
Subject: check for infinity

Posted by [g.nacarts](#) on Tue, 20 Jan 2015 20:11:45 GMT

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Hi

I have a 3D array and I want to check if it contains an infinity. Is that possible? If so, any idea how to check it?

Thanks

Subject: Re: check for infinity

Posted by [Paul Van Delst\[1\]](#) on Tue, 20 Jan 2015 21:52:39 GMT

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See <http://www.exelisvis.com/docs/FINITE.html>

On 01/20/15 15:11, g.nacarts@gmail.com wrote:

> Hi

>

> I have a 3D array and I want to check if it contains an infinity. Is that possible? If so, any idea how to check it?

>

> Thanks

>

Subject: Re: check for infinity

Posted by [eshaya](#) on Tue, 20 Jan 2015 21:56:58 GMT

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On Tuesday, January 20, 2015 at 3:11:48 PM UTC-5, g.na...@gmail.com wrote:

> Hi

>

> I have a 3D array and I want to check if it contains an infinity. Is that possible? If so, any idea how to check it?

>

> Thanks

Result = Where(FINITE(Array , /INFINITY[, SIGN=value] EQ 1)

Sign = 1, if you want positive infinities only

Sign = -1, for negative infinities

Sign = 0, for both

Subject: Re: check for infinity
Posted by [g.nacarts](#) on Tue, 20 Jan 2015 23:06:34 GMT
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Thanks a lot

Subject: Re: check for infinity
Posted by [g.nacarts](#) on Tue, 20 Jan 2015 23:29:02 GMT
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I've got one more question. Because my 3D array has thousands of elements I wanted to check whether Nans or infinity numbers exists but I cannot visualise all the outputs. My code is like this:

DataArray ; contains the 3D data

```
for i = 0, 199 do begin
  for j = 0, 199 do begin
```

Subject: Re: check for infinity
Posted by [g.nacarts](#) on Tue, 20 Jan 2015 23:33:40 GMT
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I've got one more question. Because my 3D array has thousands of elements I wanted to check whether Nans or infinity numbers exists but I cannot visualise all the outputs. My code is like this:

DataArray ; contains the 3D data

```
for i = 0, 199 do begin
  for j = 0, 199 do begin
    Barray = dataArray[* ,i,j] - Array[i,j]
    print, where(finite(Barray), /NAN))
  endfor
endfor
```

I got the value -1 a lot of times, one printed after another . When I changed it to print, where(finite(Barray)) I got zeros. But I can only see in the last entries because the first are deleted. There is any other way? And what the -1 and 0 stands for?

Subject: Re: check for infinity
Posted by [Matthew Argall](#) on Thu, 22 Jan 2015 21:57:39 GMT
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See <http://exelisvis.com/docs/WHERE.html>

You might not want to use the `Where()` function. Just `Finite()`.

Also, you can save yourself a for loop:

```
for i = 0, 199
  print, finite(DataArray[i, *, *] - Array)
endfor
```

p.s. There are also ways of doing this without using a loop.
