OPS Rehearsal (Day 1: 2020-07-28) Meeting notes

Date

28 Jul 2020

Attendees

- Robert Gruendl
- Robert Blum
- Wil O'Mullane
- Stuart Marshall
- Monika Adamow
- Lauren MacArthur
- Unknown User (mbutler)
- Michael Reuter
- Unknown User (abauer)
- Jeffrey Carlin
- Leanne Guy
- Kevin Reil
- Unknown User (emorganson)

This is the first meeting of the observing team for ops rehearsal 2. In regular operations, there is a daily meeting called the "Nightly Plan meeting" according to the current version of the operations plan. The meeting is "Led by the Night time Operations manager or shift manager, includes a Production Scientist (Data Production), a Scheduler Scientist (Sys Perf), and an Observatory Support Scientist." The purpose of the meeting is to "Make sure the Data Facility is ready to process images and distribute alerts, flag issues from the previous evening's observations."

The agenda below can be used to rehearse this kind of meeting which will be critical to ops success on nightly timescale. We don't have a scheduler aspect yet, but we can imagine changing the data taking set up as a prelude to nightly scheduling input.

For context of our discussions during this rehearsal, the operations plan lists the following as the high level activities for Observatory Operations (i.e. what happens in Chile):

The key responsibilities of Observatory Operations can be summarized as

- Creating the plan for both daily- and nightly activities, including procedures for on-the-fly decisions required during operations to adapt to variable environmental conditions;
- Collecting, managing and transferring survey, calibration, engineering, and environmental data from the summit hardware for processing in coordination with the Data Product Department;
- Real-time assessment and diagnosis of the quality of the acquired raw imaging and engineering data;
- Real-time tracking and diagnosis of survey progress metrics;
- Monitoring, maintaining, servicing, and optimizing the telescope, camera, summit facilities, and other equipment needed to support survey observing using a continuous maintenance plan; and
- Providing administrative support for Chilean staff (both Chilean and ex-patriate).

The Observatory Operation Department will require coordination with the other departments in the following ways including but not limited to:
Daily/Nightly verification with Data Products Department of system connectivity for data transport, archiving and support of Alert Production, overseen by the on-call shift manager;

- Quality Evaluation of daily Calibration Data Products (e.g. bias, dark and flatfield images) in near real time, as input data are acquired each afternoon. The QA is based on results from batch image processing made available from Data Production and System Performance. This is overseen by the Calibration Scientist;
- Systems Performance department for any adjustments to the strategic survey priorities, overseen by the Observatory Scientist in order to change observing strategies to respond either to newly discovered systematic effects in the data or in response to potential degraded telescope/camera performance;
- Inputs for modifications to Observatory system software (e.g. as may result from information flowing to Observatory Operations from Data Production and System Performance - see above bullet), overseen by the Observatory Software Manager.

These are well aligned with the activities we plan for this week.

Agenda

- Status report from La Serena (Stalder). What data were obtained last night? "Real time assessment was in the slack channel:" Issue with condensation.
- Data transfer and processing (Gruendl). What was transferred and how long did it take. Processing status.
- Quality checks on data processed (MacArthur)
- Plan for night 2 (all).

Discussion items

Time	Item	Who	Notes

10m	Status LS	B Stalder	• took flats , biases , darks- • clear problem with L3 fogging. ◦ Replaced N2 bottle fogging is going away - lens clear this morning - tonight will repeat. • Late Time was ok for Kevin Reil

10m	Data Transfer and Processing	R Gruendl	• Unknown User (emorganson) two ingesters running
			  ◦ killed one and reingested ..
			  ◦ https://lsst.ncsa.illinois.edu/processing_monitor/comcam_archiver/
			  ◦ transfer finished minutes after data taking
			• Unknown User (mbutler) BBCP transfered all files in 52s. (~5G) as opposed to FTP

	processing	M. Adamow	• All ok - problems writing to calibs
			  ◦ owned by Robert - no group perms - can set
			• Bias, Dark, Flat - combined and ingested (based on group id)
			  ◦ not sure if the bias from last week was used or if the current biased was used
			  ▪ to be checked
			• 15 min on 10 cores to process
			• Question of naming
			  ◦ its ok for Lauren

10m	QA	L MacArthur	`Notebook/project/shared/comCam/rerun/calib_construction/` (really hoping that was the right place to poke around in!) and just chose the `expId` associated with the “latest” bias/dark/flat. Some (rather ugly…) pdfs of the notebook outputs can be found at: https://lsst.ncsa.illinois.edu/~lauren/OpsRehearsal_2/OpsR2_calibQuickLook_bias.pdf https://lsst.ncsa.illinois.edu/~lauren/OpsRehearsal_2/OpsR2_calibQuickLook_dark.pdf https://lsst.ncsa.illinois.edu/~lauren/OpsRehearsal_2/OpsR2_calibQuickLook_flat.pdf • these are not valid - not using the correct calibraiton • need to update the run from last night. • any other views can be added as needed will try to add diferencing
30 min	Discussion and plan for n2	all	Similar data as for n1. Will ask Kevin Reilto adjust illumination to add variance from n1. Much discussion about gen 2 v gen 3 and other levels of sophistication to plan for next rehearsal. Eventually this becomes commissioning. What is the most useful thing to do before commissioning.

Action items

Leanne Guy let's make a github repo for notebooks or scripts. Monika Adamowto make repo.

Kevin Reil to adjust illumination on camera for flats

Brian Stalder and/or Kevin Reil to ensure data taking params same as last night (exp time, etc)