

Title: Preparation of *in situ* temperature and salinity profile data CDRs for joint studies of sea level with altimeter and GRACE data

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This proposal is for support of the development of “*World Ocean Database 2009*” which is a collection of ocean Climate Data Records (CDRs) that are frequently used in conjunction with satellite observations of the world ocean to study the role of the ocean as part of the earth’s climate system. The World Ocean Database produced by the NODC Ocean Climate Laboratory is the world’s largest collection of ocean profile-plankton data available internationally without restriction. There have been four versions of the World Ocean Database compiled and published to date. During the past 16 years the NODC Ocean Climate Laboratory (OCL) has provided international leadership in the development of global, comprehensive, integrated, scientifically quality-controlled, ocean profile databases. These databases, and products based on these databases, are frequently used by the scientific community as evidenced by citations in the scientific literature. In particular, the remote-sensing satellite community has used WOD in studies of satellite altimetry, ocean color studies, and ocean data assimilation.