Subject: Re: replace integration by summation
Posted by Fabzi on Tue, 18 Jun 2013 16:42:58 GMT

Hi everyone,

On 06/18/2013 06:17 PM, Phillip Bitzer wrote:
> The best routine to use depends how the data varies. What is "wrong"
with the answers?

I will ruthlessly use this thread to ask my question to the atmospheric
modellers in the IDL community out here. I am also secretly asking
myself how many atmospheric modellers are reading this group ;-)

I am vertically integrating a quantity from an atmospheric model output
(in this case: moisture flux) over the atmospheric column. I made some
searches and it came out that some people use trapezoidal rule for this,
some use the midpoint approximation rectangle rule
(http://en.wikipedia.org/wiki/Rectangle_method). There aren't many more
options because the data is tabulated (z-coordinates=pressure,
values=flux).
To me, the rectangle rule makes more sense from the "gridded point of
view" of atmospheric models. Does anyone have a hint or a good reference
explaining how this should be "correctly done" in this case? Thanks!

Fab