Observations of the Climate System

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Abstract

Observations of the climate system are critical for model validation and initialization, and also for monitoring in case of "surprises." Presently, we are still benefiting from data provided by the international fleet of Earth Observing satellites launched from the late 1990's onwards as well as from the longer-term record provided by the operational meteorological satellites. However, we could be facing some data gaps in the near term in some critical areas. In situ measurements continue to be vital and, while they may be augmented by future satellite measurements, will continue to be irreplaceable.