
Subject: array handling

Posted by jochem.verelst@gmail.com on Sat, 06 Jan 2007 10:59:30 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi all,

I am a newbie in IDL. Although I cannot handle the following problem, I am sure for the 'Masters' this is peanuts.

The problem:

I wish to filter an array of redundant data in one line. This is a part of the line to be filtered:

```
-Inf      -NaN      -Inf      0.542373      2.39394      2.28125
0.000000  0.000000  0.000000
      3.21053      1.21839      0.000000      -NaN      0.967213
2.03448    0.724138    0.000000    0.000000    0.000000
-NaN
```

With WHERE I can get rid of the zeros, but I don't know how to exclude the '-NaN' and '-Inf'.

Any help would be most welcome,
greetz, Jochem

Subject: Re: array handling

Posted by [sirvival](#) on Mon, 03 Jan 2011 14:04:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

On 3 Jan., 13:54, bing999 <thibaultga...@gmail.com> wrote:

> Hi,

>

> In an array, I would like to select only one element over 2 to make a
> new array. Is there an IDL routine to do it?

>

> Thanks !

Hi,

do you mean that you want only values greater than two?
If so you can use the where command.

```
pos = where( array gt 2)
newarray = array[pos]
```

Subject: Re: array handling

Posted by [Thibault Garel](#) on Mon, 03 Jan 2011 18:08:41 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Jan 3, 3:04 pm, sirvival <fpfei...@hs.uni-hamburg.de> wrote:

> On 3 Jan., 13:54, bing999 <thibaultga...@gmail.com> wrote:

>

>> Hi,

>

>> In an array, I would like to select only one element over 2 to make a

>> new array. Is there an IDL routine to do it?

>

>> Thanks !

>

> Hi,

> do you mean that you want only values greater than two?

> If so you can use the where command.

>

> pos = where(array gt 2)

> newarray = array[pos]

Thanks for answering. But what I want is to divide the number of elements of my array by 2 by keeping only elements with odd index for instance. Is there an IDL routine which does it?

cheers

Subject: Re: array handling

Posted by [David Fanning](#) on Mon, 03 Jan 2011 18:16:09 GMT

[View Forum Message](#) <> [Reply to Message](#)

bing999 writes:

> Thanks for answering. But what I want is to divide the number of

> elements of my array by 2 by keeping only elements with odd index for

> instance. Is there an IDL routine which does it?

IDL> array = indgen(10)

IDL> print, array

0 1 2 3 4 5 6 7 8 9

IDL> print, rebin(array, 5)

0 2 4 6 8

Cheers,

David

--

David Fanning, Ph.D.

Subject: Re: array handling
Posted by [Paul Van Delst\[1\]](#) on Mon, 03 Jan 2011 19:10:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

> bing999 writes:

>

>> Thanks for answering. But what I want is to divide the number of
>> elements of my array by 2 by keeping only elements with odd index for
>> instance. Is there an IDL routine which does it?

>

> IDL> array = indgen(10)

> IDL> print, array

> 0 1 2 3 4 5 6 7 8 9

> IDL> print, rebin(array, 5)

> 0 2 4 6 8

Or for the IDL 8-ers out there:

IDL> array = indgen(10)

IDL> print, array

0 1 2 3 4 5 6 7 8 9

IDL> print, array[0:-1:2]

0 2 4 6 8

and if you want the even indices (at least, even for those of us that start counting things at one :o),

IDL> print, array[1:-1:2]

1 3 5 7 9

cheers,

paulv

p.s. happy new year btw....

Subject: Re: array handling
Posted by [natha](#) on Mon, 03 Jan 2011 19:50:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

And if you don't have IDL 8:

```
print, array[1:*:2]
```

Subject: Re: array handling

Posted by [MC](#) on Wed, 05 Jan 2011 15:07:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Jan 4, 7:16 am, David Fanning <n...@dfanning.com> wrote:

> bing999 writes:

>> Thanks for answering. But what I want is to divide the number of
>> elements of my array by 2 by keeping only elements with odd index for
>> instance. Is there an IDL routine which does it?

>

> IDL> array = indgen(10)

> IDL> print, array

> 0 1 2 3 4 5 6 7 8 9

> IDL> print, rebin(array, 5)

> 0 2 4 6 8

>

> Cheers,

>

> David

>

Err, isn't that's going to average the data without the /sample keyword? As an alternative, how about about using reform:

```
IDL> array = indgen(10)
```

```
IDL> evenodd=reform(array,2,5)
```

```
IDL> print,"even:" & print,evenodd(0,*)
```

```
IDL> print,"odd:" & print,evenodd(1,*)
```

As one line:

```
print,(reform(array,2,5))(1,*)
```

Cheers MC

Subject: Re: array handling

Posted by [David Fanning](#) on Wed, 05 Jan 2011 15:16:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

MC writes:

> Err, isn't that's going to average the data without the /sample

> keyword?

I think if it averaged the data there would be a decimal point and a .5 in the answer. ;-)

REBIN always does a /SAMPLE when making the array smaller, by default.

> As an alternative, how about about using reform:

>

> IDL> array = indgen(10)

> IDL> evenodd=reform(array,2,5)

> IDL> print,"even:" & print,evenodd(0,*)

> IDL> print,"odd:" & print,evenodd(1,*)

>

> As one line:

> print,(reform(array,2,5))(1,*)

There are LOTS of alternatives. This was just the simplest solution that came to mind. :-)

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: array handling

Posted by [David Fanning](#) on Wed, 05 Jan 2011 15:20:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

David Fanning writes:

> I think if it averaged the data there would be a

> decimal point and a .5 in the answer. ;-)

>

> REBIN always does a /SAMPLE when making the

> array smaller, by default.

Whoops! A half second after I hit that damn SEND button I thought maybe I should just check this out. Of course, you are absolutely right, and I am terribly, terribly wrong. This is how it's been going for me lately. :-)

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: array handling

Posted by [MC](#) on Wed, 05 Jan 2011 21:30:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Jan 6, 4:20 am, David Fanning <n...@dfanning.com> wrote:

> David Fanning writes:

>> I think if it averaged the data there would be a

>> decimal point and a .5 in the answer. ;-)

>

>> REBIN always does a /SAMPLE when making the

>> array smaller, by default.

>

> Whoops! A half second after I hit that damn SEND button

> I thought maybe I should just check this out. Of course,

> you are absolutely right, and I am terribly, terribly

> wrong. This is how it's been going for me lately. :-)

>

> Cheers,

> David

>

Your rapid response is one of the reasons why this is still such a good NG, people readily admit mistakes and others embellish simple answers with ever increasing sophistication. Wile E. usually falls into the latter camp!

By the way Happy New Year to All!

Cheers MC
