

# Trimble R7 and 5700 Firmware issue for receivers with FW less than 2.3

Article Number: 844 | Rating: Unrated | Last Updated: Tue, Apr 19, 2016 at 5:22 PM

Trimble has indicated that there is an issue with their firmware that will cause the 5700 and R7 models to become inoperable after the GPS week roll over on 14 FEB 2016. The issue also affects the 4700/4800 series receivers too, but the To assist the UNAVCO community we have written instructions on how to upgrade your firmware to 2.32 and a copy of the program that is needed to upgrade to 2.32. The attachments are available below. If you have bad data, instructor

**Please note that it is most likely that you will need a warranty code password to update you receiver. The receivers expiration warranty date can be found using WinFlash. If is older than 1/2004 you need**

## UPDATE 16 APR 2016: Email addresses for requesting codes:

UNAVCO Community members : [marc\\_dahlberg@trimble.com](mailto:marc_dahlberg@trimble.com)

non UNAVCO Community members : [Sales\\_TrimbleProtected@Trimble.com](mailto:Sales_TrimbleProtected@Trimble.com)

The following is a statement from Trimble that explains the issue.

### Trimble message:

On February 14, 2016, certain older versions of Trimble firmware will experience what is akin to a GPS week rollover. Trimble 4700 and 4800 GPS receive weeks, receiver data outputs will have the wrong time reference. This will negatively impact subsequent systems that are communicating with that receiver. More recent Trimble GPS/GNSS receivers types, including Trimble 5700, NetRS, NetR3, NetR5, NetR8, and NetR9 with **current firmware** are not impacted. Further testing has shown the 4000SE/SSE/SSi will also handle the rollover without issue.

For the single 5700 receiver listed, this can be updated to firmware v2.30 or higher and will be fine. All NetRS receivers reported showed firmware versions

Unfortunately, there is no technical solution available for the Trimble 4700 and 4800 GPS receivers to correct this issue.

Regarding communications, every receiver model is being handled by their respective Business Areas within Trimble as far as how they communicate

#####

IMPORTANT: For users who have bad data that was collected after 14FEB16.

You can correct for the week offset in the data by using TEQC to create your RINEX data. By using the "-week" flag in TEQC, you can force the correct week to be used when creating RINEX files.

e.g `teqc -week ##### FILENAME.dat > FILENAME.obs` (where ##### is the GPS week number that that the data was collected on).

For example, here is a RINEX file created using just the raw data file and no TEQC flags:

```
-Unknown- -Unknown- OBSERVER / AGENCY
0440100569 TRIMBLE 5700 1.24 REC # / TYPE / VERS
00000000 TRM4 1249.00 NONE ANT # / TYPE
-1282457.3621 -4718377.6066 4084178.4582 APPROX POSITION XYZ
0.0530 0.0000 0.0000 ANTENNA: DELTA H/E/N
1 1 WAVELENGTH FACT L1/2
7 L1 L2 C1 P2 P1 S1 S2 # / TYPES OF OBSERV
17 LEAP SECONDS
SNR is mapped to RINEX snr flag value [0-9] COMMENT
L1 & L2: min(max(int(snr_dBHz/6), 0), 9) COMMENT
1996 7 12 18 32 30.00000000 GPS TIME OF FIRST OBS
END OF HEADER
```

Here is the same data but this time the '-week 1885' flag was used:

```
-Unknown- -Unknown- OBSERVER / AGENCY
0440100569 TRIMBLE 5700 1.24 REC # / TYPE / VERS
00000000 TRM4 1249.00 NONE ANT # / TYPE
-1282457.3621 -4718377.6066 4084178.4582 APPROX POSITION XYZ
0.0530 0.0000 0.0000 ANTENNA: DELTA H/E/N
1 1 WAVELENGTH FACT L1/2
7 L1 L2 C1 P2 P1 S1 S2 # / TYPES OF OBSERV
17 LEAP SECONDS
SNR is mapped to RINEX snr flag value [0-9] COMMENT
L1 & L2: min(max(int(snr_dBHz/6), 0), 9) COMMENT
2016 2 26 18 32 30.00000000 GPS TIME OF FIRST OBS
END OF HEADER
```

Posted by: [Henry Berglund](#) - Tue, Mar 1, 2016 at 6:58 PM. This article has been viewed 14516 times.

Online URL: <https://kb.unavco.org/kb/article/trimble-r7-and-5700-firmware-issue-for-receivers-with-fw-less-than-2-3-844.html>