

Open Data & Infrastructures

FERNANDO AGUILAR

European Open Science Cloud



EOSC aims to be a “**Research data commons**”, involving different actors.

Long term **Sustainable Science**, including any discipline.

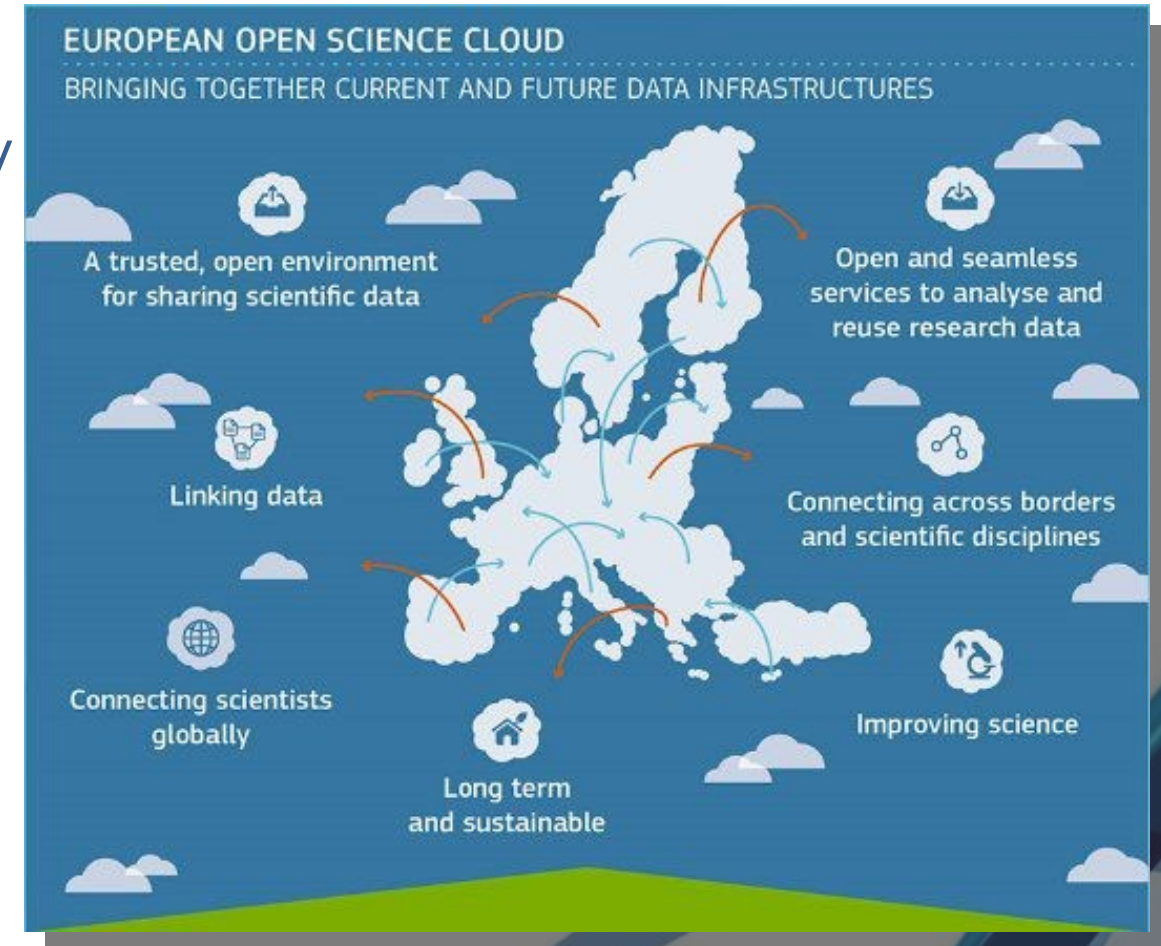
Promoting **interdisciplinarity**.

Unique access point to data, services, training, resources, infrastructure...

Federation of existing and emerging infrastructures: dat1, computing, thematic...

Open, global standards. Open Access.

Web of **FAIR** data



Software – Services – Infrastructure

To process some data type or volume, having software or workflows is not enough.

Proper infrastructure to support. **Services.**

EOSC

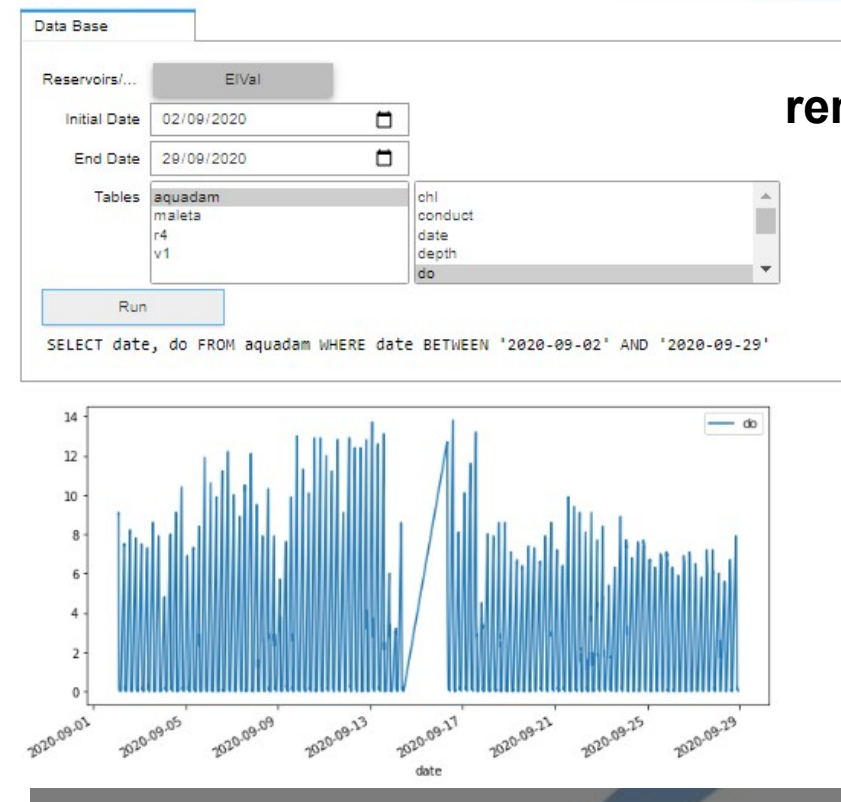
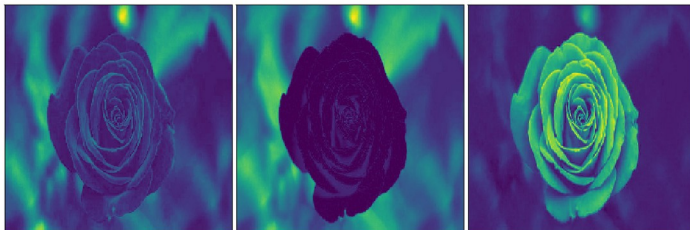
deep.ifca.es

Automated Plant Recognition

Predictions

1. Rosa chinensis | 90 %
[Images | Wikipedia](#)
99 images in DB
2. Camellia japonica | 6 %
[Images | Wikipedia](#)
77 images in DB
3. Calendula officinalis | 1 %
[Images | Wikipedia](#)
140 images in DB

input (3 feature maps)



remote-sensing.ifca.es

European Open Science Cloud



**EUROPEAN OPEN
SCIENCE CLOUD**

All Resources 273

CATEGORIES

Compute	41
Data management	87
Networking	12
Processing & Analysis	66
Security & Operations	18
Sharing & Discovery	58
Storage	26
Training & Support	26

FILTERS

Scientific Domains

Find or choose from the list below

<input type="checkbox"/> Generic	146
<input type="checkbox"/> Generic	145
<input type="checkbox"/> Natural Sciences	82

Resources

1 - 10 of 273 results

Sort by: by name A-Z

10 20 30 Items on page

100 Percent IT Trusted Cloud

Infrastructure
by the Univer

Provided by: 1
Scientific doma
Dedicated for:

☐ Add to co

**EUROPEAN OPEN
SCIENCE CLOUD**

Find resource...

ORDER REQUIRED

All resour... ▾



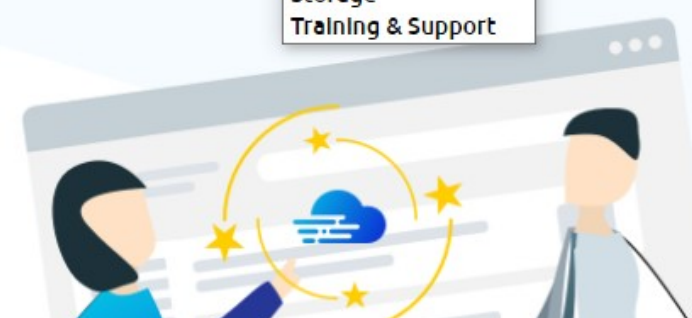
- All resources
- Compute
- Data management
- Networking
- Processing & Analysis
- Security & Operations
- Sharing & Discovery
- Storage
- Training & Support

3DBION

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Provided by: V

**Welcome to the EOSC
Portal Catalogue and
Marketplace**



EOSC-SYNERGY in a nutshell

<https://eosc-synergy.eu/>

Promote EOSC High Quality Services

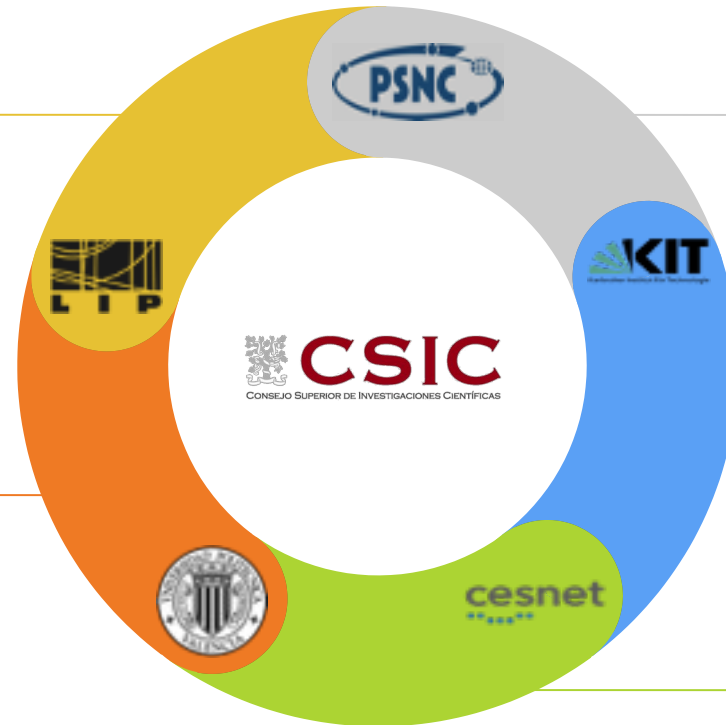
Software quality as a service, **FAIRness evaluation** and quality certification badges

Thematic Services Integration

10 thematic services addressing 4 scientific areas (Earth Observation, Environment, Biomedicine and Astrophysics)

22 partners in 10 countries

(ES, PT, FR, UK, DE, NL, CZ, SK, PL and BR)



Skills development

Environment for tutorials with a dedicated MOOC platform, courses methodology and a Hackaton as a service platform

Capacity Expansion at the Infrastructure level

Integration of services and resources from the RIs of the consortium partners

Alignment at the Policy Level

Collaboration with regional projects on landscaping activities, gap analysis and contribution to EOSC policies



LABORATÓRIO NACIONAL DE ENGENHARIA CIVIL



FAIR Assessment tools - FAIR EVA

- ▶ FAIR EVA - Evaluator, Validator and Advisor
- ▶ Comply with **FAIR Data principles**:
 - 1. Data**: use a proper format
 - 2. Metadata**: community standard. Machine-actionable (JSON, XML, RDF...)
 - 3. PIDs**: Persistent Identifier (e.g. DOI). Provided by an accepted authority.
 - 4. Repository/Data service**: indexed and machine-actionable.
- ▶ Integration: Different types of repositories/data portals

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