Subject: Re: Negative Variance?
Posted by wlandsman on Fri, 20 Mar 2009 02:43:45 GMT

On Mar 19, 6:00 pm, "anniebry...@gmail.com" <anniebry...@gmail.com>
wrote:
> I am using the VARIANCE comand in IDL and am getting negative values.

I would check that you not getting round-off problems by using double
precision or the /DOUBLE keyword to VARIANCE.   As discussed in
 http://en.wikipedia.org/wiki/Algorithms_for_calculating_vari ance
round-off error can accumulate in the two-pass variance calculation
(used by IDL) when most values are similar but some are wildly
different.

I had a similar headscratcher a few years back when I found that
SMOOTHing a non-negative array could yield negative numbers.   This
was a roundoff problem that was fixed by using double precision.

--Wayne