

Instrument	Level	Data Name	Description
ASI	L1	asf_????	All-sky imager full resolution images of 256x256 pixels (???? = 4-letter code of ground station)
		ast_????	All-sky imager thumbnail images of 32x32 pixels (???? = 4-letter code of ground station)
ASK	L1	ask_????	All-sky imager keogram images of 256 pixels (???? = 4-letter code of ground station)
ESA	L0 or L2	For ESA: ? = f or r or b	f=full, r=reduced, b=burst
		pei?_density	ion density
		pei?_t3	diagonalized ion temperature
		pei?_en	ion energy spectrogram
		pei?_en_eflux	ion energy flux spectrogram
		pei?_velocity	ion velocity (DSL)
		pei?_velocity_???	ion velocity (???=DSL or GSE or GSM)
		pei?_ptens	ion pressure tensor (DSL)
		peif_mftens	ion momentum flux tensor (DSL)
		pei?_magt3	ion temperatures in B frame
		pei?_avgtemp	trace of diagonalized temperature tensor divided by 3
		pei?_vthermal	ion thermal velocity
		pei?_symm	direction of pressure tensor symmetry (DSL)
		pei?_symm_ang	angle between symmetry direction and B
		pei?_ang	ion angle spectrogram
		pei?_tot	total ion count
		pei?_en_counts	ion count vs. energy
		pei?_mode	ion instrument mode
		pee?_density	electron density
		pee?_t3	diagonalized electron temperature
		pee?_en	electron energy spectrogram
		pee?_en_eflux	electron energy flux spectrogram
		pee?_velocity	electron velocity (DSL)
		pee?_velocity_???	electron velocity (???=DSL or GSE or GSM)
		pee?_ptens	electron pressure tensor (DSL)
		pee?_mftens	electron momentum flux tensor (DSL)
		pee?_magt3	electron temperatures in B frame
		pee?_avgtemp	trace of diagonalized temperature tensor divided by 3
		pee?_vthermal	electron thermal velocity
		pee?_symm	direction of pressure tensor symmetry (DSL)
		pee?_symm_ang	angle between symmetry direction and B
		pee?_ang	electron angle spectrogram
		pee?_tot	total electron count
pee?_en_counts	electron count vs. energy		
pee?_mode	electron instrument mode		
SST	L1 or L2	For SST: ? = f or r or b	f=full, r=reduced, b=burst
		psi?_#	# = same quantities as for ESA
		pse?_#	# = same quantities as for ESA
MOM (on-board moments)	L1 and L2	peim_density	ESA ion density
		peim_flux	ESA ion flux
		peim_mftens	ESA ion momentum flux tensor
		peim_eflux	ESA ion energy flux

		peim_velocity	ESA ion velocity
		peim_press	ESA ion pressure
		peem_density	ESA electron density
		peem_flux	ESA electron flux
		peem_mftens	ESA electron momentum flux tensor
		peem_eflux	ESA electron energy flux
		peem_velocity	ESA electron velocity
		peem_press	ESA electron pressure
	L1 and L2	psim_#	# = SST quantities (same as for ESA)
		psem_#	# = SST quantities (same as for ESA)
EFI	L1 or L2	eff	E field, fast survey/full orbit, 3D
		efp	E field, particle burst, 3D
		efw	E field, wave burst, 3D
		eff_dot0	E field, fast survey/full orbit, 3D, using E dot B=0
		efp_dot0	E field, particle burst, 3D, using E dot B=0
		efw_dot0	E field, particle burst, 3D, using E dot B=0
		eff_0	E field, fast survey/full orbit, 3D, using Ez=0
		efp_0	E field, particle burst, 3D, using Ez=0
		efw_0	E field, particle burst, 3D, using Ez=0
		efs	On-board spin-fit electric field
		efs_0	On-board spin-fit electric field using Ez=0
		efs_dot0	On-board spin-fit electric field using E dot B=0
		vaf	Voltage, processor A, fast survey/full orbit
		vap	Voltage, processor A, particle burst
		vaw	Voltage, processor A, wave burst
		vpf	Voltage, processor B, fast survey/full orbit
		vbp	Voltage, processor B, particle burst
		vbw	Voltage, processor B, wave burst
		ef?_hed	16-byte packet header for analogous data type; ?=f or p or w
		ef?_raw	raw data for analogous data type; ?=f or p or w
		va?_hed	16-byte packet header for analogous data type; ?=f or p or w
		va?_raw	raw data for analogous data type; ?=f or p or w
FBK	L1 only	fb1	Filter Bank 1 (E and/or B)
		fb2	Filter Bank 2 (E and/or B)
		fbh	Filter Bank high frequency (100-300kHz)
	L1 and L2	fb_hff	High-frequency filter peak and average values
		fb_eac12	Spectrogram E field AC component, sensors 1&2 (spin plane)
		fb_eac34	Spectrogram E field AC component, sensors 3&4 (spin plane)
		fb_eac56	Spectrogram E field AC component, sensors 5&6 (axial)
		fb_edc12	Spectrogram E field DC component, sensors 1&2 (spin plane)
		fb_edc34	Spectrogram E field DC component, sensors 3&4 (spin plane)
		fb_edc56	Spectrogram E field DC component, sensors 5&6 (axial)
		fb_scm?	Spectrogram SCM? (search coil) ; ?=1,2,3 (three axes)
		fb_v?	Spectrogram floating potential of sensor ?=1,2,3,4,5,6
FFT (on-board)	L1 and L2	ffp_16	FFT power spectrum in particle burst x 16 frequencies
		ffp_16_dbpara	FFT power spectrum for dB (parallel)
		ffp_16_dbperp	FFT power spectrum for dB (perpendicular)
		ffp_16_eac12	FFT power spectrum for AC component E12
		ffp_16_eac34	FFT power spectrum for AC component E34
		ffp_16_eac56	FFT power spectrum for AC component E56
		ffp_16_edc12	FFT power spectrum for DC component E12

		ffp_16_edc34	FFT power spectrum for DC component E34
		ffp_16_edc56	FFT power spectrum for DC component E56
		ffp_16_epara	FFT power spectrum for E (parallel)
		ffp_16_eperp	FFT power spectrum for E (perpendicular)
		ffp_16_scm?	FFT power spectrum for SCM? ; ?=1,2,3 (axes)
		ffp_16_v?	FFT power spectrum for V? ; ?=1,2,3,4,5,6 (sensors)
		ffp_32_#	# = same quantities in particle burst x 32 frequencies
		ffp_64_#	# = same quantities in particle burst x 64 frequencies
		ffw_16_#	# = same quantities in wave burst x 16 frequencies
		ffw_32_#	# = same quantities in wave burst x 32 frequencies
		ffw_64_#	# = same quantities in wave burst x 64 frequencies
FGM	L1 and L2	fgl	B field, low telemetry (low data rate)
		fgh	B field, high telemetry (high data rate)
	L2 only	fge	engineering data (decimated from FGH)
		fgs	B field, spin-resolution magnetic field B in DSL
FIT (on-board)	L2 only	efs	On-board spin-fit electric field (EFI) data
		efs_0	On-board spin-fit electric field (EFI) using $E_z=0$
		efs_dot0	On-board spin-fit electric field (EFI) using $E \cdot B=0$
		efs_sigma	Variance of onboard spin-plane electric field spin fit
		fgs	On-board spin-fit FGM data
		fgs_sigma	Variance of onboard spin-plane magnetic field spin fit
		fit	SpinFIT file E&B raw data
fit_bfit	FGM spinfit calibrated data: A,B,C,sig,avg		
fit_efit	EFI spinfit calibrated data: A,B,C,sig,avg		
GMAG	L2	mag_????	Ground magnetometer data in DHZ coordinates (???? = 4-letter code of ground station)
SCM	L1 and L2	For SCM: ? = f or p or w	f=fast survey, p=particle burst, w=wave burst
		scf	waveform fast survey (DSL)
		scp	waveform particle burst (DSL)
		scw	waveform wave burst (DSL)
		sc?_misalign	misalignment of Z axis from spin axis
		sc?_dc	X-Y (spin plane) values of the DC field in DSL
		sc?_iano	time discontinuities of data
		sc?_cal	calibrated data (unit depends on selected step)
STATE	L1	state_pos	GEI position, xyz
		state_vel	GEI velocity, xyz
		state_man	Maneuver flag
		state_roi	Regions of interest
		state_spinras	spin axis right ascension, deg
		state_spindex	spin axis declination, deg
		state_spinalpha	Geom to spin axis, Euler alpha, deg
		state_spinbeta	Geom to spin axis, Euler beta, deg
		state_spinper	spin period, sec
		state_spinphase	spin phase, deg