Better DistoX Surveying

TopoDroid v, 3.4.0d

Marco Corvi

June 2017

Survey productivity

- TopoDroid is a productivity app:
- better surveys
 - semantically richer
 - more information
 - more accurate

TopoDroid & Survey semantics

Data attributes

- automatic leg recognition and station assignment
- legs: normal, duplicate, surface
- splays: normal, 'X' (primary), commented

Icons, lines, areas

- more than 200 symbols (divided in sets)
- point symbols can be orientable and have text

TopoDroid & Survey information

Data

- extensive use of colors to mark properties
- selectively hide data, to focus only on the most relevant

Sketches

- sketch references (grids, midline, splays, outline)
- natural draw and erase

Integration of data and sketches with

- Text notes
- Audio records
- Photos
- Sensor data

Accuracy

- DistoX precision = a fraction of a degree only if
 - Well calibrated
 - Well used

TopoDroid & Calibration accuracy

- check the calibration at a glance
 - Data angular distribution
 - Error histograms
- detect data errors
 - Incomplete data [pink]
 - Saturated data [red]
- verify a calibration
 - Cross-Validation with another calibration

TopoDroid & Survey accuracy

- Manage calibration-check shots
- Highlight [red] possibly bad shots
- Report histogram of accuracy within leg-shots
- Automatically "remove" overshooted and undershooted
- Visually inspect loop closure