GOP AC Report

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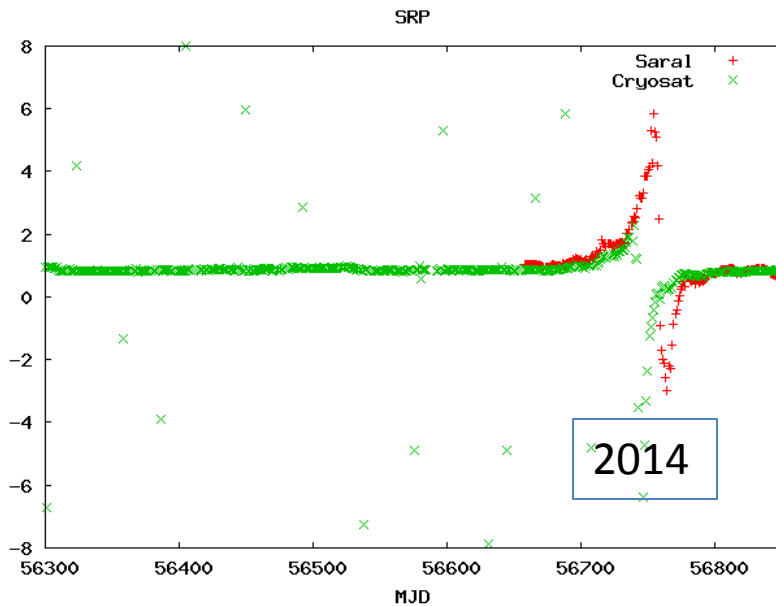## Recent work

- Merging of the DORIS-Bernese and Bernese 5.2 (testing stage)

  - ➤ consistency with official Bernese version
  - ➤ measured satellite attitude

- Implementations of the RINEX data processing

  - ➤ Computation of PHC-COM correction
  - ➤ Reconstruction of Doppler measurement
  - ➤ Onboard clock modeling
  - ➤ Phase processing ?

- Changes in SRP estimation

GOP SRP estimation strategy

- Iterative process
- first iteration

  - ➤ SRP estimated per day
  - ➤ 1-rev harmonics not adjusted
  - ➤ Drag estimated once per day

- second iteration

  - ➤ SRP estimated with constraints 0.0001(almost fixed)
  - ➤ 1-rev harmonics adjusted in along track
  - ➤ Drag estimated each 0.5 hour for „low" satellites

Periods of SRP estimation strategy failure

- Saral and Cryosat aprox. April-May 2014
- Saral only aprox. April-May 2015
- systematic behavior of the SRP time series
- Geocenter (mainly Tz), Scale and WRMS affected
  - ➢ no problem when long-term value of SRP fixed

<u>SRP estimation strategy failure – conclusions:</u>

- change of GOP SRP strategy

   ➢ fixed SRP

   ➢ all satellites/ selected satellites ?

   ➢ all periods/ selected periods ?

- Could the SRP estimation problem indicate some abnormality?