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To Whom It May Concern

Space Geodesy Data and Product Archiving and Information Support

The worldwide network of 58 DORIS (Doppler Orbitography and Radio Positioning Integrated by Satellite) stations is used to support precision orbit determination for low Earth orbiting remote sensing satellites, such as the SPOT series of satellites (managed by the French space agency, the Centre National d'Etudes Spatiales or CNES), and ocean radar altimetry satellites such as TOPEX/Poseidon and Jason-1 (managed by NASA and the CNES), ENVISAT (managed by the European Space Agency), and future missions such as Jason-2 (managed by NOAA/EUMETSAT/CNES/NASA), Altika (joint with CNES and the Indian Space Research Organization), and Cryosat-2 (a European Space Agency ice-mapping mission).

The synoptic mapping of the world's oceans from altimeter satellites, and the use of these data to determine the global change in mean sea level, place stringent demands on all aspects of the altimeter measurement system, including the global reference frame within which these global mean sea level rates are determined. Using the precision measurements from satellite laser ranging (SLR) and DORIS, as well as the reference frame realized from the joint analysis of SLR, Global Positioning System (GPS), DORIS and VLBI data, we have determined the TOPEX/Poseidon orbits to an accuracy of 2 – 2.5 cm, and the orbits of Jason-1 to an accuracy of 1 cm. These precise orbits and the reference frame in which they are produced allow us to determine global rate of change of mean sea level to 3.2 mm/year, using altimetry data from both TOPEX and Jason-1.

These outcomes were achieved thanks to an easy and efficient access to Earth science data, in particular space geodesy measurements and products. The Crustal Dynamics Data Information System (CDDIS) has been a major actor in this field for more than two decades.

In order to allow the international scientific community to achieve its goals and improve the global reference frame, orbit determination accuracy and knowledge of the mean sea level rise, it is crucial that CDDIS continues operations of the archive and enhance the system. CDDIS should also integrate its metadata into other Earth science support systems in order to increase the value of the system to a broader science community. The international scientific community in general and the IDS community in particular, are confident that the extensive experience gained from 25 years of operating NASA's space geodesy archive will ensure not only continuity but also an efficient management of this important data set.

What ultimately is at stake is the following:

(1) the ability to determine (sooner rather than later) if there is an acceleration in the global rise in mean sea level;

(2) the ability to adequately intercalibrate altimeter data from different satellite missions (e.g., TOPEX/Poseidon, Side A vs. TOPEX/Poseidon, Side B, vs. Jason-1, vs. the future Jason-2),

(3) the ability to close the mass budget and sort out on a regional basis in the oceans how much of sea level rise is steric (driven by thermal expansion or heating of the oceans), and how much is driven by added mass (cf. Ice or glacier melt).

We note that the global determination of mean sea level is one example of the many applications that require a precise terrestrial reference frame.

For the IDS contribution, CNES and IGN will keep on working hard to extend and improve the DORIS network, various space agencies worldwide will launch new satellites fitted out with DORIS receivers and Analysis Centers will process DORIS data and deliver products. Measurements and products archive and distribution are in the heart of these various activities. We thus emphasize on the importance of the CDDIS and its future, continued funding.

Yours sincerely,

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Chairman