Chronology of Expendable Vehicle Launches Since 1990 Involving NASA[1]

KSC Release No. 14-96 March 1996

Launch Date	Payload	Launch Vehicle	Site[2]	Status
June 1, 1990	ROSAT *Roentgen Satellite*. NASA/German payload; U.S. Air Force vehicle.	Delta II (Delta 195)	ETR, LC 17A	Earth orbit.
July 25, 1990	CRRES *Combined Radiation and Release Effects Satellite*. NASA payload; launch vehicle services contract.	Atlas I (AC-69)	ETR, LC 36B	Earth orbit.
May 14, 1991	NOAA-D (TIROS) *National Oceanic and Atmospheric Administration-D*. A Television Infrared Observing System (TIROS) satellite. NASA-developed payload; USAF vehicle.	Atlas-E (Atlas 50-E)	WTR, SLC 4	Polar Earth orbit.
June 29,1991	REX *Radiation Experiment*. USAF payload; NASA vehicle.	Scout 216	WTR, SLC 5	Earth orbit.
June 7, 1992	EUVE *Extreme Ultraviolet Explorer*. NASA payload; USAF vehicle.	Delta II (Delta 210)	ER, LC 17A	Earth orbit.
July 3, 1992	SAMPEX *Solar, Anomalous and Magnetospheric Particle Explore*r. NASA payload with German and U.S. instruments; NASA vehicle.	Scout 215	WR, SLC 5	Earth orbit.

[1] This chronology covers ELV launches conducted under NASA's two-phased Mixed Fleet ELV plan, announced in May 1987 (see Headquarters News Release No. 87-76).

[2] Acronym key provided at end of chronology.

-
Continued

Launch Date	Payload	Launch Vehicle	Site*	Status
July 24, 1992	Geotail NASA/Japanese spacecraft. First launch under Medium Expendable Launch Vehicle (MELV) launch vehicle services contract. Geotail part of International Solar Terrestrial Program (ISTP).	Delta II (Delta 212)	ER, LC 17A	Earth orbit.
Sept. 25, 1992	Mars Observer NASA payload; launch vehicle services contract.	Commercial Titan (CT-4)/ Transfer Orbit Stage (TOS)	ER, LC 40	Achieved Mars Transfer Orbit. Spacecraft ceased communication after Mars orbital entry burn.
Nov. 21, 1992	MSTI I *Miniature Seeker Technology Integration I.* Strategic Defense Initiative Organization (SDIO) payload; NASA vehicle.	Scout 210	WR, SLC 5	Earth orbit.
June 25, 1993	RADCAL *Radar Calibration Satellite.* USAF satellite; NASA vehicle.	Scout 217	WR, SLC 5	Earth orbit.
Aug. 9, 1993	NOAA-I (TIROS) *National Oceanic and Atmospheric Administration-I.* A Television Infrared Observing System (TIROS) satellite. NASA-developed payload; USAF vehicle.	Atlas-E (Atlas 34-E)	WR, SLC 4	Polar orbit. Spacecraft ceased communication two weeks after nominal launch.
April 13, 1994	GOES-I *Geostationary Operational Environmental Satellite-I;* NASA-developed payload; launch vehicle services contract.	Atlas I (AC-73)	ER, LC 36B	Geosynchronous Earth orbit.

- Continued

Launch Date	Payload	Launch Vehicle	Site*	Status
May 8, 1994	MSTI II *Miniature Seeker Technology Integration II*. Ballistic Missile Defense Organization (BMDO, formerly SDIO) payload; NASA vehicle.	Scout 218 (Last NASA Scout)	WR, SLC 5	Earth orbit.
Nov. 1, 1994	Wind NASA payload carrying international instruments; MELV launch vehicle services contract. Wind first of two missions in Global Geospace Science initiative, U.S. contribution to International Solar Terrestrial Physics (ISTP) program.	Delta II (Delta 227)	ER, LC 17B	Lunar swingby.
Dec. 30, 1994	NOAA-J (TIROS) *National Oceanic and Atmospheric Administration-J*. A Television Infrared Observing System (TIROS) satellite. NASA-developed payload; USAF launch.	Atlas-E (Atlas 11-E)	WR, SLC 4	Polar Earth orbit.
May 23, 1995	GOES-J *Geostationary Operational Environmental Satellite-J*. NASA-developed payload; launch vehicle services contract.	Atlas I (AC-77)	ER, LC 36B	Geosynchronous Earth orbit.
Nov. 4, 1995	RADARSAT; SURFSAT-1 *Radar Satellite; Summer Undergraduate Research Fellowship Satellite-1*. RADARSAT cooperative effort between Canadian Space Agency, NASA, and NOAA. MELV launch vehicle services contract.	Delta II (Delta 229)	WR, SLC 2	Low Earth orbit.
Dec. 3, 1995	SOHO *Solar and Heliospheric Observatory*. Payload a cooperative European Space Agency (ESA)/NASA effort; launch vehicle services contract. SOHO part of International Solar Terrestrial Program (ISTP).	Atlas IIAS (AC-121)	ER, LC 36B	En route to Halo orbit (937,000 miles/1.5 million kilometers) from Earth toward Sun.

- Continued

Launch Date	Payload	Launch Vehicle	Site*	Status
Dec. 30, 1995	XTE *X-ray Timing Explorer*. NASA payload; MELV launch vehicle services contract.	Delta II (Delta 230)	ER, LC 17A	Low Earth orbit.
Feb. 17, 1996	NEAR *Near Earth Asteroid Rendezvous spacecraft*. NASA payload; MELV launch vehicle services contract.	Delta II (Delta 232)	ER, LC 17B	Delta VEGA trajectory (Delta V/ Earth Gravity Assist)
Feb. 24, 1996	Polar NASA payload; MELV launch vehicle services contract. Final mission of NASA's Global Geospace Science (GGS) program, the U.S. contribution to International Solar Terrestrial Physics (ISTP) effort (see also Wind, November 1994).	Delta II (Delta 233)	WR, SLC-2	Elliptical polar orbit.

KEY

ETR = Eastern Test Range. Includes Cape Canaveral Air Station, Fla.
WTR = Western Test Range. Includes Vandenberg Air Force Base, Calif.
LC = Launch Complex, Eastern Range.
ER = Eastern Range. Most current designation.
WR = Western Range. Most current designation.
SLC = Space Launch Complex, Western Range.