STARS4ALL EAP background

- STARS4ALL is a citizen science community working on measuring light pollution;
  - PI Esteban Gonzalez Guardia, UPM Madrid
  - STARS4ALL was a EU project that ended in 2018
  - currently works through STARS4ALL foundation
  - Offers home to related light pollution research initiatives
  - interesting web site; a tool to visualize data from photometer network; uses crowd funding to fund community
- network of 100+ photometers expect to double near future
- working infrastructure for aggregating light pollution observation data in place
- Data published in Zenodo

STARS4ALL and EOSC-Hub

- Make their 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	- Metadata schema for data and research objects - Implementation of metadata schema in B2SHARE - data analysis JN with access to B2SHARE & Zenodo - PIDs for RO and instruments	REVIEW IP IP IP	
Q2	- RO Metadata harvesting by B2FIND - RO Metadata harvesting by GEOSS portal - Conversion existing data-sets		
Q3	- HVA STARS4ALL data infrastructure by mirroring all components		
Q4	- checks & testing, writing documentation		

Current status 08-04-2020 (1 / 2)

- Description in the Community Requirements DB and design documents completed.
- First version of the specific metadata schema for our community done, including a mapping with existing metadata fields in B2SHARE. We have based on **schema.org**, **ro-crate and the skyglow observations standard** to model it**.
- Mechanism to create RO in B2SHARE decided. We will use **the related identifier** metadata field.
- We have decided the type of datasets (generated by the photometers) that we are going to upload to B2SHARE.
- We are starting the implementation phase in B2SHARE.

Current status 08-04-2020 (2/2)

- Discussions with RDA PID4instruments WG initiated.

- Access to the **EGI Notebooks service granted**. We are making some preliminary tests with datasets.

- Still technical aspects to clarify along the way:
  - STARS4ALL data integration in GEOSS platform using B2SHARE preferably as the data provider.
  - We have a contact that has experience in integrating data on GEOSS.
  - We need some support from GEOSS team to harvest B2SHARE deposited STARS4ALL metadata

Next Steps

- Continue discussion with B2SHARE team:
  - Investigate harvesting B2SHARE deposited data by GEOSS platform
  - B2SHARE team will look into this, but we'll also take further action
- Continue discussion with B2HANDLE experts
- Start discuss with B2FIND support team
  - Actionable links for RO
- Prepare datasets to deposit it on B2SHARE.