
Subject: decimal precision

Posted by [omar ali](#) on Tue, 22 Dec 2015 21:41:05 GMT

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Hi,

I have a variable of 8 digits precision and i need to make it of to precision. for example $x=7.86567123$ and i want it to be $x=7.87$

Hint, i do not need to print it. I need to let idl use it in memory like that $x=7.87$

Thanks in advance

O.A

Subject: Re: decimal precision

Posted by [David Fanning](#) on Tue, 22 Dec 2015 21:46:13 GMT

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omar ali writes:

>
> Hi,
> I have a variable of 8 digits precision and i need to make it of to precision. for example
> $x=7.86567123$ and i want it to be $x=7.87$
> Hint, i do not need to print it. I need to let idl use it in memory like that $x=7.87$

$xprime = \text{Round}(x * 100)/100.0$

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: decimal precision

Posted by [omar ali](#) on Wed, 23 Dec 2015 12:37:55 GMT

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> Hi,
> I have a variable of 8 digits precision and i need to make it of to precision. for example

> x=7.86567123 and i want it to be x=7.87
> Hint, i do not need to print it. I need to let idl use it in memory like that x=7.87
>
>
> Thanks in advance
>
> O.A

Hi David,

Thank you very much for the swift answer. Indeed, I could solve digits precision issue but i could not use it for my main goal. Indeed, I am cutting a tiff format and I need to have the corners` coordinates in two decimals precision. I need the corners to be like this:

```
NORTHER_LATITUDE>40
SOUTHER_LATITUDE>30
WESTER_LONGITUDE>-13.05
EASTER_LONGITUDE>0.01
```

thanks in advance

Subject: Re: decimal precision

Posted by [omar ali](#) on Wed, 23 Dec 2015 13:18:34 GMT

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Hi David,

Details of my exact problem is as follow:

I am writing a geotiff with the following command "example(1)". the tiff is successfully created. However, when I check the corners coordinate using other software or even in idl I find it like "example (2)". I want the coordinates to be calculated as "example(3)"

Thanks in advance,
O.a

Example(1)

```
-----
output='w:\tiff\resized.tif'
write_tiff, output, t00, geotiff=geo, /float, PLANARCONFIG=2
```

Example(2)

```
-----
Corner Coordinates:
Upper Left ( -13.0500002, 40.0000000)
Lower Left ( -13.0500002, 30.0000000)
Upper Right ( 0.0099998, 40.0000000)
Lower Right ( 0.0099998, 30.0000000)
```

Example(3)

```
-----
```

Corner Coordinates:

Upper Left (-13.05, 40.00)

Lower Left (-13.05, 30.00)

Upper Right (0.01, 40.00)

Lower Right (0.01, 30.00)

Subject: Re: decimal precision

Posted by [David Fanning](#) on Wed, 23 Dec 2015 14:20:51 GMT

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omar ali writes:

> Details of my exact problem is as follow:

> I am writing a geotiff with the following command "example(1)". the tiff is successfully created. However, when I check the corners coordinate using other software or even in idl I find it like "example (2)". I want the coordinates to be calculated as "example(3)"

I think your idea of the way computers work is a little oversimplified.

This is always a good place to start:

https://www.idlcoyote.com/math_tips/sky_is_falling.html

https://www.idlcoyote.com/math_tips/storenum.html

I think you are in good shape without doing anything else. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")
