

New Features in TerraMatch

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Find Rubbersheet Correction

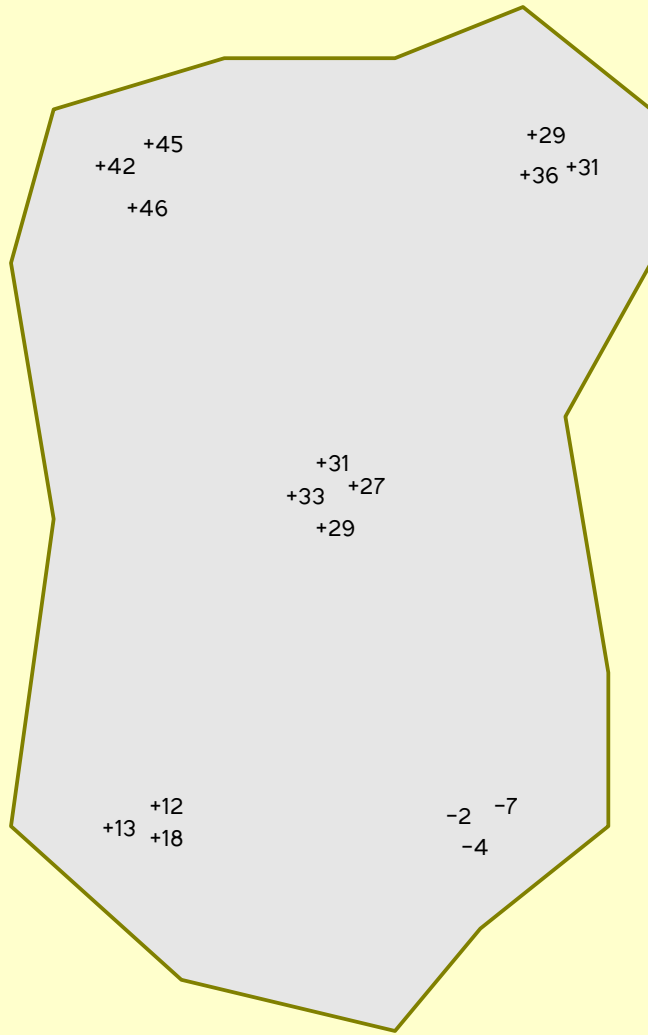
- Fixes data to match control points using a triangulated correction model for xyz, xy or z
- Observations come from tie lines
- Possible last adjustment step for aerial airborne data:
 1. Match data internally
 2. Match to control using rubbersheet

The screenshot shows the 'Find Rubbersheet Fit' dialog box with the following settings:

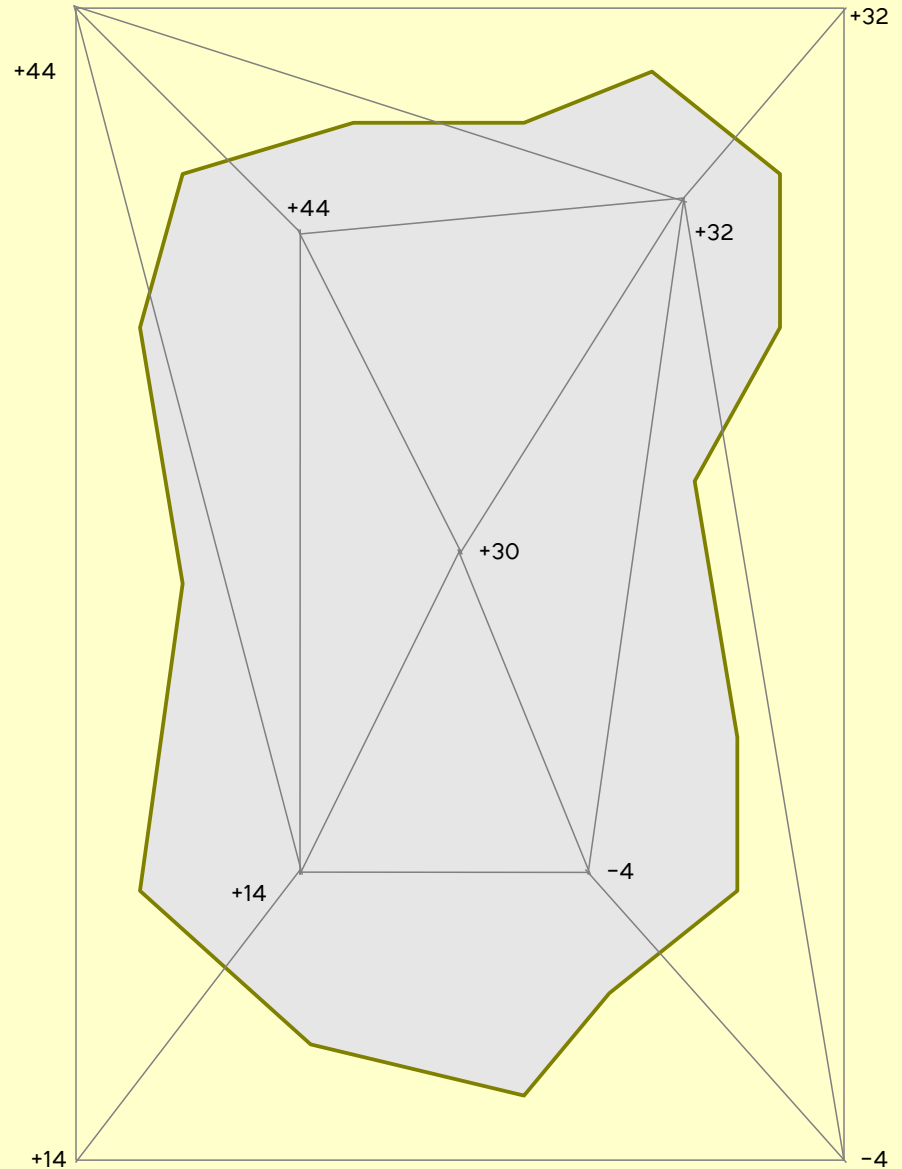
- Source:** Active tie lines
- Trajectory dir:** E:\jyvaskyla_airborne\trajectory (with a 'Browse...' button)
- Solve:** Z
- Expand model:** Closest correction
- Averaging:**
 - Max count: 15 (closeby points)
 - Max distance: 50.0 m
 - Merge final correction points

Buttons: OK, Cancel

Find Rubbersheet Correction



Elevation differences to control



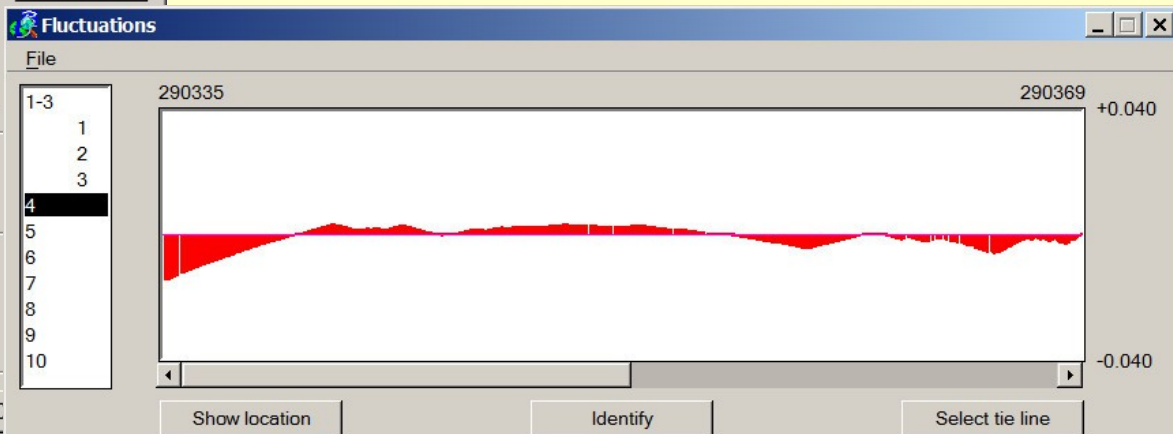
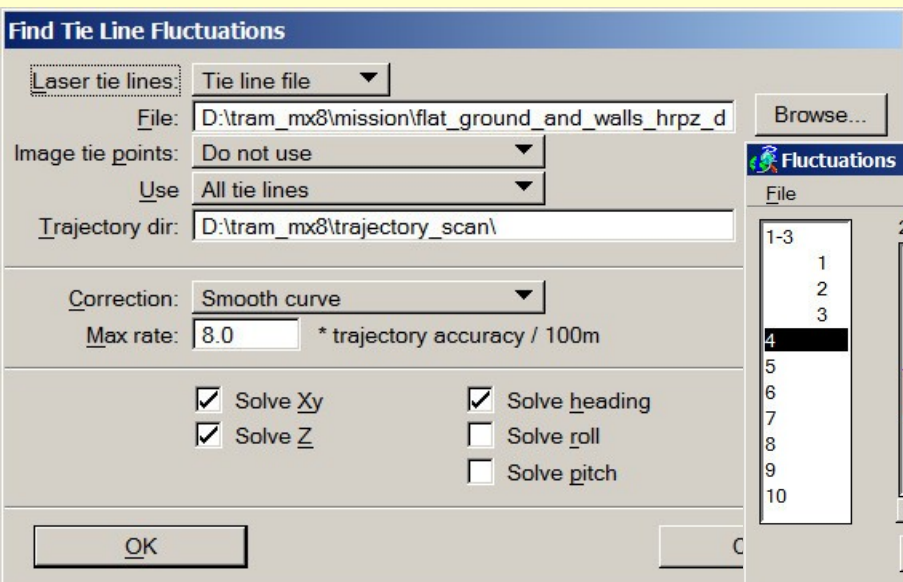
Correction model

'Reduce to single line' in Tie Lines

- Menu command modifies tie lines so that each tie line has observations from a single line only
- Makes tie lines more suitable for per scanner solutions as trajectory drift is not affecting mismatches

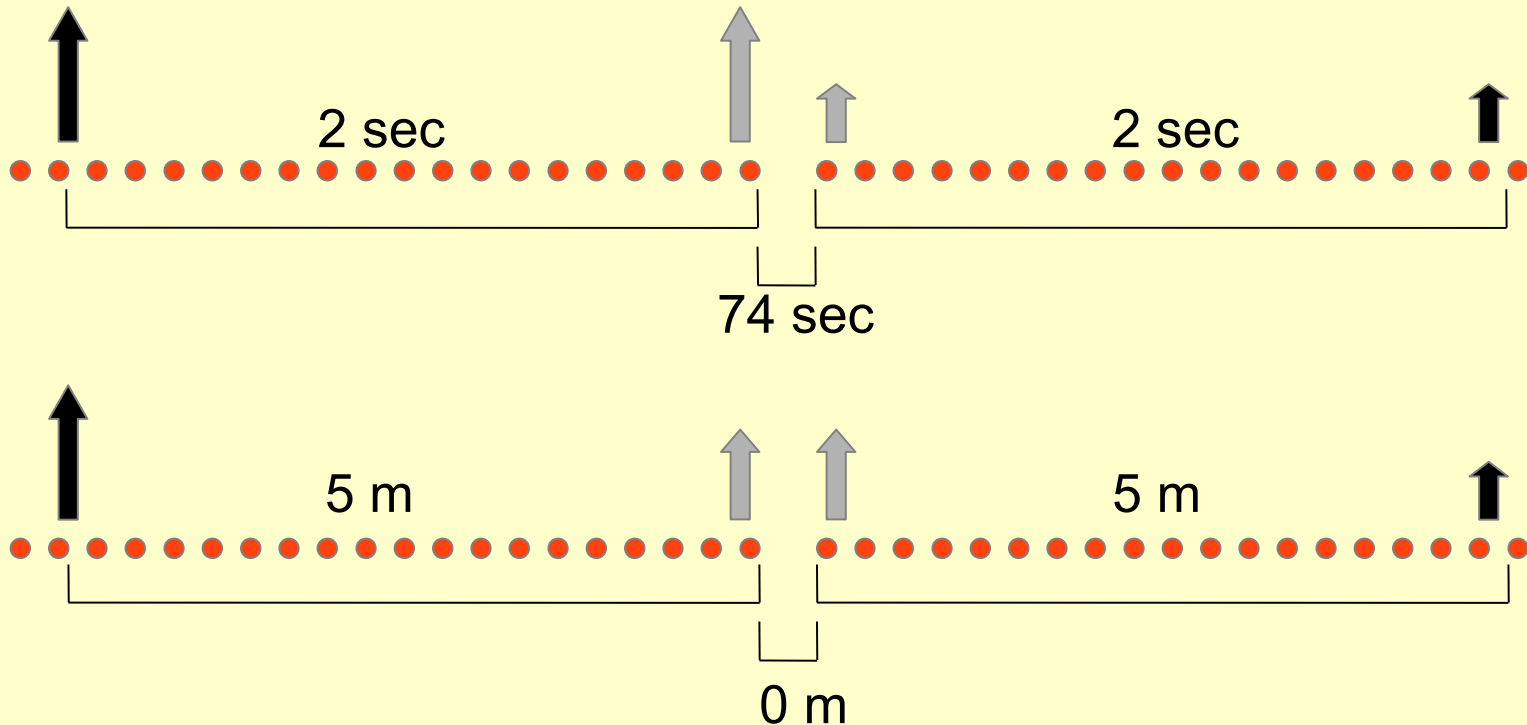
Find Tie Line Fluctuations Improvement

- User can specify the rate at which correction may change
- Better control on the correction curve
- Bad observations will have less effect on curve
- Change rate is relative to trajectory accuracy estimates
 - Z accuracy estimate is 0.100 m
 - Rate limit is $2.0 * \text{estimate} / 100\text{m}$
 - Correction can change max 0.2 m during 100m traveling



Apply Correction Improvement

- Correction values between tie lines are now interpolated relative to travel distance and not relative to time as before
- Better correction at stops
 - Time relative correction could cause a shift between the data before the stop and after the stop



Find Intensity Correction



- Solves a correction for intensity based on range and improves intensity values
- Requires overlap points from multiple lines or scanners
- Compares points at the same location and computes average intensity from different ranges
- Should be done when:
 - Line passes have been matched to each other
 - Cut overlap has not been done
- Important if intensity will be used for generating products:
 - Paint line vectors
 - Intensity ortho

Find Intensity Correction

Minimum range: m
 Maximum range: m
 Range interval: m
 Sampling radius: m
 Trajectory dir:

Use classes

1	Default
2	Ground
3	Low vegetation
4	Medium vegetation
5	High vegetation
6	Building
7	Low point
8	Model keypoints

