Subject: Bug in SEARCH2D.PRO in IDL 5.0
Posted by David Foster on Tue, 27 May 1997 07:00:00 GMT
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IDL 5.0 Bug Report: SEARCH2D.PRO

Platform: Sun Sparc 2/10/20/Ultra, Solaris 2.5, OpenWindows

The following is an excerpt from a notice I sent to RSI concerning
a bug in the SEARCH2D.PRO function. The bug occurs when the seed
point for your 2D search is on one of the edges of the image. The
results from SEARCH2D() are almost the exact opposite of what you
would expect! This problem can be easily reproduced by the
following code (note that in this example you are searching for
"non-object" pixels):

```
window, xsize=512, ysize=256, /free
array = bytarr(256,256)
array(*) = 100
array(0:100,*) = 0
array(200:255,*) = 0
array(*,0:100) = 0
array(*,200:255) = 0
tvscl, array, 0          ; Display image with "object" in middle
xseed = 0
yseed = 0
roi = search2d(array, xseed,yseed, 0,1)  ; Search for 0 >= pixels <=1
array(roi) = 1
tvlct, 255,0,0, 1        ; Mark pixels found as red
tv, array, 1
```

The SEARCH2D.PRO function was modified considerably for IDL 5.0, and
keyword were added, others were obsoleted, yet these changes are not
reflected in the Online help!! Nor are they documented in the
"New and enhanced routines" section of "What's New in IDL 5.0".

Since SEARCH2D() was changed so that it now uses LABEL_REGION() to
find the region, the bug may actually be in LABEL_REGION(), so be
aware of this if you use either of these routines.

Hope this is useful info.

Dave
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 "I have this theory that if we're told we're bad,
    then that's the only idea we'll ever have.
  But maybe if we are surrounded in beauty,
     someday we will become what we see."   - Jewel Kilcher