Systematic Range Error 2013-2014
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[1] Residual Analysis: Procedure Overview

- 5 satellites (LAGEOS 1+2, AJISAT, STRLETTE & LARES).
- One-year batch.
- Data: 5-day per for LAGEOS 1 and 2, 1-day arc for LEOs.
- Station-dependent Calib correction for LAG1+2 & AJI.
- Acceleration parameters: Gravity field 4x4 as 1-year common param, and 5 empirical params twice per arc.
- Station coordinates: all solved for with loose constraints. Velocity fixed to SLRF2008.
- Range bias: solved for per station per satellite types ("LAG1+2", "AJI", "STRL", "LARS").

We recommend the representatives of each station to review the observation procedure.

[2] POD Analysis Settings

Software “c5+++”
- S1 batch: LAGEOS 1+2, AJISAT, STRLETTE & LARES.


Test #1:
- Single-shot returns per NP bin

Test #2:
- Single-shot RMS in a NP bin

Test #3:
- System delay (calibration)

Test #4:
- Time to the nearest calibration

Test #5:
- Range rate

Find your station’s charts below!
- We recommend the representatives of each station to review the observation procedure or hardware especially if a comment box is attached.
- Note that the post-fit residuals are the mixture of the measurement error at a station and the model error in our orbit computation. There is a risk of false alarm.

World Top 12 in data yield (total passes > 3500)
(Visit http://geo.science.hit-u.ac.jp/ for the charts of these 25 stations.)