Trimble Geomatics Office (TGO) Data Processing

1. *Create a project*

- ❖ Start Trimble Geomatics Office
- ❖ Choose New Project and enter the project name. Choose Sample Data as the Template.
- ❖ Hit Folder and specify your local disk. This is where you are going to store all of your data and the results.
- ❖ Verify Project Property. Please do the following
    - ✓ In Project Details tag, put your name in Computer Operator.
    - ✓ In Coordinate System tag, change it to US SPSC 1983, Ohio South 3402, NAD 83, and GEOID 99. Put 100.0 m as default elevation.

2. *Load GPS data*

- ❖ Once you download files from the class web save it to your local disk, copy them to the checkin file created by TGO
- ❖ Back to Trimble Geomatics Office. Hit File/Import/RINEX files
- ❖ Select the file you downloaded.
- ❖ Verify the station name, start time, end time, antenna height and antenna type. Hit OK when the data is loaded.
- ❖ Hit View/Point Labels, select Name. Zoom or Pan if needed.

3. *Verify coordinates of the base station*

- ❖ 2629125 "Base at CFM" is the designated base station whose coordinates (WGS84) are: $\varphi = 39°59'58''.2894$, $\lambda = 83°02'27''.2423$ and $h = 208.650 \cdot m$. Select 2629125 and double-click it.
- ❖ Input the coordinates of 2629125 and click on the right buttons (?) and pick control quality. By doing this, we are assuming that the coordinates of our base are precisely known.
- ❖ Close Properties window.

4. *Process Data*

- ❖ Click on the baseline you want to process
- ❖ Hit Survey/GPS Processing Styles. Choose Edit afterward.
- ❖ Select the desired Solution Type: **Code** or **Fixed**
- ❖ Choose elevation mask 13 degrees and for ephemeris – broadcast
- ❖ Hit ok! Twice
- ❖ Click on the baseline. Hit Survey/Process GPS baselines. Hit Save when the process is done.
- ❖ Click on the baseline. Right-click it and select Properties. Hit the bottom button and verify your observation statistics. Check you RMS. Is it very large?

5. *Project report*

- ❖ Select one base line on the screen by clicking onto it.
- ❖ Hit Reports/GPS baselines processing report.

❖ Print it out as part of your homework report.