

Clinic Session 3: System Accuracy/Biases

Science Forum (3.306): 13:30-, 14:20-, 15:30-, 16:20-

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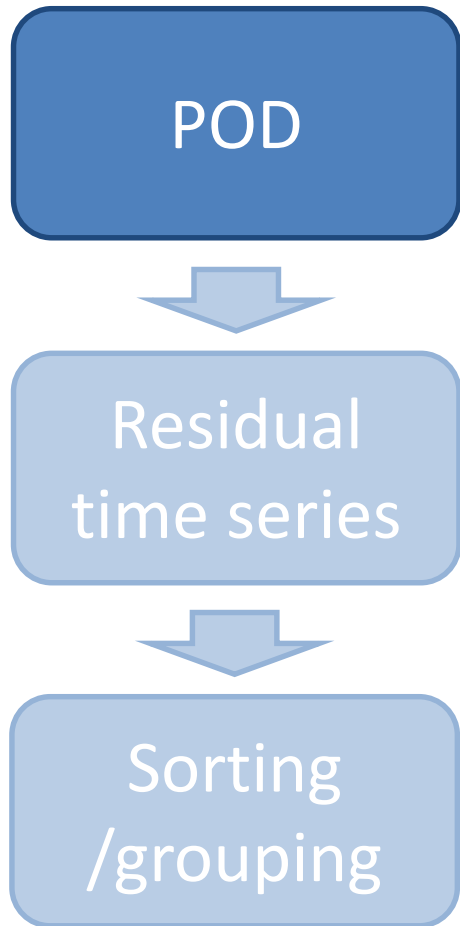
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Precise QC: July 2017 to June 2018



POD: Software “c5++”

- 6 satellites combined (LAGEOS 1+2, LARES, AJISAI, STRLETTE & STELLA). One-year single batch.
- Orbit: 5-day arc for LAGEOS-1 and -2. 3-day arc for LEOs.
- Station-dependent CoM correction for LAG1+2 & AJI.
- Acceleration parameters: Gravity field 4x4 as 1-year common params, and 5 empirical params twice per arc.
- Station coordinates: all solved for with loose constraints. Velocity fixed to SLRF2014.
- Per-site atm loading (L Petrov’s) applied.
- Range bias: solved for per station per satellite types (“LAG1+2”, “LARES”, “AJISAI”, “STARLETTE+STELLA”)

POD

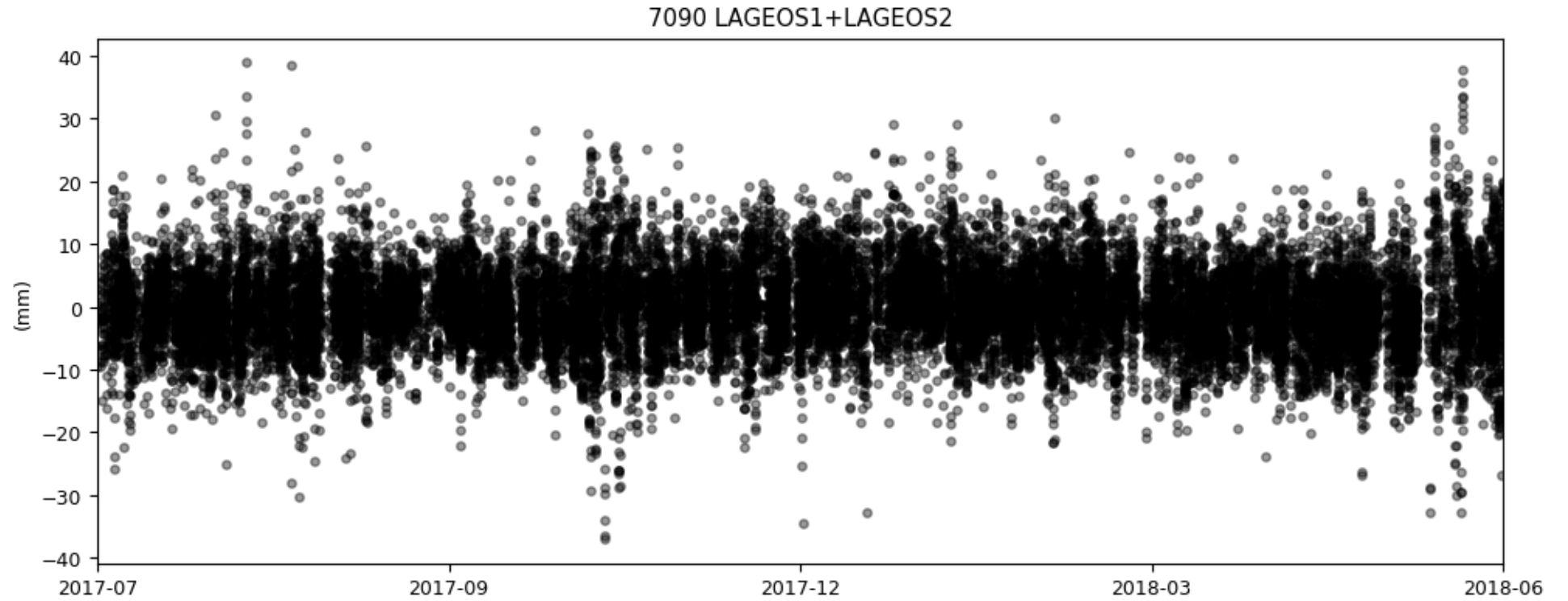


Residual
time series

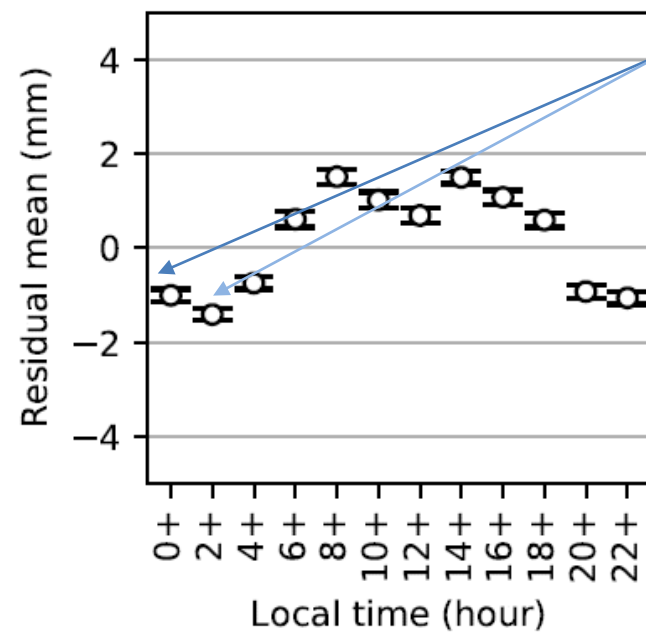
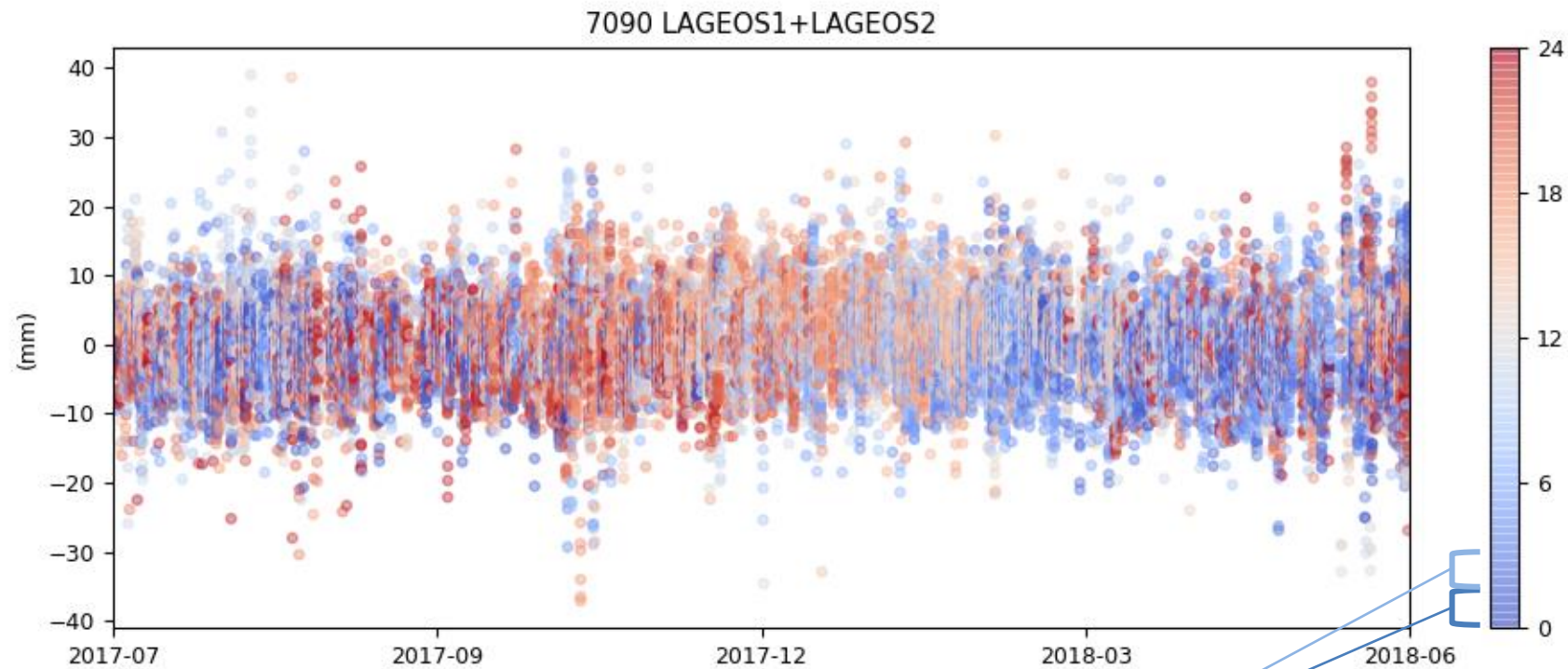
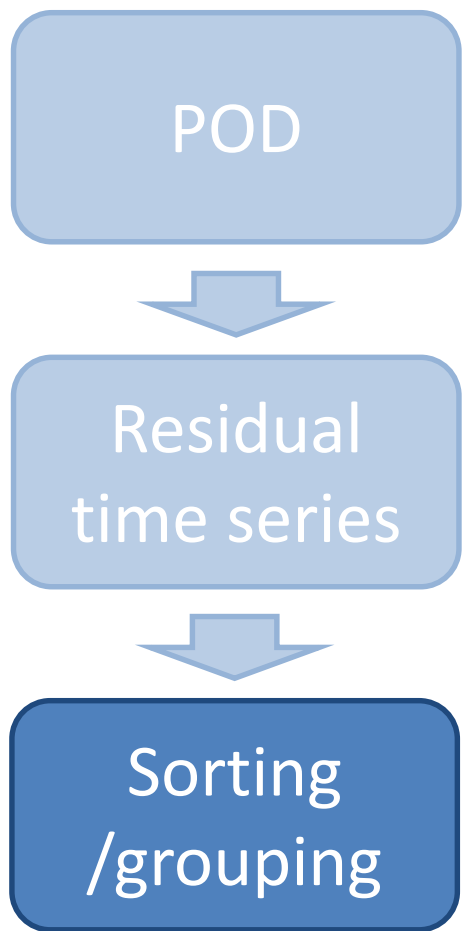


Sorting
/grouping

Example: 7090 (Yarragadee)



Residual RMS: 6.2 mm



Precise QC availability:

- 29 Stations with > 200 LAGEOS passes in the 12 mo span
7090,7941,7825,7237,7105,7810,7840,7110,7501,7841,
7821,8834,7839,7119,7819,1887,7838,7249,7827,7407,
1873,1879,7845,1893,1891,1868,1889,1886,7811