

2021-06-15 Science Metric Development Agenda and Meeting notes

Date

15 Jun 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: <ul style="list-style-type: none">+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](#)
- [Simon Krughoff](#)
- [Jeffrey Carlin](#)



Regrets







Metric Tracking Dashboard

URL:

Discussion items

Item	Who	Pre-meeting notes	Notes and Action Items
News, announcements and task review	Leanne Guy		<ul style="list-style-type: none">• NBReport - Simon needs a more concrete description of need. Current use case is too broad. RHL: don't want to invent requirements up front. Need to start doing verification first. RHL: <input checked="" type="checkbox"/> Robert Lupton Scope: What is the role of notebooks in certifying calibration products RHL to come up with a proposal. 10 Aug 2021
CMR	Jeffrey Carlin Keith Bechtol	Current draft of DMTR-311 <ul style="list-style-type: none">• w14 for v22.0.0 and backport the scarlet fix• Gen2/Gen3 comparison request from Yusra	<ul style="list-style-type: none">• Little progress - noo full parity btw G2/3 ppls, Y would like metrics calculated on the G2 oprocessed data before OK-ing a release. Eli is writing a script to compare results Slack conversation here: https://lsstc.slack.com/archives/C4JQP6FRS/p1623111517088600, <div> DM-30696 - Jira project doesn't exist or you don't have permission to view it.</div> <ul style="list-style-type: none">• TE1/TE2 - rerun with deblending flag. Results look more reasonable <input checked="" type="checkbox"/> Jeffrey Carlinask Yusra about proving Gen2/3 results privately and publish Gen3 native in CMR. 22 Jun 2021

Bugs, issues, etc of the week	All	Review of any issues that have come up during the week with faro and metric computation	<ul style="list-style-type: none">  DM-13758 - Jira project doesn't exist or you don't have permission to view it. <p>- do the filtering before assembling the matched catalog. New ticket created to do in faro - close this one out</p>
Status of reprocessing	Jeffrey Carlin Keith Bechtol	<ul style="list-style-type: none"> What versions are we reprocessing now and what is the status w18. Status of failed tract and coaddition step? 	<ul style="list-style-type: none"> Morgan running (gen2) w22 - one failed tract. 3718)? cosmos tract. Done, will not reprocess to get a self consistent run. gen3 w_2021_22 processing ticket: <div>  DM-30365 - Jira project doesn't exist or you don't have permission to view it. </div> <ul style="list-style-type: none"> w18 - will not be rerun.

Development status	Leanne Guy	<ul style="list-style-type: none"> Ticket <div>  DM-30054 - Jira project doesn't exist or you don't have permission to view it. </div> : loading reference catalogs with colour terms applied New RC2 dataset created for use with faro by Simon Krughoff - subset of cosmos fields. Details Closeout of the Spring 2021 epic <div>  DM-26993 - Jira project doesn't exist or you don't have permission to view it. </div> <p>and new Fall 2021 epic</p> <div>  DM-30748 - Jira project doesn't exist or you don't have permission to view it. </div> <ul style="list-style-type: none"> Using object table and source table (parquet format) Backlog epic: <div>  DM-29525 - Jira project doesn't exist or you don't have permission to view it. </div> 	<ul style="list-style-type: none"> Access to schema of tract object table is possible: See this thread. <ul style="list-style-type: none"> Can access for the tract object and source tables. Need to do this because on the RSP, could not load the full tract into memory, so a workaround was needed. Suggestion from Eli to get the parquet schema without loading anything. Simon's new dataset. Minimum of checking. 8 visits from 5 bands in cosmos, just with 6 central chips from HSC. Run that dataset through DRP Step 1 (SFP, JC, FGCM)/2 (warp/coadd)/3(meas FP object creation). Only 4 patches with full coverage. All this with w24 ran to completion with no error in quanta. Eli said FGCM outputs were not terrible. Will be (intention is to) better than validation_hsc - more visits/bands. Still in the ci / testing./reg. issues phase. repo contains only raw/calib and not outputs. Need a shared location at NCSA <p>Leanne Guy Need to test and refine the RC2 dataset and run faro on tit. 31 Aug 2021</p> <ul style="list-style-type: none"> Keith: For Fall 2021 epic, wearing commissioning hat, I would personally like to prioritize implementation of a collection of metrics to provide basic quality evaluation of individual detectors / visits, in other words, metrics that would be run immediately upon taking on-sky images, and which could be used as part of an on-the-fly analysis system providing feedback to observers. <ul style="list-style-type: none"> Propose to develop these metrics using HSC RC2 Propose to use sourceTable as main catalog input (work in progress) <div>  DM-26214 - Jira project doesn't exist or you don't have permission to view it. </div>) <ul style="list-style-type: none"> Needs reference catalogs as input (work in progress) <div>  DM-30732 - Jira project doesn't exist or you don't have permission to view it. </div>) <ul style="list-style-type: none"> Example metrics: number of detected objects (flagged objects), throughput, image quality, sky brightness, matches to reference catalogs, effective depth, anomaly detection Question: Could we apply these metrics to AuxTel imaging to attempt to perform a closed loop test? Part of the thinking here is that I want to start getting more specific about the types of information we need to address the use cases that have been developed, having some example metrics to use to think more concretely about visualizations and generally moving information where it needs to go. RHL: Auxtel is one way to do it, can also run on HSC single frame data. Reply DC2 data through the camera data could also be used.
AOB	Leanne Guy	Next meeting 2021-06-28.	

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