

NMR data processing software

Delta

NMR Software

v5.0

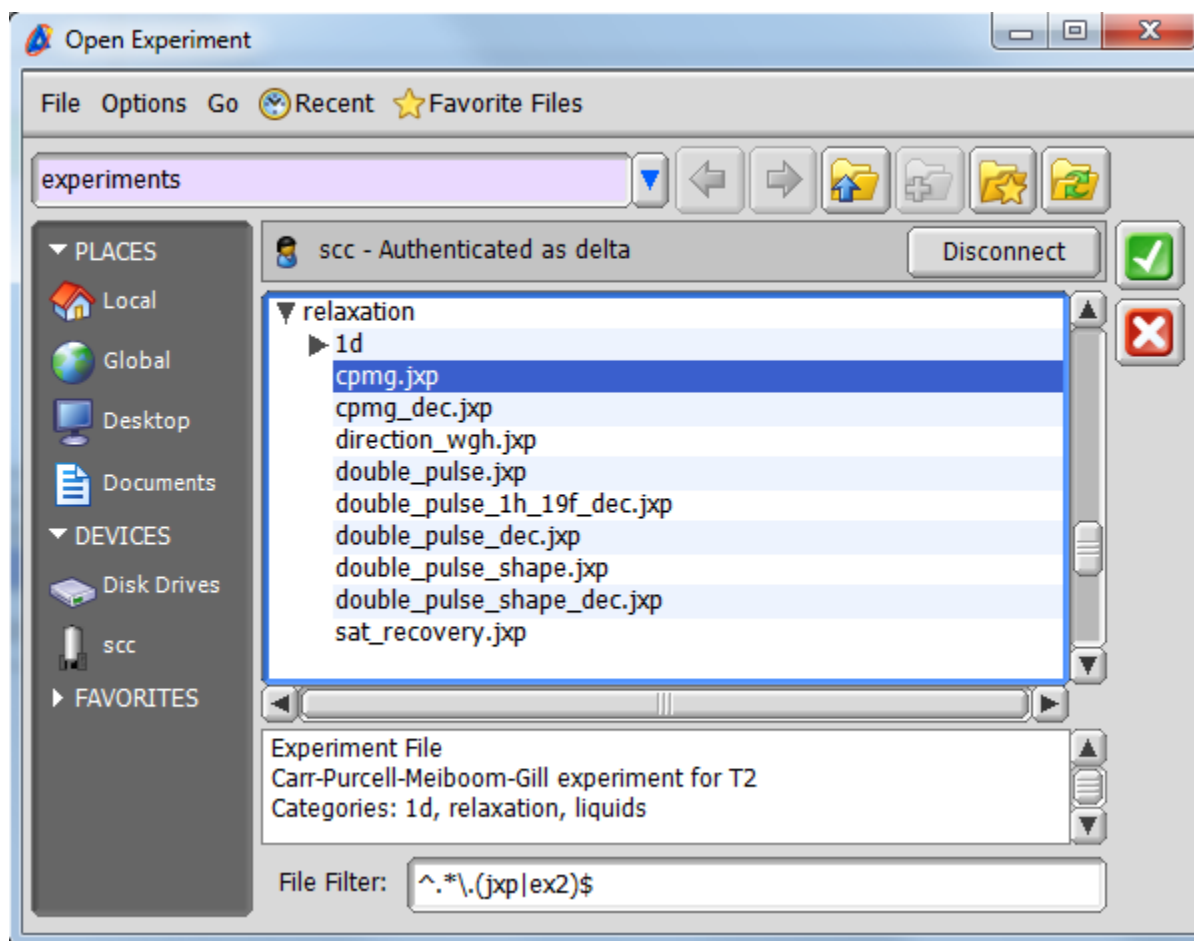


T2测定及数据处理



1. T2测定

➤ 选择脉冲序列cpmg



- 打开编辑，修改参数recvr_gain为10， scans为8， prescans为1

The image displays two screenshots of the 'Experiment Parameters' dialog box, showing the configuration of acquisition parameters.

Top Screenshot: The 'Acquisition' tab is selected. The parameter **recvr_gain** is highlighted with a red box and set to 10.

Bottom Screenshot: The 'Acquisition' tab is selected. The parameters **scans** and **x_prescans** are highlighted with a red box. **scans** is set to 8, and **x_prescans** is set to 1. A tooltip for **scans** indicates the formula $\text{scans} = 8 * n$.

Parameter	Value
recvr_gain	10
x_domain	Proton
x_offset	5[ppm]
x_sweep	15[ppm]
x_points	16384
scans	8
x_prescans	1
mod_return	1
x_acq_time	2.73241[s]
x_resolution	0.36598[Hz]

➤ 设置delay_list, tau_step及relaxation_delay的值→设置完成, 检查各参数→submit job

Experiment Parameters

Header Instrument Acquisition Pulse Diagram ★ Favorites

+ Add Parameters ?

x_pulse 7[us] x90

x_atn

delay_list 1[s] 点击此处弹出右侧窗口

tau_step 0.2[s] 可根据谱图质量进行适当优化, 值越小, 越利于消除J耦合影响, 但不能小于5ms

tau_interval 99.993[m]

loop_number 5

calc_delay 1[s]

relaxation_delay 7[s] > 5T1值

repetition_time 9.73241[s]

obs_dante_presatura

dante_presat

dante_offset 5[ppm] x_offset

dante_pulse 4[us]

dante_interval 96[us] 0.1[ms] - dante_pulse

Set delay_list

Dimension

☐ None

☒ Y

☐ Z

☐ A

☐ B

☐ C

☐ D

☐ E

Array Type

☐ Listed 去掉勾选

☐ Linear

☐ Bi-linear

☒ Exponential 选择exp形式

☐ Logarithmic

Start 10[ms]

Stop 2[s] 终点值 > T2值

Points 8

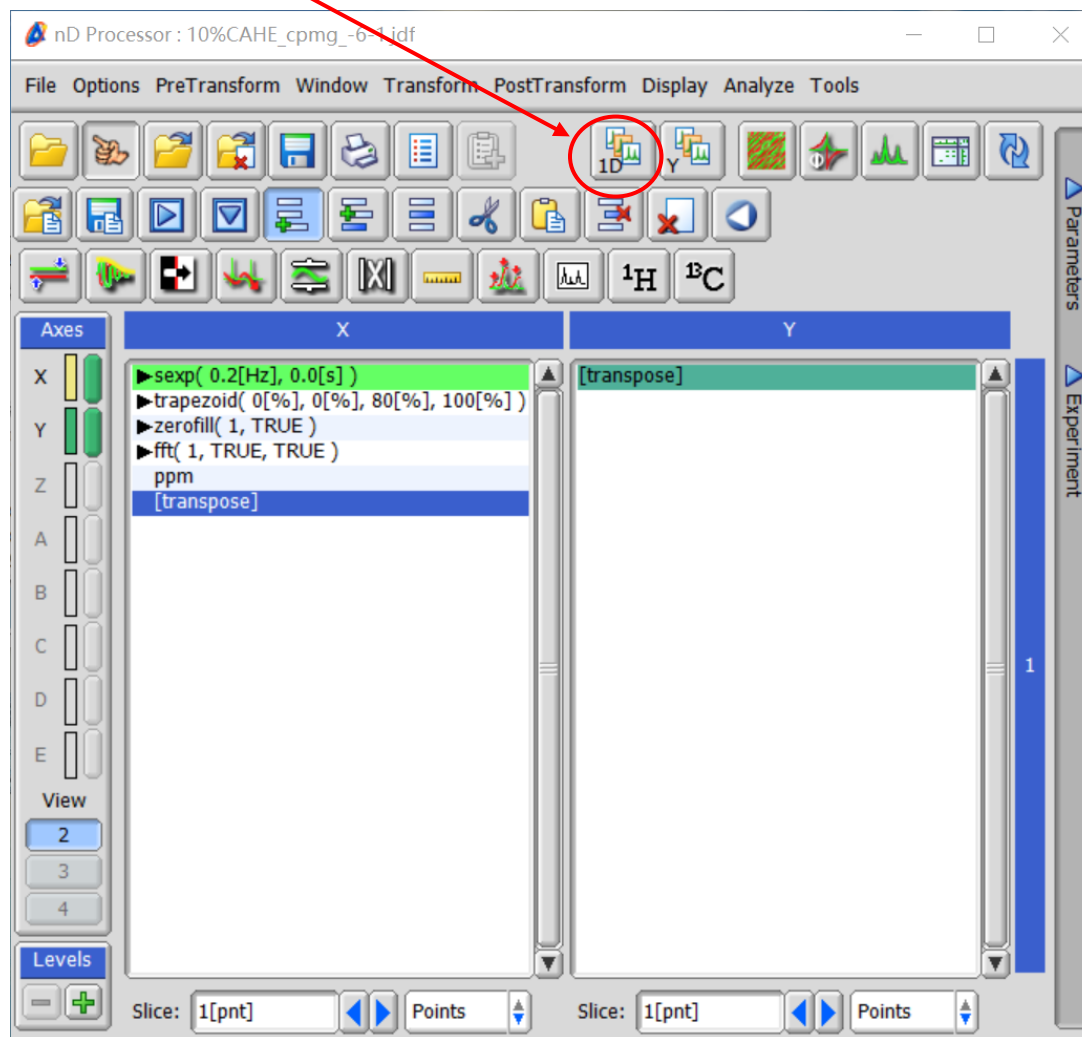
s, 440.14204[ms], 938.23456[ms], 2[s]

Set Value 点击set value, 完成设置, 关闭此窗口

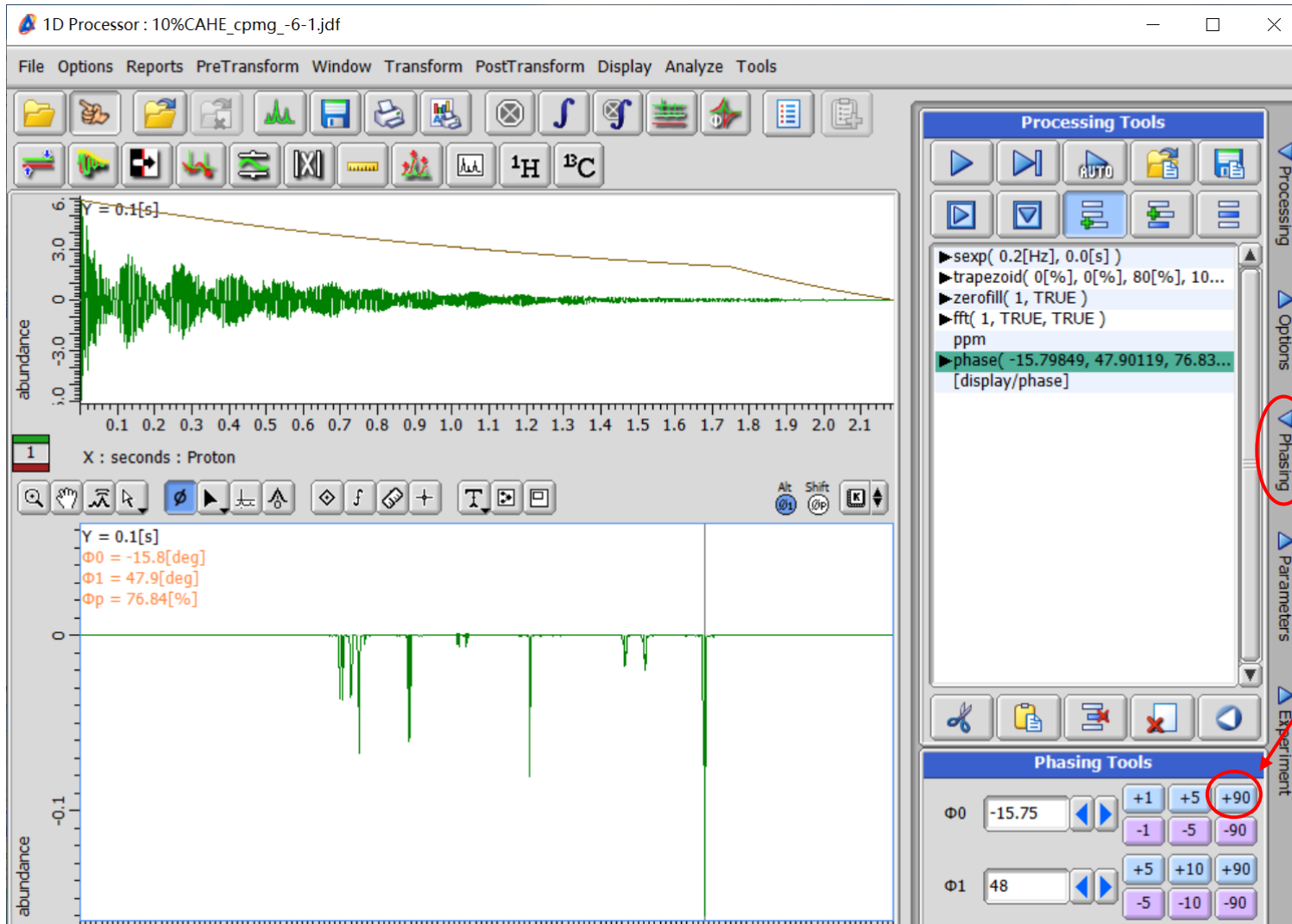
Cancel

2. T_2 数据处理

- 打开T2数据，点击1D谱图，调相位

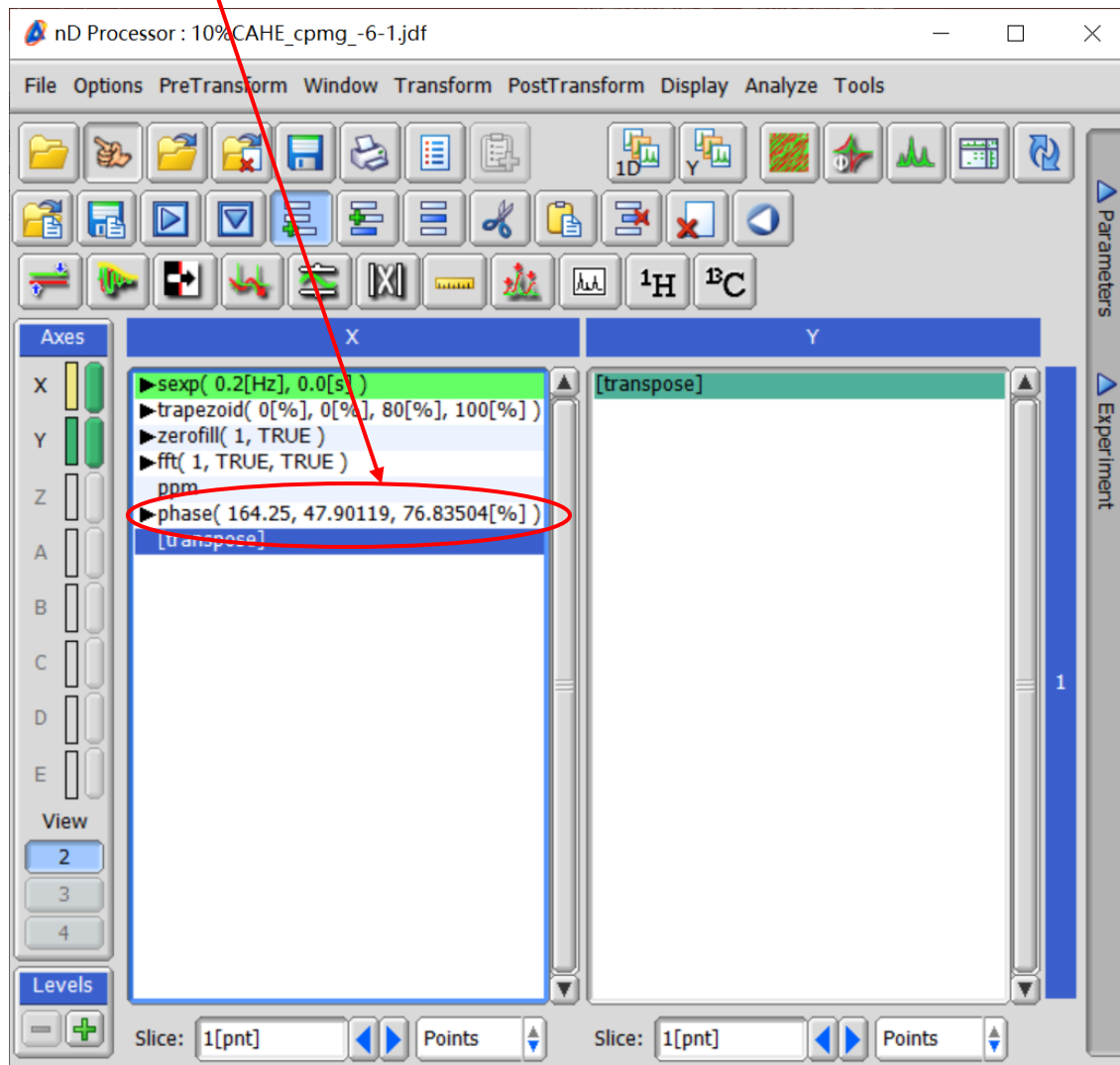


➤ 调相位时需要调整 180° 使谱图翻转朝上

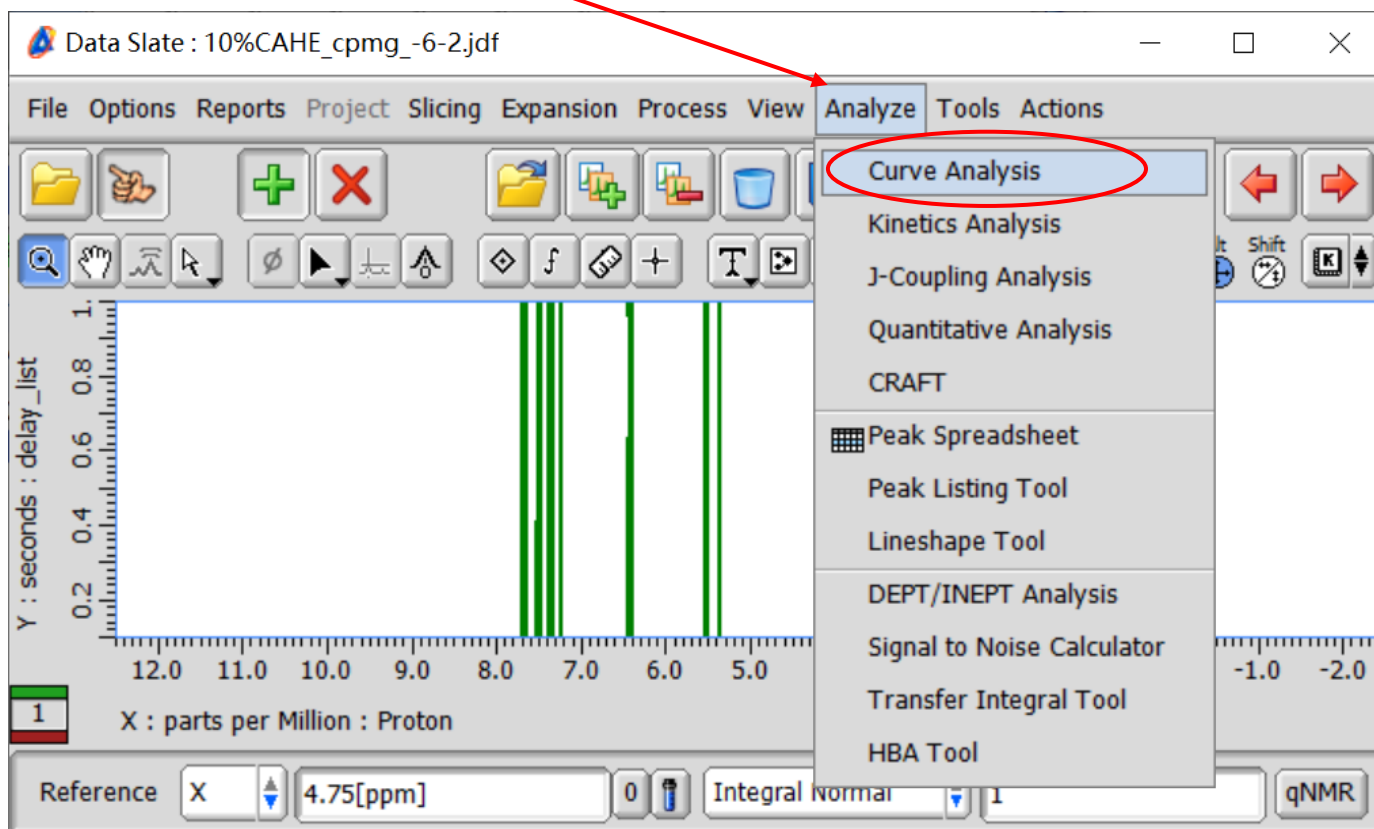


可点开phasing
窗口在0级相
位处点两次
+90直接翻转

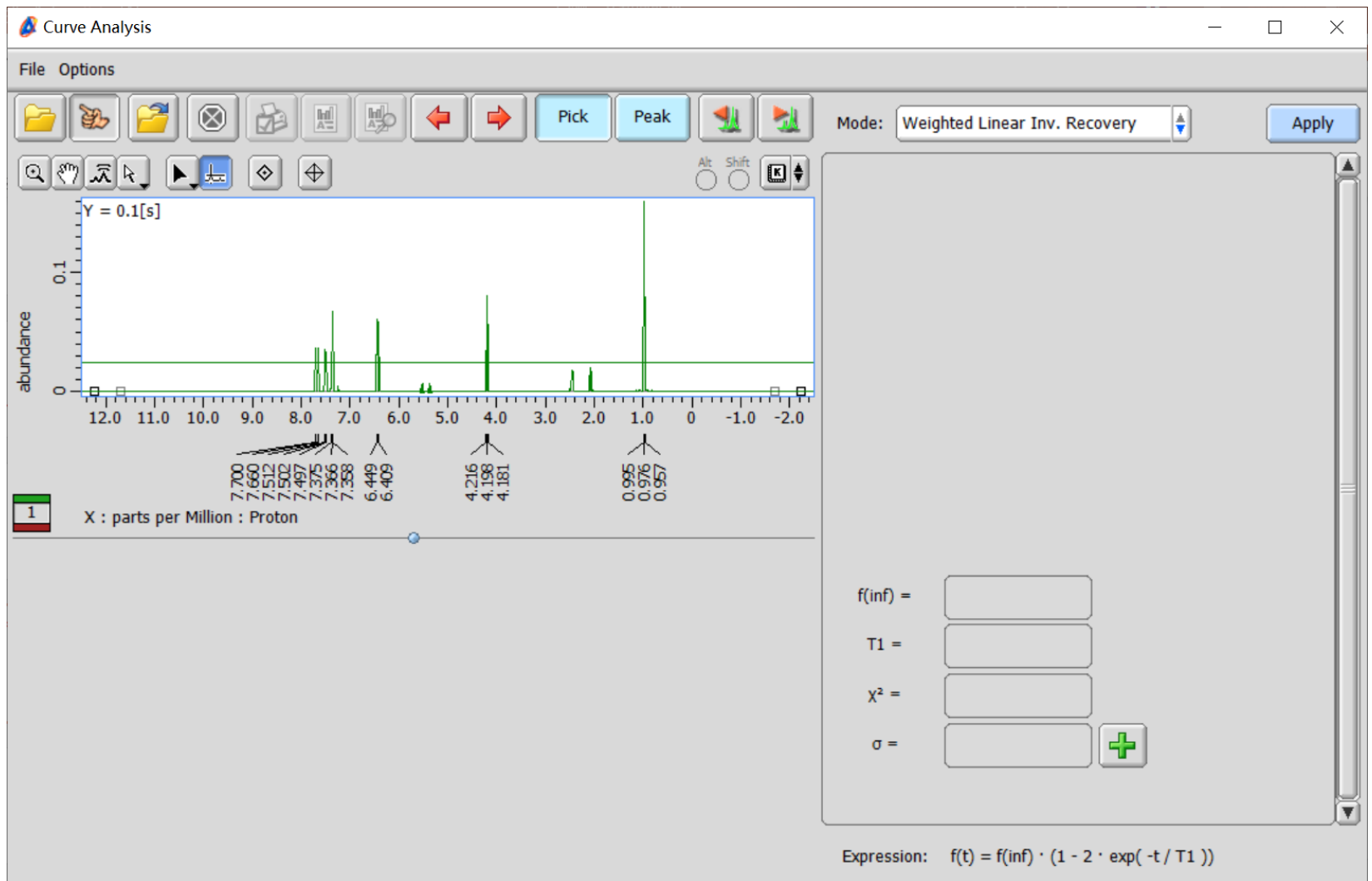
- 调完相位后，可在列表中看见多了相位处理，再打开谱图显示 



➤ 打开curve analysis



➤ 点击  调整取峰阈值→再点击  标峰→再选择  取峰



- 选择要计算T2的峰，选择拟合方式Weight Linear Spin Lock或Unweight Linear Spin Lock→点击Apply，自动计算出T2值

