Subject: Re: Calculate median of stacks of images using IDL
Posted by dg86 on Mon, 09 Jun 2014 11:18:58 GMT
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On Saturday, June 7, 2014 6:42:04 PM UTC-4, David Grier wrote:
> On Friday, June 6, 2014 4:46:37 PM UTC-4, Nitsorn Wongsajjathiti wrote:
>
>> Hi,
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>
>> I am trying to compute a median of a stack of images in TIF format for my research. From another source I found out a way to compute this from stack of images present in a GDF format, using
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>
>> IDL> buf=read_gdf('demo.gdf')
>
>>
>
>> IDL> help, buf
>
>>
>
>> BUF FLOAT = Array[640, 480, 100]
>
>>
>
>> IDL>b=median(buf,/double,dimension=3)
>
>>
>
>>
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>
>> However, I am having difficulty converting my TIF images into GDF, but still need to normalize my images somehow. Any suggestions on how to do so?
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>
>> Thank you in advance. Any help will be highly appreciated!
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>
>> Nitsorn Wongsajjathiti
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>
> Hi Again,
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>
> You can use READ_IMAGE to read in your images, then stack them up, and take the median.
>
>
>
> filenames = file_search("my_filename_regex*.tif")
>
> buf = []
>
> for f in filenames do $
>
>   buf = [[[buf]], [[read_image(f)]]]
>
>
>
> b = median(buf, /double, dimension=3)
>
>
>
> TTFN,
>
>
>
> David

I was trying to avoid having to figure out the dimensions of the images. Here's a more general version:

```
buf = list()
for f in file_search("mynames*.tif") do $
    buf.add, read_image(f)
b = median(buf.toarray(), /double, dimension=1)
```

This works for grayscale and color images, regardless of the pixel ordering.

TTFN,

David