



Eulerian and Lagrangian sampling of water masses along hurricanes

Hurricanes are well known extreme weather events; more intensive ones cause (more) loss of lives and property. Accurate prediction of the track and intensity is vital to limit losses. Better knowledge of the oceanic surface and subsurface conditions is known to decrease forecast uncertainties over longer time horizons. However, due to the extreme nature of these storms (wave height, currents, winds, etc), in-situ measurements using non-autonomous platforms (viz., ships) is impossible! Satellite measurements from infrared radiometers (e.g., which provide SST and atmospheric column measurements) cannot be used due to clouds and precipitation, the latter also limits the usability of data from microwave satellite data. Therefore these events are also sparsely observed. Emerging technologies such as remotely piloted drones are providing us new observing capabilities. In this presentation we will compare high-resolution (0.08-deg) ocean reanalysis with available in-situ measurements (drone, airborne XBT) along th

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