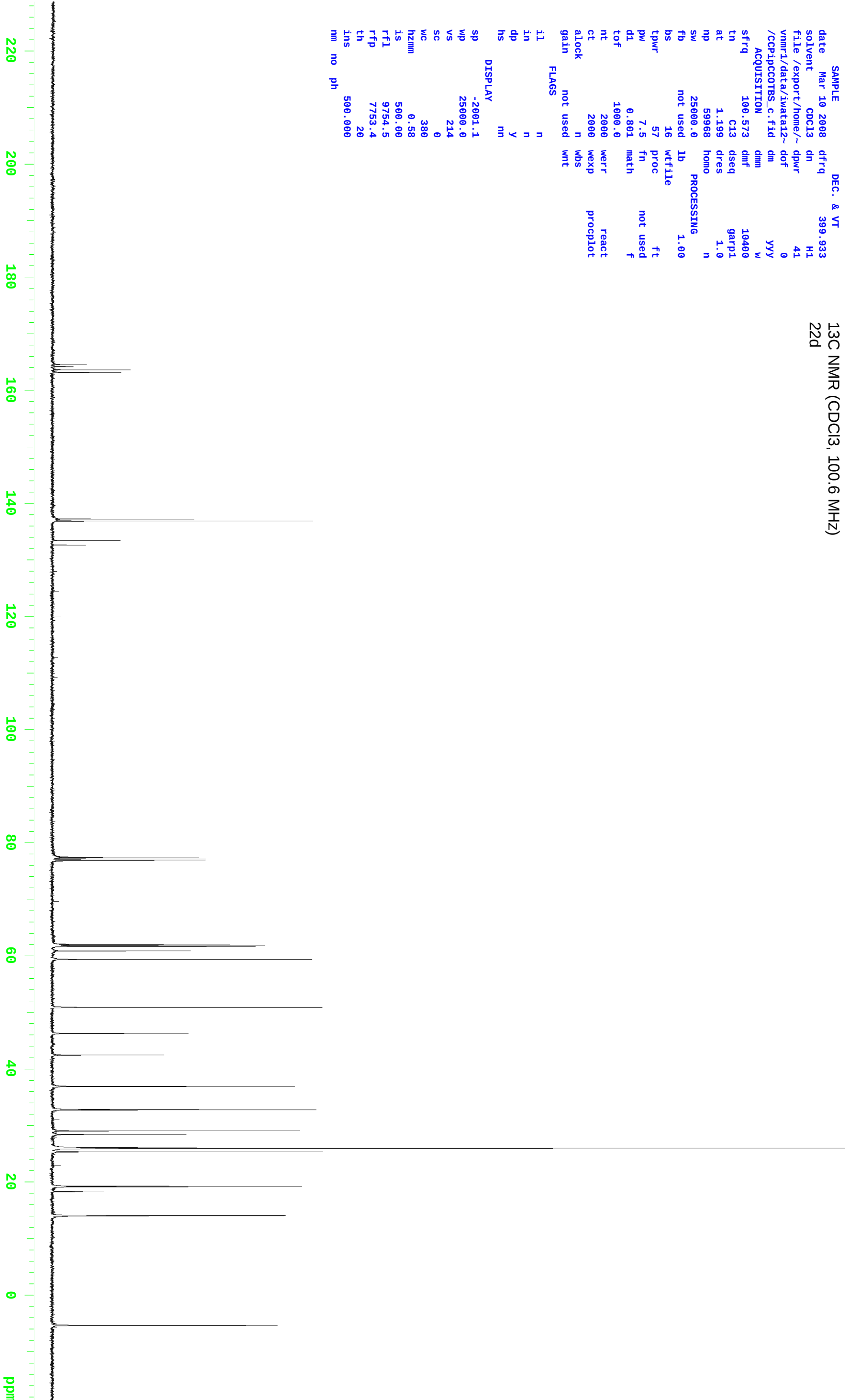
rfp 7753.4

th 20

ins 500.000

nm no ph

13C NMR (CDCl3, 100.6 MHz)
22d

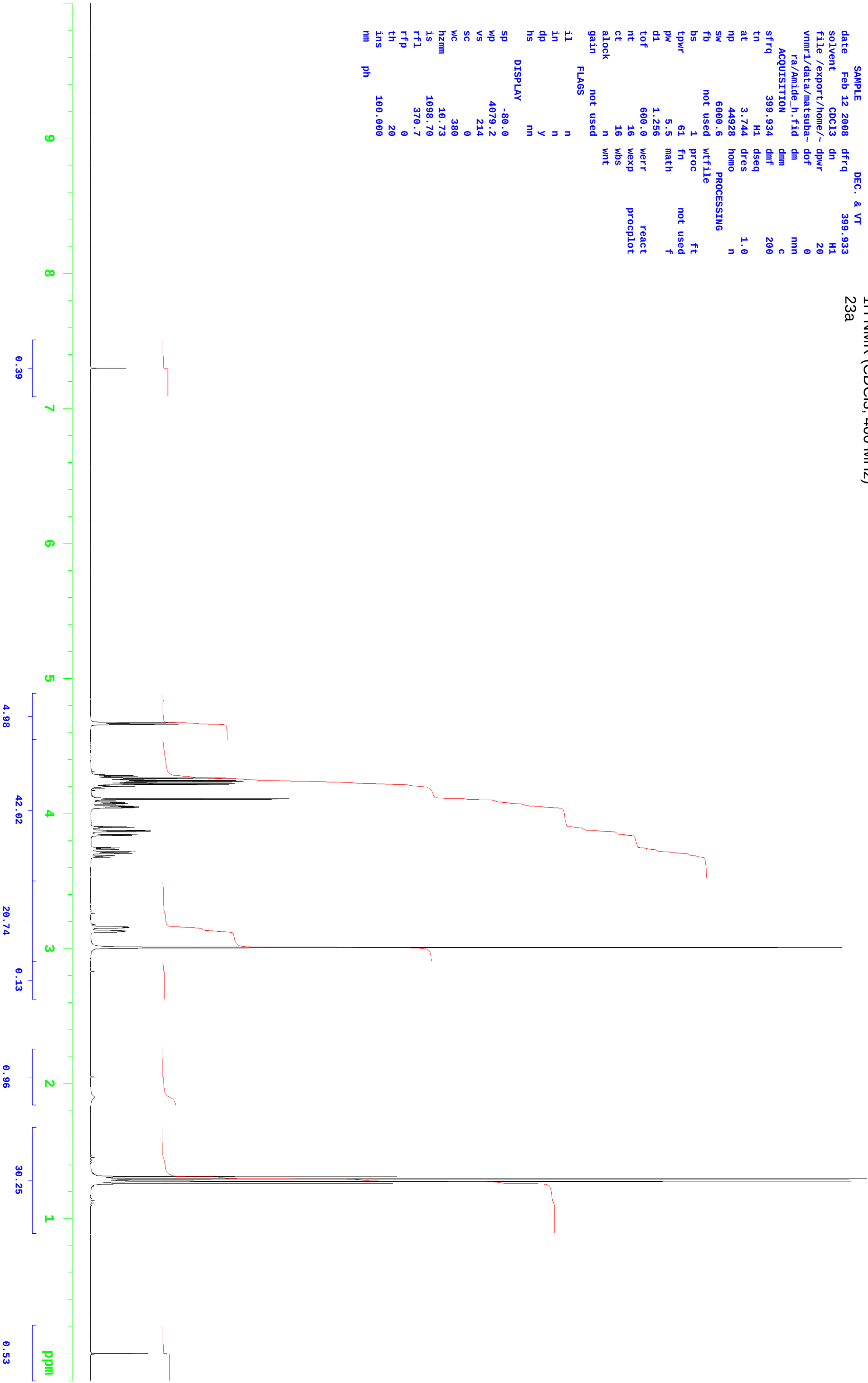


matsubara/Amide

exp11 std1h

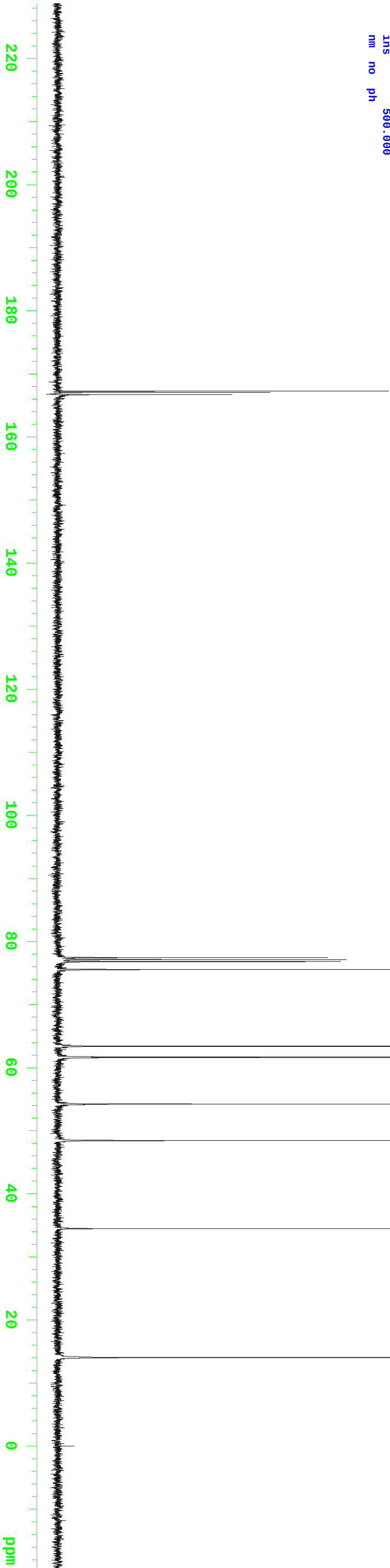
SAMPLE		DEC. & VT	
date	Feb 12 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/matsuba-	dof		0
ra/Amide_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1098.70		
rfl	370.7		
rfp	0		
th	20		
ins	100.000		
nm	ph		

¹H NMR (CDCl₃, 400 MHz)
23a



13C NMR (CDCl3, 100.6 MHz)
23a

SAMPLE		DEC. & VT	
date	Feb 12 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/matsuba-	dof		0
ra/Amide.c.fid	dm		yyy
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procp1ot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2001.9		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmm	2.21		
is	500.00		
rfl	9755.2		
rfp	7753.4		
th	20		
ins	500.000		
nm	no	ph	



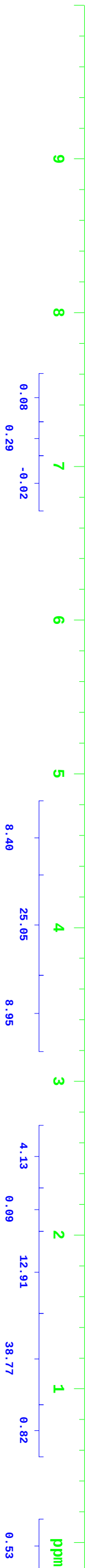
iwata12/PipAmide1

exp11 std1h

1H NMR (CDCl3, 400 MHz)

23b-trans

SAMPLE		DEC. & VT	
date	Feb 27 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata12-	dof		0
/PipAmide1.h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	16	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	1294.06		
rfl	400.3		
rfp	0		
th	20		
ins	100.000		
nm	ph		

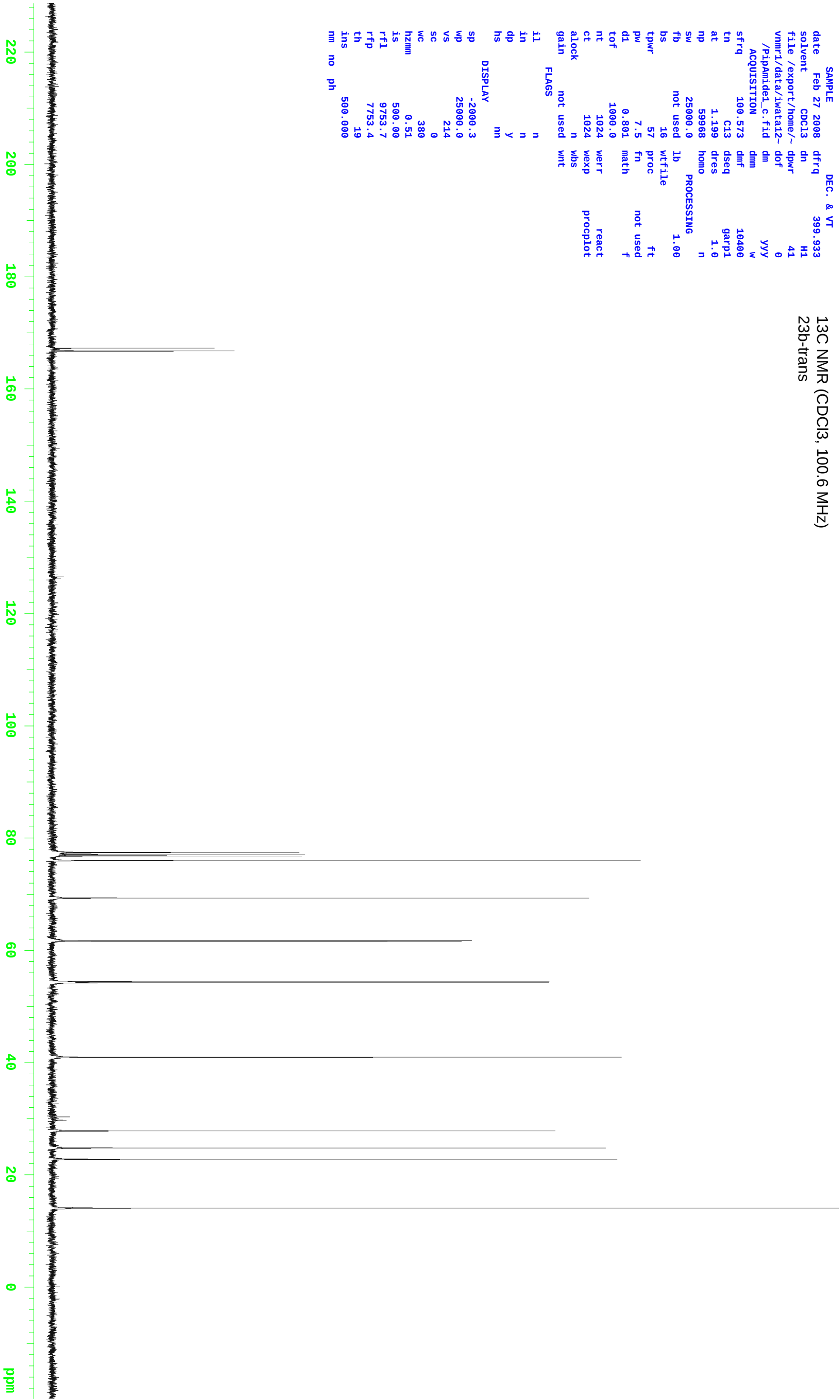


iwata12/PipAmide1

exp11 std13c

SAMPLE		DEC. & VT	
date	Feb 27 2008	dfreq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/iwata12-	dof		0
/PipAmide1.c.fid	dm		YVY
ACQUISITION			
sfrq	100.573	dmm	w
tn	C13	dmf	10400
at	1.199	dseq	garpl
np	59968	homo	1.0
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	1024	werr	react
ct	1024	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-2000.3		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzmm	0.51		
is	500.00		
rfl	9753.7		
rfp	7753.4		
th	19		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
23b-trans



iwata12/PipAmide2

exp11 std1h

SAMPLE

date Feb 26 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 20

nmr1/data/iwata12~

dof 0

/PipAmide2_h.fid

dm

nmn

ACQUISITION

dmm

c

sfrq 399.934

dmf

200

tn H1

dseq

at 3.744

dres

1.0

np 44928

homo

n

sw 6000.6

PROCESSING

fb not used

wfile

bs 1

proc

ft

tpwr 61

fn

not used

pw 5.5

math

f

dl 1.256

tof 600.0

werr

react

nt 16

wexp

procp1ot

ct 16

wbs

alock

n

wnt

gain not used

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -80.0

wp 4079.2

vs 214

sc 0

wc 380

hzmnm 10.73

is 1017.13

rfl 378.9

rfp 0

th 20

ins 100.000

nm

ph

DEC. & VT

399.933

H1

20

0

nmn

c

200

1.0

n

PROCESSING

ft

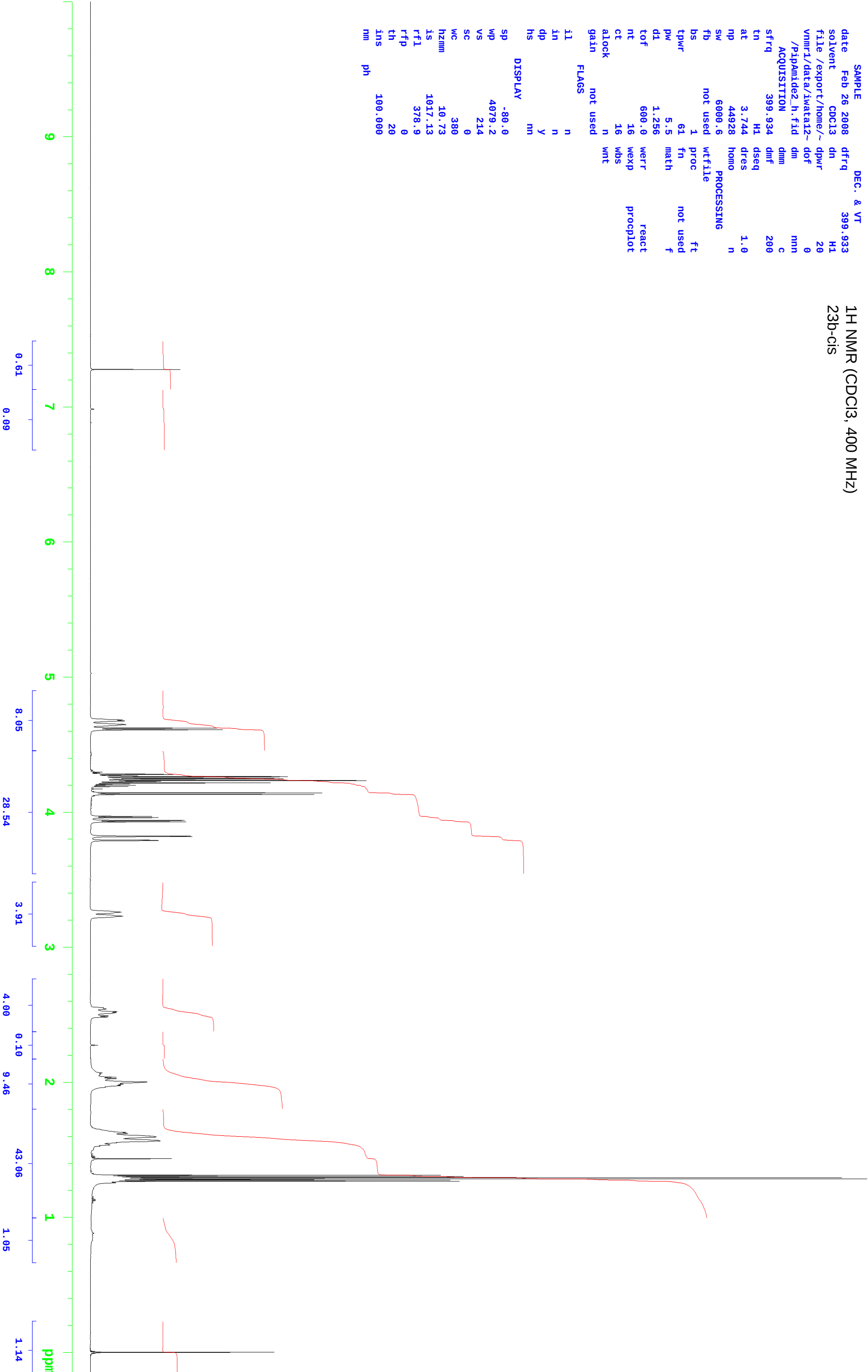
not used

f

react

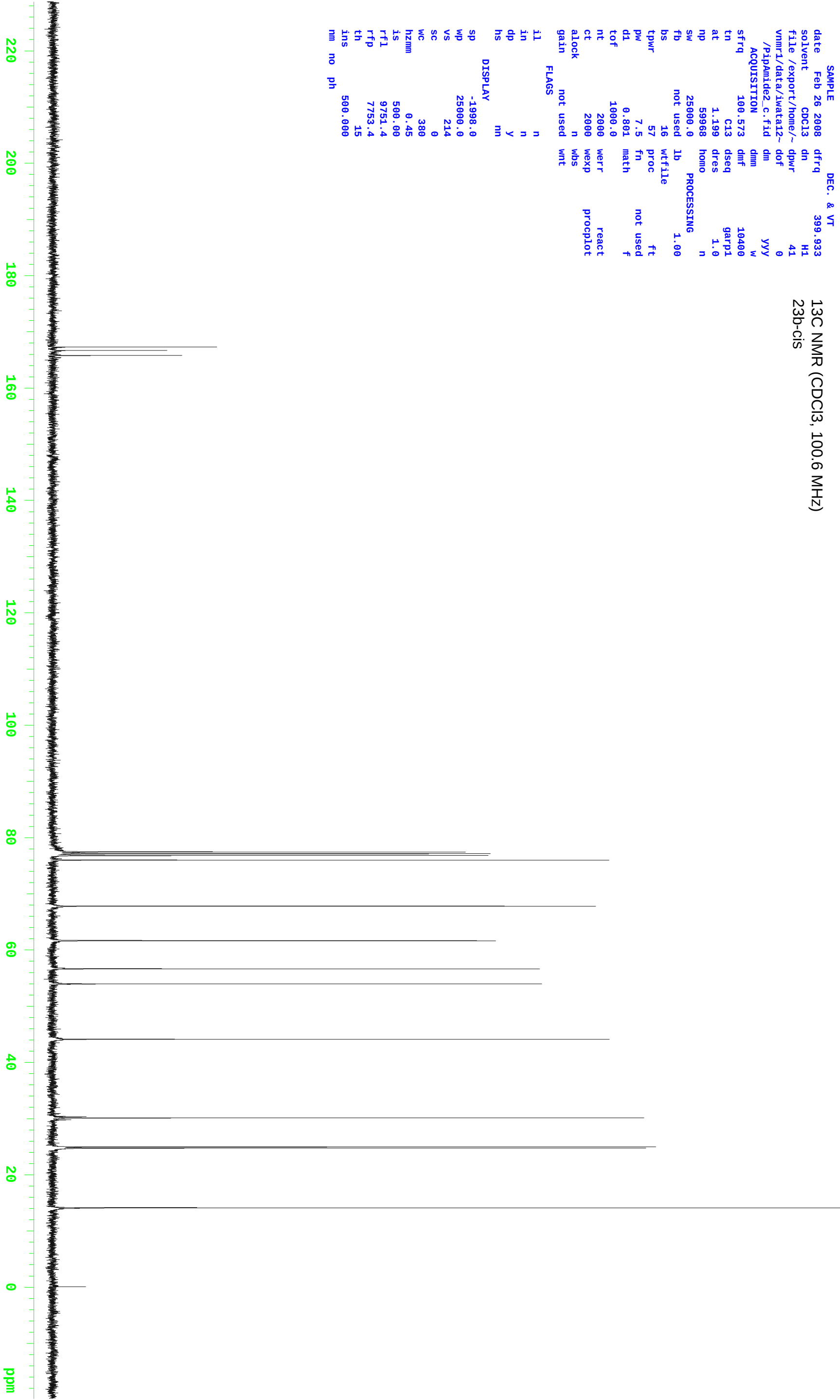
procp1ot

1H NMR (CDCl3, 400 MHz)
23b-cis



13C NMR (CDCl3, 100.6 MHz)
23b-cis

SAMPLE DEC. & VT
date Feb 26 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata12~ dof 0
/PipAmide2.c.fid dm yyy
ACQUISITION dnm w
sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 2000 werr react
ct 2000 wexp procp1ot
alock n wbs
gain not used wnt
FLAGS
il n
in n
dp y
hs nn
DISPLAY
sp -1998.0
wp 25000.0
vs 214
sc 0
wc 380
hzzmm 0.45
is 500.00
rfl 9751.4
rfp 7753.4
th 15
ins 500.000
nm no ph



SAMPLE

date Apr 30 2008

dfreq 399.933

solvent CDCl3

dn H1

file /export/home/~

dpwr 20

vmr1/data/iwata12~

dof 0

/epheCyc_h.fid

dm mnn

ACQUISITION

dmm c

sfrq 399.934

dmf 200

tn H1

dseq

at 3.744

dres 1.0

np 44928

homo n

sw 6000.6

PROCESSING

fb not used

wfile

bs 1

proc ft

tpwr 61

fn not used

pw 5.5

math f

dl 1.256

tof 600.0

werr react

nt 16

wexp procp1ot

ct 16

wbs

alock n

wnt

gain not used

FLAGS

il n

in n

dp y

hs nn

DISPLAY

sp -80.0

wp 4079.2

vs 214

sc 0

wc 380

hzmnm 10.73

is 1391.36

rfl 379.4

rfp 0

th 20

ins 100.000

nm ph

DEC. & VT

399.933

H1

20

0

mnn

c

200

1.0

n

ft

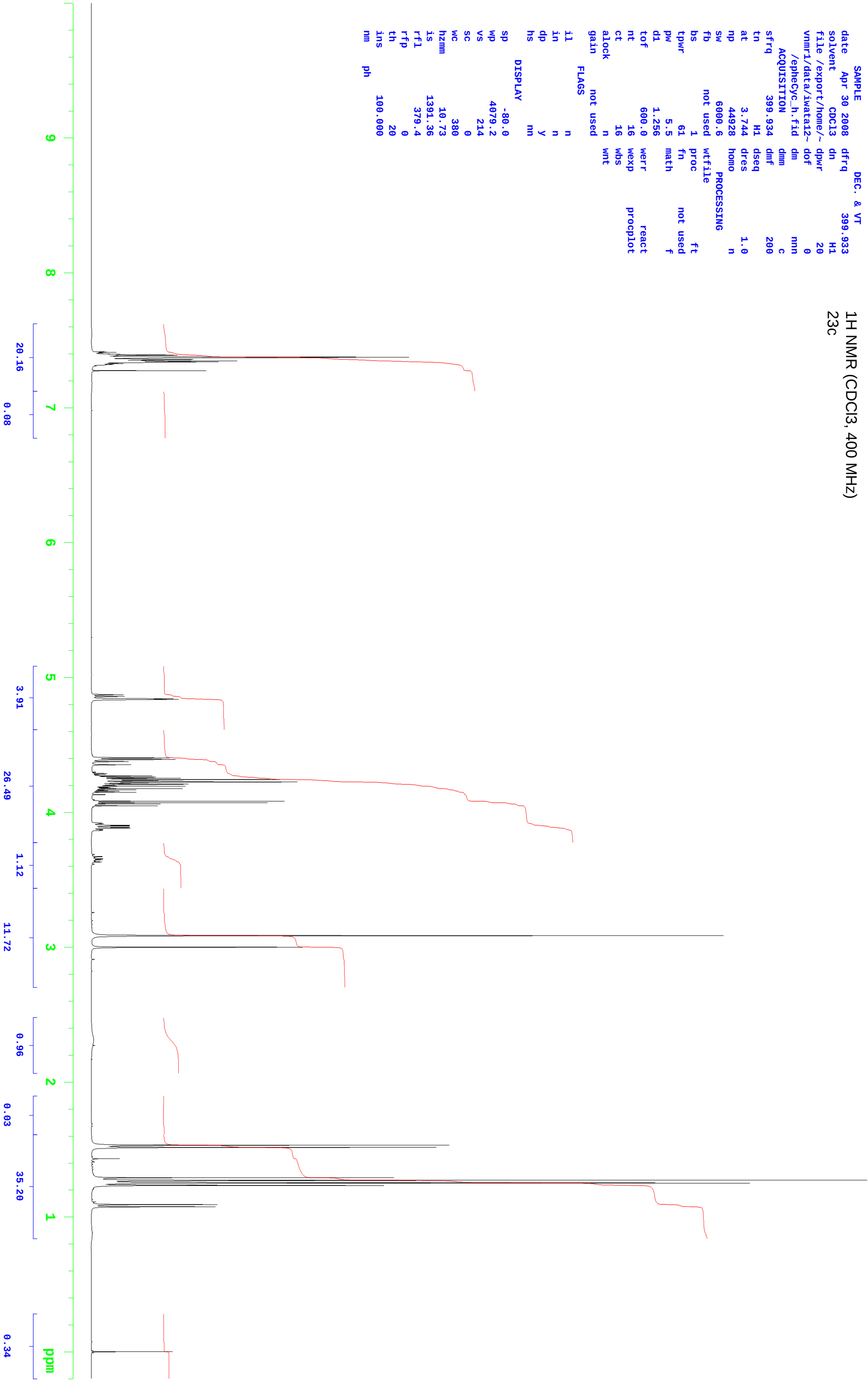
not used

f

react

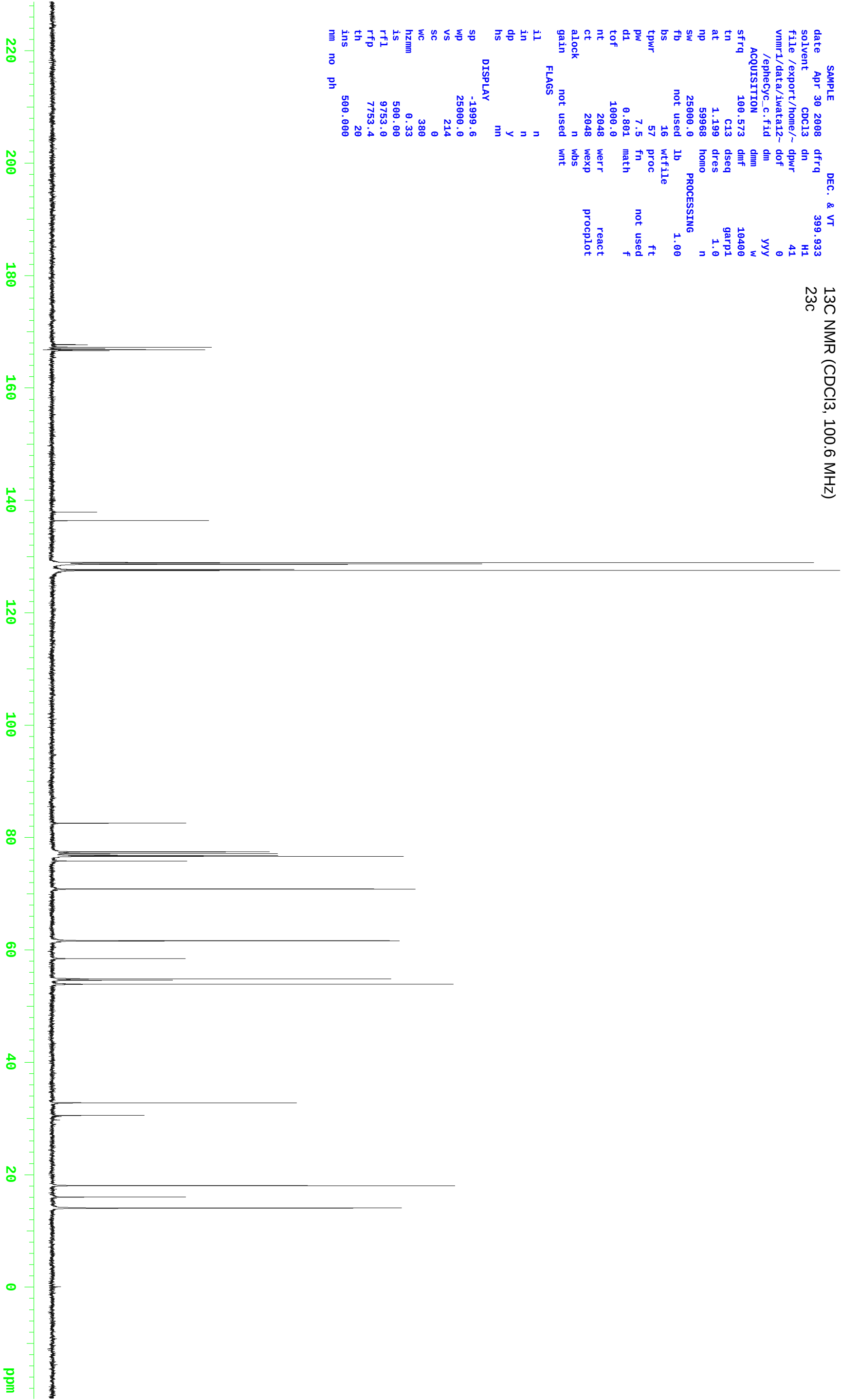
procp1ot

1H NMR (CDCl3, 400 MHz)
23C



SAMPLE		DEC. & VT	
date	Apr 30 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	41
nmr1/data/Iwata12-	dof		0
/epheCyc.c.fid	dm		yyY
ACQUISITION			
sfrq	100.573	dmf	10400
tn	C13	dseq	garpl
at	1.199	dres	1.0
np	59968	homo	n
sw	25000.0	PROCESSING	
fb	not used	lb	1.00
bs	16	wtfile	
tpwr	57	proc	ft
pw	7.5	fn	not used
dl	0.801	math	f
tof	1000.0		
nt	2048	werr	react
ct	2048	wexp	procplot
alock	n	wbs	
gain	not used	wnt	
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-1999.6		
wp	25000.0		
vs	214		
sc	0		
wc	380		
hzm	0.33		
is	500.00		
rfl	9753.0		
rfp	7753.4		
th	20		
ins	500.000		
nm	no	ph	

13C NMR (CDCl3, 100.6 MHz)
23c

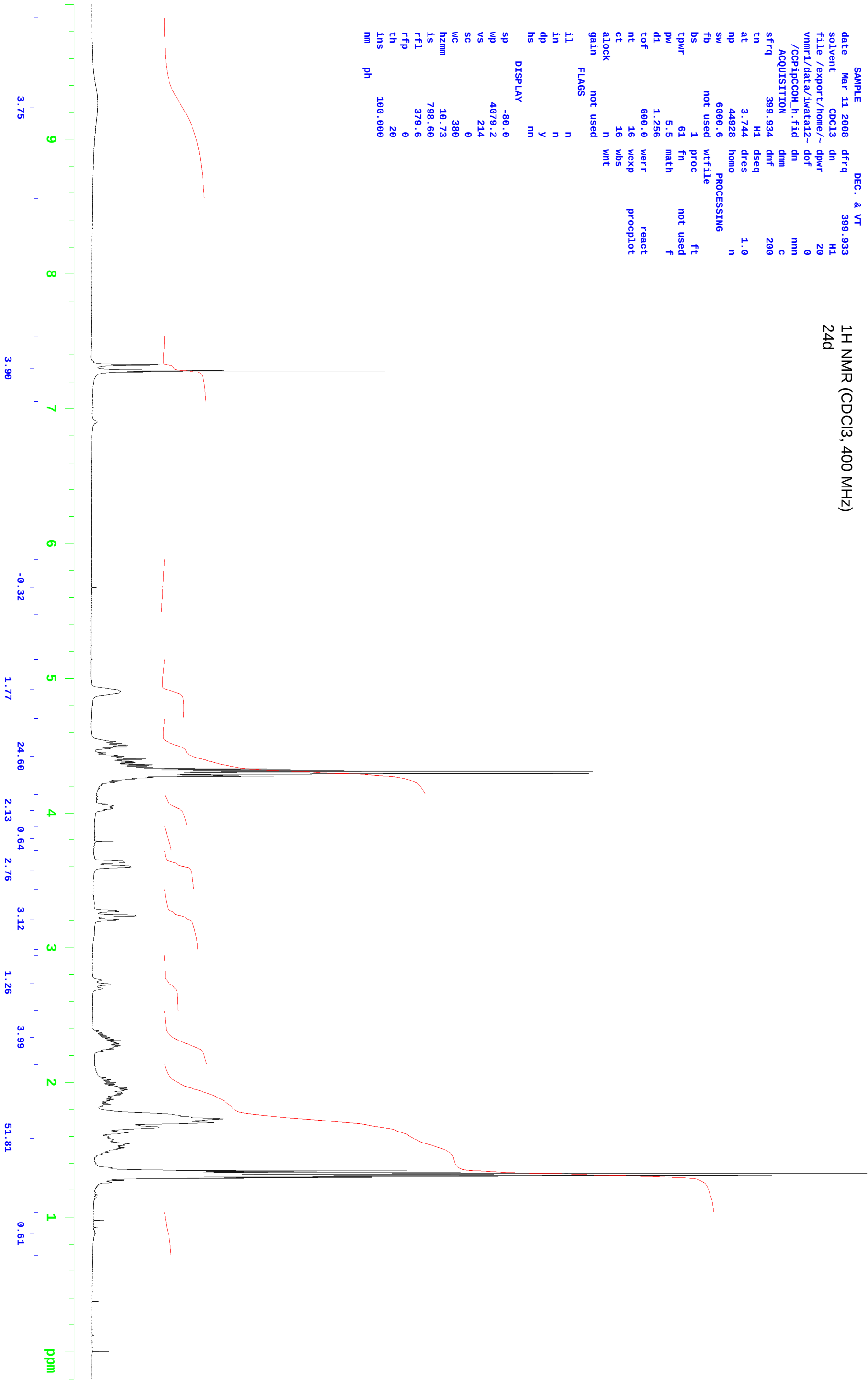


iwata12/CCPipCCOH

exp11 std1h

SAMPLE		DEC. & VT	
date	Mar 11 2008	dfrq	399.933
solvent	CDCl3	dn	H1
file	/export/home/~	dpwr	20
nmr1/data/iwata12~	dof		0
/CCPipCCOH_h.fid	dm		nmn
ACQUISITION			
sfrq	399.934	dmf	c
tn	H1	dseq	200
at	3.744	dres	1.0
np	44928	homo	n
sw	6000.6	PROCESSING	
fb	not used	wfile	
bs	1	proc	ft
tpwr	61	fn	not used
pw	5.5	math	f
dl	1.256		
tof	600.0	werr	react
nt	16	wexp	procp1ot
ct	16	wbs	
alock	n	wnt	
gain	not used		
FLAGS			
il	n		
in	n		
dp	y		
hs	nn		
DISPLAY			
sp	-80.0		
wp	4079.2		
vs	214		
sc	0		
wc	380		
hzmnm	10.73		
is	798.60		
rfl	379.6		
rfp	0		
th	20		
ins	100.000		
nm	ph		

1H NMR (CDCl3, 400 MHz)
24d



13C NMR (CDCl3, 100.6 MHz)
24d

SAMPLE DEC. & VT
date Mar 11 2008 dfreq 399.933
solvent CDCl3 dn H1
file /export/home/~ dpwr 41
vnmr1/data/iwata12~ dof 0
/CCPipCCOH.c.fid dm yyy
ACQUISITION dnm w
sfrq 100.573 dmf 10400
tn C13 dseq garp1
at 1.199 dres 1.0
np 59968 homo n
sw 25000.0 PROCESSING
fb not used lb 1.00
bs 16 wfile
tpwr 57 proc ft
pw 7.5 fn not used
dl 0.801 math f
tof 1000.0
nt 2000 werr react
ct 2000 wexp procp1ot
alock n wbs
gain not used wnt

FLAGS

il n
in n
dp y
hs nn

DISPLAY

sp -1995.8
wp 25000.0
vs 214
sc 0
wc 380
h2mm 0.38
is 500.00
rfl 9749.1
rfp 7753.4
th 20
ins 500.000
nm no ph

