DISCUSSION OF A HOMOGENEOUS, LONG TIME SERIES OF ALTIMETER DATA

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There are currently three historical radar altimeter data sets, GEOS 3, SEASAT and GEOSAT and two on-going missions, namely ERS-1 and TOPEX/POSEIDON. In the mid anti late '90s, follow-on missions are under study or planned for GEOSAT, ERS-1 and TOPEX/POSEIDON. Scientists will need to use all the corresponding data sets together to get time and spatial coverage required by geophysical-/oceanographic studies. However, existing Geophysical Data Record (GDR) data set. contain different formats, ephemerides, and instrumental and environmental corrections. We want. to begin an altimeter forum devoted to the data homogeneity problem. Getting homogeneity for these data is a scientific and a technical problem. On one hand, scientific issues include questions of input. data, model s ant] algorithms to compute orbits, environmental and geophysical corrections. Do we need to regenerate orbits with a series of standard constants, models and algorithms? Do we need to use standard models or other sensors to produce corrections? Definitely, the answers are positive to facilitate the study of the eve).lution of the ocean at multi year time scales. On the other hand, technical aspects will be reviewed: definition of a common unit system, common reference frames, and common formats. PO.DAAC and AVISO have already demonstrated the ability to produce a merged TOPEX/POSEIDON GDR product. Both active archive centers propose Lo be focus points. to gather requirements for altimeter data homogeneity and to organize actions in order to solve the corresponding problems.

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2. Session G1/OA19 - Operational Uses of Altimetry

3. Philippe Gaspar

4. No additional equipment needed

5. Prefer oral session