Are you Ready for GPS Week Number Rollover?



The GPS Week Rollover event will occur on 6 April 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 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.

With the wide variety of GPS technology applications in use, the impact to users will vary depending on its usage (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 Happens if the Receiver is Not Updated?

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 back in 1999.

https://www.gim-international.com/content/news/are-you-ready-for-gps-week-number-rollover