
Subject: Re: Adding or averaging multiple grid arrays returns all NaNs

Posted by [Dick Jackson](#) on Thu, 18 Feb 2016 17:47:12 GMT

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On Wednesday, 17 February 2016 04:34:53 UTC-8, Luke Conibear wrote:

> Hi,
>
> I have a 2D grid array (lon, lat) for each day of my data:
>
> GRID FLOAT = Array[3999, 1999]
>
> This array is dispersed with values and plots to a map nicely.
>
> When I add multiple grids together or average them (as below), every value in the 2D array turns to NaN, so the plot is blank.
>
> TOTAL_GRID FLOAT = Array[3999, 1999]
> total_grid = total_grid + grid
> MEAN_GRID FLOAT = Array[3999, 1999]
> mean_grid = total_grid / n_days
>
> Does anyone know a solution, as looping for every lat and lon cell would be very computationally expensive for my large data set?
>
> Thanks,
> Luke

Hi Luke,

Good question! Am I right that 'NaN' in your data would be treated the same as zero? (It looks like it, since you divide the total by n_days) If so, preparing a "real_grid" from "grid" would work. You could do this before adding grid to total_grid:

```
grid[Where(Finite(grid, /NAN))] = 0
```

If you needed to track which grid elements always had NaN, there are ways to handle that too. Let us know if this is sufficient.

--

Cheers,
-Dick

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