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## **A New Perspective on the Significance of Light Precipitation from CloudSat**

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Despite recent advances in global precipitation measurement, many contemporary satellite sensors inherently lack the required sensitivity to accurately identify and delineate areas of light rainfall. As a result, the true global distribution of light rainfall, its importance in the global hydrologic cycle, and our ability to model the processes that govern the onset of precipitation remain uncertain. With a growing number of precipitation cross-sections in its quicklook archive and the recent development of a suite of new precipitation retrieval algorithms, the ability of CloudSat's millimeter wavelength Cloud Profiling Radar (CPR) to detect and quantify the intensity of light rainfall has now been established. This presentation will review several key findings that have emerged from early analysis of new CPR-based precipitation products. The results underscore the anticipated role of CloudSat and complementary A-Train observations for quantifying the contribution of light rainfall to the global hydrologic cycle and better understanding the factors that may modify its distribution in a changing climate.