

Astronomy 101 Section 1
Exploring the Outer Solar System

28 October, 2016

Mission	Event	Date
Pioneer 10	launch	3 Mar 1972
	Jupiter flyby	3 Dec 1973
	last contact	23 Jan 2003
Pioneer 11	launch	6 Apr 1973
	Jupiter flyby	4 Dec 1974
	Saturn flyby	1 Sep 1979
	last contact	30 Sep 1995
Voyager 1	launch	5 Sep 1977
	Jupiter flyby	5 Mar 1979
	Saturn flyby	12 Nov 1980
Voyager 2	launch	20 Aug 1977
	Jupiter flyby	9 Jul 1979
	Saturn flyby	25 Aug 1981
	Uranus flyby	24 Jan 1986
	Neptune flyby	25 Aug 1989
Galileo	launch	18 Oct 1989
	Venus flyby	10 Feb 1990
	Earth flyby	8 Dec 1990
	951 Gaspra flyby	29 Oct 1991
	Earth flyby	8 Dec 1992
	243 Ida flyby	28 Aug 1993
	probe into Jupiter and Jupiter orbit	7 Dec 1995
	de-orbit into Jupiter	21 Sep 2003
Cassini	launch	15 Oct 1997
	Venus flyby	26 Apr 1998
	Venus flyby	24 Jun 1999
	Earth flyby	18 Aug 1999
	Jupiter flyby	30 Dec 2000
	Saturn orbit	1 Jul 2004
	Huygens probe to Titan	14 Jan 2005
	planned de-orbit	15 Sep 2017
New Horizons	launch	19 Jan 2006
	Jupiter flyby	28 Feb 2007
	Pluto flyby	14 Jul 2015
	planned flyby of 2014 MU69	1 Jan 2019
Juno	launch	5 Aug 2011
	Earth flyby	9 Oct 2013
	Jupiter orbit	5 Jul 2016