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Dr. Coy has been a part of the Global Modeling and Assimilation Office (GMAO) at NASA Goddard Space Flight Center (GSFC) since August 2012. Before that time he worked in the Upper Atmospheric Physics Branch of the Naval Research Laboratory studying the global assimilation of new data types with a focus on the improvement of middle atmosphere data assimilation. Past experience also includes teaching meteorology (Saint Louis University) at both the undergraduate and graduate level. His research interests have directly involved a wide variety of data types, including mesospheric Space Shuttle re-entry data, rocket soundings, and radar based gravity wave observations (while at the University of Alaska and NOAA). He has analyzed winds, temperatures, and constituents from global circulation models, transport models, and data assimilation products, with emphasis on the middle atmosphere circulation, planetary waves, tides, and inertia gravity waves. His current work includes data assimilation and forecasting for the stratosphere, middle atmosphere dynamics, including stratospheric sudden warming events, and the analysis of the Quasi-Biennial Oscillation (QBO) as found in the NASA GMAO products: global re-analyses, near-real time forecast systems, and seasonal prediction systems, as well as prototype development systems. Dr. Coy has authored or co-authored more than 40 research articles that have been published in peer-reviewed scientific journals.