



Flyout Chart

Lihang Zhou, Arron Layns, Tom Schott
Walter Wolf, Bonnie Reed, Xingpin Liu, Kathryn Shontz



Future JPSS Product Processing



Mission Unique	Enterprise		
AMSR RDR	Active Fires (VIIRS)	Green Vegetation Fraction (VIIRS)	Sea Ice Concentration (ATMS)
ATMS AP/RDR/SDR/TDR	Aerosol Optical Thickness (VIIRS)	Ice Surface Temperature (VIIRS)	Sea Surface Temperature (AMSR-2/3)
CrIS AP/RDR/SDR	Aerosol Particle Size Parameter (VIIRS)	Imagery (AMSR-2/3)	Sea Surface Temperature (VIIRS)
VIIRS AP/RDR/SDR	Albedo (Surface) (VIIRS)	Imagery (ATMS)	Sea Surface Wind Speed (AMSR-2/3)
CERES AP	AMSR Calibrated Sensor Data (AMSR)-2/3)	Infrared Ozone Profile (CrIS)	Snow Cover/Depth (AMSR-2/3)
OMPS-N AP/RDR/SDR	Atmospheric Vertical Moisture Profile (CrIS/ATMS)	Land Surface Emissivity (ATMS)	Snow Cover (ATMS)
OMPS-L AP/RDR/SDR	Atmospheric Vertical Temperature Profile (CrIS/ATMS)	Land Surface Temperature (ATMS)	Snow Cover (VIIRS)
VIIRS Imagery EDR	Carbon Monoxide (CO) (CrIS)	Methane (CH4) (CrIS)	Snow Water Equivalent (ATMS, AMSR-2)
<p>Associated Intermediate, Ancillary, and Auxiliary products would follow the appropriate mission-unique or enterprise product.</p> <p>JPSS also supports inclusion of JPSS data into blended and derived satellite products (not listed here).</p>	Carbon Dioxide (CO2) (CrIS)	Moisture Profile (ATMS)	Soil Moisture (AMSR-2/3)
	Cloud Base Height (VIIRS)	Ocean Color/Chlorophyll (VIIRS)	Surface Type (AMSR-2/3)
	Cloud Coverage/Layers (VIIRS)	Outgoing Longwave Radiation (CrIS)	Surface Type (VIIRS)
	Cloud Effective Particle Size (VIIRS)	Ozone Nadir Profile (OMPS-N)	Suspended Matter (VIIRS)
	Cloud Liquid Water (AMSR-2/3)	Ozone Total Column (OMPS-N)	Temperature Profile (ATMS)
	Cloud Liquid Water (ATMS)	Polar Winds (VIIRS)	Total Precipitable Water (AMSR-2/3)
	Cloud Mask (VIIRS)	Precipitation (Type/Rate)(AMSR-2/3)	Total Precipitable Water (ATMS)
	Cloud Optical Thickness (VIIRS)	Quarterly Surface Type (VIIRS)	Vegetation Indices (VIIRS)
	Cloud Top Height (VIIRS)	Rainfall Rate (ATMS)	Vegetation Health Index Suite (VIIRS)
	Cloud Top Pressure (VIIRS)	Sea Ice Characterization (AMSR-2/3)	Land Surface Temperature (VIIRS)
Cloud Top Temperature (VIIRS)	Sea Ice Characterization (VIIRS)	Surface Reflectance (VIIRS)	



Planning for Implementation



- **A fly-out chart** (of when the products running in NDE/When the products turning off from IDPS) is necessary to communicate the implementation of EDR re-allocation
- JSTAR-AMP will work with STAR science teams/AIT, NJO, OSGS, ground POCs to put together the fly-out chart
 - Factors included in the timeline:
 - » When Enterprise Algorithms DAP ready to deliver
 - » When Enterprise Algorithms in NDE operation
 - » When enterprise product will be archived in CLASS
 - » When the IDPS algorithms can be turned off



Dependencies to be Addressed



- Surface Reflectance
 - ✓ Initial DAP is expected to be delivered very soon
- GVF on SR
 - Need timeline for use of enterprise product
- Polar Winds on VCM
 - Need timeline for use of EVM
- NUCAPS VIIRS/CrIS collocation on VCM and CTH
 - Need timeline for use of enterprise cloud product

Enterprise Algorithm Schedule: S-NPP Milestones

Task	2015												2016												2017								
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9			
Active Fires			◆						▲		▲																						
Aerosol (AOD, ADP, VolAsh)			◆					▲	◆				◆				▲	▲															
Cloud Mask			◆					▲	◆				◆				▲	▲															
Cloud Phase/Type			◆					▲	◆				◆				▲	▲															
Cloud Height (ACHA)			◆					▲	◆				◆				▲	▲															
DCOMP			◆					▲	◆				◆				▲	▲															
NCOMP			◆					▲	◆				◆				▲	▲															
Ice Surface Temperature			◆					▲	◆				◆				▲	▲															
Sea Ice (Age/Concentration)			◆					▲	◆				◆				▲	▲															
Snow Cover - Binary Map			◆					▲	◆				◆				▲	▲															
Snow Cover - Fraction			◆					▲	◆				◆				▲	▲															
Ozone Nadir Profile (V8Pro)													◆	▲		◆		▲	▲														
Ozone Total Column (V8TOz)											▲	◆	◆					▲	▲														
Surface Reflectance															▲			◆	▲		◆	▲	◆	▲									
Surface Albedo																	▲			▲	◆	▲	▲	◆	▲	◆	▲	▲					
Land Surface Temperature																	▲			▲	◆	▲	◆	▲	◆	▲	▲						
Vegetation Indices																	▲			▲	◆	▲	◆	▲	◆	▲	▲						

▲ CDR
 ▲ TRR
 ▲ ARR
 ▲ SR
 ▲ ORR
 ▲ TTO
 ◆ DAP 0
 ◆ DAP 1
 ◆ DAP 2



Actions/Path Forward



- ✓ Science review of land and ozone products (Mar 2016)
 - Initial design and timelines
 - Dependencies identified
- J1 Project Plans ready to present in June's PSDI Annual Review (Jun 2016)
 - Updated flyout chart (Jun 2016)
- JPSS Submission Agreement for all EDRs (later 2016)
- User communication (Starts now)
 - Format changes (HDF5 to netCDF4), QF changes, Data file and Metadata content changes
 - Provide tools, readers/converters
 - Documentation updates
 - Users workshop/Annual Science Team Meeting