

# IGN Analysis Center Report

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# OUTLINE

- Regular DORIS data processing at IGN for IDS
- On-going research activities, current difficulties and plans
- Conclusions

# Regular IDS activities

- Regular submission of SINEX solutions (every 3 months) using exact same processing strategy

= ignwd15

NB: recent reprocessing of last few years (SOEB preprocessing flag) + problem with CDDIS data delivery solved

- Current issues:
  - DORIS/RINEX data processing (see other presentation)
  - Transition from GIPSY/OASIS II to GipsyX (see other presentation)

# Research activities

- DPOD2014
  - (see presentation from Guilhem Moreaux)
- DORIS station tropospheric results
  - Complete reprocessing using latest DPOD2014 solution (station coordinates fixed)
  - NB: currently postponed
- DORIS/RINEX
  - Phase center correction investigation (ground stations and satellites)
  - NB: assuming that DORIS/RINEX problem is solved and that GipsyX is fully operational for DORIS data processing

# Current difficulties

- DORIS/RINEX processing is not totally implemented
  - (see other presentation)
- Transition from GIPSY/OASIS II to GipsyX foreseen in 2017-2018
  - GIPSY/OASIS II will not be maintained anymore by JPL
  - GipsyX is
    - Fully operational for GPS data processing
    - Almost operational for DORIS Jason2/RINEX data processing
    - Not operational for DORIS Doppler data processing
  - IGN has now an official GipsyX licence

# Future plans

(assuming that DORIS/RINEX data processing is fully operational for Jason2 for both GIPSY/OASIS II and GipsyX soon)

- GIPSY/OASIS II:
  - Adding new satellites (Jason-3, Sentinel)
    - is it worth it?
  - Combining DORIS results in a multi-satellite solution as before or summing up individual results?
- GipsyX:
  - Expanding data processing to other DORIS/RINEX satellites
  - Developing new Doppler capability with the older satellites
  - Phase center corrections (using long-term time series of phase residuals)

# CONCLUSIONS

- Urgent actions:
  - Continue ignwd15 submission using GIPSY/OASIS II (as it is).
  - Finalize DORIS/RINEX data processing for Jason-2 (developements done in parallel with GIPSY/OASIS II and GipsyX)
- Long term
  - Reprocess 1 year of recent DORIS/RINEX data with GipsyX (preliminary tests and then a new ignwd16?)
  - Complete reprocessing of DORIS data with GipsyX (2018)