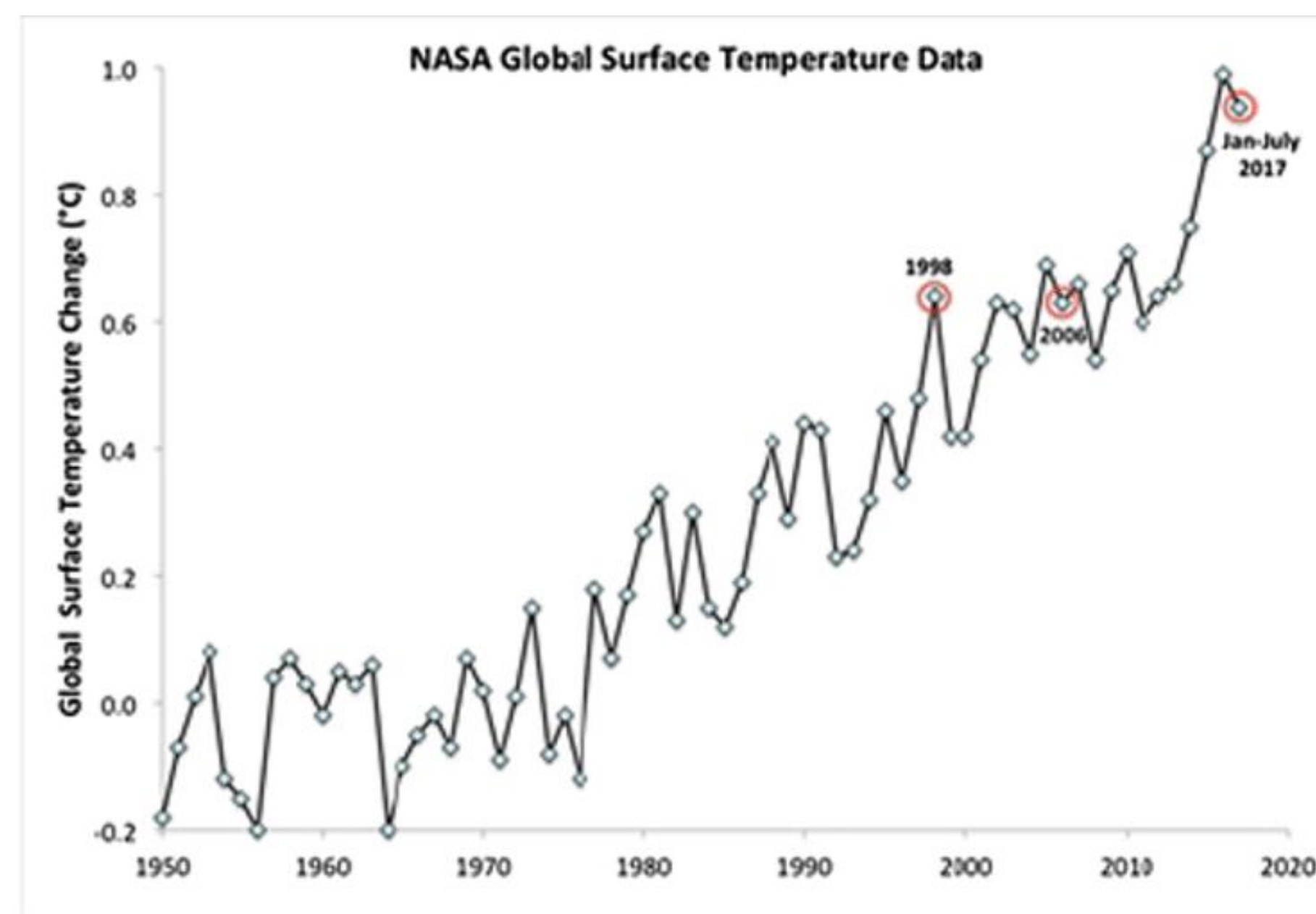# Thermalwatch

Team: Aaron Santiago, Zachary Hallemeyer
Client: Christopher Doughty, Camille Gaillard, Benjamin Wiebe
Team Mentor: Saisri Muttineni

Problem

- Climate change is causing increased temperatures around the world.
- Lack of easy to use satellite temperature data
- Hawaii has an increased risk of climate change due to vulnerable forest canopies
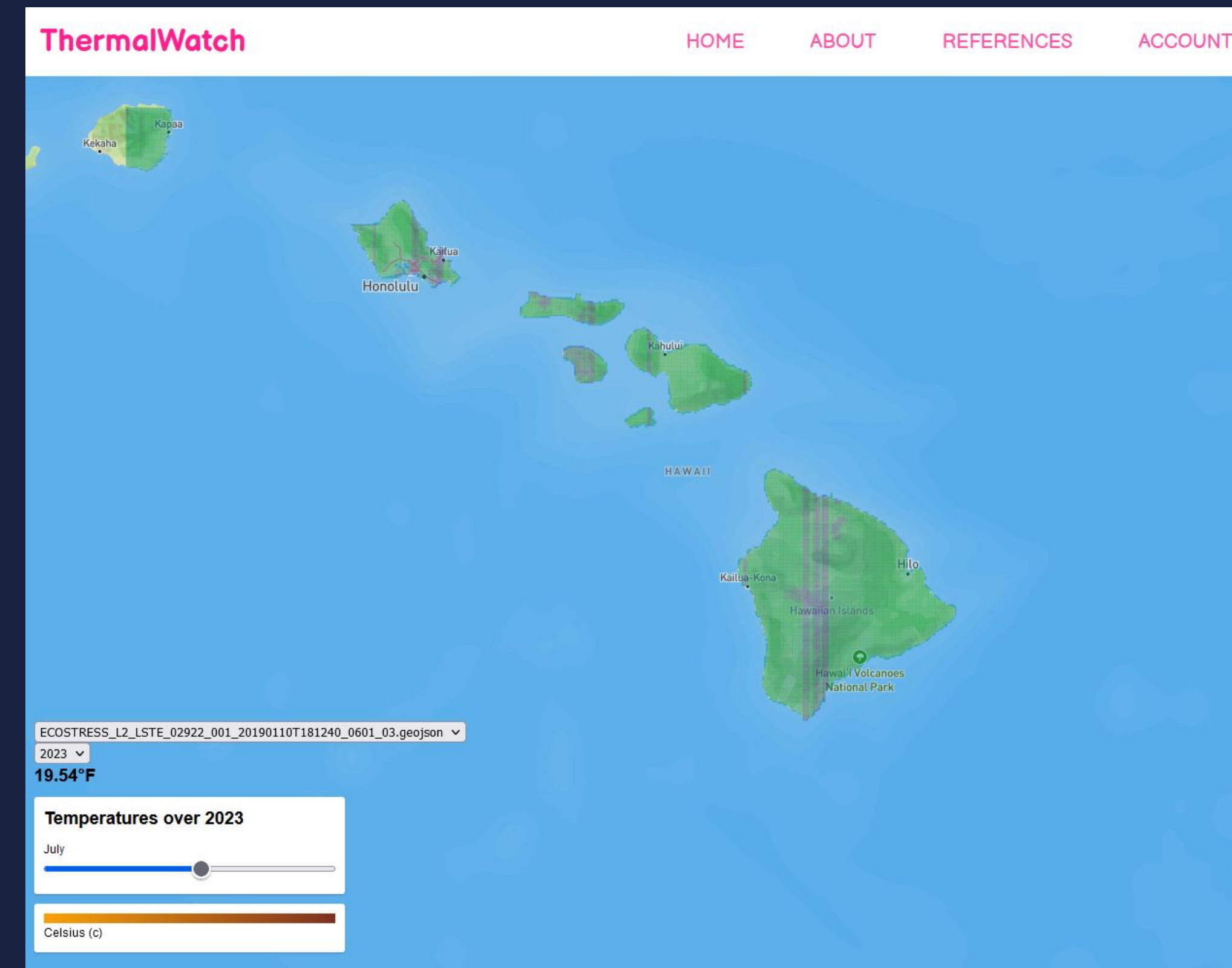

NASA Temperature Graph

Solution Overview

Our web application is composed of an intuitive interface that overlays temperature readings over a globe/map like google earth. Some of our features:

- Near real time temperature monitoring
- Alert system for custom thresholds
- Allows users to compare historical temperatures with current temperatures
- Easy access to temperature data files

How It Works

- Thermalwatch.org is an open-sourced web application
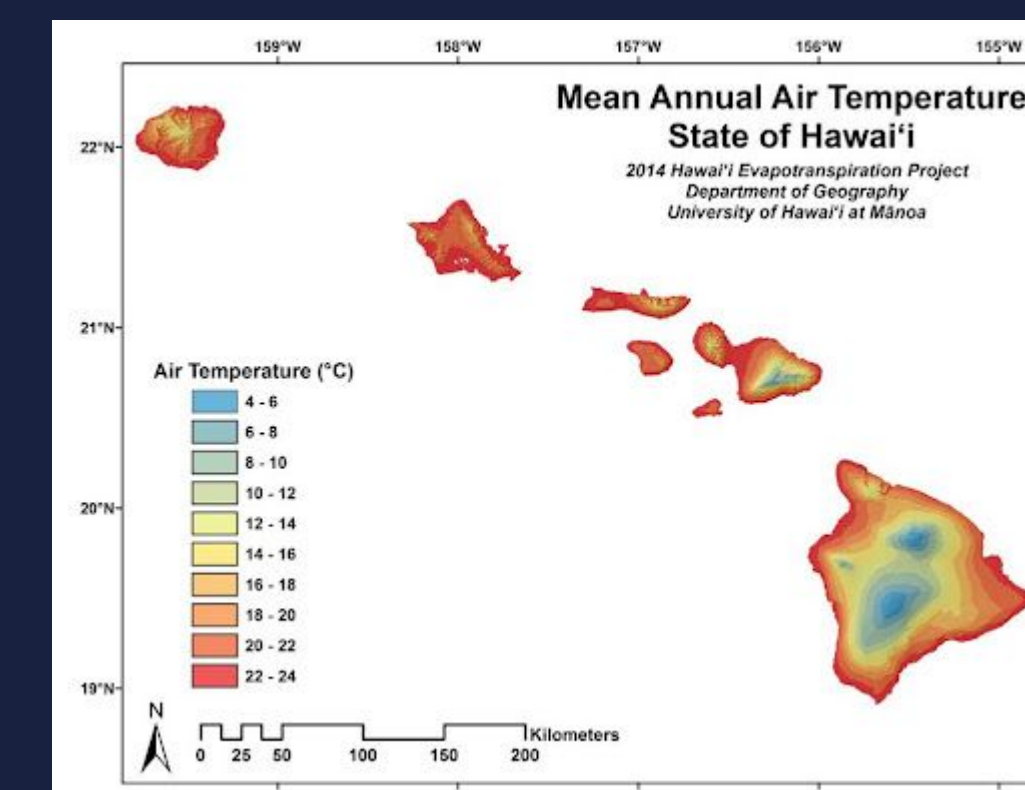- Easy temperature monitoring/viewing of data

Challenges and Testing

- Map box Storage Limitations
- Land Masking
- Monsoon Not allowing Communication
- Cloud Masking
- Alert System
- Averages of Data

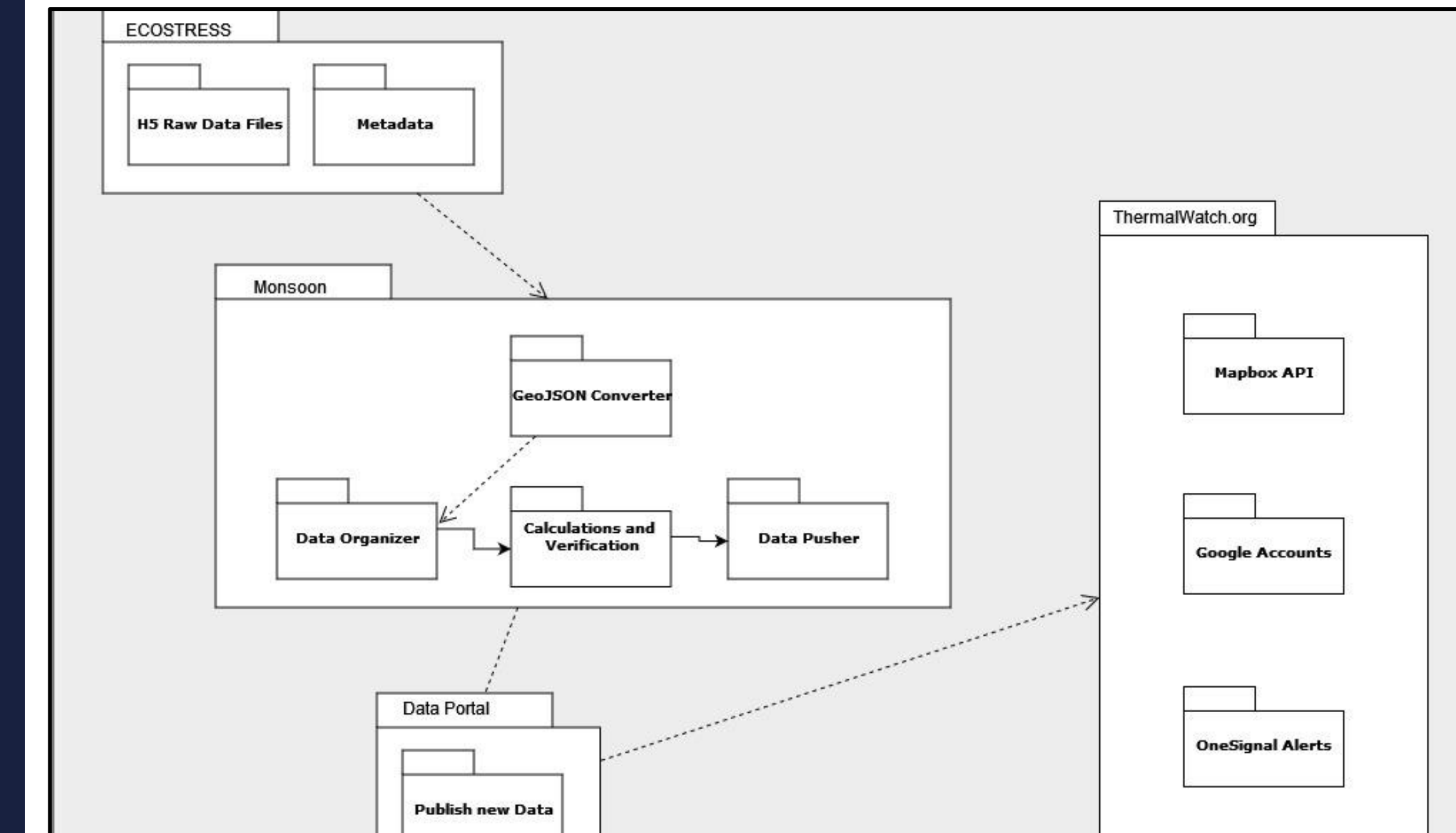- JEST
- PyTest
- Vue Compiling

Feature Highlights

- Alerts users of temperature changes based on user thresholds
- Saves up to 5 areas for a user to monitor
- Updates as soon as new information is received from NASA

NORTHERN ARIZONA UNIVERSITY
School of Informatics, Computing, and Cyber Systems

Architecture

Technologies

Future Work

We will continue to work on the website and optimizing it to fit the needs of our clients. We also may potentially expand it to be a worldwide monitoring system.

Scan this to check out our current website.