Using Geomatics Office

Underlined headings refer to options on the project bar at the left hand side of the screen.
Underlined, italics headings refer to the drop menus at the top of the screen.

1. <u>Projects</u>: open or create a project. Use the "Metric" template. Click 'OK'. After a few seconds the project properties dialog appears.

2. Project Properties: Units and Format- Change (if desired) lat. long. format to DDD.dddd (decimal degrees) from DMS (degrees, minutes, seconds) format.

3. Project properties- setting up a UTM coordinate system.
   a. Choose the Coordinate System tab.
      i. Under Coordinate System Settings, click Change.
      ii. New system (or choose a recently used system).
      iii. Set up a coordinate system as appropriate, for example, in Barrow, choose UTM Zone 4 North.
      iv. Choose a datum. For example, to plot on Alaskan USGS maps choose NAD 27 Alaska datum. Otherwise choose WGS84.
      v. Select a geoid model if elevations above mean sea level are desired.
      vi. Click the Apply button.

4. <u>Import</u>: from '.DAT' file. Double check configuration (ant. Heights, types etc.) for each file in the "checkin" window. For kinematic files make sure to select or deselect continuous data as desired.
   a. <u>*View*</u>: select point labels and show desired info.
   b. The graphics window should now show your points and possible baselines.

5. <u>Process</u>: click the wave icon to process the baselines that are shown in the graphics window.
   a. Evaluate your processing results (solution type, ratio, reference variance, RMS; see manuals for details) and then click save if you feel confident in the solution.

6. <u>*Adjustment*</u>: adjustment styles- edit the desired confidence level (95% confidence is standard)
   a. Enter the appropriate set-up errors.

7. <u>Adjust</u>: click the adjust icon to perform a free adjustment.

8. <u>Adjust</u>: Points- Enter the known WGS84 coordinates for the base station.
   a. Fix these coordinates by highlighting the fix column and clicking 2D and height at the RHS of the box.
   b. If working in NAD27, <u>*adjustment – datum*</u>- select project datum.
   c. To include geoid heights, <u>*adjustment- options*</u>, choose geoid, then click load.

9. <u>Adjust</u>: click adjust icon again to perform a fixed adjustment.

10. <u>Export</u>: export coordinates in desired format.
    a. Option 1: <u>export</u>- GIS file/custom- choose an appropriate format.
    b. Option 2: save the HTML report in a place you want it.