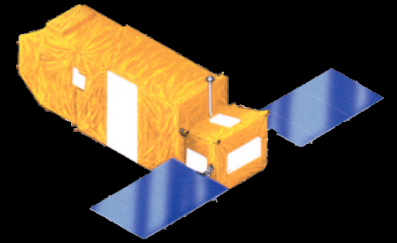


**FUSE**

JOHNS  
HOPKINS  
UNIVERSITY



# The Future of FUSE: Strategies and Tradeoffs

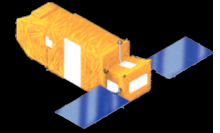
Bill Blair

FUSE Deputy PI

Chief of Observatory Operations

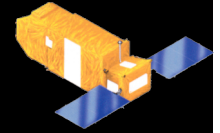
FOAC Meeting-November 2, 2004  
Paris, France

# Fiscal Realities:



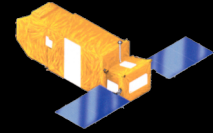
## FY 2005 and 2006

- This timeframe was supported by SR04 at nearly the expected (prior) levels. (-\$100K/yr)
- But continued Project Downsizing was already built into that budget.
  - One person terminated at end of Aug. 2004.
  - Need to decrease by two at end of FY05 (by Oct. 1, 2005: note this is half way through Cy. 6!)
  - International partner support uncertain/decreasing with time.
    - Real loss of operations FTEs without any cost savings to project.
- Control center staffing to remain at 7.
- No ongoing OSC engineering support beyond 12/04.



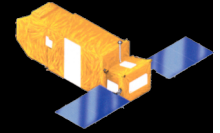
# Downsizing Strategy

- Maintain all critical observing capabilities and accept lower performance and/or greater latency in other parts of the project.
  - Retention of key personnel.
  - Cross training where feasible. (Protect against attrition.)
  - Reassess manpower needs vs. time.
    - E.g., CalFUSE development winding down --> decrease FTEs.
  - Expect scientific staff to (on average) offset 1-2 months of salary with grants.
    - Helps maintain corporate memory.
    - But note loss of those partial FTEs from operations capability!
- Total ops FTEs: Spring 2004: 27    Fall 2004: 25.5  
Oct. 2005: ~23    Oct. 2006: ~21



# Potential Cy6 Impacts

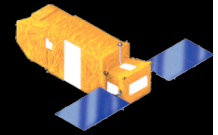
- Current plan: absorb FY05 personnel losses in user support and calibration/operations support areas.
  - Have MP and other SciOps staff “fill the gaps” in User Support.
  - Drop/limit FUSE AAS meeting presence.
  - Less frequent calibrations (and/or larger latency in implementing new calibrations).
- How far can/should this downsizing model be pushed?



# Other Potential Impact Areas

- Fewer special operations (Coordinated, constrained, ToO, difficult to schedule, manual operations.)
  - Means some “accepted” targets/programs may not be executed or will be greatly delayed.
- Less frequent/more standardized channel alignments.
  - Impacts overall data quality, science return.
- Eliminate data assessment prior to archiving data.
  - Some bad data sets will be archived; problems will need to be identified by users.
  - Much longer latency in problem ID and reobservation requests.
- Eliminate weekly program accounting reports.
  - Also used to find/track problems and request reobservations.
  - George uses for proposal funding strategies.
- Greatly simplify Technical Review process for proposals.
  - May require a “conditional” acceptance of observations.
- Accept larger latency in processing/archiving of new data sets.

# Fiscal Realities: FY 2007-2008



- SR04 funding levels drop considerably from FY06 level.
- Current budget exercises indicate we can make it through FY08 (i.e., end of Sept. 2008) under these assumptions:
  - No significant problems with S/C or UPRM.
  - Reduce ops staff by 4 FTE-years (e.g., drop two add'l FTEs for FY07-08).
  - Decrease in admin/mgmt staffing levels.
  - Many more of the impacts on previous page will need to be adopted.
  - Possibly more draconian measures will be needed, starting Cy7:
    - Decrease fraction (and amount) of Standard/Legacy time accepted.
    - Strongly encourage long, plain vanilla observations.
    - Further restrict any special operations, difficult targets.
- We can go to SR06 and ask for additional funding, but...
  - Timing is awkward. (We would already have to be prepared to downsize-- just a few months before FY2007.)
  - Uncertainty as to whether relief will be forthcoming. (Can't plan on it.)

