

Title: Weather in a Tank

Abstract: A collaboration between faculty and students at six universities in a project called Weather in a Tank is described, in which, ways of teaching atmosphere, ocean, and climate dynamics are explored that bring students into contact with real fluids and fundamental ideas. Exploiting the use of classic rotating laboratory experiments, real-time meteorological data and associated theory, teaching tools, curricular, and evaluation materials have been developed that focus on fundamental aspects of atmospheric and oceanographic dynamics for use in undergraduate teaching. The intent of the project is to help students learn how to move between phenomena in the real world, theory, and models.



Figure 1 – Dr. Kumar demonstrating an experiment using the rotating tank in the University’s earth science building.



Figure 2 – Students and faculty from the University of Delaware participating in the experiments.