SOURCE COOPERATIVE

AUSPATIOUS

SHARES THROUGH SOURCE

INTRODUCING AUSPATIOUS:

Auspatious specialises in supporting geospatial technology projects, providing software development, data wrangling, and technical leadership. Find out more about Auspatious.com

CLOUD OPTIMIZING DATASETS:

One project spearheaded by Auspatious was to convert an existing dataset into a cloud native format, the project was in collaboration with Australian Antarctic Division, and aimed to make the Group for High Resolution Sea Surface Temperature (GHRSST) Multi-scale Ultra-high Resolution (MUR) dataset easier to access. This is a daily dataset, which is accessible from NASA as NetCDF files, which work fine for single-date access, but if you want to explore a year or decade or longer, then the data requires downloading. Auspatious converted the individual measurements from each day to cloud optimised geotiffs and created a GeoParquet STAC index file to them. This optimization makes it possible to access all the data and create a lazy-loaded Xarray using Python, which can then be subset and analysed in seconds using distributed computing tools like Dask.

SHARING THROUGH SOURCE: KEY BENEFITS AND IMPACT

- Source provided Auspatious a scalable data store that is discoverable, low-cost, and designed to support many types of user expertise.

AUSPATIOUS DATASETS ON SOURCE:

- Documentation and access on Source:
  https://source.coop/repositories/ausantarctic/ghrsst-mur-v2/description
- For additional reference: GitHub code: github.com/auspatious/ghrsst-cogger

ABOUT SOURCE COOPERATIVE

Source Cooperative is a data publishing utility that allows trusted organizations and individuals to share data using standard HTTP methods. Find out more at https://source.coop/

"I value Source Cooperative as a scalable, practically unlimited in size, data store for open data. I could store the data in a commercial account that I manage, but I prefer using a well-known, discoverable space for storage. I like using Source when it's for a broader public good, one which provides public usefulness.

For example, I've downloaded a high resolution elevation model for Tasmania and converted it to a nice COG and it just made sense for me to store it and document access on Source because then everyone can get value out of its simpler access. I appreciate that Source truly supports the broader public good to catalyze collaboration, sharing, and building on existing data."

Alex Leith, Auspatious Founder