

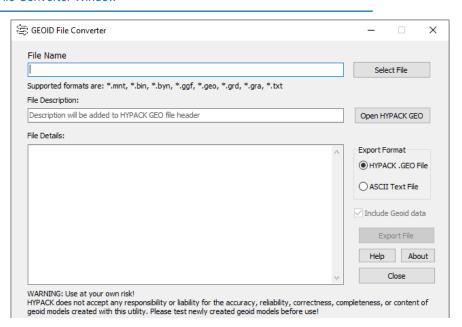
GEOID File Converter

By Rizwan Shariff

The GEOID File Converter program allows you to import and convert various geoid models into a HYPACK[®]-compatible geoid format for use. This program supports most available geoid formats. If there are any additional file formats you would like for us to include, please reach out to the Technical Support team at help@hypack.com.

The GEOID File Converter can be accessed from the HYPACK[®] Shell by clicking Utilities --> Geodesy --> Geoid Generator. This opens the GEOID Converter.

GEOID File Converter Window



IMPORTING GEOID FILES

From the GEOID File Converter, import a geoid file by clicking [Select File]. The supported file formats are *.mnt, *.bin, *.byn, *.ggf, *.geo, *.grd, *.gra, and *.txt files.

All Files(*.*)

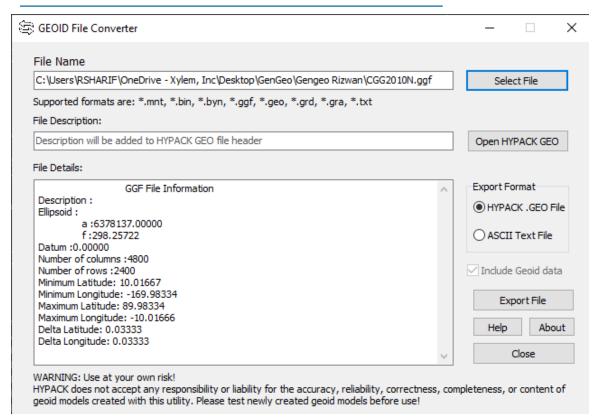
All Files(*.*)
French Geoid Files (*.mnt)
US National Geodetic Survey Files (*.bin)
Natural Resources Canada Files (*.byn)
Trimble GGF Files (*.ggf)
HYDROMAGIC GEO Files (*.geo)
Natural Resources Canada GRD Files (*.grd)
Generic ASCII File (*.gra)
ASCII XYZ/YXZ File (*.txt)

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Existing HYPACK GEO files can also be imported by clicking [Open HYPACK GEO]. This loads the HYPACK[®]-compatible geoid files present in the C:\HYPACK 202X\datum folder.

After the selected geoid file is successfully parsed and imported, the metadata of the file is displayed under File Details.





EXPORTING GEOID FILES

Once you've imported your geoid file, you have a few export options:

- You can type in text in the File Description field, which will be added to the header information of the exported file.
- You can select the file export location, and the same file can be used to set the geoid model in Geodesy.

Right now you can export the geoid as either a HYPACK .GEO File or ASCII Text File by selecting the appropriate option under Export Format.

- HYPACK .GEO File: You can export the imported geoid file as a HYPACK .GEO file for use in HYPACK[®].
- **ASCII Text File**: The imported geoid file can also be exported as an ASCII text file that contains the values for latitude, longitude, and separation separated by spaces. If ASCII

Text File is selected, you have option to include or omit geoid separation information by checking or unchecking the "Include Geoid Data" checkbox. When unchecked, only the header (metadata) of the geoid file will be written to the ASCII file.

Format of ASCII Text File - Include Geoid Data Enabled

```
Header · Information:
order: ·L
rident: Geoid file
ellipsoid a: 6.37814e+06
ellipsoid f: 298.257
datum: · NUL
reserved:
creation program: GENGEO
Num · Rows: · 361
Num · Columns: · 301
Num \cdot Z : \cdot 1
min·lon·value·(in·degrees): -- 69.00000
lon spacing (in degrees) 0.01667
min·lat·value·(in·degrees): 15.00000
lat spacing (in degrees): 0.01667
encoding.of.undefined.value: 1000000000.00000
header.size: 96
Geoid · Data (Latitude, · Longitude, · Separation):
15.00000 -- 69.00000 -- 29.29360
15.00000 -- 68.98333 -- 29.33140
15.00000 -- 68.96667 -- 29.37100
15.00000 -- 68.95000 -- 29.41210
15.00000 -- 68.93333 -- 29.45400
15.00000 -- 68.91667 -- 29.49650
15.00000 -- 68.90000 -- 29.53820
15.00000 -- 68.88333 -- 29.58070
15.00000 -- 68.86667 -- 29.62330
15.00000 -- 68.85000 -- 29.66600
15.00000 -- 68.83333 -- 29.70900
15.00000 -- 68.81667 -- 29.75220
15.00000 -- 68.80000 -- 29.79560
15.00000 -- 68.78333 -- 29.83970
15.00000 -- 68.76667 -- 29.88460
15.00000 -- 68.75000 -- 29.93010
15.00000 -- 68.73333 -- 29.97600
15.00000 -- 68.71667 -- 30.02190
15.00000 -- 68.70000 -- 30.06760
15.00000 -- 68.68333 -- 30.11310
15.00000 -- 68.66667 -- 30.15800
15.00000 -- 68.65000 -- 30.20430
15.00000 -- 68.63333 -- 30.25150
15.00000 -- 68.61667 -- 30.29960
15.00000 -- 68.60000 -- 30.34850
15.00000 -- 68.58333 -- 30.39810
15.00000 -- 68.56667 -- 30.44820
15.00000 -- 68.55000 -- 30.49830
15.00000 -- 68.53333 -- 30.54790
15.00000 -- 68.51667 -- 30.59630
15.00000 -- 68.50000 -- 30.64330
15.00000 -- 68.48333 -- 30.68910
15.00000 -- 68.46667 -- 30.73390
15.00000 -- 68.45000 -- 30.77840
15.00000 -- 68.43333 -- 30.82310
```

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