

Explorer 1 became the first successfully launched satellite by the United States when it was sent to space on January 31, 1958. A quick response to the Soviet Union's launch of Sputnik 1, Explorer 1's success marked the beginning of the U.S. Space Age. Right: A model of Explorer 1, held by JPL's Director William Pickering, scientist James Van Allen and rocket pioneer Wernher von Braun.

### January 2017

S	M	Т	W	T	F	S
01 New Year's Day	02	2004 Mars Exploration Rover "Spirit" lands at Gusev Crater on Mars.	04	05	06	07
08	09	10	11	Deep Impact launches to encounter comet Tempel 1.	13	2005 14 The Huygens probe lands on Titan, Saturn's mysterious smoggy moon.
2006 Stardust brings comet samples back to Earth.	16 Martin Luther King Jr. Day	2016 17 Jason 3 satellite launches to measure global sea surface heights.	18	19	20	21
22	23	1986 Voyager 2 makes the first-ever flyby of Uranus.	1983 25 The Infrared Astronomical Satellite launches into Earth's orbit.	26	27	28
29	30	1958 Explorer 1 is launched as the first U.S. satellite.				



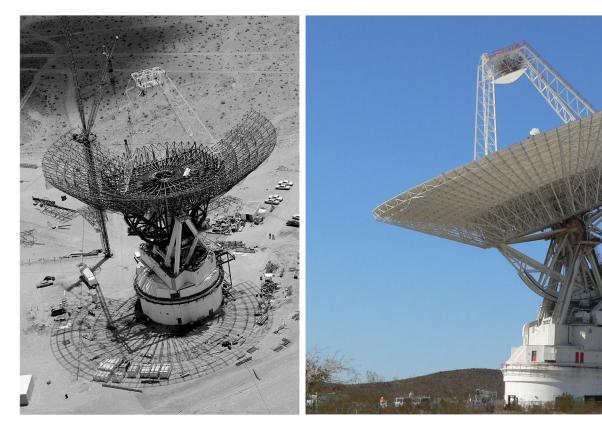


Left: John Casani, Voyager project manager in 1977, holding a small Dacron flag that was folded and sewed into the thermal blankets of the Voyager spacecraft before they launched 36 years ago. Below him lie the Golden Record (left) and its cover (right). Right: Artist's concept of NASA's Voyager 1 spacecraft entering interstellar space, or the space between stars.

## February 2017

S	M	Т	W	Т	F	S
			01	02	03	04
				Groundhog Day		
1974 05 Using gravity- assist, Mariner 10 swings by Venus to propel on to Mercury.	06	1999 07 Stardust launches to return samples of comet and interstellar dust to Earth.	08	09	10	2000 11 The Shuttle Radar Topography mission launches to map Earth's topography.
1997 12 JPL teams up with the Space VLBI to observe the distant universe.	13	14 Valentine's Day	15	16	1998 17 Voyager 1 becomes the most distant human-made object in space.	18
19	20 President's Day	21	22	23	1969 Mariner 6 launches to assist in the first dual mission to Mars.	25
26	27	28				





The Goldstone Deep Space Communications Complex, located in the Mojave Desert in California, is one of three complexes that comprise NASA's Deep Space Network (DSN). The image on the left was taken on June 17, 1965, during its construction.

#### **March 2017**

S	М	Т	W	Т	F	S
			01	JPL's Microwave Instrument on the Rosetta Orbiter Iaunches.	03	04
1979 Voyager 1 makes its closest approach to Jupiter.	2009 The Kepler mission launches on a search for Earth-like planets.	1958 07 Pioneer 4 launches and escapes Earth's gravity to orbit the Sun.	08	09	2006 10 Mars Reconnaissance Orbiter enters Mars orbit.	11
12  Daylight Saving	13	14	15	16	2002 17 The GRACE mission is launched.	18
Daylight Gaving					St. Patrick's Day	
19	20	Ranger 9 launches and three days later impacts the Moon in crater Alphonsus.	22	2016 23 Goldstone radar images the closest comet flyby of Earth in recorded history.	24	25
26	27	28	29	30	31	







JPL's Finding Individuals for Disaster and Emergency Response (FINDER) prototype technology can locate individuals buried under rubble in disaster scenarios. The suitcase-sized device helped uncover four survivors following the 7.8-magnitude earthquake that devastated Nepal on April 25, 2015.

# **April 2017**

S	M	Т	W	Т	F	S
						01
						April Fools' Day
02	03	04	05	06	2001 07 Mars Odyssey launches; it enters the red planet's orbit on October 24.	08
09	10	11	12	13	14	15
16 Easter	17 1967 Surveyor 3 launches, landing on the Moon on April 20.	2014 18 OPALS experiment begins testing on the International Space Station.	19	20	21	22 Earth Day
23	24	25	26	27	2003 28 Galaxy Evolution Explorer launches to study the history of star formation.	2013 29 The Cassini team observes a behemoth hurricane near Saturn's north pole.
2015 30 JPL's FINDER instrument locates four trapped men after a 7.8 earthquake.						





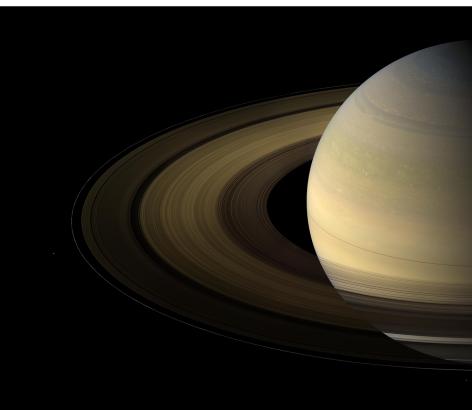
The above sequence depicts the entry, descent, and landing (EDL) phase of the Mars Science Laboratory mission. Instead of the familiar airbag landing systems of the past Mars missions, Mars Science Laboratory used a guided entry and a Sky Crane touchdown system to land the massive Curiosity rover. JPL's mission control room burst into celebration after receiving confirmation of the successful landing.

## **May 2017**

S	M	Т	W	Т	F	S
2004 The Mars Exploration Rovers begin the first of several extended missions.	01	02	03	1989 Magellan launches on a mission to Venus.	05	06
07	08	09	10	11	12	13
JPL technology launches on Herschel/ Planck mission. <b>Mother's Day</b>	15	16	17	18	19	2010 20 The "Opportunity" rover surpasses the duration record set by Viking 1.
21	22	23	24	2008 25 Phoenix lands near Mars' north pole to dig for water ice and analyze the soil.	26	27
28	29 Memorial Day	Mariner 9 launches for Mars, becoming the first spacecraft to orbit another planet.	31			







Left: The Cassini spacecraft inside a JPL assembly room. The Cassini orbiter and its two onboard cameras were designed, developed and assembled at JPL. Right: Of the countless equinoxes Saturn has seen since the birth of the solar system, this one, captured here in a mosaic of light and dark, is the first witnessed up close by an emissary from Earth ... none other than our faithful robotic explorer, Cassini.

#### **June 2017**

S	M	Т	W	Т	F	S
				01	1966 02 Surveyor 1 becomes the first U.S. space- craft to make a soft landing on the Moon.	03
04	05	2015 06 RoboSimian places in the top five at DARPA's Robotic Challenge finals.	07	08	09	2003 Mars Exploration Rover "Spirit" launches for Mars.
11	12	2012 NuSTAR launches to conduct a deep X-ray survey for black holes.	14 Flag Day	15	16	17
18 Father's Day	19 1976 Viking 1 arrives in orbit at Mars.	2008 The Ocean Surface Topography/Jason 2 mission launches.	21	22	23	24
25	1978 26 The experimental Seasat satellite launches to study Earth and its seas.	27	The Low- Density Supersonic Decelerator reentry vehicle for Mars is tested over Hawaii.	29	2004 Cassini-Huygens enters Saturn orbit.	





Clockwise from top left: A dry run exercise for Ranger 7. Center: A model of the Ranger 6 spacecraft. Top right: The first picture of the Moon taken by a U.S. spacecraft (Ranger 7), on July 31, 1964. Bottom left: Ranger 7 Launch and mission control. Bottom right: NBC TV rehearsal in building 179 with Cliff Cummings in front of a Ranger block 2 spacecraft.

# **July 2017**

S	M	Т	W	Т	F	S
						01
2014 02 OCO-2 is launched to study carbon dioxide in Earth's atmosphere.	2005 Deep Impact's impactor collides with comet Tempel 1.	1997 Mars Pathfinder lands. 04 2016 Juno enters Jupiter's Orbit. Independence Day	05	06	2003 Mars Exploration Rover "Opportunity" launches for Mars.	08
09	10	11	12	13	1965 14 After an eight month voyage to Mars, Mariner 4 radios back the first close-up photos.	2011 15 The Dawn spacecraft enters orbit around proto- planet Vesta.
16	17	18	19	1976 20 Viking 1's Mars lander becomes the first craft to soft-land on another planet.	21	22
2015 23 Kepler scientists discover the first near- Earth size planet in the "habitable zone".	24	25	26	27	1964 28 Ranger 7 launches and executes an intentional crash- landing into the Moon.	29
30	31					



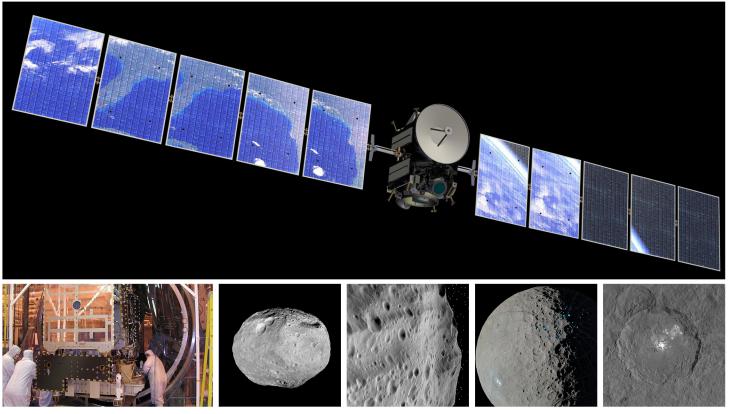


Over its ten years in space, NASA's Spitzer Space Telescope has evolved into a premier tool for studying exoplanets. Left: Preparation and assembly of the Spitzer Space Telescope. Right: The giant star Zeta Ophiuchi is having a "shocking" effect on the surrounding dust clouds in this infrared image from NASA's Spitzer Space Telescope. Zeta Ophiuchi is a young, large and hot star located around 370 light-years away.

### August 2017

S	M	Т	W	Т	F	S
2003 Spitzer Space Telescope launches to study asteroids, dust-covered stars and distant galaxies.		01	02	03	2007 Phoenix, a Mars lander, launches to the red planet.	2012 05 The MSL "Curiosity" rover makes a dramatic landing on the red planet.
06	07	2001 08 Genesis launches on a mission to return samples of the solar wind to Earth.	09	Magellan enters 10 orbit around Venus and will ultimately map 98 percent of the planet's surface.	11	2005 Mars Reconnaissance Orbiter launches to study the history of water on Mars.
2005 13 The Stardust spacecraft is reactivated to conduct a follow- up visit to Tempel 1.	14	15	16	17	18	19
1975 The Viking 1 orbiter/lander pair is launched towards Mars.	21	22	23	24	25 1989 Voyager 2 is the first spacecraft to fly by Neptune.	26
27	1993 28 Galileo flies by a second asteroid, Ida, on its way to Jupiter.	29	30	31		



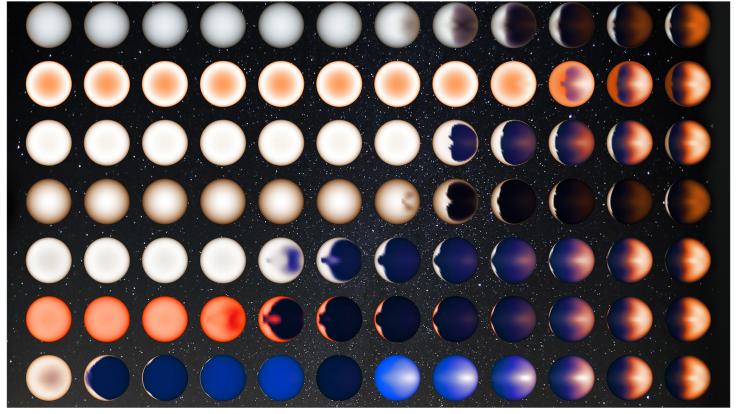


Top: Artist rendering of Dawn, part of NASA's Discovery Program of competitively selected missions, which was launched in 2007 to orbit the large asteroid Vesta and the dwarf planet Ceres. Bottom left: The Dawn spacecraft is being moved into a thermal vacuum chamber for bake-out. Bottom row: A series of images captured by Dawn, of giant asteroid Vesta and dwarf planet Ceres.

### September 2017

S	M	Т	W	Т	F	S
					01	02
03	04 Labor Day	2012 05 Dawn leaves protoplanet Vesta after its 14 month orbit.	06	07	08 1967 Surveyor 5 launches en route to the Moon.	09
2011 10 GRAIL twin spacecraft launch to explore the Moon's gravity.	11	1997 Mars Global Surveyor enters orbit.	2007 13 Mars Exploration Rover "Opportunity" descends into Victoria Crater.	14	15	16
17	18	19	20	21	22	23
24	25	2006 26 Mars Exploration Rover "Opportunity" begins exploring Victoria Crater.	2006 27 The Dawn mission to asteroid Vesta and dwarf planet Ceres launches.	28	29	30



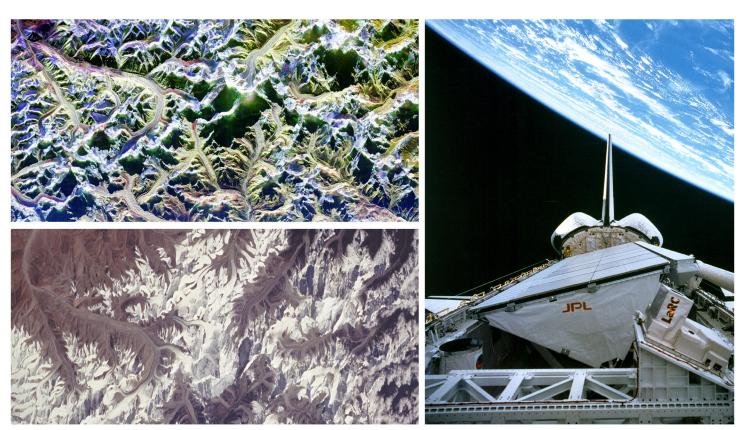


Above: A grid showing how clouds on exoplanets called "hot Jupiters" might look to a space traveler, based on computer modeling and data from NASA's Kepler Space Telescope.

### October 2017

S	M	Т	W	Т	F	S
01	02	03	04	05	1990 Ulysses spacecraft launches to study the Sun and its poles.	07
08	09 Columbus Day	10	11	12	13	14
15 1997 Cassini launches on a 6 1/2-year journey to Saturn.	16	17	18 1989 Galileo launches on a six-year journey to Jupiter.	1967 Mariner 5 flies by Venus.	20	21
22	23	1998 24 Deep Space 1 launches to flight test advanced technologies.	25	26	27	28
1991 29 En route to Jupiter, Galileo makes the first flyby of an asteroid.	30	JPL Anniversary!				



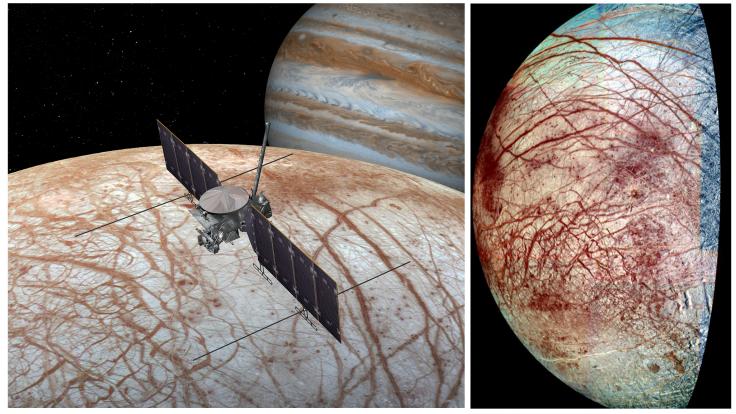


Left: Two images of Mount Everest. The image at the top was acquired through thick cloud cover by the Spaceborne Imaging Radar-C/X-band Synthetic Aperture Radar (SIR-C/X-SAR) aboard the space shuttle Endeavour on April 16, 1994. The image on the bottom is an optical photograph taken by the Endeavour crew during the second flight of SIR-C/X-SAR. Right: The SIR-C/X-SAR is shown in the payload bay of the orbiting space shuttle Endeavour.

#### **November 2017**

S	M	Т	W	Т	F	S
			2010 01 The 70-meter antenna at Goldstone goes back on-line after upgrades.	02	03	2010 Deep Impact-EPOXI flies by comet Hartley 2.
05	06	07	08	09	10	11
Daylight Saving		Election Day				Veterans Day
1981 12 The first in a series of radar imagers is launched on the space shuttle.	13	14	15	16	17	18
19	20	21	22	23	24	25
				Thanksgiving Day		
2011 26 Mars Science Laboratory rover, "Curiosity," launches for Mars.	27	28	29	30		





Left: This artist's rendering shows NASA's Europa mission spacecraft (as currently configured), which is being developed for a launch sometime in the 2020s. The mission would place the spacecraft in orbit around Jupiter in order to perform a detailed investigation of the giant planet's moon Europa -- a world which exhibits conditions favorable for life. Right: An enhanced-color image of Europa from NASA's Galileo spacecraft.

#### **December 2017**

S	M	Т	W	Т	F	S
					01	02
03	04	05	06	2001 07 The U.SFrench Jason 1 ocean- ography satellite launches.	08	09
10	11	12	2013 13 The Wide-field Infrared Survey Explorer is reactivated to hunt for asteroids.	2009 The Wide-field Infrared Survey Explorer launches.	2010 15 Mars Odyssey becomes the longest serving spacecraft at Mars.	16
2012 17 The twin Gravity Recovery and Interior Laboratory satellites impact Earth's Moon.	18	19	20	21	22	23
24	25 Christmas Day	26	27	28	29	2000 En route to Saturn, Cassini flies by Jupiter.
31						

