STAR*NET 8: Features & Benefits

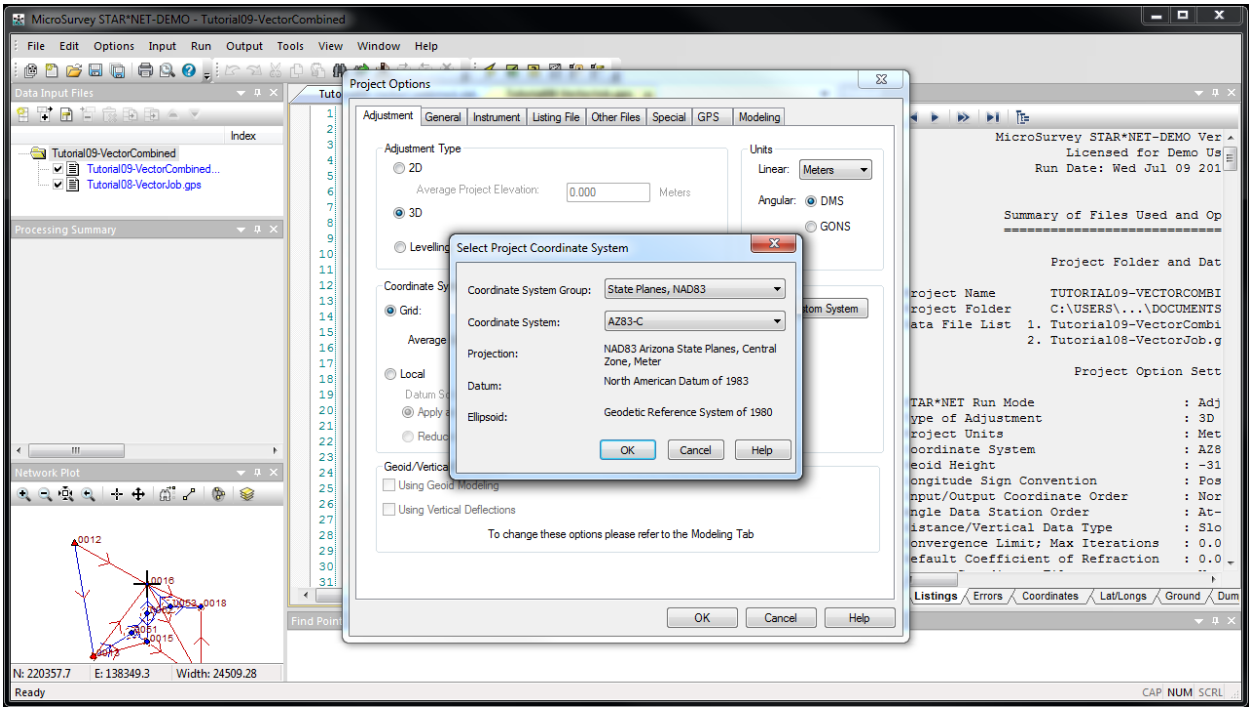
Table of Contents

STAR*NET 8

Release Date: May 9, 2014

CS-Map Coordinate System Engine

Upgrade Tour Movie: click here



Feature	Benefit
CS-Map coordinate system engine	100% cross-compatibility between all MicroSurvey products including STAR*NET, FieldGenius, MSCAD, inCAD, embeddedCAD, etc.
Over 3800 predefined coordinate systems, worldwide, are now available to select from	Greatly expands the usability of STAR*NET especially outside of North America, as only UTM and SPCS zones were previously available.
Custom Coordinate System Editor supports more datum and projection types	The old text-based coordinate system definition file “starnet.cus” was very limited in the systems that could be defined because it only supported a few projection types.

Geoid Modeling (.bin/.byn files)

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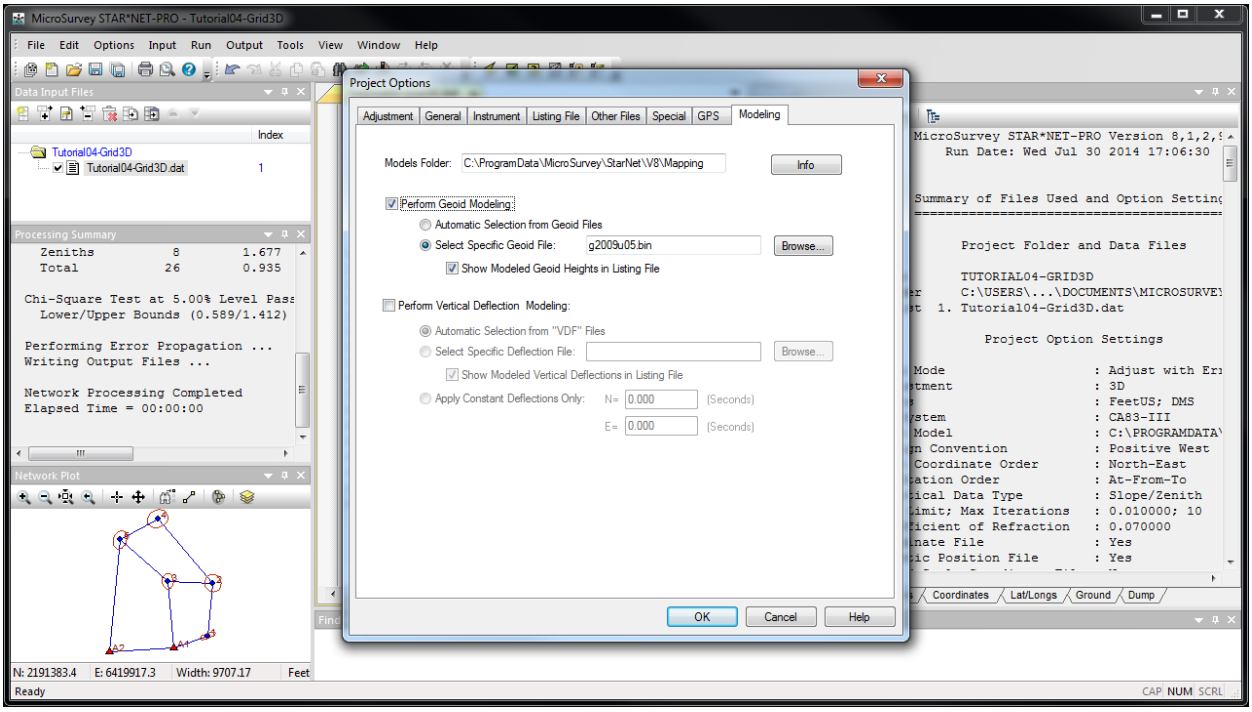

Feature	Benefit
Direct support of NGS and NRCan geoid files (.bin/.byn) for geoid modeling	Conversion to .ght format (using the STAR*Geoid utility) is no longer necessary. This improves user confidence by using officially distributed geoid files from NGS/NRCan. Further, STAR*Geoid did not support NRCan's newer .byn format (like HT2_0.byn).
Hundreds of worldwide geoid models are available for download via the MicroSurvey Helpdesk.	Easy and free access to geoid models.

STAR*NET 8.1

Release Date: August 1, 2014

Network Plot

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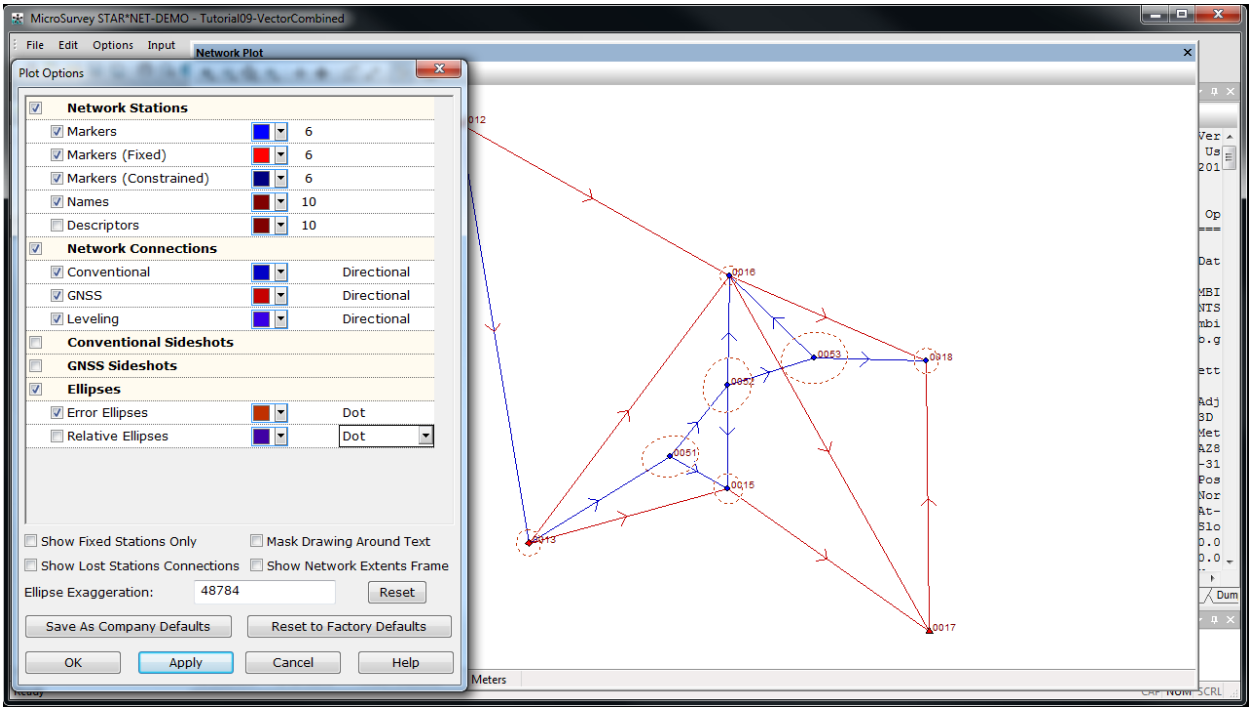
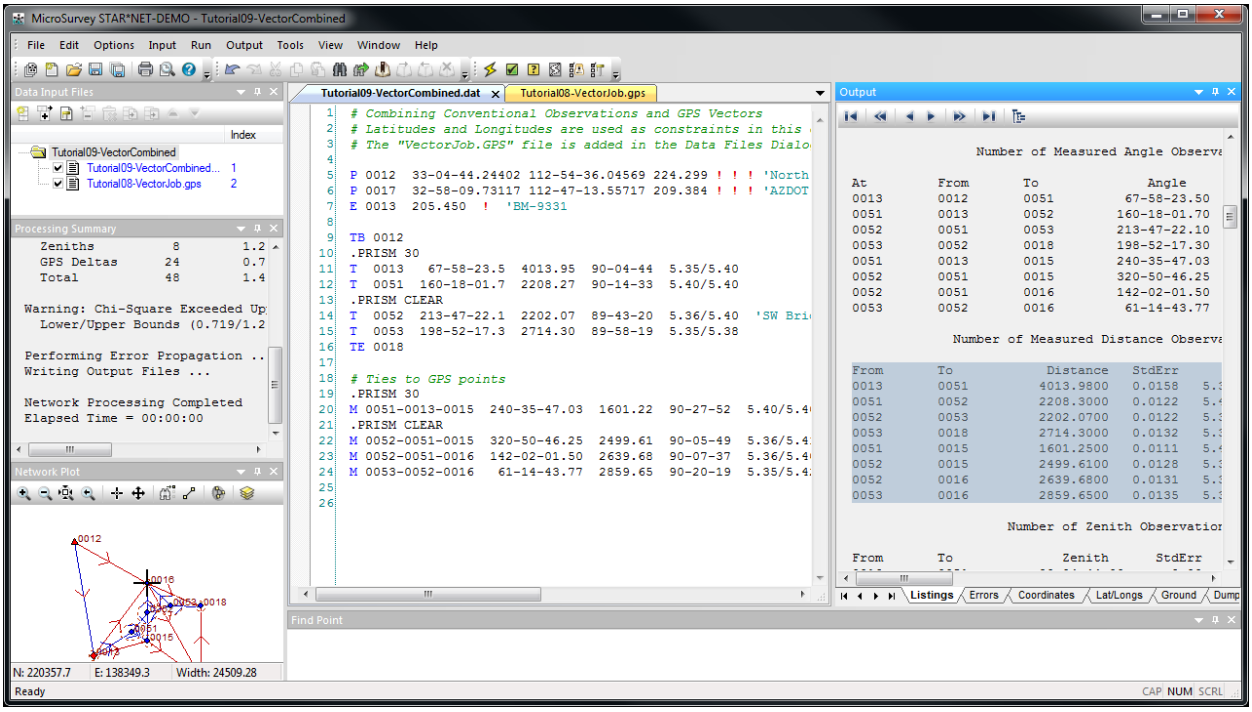


Feature	Benefit
New Plot Options dialog	All network plot display options are now customizable (for example: no hard-coded colors) in an intuitive but powerful dialog.
Specify the color, size, and linetype of each network element	Graphically differentiate Conventional, GPS, and Leveling observations by color or linetype, etc. More control for the user.
Directional Linetypes	Directional arrowheads provide an immediate indication of both the direction and number of observations between two stations. Users can quickly notice regions with low redundancy without having to analyze the listing.
Zoom and Pan mouse controls	Intuitive CAD-like mouse control makes manipulating the network plot view fast and easy.

.PRISM Command

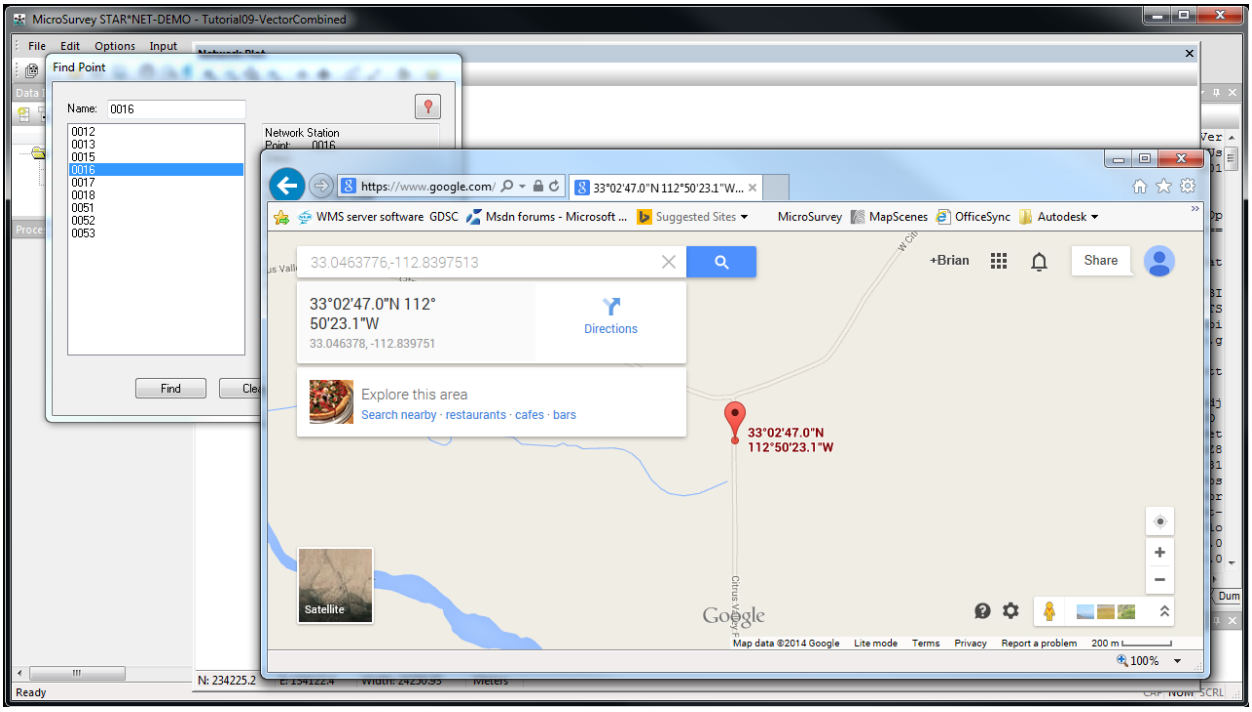
Upgrade Tour Movie: [click here]



Feature	Benefit
Specify an prism offset correction to add to all following distances	Very easy to correct a fairly common field mistake: using a prism with the wrong prism offset setting. Previous solution required calculating and hand-modifying every incorrect distance value (potentially thousands of manual edits), which is time consuming and very prone to error. This will absolutely save users time and money!
.PRISM value	You can specify one offset value (in millimeters), and STAR*NET will scale it to the appropriate unit and add it to the distance values that follow.
.PRISM value1 value2	You can specify two offset values (both in millimeters), and STAR*NET will subtract them (value1-value2), scale the difference to the appropriate unit and add it to the distance values that follow. This allows you to specify the correct prism offset value and the incorrect prism offset value that was used for the measurements, rather than just a correction value.
.PRISM OFF|ON|CLEAR	Stop, start, and reset the prism correction. If the mistake was realized and corrected halfway through the survey, just add a .PRISM OFF or .PRISM CLEAR command after the last incorrect observation to stop applying the correction value.

Google Maps™ Support

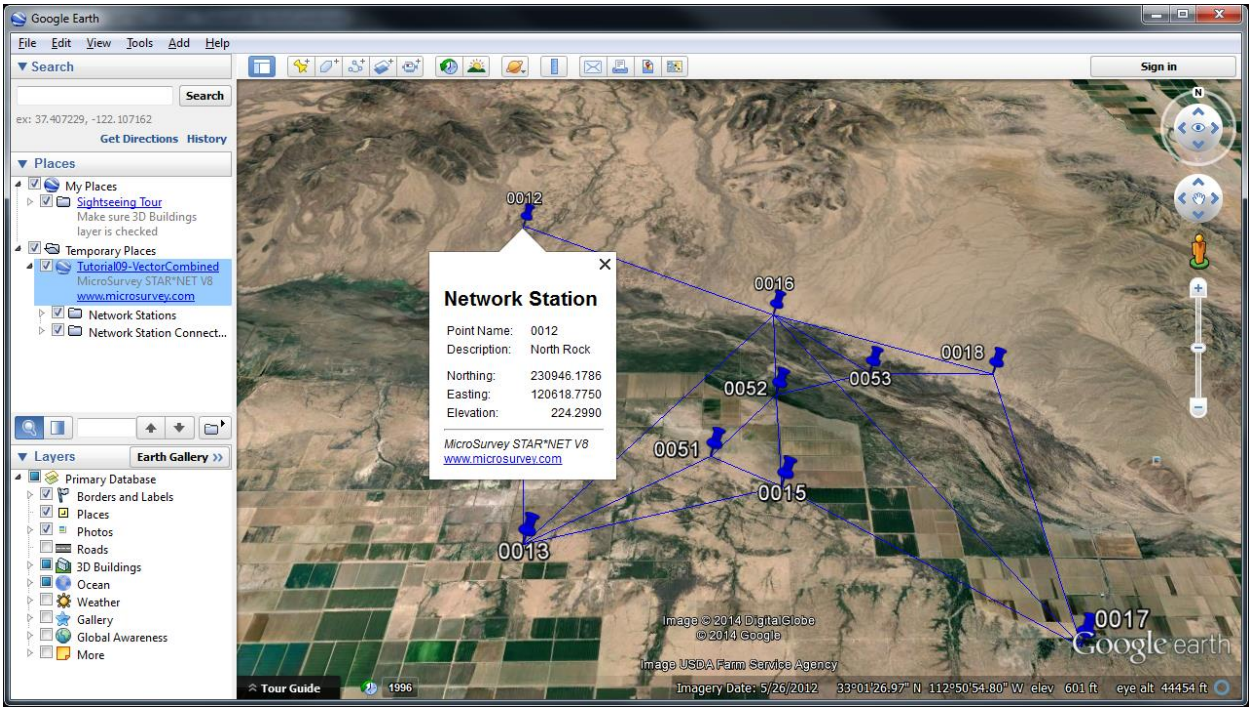
Upgrade Tour Movie: click here



Feature	Benefit
View Point in Google Maps	Users can view their adjusted network stations (2D/3D Grid projects only) in a free online service that everyone is already familiar with.

Google Earth™ Support

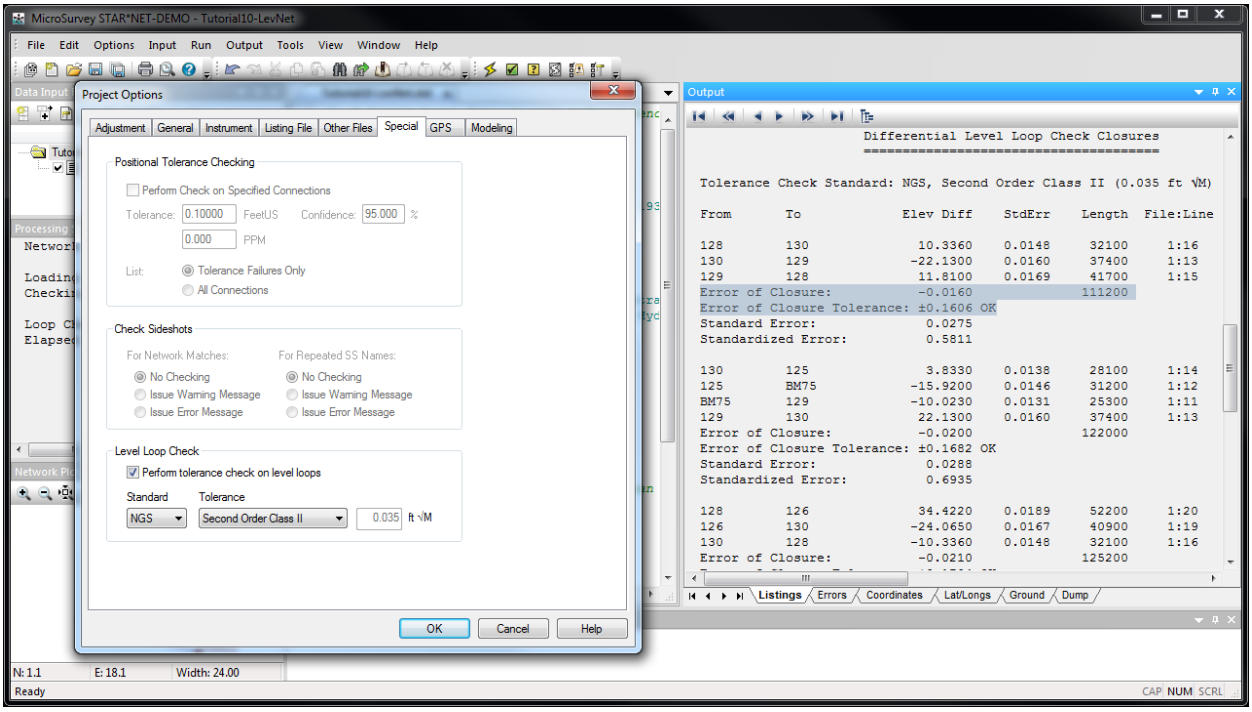
Upgrade Tour Movie: click here



Feature	Benefit
View Network in Google Earth	Users can view their adjusted network stations and connections (2D/3D Grid projects only) in a free* program that everyone is already familiar with.
Export .kml/.kmz File	The .kml or .kmz file is another deliverable that our users can provide as a value-add to their clients.

Level Loop Tolerance Check

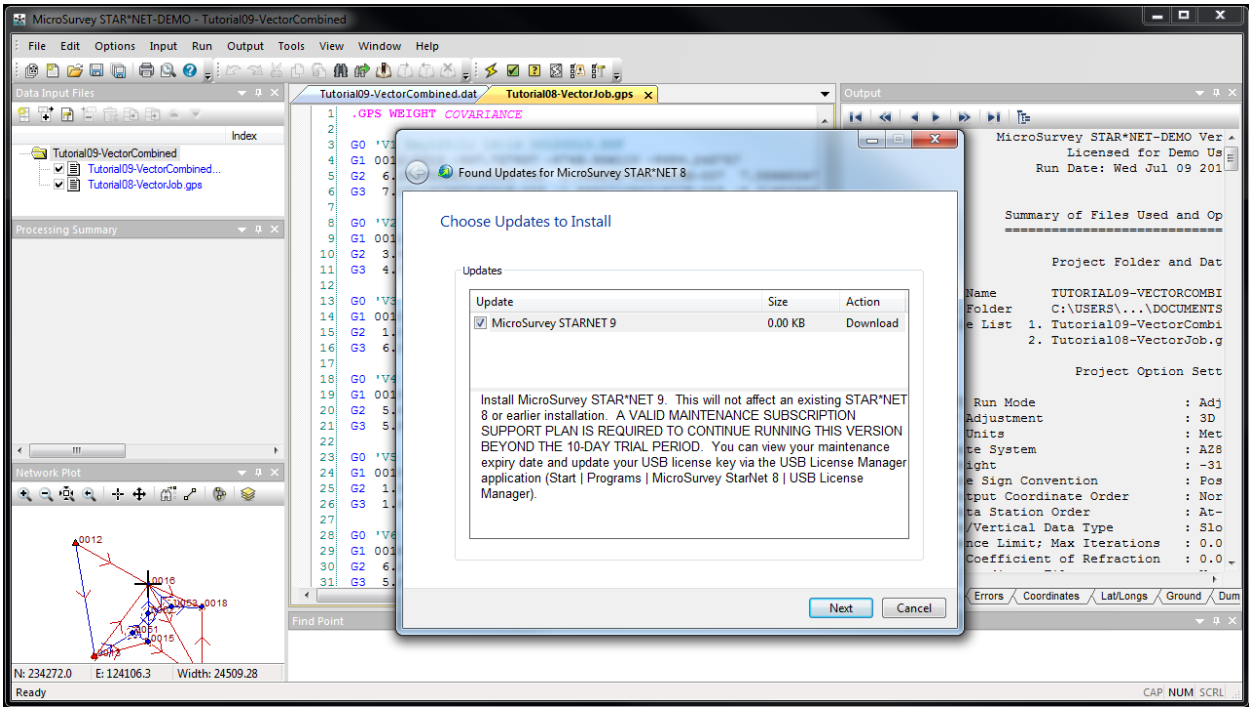
Upgrade Tour Movie: click here



Feature	Benefit
Loop Lengths given in Listing	Analysis of listing file is easier/faster because all relevant information is displayed together in the same section. No need to jump back and forth between different sections to determine the segment lengths, and no need to manually sum them to compute the total loop lengths.
Tolerance Check (optional)	Automatically analyze whether differential leveling loops meet specific classification requirements. Written with pre-configured standards of accuracy from United States National Geodetic Survey and Natural Resources Canada, but it also allows for using a custom classification formula.

Online Updater

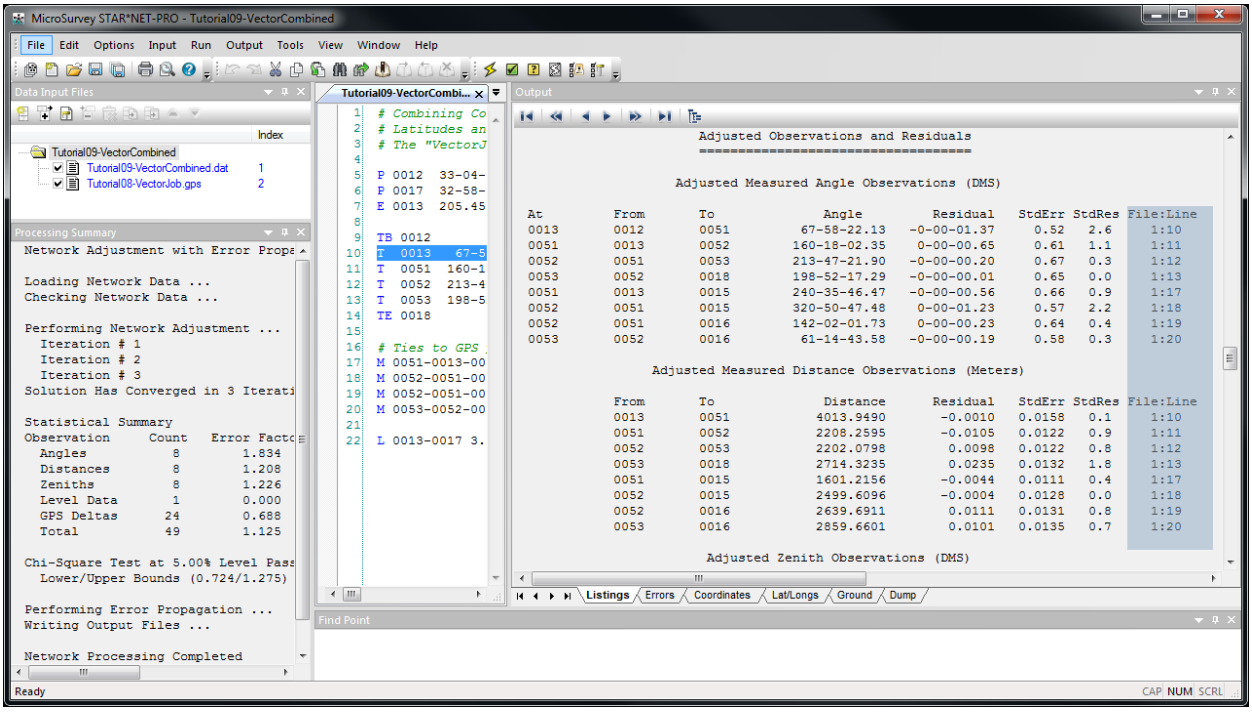
Upgrade Tour Movie: [click here]



Feature	Benefit
Check For Updates	Users can quickly check online to see if there are any updates available to download and install. This makes it easy for users to ensure they are using the latest version so they can get the most out of their maintenance subscription and support plan and maximize their return on investment.
Auto Update	Users can be informed automatically, without having to do a check. Again, this helps users maximize their ROI.
Auto Update Preferences	Users can change the automatic update check frequency, or disable it completely if they do not intend on renewing their maintenance in order to continue getting the latest updates.

File References

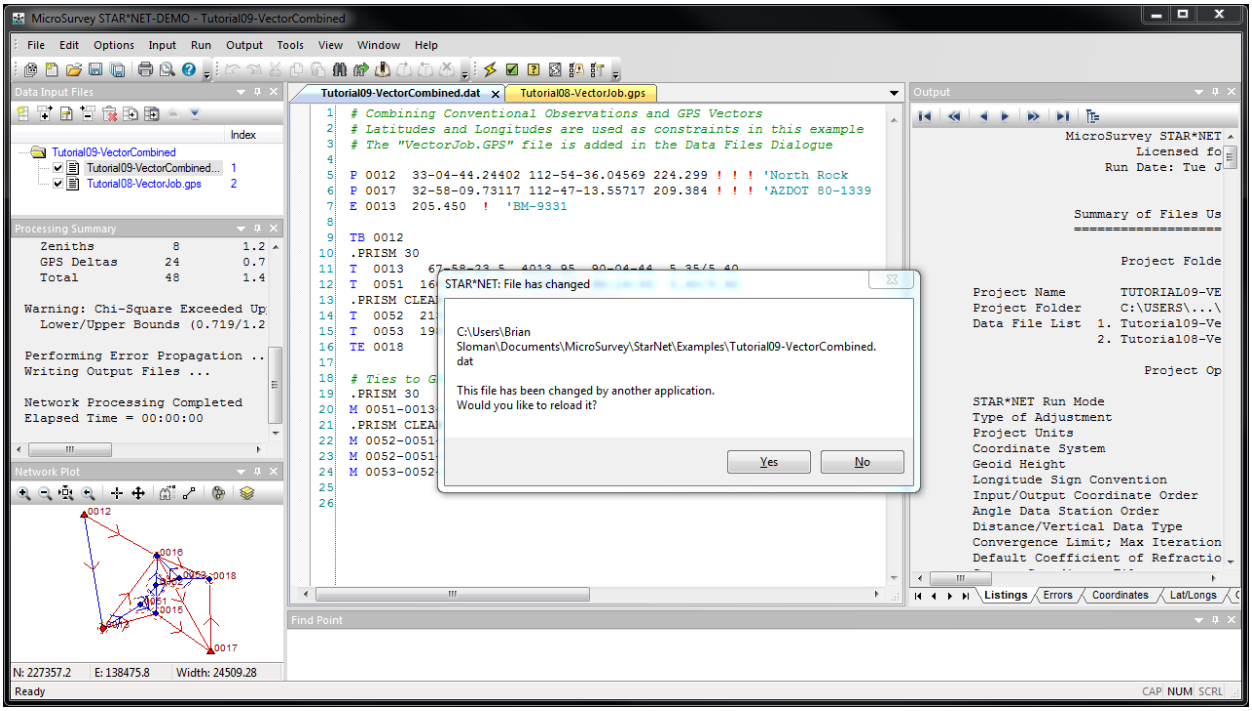
Upgrade Tour Movie: click here



Feature	Benefit
Index column in Data Input Files panel	File References (like 1:10 for File 1, Line 10) correspond to the new Index shown beside each data file. For projects containing many data files, this makes it easy to identify the appropriate file.
Double-click File:Line in Listing	Double-clicking on a : character (like in 1:10) immediately jumps to the appropriate file and highlights the appropriate line.

Data File Monitor

Upgrade Tour Movie: [click here]



Feature	Benefit
Data editor will automatically refresh any open data files that are overwritten or appended to by the GPS Import command	Previously, users had to close and reopen the data file in order to refresh the file – this could result in confusion with not seeing the new data, accidentally re-saving the old data and losing the new data, and other similar problems. The new refresh is instant and automatic.
Data editor will prompt to refresh any open data files that are modified outside of STAR*NET	A data file might be modified outside of STAR*NET in several scenarios, like: - The "Edit External" button is used to open up the data file in some other text editor - Somebody on another computer is editing the file - A file is updated by re-exporting it from one of the conversion utilities or other survey software The new behavior helps ensure that the editor always displays the expected data. It is automatic and intuitive, and STAR*NET now behaves like other modern text editors in this sense.

STAR*FieldGenius Enhancements

Upgrade Tour Movie: n/a

Feature	Benefit
Convert OB (Observation) records from the .raw file to BM (Bearing Measurement) records in the .dat or .gps data file	Some users handled point offsets by performing a COGO calculation to create a new point relative to another measured point. These calculations now carry over into the converted STAR*NET data.
Convert GO (GPS Offset) records from the .raw file to G4 records in the .gps data file	GPS Offset measurements, when imported to STAR*NET, used to ignore the offset and create the resulting point at the measured position instead of offsetting it as specified. The offset is now imported to the new "G4" record. This defines the offset direction and distance, resulting in the "to" point being created in the correctly offset position.
New G4 Data Record can be added to any vector group in a STAR*NET data file (not just FieldGenius)	The new G4 records are currently only created by the FieldGenius GPS importer, but it is a generic solution that can be manually added to any vector, and in the future we can add this to other GPS import formats as necessary.
Fixed other issues importing FieldGenius GPS data	Overall robustness has been improved by fixing problems with various "odd" scenarios that have been reported.

STAR*Carlson Enhancements

Upgrade Tour Movie: n/a

Feature	Benefit
Import Resection Observations	Resections used to be ignored, so you lost some potentially important observation data. It now creates Direction Set with a DM record for every shot.
Average Shots in Multiple Sets (option)	This is an option that Starplus removed from STAR*Carlson several years ago, and SurvCE users asked us to bring it back. If you do a Set (say, backsighting point 1 and foresighting point 2), then do another, and another, etc… the Converter will average the sets together and write a reduced observation.
Import GPS Descriptions (option)	The option to Import Descriptions did not work, now it does. Self-explanatory.

STAR*Leica DBX Enhancements

Upgrade Tour Movie: n/a

Feature	Benefit
Use All Set Observations (option)	This option, added in 8.0, only applied to sets collected with the “Sets of Angles” application; it now also applies to sets collected with the “Traverse” application.
DMS Angular Precision (option)	The Angular Precision setting now controls the number of decimal places for the seconds value (like 2 for DDD-MM-SS.ss) instead of the degrees value (like 6 for DDD-MM-SS.ss). This is more intuitive.
Staking Observations (option)	Staking observations can now be converted as Measurement records.
Checkshot Deltas	Checkshot deltas will now be converted as comment records.

Miscellaneous Enhancements

Upgrade Tour Movie: n/a

Feature	Benefit
Project Manager, Template Data File (option)	In STAR*NET 6 new projects were always created with a blank data file. In STAR*NET 7 we added a template mechanism, and new projects were always created with a copy of that template data file. Most users didn’t take advantage of the ability to customize the template file (for example by adding their commonly used control points, etc) so in STAR*NET 8.1 we added an option
Listing Index Tree	When using the Listing Index Tree, clicking on a section may jump the selected heading to the bottom of the Listing view. This was probably the #1 bug report since STAR*NET 7.
2D DXF Files	When exporting a DXF file, a defect with the option to “Export as 2D DXF File” has been fixed. This was a very common bug report.
Custom Coordinate System Editor	Several issues present in STAR*NET 8.0 have been fixed, making the Custom Coordinate System Editor easier to use and more flexible in 8.1. For example, custom systems can now be edited or deleted.