Subject: Re: Coadd images that contain no stars
Posted by Russell Ryan on Mon, 28 May 2012 05:26:37 GMT
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On May 27, 11:19 am, spasoklampa...@yahoo.com wrote:
> On May 27, 6:05 pm, Russell Ryan <rr...@stsci.edu> wrote:
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>> On May 27, 10:56 am, spasoklampa...@yahoo.com wrote:
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>>> Hi,
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>>> I have two images from GALEX from a molecular cloud, that need to
>>> be combined to create an image. The problem is that there are no stars
>>> present. There is only the nebula. How is it possible to coadd these
>>> two frames? On each image half of the cloud is present and there is
>>> some overlap of course. Is there a way in IDL?
>
>>> Thanks a lot
>
>> Why cant you just add them? I'm confused....
>
>> Do you need to align the images? If so, then you need to correlate
>> the two images to find the appropriate shifts. Even then, and I know
>> how careful you need to be, the GALEX PSF varies across the FoV
>> significantly. So coadding frames of anything can be very tricky if
>> they're not centered on precisely the same position in the sky.
>
> Well the problem is that in the first frame half of the cloud
> appears in the lower left of frame, while in the second frame the
> other half appears in the upper right part of the frame. Since there
> are no stars present on both images, how is it possible to estimate
> the shifting to make the coaddition?

You need to correlate the images.

http://en.wikipedia.org/wiki/Phase_correlation

Just follow the description in the Method section. Maybe you don't
want the Hamming window... Either way, I think there is code in the
astro library to do this.