GRUAN Mid-Atlantic Consortium Activities

Abstract

This poster we will discuss the Global Climate Observation Site (GCOS) Reference Upper Air Network (GRUAN) activity at the Howard University Beltsville Research (HUBR) Campus at Beltsville, MD. HUBR is the only university-run GRUAN site (http://gruan.org) with a focus on satellite-validation activity and inter-agency collaboration under the guidance of the GRUAN Mid-Atlantic Consortium (G-MAC), a group of scientists with interest in studying satellite data quality, characterize upper air instrumentation uncertainties, and climate processes and trends. In this poster presentation, we will discuss (1) the motivation for GRUAN and G-MAC organization; (2) accomplishments to date regarding satellite data quality and specifically comparisons of the NOAA-Unique CrIS/ATMS Processing System (NUCAPS) with Beltsville-launched sonde and its regional variations and relationships with Raman lidar data. In particular, we will describe our efforts of multiple data product integration to estimate Site Atmospheric State Best Estimate (SASBE) product; (3) recent instrument evaluation activities and dual-sonde launches in collaboration with NWS Sterling Field Support Center (SFSC) (4) ongoing support for the NPROVS+ data led by NOAA-STAR (5) highlights of outreach under this grant and benefits for education as well as training.