Subject: Re: interpolate large numbers
Posted by pgrigis on Tue, 07 Jun 2011 21:42:11 GMT
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On Jun 7, 5:35 pm, ece <ecekile...@gmail.com> wrote:
> Hi,
> I have a problem. i want to interpolate linearly some large numbers
> such as:
>
> frequency L
> 6.28865e+14 8.2654538e+28
> 1.66951e+15 4.0936348e+28
> 1.75106e+15 3.9580807e+28
> 2.05175e+15 3.4878620e+28
> 2.31700e+15 3.0611352e+28
> 4.90883e+17 1.0399752e+25
> 1.47366e+18 1.2454723e+24
> 2.44933e+18 4.6650308e+23
>
> First I created the interval for the interpolation :
> range=maken(6.28865E+14,2.44933E+18,1000)

1000 points will not divide that range in a fine enough
grid - the first few data points will all be around the
first element of your range array.

You could increase the resolution of your range, or
use a logarithmic scaling instead (which is probably
better).

Ciao,
Paolo

> I used the interpol:
> Lum=interpol(L,frequency,range)
>
> But when I plot the result it does not look a linear interpolation,
> there are gaps and curves between data points. Do you have a
> suggestion?
>
> My aim is to integrate this data points and get L. If I di it same way
> in the alog10(freq) and alog10(L) values the intepolation looks nice,
> but I couldn't figure out how to convert integral result in alog10
> values to normal scale.