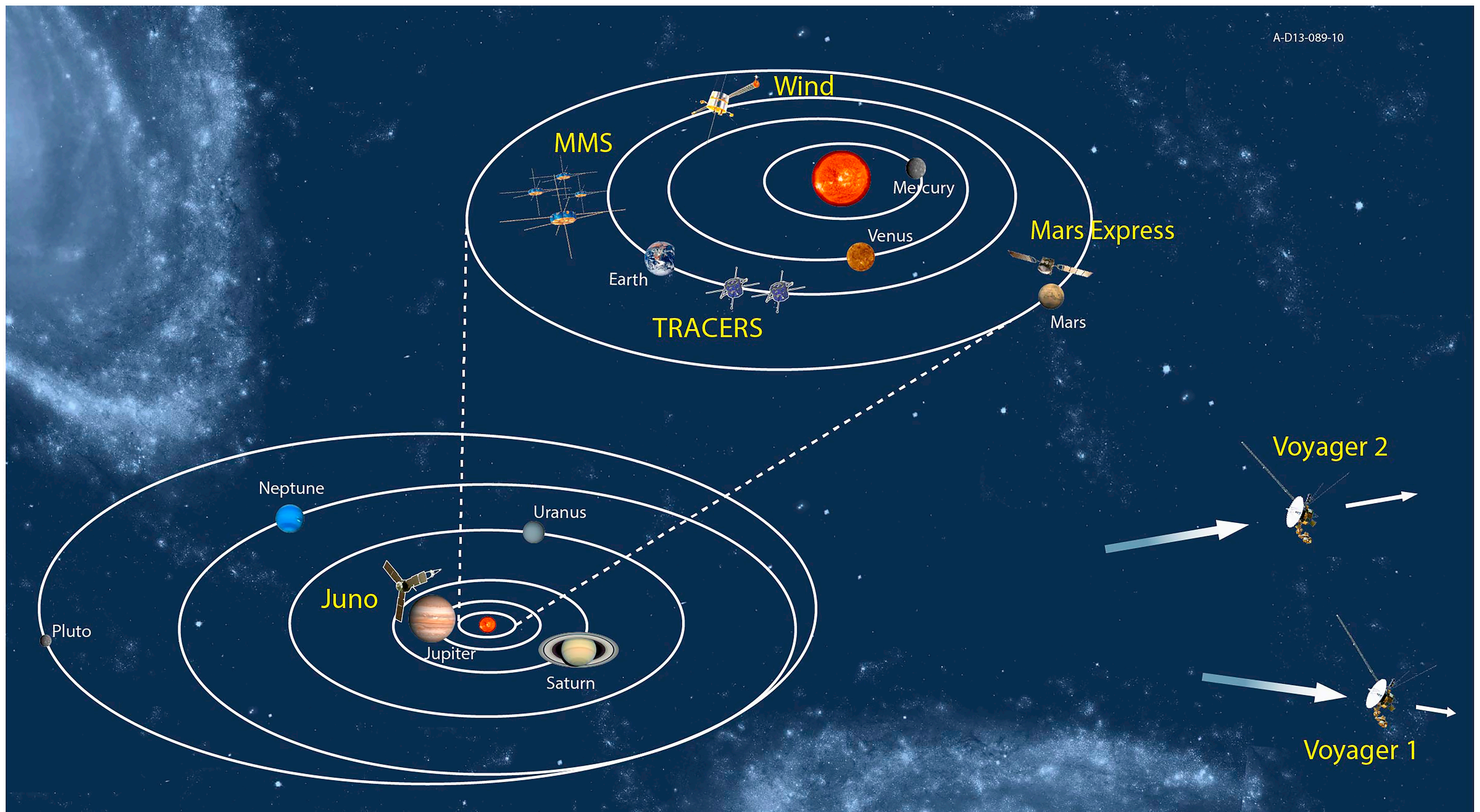


# UNIVERSITY OF IOWA INSTRUMENTS IN SPACE

A-D13-089-10



Spaceflight instruments and rockets designed and built at the University of Iowa in the Department of Physics & Astronomy (1958-2026)

\* Spacecraft carrying currently operating U. of Iowa instruments

Spacecraft	Launch Date (UT)	Spacecraft	Launch Date (UT)	Spacecraft	Launch Date (UT)
Explorer 1	1958 Feb. 1	Injun 5	1968 Aug. 8	<b>Magnetospheric Multiscale Mission / 2</b> *	2015 Mar. 12
Explorer 2 (launch failure)	1958 Mar. 5	Explorer 41 (IMP-5)	1969 June 21	<b>Magnetospheric Multiscale Mission / 3</b> *	2015 Mar. 12
Explorer 3	1958 Mar. 26	Explorer 43 (IMP-6)	1971 Mar. 13	<b>Magnetospheric Multiscale Mission / 4</b> *	2015 Mar. 12
Explorer 4	1958 July 26	Explorer 45 (SSS)	1971 Nov. 16	HERCI CubeSat (Fox-1D satellite)	2018 Jan. 12
Explorer 5 (launch failure)	1958 Aug. 24	UK 4 (Ariel-4)	1971 Dec. 11	HaloSat Cube Satellite	2018 May 21
Pioneer 1	1958 Oct. 11	Pioneer 10	1972 Mar. 2	<b>TRACERS 1</b> *	2025 July 23
Pioneer 2	1958 Nov. 8	Explorer 47 (IMP-7)	1972 Sept. 23	<b>TRACERS 2</b> *	2025 July 23
Pioneer 3	1958 Dec. 6	Pioneer 11	1973 Apr. 6		
Pioneer 4	1959 Mar. 3	Explorer 50 (IMP-8)	1973 Oct. 26		
Explorer 7 (launch failure)	1959 Jul. 16	Hawkeye 1	1974 June 3		
Explorer 7	1959 Oct. 13	Helios 1	1974 Dec. 10	<b>Experiments on Rockets</b>	<b>Launch Date</b>
S-46 (launch failure)	1960 Mar. 23	Helios 2	1976 Jan. 15	Rockoons (109 launches) payloads and casings	1951-1957
Injun 1	1961 June 29	<b>Voyager 2</b> *	1977 Aug. 20	Javelin 8:45 experiment	1967 Sept. 21
Explorer 12	1961 Aug. 16	<b>Voyager 1</b> *	1977 Sept. 5	Javelin 8:46 experiment	1968 May 25
Ranger 1 (failed to reach orbit)	1961 Aug. 23	International Sun-Earth Explorer 1	1977 Oct. 22	Spear 1 pressure gauge	1987 Dec. 13
TRAAC	1961 Nov. 15	International Sun-Earth Explorer 2	1977 Oct. 22	Spear 3 pressure gauge	1993 Mar. 15
Ranger 2 (failed to reach orbit)	1961 Nov. 18	International Sun-Earth Explorer 3	1978 Aug. 12	Rocket Auroral Correlator Experiment	2002 Feb. 6
Injun 2 (launch failure)	1962 Jan. 24	Firewheel (launch failure)	1980 May 25	High Bandwidth Auroral Rocket	2003 Jan. 28
Discoverer 38	1962 Feb. 27	Dynamic Explorer 1	1981 Aug. 3	Correlations of High Frequencies & Auroral Roar Mission	2007 Feb. 28
Mariner 1 (launch failure)	1962 Jul. 22	Plasma Diagnostics Package (shuttle Columbia)	1982 Mar. 22	Twin Rockets to Investigate Cusp Electrodynamics Mission 1/A	2007 Dec. 10
Mariner 2	1962 Aug. 27	AMPTE / IRM	1984 Aug. 16	Twin Rockets to Investigate Cusp Electrodynamics Mission 1/B	2007 Dec. 10
Explorer 14	1962 Oct. 2	Plasma Diagnostics Package (shuttle Challenger)	1985 Jul. 29	Auroral Current and Electrodynamic Structure (ACES) Rocket 1/A	2009 Jan. 29
Explorer 15	1962 Oct. 27	Galileo	1989 Oct. 18	Auroral Current and Electrodynamic Structure (ACES) Rocket 1/B	2009 Jan. 29
Injun 3	1962 Dec. 12	CRRES	1990 July 25	Black Brant IX Sounding Rocket/CyXESS Mission	2009 Nov. 13
Relay 1	1962 Dec. 13	Geotail	1992 July 24	Correlations of High Frequencies & Auroral Roar Mission	2010 Feb. 17
P-11	1964 Aug. 14	<b>Wind</b> *	1994 Nov. 1	Off-Plane Grating Rocket for Extended Source Spectroscopy 1	2015 May 2
OGO 1	1964 Sept. 5	Polar	1996 Feb. 24	Twin Rockets to Investigate Cusp Electrodynamics Mission 2/A	2018 Dec. 8
Mariner 3 (shroud failure)	1964 Nov. 5	Cluster I (4 spacecraft) (launch failure)	1996 June 4	Twin Rockets to Investigate Cusp Electrodynamics Mission 2/B	2018 Dec. 8
Injun 4	1964 Nov. 21	Cassini	1997 Oct. 15	Cusp Alfvén & Plasma Electrodynamics Rocket 2	2019 Jan. 4
Mariner 4	1964 Nov. 28	Cluster / Salsa (FM6)	2000 July 16	Investigation of Cusp Irregularities 5 (ICI-5) Mission	2019 Nov. 26
OGO 2	1965 Oct. 14	Cluster / Samba (FM7)	2000 July 16	VLF Trans-Ionospheric Propagation Exp. Rocket (VIPER) search coils	2021 May 26
OGO 3	1966 June 7	Cluster / Tango (FM8)	2000 Aug. 9	Loss through Auroral Microburst Pulsations (LAMP) instrument	2022 Mar. 5
Explorer 33 (IMP-D)	1966 July 1	Cluster / Rumba (FM5)	2000 Aug. 9	Auroral Current & Electrodynamic Structure (ACES) Rocket 2/A	2022 Nov. 20
Explorer 34 (IMP-4)	1967 May 24	<b>Mars Express</b> *	2003 June 2	Auroral Current & Electrodynamic Structure (ACES) Rocket 2/B	2022 Nov. 20
Mariner 5	1967 June 14	<b>Juno</b> *	2011 Aug. 5	Investigation of Cusp Irregularities 5b (ICI-5b) Pathfinder Mission	2026 Mar. 11
Explorer 35 (IMP-E)	1967 July 19	Van Allen Probe A	2012 Aug. 30	<b>OCHRE (Observing Cusp High-Altitude Reconnection &amp; Electrodynamics)</b>	<b>TBD</b>
OGO 4	1967 July 28	Van Allen Probe B	2012 Aug. 30	<b>COUSIN - Study of small-scale auroral region energy deposition</b>	<b>TBD</b>
OGO 5	1968 Mar. 4	<b>Magnetospheric Multiscale Mission / 1</b> *	2015 Mar. 12		