

Reprocessing in IGS14 Frame

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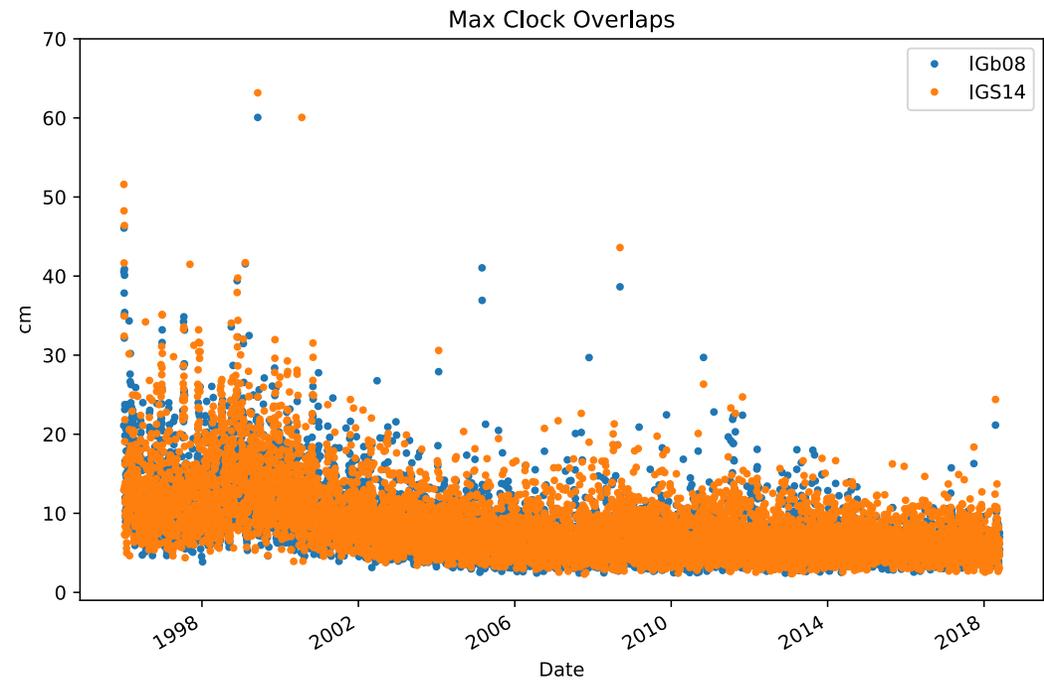
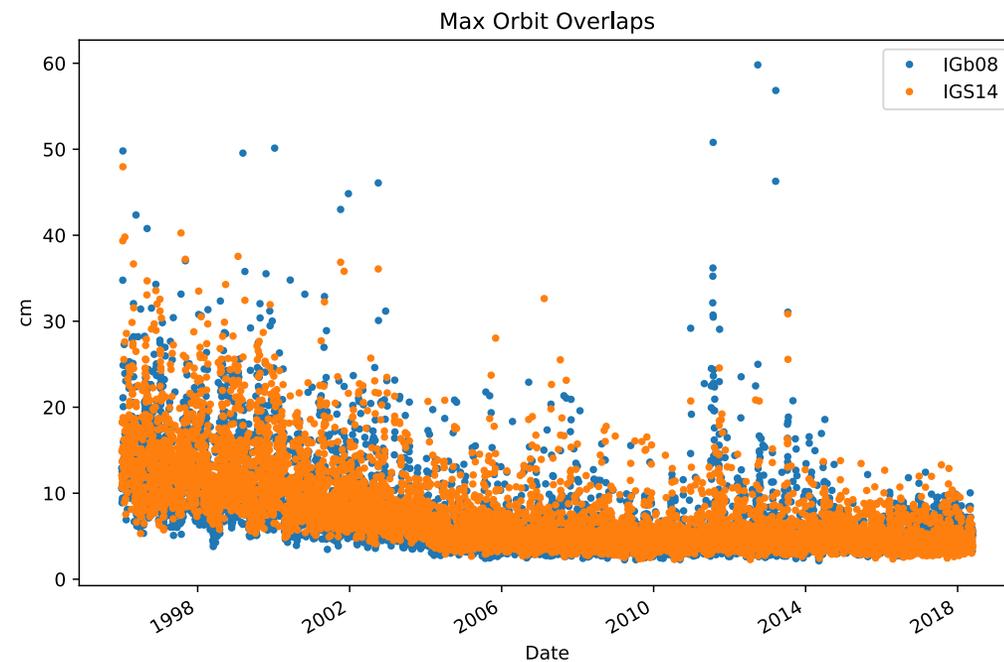
Wednesday, Dec 12, 2018

Repro Update

- Currently have reprocessed 1996-2018 in IGS14
- Using new GipsyX software
- POD process follows the procedure used in JPL GPS operations
- Initial orbit and clocks from previous repro in IGb08

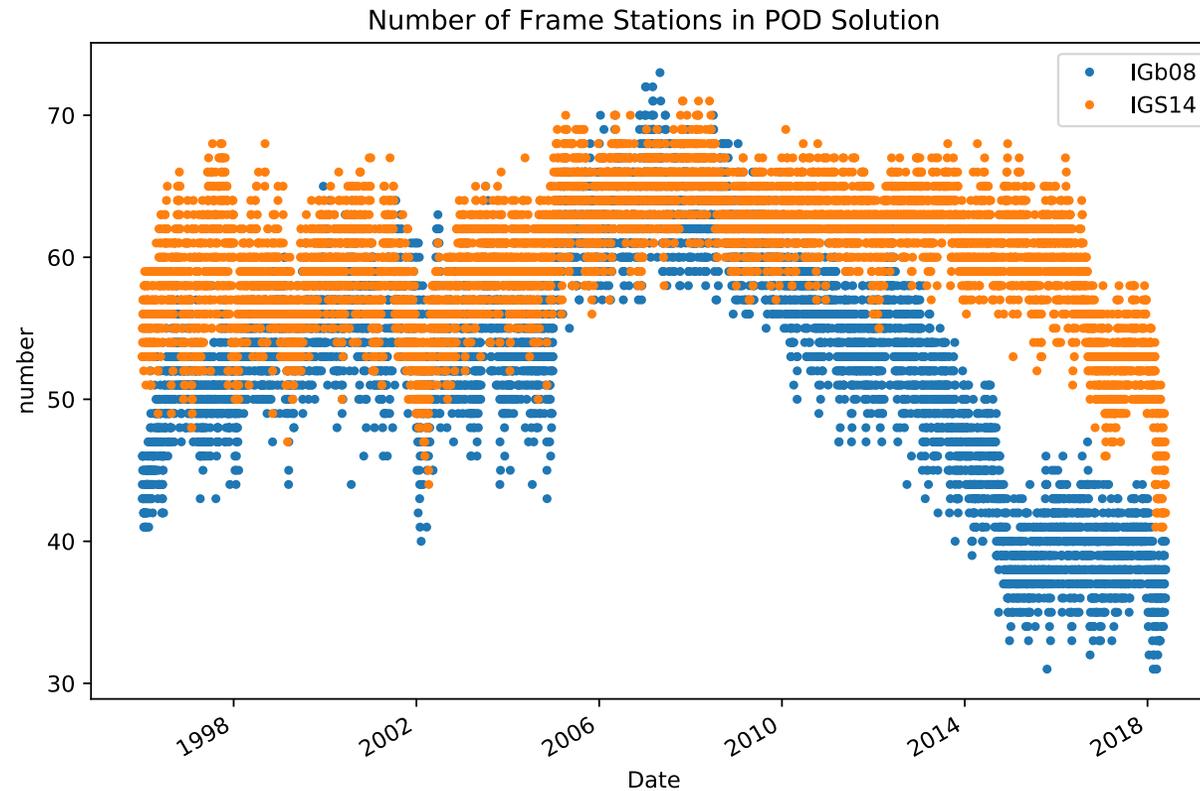
Orbit and Clock Overlaps

- 30-hour data arcs => 6-hour overlap of solutions
- RMS of the 3D orbit differences and clock differences per GPS satellite
- Figures illustrate maximum differences in overlaps



Frame Sites

- Stations are selected based on their geographic location, and PPP statistics. We constrain at least 40 of the 80 stations to be frame stations
- Frame sites are defined by the reference frame



Timeline update

- Processed 1996-2018 in IGS14
- Plan to process back to 1992
- Goal: release products by Spring 2019
- Potential challenges
 - Station sparseness in early 1990s
 - Software adjustments using GipsyX in early years (e.g. adding Block I models)
 - Receiver type classifications and handling of RINEX 2 observables in early cross-correlating receivers