Subject: Re: Byte-Scaling Tiff Stacks Posted by btt on Fri, 21 Jul 2006 19:34:12 GMT View Forum Message <> Reply to Message

```
Magdalena83 wrote:
> Thanks for replying; here are my answers for your inquiries:
>> Could you post to the news group the following...
>>
>> print, SIZE(image name)
      512
             170
                                 42823680
> 3
                    492
> print, MIN(image_name)
>> print, MAX(image_name)
> 255
>> DEVICE, GET_DECOMPOSED = thisDecomp
>> print, thisDecomp
> 0
>> Also, what do you mean by "black and white images"? Do you really mean
>> greyscale or do you mean bilevel (like 0 and 1 or 0 and 255)?
```

- > Sorry, I meant 16-bit grayscale images.

- > IDL can read them fine if I convert the tiffs to 8-bits in ImageJ
- > beforehand, but I am worried that I will lose too much info by doing
- > this. I believe that byte-scaling should fix the problem, but "bytscl"
- > isn't working.

>

- > Basically, I am looking for the best way to read in stacks of 16-bit
- > tiff images so that I can perform alignment procedures on them and then
- > FFT certain pixels to search for oscillations in intensity.

>

- > The data was originally .fits format, but I flatted and dark-subtracted
- > them in ImageJ, which can't write .fits files. Thus, I now have a stack
- > of 2500 .tif frames ready to be aligned, but IDL doesn't read them
- > correctly.
- > Thanks for any advice you can give.

>

Hello again,

Well, BYTSCL really isn't what you are looking for. In basic useage the BYTSCL looks for the min and max range of the input data and linearly scales these (along with all the other values) to stretch from 0B to 255B. Your input data appears to already be in that range, so the isn't anything that BYTSCL can do with the data.

If you want to scale the data into some other range (like 16 bit signed -32,768 to +32,767) then you might want to use something like

http://www.dfanning.com/programs/scale_vector.pro

which lets you specify the top and bottom values for the intensity range you want.

Ben