Subject: Re: Calculating mean (was mean and sdev)
Posted by nospam on Thu, 05 Mar 1998 08:00:00 GMT
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In article <34FE5D52.70D510F8@linmpi.mpg.de> Kevin Ivory <Kevin.Ivory@linmpi.mpg.de> writes:

> Kevin Spencer wrote:
>> they get rid of stdev in the first place? And calculating the mean
>> is trivial; just use total(x)/n_elements(x).
>
> It is not as trivial as that. If your array contains NaNs, you will
> always get a NaN as a result. In many cases you will want to have
> the mean of the finite values.

I just looked at the source for moment in IDL 5.0.2, and it appears
that it does not correctly handle NaNs.

```
TypeX = SIZE(X)

nX = TypeX[TypeX[0]+2]
Mean = DATOTAL(X, Double = Double) / nX
```

the function DATOTAL just calls total() and massages the return type.
The documentation for total() says that you have to set /NAN to have
it treat NaNs as missing data, and the call to total does not do that,
nor does it remove the NaNs from the count of elements.

scott

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Scott Stuart
stuart at ll mit edu