A Quick Tour

In the standard RMNLIB distributions there are sample RPN standard files that are available for demonstration. There are normally available under \$ARMNLIB/data/SAMPLES/fstd_samples. It is assumed that the directory \$ARMNLIB/bin is included in your \$PATH variable)

xrec -imflds \$ARMNLIB/data/SAMPLES/fstd_samples/sample_fstd89 &

If everything is set properly, 3 windows should normally appear. The first window is the display window, with a black background and on which the following message is written:

The window should then be enlarged following normal window manager methods. Then two other windows should appear, the "Control Panel" window and the "Record Selector" window. The windows setup should look like this:

X xreeDisplay – 🗆 🗙	X xrecControlPanel – 🗆 🗙	
Rever En Couleurs v. 5.4 - March 15th, 2005	File Display Grid Vectors Calc. Contours Options	
	Zoom Grid point values	
	Activate Redraw Erase Superposition window(s) all fields	
	STOP	
	Zoom: [1.0, 1.0, 121.0, 101.0]	
	X xrecRecordSelector -	
	Ok Clear Erase sel. 198/198 n: 001 criteria	
	Field Type Level Time IP3 Stamp Date	
Service through	XY X 0 mb 1 2 VALEURS 00****0000-()0Z 00Z
seianea	>> X 10 mb 20 30 DESCRIPT 00***0000-/	00Z
	DZ P 1000 mb 500 36 FE OPRUN 270ct1989-: PN P 0 mb 36 0 FE OPRUN 270ct1989-:	12Z
	GZ P 500 mb 36 0 FE OPRUN 270ct1989-	12Z
	GZ P 700 mb 36 0 FE 0PRUN 270ct1989-: DQ P 500 mb 36 0 FE 0PRUN 270ct1989-	12Z 12Z
	WW P 700 mb 36 0 FE OPRUN 270ct1989-	12Z
	x HR P 850 mb 36 0 FE OPRUN 270ct1989-:	122
	STANDAR AND	
	ALL MARKEN STATE	
Atmospheric Environment Service - Environment Canada	All Hard All March	
		AC

Most program commands are activated with the mouse. Unless mentioned explicitly, the left mouse button is the only one that has to be used.

To get an idea of the functionality offered by the program, go in the record selector and click with the left mouse button on any record that you find interesting. In this example, the record selected is the 36hr forecast of sea level pressure (PN). Press the OK button, at the upper left of the selector.

>	<		XI	ecRecordSele	ector		_ – ×
(Jk se	Clear lectio	Erase sel. criteria	198/198 n	: 001		
	Field	d Type	Level	Time	IP3 :	Stamp	Date
\geq	XY	Х	0 mb	1	2	VALEURS	00****0000-00Z
	100	Х	10 mb	20	30	DESCRIPT	00***0000-00Z
	>>	Х	10 mb	20	30	DESCRIPT	00***0000-00Z
	DZ	Р	1000 mb	500	36	FE OPRUN	270ct1989-12Z
	PN	Р	0 mb	36	0	FE OPRUN	270ct1989-12Z
	GZ	Р	500 mb	36	0	FE OPRUN	270ct1989-12Z
	GZ	Р	700 mb	36	0	FE OPRUN	270ct1989-12Z
	QQ	Р	500 mb	36	0	FE OPRUN	270ct1989-12Z
	NN	Р	700 mb	36	0	FE OPRUN	270ct1989-12Z
V	HR	Р	850 mb	36	0	FE OPRUN	270ct1989-12Z

After a few seconds, the field will first by displayed in colors. Then the geography will be drawn, followed by contours, labels and a legend. The image displayed should look like the one just below, shown with the identification of its various components:



We will now change some display attributes. Locate the "Display" menu	Display Grid Vectors Calc.
at the first row of the "Control Panel".	
Click on the menu. A list of menu	~ Contours
items appears. These menu items are	
toggles that can switch on/off a display	e ^ Central values
option. The items with a diamond to	◆ Geography
their left are currently active.	Source grid
	Output Grid
	🔷 Legend
	🔷 Color Legend 🧧
	C ∻ Smoothing O
	l∻Local Extrema
	r Topography g
	Missing values
	Redraw Window after selection



Here is another example, a 36 hour forecast of relative humidity at 700 mb. The field is displayed by default with irregular contour intervals. The intervals drawn are 50%, 70%, 80% and 90%. We have re-activated the display of most attributes.



We will now try the "Contour Interval" menu. A list of intervals is displayed. The current contour interval has a diamond to its left. Here we have selected the interval "10", which translates for 10% for this field.



The same field with the 0% contour interval selected. When this interval is selected, no contour lines are drawn, and the field is displayed in smooth shading. The color table is linearly spreaded over the minimum and maximum values of the data.



Now here we have turned off the "Legend" and "Color legend" items. When these two items are turned off, the display area of the data takes the whole window. This feature can be useful when one prefers to include a custom annotation rather than the default one.



We will try the zoom and pan functions of the program. Locate the "Zoom" button, in the "Control" panel. Click that button, and go in the display window. With the left mouse button, click on the upper left part of an area that you would like to enlarge. Keep the mouse button pressed, and move to the right.

A selection rectangle will appear, and will grow or shrink as you move the mouse. When the desired area is selected, release the mouse button, and click again to confirm that the selected area is correct. The selected area should now fill the entire window, as shown on the rightmost image.



To move within the enlarged area, click the "Zoom" button, go in the display window, press and hold the middle button. A line will appear and will follow the mouse. The end of the line shows the next location of the anchor point. In this example we move to northern tip of Lake Superior to the right. When done, clic with the left mouse button. The panned image is shown on the right.



To unzoom, click on the "Zoom" button, go in the display window and click with the right mouse button.

To quit the program, locate the "File" menu, at the upper left of the Control Panel. Select that menu. The last menu items are "Quit" and "Quit and save configuration". When either item is selected, the program stops immediately and all windows disappear.