

LSST, 933 N. Cherry Avenue, Tucson, AZ 85721

www.lsst.org

August 29, 14 Dr. Luiz N. da Costa Observatorio Nacional Rio de Janeiro, Brazil

Dear Dr. da Costa;

The Large Synoptic Survey Telescope (LSST) is the top-ranked major ground-based facility recommended by the National Research Council's Astronomy and Astrophysics decadal survey committee in its 2010 report, New Worlds, New Horizons. It is being carried out as an US National Science Foundation (NSF) and Department of Energy (DOE) partnership, with NSF responsible for the telescope and site, education and public outreach (EPO), and the data management systems; DOE provides the camera and related instrumentation. LSST will begin full science operations in 2022 and bring to scientists and non-scientists alike the excitement of unprecedented discovery.

We commend you for the innovative work done by you and your group for the Dark Energy Science (DES) project. There seem to be many commonalities between the LSST data management system and the challenges you are addressing for DES. In particular there would seem to be synergy in the area of quality assessment of pipeline-reduced wide field optical data, including the visualization of alert streams. We are very happy you are interested in processing and analyzing DECam data with the open-source LSST software stack, and exploring the possibility of using it to prepare astronomers in Brazil for the advent of LSST operations. Having an early adopter of the LSST software stack will be extremely valuable for us, and will help to confirm that we are on the right track with the Level 1 and 2 data processing, and the Level 3 capabilities that we plan to make available to researchers.

In addition, we welcome your proposal to have Dr. Angelo Fausti come to LSST Headquarters in Tucson for between one and three years, both to better learn the LSST software stack, and to participate on a part-time basis in our work to establish data quality pipelines, tools, and metrics for LSST. To the extent that Dr. Fausti's work is directly useful to the LSST project, we are willing to partially fund him as well.

Thank you for the opportunity to collaborate and we wish you every success with this proposal.

Sincerely.

Jeffrey P. Kantor Project Manager

LSST Data Management

LSST Project Office

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