



The CAWSES global observing campaign on tides: An overview

W.E. Ward (1), J. Oberheide (2), and the CAWSES Tidal Campaign Team

(1) Dept. of Physics, University of New Brunswick, Fredericton, Canada (ward@unb.ca), (2) Physics Department, University of Wuppertal, Wuppertal, Germany

The CAWSES global tidal campaign has been organized to coordinate and facilitate work by various groups around the world to help resolve outstanding issues in our present understanding of tides. It is one of the projects sponsored under Theme 3, Atmospheric Coupling Processes, of the international Climate and Weather of the Sun Earth System program (CAWSES, a SCOSTEP sponsored program). The overall goal of the campaign is to provide global data sets for several concentrated time periods over the next few years which includes coordinated ground-based and satellite measurements and modeling efforts.

These campaigns will allow the characterization of the heating sources, tidal components (migrating and nonmigrating), and tidal effects from the surface of the Earth to the ionosphere, and support and stimulate the use of models to simulate the conditions during these campaigns. The first tidal campaign took place from September 1 to October 31, 2005 to coincide with the "World Month" campaign undertaken by the Incoherent Scatter Radar community. Radar, microwave, optical, and ionospheric observations and satellite data were collected during this time period and are now starting to be analyzed. Of special interest is determining the consistency of tidal signatures observed by various means. Two more campaigns will follow in spring and summer 2007. In this paper, we describe the organization of this effort, plans for the incorporation of various observation types, early results from the first campaign and future plans.