



State of the Ocean: Presenting Near Real Time Ocean Parameters and Contextual Layers on Google Earth as an Exploration and Discovery Tool for Public Consumption

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The State of the Ocean (SOTO) is an enhanced Google Earth browser-based web interface developed by the Physical Oceanography Distributed Active Archive Center (PO.DAAC) that allows users to explore near real time imagery of various geophysical parameters and learn about their interconnected relationship to large and small scale ocean-related phenomena. Science data from PO.DAAC and other archives are transformed into KML image layers which are updated on an hourly basis, including sea surface temperature (SST), chlorophyll, ocean winds, ocean circulation, and SST and sea surface height (SSH) anomalies. These layers can be displayed simultaneously and overlaid with additional contextual information such as buoy data, ocean storm tracks, and current events in order to educate and enhance the understanding of both the general public and science community about the cause and effect of ocean processes.