Subject: need the dimensions of an array Posted by Thomas Nehls on Fri, 26 Mar 2004 13:13:35 GMT

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Hi,

using read_tiff I Read an image into a variable lets say pixel interleaved (channels, columns, rows)

now I need the number of columns and the number of rows

```
like that:
img = READ_TIFF(file)
num_col = ?(img[1])
```

num_rows= ?(img[2])

I tried SIZE(img,/Dimensions) which returns: 3, 385, 345 very nice! I need only the Number "385" and the "345" respectively Do you understand what I want to say?

Thanks Tom

Subject: Re: need the dimensions of an array Posted by MKatz843 on Sun, 28 Mar 2004 23:30:22 GMT

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Thomas Nehls <thomas.nehls@tu-berlin.de> wrote in message news:<c41a69\$pvv\$1@mamenchi.zrz.TU-Berlin.DE>...

```
> Hi,
```

>

- > using read_tiff I Read an image into a variable lets say pixel
- > interleaved (channels, columns, rows)

> now I need the number of columns and the number of rows

> like that:

- > img = READ_TIFF(file)
- > num_col = ?(img[1])
- > num_rows= ?(img[2])

>

- > I tried SIZE(img,/Dimensions) which returns: 3, 385, 345
- > very nice! I need only the Number "385" and the "345" respectively
- > Do you understand what I want to say?
- > Thanks
- > Tom

Since SIZE(img, /Dimensions) returns an array, you are looking to

extract single values from the array. If you're always reading 3-dimensional arrays, you can do this

```
s = SIZE(img, /Dimensions)
width = s[1]
height = s[2]
depth = s[0].

Or in one less step, treat the values returned by the SIZE function like this
width = (SIZE(img, /Dimensions))[1]
height = (SIZE(img, /Dimensions))[2]
depth = (SIZE(img, /Dimensions))[0]

You could also have a 2-element size array
Nxy = (SIZE(img, /Dimensions))[1:2]
```

M. Katz

Subject: Re: need the dimensions of an array Posted by pissulla on Sun, 28 Mar 2004 23:53:36 GMT View Forum Message <> Reply to Message

and then access Nxy[0] for the width and Nxy[1] for the height.

```
Thomas Nehls <thomas.nehls@tu-berlin.de> wrote in message
news:<c41a69$pvv$1@mamenchi.zrz.TU-Berlin.DE>...
> Hi,
>
> using read tiff I Read an image into a variable lets say pixel
> interleaved (channels, columns, rows)
> now I need the number of columns and the number of rows
>
> like that:
        = READ_TIFF(file)
> ima
> num_col = ?(img[1])
> num_rows= ?(img[2])
>
> I tried SIZE(img,/Dimensions) which returns: 3, 385, 345
> very nice! I need only the Number "385" and the "345" respectively
> Do you understand what I want to say?
> Thanks
> Tom
```

I'm not sure if I understand your problem, but why don't you use

Hi Tom,

```
img = READ_TIFF(file)
info = SIZE(img,/DIMENSIONS)
num_col = info[1]
num_rows = info[2]
```

now num_col should have the value 385 and num_rows 345.

Cheers, Darius

Subject: Re: need the dimensions of an array Posted by Thomas Nehls on Mon, 29 Mar 2004 07:55:58 GMT View Forum Message <> Reply to Message

M. Katz wrote:

```
> Thomas Nehls <thomas.nehls@tu-berlin.de> wrote in message
news:<c41a69$pvv$1@mamenchi.zrz.TU-Berlin.DE>...
>> Hi,
>>
>> using read tiff I Read an image into a variable lets say pixel
>> interleaved (channels, columns, rows)
>> now I need the number of columns and the number of rows
>>
>> like that:
         = READ_TIFF(file)
>> img
>> num col = ?(img[1])
>> num_rows= ?(img[2])
>> I tried SIZE(img,/Dimensions) which returns: 3, 385, 345
>> very nice! I need only the Number "385" and the "345" respectively
>> Do you understand what I want to say?
>> Thanks
>> Tom
>
> Since SIZE(img, /Dimensions) returns an array, you are looking to
> extract single values from the array. If you're always reading
> 3-dimensional arrays, you can do this
> s = SIZE(img, /Dimensions)
> width = s[1]
> height = s[2]
> depth = s[0].
```

- > Or in one less step, treat the values returned by the SIZE function
- > like this
- > width = (SIZE(img, /Dimensions))[1]
- > height = (SIZE(img, /Dimensions))[2]
- > depth = (SIZE(img, /Dimensions))[0]

>

- > You could also have a 2-element size array
- > Nxy = (SIZE(img, /Dimensions))[1:2]
- > and then access Nxy[0] for the width and Nxy[1] for the height.

>

> M. Katz

Thank you very much for your help, unfortunately and because of the Time shifting between you and me, I needed to find a solution somehow and now this works:

```
col = LONG(N_ELEMENTS(img[0,*,0]))
row = LONG(N_ELEMENTS(img[0,0,*]))
```

Bye Tom

Subject: Re: need the dimensions of an array Posted by wmconnolley on Mon, 29 Mar 2004 09:30:40 GMT View Forum Message <> Reply to Message

Thomas Nehls <thomas.nehls@tu-berlin.de> wrote:

- > Thank you very much for your help, unfortunately and because of the Time
- > shifting between you and me. I needed to find a solution somehow and now
- > this works:

```
> col = LONG(N_ELEMENTS(img[0,*,0]))
> row = LONG(N_ELEMENTS(img[0,0,*]))
```

This is what I use, its easier than remembering how size works...

-W.

--

William M Connolley | wmc@bas.ac.uk | http://www.antarctica.ac.uk/met/wmc/Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself I'm a .signature virus! copy me into your .signature file & help me spread!

Subject: Re: need the dimensions of an array Posted by Dick Jackson on Mon, 29 Mar 2004 17:32:50 GMT

```
<wmc@bas.ac.uk> wrote in message news:4067deaf@news.nwl.ac.uk...
> Thomas Nehls <thomas.nehls@tu-berlin.de> wrote:
>> Thank you very much for your help, unfortunately and because of the
Time
>> shifting between you and me, I needed to find a solution somehow and
now
>> this works:
>> col = LONG(N_ELEMENTS(img[0,*,0]))
>> row = LONG(N_ELEMENTS(img[0,0,*]))
>
> This is what I use, its easier than remembering how size works...
Do remember, though, that simply doing this subscripting can use up a
lot of time and memory:
http://www.dfanning.com/misc_tips/submemory.html
How about this:
col = (Size(img, /Dimensions))[1]
row = (Size(img, /Dimensions))[2]
Cheers,
-Dick
Dick Jackson
                               dick@d-jackson.com
D-Jackson Software Consulting /
                                   http://www.d-jackson.com
                          / +1-403-242-7398 / Fax: 241-7392
Calgary, Alberta, Canada
```