

Delta Tips

NMDT_0066

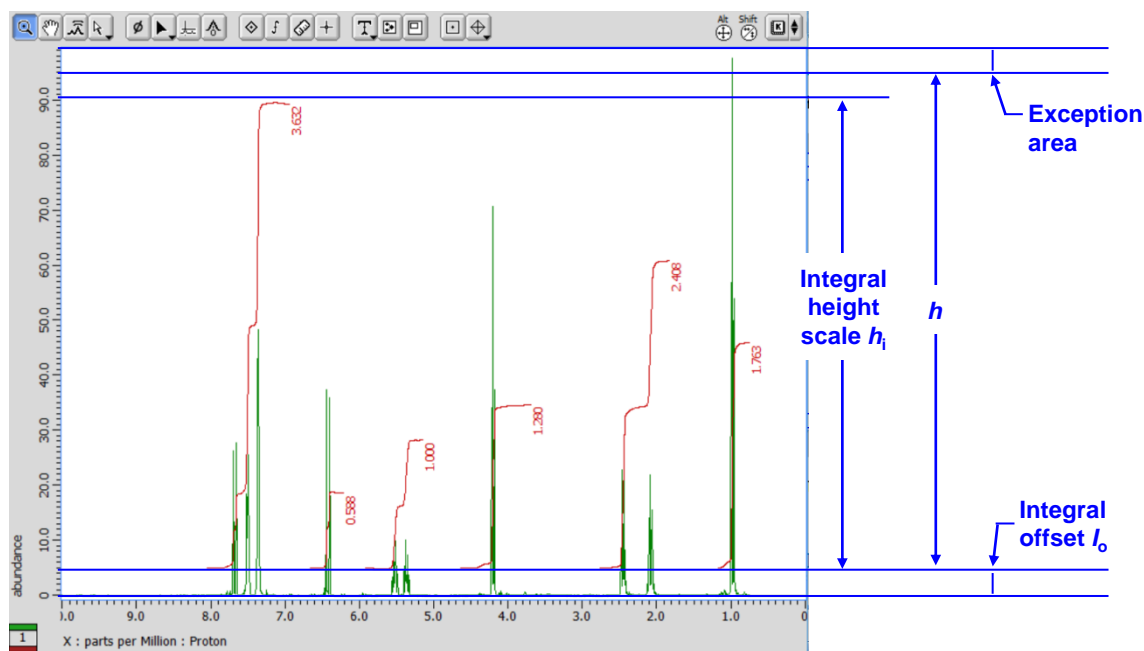
How to Set Offset and Height of Integral Curve

NMR data processing software

Delta
NMR Software
v5.0



In Delta software, integral curves are scaled and displayed automatically. It is possible to change the default value of integral offset and height by using the **Preferences**.

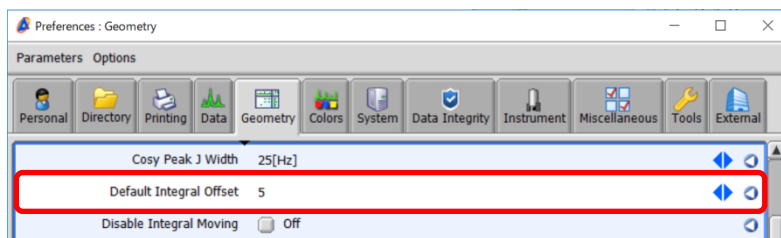


The integral curve is automatically set by the software as shown in the figure above. The integral offset I_o is the distance from the peak threshold level. The integral height scale h_i is a scaling factor for the integral height, the constant of proportionality of integral height to $h = 1$. The h is the height from integral offset I_o to the exception area. Note that the integral height scale h_i corresponds to the tallest integral curve.


- ★ The height of exception area depends on the size and resolution of your screen.
- ★ It is possible to adjust the integral curve manually. Refer to Delta Tips **Interval and Baseline of Integration** (⇒NMDT_0060).

How to set Default Integral Offset I_o :

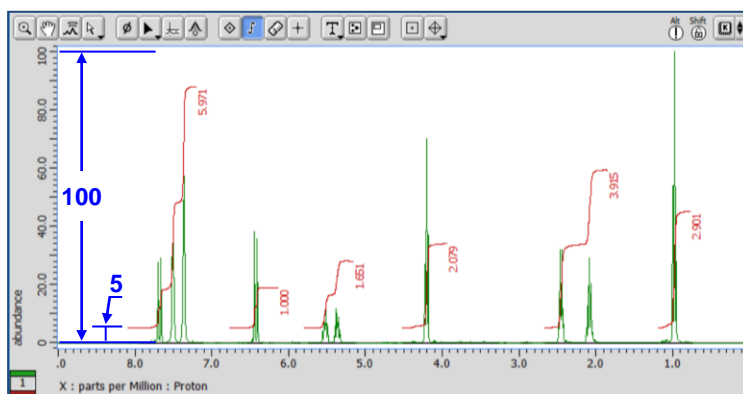
- ① Select **Options — Preferences** in the **Delta Console** window to display the **Preferences** window.
- ② Input the offset value into the **Default Integral Offset** box in the **Geometry** tab.



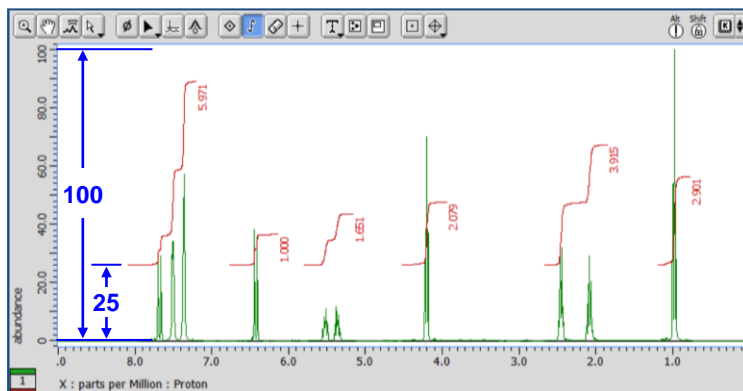
Preferences—Default Integral Offset

★ If you need to reset the current value to the default value, press the  button.

③ Select the data to apply the change.



Default Integral Offset = 5 (Default)




Default Integral Offset = 25

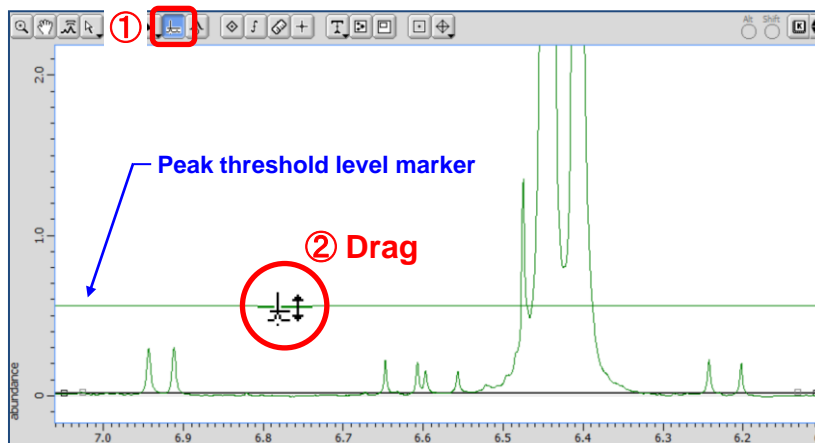
★ Peak Threshold Level

The peak threshold level is automatically determined by the algorithm which is set in **Baseline Detection Method** in the **Preferences** window. It is possible to adjust the peak threshold level manually. Note that it is also possible to change its algorithm setting in the **Preferences** window.

How to adjust the peak threshold level manually:

① Click the  button to display the threshold level markers on the data.

- ② Select the peak threshold level marker and note that the cursor has changed into  .
Drag and drop it where needed.



How to change the default setting:

- ① Select **Options — Preferences** in the **Delta Console** window to display the **Preferences** window.
- ② Change the default setting in the **Geometry** tab as follows:

[Baseline Detection Method]:

Traditional1 : Delta V4.3.6 algorithm (Default)

Traditional2 : Algorithm used in JEOL NMR data processing software ALICE2

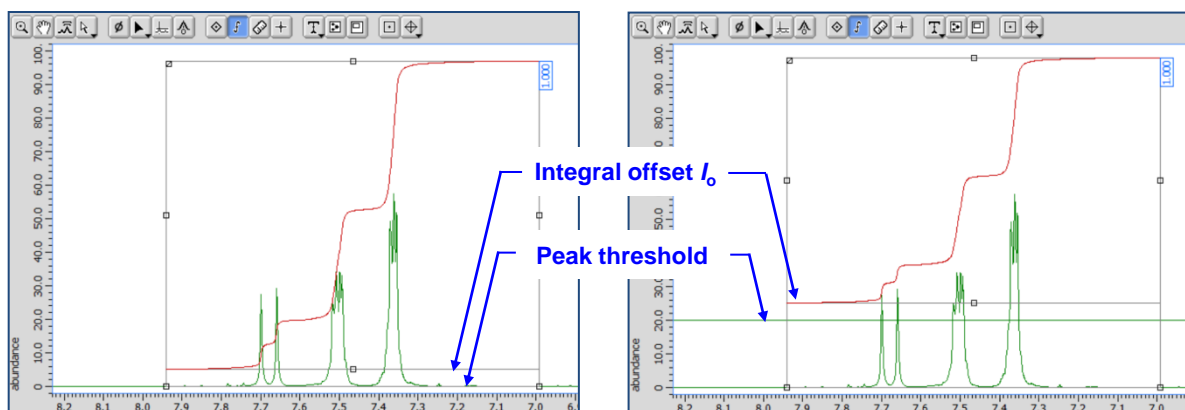
Histogram : Delta V5.0.0 original algorithm

[Baseline Threshold Scale]:

Set a scaling factor to finely adjust the peak threshold level.

[Baseline Noise Scale]:

Set a scaling factor to finely adjust the noise threshold level.



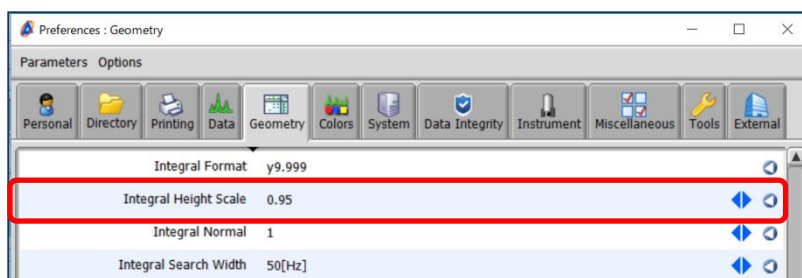
Before (left) and after (right) adjustment of the peak threshold level (default integral offset = 5)



Integral Height Scale h_i :

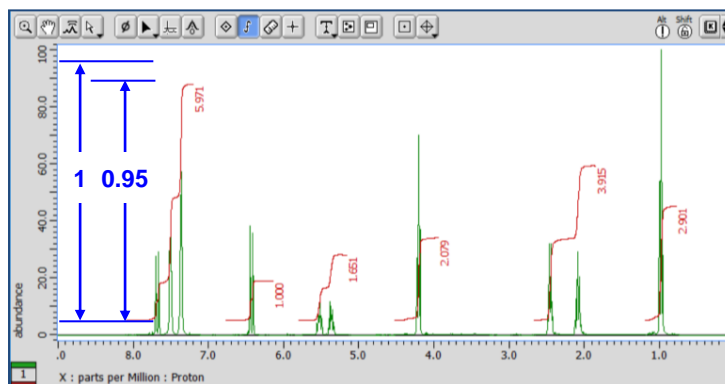
- ① Select **Options — Preferences** in the **Delta Console** window to display the **Preferences** window.
- ② Input the integral height scale h_i value into the **Integral Height Scale** box in the **Geometry** tab.

★ Refer to the figure on page 1 for setting of the integral height h_i .

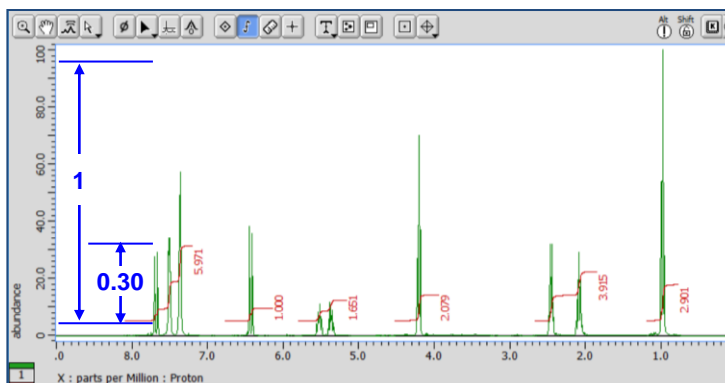


Preferences—Integral Height Scale

- ③ Select the data to apply the change.



Integral Height Scale = 0.95 (Default)



Integral Height Scale = 0.30