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

M. Katz

Subject: Re: need the dimensions of an array
Posted by [pissulla](#) on Sun, 28 Mar 2004 23:53:36 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
```

Hi Tom,

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

```
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
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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
>>
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>> num_col = ?(img[1])
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>>
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>> Do you understand what I want to say?
>> Thanks
>> Tom
>
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> 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
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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

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