Shortwave-absorbing aerosols and their interactions with the large-scale environment

Conveners: Paquita Zuidema, Allison Aiken, Art Sedlaceck, Yan Fen

Aerosol-Cloud Interactions:

2:38 Allison Collow and Mark Miller: Radiative Heating Rate Profiles over the Southeast Atlantic Ocean during the 2016 and 2017 Biomass Burning Seasons [10 minutes + 2 Q/A]

2:50 Paul Barrett: On the collaboration between UK CLARIFY and LASIC [10 minutes + 2 Q/A]

3:02 Jianhao Zhang: Amplification of the seasonal cycle in low clouds over the remote southeast Atlantic when biomass-burning aerosol is present [10 minutes + 2 Q/A]

3:14 Pablo Saide and Calvin Howes: Hygroscopicity parameter from LASIC observations and comparison to models [10 minutes + 2 Q/A]

3:38 Michael Diamond, Ann Fridlind/Andrew Ackerman, Jan Kazil: Stratocumulus-to-cumulus transitions in the presence of smoke [15 minutes + 5 Q/A]
• A theme in many presentations was an increasing synergism in the analysis of LASIC datasets with those from aircraft campaigns with similar goals (CLARIFY (UK), ORACLES (NASA)); see Special Issue in ACP/AMT also

• Post-Session Discussion strategizing on how to further develop the stratocumulus to cumulus process modeling studies including better take advantage of the Ascension Island ‘decoupled stratocumulus’ observations.

Todos:
• Planning for a fall virtual working group meeting for the process cloud modeling studies
• LASIC overview paper

ongoing
Copernicus ACP/AMT Special Issue, “New observations and related modelling studies of the aerosol–cloud–climate system in the Southeast Atlantic and southern Africa regions “

Southeast Atlantic session at AMS 2021 annual meeting in aerosol-cloud interactions, lead-convener Michael Diamond UW