

LSST:UK Newsletter 28 (November 2022)

- [Introduction](#)
- [Call for membership of DESC Equity, Diversity, and Inclusion \(EDI\) Committee](#)
- [The 2023 call for LSST:UK Affiliate PIs and Junior Associates is open](#)
- [Final call for Data Preview 0 Delegates](#)
- [Update from the Survey Cadence Optimisation Committee \(SCOC\)](#)
- [Recent LSST:UK Science Centre outputs](#)
- [Forthcoming meetings of interest](#)
- [Announcements](#)



Introduction

Recent construction work on the summit of Cerro Pachón has included the installation on the Telescope Mount Assembly (TMA) of a small instrument called the StarTracker (shown right). This comprises a pair of digital cameras with telephoto lenses, and will be used during Commissioning to re-verify on-sky the pointing performance of the TMA (which had previously been verified in the [Asturfeito](#) factory in Spain).



The Rubin Construction Project has also recently announced a significant change to the commissioning plan, with the decision that ComCam will not now undertake on-sky observing. As many of you know, ComCam, the commissioning camera, comprises one raft of nine detectors identical to those to be used in LSSTCam and with identical readout electronics, etc, so it is, essentially, 1/21 of the full camera. As its name suggests, it was intended to be used for a wide range of commissioning activities prior to the availability of LSSTCam, and many such tasks, testing both physical infrastructure (e.g. cooling) and software interfaces, have been performed since ComCam was installed in the TMA in August. The previous [plan for commissioning and early science](#) envisaged this being followed by a campaign of on-sky observing with ComCam, generating data products to be released as Data Preview 1 some time between March and July 2024. However, it now appears that LSSTCam will be ready at the time that ComCam on-sky observing was due to start, so it has been decided to scrap the ComCam on-sky campaign, as that will allow more commissioning observations with LSSTCam. The detailed consequences - e.g. for the timing and content of DP1 - have still to be announced, but, in general, this should be a good thing, as it will yield more commissioning data earlier in the process. In particular, it could allow more template images to be taken earlier, enabling a more comprehensive alert generation programme at an earlier stage in survey operations. The Construction Project will announce further details at the [AAS meeting in January](#).

Closer to home, a major administrative milestone has been passed with UK involvement in LSST being approved by the Projects and Investments Committee (PIC) of the Department of Business, Energy and Industrial Strategy (BEIS). The total cost of UK involvement exceeds STFC's delegated budgetary authority, so it needs approval from UKRI's parent government department, BEIS, to award our future funding - and, hence, before it can sign our Data Rights Agreement. That approval is provided in response to successful review of a business case that sets out the economic benefits to "UK plc" of the project, as well as its potential scientific and educational return. Production of the business case was led by George Madden at STFC, to whom we all owe a debt of gratitude for the work he put in over a period of many months to shepherd the developing business case through a series of interim reviews culminating in the PIC meeting. Thanks are also due to members of the Rubin and IRIS leadership teams who participated in the earlier review stages.

Those with ideas for future newsletter items should contact the LSST:UK Project Managers ([@ George Beckett](#) and [@ Terry Sloan](#) [lusc_pm@mlist.is.ed.ac.uk](#)), while everyone is encouraged to subscribe to the [Rubin Observatory Digest](#) for more general news from the US observatory team.

[@ Bob Mann](#)

Call for membership of DESC Equity, Diversity, and Inclusion (EDI) Committee

The DESC is currently seeking volunteers or nominations for the Equity, Diversity, and Inclusion (EDI) Committee. We are seeking to expand our pool of candidates in order to ensure broad representation on this committee. Time spent working on these committees is service to the collaboration, and counts toward achieving DESC builder status.

If you would like to nominate a member to the committee - or have any questions about this role - please contact Sierra Villarreal (sierrav@slac.stanford.edu), while if you would like to volunteer for any DESC committee (including EDI), please fill out the volunteer questionnaire at <https://forms.gle/YyW7nVMRypJ4b4cN8>.

The deadline for receiving nominations is Wednesday, December 7th.

Sierra Villarreal, on behalf of the DESC Collaboration Council

The 2023 call for LSST:UK Affiliate PIs and Junior Associates is open

Access to proprietary LSST data by UK researchers will be obtained in exchange for the UK's in-kind contribution to Rubin operations. The content of the UK in-kind package has been approved by the Rubin Management Board, but the UK data rights agreement has not yet been signed. This signing is expected to happen in the next few months whereupon we will know the arrangements for UK data rights during LSST operations.

The 2023 selection round shall therefore be an interim arrangement which only awards data rights up to 30/09/23, rather than for the three-year terms that has been typical in most previous rounds. This will allow UK researchers to continue to engage with LSST Science Collaborations, etc, until we know how we will manage UK data rights in the longer run.

The selection round will operate as follows:

- Those whose current term extends beyond 30/09/23 should NOT apply in this round.
- Those who currently hold Affiliate PI or Junior Associate status and whose term ends between now and 30/09/23 will be emailed to ascertain whether they want their current term to be extended to that date.
- Those who do not currently hold Affiliate PI or Junior Associate status can use the form to apply for data rights up to 30/09/23: candidate Junior Associates may self-nominate or be nominated (using the same form).

More information about the form and scope of the current call is available on the LSST:UK Confluence site ([2023 LSST Affiliate PI/Junior Associate Selection Round](#)) while those uncertain as to their current data rights status can consult the [current list of Affiliate PIs and Junior Associates](#).

Application form: <https://edinburgh.onlinesurveys.ac.uk/2023-lsst-affiliate-pi-ja-application>

Applications will close at 16.00 on Tuesday, December 13, 2022

@ Terry Sloan

Final call for Data Preview 0 Delegates

The Rubin Observatory Data Preview programme is providing the community with access to LSST-like data using the tools - primarily the Rubin Science Platform (RSP) - through which the survey data releases will be accessed. Data Previews 1 and 2 will provide access to commissioning data (from ComCam and LSSTCam, respectively), but the programme has started with Data Preview 0 (DP0), which is built on simulated LSST data from DESC. In addition to providing access to the simulated data products through an early release of the RSP, DP0 has supported training activities that extend beyond LSST-specifics, to encompass broader computational skills that will be required for effective exploitation of LSST data. It has also fostered a learning community, in which developing knowledge is shared and support provided amongst the cohort of DP0 Delegates.

So far 500 researchers have joined the Data Preview programme to become DP0 Delegates, and the Rubin Community Engagement Team has [recently opened a final call](#) for a further 100 places. This call is only open to those who already have LSST data rights (as recorded in the [official list of international data rights holders](#)). However, it will remain open until the 100 places have been filled, and that is expected to take several months, so **there should be time for UK researchers to obtain data rights in the 2023 call for LSST:UK Affiliate PIs and Junior Associates and then apply to become a DP0 Delegate.**

Further information about this DP0 call, including a link to its application form, can be found in [a post](#) on the Community forum.

@ Bob Mann

Update from the Survey Cadence Optimisation Committee (SCOC)

The Survey Cadence Optimisation Committee (SCOC) had its third joint workshop with the Science Collaborations (in virtual format) 2-3rd November 2022.

<https://project.lsst.org/meetings/scoc-sc-workshop3/home> .

The talks and videos are available which include some summary recommendations of the SCOC that will go into the Phase II report ([the Phase I report can be found on the SCOC website](#)). You will see that there was a set of 8 questions that the SCOC looked at particularly closely at this staff (see Slide 9). These cover many of the interesting questions and pressing questions for cadence including

- Q3 : footprint refinements (i.e. extragalactic vs galactic survey footprints),
- Q4 : rolling cadence, which decreases the revisit time gap, but then results in bands per year
- Q5: deep drilling field strategy, the SCOC endorse the Euclid DF south as the 5th deep drilling field. But using 2 camera footprints to cover the Euclid area.

You can read the full report above and the Public SCOC meeting minutes [are available on the LSST Community website](#).

The SCOC membership will rotate with 6 members changing. The UK had two members who served on the first 2 years (Meg Schwamb QUB and Hiranya Peiris UCL - LSST:UK would like to thank both for their dedication and efforts). Seven new members will join, with the full list available in the slides linked above, (including Stephen Smartt Oxford/QUB).

@ Stephen Smartt

Recent LSST:UK Science Centre outputs

The LSST:UK Science Centre has recently produced the following technical reports.

Title	Author	Description
D2.3.2 Design of infrastructure for LASAIR	Roy Williams, Gareth Francis, Ken Smith and Dave Young	<p>The Lasair Community Broker is a platform for astronomers to work effectively with the LSST transient alert stream: it is designed to be fast, flexible, and capable. While intended for the LSST alert flow, that is still in the future. Therefore Lasair development work so far has used a prototype system, Zwicky Transient Facility (ZTF), that has been running since 2018, and which has been built to be a prototype of LSST.</p> <p>This report describes the technical infrastructure of the Lasair Community Broker: the purpose, the architecture and design, the underlying technologies, and how the components work together</p>
D3.2.2 Lasair User Interface	Dave Young, Roy Williams, Gareth Francis, Ken Smith	<p>Given that LSST data is not yet available, Lasair has worked with data from the Zwicky Transient Facility (ZTF) for the last four years. ZTF is similar in crucial ways to what the LSST stream will be: data is delivered as fast as possible from the telescope, using the Kafka technology.</p> <p>The central purposes of Lasair are to (1) collect the transient alerts and amplify their scientific usefulness by adding value, and (2) to allow scientists to find objects that are relevant to their own science goals.</p> <p>Lasair allows users to execute a wide class of SQL queries on the database of active objects, and to convert those to filters on the real-time stream, with the outputs pushed – in near real time – to other machines or to email. Lasair also provides an API for data access, so that users can build code and notebooks to work with Lasair objects and lightcurves. Lasair allows users to “annotate” the database of transients with their own classifications. Lasair allows users to log in to the website, where they can store and share filters, watchlists, areas, and annotations.</p> <p>This report describes the user interface of the Lasair Community Broker: the purpose, the architecture and design, the underlying technologies, and how the components work together.</p>

@ Terry Sloan

Forthcoming meetings of interest

Meetings of potential interest for the coming months include:

- 27th February – 3rd March: DESC Collaboration Meeting (virtual). Details to be published on [DESC members website](#) (login required).
- 24th - 28th July: DESC Collaboration Meeting (SLAC).

Members of the Consortium (not in receipt of travel funding through one of the Science Centre grants) may apply for travel support for meetings of this kind via the the LSST:UK Pool Travel Fund. Details are available at [Forthcoming LSST-related Meetings](#) .

Note that the current list of forthcoming meeting is always available on the [Relevant Meetings](#) page. You may also wish to check information held on the LSST organisation website [LSST-organised events](#) and the [LSST Corporation website](#).

@ George Beckett

Announcements

If you have significant announcements that are directly relevant to LSST:UK and would like to share the announcement in a future newsletter, please contact the [LSST:UK project managers](#).