Subject: Re: ENVI_INIT_TILE tiling problem
Posted by a.l.j.ford on Wed, 18 Mar 2009 19:47:47 GMT
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On Mar 18, 12:08 am, a.l.j.f...@gmail.com wrote:
> On 17 Mar, 23:09, David Fanning <n...@dfanning.com> wrote:
>
>
>
>> a.l.j.f...@gmail.com writes:
>>> This is where I am now. So far I don't get any errors, but the
>>> processing takes forever and never finishes, as if it has hung.
>
>> I know next to nothing about ENVI, but I have never
>> once used MIN_CURVE_SURF that it didn't occur to
>> me that I would have grandchildren sooner than I
>> would get a smooth surface. :-(
>
>> Cheers,
>
>> David
>
>> --
>> David Fanning, Ph.D.
>> Coyote's Guide to IDL Programming (www.dfanning.com)
>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>
> LOL It could be the same in my case... I'm still waiting! :-) I'll let
> it run for as long as I can stand it, then try something less time
> consuming than min_curve_surf.

OK, I eventually realised that I'd missed the '' from around my output filename in envi_setup_head. It now reads:

envi_setup_head, fname='output_test'

I decided to try things out on a much smaller array size. My input array with missing values was 100 x 100, which meant no Tiling was needed. Using both TRI_SURF and MIN_CURVE_SURF the process completed both times! SUCCESS! The output from TRI_SURF was dire though, and I

doubt I'll use it again. The output from MIN_CURVE_SURF looked very representative. So, I then tried TRI_SURF on a 500 x 600 array. The output from this was even worse! Here is the input, with missing values as 0 (black) to be interpolated over:

[IMG] http://img156.imageshack.us/img156/8798/arraymissingvalues.j pg[/IMG]

And here is the result from TRI_SURF. Tiling kicked in and split the array into two. Not only is the interpolation of the missed values very poor, there is a big mis-match between the tiles, where elevations suddenly rise in a step.

[IMG]http://img156.imageshack.us/img156/7532/arraytrisurf.jpg[/IMG]

Can anyone tell me, is this an inevitable consequence of doing Interpolation withing Tiling, or have I done something wrong again?! I certainly hope there is a way around this.

In any case, TRI_SURF spat out this 500 x 600 interpolated array in no time at all... but when I did the exact same thing with MIN_CURVE_SURF it took so long I gave up. Then I tried a 500 x 250 array... same thing! Then just a 200 x 200 array... still so long (hours) I

gave up. This surely can't be right, or am I being naive?!

Could/should I be using different interpolation techniques? Is so, what would you recommend for the kind of data you see in my example above? I'm after nice smooth interpolation if possible.

Thanks again
