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Subject: Re: max/min over only one dimension?  
Posted by [Kevin Ivory](#) on Fri, 23 Oct 1998 07:00:00 GMT  
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Arel Weisberg wrote:

- > Is it possible in IDL to find the maximum in each row of a 2-D array
- > without a for loop?
- >
- > More generally is it possible to find extrema in only one dimension of a N
- > dimensional array without for loops?

I'll just cite a post to this newsgroup by Craig Markwardt on 18 Mar 1998:

- > I have also had the need for totalling over selective dimensions
- > (sometimes more than one dimension), and also MIN/MAX.
- >
- > Check out my IDL web page for CMAPPLY(), which can apply quite a
- > number of operations to selected dimensions of an array. You can do
- > this to more than one dimension at a time using a \*list\* of dimensions
- > (similar to the DIMENSIONS parameter to MAKE\_ARRAY or to REFORM).
- >
- > <http://astrog.physics.wisc.edu/~craigm/idl/idl.html>
- >
- > CMAPPLY supports more than just addition; it does:
- >
- > '+' addition        '\*' multiplication
- > 'AND' logical AND    'OR' logical OR
- > 'MAX' maximum        'MIN' minimum
- >
- > Where possible I avoid loops to improve performance, but your mileage
- > may vary depending on the detailed use. [ For example, for small
- > arrays, your own loop may be faster ].
- >
- > Craig
- >
- > --
- > -----
- > Craig B. Markwardt, Ph.D.        EMAIL: [craigmnet@astrog.physics.wisc.edu](mailto:craigmnet@astrog.physics.wisc.edu)
- > Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
- > -----

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