
Subject: Re: rejecting a few pixel values from an array of pixel values

Posted by [David Fanning](#) on Sat, 13 Mar 2010 15:40:38 GMT

[View Forum Message](#) <> [Reply to Message](#)

sid writes:

> I am having an image array with 1024*1024 pixel values with pixel
> values ranging from 1.39 to 0.03. Now I need only pixel values ranging
> from 1.1 to 0.8, so please do suggest me what method to follow to get
> only the pixel values of my interest, also suggest if any looping can
> be done for this kind of job.

I take it you are new to IDL. :-)

Here is a suggestion. Don't write loops in IDL. You
can find the image values you want like this:

```
indices = Where(image GE 0.8 AND image LE 1.1, count)
IF count GT 0 THEN valuesOfInterest = image[indices]
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: rejecting a few pixel values from an array of pixel values

Posted by [Robert Moss, PhD](#) on Sat, 13 Mar 2010 15:55:45 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Mar 13, 10:01 am, sid <gunvicsi...@gmail.com> wrote:

> Hi,
> I am having an image array with 1024*1024 pixel values with pixel
> values ranging from 1.39 to 0.03. Now I need only pixel values ranging
> from 1.1 to 0.8, so please do suggest me what method to follow to get
> only the pixel values of my interest, also suggest if any looping can
> be done for this kind of job.
> regards
> sid

No looping is required. Briefly you probably want the WHERE function

or the HISTOGRAM function, depending on what you plan on doing. As an example (by no means intended to be the most clever or shortest) you could do the following:

```
;; Assume zero can be used as missing data
;; mask the data over 1.1
hi = WHERE( image GT 1.1, nhi )
IF nhi GT 0 THEN image[ hi ] = 0
;; mask the data less than 0.8
lo = WHERE( image LT 0.8, nlo )
IF nlo GT 0 THEN image[ lo ] = 0
```

;;at this point only pixels in image that are non-zero are between 0.1 and 1.1 inclusive

If you just want statistics on those pixels, skip all that and use histogram
h = HISTOGRAM(image, MIN = 0.8, MAX = 1.1, BINSIZE = 0.01)

r
