
Subject: Re: MEDIAN filtering and why it's not working
Posted by [David Foster](#) on Wed, 10 Jun 1998 07:00:00 GMT
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T Bowers wrote:

```
>
> Hi,
> How come
>
> print, median([0.0,1.0,1.5,2.0,5.0,6.0], 3, /EVEN)
>
> prints
> 0.00000 1.00000 1.50000 2.00000 5.00000 6.00000
>
> instead of
> 1.00000 1.00000 1.00000 5.00000 5.00000 5.00000
>
> Doesn't look like it's filtering anything to me, no matter what
> I set the filter width to.
>
> Actually, I'd really like it to print
> 1.00000 5.00000
> just the median of each filter width. I'm trying to filter spikes in
> time series data.
> I'm using IDL 5.02 and win95
```

Check the Online help for info on MEDIAN(), because you are a bit confused as to how it works. For example, the median of [1.0,1.5,2.0] is 1.5, not 1.0 as you suggest. With a width of 3, each element of your median array will be the median of itself and its two neighbors. Since your array is monotonically increasing, each element will be its "own" median value.

If you want only the median values from every 3 elements, then you can use:

```
index = lindgen(n_elements(array))
ind3 = where(index mod 3 eq 0)
```

```
median3 = (median(array, 3))[ind3]
```

Hope this helps.

Dave

```
>
> tia,
> todd bowers
```

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David S. Foster      Univ. of California, San Diego  
Programmer/Analyst   Brain Image Analysis Laboratory  
foster@bials1.ucsd.edu   Department of Psychiatry  
(619) 622-5892      8950 Via La Jolla Drive, Suite 2240  
                         La Jolla, CA 92037  
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