

Aerosol Characterization from Polarimeter and Lidar (ACEPOL) (Oct-Nov, 2017)

NASA and SRON (Nederland) will collaborate in the ACEPOL field campaign, based from AFRC, to acquire data with advanced active and passive remote sensors. These data will be used to develop and assess algorithms for retrieving profiles of aerosol optical and microphysical properties for various atmospheric applications. The measurements and algorithms are applicable to future satellite missions such as ACE, PACE, METOP-SG, and EarthCare.

ER-2 instruments

- AirSPEX
- RSP
- HSRL-2
- AirMSPI
- CPL
- AirHARP

Ground-based instruments

- AERONET
- MPLNET

Possible coincident measurements from CIRPAS Twin Otter during Navy CASPAR West mission

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Objective: Provide a link between detailed microphysical/optical characterizations of column integrated and vertically-resolved aerosol properties.

Hypothesis: Polarimeter-Lidar combination would enable detailed characterization of several distinct aerosol layers (e.g. elevated dust/smoke and boundary layer smog).