



PRO Contributors

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GOES-R Ground System Status and Gridded Product Update

2023 GLM Science Meeting





GOES-U T20



Date (Based on 4/30/24 Launch)	GOES-16		GOES-19	
	Location	Activity	Location	Activity
4/30 – 5/28	75.2°W	GOES-East Operations		Launch and Orbit Raising
5/29 – 11/29			89.5°W	GOES-19 PLT and PLPT • First public ABI Image (Vis & IR) @ 89.5°W
12/3				GOES-19 Handover Readiness Review (HRR)
12/4				GOES-19 Handover to OSPO
12/5 – 12/19		GOES-16 “nudge“ to 75.5°W		GOES-19 Drift from 89.5°W to 75.2°W • ~1 deg/day drift
12/19	75.5°W	GOES-16 in co-location configuration • X-Band and S-Band downlink for colocation	75.2°W	GOES-19 arrives at 75.2°W and instruments resume • X-Band and L-Band downlink after drift for colocation
12/19 – 2/3		GOES-16 in co-location configuration • X-Band and S-Band downlink		GOES-19 Post-Drift Product Checkout at new location • X-Band and L-Band downlink
1/30/25				GOES-19 Operational Transition Readiness Review (OTRR)
2/4		X-band downlink off and instruments shut down		GOES-19 Declared operational GOES-East • Begin GOES-19 GRB broadcast / nominal distribution • SAR/DCS services transitioned to GOES-18
2/4		Begin GOES-16 drift to 105°W • Drift using AJTs • ~0.5 deg/day max drift rate		
4/4	105°W	GOES-16 arrival at 105°W followed by storage mode		

* version dated 11/2/23



GLM Progress Since Last Meeting



WR	ADR	Title	PR or DO	Date in OE	Impact to this VAL
6412	549	Eliminate GLM L1b dependency on APIDs 384 and 385 - ADR 549	DO.11.00.00	10/1/22	medium
7178	906	GLM CDRL79-to-GS LUT translation tool - ADR 906	DO.11.00.00	10/1/22	medium
	1291	G18 GLM CDRL79 Rev F	PR.09.08.38	11/8/22	high
	1288	Scripts to push GLM Navigated Backgrounds to eGRES	PR.09.09.00	12/6/22	low
9341		G17 GLM Navigation outliers reported at RBU	MM.11.01.00	12/9/22	none
9469		Unable to import openpyxl [used in GLM LUT conversion tool]	MM.12.01.00	5/4/23	low
7449		GLM Geographic Coverage Extents are incorrect	DO.12.01.02	5/23/23	low
9062	906	GLM Background Gain Cal-INR generation method - ADR 906	DO.12.00.00	5/23/23	medium
9315		GLM Nav out of spec for 48hrs	DO.12.01.00	6/16/23	low

11/8/2023 – GOES-18 GLM Reached Full Validation



Gridded GLM Progress



WR	ADR	Title	PR or DO	Date in OE	Impact to this VAL
8478		Add GLM Flash Extent Density product	DO.11.00.00	10/1/22	medium
8964		Store GLM Flash Extent Density product to LZSS	DO.11.02.00	12/1/22	low
9168		GLM Flash Extent Density tile file naming - PRO Type 2	DO.11.02.00	12/1/22	low
9646		GLM FED Outages	Closed	6/29/23	low
8479		Add 5-minute accumulation to GLM Flash Extent Density	Closed	9/22/23	low

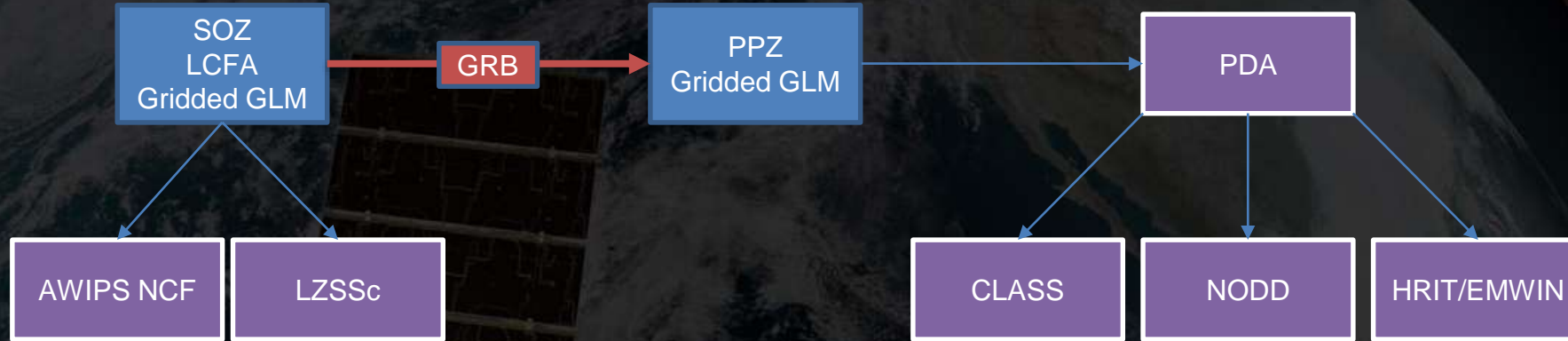


What's next?



WR	ADR	Title	PR or DO	Date in OE	Impact
7538	1060	Interim Solution to Facilitate GLM Gridded Product	HOLD	TBD	low
9187		Unable to Load GLM Events in PADIV	HOLD	HOLD	none
9667		G16/G18 GLM L2 Product Outage to GeoCloud Endpoint	TBD		none
9700		COOP FINDING: G16/G18 GLM L2/INST-CAL Archive Impacts to MLS/LZSSc	TBD		none
9720	1345	GLM Blooming Filter tuning - ADR 1345	Flight	LUTs to be delivered	high
9724		CBU GLM Landmarking Very Delayed	TBD		low
	1348	GLM Coastline intermittent Read and Write errors	HOLD	HOLD	low
9641	1350	G19 GLMFED is not produced in the TEST SLOT and STORAGE Slot - ADR 1350	DO.13.00.00	11/22/23	low
9735		Remove GLM FED reliance on TBSM	DO.13.00.00	11/22/23	low
9517		GLMFED Failed to Rename Errors to AWIPS TNCF in ITE	TBD		low
9736		Update GLM FED to handle NFS slowness	TBD		low
9808		GGSS Ops: SOZ OE GLM FED OUTAGE J275	TBD		low

Gridded GLM in PPZ



- SOZ produces GLM Gridded Product
- GRB only contains GLM L2 LCFA
- Currently Gridded GLM only goes to NCF & LZSS
- GLM Gridded Product format is user-specific AWIPS sectorized
- Only sectors (or tiles) with lightning are created and distributed
- These are known as “Punctured Tiles”

- PPZ interfaces with PDA
- PDA can provide products to a range of users
- GLM Gridded processing will be implemented on the PPZ
- Output product will be Full Disk “PUG Friendly” format
- One product per minute
- We are exploring inclusion of additional grids



Summary

- Operational GLM data are at Full maturity and continue to perform well for both GOES-16 and GOES-18
- GOES-U Transition to East Operations in early Q2FY25
- GOES-16 Storage at 105deg in Q2FY25
- Gridded GLM PDA distribution in Q3FY24