Subject: Re: Summing arrays without loops
Posted by Ken Mankoff on Tue, 16 Oct 2001 20:07:41 GMT
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On Tue, 16 Oct 2001, Matt Jolly wrote:

> Hello IDL users,
>
> I have a 3d array of daily precipitation data for the globe that I would
> like to sum for the entire year but I would like to do it without looping.
> The array is initialized as follows:
>
> IDL> data = fltarr(365,192,94)
>
> where 365 is the number of days, 192 is the number of longitudes and 94 is
> the number of latitudes.
>
> Is there a way to sum the daily values without writing a nested loop?
>

help, total(data, 1)
<Expression>   FLOAT   = Array[192, 94]

or, with a mask of values gt 0:

mask = total(data gt 0, 1)
sum = total(data, 1)
result = sum / (mask>1)

  -k.

--
Ken Mankoff
LASP://303.492.3264
http://lasp.colorado.edu/~mankoff/

Subject: Re: Summing arrays without loops
Posted by Mark Hadfield on Tue, 16 Oct 2001 20:24:35 GMT
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From: "Matt Jolly" <mattj@ntsg.umt.edu>
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> Is there a way to sum the daily values without writing a nested loop?

There sure is: TOTAL(data, 1)

Mark Hadfield
m.hadfield@niwa.cri.nz http://katipo.niwa.cri.nz/~hadfield
National Institute for Water and Atmospheric Research

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