Digitizing Resolution of the Trimble NetRS Receiver

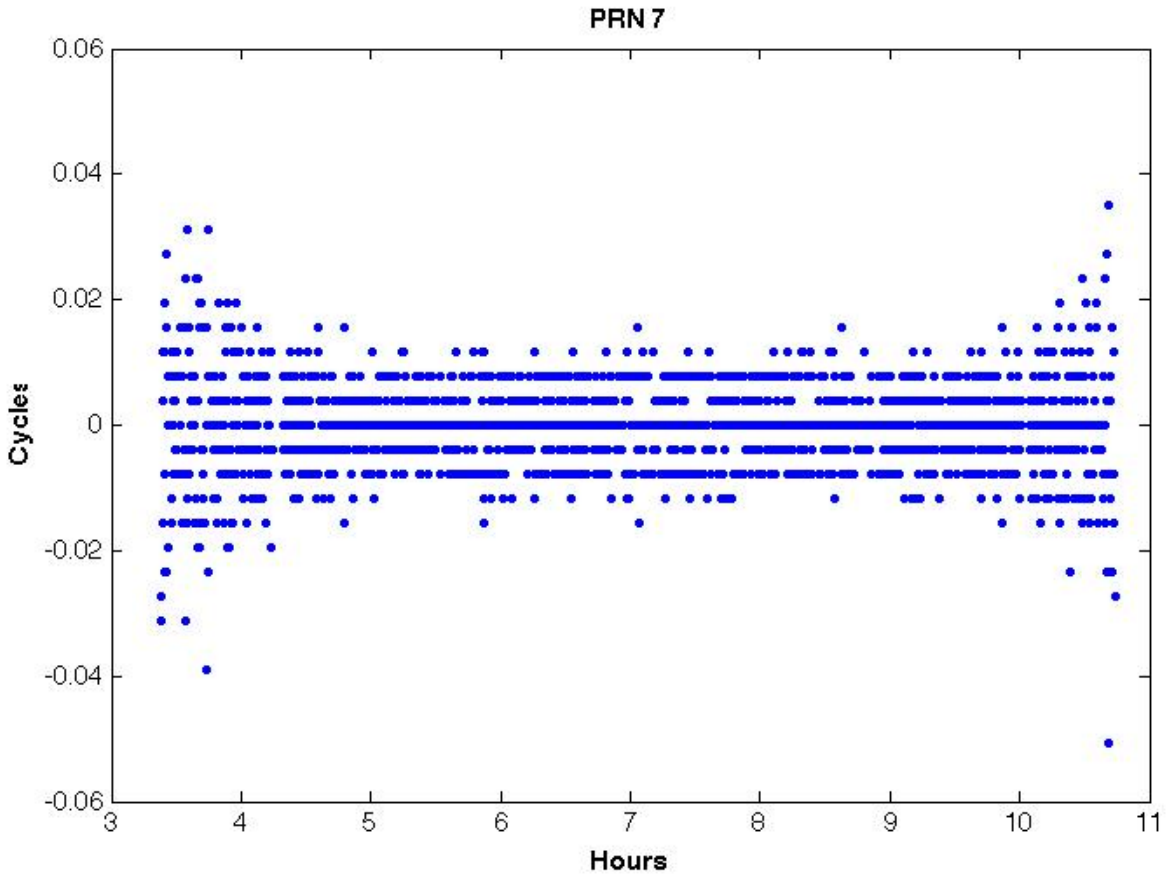
688 Henry Berglund August 12, 2016 GNSS Receiver Test Reports 2532

While differencing the L2 and L2C carrier phase measurements made with a NetRS receiver, we have observed a banding pattern; the difference between each band is ~0.0039 (1/256) cycles.

This banding demonstrates that the digitizing resolution of the NetRS receiver is 1/256 (1/2^8) of a cycle - the receiver is using an 8 bit A-D conversion.

This analysis was done using a translation of RT27-format data using extended resolution on the phase values beyond the usual 0.001 cycle resolution available in RINEX observation format.

The following figure shows the difference between the L2 and L2C carrier phase measurements for PRN 7 from a NetRS receiver. Similar analyses of other receivers will be posted when available.



Online URL: https://kb.unavco.org/article/digitizing-resolution-of-the-trimble-netrs-receiver-688.html