Subject: Re: An approximation of the cumulative integral of Y
Posted by Vijay Shah on Sun, 12 Jul 2009 15:58:26 GMT
View Forum Message <> Reply to Message

Hi Vince,
Thanks for the info.
I checked the int_tabulated. But the IDL help files indicate "Data that is highly oscillatory requires a sufficient number of samples for an accurate integral approximation."
I am not sure for 10 to 12 samples what would work best. I will search google to find more information on this. If you know of any paper about comparison, please feel to send it.

Regards,
Vijay

On Jul 11, 1:07 pm, Vince Hradil <vincehra...@gmail.com> wrote:
> On Jul 11, 11:43 am, Vince Hradil <vincehra...@gmail.com> wrote:
>
>
>
>> On Jul 11, 12:39 am, Vijay Shah <vijayps...@gmail.com> wrote:
>
>>> Hi,
>>> Is there any subroutine in IDL that allows to computes an
>>> approximation of the cumulative integral of Y via the trapezoidal
>>> method (with unit spacing)?
>
>>> Regards,
>>> Vijay
>
>> INT_TABULATED() works nicely (not really what you want, but better?)
>
>> It would be easy enough to write using SHIFT(). Something like
>
>> y2 = (y+shift(y,1))/2
>> x2 = (x+shift(x,1))/2
>> integral = total(x2*y2); or total(x2*y2,/cumulative)
>
>> You have to figure out how to deal with the "ends" from the shift...
>
> Let's see, I think that should be:
> x2 = x-shift(x,1)
> or use delta x if it doesn't change