



New Features in TerraMatch

What's New in Terrasolid Feb 2018

Webinar

22 February 2018

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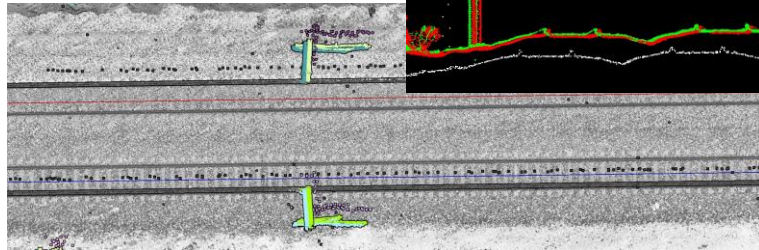


Various Improvements

- **Fix lines** menu command for fixing some lines
 - Converts tie lines to known point tie lines using observations from given lines as known points
- **Open Main tool box** setting in **Operation** category. Set this off if you create a ribbon user interface for TerraMatch tools.
- **File / Save As** menu command saves tie lines in old text file format if user gives file name with .txt extension

Group Tie Lines

- Automatic search for tie lines using groups such as poles
- Automatic search for tie lines using groups such as poles groups from different passes best
- Makes it possible to automatically match mobile data to airborne data in a railway or highway data set



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Signals on Vertical Surfaces

- Ability to search for signal markers on vertical surfaces
- Set **Placement** as **Vertical surface** in signal marker definition
- Compute normal vectors for the point cloud
- Use **Import points / From text file** or **Import points / From selected vectors** to run the search

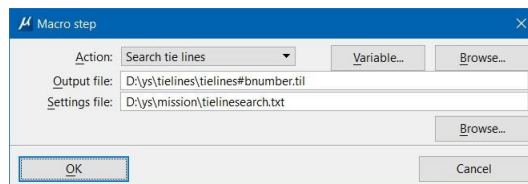
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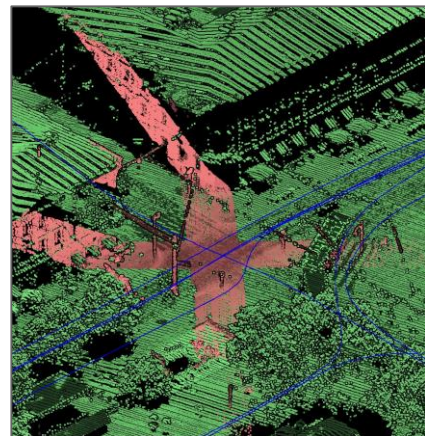
Tie Line Search in Macros

- Save settings first:
 - Start **Define Tie Lines** and select general tie line settings
 - Select **File / Search tie lines** menu command and enter search settings
 - Select **File / Save settings As** to save settings
 - Use **Search tie lines** step in a macro



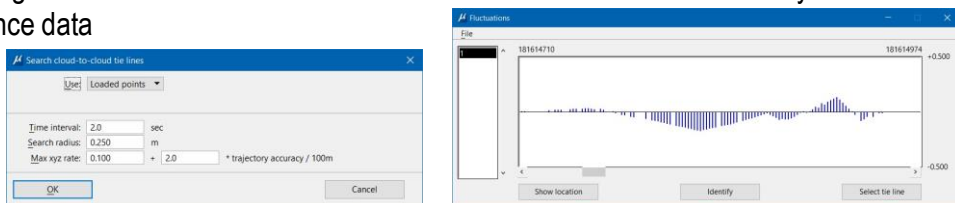
Search Cloud-to-Cloud Tie Lines

- New automatic capability for fitting mobile data to reference data such as airborne LIDAR
- Searches for observations using mobile data from a user specified time interval (2.0 sec)
- Tests what xyz shift would match mobile points best with the reference data
- Uses only points with planar dimension



Cloud-to-Cloud Tie Lines

- For each axis, chooses first those observations which have the best number of matching points
- Consecutive correction shifts can not differ too much
- Accepts only those observations which do not differ too much from closest more reliable observations
- End result is automatically collected smooth XYZ correction curve
- In the right environment one can fix mobile data to about the same accuracy level as reference data



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Cloud-to-Cloud Requirements

- Reference data must have hits on wall like surfaces
- Wall like surfaces must be seen by mobile scanner as well
- XY correction is not possible if there are no visible wall surfaces – one has to measure fixed points in the field or collect from an orthophoto
- You must run **Compute normal vectors** on mobile data – this flags points as planar dimension or suitable for matching

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