

Automatic Offset Calculation using Terrasync

Our goal is to show you how to collect with an offset from a feature, when standing too close to the feature will block the receiver, and delay carrier lock.

Pair a Juno (SB or 3) to GPS Receiver; Pro XT, Pro XH or Pro6H

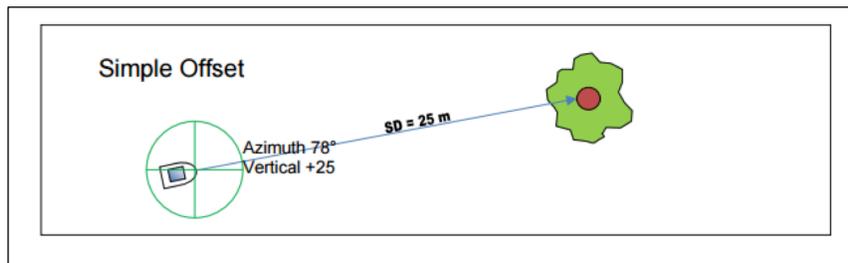
In your data collection area, start Terrasync and make sure the GPS Receiver is connected and you are able to obtain a position (Status→Skyplot).

Create a new ROVER on the SDMC Card (aka Storage Card). When asked set the correct antenna height. Each color on the range pole is 1 foot

Obtain carrier lock (see previous instructions and videos).

Find a location near the feature you wish to collect. Make sure the position has as clear view of the sky as possible. Measure the distance you are from the feature (use metric). Use a compass to obtain the bearing or direction you are from the feature. You do this by pointing the BLACK directional arrow on the plastic housing

surrounding/protruding from the compass towards the pole or other feature, and then rotate the bezel (dial) to put the RED magnetic arrow indicator “in the shed,” that is, inside the arrow outline shape



inside the bezel. You can then read and write down your bearing from the bezel numbers scribed around the inner or outer edge of the bezel. You read the number that lines up with the arrow/line on the outside of the compass that points towards your feature. Values should be between 0 and 359°. For our class you only need to use a horizontal azimuth (bearing) and do not need a vertical offset.

Note the distance and bearing from your receiver location to your feature. Then, with a rover file open, and carrier lock on, **select OPTIONS and LOG LATER then select Done**. This will allow you to enter your offset variables before collecting data at a point.

Create a new point feature within the Rover file. Notice that the “capture count down indicatory pencil” is replaced by a double bar, or PAUSE indicator. **SELECT THE OPTIONS AGAIN** and select Bearing and Distance, then enter your bearing and distance in meters (see figure).

Now press the LOG button (usually at the lower right of the Terrasync screen) and the “capture status pencil” begins to count your points.

Select Done when you have collected your feature.



Repeat as many times as needed for points, remembering that the log later option requires an extra step to collect points, so you may remove it when you're done with offsets.

Transfer the data and differentially correct (after one hour is past after last collection).