alx writes:

> In order to process some GPS data, I logically write:
> IDL> map = map_proj_init(101, ELLIPSOID=24, ZONE=31)
> wanting to use WGS84 ellipsoid and UTM projection (zone 31 is for
> Paris), for further use of the "map_proj_forward" function. Then :
> IDL> print, map.A, map.E2, map.PROJECTION
>   6370997.0   0.00000000   20
> shows that IDL rather chooses the SPHERE and the projection n°20.
> Moreover this projection is not referenced in the IDL_help, the
> projection index ranging from 0 to 19.
> Forcing GCTP keyword to 1 does not change anything.
> What does it mean ?

Well, I think it means the IDL UTM map transformation is
screwed. You can ONLY use a spherical datum with this
transformation. The datum I was trying to use the other
day was WGS84 and I was getting the magnitude of errors
you are getting. This is a problem, since ANY data you
get from satellites is probably using a WGS84 datum.
Which means there is no way you can use this data in
IDL. (Well, unless accuracy doesn't matter to you.)

Maybe this is why IDL examples always use global map
projections. A couple hundred meters here and there
is chump change on that scale.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")