Static mode processing

*NEW for version 3*
The percentage of carrier-phase observations with fixed ambiguities

The Antenna Phase Centre (APC) to the Antenna Reference Point (ARP) offset used by CSRS-PPP. Based on antenna model listed on the RINEX header record.

The estimated coordinates (in the selected reference frame and epoch)

Uncertainties:
SIG_PPP: standard deviation (95%) of the PPP estimated coordinates
SIG_TOT: total standard deviation (95%); incorporates both PPP and epoch transformation uncertainties

A priori position (approx.) (from RINEX header or from code solution)

Orthometric Height (only if the position is within the geoid model bounds)

ARP to the Survey Marker distance is provided by the user on the “ANTENNA: DELTA H/E/N” RINEX header record. The ARP is usually the bottom of the antenna mount.

Used Products: ephemerides and clock corrections (FINAL, RAPID, or ULTRA-RAPID)

RINEX file name
Station name
Page 2 – Satellite Sky Distribution

The plot shows the track of each satellite in the sky relative to the antenna. The center of this polar projection plot would be directly overhead while the outer ring of this plot would be the horizon. The plot is oriented so that North is in the “up” direction on the page.
The convergence plots show the time-series of the difference between the estimated and a priori positions for each epoch where the a priori positions are taken from the RINEX header or from the code solution. The green line shows the total standard deviations (95%) including the uncertainties due to the epoch transformation, if any.

*NEW for version 3*

The orange line represents the final estimated solution.
1) The “Estimated Tropospheric Zenith Delay” plot shows the total estimated troposphere delay in the zenith direction for each epoch in the solution. Values are scaled by a time correlation factor.

2) The “Station Clock Offset” plot shows the estimated offset between the receiver clock and GPS time for each epoch in the solution. Values are scaled by a time correlation factor.

3) The “Tracked Satellites and Reset Ambiguities” plot shows the number of satellites tracked in blue and the percentage of ambiguities reset in red.
The “Residuals” plots show the estimated Carrier Phase and Pseudo-Range (code) residuals for each processed satellite at each epoch.
This plot indicates, for all satellites at each epoch, the status of the estimated parameters:

- **Fixed ambiguity (green):** integer ambiguities that were validated by the software’s algorithms are indicated in green.

- **Float ambiguity (yellow):** this ambiguity could not be resolved to an integer.

- **Datum ambiguity (cyan):** to estimate receiver phase-bias parameters in the PPP filter, the filter must fix a priori a certain number of ambiguities. These selected ambiguities are called datum ambiguities.

- **New arc (red):** when an ambiguity parameter is first observed, it is plotted in red.