



## MCST Best Understanding for Optimum SMIR Operations

- Focal Plane Bias of -0.9 V (110/226 for Vdet/Itwk)
- SWIR Sub-frame differences about -2, 0, 0 (5, 6, 7)
- IR gain (20 - 25) not flux dependent
- B7 “thermal leak” nearly absent
- SWIR linear gains lower by 20 - 25%
- Several channels not functioning
- *PV LWIR seemingly Electronic Cross-talk free with at-launch settings*



# Detector/Channel Functionality



- B7-Ch14 only SWIR channel seriously out of family (*Native LIB product ordering*)
- B22-Ch 4, B24-Ch 9 detectors non-functioning
- B23-Ch 10, B25-Ch 9,10 out of family
  - Uncertain if out-of-family detectors will be calibratable
- B21 TBD



# What to do yet

- Freeze at 110/226 for time being
- Verify stability with March 4-6 data sets
- Run Lazarus  $I_{twk}$  sweeps to probe detector functionality
- Present findings to Electronic Cross-talk Workshop 13 March
- Check results with moon in SV Port, 24 March
- Seek Discipline Team Leaders guidance on future adjustments (April or June)



# Present Data Sets

- IR calibration good, expect decent channel to channel uniformity
- SWIR calibration recoverable up to 18 March, will provide factors to apply to DAAC L1B products; updated LUTs in place for data starting 18 March



# What are Data Sets for 110/226

057/18:39:37 to 058/14:44:10

059/13:48 to 059/19:08

059/19:53 to 059/20:42

059/22:10 to 061/21:00:00

066/17:12:55 to 075/??

- **MODIS WILL HAVE PROVIDED ABOUT 12 DAYS (24X12) OF DATA IN OPTIMUM CONFIGURATION BY COB 15 MARCH. THIS INCLUDES ABOUT 9 COMPLETE JULIAN DAYS, INCLUDING 8 CONSECUTIVE DAYS 7 - 14 MARCH**



# MODIS/Spacecraft Activities Coming Week



- Sensor Gain Change, Band 14H
- Spacecraft roll/yaw slews
  - Two days, beginning Day 075/ 16:00 GMT
  - MODIS IR bands (5 -7, 20 - 36) off up to 56 hours
  - May add up to 40 minutes outage in SMIR for Lazarus Itwk sweep