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Subject: Re: SMOOTH or TS\_SMOOTH

Posted by [lecacheux.alain](#) on Wed, 21 Nov 2012 14:28:29 GMT

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Le mercredi 21 novembre 2012 14:09:46 UTC+1, mark...@gmail.com a écrit :

> Typing code too quick....corrected version

```
>  
>  
>  
> X = 50  
>  
> N = 3  
>  
> arrayData = dindgen(X)  
>  
> arrayBackwardMovingMean = dblarr(X)  
>  
> for i = 0, X - 1 do arrayBackwardMovingMean[i] = mean(arrayData[min([0, i - N] : i)])
```

A more "IDL" way (untested) might be :

```
pad = !Values.F_NAN + dindgen(N)  
print, mean(reform([pad,reform(rebin([arrayData, pad], X+N, N), (X*N)*N)], X+N+1, N), DIM=2, /NAN)
```

or, more explicitly:

```
print,mean( $  
reform( $  
[pad,reform(rebin([arrayData, pad], X+N, N), (X*N)*N)] $ ;replicate and pad your array N times  
, X+N+1, N), $ ;do the shift  
DIM=2, $ ;do the average  
/NAN) ;handle the bounds
```

alx.

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