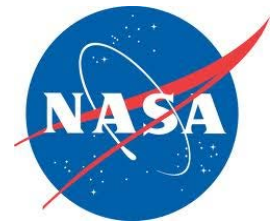# *Land breakout*
Welcome and introduction

Ivan Csiszar

NOAA/NESDIS/STAR

Land algorithm status

- Algorithms are currently transitioning to Enterprise solutions
  - changes in retrieval algorithm, product content, format
- Preparations for reprocessing are ongoing
- Long-term product monitoring and maintenance continues
  - http://www.star.nesdis.noaa.gov/jpss/EDRs/index.php
- Product development is generally in sync with operational applications
  - NCEP/EMC land: consistent, gridded, global, 1-km composites
  - biophysical variables for terrestrial ecological studies
  - fire radiative power for smoke/air quality applications
  - National Ice Center (NIC), Navy, NWS Alaska
  - etc.
- NASA ST production / reprocessing ongoing
  - continuing coordination and synchronization for select algorithms
  - implementation challenges
    - NASA-unique SDR, formats, NDE vs. SIPS production systems

Schematic view of proposed Land Enterprise System

Granule Aeros, CM	Granule SDR	Granule SR	Granule LST, LSA, Snow/Ice binary map, SF	Granule Active Fire

NN mapping, Sin projection, multiple layers (observations from different orbits; keep pixel CM, Aeros)

Gridding algorithm responsibility

1, 7, 8 days composite:

SDR

SR

Compositing:
- *apply selection criteria (SAVI, max/min)*
- *apply time window*
- *apply QC (Aeros, CM)*

Sin -> Lat/Lon

Sin -> Lat/Lon (option 1)

Either gridding or product algorithm responsibility

LSA   LST

Product algorithm responsibility

32 days composite:

SR → AST, AST-LWM

Sin -> Lat/Lon

SR/BT/VI monthly

Daily ST

M. Tsidulko, IMSG

Fire, Snow, Burned area

Product algorithm responsibility

GVF	NDVI-TOA
NDVI-TOC	EVI
LAI	VHP

Snow/Ice binary map

Snow Fraction

Product algorithm responsibility

Sin -> Lat/Lon (option 2)

Consistency check   **Gridding algorithm responsibility**

Enterprise implementation schedule

- Algorithm readiness
  - Surface reflectance: September 2017
  - VI, LST, LSA: August/September 2017
  - Active Fire – already operational – updates coming
  - Surface Type – annual updates – updates coming
- JPSS-1 readiness
  - Recent 8-day dataset provided to STAR needs to be evaluated
  - Validation schedule updates?
  - Expect some changes in SDR, ECM etc.

Principal issues

- Operational NDE implementation needs more coordination
  - Need to know status of upstream products
  - Need to access to correct versions of upstream products
  - Operational implementation appears to be slower than expected
  - Need to properly plan for update bundles
- Readiness for reprocessing lagging
  - Need SDR evaluation and upstream EDR readiness
- Operational (i.e. OSPO quality monitoring)
  - Need better coordination and notification of issues
- Requirement changes and data access (PDA etc.)
  - User-driven processes
- Operational use of products lagging
  - re-think approaches to the problem
  - How do the products fit into the new NCEP modeling framework?

Agenda (am)

	Land Chair: Ivan Csiszar ESSIC Room 4102		
0915 - 1710			
0915 - 0935	*Introduction and Welcome*	Ivan Csiszar	STAR
0935 - 0955	*Surface Reflectance*	Eric Vermote	NASA
0955 - 1015	*Vegetation Product Suite*	Ivan Csiszar	STAR
1015 - 1030	*Break*		
1030 - 1050	*Land Surface Albedo*	Yunyue (Bob) Yu	STAR
1050 - 1110	*Land Surface Temperature*	Yunyue (Bob) Yu	STAR
1110 - 1130	*Active Fire*	Ivan Csiszar	STAR
1130 - 1150	*Vegetation Health*	Felix Kogan	STAR
1150 - 1200	*Discussion*		
1200 - 1315	*Lunch*		

Agenda (pm)

1315 - 1335	*Surface Type and Surface Type Change*	Xiwu (Jerry) Zhan	STAR
1335 - 1355	*Land Product Characterization System*	Kevin Gallo	STAR
1355 - 1415	*NASA Land Science Team Status*	Miguel Román	NASA
1415 - 1435	*CEOS Land Product Validation*	Miguel Román, Tomoaki Miura	NASA
1435 - 1445	*Discussion*	**15:00 – 15:30 Yihua Wu, Weizhong Zheng**	
1445 - 1530	***Break***		
1530 – 1550	*Product Interdependencies, Consistency, Common Gridding and Compositing, Upstream Product Issues*	Open discussion	
1550 – 1610	*Reprocessing*	Open discussion	
1610 - 1630	*New Operational Land Products*	Open discussion	
1630 - 1650	*JPSS - GOES-R Algorithm Integration and Enterprise Products*	Open discussion	
1650 - 1710	*Non-NOAA Satellite Assets*	Open discussion	