

# STARS4ALL and EOSC-Hub

- Make our infrastructure more robust
  - Hosting services to mirror/backup the essential data aggregation and management components
- Improve discoverability of their project & data via
  - B2FIND, B2SHARE
  - GEOSS platform
- Improve data management practices
  - Deposit also secondary and tertiary data e.g. analysis, publications
  - Introduce Research Objects or Resource bundles for related primary, secondary and tertiary data combine and them with organizational information
  - Use of PIDs for sensors and Resource Objects
- Improve usability of their data
  - Actionability of the research object links when displayed in B2FIND and B2SHARE
- Use of Jupyter Notebooks for analyzing observation data directly from Zenodo and B2SHARE

# STARS4ALL EAP Planning

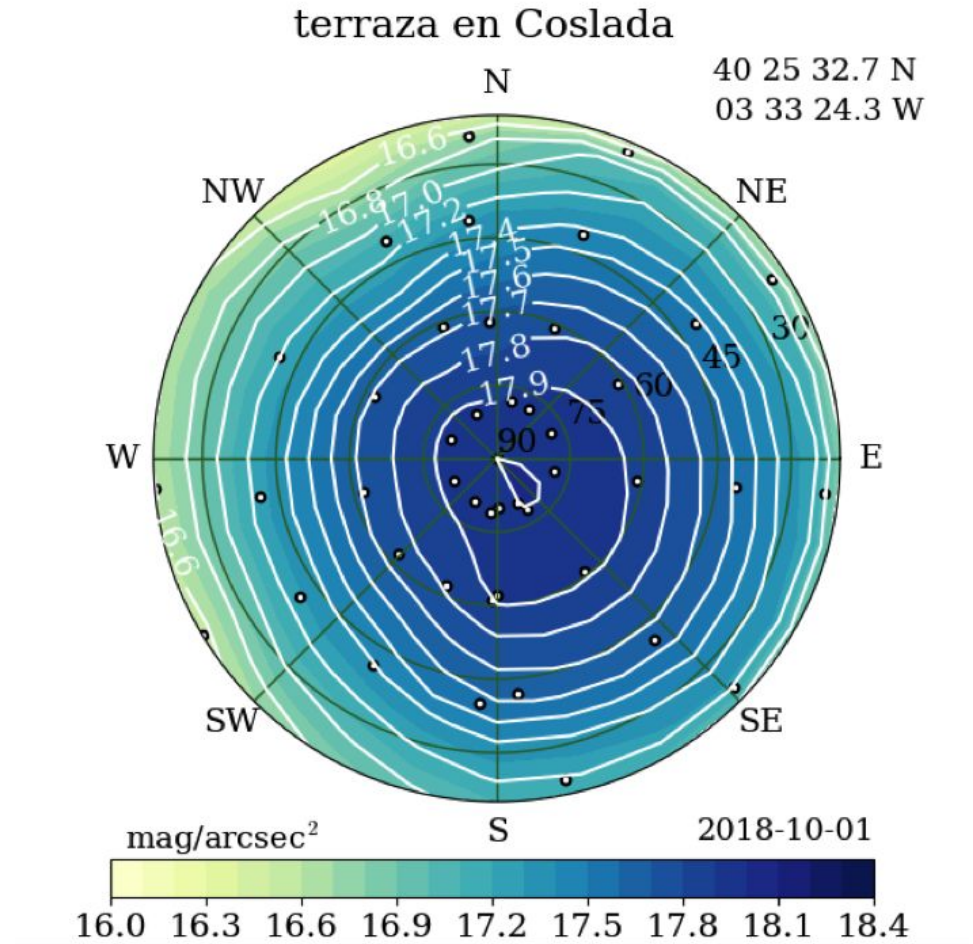
Q1	<ul style="list-style-type: none"><li>- Metadata schema for data and research objects</li><li>- Implementation of metadata schema in B2SHARE</li><li>- data analysis JN with access to B2SHARE &amp; Zenodo</li><li>- PIDs for RO and instruments</li></ul>
Q2	<ul style="list-style-type: none"><li>- RO Metadata harvesting by B2FIND</li><li>- RO Metadata harvesting by GEOSS portal</li><li>- Conversion existing data-sets</li></ul>
Q3	<ul style="list-style-type: none"><li>- HVA STARS4ALL data infrastructure by mirroring all components</li></ul>
Q4	<ul style="list-style-type: none"><li>- checks &amp; testing, writing documentation</li></ul>

# NEW DATA POLICY & B2SHARE TEST SERVER



- Monthly datasets per photometer
- We will create a record per sensor
  - A new version will be generated when a new dataset will be uploaded
- First version of the community metadata schema is ready on test servers
  - Bases on the community standard for skyglow observations
- New EOSC service activated -> **Virtual Collections**
  - Objective: Grouping photometers
  - UC1: Virtual collection for all photometers
  - UC2: Virtual collections for projects' photometers

# NEW DATA FROM PROJECT NIXNOX



DATASET + IMAGE

# EGI NOTEBOOKS

- For researching purposes
  - Calculation of day averages based on some factors:
    - Moon phase
    - Location -> moon altitude
    - Clouds
  - Identification of light sources bases on Nixnox data (ongoing)
- For educational purposes (future)
  - Timezones
  - Moon phases
  - Light policies in cities

# PIDs for STARS4ALL sensors

- Community UC5: The user wants to register a new monitoring station in B2HANDLE, generating a persistent identifier (PID) in the system. This station will have information associated such as location, sensors information. This PID will be used and referred to when a user deposit the measurements of the sensor (in UC3).
- Technical plan: We want issue PIDs for STARS4ALL sensor equipment, so we can refer to every sensor unambiguously and connect it to appropriate sensor metadata

# PIDs for STARS4ALL sensors

- Discussed RDA PID4Instruments WG outcomes, existing schema but not complete for STARS4ALL purposes
- Prefer to manage PID resolution result by STARS4ALL, not using B2SHARE instrument landing page (planned)
- Have requested access to PID test service to test integration: issuing, resolution management etc.
- Some interesting challenges to solve when replacing sensors (versioning)
- Will purchase own STARS4ALL prefix

# OTHER SERVICES

## ➤ B2FIND

- Integration between B2SHARE and B2FIND tested & checked.
- Waiting deployment STARS4ALL community on B2SHARE production

## ➤ B2SHARE - GEOSS

- First integration test done -> Test report generated
- Working on B2SHARE community metadata for integration in GEOSS



# Next Steps

- B2SHARE:
  - Continue the integration process with GEOSS
  - Deployment of the community schema on production servers
- Integration with B2FIND
- Prepare educational notebooks
- Discuss SLAs
- Deployment of STARS4ALL systems on EGI VM platform.