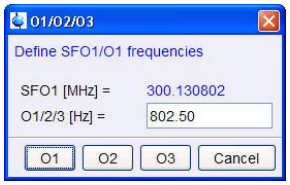
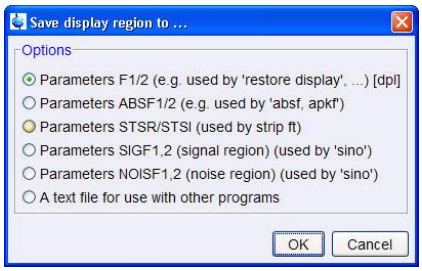
Calibration of 90˚ pulse

+ First run a one scan 1D proton spectrum. Use ns of 1 and ds of 0.

+ Expand a peak near the middle of the spectrum and select 
+ Click on or near the peak you have selected and select [O1] from the dialog box that opens.



+ Right-click on the spectrum and select **[Save Display Region To…]** in the drop-down menu, and select the “Parameters F1/2” option.

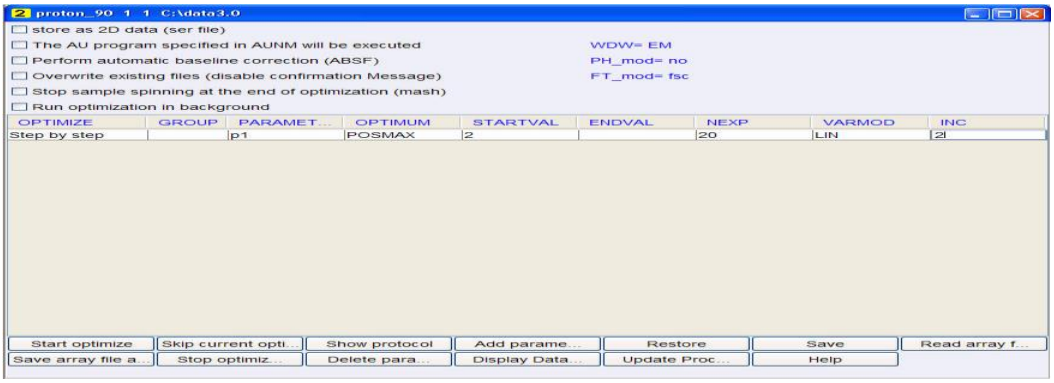


+ In the **[AcquPars]** tab, change the following:

PULPROG = **zg** (not zg30)
D1 = **10**
DS = **0**
NS = **1**

+ In the **[ProcPars]** tab, change **ph_mod** to “**pk**”

+ Type ***popt***

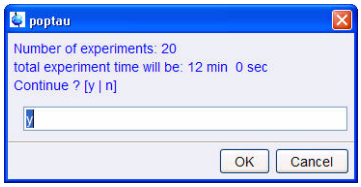


+ Make the following changes in the window:

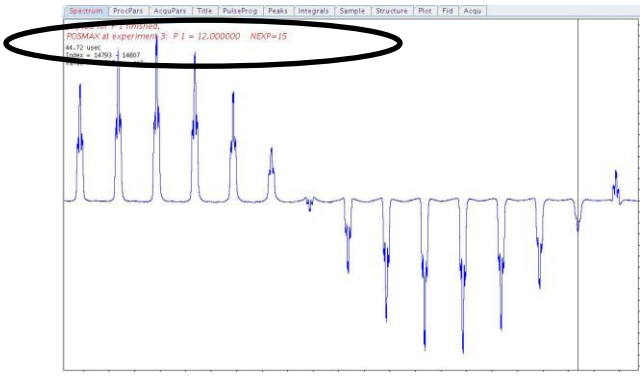
PARAMET = **P1**
STARTVAL = **2**
ENDVAL = **50** (or NEXP = 25 and INC = 2)
Make sure all cells get populated.

+ Click on Save then Start optimize

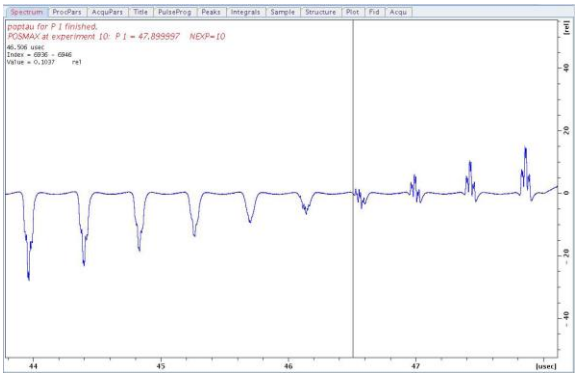
+ In the following box, answer “y” to overwrite old data, then click **[OK]**.



When the experiment is finished, the 90 deg pulse will be displayed. Select the [Spectrum] tab to see the entire array and use the button to put all the spectra on scale. Note that EXPNO is 999.



+ Fine tune the calibration from where the peaks cross from negative to positive (spectra 14 and 15 in the above example) using the ***popt*** command again, adjusting the values accordingly and look for the spectrum closest to the null point.



To use this value in subsequent experiments, you need to type (instead of the Prosol button):
> ***getprosol 1H p1 –PLdB1*** where **p1** is the value for the 90˚ pulse you just determined and **–PLdB1** is the power level for the pulse in –dBW units. These latter values are probe-dependent.