ATS/CIRA Colloquium

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Research in Hawaii: From Sea-Salt Aerosols to Hurricanes

Hosted by Michael Bell

3 p.m. Thursday, Oct. 15 via Microsoft Teams

This presentation has something for everyone: instrumentation design, a tropical cyclone, microphysical processes, atmospheric dynamics, mountain meteorology, and if that's not enough, appealing imagery and photography. This is all possible due to a two-part presentation format. In the first part, we'll explore a new method of sampling the sea-salt aerosol size distribution in-situ using a new kite-borne instrument called the mini-GNI. The surprising results show that sea-salt aerosol presence in the coastal atmosphere is more strongly dependent on wave height than wind speed. In the second part of the presentation, we'll explore the wide variety of impacts Hurricane Lane (2018) had on the Hawaiian Islands, everything from fire to rain. Lane is the first documented case of a fire hazard occurring due to red flag warning conditions created by the hurricane environment, and it is also the wettest tropical cyclone ever documented in Hawaii. The hurricane environment combined with the topography of the islands enhanced impacts, brought fire and rain simultaneously, and sheds light on the issue of compounding hazards in a changing climate.

Colloquia page: atmos.colostate.edu/colloquia