

ATS/CIRA Special Seminar

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Visiting ATS from the University of Washington

Precipitation Processes in Cyclones Passing over a Coastal Mountain Range: Recent Results from the Olympic Mountains Experiment (OLYMPEX)

Hosted by Kristen Rasmussen

Tuesday, Sept. 18, 2018

**ATS room 101
Discussion will begin at 2 p.m.**

The Olympic Mountains Experiment (OLYMPEX) was a multi-faceted, international, multi-agency field campaign that took place over the Olympic Mountains in the Pacific Northwest during the fall 2015 and continued through the winter 2016. The goals of OLYMPEX were to provide physical validation and verification of satellite-derived precipitation measurements by the Global Precipitation Measurement (GPM) satellites and to document the precipitation processes in land-falling wintertime cyclones as they approach land and are modified by complex terrain. The data assets of OLYMPEX covered both the windward and lee sides of the Olympic Mountains including an array of rain gauges and disdrometers placed at a variety of elevations, multi-frequency ground-based dual-polarization radars (NASA's S-band NPOL and Ka/Ku-band D3R, NSF's X-band DOW, and Environment Canada's X-band), and three aircraft (NASA's DC-8 and ER-2 and the University of North Dakota's Citation). This presentation summarizes a wide variety of results from these OLYMPEX datasets that document the nature of orographic enhancement of precipitation as storms pass over a coastal mountain range.

Link to seminar page: <https://www.atmos.colostate.edu/colloquia/>