Subject: Re: how to get the index of the maximum element in each row for a 2D matrix efficiently
Posted by JD Smith on Fri, 29 Aug 2003 19:05:37 GMT
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On Fri, 29 Aug 2003 10:34:52 -0700, Xiaoying Jin wrote:

> Hi, there,
>
> Suppose we have a 2D dimension matrix A(i,j), I want to get the index of
> the max element in each row.
>
> Basicly, we can do a for loop on each row, then use 'max' function to
> get the index for each row. But for a matrix having many rows, that will
> be pretty slow-->not efficient. Is there a function that can return what
> I want if I input a 2D matrix.
>
> In the previous version, 'total' function can only get the total values
> of the whole matrix. Now it can get the total values on each dimension
> by setting the keyword 'dimension'.
>
> So how is 'max' working?

Starting with v5.6, MAX will do this for you with its own DIMENSION
keyword. Remember that in IDL dimensions start, perversely, with 1,
as opposed to everything else, which is 0 based. As of now we can
thread the following:

TOTAL
PRODUCT
MIN
MAX
MEDIAN

The only remaining operators I wish could be dimensionally threaded in
this way are AND, OR, and especially the new && and ||
short-circuiting ops.

JD