

Arctic Satellite Remote Sensing Real-Time and Archived Data for Environmental and Climate Research and Operations

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The Geographic Information Network of Alaska (GINA) at the University of Alaska Fairbanks' (UAF) International Arctic Research Center receives, archives, and distributes in near-real-time satellite data for the Arctic region. The millions of images and data products stored at GINA provide an important tool for long-term environmental studies and as a baseline for climate change detection. GINA operates its own X-band receiving station for MODIS data and the newly launched US NOAA Suomi NPP satellite. MODIS and NPP VIIRS sensor data are processed and delivered in near-real-time and provide valuable support for wildfire, volcanic eruption, sea ice, and ship operations. GINA partners with the NOAA/NESDIS Fairbanks Command and Data Acquisition Station to receive MODIS, AVHRR, DMSP, Landsat, and other satellite data. Landsat 8 and GOES-R data will be captured and processed in the future under this partnership, as well. This presentation will describe environmental and imagery satellite data sets available from the University of Alaska GINA program. The presentation will also highlight ongoing wildfire, sea ice, volcano, and hydrology research outcomes using this data that have been achieved by Japanese and American researchers working together at the UAF International Arctic Research Center.

キーワード: arctic, remote sensing, Alaska, near-real-time data, environmental research, climate research

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