

Information Sharing **During Commissioning** 

Keith Bechtol, Steve Ritz

**Project and Community Workshop** 10 August 2023













## **Reminder - Code of Conduct**



Project & Community Workshop 2023

7-11, August 2023 | Marriott University Park Tucson | Tucson, AZ

Register Travel & Venue Code of Conduct Agenda

Harassment and unprofessional conduct (including the use of offensive language) of any kind is not permitted at any time and should be reported to:

- Andrew Connolly (ajc@astro.washington.edu),
- John Franklin Crenshaw (jfc20@uw.edu), and/or
- Alysha Shugart (<u>ashugart@lsst.org</u>).



Rubin Observatory adheres to the principles of kindness, trust, respect, diversity, and inclusiveness in order to provide a learning environment that produces rigor and excellence.

Handshakes OK Elbow/Fist Bump OK Check name-tags for these contact

comfort level stickers.



Wear a mask if you want to!

Use the confidential email <u>rubin2023-covid@lists.lsst.org</u> to request a test, report your test results, or ask questions.



If someone is wearing a pin like this, and it indicates a low social battery, please give them their space or offer to restart the conversation at a later time.

If you feel unsafe at any time send an email to rubin2023-helpline@lists.lsst.org

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## **Reminder - Virtual Participation**



Virtual participants should be muted when they're not speaking.



In-person participants should speak into the room microphone(s), or the chair should repeat all questions into the microphone, so that the virtual participants can hear what is said.



In the Rubin2023\_PCW Slack Space, all participants can use the session's channel for Q&A and discussion. The channel name convention is, e.g.: #day1-mon-slot3a-intro-to-rubin



In Zoom, use the chat to:

- request to unmute to ask a question, or
- type your question so someone can speak it aloud.

The Zoom "raise hand" feature is generally harder for moderators to track, and is not preferred, but may be used at the discretion of the session chair.

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- 1. Introduction, Boundary Conditions During Commissioning, Interfaces, Timeline, Goals of Session - S. Ritz (15')
- 2. Draft for Feedback: Information and Communication During Each Phase of Commissioning - K. Bechtol (30')
- 3. Discussion, Q&A, open questions (45')

### Policy document being drafted. Feedback welcome and appreciated!



- The Rubin Science Community needs timely information about the technical and scientific performance of the as-built system to prepare for their science analyses.
- The Project team must be fully enabled, with the free flow of communication within the Project team, to focus on time-sensitive work needed to demonstrate Construction Completeness and Operational Readiness.
- To maximize public engagement, there is a major media release planned shortly after System First Light. <u>See Tuesday session on this topic</u>.



# Context: Current Rubin Data Policy RDO-013

### http://ls.st/RDO-013\*

April 2020, added this language:

**DPOL-516** Science Data from Commissioning: Scientific analysis of the commissioning data will be an integral and necessary part of the science verification process. **All commissioning data used for science will be released to all LSST Users prior to any publication by anyone.** Members of the commissioning team may not submit science papers to a journal and/or the arXiv based on commissioning data prior to the release of those data to LSST Users, but they may undergo the Rubin Observatory Publication Board process (this board is part of the construction project, not operations) in advance of the release of those data.

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Currently, we are functioning in a transparent fashion, pasting images and results in open slack channels and meeting pages open to anyone in Rubin. Other communications (*e.g.*, technotes) are world-readable. This is good.

The Rubin Observatory has a set of standards for data security. The relevant aspects are as follows:

- 1. During commissioning, engineering and imaging data will be embargoed for all non-Project team members for a period of at least 30 days following the observation. After this 30 day embargo, only with explicit approval may proprietary information, including data products from commissioning, be shared outside the Project team.
  - Data aside from focal plane scientific data may be made available following the Project plan which includes astronomical metadata (within 24 hours), alert postage stamp images (within 60 sec), and weather and sky monitoring data.



- 2. Project team members are required to use only approved Project tools, platforms, and processes for communication, data access and analysis, documentation, software development, work management, etc. In practice, we expect most work done by the Project team on the commissioning data to be done within protected directories at the Rubin US Data Facility at SLAC.
- 3. To maximize opportunities for public engagement, Rubin Observatory will embargo all images prior to major event releases (*e.g.*, the System First Light celebration) as leaks severely compromise public relations effectiveness.

→ See <u>PCW session on Rubin Observatory Construction Celebration Plans</u>



## Timeline: First Photon to Year 2 of LSST







# Draft for Feedback: Information Sharing and Communication During Each Phase of Commissioning



The **Project team** includes all individuals working for Rubin Observatory who have access to proprietary engineering and on-sky commissioning data from LSSTCam prior to their release, which includes all Rubin Observatory staff as well as participants in the SIT-Com In-Kind Contribution Programs (<u>SITCOMTN-050</u>)

**Focal plane scientific data** corresponds to proprietary data products from on-sky imaging with LSSTCam as defined in the Rubin Data Policy (<u>RDO-013</u>)

A **derived data product** is defined in the Rubin Data Policy (<u>RDO-013</u>) as a data product that is derived from LSST proprietary data but that cannot be used to recreate any proprietary LSST data product(s).



All pixel images and representations of pixel images of any size field of view, including individual visit images, coadd images, and difference images based on LSSTCam commissioning on-sky observations are embargoed for a period of at least 30 days, with the exception of alert postage stamp images.



During the period from installation of LSSTCam on the telescope to the release of Data Preview 2, all communications (including informal discussion) regarding proprietary engineering and on-sky data with LSSTCam are internal to Rubin Project by default.

Outward-facing communications, including all on-sky LSSTCam images, are reviewed by SIT-Com leadership, the Rubin Celebrations Organizing Committee (RCOC) and its relevant subgroups, and the Communications team, and are approved for release by the Project Director or designated alternate.

Status of the commissioning effort will be shared frequently with the world.



Outward Facing Communication (Part 2 of 2)

Example outward-facing communications:

- Weekly digests and News stories on <u>Rubin Observatory webpages</u>
- <u>Published project status webpage</u>
- Rubin Observatory press releases / media events
- Released photographs, plots, and on-sky images
- Approved technotes (see upcoming slides)



Free and unfettered communication among Project team members is essential for commissioning success. Project team members are required to use only approved Project tools, platforms, and processes for communication, data access and analysis, documentation, software development, work management, etc. Derived data products are not subject to those restrictions, but are embargoed until approval for release (see upcoming slides).

In practice, we expect most work done by the Project team on the commissioning data to be done within protected directories at the Rubin US Data Facility at SLAC.



Prior to the release of associated data products as part of the Early Science program, derived data products from LSSTCam on-sky commissioning data may be shared beyond the Project team only in the following situations:

- the derived data product has been approved for release in one of the official Rubin Observatory outward-facing communication channels;
- (2) the derived data product is documented as part of an approved technote (see upcoming slides)

Derived data products that represent visit, coadd, and difference images from LSSTCam on- sky commissioning, with the exception of alert postage stamp images, are embargoed for a period of at least 30 days following the observation.



During the on-sky commissioning period with LSSTCam, members of the Project team are allowed to discuss technical details of their work outside the team, and they may freely discuss aspects that do NOT relate to specific on-sky data products from LSSTCam or interim science performance.

Discussion on the general status of commissioning should refer to Project-approved resources for information on the progress of commissioning activities (e.g., digests, news stories, published Project status on the Rubin Observatory website).



Derived data products resulting from analysis of AuxTel datasets, and electro-optical datasets from ComCam and LSSTCam, as well as non-proprietary precursor datasets (e.g., HSC and DECam) and non-proprietary simulated datasets (e.g., DESC DC2) may be openly discussed and shared.



<u>Technotes</u> are a way for Rubin Observatory team members to write standalone documents that are native to the web, can be cited in literature, and are easy to write, publish, and update. See listing at <u>www.lsst.io</u>.

During the on-sky commissioning period with LSSTCam, technotes are anticipated to be one of the primary mechanisms to share information about Rubin Observatory data with the science community. Project team members are encouraged to document their analyses in the form of technotes, e.g., to describe an algorithm or analysis software, to characterize and/or propose a solution to an outstanding issue, or to present the results of a science verification / validation study.

Technotes may present science validation analyses, but are not intended to include novel scientific results / discoveries.



Prior to the associated Early Science release, technotes that involve proprietary on-sky LSSTCam data must be first drafted in a restricted space and reviewed/approved by the Project using a standard checklist in a timely manner before posting. This process will ensure that released technotes meet basic standards for documentation quality and conform to Rubin Observatory information release policies.

Derived data products may be documented and shared via technotes that have been approved for public release.



When presenting on Rubin Observatory technical and scientific performance at institutional meetings, LSST Science Collaboration meetings, scientific conferences, seminars and colloquia, etc., Project team members are responsible for following presentation guidelines adopted by the Project. The presentation content related to Rubin Observatory technical and scientific performance may only include released materials.



Members of the Project team are welcome to include descriptions of their commissioning activities to support external grant proposals and observing proposals. Embargoed information cannot be included, except with specific approval of the Rubin Observatory Project Office. Approved derived data products may be included.



The commissioning-era information sharing policies apply to student dissertations and theses. Students on the Project team who intend to report results from analysis of unreleased on-sky LSSTCam commissioning data as part of their dissertation/thesis are advised to document their work via technotes so that approved results can be shared outside the Project team.



# Peer-Reviewed Journal Publications:

The **Project Publication Policy** [LPM-162] covers all publications that describe Project-funded work to design, develop, construct, commission, or operate the Observatory, and all publications based on access to non-public intellectual property of the Project or proprietary information related to the Project.



## Peer-Reviewed Journal Publications: Construction Papers

Rubin Observatory is drafting a set of **Construction Papers** to be published in peer-reviewed journals as part of the body of documentation to describe the technical and scientific performance of the as-built system. The Construction Papers describe infrastructure work by Project team members and are thus covered by the Project Publication Policy.

Construction Papers that describe scientific performance will be completed by the Data Preview 2 release date in order to support the community to write science papers based on Early Science data products.



Members of the Project team might also contribute to science papers that use released commissioning data from the Early Science program.

Science papers that rely only on released Early Science data products are NOT covered by the Project Publication Policy.<sup>1</sup>

<sup>1</sup>Authors should consult with the Rubin Observatory Publication Board if they are uncertain whether any aspect of a manuscript in preparation would be classified as infrastructure work covered by the Project Publication Policy.



## Peer-Reviewed Journal Publications: Science Paper Guidelines (Part 1 of 4)

For science papers that include members of the Project team as authors, we suggest the following guidelines to promote transparency:

- Project team members may begin writing science papers based on commissioning data prior to the release of associated Early Science data products. Those science papers may not be submitted until the associated data products are released.
- Project team members are free to collaborate with others beyond the Project team on science papers that use Early Science data. The Project team authors are welcome to inform their collaborators about their intent to write such science papers prior to the release, but **no aspects of any science result** may be shared until after the associated data release.



For science papers that include members of the Project team as authors, we suggest the following guidelines to promote transparency:

- The authors are encouraged, but not obliged, to announce plans for science publications as soon as possible within the Project team and welcome collaboration. They should discuss relevant publication policies (*e.g.*, from LSST Science Collaborations) well in advance to avoid possible misunderstandings.
- A technote describing science validation analysis of on-sky commissioning data could become the basis for (parts of) a science paper submitted to a peer-review journal / the arXiv.



For science papers that include members of the Project team as authors, we suggest the following guidelines to promote transparency:

- The authors are encouraged to circulate a draft within the Project team for comments several weeks in advance of submission / public posting. Since these non-infrastructure publications are not covered by the Project Publication Policy, there is no formal review by Rubin Observatory.
- The authors should encourage co-authorship as appropriate to recognize the contributions of other Project team members. No one should be listed as a co-author without their explicit permission.



For science papers that include members of the Project team as authors, we suggest the following guidelines to promote transparency:

• The publication should reference appropriate Construction Papers, technotes, and other Rubin Observatory documentation.



Under extraordinary circumstances, the Project may publicly release scientific results and associated data earlier than the planned timeline.



The Operations team is working on methods and guidelines to enhance early science publicity. The Project team will be encouraged to follow those guidelines and to help showcase the science results and potential of Rubin Observatory.

The evolution of the policies and guidelines described here into the Operations period is in the Operations team purview.



# Discussion

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