

# Trimble Geomatics Office - How to apply precise orbits in TGO

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## Using Precise Orbits in Trimble Geomatics Office

Precise ephemeris are calculated and posted on SOPAC 3 weeks after the day the data were collected. They are used with RINEX data in place of the .nav file when cm or better accuracy is required.

1.

Go to the SOPAC Data Archive: <http://sopac.ucsd.edu/dataArchive/>

2.

Click the link to "SOPAC Data Browsers". Click "Data Archive: Data By Date".

3.

From the dropdown menu select "products".

4.

Select the year and enter the 3 digit day-of-year (DOY--see link in (6), below). Click "Show Data".

5. Look for files of the type:  
igs[wwwwd].sp3.Z

Where:

www = GPS week

d = day of week

Make sure you get several hours' worth of ephemeris data before and after your survey time--this may mean retrieving multiple .sp3 files.

6. Use UNAVCO calendars to convert to GPS week and day:  
<http://kb.unavco.org/data/glossary.html#calendar>

7.

Unzip the files.

8.

Import the files into TGO: Import > Precise ephemeris files (\*.sp3, \*.e18) > OK.

9.

Change the survey processing style: Survey > GPS Processing Styles > Edit. Change Ephemeris from "Broadcast" to "Precise".

Online URL:

<https://kb.unavco.org/article/trimble-geomatics-office-how-to-apply-precise-orbits-in-tgo-610.html>