Subject: Re: Need help reconstructing flat-field. Minimization problem.
Posted by jdshaw on Wed, 24 Oct 2007 21:06:24 GMT
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Jonathan,

I had a similar problem with a sky survey I did last year. The flats the telescope operators provided were well below the linear response area of the chip. So, I don't know if this will help, but this is what I did:

> From each night's data, I took about forty different images used the SKY routine from the asto libraries (http://idlastro.gsfc.nasa.gov/contents.html) to find the sky background and then normalized each image to its average sky value. I placed these in a 2048x2048x40 array (2048x2048 is the size of the chip). Then took the median value for each pixel (alternatively, you can sigma-clip out high values and average the rest).

This is simple but worked surprisingly well at preserving the flux values.

If you are taking terrestrial - sorry aereal - images this probably is to crude for your needs but may be a place to start. I suspect you may need to write your own 'SKY' routine to find suitable normalization values.

I'd be interested to hear your solution.

- John Shaw
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