Subject: Re: Need help to optimize for speed
Posted by Craig Markwardt on Tue, 16 May 2000 07:00:00 GMT
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From way of Hamid <kohen@jpl.nasa.gov> writes:

> Hi,
>
> I have this for loop that searches for a particular pattern (roi).
> This search takes for ever.
> Does anyone knows how to optimize this code for speed.

How about this?

```
ncols = size1(1)
cc = convol(bscl, roi, total(roi), /center, /edge_truncate)
wh = where(abs(cc - 1) LT 0.01, nmatches)
if nmatches GT 0 then begin
  rows = wh / ncols   - 1
  cols = wh MOD ncols - 1
endif
...
```

This will find the best close matches, just a few of them, which you can then examine in more detail, like you are already doing. ROWS and COLS contain the row and column indices for each likely match. Depending on how tolerant of noise you are, you can increase or reduce the value of 0.01.

Just looking at your code, it seems that you are hurting yourself by making lots of calls to EXTRAC, which is a function written in IDL. Doing the array subscripting explicitly should speed things up some.

Craig

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