## The DISCOVER passive microwave data available for climate study

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Satellite microwave radiometers have been operating since 1987 in polar orbits around the earth on a succession of DMSP satellites. When consistently processed and inter-calibrated to a precision of 0.1K, the data from these instruments result in a long-term high-quality ocean climate data set of surface winds, atmospheric water vapor, cloud liquid water, rain rates, and sea surface temperatures. The NASA MEaSURES DISCOVER project funds the intercalibration, consistent processing, validation, distribution and support of these satellite radiometer ocean Earth Science Data and Climate Records. This poster will present the DISCOVER microwave climate data set, outline the many steps required to make the DISCOVER products, and highlight the challenges to making CDRs such as geolocation, intersatellite differences, instrumental drifts, antenna surface complications, and product design. Examples of the application of these data to climate studies will be provided.