Subject: point datasets in ENVI: some potentially useful routines and an ROI problem

Posted by MarioIncandenza on Fri, 04 Nov 2005 03:59:53 GMT

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Hello IDL comrades,

I've been working up a set of routines to more easily visualize and analyze sample points in map imagery using ENVI. The routine library, such as it is, can be found at

ftp://ftp.nrlmry.navy.mil/pub/receive/hyer/envi\_point\_pro.pr o

The routines in this library perform the following functions:

## **GIVEN:**

- an georeferenced image display in ENVI
- a list of XY data in lat/long

## YOU CAN:

- get boundaries of file area or image window area in lat/lon coords;
- get indices of points overlapping the file area or Image window area;
- Use direct graphics to display the points on the Image or Scroll windows;
- Query the file for the values corresponding to the point locations, and return the output directly into IDL;
- \*\*\*: This is where the problem is-- see below.\*\*\*
- generate an ROI of the points to manipulate using the ROI tools in ENVI.

All these functions are fully scriptable, once the display is created in ENVI, which I guess can also be done with ENVI\_DISPLAY\_BANDS.

The above FTP address expires quickly (3 days, I think), so if someone else can host this, it can remain available after this thread has died down. I look forward to making some major improvements to it, above and beyond the immediate problem.

Now, on to the problem:

When you create an ROI using ENVI\_CREATE\_ROI and ENVI\_DEFINE\_ROI, for some reason ENVI treats it like a stepchild. It will appear in the ROI list in ROI Tools, but it will not display, and will return bad numbers when you use ENVI\_GET\_ROI\_DATA. The workaround I have found is to save and then restore the ROI, at which point it behaves correctly. But that workaround, well, it's undesirable, and shouldn't be necessary. Any ideas about how I can get ENVI to treat my home-made ROIs better?

Looking for help in just the right place,	
Edward Hyer.	
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