# Delta Tips

Select Expansion – Linearize.

### NMDT\_0033

# Visualization of Arrayed Data



JEOL RESONANCE

## < How to linearize arrayed data >

It is possible to open an arrayed data in Data Slate and to use the "**Linearize**" function in order to arrange all the 1D spectra side by side. This is useful if you measure pulse width or diffusion coefficient, for instance. In this example, we will show how to measure pulse width.

#### Data Slate 🙆 Data Slate : adm single pulse dec 13c pwcheck-1-2.jdf File Options Reports Project Slicing Expansion Process View Analyze Tools Actions Separate Slices 2 🕂 🖌 🛚 😂 🗳 🛞 🖇 4 - Lavers 🐴 💏 🖪 Track Zooms Refer to User's Manual on how to o\_\_\_\_adm\_single\_pulse\_dec\_13c\_pv Set Step Interval 8 collect arrayed data (i.e. pseudo 2D Set Dimension obs\_width 14.0 data) on JEOL NMR spectrometers. In Expand 0.11 Expand... this example, obs\_width\_90 was microseconds Delete Expansion 8.0 varied from 1 $\mu$ s to 19 $\mu$ s (step 0.5 $\mu$ s). Linearize 2:0 All the 1D spectra were stored as a 2:0 single pseudo-2D data file. 40.0 50 0 30.0 20.0 X : parts per Million : Carbon13 - 0 **X** Data Slate : VECTOR File Options Reports Project Slicing Expansion Process View Analyze Tools Actions + × 🚰 🔖 🏪 🕤 🗖 😂 🕰 🛞 🗲 🔶 🌩 🚰 🖏 🐴 💏 📧 🕈 adm\_single\_pulse\_dec\_13c\_pwcheck-1-2.j nicrosec single pulse\_dec 0.0 40.0 50.0 30.0 20.0 1 X : parts per Million : Carbo The plot of signal intensity vs. 180 360 2 abundance **~**..... pulse width consists of 37 oneւս և և և և և և dimensional <sup>13</sup>C spectra arranged 7.5 15.5 17.5 13.5 11.5 95 side by side. X : microseconds : obs\_width\_90 Data Slate : VECTOR - 0 **X** File Options Reports Project Slicing Expansion Process View Analyze Tools Actions 🔁 🔥 + × 🦥 🔖 🏊 🕤 🗖 😂 🖉 🛞 🗲 🔶 🔶 +&I & & + 🐴 💏 🖪 To simplify the plot, it might be adm\_single\_pulse\_dec\_13c\_pwcheck-1-2.jdf microseo convenient to zoom in on a 0.0 single pulse\_dec specific peak (e.g. 38.6 ppm) 44.0 43.0 42.0 39.0 38.0 37.0 36.0 45.0 40.0 35.0 34.0 33.0 32.0 41.0 rather than a group of peaks. 1 X : parts per Million : Carbon13 1809 360° abundance 6 2.5 14.5 18.5 6.5 10.5 X : microseconds : obs\_width\_90