

## Creating a Geoid Field File from NRCAN .byn Geoid model

Support Toll Free: (855) 414-9453

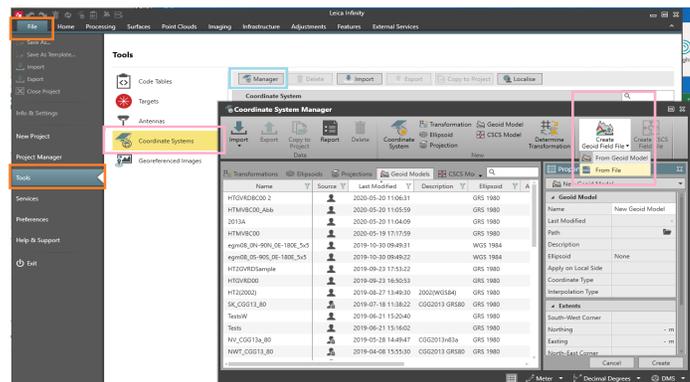
This is a quickguide which outlines the steps using **Leica Infinity** to take any Geoid Models as found on NRCAN (Natural Resource Canada) to create a Geoid Field file to use in a **Leica Captivate/Viva** controller.

There are various different geoids, please ensure you understand the differences, and the application of each of them as found here: <https://webapp.geod.nrcan.gc.ca/geod/data-donnees/geoid.php>

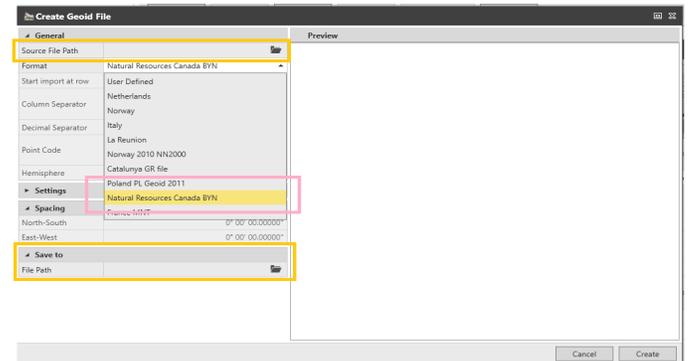
For more information about geoid/geodetic datums, please refer to: <https://www.nrcan.gc.ca/height-reference-system-modernization/9054>

In Infinity, navigate to the **File** tab and to <Tools>, <Coordinate System>, and select **Manager**.

In the master Coordinate System Manager, click on **Geoid Field Field**, and select **From File**

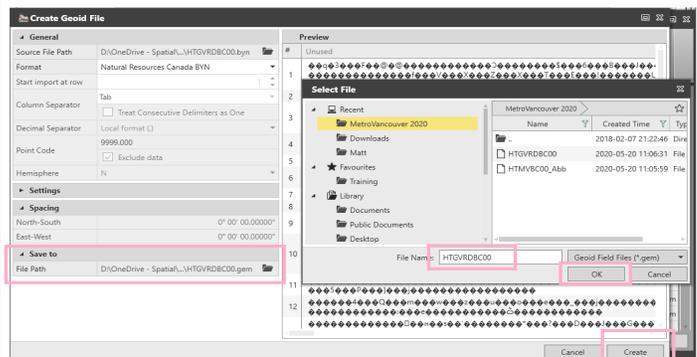


Select the Correct Source File Path of your .byn  
Ensure that the for format is set to **Natural Resource Canada BYN**  
Select the correct path to Save the .gem file to



Please note that the .byn preview will show binary characters, and also settings of the Geoid Field file (.gem) will be based on the settings of the original .byn Geoid file.

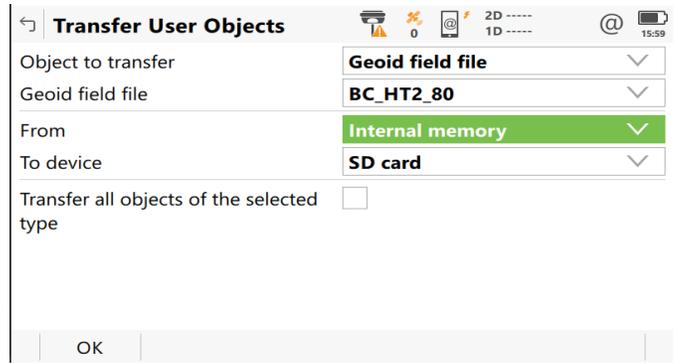
Press OK and then Create.



Methods of Loading Geoid Field File:

With the SD card or USB card that is to be used in the CS controller inserted directly into the computer, copy the .GEM file to the \Data\GPS\Geoid on the memory card.

With the .gem file in the correct folder and at the main menu:



**In SmartWorx Viva**

1. Press 4 (User) --> 4 (Tools & utilities..)
2. Press 1 (Transfer user objects) In the transfer objects screen select the Geoid field file from the pull down, specify what medium the Geoid field file is stored and transfer the file to the internal memory.
3. With the required fields populated, the name of the Geoid field file will be available in the Geoid Field file pull-down.
4. Select the correct file and press F1 (OK).

Once copied, the instrument will display that the transfer was successful.

**In Leica Captivate**

1. Press (Settings) --> (Tools) --> (Transfer user objects)
2. In the transfer objects screen select the Geoid field file from the pull down, specify what medium the Geoid field file is stored and transfer the file to the internal memory.
3. With the required fields populated, the name of the Geoid field file will be available in the Geoid Field file pull-down.
4. Select the correct file and press F1 (OK).

Once copied, the instrument will display that the transfer was successful.