Subject: Interpolate
Posted by Dete van Eeden on Tue, 15 Sep 2015 09:16:02 GMT
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Hallo

If I have a set of data:

x= 0,1,2,3,4,5 and y = 101,245,366,410,525

how do I use the interpolate function to interpolate the y values for x= 0.5,1.5,2.5 etc?

Thanks!

Subject: Re: Interpolate
Posted by Haje Korth on Tue, 15 Sep 2015 11:20:29 GMT
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On Tuesday, September 15, 2015 at 5:16:04 AM UTC-4, Dete van Eeden wrote:
> Hallo
>
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>
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>
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>
> Thanks!

use interpol instead of interpolate for this. ?interpol gives you the syntax.

Subject: Re: Interpolate
Posted by Dete van Eeden on Tue, 15 Sep 2015 13:31:45 GMT
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On Tuesday, September 15, 2015 at 1:20:32 PM UTC+2, Haje Korth wrote:
> On Tuesday, September 15, 2015 at 5:16:04 AM UTC-4, Dete van Eeden wrote:
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> use interpol instead of interpolate for this. ?interpol gives you the syntax.

Thank you, is there some way that you can just specify the amount of points for example if i want to interpolate 42 points to 256 points?

Subject: Re: Interpolate
Posted by Klemen on Tue, 15 Sep 2015 14:18:50 GMT
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```
IDL> x = findgen(42)
IDL> y = (x-20.)^2   ;just an example
IDL> plot, x, y
IDL> yy = interpol(y, 256)
IDL> plot, indgen(256), yy
```

Subject: Re: Interpolate
Posted by David Fanning on Tue, 15 Sep 2015 14:37:37 GMT
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Klemen writes:

> IDL> x = findgen(42)
> IDL> y = (x-20.)^2   ;just an example
> IDL> plot, x, y
> IDL> yy = interpol(y, 256)
> IDL> plot, indgen(256), yy

Humm. Not sure that is right. Isn't it more like this:

```
x = findgen(42)
y = (x-20.)^2   ;just an example
!P.Multi=[0,2,1]
cgplot, x, y
xfrac = cgScaleVector(findgen(256), 0, N_Elements(x)-1)
yy = Interpolate(y, xfrac)
cgplot, xfrac, yy, color='red'
!P.Multi=0
END
```

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: Interpolate
Posted by Haje Korth on Tue, 15 Sep 2015 17:32:27 GMT
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Try i=interpol([101,245,366,410,525],[0,1,2,3,4,5],[0.5,1.5,2.5])

On Tuesday, September 15, 2015 at 9:31:48 AM UTC-4, Dete van Eeden wrote:
> On Tuesday, September 15, 2015 at 1:20:32 PM UTC+2, Haje Korth wrote:
>> On Tuesday, September 15, 2015 at 5:16:04 AM UTC-4, Dete van Eeden wrote:
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>>>
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