

# TopoDroid Data reduction

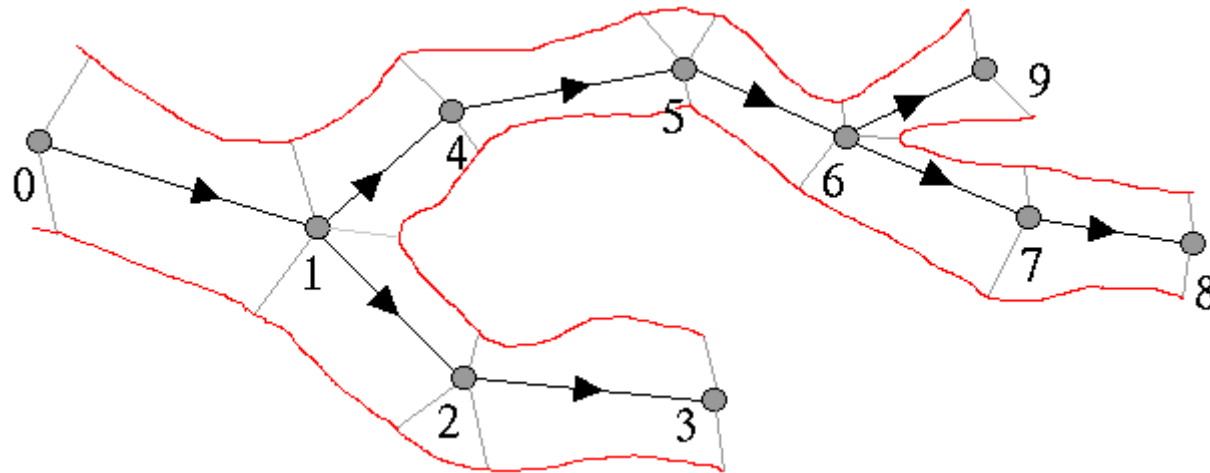
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# Data reduction

- Survey data are the primary objects
- Survey stations are “names” written in the survey data
- Data reduction is done on the fly when a sketch is opened
  - a data reduction for each sketch
  - survey data statistics are available only from the Sketch Window





# Survey Data statistics



The screenshot shows the 'Statistics' panel of the surveying application. The panel has a dark background and a white border. At the top, there is a toolbar with various icons including a pencil, eraser, arrow, Bluetooth symbol, list, document, and a circular arrow. Below the toolbar, the text 'Statistics' is displayed in white. The statistics are listed as follows:

- Legs 22 157.3 m
- Duplicate shots 0 0.0 m
- Surface shots 0 0.0 m
- Splays 313
- Stations 23
- Loops 0
- Components 1
- Zero station: 0
- Length 157.1 m
- W 18 E 0 N 6 S 5 [m]
- Depth -0.0 m -136.6 m
- Stations 23
- Shots 22, Duplicate 0, Surface 0
- Splays 313
- Angle errors  $0.21 \pm 0.14$
- no loop

At the bottom of the panel, there is a blue button labeled 'Back'.

# Loop closure

- loops can be
  - left open
  - closed compensating the legs in the reduction
- better leave loops open and visually check the misclosure in the sketches
- or use different station names (eg, “7”, “7a”), thus avoiding loop in the survey data
  - remember to identify the station in the postprocessing  
(eg “equate 7 7a”)

# Trilateration

- special loop closure that applies to triangles
- the azimuth of the base is unchanged
- the azimuth of the two sides are changed so that they join at the vertex