

Session 3

Open Data & Digital commons



SciencesPo

Quizz about last session



1

Go to **wooclap.com**

2

Enter the event code in the top banner

Event code

GOEQQJ

 [Copy participation link](#)

Presentation

What is open data ?

Why is open data important ?

- **Research**
- **Tech**
- **Democracy (transparency, accountability...)**
- **Innovation**

What are...

- (Structured or unstructured) data ?
- Metadata ?
- Databases ?
- API ?

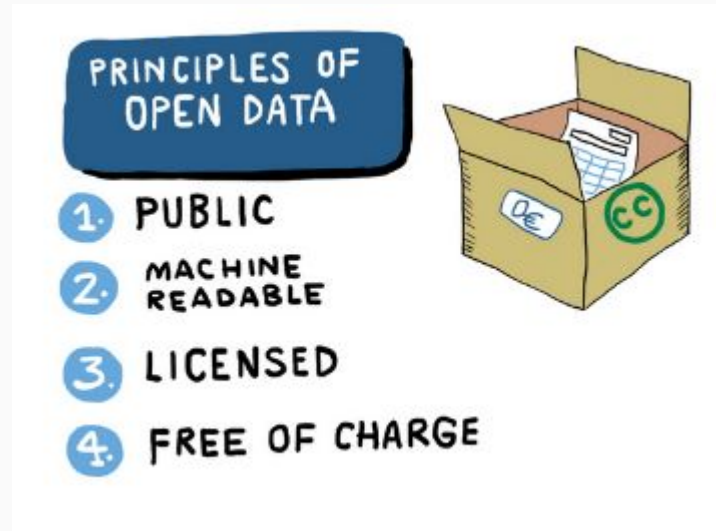
What are...

- **Data** are units of information. They can be structured (age, name address...) or unstructured (text, mobile activity, social media posts...). **Metadata** is “data about data” (date and time of creation of a text...)
- **Databases** are organized collections of structured or unstructured data. They can be contributive and open.
- **API** is a set of defined rules that enable different applications to communicate with each other.

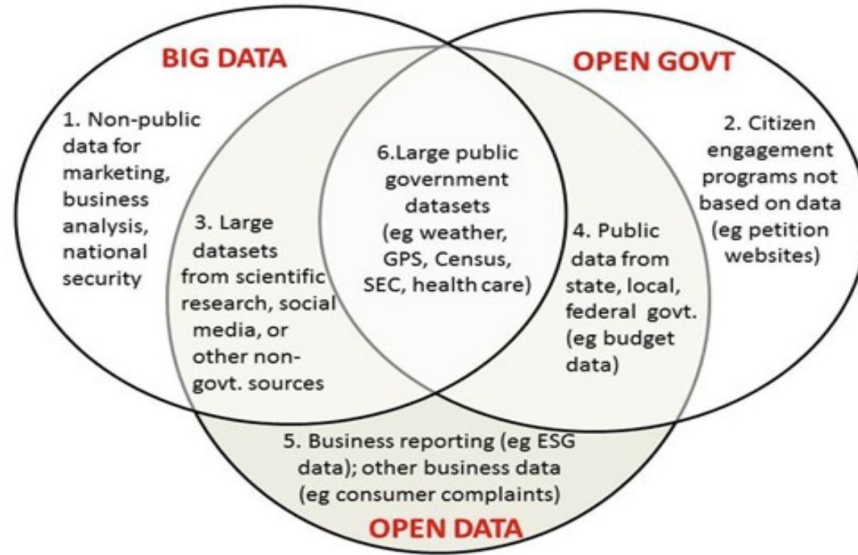
Open data & Digital commons ?

- **Data** are non rival but can be exclusive
- **Databases** can be contributive and open.
- **APIs** enable different stakeholders (administrations, enterprises) to open their data according to rules (generally) agreed in common.

Open data requirements



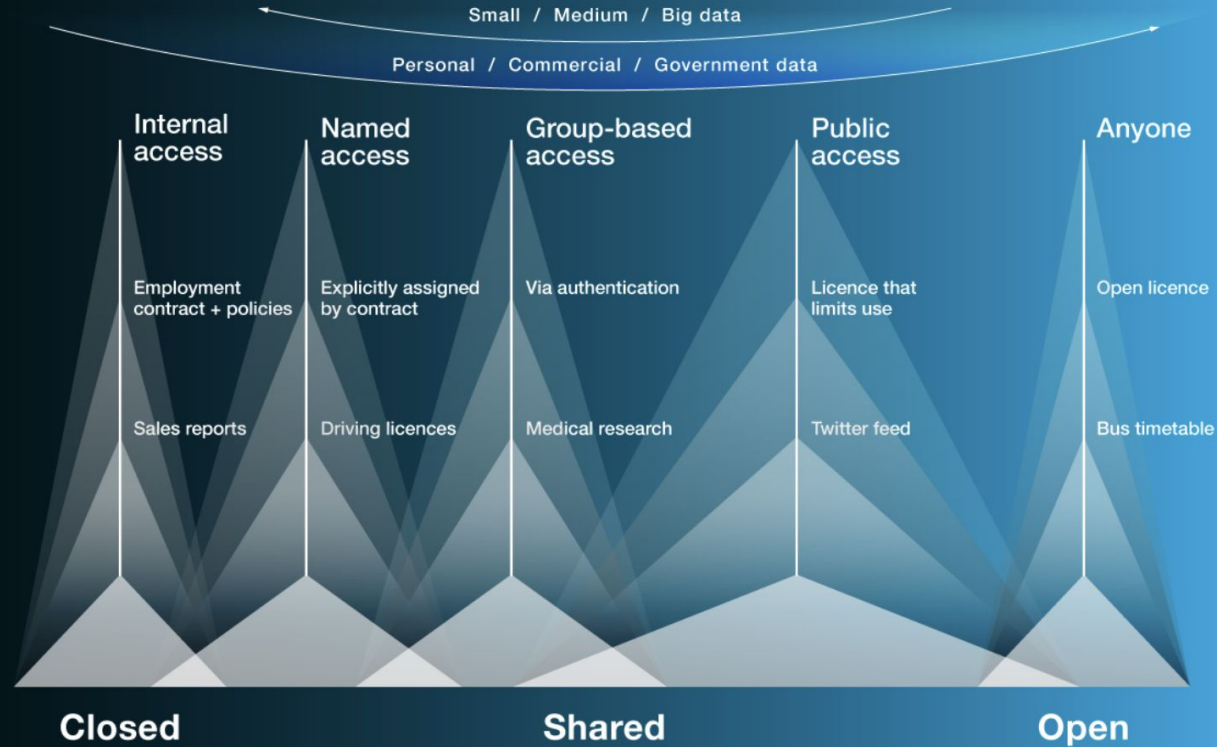
Open data requirements



1



The Data Spectrum



The Data Spectrum helps you understand the language of data.



theodi.org/data-spectrum

Arguments against open data

- Security ?
- Privacy ?
- Quality ?
- Value capture ?
- Cost ?

data.europa.eu - The official portal for European data

[Home](#) [Data](#)  [Academy](#) [Community](#)  [Publications](#)  [Documentation](#) 

1 552 471

Datasets

European public sector datasets

179

Catalogues

Datasets grouped by catalogue

36

Countries

Explore datasets by country

1 444

News pieces

News related to open data

203

Data stories

Inspiring stories about open data

11

Courses

Learning material on open data

Data stories

Filter by

Country

- Any -

Year

- Any -

Search



Search results (221)

Sort by

Last created

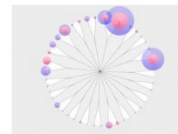


04 September 2023

Open data to track progress in the EU's recycling targets

Recycling is a key element of the European Union's waste management policy. It aims to contribute to the realisation of a circular economy that maximises the...

[Show more](#)



Open Data Inception - 2600+ Open Data Portals Around the World

Try Education, France or Weather

Clear all



[View as list on Opendatasoft's website](#) [Add a portal](#) [Download the latest version here](#) [View terms of use](#)

<https://opendatainception.io/>



Contributing to digital commons

Mateo Lostanlen, co-founder of Pyronear

Felix Veith, co-founder of Pyronear



Pyronear wildfire detection

2023



www.pyronear.org



Pyronear



contact@pyronear.org



Pyronear



Pyronear

A passionate team

NOTRE ÉQUIPE

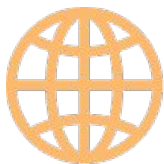
+25 volunteers

- *Engineers, data scientists, designers and students united in this cause*
- *Motivated to democratize automatic detection*
- *High-performance, affordable solutions for protection against natural hazards*



Des valeurs fondatrices

NOS VALEURS



Open-Source



Non-profit



Voluntary

The Pyronear project is driven by three values:

- **Open-Source:** we make all our code available to the public, so that everyone can collaborate transparently.
- **Non-profit:** Pyronear is a non-profit organization dedicated to the common good and free software.
- **Voluntary:** Federate a group of highly motivated volunteers.

Pyronear installations



PYR  NEAR

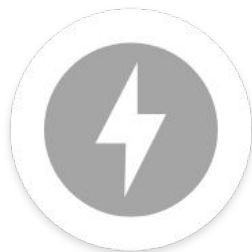
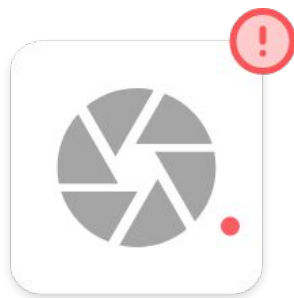


DÉPARTEMENT
DES ALPES-MARITIMES

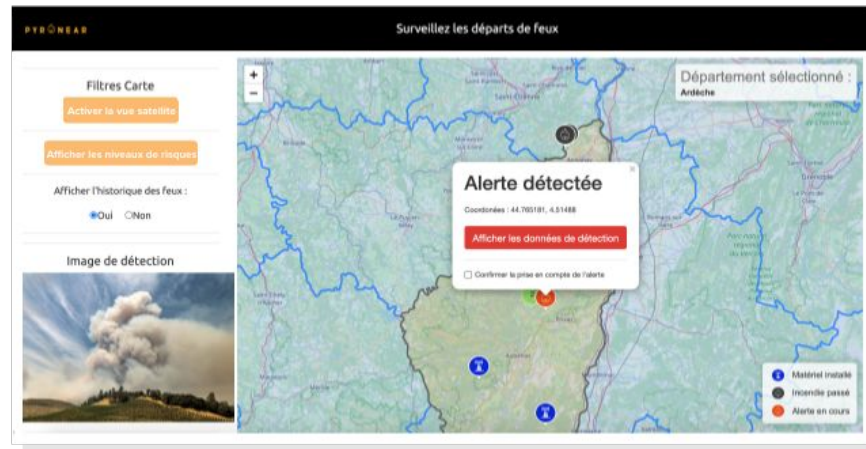


Wildfire Detection Pipeline

Early wildfire detection system



Alerte



Alerte détectée

PROTOTYPE

API

PLATFORME



Pyro-Station



Pyro-API



Pyro-Plateforme

#2 Pyro-Station

Pyro-Station



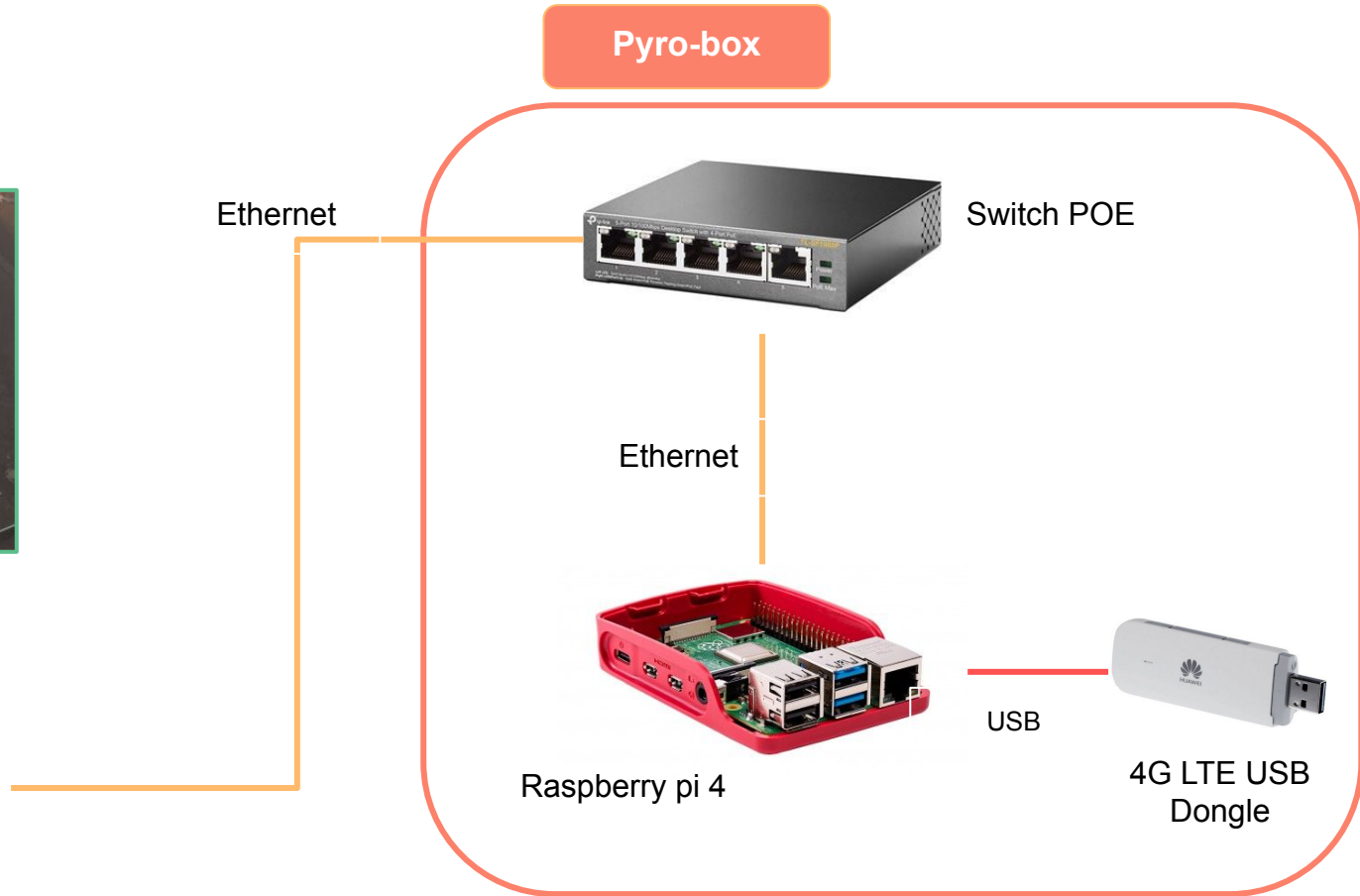
IP Camera



Pyro-box

#2 Pyro-Station

Pyro-box



#2 Pyro-Station

Wildfire detection model

Computer Vision
Model



#2 Pyro-Station

Wildfire detection model

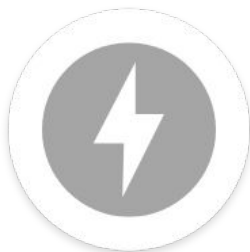
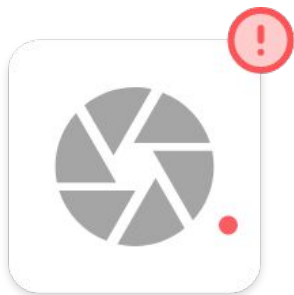


#3 Pyro-API

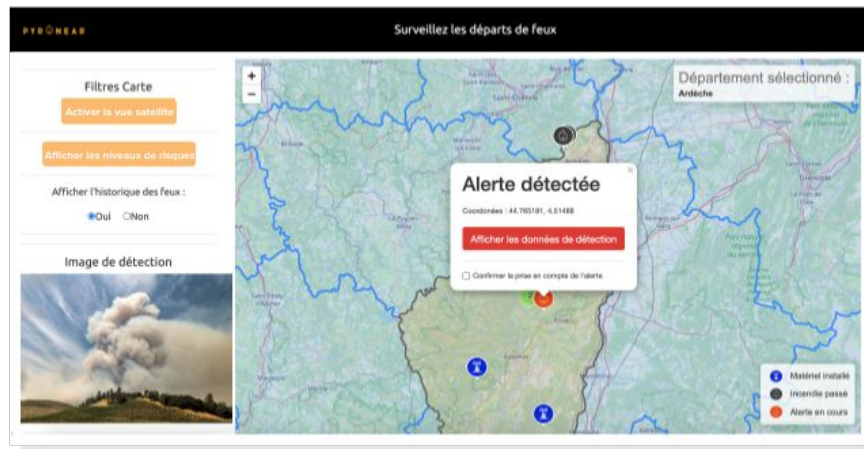
Pyro-API



DATABASE



Alerte



Alerte détectée

PROTOTYPE

API

PLATEFORME



Pyro-Station



Pyro-API



Pyro-Plateforme

PYR  NEAR

Pyro-Plateforme





Challenges

Challenges

Open data

Credibility as NGO

Economic Model

**Governance &
Replicability**




Build a community

#4 Pyro-Plateforme

Github

pyronear

OverviewRepositories (17)Projects (1)PackagesTeams (6)People (16)



PyroNear

Preserving forests from wildfires one commit at a time

28 followers

Paris

<https://pyronear.org/>

[@pyro_near](#)

Sponsor

Unfollow

Pinned

pyro-vision

Public

Computer vision library for wildfire detection

Python

43

24

pyro-api

Public

Alert Management API for wildfire prevention, detection & monitoring

Python

20

7

pyro-platform

Public

Detection & monitoring platform of wildfires

Python

9

9

pyro-risks

Public

Data science for wildfire risk forecasting and monitoring

Jupyter Notebook

21

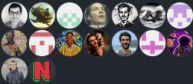
8

View as: Public

You are viewing the README and pinned repositories as a public user.

You can [create a README file](#) visible to anyone.

People



Top languages

Python

Jupyter Notebook

HTML

Dockerfile

Jinja

Most used topics

wildfire

docker

python

computer-vision

deep-learning

Manage

Repositories

Find a repository...

Type

Language

Sort

New

pyronear.github.io

Public

Website of Pyronear

HTML

5

Apache-2.0

7

0

8 (3 issues need help)

0

Updated 2 days ago

pyro-storage

Public

Data curation for wildfire detection

Python

1

Apache-2.0

0

0

1

Updated 2 days ago

pyro-api

Public

Alert Management API for wildfire prevention, detection & monitoring

Python

20

Apache-2.0

7

0

20 (7 issues need help)

7

Updated 2 days ago

pyro-vision

Public

Computer vision library for wildfire detection

Pyro-Crowdsourcer

PYR🔥NEAR

À propos de Pyronear


Participez à la protection des forêts

👉 Comment aider ?

En partageant une photo, vous participez à la création d'un jeu de données public qui permet d'aider à la détection de feux de forêts.

[En savoir plus sur notre système de détection](#)


Envoyer une photo ⌵

 **Envoyer ma photo**


Télécharger une ou plusieurs photo


 Glisser/ déposer une photo ici - ou parcourir

Maximum 200Mo - format acceptés : png, jpeg

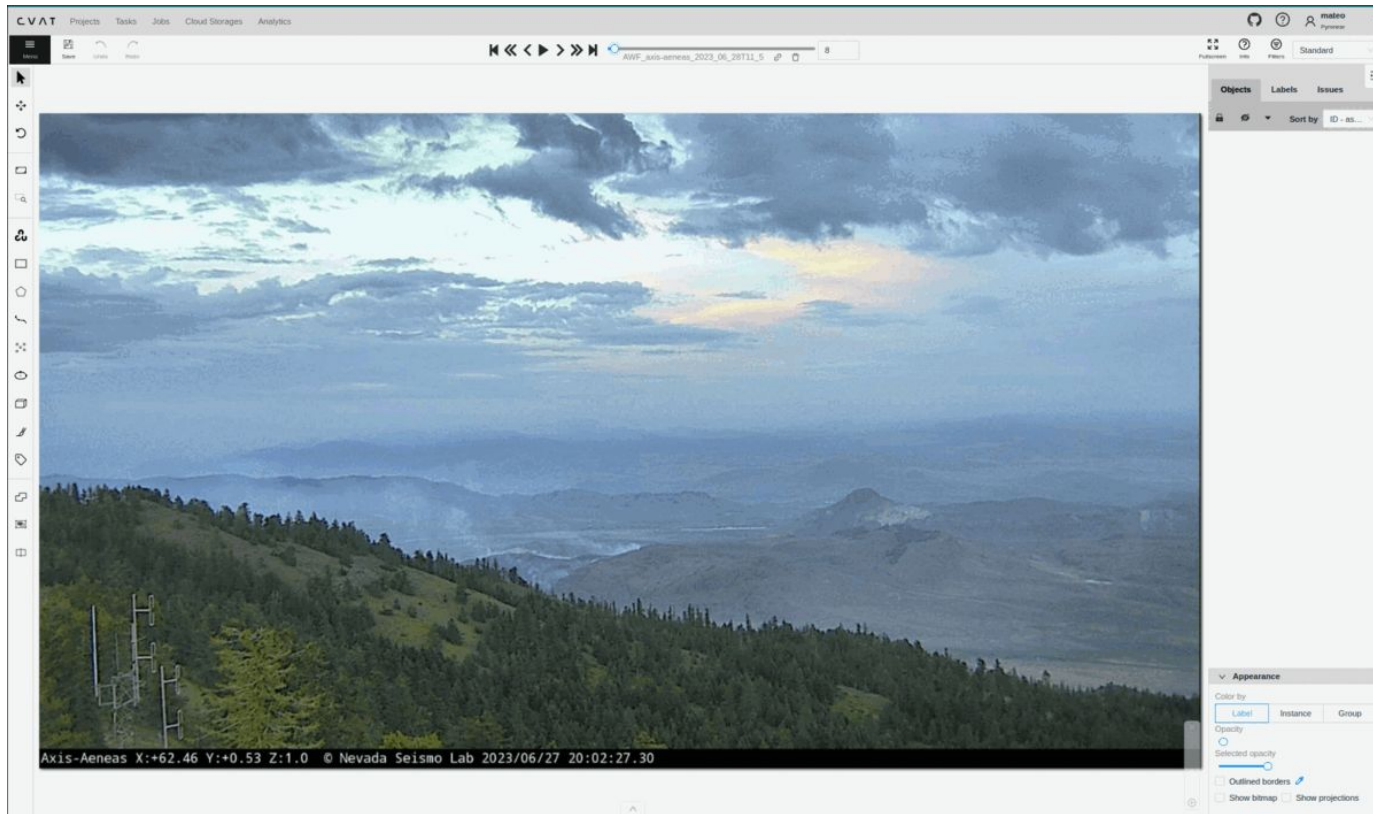
 **Quel type de photo envoyer ?**

Idéalement, partagez-nous une photo depuis une vue assez dégagée sur une zone forestière, avec et/ou sans flamme/fumée.





Pyro-Annotation Tool



And many questions to solve

Communication

User Research

Find data sources

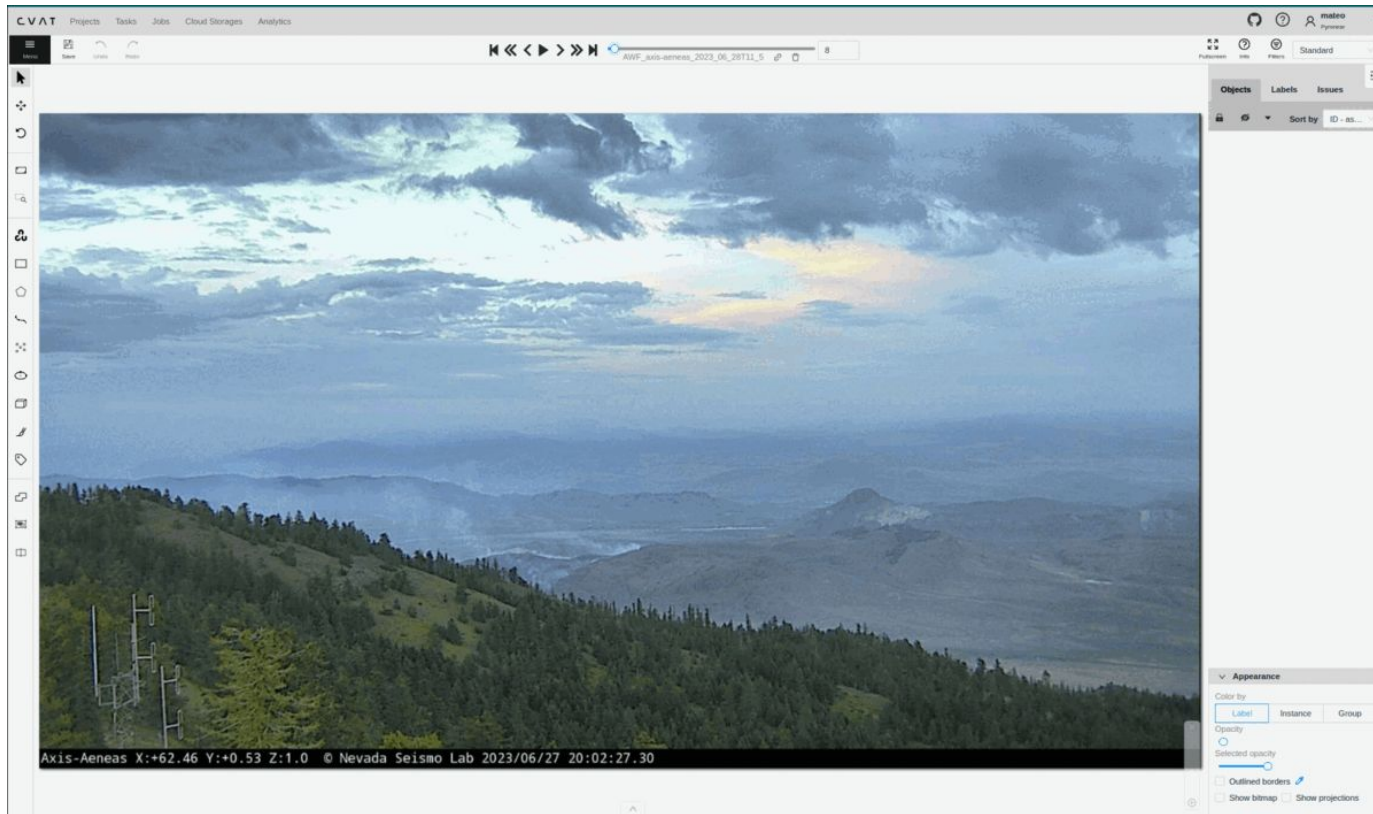
How to open data

Understand wildfire ecosystem



Annotations

Pyro-Annotation Tool





USING DATA TO END WILDFIRES

PYR  NEAR

