2021-09-28 Science Metric Development Agenda and Meeting notes

Date

28 Sep 2021

Location

Browser	Room System	Phone Dial-in
https://bluejeans.com/690803707 or https://ls.st/rsv	1. Dial: 199.48.152.152 or bjn.vc 2. Enter Meeting ID: 690803707 -or- use the pairing code	Dial-in numbers: • +1 408 740 7256 • +1 888 240 2560 (US Toll Free) • +1 408 317 9253 (Alternate Number) Meeting ID: 690803707

Attendees

- Keith Bechtol
- Jeffrey Carlin
- Simon Krughoff
- Leanne Guy
- Peter Ferguson
- Colin Slater

Regrets

- Erik Dennihy

Metric Tracking Dashboard

URL:

- DC2 and HSC RC2 monthly reprocessing (Gen3 and Gen2/3, faro): https://chronograf-demo.lsst.codes/sources/2/dashboards/75
- Nightly CI (Gen3, faro): https://chronograf-demo.lsst.codes/sources/2/dashboards/70

Discussion items

Item	Who	Pre-meeting notes	Minutes
News, announcements and task review	All	• Task review • Co-work etiquette.	• If going to have a special session with co-work, we should advertise. It is no longer co-work if we have a one-hour presentation. Perhaps those topics are more appropriate for the Tuesday status meeting. Sentiment that this should be unstructured time. Don't expect deep dives into technical topics to be very regular.

Bugs, issues, topics, etc of the week	All	• We have metrics in chronograph!!!! Horray.
		• But we have issues with the dashboard.
			• Metrics and datasets collided and end up on wrong plots. There is something amiss about the selections that needs to be sorted out.
			• Probably not filtering correctly on the dataset tag.
			• Select 7d + tract 9813 to get only faro + rc2_subset metrics.
			• Can we add the spec. thresholds to the chronograph plots? Not easy with this version. Moving to chronograph 2.0 on a ~ 6month timescale.
			  ◦ Could potentially add data for specs, but unfortunately chronograph would not treat lines as being special in any way other than mousing over to see label. Maybe we should think about report tooling that queries from influxDB. There effort into visualization in influx2.
			  ☑ Leanne Guy Simon Krughoff to think about how to engage with influx and make feature request 19 Oct 2021
			• We will have to do a bulk shift to a new table not named validate_drp. All science pipelines folks are using that package as well. Another option is generating a new table that is a copy and starting from scratch populating with metric values. There are ways a renaming a table. SELECT * into (new table name). Then everyone would have to put new results in new table.
			  ☐ Leanne Guy to talk to Science Pipelines (Yusra) about when do this transfer 19 Oct 2021

Reprocessing status and metrics review	Jeffrey Carlin Keith Bechtol	• Nightly CI with new rc2_subset • RC2/DC2 reprocessing epic : DM-26911 - Jira project doesn't exist or you don't have permission to view it. • w_2021_38 RC2: DM-31795 - Jira project doesn't exist or you don't have permission to view it. • w_2021_36 DC2 : DM-31699 - Jira project doesn't exist or you don't have permission to view it.	• Is there a standard way to know what is the latest collection? See the RC2/DC2 reprocessing JIRA epic

DP0.2	Colin Slater
	
	Leanne Guy
		Faro for DP0.2
		
		• Jeffrey Carlin Faro in DRP.yaml status
		• RFC-807 - schema changes for DP0.2 are approved
		• Erik Dennihy Jeffrey Carlin Status of conversion to using parquet files as input to faro
			• DRP.yaml
			  ◦ Jeff has tested this in DRP.yaml in rc2_subset. Separated into SFP and coadd processing and ran 2 groups at the end.
			  ◦ i.e compute SVP metrics at the stage of SVP rather than waiting for everything to finish
			  ◦ Wants to do more testing in CI imsim DRP.yaml before going with it.
			  ◦ Planning to put ticket into review and get it in today or tomorrow.
			  ◦ DM-31848 - Jira project doesn't exist or you don't have permission to view it.
			  ◦ Colin wants to better understand the errors seen running on full end-to-end processing on <dataset>, can we test on other datasets, or separate out the steps to look at each.
			  ◦ Can we run the faro steps on the weekly 36 processed data? Run faro based on the products of DRP.yaml would be a useful exercise.
			• Parquet conversion
			  ◦ tract and patches:
			  ◦ DM-31459 - Jira project doesn't exist or you don't have permission to view it.
			  ◦ Keith has picked up some of Erik's work on converting to using parquet tables. Keith took the branch and added capability to selectively load columns from the specific band. Need this to compute a per-band metric.
			  ◦ Difficult to run TE3/4 or stellar locus based on the parquet files in the next 48hrs. Fallback is that we continue to use the FITS files.
			  ◦ Column renaming RFC is yet to land - are we depending on anything that will change, e.g., psFlux psfFlux . Most changes are in the Object table.
			  ◦ Decision: FITS files will be our basis for DP0.2 process. Continue to push ahead and complete the migration to parquet.

Development status	Leanne Guy	• Fall 2021 epic DM-30748 - Jira project doesn't exist or you don't have permission to view it. • Backlog epic: DM-29525 - Jira project doesn't exist or you don't have permission to view it.	• Keith wants to get the documentation ticket through for the review. Can we do it this week? Branches are not built. • Daily builds of documentation: https://pipelines.lsst.io/v/d_2021_09_28/modules/lsst.faro/index.html • Try to get documentation out for Friday.

AOB	Leanne Guy	Potential co-working session ideas here	• LPG: Suggest we move this to a "Science Metric co-work" confluence page that we can consult. ☑ Keith Bechtol to make confluence page for co-work idea 05 Oct 2021

List of tasks (Confluence)

Description	Due date	Assignee	Task appears on
☐ Leanne Guy to talk to Science Pipelines (Yusra) about when do this transfer **19 Oct 2021**	19 Oct 2021	Leanne Guy	2021-09-28 Science Metric Development Agenda and Meeting notes
☐ Leanne Guy arrange to disucss at a future meeting if there are metrics from PDR3 & this paper that we might want to include in faro. **26 Oct 2021**	26 Oct 2021	Leanne Guy	2021-08-31 Science Metric Development Agenda and Meeting notes
☐ Colin to ask about capturing ideas for improvement to the stellar locus algorithm **30 Nov 2021**	30 Nov 2021		2021-11-09 Science Metric Development Agenda and Meeting notes
☐ Colin Slater to make a preliminary draft agenda for a workshop to clarify visualization use cases for science verification and validation		Colin Slater	2022-04-19 Science Metric Development Agenda and Meeting notes
☐ Jeffrey Carlin to review metric specification package organization and the relationship to formal requirements documents		Jeffrey Carlin	2022-04-19 Science Metric Development Agenda and Meeting notes
☐ Keith Bechtol Schedule a time to have focused discussion on verification package, potentially next status meeting		Keith Bechtol	2021-09-14 Science Metric Development Agenda and Meeting notes
☐ Keith Bechtol to make a ticket to better understand mapping of these camera and calibration products characterization efforts to verification documents and the focus of these efforts. Discuss with the SCLT		Keith Bechtol	2021-09-14 Science Metric Development Agenda and Meeting notes