



Geographic Information Systems (GIS)

NASA Earth science data provide a wealth of information to aid in our understanding of Earth's processes. Our Earth Observation data are *freely and openly available* to anyone. We provide data through geospatial services, maps and applications through online Geographic Information Systems (GIS) platforms. Our goal is to make sure our data are discoverable, easily accessible, and usable to the broader community, specifically those employing GIS technology.



Learn

earthdata.nasa.gov/learn/gis
earthdata.nasa.gov/learn/backgrounders/gis

Jump in at our central GIS page connecting you to all of the relevant resources, or start off with the GIS Backgrounder, which provides an introduction to GIS with an Earth observation lens.

Discover and Explore

worldview.earthdata.nasa.gov
nasa.maps.arcgis.com

NASA Worldview is an imagery mapping and visualization tool with the capability to interactively browse more than 1,000 full-resolution satellite imagery layers. Many of the available imagery layers span several years and are updated within three hours of observation. You can search and add layers via thematic areas or science disciplines. NASA also utilizes Esri's ArcGIS Online: a collaborative web GIS that allows users to create and share data, layers, maps, applications, and analytic products. A multitude of public content is available, ranging from web services, dashboards, notebooks, and StoryMaps. Our gallery includes thematic content developed collaboratively by our data centers.

Access

search.earthdata.nasa.gov
appears.earthdatacloud.nasa.gov

Earthdata Search provides the means for discovery, filtering, visualization, and access across all of NASA's Earth science data holdings. This includes more than 33,000 Earth observation data collections freely available for download. It allows you to search by any topic, collection, or place name. The Application for Extracting and Exploring Analysis Ready Samples (AppEEARS) offers a simple and efficient way to access and transform NASA data. AppEEARS enables users to subset geospatial datasets using spatial, temporal, and band/layer parameters. Users can also reproject data and export to GIS-ready file formats such as GeoTIFF.

Use

earthdata.nasa.gov/learn/pathfinders/gis-pathfinder

The GIS Data Pathfinder provides a guided walkthrough of how to use NASA data and services in GIS tools. This resource provides links to the tools from which data can be visualized, subset, and downloaded in different file formats, as well as a brief tutorial on using tools to access and use NASA geospatial web services. [NASA's Earthdata YouTube channel](#) also includes a GIS Playlist that showcases relevant webinars and demonstrations.

Connect

forum.earthdata.nasa.gov

Earthdata Forum is a new tool developed to engage subject matter experts from NASA to discuss general questions, research needs, and data applications. Here you have the capability to search by discipline, major projects, and services/usage, which includes a tag for "GIS Tools". Users can query how to access, view, and interpret the data, alleviating time and energy spent working with complex data and focusing instead on the research and analysis aspects of science.

