

NMR data processing software

Delta

NMR Software

v5.0



J分辨实验测定



1.同核J分辨实验

同核J分辨实验常用的脉冲序列为：**homo_j_resolved.jxp**

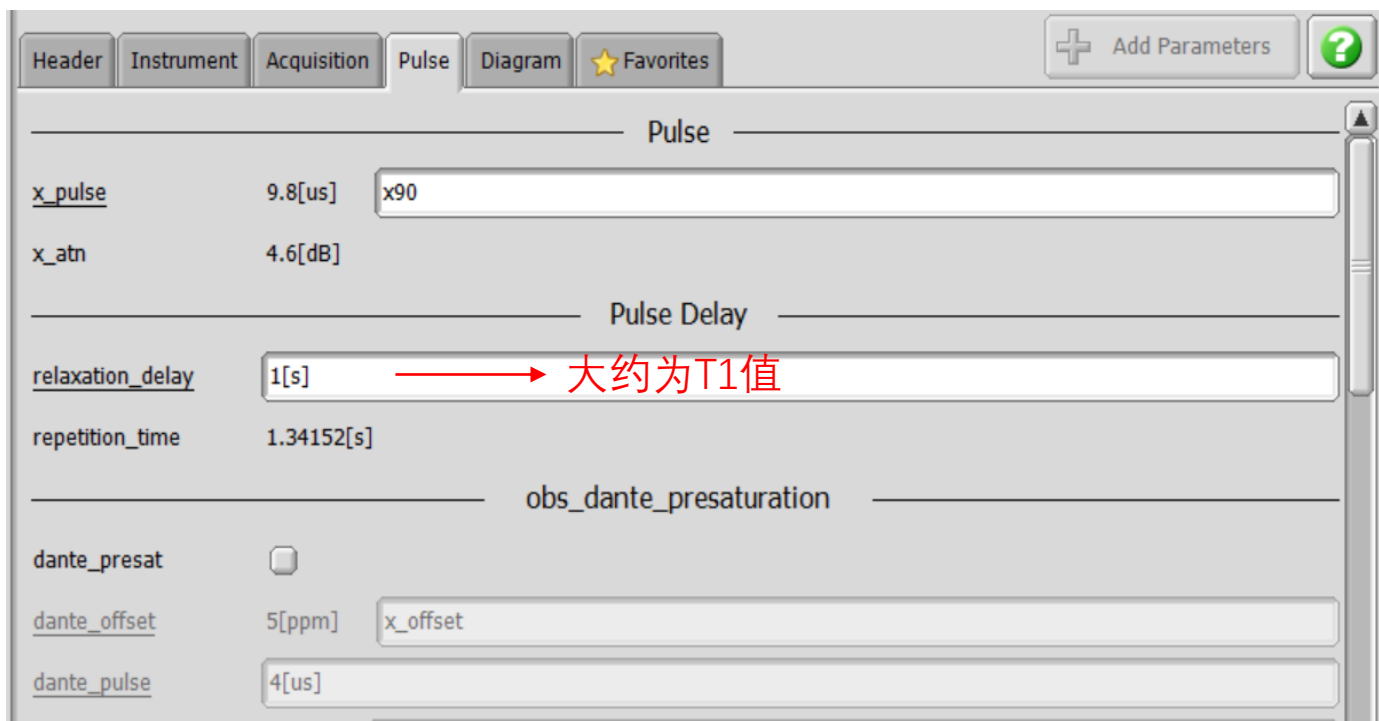
➤ 设置参数：x轴点数，扫描次数，Y轴的宽度，Y轴的点数

Experiment Parameters

Header Instrument Acquisition Pulse Diagram ★ Favorites + Add Parameters ?

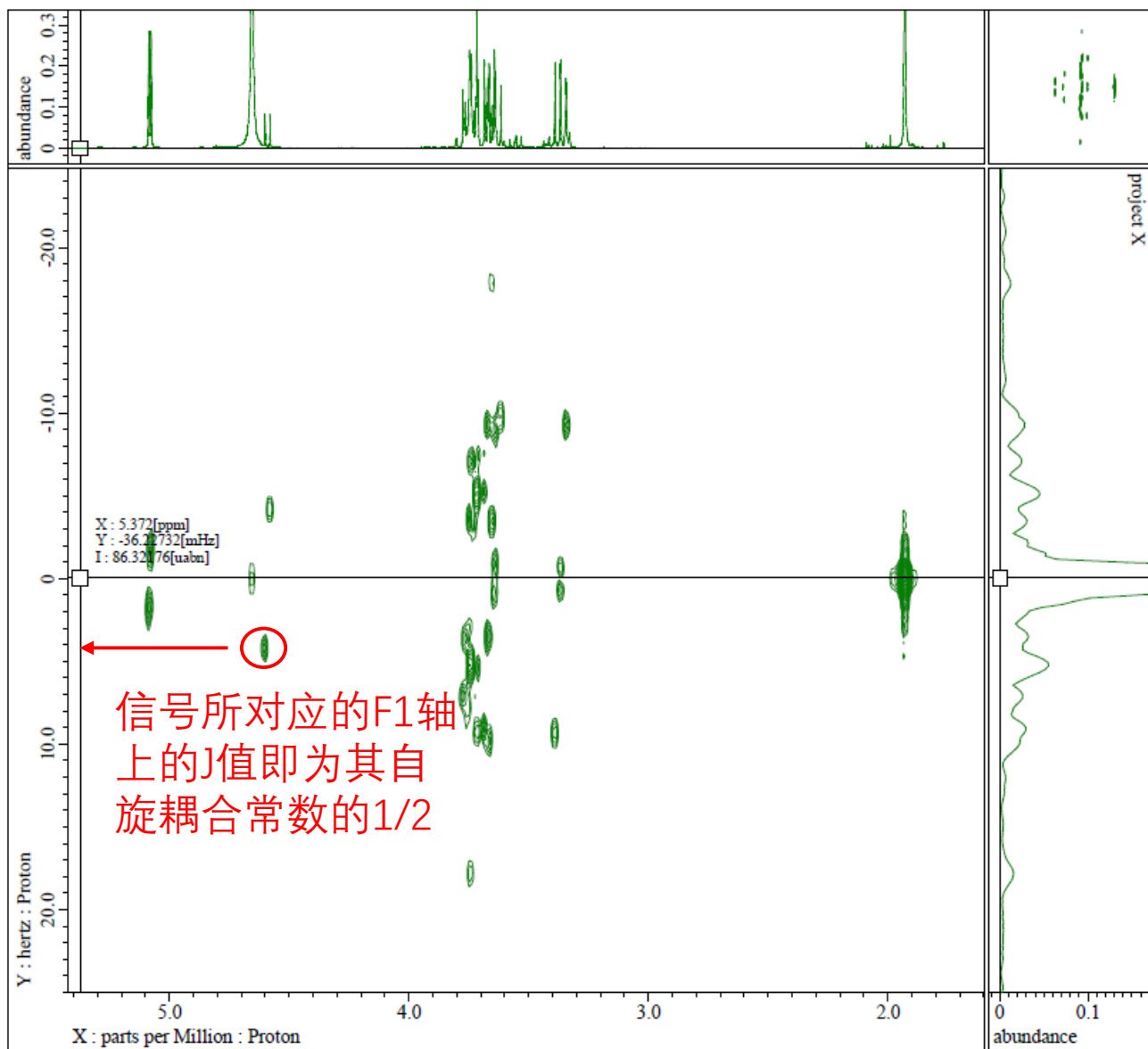
x_domain	Proton
x_offset	5[ppm]
x_sweep	15[ppm]
x_points	2048 → 影响X轴的分辨率，可根据需求调整
scans	4 → 扫描次数必须为4的倍数
x_prescans	4
mod_return	4
y_sweep	30[Hz] → 大于最大的耦合常数值，也即为多重峰的最大宽度
y_points	64 → 影响y轴分辨率，谱宽较大时需增加点数
x_acq_time	0.34152[s]
x_resolution	2.92809[Hz]
y_acq_time	2.13333[s]

➤ 设置参数：弛豫等待时间



设置完参数，提交实验。

➤ 谱图说明



2. 异核J分辨实验

同核J分辨实验常用的脉冲序列为：**hector_j_resolved.jxp**

➤ 设置参数：x轴点数，扫描次数，Y轴的宽度，Y轴的点数

Experiment Parameters

Header Instrument Acquisition Pulse Diagram Favorites

x_domain	Carbon13
x_offset	100[ppm]
x_sweep	250[ppm]
x_points	2048 → 影响X轴的分辨率
scans	4 → 扫描次数必须为4的倍数
x_prescans	4
mod_return	4
y_sweep	250[Hz] → 大于最大的耦合常数值
y_points	64 → 影响y轴分辨率，谱宽较大时需增加点数
x_acq_time	81.49192[ms]

➤ 设置参数：弛豫等待时间

The screenshot shows a software interface with several tabs: Header, Instrument, Acquisition, Pulse, Diagram, and Favorites. The 'Pulse' tab is selected. The interface is divided into sections: 'Pulse', 'Pulse Delay', and 'irr_decoupling'.
- Under 'Pulse':

- x_pulse: 8.7[us] (with a dropdown menu showing 'x90')
- x_atn: 8[dB]

Under 'Pulse Delay':

- relaxation_delay: 1[s] (with a red arrow pointing to the text '大约为T1值')
- repetition_time: 1.08149[s]

Under 'irr_decoupling':

- irr_noe:
- irr_decoupling:
- irr_domain: Proton

➤ 谱图说明

