

Observations and Data Assimilation

Observations and assimilation of atmospheric constituents

Atmospheric constituents, including aerosols and trace gases, play critical roles in weather, air-quality, and climate. Routine assimilation of aerosols, trace gases, and terrestrial carbon and ecosystems are emerging as data become more plentiful and the imperative for the synthesis of observations with models becomes more obvious (e.g., the impact of aerosols on weather and air quality prediction, the feedback between the physical and biogeochemical components of the Earth system). This session of the World Weather Open Science Conference focuses on the provision of accurate measurements of atmospheric constituents and their assimilation into numerical models for chemical weather, seasonal and climate predictions. Abstracts are sought for presentations that address all aspects of atmospheric constituent measurements and data assimilation into global and regional models.