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**Examining Stratocumulus Properties over the Southeast Pacific** ISABEL MCCOY, New Mexico Tech Physics Department, ANDREAS MUHLBAUER, JISAO, University of Washington, ROBERT WOOD, Department of Atmospheric Sciences, University of Washington — Variability in Stratocumulus (Sc) clouds is important to the planetary albedo and radiation budget because they reflect incoming shortwave radiation back to space thereby cooling the atmosphere. Understanding more of their micro and macro physical properties is essential to reduce uncertainty in global climate model prediction and add confidence in future climate predictions. In 2006, Robert Wood and Dennis Hartmann characterized Sc clouds into four main categories based on their morphology and level of mesoscale organization. In this poster, we focus on two of these categories, namely open and closed cells, because of their differing cloud coverage. We use satellite data (from NASA's CloudSat and Goes 10) in combination with the occurrence identifications to develop statistics on the microphysical characteristics for each type of cloud. The results compare successfully to the aircraft data from a recent campaign sampling the same region (the VOCALS Regional Experiment over the Southeast Pacific for Oct. and Nov. of 2008). We find that, when the two cases are contrasted, the open cells have both a higher drizzle rate (at cloud base) and a larger range of rates than the closed. Further, this method of characterizing satellite data to derive pertinent results about Sc clouds is successful. Whether these properties are specific to the Southeast Pacific Sc clouds, and if similar results can be found for expanded time and area, is the topic of future research.

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