
Subject: coregistering images - help needed
Posted by [gunvicsin11](#) on Fri, 14 Oct 2016 07:38:27 GMT
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I have two images I have to align one image with respect to the other,

I have two solar images size is 2048 by 2048. But the problem is in one image the data resolution is 1.0648 arcsec/pixel and other is 1.2 arcsec/pixel

So due to this in xaxis the data coverage is 1700pixels(out of 2048 pixels) in imagea

in imageb the data coverage is 1900 pixels(out of 2048 pixels)

I want imageb with resolution and data coverage as imagea.

please do help me out in this regard.

Note: I have 500 images (like imageb) which i have to bring to imagea resolution.

thanks

Subject: Re: coregistering images - help needed
Posted by [Helder Marchetto](#) on Fri, 14 Oct 2016 09:27:18 GMT
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On Friday, October 14, 2016 at 9:38:34 AM UTC+2, sid wrote:

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> please do help me out in this regard.
>
> Note: I have 500 images (like imageb) which i have to bring to imagea resolution.
>
> thanks

If the objective is to register the two images, then I would:

- 1) cut the images to the relevant part (imagea to 1700x1700 pixels^2 and similarly for imageb)
- 2) use `congrid()` to fix the sizes of the two images. Make sure you use a good interpolation option
- 3) register the images

Notice that $1700/1900$ is not the same as $1.0648/1.2$. In other words, the cutting the images as mentioned, will result in different data resolutions.

Or, by enlarging imagea from 1700 to 1900 pixel, you will end up with a resolution of $1.0648 \cdot 1900/1700 = 1.19$ and not 1.2.

Cheers,
Helder

Subject: Re: coregistering images - help needed

Posted by [Markus Schmassmann](#) on Fri, 14 Oct 2016 09:46:03 GMT

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On 10/14/2016 11:27 AM, Helder wrote:

> On Friday, October 14, 2016 at 9:38:34 AM UTC+2, sid wrote:

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if the metadata of your images contain the position of the solar center and the angle indicating where solar north is, use this data instead of trying to figure out yourself.

You might get slightly better results, if you use a single call to interpolate instead of using `congrid` and later rotate your image and shift it fraction of a pixel.

Subject: Re: coregistering images - help needed
Posted by [gunvicsin11](#) on Fri, 14 Oct 2016 11:12:14 GMT
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On Friday, October 14, 2016 at 3:16:05 PM UTC+5:30, Markus Schmassmann wrote:

> On 10/14/2016 11:27 AM, Helder wrote:

>> On Friday, October 14, 2016 at 9:38:34 AM UTC+2, sid wrote:

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Thanks a lot for the replies. It was really very helpful.
