



NASA Earthdata
Michele Thornton



NASA Earthdata Introduction



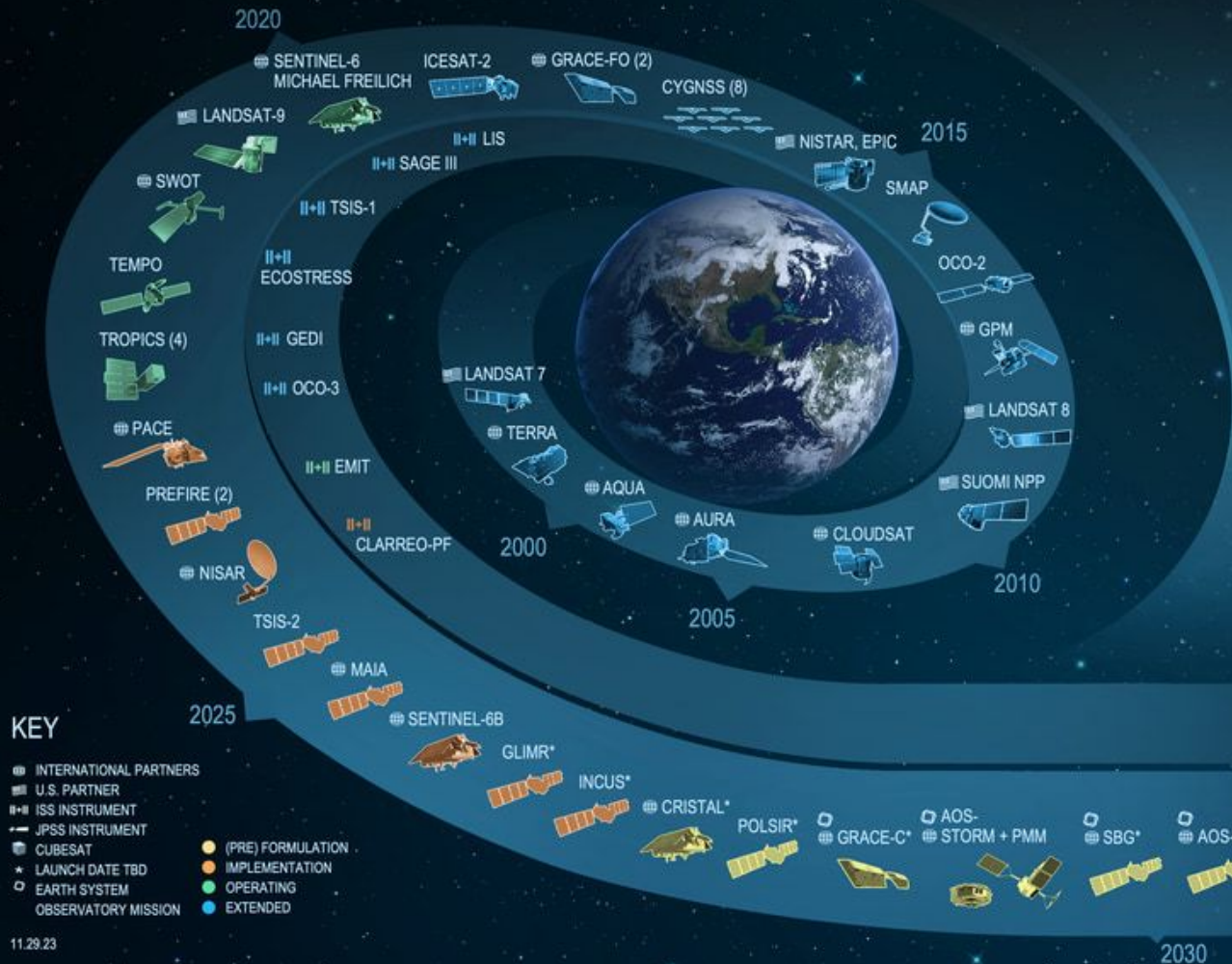
NASA

EARTHDATA

earthdata.nasa.gov



EARTH FLEET



INVEST/CUBESATS

- NACHOS 2022
- CTIM 2022
- NACHOS-2 2022
- MURI-FD 2023
- SNOOPI* 2024
- HYTI* 2024
- ARGOS* 2024

JPSS INSTRUMENTS

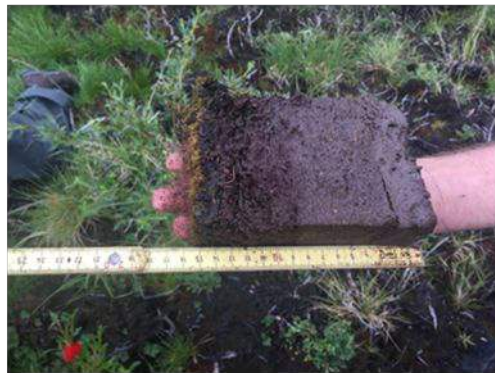
- OMPS-LIMB 2022
- LIBERA 2027
- OMPS-LIMB 2027
- OMPS-LIMB 2032

ISS INSTRUMENTS

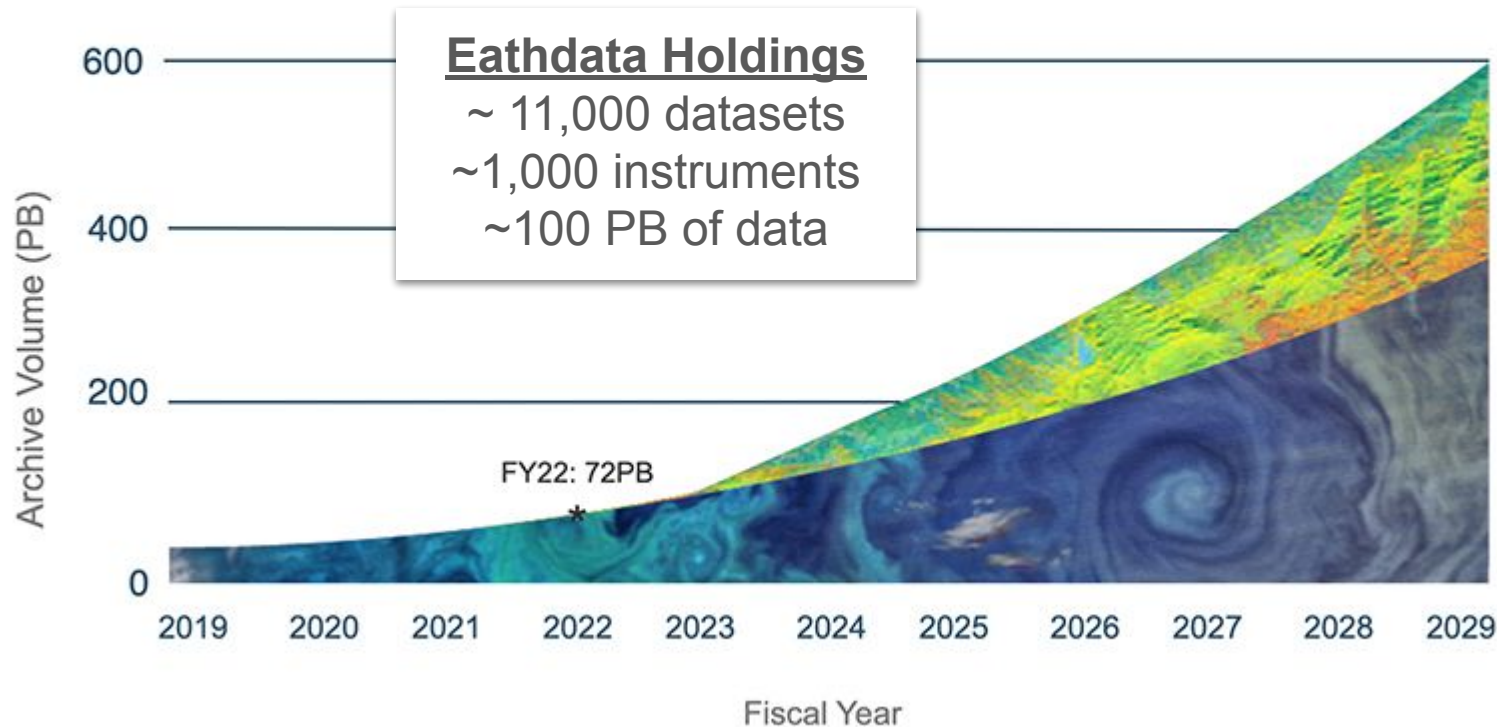
MISSIONS

KEY

- INTERNATIONAL PARTNERS
- U.S. PARTNER
- ISS INSTRUMENT
- JPSS INSTRUMENT
- CUBESAT
- LAUNCH DATE TBD
- EARTH SYSTEM
- OBSERVATORY MISSION
- (PRE) FORMULATION
- IMPLEMENTATION
- OPERATING
- EXTENDED



Earth Science Data Archive Growth Projection



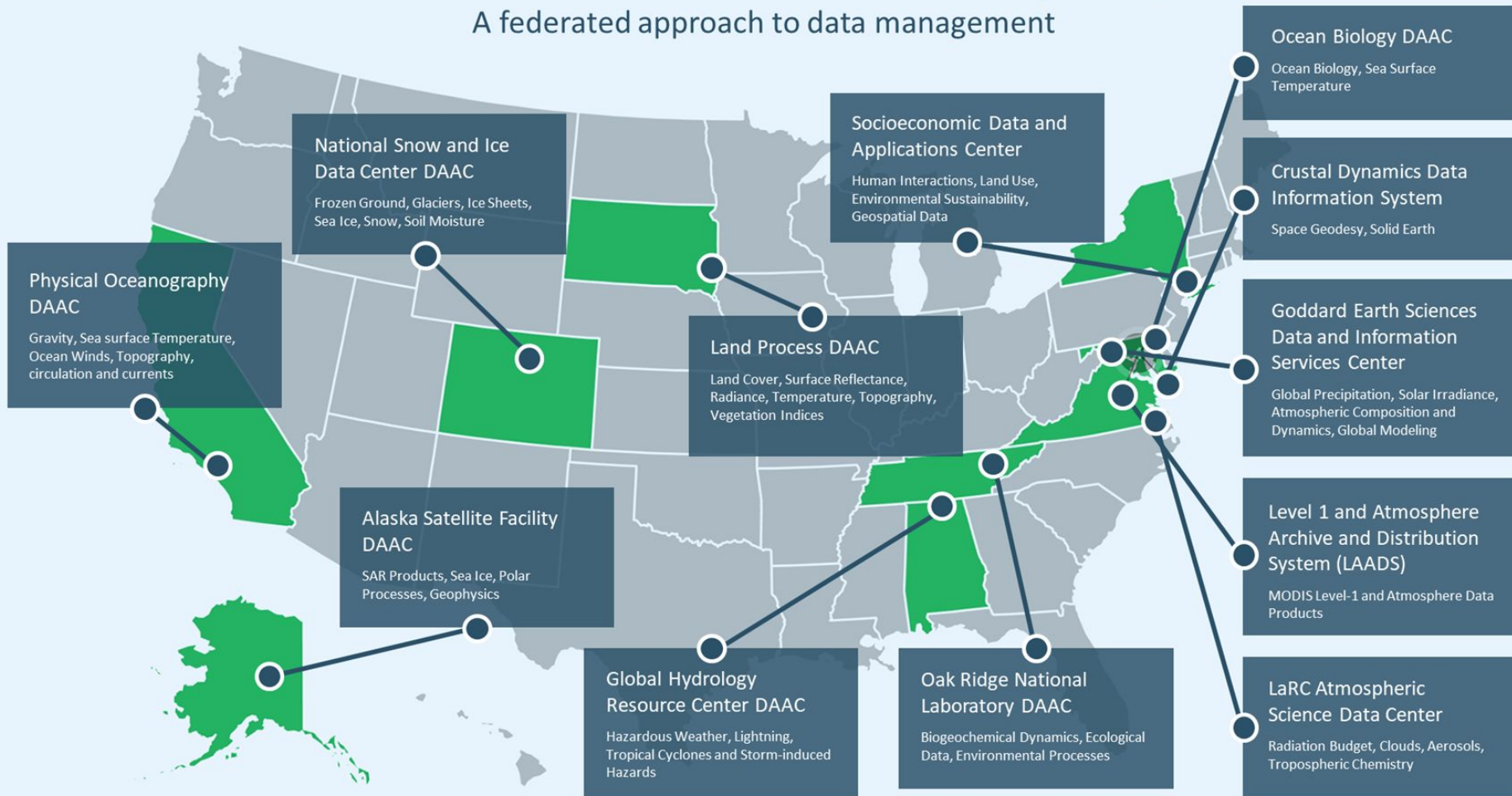
NASA Earthdata Introduction



EARTH DATA

Earth Science Data and Information
System (ESDIS) Project

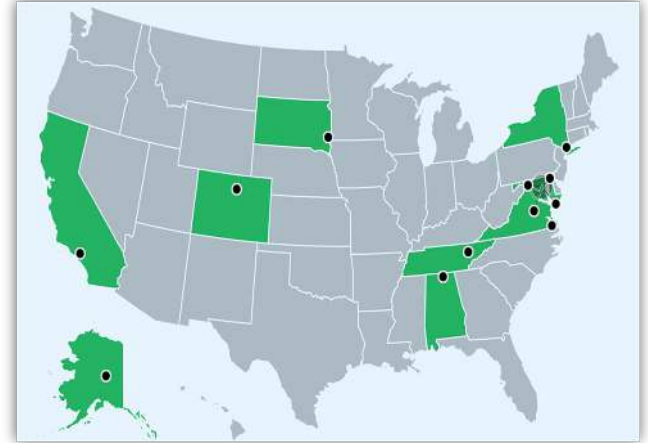
NASA's Distributed Active Archive Centers (DAACs): A federated approach to data management



NASA Earthdata Introduction - DAACs

Distributed System

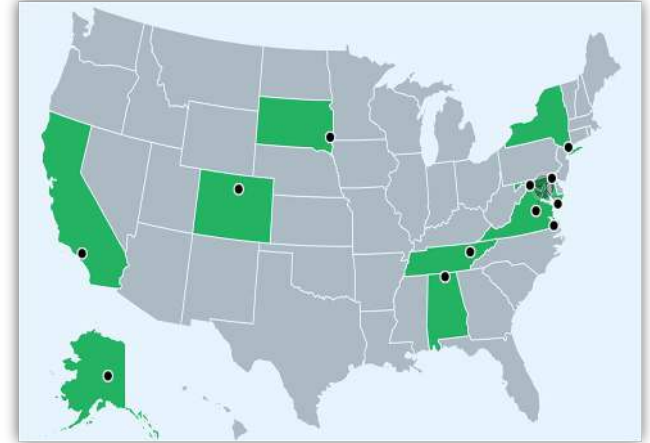
- **Focus on support** of data producers and data users
- Domain/discipline expertise
- Varied data formats have diverse standardizing protocols and metadata
- NASA Earthdata data are archived **through** DAACs



NASA Earthdata Introduction - DAACs

DAACs

- Standardize data/formats
- Create User Guides
- Provide collection and file-level metadata
 - Common Metadata Repository (CMR)
- Publish data to NASA Earthdata
- Generate dataset Citations/DOI's



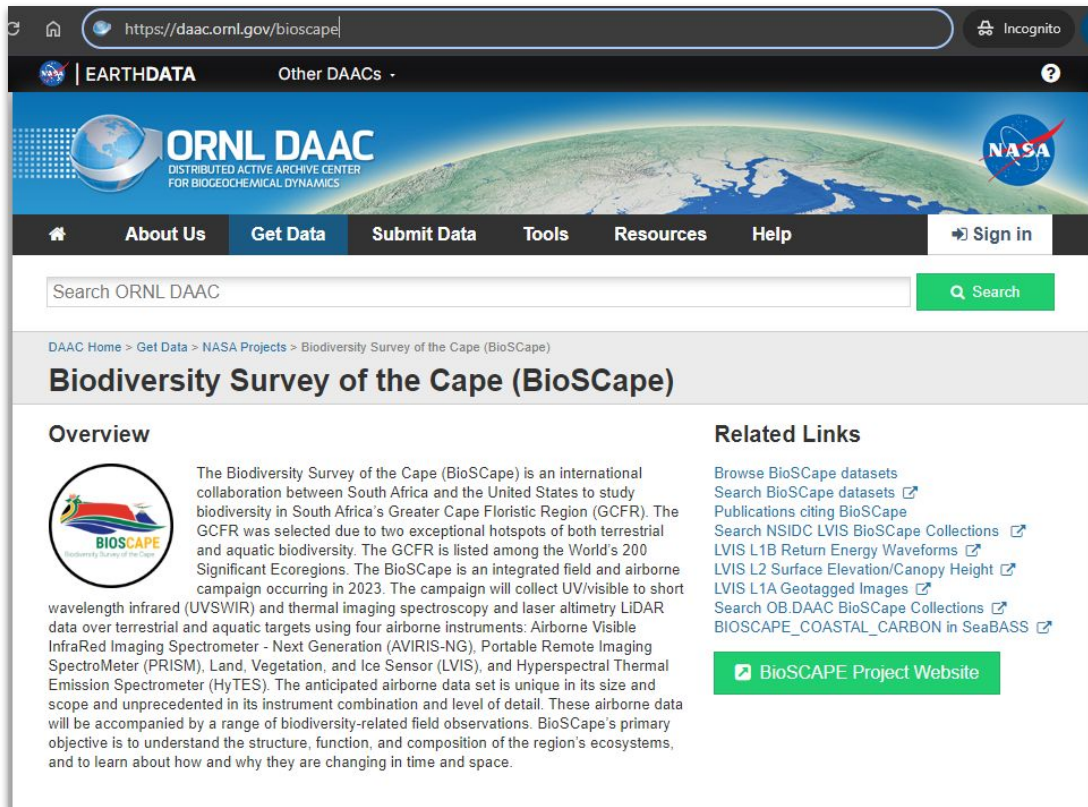
NASA Earthdata Introduction – ORNL DAAC



The screenshot shows the ORNL DAAC website home page. At the top, there is a navigation bar with 'EARTHDATA' and 'Other DAACs'. Below this is a search bar for 'Search ORNL DAAC'. The main content area features a large image of a satellite map of the Mississippi River Delta with a colorful overlay representing ecogeomorphic cell products. A caption below the image reads: 'Ecogeomorphic Cell Products across the MRD, LA, USA, 2021. This product delineates the Mississippi River Delta (MRD) landscape into distinct small contiguous areas of land with similar ecological and geomorphological characteristics.'

<https://daac.ornl.gov>

<https://daac.ornl.gov/bioscape>



The screenshot shows the ORNL DAAC website page for the Biodiversity Survey of the Cape (BioSCAPE). The page title is 'Biodiversity Survey of the Cape (BioSCAPE)'. The main content area is divided into two columns: 'Overview' and 'Related Links'. The 'Overview' section contains a circular logo for BioSCAPE and a paragraph of text describing the project. The 'Related Links' section lists several links to datasets and publications. A green button at the bottom right of the page reads 'BioSCAPE Project Website'.

Overview

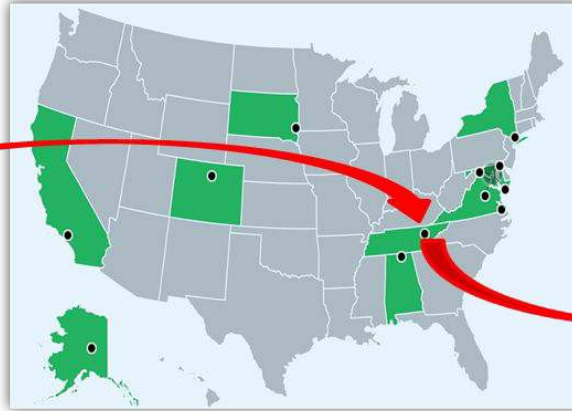
The Biodiversity Survey of the Cape (BioSCAPE) is an international collaboration between South Africa and the United States to study biodiversity in South Africa's Greater Cape Floristic Region (GCFR). The GCFR was selected due to two exceptional hotspots of both terrestrial and aquatic biodiversity. The GCFR is listed among the World's 200 Significant Ecoregions. The BioSCAPE is an integrated field and airborne campaign occurring in 2023. The campaign will collect UV/visible to short wavelength infrared (UVSWIR) and thermal imaging spectroscopy and laser altimetry LiDAR data over terrestrial and aquatic targets using four airborne instruments: Airborne Visible InfraRed Imaging Spectrometer - Next Generation (AVIRIS-NG), Portable Remote Imaging SpectroMeter (PRISM), Land, Vegetation, and Ice Sensor (LVIS), and Hyperspectral Thermal Emission Spectrometer (HyTES). The anticipated airborne data set is unique in its size and scope and unprecedented in its instrument combination and level of detail. These airborne data will be accompanied by a range of biodiversity-related field observations. BioSCAPE's primary objective is to understand the structure, function, and composition of the region's ecosystems, and to learn about how and why they are changing in time and space.

Related Links

- [Browse BioSCAPE datasets](#)
- [Search BioSCAPE datasets](#)
- [Publications citing BioSCAPE](#)
- [Search NSIDC LVIS BioSCAPE Collections](#)
- [LVIS L1B Return Energy Waveforms](#)
- [LVIS L2 Surface Elevation/Canopy Height](#)
- [LVIS L1A Geotagged Images](#)
- [Search OB.DAAC BioSCAPE Collections](#)
- [BIOSCAPE_COASTAL_CARBON in SeaBASS](#)

[BioSCAPE Project Website](#)

NASA Earthdata Introduction - DAACs



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 **EARTHDATA**
OPEN ACCESS FOR OPEN SCIENCE

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Your Gateway to NASA Earth Observation Data

The Earth Science Data Systems (ESDS) Program provides full and open access to NASA's collection of Earth science data for understanding and protecting our home planet. Begin your Earthdata exploration by clicking on any of the discipline icons above.

[Get Started](#) [Find Data](#) [Use Data](#)



Data

Find and use NASA Earth science data fully, openly, and without restrictions.

Get Started

Find Data

Use Data

Earthdata Search

Data Tools

Data Recipes

Worldview

Worldview Image of the Week

Worldview Snapshots

Global Imagery Browse Services (GIBS)

Common Metadata Repository (CMR)

Land, Atmosphere Near Real-Time Data (LANCE)

Fire Information for Resource Management System (FIRMS)

Active Fire Data

Fire Email Alerts

Fire Map (Global)

Fire Map (US/Canada)

NASA Earthdata Introduction

Earthdata Search (search.earthdata.nasa.gov)

- Unified search and discovery interface for all of NASA's Earth Science data
- Powered by the NASA Common Metadata Repository (CMR) and CMR API

The screenshot displays the NASA Earthdata Search interface. On the left, there are filters for Spatial (Africa), Temporal (2023-01-01 to 2023-12-31), and Granules (Africa granules on map). The main panel shows search results for 'ECOSTRESS Land Surface Temperature and Foliosity Daily L3 Global / 0m V001', displaying a grid of granule thumbnails with their respective IDs and dates. On the right, a satellite map of Africa is shown with a green polygon search area over the southern part of the continent, labeled 'polygon search' with an arrow pointing to it.