Subject: Re: problem in using function ll_to_utm.pro
Posted by Baikal on Wed, 21 May 2008 01:37:34 GMT
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> On May 20, 8:19 pm, Baikal <royou...@cnu.ac.kr> wrote:
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>
>> To all,
>
>> I am a physical oceanographer who needs to use your idl program in my
>> model output post-processing.
>
>> While utilizing your utm conversion program (ll_to_utm.pro) in my
>> research work, I have a problem due to zone change so that I encounter
>> a discontinuity problems as follows;
>
>> test_lon=[125.999,126.000] ; define test lon & lat
>> test_lat=[36.000,36.000]
>> ; test output
>> for i=0,1 do
>> print,i,test_lon(i),test_lat(i),ll_to_utm(test_lon(i),test_l at(i))
>> 0 125.999 36.0000 770330.54 3988106.3
>> 1 126.000 36.0000 229579.34 3988109.1
>
>> I undrestand this is due to zone change from 51 to 52.
>> I wonder how I can avoid this trouble in map drawing where my
>> coastline data points lie over 125 to 127 E longitude.
>
>> I appreciate your helps.
>
> Hi,
>
> I think I might have prepared that routine. To my understanding, you
> don't want to work across UTM zones. My memory is a little rusty, but
> I recall that the warping is minimized along central meridian of any
> zone. I take that to mean that distortion is maximized along the
> edges.
>
> On the other hand, I suppose it is possible to offset the values in
> one zone against the central meridian of the other - after all, the
> origin of any UTM zone is some arbitrary value. You would have to
> dive into the Snyder work referenced in the code. In any event, I
> wonder why you are not mapping with your lat lon values directly. Why
> bother going to UTM coords?

>
> While we are at it, I have posted an update to that collection files -
> in particular to UTM_ZONE so that it behaves a little better with
> vectors of inputs. See ...
>
> http://www.tidewater.net/~pemaquid/geo.zip
>
> Cheers,

>

In my post-processing of model output, I am calculating the trajectory coordinates in metric unit so that to display the, trajectories of number of particles, I need to set up the coordinate in terms of UTM. That's why I bother myself and you in trying to use UTM.

Thanks for your quick reply

Young Jae Ro

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