

Abstract

Title: Measurements of Tropospheric Ozone at Barbados (13.1N, 59.2 W) during the Summer of 2010.

Ozone (O_3) in the troposphere (0-15 km) is important from a health and climate perspective. High concentrations of O_3 can impact the respiratory system negatively; especially when mixed with aerosols (natural or anthropogenic). Ozone is also a greenhouse gas that can lead to the warming of Earth's climate. To understand the background of O_3 concentrations and its variations, ozone balloon measurements were carried out each week. These measurements were taken at the Caribbean Institute of Meteorology and Hydrology in Husbands, Barbados (13.1N, 59.2W). In order to measure tropospheric ozone, a cathode and anode solution was prepared. Following that, three to seven days before the launch, ozonesondes were prepped and the background current was recorded. On the day of launch, a final background current was taken. In this presentation, we will discuss the process and the measurements collected from Barbados and compare them to ozone measurements that were taken in Cape Verde. This comparison will depict the relationship between eastern and western Atlantic regions.