

2021-12-07 Science Metric Development Agenda and Meeting notes

Date

07 Dec 2021

Location

Zoom alias : <https://ls.st/rsv>

Zoom: <https://noirlab-edu.zoom.us/j/96120781994?pwd=bCtpT3Q3b2RsU1ZBRUFaSnUrZXo3Zz09#success>

Attendees

- [Leanne Guy](#)
- [Colin Slater](#)
- [Peter Ferguson](#)
- [Keith Bechtol](#)
- [Simon Krughoff](#)
- [Erik Dennihy](#)
- [Jeffrey Carlin](#)

Regrets

Useful links

Metric tracking dashboards



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




Rubin science pipelines weekly change log and Github repo: https://github.com/lsst-dm/lsst_git_changelog

Status of jenkins jobs and slack channel for notifications: #dmj-s_verify_drp_metrics slack channel

Discussion items

Item	Who	Pre-meeting notes	Minutes
News, announcements and task review	All		<p>RHL: Setting up a meeting to the CAP to deal with problems directly related to data taken on the mountain</p> <p>ComCAM/AuxTel calibrations, RAT spectroscopy. Role of this meeting is to keep pushing data through the pipelines and available for analysis. Scientific interpretation of the data would happen at a different meeting (probably this one).</p> <p>Thinking globally about the organization of efforts around collecting data, processing data, and analyzing data. Thinking about the whole lifecycle of the data.</p> <p>RHL: Move DRP focus from test and deploy to deploy and test. Once something works on a small scale - good enough then through it to the wider QA group. Early large-scale testing on real data. Example: PSFEx PIFF.</p> <p>LPG: Need to define the criteria for pushing a component out.</p> <p>CTS: makes sense from RHL perspective of processing LATISS data, but for someone working on HSC data he considerations are not the same. How do we partition the different cadences? Not everyone will work at the bleeding edge.</p>

CI status, bugs, issues of the week	All	<ul style="list-style-type: none"> verify_drp_metrics CI jobs Check variation in metrics seen last week 	<p>Why do we have daily apparently randomly fluctuating metric values? NCSA maintenance this morning. Jeff's plan to test two successive runs.</p> <p>Non-deterministic issue with photometric / astrometric calibrations?</p> <p>Perhaps due to a config override for FGCM.</p> <p>One check would be to directly check catalog values output from the Science Pipelines.</p> <p>Suspicion: non-determinism in the order of input data products in Science Pipelines. Any algorithms that depend on order of input data products could be affected. See DM-32451.</p> <p>DC2 astrometric repeatability is larger than expected according to Yusra. But maybe DC2 and HSC not directly comparable without a bit of thought about exposure times, atmosphere corrections, etc.TE</p>
Faro Development status	Leanne Guy	<ul style="list-style-type: none"> Fall 2021 epic <div>  DM-30748 - Jira project doesn't exist or you don't have permission to view it. </div> Backlog epic: <div>  DM-29525 - Jira project doesn't exist or you don't have permission to view it. </div> Progress on conversion to parquet TeX conversions 	<p>TEx is under review.</p> <p>Peter working on astrometric.</p> <p>Jeff working on source selector task.</p> <p>Dan T working on a matching algorithm to take parquet tables as input. Peter implemented a KDTree to start development with. Matching to a refcat - 1-1 matcher not a n-way matcher. Should look at Dan's matcher. Peter and Dan should talk.</p>

<ul style="list-style-type: none"> Data processing campaigns 	Jeffrey Carlin Keith Bechtol	<ul style="list-style-type: none"> RC2/DC2 reprocessing epic : <div>  DM-26911 - Jira project doesn't exist or you don't have permission to view it. </div> <ul style="list-style-type: none"> w_2021_40 RC2: <div>  DM-32248 - Jira project doesn't exist or you don't have permission to view it. </div> w_2021_44 DC2 : <div>  DM-32391 - Jira project doesn't exist or you don't have permission to view it. </div> AuxTel AP/DiffIm 	<p>KB got a ZP estimate for one of the filters (felh0600 filter cuts on at 600nm). ED picked an example exposure for the g-band. KB will do the same ZP estimate analysis on this. Exposure is from a dense field so do not expect processing issues.</p> <p>Some config changes coming to deal with getting an astrometric solution in sparse fields. KB should not need this for the g-band image processing.</p> <p>January plans are to put gri in the filter wheel.</p> <p>ED: Next steps? SFP is working. Can we build a skymap? KB: Effort to get atlas refcat 2 added as a refcat. Get a coarse estimate for the ZP to seed the algorithm. Then run the pm calibration as part of SFP.</p> <p>Check with Merlin!</p>
DP0.2	Colin Slater Leanne Guy	Faro for DP0.2	Trying to wrap up coaad analysis - no outstanding issues found so far.
AOB	Leanne Guy	Potential co-working session ideas here	Last meeting of 2021 on 14 December. Meet again in 18 January 2022

List of tasks (Confluence)

Description	Due date	Assignee	Task appears on
<input type="checkbox"/> 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
<input type="checkbox"/> Leanne Guy arrange to discuss 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
<input type="checkbox"/> 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
<input type="checkbox"/> 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

<input type="checkbox"/> 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
<input type="checkbox"/> 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
<input type="checkbox"/> 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