Subject: Re: help on creating a mean array of data
Posted by news.qwest.net on Fri, 21 Oct 2005 18:13:16 GMT
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<pimpk24@hotmail.com> wrote in message
news:1129917339.727669.218770@g49g2000cwa.googlegroups.com.. .
> hello, iam very new to idl and would appreciate any help anyone could
> give on performing the following task:
>
> I have a large array of data which is meteorological data from multiple
> days. The data for each day is consistent (i.e. same amount) and i need
> a program that can average each kind of data

Simple case:
meanab = (daya+dayb)/2

Also a more general approach that you can apply to an arbitrary
amount of data is as follows: it uses total().

Arrays are rows in idl, so transpose them into columns,
and concatenate.
Make a matrix of data. Arrays are rows in idl, so transpose them
into columns, and concatenate.
IDL> matrix = [transpose(a),transpose(b)]
then total along the rows
IDL> sum = total(matrix,1)
then divide by the number of columns
IDL> ncol = (size(matrix,/dim))[0]
where I've taken the first element of the array returned by size()
IDL> meanab = sum/ncol

For more than 2 days, you can concatenate many rows into the array "matrix".
There are many other ways as well. You may want to look into the rebin()
function.

Cheers,
bob