Subject: ENVI batch ROI
Posted by jdvona on Wed, 05 Jun 2002 15:13:01 GMT
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I am not an IDL programmer and need help with a routine I developed. The routine batch processes a GIS vector file with multiple polygons by creating a single ROI for each individual polygon, which then outputs the mean, total and standard deviation for the pixels within the ROI.

The program has worked well for very simple polygons with few verticies, but I found a bug, which occurs with fairly complex (eg real-world) vegetation polygons. After the routine completes if I look at the ROI's in ENVI they have missing parts of the polygons, weird bisections, and filled in holes that were not part of the original polygon. The code which creates the ROI is below:
I think 3.5 has this capability but I am still running 3.2 (long story).
Thanks for the help.

```
FOR i=0,num-1 DO BEGIN

  ; read the record
  ;
  vec = ENVI_EVF_READ_RECORD(evf_id, i)
  ; convert from map coordinates to file coordinates, again
  ; this assumes that the map proj for the vector data is the
  ; same as that of the image
  ;
  ENVI_MAP_CONVERT, xpts, ypts, vec(0,*), vec(1,*), h_map=h_map,
/to_file
  ; make an ROI in memory
  roi_id = ENVI_CREATE_ROI(ns=ns, nl=nl)

  ; add the vector record as an ROI
  ENVI_DEFINE_ROI, roi_id, xpts=REFORM(xpts, /over), $
    ypts=REFORM(ypts, /over), /polygon

  ; extract the image data associated w/the ROI
  ; XXX CHANGE J=0,8 below to represent the appropriate number of
bands
 FOR j=0,0 DO BEGIN
  print, roi_id
  roi_data = ENVI_GET_ROI_DATA( roi_id, fid=fid, pos = [j])
   printf,   lun, strtrim(i,2),  total(roi_data),  MEAN(roi_data)
  ENDFOR
  ENDFOR
```