

# Release Notes

## Version 6.3 (November, 2010)

- Added several files to the map projections theme, i.e. subdirectory *map\_proj*, for more extensive testing of transverse Mercator. In particular, points 201 - 250 of each of the new *TransMerc\_\*.csv* files are tests of the ability of transverse Mercator codes to process points along a meridian at increasing delta-longitudes from the central meridian. See file *map\_proj\_index.xls* in directory *map\_proj* for details. All 300 points in the files are good, but the intention of the tests is concentrated on points 201 - 250.

## Version 6.2 (February, 2009)

- Revision of the comment lines in the Ney projection tests, namely files *Ney\_24*, *Ney\_25*, *Ney\_47*, *Ney\_48*, *Ney\_70*, and *Ney\_71* to read:  

```
# This is a modification of the Lambert Conformal Conic map projection.  
# It is NOT an instance of the Lambert Conformal Conic map projection.  
# See American Practical Navigator (Bowditch) 2002 ed. pages 32 and 796 and 800  
# See entry "modified Lambert Conformal Conic projection" on page 796  
# Software developers needing further guidance should contact GandG@nga.mil.
```
- The header of every ".csv" file in a directory under "mapproj" is changed in this way: The line "END OF HEADER" is moved to follow rather than precede the comment lines that serve as column headings. Here and elsewhere, the blank line after "END OF HEADER" is removed.
- Minor changes to the comments in the headers of files "ellipsoidal\_105" and "ellipsoidal\_110". The Z-intercept is the **semi-minor** axis of the confocal ellipsoid.
- For its Mercator module, GeoTrans 2.4.2 fixed the name of the parameter that specifies the latitude of the parallel that is portrayed at unity scale (true scale). Accordingly, in this release, the keyword, "ORIGIN LATITUDE" is replaced by the keyword, "LATITUDE OF TRUE SCALE" everywhere that it occurred in the Mercator tests.
- In file "Local\_geodetic\_201", the 2<sup>nd</sup> row, numbered "3" and the 3<sup>rd</sup> row, numbered "2" were in the wrong order. They are switched.
- The ".csv" files in the directories under "NGA\_3parDT" are reformatted to be acceptable as input to GeoTrans. The new format (GeoTrans format) may be cumbersome for some situations, and the old format files are retained with suffix "\_format6pl".

Version 6.1 (October 9, 2007)

- Some edits of the file *Instructions.rtf*.

Version 6 (September 29, 2007)

- Two new themes are added. The subdirectory "global\_3D" contains test results for the conversions between four global coordinate systems that are "3D", i.e. points above and below the ellipsoid may be represented.
- The second new theme is the set of 3 parameter datum transformations given in NIMA TR8350.2 "Department of Defense World Geodetic System 1984: its definitions and relationships with local geodetic systems", with the datum transformation specifications taken from the file "3\_params.dat" of the GeoTrans 2.4.1 release. The test results are independently computed, but the datum transformation parameters are taken from this file. See subdirectory "NGA\_3parDT".

Version 5 (July 16, 2007)

- Deleted tests LCC\_Ney\_24 and LCC\_Ney\_25. Replaced them with tests Ney\_24 and Ney\_25. This change brings the Gold Data into conformance with *The American Practical Navigator* ("Bowditch") Edition 2002, as presently understood. This is not supported by GeoTrans 2.4.1. NGA policy on this is under review.
- Added subdirectories **SRMmax** and **Sphere**. This triples the number of map projection tests. Instead of testing only the WGS84 ellipsoid, this addition also tests an extreme ellipsoid proposed by the Spatial Reference Model (ISO 18026), and a sphere of radius 20000/Pi kilometers. This is not supported by GeoTrans 2.4.1.
- Added column headings and made other appearance improvements to the .csv files.
- Organized the ZIP file into directories and subdirectories

Version 4 (February 5, 2007)

- First version distributed outside NGA and the GeoTrans contractor.