EarthOS

Building an operating system for Earth

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CAMS Workshop 2024

WHY?

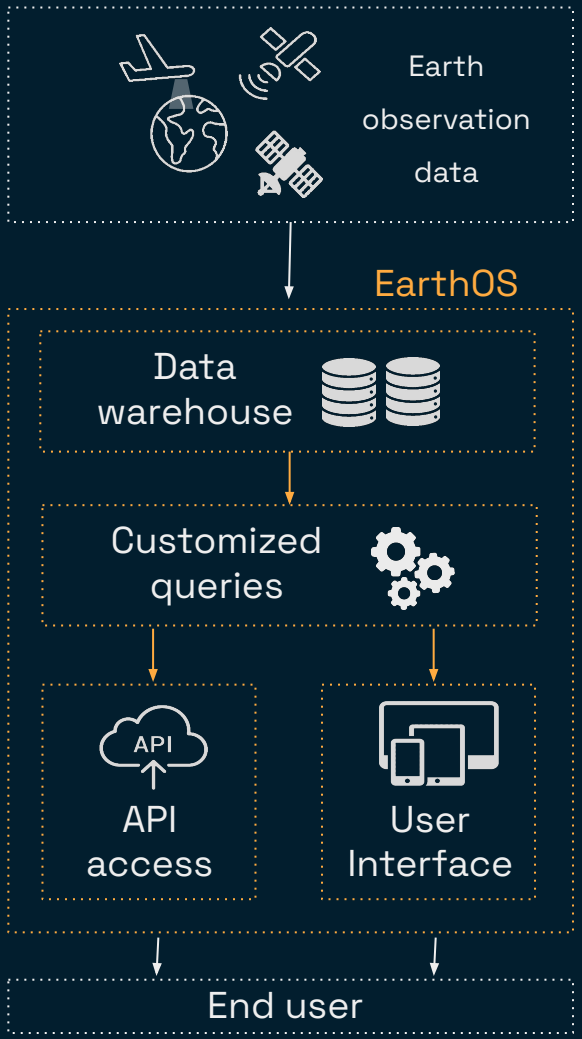
EarthOS radically lowers the barrier to entry

for **companies** and **organizations**

wishing to

power their **business logic**

with **environmental data**



Trillions of data points

Powerful query engine

Easy to use interface

Immediate results

USE CASES

Monitoring/modelling

- Methane emissions tracking
- Environmental impact monitoring/auditing
- Species range shift modelling

Mitigation

- Humanitarian preparedness and forecast-based action
- Commodities trading
- Disease and pest management

Adaptation/recovery

- Infrastructure vulnerability analysis
- Risk assessment and modelling
- Site selection, planning and monitoring for renewable energy

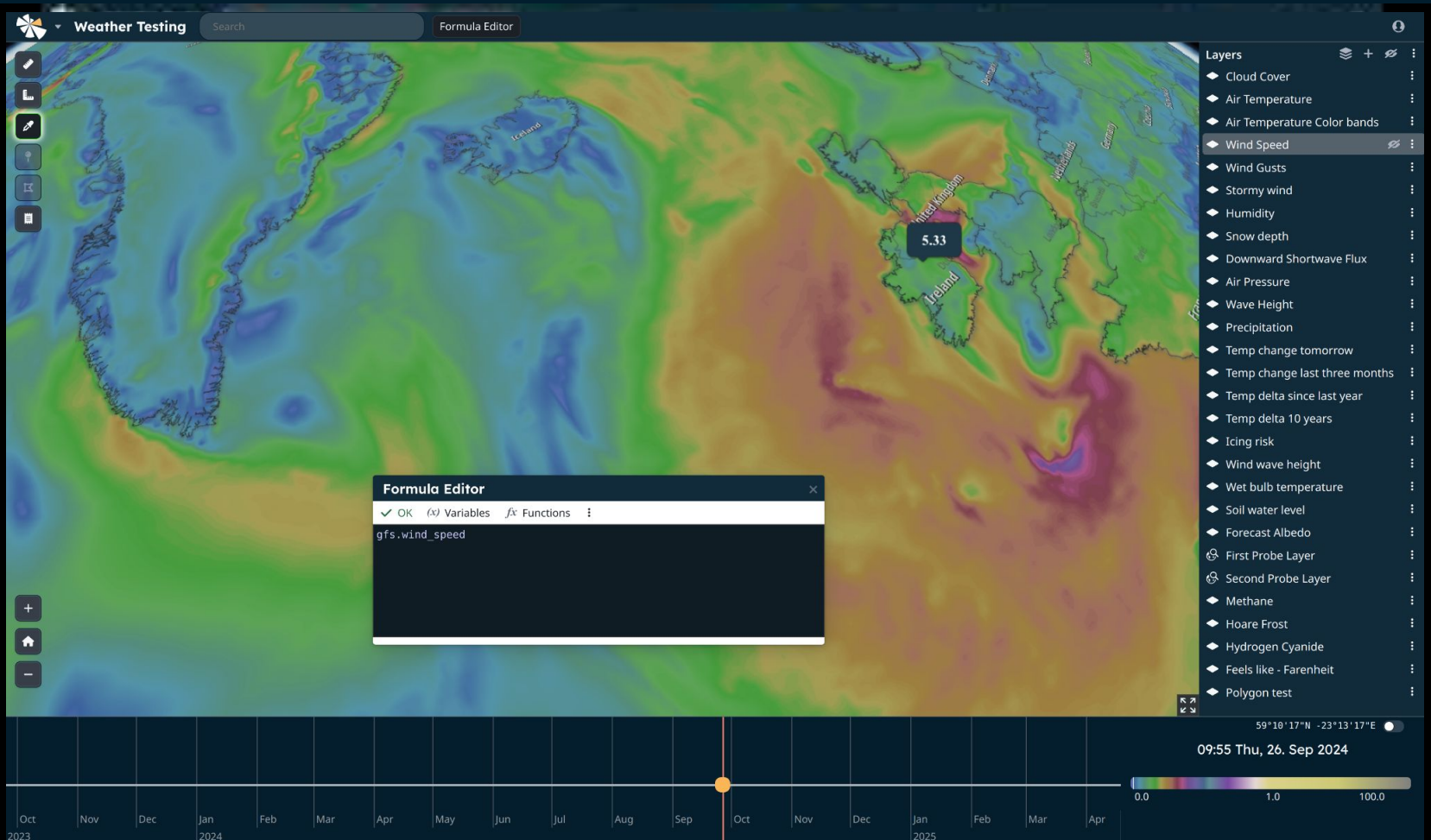
PRODUCT

EarthOS allows you to:

- Build custom models with simple **Formulas**
- **Aggregates and analytics** help you understand trends and patterns
- **Visualizations** to easily communicate data with stakeholders
- **Transparent** data sources and algorithms to facilitate provenance
- **Alerts** identify when specific conditions occur

EarthOS Marketplace enables clients to access environmental solutions and datasets developed by the best scientists on the planet without learning to code in python.

EarthOS interface



EarthOS API

```
$ pip install earthos
```

```
Python 3.12.3 (main, Sep 11 2024, 14:17:37) [GCC 13.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> from earthos import EarthOS
>>> eo = EarthOS()
>>> latitude = 37.835
>>> longitude = -122.262
>>> altitude = 2.0             # meters above ground level
>>> time = datetime.now()
>>> point = eo.get_point(
       latitude, longitude, altitude, time,
       "gfs.air_temperature")
>>> point["result"]
15.746667
```

Query points, regions, or complex combinations.

Any query that can be made in the UI.

Apply color scales or get raw data for further processing.

ROADMAP

Next 12 months:

- **Pilot** methane emissions tracker application on EarthOS
- Add **time series analysis** tools
- Add **statistics** tools
- Add **alerts** system

- **Public launch** in Q4 2024

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