

Jeffrey L. Privette Deputy Director, Center for Weather and Climate National Centers for Environmental Information

Revealing the Past, Interpreting the Present, and Informing the Future

Climate Monitoring from Space





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Climate Monitoring

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Observation Needs

Architecture

Coordination ECV Inventory

Case studies

Contact

Climate Monitoring from Space

Satellite data play a pivotal role in observing variability and change in the Earth system. Significant progress has been made in observing the Earth globally with higher temporal and spatial resolutions, which before the advent of satellites was all but impossible. With satellite observations of the Earth, we have been able to construct global views of many variables across the atmospheric, oceanic and terrestrial domains, including ozone, cloud cover, precipitation, aerosol optical depth, sea surface topography, fluctuation in polar ice mass, and changes to the land surface. Indeed, with some satellite observations now spanning more than 40 years, this type of information for climate monitoring purposes is now invaluable.

In situ observations play an important role as well. Existing *in situ* networks provide observations of parameters that are difficult and/or impossible to measure from space. They also serve as validation for satellite observations, can be used in joint analyses with satellite data, and in specific cases (e.g. optical measurements of land and ocean surfaces) provide a means of vicariously calibrating the space-based observations. Therefore, the combination of satellite and ground-based observations is essential. Whilst recognising the importance of integrated observing systems, the initial focus of this website lies with the space-based component used for climate monitoring.

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Admin Access

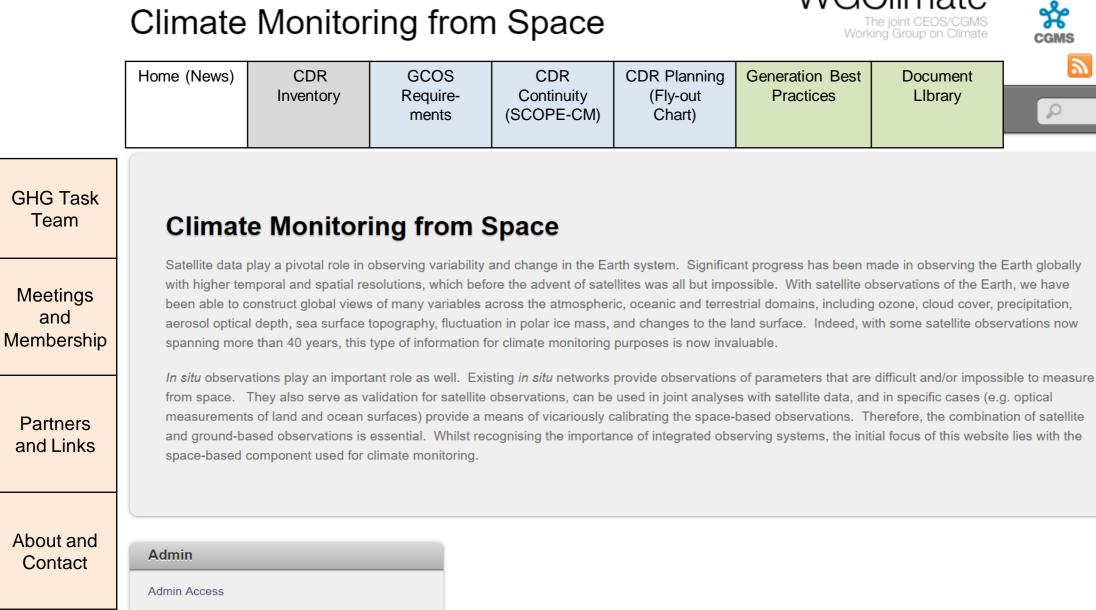
Key WGC Functions and Features per ToR

- Highly abbreviated version
 - Comprehensive view of available CDRs [Inventory portal]
 - Creation of the conditions for delivering further CDRs [SCM]
 - Optimisation of future missions to expand CDRs [CDR fly-out charts]

Key WGC Functions and Features per ToR

- CEOS Requirements
- Best Practices in CDR Generation
- Resources (document library)
- Partners
- About
- Meetings and Materials
- News

Climate Monitoring from Space



GHG Task Team

Meetings

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Partners

and Links

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