PGC maintains a list of external (non-PGC) polar GIS data resources.

Overview

PGC does not directly publish many polar GIS datasets. However, there are many GIS resources available.

The list below is non-exhaustive, but is a curated list of repositories and datasets that PGC uses and recommends. PGC does not provide support for using any of these datasets.

> If you are a polar GIS data provider and would like to add your data to this list, we would love to add you! Just send us a message with details.

GIS Data

Antarctic Digital Database

Vector and raster GIS datasets for Antarctica including coastlines, rock outcrops, contours, hillshades, and more. Maintained by the British Antarctic Survey.

Portal URL: http://www.add.scar.org

Quantarctica

Hundreds of vector and raster GIS and scientific datasets for Antarctica, developed for an online and offline use using QGIS software. Quantarctica version 3.2 was released in January 2021. For researchers who want to get started with geospatial data of Antarctica, this is a great resource. Quantarctica is maintained by the Norwegian Polar Institute.

Portal URL: https://www.scar.org/resources/quantarctica

QGreenland

Hundreds of vector and raster GIS and scientific datasets for Greenland, developed for an online and offline use using QGIS sotfware. QGreenland version 2.0 was released in March 2022. For researchers who want to get started with geospatial data of Greenland, this is a great resource. QGreenland is maintained by the National Snow and Ice Data Center.

Portal URL: https://qgreenland.org/download

SCAR Composite Gazetteer of Antarctica

Antarctic placename gazetteer including named features from SCAR countries. Maintained by Programma Nazionale di Ricerche in Antartide (Italy).

Portal URL: https://data.aad.gov.au/aadc/gaz/scar

SCAR Map Catalogue

Historic and contemporary Antarctic maps. Maintained by the Australian Antarctic Division.

Portal URL: https://data.aad.gov.au/aadc/mapcat/search_mapcat.cfm

United States Antarctic Place Names

Official United States Antarctic place names from the U.S. Board on Geographic Names. Note, these names are ingested into the SCAR Composite Gazetteer of Antarctica.

Portal URL: https://geonames.usgs.gov

National Geospatial-Intelligence Agency Arctic Open Data

Publicly released datasets of the Arctic including aeronautical, boundaries, communications, elevation, hydrography, transportation, and natural resources.

Portal URL: http://arctic-nga.opendata.arcgis.com

Arctic Research Mapping Application (ARMAP)

Arctic project locations and ship tracks for National Science Foundation-funded research.

Portal URL: http://armap.org

Natural Resources Canada

Various geospatial datasets featured in CanVec. Maintained by the Government of Canada.

Portal URL: http://www.nrcan.gc.ca/earth-sciences/geography/topographic-information/free-data-geogratis/11042

Petrochron antarctica

Relational database containing petrological, geochemical and geochronological datasets along with computed rock properties from sampled rocks across Antarctica Supported by the SCAR Geosciences Group, the INSTANT, SERCE, and PAIS Scientific Research Programmes and the GHF subgroup.

Portal   URL:
https://unisthaus.maps.arcgis.com/apps/webappviewer/index.html?id=41510d1424d742cc8bb7a0bade72dd9b

GEomap

GeoMAP, Geological Mapping of Antarctica, was launched by the Scientific Committee on Antarctic Research (SCAR) to advance geoscientific exploration in Antarctica by combining geological, geomorphological, and geophysical data into an interactive web map.

Portal URL: https://www.scar.org/ssg/geosciences/geomap/

google earth engine

Google Earth Engine combines a multi-petabyte catalog of satellite imagery and geospatial datasets with planetary-scale analysis capabilities. Scientists, researchers, and developers use Earth Engine to detect changes, map trends, and quantify differences on the Earth's surface. Earth Engine is now available for commercial use, and remains free for academic and research use.

Portal URL: https://earthengine.google.com/

ice logistics portal

Ice Logistics Portal is a global ice charts and sea ice information portal supported by Polar View, ESA, and BAS. Ice charts and imagery are available, including data for low bandwidth environments.

Portal URL: https://www.icelogistics.info/