

## **National Snow and Ice Data Center (NSIDC) Presents the State of the Cryosphere**

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The National Snow and Ice Data Center (NSIDC) has enhanced viewing capabilities for a select number of data sets through Google Earth, via the Keyhole Markup Language (KML). This unique “State of the Cryosphere” provides an opportunity for public outreach and environmental monitoring. Users can not only view static data sets, but also dynamic data sets that are updated on a consistent basis using remotely sensed data from the Defense Meteorological Satellite Program (DMSP) F13 Special Sensor Microwave/Imager (SSM/I). Since snow and ice related data sets are integrated into the application, the exploration of data sets is encouraged. Scientists may discover significant usefulness by having cryospheric data from NSIDC placed in a spatial context. For example, a glaciologist interested in researching specific glaciers will find our entire Online Glacier Photograph Database (including almost 3,000 glacier images) available. In addition, a select number of glacier pairs are represented, which can be useful for comparing glacier terminus change over time. By depicting the images through Google Earth, users can visually compare the spatial relationship among glaciers. The “State of the Cryosphere” demonstrates one way to integrate cryospheric data by viewing both static and dynamic, near real-time snow and ice data through a GIS application.