



Over 9,000 Historical Photographs Added to the Glacier Photograph Collection Database

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The Glacier Photograph Collection (GPC) is a database of photographs, both scanned from a physical object and ones that originated in digital form, of glaciers from around the world. Some images date back to the mid-19th century and provide an historical reference for glacier extent. The GPC is a component of the Global Terrestrial Network for Glaciers (GTN-G).

In early 2019, the U.S. National Snow and Ice Data Center (NSIDC) and the University of Colorado Boulder Libraries added over 9,000 newly scanned historical images to the database ranging in years from 1883 to 2012. This increased the size of the original collection by 40%, bringing the total to approximately 25,000 glacier images. The photos were acquired for a variety of reasons and by a variety of photographers, both amateur and professional. Some notable photographers in the collection are pioneer glaciologist, William O. Field; renowned photographer and glaciologist, Austin Post; and American geophysicist, Harry Fielding Reid. While the images from the whole collection are not part of a systematic monitoring program, many in the field shared their resources and built upon each other's work. Often times, the scientists were returning to another scientist's photo stations to make observations. For example, W.O. Field revisited photo stations mapped by Harry F. Reid and the International Boundary Commission of 1893-1907. All of W.O. Field's expeditions were based on repeat photography, and he documented the same areas from 1931 to 1982. There are roughly 3,000 photographs from Field in the collection showcasing the changes in glacier behavior and surrounding landscape. Beginning in the late 1970s, Bruce Molnia returned to these same stations to document changes. Some glaciers have many, many photos, while for others, there are just a few. For example, Muir Glacier in Alaska has approximately 500 images in the database whereas Talefre Glacier in France has only three.

These new images were created by scanning the large analog collection of photographic prints of glaciers now held in the University of Colorado's archive, and then researching and adding standard metadata for each image. The addition was made possible through a grant from the Council on Library and Information Resources. While most glaciologists will want to access the GPC through the GTN-G or NSIDC, historians, artists, and other disciplines may want to access the images through the University of Colorado Libraries' interface.

In spite of the variability in spatial and temporal coverage and in photo quality, the photos are an invaluable resource for understanding and communicating the extent of changes in the glacier landscape. Provided with each image is extensive standard metadata, and an online search interface makes it possible to quickly browse and obtain the images. In addition, images are cross referenced to the Global Land Ice Measurements from Space (GLIMS) glacier database. We provide the photos in a way that makes them easy for scientists to quickly search and assess whether or not they are useful for their purposes.