Subject: Re: image matching / allign images
Posted by Helder Marchetto on Thu, 19 Jul 2012 10:44:37 GMT
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On Thursday, July 19, 2012 9:37:43 AM UTC+2, Klemen wrote:
> Hi, I was wondering if somebody has any experience with aligning images (image matching) in IDL. I have found an old thread discussing this topic:
>
> https://groups.google.com/forum/?fromgroups#!topic/comp.lang .idl-pvwave/gJOaD7x7k-g
>
> I have managed to run the code of Hongjie Xie (they wrote a paper "An IDL/ENVI implementation of the FFT-based algorithm for automatic image registration" in Computers and Geosciences). It works fine. But I would like to have more than just a global shift and rotation. I am interested into local distortions. At the moment I am working on the comparison of geostationary satellite data of clouds.
>
> The second code in the mentioned post is written by T. Metcalf (SOHO). But I cannot get it running. ARANGE is probably ab undefined function that I cannot find at SOHO web pages - see below:
>
> IDL> inew=auto_align_images(s1,s2,[3.,0.,1.,0.],[0.,1.,0.,0.],ppp ,qqq)
> % AUTO_ALIGN_IMAGES: Using the Powell algorithm.
>
> Initial guess:
> % Variable is undefined: ARANGE.
> % Execution halted at: PQ2RSS 74 C:_code\Lib_downloaded\SOHO\pq2rss.pro
> % AUTO_ALIGN_IMAGES 524 C:_code\Lib_downloaded\SOHO\auto_align_images.pro
> % $MAIN$
> IDL>
>
>
> So I leave you with two questions:
> 1) Does anybody have experience with this AUTO_ALIGN_IMAGES code and if yes, what am I doing wrong?
> 2) Is there an alternative code that wraps one image into another but not linearly, with an order of at least 2 (3 or four would be better)?
>
> Cheers, Klemen

Dear Klemen,
I just googled arange.pro and found it here:
http://hesperia.gsfc.nasa.gov/ssw/yohkoh/ucon/idl/metcalf/ar ange.pro

I have no experience whatsoever with code aligning warped images.
Here you may find however a software for shift alignment.
http://idlastro.gsfc.nasa.gov/contents.html
You will need: correl_optimize, correl_images and corrmat_analyze.

Hope it helps.

Regards,
Helder