

Hunting Hurricanes: NASA's Field Programs Exploring Hurricanes With Satellites, Supercomputers and High Altitude Aircraft

Jeffrey B. Halverson

University of Maryland- Baltimore County

NASA has invested substantial resources in its Earth Science Enterprise for better understanding the genesis, intensification and landfall effects of hurricanes. In this talk, I will trace the evolution of NASA research using the DC-8 and ER-2 advanced high altitude research platforms, its orbiting sensor web of satellites, and supercomputer modeling. NASA has flown its world-class fleet of high altitude aircraft into tropical cyclones in many locales ranging from Australia's Coral Sea, to Costa Rica, to Africa's Cape Verde Islands. I will detail my own involvement in developing a program of dropsonde science and present some stunning visualizations of hurricanes developed at the NASA Goddard Space Flight Center's Scientific Visualization Studio.