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# PreCam Data Mini-Workshop Report

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DES-Calib/PreCam Telecon

11 February 2011



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# Overview

- Tuesday, February 8
- DES doc-db event:  
<http://des-docdb.fnal.gov:8080/cgi-bin/DisplayMeeting?conferenceid=863>
- Luiz da Costa's report on data processing status and plans:  
DES-doc#5287
- Marcio Maia's "PreCam Reduced Data: The Horror Gallery":  
DES-doc#5284)



# From Luiz's Report

(Text in blue commentary by DLT)

## Future Improvements

- include streaking correction — code from Tomasz, Steve
  - Fringing correction — code from Douglas
  - astrometric pre-burner — code from Douglas
  - astrometry — DESDM code – some help with SCAMP?
  - shutter map — PTC curve flats + stellar data – who?
  - ingest position of standard fields
  - Comments & flags
    - Discard
    - Type of problem
    - severity
- ↓
- Also bad pixel maps, cross-talk measurements, and other tests from the PreCam Observing wiki – who?



# From Luiz's Report

(Text in blue commentary by DLT)

## Future steps

- plot  $m_{\text{precam}} \times m_{\text{sdss}}$  for stripe 82
- Transfer images to Fermilab ?
- Ingest catalogs ?
- By-eye analysis ?
  - Streaking
  - Fringing
  - R-band feature
  - Noise
  - Low level ghosting
  - Scattered light

People to help  
look at the data



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# From Luiz's Report

(Text in blue commentary by DLT)

## New features

- Moon distance **Lots of scattered light in many of the images**
- Obstac id in db **Look-up table; image id->RA,DEC & field name**
- Feedback **People looking at the reduced data**
- 15-23 december **Nights with the most trouble-free data?**
- QA Monitor the calibration frames
- 5260 **Doc-db # for "flat-fields vs. date" document**
- Quality keyword in the header

Fermilab February 8 2011



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# From Marcio's Report

(Text in blue commentary by DLT)

Lots of scary pictures from the Horror Gallery + ...



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## Next steps / Doubts



- Check with DS9 the fits images we have in JPG to evaluate if the JPGs are efficient for establishing a visual inspection or quality assessment.
- Produce statistics of images containing streaks, blooming, ghosts, fringes, banding, ooppsss, and other features.
- Would be useful to create a quality code based on that ?  
(Useful for people to look at global properties of data...)
- How to treat images partially damaged by defects?



# Other stuff...

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- Understanding the DESDM algorithms
  - DESDM SVN repository under DESDM home page:  
<http://cosmology.illinois.edu/DES/main/index.html>
  - ...but requires a password. Don Petravick is looking into read-only version that is accessible to the collaboration.
- Access to the PreCam pipeline reductions portal -- soon.
- Proposal for plan for next step of data processing (small group discussion at Fermilab immediately following the Mini-Workshop):
  - Process all calibration frames (biases, flats) from all the nights before a general processing of the data.
  - Choose a few nights to process and re-process as a test bed for rapidly achieving data reduction quality goals before moving on to a general processing of the full data set.



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# Other stuff

(not quite from the Mini-Workshop, but related...)

PreCam in-dome and on-sky tests:

- <http://sites.google.com/site/precamsurvey/home/observing-plan/commissioning-and-periodic-tests>