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Subject: Re: zonal means

Posted by [James Tappin](#) on Mon, 23 Mar 1998 08:00:00 GMT

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Evilio del Rio wrote:

>  
> Martin Schultz wrote:  
>> ...  
>> Q: How do you compute zonal means from a 3D data cube ?  
>> (example: A(72,46,14) is a data array with longitude, latitude, altitude  
>> as dimensions, and I want to compute the averages over longitude for  
>> each latitude and altitude)

> In my opinion you should use the TOTAL function with a second argument:

>  
> IDL> help,a  
> A            FLOAT    = Array[72, 46, 14]  
> IDL> b = TOTAL(A,1) ; The argument 1 tells TOTAL to sum just in the  
> first dim.

Now for the \$64,000 question -- how do you do the same thing for medians? What we need here is an index argument to SORT analogous to the second argument of TOTAL. Methinks that the only efficient solution is currently to write the confounded thing as a CALL\_EXTERNAL piece of C code.

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