

---

This is in regards to setting up a GPS Base over an unknown point and recording static data to submit to OPUS or another post processing service as it relates to shooting RTK Rover points the 1<sup>st</sup> day and needing to correct the Rover coordinates the 2<sup>nd</sup> day.

- 1) Go into **Equip / GPS Base** and tap the Receiver tab to enter your GPS base antenna height
- 2) Tap the Green Check / tap the "**From Known Position**" tab / and tap "**Use Local Coordinate**"
- 3) Hand enter 5,000 / 5,000 / 500 for assumed base coordinates then tap the Green Check
- 4) Tap the Green Check again when prompted to create the localization file (i.e. – jobname.loc)
- 5) Tap **Yes** to "Continue with Base Setup" then tap **Yes** to "Save settings to File"
- 6) Tap Green Check to create the base reference file (i.e. – jobname.ref)
- 7) Begin recording your static file in Survey / Log Raw / Start\_Resume\_File (or with whatever method you currently use to begin recording static)
- 8) Go into **Equip / GPS Rover** to connect to your Rover and shoot a mag nail or hub 30 or 50 feet from the GPS Base as a check shot. Then store the points you need for your topo like you normally would in Survey / Store Points.
- 9) Post process the static file through OPUS or whichever method you use to obtain "Published Coordinates" for the base point you were setup over while collecting static data
- 10) After you have the post processed Base position run SurvCE and go into **Equip / Localization**
- 11) Tap the **Points** tab in the Localization routine
- 12) Tap the "**Edit**" button then type in the new OPUS coordinates in US Feet with the processed Northing, Easting and Elevation values from the report and tap the Green Check
- 13) Tap the Green Check in the top right then tap **YES** to Overwrite the localization file
- 14) When prompted that Points have been surveyed - tap **YES** to reprocess the raw file
- 15) Tap the Green Check then tap the Orange Back arrow in the top right when it shows the results
- 16) If you go into **File / Points** your points should show the new adjusted Nad83 Grid Coordinates
- 17) If you are going back out to setup your **GPS Base** on the 2<sup>nd</sup> day - setup over the same point as Day #1 and enter in your base height in Equip / GPS Base under the Receiver tab.
- 18) Tap the Green Check then tap the "**From Known Position**" tab and tap "**Read from File**" to select the \*.REF file you created on Day #1 then tap the Green Check. Tap YES then tap OK.
- 19) Now you can connect to your **GPS Rover** and stakeout the check shot you created on Day1 which was 30 or 50 feet from the base to make sure it matches properly.
- 20) For returning to the project after the 2<sup>nd</sup> day and moving forward you can just measure your GPS Base antenna height to enter it in to the GPS Base / Receiver tab then tap From Known Position / **Read From File** to select your base \*.REF reference file
- 21) **Stakeout** your check shot 30 or 50 feet from the base each time you start the base and in the middle of the day after lunch and at the end of the day before you pack up the base to make sure there is no errors introduced throughout the day.