
Subject: Re: Inconsistent Mean Calculation

Posted by [plmcelwee](#) on Tue, 21 May 2002 17:39:46 GMT

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"Mark Hadfield" <m.hadfield@niwa.co.nz> wrote in message
news:<accajn\$q28\$1@newsreader.mailgate.org>...
> "Phil" <plmcelwee@yahoo.com> wrote in message
> news:a3589d11.0205201557.1a92499f@posting.google.com...
>> I have 5000 frames of video in a NetCDF file, and I want to
>> calculate the average of frame 2557. I have read the video file
>> into both IDL v5.1 and Matlab v6.1. Additionally I have extracted
>> frame 2557 and copied it into Excel. Here are the mean calculations
>> I get for this frame:
>>
>> Matlab: 4092.6805
>> Excel: 4092.6805
>> IDL: 4093.6165
>>
>> Can anyone offer any suggestions as to why the IDL calculation is
>> different?
>
> Matlab uses double-precision real numbers whereas IDL by default uses
> single-precision. Try repeating your IDL calculations using
> double precision (for example, if you are using IDL's TOTAL function,
> set its DOUBLE keyword).

Mark and Ken, thanks for the help! Using double precision I get

IDL: 4092.6804

This is certainly close enough for what I'm doing.
