

Solids T₂ measurements (static)

(1) set up parameters for 1D spectrum

rpar 1H_analog-bbo
sweep off
put on-resonance and optimize
set & write: o1, rg, sw (dw), td, p1

sfo1	
rg	
sw(dw)	
td	
p180	

(2) check optimal number of echos for last point

rpar cpmg_test-bbo <enter>
update and : o1, rg, sw (dw), td
sweep off
edlist vc two <enter>
 the first number is 2
 the second number is the last point
 save and close
zg <enter>
to evaluate the results:
 rser 1, process, wrp 2
 rser 2, process, dual with proc2
 determine the factor and increase or decrease accordingly
 click on "2D" to leave ~TEMP

(3) create & run pseudo-2D CPMG file

rpar cpmg_analog-bbo
update and : o1, rg, sw (dw), td
update vclist with number of pairs of delays
 (e.g. 100 points list 1 – 100)
update td{F1} and si{F1} to match the vclist
sweep off
zg

checklist	
	sweep off
	atma
	180 degree pulse
	on-resonance
	vc-list updated

(4) put each fid in its own expno (only needed if using bc and ls)

stof
 enter an expno to put the first fid (can't yet exist):
 enter the number of ser's (vc-list):

(5) process each fid with bc and ls

interactively adjust and phase the first fid in the series: lb, nsp, phase
mepls (multiefp plus processing with left shift)
 enter the lb for all expnos:
 enter the nsp for all expnos:
after it has finished, check the results in dual (e <uparrow>)
multititle (add the same name to them all)
(for difference spectra: *multidiff*)

(6) create an integral list (AI scale)

inegrate the first fid in the series and save as an intrng file
wmisc intrng *name*
multi_integ3
 choose expnos: 0
 enter the starting expno:
 give the number of fids (# sers, vclist entries):
 name of intrng file: *name*

(7) put it into Excel

From Excel:
Open → D:/data/diro/nmr/dir/expno/procno/dir_int.txt
Files of type: Text Files (*.txt)
Next → space → finish

```
stof (sertofid) :

int max, exp1, proc1;
char string[80];

GETCURDATA          /* take 2D dataset from screen */

/* initialize variables */
max=100; exp1=expno+1;

/* get info from user */
GETINT("Enter starting EXPNO - it cannot currently exist: ", exp1)
GETINT("Enter # of ser's: ", max)

TIMES(max)          /* this many times */
  RSER(loopcount1+1, exp1, 1) /* write to fid */
  exp1++;           /* increase expno for writing fid */
  REXPNO(expno)
END
QUITMSG("--- finished ---")
```

mepls (multiple experiments processing plus left-shift):

```
/* ** ^A -C+_+_*_ *****/
/*      mepls              05.09.2007              */
/* *****/
/*      Short Description :              */
/*      This AU program performs multiple "efp" on increasing expnos with bc and ls. */
/* *****/
/*      Keywords :              */
/*      multiple efp bc ans ls              */
/* *****/
/*      Description/Usage :              */
/*      This AU program performs multiple "efp" on increasing expnos with bc and ls. */
/* *****/
/*      Author(s) :              */
/*      Name      : Rainer Kerssebaum              */
/*      Organisation : Bruker Analytik              */
/*      Email     : rainer.kerssebaum@bruker.de              */
/* *****/
/*      Name      Date      Modification:              */
/*      rke      900815  created              */
/*      ysb      070905  added bc and left shift              */
/* *****/
/*
$Id: mepls,v 1.5 2007/09/05 11:39:49 gsc Exp $
*/
```

```
#include <lib/util.h>
```

```
int first, max, lineb, lnsnp;
char string[80];
```

```
GETCURDATA
```

```
/* initialize variables */
```

```
first = expno; max = 100; lineb = 100; lnsnp = 4;
```

```
/* get info from user */
```

```
GETINT("Enter LB: ", lineb)
```

```
GETINT("Enter the number of left shift points: ", lnsnp)
```

```
GETINT ("Enter first expno to process : ",first)
```

```
GETINT ("Enter number of expnos : ",max)
```

```
WPAR("tmpmefp","proc")
```

```
expno = first;
```

```
TIMES(max)
```

```
  RPAR("tmpmefp","proc")
```

```
  BC
```

```
  LS
```

```
  EFP
```

```
  IEXPNO
```

```
END
```

```
DEXPNO
```

```
/* delete remaining files */
```

```
DELPAR("tmpmefp")
```

```
QUITMSG("--- multiefp finished ---")
```

```

/**** ^^A -*_C++*_ *****/
/*      multidiff      27.08.1990      */
/*****/
/*      Short Description :      */
/*      Calculate the difference spectra between expnos      */
/*      in differenc directories.      */
/*****/
/*      Keywords :      */
/*      diff, difference      */
/*****/
/*      Description/Usage :      */
/*      Calculate the difference spectra between expnos in      */
/*      different directories. The      */
/*      program assumes the current dataset is the one to be      */
/*      subtracted. The difference is stored in procno 2.      */
/*****/
/*      Author(s) :      */
/*      Name      : Rainer Kerssebaum      */
/*      Organisation : Bruker Analytik      */
/*      Email      : rainer.kerssebaum@bruker.de      */
/*****/
/*      Name      Date      Modification:      */
/*      rke      900827      created      */
/*      ysb      070909      modified      */
/*****/
/*
$Id: multidiff,v 1.3 2000/07/12 11:39:43 gsc Exp $
*/

```

```

int      exp1,proc1,ne;
char      nm1[20];

```

```

GETCURDATA      /* take 1D dataset from screen */

```

```

/* initialize variables */

```

```

exp1=expno; proc1=2; strcpy(nm1, name); ne=100;

```

```

/* get 1D data set from user */

```

```

GETSTRING("Enter name of second data set: ", nm1)
GETINT("Enter starting EXPNO of second data set: ", exp1)
/*GETINT("Enter target PROCNO: ", proc1)*/
GETINT("Enter # of Fids: ", ne)

```

```

TIMES(ne)      /* this many times */

```

```

WRP(2)
DATASET(name,expno,procno,disk,user)
DATASET2(nm1,exp1,procno,disk,user)
DATASET3(name,expno,procno,disk,user)
STOREPAR("DC",-1.0)
ADD
IEXPNO
++exp1;

```

```

END

```

```

/* all done */

```

```

QUITMSG("--- multidiff finished ---")

```