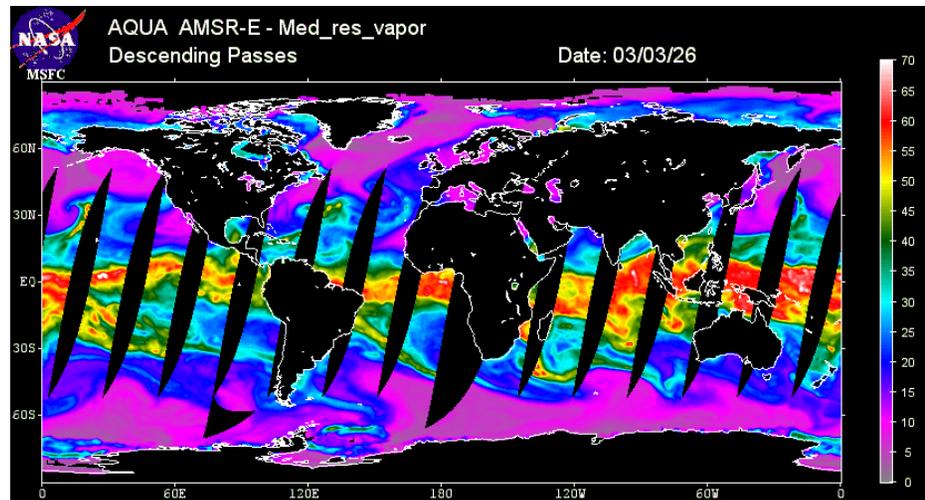


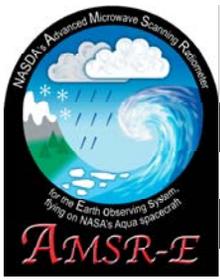
# AMSR-E SIPS Processing Status



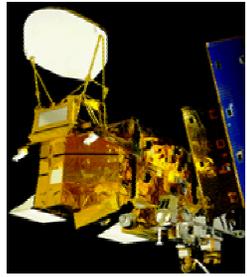
3 August 2004

Kathryn Regner

University of Alabama in Huntsville  
Information Technology and Systems Center

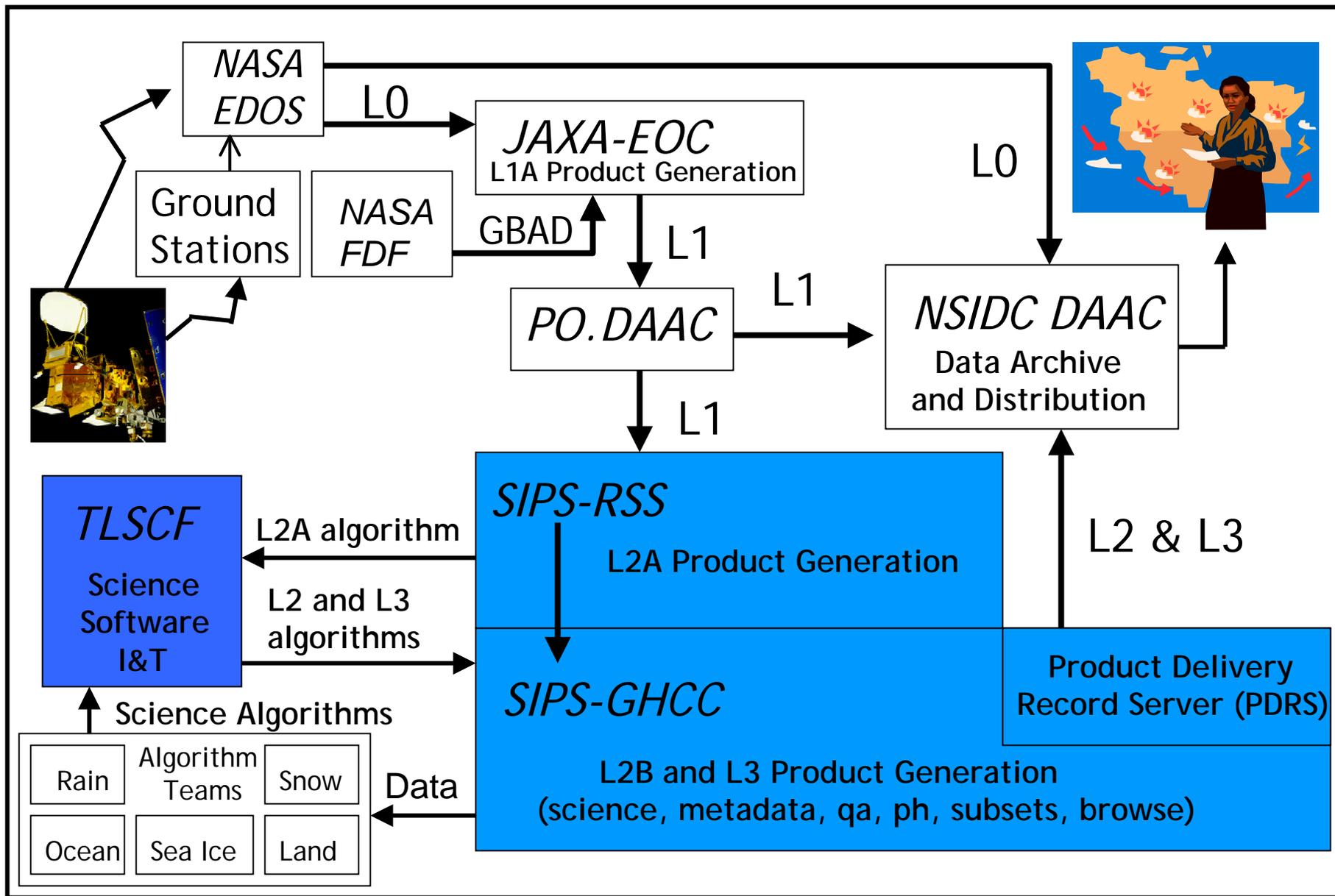


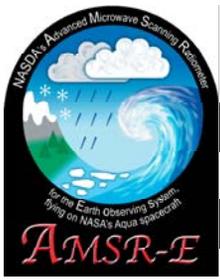
# Outline



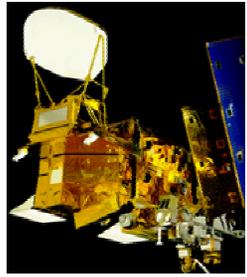
- Data Flow Review
- Processing & Algorithms Status
- Browse Products
- Product Generation Rules and Late Files Processing
- Processing Plans
- Point of Contact Information

# AMSR-E Data Flow

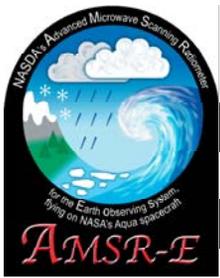




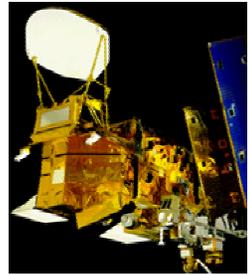
# Current Status



- Forward processing with latest algorithms
  - 24 x 7 operations running very smoothly
  - Nominal near real time ingest at GHCC ranges on average 17-23 hours after observation
- Reprocessing with latest algorithms
  - Began on May 10, 2004
  - Rate varies; currently averaging approximately 4 x near real time rate

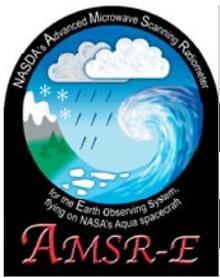


# Algorithm Versions

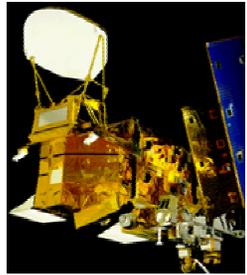


| Algorithm  | Public Release |            | 1 <sup>st</sup> Reprocessing<br>5/10/2004 | 2 <sup>nd</sup> Reprocessing<br>3/1/2005 |
|------------|----------------|------------|---|--|
|            | 9/1/2003       | 3/1/2004   |   |  |
| L2A Tb     | <i>B01</i>     | B01        | B01                                       | <i>B02</i> *                             |
| L2 Land    |                | <i>B01</i> | B01                                       |  |
| L2 Ocean   |                | <i>B01</i> | B01                                       |  |
| L2 Rain    |                | <i>B01</i> | <i>B02</i>                                |  |
| L3 Land    |                | <i>B01</i> | B01                                       |  |
| L3 Ocean   |                | <i>B01</i> | B01                                       |  |
| L3 Rain    |                | <i>B01</i> | B01                                       |  |
| L3 Sea Ice |                | <i>B01</i> | <i>B02</i>                                |  |
| L3 Snow    |                | <i>B01</i> | <i>B02</i>                                |  |
| L3 Rain    |                | <i>B01</i> | <i>B02</i>                                |  |

\* New version of L2A algorithm based on new version of L1A algorithm



# New Browse Imagery

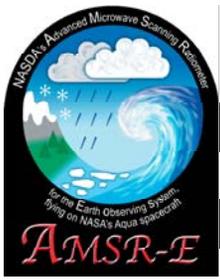


- Near-real time level-2 and level-3 browse images in *PNG format* are generated as L2A data are acquired. Available from SIPS FTP Server and SCF Web Site (soon)

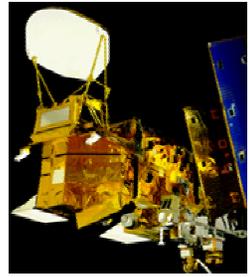
[ftp://ariel.nsstc.nasa.gov/browse\\_png](ftp://ariel.nsstc.nasa.gov/browse_png)

<http://www.ghcc.msfc.nasa.gov/AMSR/>

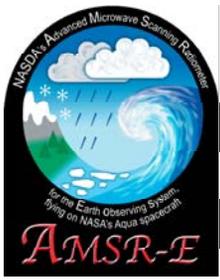
- Final level-2 and level-3 browse images *in HDF format* created from climate research quality products will be available from the NSIDC DAAC.
- Browse for entire mission dataset will be generated as part of the March 2005 reprocessing.



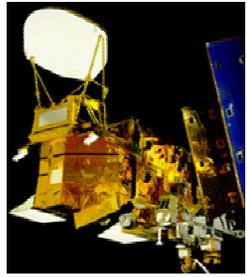
# Late Files Processing



- SIPS-GHCC recently implemented the capability to generate *replacement Level 3 products* when a Level 2A file is received after the corresponding Level 3 products have been created and delivered to the DAAC
  - automatically staged for pickup (on PDRS)
  - email to DAAC Ops lists late and replacement file names

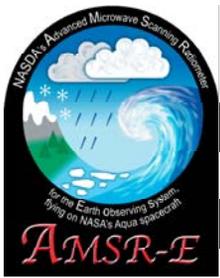


# Late Files Processing (cont)

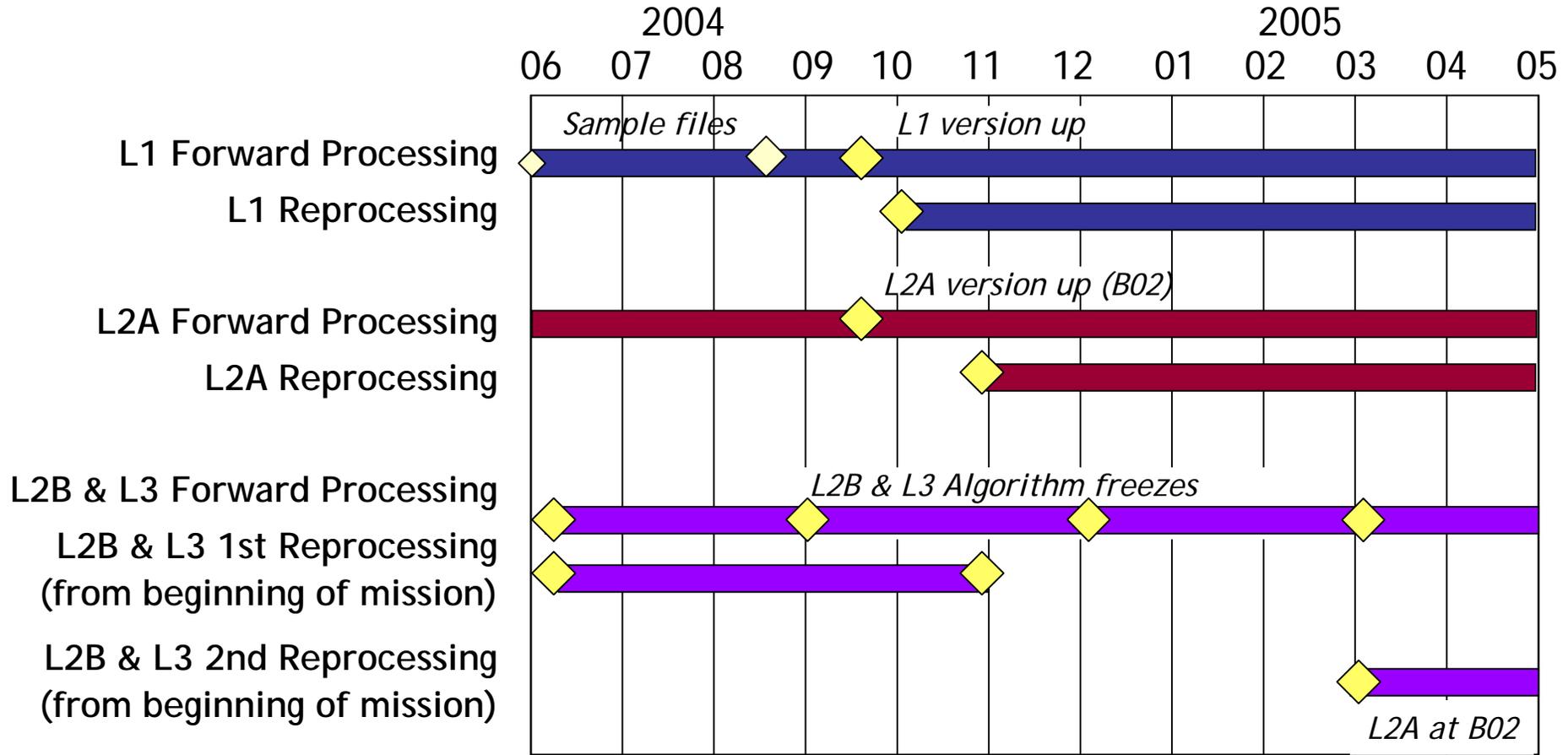
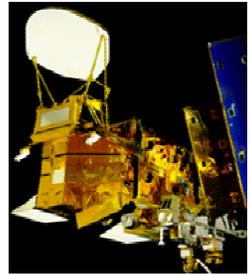


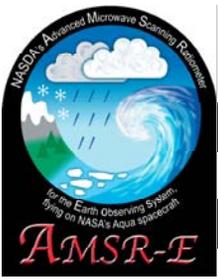
- Two classifications of late files:
  - L2A file is older than 6 days but not older than 45 days
    - Level-3 products will be regenerated and staged for pickup on the PDRS, ideally before the monthly processing for that L2A file has occurred.
  - L2A file is older than 45 days ("really late")
    - Requires adding the late file(s) to the existing set of L2A files, for the entire month, and regeneration of all products. Evaluated on a case-by-case basis.



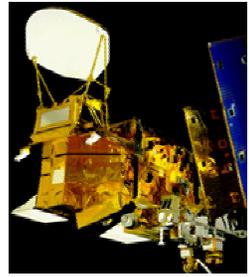


# Processing Plans

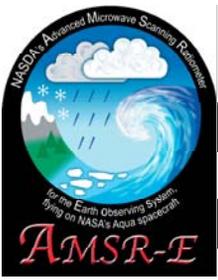




# FTP Data from Ariel



- *SIPS Computer Security is a Priority*
- Secure FTP was implemented in June 2004
  - Qualified AMSR-E science or validation team members who wish to access data and browse on Ariel will need to install Secure FTP or similar public domain freeware
  - For further information or help, please contact our friendly Systems Administrators at
  - [sysadmin@ariel.nsstc.nasa.gov](mailto:sysadmin@ariel.nsstc.nasa.gov)
- In January 2005 Restricted FTP will no longer be available.



# SIPS-GHCC POCs

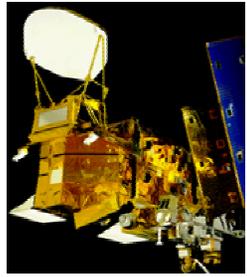
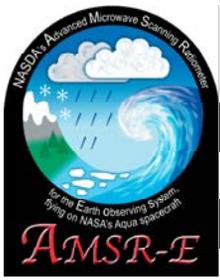


- SIPS-GHCC Point of Contact during Michael Goodman's tour of duty at NASA HQ

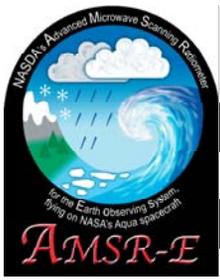
Kathryn Regner

256-961-7791

[kathryn.regner@msfc.nasa.gov](mailto:kathryn.regner@msfc.nasa.gov)



# Backup Charts

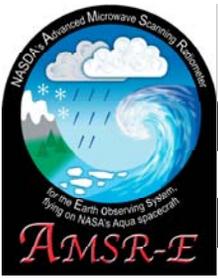


# SIPS-GHCC

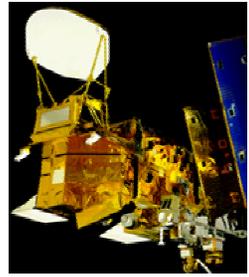
## Products Retention Plan



- These products are kept on line for 45 days:
  - L2A Brightness Temperatures
  - L2B Land, Ocean, and Rain
  - L3 Daily Ocean, Snow, and Sea Ice (6, 12, 25km)
  - L3 Snow Pentad and Weekly Ocean
- These products are kept on line for 6 months:
  - Monthly Ocean, Monthly Snow and Rain Grid
- Current plans are to keep the Browse PNG and all subsets on line indefinitely.

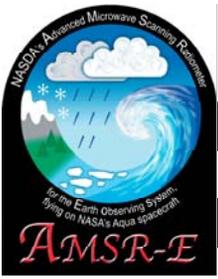


# Product Maturity Indicator

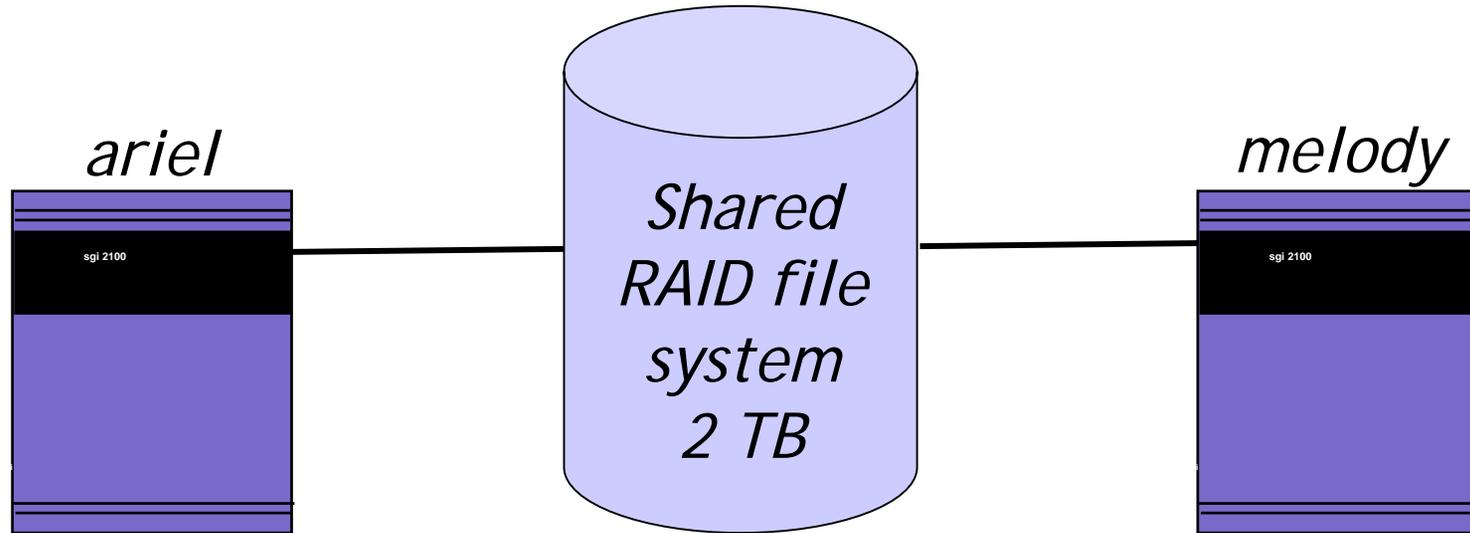


## *Excerpt from the AMSR-E Data Management Plan*

- The AMSR-E standard product file names contain a product maturity indicator.
- Valid values for the standard product maturity indicator are “B”, and “V” for Beta, and Validated, respectively.
  - “Beta” product maturity indicates use of NASDA calibrated data in producing the Level 2A TBs; the product maturity will graduate to “Validated” once the science software has been tested and the algorithm validated using the official NASA calibration.
- One final value for the product maturity code is “P,” preliminary, which indicates non-standard near real time preliminary data products available at NSIDC through their Web based non-ECS system. These data are only available until the corresponding standard product (“B” or “V”) is ingested at NSIDC. Currently, there is a 4-6 day delay between preliminary products and standard products.



# SIPS-GHCC Production System



Routine processing

Special processing for error recovery and late L2A files

Restricted FTP server

- Data distribution to NSIDC DAAC
- Science team QC and custom subsets

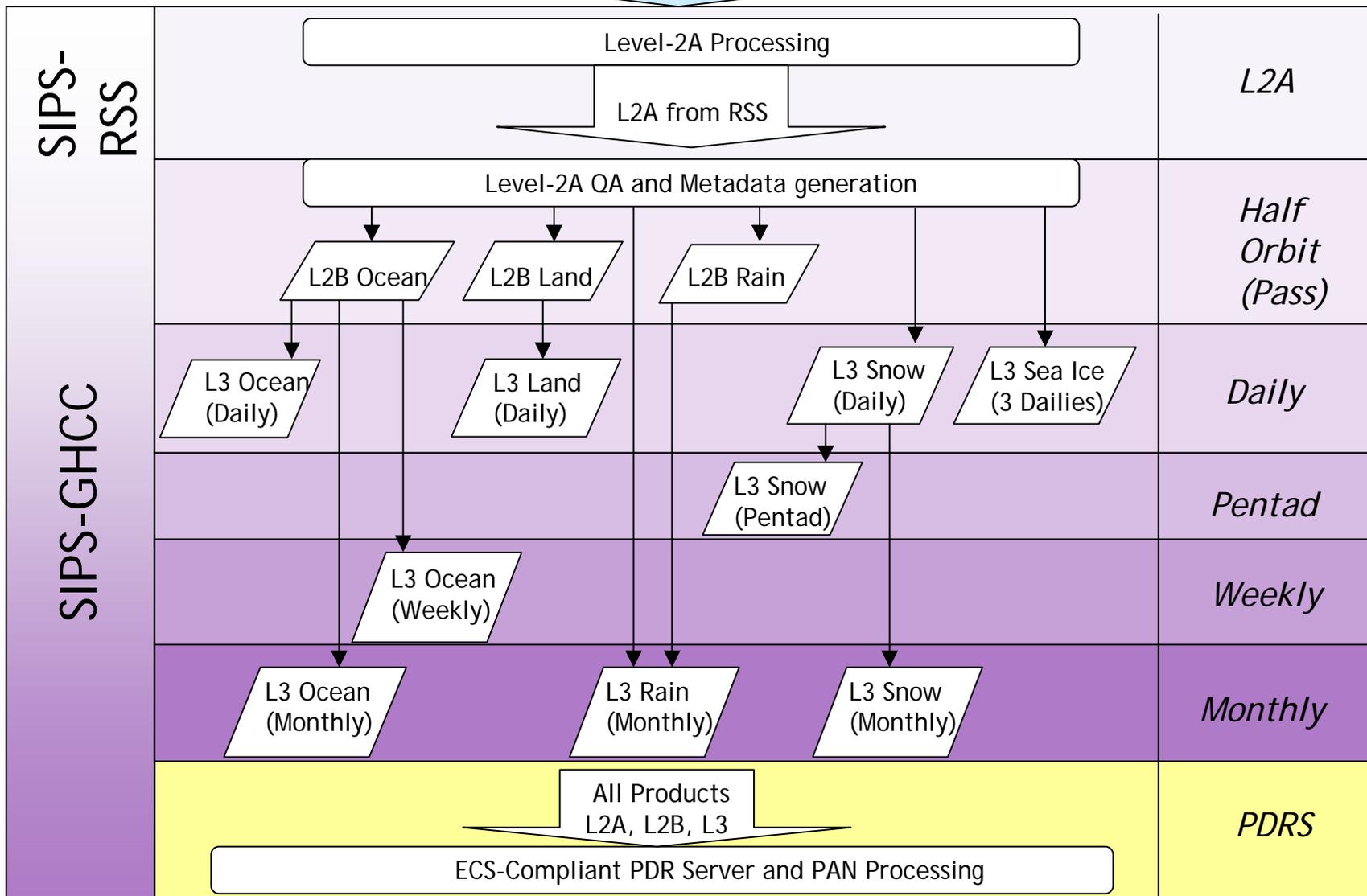
Reprocessing

Software development for processing automation  
Integration and test

# SIPS High Level Software Architecture

L1 from JAXA  
via PO.DAAC

Processing  
Automation  
Scripts



L2 & L3 Products  
& PDRs to NSIDC

PANs, PDRDs  
from NSIDC