Page 1 –

RINEX file name

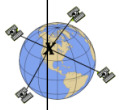
Used products: ephemerides and clock corrections (FINAL, RAPID, or ULTRA-RAPID)

Kinematic mode processing

Updated in version 5
List of signals processed

The percentage of carrier-phase observations with fixed ambiguities

Updated in version 5
Antenna model and reference Phase Centre Offset (PCO) used. Based on antenna model in RINEX header



CSRS-PPP 5.10.0 (2025-04-14)

3512.20O

Data Start	Data End	Duration of Observations
2020-08-01 13:35:13.00	2020-08-01 17:21:35.00	3:46:22

Processing Time	Mode	Product Type
12:46:06 UTC 2025/05/01	Kinematic	Final

Observations
GPS : C1 C2 L1 L2

Elevation Cut-Off	Rejected Epochs	Fixed Ambiguities	Estimation Steps
7.5 degrees	5.35 %	0.00 %	1.00 sec

Antenna Model	APC to ARP	ARP to Marker
ASH701975.01A	REF PCO : GPS	H:1.770m / E:0.000m / N:0.000m

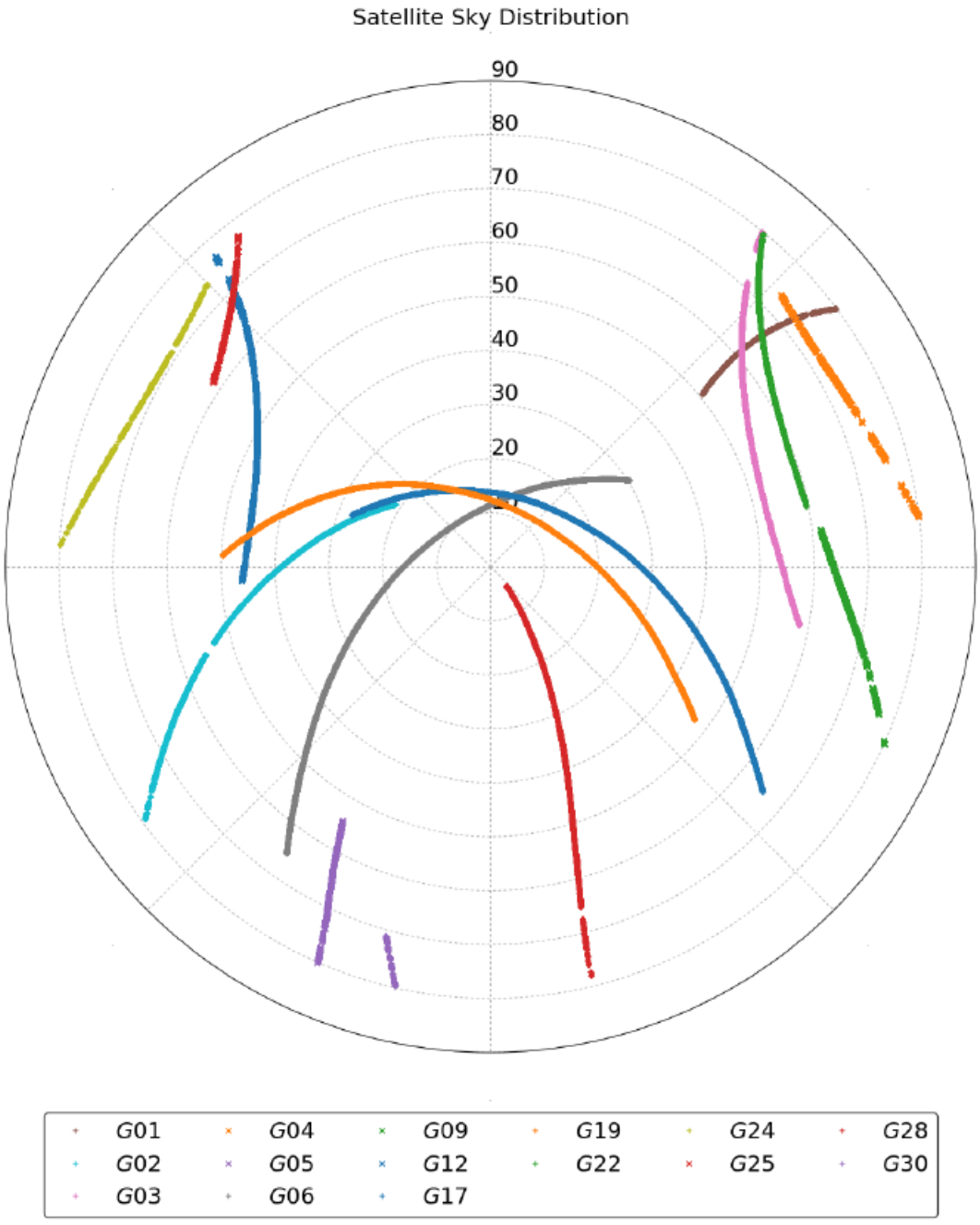
(APC = antenna phase center; ARP = antenna reference point; REF PCO = reference phase center offset)

Estimated NAD83 Positions for 3512.20O can be found in 3512.pos

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.

Page 2 – Satellite Sky Distribution

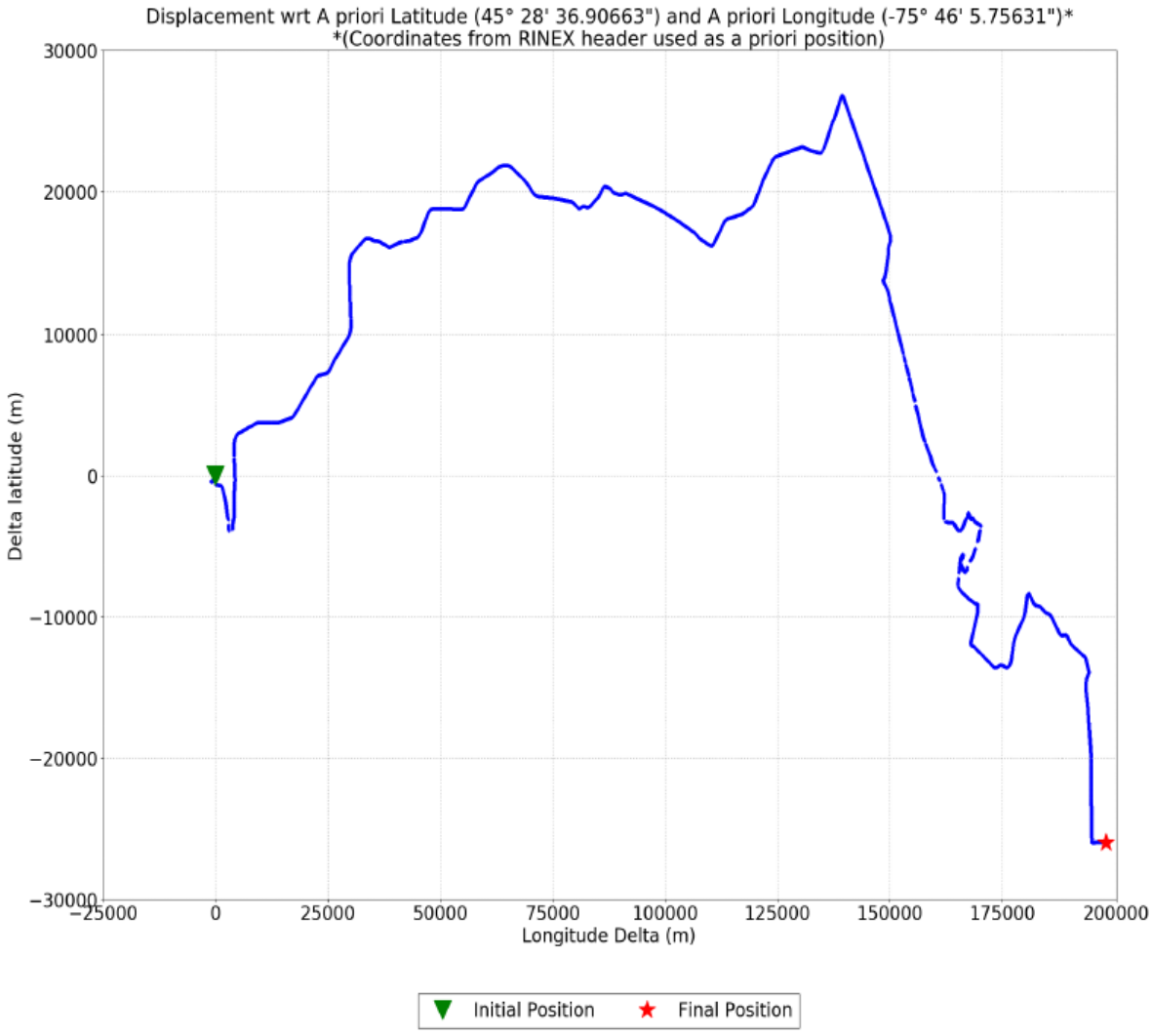
The plot shows the track off each satellite in the sky relative to the antenna. The center of this polar projection plot would be directly overhead while the outer ring of this plot would be the horizon. The plot is oriented so that North is in the "up" direction on the page.



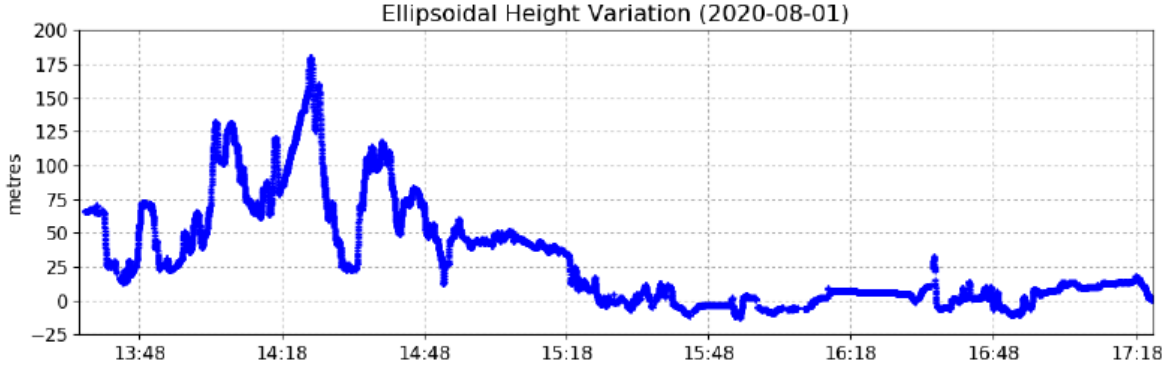
Page 3 – Displacement

1) The horizontal displacement with respect to the a priori position
2) Ellipsoidal height variation

1)

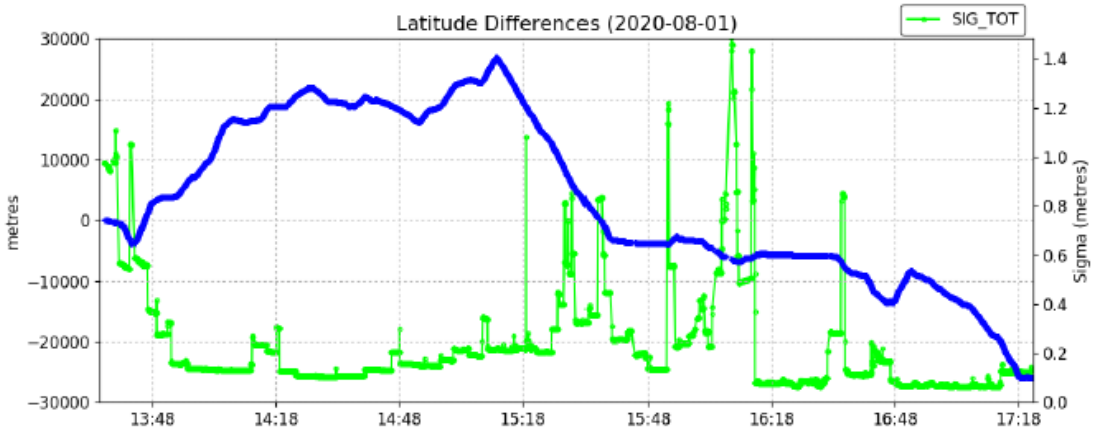


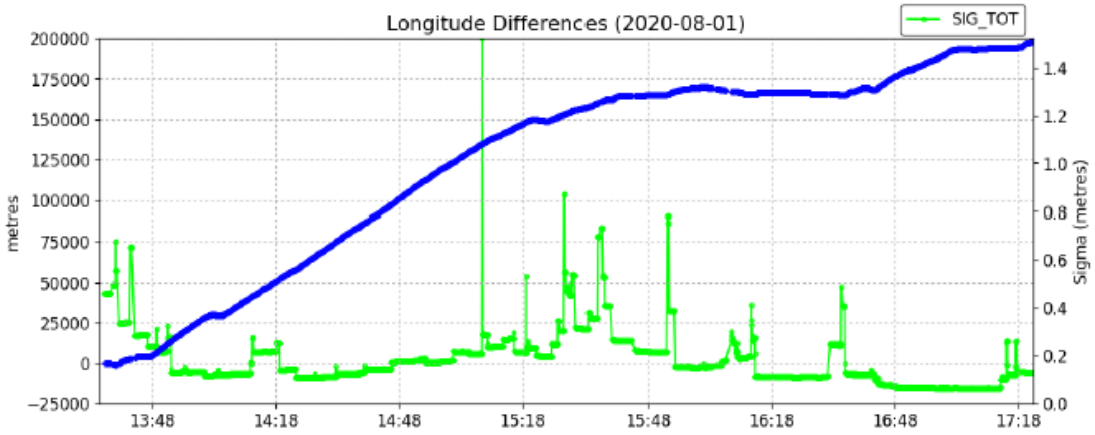
2)

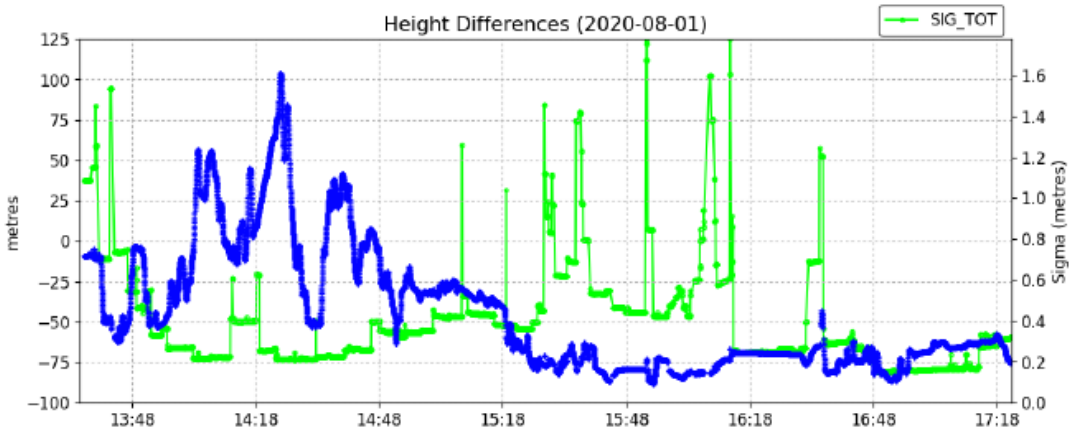


Page 4 – Latitude / Longitude / Height Differences

The 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 RINEX header or from code solution. The green lines show the total standard deviations (95%) including the uncertainties of the epoch transformation, if any.







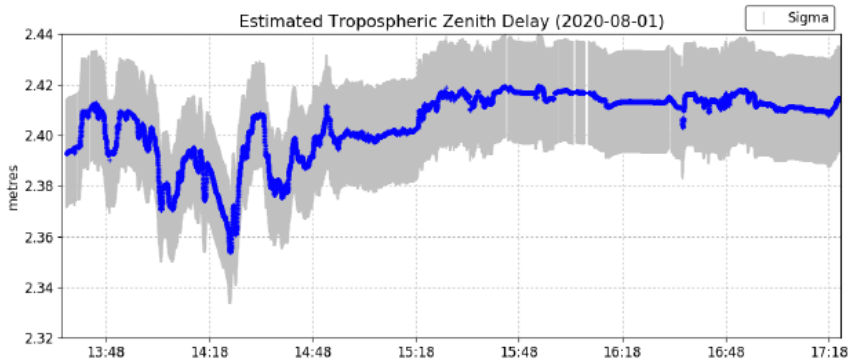
Page 5 – Estimated Tropospheric Zenith Delay / Station Clock Offset / Tracked Satellites and Reset Ambiguities

1) The “Estimated Tropospheric Zenith Delay” plot shows the total estimated tropospheric delay in the zenith direction for each epoch in the solution.

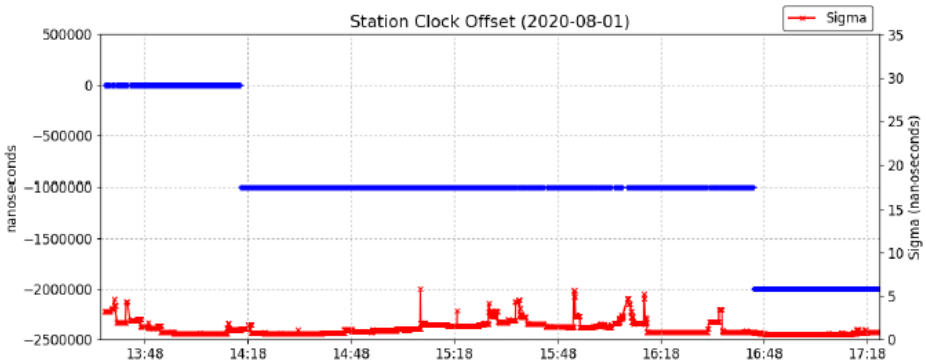
2) The “Station Clock Offset” plot shows the estimated offset between the receiver clock and the GPS time for each epoch in the solution.

3) The “Tracked Satellites and Reset Ambiguities” plot shows the number of satellites tracked in blue and the percentage of ambiguities reset in red.

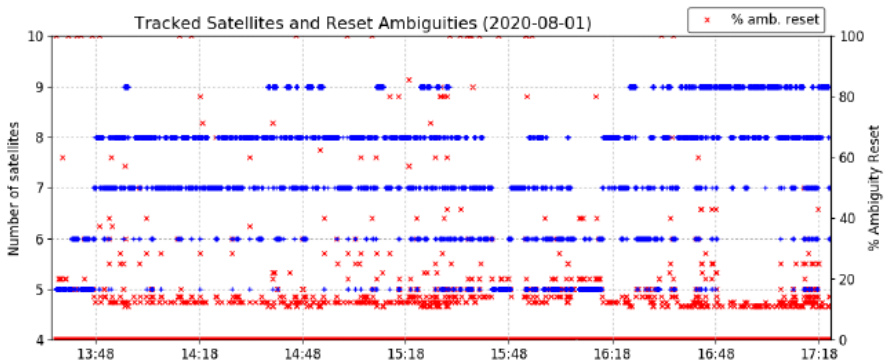
1)



2)

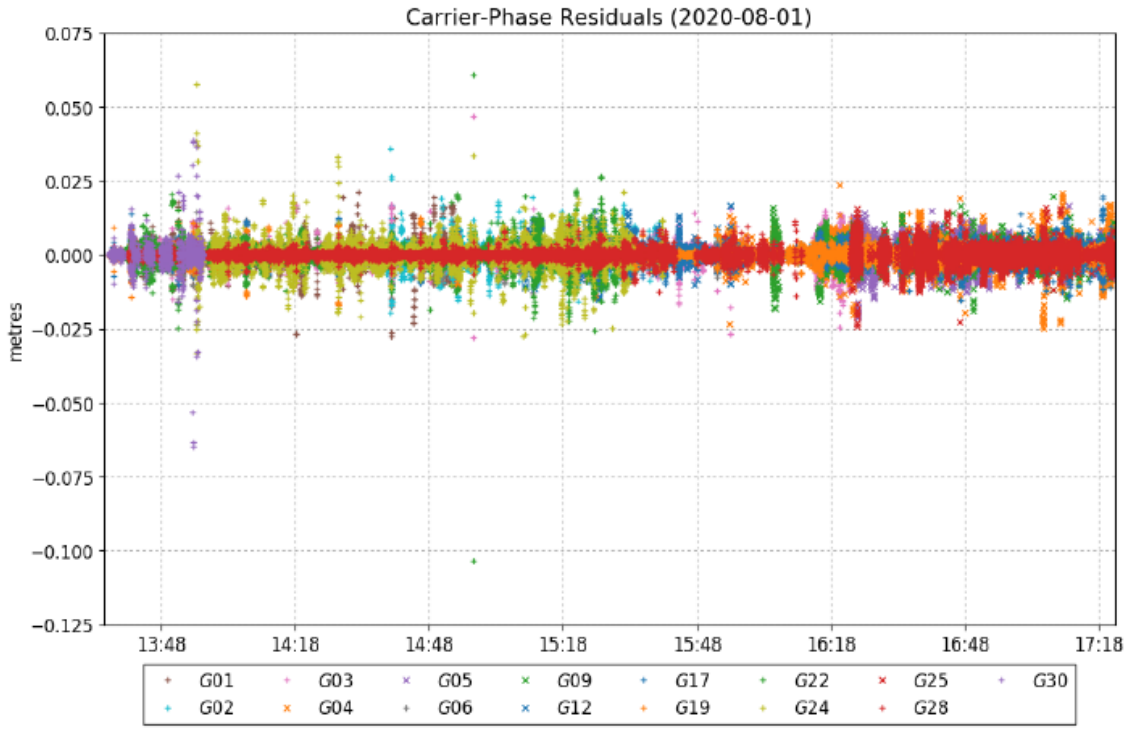


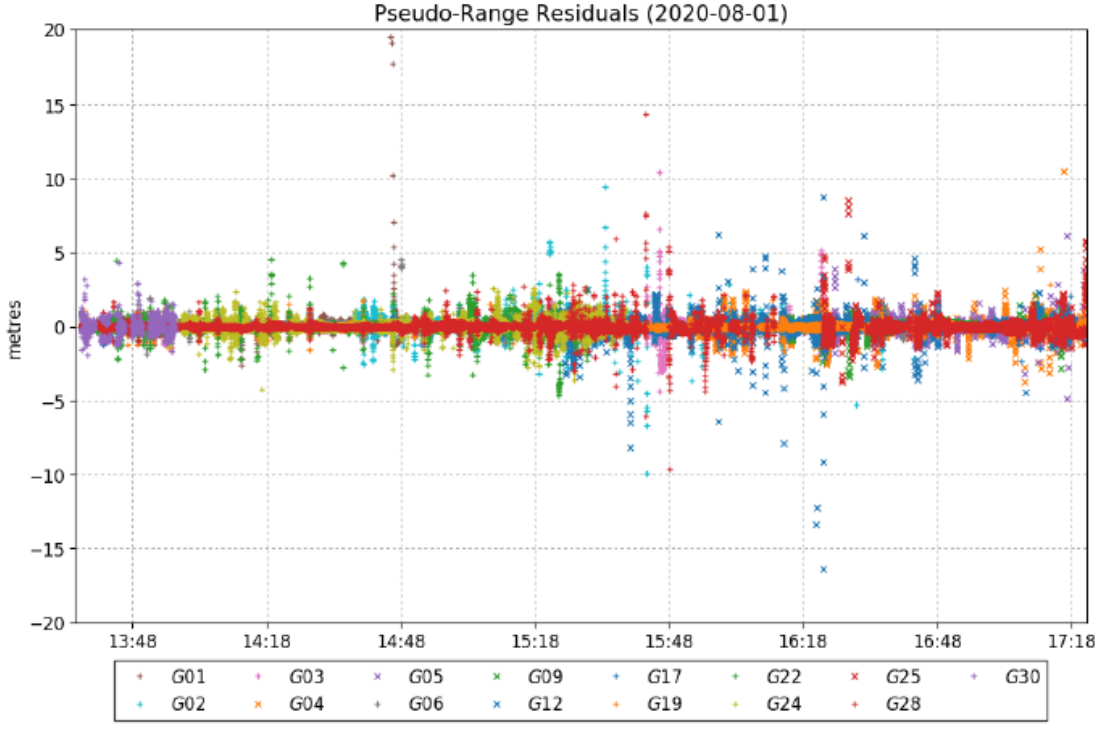
3)



Page 6 – Carrier-Phase / Pseudo-Range Residuals

The “Residuals” plots show the estimated Carrier Phase and Pseudo-Range (code) residuals for each processed satellite at each epoch.





Page 7 – Phase Ambiguity Status

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