Subject: Re: Multi bands mean
Posted by David Fanning on Fri, 08 Feb 2008 17:05:16 GMT
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jujo@argentina.com writes:

- > I have a multi-bands image. I need to calculate the mean value of each
- > pixel, considering all the bands. It can be easily done using:
- > mean_image=total(multi_bands_image, 3) / number of bands
- However, I have some nan values, which have to be discarded before the
- > calculation. I can do that:
- > mean_image=total(multi_bands_image, 3, /nan) / number of bands
- > However, if I do that, the nan values become zeros and the average
- > includes them. How can I do to calculate the mean without considering
- > nan values?

Seems to me you want this:

mean_image=total(multi_bands_image, 3, /nan) / total(finite(a),3)

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: Multi bands mean

Posted by David Fanning on Fri, 08 Feb 2008 17:09:34 GMT

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David Fanning writes:

> mean_image=total(multi_bands_image, 3, /nan) / total(finite(a),3)

Whoops! Of course, a is the "universal variable", and in your case will be equal to multi_bands_image. :-)

Cheers.

David

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

Subject: Re: Multi bands mean

Posted by David Fanning on Fri. 08 Feb 2008 17:15:37 GMT

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David Fanning writes:

>> mean_image=total(multi_bands_image, 3, /nan) / total(finite(a),3)

- > Whoops! Of course, a is the "universal variable", and in
- > your case will be equal to multi_bands_image. :-)

Whoops! Whoops! (I'm trying to get ready for an international trip here...)

I *think* TOTAL will cast the finite array, which is a byte array, into floats, but you better make sure of that. I don't have time to. :-)

Cheers.

David

David Fanning, Ph.D.

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

Subject: Re: Multi bands mean

Posted by jujo on Fri, 08 Feb 2008 17:44:49 GMT

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Hi David, Your tip worked fine! Thanks a lot!

Best.

Jurandir

```
On 8 fev, 15:15, David Fanning <n...@dfanning.com> wrote:
> David Fanning writes:
>>> mean_image=total(multi_bands_image, 3, /nan) / total(finite(a),3)
>
>> Whoops! Of course, a is the "universal variable", and in
>> your case will be equal to multi_bands_image. :-)
>
> Whoops! Whoops! (I'm trying to get ready for an international
> trip here...)
>
> I *think* TOTAL will cast the finite array, which is
> a byte array, into floats, but you better make sure of that.
> I don't have time to. :-)
>
> 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.")