
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

>

> 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!

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:

>> Hallo

>>

>> If I have a set of data:

>>

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

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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:

>>> 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!

>>

>> 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?
