Subject: Image subtraction values
Posted by beardown911 on Sun, 04 Jul 2010 05:00:44 GMT
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Dear all,

I've been trying to calculate deviation of each image from the mean at
pixel by pixel basis.
When I checked pixel values, they look to be way high.
I've trying to figure it out, but due to my short knowledge of IDL,
problem solving doesn't seem to progress.
For your better understanding, I would like to show what I wrote.
I really appreciate for your comments and advice.

```
 ;------------------------------------------------------------ ------------------------------------
pro deviation

file = File_Search('C:\DataProcessing\Images\*.tif', Count=count)

nImages = n_elements(file)

  OK = QUERY_TIFF(file[0], info)
  print, info.dimensions

  imageSize = info.dimensions
  ns = imageSize[0]
  nl = imageSize[1]

Volume = fltarr(ns, nl, nImages)
imageMean = fltarr(ns, nl) ; stacked image mean
imageDev = fltarr(ns, nl)  ; image difference
imageFloat = fltarr(ns, nl) ; converting floating point


FOR i=0, count-1 DO BEGIN

     Image = READ_TIFF(file[i])
     imageFloat = float(reform(Image))

     Volume[*,*,i] = imageFloat
     imageMean = total(Volume, 3)/nImages
     imageDev = imageFloat - imageMean

        FILE_MKDIR, 'C:\DataProcessing\Images\Temp\'
        outdir = 'C:\DataProcessing\Images\Temp\'
        basename = File_BaseName(file, '.tif')
        outfile = outdir + basename + '.dev.dat'
```

```
        OPENW, LUN, (outfile[i]), /GET_LUN
        WRITEU, LUN, imageDev
        FREE_LUN, LUN

ENDFOR

END
 ;------------------------------------------------------------ -----------------
```