

Installation and User Instructions

GeoCoordTrans

Version 2.0



November 2020

Version 2.0.0

Welcome to GeoCoordTrans version 2.0

GeoCoordTrans version 2.0 is a computer program for converting coordinates (geographic and projected) between all the coordinate systems used in Ghana. GeoCoordTrans is easy to use and full of wizards to assist you with complex task. GeoCoordTrans can convert single coordinates or multiple coordinates stored in Text files (i.e. **.csv**, **.txt**) and Microsoft access file

Getting Started

System requirements

Minimum System requirement

Operating system: Windows XP/Vista/7 or later
Processor Dual core CPU 2.4 GHz
2 GB system memory
.Net 3.5
DirectX 9.0 or above
1.5 GB of free hard drive space

Recommended System requirement

Operating system: Windows XP/Vista/7 or later
Dual core CPU 3.0 GHz
4 GB system memory
.Net 4.0 or above
DirectX 9.0 or above
1.5 GB of free hard drive space

Installation

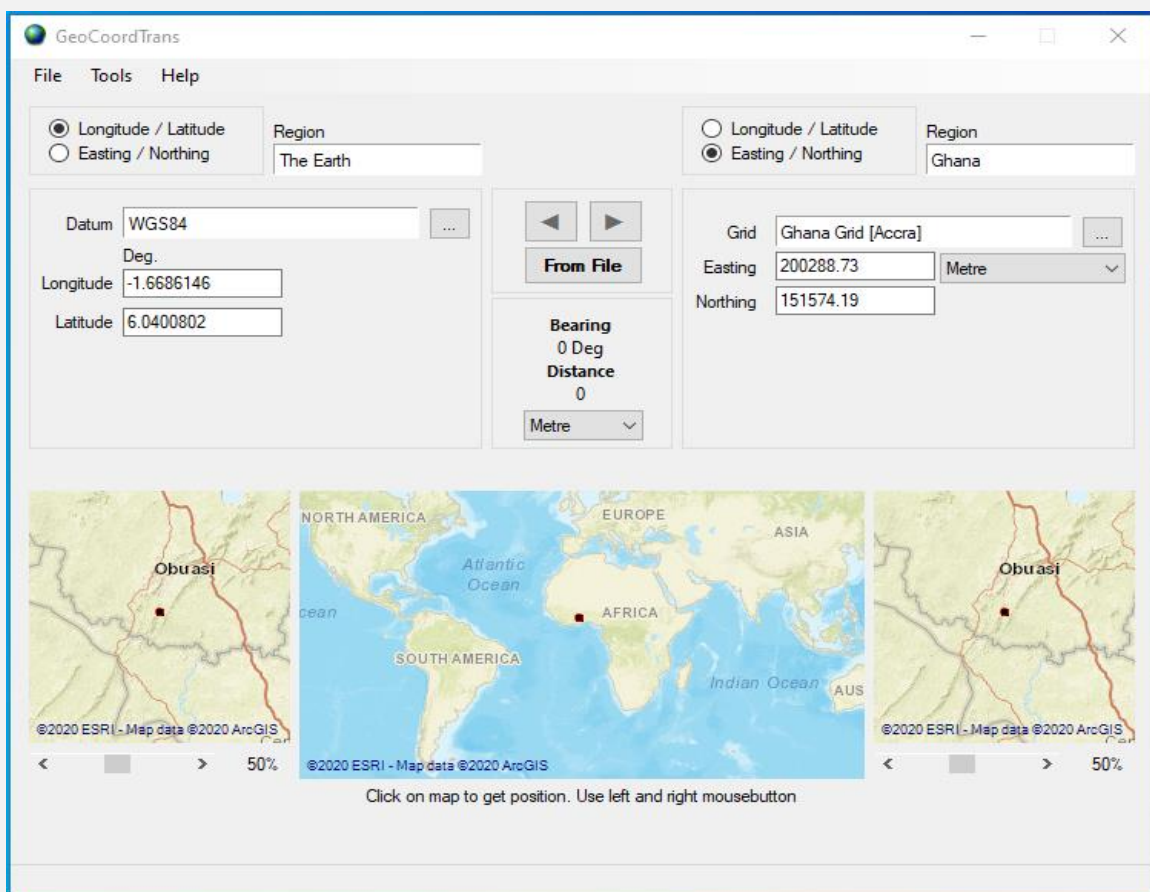
1. Extract content of Setup file to Computer
2. Open extracted file.
3. Find setup.exe and execute it
4. Follow the on-screen instructions to complete the set-up process

Launching GeoCoordTrans version 2.0

1. Start by clicking the “GeoCoordTrans version 2.0” icon on your desktop, or
2. Going to your programs menu and selecting **GeoCoordTrans version 2.0**, the default path should be “Start” -> “All Programs” -> “GeoCoordTrans version 2.0” -> “GeoCoordTrans version 2.0”.

Main Interface

The main menu of **GeoCoordTrans version 2.0** is a full of miscellaneous tools such as, parameters, wizards and map tools for single or multiple point(s) coordinate transformation, unit conversion and main interface map manipulation.



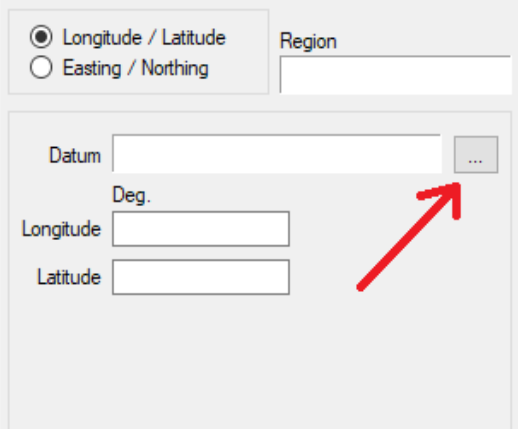
Single point Coordinate Conversion

This can be achieved by manually typing in the coordinates of the point in either sides of the sections with respect to the coordinate type and reference system **or**, by Identifying the location of the point on the interface map and clicking on that position to acquire the coordinates

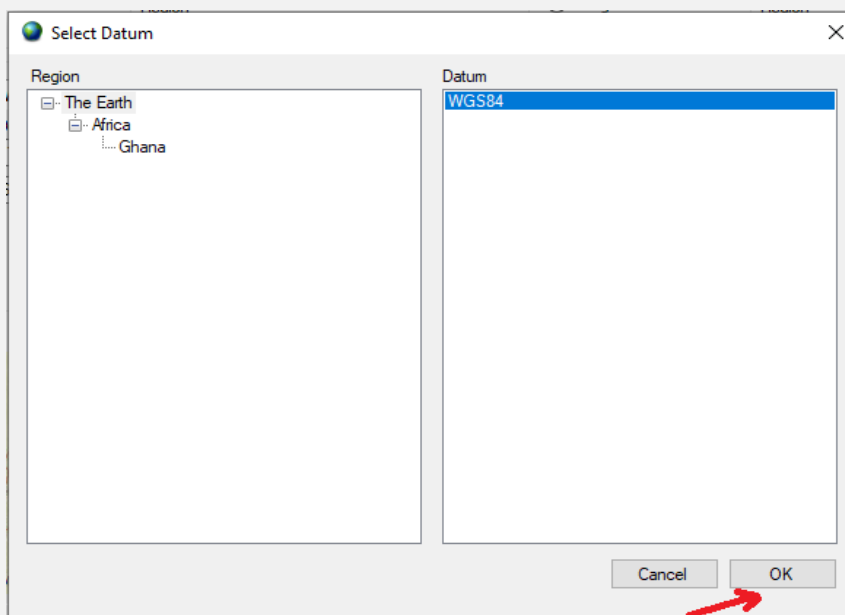
Example; To convert geographic coordinate (Longitude/Latitude) of a point picked with a GPS in WGS84 to projected coordinates (Easting/Northing) in UTM system.

Longitude = -1.6686146^0 and Latitude = 6.0400802^0

1. Select coordinate system of point



The screenshot shows a software interface for coordinate conversion. At the top, there are two radio buttons: 'Longitude / Latitude' (selected) and 'Easting / Northing'. To the right is a 'Region' text box. Below these are input fields for 'Datum', 'Deg.', 'Longitude', and 'Latitude'. A red arrow points to a small button with three dots next to the 'Datum' field.



☒ Longitude / Latitude
☐ Easting / Northing

Region: The Earth

Datum: WGS84

Deg.

Longitude:

Latitude:

2. Enter Coordinates of point

☒ Longitude / Latitude
☐ Easting / Northing

Region: The Earth

Datum: WGS84

Deg.

Longitude: -1.6686146

Latitude: 6.0400802

- Repeat step 1 for other section based on coordinate system to convert to.
- Click respective convert button based on which section to convert from. For this example, input coordinates were inserted on the left side, thus **to-right** convert button is clicked.

5. Results

☐ Longitude / Latitude
☒ Easting / Northing

Region: Ghana

Grid: UTM Zone 30N [WGS84]

Easting: 647345.93

Northing: 667815.29

Metre

Coordinates can also be acquired by identifying point on map clicking on the point to automatically generate coordinates of the point and then clicking on respective convert button to convert coordinate.

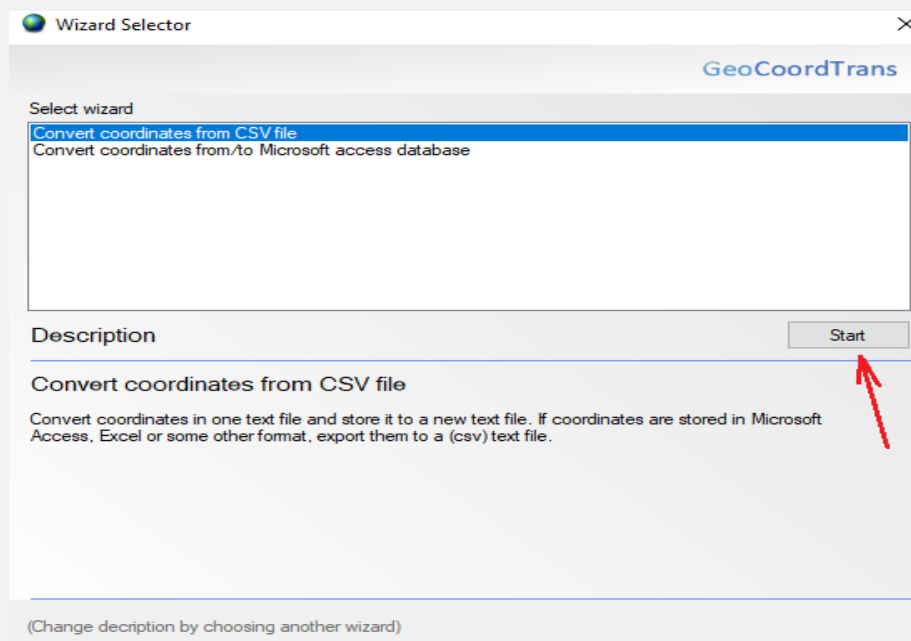


Multiple points Coordinates Conversion

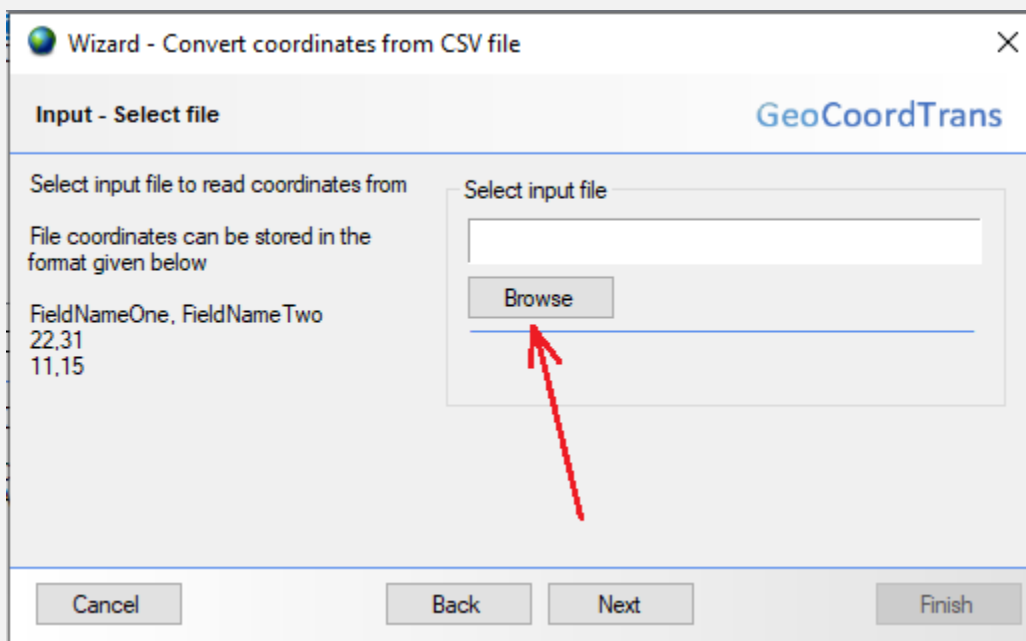
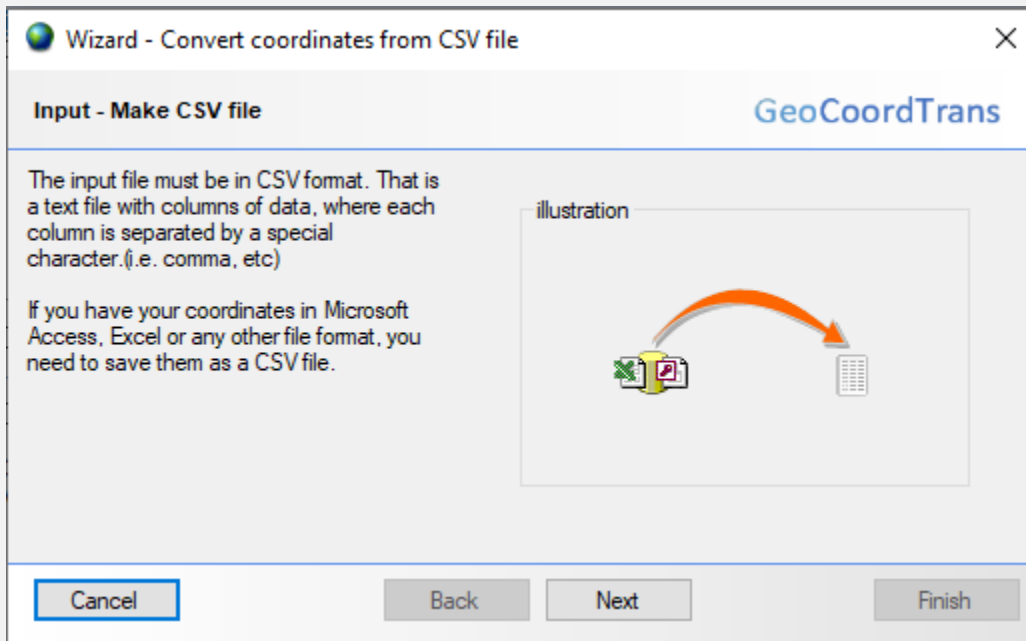
GeoCoordTrans can convert coordinates of points stored in a Text file (i.e. csv, txt) and Microsoft access file. For example;

To convert coordinates stored in a CSV file

1. Load Wizards form by clicking on **From File** button or **Tools -> Wizards**. Select wizard to use and click **Start**.



2. Follow the wizard instructions to complete the conversion process



Wizard - Convert coordinates from CSV file

Input - Select file GeoCoordTrans

Select input file to read coordinates from

File coordinates can be stored in the format given below

FieldNameOne, FieldNameTwo
22,31
11,15

Select input file

C:\Users\umbre\Desktop\Test Data.csv

Browse

Test Data.csv

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Input - Select separator GeoCoordTrans

Select a sign that represents the field separator.
The sign between each coordinate in the file

Separator

Comma

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Input - Coordinate type GeoCoordTrans

Select coordinate type you want to convert from.

Longitude/Latitude if you want to use a datum system
Easting/Northing if you want to use a grid system

Coordinate Type

☒ Longitude / Latitude
☐ Easting / Northing

Select which format your coordinates are stored in.

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Input - Activate fieldnames GeoCoordTrans

Check the fieldname box if file contains fieldnames on first row.

Field names on first row / Preview

☒ Fieldnames on first row

Name ,WO Latitude ,WO Longitude

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Input - Select fieldnames

GeoCoordTrans

Select fields that represent the correct coordinate type

Select field names / Preview

Longitude	Field	WO Longitude	Switch
Latitude	Field	WO Latitude	

Longitude

- 1.22111111
- 1.22083333
- 1.22416667
- 1.22416667
- 1.22583333

Latitude

- 6.63083333
- 6.63
- 6.62944444
- 6.62916667
- 6.62888889

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Input - Coordinate system

GeoCoordTrans

Select coordinate system to convert from

Datum/ Region

Accra

Select datum

Region Ghana

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Output - Select file

GeoCoordTrans

Select file to write coordinates to

Select output file

C:\Users\umbre\Desktop\Test Data_out.csv

Browse

Test Data_out.csv

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Output - Coordinate type

GeoCoordTrans

Select coordinate type you want to convert to.

Longitude/Latitude if you want to use a datum system
Easting/Northing if you want to use a grid system

Coordinate Type

☐ Longitude / Latitude

☒ Easting / Northing

Select which format the output coordinates should be stored in.

Cancel Back Next Finish

Wizard - Convert coordinates from CSV file

Output - Coordinate system

GeoCoordTrans

Select coordinate system to convert to

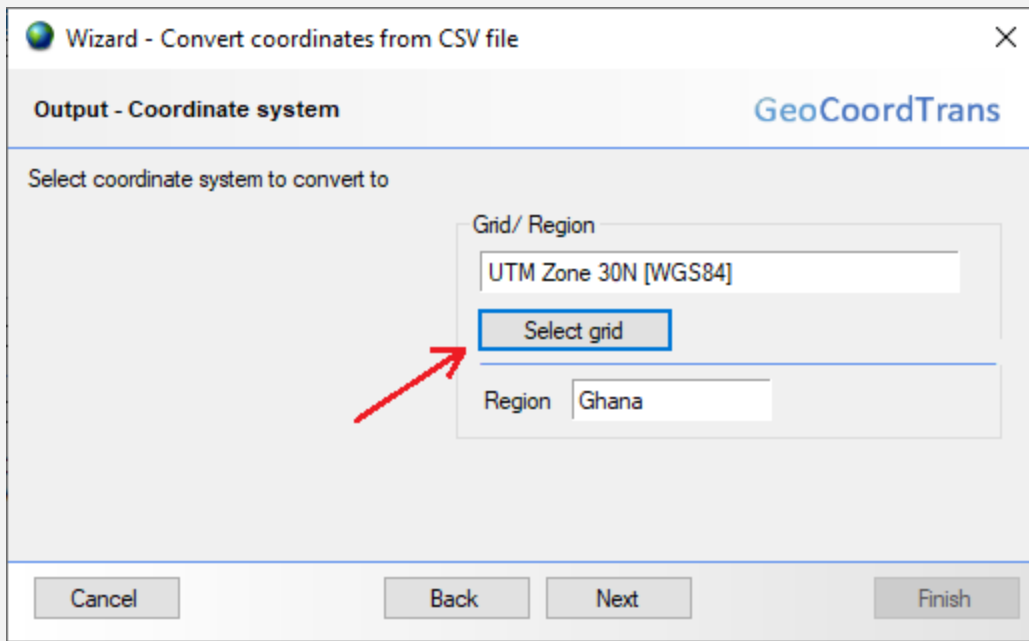
Grid/ Region

UTM Zone 30N [WGS84]

Select grid

Region Ghana

Cancel Back Next Finish



Wizard - Convert coordinates from CSV file

Output - Unit

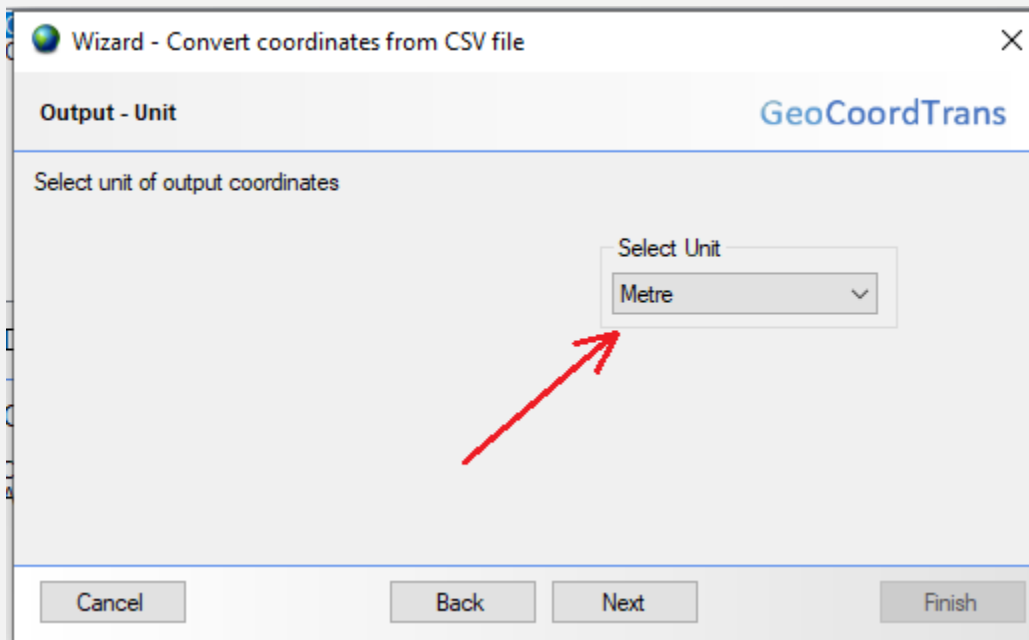
GeoCoordTrans

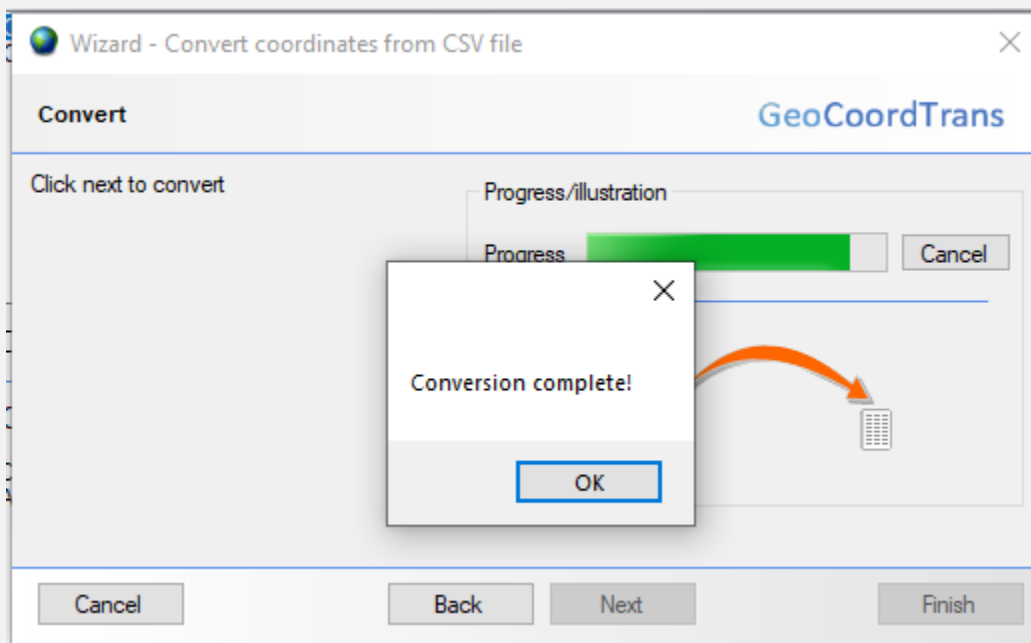
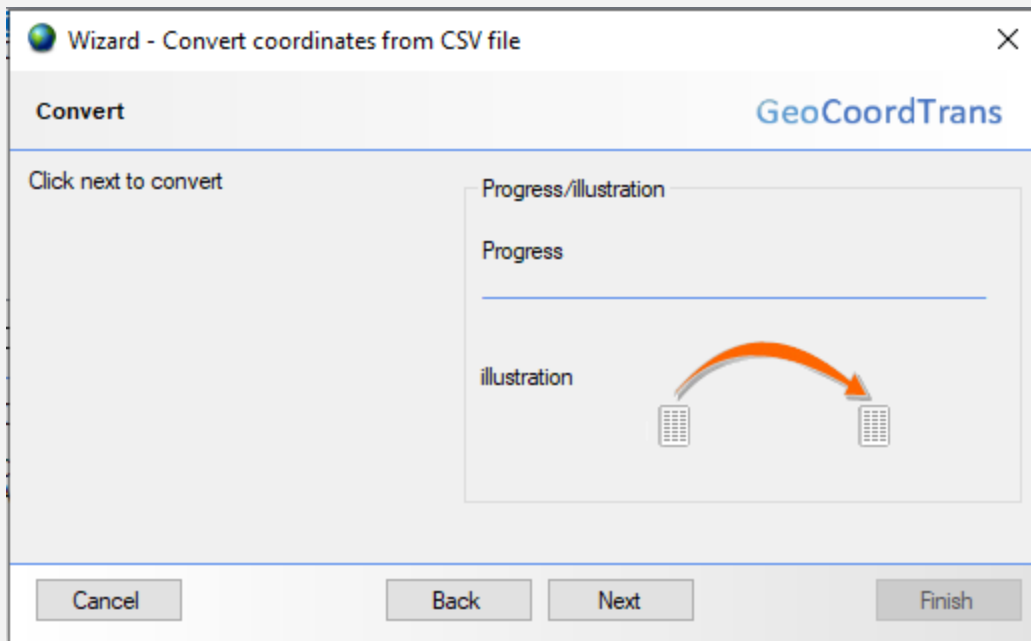
Select unit of output coordinates

Select Unit

Metre

Cancel Back Next Finish





3. Check **Open file** checkbox to open file or click on **Finish** to close wizard

