



## Satellite image atlas of glaciers of the world

**J. Ferrigno** (1), and R. Williams (2)

(1) US Geological, Virginia, USA (2) US Geological Survey, Massachusetts, USA  
(jferrigno@usgs.gov / Phone: +1 703 648 6360)

In 1978, the USGS began an international effort to prepare an 11-chapter USGS Professional Paper 1386, "Satellite Image Atlas of Glaciers of the World" to provide an accurate regional inventory of the areal extent of the glaciers of the earth during the relatively narrow time interval of 1972-1981 using satellite images and other data sources. Optimum satellite images were distributed to a team of 70 scientists, representing 25 nations and 45 institutions, to describe either a geographic area (chapters B-K) or a glaciological topic (included in Chapter A). The scientists used Landsat 1, 2, and 3 multispectral scanner (MSS) images and Landsat 2 and 3 return beam vidicon (RBV) images to inventory the areal occurrence of glacier ice within the boundaries of the spacecrafts' coverage (between about 82° north and south latitudes). Some later contributors also used Landsat 4 and 5 MSS and Thematic Mapper, Landsat 7 Enhanced Thematic Mapper Plus (ETM+), other satellite images, and later data. In addition to analyzing images of a specific geographic area, each author summarized up-to-date information about the glaciers within each area and compared their present-day distribution with reliable historical information (from published maps, reports, and photographs) about their past extent. As the publication reaches completion, we here give a comprehensive worldwide review of the status of the cryosphere during the decade of the 1970s.