D3.12.1 Citizen Science System Trial

WP3.12 Support of EPO software

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1 Executive Summary

This document briefly describes deliverable D3.12.1 "*Citizen Science system trial"* from the LSST:UK Phase B WP 3.12 *"Support of EPO software".* The aim of the deliverable is to test integration and data flow from the Rubin Science Platform to a Zooniverse project. It thus required coordination on both project and Zooniverse sides.

2 Introduction

This document reports on deliverable D3.12.1 *"Citizen science system trial"* from the LSST:UK Phase B WP 3.12 *"Support of EPO software"*.

WP3.12 forms part of the LSST:UK In-kind contribution, UKD-UKD-S2 *"LSST:UK's contribution to EPO software"*.

D3.12.1 is a Zooniverse test project. The deliverable aim is to test integration and data flow from the Rubin Science platform to a Zooniverse project; the material was presented to the 2023 Project and Community Workshop.

Please be aware that the original title of this deliverable was "Space warps trial project with bulk data". The change in its title reflects the change in the nature of this test project as agreed with the in-kind recipient group, i.e. the EPO team, and the participating Space Warps science team.

Section 3 describes briefly the work done by the Zooniverse team in connecting the systems together. This required modifications to the Zooniverse API.

3 Implementation

3.1 Notebooks

We aim to provide users of the Rubin Science Platform with notebooks which can carry out the data transfer. These are available here: https://github.com/lsst-epo/citizen-science-notebooks.

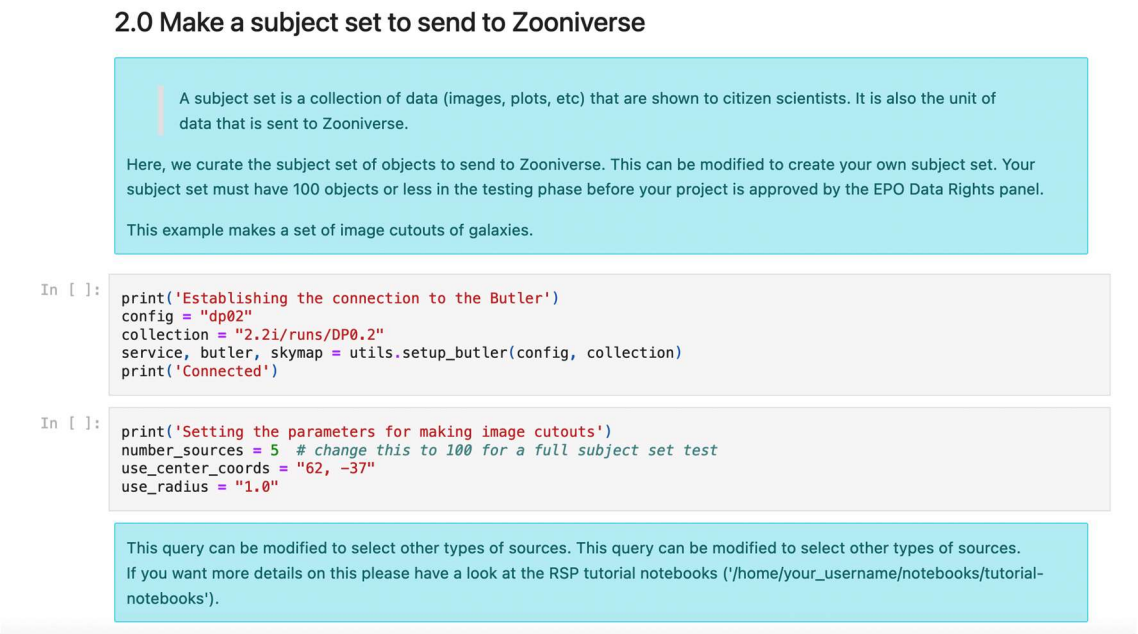

Figure 1: An extract from the Citizen_Science_Testing.ipynb notebook. This is one of the notebooks available at https://github.com/lsst-epo/citizen-science-notebooks.

In the notebook shown in Figure 1, queries on the Rubin platform can be transferred via this notebook to the Zooniverse side, into a new project created for the purpose.

3.2 Zooniverse API updates

The Zooniverse API was updated to allow for programmatic uploads of data to support this use case. Links to the key code follow.

- To allow deletion of data from the project side:

  https://github.com/zooniverse/panoptes/pull/3579

- To enable reporting for successful import of data:

  https://github.com/zooniverse/panoptes/pull/3823

- To report on progress:

  https://github.com/zooniverse/panoptes/commit/4fbc80a460bf37aabb4aefc2a4a012de1ebc9755

These updates also required some bug fixing:

https://github.com/zooniverse/panoptes/pull/3577

3.3 Example usage of the Zooniverse API

An example python implementation using the Zooniverse API to import data is given here:

https://github.com/zooniverse/panoptes-python-notebook/blob/master/examples/subject_set_import_vera_rubin.ipynb

3.4 Zooniverse API Documentation

Documentation on the Zooniverse system API is stored here:

https://zooniverse.github.io/panoptes/#feature-description

4 Testing and Follow-up work

These tools were provided to the Space Warps team who served as testers. Feedback from their use will be used in future version of the Notebook and in continuing to develop the Zooniverse API.

We had hoped to run an end to end test (including a live citizen science project). However, this would have required access to real (rather than simulated) data in the RSP, which was not available at the close of phase B. We expect to run this test early in phase C.