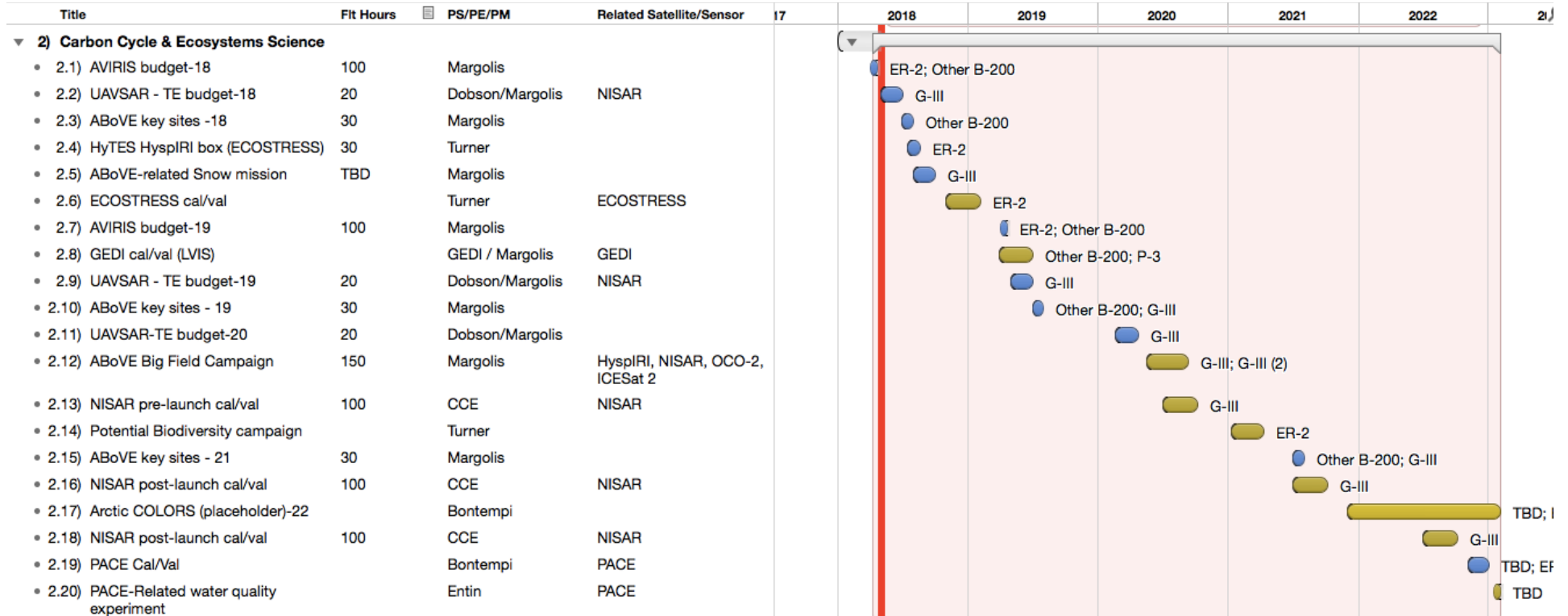


Atmospheric Chemistry and Composition

Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022
1) Atmospheric Composition and Chemistry									
• 1.1) Long Island Sound Ozone study	150	Al-Saadi	Tempo, TropOmi		B-200 L				
• 1.2) AJAX	70	Jucks	OCO-2		Alpha Jet				
• 1.3) SHOW / ASMLS	20	Jucks/IIP			ER-2				
• 1.4) ROSCOE	4	Maring	CATS-ISS		ER-2				
• 1.5) CAMP2Ex	223	Maring	A-Train, ACE		P-3				
• 1.6) AJAX	70	Jucks	OCO-2		Alpha Jet				
• 1.7) FIRE-CHEM-AQ	150	Lefer	A-Train, ISS		DC-8; UC-12; NASA GV; ER-2				
• 1.8) FASME Pre-scribed burn	25	Lefer			Sherpa				
• 1.9) Chemistry Mission-in-development / South East Asia Outflow	30	Jucks			WB-57; ER-2				
• 1.10) AJAX	70	Jucks	OCO-2		Alpha Jet				
• 1.11) FASME Pre-scribed burn	25	Lefer			Sherpa				
• 1.12) ARISE II		Maring			P-3				
• 1.13) PACE cal/val		Bontempi	PACE		TBD				

Carbon Cycle and Ecosystems



Cryosphere, Water and Energy Cycle

Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022
3) Cryospheric Science									
• 3.1) OIB Arctic 2018	250	Wagner, Tagg	ICESat 2		P-3				
• 3.2) Arctic melt 2018 (OIB)	100	Wagner			Falcon				
• 3.3) OIB Antarctica 2018	230	Wagner, Tagg	ICESat 2			DC-8			
• 3.4) ICESat-2post-launch cal/val	100	Thorston Markus	ICESat 2			DC-8			
• 3.5) OIB Arctic 2019	250	Wagner, Tagg	ICESat 2			P-3			
• 3.6) OIB Antarctica 2019	250	Wagner, Tagg	ICESat 2				TBD		
• 3.7) ICESat-2post-launch cal/val	100	Thorston Markus	ICESat 2				P-3 or DC-8		
• 3.8) OIB Arctic 2020	250	Wagner, Tagg	ICESat 2				P-3		
• 3.9) Snow-over-ice UAS mission in development		Wagner					Global Hawk		
• 3.10) ICESat-2post-launch cal/val	100	Thorston Markus	ICESat 2				P-3 or DC-8		

Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022
4) Water and Energy Cycle									
• 4.1) Red River flooding	5		SMAP, SMOS		G-III (2)				
• 4.2) Airborne Snow Observatory	50	Entin/Doorn			A90				
• 4.3) SnowEX - 19	50	Entin	GCOM-W1, GPM, SCLP			G-III			
• 4.4) Red River flooding	5		SMAP, SMOS			G-III (2)			
• 4.5) SWOT cal/val over the ocean - pilot program (DopplerScat; MASS)	50	Lindstrom	SWOT			NASA GV			
• 4.6) SMAPVEX - 19	100	Entin	SMAP			DC-3			
• 4.7) Summer NI-SMEX	30	Entin/Dobson	NISAR			G-III (2)			
• 4.8) AirSWOT hydrology cal/val		Lindstrom	SWOT			B-200 D			
• 4.9) SnowEX - 20 / ABoVE	75	Entin	GCOM-W1, GPM, SCLP				P-3		
• 4.10) AirSWOT hydrology cal/val		Lindstrom	SWOT				B-200 D		
• 4.11) SnowEX - 21	50	Entin	GCOM-W1, GPM, SCLP					P-3; G-III	
• 4.12) AirSWOT hydrology cal/val		Lindstrom	SWOT					B-200 D	
• 4.13) SWOT post launch cal/val over the ocean -	120	Lindstrom	SWOT						NASA GV

Earth Surface and Interior, Weather

Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022	:
5) Earth Surface & Interior										
• 5.1) UAVSAR / EIS - 18	290	Dobson; Tagg	NISAR							
• 5.2) Salton Sea mud pots	10	Phillips	HypSIRI / ASTER							
• 5.3) UAVSAR / EIS - 19	290	Dobson; Phillips	NISAR							
• 5.4) UAVSAR / EIS - 20	290	Dobson; Phillips	NISAR							
• 5.5) UAVSAR / EIS - 21	290	Dobson; Phillips	NISAR							
• 5.6) UAVSAR / EIS - 22	290	Dobson; Phillips	NISAR							
• 5.7) NISAR pre-launch cal/val	200	CCE / Dobson	NISAR							
• 5.8) NISAR post-launch cal/val	100	Dobson	NISAR							
6) Weather										
• 6.1) Severe storm campaign/VORTEX-SE (2019 or 2020)	80	Lee/Petersen	GOES-R, GMP							
• 6.2) GOES-R, GOES-S cal/val	100	Kakar	GOES-R, GOES-S							
• 6.3) Aeolus cal/val		Lee	ADM/Aeolus							
• 6.4) Aeolus/GPM cal/val / CPEX2	100	Kakar	ADM / GPM							
• 6.5) Severe storm campaign/VORTEX-SE	80	Lee/Petersen	GOES-R, GMP							
• 6.6) Aeolus cal/val	100	Kakar	ADM / GPM							
• 6.7) Aeolus cal/val	100	Kakar	ADM / GPM							
• 6.8) "3D Winds" cal/val		Lee	3D Winds							

New Technology

Title	Flt Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022	
8) New Technology										
• 8.1) C-Harrier	40	AITT	Aqua, Terra, S-NPP		CIRPAS Twin Otter					
• 8.2) DopplerScatt		AITT			B-200 D					
• 8.3) CIRES-IDD		IIP16			SIERRA					
• 8.4) Air-LUSI	18	AITT	S-NPP		ER-2					
• 8.5) DopplerScatt		AITT			B-200 D					
• 8.6) HALO	66	IIP			B-200 L					
• 8.7) AirMSPI-2	18	AITT			ER-2					
• 8.8) Compact Limb Sounder / SHOW	12	IIP			ER-2					
• 8.9) Air-LUSI	18	AITT	S-NPP		ER-2					
• 8.10) Compact midwave imaging system		IIP16				Falcon				
• 8.11) Airborne Differential Absorption Radar		IIP16				Sherpa				
• 8.12) SLI-T		ESTO	Landsat				Any Twin Otter			
• 8.13) IIP 2019		IIP19								
• 8.14) Multi Application Smallsat Tri-band Radar Air-MASTR		IIP16					DC-8			TBD

Earth Venture - Suborbital

Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022
7) EVS-2									
• 7.1) ACT-America-2018	620	Jucks	OCO-2						
• 7.2) ACT-America-2018	113	Jucks	OCO-2						
• 7.3) ACT-America-2019	620	Jucks	OCO-2						
• 7.4) ACT-America-2019	113	Jucks	OCO-2						
• 7.5) ATom-4	120	Maring	OCO-2						
• 7.6) ORACLES-2018	120	Maring	ACE						
• 7.7) OMG-18-Sondes	66	Dobson, Wagner							
• 7.8) OMG-19-Glistin	84	Dobson, Wagner							
• 7.9) OMG-19-Sondes	66	Dobson, Wagner							
• 7.10) OMG-20-AXCTD	75	Maring							
Title	Fit Hours	PS/PE/PM	Related Satellite/Sensor	17	2018	2019	2020	2021	2022
9) EVS-3 (approximate)									
• 9.1) Proposals due									
• 9.2) Awards									
• 9.3) Estimated EVS-3 schedule					TBD				