DORIS/IGN and INASAN Analysis Center Report

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OUTLINE

- IGN and INASAN recent solutions
- Work done since last AWG (Washington DC)
    - Data
    - Models
    - Estimation strategy
- Future plans

IGN and INASAN developments

- Both using GIPSY-OASIS
- Basic assumptions
  - Use different models when possible
  - Provide results of similar quality
- Recent solutions
  - IGN: ignwd13 (complete) + ignwd15 (complete)
  - INASAN: inawd08 (in progress)

    NB: INASAN inawd08 will be complete by the end of the week

Solutions chacteristics

solution	ignwd13	inawd08	ignwd15
Gravity field	EIGEN-06S2	GOCO02S	EIGEN-06S2
Gravity field degree	200	120	200
Mapping function	VMF-1	GMF	VMF-1
Elevation cutoff	7 degrees	12 degrees	7 degrees
Satellites	All available	All available but HY2A and Saral	All available
Phase Law correction	No	No	Yes

Remaining problems and open issues

- ignwd15: old data set used for SPOT4 in 1998
  - Problem in TZ (see Willis et al., J. Geod., 2006) (resubmission in progress)
- ignwd15: no systematic check for some satellite models (drag coefficient, solar radiation coefficient)
- ignwd15: estimation strategy could be improved (less opr parameters –see Stepanek-, no tropospheric horizontal gradient

Conclusions

- ignwd13 and ignwd15 submitted. The only difference is the use of the Phase Law corrections → possible tests

- Potential interest to do a new solution (ignwd16) of time permits

- Need to upload solution + derived products at CDDIS + IGN data center

- Need to restart automated data processing with the new options (latest solution only)