2021-07-13 Science Metric Development Agenda and Meeting notes

Date

13 Jul 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

- Leanne Guy
- Keith Bechtol
- Robert Lupton

Regrets

Metric Tracking Dashboard

URL:

Discussion items

Item	Who	Pre-meeting notes	Notes and Action Items
News, announcements and task review	Leanne Guy		Tasks • Gen 3 results in the CMR this time with a note that this is the last time. Will probably continue this until we have pipelines full parity • Schedule Dan from early August. • RHL hasa draft of a notebook out of Chris - will pass on details to Simon when there are more AO for community engagement with commissining out – good interest. • Interest from DESC See #desc-announce, not sure about other SCs yet.

Bugs, issues, topics, etc of the week	All	- Use of logger in faro . Some guidelines have emerged from work on
		
		⚠️ DM-31016 - Jira project doesn't exist or you don't have permission to view it.
		   - Do not use lsst.log, use python 'logging' instead. See an example in 'separations.py'
		`import logging`
		`log = logging.getLogger(__name__)`
		`log.debug("No matching visits "`
		`        "found for objs: %d and %d" % obj1, obj2)` - Except if a class is using 'Task' - then the logger that is attached to each 'Task; should be used. e.g 'self.log.info()'. See example in 'TractMeasurementTask'
		`class TExTask(Task):`
		`...`
		`self.log.info("Measuring %s", metricName)` - Do not use "f-strings" in any log call 😞 'Task has been set to use % formatting and at the log handler level, f-string and % formatting cannot be mixed. This only applies to logging. f strings can be used elsewhere. - Use , `self.log.info`("my message %s", message) and ~~not `self.log.info("my message %s" % (message)).`~~ - See also
		
		⚠️ RFC-783 - Jira project doesn't exist or you don't have permission to view it.
			- The developer guide does not explain all of this - Define convention for loggers, e.g "faro.method" - Do not use print statements at all in faro ☑️ Leanne GuyCreat a ticket to update developer guide. 20 Jul 2021

Reprocessing status and metrics review	Jeffrey Carlin Keith Bechtol	Dashboards can be found here: https://chronograf-demo.lsst.codes/sources/2/dashboards Monthly reprocessing: - DRP metrics monthly Gen 2 (HSC RC2) - Where is the Gen3 squash dashboard - follow up with Yusra - Get the new test dataset running and metrics into a dashboard (or add to existing) in squash	- Still no faro metrics being written to squash – need to address the bug first. - Specify dates in dispatch_verify (lsst_verify) for upload to squash. Default is the time the job was run. Lack of provencance. - What about a sandbox dashboard to test dispatch_verify/dev? ☑️ Simon Krughoffto ask what happened to the sandbox dashboard. 20 Jul 2021

| Develop ment 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. | • DM-31013 : NaNs being reported by all metrics. Problem with validation datasets - FGCM format changed? jeff will look at it
• Keith been working on switching to using parquet tables DM-26214.
  ○ Has switched to src table for single detector metrics. Very fast. Per visit and per detector src catalogs only so far.
  ○ Implemented as additional base classes rather than replacing old.
  ○ Complete this PR first then move to implementation of using parquet in the remainder of the code
• DM-30748: Reference catlogs
  ○ Gen 3 magic - will give the dataids associated with the shards that overlap the spatial region of the quantum being computed. So no need to load the whole reference catalogs! Access spatial info, timestanmp of visit from the dataId associated with the quantum. Can then apply the correct proper motion.
  ○ Can now proceed to implementing all metrics that require comaprison to external catalogs.
• Simon has run DRP pipelines on reduced dataset. Can get through coadd and coadd measurement. One patch with complete coverage in all bands. Issue is time - 240 mins for SFP. Maybe not a nightly reprocessing. Deblending and measurement is time consuning. So we have a coherent dataset that can be run fully but time is an issue.
  ○ Starting repo 15GB . |
| AOB | Leanne Guy | Next meeting 2021-07-06 | |

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