Will
McCarty
NASA Global Modeling and Assimilation Office
Ricardo Todling, NASA Global Modeling and Assimilation Office
Nikki Prive, NASA Global Modeling and Assimilation Office
Mohar Chattopadhyay, NASA Global Modeling and Assimilation Office
Gary Partyka, NASA Global Modeling and Assimilation Office
Ronald Gelaro, NASA Global Modeling and Assimilation Office
Oral
Recent advances at the Global Modeling and Assimilation Office (GMAO) have focused on the assimilation of additional radio occultation (RO) bending angle measurements in the Goddard Earth Observing System (GEOS) atmospheric data assimilation system. These efforts targeted the GEOS near-real-time forward processing system and may serve as the backbone for the next atmospheric reanalysis of the 21st century. In the most recent system upgrade, the assimilated RO counts increased by a factor of four with the addition of the COSMIC-2 constellation. Furthermore, with the advent of near-real-time commercial RO measurements, even more growth is expected. This presentation will quantify the impacts of new public and commercially-sourced data available to the GEOS system. The RO data assimilated in these experiments are from both the routinely acquired operational data streams as well as those from Spire Global, Inc. available via the Commercial SmallSat Data Acquisition (CSDA) Program.
Presentation file
mccarty-presentation.pdf
Meeting name
8th International Radio Occultation Working Group Meeting - IROWG-8
Download to PDF