

UK involvement in LSST: Phase A

Data Management Plan

N.B. this Data Management Plan was generated using DMPonline (<http://dmponline.dcc.ac.uk>).

Data types

Specify the types of data the research will generate.

The research will generate simulated image data, plus image and catalogue data products produced by running real and simulated image data through the LSST data reduction pipelines.

Data preservation

Specify which data will be preserved and how.

Most of the data products generated will be used to test analysis algorithms and have no long term value. They are, therefore, likely to be deleted once they have served their purpose in testing development code.

Some of the image simulation runs may generate large datasets that will be of value to a number of research groups in the UK and elsewhere. The Phase A Data Access Centre Workpackage is being undertaken in Edinburgh, led by the Wide-Field Astronomy Unit, who have the expertise to preserve and publish datasets that have longer term value.

Specify the software and metadata implications.

There are no special software or metadata implications. Most data products will be generated in files adhering to the ubiquitous FITS standard, or be preserved in relational databases of conventional design.

Most of the data will be generated using, and for manipulation by, the LSST project software stack, which will be maintained by the LSST project into the 2030s, so there should be no issues relating to the software needed to read and interpret the data that are preserved.

Specify for how long the data will be preserved.

Those data deemed to have lasting value will be preserved indefinitely (subject to continued funding by STFC) or until they have been superseded or rendered obsolete.

Data sharing

Specify and justify which data will have value to others and should be shared.

The data to be generated by the project will be created specifically for sharing within the LSST:UK Consortium, and, potentially, with collaborators working on LSST in other countries. Much of it will be unique, in the sense of studying systematic effects in LSST data, and their attempted remediation, not considered by other groups, so that it will be of interest to a broad range of researchers working on LSST.

Specify and justify the length of any proprietary period.

Data will be shared within the LSST:UK Consortium without proprietary restrictions, and any proprietary period applied before data are released to the wider community will reflect the accepted norms within astronomy for pre-publication data.

Specify how data will be shared

The data will be shared via publication using the standard Virtual Observatory protocols, as well as being made available online via other user interfaces.

Resources

Specify and justify any resources required to preserve and share the data.

The staff of the Wide-Field Astronomy Unit who will work in the Phase A Data Access Centre workpackage possess all the necessary expertise required to preserve and share the data, and the DAC itself should have the resources required to support that activity, if funded at the requested level. The preservation and sharing of the data beyond the end of Phase A (i.e. after 31 March 2019) will be dependent on future funding of WFAU and of LSST DAC activities in the UK.