

<b>Date</b>	<b>Name</b>	<b>Event</b>
<b>1800</b>	Thomas Wedgwood	Thomas Wedgwood (1771-1805) produces 'sun pictures' by placing opaque objects on leather treated with silver nitrate. The resulting images deteriorated rapidly.
<b>1804</b>	Thomas Wedgwood	In 2008 one of the major historians of early British photography, Dr Larry J Schaaf, has suggested at length that a surviving photogenic drawing of a leaf (attributed to William Fox Talbot) could in fact be by Thomas Wedgwood, and might date from 1804 or 1805.
<b>1816</b>	Joseph Niepce	Joseph Nicéphore Niépce (1765-1833) combines the camera obscura with photosensitive paper.
<b>1825</b>	Joseph Niepce	In 2002, an earlier surviving photograph which had been taken by Niépce was found in a French photograph collection. The photograph was found to have been taken in 1825, and it was an image of an engraving of a young boy leading a horse into a stable. The photograph itself later sold for 450,000 Euros at an auction to the French National Library.
<b>1826</b>	Joseph Niepce	Joseph Niépce produces the first permanent image (Heliograph) using a camera obscura and white bitumen. It shows a view out of a window over roof tops at Le Gras, France. Prior to 2002 it was thought to be the oldest surviving photograph.
<b>1829</b>	Joseph Niepce & Louis Daguerre	Niépce and Louis Daguerre (1787-1851) sign a ten year agreement to work in partnership developing their new recording medium.
<b>1834</b>	William Henry Fox Talbot	Henry Fox Talbot (1800-1877) creates permanent (negative) images using paper soaked in silver chloride and fixed with a salt solution. Talbot created positive images by contact printing onto another sheet of paper. Talbot's The Pencil of Nature, published in six installments between 1844 and 1846 was the first book to be illustrated entirely with photographs.
<b>1837</b>	Louis Daguerre	Louis Daguerre creates images on silver-plated copper, coated with silver iodide and 'developed' with warmed mercury. These images were the first example of the Daguerreotype, photographic process.
<b>1838</b>	Friedrich Wilhelm Bessel	Determines the distance of the star 61 Cygni, by measuring its parallax.
<b>1839</b>	Louis Daguerre	Louis Daguerre patents the Daguerreotype. The Daguerreotype process is released for general use in return for annual state pensions given to Daguerre and Isidore Niépce (Joseph Nicéphore Niepce's son): 6000 and 4000 francs respectively.
<b>1839</b>	John Herschel	John Frederick William Herschel (1792-1871) uses for the first time the term Photography; which literally means writing with light.
<b>1839</b>	Louis Daguerre	First unsuccessful daguerreotype of the moon obtained by Daguerre His image was blurred image and required a long exposure.
<b>1839</b>	François Arago	François Jean Dominique Arago (1786-1853) announces the Daguerreotype process at the French Academy of Sciences on the 7th of January 1839. Arago predicts the future use of the photographic technique in the fields of selenography, photometry and spectroscopy.
<b>1840</b>	John William Draper	John William Draper (1811-1882) obtains the first successful (correctly exposed) Daguerreotype of the moon using a 6-inch (13 cm) reflector with a long focal length and 20 minute exposure.
<b>1841</b>	William Henry Fox Talbot	William Henry Fox Talbot patents his process under the name Calotype.
<b>1842</b>	G Majocchi	Austrian astronomer Gian Alessandro Majocchi obtains the first photograph of the partial phase of a solar eclipse on a Daguerreotype on the 8th of July 1842, with a 2 min exposure.
<b>1845</b>	Armand Fizeau & Jean Foucault	According to Francois Arago, a large number of Daguerreotypes of the Sun were obtained by Armand Hippolyte Louis Fizeau (1819-1896) and Jean Bernard Léon Foucault (1819-1868) at the Paris Observatory. One of these photographs, taken on the 2nd of April 1845, still survives.
<b>1849</b>	William Bond & John Whipple	William Cranch Bond (1789-1859) and John Adams Whipple (1822-1891) obtain a series of lunar daguerreotypes with the 15-inch (38 cm) Harvard refractor using 40 second exposures, during the period 1849 to 1852.
<b>1850</b>	John Whipple & George Bond	First Daguerreotype photograph of a star - Vega (alpha Lyrae) is obtained by John Adams Whipple and George Phillips Bond using the 38 cm Harvard refractor and a 100 second exposure on the 17th July, 1850.

<b>1851</b>	Frederick Scott Archer	Frederick Scott Archer (1813-1857), improves photographic resolution by spreading a mixture of collodion (nitrated cotton dissolved in ether and alcohol) and chemicals on sheets of glass. Wet plate collodion photography was much cheaper than Daguerreotypes. This negative- positive process permitted unlimited reproductions. The process was published but not patented.
<b>1851</b>	M Berkowski	First Daguerreotype of a total eclipse of the Sun obtained, recording the inner corona and several prominences on 28th July 1851 by Berkowski from Konigsberg, Germany (now Kaliningrad, Russia).
<b>1851</b>	Angelo Secchi	In Rome Angelo Secchi (1818-1878) records Daguerreotypes of the partial phases of a solar eclipse with a 6.5-inch (16.2 cm) refractor of 8-feet (2.5 m) focal length.
<b>1851</b>	John Adams Whipple	On the 22nd of March 1851, George Phillips Bond recorded in his notebook: 'Succeeded in Daguerreotyping Jupiter. Six plates were taken by Whipple and could distinguish the two principal equatorial belts – Time about as long as the Moon required or not much longer'. This pre-dates the planetary images of the Henry Brothers (1885-6) by over 30 years.
<b>1852</b>	Warren de La Rue	First wet plate collodion images of the Moon obtained by Warren de la Rue (1815-1889) using a 13-inch (33 cm) reflector with 10-foot (3.05 m) focal length, on a mount without a clock drive.
<b>1854</b>	Joseph Bancroft Reade	Joseph Bancroft Reade (1801-1870) uses a 60 cm reflector to photograph the sun (wet collodion). These images reveal the molten look of the solar photosphere.
<b>1855</b>	Alphonse Poitevin	Alphonse Poitevin invents the Collotype Process. The collotype plate is made by coating a plate of glass or metal with a substrate composed of gelatin or other colloid and hardening it. Then it is coated with a thick coat of dichromated gelatine and dried carefully at a controlled temperature (a little over 50 degrees Celsius).
<b>1856</b>	Lewis Morris Rutherfurd	Lewis Morris Rutherfurd (1816-1892) photographs the Moon and the Sun using an achromatic refractor of 11.25-inch (28.5 cm) aperture over a two year period from 1856 to 1858.
<b>1857</b>	George Phillips Bond	George Philips Bond (1825-1865) (son of William Cranch Bond) and John Adams Whipple, produces wet collodion photographs of the double star Mizar (Zeta Uma) and Alcor (80 Uma) using the 15-inch (38 cm) Harvard refractor.
<b>1857</b>	Warren de La Rue	Warren de la Rue obtains images of Jupiter and Saturn with a 13-inch (33 cm) reflector. The exposures (12 seconds for Jupiter and 60 seconds for Saturn) were unsuccessful. The planet images measured only 1/2 mm on the plate.
<b>1858</b>	Warren de La Rue	Warren de la Rue tries to image comet Donati without success.
<b>1858</b>	William Usherwood	William Usherwood records the comet Donati with a 7 seconds exposure on Walton Common on the 27th September 1858. He was at the time a miniature artist from Walton-on-the-Hill, Surrey.
<b>1858</b>	George Phillips Bond	George Phillips Bond shows that the magnitude of stars could be derived from astronomical photographs, i.e. stellar photometry.
<b>1858</b>	Warren de La Rue	Daily images of the Sun (weather permitting) using Warren De La Rue's, Kew Photoheliograph are obtained. A total of 2778 Sun photographs were obtained between the years 1862 and 1872.
<b>1860</b>	Warren de La Rue	Warren de la Rue produces wet collodion photographs of the total eclipse of the Sun from Rivabellosa, Spain on the 18th of July, with the Kew Photoheliograph, using 60 second exposures.
<b>1861</b>	Warren de La Rue	Warren de la Rue mentions the possibility of conducting a photographic survey to obtain a Star Map of the whole sky.
<b>1861</b>	James Clerk Maxwell	James Clerk Maxwell (1831-1879) demonstrates a colour photography system involving three black and white photographs, taken through red, green and blue filters. This process is the same used today by modern Astrophotographers who now use specialized CCD cameras with electronic filter wheels containing LRGB filters.
<b>1863</b>	William Huggins	William Huggins publishes a paper in the Proceedings of the Royal Society titled - 'On the lines in the Spectra of Some Fixed Stars'. This was followed by other papers on the spectra of various stars, which showed that each contained a selection of lines also visible in the solar spectrum.
<b>1864</b>	Henry Draper	Henry Draper (1837-1882) images the Moon using a 15.5-inch (40 cm) reflector built by himself during the period 1864 to 1865.

<b>1864</b>	William Huggins	William Huggins recorded the spectra of NGC 6543 (Cat's Eye Nebula), a bright Planetary Nebula in Draco. Instead of a series of spectral lines he found only a single bright Emission line. He concluded that this was due to gas, thus proving that certain 'nebulae' were in fact gaseous and not made up of individual stars.
<b>1865</b>	Lewis Morris Rutherfurd	Lewis Morris Rutherfurd obtains excellent Moon images using a specially corrected photographic 11.25-inch (29 cm) lens. This was the first photographic telescope or Astrograph ever constructed.
<b>1871</b>	Hermann Carl Vogel	German astronomer Hermann Carl Vogel (1841-1907) obtains excellent photographs of the Sun using a 11.5-inch (29.4 cm) refractor at Bothkamp, Germany, equipped with an electrical shutter , using exposures of between 1/5000 to 1/8000s.
<b>1871</b>	Richard Leach Maddox	Richard Leach Maddox (1816-1902), proposes the use of an emulsion of gelatin and silver bromide on a glass plate, the so called 'dry' photographic plate process.
<b>1871</b>	Henry Davis & Lord Lindsay	Henry Davis, the photographic assistant of Lord (James Ludovic) Lindsay (1847–1913) photographs the total eclipse of the Sun on the 12th of December, from Baikul, South Canara, India.
<b>1871</b>	Lewis Morris Rutherfurd	Lewis Morris Rutherfurd records the solar molten appearance with some detail.
<b>1872</b>	Henry Draper	Henry Draper photographs for the first time the spectrum of a star (Alpha Lyrae, Vega) using a 28-inch (72 cm) reflector and a quartz prism.
<b>1873</b>	Edward Walter Maunder	Edward Walter Maunder (1851-1928) installs at the Greenwich Observatory a photoheliograph to record the Sun on a daily basis. Maunder is best remembered for his study of sunspots and the solar magnetic cycle that led to his identification of the period from 1645 to 1715 known as the Maunder Minimum.
<b>1874</b>	Pierre Janssen	Pierre Jules César Janssen (1824-1907) develops the 'Revolver Photographique' to record the transit of the planet Venus across the face of the sun, on the 8th December 1874. This was the first webcam, with an impressive frame rate of 100 images per hour (for then anyway!).
<b>1875</b>	Henry Draper	Henry Draper photographs the spectra of bright stars using a 11-inch (28 cm) refractor and a quartz prism located close to the photographic plate.
<b>1876</b>	William Huggins	William Huggins (1824-1910) uses the 'dry' plate for the first time to record spectra. From 1876 to 1886, Huggins and Miller photograph the spectra of all the first and second magnitude stars, with 60 minute exposures.
<b>1876</b>	Pierre Janssen	In 1876 Jules Janssen presents his first solar photographs to the French Academy of Sciences (10 to 70 cm diameter). These wet collodion images were obtained with a 140 mm refractor with exposures of 1/500 to 1/6000s. During 1877/1878 Jules Janssen obtains a high number of solar photographs showing the solar granulation (photosphere) for the first time.
<b>1879</b>	Andrew Ainslie Common	Andrew Ainslie Common (1841-1903) photographs Jupiter using his 36-inch (91 cm) reflector of 17.4 feet focal length (5.30 m), using exposures of 1 second. The images were only 1 mm wide.
<b>1880</b>	Henry Draper	Henry Draper obtains the first photograph of the Orion nebula (M 42) on the 30th of September 1880, using a 11-inch (28 cm) Alvan Clark refractor with a 51 minute exposure. Draper obtains two other photographs of M 42 in March of 1881 and the 14th March 1882 with longer exposure times of 104 minutes and 137 minutes respectively.
<b>1881</b>	Pierre Janssen	It used to be thought that Janssen was the first to obtain a successful image of a comet, when he photographed the comet, Tebbutt 1881 III, on 30th of June 1881. Janssen used a dry plate with an exposure of 30 minutes and a 50 cm f/3 instrument. The same comet was also imaged by Henry Draper, Andrew Ainslie Common and Margaret Huggins. However it is now known that the honour of being the first to photograph a Comet, now belongs to William Usherwood when he successfully captured Donati's Comet on the 27th of September 1858.
<b>1882</b>	David Gill	David Gill (1843-1914), of Cape observatory, photographs the great comet of 1882 using a portrait lens of 63 mm aperture (f/4.5)
<b>1882</b>	William Huggins	William Huggins photographs of the spectrum of a nebula - the 'Great Orion (M 42) nebula for the first time, using a 45 minute exposure.

<b>1882</b>	Edward Charles Pickering	Edward Charles Pickering (1846-1919) starts a programme at the Harvard Observatory using objective prisms. The setup enabled Pickering to obtain many stellar spectra on a single plate.
<b>1883</b>	Andrew Ainslie Common	Andrew Ainslie Common photographs the 'Great Orion' nebula using his 36-inch (91 cm) reflector on the 30th of January 1883. The 37 minute exposure reveals stars that were not detected visually, for the first time. On the 28th of February 1883, he obtains a 'deeper' image with an exposure of 60 minutes.
<b>1885</b>	Paul Henry & Prosper Henry	During the period 1885 to 1886- The Henry Brothers: Paul Henry (1848-1905) and Prosper Henry (1849-1903); photograph Jupiter and Saturn using the Paris observatory's 33 cm refractor (3.43 m focal length). These were the first successful planetary images.
<b>1885</b>	Isaac Roberts	In the period 1885 to 1899- Isaacs Roberts (1829-1904) obtains a long series of photographs from 1885 to 1897 and publishes two volumes with these results (the first in 1893 and the second in 1899, both with the same title 'Photographs of Stars, Star Clusters and Nebulae'.
<b>1887</b>	Amedee Mouchez	Amédée Mouchez (1821-1892) hosts the first meeting of the "Carte du Ciel" Project at the Paris observatory. Eighteen observatories agreed to cooperate and to adopt, as a standard design for a photographic telescope, the 33 cm refractor developed by the Henry brothers
<b>1887</b>	William Edward Wilson	Over a twelve year long period, from 1887 to 1899 - William Edward Wilson (1851-1908) records several deep-sky images at the Daramona Observatory (Westmeath, Ireland). The Wilson photographs are practically unknown today.
<b>1888</b>	William Henry Pickering	William Henry Pickering (1858-1938) using Harvard's 13 inch Boyden Refractor takes some of the earliest photographs of Mars from Cambridge, Massachusetts.
<b>1889</b>	Edward Emerson Barnard	First of a long series of wide-field deep-sky astrophotographs obtained by Edward Emerson Barnard (1857-1923). Lick Observatory, Crocker telescope, Willard 6" lens.
<b>1890</b>	Edward Singleton Holden	Edward Singleton Holden (1846-1914) obtains high resolution images of the Moon using the 91 cm Lick Observatory refractor.
<b>1894</b>	Moritz Loewy & Pierre Puiseux	In the period 1894 to 1910, Moritz Loewy (1833-1907) and Pierre-Henri Puiseux (1855-1928) obtain 6000 photographs, over 500 nights of the Moon using the 60 cm Paris observatory Coudé refractor. These images were used to create the first atlas of the Moon - L'Atlas Photographique de la Lune was edited by the Paris Observatory between the years 1896 to 1910.
<b>1898</b>	James Keeler	James E. Keeler (1857-1900) starts a photographic survey of nebulae at the Lick Observatory (Mount Hamilton, California). Keeler used the Common reflector (91 cm aperture) that was offered to the observatory by Edward Crossley (1841-1905).
<b>1898</b>	William Edward Wilson	William Edward Wilson uses his cinematograph device to take a video of sunspots. It was capable of taking 100 photographs per hour. An early 'high speed' webcam.
<b>1899</b>	Julius Scheiner	The German astronomer Julius Scheiner (1858-1913) records the spectrum of the spiral Galaxy M 31 with an exposure of over 7 hours, proving that it was composed of individual stars.
<b>1901</b>	George Willis Ritchey	George Willis Ritchey (1864-1945) obtains a series of excellent photographs of nebulae using the Mount Wilson 60 cm reflector in the years 1901 to 1902.
<b>1903</b>	Pierre Janssen	Pierre Janssen publishes his monumental photographic atlas of the sun - 'Atlas de Photographies Solaires'.
<b>1903</b>	William Henry Pickering	William Henry Pickering publishes first ever Lunar Photographic Atlas.
<b>1909</b>	George Willis Ritchey	George Willis Ritchey records several star clusters and nebulae with the 1.52 m f/5 Mount Wilson reflector, with exposures of up to 11 hours obtained over several nights. These photographs had a resolution of about one arc second.
<b>1911</b>	Edward Emerson Barnard	Edward Emerson Barnard obtains excellent images of Saturn using the 1.52 metre Mount Wilson reflector.

<b>1913</b>	Edward Emerson Barnard	Edward Emerson Barnard publishes Photographs of the Milky Way and of Comets, in Publications of Lick Observatory, Vol.11. These images were obtained from 1892 to 1895 using the Crocker telescope.
<b>1918</b>	Francis Gladheim Pease	First photographs of nebulae obtained by F.G. Pease (1881-1938), with the new Hooker 100" (2.54 m reflector) at Mount Wilson
<b>1924</b>	Edwin Hubble	Edwin Hubble (1889-1953), using the 2.54 m Hooker Telescope, was able to identify Cepheid variables in the Andromeda galaxy and estimates it's distance (800 000 light years). Hubble changed our understanding of the nature of the universe by demonstrating the existence of other galaxies besides our own.
<b>1927</b>	Edward Emerson Barnard	Publication of 'Atlas of Selected Regions of the Milky Way', four years after the death of Barnard. Most of the plates included in the Atlas (40 out of 50) were obtained at Mount Wilson observatory with the Bruce Telescope
<b>1929</b>	Edwin Hubble	Edwin Hubble, based on photographs of spectra (exposures of tenths of hours), discovers that the amount of the redshift observed in several galaxies increases in proportion to their distance to the Milky Way. This became known as 'Hubble's' law, and would help establish that the universe is expanding.
<b>1929</b>	Marcel de Keroylr	From 1929 to 1934, the French astronomer Marcel de Kerolyr photographs nebulae and galaxies using the 80 cm f/6 reflector of the Paris observatory astrophysics station at Haute Provence.
<b>1930</b>	Bernhard Schmidt	In 1930 he built the first Schmidtspiegel (now known as the Schmidt camera). Astronomers had long dreamed of a camera which could take images of large areas of the sky without the distortion at the edges that current telescopes gave, and at the same time only required short exposure times.
<b>1936</b>	Milton Lasell Humason	Milton Lasell Humason (1891-1972) images galaxies at 240 000 000 light-years with the Hooker telescope.
<b>1948</b>	Edwin Hubble	Edwin Hubble uses the new 200 inch (5.08 m) Hale telescope for the first time at Mount Palomar, California.
<b>1948</b>	POSS	The Palomar Observatory Sky Survey (POSS) begins. It was not completed until 1958. The first plates were shot in November 1948 and the last in April 1958. This survey was performed using blue-sensitive (Kodak 103a-O) and red-sensitive (Kodak 103a-E) photographic plates on the 48 inch (1.22 m) Samuel Oschin Schmidt telescope.
<b>1990</b>	Hubble Space Telescope	The Hubble Space Telescope (HST) was launched on the 24th April 1990. It is named after the American astronomer Edwin Hubble. Although not the first space telescope, the Hubble is one of the largest and most versatile, and is well-known as both a vital research tool and a public relations boon for astronomy.