



Measurement of aerosol radiative properties during POLARCAT 2008

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During POLARCAT 2008, the solar spectral flux radiometer (SSFR) was deployed onboard NASA's and NOAA's P-3 research aircraft, and on the NOAA research vessel "Ronald H Brown," for measuring aerosol optical properties such as spectral radiative forcing and absorption, spectral surface albedo, and cloud properties. We will provide an overview of measurements for a wide range of conditions such as arctic haze events, Canadian forest fire plumes, or pyrocumulus convection. In addition, we will show examples for observed changes in cloud optical properties in the presence of aerosol particles and present the new idea of combining cloud and aerosol radiative forcing in one concept.