Draft V1

Action Items IDS AWG meeting, Darmstadt, Germany, May 26-27, 2010

1. <u>AC's</u>: The IDS will work towards an operational combination. The first step will be to produce updates to IDS-3 at 3 month intervals with approximately 3 month latency. The extension of the IDS-3 to an operational combination will be reevaluated at the iDS Workshop in Lisbon. The schedule for the next deliveries will be:

June 20, 2010. Deliver SINEX solutions through March 28, 2010, 00:00 UT. Sept. 20, 2010. Deliver SINEX solutions through June 27, 2010, 00:00 UT. Dec. 20, 2010. Deliver SINEX solutions through Sept. 27, 2010, 00:00 UT (To be confirmed based on discussions in Lisbon).

The series should be an extension of what was submitted for ITRF2008, in so far as that is possible, and the same strategy will be provisionally used for the next combinations. Jason-2 should be included in these solutions, based on the positive results presented at the AWG.

- 2. AC's: Submit single-satellite SINEX solutions for 2009 to J.J. Valette, Guilhem Moreaux, either in COVAR or Nomal Equation format. The purpose is to try and isolate the reason for the differences between the analysis center solutions in the scale of the IDS combination (e.g. why are there two families of solutions?), and to attempt to see if more information can be found regarding the potential SPOT-5 SAA problem reported by Stepanek et al. (2010).
- 3. <u>AC's:</u> Ascertain if other AC's also observe the SPOT-5 SAA anomaly for (some) of the South America DORIS stations. Is there a strategy that can mitigate this effect if it is confirmed? Are other stations (e.g. Ascension, Tristan de Cunha, Kourou ...) also affected?
- 4. <u>AC's.</u> For 2009, process Jason-2 data using only one or two channels. Compare with using all channels. The purpose is to ascertain if the strengthening in the determination of TZ is due to geometry (ie inclination), or the availability of more low-altitude data or both. Question: should AC's submit single satellte Jason-2 solutions with this approach, or submit a modified version of their combined sinex series.
- 5. <u>JJV & GM</u>. Provide further information to AC's on the quality & nature of the EOP solutions for ITRF2008, particularly where anomalies occurred in the AC submissions. <u>AC.'s:</u> Study information provided on EOP quality, and adjust scripts, input files as necessary to eliminate a repetition of these anomalies in the future. Question: Request AC's to submit updated SINEX files to IDS data centers to correct these anomalies?

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- 6. **AC's.** Attempt to process RINEX DORIS phase data by workshop, and report progress by workshop in Lisbon.
- 7. **AC's.** Begin analysis of Cryosat-2 data Report progress of analysis and any potential problems by workshop in Lisbon.
- 8. <u>JJV & GM</u>: Respond to GAU (Ramesh) & INA (Sergei) regarding their newly submitted 2009 series.
- 9. <u>AC's:</u> Analyze newly released ITRF2008 (IGN) solution, and also the published ITRF2008(DGFI) solution. Work with the Analysis Coordinator on a joint paper to the reference frame symposium in Marne-la-Vallée in October 2010.
- 10. <u>ALL</u>. Consider abstracts for the DORIS workshop in Lisbon, due Juen 18, 2010.

Other Issues

- 1. In light of the availability of more low-altitude data from Jason-2 & Cryosat-2, All AC's who have not already done so, should attempt to upgrade their software to use the more modern troposphere mapping functions (GMF, VMF1). They should validate their improvements and make an assessment of the impact of the mapping function on their IERS solutions.
- 2. For the purposes of simplifying orbit comparisons with analysis centers, particularly wrt to Jason-2 & Cryosat-2, AC's should submit orbits with UTC time tags in sp3c format at 60 second intervals on the interval of integer minutes and zero seconds. Orbits not in the proper format or at the right time-step intervals won't be analyzed or compared.
- 3. <u>Nomenclature</u>: For the present we agree to adjust the name of each AC series if there is a substantive change in either analysis strategy or new DORIS satellite (Jason-2, Cryosat-2, Saral/Altika).
- 4. Nonconservative force modeling: (radiation pressure & atmospheric drag); Without altering the strategy for the operational combination, AC's should investigate improvements to radiation pressure and atmospheric drag modeling.
- 5. **FGL & PS**. Ascertain if newly re-drafted IERS standards contain sufficient information for GOP to upgrade their tidal model from CSR3 to a more modern tide model.
- 6. <u>All AC's & FGL</u>: Determine if atmospheric loading and/or hydrological loading can be included in the OD software packages of the different analysis centers (as other techniques are evaluating this effect, and the IERS may require the application of atmosphere loading in the generation of the next ITRF).