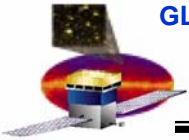


LAT Face to Face Manager' Meeting
June 30, 2004

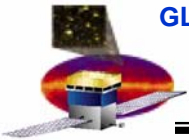
LAT Level Design Status

Rob Black rpblack@slac.stanford.edu

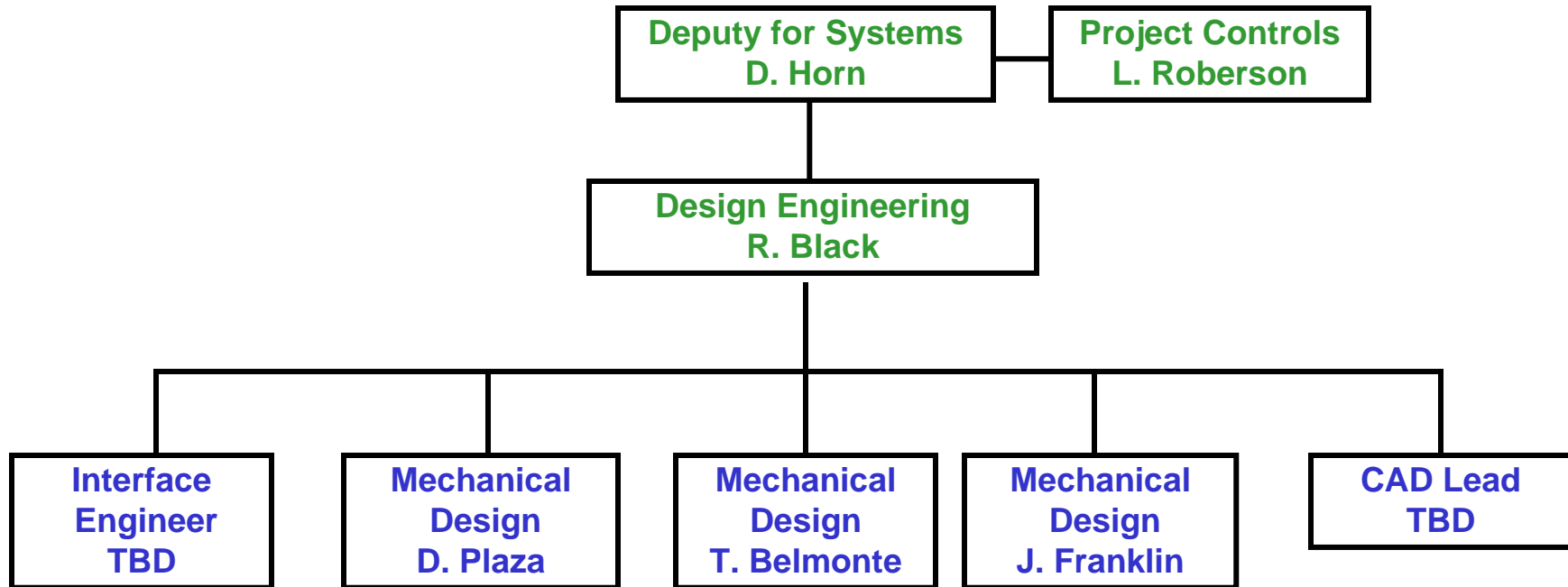


Agenda

- **Agenda**
 - **Org Chart**
 - **Last Month's Accomplishments**
 - **Open Issues**
 - **Documentation Status**
 - **Special Topic: Solid Model Control**



Design Engineering



Roles

IDD and ICD
interfaces and
documentation
Outline Drawings
SCDs

Roles

Grid
Grid Box Assy.
EMI Skirt
Cable Ways
Connector Panels

Roles

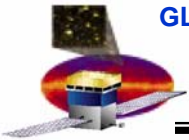
Thermal Combs
Installation Assy.
Tracker Installation

Roles

Simplified Tracker
CAL-TEM-PS Assy.

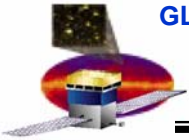
Roles

CAD model
Administration
Release
Coordination
Configuration
Control
Documentation
Maintenance



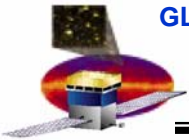
Last Months Accomplishments

- **Continued Support of Mechanical Systems**
 - **ACD match drilling**
 - **Drawing and Design Support**
- **Initial Implementation of CAD model Control methodology**
- **Update of LAT Level Drawing Tree**
- **Review of IDD Status**
- **Working on Updates to 1 X 4 to reflect tracker interfaces**
- **Support of I & T of single bay**
- **Initial meeting with Lockheed blanket designer**



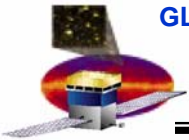
Open Issues

- **Waiting for Feedback on CAL-LAT IDD LAT-DS-00233 Rev 07 from NRL**
 - Sent to Neil Johnson 06/17/04
- **Staffing**
 - Need to find CAD Lead
 - Need to find Interface Engineer
- **Establish Plan for model migration to a more controlled location**
 - Mechanical Systems and LAT Top assemblies have been migrated
 - IDD's are in process
 - Electronics plans to move them over as they are released
 - Transition plans for other subsystems need to be established
- **Clarify plan for MLI Blanket Design**
 - Define availability of Lockheed Design Engineer (Tom McCloskey)
 - Work with I & T to utilize 1 X 4 mock-up on non-interference basis
 - 1 X 4 can be updated to sufficient fidelity for blanket fit checking
 - If 1 x 4 can not be used significant work must be put into full up mock up
- **Instrumentation**
 - Instrumentation Termination Bracket
 - Drawing showing locations
 - Specific hardware definition (part numbers and vendors)
 - Installation method



Design Group Top Level Drawing Status

Document	Task Description	Assigned	Start	Percent Complete	Complete Est	Comments
Design Group Tasks						
<u>Top Assy Drawings</u>						
LAT-DS-02559	CAL-TEM-PS Assembly drawing	J.Franklin	6/1/2004	50%	7/16/2004	Currently working 1 X 1 for I & T
LAT-DS-02560	LAT Tower assembly drawing	J.Franklin	5/7/2004	25%	7/30/2004	Need Tracker Outline model and installation process
LAT-DS-02561	LAT Tower & Elect Assembly Drawing	Team	5/19/2004	25%		Need E boxes
LAT-DS-02563	LAT Instrument Assembly Drawing	T. Belmonte	5/21/2004	10%		Place holder created, need subsystem models
LAT-DS-01626	ACD Assembly	T.Belmonte	not started			Need updated models from ACD folks
LAT-DS-01627	LAT Assembly Drawing	D.Plaza/T.Belmonte	5/26/2004	10%		Place holder created, need subsystem models
<u>Interface Updates</u>						
LAT-DS-00038	LAT Instrument Layout	T.Belmonte	not started			Good verification, but not used by other subsystems
LAT-DS-00309	Update ACD IDD	T.Belmonte	6/28/2004			Working on draft of proposed changes
LAT-DS-00233	Update CAL IDD	J.Franklin	not started			Majority of changes incorporated, NRL reviewing
LAT-DS-00040	Update LAT Instrument Stay Clear	T.Belmonte	6/29/2004			Working on draft of proposed ACD changes
LAT-DS-01631	MGSE Envelope Drawing	TBD	not started			Not currently working
LAT-DS-00851	Tracker-LAT Interface	J.Franklin	6/29/2004			Need to work with tracker on updates
1196 EI-Y46311-000	S/C Interface, Blankets, Cables, etc.	TBD	not started			Need to work with R.Bielawski



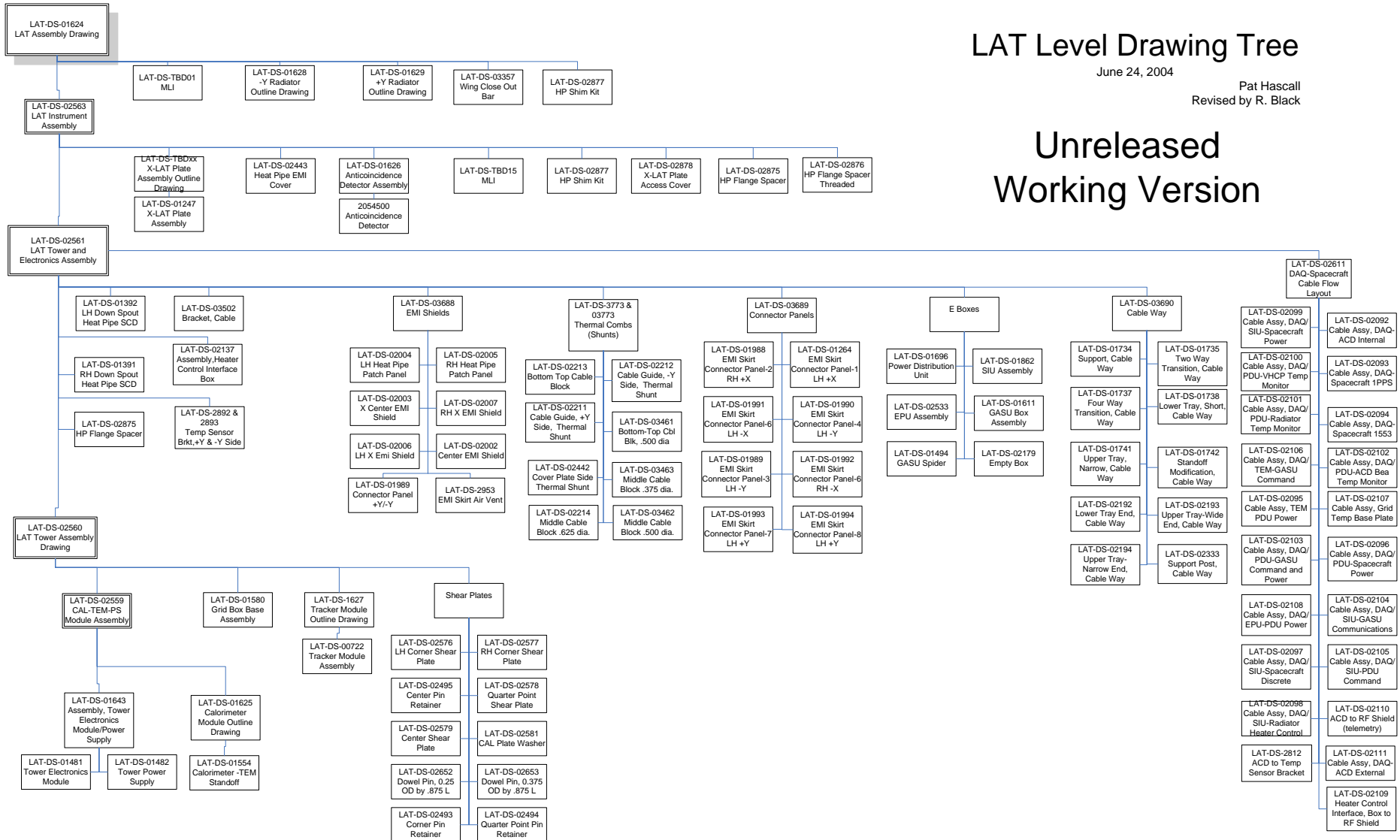
LAT Level Drawing Tree

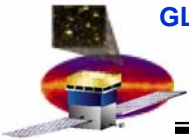
LAT Level Drawing Tree

June 24, 2004

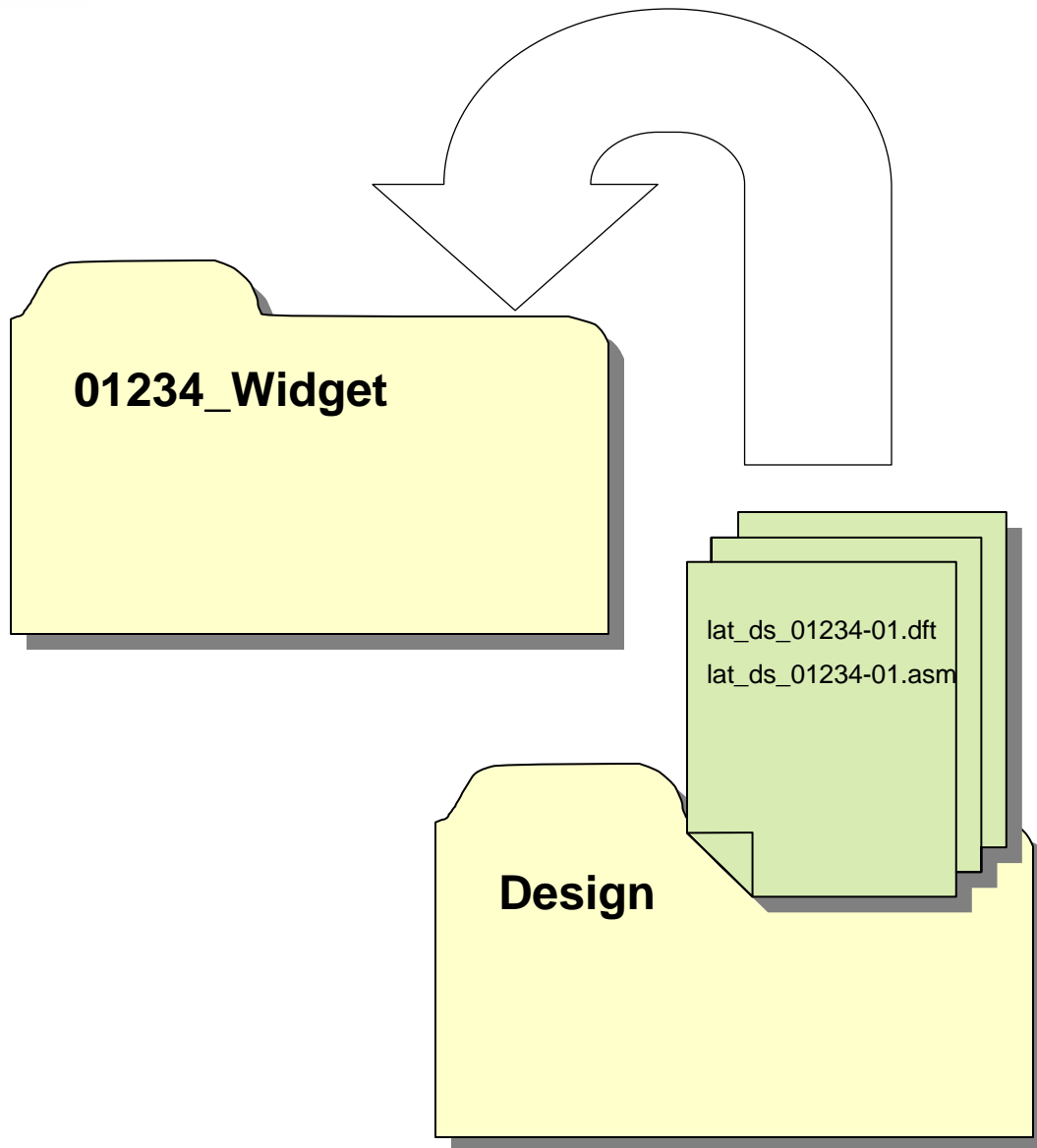
Pat Hascall
Revised by R. Black

Unreleased Working Version

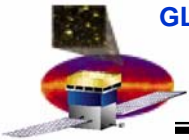




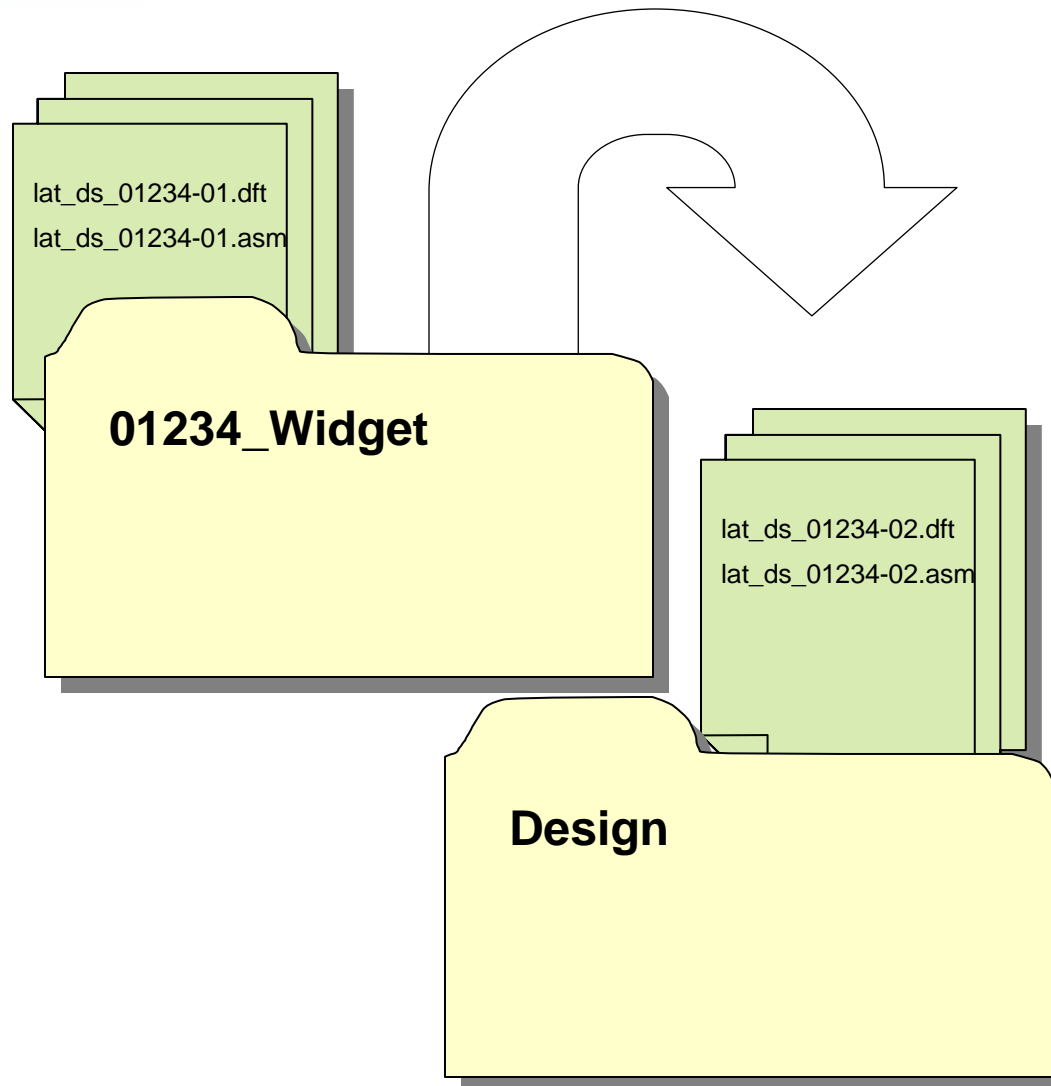
Initial Model Release Flow



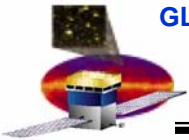
- As drawings are released the draft file and its associated files are moved up and into the released folder.
- The released folder will contain the current revision as well as all previous revisions



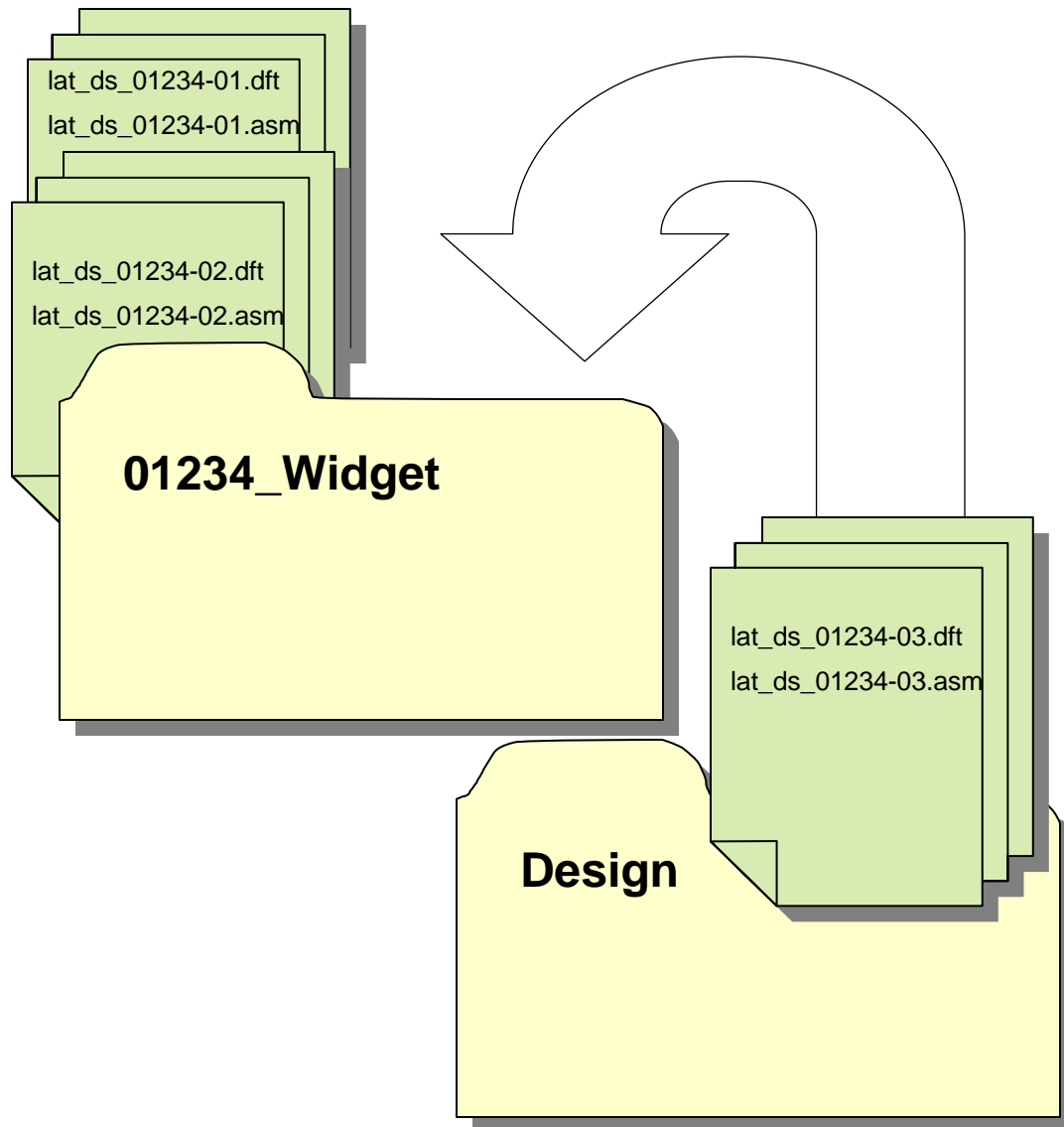
Working Model Flow



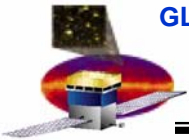
- As design changes are required the current released versions of the files will be copied down to the design folder.
- The working model in the design folder will be named at one revision number higher than the latest revision.
- Trades studies and other reference files should be kept in the design folder.



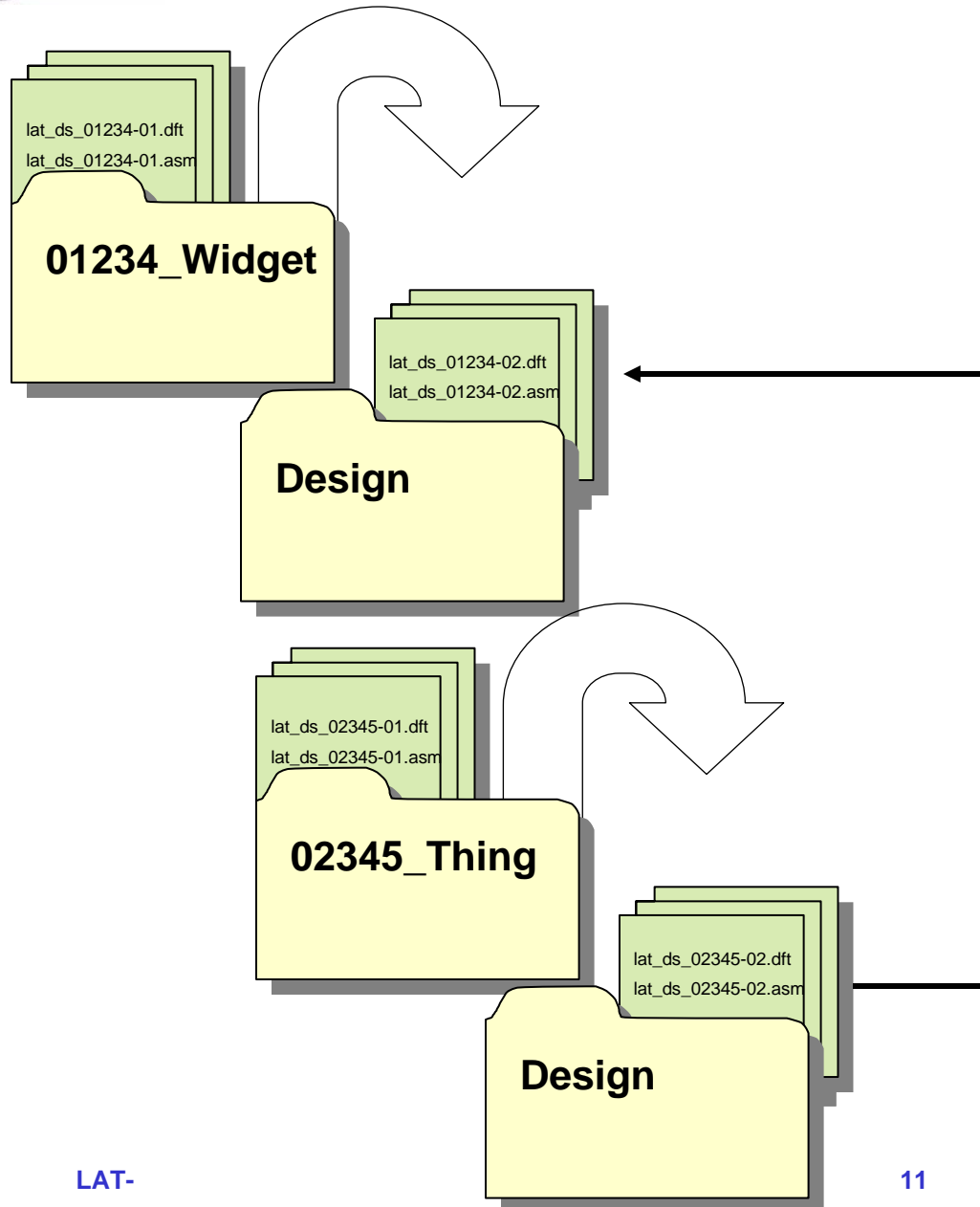
Revised Model Flow



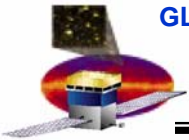
- As the next revision drawings are released the updated draft file and its associated files are moved up and into the released folder.
- The released folder will contain the current revision as well as all previous revisions.
- Trade Study models should be deleted or archived after the changes they were used for are released.



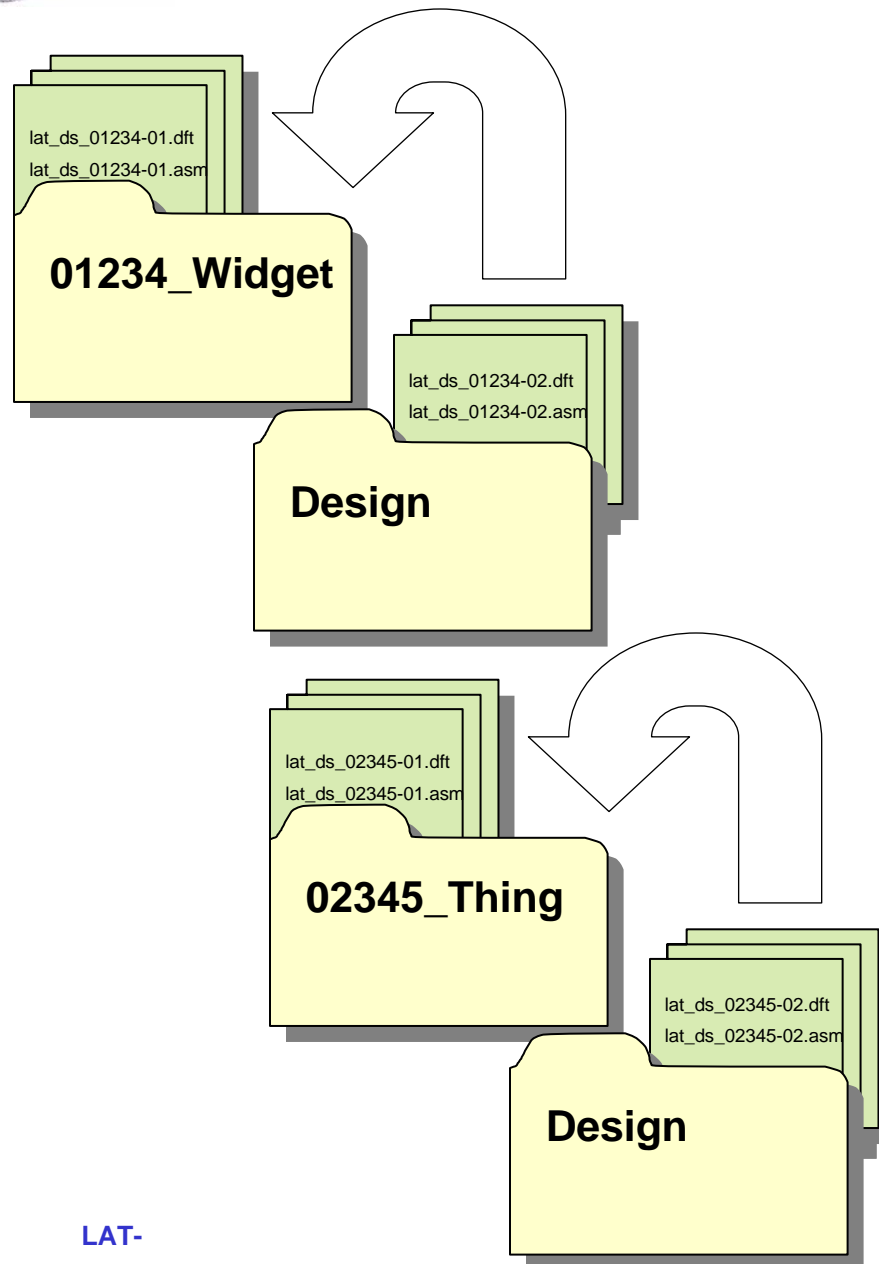
Updating Lower Level Assy



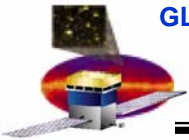
- As design changes are required to lower level parts the current released versions of the files will be copied down to the design folder.
- The working model in the design folder will be named at one revision number higher than the latest revision.
- If the next assembly is required for design verification, the lower level should point to a pending rev in the next level design folder.



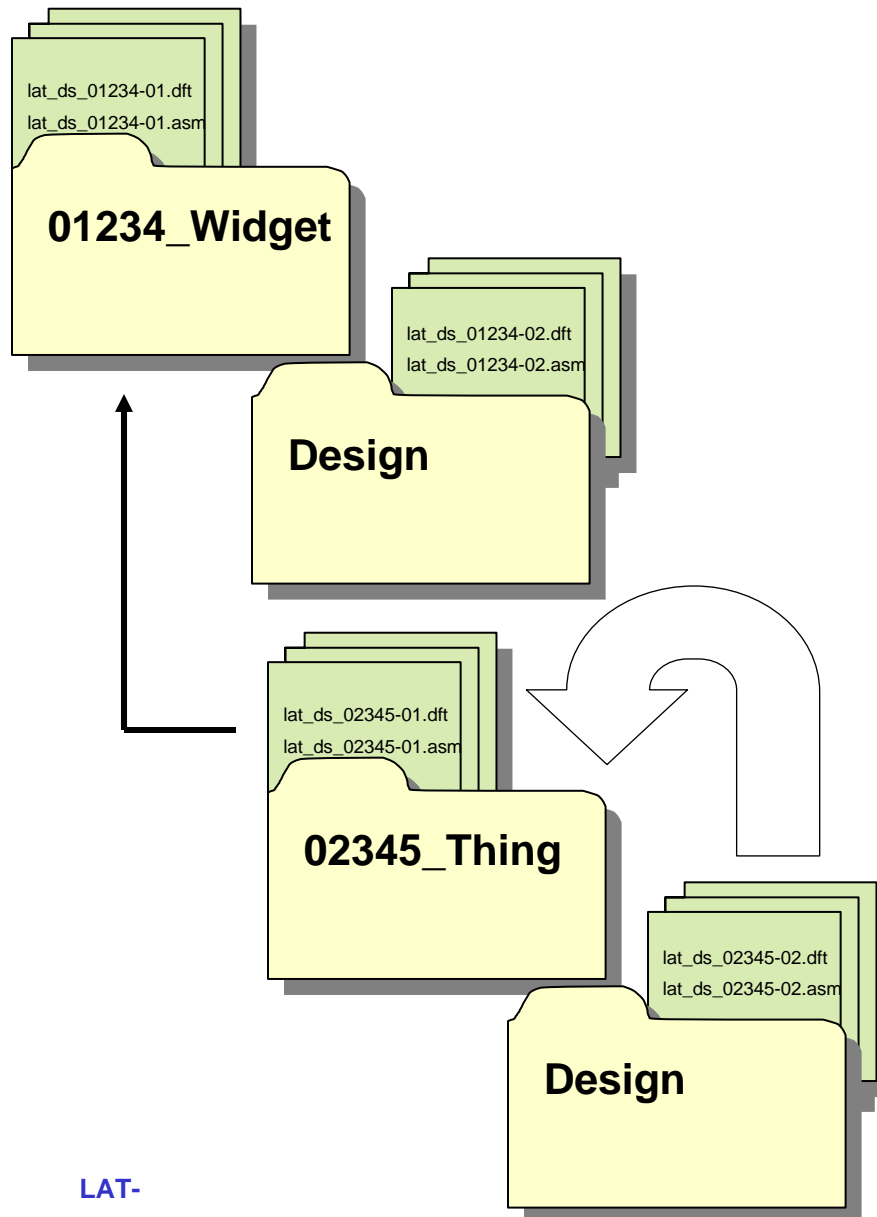
Releasing Lower Level Assy with changes to next Assy



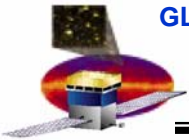
- As lower level designs are to be released they are moved up as before.
- If the change requires a new revision of the next assembly then both file sets are moved.
- If the revision of the next assy. does not have to be rolled the next assembly stays



Releasing Lower Level Assy with no changes to next Assy



- As lower level designs are to be released they are moved up as before.
- If the revision of the next assy. does not have to be rolled the next assembly stays and the link in the to the lower level model is updated.
- Note this only occurs when there is no change to the next level BOM or no dimensions are changed at the next level



Issues and Actions

Issues

- Currently no folders exist for GSE

Actions required

- Subsystem managers need to provide a list of CAD users and directories they need access to.
- Procedure needs to be established where in CAD administrator performs a where used as part of the release cycle to inform users that updates are required.
- Models need to be migrated over to the V: drive
 - Electronics plans to move them over as they are released
 - Transition plans for other subsystems need to be established