DAQ Support and Development (non-Run II) Project Status Update for 09/05/2006

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Project Deliverables Status

- DAQ Development and Support (non-Run II)
  - Proposed Experiments (watching *for warning signs)*
    - Minerva no development request (asked to review systems in future)
    - SciBoone no development request (attend workshop)
    - MIPP Upgrade
      - Help define DAQ design for proposal (~15Sep2006)
      - what CD is willing to develop for MIPP
  - Small Experiments
    - COUPP no development request
  - Test Beam Experiments (no activity)
  - Meson Test Beam Facility Upgrade represents potential significant request
    - CAMAC support or VME migration path
    - General readout upgrades/new hardware support

Project Deliverables Status (cont. 2)

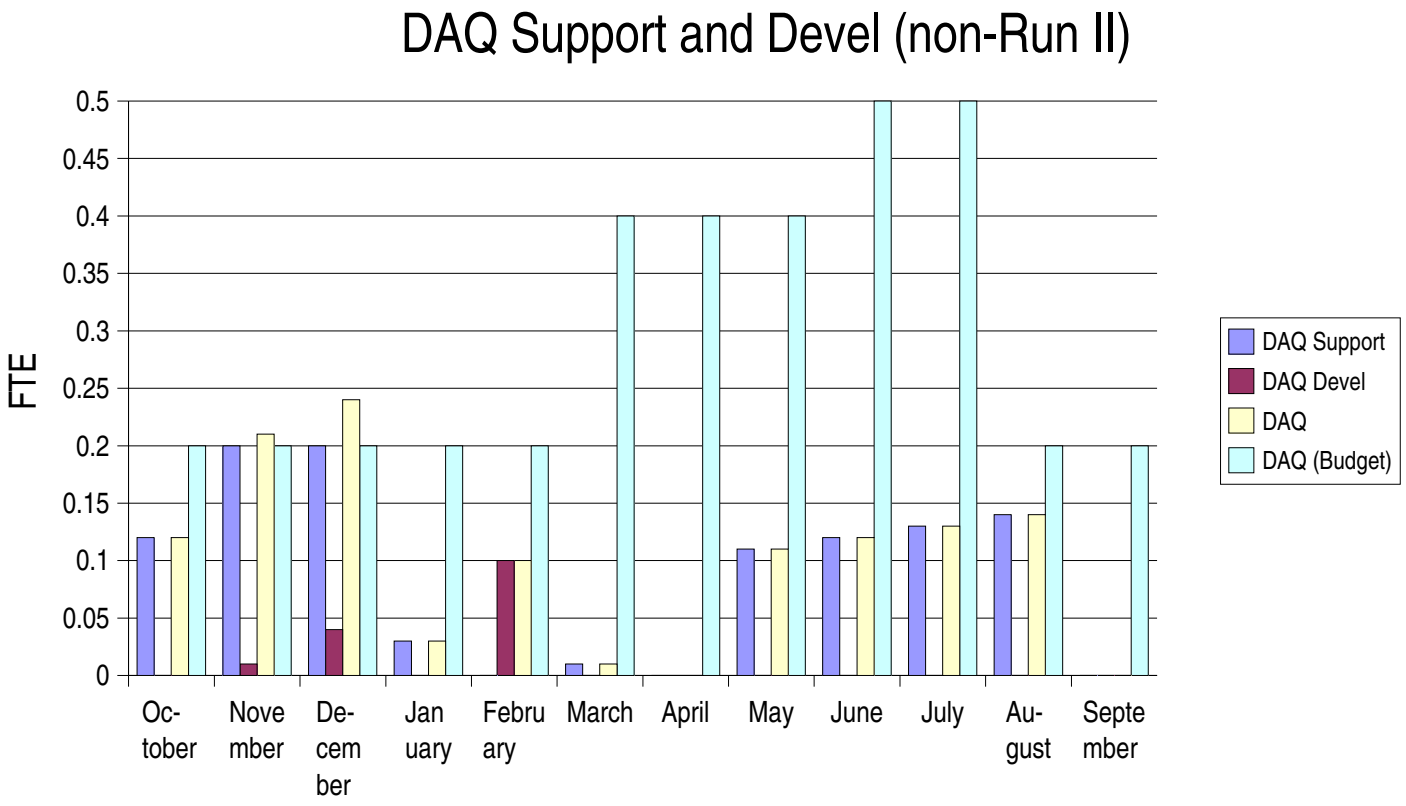
- CMS Remote Operations
  - Develop the event server piece of the storage manager to support online monitor programs (consumers) such as the event display
  - Release of enhanced event server 09/01/2006
    - Support for multiple consumers and consumer trigger requests
      - Storage manager changes to support multiple consumers and allow consumers to specify trigger requests were delivered last week
      - Communication within the storage manager team has improved as deadlines have neared. In some cases, details of how the final system will work are still being worked out.
  - Learn about and contribute to CMS plans for remote operations
  - Not much activity at the committee level (LHC@FNAL or CMS working sub-group)

Project Deliverables Status (cont. 3)

- Astrophysics
  - DES (No activity beyond workshop in February)
  - SDSS-II DAQ Upgrade
    - Remaining tasks:
      - Replace two bad Peritek VCQ-M video daughter cards on spare video boards at APO
      - Update the documentation to reflect the new system
      - (Improved astro sky subtraction has been deferred for now)
    - Occasional MVME5500 network problems (board hangs) have become much more frequent since the summer shutdown. These will need to be investigated with the help of APO staff.
    - Operational support mode by 09/30/2006

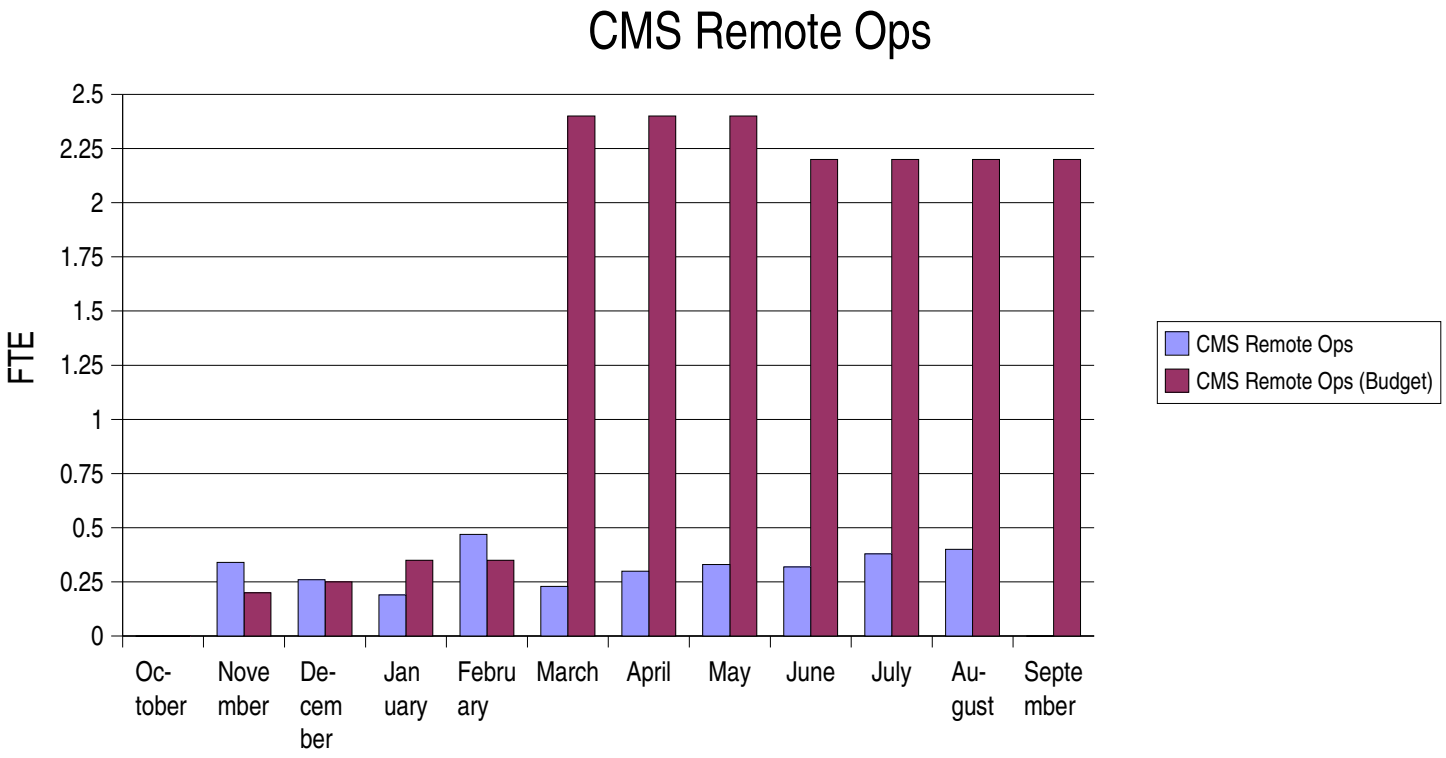
Effort Profile General DAQ Support and Development (non-Run II)

- (Tools) 0.05 FTE prior to Jan; 0.08 FTE Feb DES Workshop,



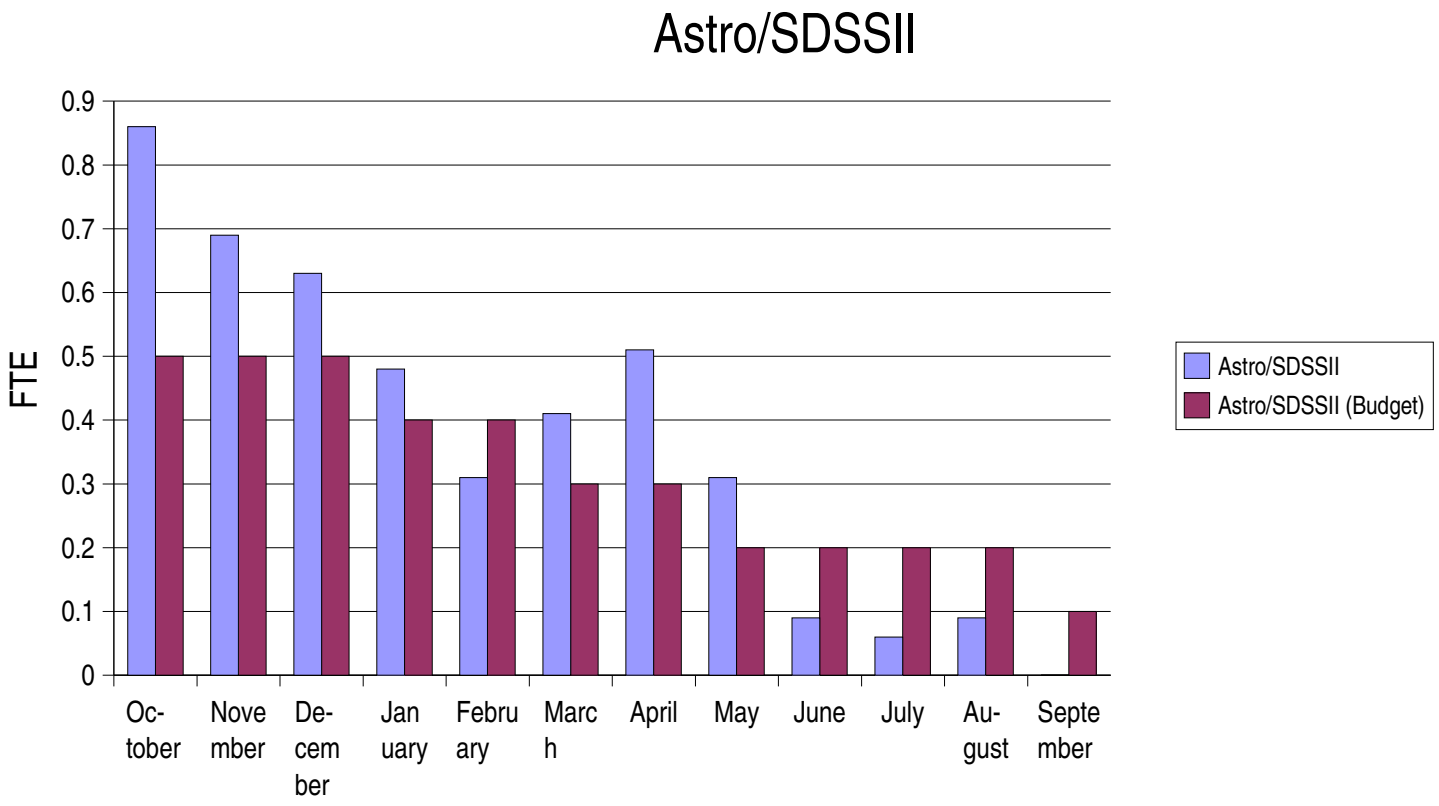
Effort Profile CMS Remote Operations

- In theory effort loaned to AMR for generic remote operations tasks



Effort Profile SDSS II Upgrade

- FY07 is mainly bug fixing, support, and less essential features



Risks

- General issue of available effort already over-subscribed
  - Not keeping pace in some areas forcing harder look at priorities
  - New requests mean effort must be squeezed from other projects
  - New requests can happen with little warning, hard to plan and optimize effort (often not in time for budget planning).
    - Forces some crystal ball gazing
  - Priorities can change over time forcing re-evaluation and re-allocation of effort
- DAQ Development and Support
  - MTEST upgrade may get approved and require significant development and support
    - VME migration path or additional CAMAC work
      - No longer have expertise in group for some hardware (e.g. CAMAC)

Risks (Cont.)

- CMS Remote Operations
  - Level of involvement after 09/01/2006 needs to be worked out
  - Fuzzy boundaries between remote operations and CMS-specific work
  - Difficulty getting information from the CMS collaboration
  - Sudden requests for extra effort impacts other laboratory/division priorities
  - Requests directly to division management and/or around line causing difficulties in managing effort

Risks (Cont. 3)

- Astrophysics
  - SDSS II Upgrade (in production)
    - Final tasks may linger due to priorities or difficult nature
    - Failures in hardware components that were not upgraded (e.g. Vigra video cards, 712M SCSI interface cards, VCI+ cards)
  - DES could request development help