Subject: integration in idl
Posted by gunvicsin11 on Sat, 05 Jan 2013 12:49:13 GMT
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Hello everyone,
         I have to do integration for this equation
$f=I(i,x)*costheta(x)*sintheta(x)$
x is the limit from 0 to 90
this i in the above equation also varies from 0 to 35 values.
so result f should be an array.
How to do the integration for this kind of array.
I wrote a function
and used qromb for integration but it didnt work.
this array is creating problem and I couldnt solve it. Please do help me out in this case.
thanking you in advance,
sid

Subject: Re: integration in idl
Posted by Jeremy Bailin on Mon, 07 Jan 2013 22:27:05 GMT
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On 1/5/13 6:49 AM, sid wrote:
> Hello everyone,
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> thanking you in advance,
> sid
>

Unfortunately, there's not a good vectorized way of doing this. You're
going to have to loop through the different values of i.

-Jeremy.

Subject: Re: Integration
Posted by wlandsman on Wed, 20 Feb 2013 18:18:49 GMT
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On Wednesday, February 20, 2013 12:00:32 PM UTC-5, fd_...@mail.com wrote:
> Hi all
>
>
>
> I have a question about integration.
>
>
>
It's not clear from your post whether you have tabulated data - a set of X,Y values -- or a known function.   (DERIV works on tabulated data, but you give a function Y=2T.)   For tabulated data, I suggest the Exelis procedure INT_TABULATED.   But if you can write the IDL function, then it is possible to integrate with more accuracy since the function can be evaluated at any X value.   In that case I suggest Craig Markwardt's QPINT1D

http://cow.physics.wisc.edu/~craigm/idl/down/qpint1d.pro

although there are several other good IDL integrators around. --Wayne

> I used the DERIV function in order to differentiate a function. Now I want to integrate a function but don't know which function to this work. I want a function that do the same work as the DERIV function but in the "opposite direction". E.g. Assume Y=2t, the integral of DERIV(t,Y) equals Y=2t (which is obvious I think).
>
>
>
> Cheers
>
> M