

# AP Pipeline Meeting, 2019-07-15

BlueJeans: <https://bluejeans.com/426716450>

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

Topics for discussion

- June false positive sprint (Eric Bellm Yusra AlSayyad Meredith Rawls Unknown User (gkovacs) )
  - lots of good findings, capturing lots of followon action in tickets.
  - Gabor has tried processing HiTS with instcals but there were lots of astrometry failures so it's not quite ready for any kind of significant comparison
  - Gabor also trying to the calexp-calexp run
- DES processing (Unknown User (emorganson)):
  - has done some profiling work:
    - ran on DECam (half LSST size CCDs) on lsst-dev09, comparable to operations speeds
    - total time 101 seconds (5x longer than desired, but still 5x faster than DESDM)
    - convolution (smaller kernels?), fitsIO (pre-loading and post-saving could help), scipy.lmdif (tune this), meas\_base wrappers (the measurement plugin code—fewer measurements?), warpExposure (smaller kernel?), makeStatistics are 50% of the runtime
      - going to require lots of code changes, maybe accepting worse algorithms (e.g., smaller kernels) to get to target latencies
      - or longer latencies!
      - thread convolution or warping? (OpenMP) buying more processors is not a major budgetary issue relative to hard drives ((GPUs?))
- ap\_association (Unknown User (cmorrison)):
  - away at DESC
- DCR (Ian Sullivan):
  - has been gone for a week and a half; tech note (DMTN-121) is in review with Eric and John.
- Review CI (<https://chronograf-demo.lsst.codes/>):
  - ☑ Krzysztof Findeisen will look into 0 unassociated DIASources on 10 July—looks like ProcessCcd crashed. John says there were a failure to open the templates (cFITSIO error)? Probably this should have shown up as a build failure in Jenkins, will ticket it
    - the pipeline crashed because it couldn't load defects.



DM-20570 - Jira project doesn't exist or you don't have permission to view

it.

and



DM-20571 - Jira project doesn't exist or you don't have permission to view

it.

- PCW session review
  - sessions that are high-priority for the team:
    - Data Management All Hands
    - Progress on QA Tooling
    - Gen 3 porting in the hack session (as directed by Fritz, described in DM All Hands on day 1)
  - others of interest:
    - time domain day of focus
- AOB
  - Meredith and John are interested in understanding DESC DC2 DIA.
    - we will continue to monitor slack channels etc. to see if there are algorithmic learnings emerging from DESC, and/or steal their cool plots
  - KF will be giving a MetricTask presentation (& how to make it work for DRP) to Princeton Wednesday
  - John is looking for volunteers to look at Tim's QA tooling