Subject: array handling

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

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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 0.967213 3.21053 1.21839 0.000000 -NaN 0.000000 2.03448 0.724138 0.000000 0.000000 -NaN

With WHERE I can get rid of the zeros, but I dont 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

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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) newarry = array[pos]

Subject: Re: array handling

Posted by Thibault Garel on Mon, 03 Jan 2011 18:08:41 GMT

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```
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)

> newarry = 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.

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 Paul Van Delst[1] on Mon, 03 Jan 2011 19:10:09 GMT

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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

Or for the IDL 8-ers out there:

IDL> array = indgen(10)

IDL> print, array

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

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print, array[1:*:2]

```
Subject: Re: array handling
Posted by MC on Wed, 05 Jan 2011 15:07:54 GMT
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```

```
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
                             5
                   3
                                   6
                                        7
                                              8
                                                 9
> 0
        1
                        4
> IDL> print, rebin(array, 5)
      0
           2
                 4
                      6
> 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

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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

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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