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Sign in to edit Timeline of Jupiter is the simplified chronology of Jupiter, here, you will see the major events of Jupiter from 4.566 billion years ago, to today and even the future. Jupiter was the first planet to form in our solar system. And Jupiter protects Earth from major astroid impacts and puts them into the astroid belt. Timeline[] Jupiter 4.566 Billion Years Ago 4.566 Billion Years Ago[] 4.565 Billion Years Ago[] Jupiter began growing collecting gas from his surroundings Jupiter 4 billion years ago 4.561 - 4 Billion Years Ago[] Jupiter developed a circumplanetary disk. Several moons formed but crashed back into Jupiter due to friction. Jupiter gained Io, Europa, Ganymede, and Callisto Jupiter gained other moons by capturing them. Jupiter throws asteroids into the Inner Solar System with his gravity, these asteroids brought Earth the things she needed for life. Jupiter ejects Planet 9. Jupiter is the largest planet in the Solar System. He possibly was double the size of today. 3.8 Billion Years Ago[] Jupiter started protecting Earth's life from potentially dangerous asteroids and comets Jupiter 30 years ago 350 Years Ago[] Jupiter gained his Great Red Spot 1992-1994[] A comet called Shoemaker-Levy 9 crashed into Jupiter, which broke out into 21 pieces Jupiter today Today[] Since 2016, Juno started orbiting Jupiter, revealing some of his mysteries Jupiter is now the 5th planet from the Sun Jupiter is shrinking by 2 cm per year 20 Years From Now[] Jupiter loses his Great Red Spot Few Million Years From Now[] Jupiter stops shrinking and gained a constant size Jupiter in 7-8 billion years 7-8 Billion Years From Now[] Jupiter will be the 3rd planet from the Sun Jupiter will be hotter Jupiter has expanded from this Jupiter will gain enhanced aurora 10^43 Years From Now Jupiter will be destroyed by a black hole Page 2 Quasar (Bottom)Irregular (Top) 3C 321 are two galaxies, well one galaxy and one quasar, the galaxy is being killed by the quasar. Bio[] The galaxies are two sisters that hate each other, one of them are killing the other for an unknown reason. Origins[] Millions of years ago there was two galaxies which were sisters and they were good friends, but suddenly one of the galaxies collided with a quasar the quasar won the fight and the quasar wanted to get rid if both galaxies, so the quasar aims its rays at the other galaxy and the other galaxy is being shredded to pieces by the quasar. Share: Jupiter is the fifth and largest planet from the Sun, a gas giant exceeding the mass of all other Solar System planets combined. It orbits the Sun at 5.20 AU with an 11.86-year period. Its diameter is 11 times that of Earth. After the Moon and Venus, it's the third-brightest object in Earth's night sky, observed since prehistoric times. The planet is named after the chief Roman deity, Jupiter. In 1906, 588 Achilles, the first trojan asteroid of Jupiter, was discovered by Max Wolf. In 1932, Rupert Wildt identified absorption bands of ammonia and methane in the spectra of Jupiter. In 1938, three long-lived anticyclonic features called "white ovals" were observed on Jupiter. In 1939, smaller, white oval-shaped storms were formed on Jupiter, which would eventually merge to create Oval BA. In 1940, smaller, white oval-shaped storms were formed on Jupiter, which would eventually merge to create Oval BA. In 1955, Bernard Burke and Kenneth Franklin discovered that Jupiter emits bursts of radio waves at a frequency of 22.2 MHz. Beginning in 1973, several spacecraft performed planetary flyby maneuvers that brought them within the observation range of Jupiter. The Pioneer missions obtained the first close-up images of Jupiter's atmosphere and several of its moons. They discovered that the radiation fields near the planet were much stronger than expected. In 1973, the first robotic probe visited Jupiter. Since then, Jupiter has been visited by nine robotic probes: seven flybys and two dedicated orbiters, with two more en route. Since 1973, Jupiter has been visited by automated spacecraft, when the space probe Pioneer 10 passed close enough to Jupiter to send back revelations about its properties and phenomena. In 1976, the International Astronomical Union formally adopted the name Jupiter for the planet and has since named its newly discovered satellites for the god's lovers, favorites, and descendants. Before the flyby of the Voyager 1 probe in 1979, eight additional satellites of Jupiter were discovered. In February 1992, the Ulysses solar probe performed a flyby maneuver of Jupiter to attain a polar orbit around the Sun. During this pass, the spacecraft studied Jupiter's magnetosphere. In July 1994, the Comet Shoemaker–Levy 9 comet collided with Jupiter. The impacts were closely observed by observatories around the world, including the Hubble Space Telescope and Galileo spacecraft. In 1994, the Galileo spacecraft witnessed the impact of Comet Shoemaker–Levy 9 when it collided with Jupiter. In July 1995, a 340-kilogram titanium atmospheric probe was released from the Galileo spacecraft, entering Jupiter's atmosphere on December 7. On December 7, 1995, the Galileo mission reached Jupiter and became the first spacecraft to orbit the planet. It remained in orbit for over seven years, conducting multiple flybys of all the Galilean moons and Amalthea. A 1997 review determined that early astronomical records and drawings from 1664 to 1839 had little or no possibility of documenting actual impacts on Jupiter. In 1998, two of the white ovals on Jupiter merged together. The discovery of numerous small outer moons since 1999 complicated the prior classification of Jupiter's moons into four groups of four, based on their similar orbital elements. In 2000, an atmospheric feature formed in the southern hemisphere that is similar in appearance to the Great Red Spot, but smaller. The merged feature was named Oval BA. In 2000, the Cassini probe flew by Jupiter on its way to Saturn, and provided higher-resolution images. In 2000, the merged white ovals on Jupiter absorbed the third oval, becoming Oval BA. On September 21, 2003, the Galileo orbiter was deliberately steered into Jupiter to be destroyed, preventing contamination of the moon Europa. Due to funding difficulties, NASA's JIMO (Jupiter Icy Moons Orbiter) mission was cancelled in 2005. In 2007, the New Horizons probe flew by Jupiter for a gravity assist en route to Pluto. The probe's cameras measured plasma output from volcanoes on Io and studied all four Galilean moons in detail. Computer simulations in 2008 suggest that Jupiter does not cause a net decrease in the number of comets that pass through the inner Solar System, as its gravity perturbs their orbits inward roughly as often as it accretes or ejects them. In April 2011, the ESA formally ended the partnership with NASA on the EJSM/Laplace mission, citing budget issues at NASA. As of 2015, the Great Red Spot was measured at approximately 16,500 by 10,940 kilometers and decreasing in length by about 930 km per year. NASA's Juno mission arrived at Jupiter on July 4, 2016, with the goal of studying the planet in detail from a polar orbit. On August 27, 2016, the Juno spacecraft completed its first flyby of Jupiter and sent back the first-ever images of Jupiter's north pole. A 2016 paper reports that the trapezoidal rule was used by Babylonians before 50 BC for integrating the velocity of Jupiter along the ecliptic. In April 2017, a "Great Cold Spot" was discovered in Jupiter's thermosphere at its north pole. Juno completed 12 orbits before the end of its budgeted mission plan, ending in July 2018. A subsequent proposal was developed for a joint NASA/ESA mission called EJSM/Laplace, with a provisional launch date around 2020. In June of 2018, NASA extended the Juno mission operations plan to July 2021. In October 2021, a Juno flyby mission measured the depth of the Great Red Spot, putting it at around 300–500 kilometers. The European Space Agency's Jupiter Icy Moon Explorer (JUICE) mission was launched on April 14, 2023. NASA's Europa Clipper mission was launched on October 14, 2024. In January of 2021, the Juno mission was extended to September 2025 with four lunar flybys: one of Ganymede, one of Europa, and two of Io. The Chinese National Space Administration's Tianwen-4 mission, which aims to launch an orbiter to the Jovian system and possibly Callisto, is planned for around 2035. This is the timeline of Jupiter, and we're gonna show you the timeline: 4.6 Billion Years Ago Jupiter's core formed 4.5 Billion Years Ago Jupiter began growing collecting gas from his surroundings 4 Billion Years Ago Jupiter developed a circumplanetary disk Several moons formed but crashed back into Jupiter due to friction Jupiter gained Io, Europa, Ganymede, and Callisto Jupiter gained other moons by capturing them Jupiter throws asteroids into the Inner Solar System with his gravity, these asteroids brought Earth the things she needed for life. Jupiter ejected Planet 9 Jupiter is the largest planet in the Solar System He possibly was double the size of today 3.8 Billion Years Ago Jupiter started protecting Earth's life from potentially dangerous asteroids and comets 350 Years Ago Jupiter gained its Great Red Spot 1992 A comet called Shoemaker-Levy 9 crashed into Jupiter, which broke out into 21 pieces Today Since 2016, Juno started orbiting Jupiter, revealing some of his mysteries Jupiter is now the 5th planet from the Sun Jupiter is shrinking by 2 cm per year Future: 20 Years From Now Jupiter loses its Great Red Spot Few Million Years From Now Jupiter stops shrinking and gained a constant size 5 Billion Years From Now Jupiter will be the 3rd planet from the Sun Jupiter will be hotter Jupiter has expanded Jupiter will gain enhanced aurora Hubble image of the scar taken on 23 July 2009 during the 2009 Jupiter impact event, showing a blemish of about 8,000 kilometres long.[1] In recorded history, the planet Jupiter has experienced impact events and has been probed and photographed by several spacecraft. Main article: Impact events on Jupiter Notable Jupiter impact events Event Date (UTC) Rough originalsize (meters) Latitude (°) Longitude (°) Discoverer(s) Aug 2023 event[2] 2023/08/28 16:45 ? ? ? ? Oct 2021 event[3][4] 2021/10/15 13:24 ? +20 201 Ko Arimatsu Sep 2021 event[5] 2021/09/13 22:39:30 ? −5.5 105.7 José Luis Pereira Apr 2020 event[6] 2020/04/10 1-4 ? ? Juno team Aug 2019 event[7] 2019/08/07 04:07 ? ? ? Ethan Chappel May 2017 event[8][9] 2017/05/26 19:25 12 +51 ? Sauveur Pedranghelu Mar 2016 event[8][10] 2016/03/17 00:18:33 15 ? ? John McKeon Sep 2012 event[8][11] 2012/09/10 11:35:00 30 +2 345 Dan Peterson Aug 2010 event[8][12] 2010/08/20 18:22:12 10 +11 ? Masayuki TachikawaAoki Kazuo Jun 2010 Jupiter impact event[13] 2010/06/03 20:31:20 13 ? ? Anthony Wesley Jul 2009 Jupiter impact event[14] 2009/07/19 13:30 200–500 −57 55 Anthony Wesley Jul 1994 Comet Shoemaker–Levy 9[15] 1994/07/16 20:13:16 – 1994/07/22 08:06:16 1800 varies for each fragment varies for each fragment Carolyn ShoemakerEugene ShoemakerDavid Levy Mar 1979 event[16] 1979/03/05 17:45:24 ? ? ? Voyager team Galileo spacecraft entry – September 21, 2003 Galileo probe entry – December 7, 1995 Juno Galileo New Horizons Cassini-Huygens Ulysses (twice) Voyager 2 Voyager 1 Pioneer 11 Pioneer 10 ^ Dennis Overbye (24 July 2009). "Hubble Takes Snapshot of Jupiter's 'Black Eye'". The New York Times. Retrieved 6 June 2010. ^ Jones, Andrew (31 August 2023). "Amateur astronomers spot new impact on Jupiter". Space.com. Retrieved 31 August 2023. ^ Bartels, Meghan (21 October 2021). "Jupiter hit by another space rock in rare views captured by Japanese skywatchers". Space.com. Retrieved 16 December 2021. ^ King, Bob (18 October 2021). "Jupiter Whacked Again? 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Timeline of Events 1610 1.7.1610 Galileo Galilei observes three of the four largest moons of Jupiter for the first time. He named them, and in turn the four are called the Galilean moons. Ganymede not discovered by him until January 13. 1.13.1610 Galileo Galilei discovers Ganymede, 4th moon of Jupiter. 1973 12.3.1973 Pioneer program: Pioneer 10 sends back the first close-up images of Jupiter. 1979 3.5.1979 America's Voyager 1 spacecraft has its closest approach to Jupiter, 172,000 miles. 1994 7.20.1994 Comet Shoemaker-Levy 9's Fragment Q1 hits Jupiter. 1995 1998 3.2.1998 Data sent from the Galileo spacecraft indicates that Jupiter's moon Europa has a liquid ocean under a thick crust of ice. 2001 2003 9.21.2003 ''Galileo'' mission is terminated by sending the probe into Jupiter's atmosphere, where it is crushed by the pressure at the lower altitudes. 2007 2.28.2007 Jupiter flyby of the New Horizons Pluto-observer spacecraft.