
Subject: Re: Get min and max values from a multiband image according to pixel locations of classification image

Posted by [David Fanning](#) on Sat, 17 Nov 2012 15:40:00 GMT

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Dry in water writes:

>
> Hello all,
>
> I have a question to solve following issue.
> I have two images. One is a multiband image with 7bands. Another is an classification image with 3 classes. The classes named by class1 to class3. I'd like to obtain a single max/min values from a multiband image according to pixel locations of each classes (class1, class2, class3) of classification image. Could you help me for this?
>
> Thank you very much

Get the MIN and MAX values of the band interleaved image:

```
minImage = Min(image, DIMENSION=3, Max=MaxImage)
```

Locate class pixels:

```
class1Pixels = Where(classifiedImage EQ class1, count)
IF count GT 0 THEN BEGIN
    class1Min = minImage[class1Pixels]
    class1Max = maxImage[class1Pixels]
ENDIF
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: Get min and max values from a multiband image according to pixel locations of classification image

Posted by [David Fanning](#) on Sat, 17 Nov 2012 15:53:35 GMT

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David Fanning writes:

> class1Pixels = Where(classifiedImage EQ class1, count)

```
> IF count GT 0 THEN BEGIN
>   class1Min = minImage[class1Pixels]
>   class1Max = maxImage[class1Pixels]
> ENDIF
```

If your images are large, it is often MUCH faster to use the Histogram command to locate classified pixels. Assume, for example, that in your classified image, the three classes are labeled with 1, 2, and 3. Then:

```
h = Histogram(classifiedImage, BinSize=1B, Reverse_Indices=ri)
class1Pixels = Reverse_Indices(ri, 1, COUNT=cnt1)
class2Pixels = Reverse_Indices(ri, 2, COUNT=cnt2)
```

Etc.

You can find Reverse_Indices here:

http://www.idlcoyote.com/programs/reverse_indices.pro

Cheers,

David

--

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