Subject: Re: statistics on large arrays
Posted by Martin Schultz on Tue, 23 Mar 1999 08:00:00 GMT
View Forum Message <> Reply to Message

Steve Carothers wrote:
>
> Is there a limit to how large an array can be when finding the average or
> stdev of the entire array? I have an array of about 630,000 elements. When
> I try to find the average, the result is "NaNQ".
>
> Steve

One thing you may want to try is to explicitely use a double formatted
array to overcome this problem (although you may then approach your
memory limits ...). Apparently, MEAN has a /DOUBLE keyword. Does it
help?

```
IDL> a=findgen(20)
IDL> print,mean(a) & help,mean(a)
% Compiled module: MEAN.
      9.50000
<Expression>    FLOAT     =       9.50000
IDL> a=dindgen(20)
IDL> print,mean(a) & help,mean(a)
       9.5000000
<Expression>    DOUBLE    =       9.5000000
```

Regards,
Martin.
--

---------- -------
Dr. Martin Schultz
Department for Engineering&Applied Sciences, Harvard University
109 Pierce Hall, 29 Oxford St., Cambridge, MA-02138, USA

phone: (617)-496-8318
fax : (617)-495-4551

e-mail: mgs@io.harvard.edu
Internet-homepage: http://www-as.harvard.edu/people/staff/mgs/
---------- -------

Subject: Re: statistics on large arrays
Posted by korpela on Wed, 24 Mar 1999 08:00:00 GMT

In article <dcDJ2.929$Rd5.1323@news.flash.net>,
Steve Carothers <onav1@flash.net> wrote:
> Is there a limit to how large an array can be when finding the average or
> stdev of the entire array? I have an array of about 630,000 elements. When
> I try to find the average, the result is "NaNQ".

Are all of the values in the array defined values (i.e. not Inf or NaN)?
An Inf or a NaN in an array will cause the average to be NaN.

Eric

--
Eric Korpela | An object at rest can never be
korpela@ssl.berkeley.edu | stopped.
Click for home page.