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Comparison of Satellite and Ground-Based Data on Polar Mesospheric Clouds JODIE TVEDTNES, MICHAEL TAYLOR, Utah State University, MATTHEW DELAND, Science Systems and Applications, Inc., MARK ZALCIK, NLC CAN AM — Data from the Solar Backscatter Ultraviolet (SBUV) instruments on the NOAA polar orbit satellites have been analyzed to determine the presence of Polar Mesospheric Clouds (PMCs) over the North American continent for five consecutive years from 2001 through 2005. PMCs are ice clouds that form near the mesopause (80-85 km) during summer months at high latitudes. From the ground, these clouds can be seen during twilight hours as Noctilucent or "night shinning" Clouds (NLC) and their occurrence has been growing over the last several decades prompting speculation concerning their role in climate change. For this poster we compare reports of displays seen from the ground over the North American continent primarily by observers participating in the Canadian noctilucent cloud observing network CAN AM with the SBUV satellite data. Our primary goal is to investigate the occurrence and spatial extent of the clouds, as well as to search for unusual low latitude events (<50 deg) that have occasionally been seen as far south as Logan, Utah.

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