



AIRS V5 Processing/ Reprocessing at GES DISC

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GES DISC



Overview

- Evolution System Overview
- L1 Status
- L2/L3/Matchup Status
- NRT Status
- Access Statistics
- Future Activities



S4PM – Processing

- 3 machines support L0 archives and L1 reprocessing.
 - Each machine yielded about 10x in L1 reproc
 - Also being used for L2 reprocessing (yield $\sim 1.5X$)
- 4 machines dedicated to L2 reprocessing
 - 1 machine yields $\sim 1.5X$
 - 3 machines yield $\sim 3.5X$ each
- 1 machine dedicated to NRT
- Net processing rate: $\sim 16X$



S4PA – Archive

- Distributed Disk-based Archive
 - L0 archive split across 3 systems
 - L1 archive split across 2 systems
 - L2 and Matchups archived on 1 system
 - L3 products archived on system shared with complementary datasets
- Redundant Storage
 - Subdivided RAID
 - Small number of file systems divided into tape-sized volumes
 - Each volume is backed up to tape, tapes stored off-site.
 - L0 and L3 archives “replicated” on separate S4PA instances
 - “Control” file systems (databases, station directories) are mirrored



Data Discovery and Access

- Direct FTP
- Mirador
- WHOM
- WIST
- Giovanni (L3)
- FTP Pull, Push Subscriptions
- S4PA MRI
- On-The-Fly Subset



L1 Processing Status

- Started reprocessing: Mar 9 2007
- Finished reprocessing: Jun 4 2007
- Average X-Rate: ~20X
- Some problems
 - AMSU holes
 - Processing rates can outrun operators

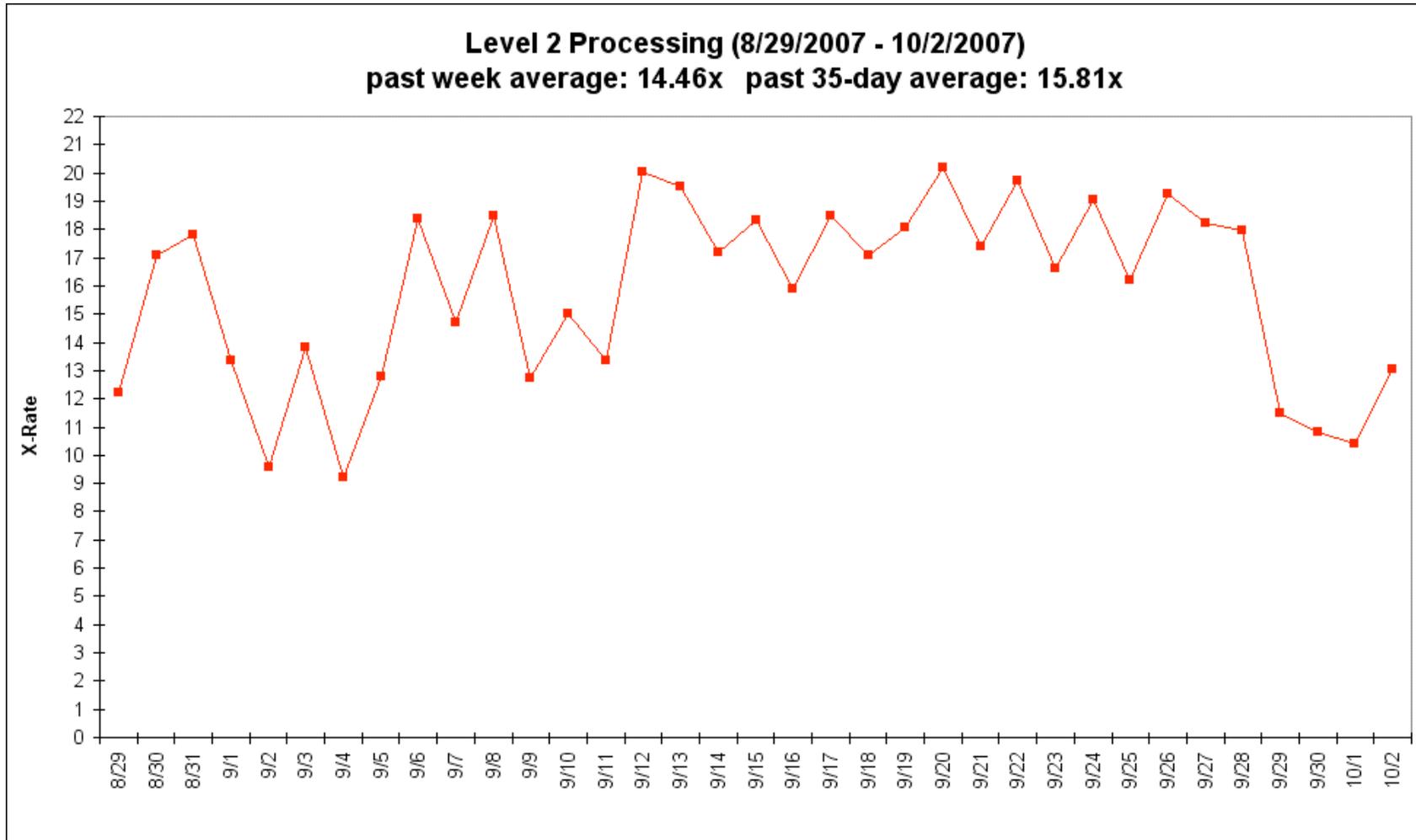


L2 Processing Status

- Processing large contiguous chunks
- Started reprocessing 07/11/07
- Have completed 1102 of 2166 data-days – just over half-way!
- Estimated completion in Jan 2008

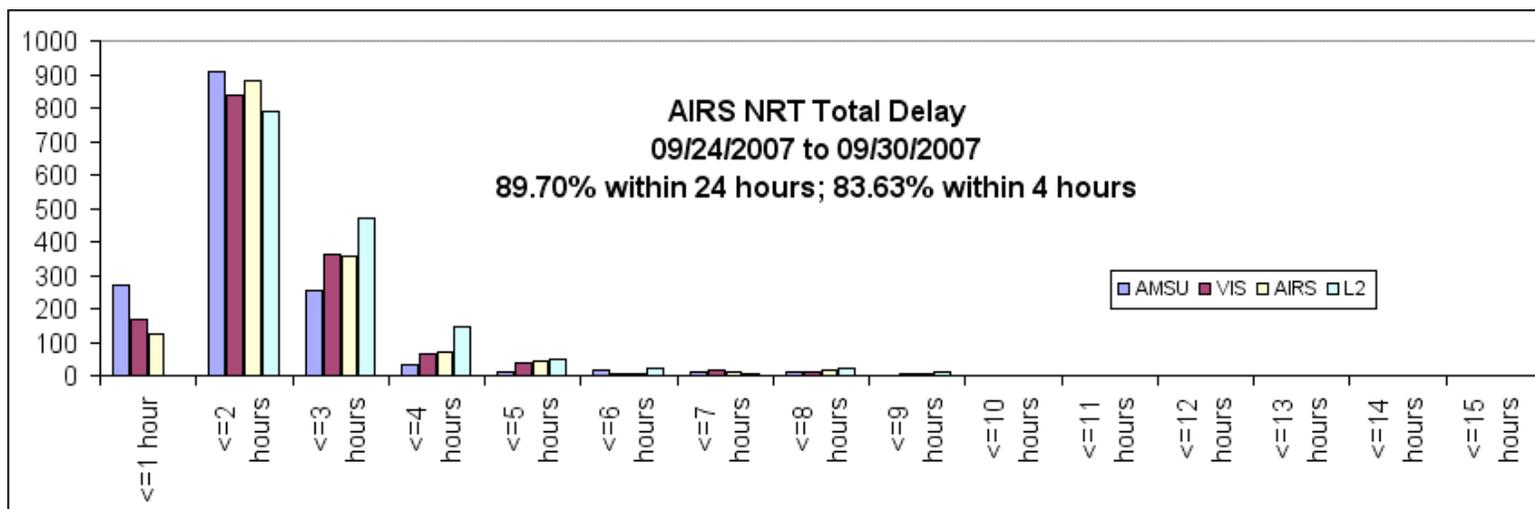
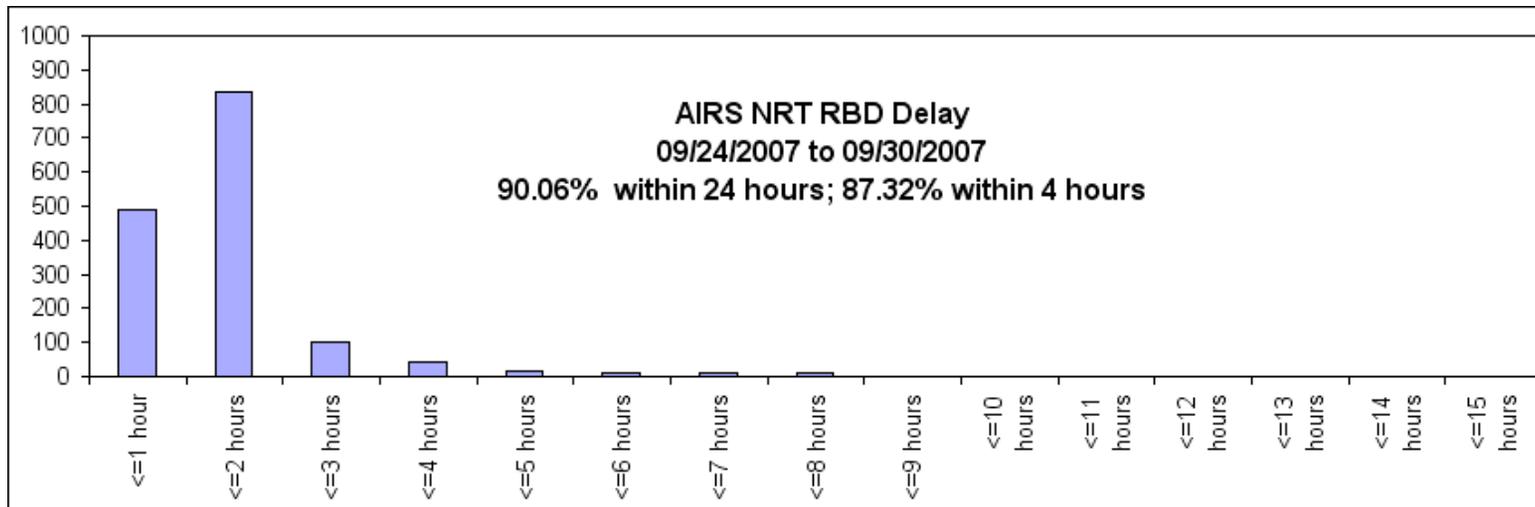


L2 Processing Rate



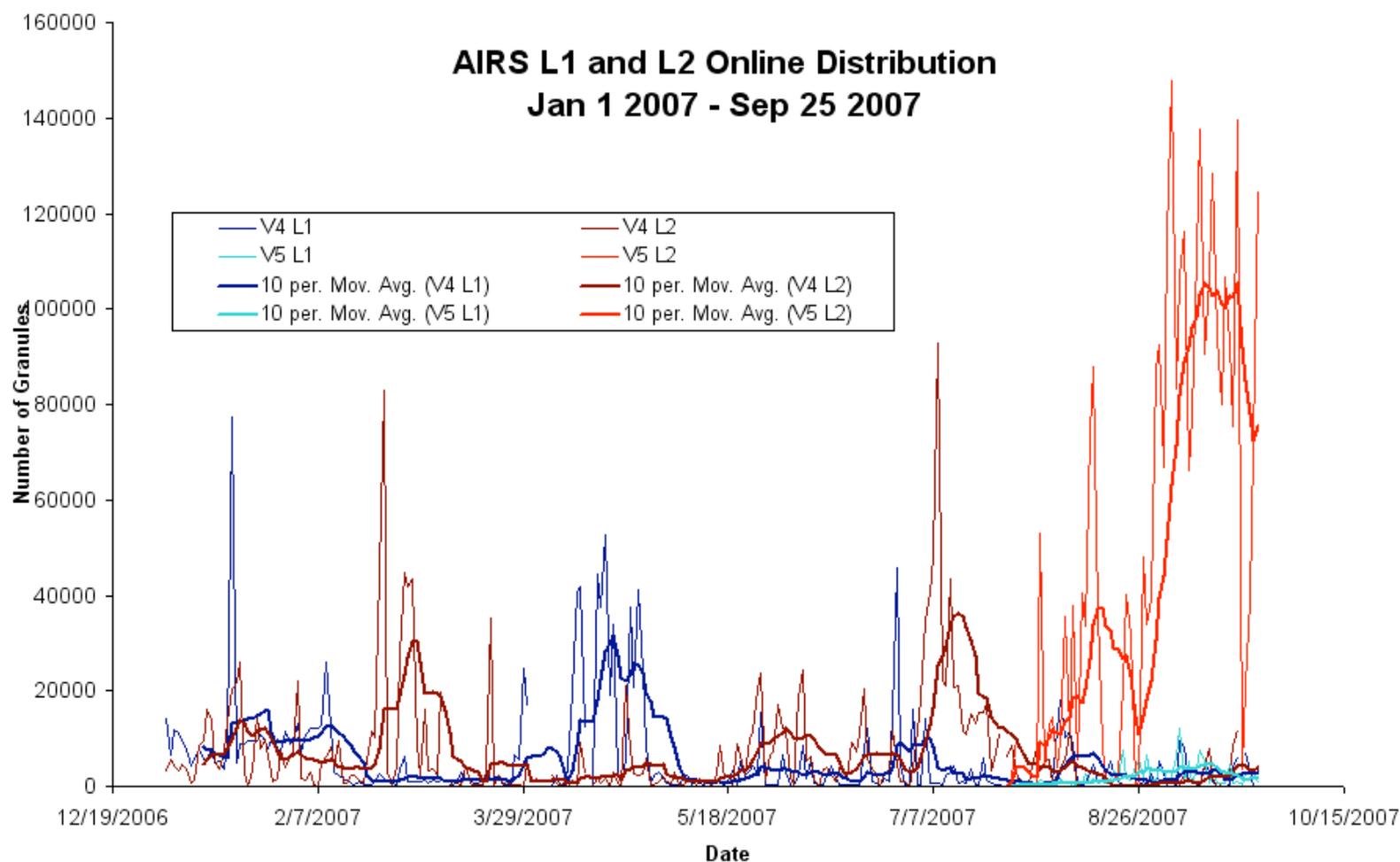


Near-Real-Time Status





Distribution Metrics





Future Considerations

- ECS Rolloff
 - ECS power off no later than Dec 2007
 - ECS access to AIRS data ends Oct 31 2007
 - Complete 5 year collection of V4 L2 data is available in S4PA
- GRiB2 and half-degree GFS products