

Abstract Submitted
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The First Ten Months of Investigation of Gravity Waves and Temperature Variability Over the Andes JONATHAN PUGMIRE, NEAL CRIDDLE, MICHAEL TAYLOR, DOMINIQUE PAUTET, YUCHENG ZHAO, CENTER FOR ATMOSPHERIC AND SPACE SCIENCES, UTAH STATE UNIVERSITY TEAM — The Andes region is an excellent natural laboratory for investigating gravity wave influences on the Upper Mesospheric and Lower Thermospheric (MLT) dynamics. The instrument suite that comprised the very successful Maui-MALT program was recently re-located to a new Andes Lidar Observatory (ALO) located at Cerro Pachon, Chile to obtain in-depth seasonal measurements of MLT dynamics over the Andes mountains. As part of the instrument set the Utah State University CEDAR Mesospheric Temperature Mapper (MTM) has operated continuously since August 2009 measuring the near infrared OH(6,2) band and the O₂(0,1) Atmospheric band intensity and temperature perturbations. This poster focuses on an analysis of nightly OH temperatures and the observed variability, as well as selected gravity wave events illustrating the high wave activity and its diversity.

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