

## Processing Base Station Static Data from a 5700 Receiver

- Eject the card from the 5700 receiver / slide it into the compact flash adapter / slide the CFA adapter into your laptop.
  - In **My Computer**, Open the drive that is assigned to the Flash card.
  - **Copy** and **Paste** the data into your job folder.
  - Once this is done, open up the **Rinex Utility**. Select the **File Menu / Open**, and **browse** to your .TO1 file that needs to be sent to OPUS. **Select Open**.
  - Once the File is open, **Select File / Convert Files**.
  - After the conversion, you will now have the .09o file (to send to OPUS) and the .09n file (not needed).
  - Go to the OPUS Website, <http://www.ngs.noaa.gov/OPUS/> .
1. Enter your Email Address
  2. Browse to your .09o file.
  3. Select your antenna type ( TRM41249.00 Trimble Zephyr Geodetic with GP)
  4. Enter your Antenna height. (if using the GPS tripod and pinning it at 2meters, your measurement will be 2 meters)
  5. If your session is under 2 hours use OPUS RS, if it is more than 2 hours use OPUS.
    - You should now receive a corrected coordinate and additional information back from the NGS shortly.

The next page includes an OPUS report with highlighted locations of the important information.

This is just a sample solution, with good planning and longer recording sessions, you should get better data than this example.

- The top highlighted portions show the start and stop times of the sessions, and how many observations were collected and used out of the data set.
- The bottom highlighted areas show the computed coordinates, and to the right of each coordinate shows the accuracy of this computed coordinate in meters. Given good planning and no obstructions over a long data session, you should be able to get accuracies down on the .01m on your horizontals.

NGS OPUS SOLUTION REPORT

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All computed coordinate accuracies are listed as peak-to-peak values.

For additional information: <http://www.ngs.noaa.gov/OPUS/about.html#accuracy>

USER: Jaime@westerndatasystems.com      DATE: November 11, 2009  
RINEX FILE: 7151314q.09o      TIME: 18:45:31 UTC

SOFTWARE: page5 0909.08 master28.pl 081023      START: 2009/11/10  
16:37:00  
EPHEMERIS: igr15572.eph [rapid]      STOP: 2009/11/10 20:16:00  
NAV FILE: brdc3140.09n      OBS USED: 7317 / 8168 : 90%  
ANT NAME: TRM5800      NONE      # FIXED AMB: 37 / 43 : 86%  
ARP HEIGHT: 2.25      OVERALL RMS: 0.017(m)

REF FRAME: NAD\_83(CORS96)(EPOCH:2002.0000)      ITRF00  
(EPOCH:2009.8596)

X: -2685275.064(m) 0.060(m)      -2685275.906(m) 0.060(m)  
Y: -4305539.798(m) 0.067(m)      -4305538.357(m) 0.067(m)  
Z: 3851231.725(m) 0.036(m)      3851231.831(m) 0.036(m)

LAT: 37 22 58.49086      0.058(m)      37 22 58.50889      0.058(m)  
E LON: 238 2 56.66382      0.015(m)      238 2 56.60378      0.015(m)  
W LON: 121 57 3.33618      0.015(m)      121 57 3.39622      0.015(m)  
EL HGT: -24.315(m)      0.070(m)      -24.868(m)      0.070(m)  
ORTHO HGT: 8.332(m) 0.150(m) [NAVD88 (Computed using  
GEOID09)]

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 10)	SPC (0403 CA 3)
Northing (Y) [meters]	4137867.906	598982.528
Easting (X) [meters]	592873.636	1871512.710
Convergence [degrees]	0.63697873	-0.88830382

**To convert your data to the .dat format for PFO do the following 1 of 2 things.**

**OPTION 1**

- Go to your project folder and right click your compressed .T01 file.
- You should have an option in the list to convert to .DAT., if so, Select this. Your file is now in a format that PFO can read for correcting your field data.

*If that does not work, do the following:*

**OPTION 2**

- **Open Data Transfer.**
- Change you device to **Survey Card**. *(If this is not in the pull down list, refer to the bottom of the page in red on how to make this device.)*
- Select the **Green check** mark to connect to the device.
- Click the **ADD** button.
- **Browse** to your project folder through the shown folders and open it.
- Change the **files of type:** to **5000 Series Receiver files.**
- **You should now see the .T01 file in the project folder**
- Go to **Destination:** and make sure that it is browsed to your project folder. This will ensure that it saves it in the correct place for you.
- Once the file is selected, and your destination is confirmed, select the **Open** button.
- You should now see the file on the main window of Data Transfer. **Select Transfer all.** Your .Dat file is now created.
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**MAKING A NEW SURVEY CARD DEVICE IN DATA TRANSFER**

- Select the **Devices** button
- Select **New**.
- Scroll through the list until you see the **Survey Data Card**, and select it, then select **OK**  
*(You can select the c: drive, or select a general location where you will be storing your projects)*
- Select **Next**
- Enter a name for the device you created (Ex. GPS Jobs- DAT Conversion)
- Once you finish the creation, the new device will now be available in your main pull down device menu.
- Click the green check mark to connect and complete the steps from above to convert your data.