

INSTALLING, ADOPTING AND USING CLOUD DATA STORAGE IN REALISATION OF LSST TASKS

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The Vera C. Rubin Observatory is preparing for the start of the Legacy Survey of Space and Time (LSST) ten-year long operation. In this context, the LSST Transient and Variable Star Scientific Collaboration, in partnership with the Heising Simons Foundation, has invited applications for kickstarter grants to improve the readiness of teams involved in LSST operations. With this project, we bring together two LSST in-kind groups from Serbia and Croatia with the goal of expanding their research capacities in the areas of data storage, processing, and administration for LSST-related science.

We anticipate a requirement for an important component - data storage - as part of the proposed collaboration. Both organizations will generate a substantial amount of data as a result of their LSST in-kind contributions, i.e. the intermediate and final data products of LSST-related work. As a result, we suggest here the acquisition and installation of cloud data storage (CDS) at the University of Kragujevac in Serbia. Furthermore, the data storage will be used as a data legacy repository long after the LSST project is completed.

The primary goals of this project are to develop the region's first open-access storage system for LSST-related science, to promote long-term collaboration between the two LSST in-kind teams, and to expand astronomical research capacity at the University of Kragujevac. We will cover the potential usage of the CDS for scientific simulation support during the pre-run phase, as well as data storage during the LSST telescope's operating time in this talk. We go through the cloud system's accessible services and established capabilities in depth, as well as the options for integrating them into our software demands.