Tides/HF Splinter Summary

Tsunami observations by satellite altimeters JF LEGEAIS (CLS/Space Oceanography Division)

- Difficulty in observing tsunami events with even several altimeters flying but important data for post-event modeling validation and improvement
- Seasonal modulation of tides in shallow seas J. CHERNIAWSKY (Institute of Ocean Sciences)
 - □ Long tide records now prone to studies of temporal variability but signals are small, data is noisy and model/data agreements are not clear
- COMAPI: new regional tide solutions and high Jason-1 end of life orbit frequency dynamical atmospheric correction M. LUX (NOVELTIS) ...given by Mathilde Cancet
 - Northeast Atlantic and Med Sea regional tide and dynamical atmospheric correction (DAC) products developed/available to improve coastal altimetry processing
- Regional tidal atlas for coastal and shelf seas: methodology and validation F. LYARD (CNRS/LEGOS)
 - Need for data cleanup regarding internal tides contamination before assimilation and better characterization of errors for minor constituents, as well as better models (e.g., bathymetry)

Tides/HF Splinter Summary

- SLOOP: towards a new methodology for handling S1 and S2 tidal waves in DAC for altimetry products J. LAMOUROUX (NOVELTIS)...given by F. Lyard
 - Seasonality in S1 should be considered, most likely done as part of the dynamical atmospheric correction (DAC), and similar issues should be examined for S2, taking into account higher sampling atmospheric products

Posters (Tides/HF Splinter)

- IMPROVEMENT IN GLOBAL OCEAN TIDE MODEL IN SHALLOW WATER REGIONS CHENG Yongcun, Technical University of Denmark
- □ COMAPI: A NEW GLOBAL LOW FREQUENCY DYNAMICAL ATMOSPHERIC CORRECTION LUX Muriel, NOVELTIS
- □ IMPROVING THE DYNAMIC ATMOSPHERIC CORRECTION USED FOR ALTIMETRY CARRERE Loren, CLS
- □ IMPACT OF THE 3-HOURS METEOROLOGICAL FIELDS ON THE ATMOSPHERIC CORRECTIONS FOR ALTIMETRY CARRERE Loren, CLS
- THE PARTITIONING OF COHERENT AND INCOHERENT TIDAL VARIANCE NEAR THE HAWAIIAN RIDGE ZARON Edward, Portland State University
- EOT10A A NEW RESULT OF EMPIRICAL OCEAN TIDE MODELLING BOSCH Wolfgang, DGFI

Discussion Issues

□ Jason-1 end-of-life orbit

- Regular sampling and longest record on current track best for tide determination as well for assessing non-tidal aliases
- **Drifting orbit difficult for tide studies**

Maintenance of Jason-1 on its current orbit as long as possible makes most sense

□ Jason-CS orbit change

- Change in orbit will help fill holes in the data important for determination of coastal tides
- □ Higher inclinations could also help improve high latitude solutions
- Shorter repeat periods are preferable in general for non-tidal dealiasing procedures (baroclinic dynamics at longer periods)

Moving to a different orbit would be preferred

1 mm/yr drift accuracy

Spurious drifts from tides/HF aliases (maintaining relatively short tidal aliasing periods important)