

University of Maryland Space Physics Group

Instrument History

Mission	Trajectory	Year of Launch	Instrument	Description
IMP 7&8	Geocentric	1972/1973	EECA (Electrostatic Energy-Charge Analyzer)	E/q analyzer and solid state detectors
Voyager 1&2	Deep Space	1977	LECP (Low Energy Charged Particle)	Solid state detectors dE/dx by E telescope
ISEE 1&3 - ICE	Geocentric / Lagrangian-Heliocentric	1977/1978	ULECA (Ultra-low Energy Charge Analyzer)	Solid state detectors with E/Q analyzer
AMPTE/CCE	Geocentric	1984	CHEM (Charge-Energy-Mass Spectrometer)	TOF telescope with E/q analyzer and solid state detector
GAS/STS-28 Space Shuttle	Low Earth Orbit	1989	LAT (Large Area Telescope)	Solar energetic particles > 0.5 MeV/nucleon detection with position sensing
Ulysses	Heliocentric	1990	SWICS (Solar Wind Ion Composition Spectrometer)	TOF telescope with E/q analyzer and solid state detector. Uses post-acceleration.
Geotail	Geocentric	1992	STICS (Super Thermal Ion Composition Spectrometer)	TOF Telescope with E/q analyzer and solid state detector
SAMPEX	Low Geocentric - Nearly Polar	1992	LICA (Low-energy Ion Composition Analyzer)	Solar energetic particles > 0.5 MeV/nucleon detection with position sensing
WIND	Lagrangian/Geocentric	1994	MASS	Energy independent mass spectrometer with E/q analyzer and post acceleration
			STICS (Super Thermal Ion Composition Spectrometer)	TOF telescope with E/q analyzer and solid state detector
			STEP (Super Thermal Energetic Particles)	TOF/Solid state detectors
			SWICS (Solar Wind Ion Composition Spectrometer)	TOF telescope with E/q analyzer and solid state detector. Uses post-acceleration
SOHO	Lagrangian	1995	MTOF (Mass-Time of Flight)	Energy independent mass spectrometer with E/q analyzer and post acceleration
ACE	Lagrangian	1997	ULEIS (Ultra Low Energy Isotope Spectrometer)	TOF/Solid State Detectors
			SWICS (Solar Wind Isotope Composition Spectrometer)	TOF telescope with E/q analyzer and solid state detector. Uses post-acceleration.
			SWIMS (Solar Wind Isotope Mass Spectrometer)	Energy independent mass spectrometer with E/q analyzer and post acceleration
Cassini	Saturn Orbit	1997	CHEMS (Charge-Energy-Mass Spectrometer)	TOF telescope with E/q analyzer and solid state detector
IMAGE	Geocentric	2000	HENA (High Energy Neutral Atoms)	TOF with microchannel plate detectors, 10-500 keV
			LENA (Low Energy Neutral Atoms)	TOF with dispersive energy analysis, 10-500 eV
STEREO	Lagrangian	Scheduled 2006	SIT (Suprathermal Ion Telescope)	TOF/Solid state detectors