Innovate4Cities:
AI x City climate action
Technical Kickoff

Useful Datasets & Tools

July 2024

OpenEarth

GLOBAL COVENANT of MAYORS for CLIMATE & ENERGY

UN-HABITAT

INNOVATE 4 CITIES

RESOURCES

Curated resources to leverage during the hackathon, maximize impact and novel insights

Brazil Geospatial Hazards & Projections

Downloadable County-level and spatialized risk indexes for multiple factors. Present, 2030 and 2050

Global Spatial hazards & Projections

Open Source reference UI with global data sets for hazards and projections (2020-2100)

Other relevant datasets

Information about the Earth's past, present and future climate

Population & admin region

API to get the population of a jurisdiction, GDP, and the jurisdiction it belongs to, + the jurisdictions it contains

Geospatial -> ML platform

No code spatial platform for data management, object detection, change detection, insights & more

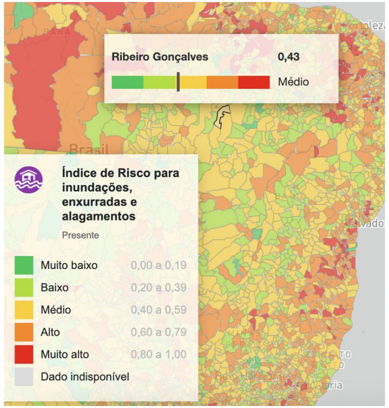
RESOURCES

AdaptaBrasil MCTI is a great resource for Hazard data

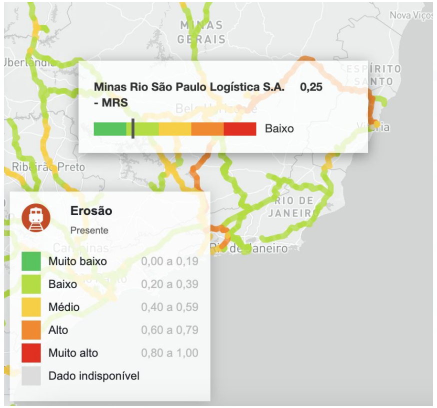
Brazil Geospatial Hazards & Projections

Downloadable County-level and spatialized risk indexes for multiple factors. Present, 2030 and 2050

Multiple hazards



County level data



Asset level data

Download in various formats

https://adaptabrasil.mcti.gov.br/

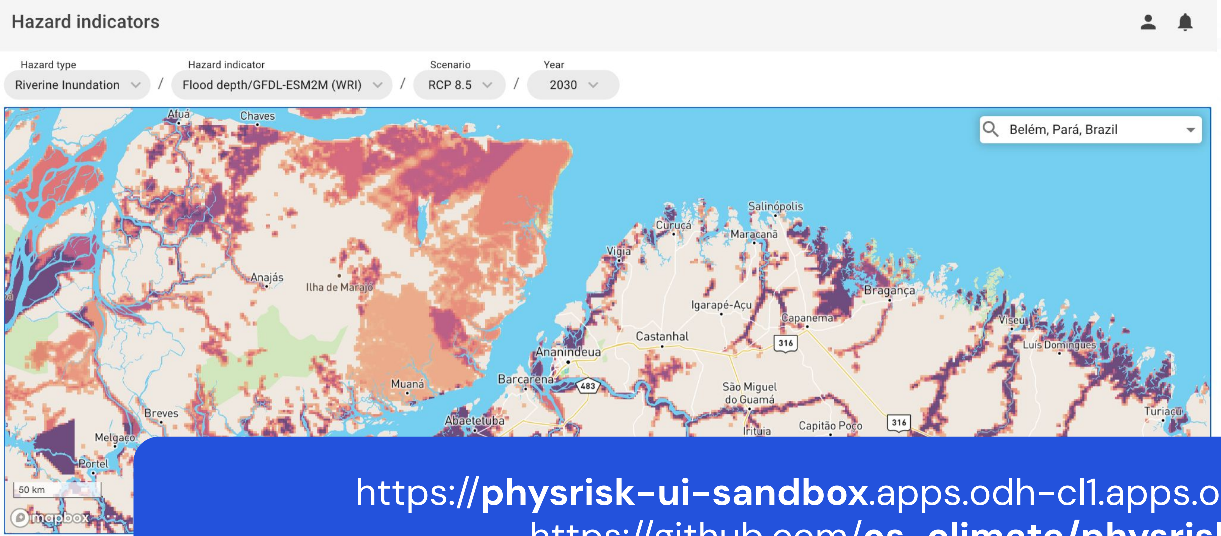
RESOURCES

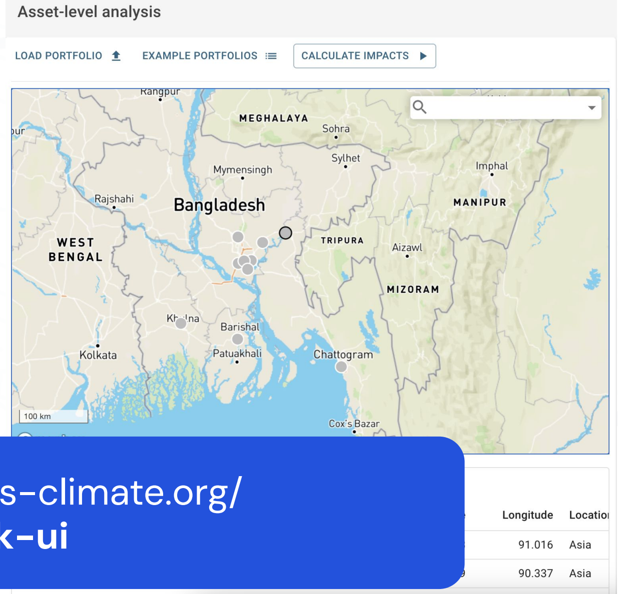
OS Climate

OS-C

Global Spatial hazards & Projections

Open Source reference UI with global data sets for hazards and projections (2020–2100)





https://**physrisk-ui-sandbox**.apps.odh-cl1.apps.os-climate.org/
https://github.com/**os-climate/physrisk-ui**

RESOURCES

OpenClimate API has relevant contextual data to enrich analysis

Population & admin region

API to get the population of a jurisdiction, GDP, the jurisdiction it belongs to, + the jurisdictions it contains

Actor overview /api/v1/actor/{actor_id}

Returns climate-related data, including historical data, for an actor.

Output

Standard output. `data` is an object representing the actor, with the following properties:

- `[...] (Has some emissions and climate targets data)`
- `Lat & Long`
- `Population`
- `GDP`

https://github.com/**Open-Earth-Foundation/OpenClimate/**blob/develop/api/API.md

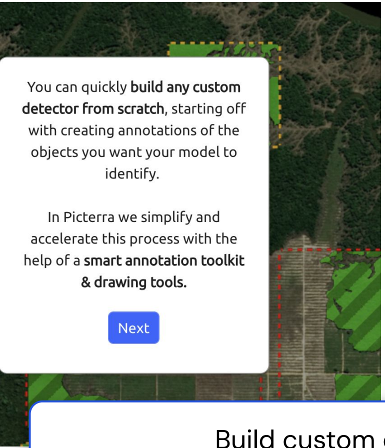
RESOURCES

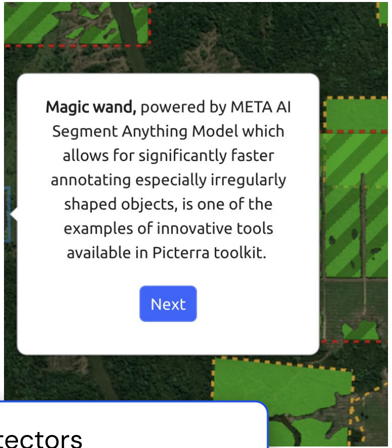
Picterra can be leveraged for object & change detection and training models

Picterra

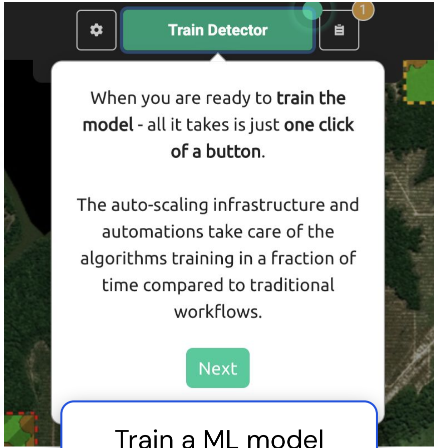
Geospatial -> ML platform

No code spatial platform for data management, object detection, change detection, insights & more

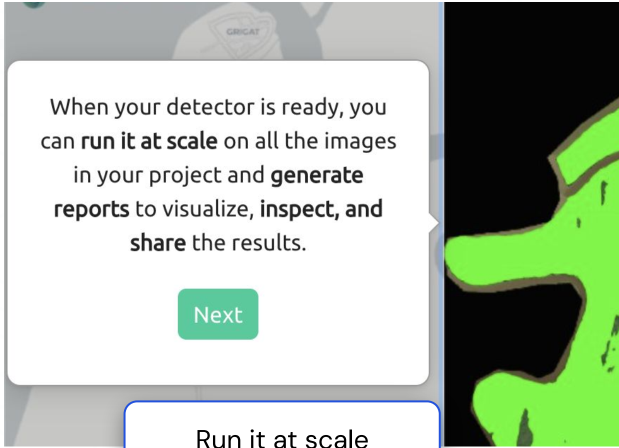




Build custom detectors



Train a ML model



Run it at scale

https://**picterra**.ch/

RESOURCES

Other Relevant Datasets

Copernicus
Europe's eyes on Earth

https://cds.climate.copernicus.eu/

Agroclimatic indicators from 1951 to 2099 derived from climate projections

Essential climate variables for water sector applications derived from climate projections

Gridded monthly climate projection dataset underpinning the IPCC AR6 Interactive Atlas

Global sea level change time series from 1950 to 2050 derived from reanalysis and high resolution CMIP6 climate projections

And more resources coming soon!

Check the website and the email for regular updates on new recommended tools and data sets to leverage for the hackathon.