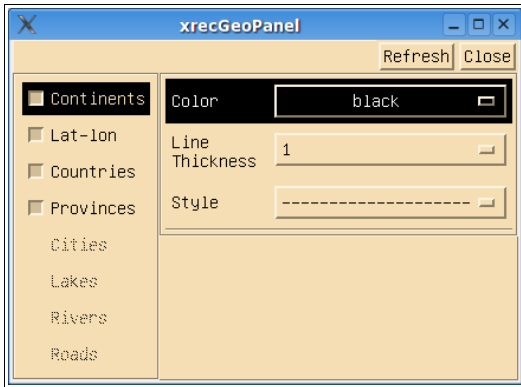


The Geography Panel

XREC offers 2 geographical outlines by default : a default, low resolution one and an optional, high resolution one. The low resolution is activated by default.

As in the “**Contours**” panel, this panel is split in two parts : the left part is composed of the geographical elements to be customized, and the right part contains the list of customizable attributes (color, line thickness, line dash). On the left side, each element has a toggle that can be set on/off, indicating the state of the element.

Low resolution geography

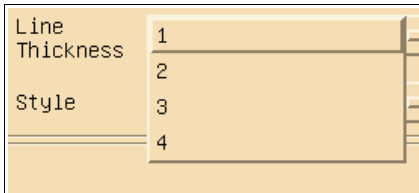


In low resolution mode, this panel is somewhat misleading. In fact only the “**Continents**” and “**Lat-lon**” elements can be configured. This will be fixed in a future version. Also in the low resolution version the “**Cities**”, “**Lakes**”, “**Rivers**” and “**Roads**” elements are dimmed, since there is no data associated with them.

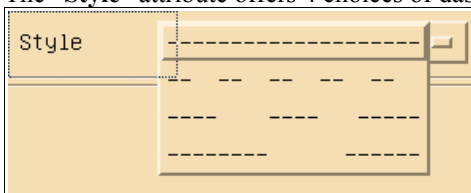
The “**Color**” attribute gives the user a choice of nine colors to draw the geographical element.



The “**Line Thickness**” attribute can be set from 1 to 4 pixels.

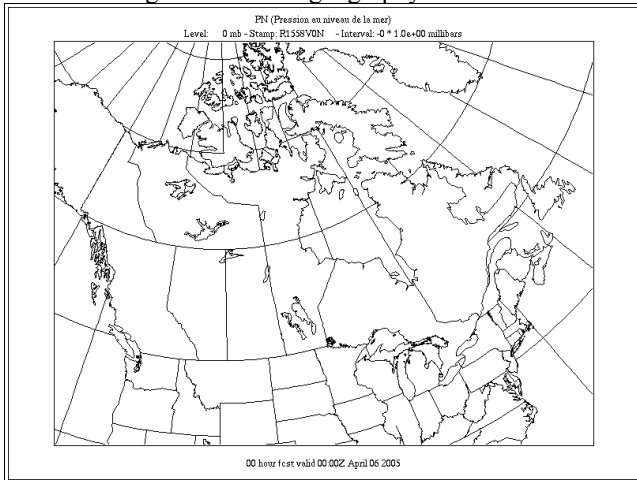


The “**Style**” attribute offers 4 choices of dash lines.



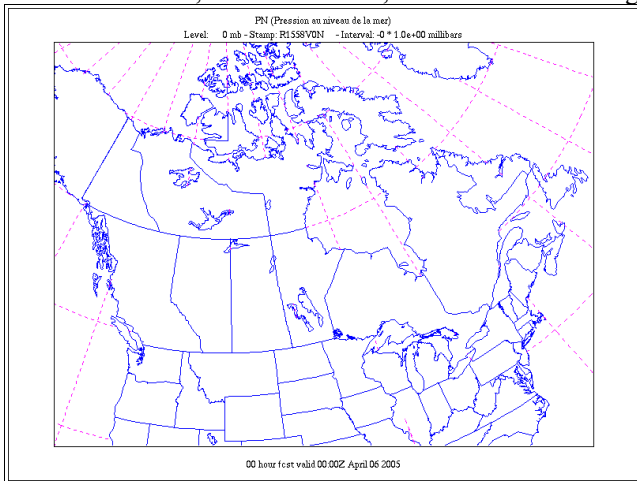
Here are some possible customizations

Default configuration – The geography and the latlon lines are drawn in black.



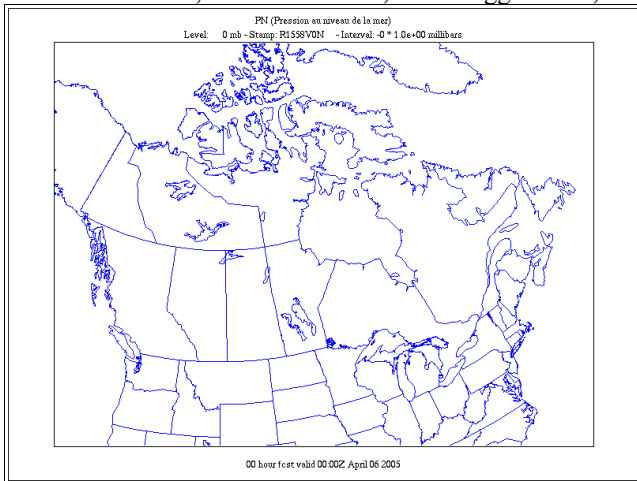
A screenshot of the xrecGeoPanel control interface. The panel has a title bar with "xrecGeoPanel" and standard window controls. Below the title bar are "Refresh" and "Close" buttons. On the left, there is a list of map elements: "Continents", "Lat-lon", "Countries", "Provinces", "Cities", "Lakes", "Rivers", and "Roads". The "Continents" checkbox is checked. On the right, there are settings for the selected element: "Color" is set to "black", "Line Thickness" is set to "1", and "Style" is set to a dashed line style.

Coastlines in blue, continuous lines, and latlon lines in magenta, dashed lines.



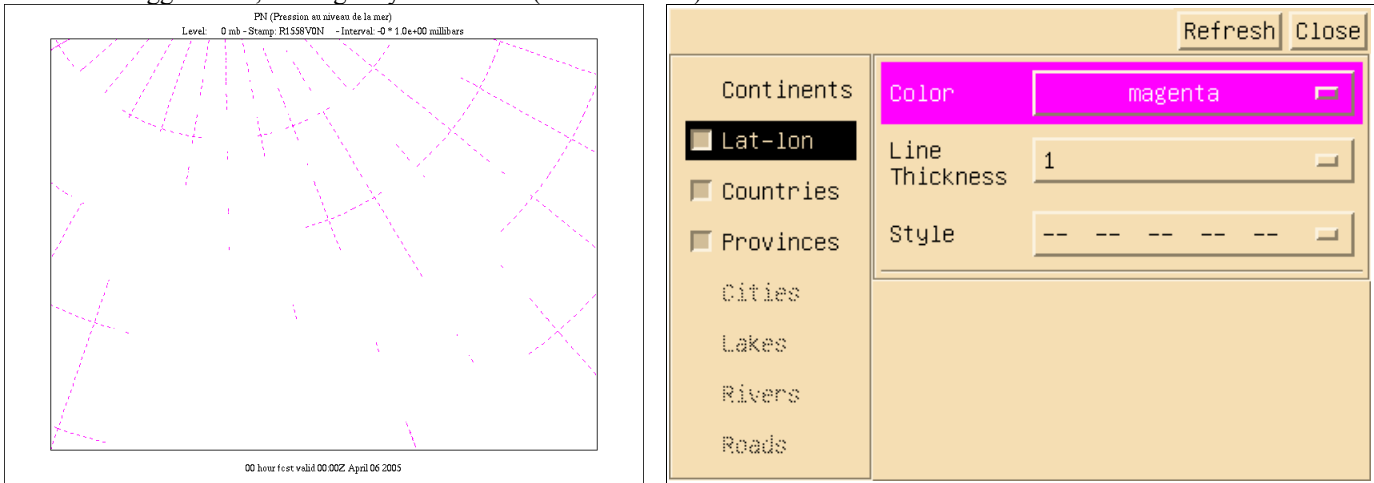
A screenshot of the xrecGeoPanel control interface. The "Lat-lon" checkbox is checked. The "Color" dropdown is set to "magenta", "Line Thickness" is set to "1", and "Style" is set to a dashed line style.

Coastlines in blue, continuous lines, latlon toggle is off, hence no latlon lines.



A screenshot of the xrecGeoPanel control interface. The "Lat-lon" checkbox is unchecked. The "Color" dropdown is set to "magenta", "Line Thickness" is set to "1", and "Style" is set to a dashed line style.

Continents toggle is off, leaving only latlon lines (not that useful).



High Resolution Geography

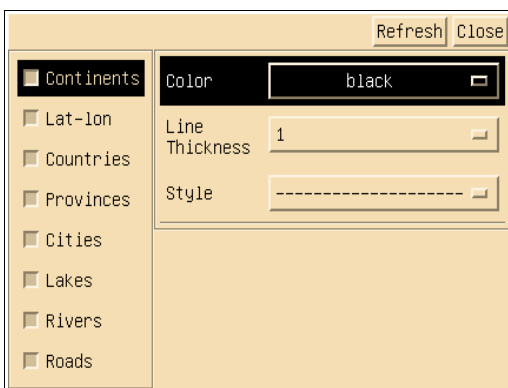
To use the high resolution geography, an environment variable, `GDB_PATH`, must be set and exported before calling `xrec` (after it is too late !)

```
export GDB_PATH=/opt/DBGeo
```

It is the responsibility of the user to find out whether or not this high resolution geography is available on his system, and where it is installed. If you are not sure, please contact your system administrator, or ask advice from MRB computer support (service.rpn@ec.gc.ca).

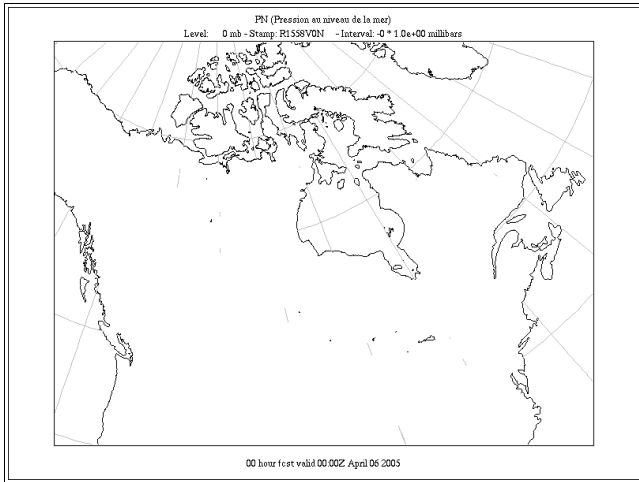
The high resolution geography package has been written by Michel Grenier (CMC), and I thank him for providing us the results of his hard work. The package optimizes the level of the detail in the geography depending upon the spatial resolution of the viewable area. So even if all the geography items are checked and supposed to be active they will show up when the resolution of the physical area meets some predefined thresholds.

This is the appearance of the “**Geography**” panel when all the `GDB_PATH` variable is defined

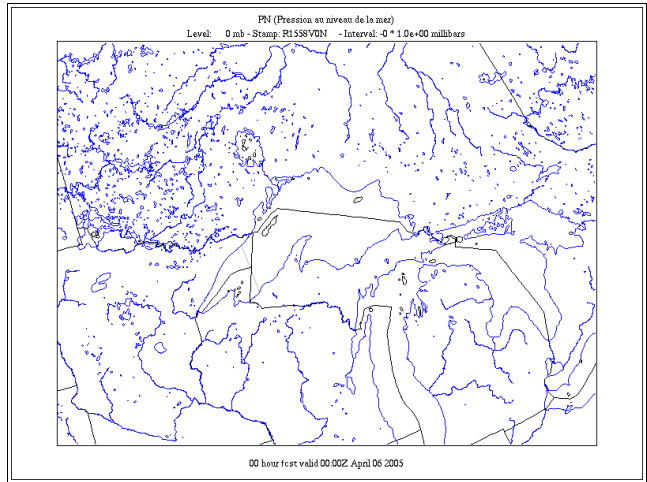


Here are some examples of this high resolution geography.

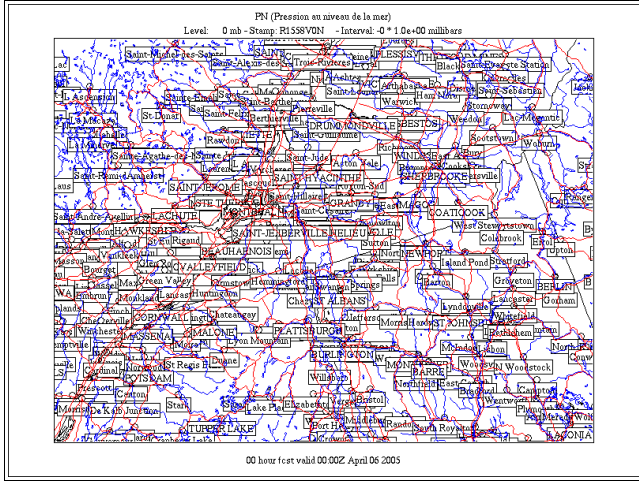
Not much is shown in this low resolution chart, even if all the elements are to be drawn are “ON”.



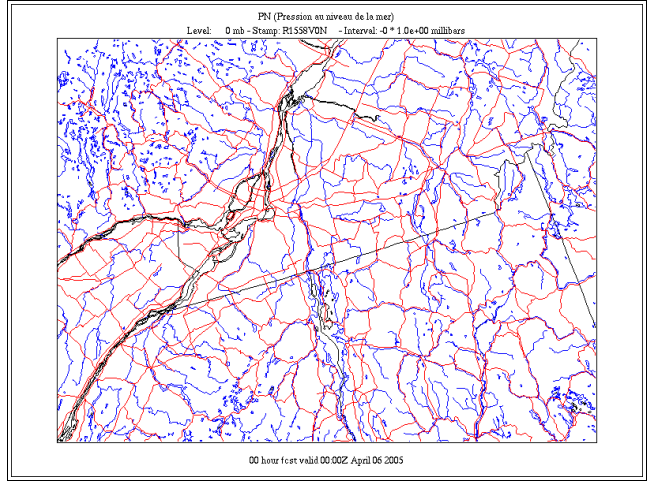
As we zoom in, more information is displayed



When we turn on the display the city names, there is much clutter...



... that disappears if we turn it off...



... or becomes more tolerable as we zoom in.

