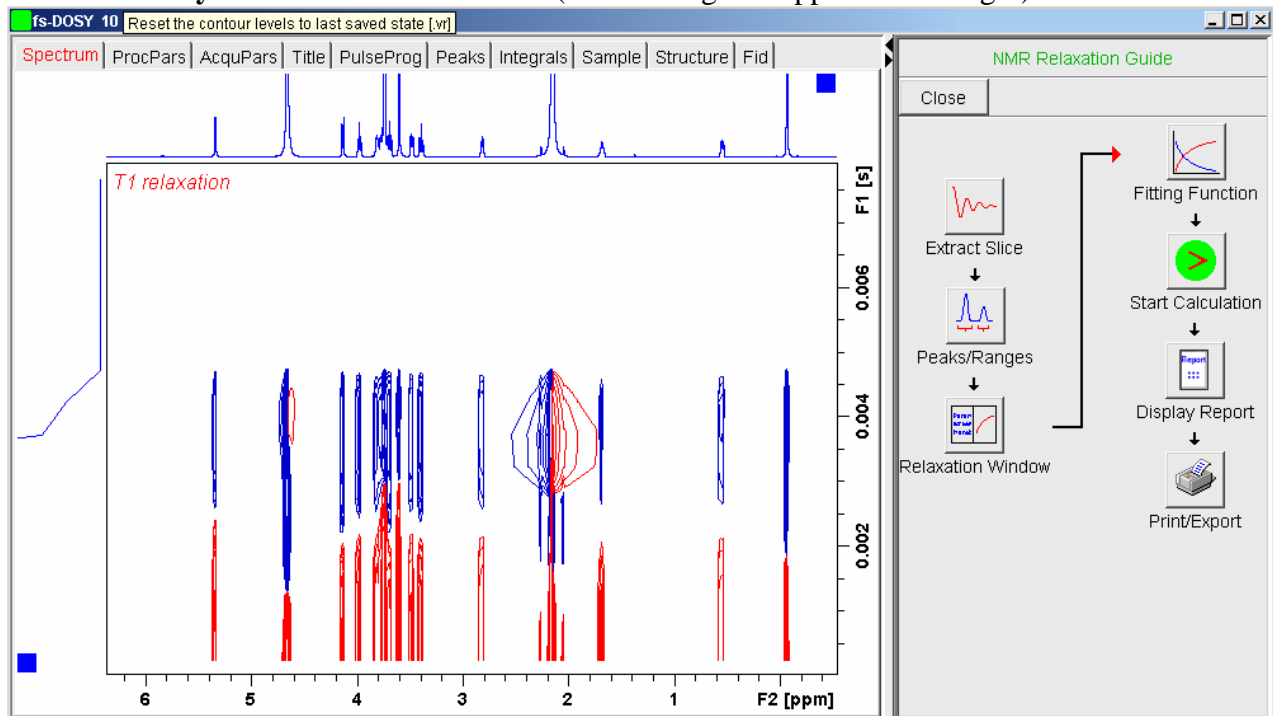


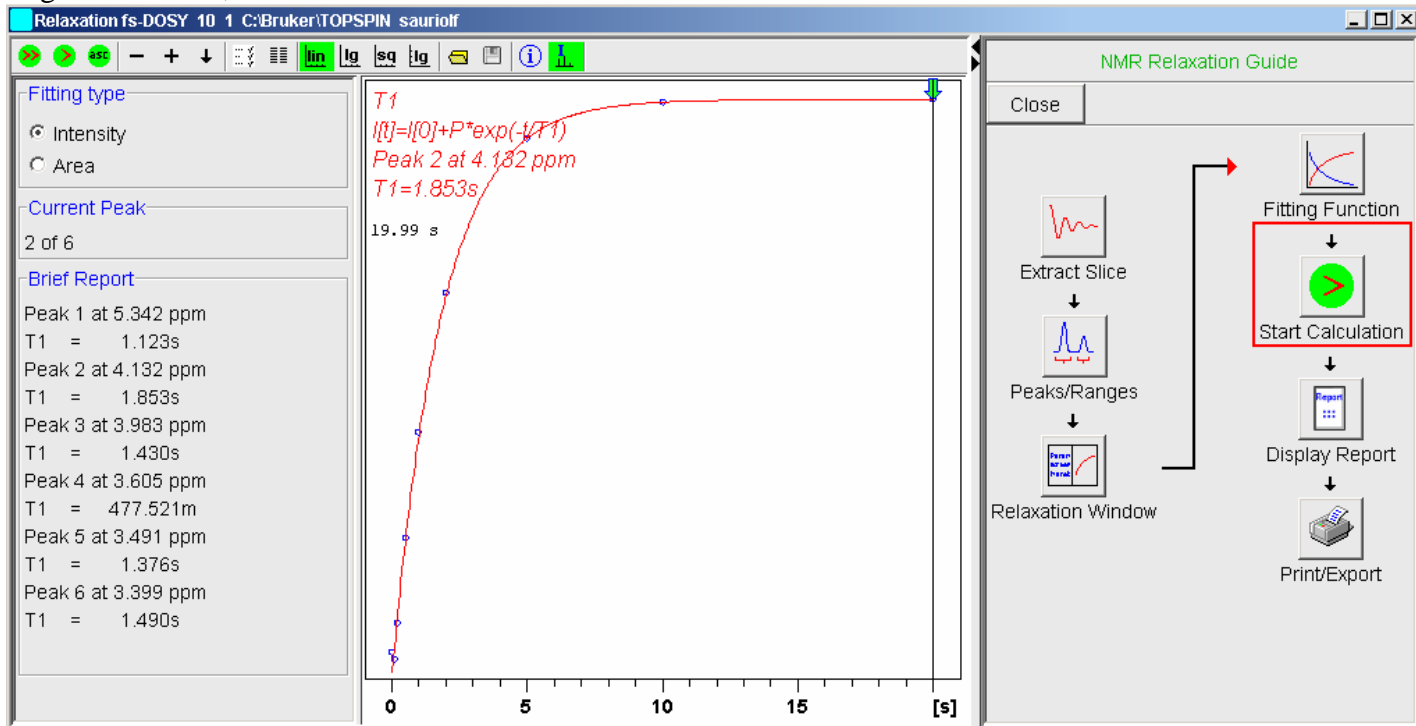
## Processing relaxation experiment ( $T_1$ ) in TOPSPIN

1. Select “**procpars**” tab and click on “**P**” to display parameters. Make the following changes:  
**Si[F1]=16,**  
**PH\_mod[F2]=pk**  
**PH\_mod[F1]=no**
2. Type “**xf2**” then Type “**abs2**”
3. Select the ‘**spectrum**’ tab
4. Click in “**Analysis → T1/T2 Relaxation**” (relaxation guide appear on the right)








5. Click on “**Extract Slice**” : in popup menu, click on “**Spectrum**”
6. Enter “**Slice number =1**” and Click on “**OK**”
7. 1D spectrum will come on screen. If the spectra is not well phased, go in phase mode, phase it : **save as 2D**, also **save and return**.
8. Note: when you have a slice on screen, notice the numbered button on the far right of the top toolbar:  
 : the “**1**” is for the 2D relaxation, the “**2**” is for the relaxation Guide, the “**3**” is for the 1D slice. After Phasing the 1D slice and saving as 2D, you will need to activate “1” and reapply Fourier transform “**xf2**” and baseline correction “**abs2**”
9. Click on “**PeaksRanges**”
10. Define Integral regions by clicking with left mouse
11. Click on the Save button on integral toolbar and select “**Export Regions to Relaxation module**”
12. In relaxation guide, Click on “**Relaxation window**” : enable “**intensity**”, Click **OK**.
13. In guide window, Click on “**Fitting Function**” Select “**uxnmrT1**” in popup window

14. In guide window, Click on “Start Calculation”.



15. In the toolbar on top of the active window, The 2 first button will execute calculation:

-  will calculate all peaks and give calculation result as a Brief Report (like in figure above)
-  Will calculate the current peak
-  The “minus” and “plus” buttons navigate to previous or next peak
-  Will show the full report. This can also be done by selecting “Display Report” in Guide window.
-  Will show/hide the text in graphic window.