

# When will the GPS Week Rollover Occur?

- The GPS Week Rollover event will occur on April 6, 2019 at 23:59:42 UTC.
  - This will be the second global event of its kind and will affect all users of Global Positioning System (GPS) technology regardless of brand. The last GPS Rollover Week event was in 1999. The next will occur in another 19.7 years.

#### What is the GPS Week Rollover?

- The GPS satellites send a 10-digit binary communication message toward Earth with a "week number" counted from 0000 to 1023.
- Once the maximum coded week of 1024 is reached (which takes 19.7 years), the week number value resets to 0000.

## What impact is expected?

With the wide variety of GPS technology applications in use today, the impact to users will vary depending on the use case, e.g., surveying with a base and rover receiver, machine control, OEM placement, or precision agriculture. Impacts such as slower initialization time and incorrect date records can be expected for some receiver and software combinations if the firmware and software are not updated to the latest available versions. In most cases an update to the latest receiver firmware and latest versions of software are recommended.

### What action to take?

- o Make sure your receivers are updated to the latest software available
- **Visit Geo-Tronics.com** to access more information and details on upgrading your current receivers.
- \*Download instructions, instruction video and firmware through this link, provided free of charge by Geo-Tronics. GNNS latest firmware is located at the link below:

https://drive.google.com/drive/folders/1f2JTKuLry3mPWcrB4WY5k-XJzDZen53O?usp=sharing

\*Geo-Tronics is not responsible for receiver damage or mis-loading of firmware. This is option has been provided as courtesy. We will not accept any liability if not loaded properly by persons other than Geo-Tronics technicians.

### The good news:

Firmware upgrades are available at no charge.

If you do not feel comfortable doing the upgrades, please contact **Geo-Tronics 931-614-0784**.

\*We have a couple solutions for you to choose from:

- #1 Call or Email for a Work Order and we will update for you at our shop.
- #2 We can assist you with the UPDATE REMOTELY via the internet. The receivers will need to be fully charged and charger attached during the process.

\*A minimal fee will be charged in conjunction with a rendered service.

#### Summary:

- Systems that are not updated with the latest firmware and software might experience slow warm-up time, or incorrect date and time stamping in the record file.
- RTK positioning and measurements are not expected to be affected. Basically, the XYZ position will be good, but the time stamp might be backdated to 1999.