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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:  
>>> 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.  
>> If the objective is to register the two images, then I would:  
>> 1) cut the images to the relevant part (imagea to 1700x1700 pixels<sup>2</sup> 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  
 $1.0648 * 1900 / 1700 = 1.19$  and not 1.2.  
> 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.

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

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