

# Re: iterative algorithm for calculating the moving average

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*Source:* <http://sci.tech-archive.net/Archive/sci.math.num-analysis/2005-04/msg00381.html>

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- *From:* "me" <[me@xxxxxx](mailto:me@xxxxxx)>
  - *Date:* Sat, 30 Apr 2005 02:06:54 GMT
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Ron, thanks for your suggestion...this is what I am doing now. The problem with this is that I still need to keep an array of the old values. The array becomes very big when I need to evaluate a 6hr moving average every minute (360 elements take up a lot of valuable resources on an old real time system). That is why I need a recursive estimation technique that does not require any indexing or reference to the old values. Online, I only have an array of 20 elements available for calculations and 50 steps to do the calculation.

Thanks!  
Yannis

"Ron Shepard" <[ron-shepard@xxxxxxxxxxxxxxxxxxxx](mailto:ron-shepard@xxxxxxxxxxxxxxxxxxxx)> wrote in message [news:ron-shepard-A15862.23174428042005@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:ron-shepard-A15862.23174428042005@xxxxxxxxxxxxxxxxxxxxxxxxxxxx)  
> In article <[xkhce.1151947\\$81.1071914@pd7tw1no](mailto:xkhce.1151947$81.1071914@pd7tw1no)>, "me" <[me@xxxxxx](mailto:me@xxxxxx)>  
> wrote:  
>  
>> Any ideas? Does anyone have any algorithms or references on the above  
>> subject?  
>  
> Why not try the obvious solution, from the running total value  
> subtract off the old "first" element, and add on the new "last"  
> element? This might involve some accumulation of roundoff errors  
> for very long strings of values, so you might want to reset  
> everything every Nth step for some suitable value of N. This  
> involves two adds and a multiplication for each time step,  
> regardless of the number of elements in the running average.  
>  
> \$.02 -Ron Shepard

Re: iterative algorithm for calculating the moving average

- **References:**

- ◆ ***iterative algorithm for calculating the moving average***

- ◆ *From:* me

- ◆ ***Re: iterative algorithm for calculating the moving average***

- ◆ *From:* Ron Shepard

- Prev by Date: ***relative errors***

- Next by Date: ***Re: stop-test for iterative methods***

- Previous by thread: ***Re: iterative algorithm for calculating the moving average***

- Next by thread: ***Re: iterative algorithm for calculating the moving average***

- Index(es):

- ◆ ***Date***

- ◆ ***Thread***