Subject: Pixel Information
Posted by Jonathan Greenspon on Wed, 26 Nov 1997 08:00:00 GMT
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I am trying to figure out a method of getting IDL to look at a 640x480
image that I have equipment generating, and then take a certain pixel
(207,179 - for example) and save the infor on that pixel only.

Then I can plot out or run an FFT analysis on the values within that
point on a given day....

Any ideas?

Subject: Re: Pixel Information
Posted by David Foster on Tue, 02 Dec 1997 08:00:00 GMT
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David Fanning wrote:
>
> Jonathan Greenspon (jon@eddyco.com) writes:
>
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>> image that I have equipment generating, and then take a certain pixel
>> (207,179 - for example) and save the infor on that pixel only.
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>> point on a given day....
>
> This has got to be a trick question. Oh, all right, I'll
> bite.
>
> How about this:
>
> pixelValues = FltArr(daysTotal)
> FOR eachimage=0,daysTotal-1 DO BEGIN
> image = OpenImage()
> pixelValues[eachimage] = image[207,179]
> ENDFOR
> Plot, pixelValues

If you will be doing this for many of the pixels repeatedly, then
you might want to create a 3D volume out of your 640x480 images:

```
ImgVol = intarr(640,480,Ndays)   ; or whatever data-type
ImgVol(*,*,0) = Image1
ImgVol(*,*,1) = Image2 ...
```

and then you can pull out the values of a given pixel over time
very quickly with:

```
x = 207
y = 179
PixelValues = ImgVol(x,y,*)
plot, PixelValues
```

Of course you will need lots of memory for this approach, but it's
very fast once you create the 3D array.

I have a routine called MAK_VOL that creates a volume out of a list
of files (you provide a filespec with ? or *). You'll need to
replace the READ_IMG() function with your own function that reads
your particular images, but this would be a good place to start:

ftp://bial8.ucsd.edu pub/software/idl/share

Dave

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