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TECH TIPS

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Survey

Trimble Grid Factory Utility: Creating Files in Trimble (.ggf) Format

Products

- Trimble Grid Factory utility

Question

How do I create a geoid file in Trimble format (.ggf) from my existing geoid data?

Answer

Use the Trimble Grid Factory to create a geoid file in Trimble format (.ggf) from existing geoid data:

1. From the existing geoid data, set up a Microsoft® Office Excel® spreadsheet definining latitude/longitude and the geoid undulation on a consistant grid.

	A	B	C	D	E	F	
1	Latitude /Longitude	20.00 degrees	20.05 degrees	20.10 degrees	20.15 degrees	20.20 degrees	20.25 de
2	59.000 degrees	19,792	19,699	19,612	19,531	19,456	19,383
3	58.975 degrees	19,806	19,714	19,630	19,552	19,481	19,411
4	58.950 degrees	19,825	19,736	19,656	19,581	19,511	19,443
5	58.925 degrees	19,848	19,762	19,685	19,614	19,546	19,479
6	58.900 degrees	19,874	19,794	19,720	19,652	19,583	19,518
7	58.875 degrees	19,902	19,825	19,758	19,692	19,624	19,560
8	58.850 degrees	19,938	19,867	19,802	19,739	19,675	19,613
9	58.825 degrees	19,976	19,909	19,848	19,788	19,728	19,669
10	58.800 degrees	20,016	19,956	19,899	19,842	19,785	19,729
11	58.775 degrees	20,057	20,003	19,951	19,899	19,844	19,792
12	58.750 degrees	20,100	20,052	20,005	19,956	19,906	19,856
13	58.725 degrees	20,150	20,108	20,065	20,020	19,975	19,926
14	58.700 degrees	20,199	20,163	20,125	20,085	20,043	19,998
15	58.675 degrees	20,249	20,219	20,186	20,150	20,111	20,070
16	58.650 degrees	20,298	20,273	20,244	20,212	20,177	20,140
17	58.625 degrees	20,345	20,326	20,300	20,272	20,241	20,207
18	58.600 degrees	20,396	20,382	20,360	20,335	20,306	20,275

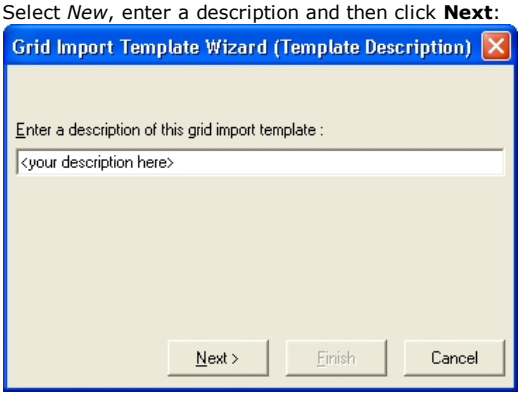
Note: the columns must be of a consistent longitude, or the Grid Factory utility does not convert the file correctly. If the columns are of a consistent latitude rather than longitude, you can swap them around in Excel using the Copy / Paste special / Transpose command.

2. The Grid Factory utility requires a text file (see below example), not an Excel file; on your spreadsheet, delete the first column and row (that is, the ones with the degree descriptions) and save the spreadsheet as a text file.

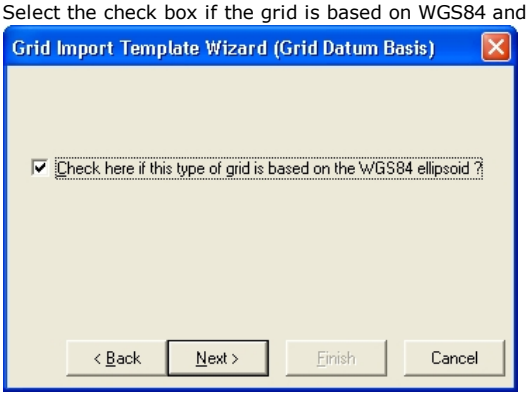
```
19,792    19,699    19,612    19,531    19,456    19,383    19,313    1
19,806    19,714    19,630    19,552    19,481    19,411    19,346    1
19,825    19,736    19,656    19,581    19,511    19,443    19,380    1
19,848    19,762    19,685    19,614    19,546    19,479    19,419    1
19,874    19,794    19,720    19,652    19,583    19,518    19,461    1
19,902    19,825    19,758    19,692    19,624    19,560    19,506    1
19,938    19,867    19,802    19,739    19,675    19,613    19,560    1
19,976    19,909    19,848    19,788    19,728    19,669    19,617    1
20,016    19,956    19,899    19,842    19,785    19,729    19,676    1
20,057    20,003    19,951    19,899    19,844    19,792    19,739    1
20,100    20,052    20,005    19,956    19,906    19,856    19,804    1
20,150    20,108    20,065    20,020    19,975    19,926    19,877    1
20,199    20,163    20,125    20,085    20,043    19,998    19,952    1
20,249    20,219    20,186    20,150    20,111    20,070    20,026    1
20,298    20,273    20,244    20,212    20,177    20,140    20,100    2
20,345    20,326    20,300    20,272    20,241    20,207    20,170    2
20,396    20,382    20,360    20,335    20,306    20,275    20,242    2
```

3. Start the Grid Factory utility.
4. Select *View / Geoid Grid Mode*.
5. Select *File / Import Grids*.

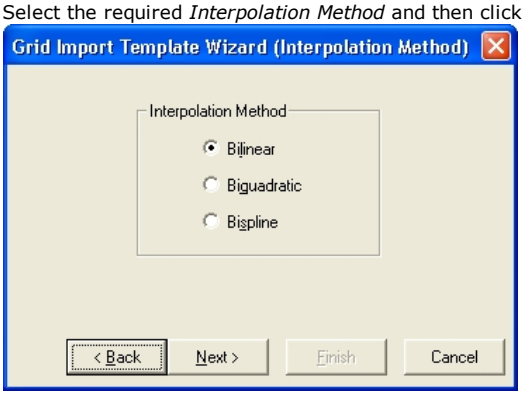
6. Select *New*, enter a description and then click **Next**:



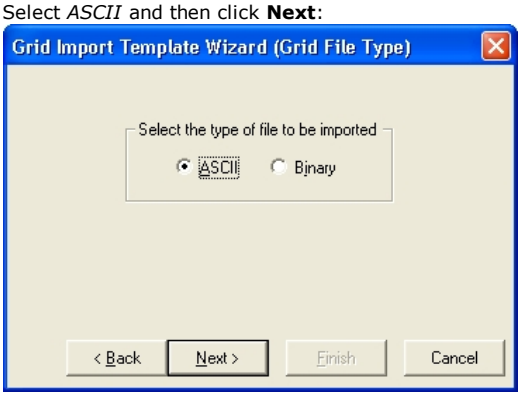
7. Select the check box if the grid is based on WGS84 and then click **Next:**



8. Select the required *Interpolation Method* and then click **Next**:

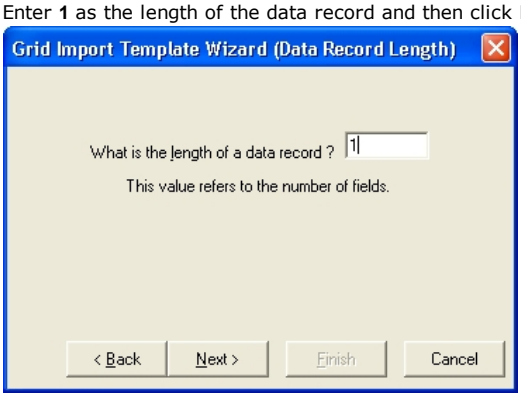


9. Select *ASCII* and then click **Next**:

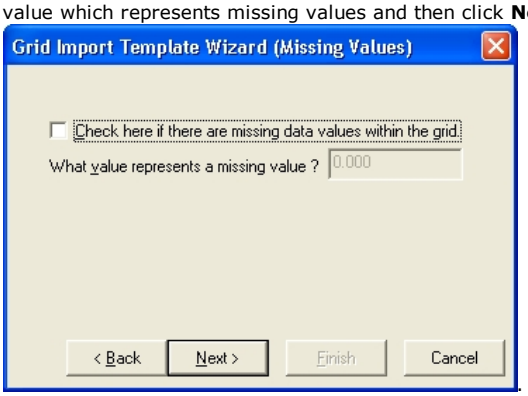


10. If the file is set up as the text file mentioned above, ensure the Data offsets are all set to zero and then click **Next:**

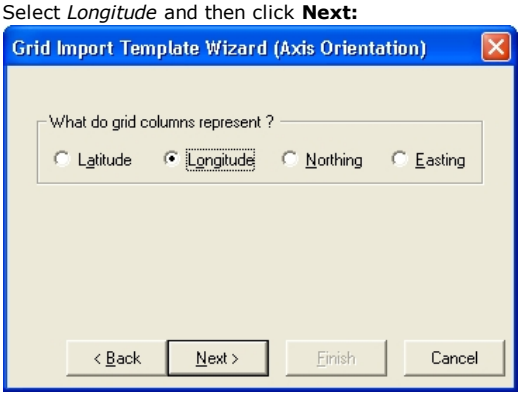
11. Enter **1** as the length of the data record and then click **Next**:



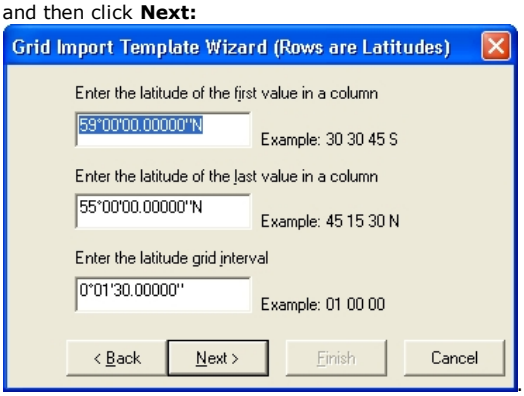
12. If there are missing values in the grid, select the check box below, enter the value which represents missing values and then click **Next:**



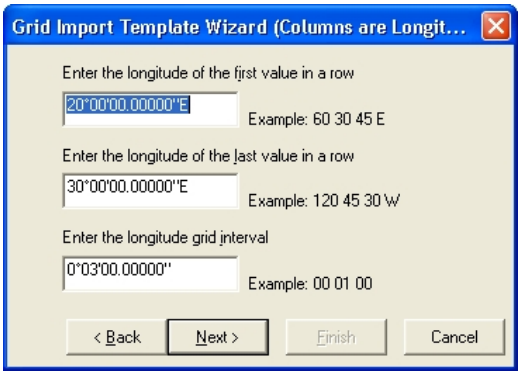
13. Select *Longitude* and then click **Next:**



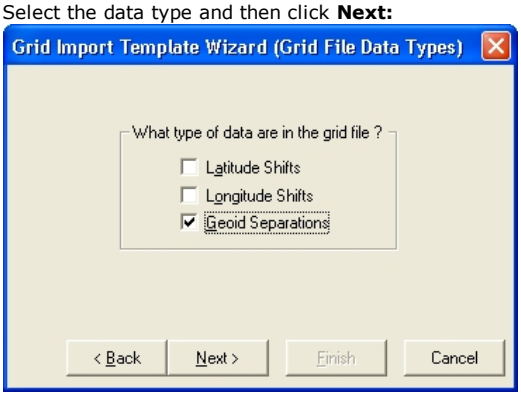
14. Fill in the latitude details (these are as specified in the original Excel file) and then click **Next:**



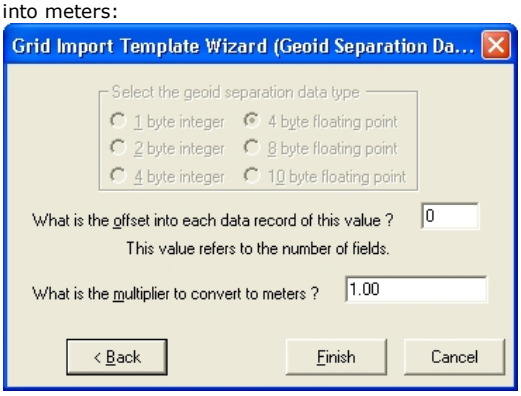
15. Fill in the longitude details (these are as specified in the original Excel file) and then click **Next:**



16. Select the data type and then click **Next:**



17. Set the offset to zero unless you want to skip fields.
    The data should be in meters; if it is not, enter the multiplier to convert it into meters:



18. Click **Finish**.
19. Highlight the name of your geoid and then select *Import*.
20. Browse to and select the text file. Do not select the Excel file; it will not work and the Grid Factory utility will crash.
21. Select *File* / *Open* and check that the file is correct by moving the cursor around the screen and viewing the values in the bottom status bar. You can also use *Edit* / *Value*.