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Subject: TRIANGULATE's bug?  
Posted by [Pachacoti](#) on Mon, 16 Nov 2015 05:44:43 GMT  
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Hi,

I'm really confused by TRIANGULATE. I got an error message with the following commands:

```
IDL> theta=dindgen(360L)
IDL> rad=dindgen(500L)
IDL> xpol=rad#cos(theta/1.8d2*!dpi)
IDL> ypol=rad#sin(theta/1.8d2*!dpi)
IDL> triangulate,xpol,ypol,tri
% TRIANGULATE: Points are co-linear, no solution.
% Execution halted at: $MAIN$
```

However, the following works:

```
IDL> xpol=rad#cos(float(theta/1.8d2*!dpi))
IDL> ypol=rad#sin(float(theta/1.8d2*!dpi))
IDL> triangulate,xpol,ypol,tri
IDL> help,tri
TRI          LONG      = Array[3, 358920]
```

My intention is to convert a polar coordinated image to a Cartesian projected one. I'm faced with this when trying to convert float to double. Could anybody shed some light on this? How should I correct? Thx in advance.

Cheers, Pachacoti

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Subject: Re: TRIANGULATE's bug?  
Posted by [David Fanning](#) on Mon, 16 Nov 2015 12:24:18 GMT  
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Pachacoti writes:

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> My intention is to convert a polar coordinated image to a Cartesian projected one. I'm faced with this when trying to convert float to double. Could anybody shed some light on this? How should I correct? Thx in advance.

There is a discussion of this problem, with a possible solution, in this article, in The Solution section:

[http://www.idlcoyote.com/code\\_tips/usegriddata.html](http://www.idlcoyote.com/code_tips/usegriddata.html)

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.")

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Subject: Re: TRIANGULATE's bug?

Posted by [Pachacoti](#) on Tue, 17 Nov 2015 01:44:57 GMT

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David,

Thank you for your reply. I followed the solution section you wrote, and it did solve the case I mentioned here. However, it fails to solve the actual one I'm working, however I tweak TOLERANCE. I put values of rad at <http://tinyurl.com/ow5zp2f> and values of theta at <http://tinyurl.com/ok3nvb9>. Anyone who is interested may feel free to play with them. Hopefully this has nothing to do with mac, win or linux...

Cheers, Pachacoti

On Monday, November 16, 2015 at 4:24:21 AM UTC-8, David Fanning wrote:

> Pachacoti writes:

>

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> article, in The Solution section:
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>
> 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.")
```

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