On 29 oct, 16:18, David Fanning <n...@dfanning.com> wrote:
> 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 ?
>
> I doubt it means anything. At most it means IDL maintains
> a different indexing scheme internally than they do in
> their public interface. That's not unusual. I don't think
> I would spend any time worrying about it. :-)
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

My problem is actually the following: when applying the
map_proj_forward function to real data,- that is to say when computing
plane coordinates from given GPS longitudes and latitudes, a very
standard operation from GPS data -, I find results wrong by a few
hundred meters...
For instance:
IDL> lon0 = 2.1937863d0 & lat0 = 47.3808737d0
IDL> map = map_proj_init(101, ELLIPSOID=24, ZONE=31)
IDL> print, map_proj_forward(lon0, lat0)
      439142.34   5247587.0
Actual easting and northing (as calculated by using other tools) are
439144 and 5247806 instead.
I then suspect somme error in map_proj_init, or maybe I am not using
it correctly.
I was wondering if other people had same experience.

alain.