

Editing Raw Data to Correct Errors in SurvCADD

This instructional sheet will walk you through correcting an incorrect rod height recorded in the raw data file. An unedited copy of the raw file should be kept in case of error. SurvCADD modules are displayed as {**COGO-Design**}, main menus are displayed as [Points], and submenus and menu commands are displayed as <Edit Points>.

- 1) Start SurvCADD and load the job you wish to edit and the current CRD file is loaded
- 2) Make a copy of your CRD file: {any SurvCADD Module} → [Points] → <Coordinate File Utilities>
 - a. Click “Copy/Merge CRD File...”
 - b. Type “T” for To another File and press “Enter”
 - c. Click the “New” tab
 - d. Click “Browse” and navigate to your drawing folder
 - e. Give the new CRD file a name such as “Smith Original.crd”
 - f. Click “Save”
 - g. Click “Open”
 - h. Type “ALL”
 - i. Press “Enter” to not renumber points
 - j. Click “Exit”
- 3) Open the raw file: {COGO-Design} → [Tools] → <Edit Process Raw Data File>
 - a. Navigate and **double click** on the *.rw5 file to open
- 4) Rename the file: [File] → <Save As>
 - a. Click “Browse” and navigate to your drawing folder
 - b. **Rename** the file to include the word “Edit” after the job name
 - c. Example Job: Smith.rw5 → Smith Edit.rw5
 - d. Click “Save”
 - e. Click “Save”
- 5) Click on [Tools] → <Coordinate File> → <List Points>
 - a. Type “ALL” into point range
 - b. Click “OK”
- 6) Find your Benchmark shot, most likely point #100
 - a. **Write down** the coordinates for the point, most likely:
 - i. N: 5XXX.XX
 - ii. E: 5000.00
 - iii. Z: 100.000
- 7) Click “OK”
- 8) In the first ~20 lines of the editor window, find the “PT” record for the backsight point (#100). Click the record once it is found.
- 9) **Replace** the **Northing** and **Easting** with the values written down in step 6

Rod height and instrument heights are listed in the “HI” entry in the raw file. SurvCADD will use the rod height listed in an “HI” entry for all points after in the file until it encounters another “HI” entry. If the rod height was entered incorrectly for all points, find all “HI” entries and change them to the correct height. The following will instruct you on how to change a single point or series of consecutive points.

- 10) Locate the “**SS**” record for the first point that has the incorrect rod height.
- 11) **Click** the “**SS**” record you want to change (new records are added above)
- 12) Add a record: **[Add] → <Instrument Height>**
- 13) Click the box under “**RodHt**” that was just added
- 14) Type in the **correct rod height** (leave the instrument height blank) and press “**Enter**”
- 15) Scroll up to find the first previous “**HI**” record and **note** the rod **height**
- 16) Locate the last “**SS**” record that has the incorrect rod height and **click** the record **below** it
 - a. Note: If the error is only for one point, click on the next record
- 17) Add a record: **[Add] → <Instrument Height>**
- 18) Click the box under “**RodHt**” that was just added
- 19) **Fill in** the rod height noted in step 16 (leave the instrument height blank) and press “**Enter**”
- 20) Save the file: **[File] → <Save>**
- 21) Process the file: **[Process (Compute Pts)] → <No Adjust>**
 - a. Set the Calculate Elevations to “**Sideshot Only**”
 - b. Uncheck “Report Closure”**
 - c. Click “**OK**”
 - d. If a Point Conflict window appears, click “**Continue Processing**”
- 22) Check the point list in the text window to see if the elevation changed
- 23) Click “**Exit**”
- 24) Close out of the raw editor: **[File] → <Exit>**
- 25) If points are already drawn, they will need to be updated with the CRD utilities: **{any SurvCADD Module} → [Points] → <Coordinate File Utilities>**
 - a. “**Update Drawing from CRD File**”

If you compare the point coordinate data from before and after the raw data processing, the elevation of the points should have changed based on the new rod readings.