Subject: Mean = NaN if NaN present
Posted by laura.hike on Mon, 24 Aug 2015 23:56:01 GMT
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Hi,

I (obviously) using data with NaNs filling in for bad data. I would like to take the mean of a subset of the data and have it fail (return NaN) if any NaNs are included in the subarray. If I use

a = mean(subarray, /NaN)

this only eliminates the NaNs from the computation, meaning that a mean would be returned even if there was only one good value in the subarray. Is there any way to do this besides incorporating an IF statement before the computation, such as

if (total(finite(subarray)) eq n_elements(subarray)) then a = mean(subarray) else a = !Values.F_NAN

which is not only convoluted but may be a nuisance to implement when indices are used to define the subarray?

Thanks,

Larry

Subject: Mean = NaN if NaN present
Posted by Helder Marchetto on Tue, 25 Aug 2015 08:11:23 GMT
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How about defining a function to do that?

function mn, subarray
if (total(finite(subarray)) eq n_elements(subarray)) then return, mean(subarray) else return, !Values.F_NAN
end

Cheers,
Helder

Subject: Re: Mean = NaN if NaN present
Posted by Jeremy Bailin on Tue, 25 Aug 2015 14:08:40 GMT
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On Monday, August 24, 2015 at 6:56:04 PM UTC-5, LMH wrote:
> Hi,

>
> I (obviously) using data with NaNs filling in for bad data. I would like to take the mean of a subset of the data and have it fail (return NaN) if any NaNs are included in the subarray. If I use
>
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>
> Thanks,
>
> Larry

Don't you just want MEAN without the /NAN flag?

-Jeremy.

Subject: Re: Mean = NaN if NaN present
Posted by laura.hike on Tue, 25 Aug 2015 21:45:17 GMT
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On Tuesday, August 25, 2015 at 7:08:41 AM UTC-7, Jeremy Bailin wrote:

>
> Don't you just want MEAN without the /NAN flag?
>
> -Jeremy.

Doh! I've been controlling for NaNs for too long! Thanks, Jeremy.
