Astronomy Timeline

This is a timeline of important events in astronomical history. Some events which are not specifically astronomical in nature are listed to give historical perspective as to what was happening in those times.

Date	Location	Event
Sometime between 13 and 20 billion years ago	The center of the Universe	The Big Bang probably occurred.
~30,000 B.C.	North America	Asian hunter-gatherers had crossed over the frozen Bering Strait to become first humans in North America.
~10,000 B.C.	South America	Those who crossed over on Bering Strait into North America had traveled as far south as Argentina by this point.
~6,000 B.C.	Europe	End of land bridge between Britain and continental Europe. Britain becomes an island.
~4,500 B.C.	Brittany (France)	The megalithic structures of Carnac were built.
~3,500 B.C.	Wales	Pentre Ifan is built.
~3,200 B.C.	Ireland	The Newgrange tomb is built.
~3,000 B.C.	England	The main stones of Stonehenge are put into place.
~2,000 B.C.	Egypt and Mesopotamia	First solar-lunar calendars
~2,000-1,500 B.C.	Scotland	The cairns, Balnuaran of Clava, were built.
~1,700 B.C.	Britain	Bronze introduced in Britain
~1,450 B.C.	Greece	Earliest records of Greek, the earliest records of any European language
~1,260 B.C.	Greece, Troy (present-day Turkey)	Trojan War
~1,000-800 B.C.	present-day Italy	The Vestini tribe put the stones of Fossa in place.
~280 B.C.	Samos (Alexandria)	Aristarchus suggests the Earth revolves around the Sun. He provides first estimation of Earth-Sun distance.

~240 B.C.	Cyrene (now Shahhat, Libya)	Eratosthenes measures the circumference of the earth with surprising accuracy!
~130 B.C.	Greece	Hipparchus develops the first acccurate star map and star catalogue with over 850 of the brightest stars.
45 B.C.	Roman Empire	Introduction of the Julian calendar, a purely solar calendar, to the Roman Empire.
31 B.C.-476 A.D.	Roman Empire	The Roman Empire is alive and well.
140 A.D.	Greece	Ptolemy suggests geocentric theory of the universe in famous work *Mathematike Syntaxis.*
5th century A.D.	England	Angles and Saxons control England.
570 A.D.	Middle East	Muhammad, founder of the Islamic religion, was born in 570 A.D. in Mecca. He died in 632 A.D.
813 A.D.	Iraq	Al Mamon founds the Baghdad school of astronomy.
1054 A.D.	China	Chinese astronomers observe supernova in Taurus.
11th century A.D.	North America	Vikings discover North America.
1120 A.D.	Egypt	Construction of an observatory in Cairo was begun in 1120 A.D. This is possibly the first observatory built in Medieval Islam. Unfortunately, the patron of the observatory was found guilty of several crimes including communication with Saturn, and was sentenced to death. The observatory was then destroyed in 1125 A.D. and the personnel were forced to flee for their lives.
1259 A.D.	Iran	An observatory was built for the famous Persian astronomer, Nasir al-Din al-Tusi. The patron of the observatory was Mongol ruler, Hulagu, who was addicted to astrology. The observatory, built upon a flattened hill, was named Maragha observatory. The observatory included an extensive library and many instruments set up in the open air.
13th century A.D.	Europe - Asia	The Crusades

1420 A.D.	Central Asia	Ulugh Beg (1394-1449), noted astronomer, had an observatory built at Samarkand in central Asia. The observatory was a 3-story building, but also contained instruments that were outdoors. Ulugh Beg's observatory produced astronomical tables that included a catalogue of over 1,000 stars. Ulugh Beg succeeded to the trhone of the province of Transoxiana in 1447 upon the death of his father. He was murdered in 1449 by an assassin hired by his son 'Abd al Latif. By then, his observatory had enjoyed three decades of existence. And he is remembered as perhaps the most important observational astronomer of the 15th century.
14th-16th century A.D.	Europe	The Renaissance
1543 A.D.	Poland	Copernicus publishes his heliocentric theory of the Universe.
1572 A.D.	Denmark	Tycho Brahe discovers a supernova in constellation of Cassiopeia.
1582 A.D.	Italy	Pope Gregory XIII introduces the Gregorian calendar.
1603 A.D.	Germany	Johann Bayer introduces Bayer designation of stars, assigning Greek letters to stars, still in use today.
1608 A.D.	Netherlands	Hans Lippershey, a Dutch spectacles maker invents the telescope.
1609 A.D.	Italy	Galileo uses telescope for astronomical purposes. He discovers 4 Jovian moons, the Moon's craters and the Milky Way galaxy.
1609 A.D.	Germany	Kepler's First and Second Laws of Planetary Motions are announced.
1609 A.D.	Germany	The Third Law of Planetary Motion is announced by Kepler in his work *Harmonice Mundi (Harmony of the World)*.
1656 A.D.	Netherlands	Christian Huygens discovers Saturn's rings and Titan, the fourth satellite of Saturn.
1659 A.D.	Netherlands	Huygens notes markings on Mars.
1666 A.D.	Italy	Martian polar ice caps are noted by Cassini.
1668 A.D.	England	The first reflecting telescope was built by Newton.

1669 A.D.	Italy	Geminiano Montanari discovers the star Algol is not steady in brightness, thus recognizing the first variable star.
1675 A.D.	France	While in Paris, Danish astronomer Ole Romer measures the speed of light.
1675 A.D.	France	Cassini discovers that Saturn's rings are split into two parts, so that today the gap is called the "Cassini Division".
1687 A.D.	England	Newton publishes his theory of universal gravitation in the work *Philosophiae Naturalis Principia Mathematica*. This is seen to be the start of Modern Astronomy.
1705 A.D.	England	Halley correctly predicts the return of a comet (Halley's comet) in 1758.
1758 A.D.	Germany	Johann Palitzsch observes Halley's comet as predicted by Halley in 1705.
1781 A.D.	England	The discovery of Uranus by Herschel
1781 A.D.	France	Messier discovers galaxies, nebula and star clusters while looking for comets. He compiles a catalogue of these objects (Messier objects).
1801 A.D.	Italy	Piazzi discovers first asteroid, Ceres.
1842 A.D.	Austria	Discovery of the 'Doppler Effect' by Austrian physicist and mathematician, Christian Doppler.
1843 A.D.	Germany	Samuel Heinrich Schwabe describes the sunspot cycle.
1846 A.D.	Germany	Johann Galle observes and discovers Neptune. His observations were prompted by mathematical calculations by French astronomer Joseph Leverrier and English astronomer John Couch Adams.
1857 A.D.	Russia	Rocket pioneer Konstantin Tsiolkovskii was born. Tsiolkovskii's work in early rocketry earned him the title of "Father of Astronautics". Many of his proposals concerning rocketry were later put into use including: use of liquid hydrogen and liquid oxygen as rocket fuel and multi-stage rocket design for achieving Earth orbit or interplanetary flight.
1860-63 A.D.	England	The beginning of spectral analysis of stars by Sir William Huggins
1868 A.D.	England	Jansen and Lockyer observe solar prominences.

1872 A.D.	U.S.A.	Henry Draper takes a photograph of the stellar spectrum of Vega. This is the first of its kind.
1877 A.D.	U.S.A.	Asaph Hall discovers Phobos and Deimos, the moons of Mars.
1877 A.D.	Italy	Shiaparelli observes the canals on Mars.
1878 A.D.	Jupiter	The Great Red Spot on Jupiter becomes prominent.
1905 A.D.	California	Mount Wilson Observatory was established for study of the Sun.
1905 A.D.	Germany	Albert Einstein introduces special Theory of Relativity in paper *Electrodynamics of Moving Bodies*.
1908 A.D.	Denmark	Hertzsprung describes giant and dwarf stars .
1908 A.D.	U.S.A.	Henrietta Swan Leavitt discovers Cepheid variables.
1911-14 A.D.	Denmark, U.S.A.	Hertzsprung and Russel introduce H-R diagram that shows how the characteristics of stars are related.
1914 A.D.	U.S.A.	Robert Goddard begins practical rocketry.
1916 A.D.	Germany	Albert Einstein introduces his general Theory of Relativity.
1923 A.D.	U.S.A.	Hubble shows that galaxies exist outside the Milky Way galaxy.
1926 A.D.	U.S.A.	Robert Goddard uses first liquid rocket fuel.
1927 A.D.	Netherlands	Oort shows the center of the Milky Way galaxy is in Sagittarius.
1930 A.D.	U.S.A.	Clyde Tombaugh discovers Pluto.
1931 A.D.	U.S.A.	Karl Jansky discovers cosmic radio waves.
1937 A.D.	U.S.A.	First radio telescope built by Grote Reber.
1957 A.D.	Russia	Sputnik, first object to orbit the Earth, launched by the Russians.
1958 A.D.	U.S.A.	Explorer 1 launched. This was the first U.S. satellite to orbit the Earth.
1960 A.D.	England	The founding of archeoastronomy
1961 A.D.	Russia	Yuri Gargarin becomes the first man in space!
1962 A.D.	U.S.A.	John Glenn becomes first American man to orbit Earth.

1966 A.D.	The Moon	First non crash landings on the Moons by Luna 9 (Russian) and Surveyor I (U.S.A.)
1969 A.D.	The Moon	Armstrong and Aldrin walk on the Moon as part of Apollo 11 mission.
1970 A.D.	Venus	The Russian Venera 7 becomes first to land softly on the surface of Venus.
1972 A.D.	U.S.A.	The U.S. launches Pioneer 10, the first satellite destined for Jupiter.
1974 A.D.	Ethiopia	"Lucy", a hominid living over 3 million years ago, is unearthed.
1974 A.D.	Near Mercury	The U.S. Mariner 10 probe transmits the first image of Mercury.
1975 A.D.	U.S.A	This developer was born!
1976 A.D.	Mars	The U.S. Viking probes land on Mars.
1977 A.D.	U.S.A.	Discovery of Uranus' rings
1978 A.D.	U.S.A.	Discovery of Charon, the moon of Pluto, by James Christy and Robert Harrington
1980 A.D.	Near Saturn	U.S. Voyager 1 sends back first images of Saturn and its rings to Earth.
1986 A.D.	Near Uranus	U.S. Voyager 2 closes in on Uranus.
1986 A.D.	U.S.A.	Space Shuttle Challenger disaster
1990 A.D.	U.S.A.	Hubble Space Telescope put into orbit from space shuttle Discovery.
1992 A.D.	Vatican City	The Vatican under Pope John Paul II announces that the Catholic Church erred in condmening Galileo's work that proved that the work of Copernicus was valid, mainly that the planets circle the Sun and not the Earth.
1994 A.D.	Jupiter	Comet Shoemaker Levy crashes into Jupiter.
1995 A.D.	Near Jupiter	Galileo space probe reaches Jupiter.
1996 A.D.	Japan	Comet Hyakutake discovered by Yuji Hyakutake.
1997 A.D.	Mars	Mars Pathfinder lands on the Red Planet.
1997 A.D.	Earth	Cassini begins its journey to Saturn.
1998 A.D.	Moon	The Lunar Prospector reaches the Moon.
1998 A.D.	Earth	Construction begins on the International Space Station.
1998 A.D.	Jupiter	Galileo discovers origin of Jupiter's Rings.

1998 A.D.	U.S.A.	John Glenn returns to space after 36 years.
1999 A.D.	U.S.A.	Scientists discover the real Hubble Constant!
1999 A.D.	U.S.A.	Chandra X-ray Observatory is put into orbit. Col. Eileen Collins becomes first woman shuttle commander.
1999 A.D.	U.S.A.	NASA loses the Mars Climate Orbiter and the Mars Polar Lander.
2000 A.D.	U.S.A.	Space Shuttle Endeavor makes a detailed, global map of Earth
2000 A.D.	Asteroid Eros	The NEAR spacecraft reaches asteroid Eros.
2000 A.D.	Mars	New evidence found for water on Mars.