AP Pipeline Meeting, 2019-04-01

BlueJeans: https://bluejeans.com/426716450

attending: Eric Bellm Ian Sullivan Krzysztof FindeisenMeredith Rawls John Swinbank Unknown User (cmorrison) Unknown User (gkovacs)Unknown User (emorganson)

Topics for discussion

- HiTS reprocessing (Meredith Rawls):
    - tracked down the source of the correlated fluxes to photometric calibration zeropoint being not great–will close that identification ticket (

⚠ DM-17536 - Jira project doesn't exist or you don't have permission to view it.

) and there will be a new "fix" ticket (

⚠ DM-18687 - Jira project doesn't exist or you don't have permission to view it.

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- DES processing (Unknown User (emorganson)):
    - have been working on the Kafka and kubernetes systems
- ap_association (Unknown User (cmorrison)):
    - ran CCD 25 for all of HITS and found a fun "behavior" for the dipole fitter–default setting is that -/+ lobes have the same value, so sum give identically zero
    - now will start working on making dax_ppdb and ap_association speak pandas (

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). Some question of whether afw.table support will be removed entirely

- Metrics & ap_verify (Krzysztof Findeisen):
    - ap_pipe create database in extra step was approved w/o deprecation period, code merged
- image differencing (Unknown User (gkovacs)):
    - last time, had found that better seeing images had bad subtractions
    - then moved to a small 9-source test image to try to track down oscillating kernel basis functions. Moving to thinking these oscillating solutions could be "good" in the sense the local subtractions are fine. the global/spatially varying solution is where the failure is happening. worries that perhaps astrometry failures at large scales are messing up the spatial solution? still investigating.
    - also trying reducing the number of sources to see
    - will chase DMTN-06 dataset to see if we can repeat that more successful subtraction
- DCR (Ian Sullivan):
    - things started working great last week–found and fixed a bug, added a hack to aid convergence. number of well-constrained dipoles dropped to ~1 from 10-15 when there was good model coverage
    - variable seeing case: still see improvement though not as dramatic. creating a new set of sims to clarify.
- Review CI (https://chronograf-demo.lsst.codes/):
    - small jump in number of unassociated sources today; but we've still got more DIASources that sources in some of these CCDs so perhaps
- AOB/table round
    - Chris to file an RFC to get someone to propose a standard for RA/Dec covariances
    - Ian on vacation next week
    - Meredith: how often should we be running ap_pipe? CI is giving us a short-term view of changes. Weekly seems a bit much? but don't want to get stuck on things caused by antiquated code. takes a couple hours of Meredith attention. we seem to think monthly is a good target for now. building templates is more work though–would help to build up script
    - Eric asks John Swinbank about what DRP is doing right now on fakes–he suggests discussing next week
    - John Parejko asks how jointcal could get DCR information–Eric is mostly arguing for "on the fly" computations from the DCR model, JP is not convinced