Ops Concept

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Ops Concept

- Personnel
  - 3 FTE QA analysts
  - 2 FTE operations personnel
  - ~15 misc. engineers and astronomers (peak)
- Primary Tasks
  - Operators
    - Monitor resources
    - Monitor runs, report problems
    - Backup and restore as needed
  - QA analysts
    - Ingest, Quicklook, and Scan/frame QA
    - Coadd QA
    - Trending and general anaysis
  - Engineering and science staff
    - Ops/QA backup
    - Misc. analysis, problem tracking
    - External reports
    - Forward code development and debugging

- 4 deliveries a day, 6 hours apart
- 8 scans completed per delivery
- IOC ops: 8/7 staffing
  - 7 day coverage, 2 staggard shifts: M-F 9-5, W-Su 4-12
  - W-F has 15 hour coverage
  - Lasts for 2 months; 1 month IOC + 1 month transition to routine ops
- Routine ops: 8/5 staffing
  - Standard 40 hour M-F work week. One shift.
- Science data requires 3.5 hours to complete transmission to the WSDC per delivery
- Ancillary data arrives 1 hour before the science data and takes 10 minute to transfer and 20 minutes to archive
- Ingest of science data requires <1 hour per delivery
- Quicklook processing requires <10 minutes per delivery
- Scan/frame pipeline processing requires <1 hour per delivery

Assumptions

- Operations staff require 1 hour per delivery of ops personnel time
  - 20 minutes to log and archive to disk and tape newly ingested telemetry (not counting recording time)
  - 20 minutes to monitor, examine and report on a Scan/frame Pipeline run
  - 20 minutes of misc resource monitoring
  - Roughly double during IOC

- Operations staff must devote 4 hours per day to other duties
  - 2 hours to recent coadd processing, either running (starting) or monitoring (not during IOC)
  - 2 hours to system-level WSDS backups

- QA analysis requires an average of 15 minutes per scan, about 8 hours per day (this is based in part on 2MASS experience)
  - 10 minutes for a normal scan
  - 60 minutes for troubled scans
  - 1/10 scans will be troubled
  - Roughly double during IOC

- QA analysts must devote 6 hours per day to other activities
  - 3 hours/day to coadd QA (not during IOC)
  - 3 hours/day to medium and long term trending analysis

- ## Operator #1: M-F 9-5
  - 0900-1100 Examine and track overnight deliveries
  - 1100-1200 Status meeting
  - 1200-1300 Lunch
  - 1300-1500 Examine and track daytime deliveries
  - 1500-1600 Backups/restores
  - 1600-1700 Status meeting

- ## Operator #2: W-Su 4-12
  - 1600-1800 Examine and track weekend day deliveries
  - 1800-2000 Make-up tasks from day shift
  - 2000-2100 Dinner
  - 2100-2200 Examine and track nighttime deliveries
  - 2200-2400 Backups/restores

- QA #1: M-F 9-5
  - 0900-1100 QL/Ingest/Scan/frame QA overnight deliveries
  - 1100-1200 Status meeting
  - 1200-1300 Lunch
  - 1300-1600 QL/Ingest/Scan/frame QA overnight deliveries
  - 1600-1700 Trending, other analysis
- QA #2: M-F 9-5
  - 0900-1200 QL/Ingest/Scan/frame QA overnight deliveries
  - 1200-1300 Lunch
  - 1300-1500 Daytime deliveries
  - 1500-1600 Trending, other analysis
  - 1600-1700 Status meeting
- QA #3: W-Su 4-12
  - 1600-2000 QL/Ingest/Scan/frame QA weekend day deliveries
  - 2000-2100 Lunch
  - 2100-2200 Trending, other analysis
  - 2200-2400 QL/Ingest/Scan/frame QA nighttime deliveries

Routine Ops

- Operator #1: M-F 9-5
  - 0900-1100 Examine and track overnight deliveries
  - 1100-1200 Status meeting
  - 1200-1300 Lunch
  - 1300-1400 Examine and track overnight coadds
  - 1400-1500 Unallocated
  - 1500-1600 Backups/restores
  - 1600-1700 Makeup tasks
- Operator #2: M-F 9-5
  - 0900-1000 Examine and track overnight coadds
  - 1000-1100 Unallocated
  - 1100-1200 Overnight backups/restores
  - 1200-1300 Lunch
  - 1300-1500 Examine and track daytime deliveries
  - 1500-1600 Makeup tasks
  - 1600-1700 Status meeting

- QA #1: M-F 9-5
  - 0900-1100 Overnight QL/Ingest/Scan/frame QA deliveries
  - 1100-1200 Status meeting
  - 1200-1300 Lunch
  - 1300-1400 Trending, other analysis
  - 1400-1600 Daytime QL/Ingest/Scan/frame QA deliveries
  - 1600-1700 Unallocated

- QA #2: M-F 9-5
  - 0900-1000 Unallocated
  - 1000-1200 Overnight QL/Ingest/Scan/frame QA deliveries
  - 1200-1300 Lunch
  - 1300-1400 Trending, other analysis
  - 1400-1600 Overnight Coadd QA
  - 1600-1700 Status meeting

- QA #3: M-F 9-5
  - 0900-1100 Overnight Coadd QA
  - 1100-1200 Unallocated
  - 1200-1300 Lunch
  - 1300-1500 Trending, other analysis
  - 1500-1700 Daytime QL/Ingest/Scan/frame QA

Routine Ops