# **Geocomp Update Q**

for Terramodel® 10.61 with Geocomp Update P

# **Release Notes**

- Introduction
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- New commands and changes

Software for Civil Engineers and Surveyors





Version Q 2023

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RELEASE NOTICE

Release Notes (Revision 1) for installing Geocomp Update Q on Trimble Terramodel® 10.61 with Geocomp Update P.

# Introduction

**Terramodel 10.61** is an application from Trimble for surveyors, civil engineers and others to display, design, draft, edit and convert terrain and alignment models of land, stockpiles, roadways, railways, sea floors and so on.

Geocomp Update Q is an update and extension for Terramodel 10.61 that significantly improves the capabilities of Terramodel with new and modified commands and other features. Geocomp Update Q requires Geocomp Update P to have been previously installed.

These release notes describe **how to install** Terramodel 10.61 and Geocomp Update Q and summarise the most significant changes since Geocomp Update P.

The installers for Terramodel 10.61 and Geocomp Updates P and Q are available from Geocomp Systems on a USB drive and from www.geocomp.com.au/geocompupdate/.

Terramodel enables the Field Data Module only, unless you attach the Sentinel Security Key that enables any other modules and Geocomp Updates that you have purchased.

When you first install Terramodel 10.61, the display shows a default configuration. Modify the configuration of your toolbar buttons, function keys, workspaces, colours, pens, carousels, prototypes, linetypes, plotter configurations, blocks and macros to suit yourself.

Installing Geocomp Update Q does not change your configuration, but it does add "Geocomp" and "Trimble" configurations. Import settings from these or from your configuration on a previous computer.

Enter commands at the command line, from menus, or by buttons on the toolbar or in toolboxes.

# How to install

# Terramodel 10.61

Install Terramodel 10.61, if you have not already done so.

Download and run the Terramodel installer from <a href="https://www.geocomp.com.au/terramodel/">www.geocomp.com.au/terramodel/</a> or select <a href="https://www.geocomp.com.au/terramodel/">Install Terramodel 10.60 and update to 10.61</a> from the installation menu on the USB drive available from Geocomp Systems.

This installer steps you through the installation or reinstallation of Terramodel 10.60, the upgrade to 10.61 and then Sentinel System Driver 7.60. Install both the USB and Parallel Port Sentinel System Drivers.

After installation, start Terramodel and, from the Help menu, select About to confirm that the version shown is 10.61.

If you start Terramodel before attaching any Sentinel key, Field Data is the only enabled module. If you attach a Sentinel Key and then start Terramodel, all your modules are listed, and the "Products" button shows the serial number and whether those modules are temporary or permanent. If you have any problems or questions about Sentinel keys or licencing, please contact us.

# GEOCOMP UPDATE Q

If you have current Customer Care Membership from Geocomp Systems, many new and modified commands are available by installing Geocomp Update Q.

Key numbers with current Customer Care Membership are included in the installer for Geocomp Update Q. If you add or renew memberships later, we supply instructions to enable these commands.

Install Terramodel 10.61 first. Then download and run the Geocomp Update P installer from <a href="www.geocomp.com.au/geocompupdate/">www.geocomp.com.au/geocompupdate/</a>, or select <a href="Install Geocompupdate/">Install Geocompupdate/</a>, or select <a href="Install Geocompupdate/">Install Geocompupdate/</a>.

After displaying these *Release Notes*, select Finish to complete the installation. Installing Geocomp Update P

- creates the folder C:\TMCustom\,
- copies files for new and modified commands into C:\TMCUSTOM\GEOCOMP,
- copies files for new and updated macros into C:\TMCustom\Macros, and
- updates some files under C:\PROGRAM FILES (x86)\TRIMBLE\.

If you do not have Customer Care, but want to renew, purchase or enquire about membership, please email <a href="mailto:support@geocomp.com.au">support@geocomp.com.au</a>.

After you install Geocomp Update P, the first command to enter is TMCUSTOM. This enables commands in Geocomp Update P by adding the folder C:\TMCUSTOM\GEOCOMP to the Terramodel Search Path (TSP), if this has not already been done. Restart Terramodel if prompted.

Then download and run the Geocomp Update Q installer from <a href="https://www.geocomp.com.au/geocompupdate/">www.geocomp.com.au/geocompupdate/</a>, or select <a href="https://www.geocomp.com.au/geocompupdate/">Install Geocomp Update Q</a> from the installation menu on the USB drive.

#### **TMCUSTOM**

The C:\TMCustom\ folder is where we suggest you place your custom configuration files such as prototypes (.PRO), workspaces (.WS), blocks (.BLK) and AutoDraft (.ADC) and AutoCAD (.ACF) configuration files.

#### **GCHELP**

At the command line, enter GCHELP for the command which displays details of the current Geocomp Update and configuration.

#### PROTOTYPE FILE

New projects are based on your prototype .PRO file. Copy your prototype file to C:\TMCUSTOM, then use SYSTEM command to select it. If you do not have your own prototype, create one by copying one of our .PRO files from C:\TMCUSTOM\GEOCOMP\ to C:\TMCUSTOM\, renaming the file and making any changes. Our "WITH-OBJECTS" files include sample layer names and sheets. Our "WITHOUT-OBJECTS" files have no objects and just the POINTS layer.

# INITIALISATION FILE

The user-interface configuration is defined in the initialisation file TMODWIN.INI.

TMODWIN.INI controls the Terramodel Search Path and the appearance and operation of the toolbar, menus, toolboxes, coordinate scroll, display, printing, line thicknesses, text, reports and function keys.

Installing Geocomp Update P does not change your initialisation. Keep your current initialisation or import sections from a TMODWIN.INI. Copy a TMODWIN.INI from your previous computer, prepare with a text editor or select from those supplied by Geocomp Systems.

To import an initialisation, use EDITINI command to "Show Old INI file", browse to select an initialisation file and then import the relevant sections. To select all sections, use Left Click on the first section and then Shift-Left-Click on the last.

To copy an initialisation, use the Copy button in EDITINI on the old computer. Then take the copy to the new computer and use EDITINI to import.

Our recommended initialisation files can be selected from C:\TMCustom\Geocomp\:

*_TMODWIN.INI FILE	RECOMMENDED FOR
GEOCOMP_AUST_DEFAULTS_TMODWIN	Australian users
GEOCOMP_USA_DEFAULTS_TMODWIN	American users
TRIMBLE_DEFAULTS_TMODWIN	Original Trimble appearance
HDMS_DEFAULTS_TMODWIN	Hydrographic charting
FIELD_DATA_TMODWIN	Field data module commands
VIEWER_TMODWIN	Viewing projects

### These initialisation files are for specific purposes:

*_TMODWIN.INI FILE	RECOMMENDED FOR
p3pad_report_tmodwin.ini	Configuring reports only
DELETE_COLORMAPS_TMODWIN.INI	Deleting colormaps only
DELETE_PALETTES_TMODWIN.INI	Deleting palettes only

Sometimes, changes to your initialisation will not take effect, due to Terramodel not finding the copy of tmodwin.ini in the hidden VirtualStore. If this is happens to you, try right-button click on the Desktop icon, select Properties then Advanced, turn on "Run as administrator" and always start Terramodel through this shortcut, or a copy of this shortcut on your taskbar or start menu. You might need to reimport your initialisation. If your IT department blocks this setting, there are other solutions.

# **System**

The [System] section of your initialisation includes your company name and address for the heading of reports. Use SYSTEM command to configure that heading and also the maximum number of objects on a project (up to 20,000,000), the undo size (19999), your prototype file name, and whether to display toolboxes when you start Terramodel.

#### ALIASES

Geocomp Update P replaces the alias file alias.ini to add hundreds of aliases to commands. If you have entered your own aliases, please re-enter them afterwards with ALIAS command or edit C:\TMCUSTOM\GEOCOMP\ALIAS.INI. Do not simply replace our ALIAS.INI with your own otherwise some new commands will not run.

# **MENUS**

Installing Geocomp Update P does not change your menus. Menus are defined in menu files. Your menus match your modules unless a menu file is defined in the [System] section of your initialisation file. To discover the name of your current menu file, if any, use GCHELP. To select a new menu file, use MENUCFG command.

Consider selecting one of these menu files from C:\TMCUSTOM\GEOCOMP.

GEOCOMP.M	For users outside USA, with menus for survey and construction
GEOCOMP_US.M	For users inside USA, with menus for survey and construction
GEOCOMP+.M	For users outside USA, with menus for survey and construction including Tunnel, Hydro and Pipe
GEOCOMP+_US.M	For users inside USA, with menus for survey and construction including Tunnel, Hydro and Pipe
GEOCOMP+HDMS.M	For users outside USA, with menus for hydrographic survey and channel construction
GEOCOMP+HDMS_US.M	For users inside USA, with menus for hydrographic survey and channel construction
VIEWER.M	For clients and managers to view Terramodel project (.PRO) files

# IMPORT AND EXPORT SCRIPTS

Import and Export scripts are installed to C:\PROGRAM FILES (x86)\TRIMBLE\SHARED\IMPORTEXPORT folder. Some scripts are hidden from the Download/Import and Export/Upload menus until you use the Import and Export Script Managers to turn them on. To delete scripts that are not relevant, delete or rename the .XI and .XE files in C:\PROGRAM FILES (x86)\TRIMBLE\SHARED\IMPORTEXPORT.

Popular scripts include the various Geocomp AutoCAD and instrument-specific scripts. If the Browse buttons on AutoCAD scripts are not visible, install MS Sans Serif font.

# MS SANS SERIF FONT

The Terramodel display font is the regular 8-point font of the MS Sans Serif typeface. If menus and other text are bigger, bolder or blurrier that you expect, this font might not be installed, especially on newer computers. To open the installer of this font, enter SSERIFE at the command line.

# ZOOM AND PAN USING YOUR MOUSE WHEEL

If you cannot use your mouse wheel to pan and zoom, go to Windows 10 Settings | Devices | Mouse and turn off "Scroll inactive windows when I hover over them".

#### COORDINATE SYSTEMS

The COORDSYS, DATUMS, ELIPSOID and .LUT files for coordinate conversion commands COORDCON (for USA) and GCCOORD (for Australia and New Zealand) have been updated. Use these commands to list all the available coordinate systems. To add coordinate systems, use ADDMAPSY command or email the details to Geocomp Systems so we can include them for everyone.

#### HATCH PATTERNS

Commands that create blocks of hatching select hatch patterns from the first TMODEL.PAT file on the TSP. If Geocomp Update P is installed, this is C:\TMCUSTOM\GEOCOMP\TMODEL.PAT. If you have defined your own hatch patterns, copy your own TMODEL.PAT to C:\TMCUSTOM\ and rename C:\TMCUSTOM\GEOCOMP\TMODEL.PAT to \TMODEL-GC.PAT.

#### **DOCUMENTATION**

Our new menu files include Index, Documents, TML List and GCHELP commands. For details of commands, please refer to the TML List.

# **ALT**

The C:\TMCustom\Geocomp\Alt\ folder contains alternative files that are available for selection when recommended by Geocomp Systems to solve problems.

# New commands and changes since P

# 3DPIPE

Report 3D pipe details. Now includes total 3D distance.

# BEST3FIT

New. Create a 3D set that best fits selected points.

# BOREHOLE AND BHIMPORT

Create DTM layers from borehole depths imported from .CSV.

#### **BRACKETS**

New. Add () around selected text.

#### **DXFCHANG**

Changes text in a .DXF file.

Added option to also remove duplicate coordinates from LWPOLYLINE entities in DXF. (Victorian Land Titles Office requires this before submitting ePlans.)

Added DXF line numbers to the report.

# F8

Label points with symbols.

Now can specify which symbol by command line.

#### GC12DIN AND GC12DOUT

Import and export 12D archive files.

Many improvements.

#### GC30PERP

Reports difference perpendicular to a DTM.

Now if point is below DTM, then difference is negative.

#### GC40PILE

Report differences between design and as-built pile points.

Now uses roadway alignment and selects any points.

# GC42AB, GC43ACSV, GC43CSV, GC43MCSV, GC43SCSV, GC44, GC44CSV, GC44S AND GC44SA

Roadway reports. Improved.

#### GC65FILE AND GC65TILT

Import an alignment from points in a file.

# **GC79**

Renumber points to match point names.

Now reports to P3Pad.

# **GCCHORD**

Create points at chords. Now uses original set smoothness.

# GCEDIT12A

Edit 12D Model attributes. Now can delete attributes.

# **GCESRIIN**

Import ESRI gridded DEM. Now also prompts for .DEM files.

# **GCIFCIN**

New. Import surfaces from .IFC files.

# **GCLASOUT**

New. Export points as .LAS files.

# **GCPAVSET**

Export for Paveset paving machines. Added Interval entry. Expanded report.

# **GCSKIPMN**

Skip manager. New button to swap skips.

# **GCTPLATE**

New. Copy roadway templates to chainages at crossing plines or .CSV records.

### **GCXMLIN**

Import Land XML data. Now imports parcels as lots.

#### **HEATMAP**

Show elevation differences with colours. Now can enter stripping depths.

#### LABELOFF

Label offsets. Now can select the text bearing.

# LAYERVIS

Make layers visible or invisible by mouse.

#### LIDAROUT

New. Export points as ASCII lidar .PTS.

#### LOTJOIN

Create closed sets inside lines and around text.

Now names of new sets are expanded if EAT text.

#### MossOut

Export MOSS GENIO files.

Now exports control points first. Fixed problems with 4D points.

# **NAMESETS**

Rename unnamed sets. Now can rename unnamed points.

# **NEWTEMPS**

New. Copy roadway templates to chainage.

# NSWSCIMS AND SCIMSTAB

Import New South Wales Survey Control and create a table.

# **PIPEADD**

Add pipes from pipe survey attributes.

#### **PLANSET**

Create a set of plans.

Now notifies when plan and profile view scales do not match.

# **PTCHOFRL**

New. Report chainage, offset and elevation where xlines cross sets.

#### **PTINSIDE**

New. Select points inside or outside all selected closed sets or plines on a layer.

Use selection in other commands by right-click Previous.

#### **PTSETATB**

Change feature attribute of sets to match attribute of first point.

(Part of Feature Attribute bundle of TMLs.)

#### RAW2RDE

New. Import Carlson .RW5 survey data via Raw Data Editor.

#### RELAYREF

New. Relayer objects to the layers of their reference objects.

# REVERSE

Reverse plines and sets. Now can reverse segment points in EAT text or bearings.

#### REVRECNO

New. Reverse the order of record numbers.

#### ROAD RUN

Export alignments to Leica Road Runner. Now prompts to select a VAL if needed.

# **SHADEISO**

Shade between isopachs. Now allows for more depth ranges.

#### **TEXTIMPT**

New. Import text at chainages.

# SHADEISO

Shade between isopachs. Now allows for more depth ranges.

#### Variable

New. Report, edit, export and import project variables.

#### XVOLUMES

Compute volumes between Xlines.

Various fixes and improvements.