Region Of Interest View

Command: vregs (view regions)

Description: Displays several regions of interest of several spectra in a window, arranged in matrix form.

Syntax:

1) *vregs*
2) *vregs reset*

- When first used, *vregs* will display a new empty window inside TopSpin with tool buttons allowing one to define the dataset list and the list of spectral regions required for the view.
- When a region view was created earlier, *vregs* will re-display the last view. The view properties are read from the file
  <user home dir>/.topspin-<hostname>/prop/globals.prop
  The respective properties are called
  SPEC_ROI_VIEWER_CELL_HEIGHT=200
  SPEC_ROI_VIEWER_CELL_MINWIDTH=150
  SPEC_ROI_VIEWER_REGPATH=<file path of the region list>
  SPEC_ROI_VIEWER_DATAPATH=<file path of the dataset list>
  SPEC_ROI_VIEWER_ORIENTATION=0
  The properties above include example values.
- *vregs reset* will always display a new empty window inside TopSpin, and not the last used view.

Dataset List:

A *datasetlist* is the path of a text file containing a list of TopSpin dataset paths, one path per line.

Example:

C:\Users\guest\topspin\examdata\exam_DNMR_ipr2sic\200\pdata\1
C:\Users\guest\topspin\examdata\exam_DNMR_ipr2sic\220\pdata\1
C:\Users\guest\topspin\examdata\exam_DNMR_ipr2sic\250\pdata\1
C:\Users\guest\topspin\examdata\exam_DNMR_ipr2sic\280\pdata\1

You may specify 1D and 2D datasets in the list.

A *regionlist* is the path of a text file containing a list of regions of interest, one region per line.
Example:

MyROI1, 1.0, 0.6
MyROI2, 2.5, 2.0
MyROI3, 2.0, 0.0, 60.0, 1.0

A region starts with an arbitrary name which will appear in the display, followed by the 1D or 2D region limits in ppm. In a 2D region, the first pair of numbers defines the F2 region (horizontal axis), the second pair the F1 region (vertical axis).

A dataset list may contain 1D and 2D datasets simultaneously, and a region list may contain 1D and 2D regions simultaneously. If, for a 2D display, the F1 region is missing, the full spectral range is displayed in this axis.
If a specified region is not contained in the full spectral range of a dataset, the full range is displayed instead of the region. This feature allows for easy generation of a matrix cell showing the entire spectrum.

Tool Buttons:

	Define the file path of the data set list Note: You can automatically generate data set lists using the command “find” (CTRL F)
	Setup or change a data set list using a text editor
	Define the data set list via TopSpin's *find* command: A dialog is opened. Enter your *find* criteria and press OK to start the search. The resulting data set list is shown in a window. Mark the data sets in the list you want to use for the *vregs* display using the mouse and the SHIFT or CTRL key, and click right. Select *Save selection in file* and define the file where you want to store the selction. Then define use the icon *Define the file path of the data set list* above to continue.
	Define the file path of the spectral region list (must have the format specified above, may contain 1D or 2D regions)
	Setup or change a region list using a text editor
	Import the regions from an *intrng* or *int2drng* type file. In TopSpin's 1D and 2D integration modes (command *.int*) you can define 1D and 2D spectral regions and save them in the files *intrng* or *int2drng.* Existing *intrng* and *int2drng* files can also be copied to other directories using the command *wmisc*. This icon allows you to navigate to such an integral region file and import its regions. They will be appended to the current region list (if one exists).
	Create the region view using the defined data set list and region list. The currently active region view will be closed.

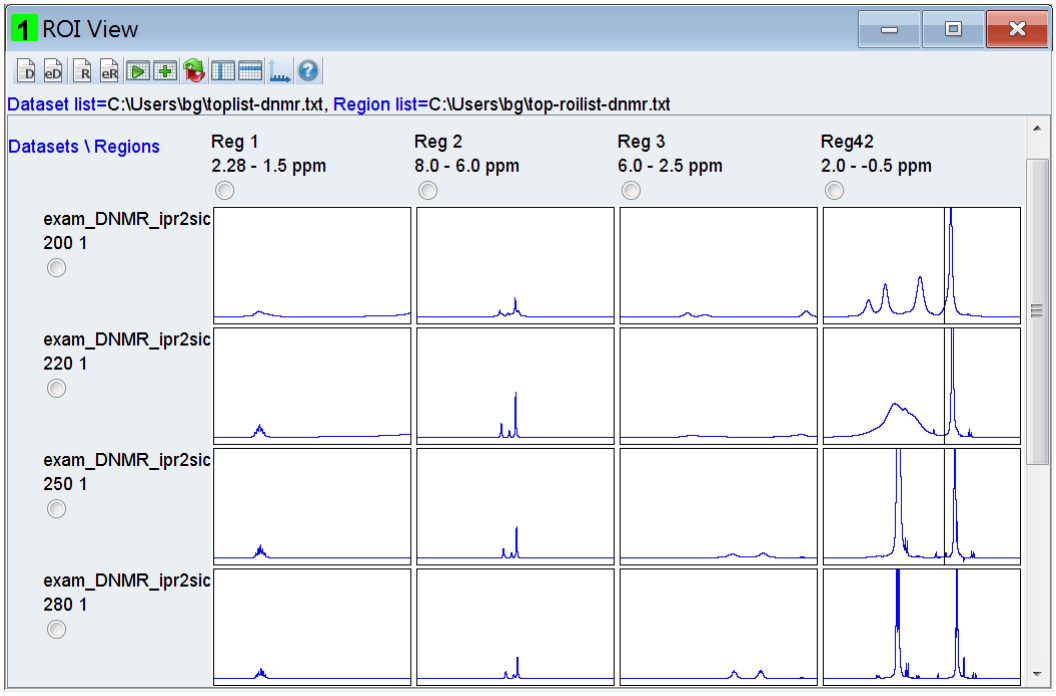
	Create the region view using the defined data set list and region list *in a new window.*
	Flip the view matrix: Layout 1: The matrix rows are data sets, the columns are regions. Layout 2: The matrix columns are data set, the rows are regions.
	Define the height of a matrix cell in pixels.
	Define the maximum width of a matrix cell. The width of a cell is automatically calculated according the window width. The value you can define here means that the cell width will not become smaller, even when you resize the TopSpin window or the internal window containing the ROI view.
	Toggle the X-axis of the selected matrix row or column on/off. If no row/column is selected by a respective radio button, all cells are treated. Note: The cell height must be bigger than about 130 pixel for the X-axis to appear. Using the respective icon of the main tool bar, you can also display a Y-axis. This requires the X-axis to be enabled.

In addition to the tool buttons described in the table above, many (but not all) of the buttons of of TopSpin's main tool bar are active, e.g. vertical scaling. Normally the commands of these buttons are applied to all cell of the view matrix. If you want to apply a button to just one row or one column of the matrix, please select the respective radio button. Clicking a selected radio button again will deselect it.

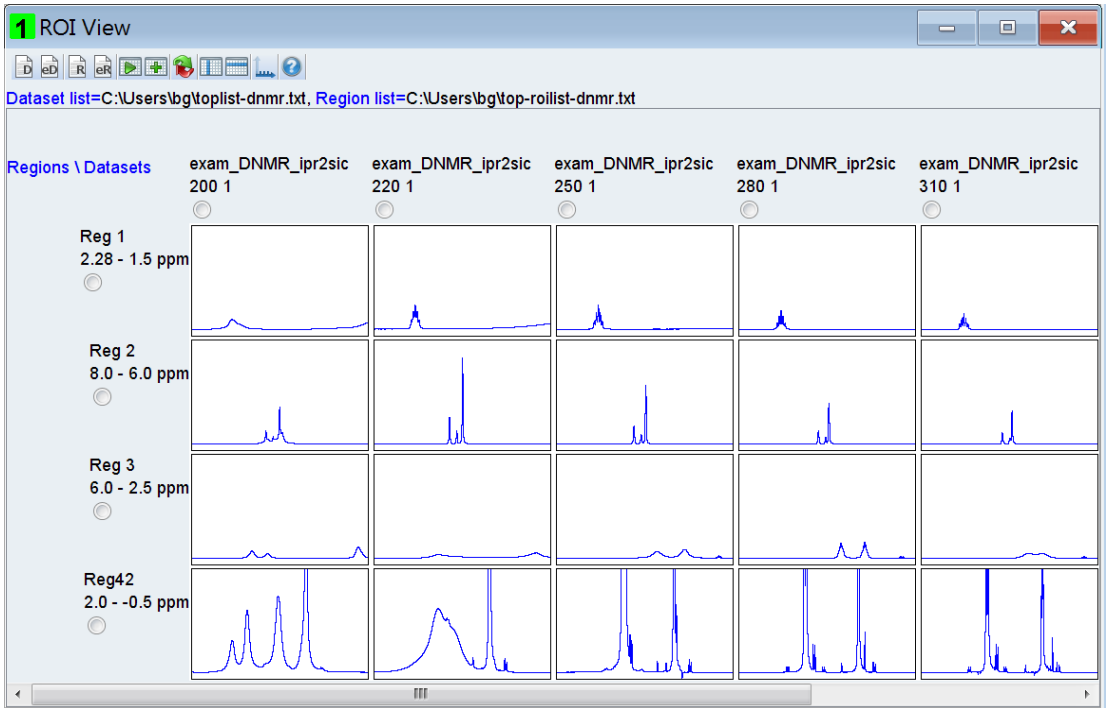
Cursor:
The cursors in all cells will move aligned, showing the same position in the regions. If other TopSpin data windows are open, the cursors are also aligned with those.

Examples:

1) The matrix rows are the datasets



2) The matrix rows are the spectral regions


1 ROI View
Dataset list=C:\Users\bg\toplist-dnmr.txt, Region list=C:\Users\bg\top-roilist-dnmr.txt
Regions \ Datasets
exam_DNMR_ipr2sic 200 1
exam_DNMR_ipr2sic 220 1
exam_DNMR_ipr2sic 250 1
exam_DNMR_ipr2sic 280 1
exam_DNMR_ipr2sic 310 1
Reg 1
2.28 - 1.5 ppm
Reg 2
8.0 - 6.0 ppm
Reg 3
6.0 - 2.5 ppm
Reg42
2.0 - -0.5 ppm