
Subject: Smooth()

Posted by [Richard French](#) on Thu, 14 Dec 2000 05:28:57 GMT

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Out of curiosity, can anyone think of a good reason that the smooth() function bombs when you ask it to smooth something by 1?

Ex:

```
print,smooth([1.,3.,4.,2.],3)
1.00000 2.66667 3.00000 2.00000
print,smooth([1.,3.,4.,2.],1)
% SMOOTH: Width must be > 2 and smaller than array dimensions: <INT
( 1)>
% Execution halted at: $MAIN$
```

I have lots of instances where the amount of smoothing I want to do is a variable, and it seems silly to have to do my own checking to see if I actually need any smoothing or not.

It certainly makes sense to me that if the smoothing width is only one bin, the smooth() function should just be a no-op and return the input array. This is what the REBIN() function does, after all - it does not complain if you tell it you want the array to be rebinned to its actual size!

I've had to construct a 'mysmooth()' function that checks to see if the number of points by which to smooth things is less than 2, in which case I just return the calling array.

Are there other functions out there that you can think of that don't have a sensible default evaluation for limiting cases like this? I would love to see this one changed.

Dick French

Subject: Re: Smooth()

Posted by [jeyadev](#) on Thu, 14 Dec 2000 15:44:25 GMT

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In article <3A385A8B.B4CCE3C5@wellesley.edu>,
Richard G. French <rfrench@wellesley.edu> wrote:

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> I would love to see this one changed.
```

See my posting yesterday about the AVG function. When it gets a scalar, it spews out an error message as the argument expected is an array. Yes, one would assume that some elementary checking to catch degenerate cases is done. I am using PV-Wave CL Version 6.01.

--

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