Subject: Re: moving average of a large array
Posted by envi35@yahoo.ca on Fri, 24 Nov 2006 14:46:46 GMT
View Forum Message <> Reply to Message

Hi, thanks for you reply. I must have been blinded not seeing SMOOTH
can be used instead of TS_SMOOTH for multi-dimension array!!

Jenny

Kenneth P. Bowman wrote:
> In article <1164296828.559622.31580@m7g2000cwm.googlegroups.com>,
> "Jenny" <envi35@yahoo.ca> wrote:
>
>> Hi, I want to calculate the moving average of a large array:
>> data[800,800,365]. The moving average is for the 3rd dimension - day of
>> year. But TS_SMOOTH only works for a vector. Anyone knows if there is
>> another function in IDL that I could use? I probably can use TS_SMOOTH
>> and for loops to get this, but it will be slow. In addition, there are
>> invalid data in my array as well.
>>
>> I've read discussions in this list about adding Dimension and NAN
>> keywords to other functions, such as Total, Median, etc., which are
>> very useful. Why nobody cares about TS_SMOOTH? Or am I asking a silly
>> question? Is there an obvious way to calculate the moving average of a
>> large array?
>>
>>
>> Thanks,
>> Jenny
>
> If x = FLTARR(800, 800, 365)
>
> try
>
> y = SMOOTH(x, [1, 1, 3])
>
> This runs a boxcar smoother, which has awful spectral characteristics.
> You also might want to consider what to do at the edges.
>
> Ken Bowman