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Subject: Re: Extract elements from floating-point array  
Posted by [Kenneth P. Bowman](#) on Sun, 06 Apr 2008 19:20:51 GMT  
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In article

<f91355dd-4389-4bf7-abc9-1525b88e8511@8g2000hsu.googlegroups.com>,  
moxament@gmail.com wrote:

> Dear IDL group members,  
>  
> I am beginner in the IDL programming and I have a lot of problems :(.  
> My question now is the following:  
>  
> I have a floating-point array Rdata with 335412 elements. The values  
> of the elements are between 5.9e+009 minimum and 3.7e+0013 maximum. I  
> want to extract the elements of the array where Rdata(i) > Rdara(i-1)  
> and Rdata(i) > Rdata(i+1) and put them in a new array, lets say  
> Rdata\_new.  
>  
> Can anyone help me PLEASE. I tried ptrarr and ptr\_new but I could not  
> get any result.  
>  
> In addition, I do not know why I usually have problems when I deal in  
> IDL with arrays like the one I mentioned before??? as I said I am  
> beginner and I do not know if IDL has problems with huge arrays like  
> mines with such element values.  
>  
> any help will be appreciated.  
>  
> Mohammed Dabboor

```
i = WHERE((rdata GT SHIFT(rdata, 1)) AND (rdata[1:n-2] GT SHIFT(rdata, -1)), count)
IF (count GT 0) THEN peaks = rdata[i]
```

SHIFT does a circular shift, so don't forget to treat the first and last elements separately.

Ken Bowman

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Subject: Re: Extract elements from floating-point array  
Posted by [Vince Hradil](#) on Sun, 06 Apr 2008 20:17:28 GMT  
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On Apr 6, 10:28 am, moxam...@gmail.com wrote:

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>  
> Mohammed Dabboor

You could try something like:

```
idx = where( Rdata gt shift(Rdata,1) and Rdata gt shift(Rdata,-1) )  
Rdata_new = Rdata[idx]
```

You'll have to figure out how to deal with the "ends", i.e. Rdata[0]  
and Rdata[n\_elements(Rdata)-1]

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