Subject: Re: Finding the mean of a set of images
Posted by David Oesch on Mon, 28 Oct 2002 10:06:51 GMT
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Hi, mfedt

Thanks a lot..I think this is the easiest way...even if reform ain't
that fast, but still it works... instead the FOR loop, WHERE is even
more powerfull ...

Dave

mfeldt wrote:

> Hi Dave,
>
> it's not easy to find an entirely array based solution for this.
> for me, i found that it helps a great deal in speed if i collapse the
> cube to two dimensions and then have a loop run over only *one*
> dimension (instead of two nested loops, which are really slow in
> idl). the additional advantage is, that in this context you can do
> all sorts of things to your cube besides mean and sd - like median,
> certain percentiles, etc...
>
> looks somewhat like this:
>
>
> InArr = fltarr(sx, sy, n) ; this is the input array
> OutArr = fltarr(sx*sy)
> UseArr = reform(InArr, sx*sy, n)
> for i=0l, sx*sy-1 do $
> OutArr[i]=median(InArr[i,*]) ; in this case, computes the median
> ; can stuff other operations here
> OutArr=reform(OutArr,sx,sy,/over)
>
> have fun with it ....
>
> mfeldt
>
> --
> Markus Feldt Voice: +49 6221 528 262
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> KAï¿½nigstuhl 17 http://www.mpia.de/homes/feldt
> D-69117 Heidelberg, Germany Si, !asi es la vida!
>
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>

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>
>
> David Oesch <oesch@giub.unibe.ch> wrote in message
news:<3DB51012.6070200@giub.unibe.ch>...
>
>> Hello outthere,
>>
>> I know this topic was up before, but all I could find in the list was to
>> go for CALL_EXTERNAL and use a FORTRAN etc. program. Here's my problem:
>> Does anyone have an algorithm for finding the mean/standardeviation etc
>> at each pixel position for a set of equal size 2-D images? Currently the
>> only way I have to do this is to extract all the values for a given
>> pixel position into a 1-D array and find the mean/standardeviation etc
>> on that. Doing it pixel by pixel like this is inefficient in IDL so I am
>> looking for an *array* based algorithm that would find all
>> the mean/standardeviation etc in parallel.
>> Any progs so far in IDL for this problem?..or a decent fortran or C program?
>>
>> Cheers...
>>
>> Dave
>>
>> --
>> ____
>>
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>>
>>   Remote Sensing is...
>>   Staying as far away from the problem as possible.
>>   - G. Archer, World Bank
>> ____
>>

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____

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