

Remote Sensing of Polar Ice

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A review is undertaken of some of the recent key achievements in the application of satellite remote sensing in the study of polar ice. The talk will be illustrated with results of exploitation of data in high-latitude process studies and studies of change in land and marine ice in response to climate variability over the satellite era (1970s until present). Examples will be treated in the context of the principal challenge to understand ice mass balance, and its relationship to sea-level and the hydrological cycle. Several case study examples demonstrate how global data from a number of critical satellite sources can now be combined to address regional patterns in ice sheet and sea-ice variations and relationships between the latter and recognised modes of climate variability.

