

Satellite observations

Polar orbiting satellites provide regular data coverage of all Arctic land and ocean areas. The data are important both for long-term climate observations and in daily, operational monitoring providing near real-time data for weather and ice forecasting. The data are used to retrieve a number of environmental variables, e.g. of sea ice, snow, glacier, hydrology, vegetation, permafrost, biodiversity and more. The Copernicus programme with the series of Sentinel satellites and other polar orbiting satellites represent the most extensive contribution to the Arctic observing systems. However, the satellite data require in situ data for algorithm development and validation of the data products.