

Kinetics

- (1) Starting from a series of 1D files:
 - a. wrpa *newname2* (this will be your 2D file)
 - b. re *newname2*
 - i. eda <return> parmode → 2D → Save (OK, OK)
 - ii. eda <return> F1 → TD → number of FIDs → Save
 - iii. edp <return> F1 → SI → 2^n > number of FIDs → Save
 - c. fdtoser <return> (will get a list of questions)
 - i. Enter name of 1D series (give the directory name of the original data)
 - ii. Enter starting EXPNO: (what's the number of the first FID?)
 - iii. Enter starting PROCNO: (usually 1)
 - iv. Enter # of FIDs: (how many exnpo's did you run?)
- (2) The file must contain a "vdlist" which contains the time points of your x-axis
 - a. Copy the file "vdlist" from shared documents to the folder of the experiment number (data/directory owner/nmr/ *newname2*/expno/vdlist)
 - b. Create a list of time points (*e.g.* origin, <ctrl>Q: $0 + ((i-1) * 293)$, where zero is the starting value and 293 is the increment in seconds – use $(ns+ds)*(aq+d1)$ to get the correct value for *your* data).
 - c. Copy the list of time points into the vdlist file (open with notepad).
- (3) xf2 <enter> (executes fourier transform of F2 dimension (FID) only)
- (4) phase <enter> (select a row – middle mouse, mov (move) to windows 1-3, ph0, ph1, save & return)
- (5) abs2 <enter> (automatic baseline correction (like abc/abs) using absg settings in F2 only)
- (6) edt1 <enter> (fill in the table with the following)
 - a. NUMPNTS (number of original 1D FIDs)
 - b. FITTYPE (toggle between area and intensity)
 - c. LISTTYP (vdlist)
 - d. LISTINC (1)
 - e. Cursor (2 , but it will choose it automatically . . .)
 - f. DRIFT (20, this is the number of points left and right of the peak position for the computer to identify the peak)
 - g. START (1, usually start with the first FID in the series)
 - h. INC (1, increment each FID by one)
 - i. FCTTYPE (linear)Save to exit
- (7) rspc <enter> (replaces with 1D spectra. To return to the 2D view, change PARMOD in eda to 2D. Note that typing parmode <space> 2D <enter> will **not** work in this case – it's a bug.)
- (8) utilities → define points → (middle mouse / append) → return
- (9) integration → define integral areas → save & return
- (10) edo <enter> CURPRIN (change to screen)
- (11) t1/t2<enter> (goes to the graphing window called t1/t2)
- (12) pd <enter> (calculates the **area** or **intensity** of the chosen peaks according to steps: 6b, 7, 9 – starts with the first peak #1, according to 6g)

- (13) `simfit <enter>` (will put the results, including x-axis time points, y-axis intensities/areas, and linear fit, on the screen).
- (14) To save the file:
 - a. open `D:\data\directory owner\nmr\ newname2\1\pdata\1`
 - b. rename the file called `simfit.txt`
- (15) in XWIN-NMR in the t1/t2 window, to get the results for peak #2
 - a. type: `nxtp <enter>`
 - b. `simfit <enter>`
 - c. repeat step (14) to save the file