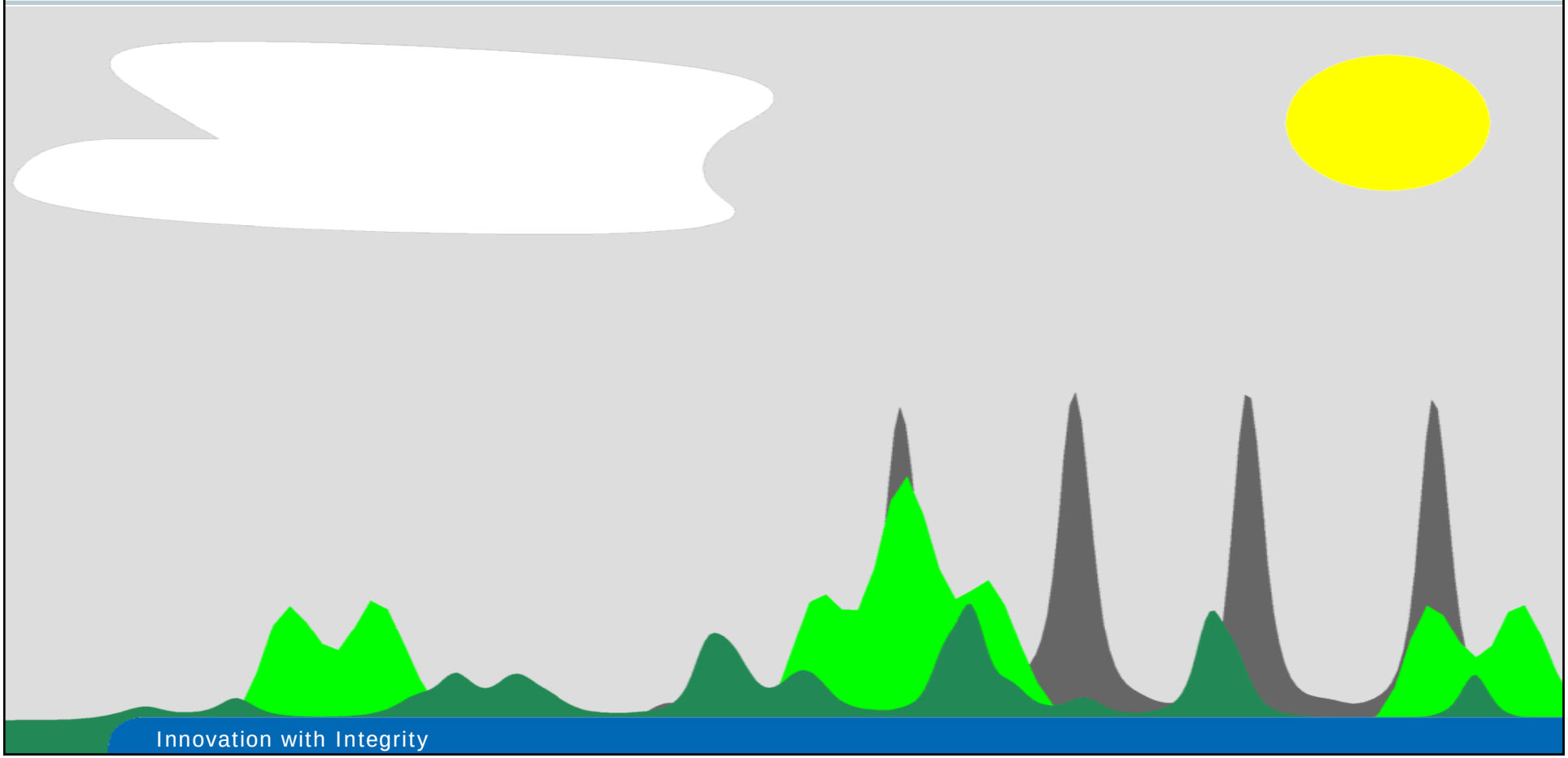
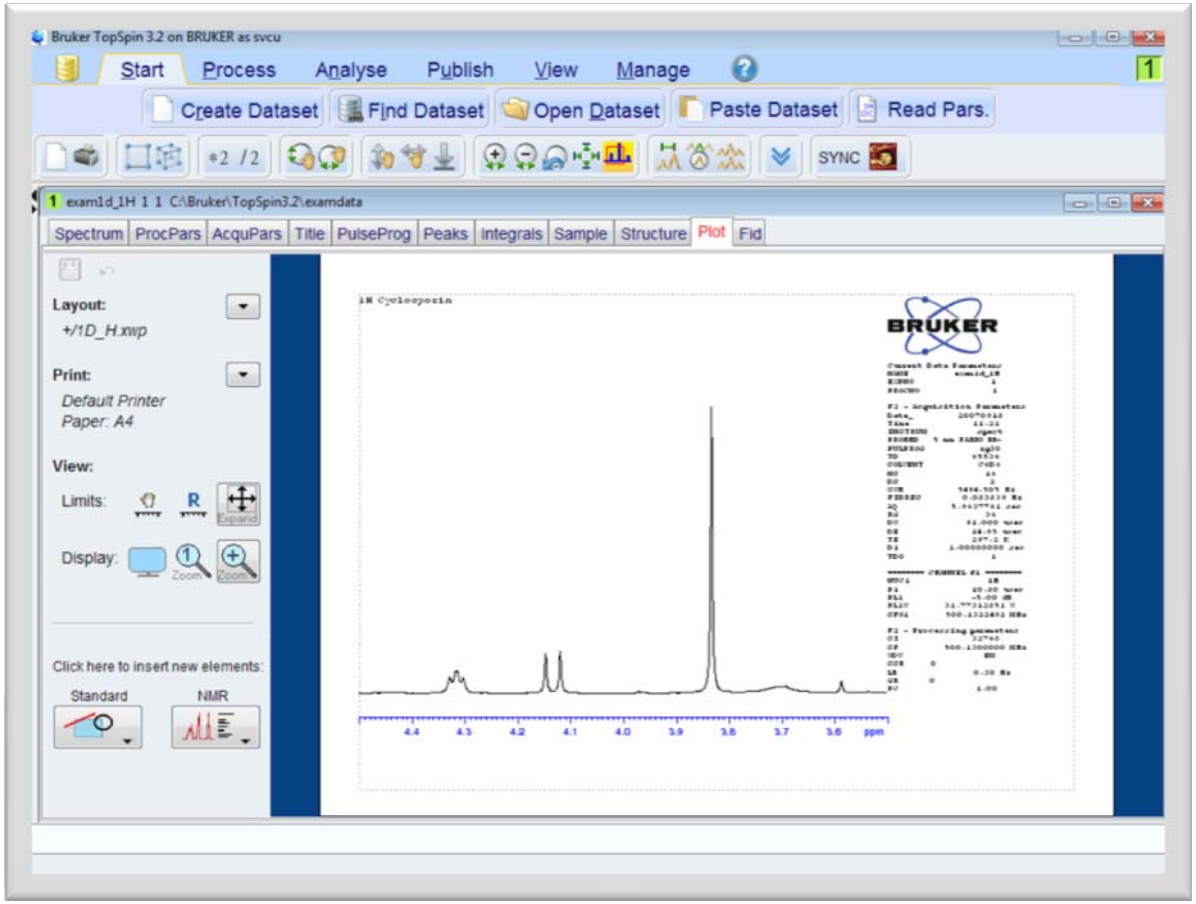
# Topspin plot editor

Clemens Anklin
Bruker BioSpin Corp
Avance-I course
Billerica MA, June 10. – 13. 2013

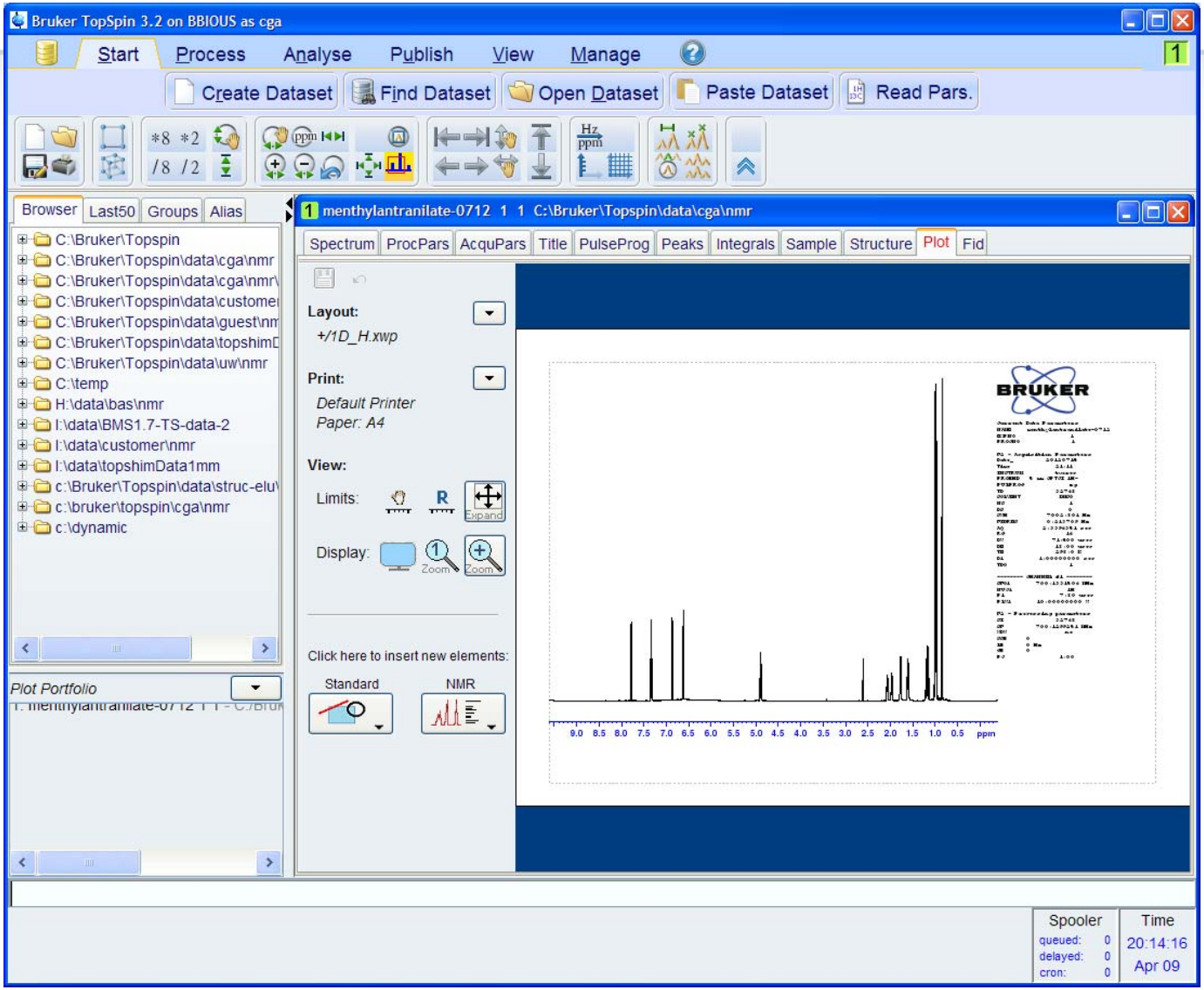


# Plotting and creating output with Topspin 3.2



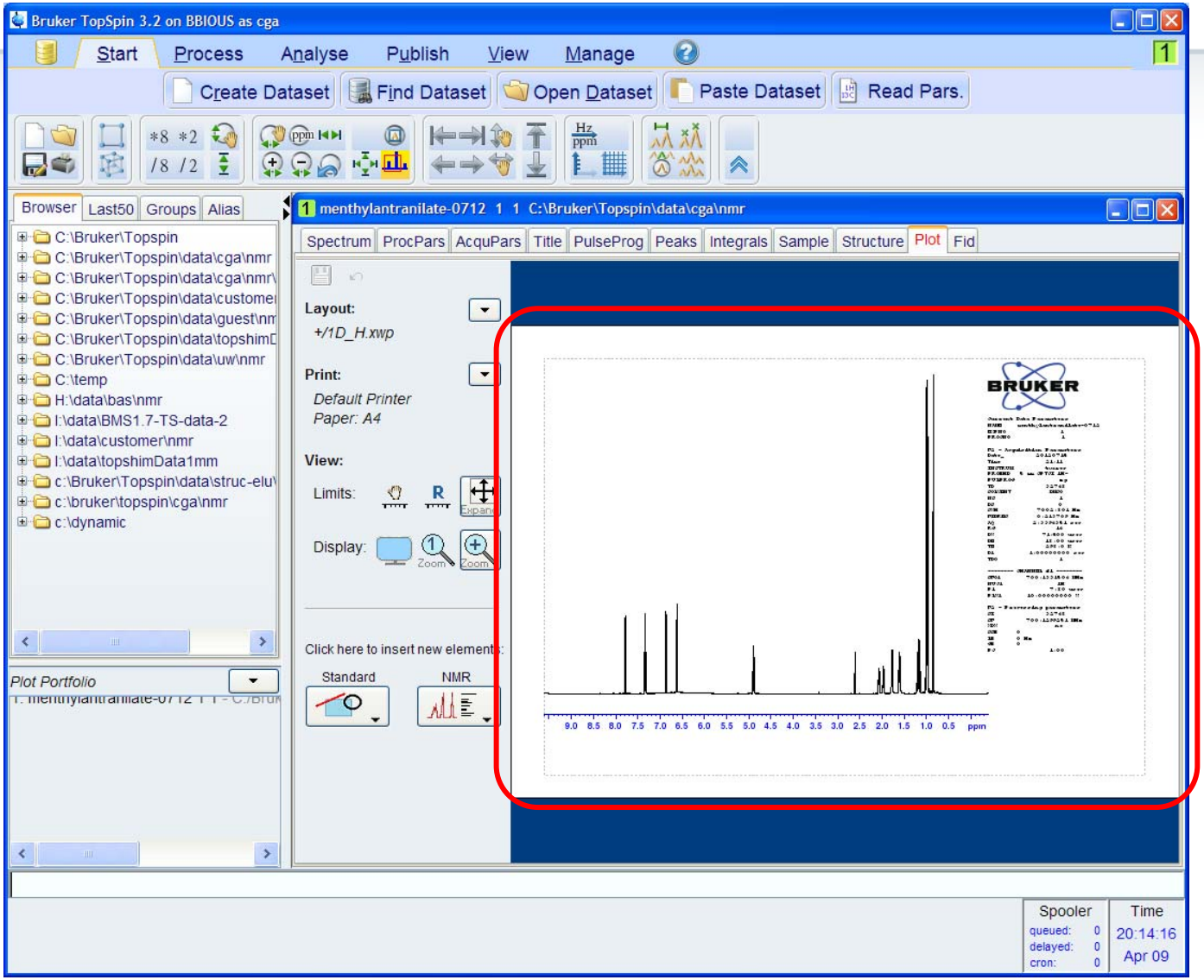
# The user interface

Overview



# The user interface

Plot area



# The user interface

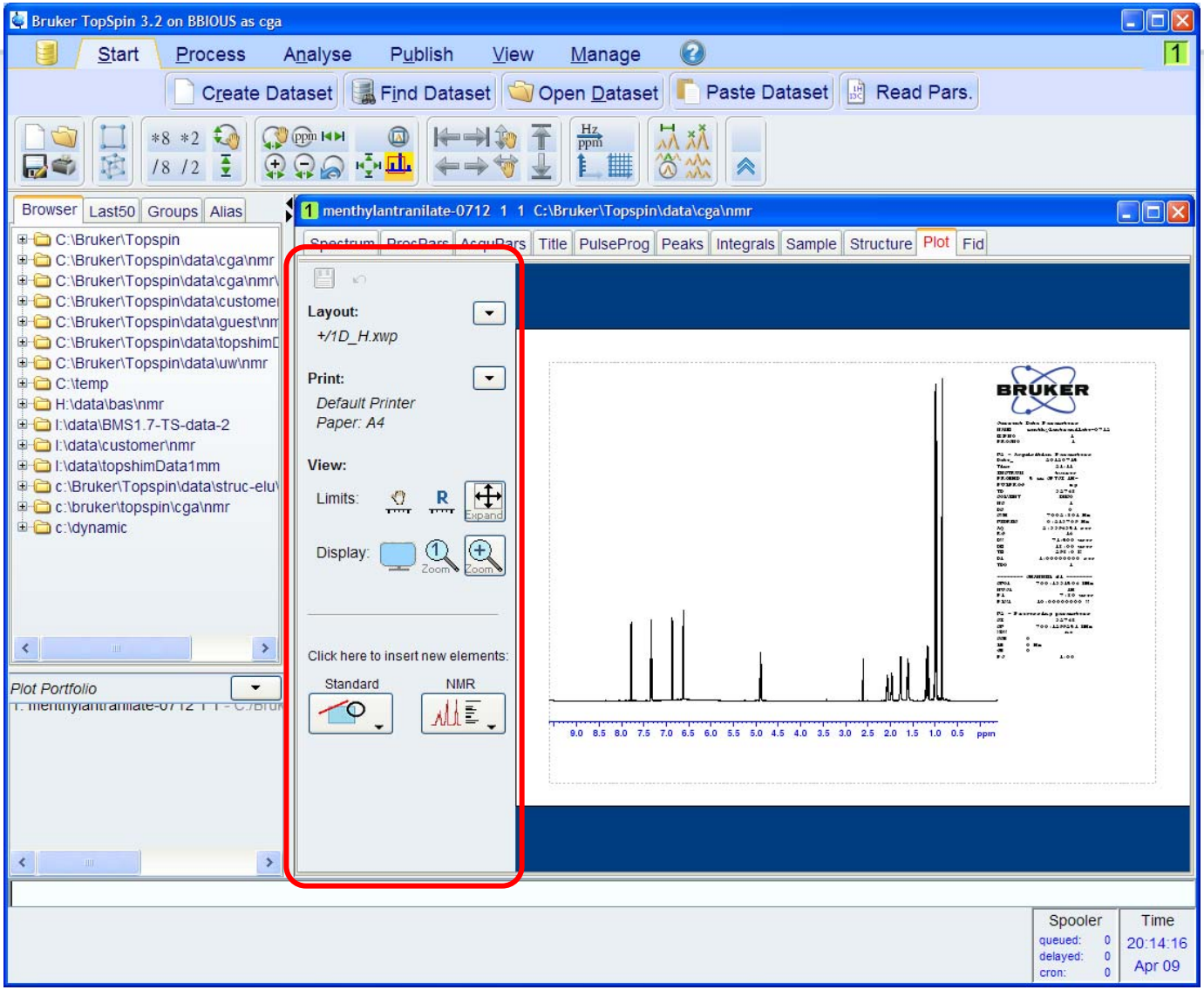
Plot functions

**Layouts**

**Printers**

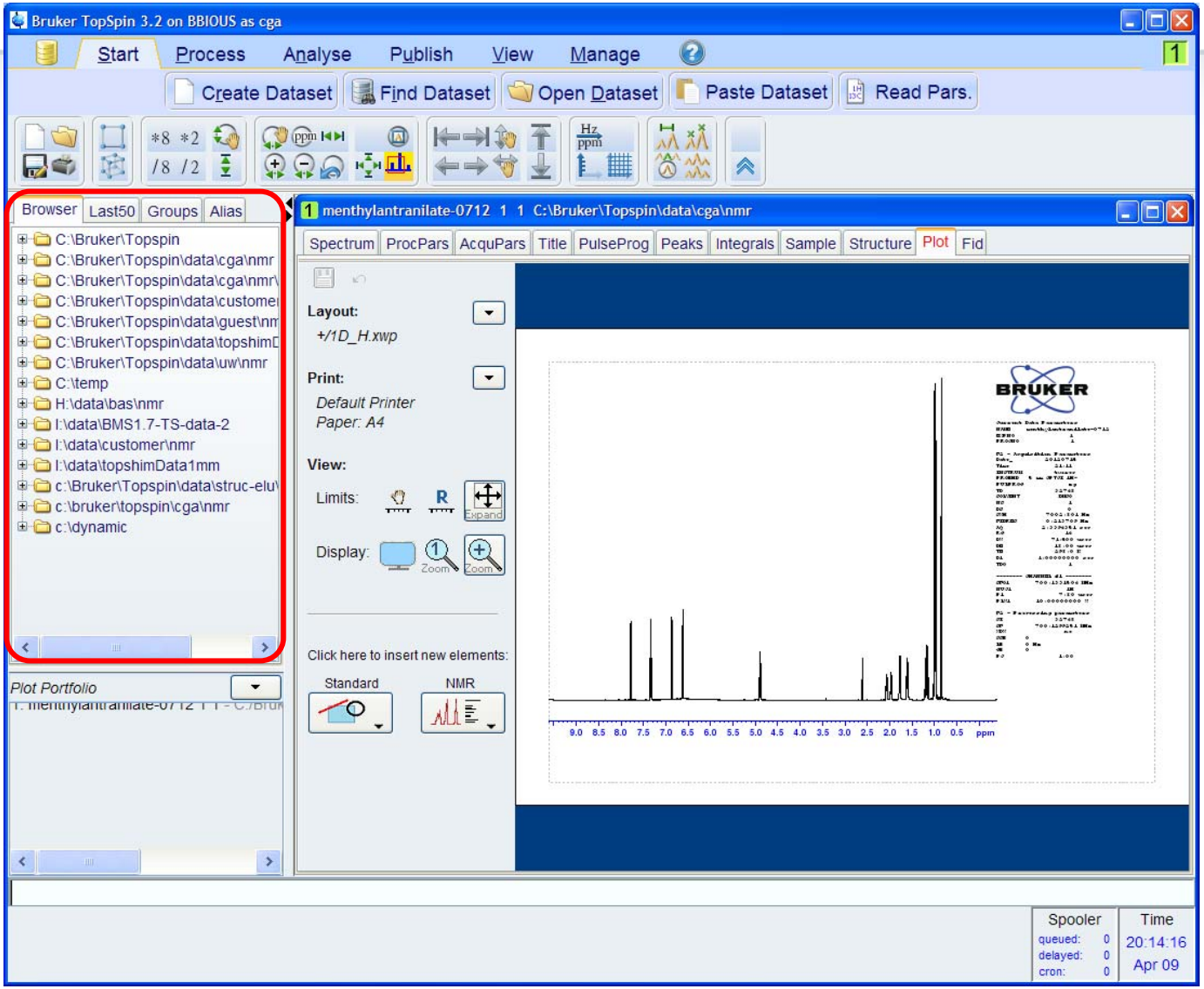
**View**

**Objects**



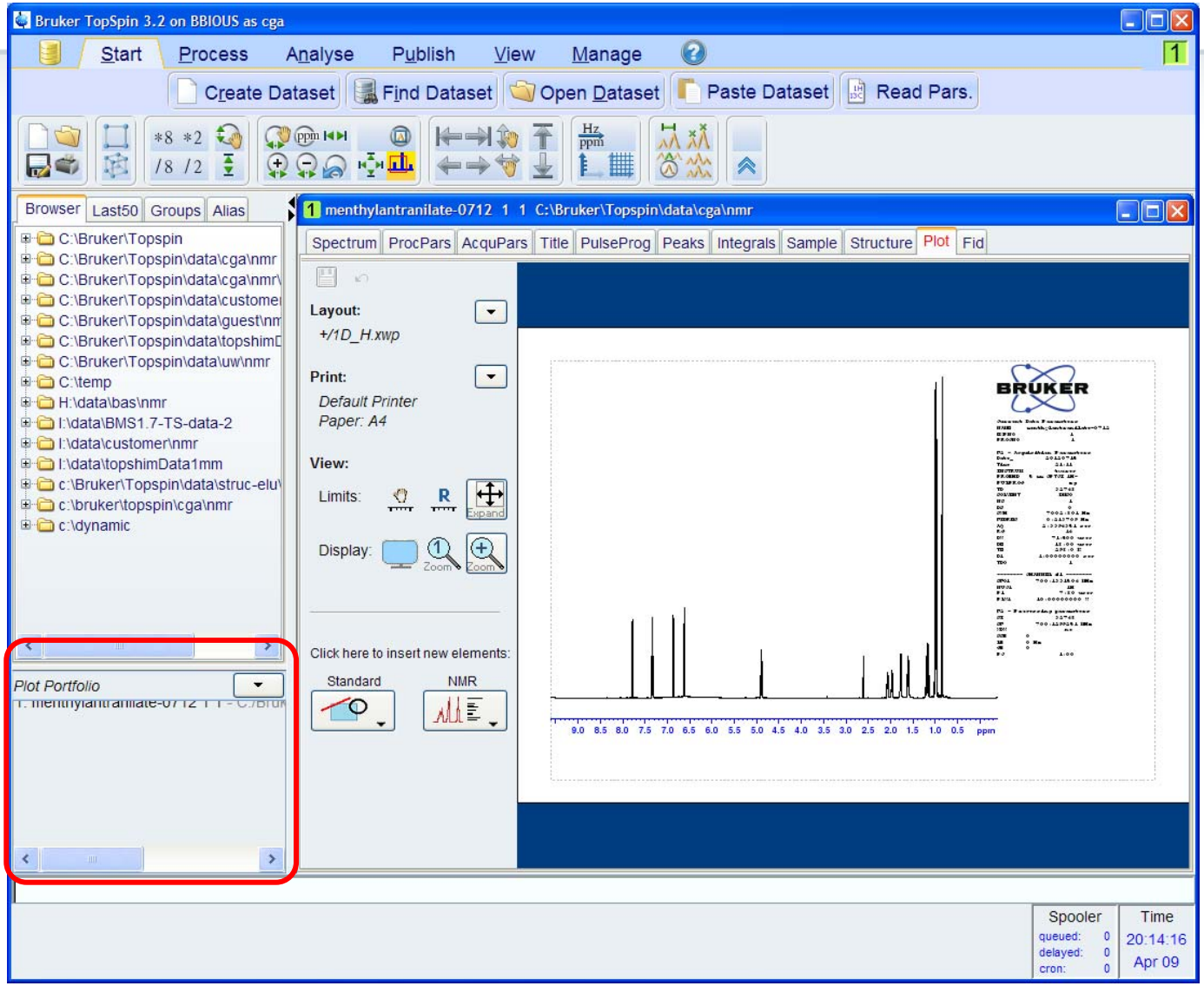
# The new user interface

Data Browser



# The user interface

Portfolio area



# The plot and view functions

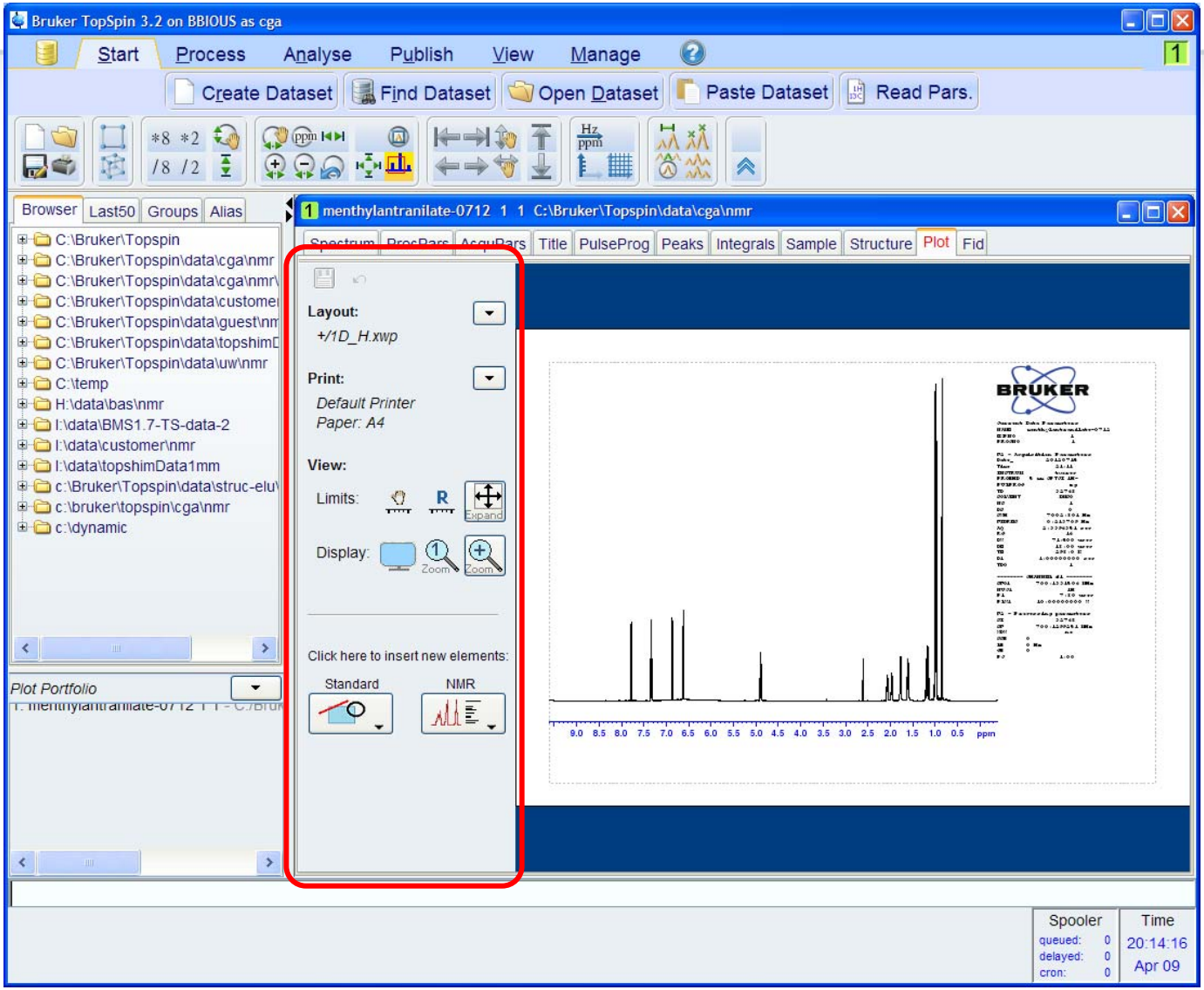
Plot functions

**Layouts**

**Printers**

**View**

**Objects**



# The plot and view functions

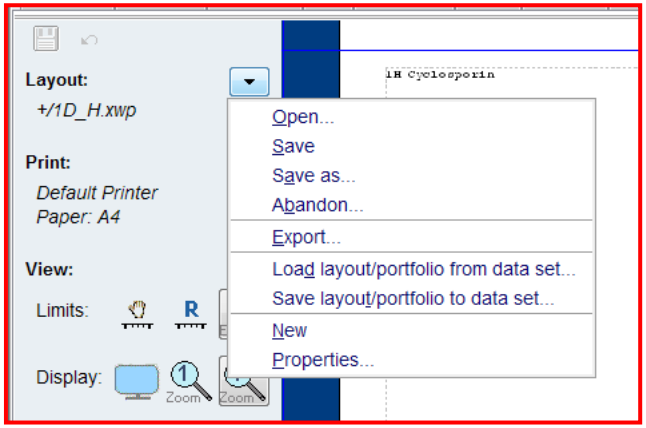
Plot functions

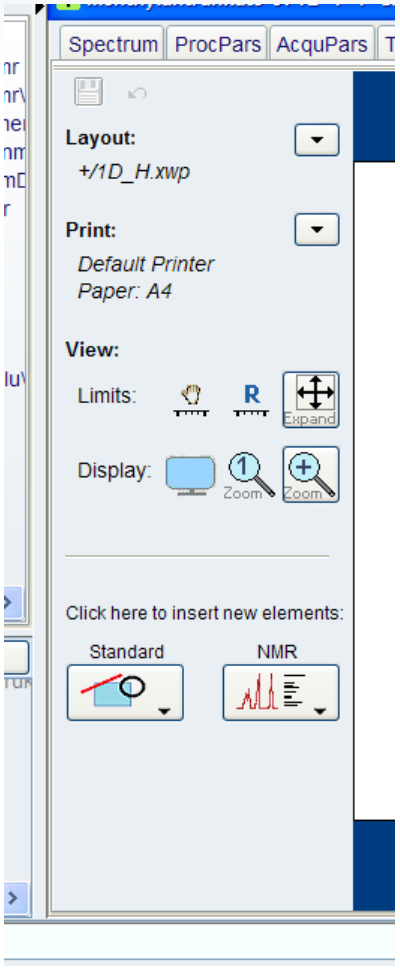
**Layouts**

Printers

View

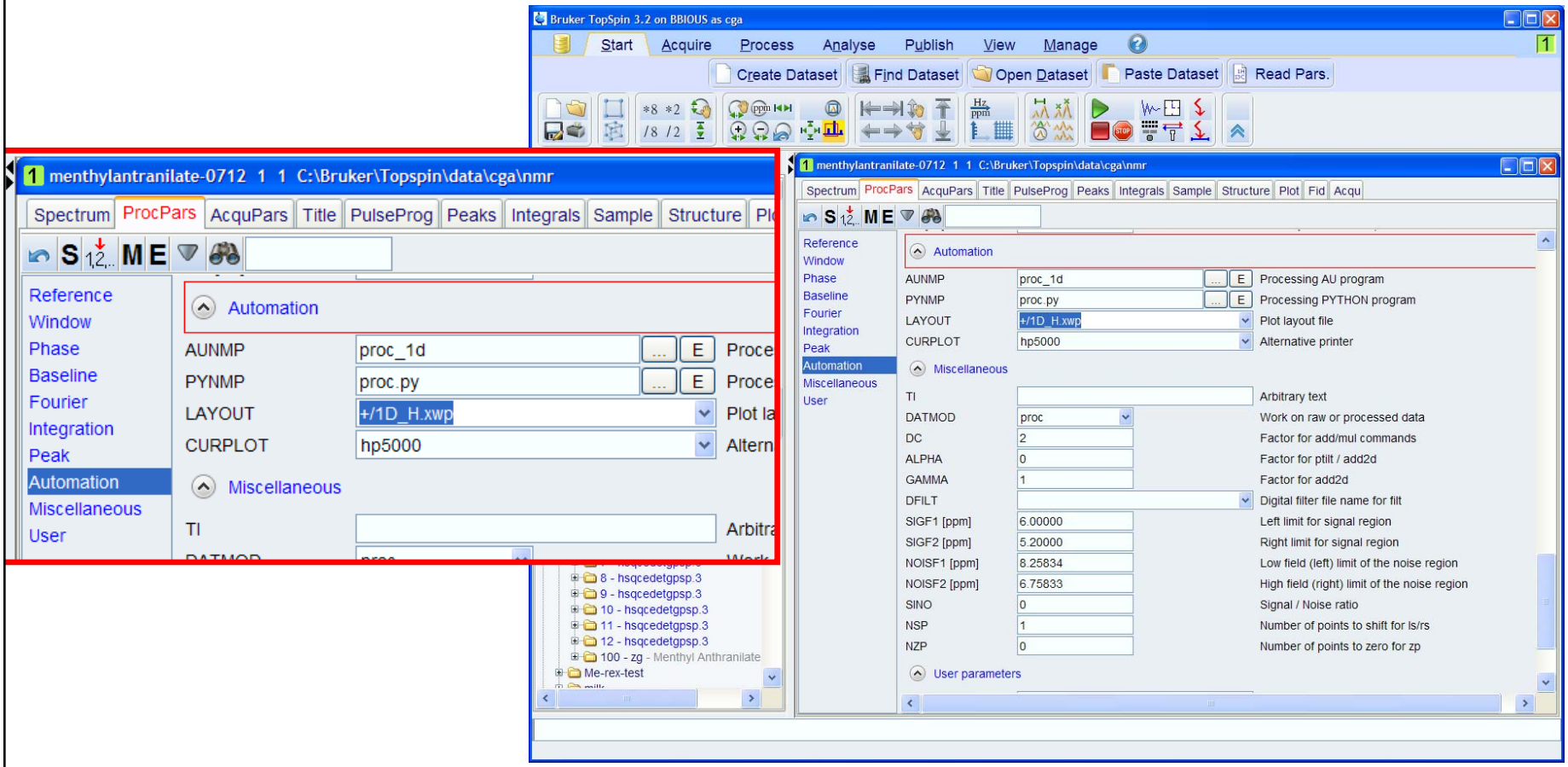
Objects



# The plot and view functions

The layout is by default imported from the data set.



# What is a layout

The layout contains information about locations, size properties of objects on your plot

It does NOT contain data.

It also contains information on what to do when data is loaded into the layout = automation actions or reset actions.

When a layout is applied to a dataset all of the above is applied and a view or printout is generated.

More later

# The plot and view functions

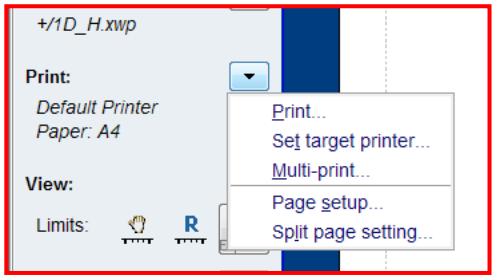
Plot functions

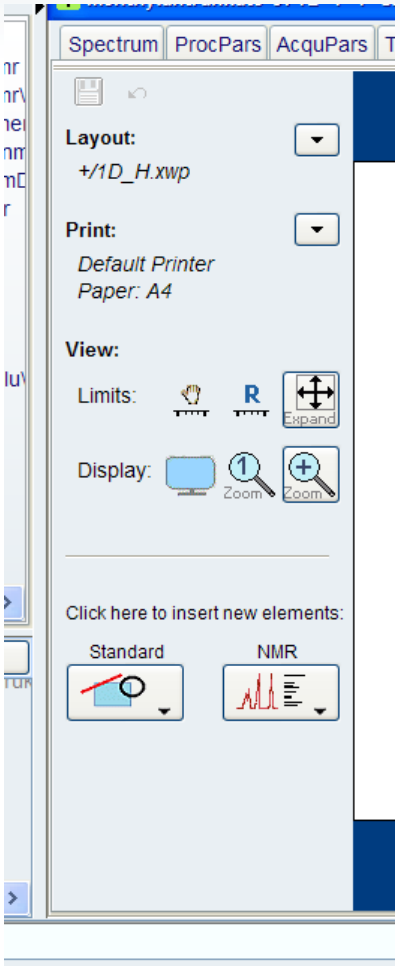
Layouts

**Printers**

View

Objects



# The plot and view functions

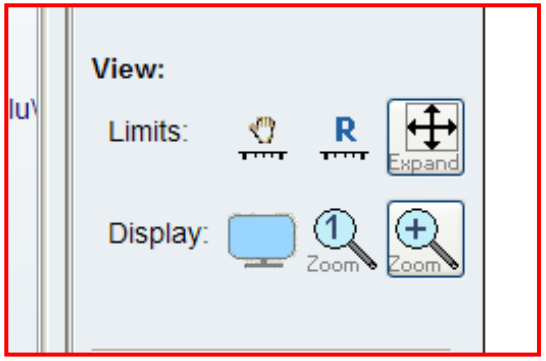
Plot functions

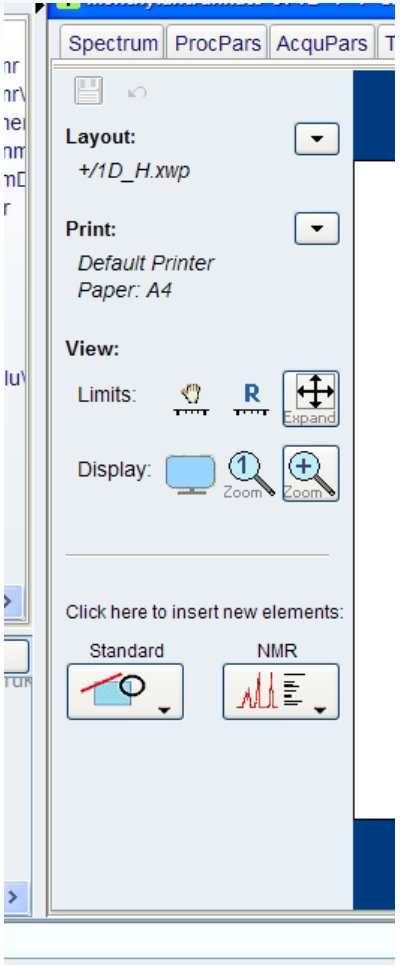
Layouts

Printers

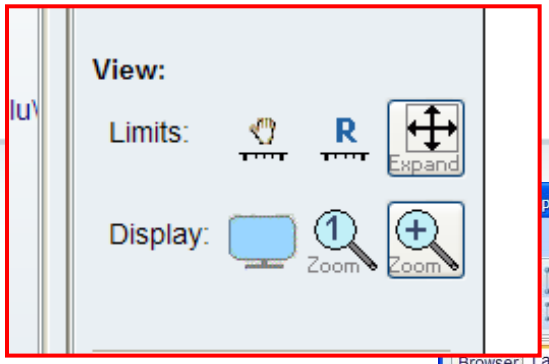
**View**

Objects

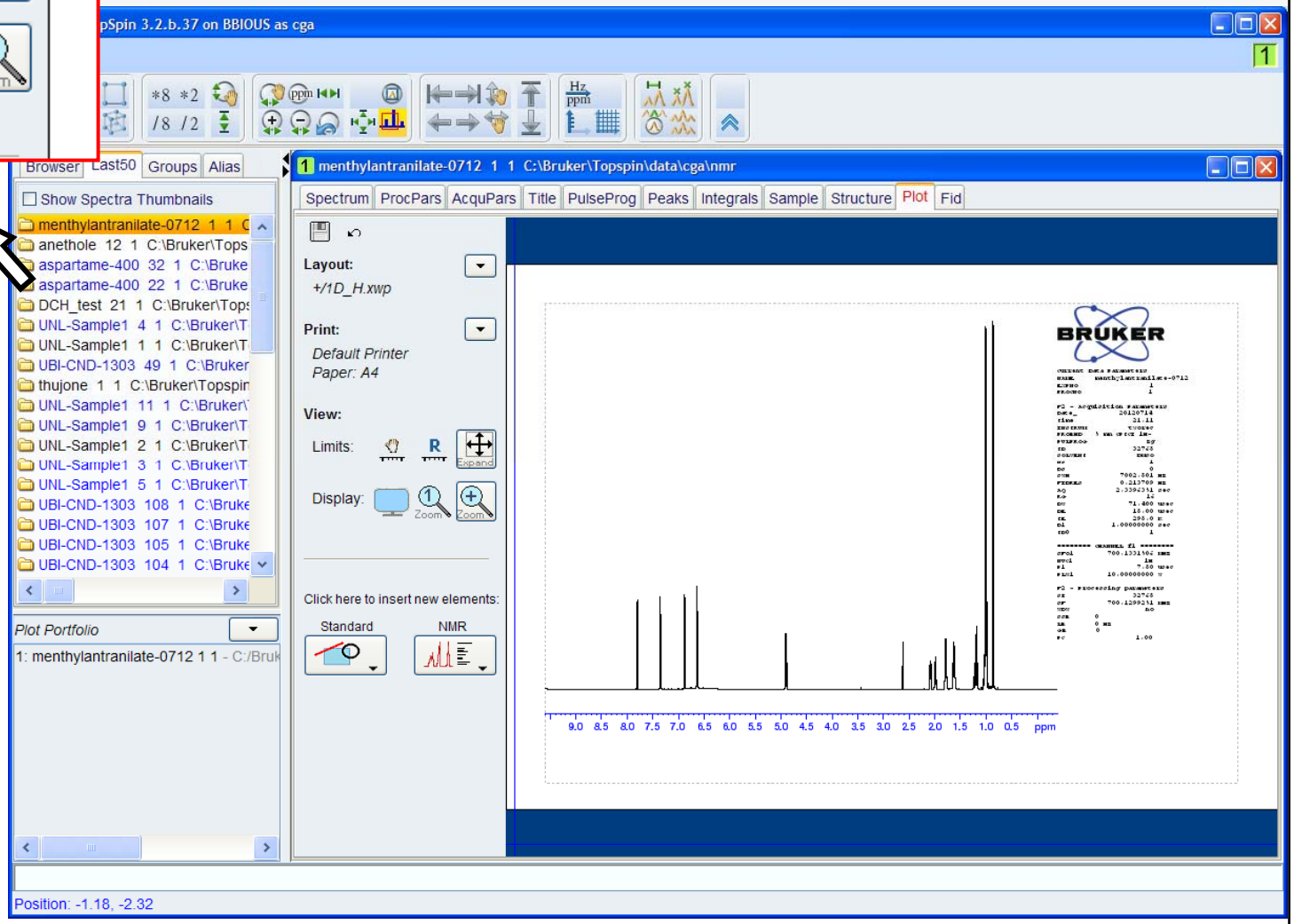


# The view functions, more detail



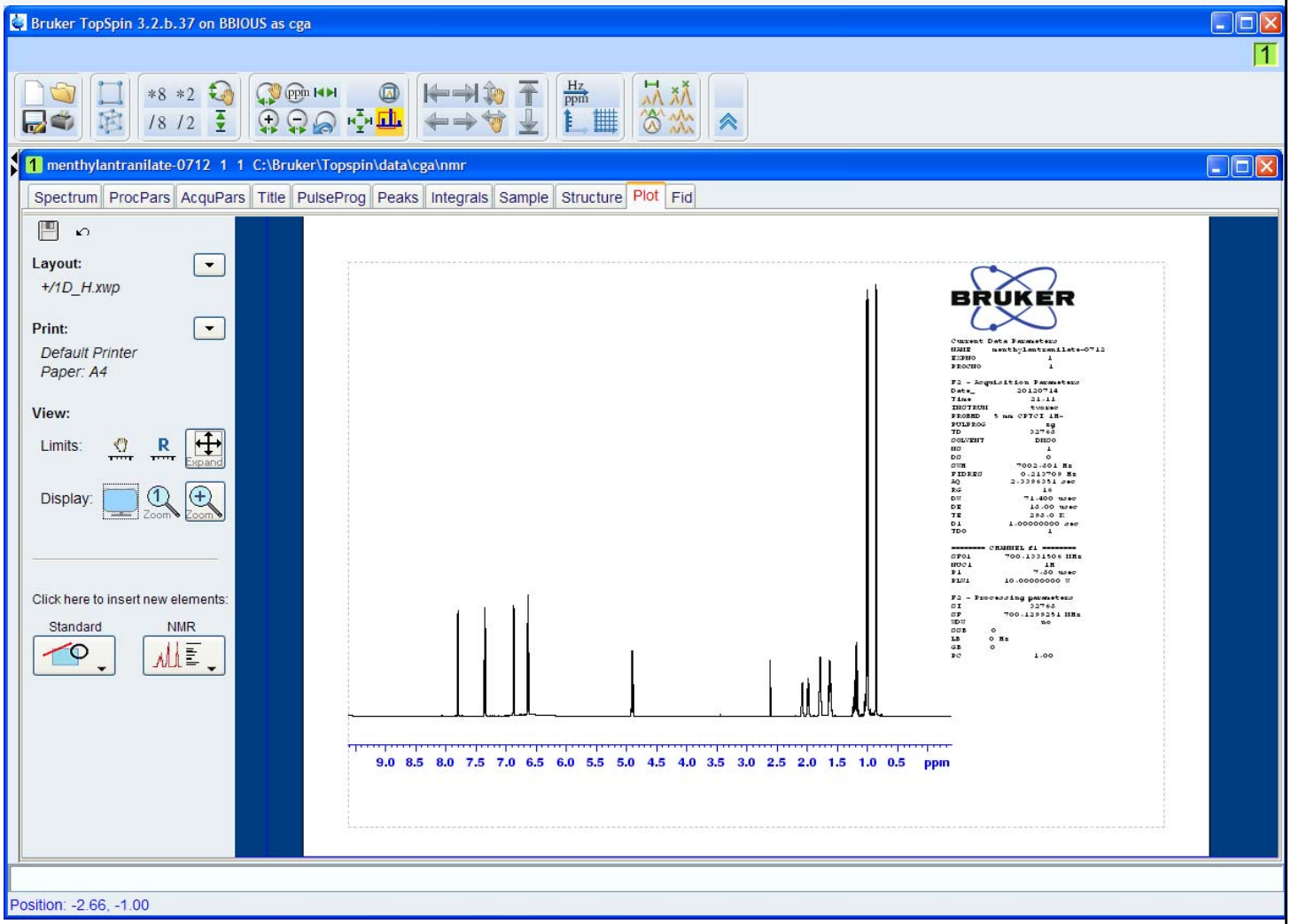

Get more
real estate



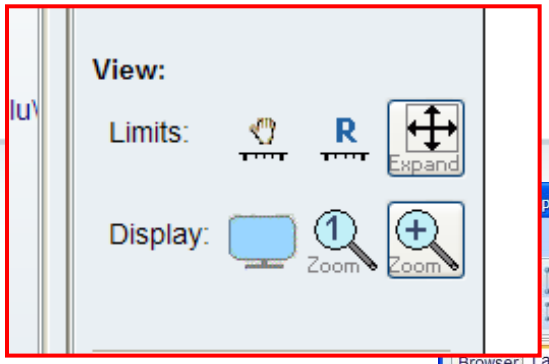
# The view functions, more detail

Get more
real estate
or optimize the
window for
plotting

**Ctrl d**
to get back



# The view functions, more detail

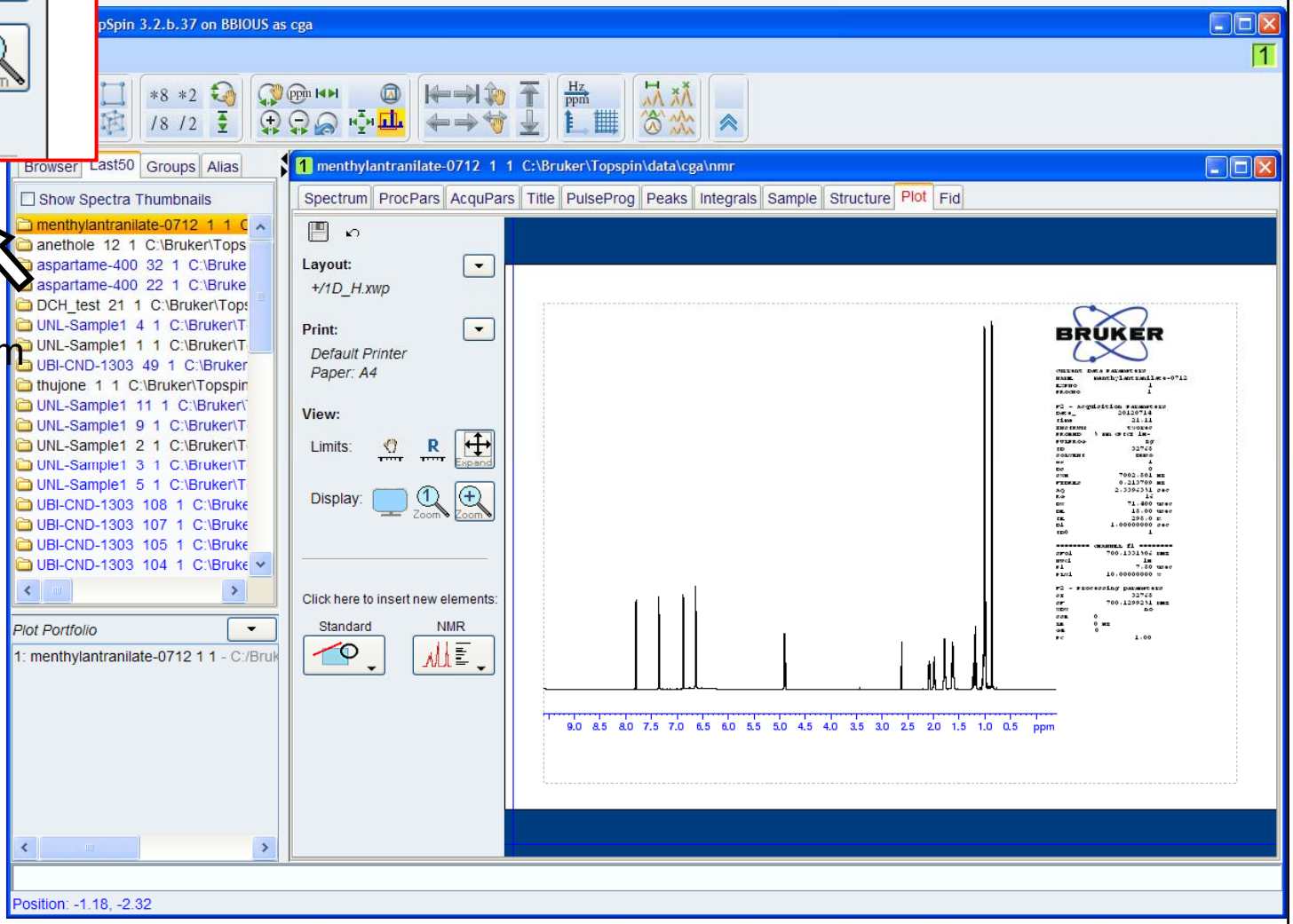



Zoom in

no expansion of the spectrum just a closer look

Span a box

and release



# The view functions, more detail

Zoom in

no expansion

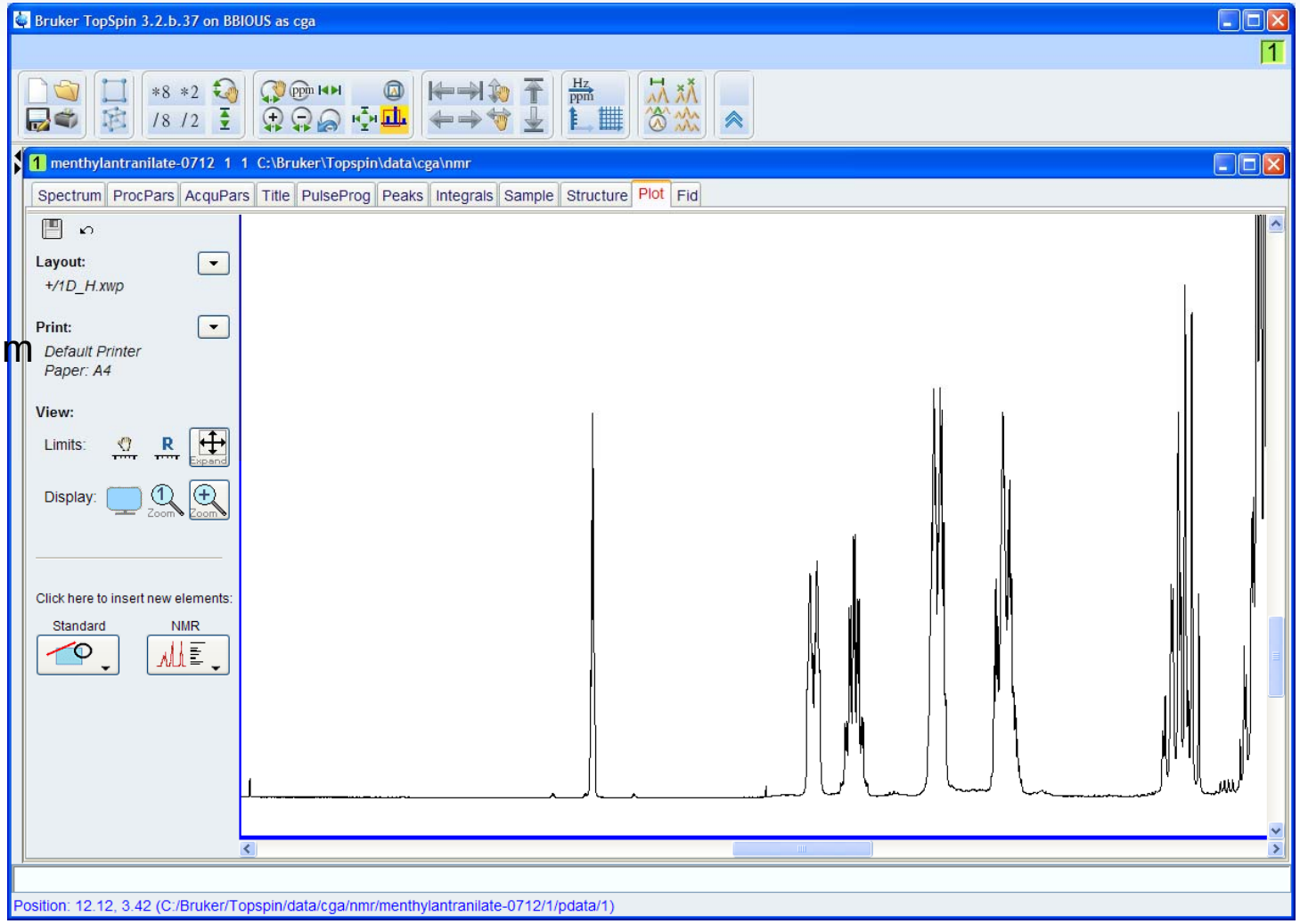
of the spectrum

just a closer

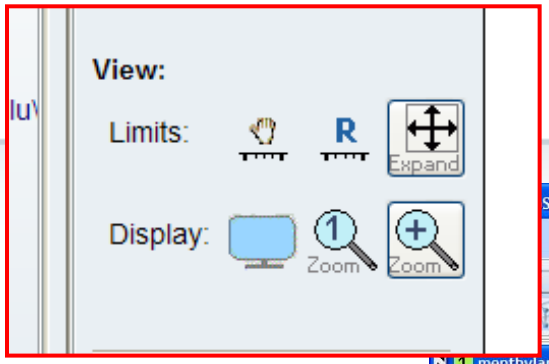
look

Span a box

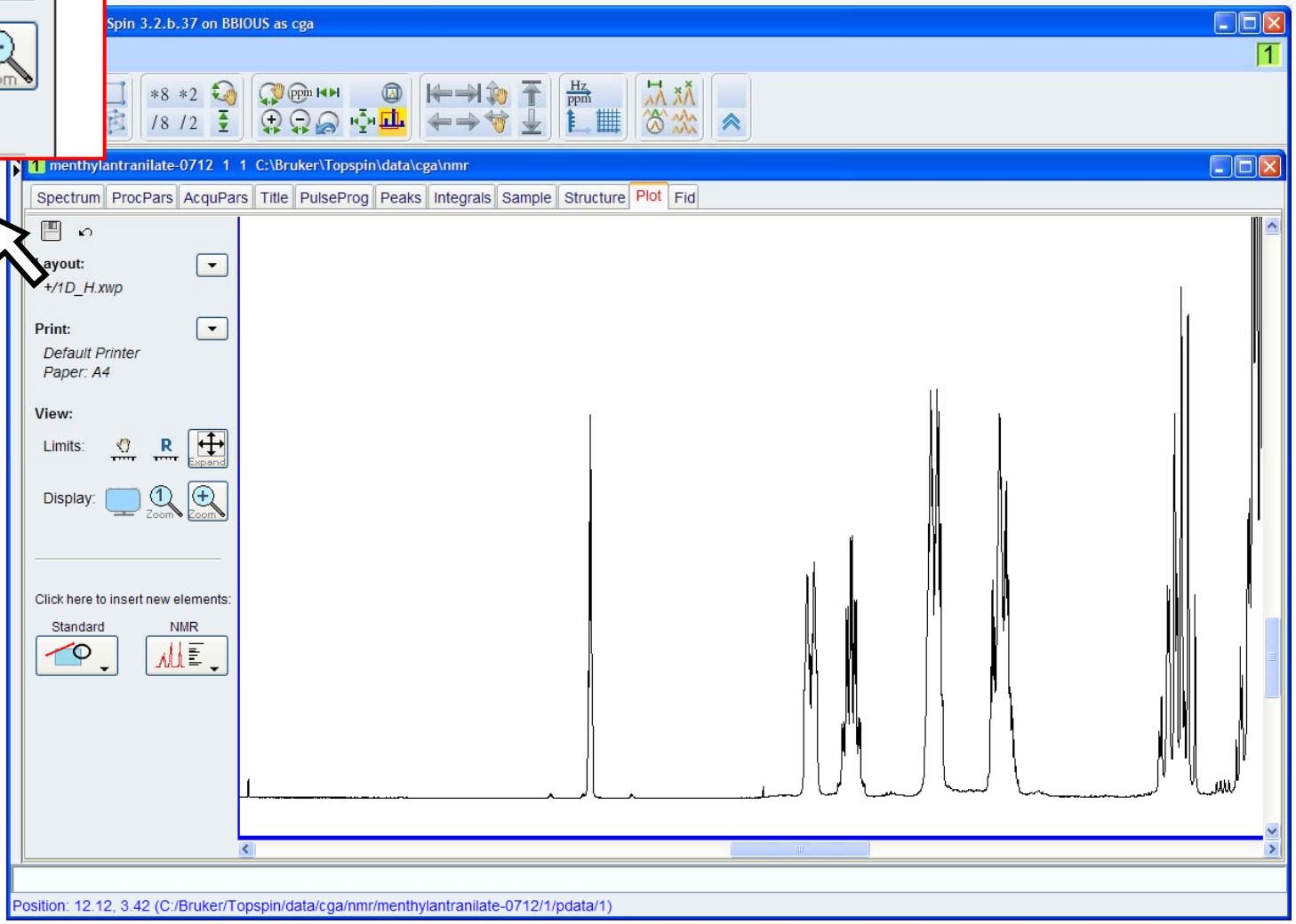
and release



# The view functions, more detail

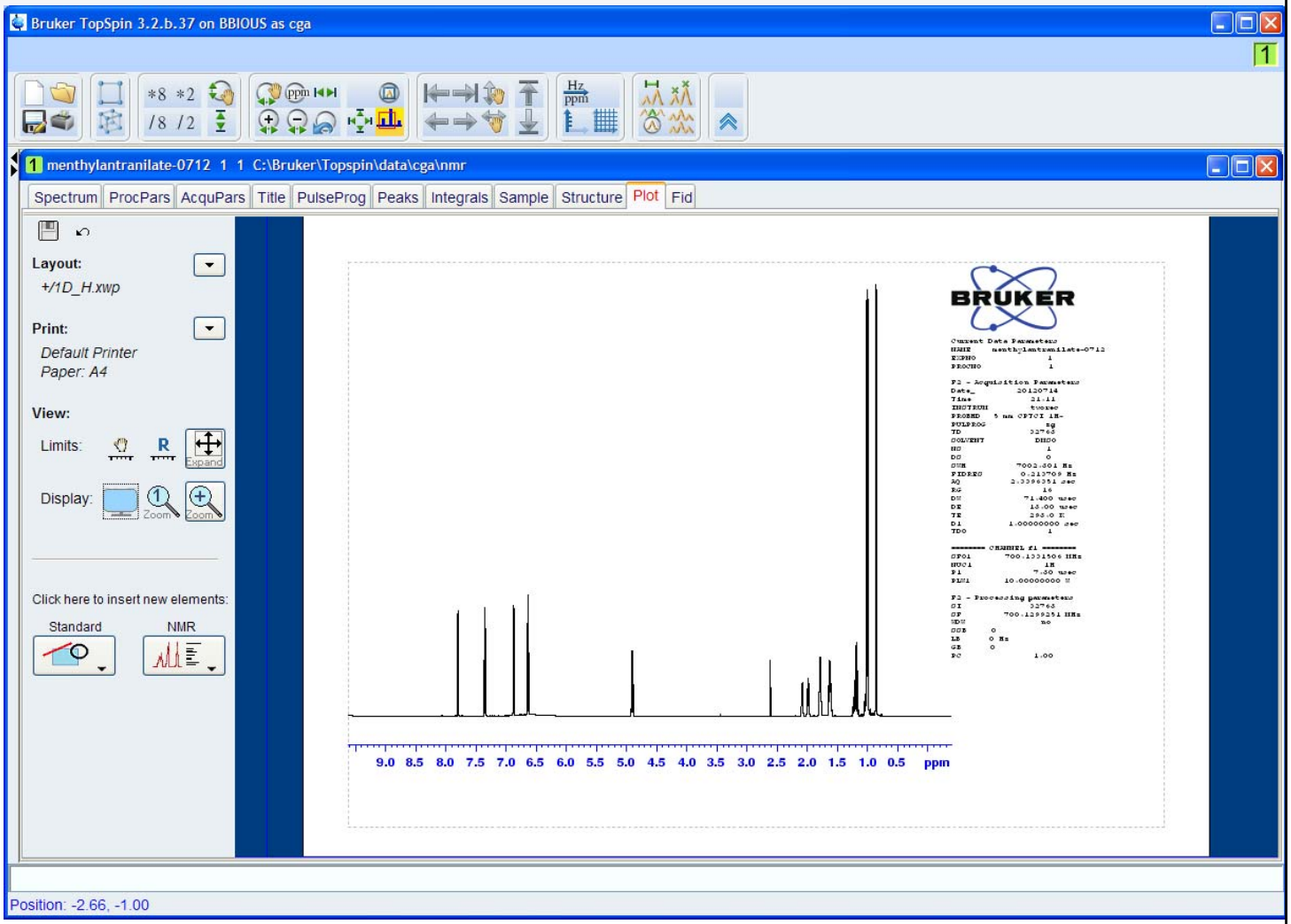



Zoom reset

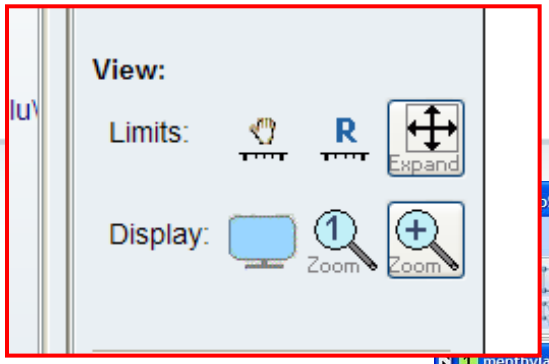


# The view functions, more detail

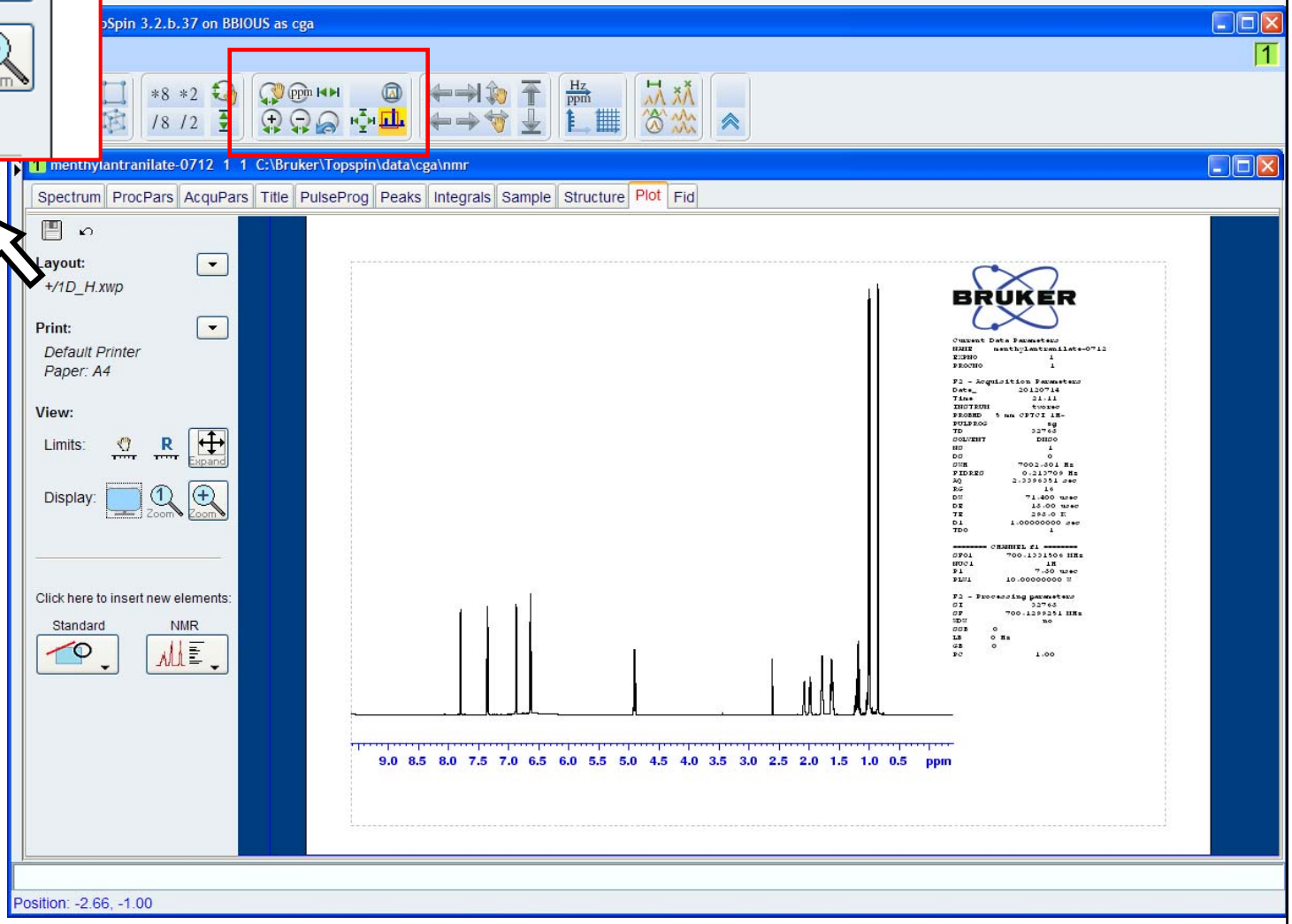
Zoom reset



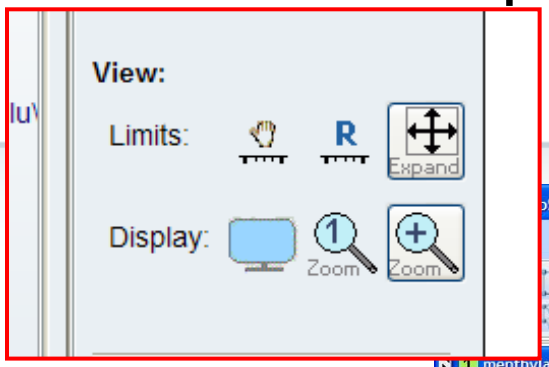
# The view functions, more detail




Expansions



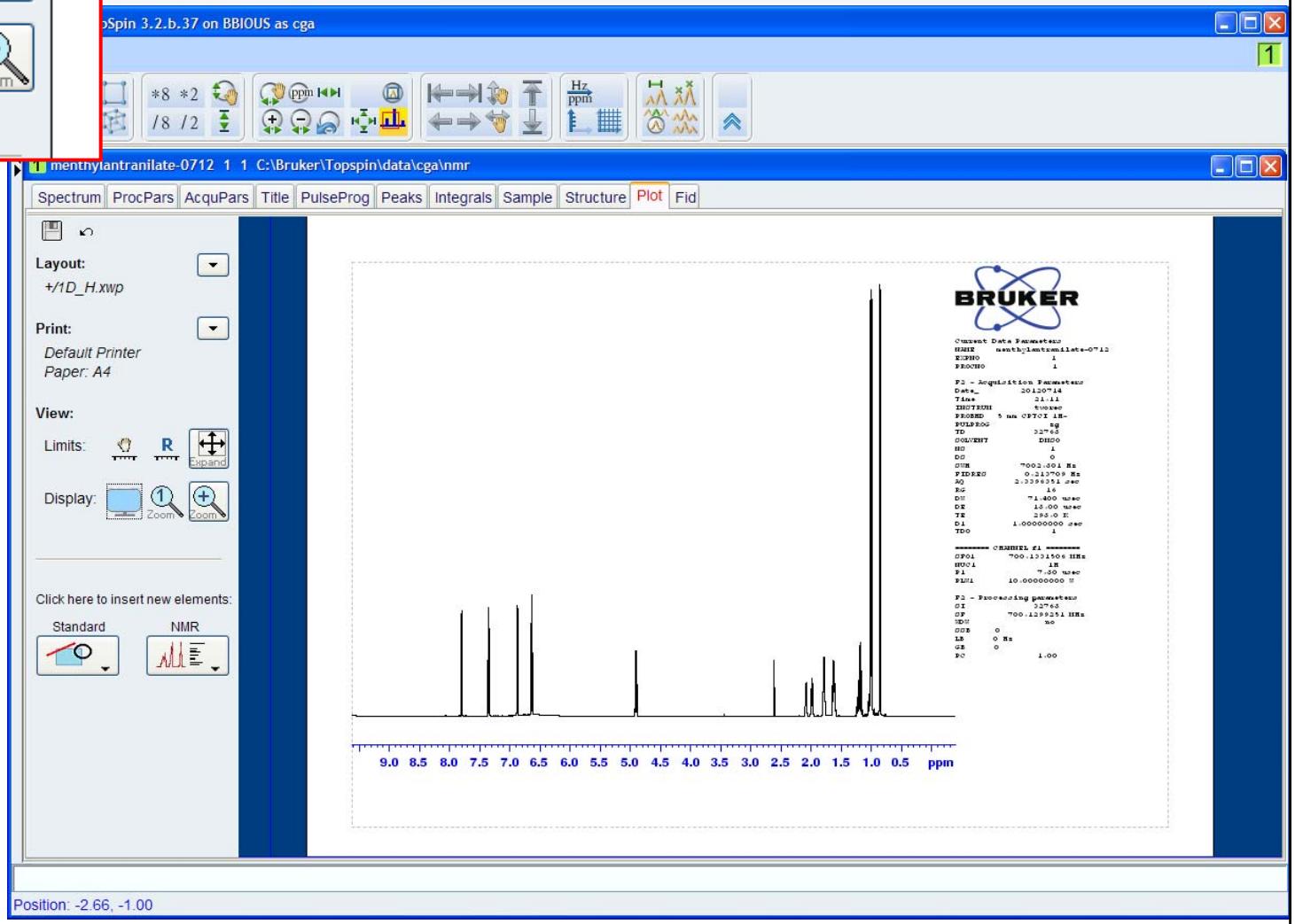
# More on expansions



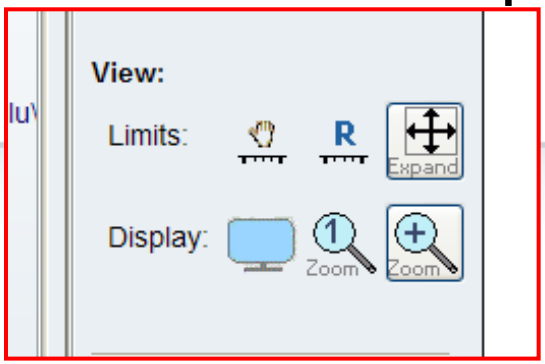

Shift – drag

Ctrl – drag

Alt - drag

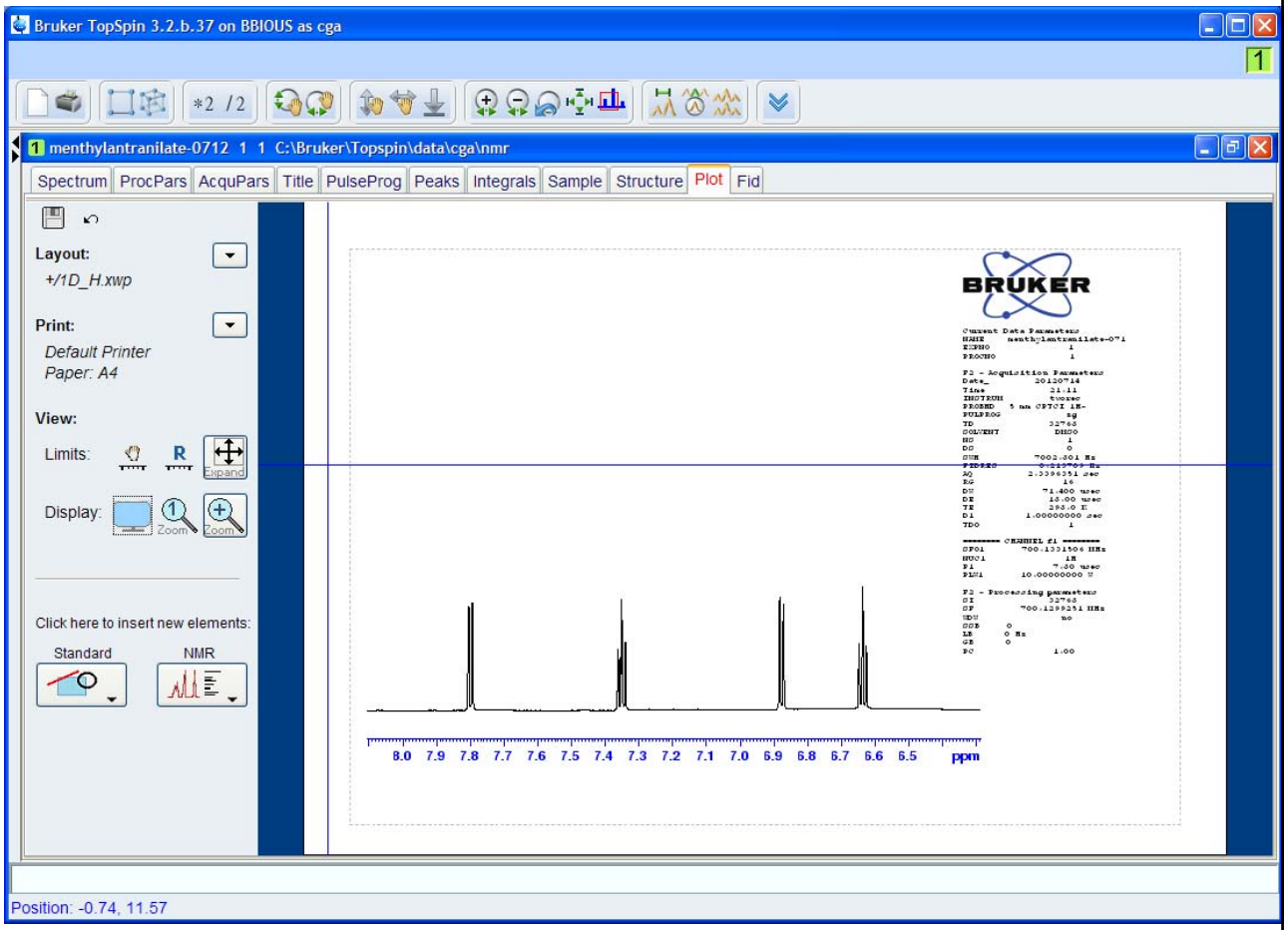


# More on expansions

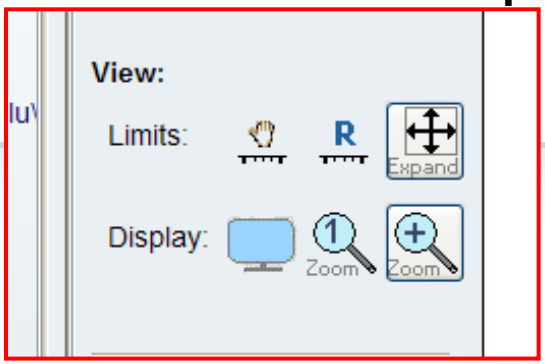



Shift – drag

Horizontal expansion only

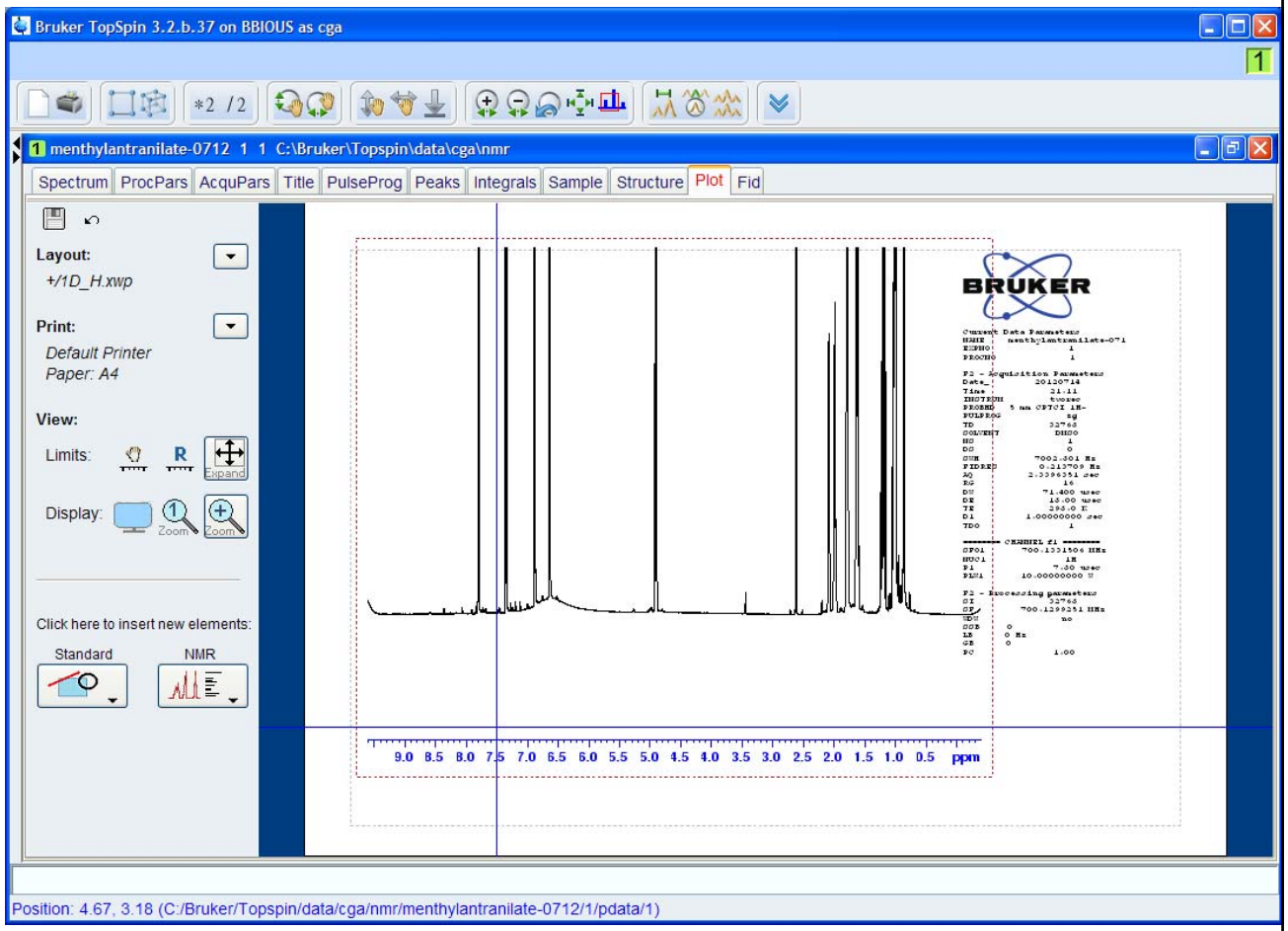


# More on expansions

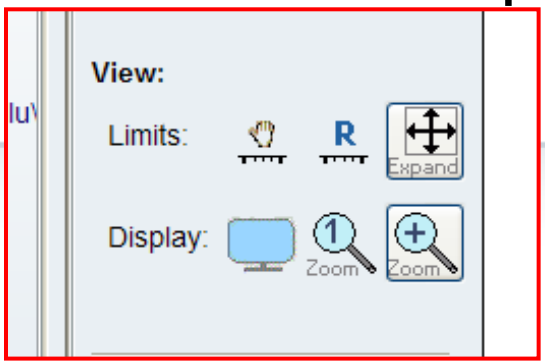



Ctrl – drag

Vertical expansion only

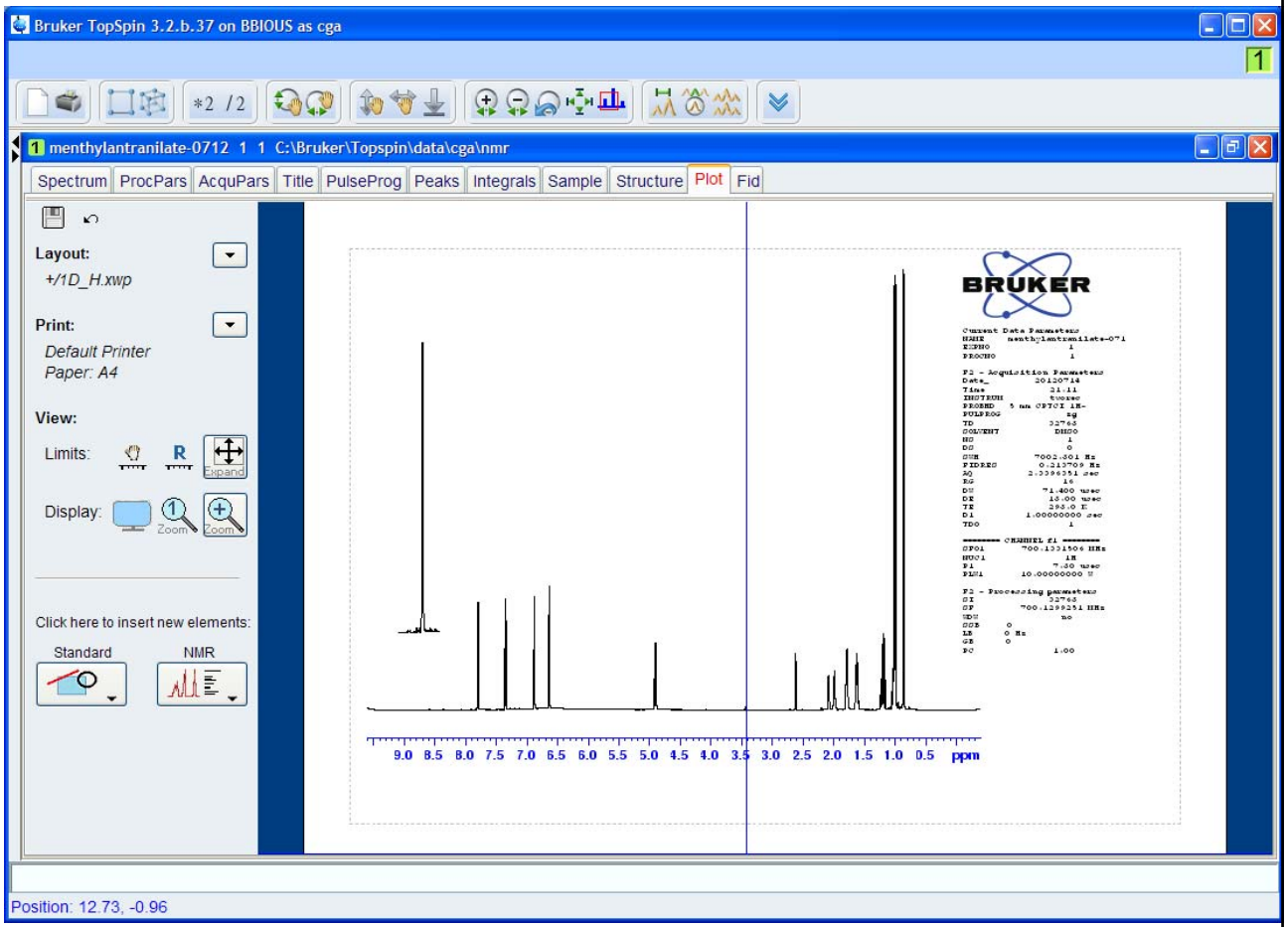


# More on expansions




Alt – drag

Creates new object
with same horizontal scale and vert expansion



# The plot and view functions

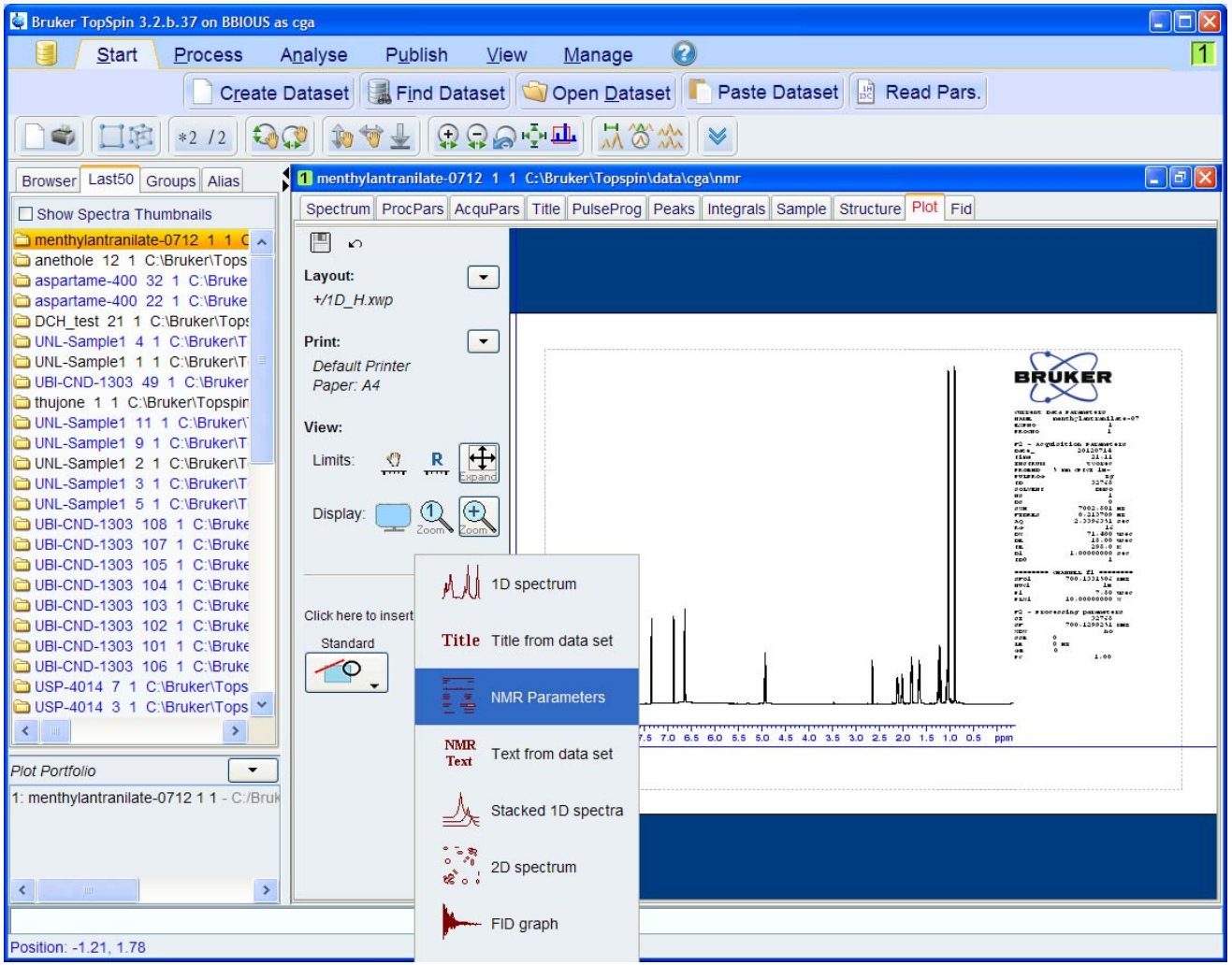
Plot functions

Layouts

Printers

View

**Objects**



# The plot and view functions

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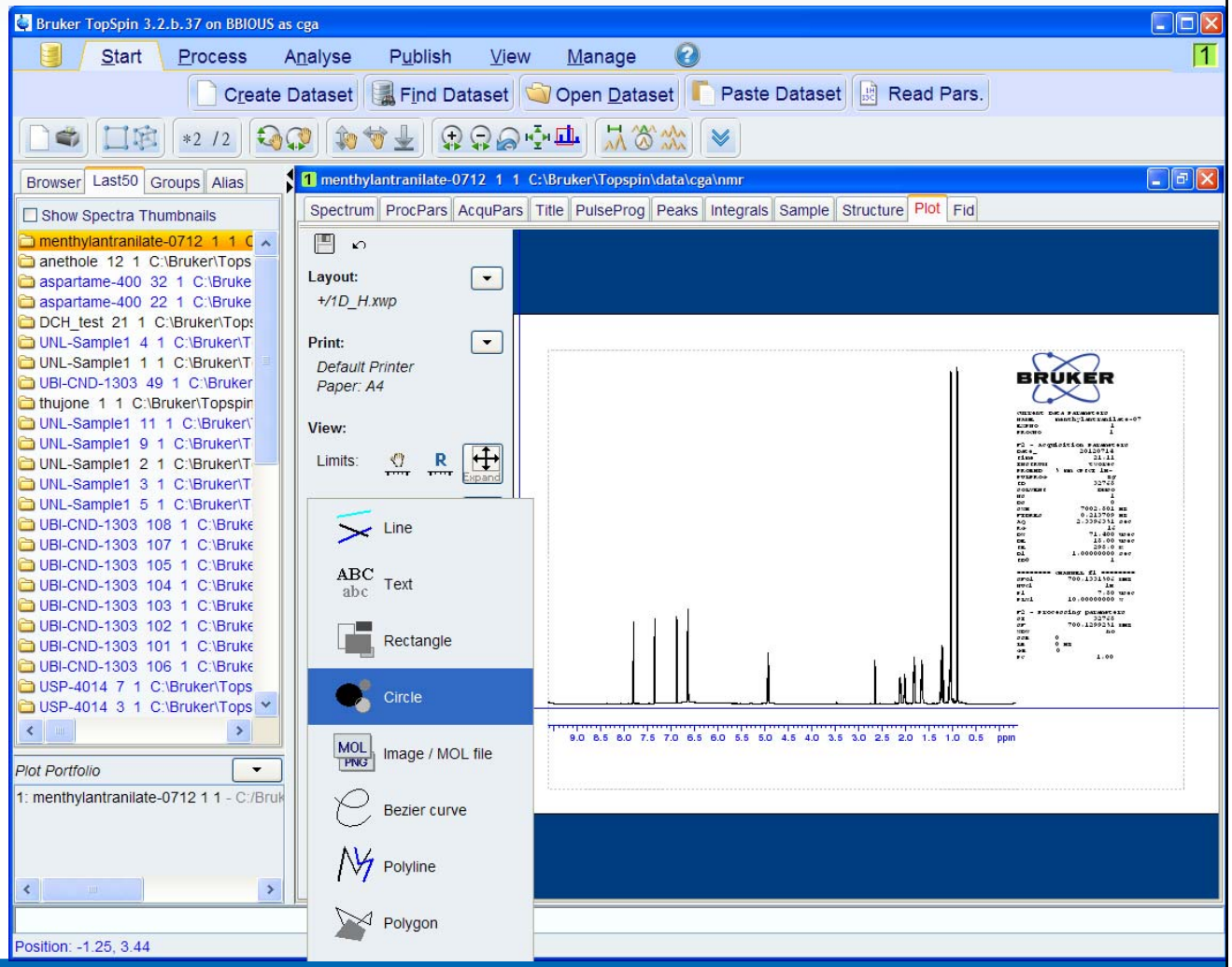
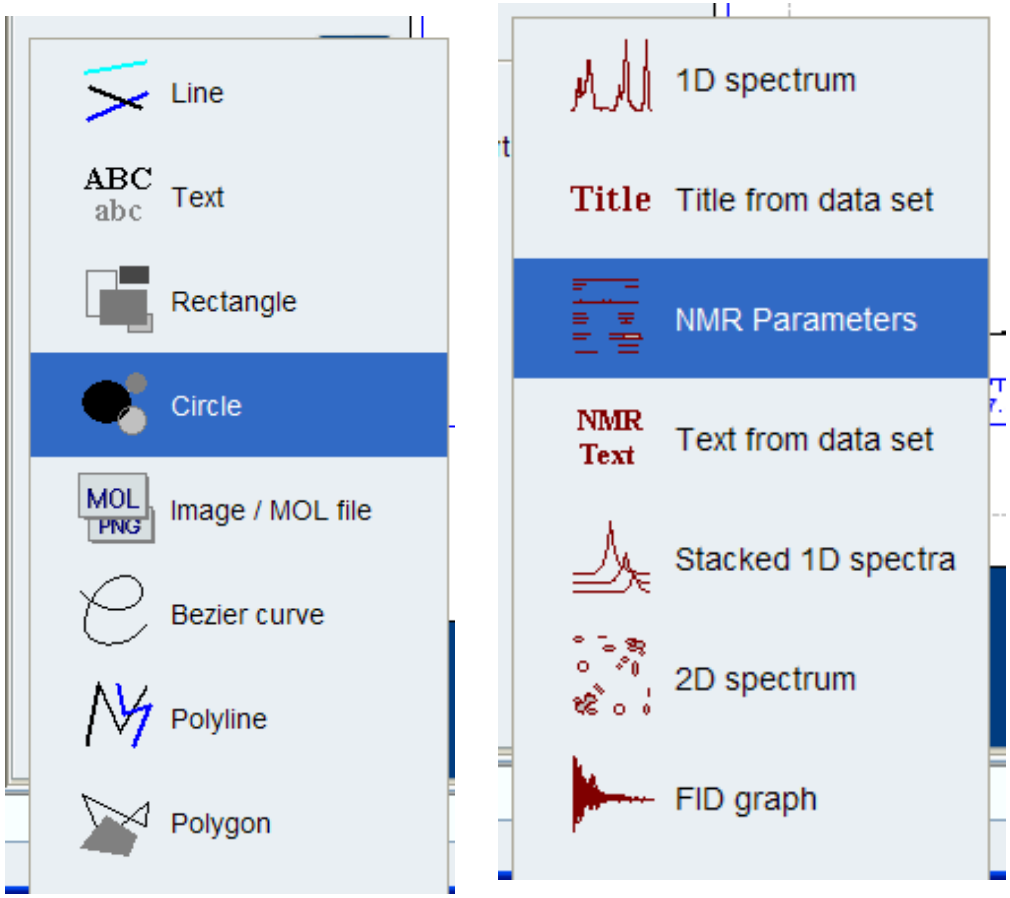


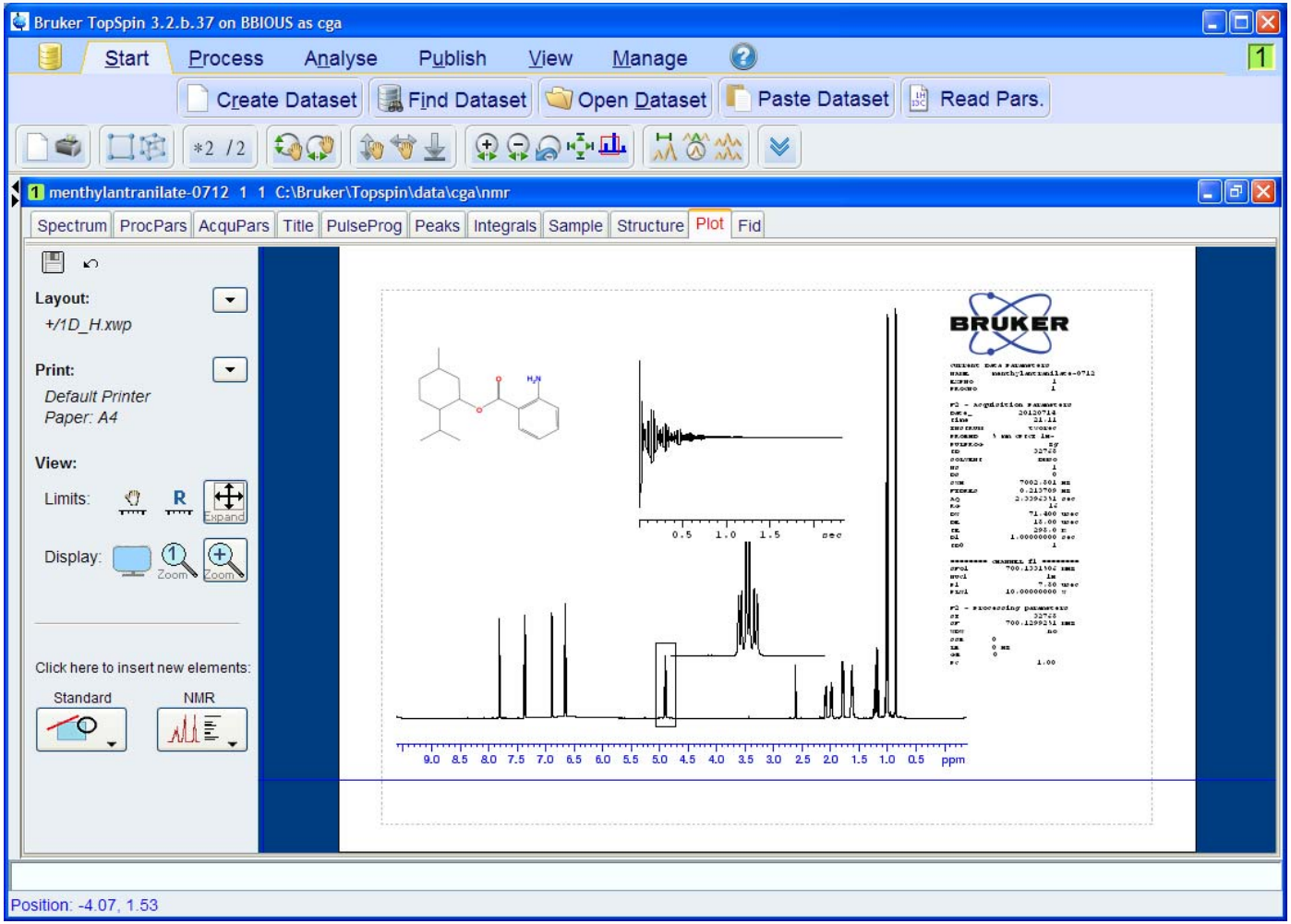
# The plot and view functions

**Objects**

Add more objects



# Applying all the tools so far

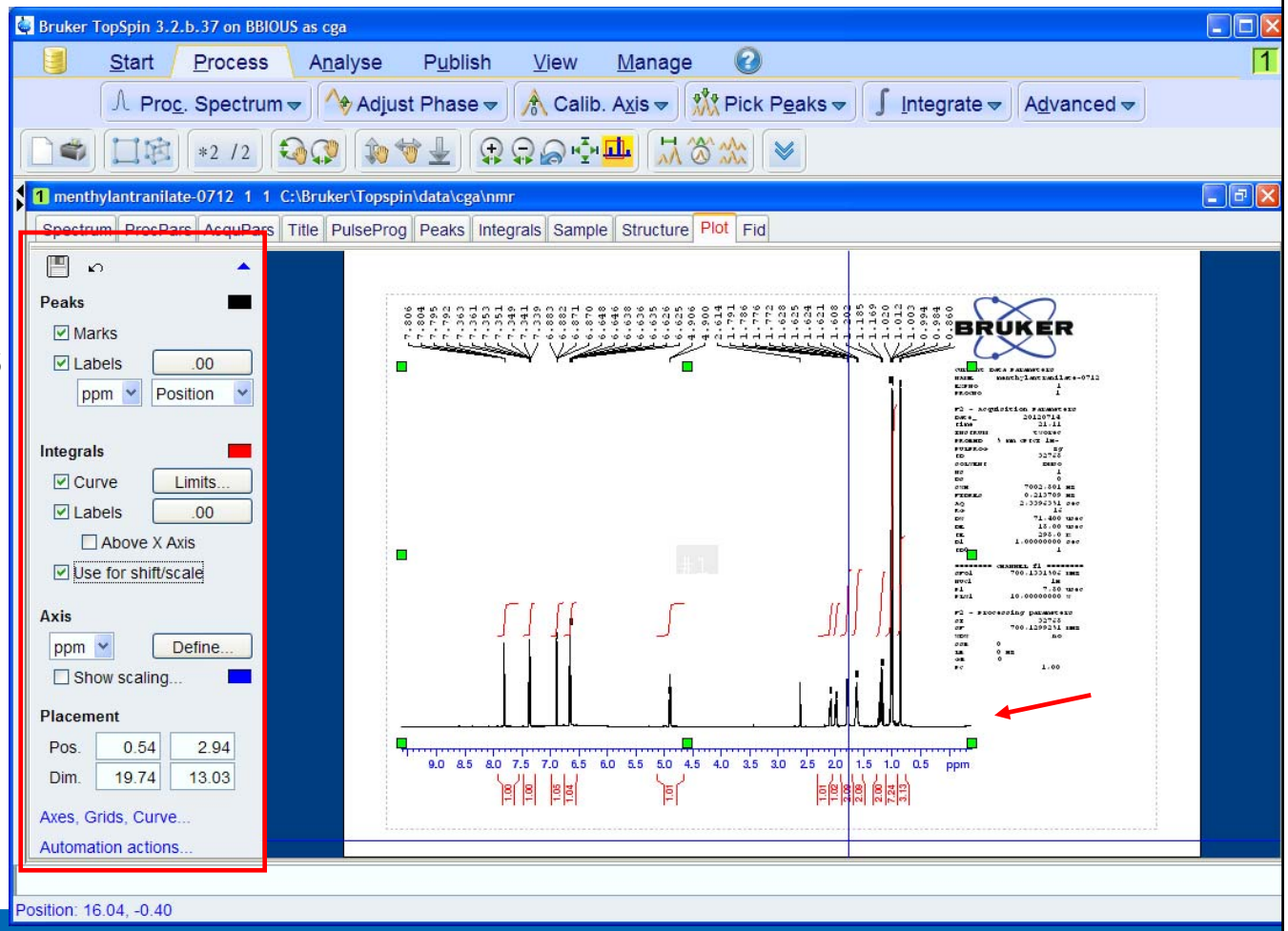


# Manipulating individual objects

- How to change the properties of individual objects
  - Changing colors
  - Fonts
  - Line style and thickness
  - And more

# Manipulating individual objects

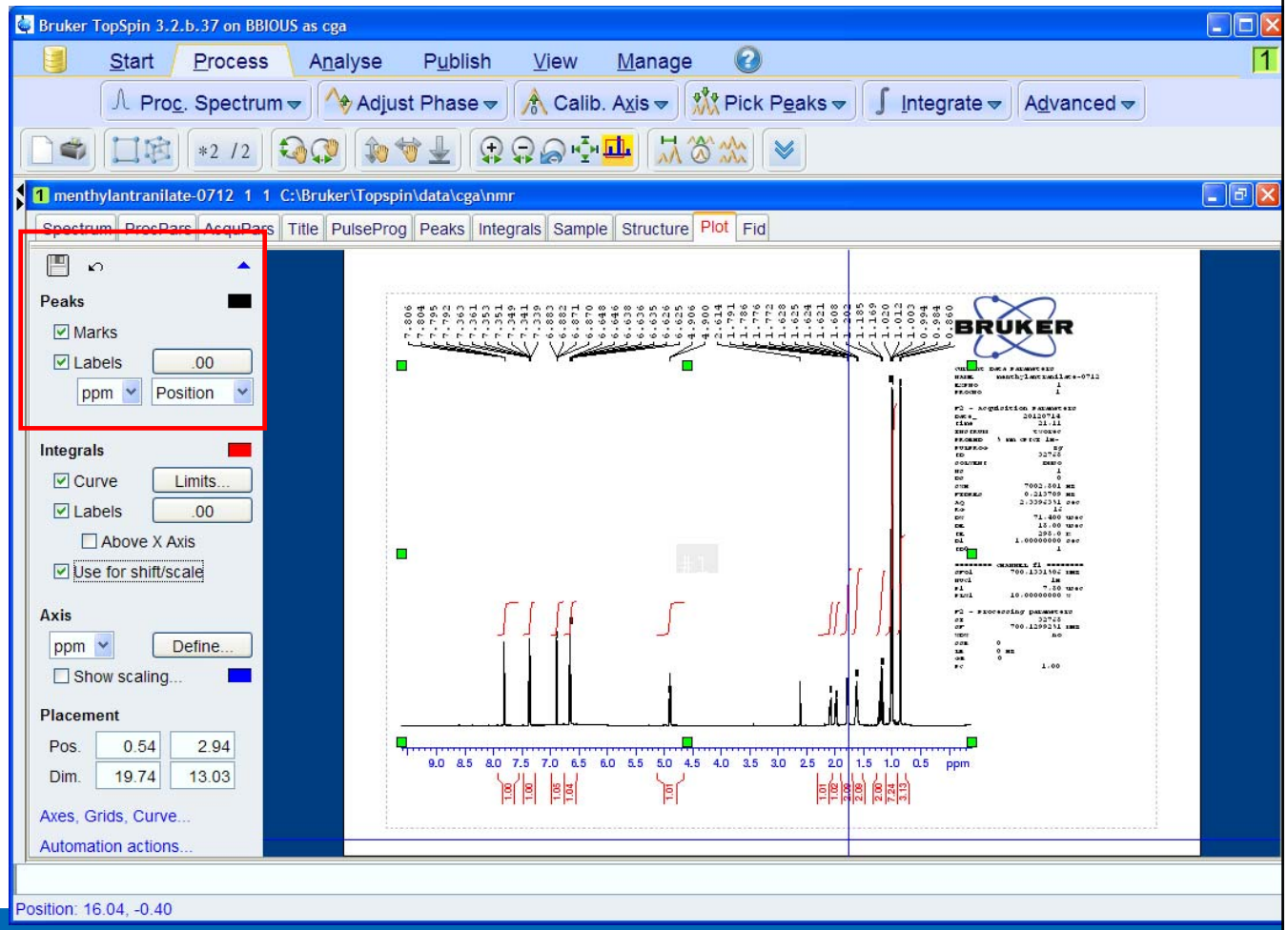
- Select the object (click on it)
  - Green corners appear
  - The menu on the left changes
  - More options under links bottom



# Manipulating individual objects

- Peaks

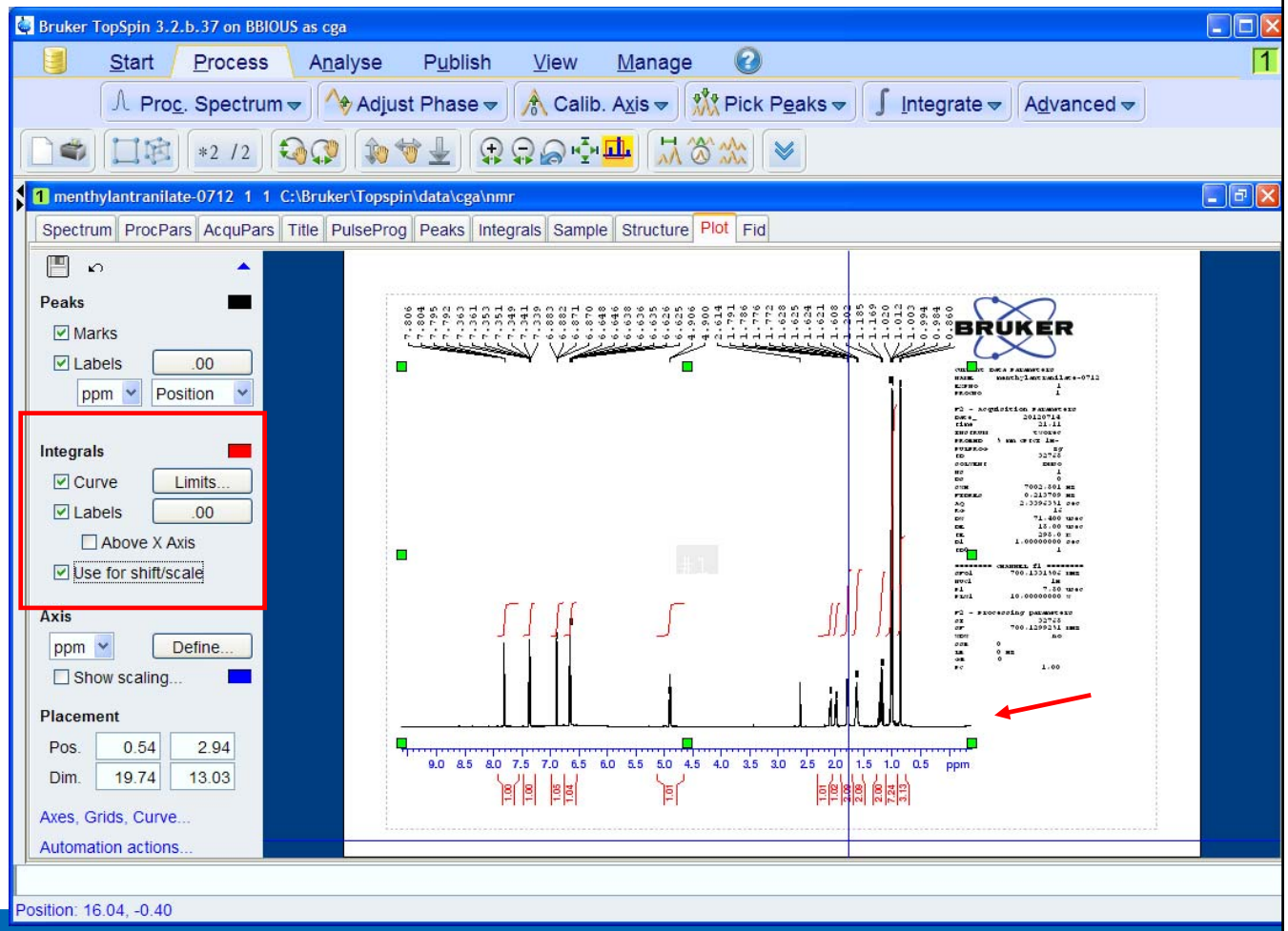
- Set the color of the marks and labels
- Choose marks on top of peaks
- Choose labels
- Set the number of decimal places



# Manipulating individual objects

- Integrals

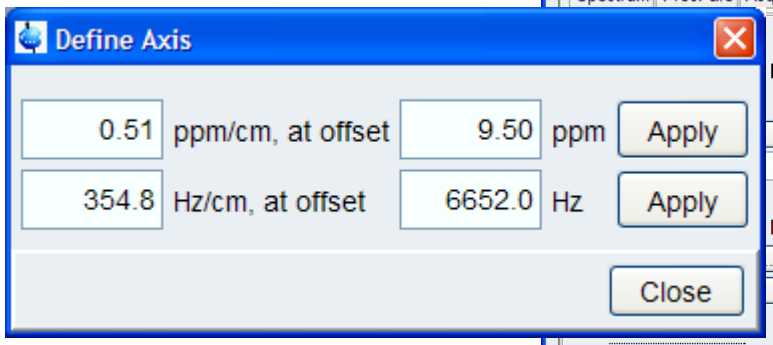
- Set the color of the integral trails and labels
- Set the number of decimal places
- Choose the position of the labels. Below the aixs or between axis and spectrum
- Check box to select interactive scaling functions



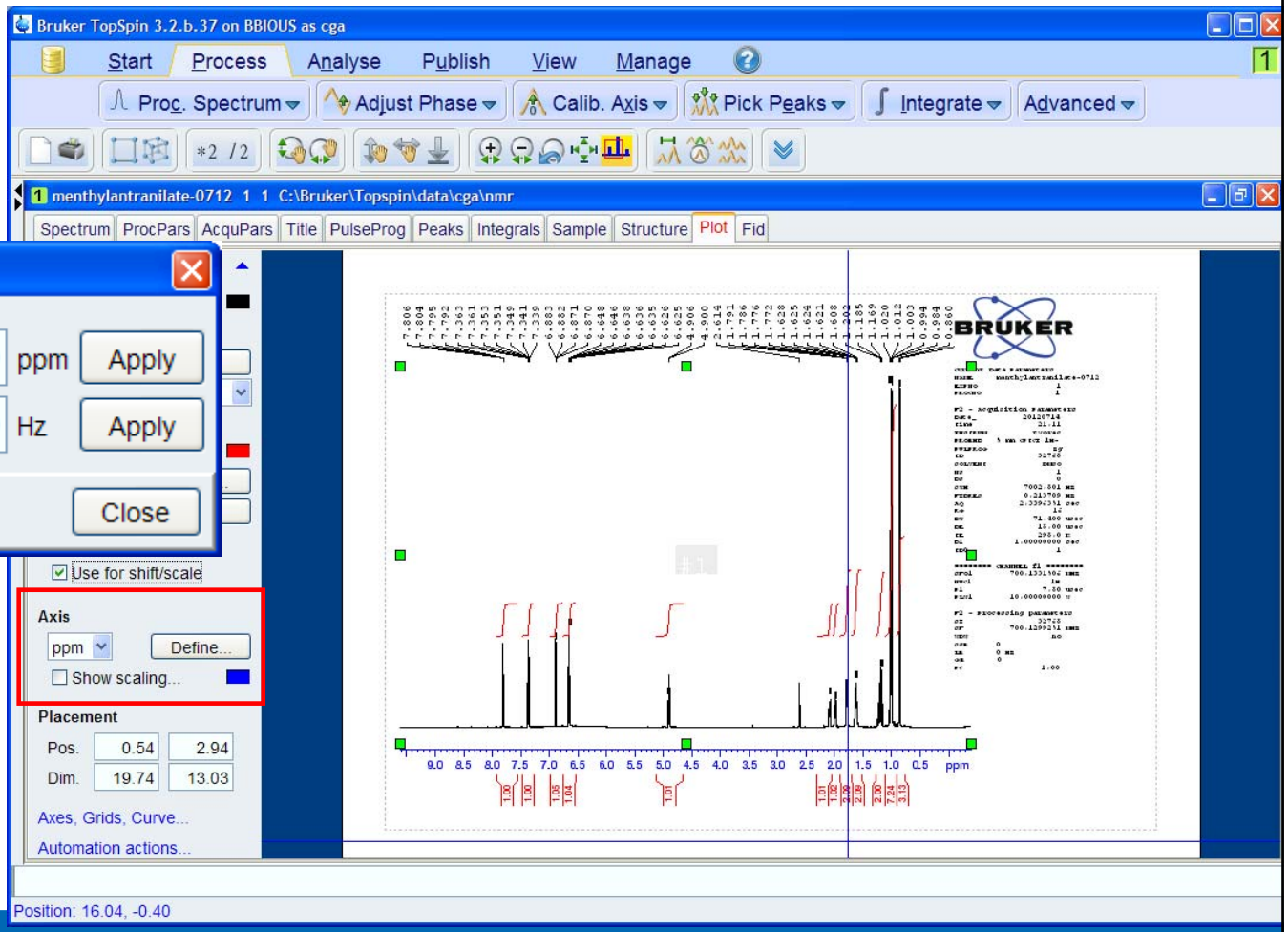
# Manipulating individual objects

- Axis

- Choose ppm, Hz or points
- Define axis details




- Choose color
- Choose display of scaling info on plot

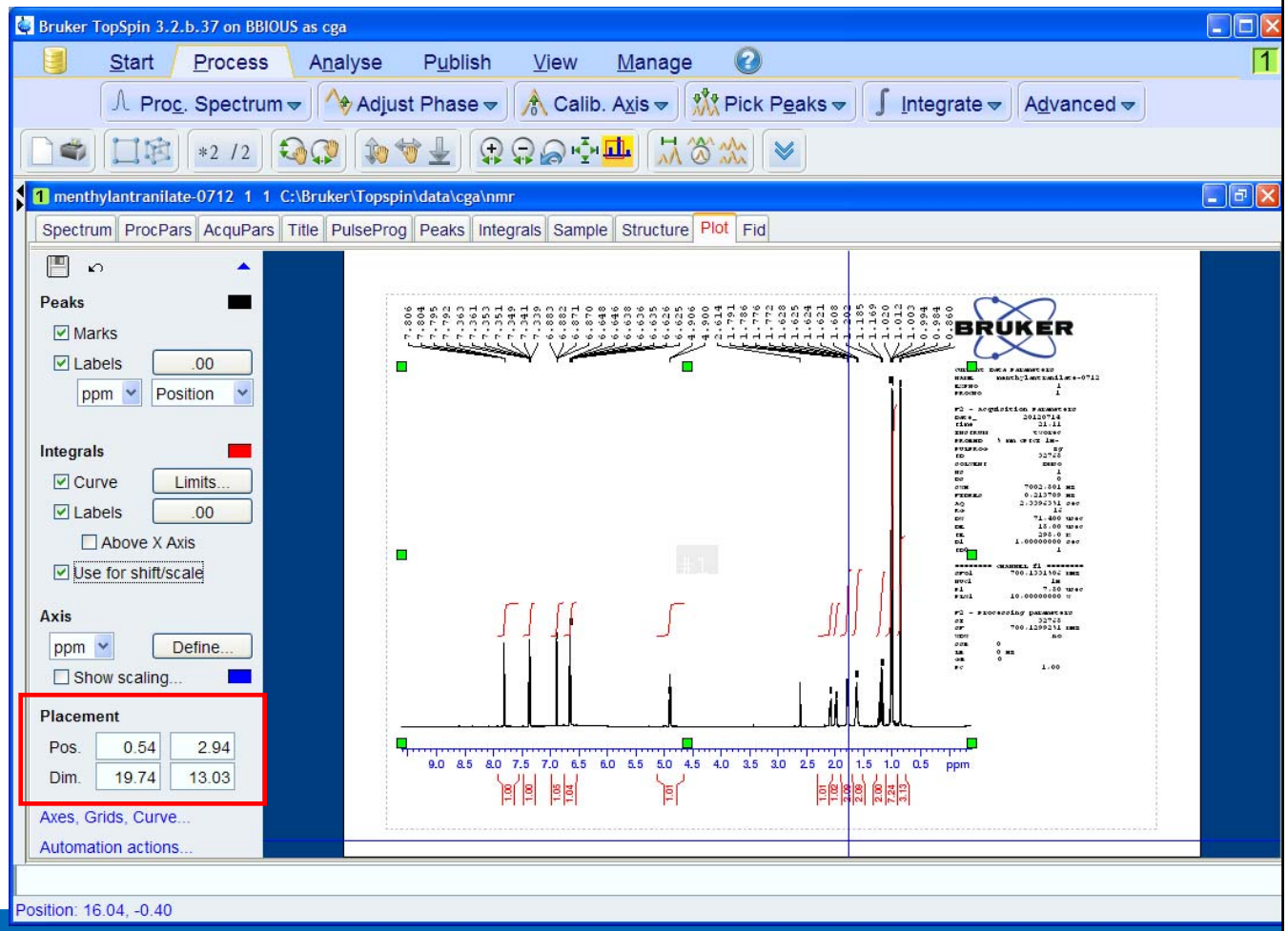


# Manipulating individual objects

- Placement

- Pos: defines the lower left hand corner of the plot (the **green** corner)
  - See next page of options
- Dim: defines the size of the plot as shown by the green corners

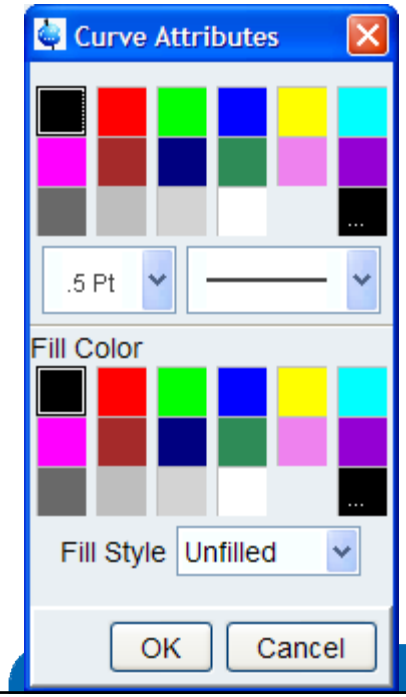
Attention Spectrum scales vertically with the dimension

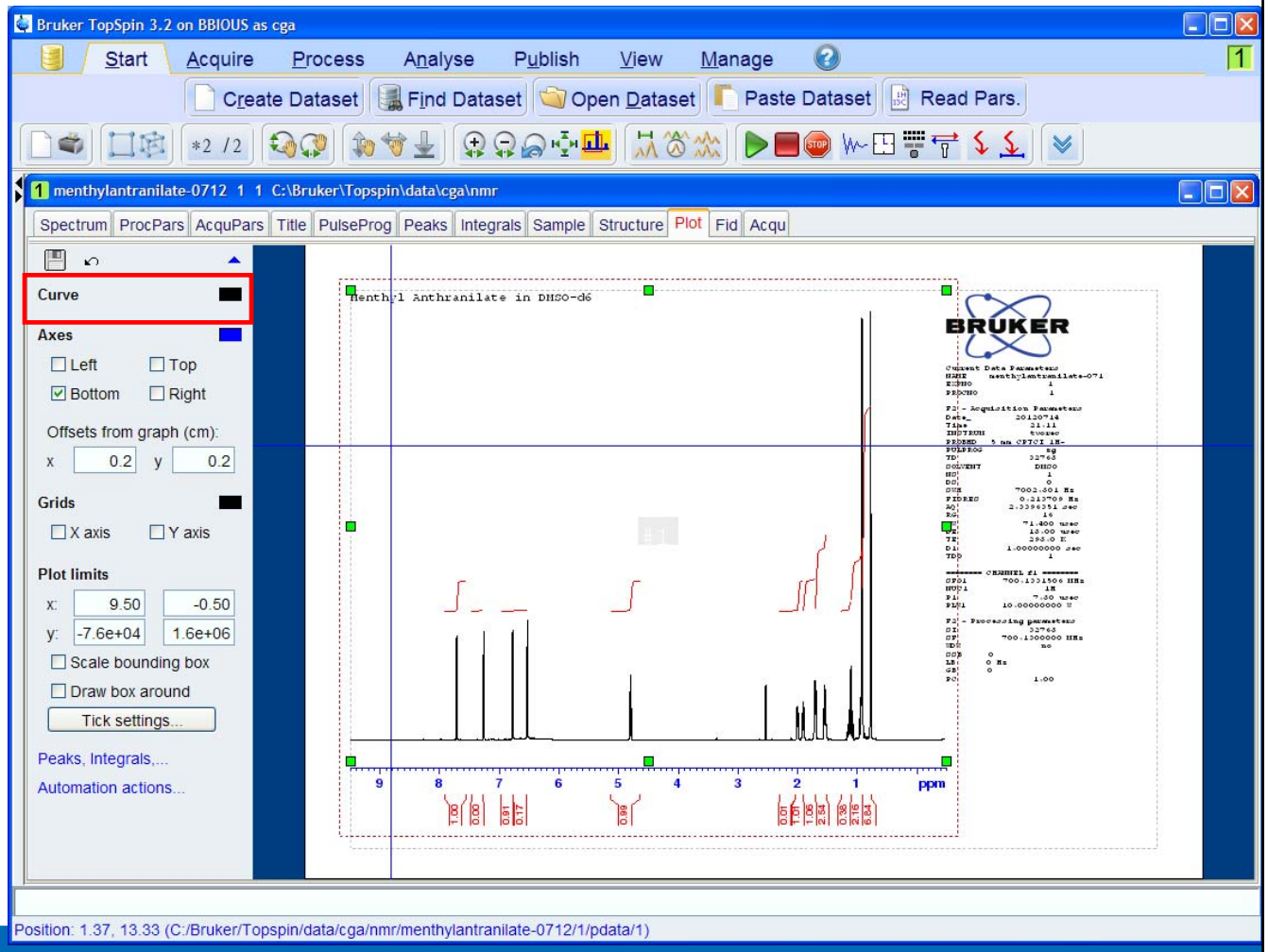


# Manipulating individual objects

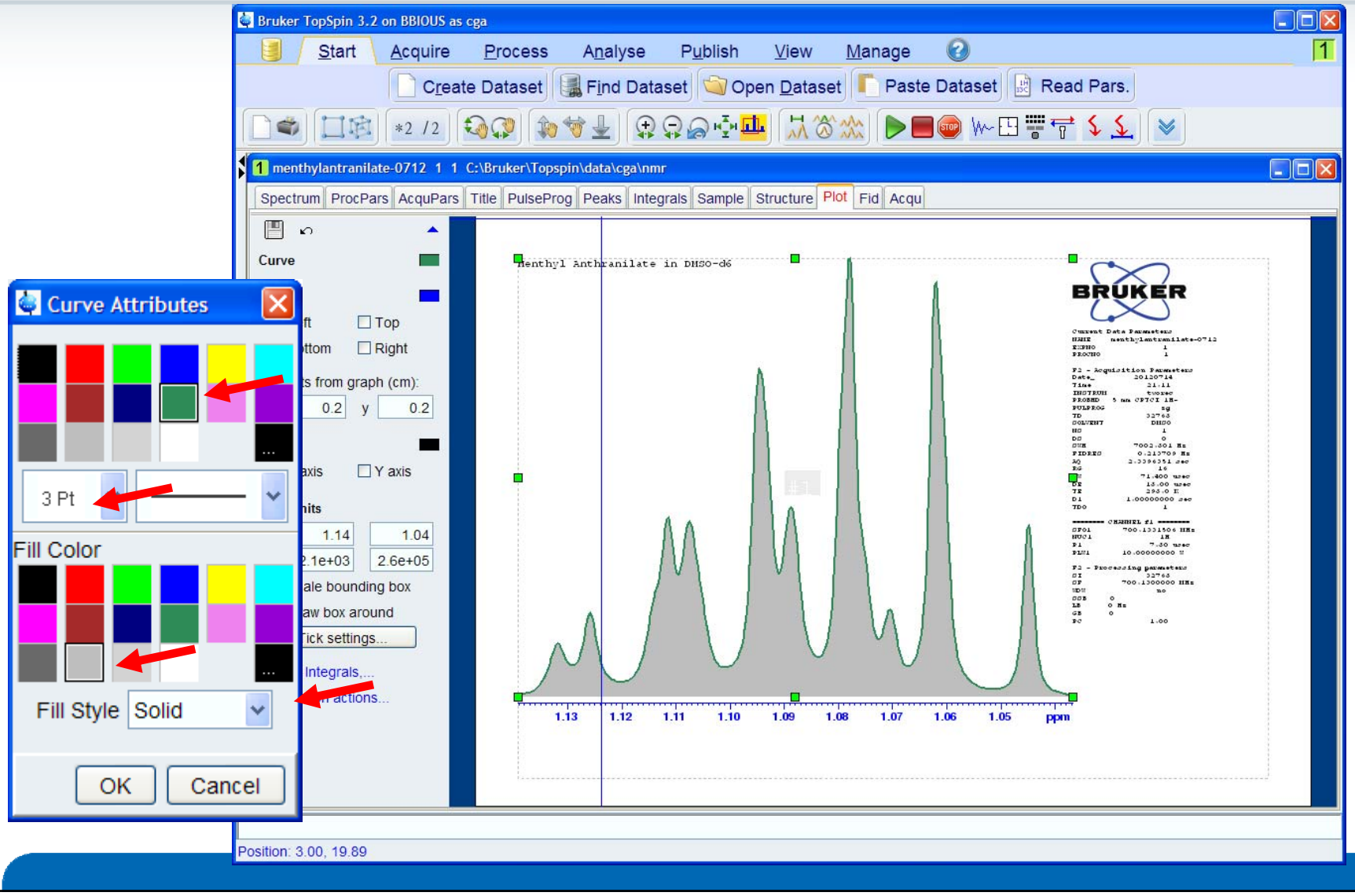
- Curve

  - Defines the color and line thickness of the spectrum



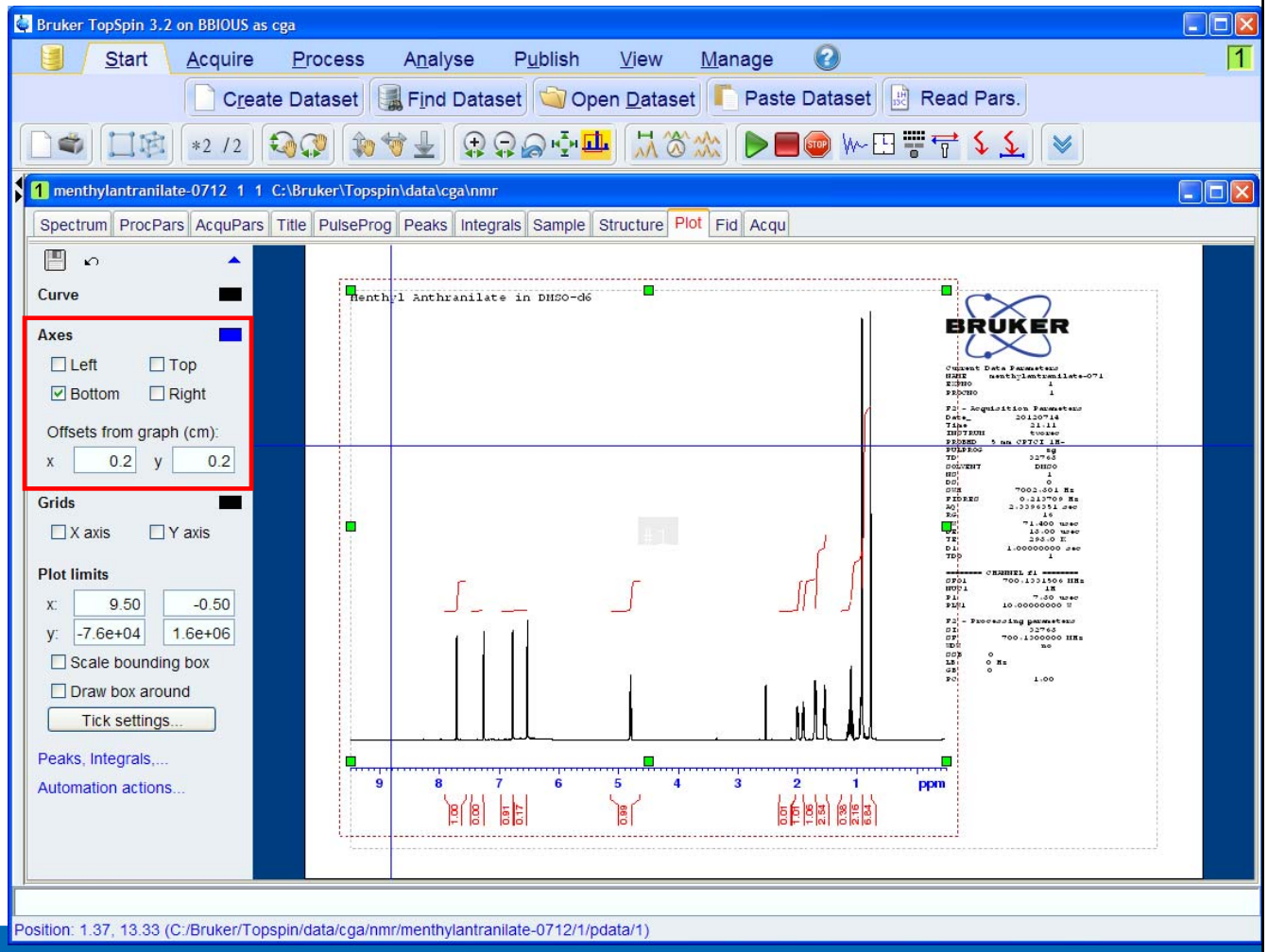
# That is how you do it.



# Manipulating individual objects

- Axes

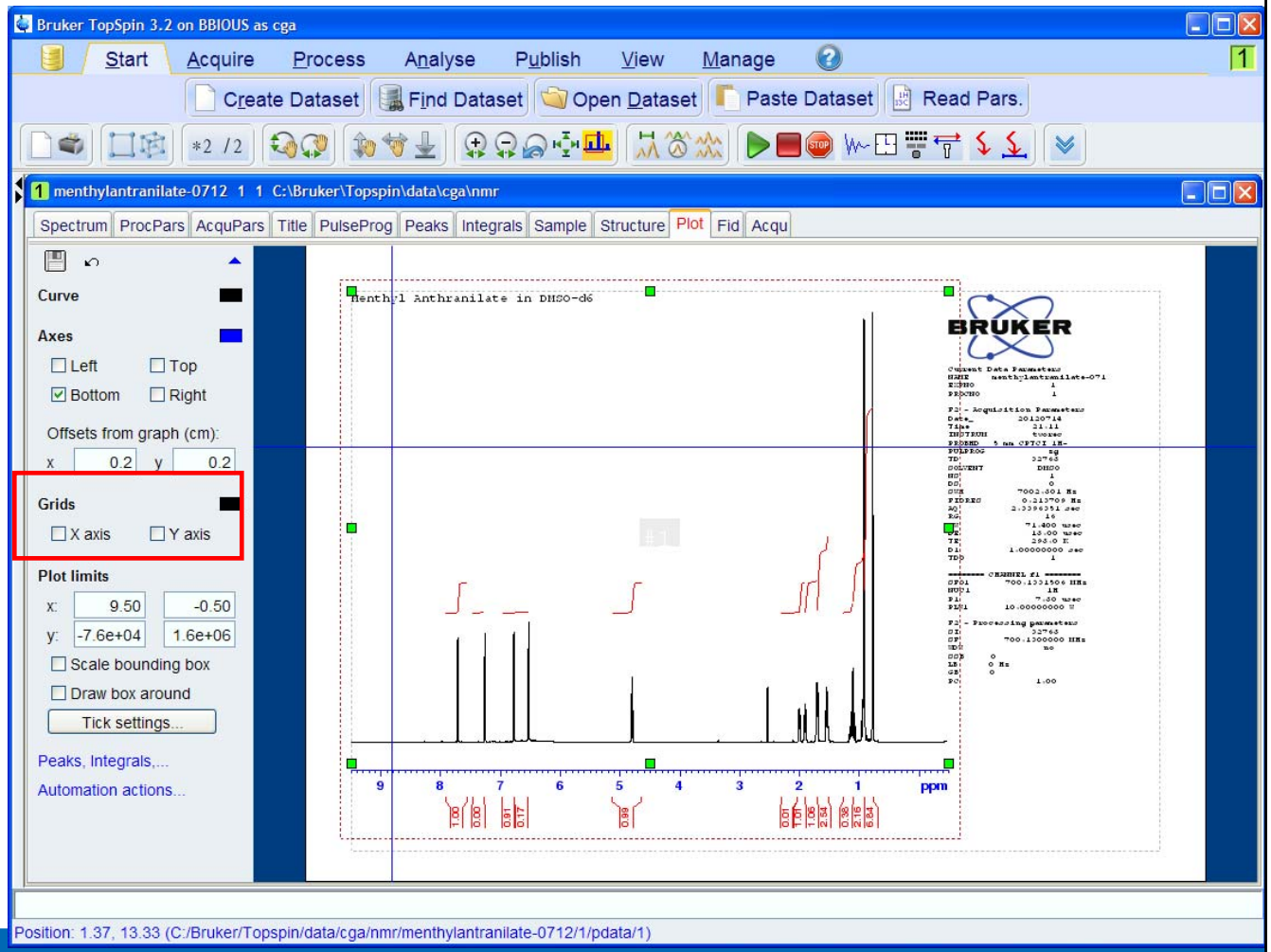
- Choice of color, line style, font size and font for axis



# Manipulating individual objects

- Grid

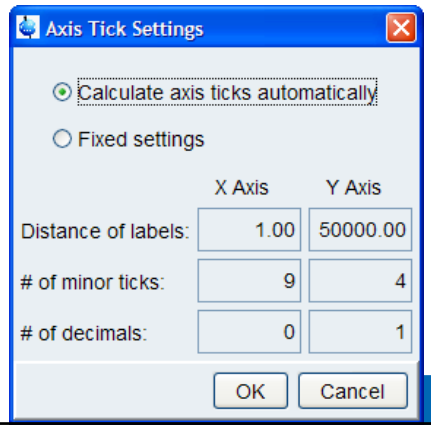
- Choice of color, line style, for X and Y grid lines

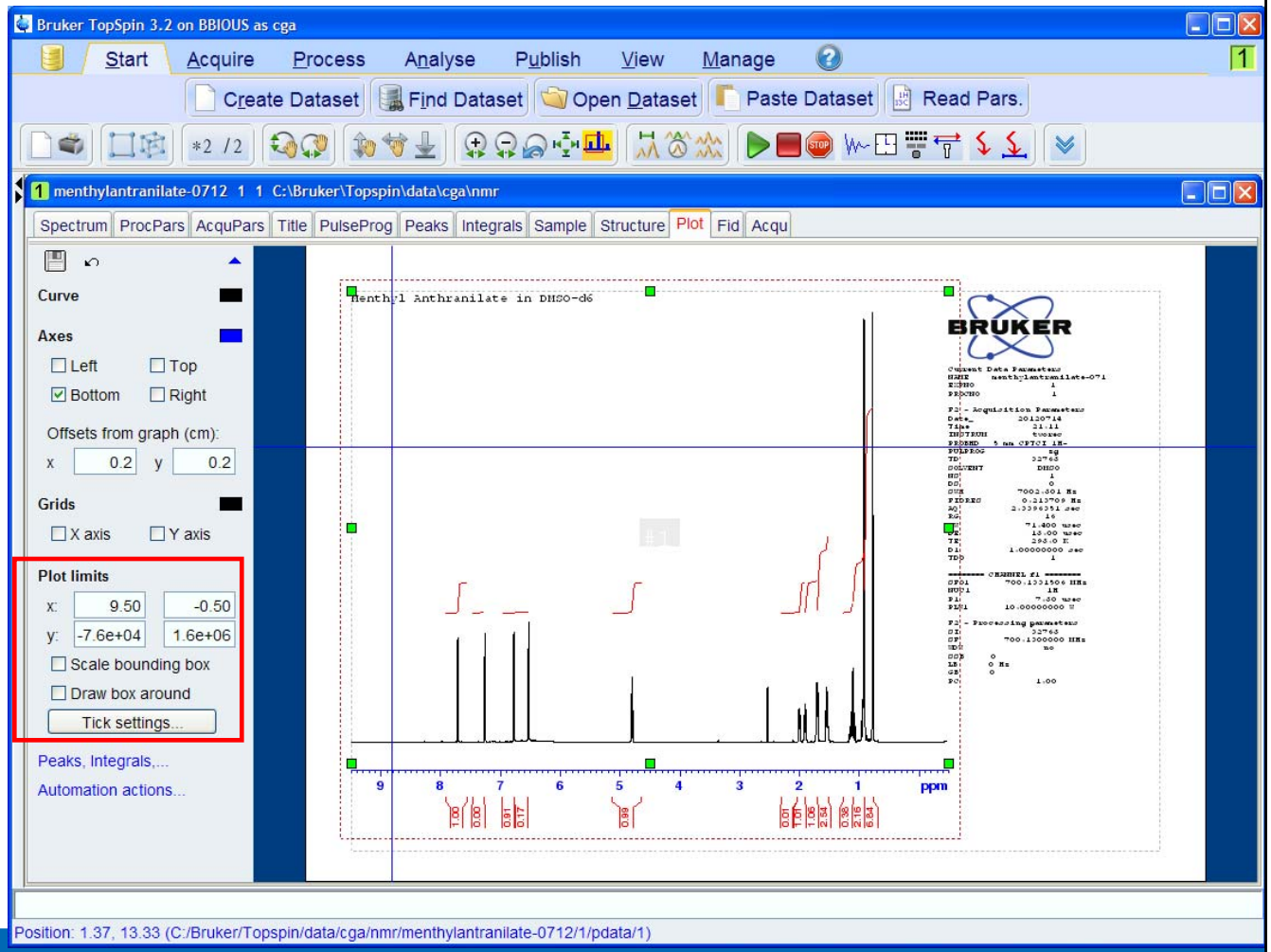


# Manipulating individual objects

- Plot limits

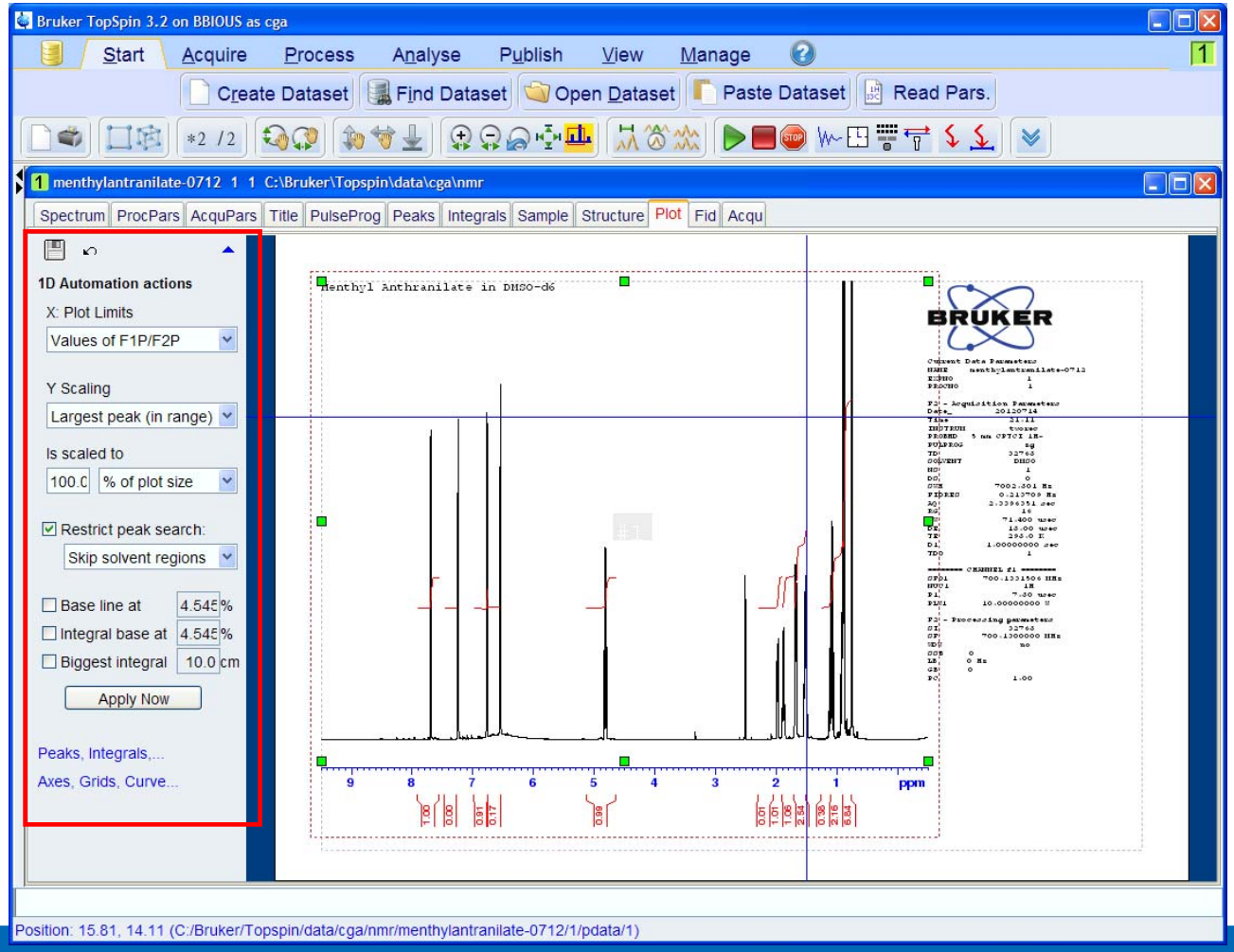
- Choice of plot limits in the units define on the first page of options
- Scale bounding box
  - Include everything
  - Include spectrum only
- Tick mark settings



# Defining Automation actions

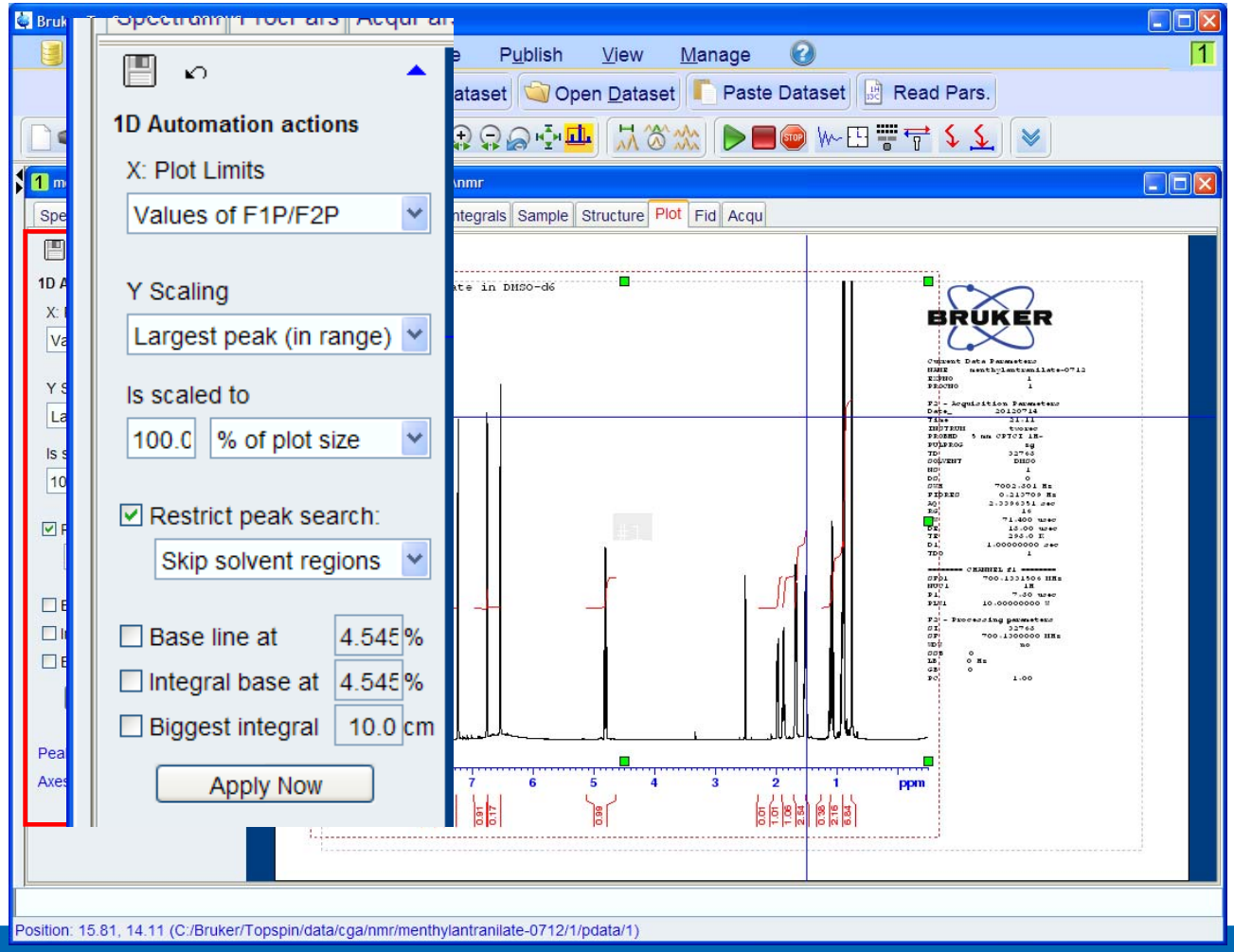
- Define what happens when you reset a spectrum, when you plot in automation or use autoplot
- Vertical and horizontal scaling
- Exclusions such as solvent or other peaks.
- Vertical arrangement of spectrum and integral



# Defining Automation actions

- **X plot Limits**

- Don’t change
  - As is in spectrum tab
- Full Range
  - The whole spectrum
- Values of F1P/F2P



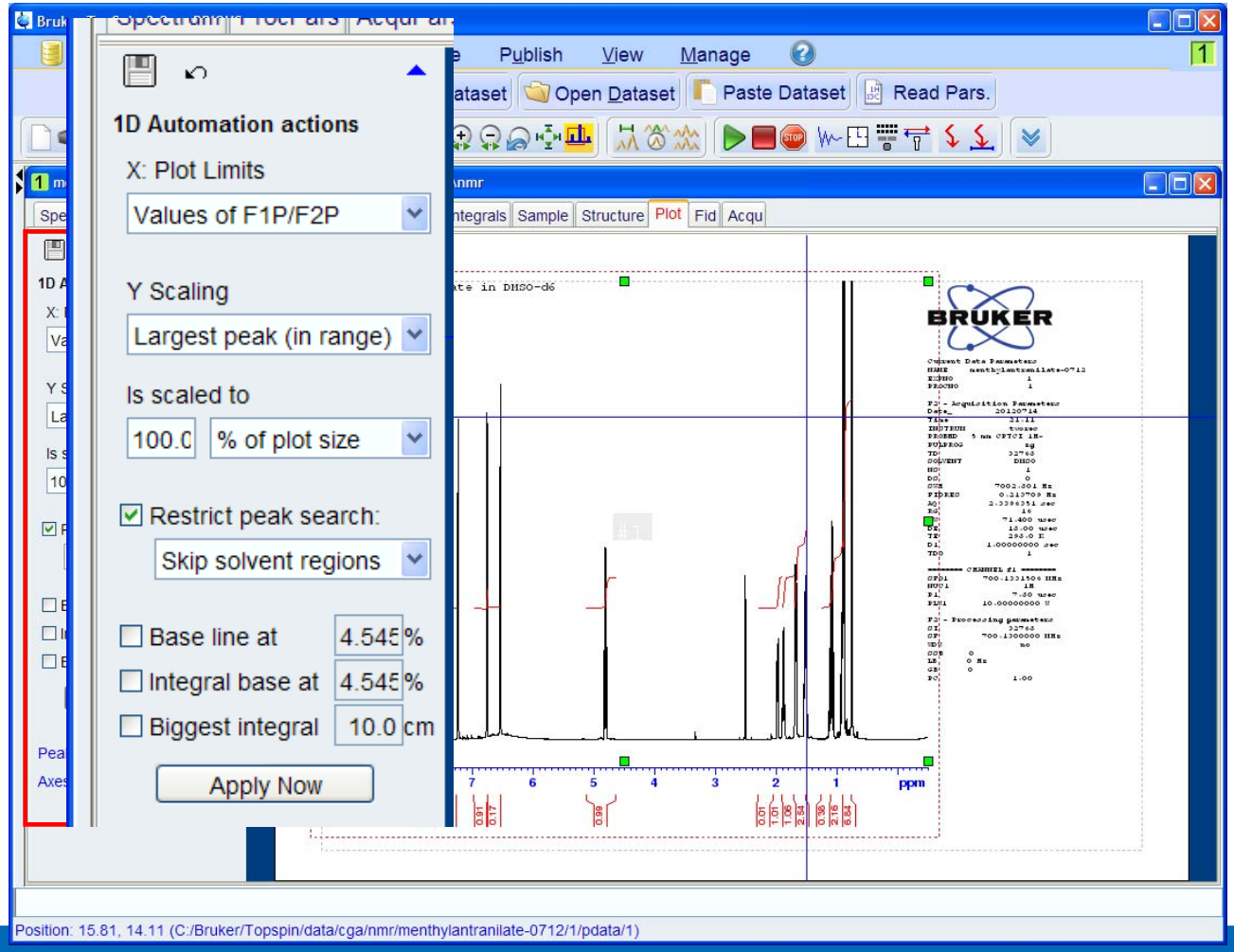
# Defining Automation actions

- **Y Scaling**

- Don't change
  - As is in spectrum tab
- Largest peak (all)
- Largest peak (in range)

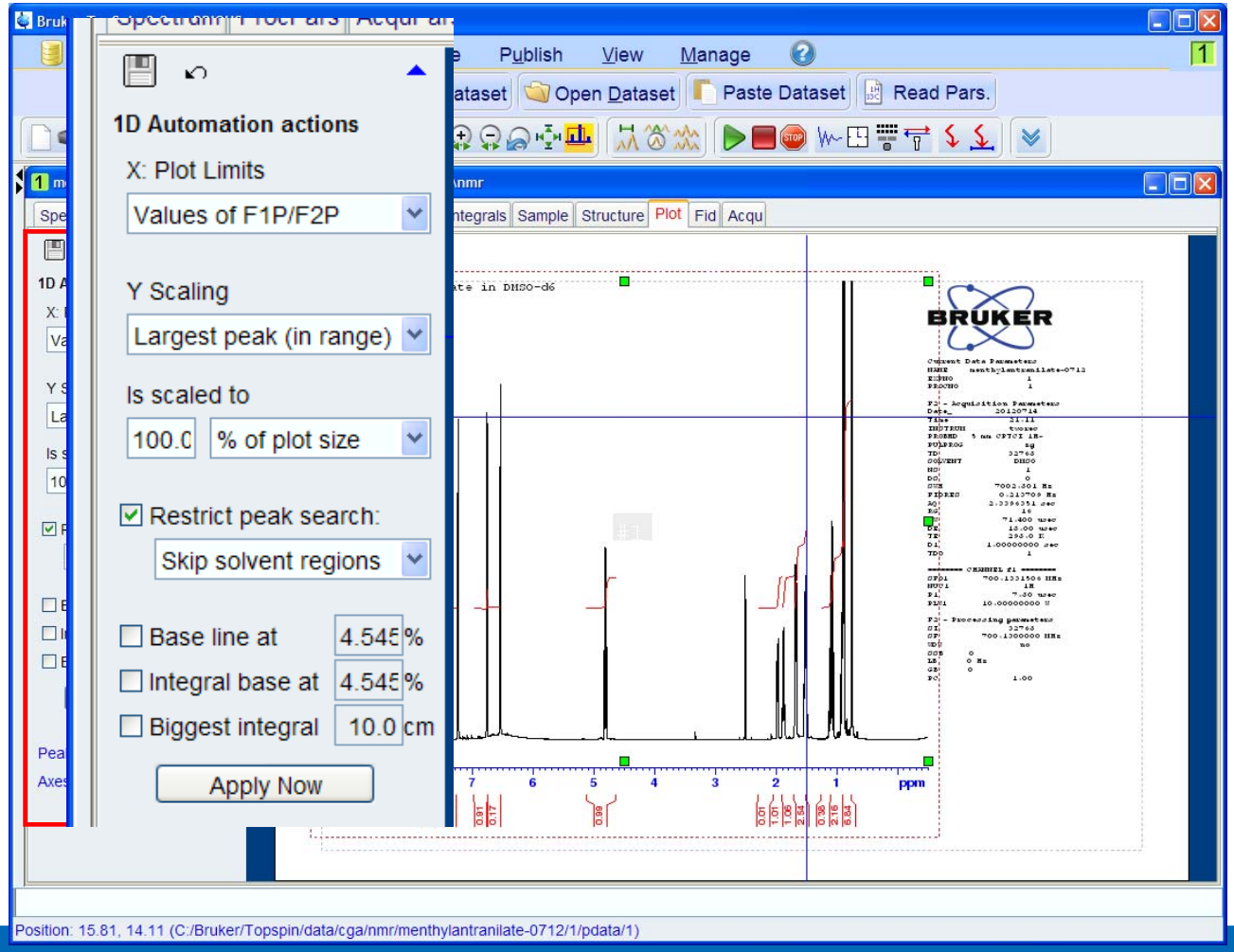
- **Is scaled to**

- Percentage of Plot size
- Specific height in cm
- Value of CY



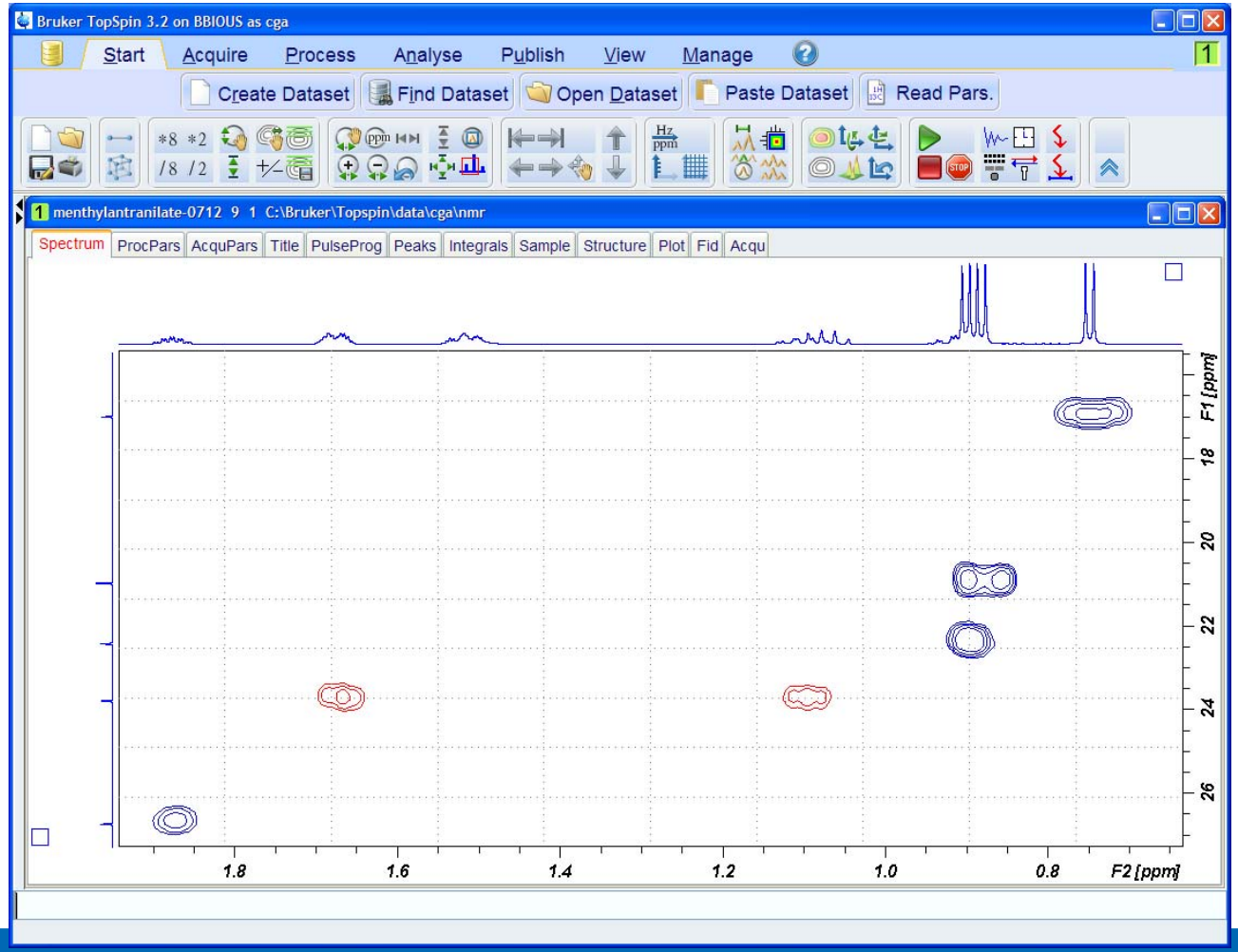
# Defining Automation actions

- **Restrict peak search**
- Use REG file
- Only integral regions
- Skip Solvent regions
- **Baseline settings**



# Now some 2D

- Preparation
- Set projections 1d spectra
- Set levels



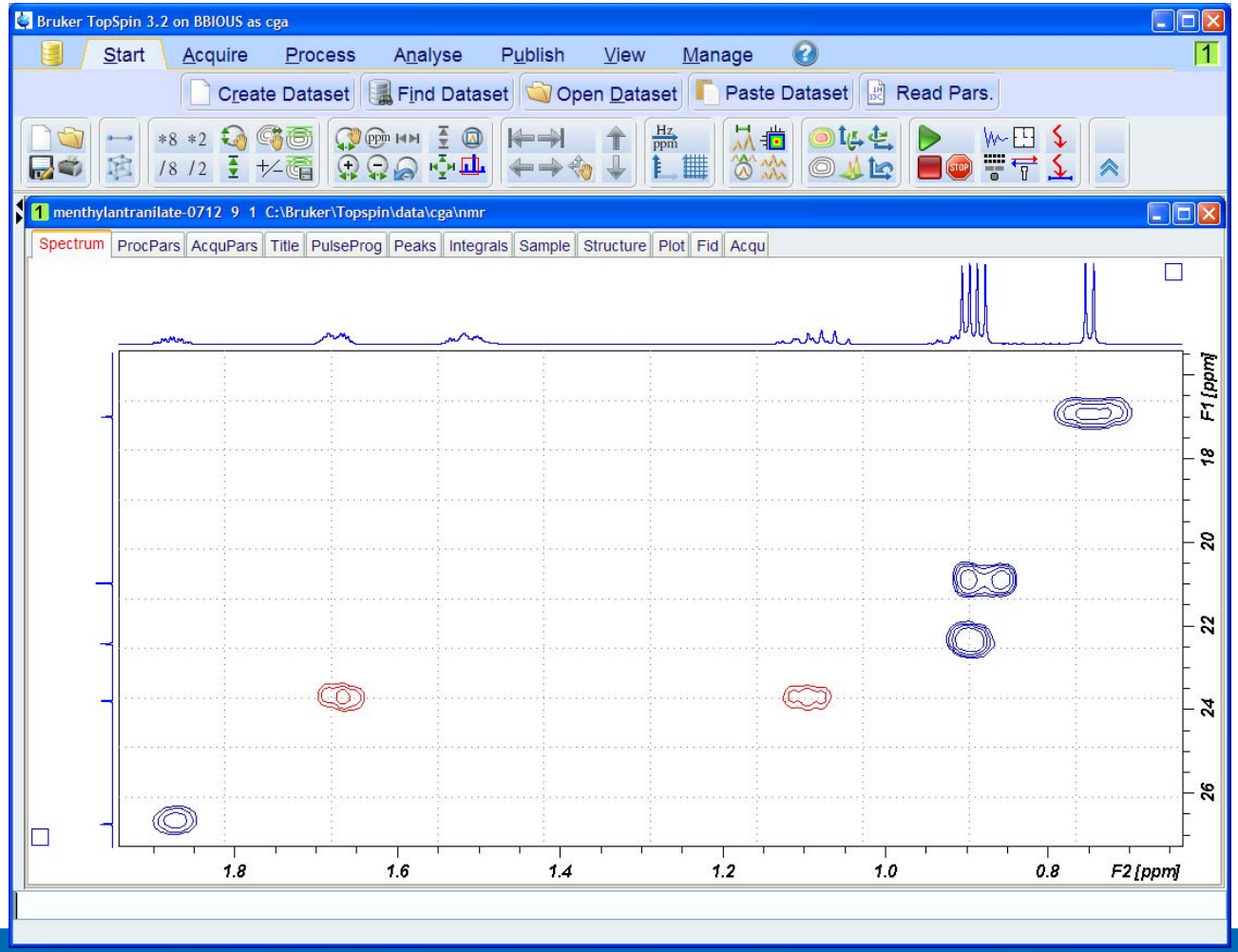
# Now some 2D

Set levels

Default

8 levels

factor 1.8
between
levels



# Now some 2D

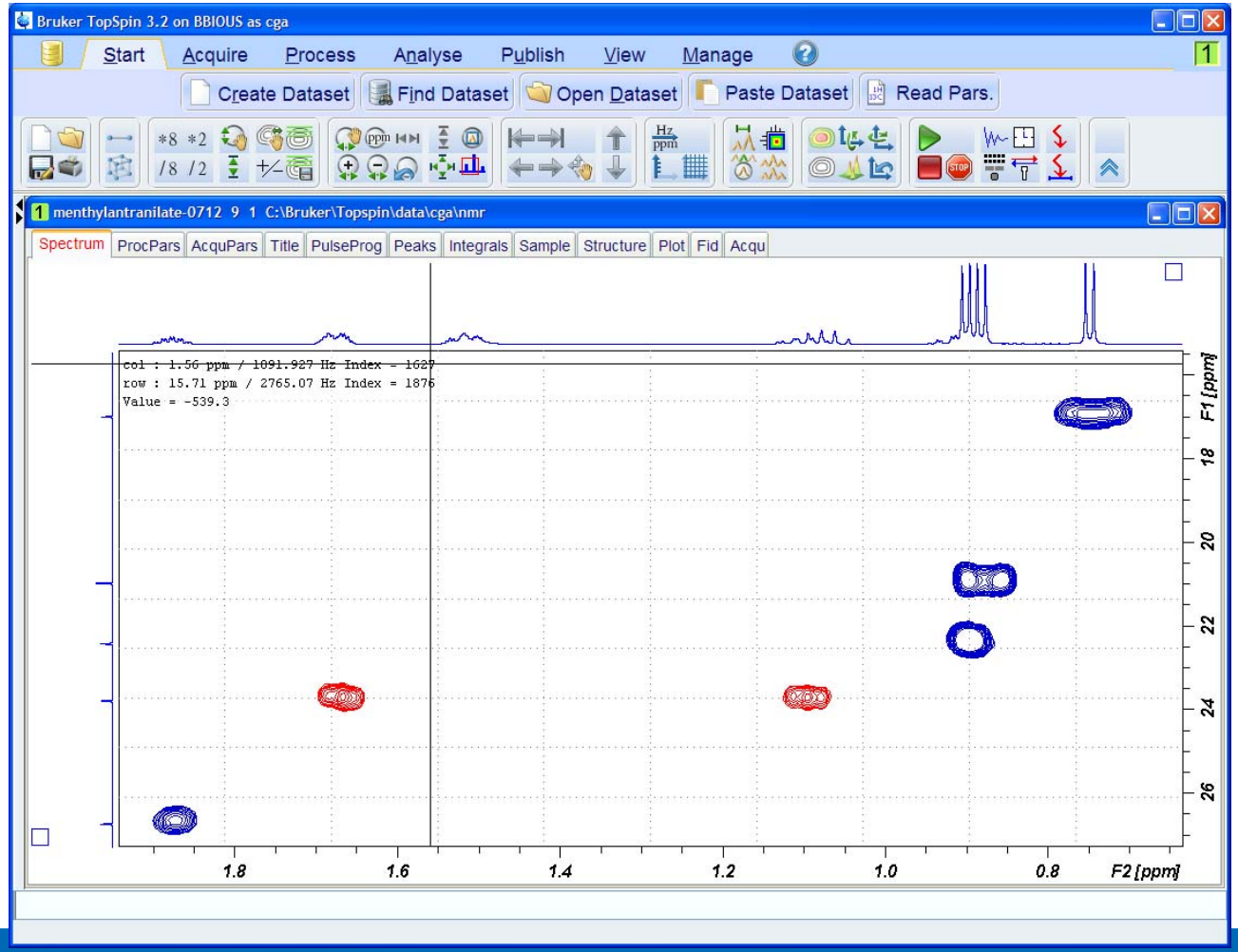
Set levels

Better

32 levels

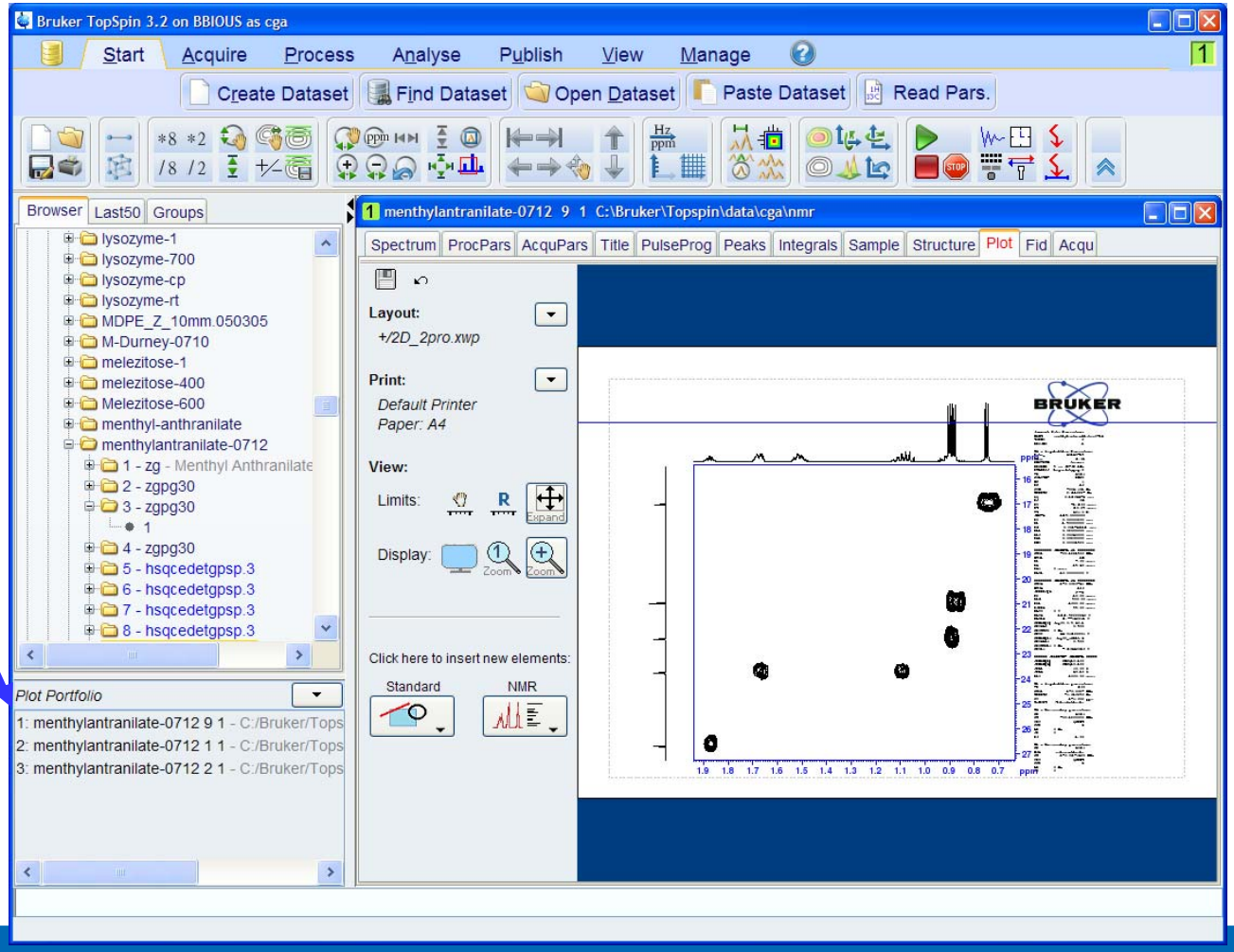
factor 1.2 between levels

Now into the plot editor



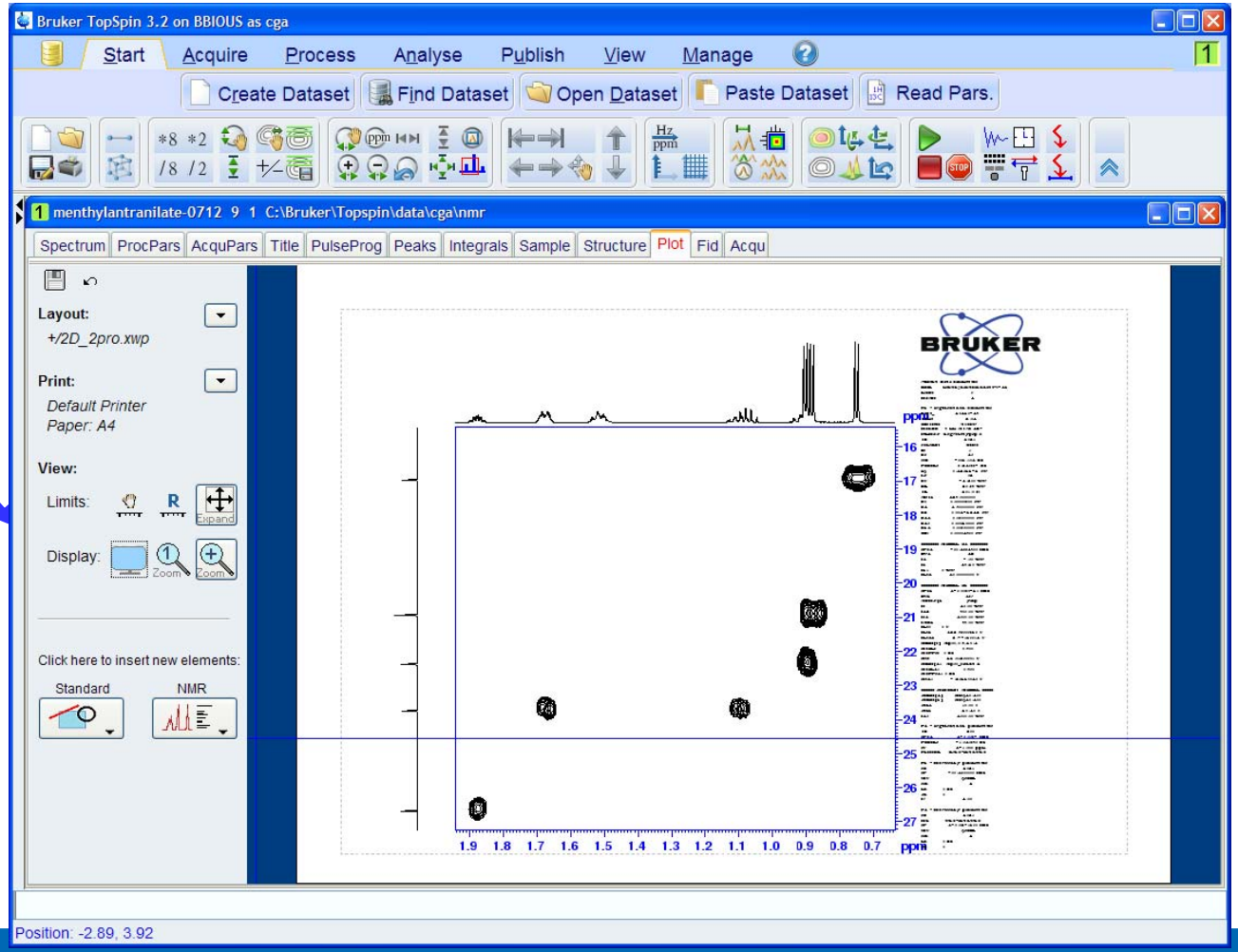
# 2D Plot Editor

Portfolio window shows path of projections



# 2D Plot Editor

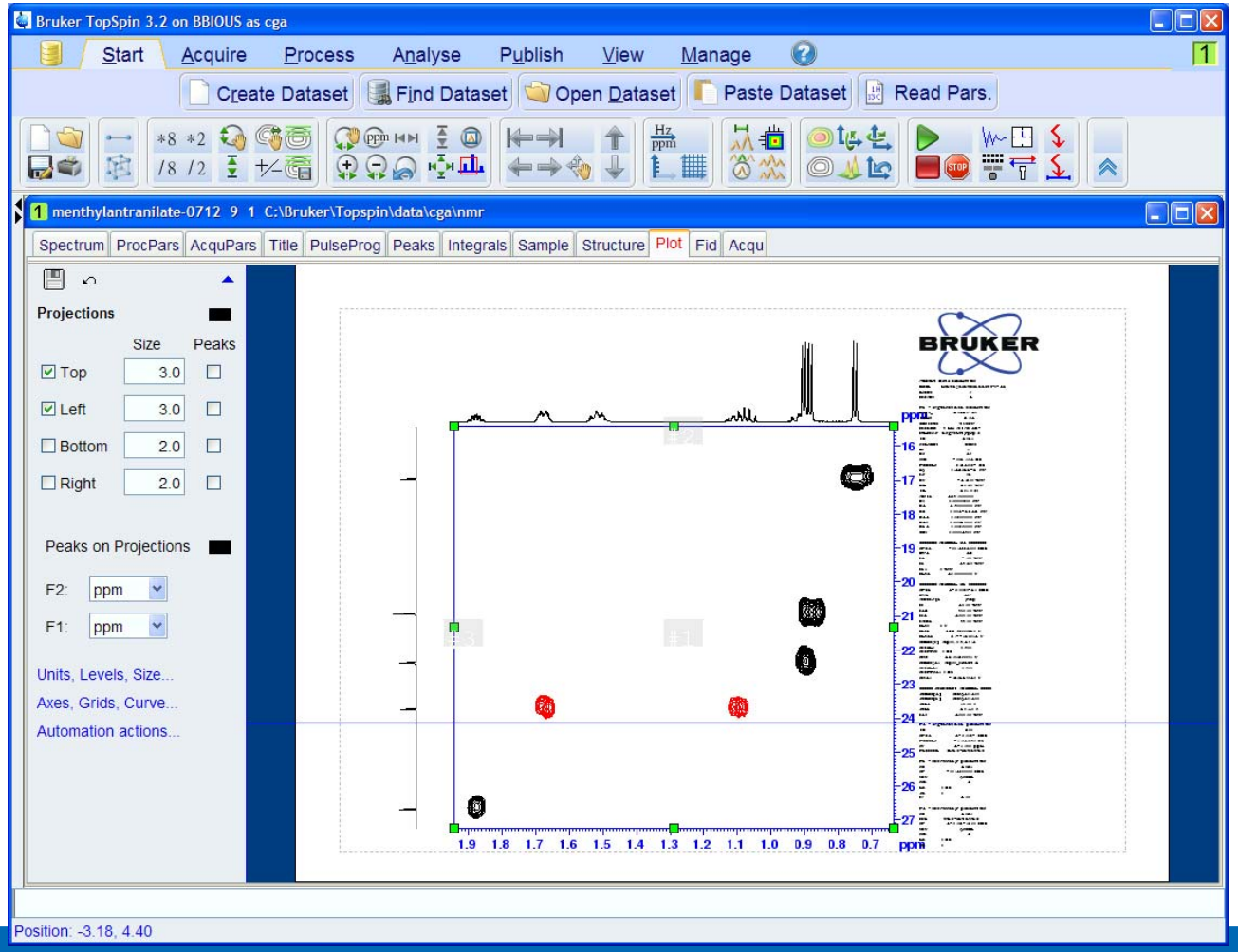
Basic options
same as 1D



# 2D Plot Editor

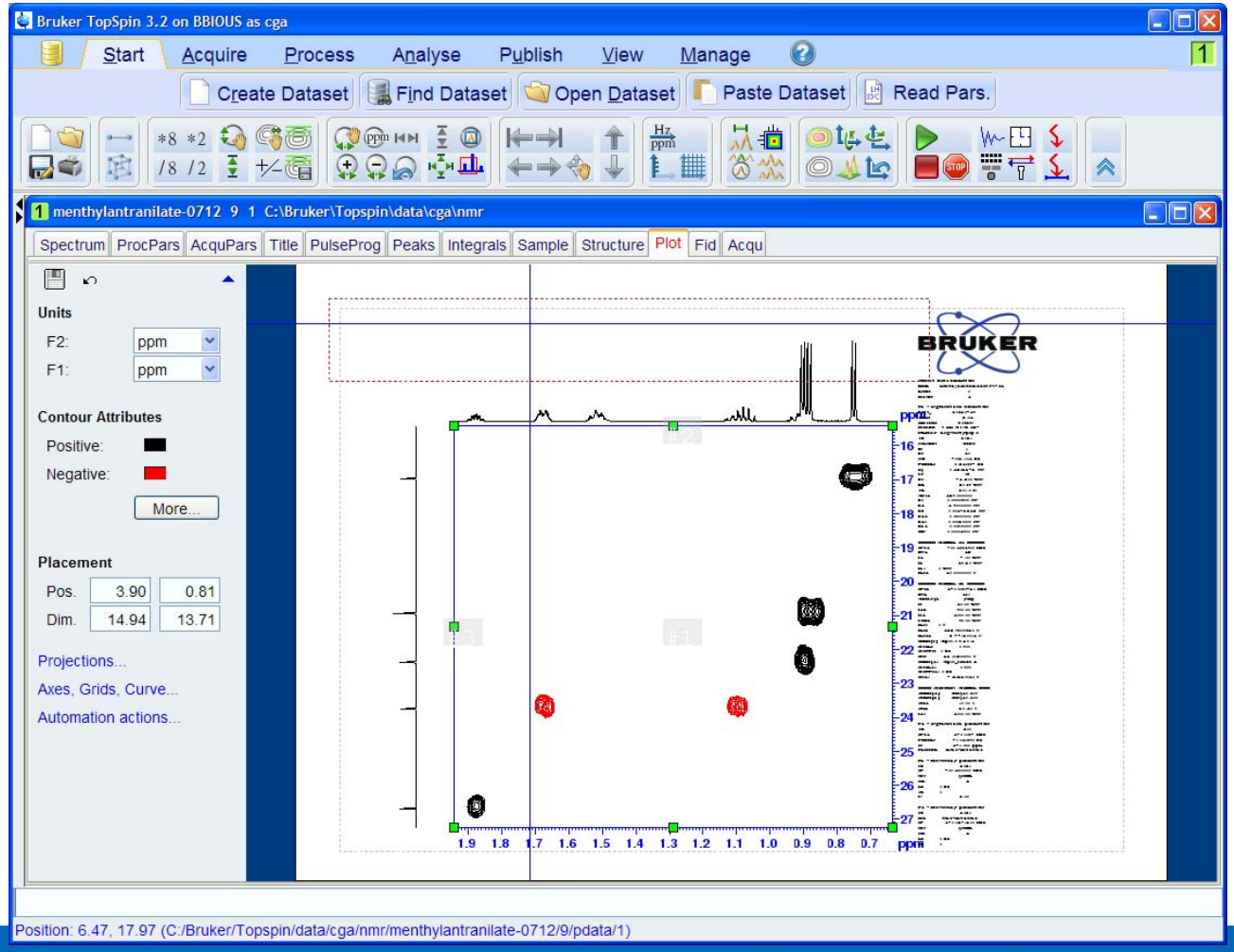
Projections

- Top, bottom, left and right
- Size of projections
- Peak display



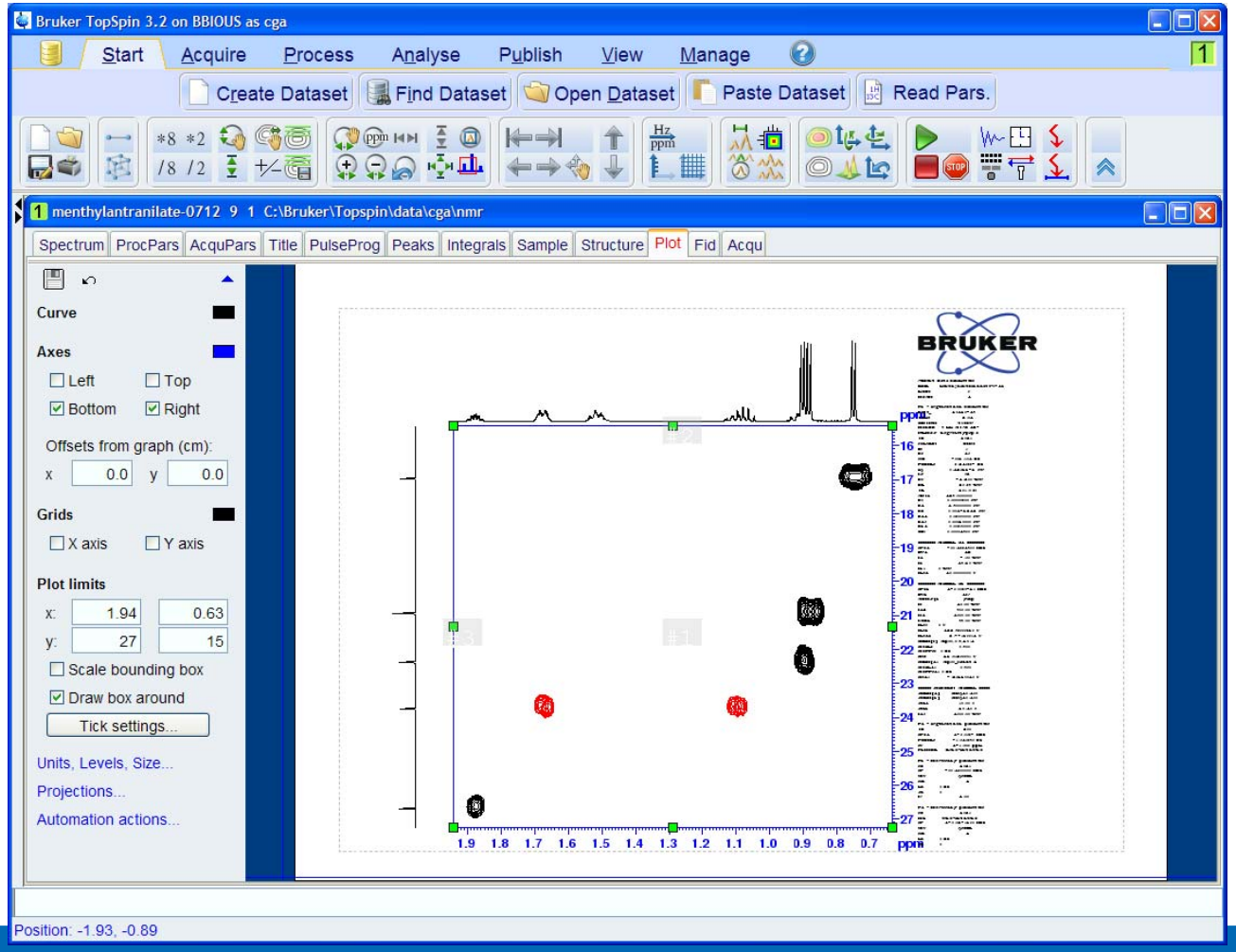
# 2D Plot Editor

- **Units, Contours and placement**
- Contours
  - Choice of colors
- Placement
  - Location of spectrum



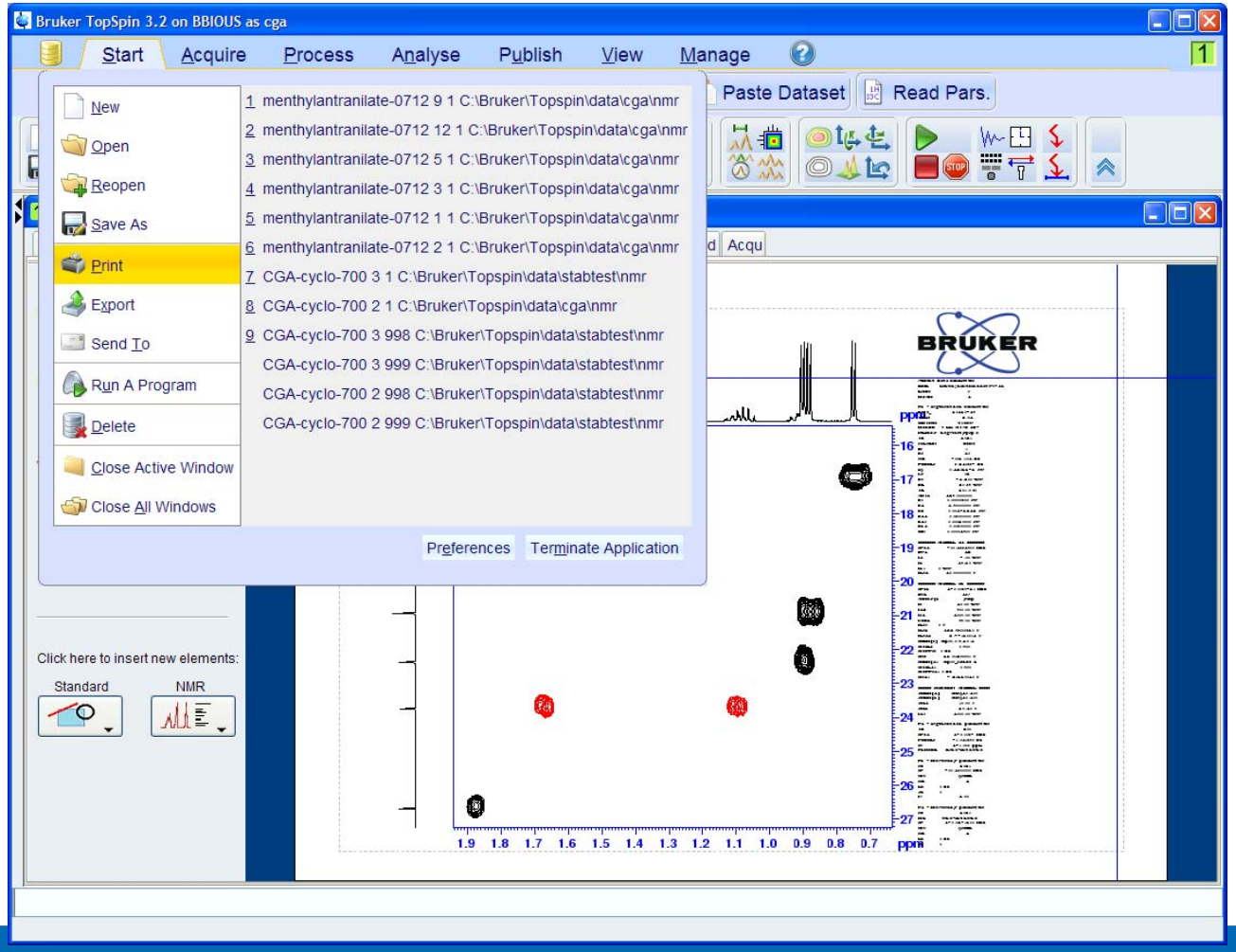
# 2D Plot Editor

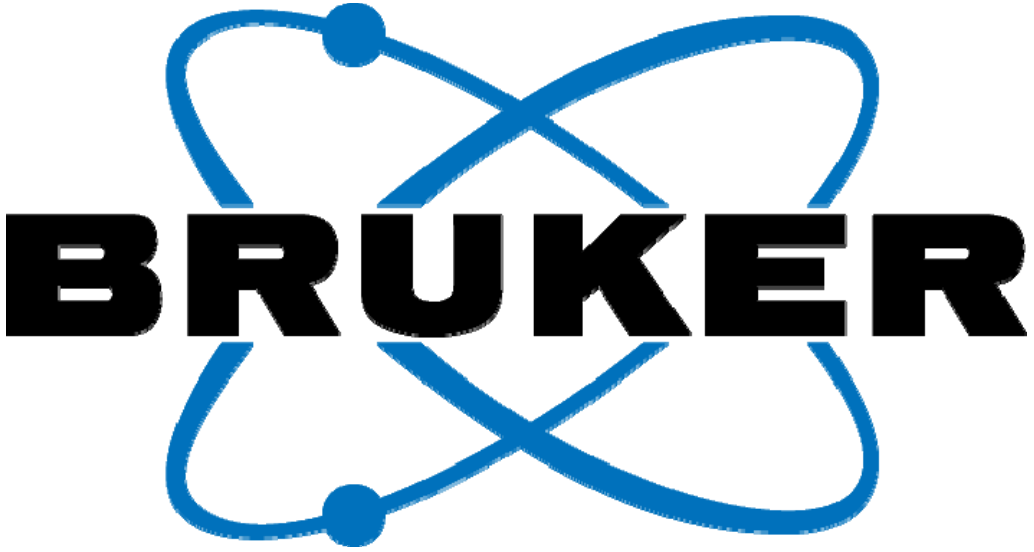
- **Curve, Axes, Grids and Plot limits**



# 2D Plot Editor

- Finishing up
- Print for hardcopies
- Export for digital copiesas PDF, PNG, PS, TIF, JPG and BMP






Innovation with Integrity