
Subject: Re: combining fits files and taking the median average
Posted by [Craig Markwardt](#) on Tue, 17 Jul 2012 14:24:07 GMT
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On Tuesday, July 17, 2012 10:09:10 AM UTC-4, Mandy Bailey wrote:

> I'm new to IDL but slowly getting the hang of things. I have four fits files, each being spectra of the same targets taken on consecutive nights. I would like to combine these into one file to analyse but I want the median average not just the average. For the latter I could simply add each file together and divide by 4 of course but I cannot see a way to take the median average when combining the files.
>
> The routine MEDIAN doesn't appear to work for combining multiple images as far as I can see.
>
> Any ideas gratefully received, thanks
> Mandy

You can stack the images into a 3D image, and then use the DIMENSION keyword of MEDIAN().

Example,

```
img_3d = dblarr(nx,ny,3)
img_3d(*,*,0) = img_1
img_3d(*,*,1) = img_2
img_3d(*,*,2) = img_3

img_med = median(img_3d, 3)
```

You may have bigger problems though. If your images need to be registered then the problem becomes a lot harder.

Craig
