Subject: Re: Surface fitting image with missing data
Posted by werner.hupfer on Thu, 31 Jul 2008 08:27:33 GMT
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On 31 Jul., 02:12, jradavenp...@gmail.com wrote:
> Hey all;
>
> I have a 2-D array (essentially an image) with dimensions [n,m]
>
> There is a large chunk in a corner of the image with no data. All
> pixels have values greater than 1, except within this chunk, which =
> 0.
>
> SFIT fits these as valid points and tips my surface (a plane) towards
> this corner! I thought I would be terribly clever by doing the
> following:
>
> result = sfit(finite(image/(image gt 0)),1,/max_degree)
>
> alas, SFIT isnt playing ball and makes a whole array of /NaN...
>
> Thoughts? Is there a version of SFIT (or something similar) with a /
> NaN keyword? A more clever way to fit a simple surface to an image
> with missing data? Thanks folks
>
> - Jim

Hello Jim

I can highly recommend the library from Craig Markwardt. I use
mpfitfun for 2D fitting. Among one of the many useful features is the
ability to do curvefit on data points set to NaN!!!!

http://cow.physics.wisc.edu/~craigm/idl/idl.html

Cheers
Werner

Subject: Re: Surface fitting image with missing data
Posted by Craig Markwardt on Mon, 04 Aug 2008 04:52:20 GMT
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werner.hupfer@googlemail.com writes:

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Thanks for the plug!

Actually MPFIT doesn't accept NaNs but probably should. Even so, you
can set the WEIGHTS to zero for your missing data (or equivalently,
the ERRORs to a very large number).

Craig

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Craig B. Markwardt, Ph.D.   EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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