

# Rasicam: Status Report

Kevin Reil

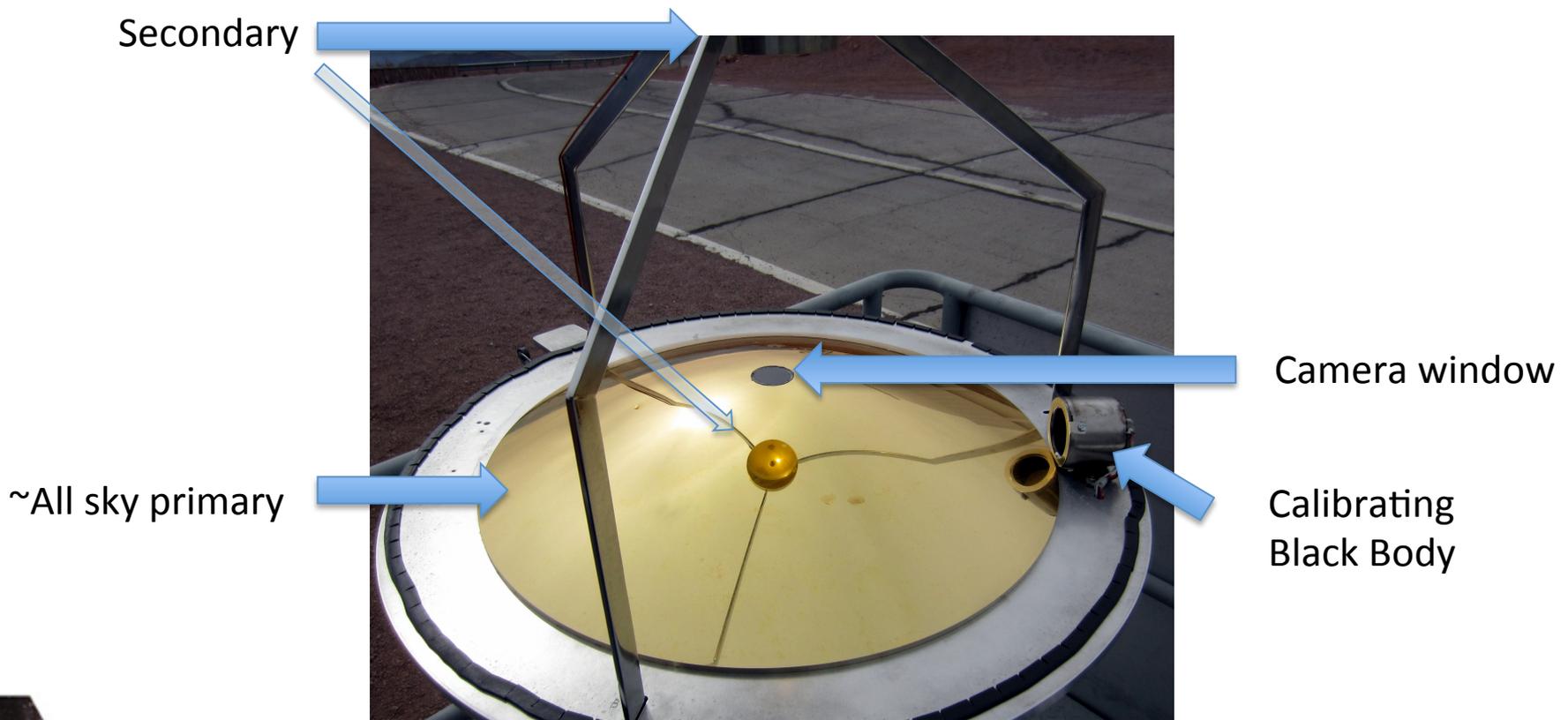
Rafe Schindler, Peter Lewis,

Howard Rogers

(Special thanks: Douglas Tucker)

# Rasicam

- Radiometric All Sky Infrared Camera



# The Good

- 282 nights of data since Nov 11, 2011
- For the most part, system runs unattended from dusk until dawn.
- All sky cloud monitoring with 90 second cadence.

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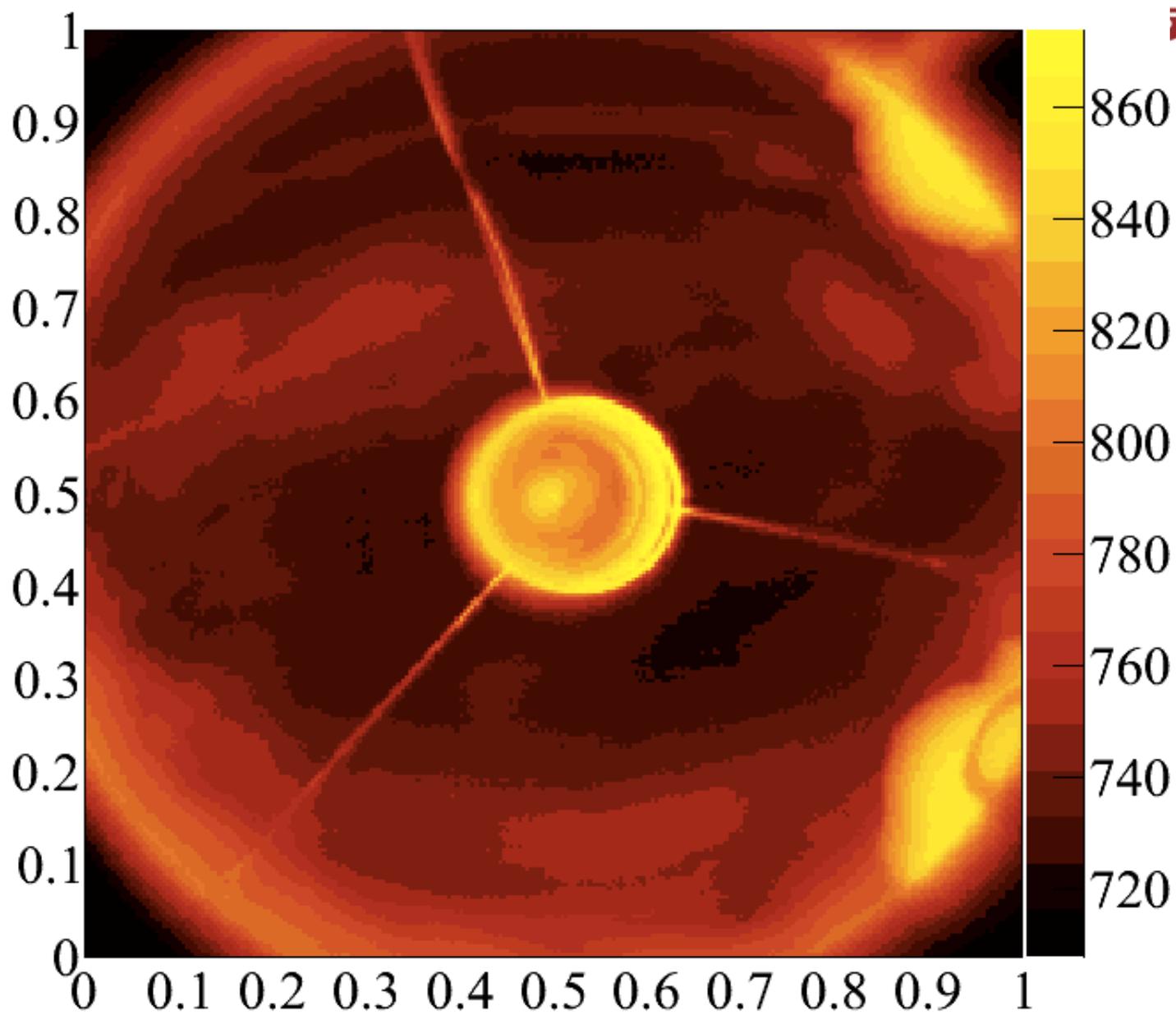
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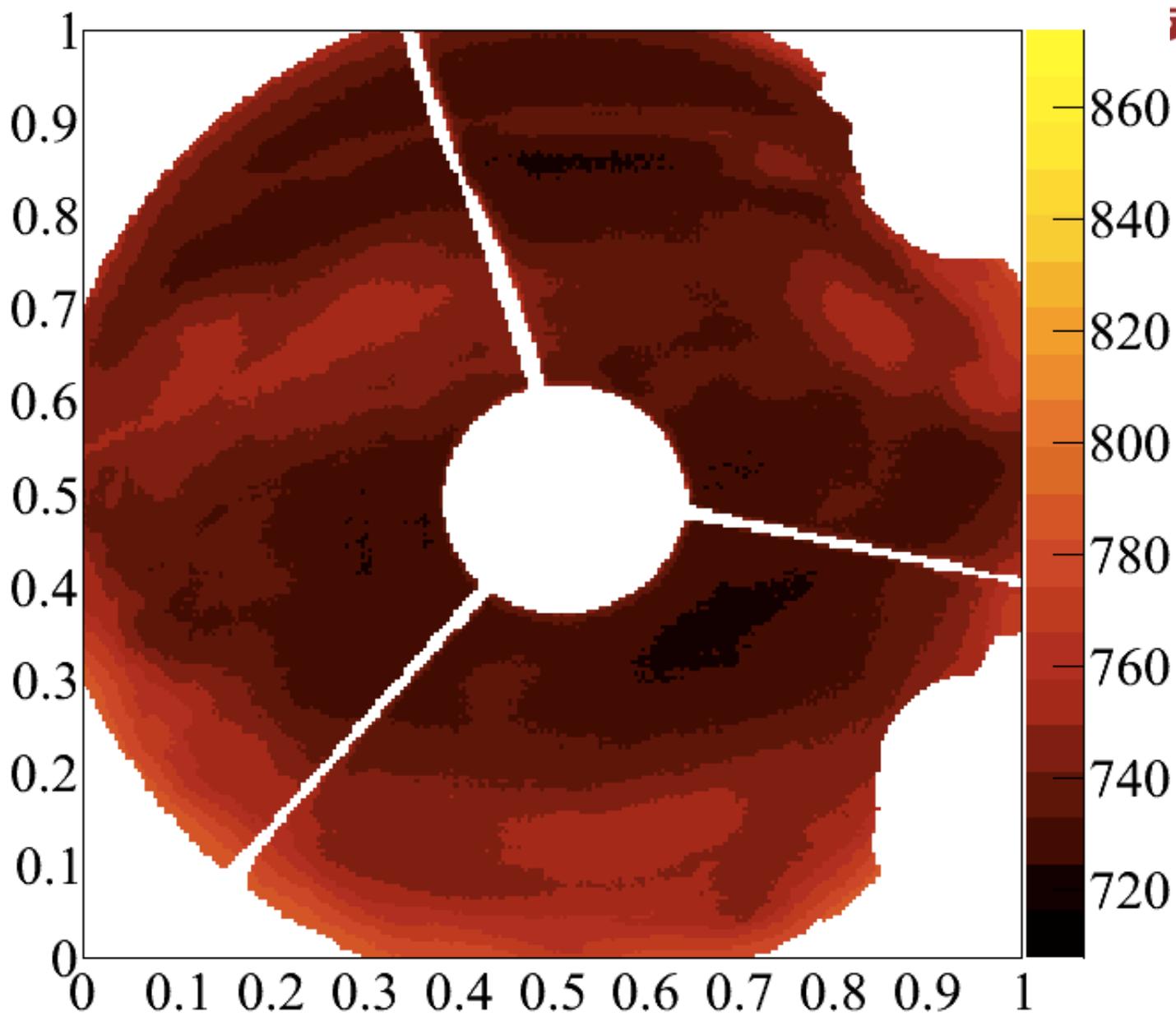
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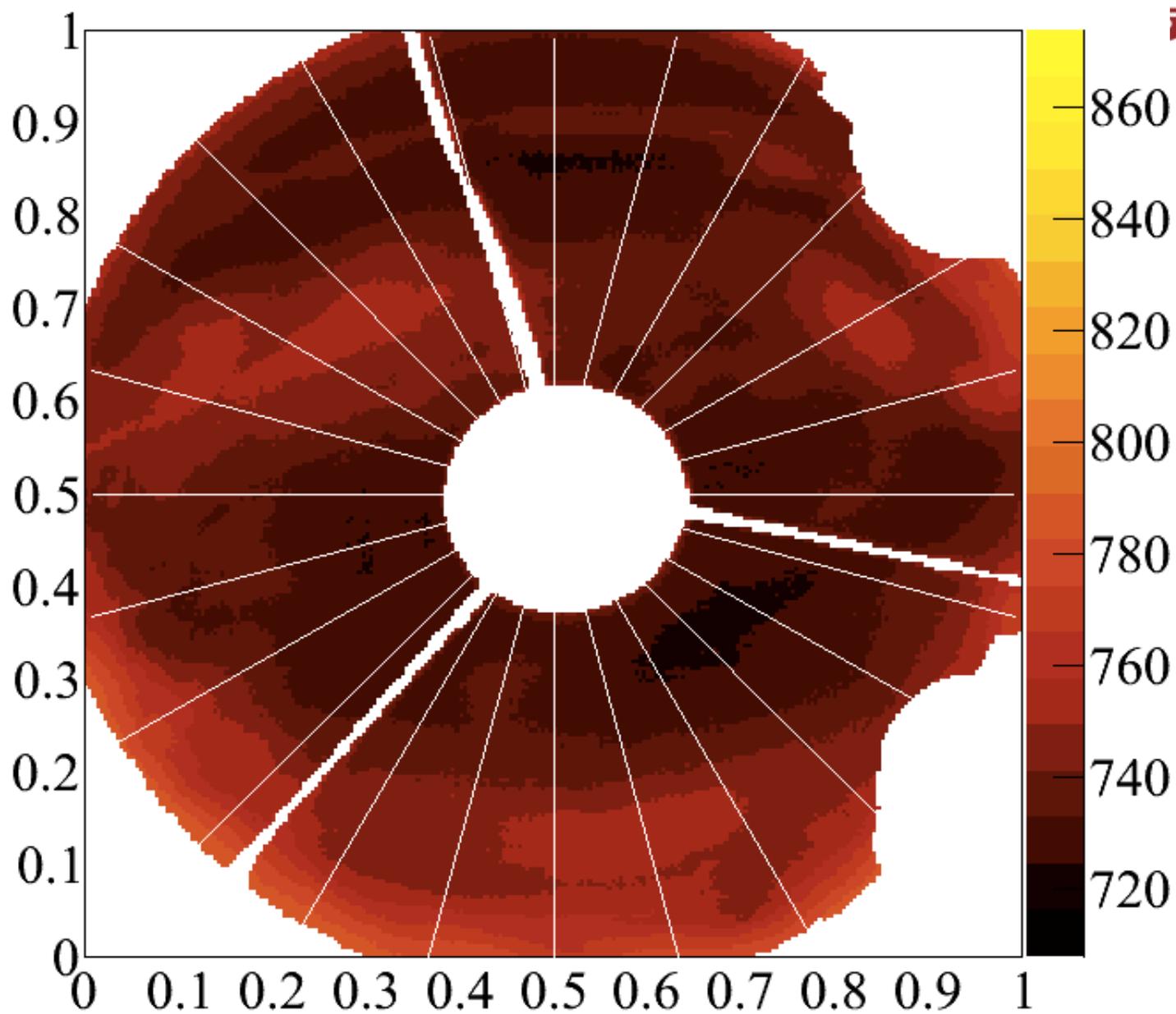
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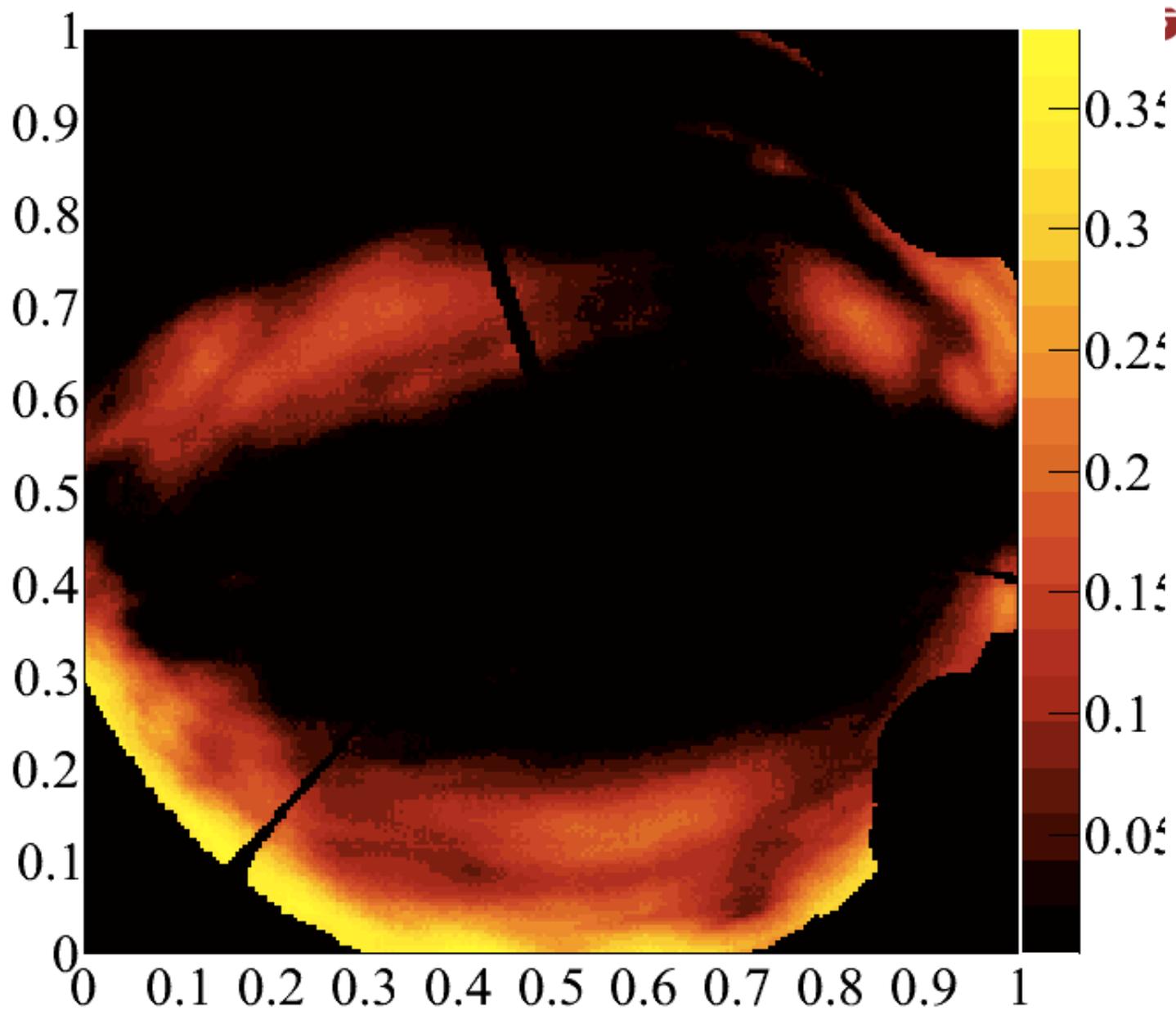
# The ~~bad~~ Less Good

- Self calibration mode has bad features
  - Need to find two points to calibrate linear response
  - Black Body provides warm end
  - Use “outer space” for cold end



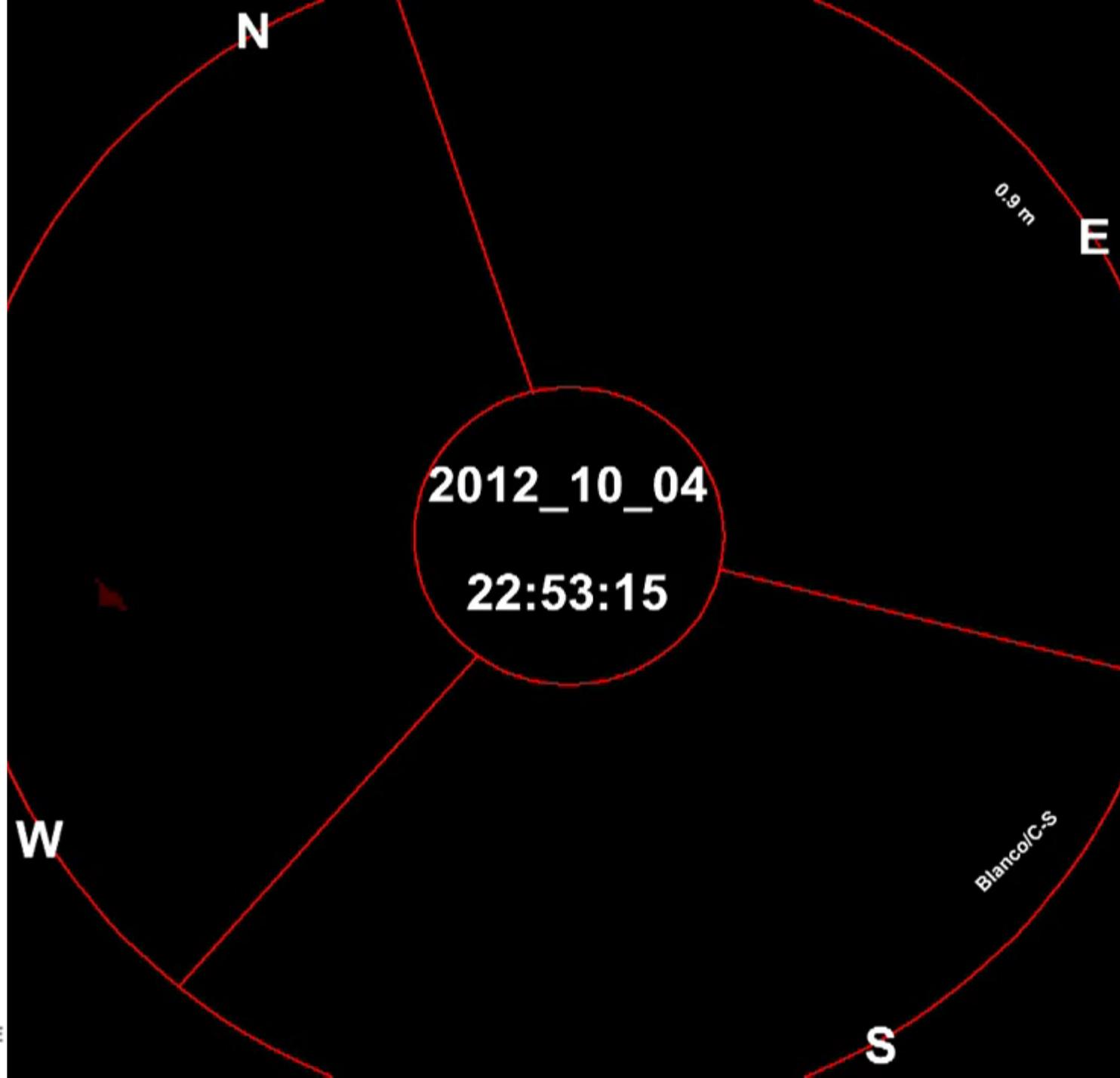


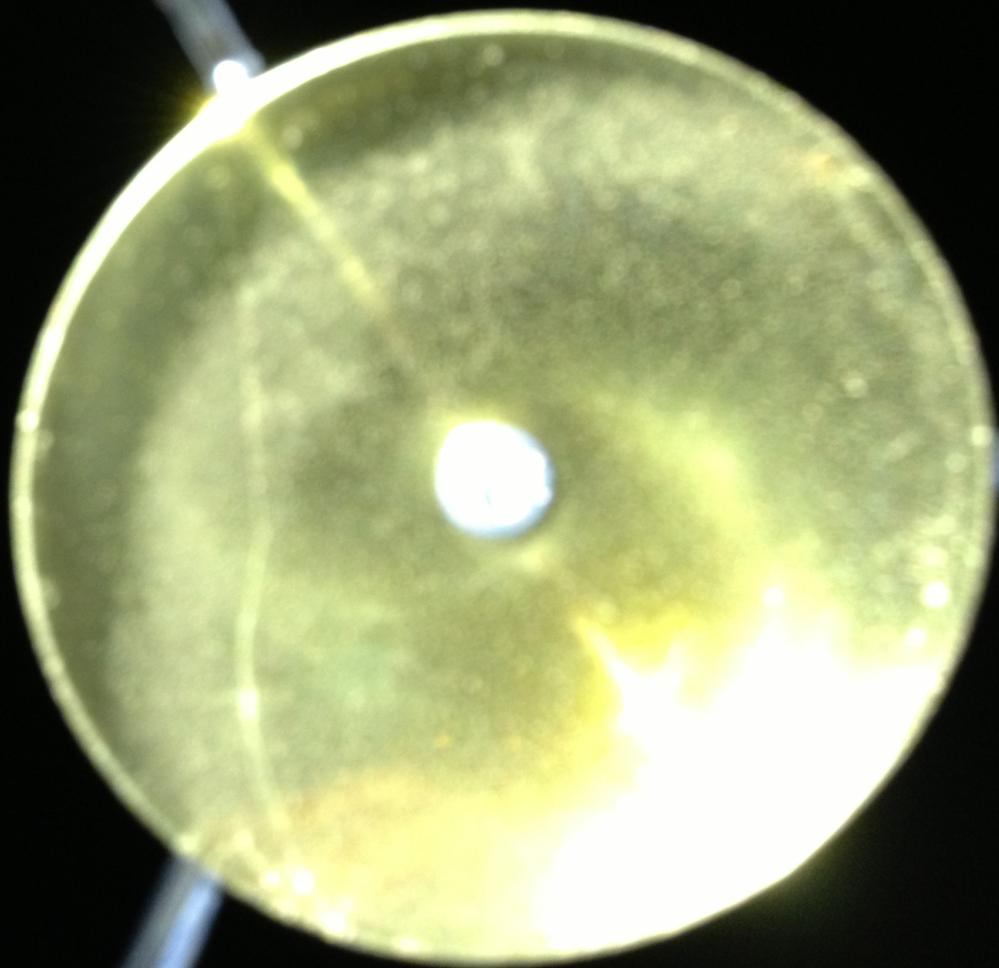


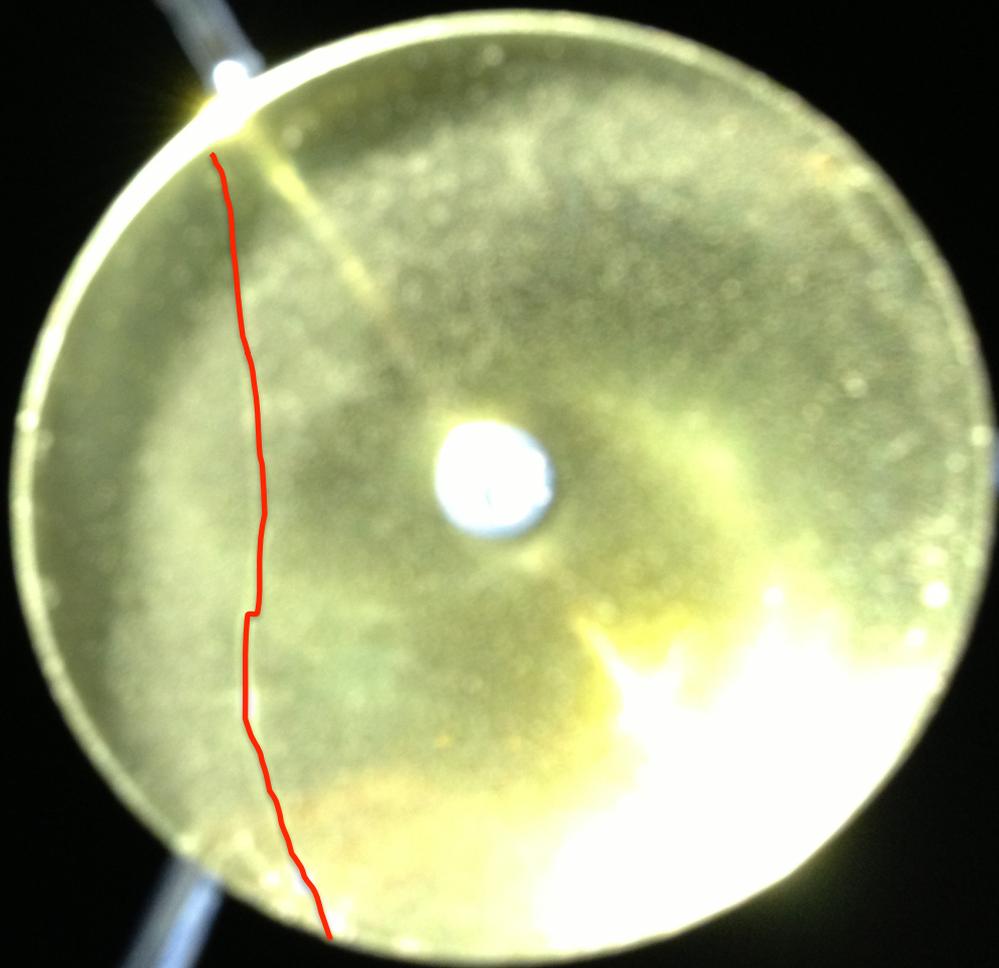


# Self-Calibration Features

- If all calibration stripes have clouds in them:
  - Zero point calibration pushes threshold higher
  - Completely cloudy skies underestimated.
- Any non inform feature spanning azimuth push zero point higher.
  - OK if soiling of mirror is uniform.
  - A clear feature spanning a large amount of azimuth appeared in data.

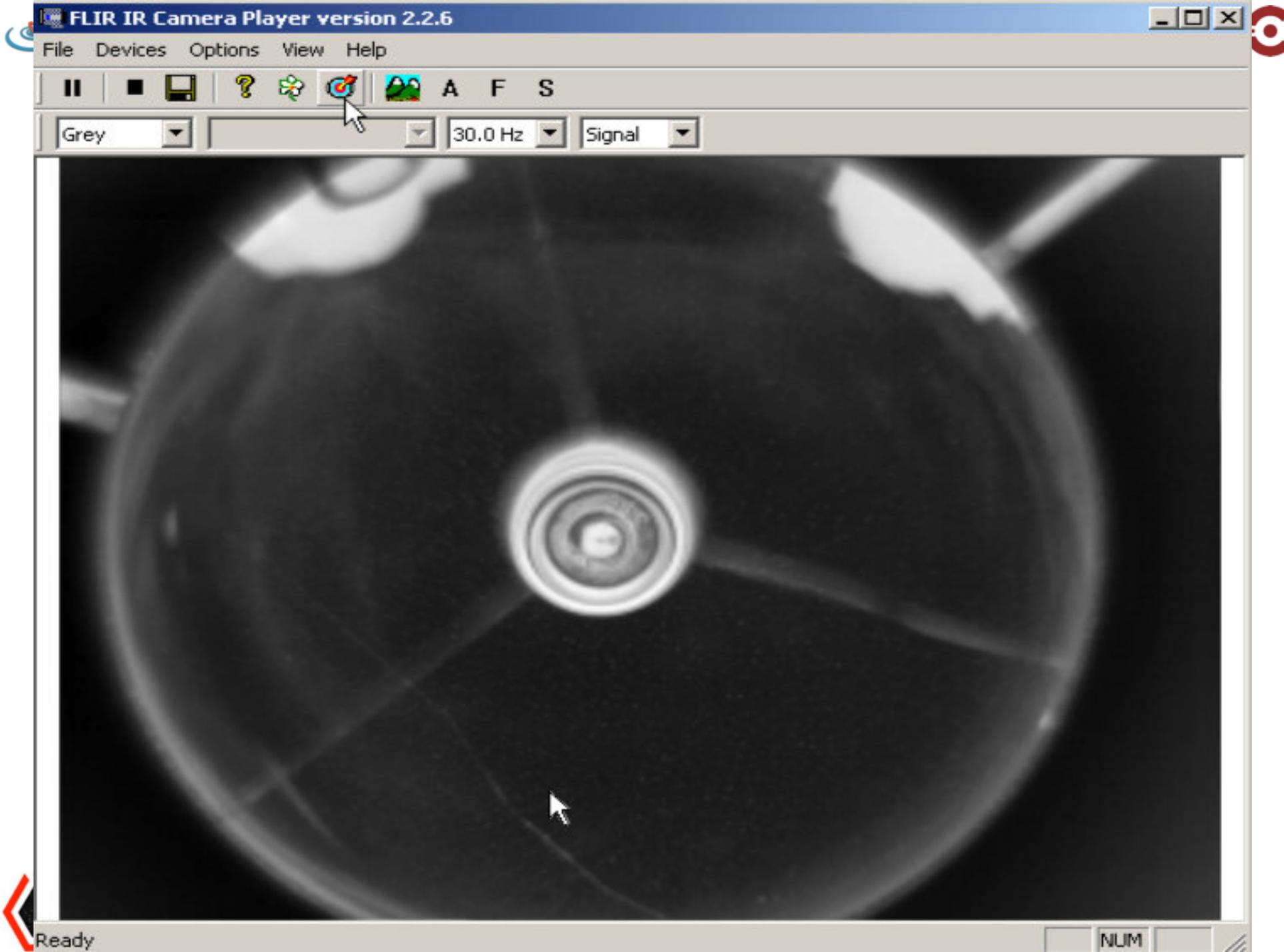


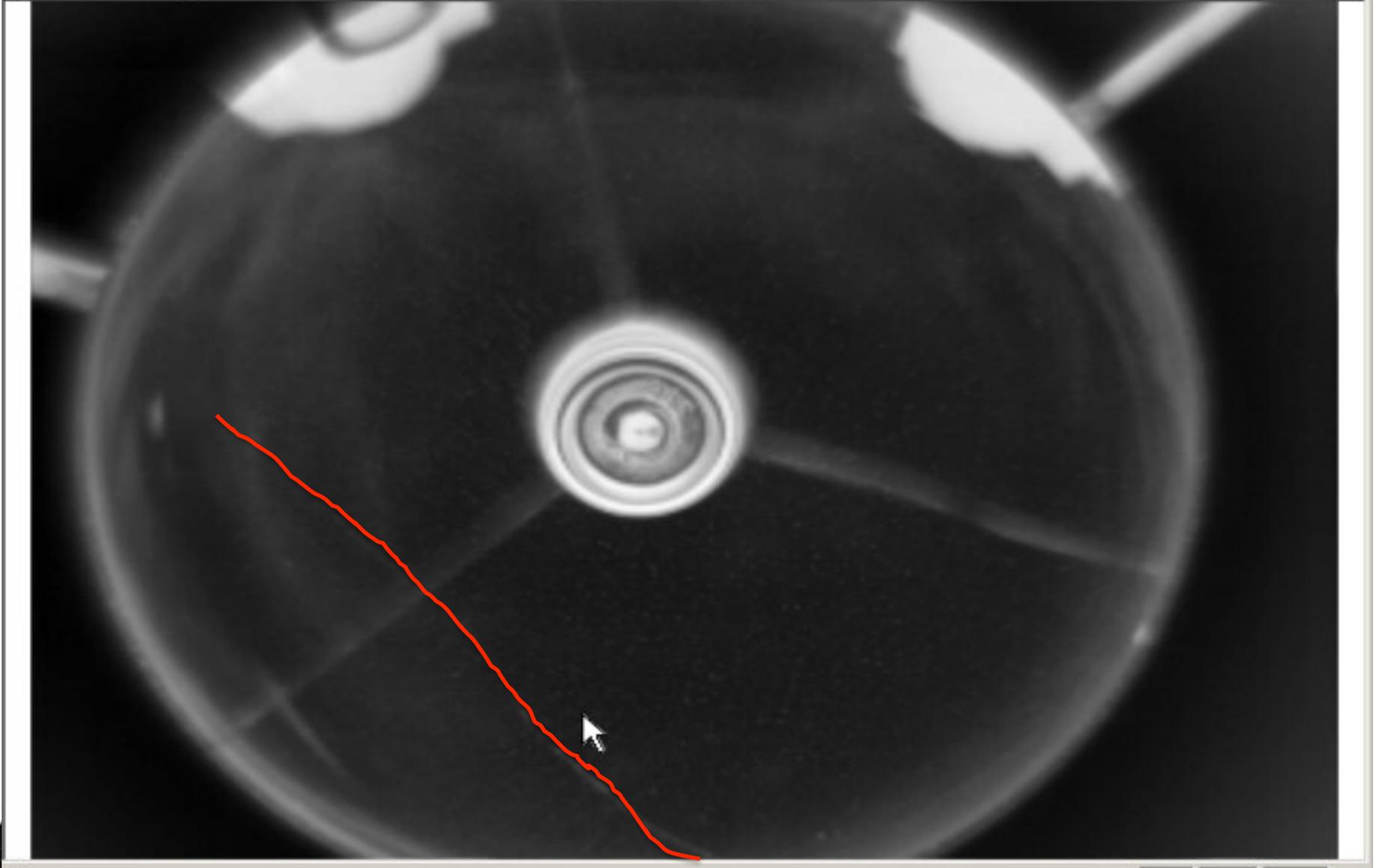




# Crack

- Fortunately it was just dirt. Cleaning occurred about 2 weeks ago.
- However...







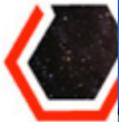
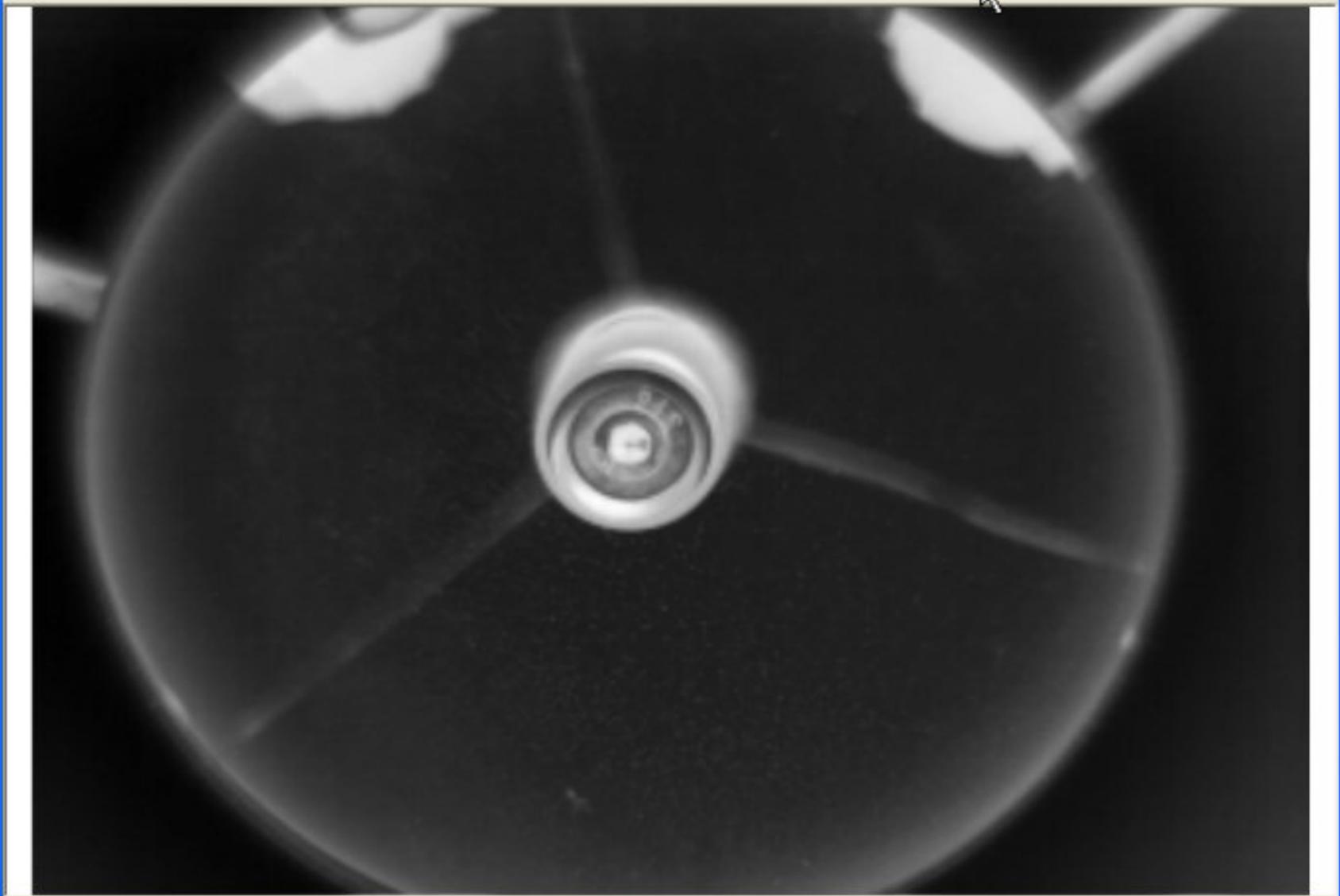
FLIR IR Camera Player version 2.2.6



File Devices Options View Help



Grey [ ] 60.0 Hz Signal [ ]



Ready

NUM

# Summary

- We have clean and well aligned mirrors.
- “Live” data is (and will be) questionable.
- Need improved calibration algorithms.
- Plan to back fill database with improved global and local clear flags from offline analysis.
  
- Establish a schedule for cleaning and immediate realignment.

