

Rubin Observatory

Data Release Productions Plans S21a (Dec Jan Feb)

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What happened Sept, Oct, Nov?

- Deblending (*Moolekamp/Taranu*)
 - Currently analyzing pipe_analysis outputs from an HSC RC2 run and in the process of commissioning Scarlet for HSC
- Astrometry: Improvement to outlier rejection to make jointcal tractable on 100s of visits - still on a branch (*Saunders*)
- PiffPsfDeterminer class (Meyers)
- Arbitrary fake images can be injected (Reed)

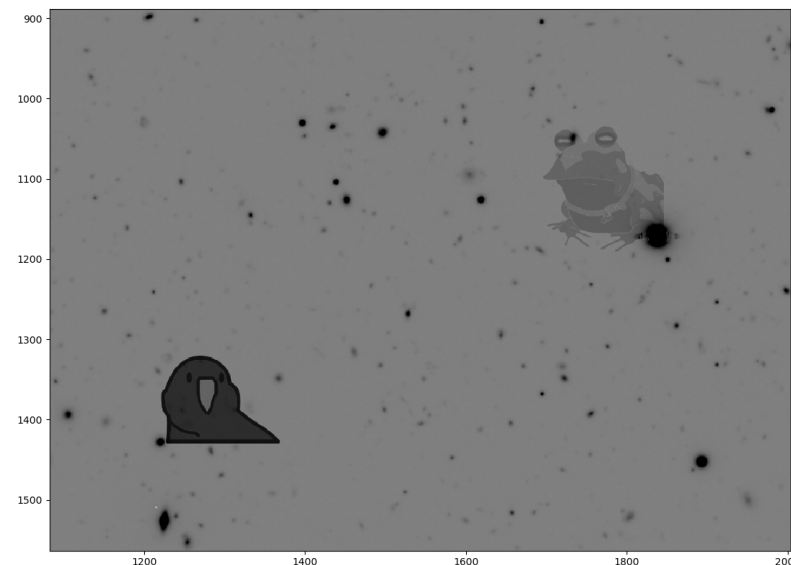


Image Credit: Sophie Reed

What happened Sept, Oct, Nov?

- Talks/Meetings:
 - Nate Lust attended and presented a virtual poster at AAS Division of Planetary Sciences meeting.
- Forward Global Calibration method (FGCM; [Burke et al, 2018](#)) was made our **default** photometric calibration algorithm for HSC

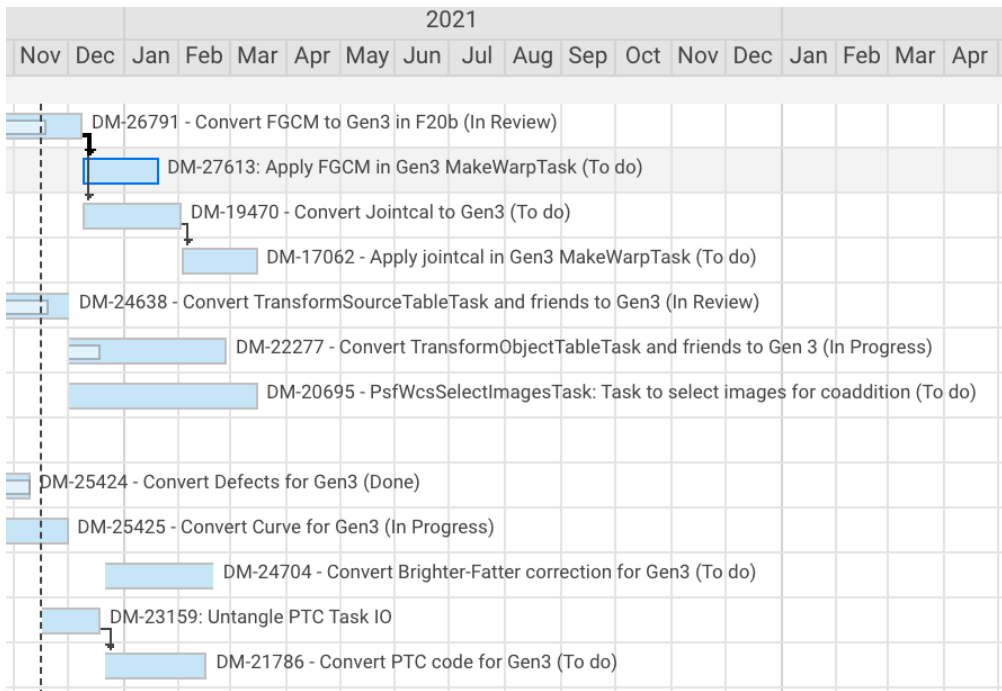


Top Priority for S21a is quitting Gen2 By



Top Priority for S21a is quitting G

- Finish converting pipelines



```
colorAnalysisPipeline.yaml
Welcome ! colorAnalysisPipeline.yaml X
Users > yusra > lsst_devel > LSST > repos > pipe_analysis > pipelines > ! colorAnalysisPipeline.yaml
1 description: Make colour analysis plots
2 tasks:
3   addQAColumns:
4     class: lsst.pipe.analysis.addQAColumns.AddQAColumnsTask
5   plot_wPerp_psfMag:
6     class: lsst.pipe.analysis.scatterPlot.ScatterPlotWithTwoHistsTask
7     config:
8       xColName: iPsMag
9       yColName: wPerp
10      xLabel: "PSF Mag i (mag)"
11      yLabel: "w Perp (griBlue) (mmag)"
12      connections.plotName: wPerp_iPsMag
13   plot_xPerp_psfMag:
14     class: lsst.pipe.analysis.scatterPlot.ScatterPlotWithTwoHistsTask
15     config:
16       xColName: iPsMag
17       yColName: xPerp
18       xLabel: "PSF Mag i (mag)"
19       yLabel: "x Perp (griRed) (mmag)"
20       connections.plotName: xPerp_iPsMag
21   plot_yPerp_psfMag:
22     class: lsst.pipe.analysis.scatterPlot.ScatterPlotWithTwoHistsTask
23     config:
24       xColName: iPsMag
25       yColName: yPerp
26       xLabel: "PSF Mag i (mag)"
27       yLabel: "y Perp (rizRed) (mmag)"
28       connections.plotName: yPerp_iPsMag
29   plot_ri_gr_CModel:
30     class: lsst.pipe.analysis.colorColorPlot.ColorColorPlotTask
31     config:
32       xColName: grCModelMag
33       vColName: riCModelMag
```



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- expanding **gen3 pipelines only**, adding to `DRP.yaml`:
 - With Gen3 it's simple to generate multiple flavors of coadds during a single DRP.
 - template generation during a DRP (DM-DRP-22)
 - difference imaging during a DRP (DM-DRP-28)
 - forced photometry on Diffim lightcurves
 - Running another iteration of `processCcd` (DM-DRP-21)



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- Get team members who are working on new features developing against the gen3 repos, including...



Top Priority for S21a is quitting Gen2 By

- Get team members who are working on new features developing against the gen3 repos, including...
- **DRP Characterization/Calibration** Activities for S21a
 - Continue integrating PIFF. Look out for a meas_extensions_piff (*Meyers*)
 - Improve handling of instrumental background effects: amp-to-amp offsets. (*Kelvin*)
 - Continue modeling scattered light from bright stars to subtract as background (*Schmitz*)
- **DRP Measurement** Activities for S21a
 - Continue galaxy colors by GaaP: PSF- and aperture-matched photometry (*Kannawadi*)
 - Continue commissioning/Validating Scarlet at tract-scale (*Taranu, Moolekamp*)

Expect questions/requests on
#dm-middleware
And tickets



DRP **Ops** Activities :

- In Sept/Oct/Nov we:
 - prepped for a bootcamp
 - onboarded Matthias Wittgen
 - Made a testdata_ci_imsim
- In S21a we will:
 - Ensure calibration products can be generated/applied in gen3 DC2 (Waters)
 - Ensure a gen3 DRP can be run on DC2 (*all*)
 - And that is maintained in a ci_imsim_gen3 (Lust)



Personnel changes for S21a

- Team still scattered across world because of Covid
- Clare Saunders on maternity leave

