

The NextGEOSS Cold Region pilot: Improved discoverability and access to polar data

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Abstract

GEO Cold Regions coordinates global efforts to provide Earth Observation (EO) products and services to science, decision- and policy-makers with a vested interest in the cryosphere (in particular) and the environment (in general) of polar regions and mountain areas around the world. The NextGEOSS Cold Regions Pilot focuses on three areas: (1) the Arctic/Svalbard region, (2) Antarctica, and (3) the Himalayan glaciers, linking together satellite and in situ data from the targeted regions, including the atmospheric, marine, and terrestrial domains, and making them available in the NextGEOSS Data Hub and the NextGEOSS Cold Regions Community Portal. The pilot liaise with ongoing initiatives such as SIOS, GEOCRI, WMO GCW, as well as national programs in Antarctica. The products resulting from the Cold Regions pilot can be used to develop Information Services for the Cold Regions Initiative, using the NextGEOSS system and making use of existing interoperability standards. This presentation will introduce the first version of the Cold Regions Community Portal, aiming to make polar data relevant for Cold Regions more easily discoverable and accessible for users.

NextGEOSS Cold Regions Community Portal

The NextGEOSS Cold Regions Community Portal provides access to a wide range of polar data from satellite, in situ and models. It harvests metadata from a series of data providers and provides a joint entry point to data originating from all of these sources. The users can search for free text, geographic area, time periods, provider's name, and multiple other criteria (Figure 1). A summary of the metadata for all datasets fulfilling these criteria is presented, allowing the user to drill down further into the details of particular datasets. Having identified a dataset of interest, a user can then follow the data access links to retrieve the data.

In addition to data search, the Community Portal provides descriptions of a selection of the products offered (Figure 2) including plots of product examples and links to further information. This aims to inform the users further to enable them to decide whether various products can be useful for a specific purpose. The Community Portal will also link to educational material and webinars on other relevant topics and products for the Cold Regions Initiative Community, including resources on how to use the NextGEOSS Data Hub and Platform.

The Community Portal has been established by means of a portal framework developed by the Norwegian Meteorological Institute. This framework is used in several other data portals, e.g. in the the SIOS Data Management System and the YOPP Data Portal, to harvest metadata from distributed data centres and harmonising the metadata into a common structure. The aim is to customise this framework to harvest metadata for data of relevance to Cold Regions from the NextGEOSS Data Hub into the Community Portal.

