

Alert Production: F18

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Large Synoptic Survey Telescope

LDM-503-05: Alert Distribution Validation

- Due **2018-07-02**.
- In brief, demonstrate that we can deploy an alert distribution system, including mini-broker with filtering capability, at the Data Facility.
- Following test spec in LDM-533.
 - Draft available; comments received from LDF, which we've not yet digested.
- We are in good shape to meet this milestone.

LDM-503-09A: Pipelines Release Fall 2018

- Due **2018-11-30**.
- Effectively an aggregation of all pipelines functionality which will be available for LDM-503-09 (the first Ops Rehearsal).
- Whether this corresponds to a “release” with a version number, release notes, characterization report, etc TBD (likely discussed between me writing these slides and presenting them...).
- Some Pipelines L3 milestones are currently tagged as predecessors for other F18 L2 milestones, but they should all(?) be retargeted to this one.
- This includes **4** AP L3 milestones and **11** DRP L3 milestones.
- *Almost* all of these are well accounted for in the current plan, except DM-DRP-9 (Data Reduction Pipeline for Auxiliary Telescope), now expected early 2019.

Activities for F18 (1)

- **Technical Debt.**

- Reserving a significant fraction of our available effort to address debt issues.
- How we plan and address this work is still up for discussion
 - Jim's talk of Tuesday is obviously on my mind as I write that
- This work will be handled by several members of the AP on DM-14447.

- **MOPS.**

- Work on the MOPS codebase to by Joachim Moeyens to resume in F18B.
 - This will involve implementing a version of the algorithm recently described by Holman et al.
 - DM-14432.
- Also ongoing work by Mario to refresh our plans for interaction with the Minor Planet Center.

Activities for F18 (2)

- **AP Pipeline enhancements.**
 - Forced photometry during DiffExp processing; Morrison; DM-14433.
 - Improvements to source association, incl. l1dbproto evaluation/integration; Morrison; DM-8471.
 - Regular "QA" processing; Rawls; DM-14464.
 - Expecting that this will involve working with Eric Morganson (LDF).
 - AP pipeline infrastructure; Findeisen; DM-14431.
 - This includes things like CI integration, metric collection, etc.
 - *But also: SuperTask/BG3 integration, which will play into ongoing middleware work.*

Activities for F18 (3)

- **Proper motion in reference catalogs.**
 - Owen; DM-8837.
 - Continuing work started by Paul Price.
- **Middleware.**
 - Owen; DM-14449.
 - Primary focus on assisting with AP conversion to new middleware.
 - But expectation (given yesterday's discussion) that this involves actually joining the BG3/SuperTask team.

Activities for F18 (4)

- **Jointcal.**
 - Parejko; DM-12196.
 - Detailed plans still have to be fleshed out (John & John & Jim meeting this afternoon).
- **Mini-Broker.**
 - Patterson; DM-10024.
 - Scaling out the LDM-503-05 broker: demonstrating that it can handle filtering a realistically sized stream, manage appropriate resource constraints, add & remove filters dynamically, etc.
 - Also discussions with SUIT about the interface.

Activities for F18 (5)

- **DCR Corrected Coadds.**
 - Sullivan; DM-12196.
 - Large scale tests of existing (post DM-9613) codebase.
 - Prototype extension to variable PSFs.
 - *Mid-cycle review to determine direction of future development.*
- **Real-Bogus Prototype.**
 - Currently no epic: will be inserted in F18B depending on schedule.
 - Patterson & Parejko.

Calibration Products: F18

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Activities for F18 (1)

- Still in flux depending on current hiring. However, best guess is:
- **Collimated beam projector data analysis.**
 - Fisher-Levine.
 - Developing the code that will take us from CBP observations to the various LDM-151-described data products.
- **Auxiliary Telescope pipeline development.**
 - Guyonnet & Fisher-Levine.
 - Currently, we have a bunch of scripts that provide useful functionality, but not a coherent product.
 - Will finish development & package for deployment (expected early 2019).

Activities for F18 (2)

- **Detector characterization.**
 - New hire.
 - Tracking work going on in DESC-PCWG and the Camera Team.
 - Understanding and implementing how we need to apply the results of that in DM.

