

DRP Metrics Monitoring 2022-12-19

Mondays 12pm - 12:50pm ET

Yusra's Zoom: <https://princeton.zoom.us/my/yusra>

Attendees:

Agenda:

- Meeting recorder - [Jim Bosch](#) (last 6 meetings were: Keith, Fred, Nate, Jeff, Clare, Arun)
- Announcements
- Review Action items from last month
 - astrometry plots (visit and coadd sky plots) now in review

- sky coverage plots (



[DM-34625](#) - Jira project doesn't exist or you don't have permission to view

it.

) now in review

- Piff robustification (



[DM-36930](#) - Jira project doesn't exist or you don't have permission to view

it.

):

- [Lauren MacArthur](#) will make a new ticket to take over adding a check on max distance to nearest PSF star, and do it in the visit summary stat code, starting from code snippet provided by [Joshua Meyers](#) :



[DM-37411](#) - Jira project doesn't exist or you don't have permission to view

it.

- some of these CCDs are salvageable
- some of these are not salvageable, and could silently cause problems downstream (maybe not FGCM, jointcal at worst weakly, definitely coadds, maybe CRs)
- this is complicated by the fact that the coadd input selection PSF checks still incorrectly use the original PSF
- [Jim Bosch](#) will add a new round of visit-summary calculation after the final PSFs, and switch back to PSFEx for the initial PSFs (



[DM-35207](#) - Jira project doesn't exist or you don't have permission to view

it.

)

- stellar locus in 9813 is wider than other tracts (long-standing, no updates)
- [Processing Status](#)
- Review w_2022_48 rerun:
 - "payload" errors (from tasks) now being included better in pilot logging
 - same characterizeImage and calibrate failures as before
 - ~40 fewer subtractImages failures compared to last run (expected)
 - 9697 patch 7 detection:
 - failed in _44 ("unable to evaluate coadd PSF")
 - succeeded in _48

- thought the fix was



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it.

but that

landed in _38

- also thought the fix might be



DM-36762 - Jira project doesn't exist or you don't have permission to view

it.

- but while timing is right, there's no connection from the code change to the behavior
- need to track this down to make sure it gets backported to v24
- want to check that the right version of the stack was actually used for step1 in _48

- templates (and other things holding lots of PSFs) do indeed take half the space



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it.

- Recall history:

- w12: psfex
- w16: piff (bad size residuals)
- w20: finalizeCharacterize (bad apcorr configs bad stellar locus)
- w22: lanczos11 + apcorr configs (better stellar locus and size residuals approx equivalent to psfEx!
- w24: PIFF kernelSize to 25. new scarlet lite storage.
- w28: attempt at fixing measure failures:



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it.

- w32: First RC2 at SLAC. subtractImages compatibility mode on
- w36: subtractImages Compatibility mode off
- w40:
- w44:
- w48: 9697/7 succeeds, extra subtractImage failures gone,

- Chronograf, plot-navigator review of _48

- "Everything looks okay"
- But the first thing Chronograph showed us for wPerp was very strange and concerning (before picking times), and we can't get back to it now.
- analysis_tools plots apparently failed to run
 - maybe this was expected, because we had 'u' band configured in HSC; this would have been fixed on



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(landed in _50)

- unclear how much (if any of this) was working prior to that ticket
- no one can explain why it ran in _44

- There will not be a _52 run. First HSC RC2 run will w_2023_02, but be prepared for surprises in tagging.

- Expect analysis_tools object core plots should be working again.
- Other tickets still pending, motivated by HSC PDR4 deadlines.
- SkyObject histogram plots should have been added (landed in _49).
- Piff performance improvements in external review, don't know when that will land.
- fgcmcal will soon be using isolated star catalog.
- new rho statistics plots landing soon in analysis_tools, including multi-tract plots
- some dataset type names will be changing to be more predictable/descriptive

- Expect a doodle for a new meeting time!
- AOB:



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it.

needs input on dataset type naming

conventions and some display choices (will discuss in slack)

- PSA: skyPlots (at least for skyObjects) seem to have inconsistent labels and numbers outside the plots (included in



DM-37172 - Jira project doesn't exist or you don't have permission to view it.

)

Action Items

| Description | Due date | Assignee | Task appears on |
|---|-------------|--------------------------------|-----------------------------------|
| <input type="checkbox"/> Add a plot with fakes stats to the dashboard. Sophie Reed 04 Sep 2020 | 04 Sep 2020 | Sophie Reed | DRP Metrics Monitoring 2020-08-07 |
| <input type="checkbox"/> Sophie to add field in metric definition to hold thresholds. DM-43364 - Getting issue details... STATUS : We need to talk about this when Sophie is back! | | | DRP Metrics Monitoring 2024-04-22 |
| <input type="checkbox"/> Sophie to add field in metric definition to hold thresholds. DM-43364 - Getting issue details... STATUS | | | DRP Metrics Monitoring 2024-03-18 |
| <input type="checkbox"/> Clare: add analyzeMatchedVisitsCore to drp_pipe step8 | | | DRP Metrics Monitoring 2023-06-26 |
| <input type="checkbox"/> Sophie: make a new list for outstanding analysis_drp plots that require moving, send to Jim | | | DRP Metrics Monitoring 2023-06-26 |
| <input type="checkbox"/> turn catchFailures on in calibrate. Add flag to indicate that deblender failed because PSF is bad. | | | DRP Metrics Monitoring 2022-10-31 |
| <input type="checkbox"/> Yusra AlSayyad Eric's account was deleted; we need to make sure he has all his logs. | | Yusra AlSayyad | DRP Metrics Monitoring 2021-06-14 |
| <input type="checkbox"/> Arun Kannawadi Modifv rho stats in pipe_analysis to use debiased moments (see DM-30751 - Getting issue details... STATUS). | | Arun Kannawadi | DRP Metrics Monitoring 2021-04-19 |
| <input type="checkbox"/> Investigate rho-stats an ellipticity resids in w_2020_06 post-Scarlet Arun Kannawadi Fred Moolekamp | | Arun Kannawadi | DRP Metrics Monitoring 2021-03-01 |
| <input type="checkbox"/> Yusra AlSayyad Do a rerun with w50 PS1 refcat and one with shrunk refcat errors. | | Yusra AlSayyad | DRP Metrics Monitoring 2021-01-04 |
| | | Jeffrey Carlin | DRP Metrics Monitoring 2021-01-04 |

☐ [Jeffrey Carlin](#) Add an absolute astrometry match-to-refcat metric to dashboard

DM-34153 - Getting issue details...

STATUS
