

SOLAR ECLIPSE NEWSLETTER

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The Solar Eclipse Mailing List

The Solar Eclipse Mailing List (SEML) is an electronic newsgroup dedicated to Solar Eclipses. Published by eclipse chaser Patrick Poitevin.

solareclipsewebpages@btopenworld.com

It is a forum for discussing anything and everything about eclipses.

Thanks to the voluntary efforts of Jan Van Gestel of Geel, Belgium, the Solar Eclipse Mailing List (listserv) has been in operation since 10 December 1997. This is the first mailing list devoted solely to topic of solar eclipses on the internet.

You can send an e-mail message to the list server solareclipses@Aula.com, which will then forward your e-mail to all the subscribers on the list. Likewise, you'll receive e-mail messages that other subscribers send to the listserv. Only subscribers can send messages.

The sole Newsletter dedicated to Solar Eclipses

Dear All,

September was a month of remembrances. Remember September 11th. Since then, we suffer on airport safeties. Which also affects us, eclipse chasers. The contribution on the SEML, and in the SENL shows.

We changed in the meanwhile our email address into **solareclipsewebpages@btopenworld.com** and of course our webpages are at **http://solareclipsewebpages.users.btopenworld.com**. Please change all your files and links.

Totality Day is getting closer. The first speakers have been announced. But is you want to present something, please let us know. It looks like it will be an interesting day.

There are still places available for the forthcoming total solar eclipse. Despite the rumours that everything is fully booked. But of course, it happens every eclipse that one thinks all is full.

Besides the December 2003 eclipse, there have been a lot of electronic traffic on the November 2003 eclipse.

The book of Todd, herewith the front page of Corona and Coronet, has been discussed in detail. In this SENL, you will find some prints and copies.

Titles and subjects have been an issue on the SEML. Keep subjects and titles the same. It makes it easier to compile this SENL.

Please enjoy the October issue of the SENL. Send your contributions to us and we will publish with pleasure.

Best regards,

Patrick and Joanne

Corona and Coronet

BEING
A NARRATIVE OF THE AMHERST ECLIPSE EXPEDITION
TO JAPAN, IN MR. JAMES'S SCHOONER-YACHT
CORONET, TO OBSERVE THE SUN'S
TOTAL OBSCURATION
9TH AUGUST, 1896

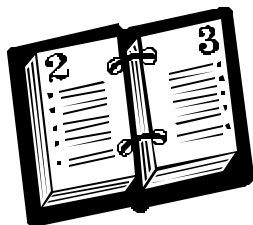
BY
MABEL LOOMIS TODD
Author of "Total Eclipses of the Sun," etc., etc.

WITH ILLUSTRATIONS

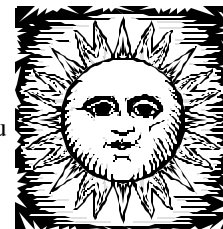


BOSTON AND NEW YORK
HOUGHTON, MIFFLIN AND COMPANY
The Riverside Press, Cambridge
1896

SECalendar



October 2002



Please find herewith the solar eclipse calendar (SECalendar) for October. If you have any additional information, queries or remarks, please drop me a mail.

For the whole Solar Eclipse Calendar, see

<http://solareclipsewebpages.users.btopenworld.com>

October 02, 1853 Death of Dominique Francois Jean Arago (1786-1853), French astronomer. Studied solar eclipse of July 08, 1842 and concluded it exist of gas. (ref. DD 9/98, Rc 1999)

October 02, 1938 Minor Planet (2237) Melnikov 1938 TB. Discovered 1938 October 2 by G. N. Neujmin at Simeis. Named in memory of Oleg Aleksandrovich Melnikov (1912-1982), on the staff of the Pulkovo Observatory since 1933 and a professor at Leningrad University since 1947. His scientific research was centered on the study of the Sun, stellar astronomy and interstellar matter by spectroscopic methods. He was also concerned with astronomical instruments and served as president of IAU Commission 9. (M 8912) Obituaries published in Astron. Zh., Tom 59, p. 1036-1037 (1982); Astrofizika, Tom 18, Vyp. 3, p. 498-500 (1982); Zemlya Vselennaya, No. 1, p. 46-47 (1983). Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 02, 1959 At the New England eclipse of October 2, 1959, Dr. E. H. Land, inventor of the Polaroid Land camera, had accompanied Harvard astronomers on a DC-6 plane that flew above the heavy overcast. On this flight, Dr. Land and his colleagues secured several excellent photographs of the corona, using Polaroid cameras with telephoto lenses. (ref. S&T 4/1961p193).

October 02, 1978 Partial Solar Eclipse. A small scientific group under the guidance of R. Gulyaev had used the Partial Eclipse for cinematographic observation of occultation of individual chromosphere spicules by the Moon. Observes have been carried out using the large Lyot-type coronagraph (lens diameter is 53 cm, equivalent focal length is 18 meters) at the Tien Shan coronal station near Alma-Ata. The brightness distributions across spicules were first derived. (ref. personal mail RG)

October 03, 1986 The shortest possible duration of a total solar eclips may be a fraction of a second. The solar eclipse of October 3, 1986 was annular along most of the central track, but was total for about a tenth of a second over a restricted area in the North Atlantic Ocean. Eight observers saw this eclipse total from a plane. Some one did <see> this eclipse and was NOT on that plane. Russel D. Eberst <observed> the eclipse around Edinburgh in Scotland. He wrote: The evening of October 3, 1986 was quite clear and so observations of artificial satelites could be done. When the first satelite of that evening was observed, 1985-82A or Kosmos 1682, it seemed to be fainter in magnitude then expected. In the first instance, it was considered as the position of the satelite, in its long axis directed to me. But when the second and the following artificial satelites were appeared, the all looked unusual faint. They all looked if they would enter the shadow of the earth and where 1 1/2 magnitude less then expected. By a sudden, I realised their was a solar eclipse partial in the United Kingdom, and the satelites whom still <saw> the sun, would experience a partial solar eclipse. Calculating the magnitude corresponding to the sun, it would be about a 75 percent eclipse. Parently, I saw an eclipse, which was theoreticly not visible in Great Britain. ref. Zenit Feb 1987.

October 04, 0590 Quote from Historia Francorum by Gregory of Tours (ca 539 ED - ca 594), bishop of Tours: ... There was an Earthquake on the eighteenth day before the Kalends (note June 14) of the fifth month, being the fourth day (of the week), early in the morning when dawn was coming. The sun was eclipsed in the middle of the eight month and its light was so diminished that it scarely gave as much light as the horns of the moon on the fifth day. ... The eight month is October (Octo is the Latin for eight) but it can be even the eclipse of 13 October AD 581 which was about the same magnitude (0.66) at Tours. (ref. ENB 9/1998)

October 04, 1582 Switch over to the Gregorian calendar and cut 10 days from the calendar. Gregory's Decree promulgating the Reform directed that the day 4 Oct., 1582, should be followed by the day 15 Oct., 1582. Not all the Catholic countries, and not all the Protestant ones, switched precisely at that time. Ref. PP/TS-9/97

October 05, 1882 Giorgio Abetti, Italian astro physicist who is best known for his studies of the Sun, born in Padua 5 October

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SECalendar

1882. He participated in numerous expeditions to observe eclipses of the sun and led one such expedition to Siberia to observe the TSE of 19 June 1936. Ref. The Bibliographical Dictionary of Scientists, edited by David Abbott, 1994.

October 05, 1931 Minor Planet 2359 Debehogne 1931 TV. Minor Planet discovered 1931, October 5 by K. Reinmuth at Heidelberg. Named in honor of Henri Debehogne, astronomer at the Royal Observatory in Uccle. Noted for his astrometric work on comets and minor planets. He also did some experiments on astrometry at eclipses.

October 06, 1241 "In this same year, namely 1241 from the Incarnation, on the 6th day from the beginning of October, on Sunday, the Sun was again eclipsed and all the air was darkened. There was great terror among everyone, just as in that eclipse which happened three years previously, as we have attested above." Refers to a solar eclipse in Split of 6 October 1241. From: Thomae Historia Pontificum Salonitanorum et Spalatinorum. Quoted in Historical Eclipses and Earth's Rotation, by F Richard Stephenson, Cambridge University Press, 1997, page 401.

October 06, 1990 Launch of Ulysses (ESA) with STS-41 Discovery. Orbit around Jupiter to research sunpoles. Initially called International Solar Polar Mission (ISPM). There were 5 astronauts in STS-41 and the flight took only 4 days. (ref. DD 10/98)

October 07, 2135 Next total solar eclipse in the Netherlands. Totality is in the north part of Holland. Utrecht will have a magnitude of 0.965. The eclipse of May 25, 2142 will be total in the Netherlands, south of the line Rotterdam-Zwolle, and including a large part of Belgium.

October 08, 1953 Minor Planet (2528) Mohler 1953 TF1. Discovered 1953 October 8 at the Goethe Link Observatory at Brooklyn, Indiana. Named in memory of Orren C. Mohler (1908-1985), solar astronomer, director of the McMath-Hulbert Observatory (1962-1979), chairman of the department of astronomy at the University of Michigan (1962-1970), member of the board of directors of the Association of Universities for Research in Astronomy (1962-1974). Mohler pioneered the exploration of the infrared solar spectrum with the lead sulphide infrared detector. His development of the vacuum spectrograph at the McMath-Hulbert Observatory led to the discovery of the "wiggly" solar spectral lines and to an understanding of the role of turbulence in the solar structure of the solar photosphere. (M 10546) Name proposed by F. K. Edmondson. Citation written by W. A. Hiltner. Obituary published in Phys. Today, Vol. 39, No. 4, p. 74 (1986). Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 09, -0424 (425 BC) "And the moon in haste eclipsed her, and the Sun in anger swore He would curl his wick within him and give light to you no more." Said to refer to a lunar eclipse of 425 BC, and an annular solar eclipse of 424 BC. Aristophanes (Greek, c450-385 BC) Chorus of Clouds (423BC) Ref. Eclipse Quotations Espenak's Webpages.

October 09, -0424 (425 BC) "On the first Mercury rises. On the third the Equinox. Night of the 15th 40 minutes after sunset, an eclipse of the moon begins. On the 28th occurs an eclipse of the sun." Inscriptions on a clay tablet, part of an ancient Chaldean astronomical almanac. The dates quoted are Chaldean. Some sources date these two eclipses to 9 (4) October 425 BC and 23 (18) October 425 BC. Ref. Eclipse Quotations Espenak's Webpages.

October 09, 1873 Birth of Karl Schwarzschild, German astronomer. Explained the fading at the edge of the sun in 1906. Died with health weakness due to World War I. (ref. DD 10/98)

October 10, 1962 Mariner 2 (US) discovered solar wind. Was on its way to Venus. (ref. DD 10/98)

October 11, 1937 Minor Planet (3036) Krat 1937 TO. Discovered 1937 October 11 by G. N. Neujmin at Simeis. Named in memory of Vladimir Alekseevich Krat (1911-1983), corresponding member of the U.S.S.R. Academy of Sciences, a staff member of the Pulkovo Observatory and from 1964 to 1979 its director. His main contributions to astronomy involved solar physics and chromospheric structure, figures of equilibrium of close binaries, classification of eclipsing variables and cosmogony. He initiated and actively participated in the development of the first Soviet stratospheric balloon observatory. (M 10547) Obituaries published in Zemlya Vselennaya, No. 6, p. 33-34 (1983); Sol. Phys., Vol. 89, No. 1, p. 1-2 (1983); Izv. Glav. Astron. Obs. Pulkovo, Astrometr. Astrofiz., No. 202, p. 3-5 (1984). Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 11, 1937 Minor planet (4723) Wolfgangmattig 1937 TB. Discovered 1937 October 11 by K. Reinmuth at Heidelberg.

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Named in honor of Wolfgang Mattig (1927-), German solar physicist and cosmologist at the Freiburg Kiepenheuer-Institut, on the occasion of his retirement. In his thesis, Mattig worked on relativistic cosmology and, in 1957, he discovered an analytical relation between the redshift and the apparent magnitude of galaxies. He took an active part in the development of the Teide Observatory, Canary Islands. Since 1980, Mattig has been the German representative in the Solar Physics Commission of COSPAR. (M 22503) Name proposed and citation prepared by J. Schubart, endorsed by G. Klare and L. D. Schmadel. Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 12, 1605 "Wendelin at Forcalquier in Provence saw the whole Sun hidden apart from a very narrow thread towards the north, which ascribed to the illuminated atmosphere." Refers to a solar eclipse at Forcalquier, France, of 12 October 1605. From: Riccioli. Quoted in *Historical Eclipses and Earth's Rotation*, by F Richard Stephenson, Cambridge University Press, 1997, page 421. Wendelin (also Vendelinus - on the moon, or official name Wendelen Govaart) was born in Herk-de-Stad, Belgium, the same town as were PP was born. In 1980 PP co-organized the Year of Wendelen in Herk-de-stad to celebrate his 400 st birthday.

October 12, 1605 This occurrence of saros 137 was observable from London with a m.901 shortly after noon. Preceding this by 15 days, on the evening of Sep 27 a Partial Lunar Eclipse was also observable from London. It is these two Eclipses that most authorities believe Shakespeare refers to in Act I, scene ii, lines 112-113 of *King Lear* when the Earl of Gloucester despairing of the coming disorder attributes it to "these late Eclipse in the Sun and Moon portend no good to us.." In the same scene Edmund, the bastard son of Gloucester, discusses these eclipses saying "My father compounded with my mother under the Dragon's Tail and my nativity was under Ursa Major, so that it follows I am rough and lecherous. Fut I should have been that I am, had the maidenliest star of the Firmament twinkled on my bastardising." The solar eclipse of 12th October fell within one degree of longitude of Spica, the brightest star in the constellation of the Virgin and hence 'the maidenliest star in the firmament'. Ref. PN. 10/99

October 12, 1983 Minor Planet (5424) Covington 1983 TN1. Discovered 1983 October 12 by E. Bowell at Anderson Mesa. Named in honor of Arthur Covington (1913-), Canada's first radio astronomer. His discovery, during the partial solar eclipse of 1946 Nov. 23, that microwave emission was far more intense from the vicinity of sunspots than elsewhere on the sun, was the first indicator that magnetic fields were important in the generation of nonthermal cosmic radio emission. In 1947 Covington inaugurated at the National Research Council of Canada daily measurements of the solar microwave flux at 10.7 cm. (M 23541) Name suggested and citation prepared by C. J. Cunningham. Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 12, 1983 Minor planet (8472) Tarroni 1983 TC. Discovered 1983 October 12 at the Osservatorio San Vittore at Bologna. Named in memory of the Italian amateur astronomer Gino Tarroni (1958-1986), a member of the Sezione Astrofili dell'Università Popolare Sestrese. A fine observer of the sun, he was in charge of the solar section of the Unione Astrofili Italiani, and he served as secretary of the Unione for the four years preceding his tragic death in a road accident. Tarroni also had interests in speleology and mountain climbing. (M 34627) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 14, 1688 John Evelyn, a founder member of the Royal Society, made the following entry in his celebrated diary for 14th October (Old Style) 1688: " The Kings Birth-day, no Gunns from the Tower, as usualy: The sunn Eclips'd at its rising: This day signal for the Victory of William the Conqueror against Herold neere Battel in Sussex: The wind (which has hitherto ben West) all this day East, wonderfull expectation of the Dutch fleete." It's interesting that Evelyn should note this eclipse, for it wasn't even partial at London. It wasn't good news for King James upon whose birthday it fell: within the month another William had landed in England and by the end of the year James had fled. The invader was crowned William III early next year. Ref. PN 10/99

October 14, 1788 Sir Edward Sabine (1788-1883). Mentioned a correlation between sunspots and magnetic disturb on earth. (Ref. Rc 1999).

October 14, 1934 Death of Sir Arthur Schuster (1851-1934). A comet is discovered and photographed by Sir Arthur Schuster (1851-1934), Germany/UK, during an eclipse in Egypt: first time a comet discovered in this way has been photographed. The Total Solar Eclipse had been observed by Sir Joseph Norman Lockyer (1836-1920), Ranard and Schuster from England, Tacchini from Italy, Trépiéd, Thollon and Puisseux from France. Observation from Sohag at the Nile. (Ref. Rc 1999)

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October 14, 1979 Minor planet (4316) Babinkova 1979 TZ1. Discovered 1979 October 14 by N. S. Chernykh at Nauchnyj. Named in honor of Artur Nikolaevich Babin (1936-) and Aleksandra Nikolaevna Koval', husband and wife, solar astrophysicists at the Crimean Astrophysical Observatory for more than 35 years, known for their research on the fine structure of active solar features. (M 23351) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 14, 2000 The first International Solar Eclipse Conference (SEC2000) in Elzenveld Antwerp Belgium organized by Patrick Poitevin and Joanne Edmonds (14 - 15.10.00). A Crossroad on Physics and Eclipses of the Sun. Speakers in chronological order: B. Foing, S. Koutchmy, E. Verwichte, F. Clette, B. Jones, P. Maley, G. Meiser, J. Anderson, P. Kalebwe, J.C. Casado, E. Hiei, O. Staiger, D. Makepiece, J. M. Lariviere, V. Rusin, D. Berghmans, R. Chou, J. Hopper, D. Fischer, F. Espenak, J. Pasachoff, F. Podmore, E. Krupp, J. Steele, F. Verbelen, R. F. Stephenson and P. Tiedt.

October 15, 1582 Switch over to the Gregorian calendar and cut 10 days from the calendar. Gregory's Decree promulgating the Reform directed that the day 4 Oct., 1582, should be followed by the day 15 Oct., 1582. Not all the Catholic countries, and not all the Protestant ones, switched precisely at that time. PP/TS-9/97

October 16, 1977 Minor planet 3798 de Jager 2402 T-3. Minor Planet discovered 1977

October 16 by I. van Houten-Groeneveld at Palomar. Named in honor of Cornelis de Jager, Dutch astronomer. His research concentrated on solar physics. He also attended different eclipse expeditions. He promoted international scientific collaboration, in particular with the Soviet Union. (M 18138) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 17, 1906 Minor planet 1781 Van Biesbroeck A906 VB. Minor Planet discovered 1906 October 17 by A. Kopff at Heidelberg. Named for George Van Biesbroeck (1880-1974) in recognition of, and appreciation for, many years of devoted services to astronomy through observations and discoveries of minor planets, comets, satellites, and double stars. He also attended solar eclipse expeditions.

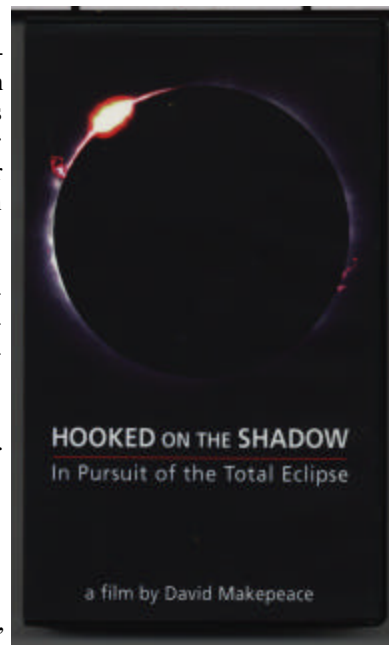
October 18, 1967 There was an eclipse of the sun by the Earth on October 18, 1967 and Surveyor V was functioning then on the moon. Unfortunately, the mirror could not be tilted to see the Earth, although temperature measurements were obtained as they did with Surveyor III, but more successful that time. (ref. S, LE O 1943-1993, FG)

October 19, 1965 Carrington rotation number 1500 starts. Begin 9 November 1853. (ref. DD 10/98)

October 20, 0301 On October 20 a spot was seen on the sun; observed from China. Ref BAA 6/00

October 21, 1790 The first official American total eclipse expedition when a party went to Penobscot, Maine. It was led by Samuel Williams of Harvard, and was given 'free passage' by the British forces, but unfortunately a mistake in the calculations meant that the party remained outside the track of totality. He did not see the corona but only an effect what we call today Baily's beads.

October 21, 1982 Minor planet (3061) Cook 1982 UB1. Discovered 1982 October 21 by E. Bowell at Anderson Mesa. Named for James Cook (1728-1779), British circumnavigator and one of the first scientific navigators. He observed the solar eclipse of 1766 Aug. 5 from Newfoundland and in 1769 measured the transit of Venus from Tahiti. In 1761 he assisted the Astronomer Royal, Nevil Maskelyne, in tests of John Harrison's fourth marine chronometer as a means of determining longitude at sea. (M 10846) Name proposed by the discoverer following a suggestion by B. Hetherington. Cook is also honored by a lunar crater. Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-



Video by David Makepeace

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October 21, 3046 Next total solar eclipse at the location of Cincinnati Observatory, Ohio. The last total solar eclipse took place on 2 January 1395. Though, there are in the meantime near-misses on 7 August 1869 (mag 0.993) and on 8 April 2024 (mag 0.996). ref. Private JM 9/99.

October 22, 1885 Prof. Theodor Ritter Oppolzer (1841-1886), professor in astronomy in Vienna and author of the monumental Canon der Finsternisse started his work. The canon was published spring 1887.

October 22, 1977 Launch of ISEE 1 and ISEE 2 (US). Research of solarwind, magneto sphere and magneto tail. Ref. DD 10/99.

October 22, 1994 Birth of the Solar Eclipse Section, VVS Belgium (Werkgroep Zonsverduisteringen). The date this decision was made by the VVS board, the founder and proposer Patrick Poitevin was in Bolivia for the Total Solar Eclipse of November 3, 1994.

October 22, -2135 (2136 BC) The first record of a solar eclipse was made in China during the reign of the Emperor Chung K'ang. The Chinese considered this event to be an attack on the Sun by a dragon, and they endeavored to scare the dragon away by making as much noise as possible. It is not sure if this description was a prediction of an observation.

October 23, 1976 A friend of Eric Jones (England) was invited for a wedding on October 23, 1976 in Melbourne. The Bride and Groom where not interested in astronomy. You can imagine their reaction as they left the Church after the ceremony and the sun was blotted out. I suppose it must have made the wedding photographs difficult to take, and I am just trying to imagine a posed picture of bride and bridesmaid all with solar filters...

October 23, 1998 SOHO again full operational after contact loss on June 24, 1998. Ref. DD 10/99.

October 24, -0443 (444 BC) "Duke Li (of the Chinese dynasty), 34th year. The Sun was eclipsed. It became dark in the daytime and stars were seen." Refers to an annular solar eclipse of 24 October 444 BC. From: Shih-chi (Chinese). Quoted in Historical Eclipses and Earth's Rotation, by F Richard Stephenson, Cambridge University Press, 1997, page 227. Stephenson points out that as only 93 percent of the Sun was obscured, the allusion to darkness must be exaggerated, and that this eclipse is the earliest in any civilisation for which the stars is reliably reported. Venus and Mercury were well placed for visibility.

October 24, 1667 Death of Govaart (Godfried) Wendelen, Belgian astronomer. Observed eclipses and calculated solar parallax. Known as Vendelinus (Mooncrater) and born in Herk-de-Stad, Belgium in 1580 which is also the birth city of Patrick Poitevin.

October 24, 1995 While many eclipse chasers went to India, Thailand, Vietnam, etc., Patrick Poitevin went to the far east small island and observed totality from Angges, Sangihe Talaud (Sulawesi) with 1m54s totality.

October 25, 1789 Birth of Samuel Heinrich Schwabe (1789-1875), German chemist and amateur astronomer. Chased for inter Mercury planet. Discovered in 1843 sunspot cycle. (ref. DD 10/98, Rc 1999)

October 25, 1975 Satellite HEOS 1 (US) stops. Studied seven years long the Sun and relation to the earth (ref. DD 10/98)

October 26, 1147 "On Sunday, the 7th day before the Kalends of November (Oct 26), a solar eclipse occurred at the 3rd hour and persisted until after the 6th . This eclipse stood fixed and motionless for a whole hour, as noted on the 'clock' . . . During this hour a circle of different colours and spinning rapidly was said to be in the way." Refers to an annular eclipse in Brauweiler, Germany, of 26 October 1147. From: Annales Brunwilarensis. Quoted in Historical Eclipses and Earth's Rotation, by F Richard Stephenson, Cambridge University Press, 1997, page 394.

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October 26, 1841 Birth of Prof. Theodor Ritter Oppolzer (1841-1886), professor in astronomy in Vienna and author of the monumental "Canon der Finsternisse".

October 26, 1970 (12 Feb 1893 - 26 Oct 1970) 1951 Marcel Minnaert studied biology at the University of Ghent in his native Belgium and physics at the University of Leiden in the Netherlands. Minnaert published a collection of poems related to astronomy and popular books on light and color and physics of the open air.

October 26, 1992 Minor planet (6337) Shiota 1992 UC4. Discovered 1992 October 26 by K. Endate and K. Watanabe at Kitami. Named in honor of Kazuo Shiota (1949-), a Japanese amateur astronomer who developed image-processing technology for astronomical photographs. He is also interested in total solar eclipses and developed a special filter for use in observing these eclipses. (M 29146) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 26, 1992 Minor planet (6338) Isaosato 1992 UO4. Discovered 1992 October 26 by K. Endate and K. Watanabe at Kitami. Named in honor of Isao Sato (1963-), Japanese expert on occultations. He succeeded in making the first photographic observation in Japan of an occultation by a minor planet, that of Geminorum by (381) Myrrha on 1991 Jan. 13. He promotes observations of occultations by minor planets in Japan generally and made the first use of a color video to obtain flash spectra at the northern and southern limits of total solar eclipses. (M 27462; M 27477) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg



Book Marcel Minnaert

October 27, 1728 Birth of James Cook (1728-1779), British circumnavigator and one of the first scientific navigators. He observed the Solar Eclipse of 1766 August 5 from Newfoundland and in 1769 measured the transit of Venus from Tahiti. (Ref. Rc 1999)

October 27, 1780 Saros 120. Samuël Williams, prof. Harvard led expedition to Penobscot Bay, Maine (during Revolutionary War! - and Bay was behind enemy lines). British granted the party safe passage.

October 28, 1992 (6459) Hidesan 1992 UY5. Discovered 1992 October 28 by K. Endate and K. Watanabe at Kitami. Named in honor of Hideo Sato (1940-), staff member of the National Astronomical Observatory (formerly Tokyo Astronomical Observatory) who first worked on the solar corona, later moving to the Sky Patrol Section as a night observer. His life's work is the photometry of close binaries. He is also one of the leading members of the observatory's baseball team. (M 30099) Name proposed by the second discoverer following a suggestion by K. Tomita. Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 29, 0840 The only emperor to have died of fright because of an eclipse was Louis of Bavaria, in 840. His three sons then proceeded to indulge in a ruinous war over succession.

October 29, 0878 ". . . the sun darkened for one hour of the day." This solar eclipse is recorded under the entries for the AD 879, but is probably the one on 29 October AD 878. From: The Anglo Saxon Chronicles translated and collated by Anne Savage, CLB Publishing Ltd. Ref FE 01/01

October 29, 0878 "The Sun was eclipsed at 1 hour of the day." Refers to the total solar eclipse of 29 October AD 878. From: The Anglo Saxon Chronicles. Quoted in UK Solar Eclipses from Year 1 by Williams.

October 29, 0878 Total solar eclipse of which London was just in the path of totality. King Alfred wrote The sun was eclipsed the first hour of the day. Also Tycho Brahe mentioned in his Historia Coelestis to the Annales Fuldenses, of which the sun was eclipsed after the 9th hour and the stars were visible. Ref. St LK 06/99.

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SECalendar

October 29, 1837 Birth of John Herschel. During the eclipse of 18 August 1868 from the Red Sea through India to Malaysia and New Guinea, prominences are first studied with spectroscopes and shown to be composed primarily of hydrogen by James Francis Tennant (1829-1915), UK, John Herschel (1837-1921, UK - son of Sir John Frederick William Herschel 1792-1871, grandson of Sir William Herschel 1738-1822), Pierre Jules Cesar Janssen (1824-1907, France), George Rayet (France), and Norman Pogson (UK/India). (Ref Rc 1999)

October 29, 1951 Minor Planet (1953) Rupertwildt 1951 UK. Discovered 1951 October 29 at the Goethe Link Observatory at Brooklyn, Indiana. Named in memory of Rupert Wildt (1905-1976), who was awarded the Eddington Medal by the Royal Astronomical Society in 1966 for his discovery in 1939 that the negative hydrogen ion is an important contributor to the opacity of the solar atmosphere. He identified the absorption bands in the red part of the spectra of the outer planets as due to methane and ammonia, and he made pioneer calculations of models for the interiors of the giant planets. A professor in Yale University's Department of Astronomy for many years, he was Yale's first scientific representative on the Board of Directors of the Association of Universities for Research in Astronomy and served two terms as AURA president and chairman of the board (1965-1968, 1971-1974). (M 6954) Obituaries published in Q.J. R. Astron. Soc., Vol. 17, p. 522 (1976); Strolling Astron., Vol. 26, p. 46 (1976); Phys. Today, Vol. 29, No. 4, p. 89 (1976); Sky Telesc., Vol. 51, p. 156 (1976); Icarus, Vol. 30, p. 441-445 (1977). Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 31, 1920 Minor planet (944) Hidalgo Discovered 1920 October 31 by W. Baade at Bergedorf. German astronomers observed the total solar eclipse 1923 September 10 in Mexico. After the eclipse they had an audience with the president of Mexico and asked permission to call this planet after Miguel Hidalgo y Costilla (1753-1811) who proclaimed the Mexican independence in 1810. R. Schorr wrote: "Zur Erinnerung an die Deutsche Sonnenfinsternis-Expedition nach Mexiko im Sommer 1923 und die ihr durch die mexikanische Regierung erwiesene gastliche Aufnahme ist unter der Zustimmung des Staatspräsidenten Don Alvaro Obregón der ... am Bergedorfer Spiegelteleskop entdeckte, durch seine Bahn besonders interessante Planet ... nach dem mexikanischen Nationalhelden Hidalgo benannt worden." (AN 221, 159 (1924)) Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg

October 31, 1999 Jack Evans, first Director of the Sacramento Peak Observatory, from 1952 to 1976, and his wife, Betty, died on October 31st. He was 90; she was 89. With their health becoming more fragile and uncertain, they had agreed to end their lives rather than become a burden to their children and grandchildren. Jack left a note that they wanted to make an end when they still were gloriously happy. Starting from a bare site in the Lincoln National Forest, Jack collected an outstanding scientific staff, and with their help, built Sac Peak into the world's premier solar observatory. Ref. JB 11/99

and ... keep those solar eclipse related messages coming ...

Best regards, Patrick and Joanne, solareclipsewebpages@btopenworld.com and <http://solareclipsewebpages.users.btopenworld.com>



CD ECLIPSE by Madrugada

SECalendar

SECalendar August - Maria Mitchell

From : Alcovedbase@aol.com To : patrick_poitevin@hotmail.com Date : Tue, 13 Aug 2002 22:07:08 EDT

Hi Patrick, As a die-hard variable star observer and resident of Boston/MA, I was surprised to find a "?" for the date Maria Mitchell died on your calendar. As you can see from several links I have provided below, Mitchell who was one of the most famous American scientists of the 19th century and the first female professor of astronomy in the US, died in Lynn, MA on June 28, 1889. Maria Mitchell Association through the Maria Mitchell Astronomical Observatory on the island of Nantucket honors this remarkable scientist by providing research opportunities to numerous variable star astronomers.

More information on M.Mitchell can be found at:

<http://www.mmo.org>

<http://cannon.sfsu.edu/~gmarcy/cswa/history/mitchell.html>

<http://www.lucidcafe.com/library/95aug/mitchell.html>

<http://www.lkwdpl.org/wihohio/mitchell.htm>

<http://www.lkwdpl.org/wihohio/mitc-mar.htm>

Clear skies! Haldun I. Menali Amateur Astronomer Boston, MA Member and Observer; ATMob, AAVSO, AFOEV, BAA <http://members.aol.com/astroalcove/index.html>



**CD ECLIPSE by
Marcela Morelo**

SECalendar for October - 1780 versus 1790

From: Robert B Slobins To: "INTERNET:SOLARECLIPSES@AULA.COM" <SOLARECLIPSES@AULA.COM>
Date: Sat, 28 Sep 2002 02:21:19

Please correct your entry for 21 October 1780 from 1790. cheers/rbs

SEDates

TD2003 Preliminary Program

Dear All, In continuation of the De Duistere Dag (The Dark Day), which we organized in Belgium since 1995, and the last issue of Totality Day 2001, held in Milton Keynes UK, we want to introduce to you TOTALITY DAY 2003.

TOTALITY DAY is organized after each total solar eclipse. To give the participants the time to evaluate their data, TOTALITY DAY will be one or two months after a total solar eclipse. To avoid confusion with the Solar Eclipse Conference, Totality Day is a one-day meeting. A few main subjects will be lectured and the remaining time of the day will be completed with short lectures and presentations about the last total solar eclipse.

Totality Day 2003 will be on Saturday 8 February 2003 in the Berrill Lecture Theatre of the Open University of Milton Keynes, England. Doors open at 8h00, closing at 20h00. Lectures from 10h00 to 12h00 and from 14h00 to 18h00. At lunchtime, the attendees can bring a pack-lunch. However, we arranged some sandwiches for sale.

It will be possible to meet from Friday evening. No official solar eclipse activities, though, an informal meeting in Milton Keynes. Saturday night, after Totality Day 2003, as well. No official activity either, though, it is the intention to have dinner together.

The Open University is centrally located in England and has a wonderful theatre that can hold 300 participants. All technical facilities are available for the lectures. There will be large display areas, where everyone can present any interesting collections. This area is also dedicated for trade stands. If you want to present something about the 2002 or 2003 Total Solar Eclipse, present a poster, or want to trade anything related to solar eclipses, please let us know. Thanks to the Open University of Milton Keynes, more particularly Prof. Barrie Jones, attending TOTALITY DAY 2003 will only cost 3 English Pounds. It is necessary to make prior arrangements with us if you wish to make a presentation, lecture, or poster display.

TOTALITY DAY 2003 - 8 February 2003 - (PRELIMINARY) PROGRAM

08h00 Doors open. Entrance Main Reception of Berrill Building (<http://www.open.ac.uk/>)

10h00 Opening TD2003 by Prof. Barrie W. Jones (UK)

10h10 Lectures

12h00 Lunch (Berrill Café is open for sandwiches, drinks or pack-lunch)

14h00 Lectures

17h30 POsters

17h55 Closing TD2003 by Joanne and Patrick Poitevin (UK)

20h00 Doors closed

Speakers lined up:

Recording Shadow Bands by Eric Strach (UK)

The 2002 TSE in Botswana by Barrie W. Jones (UK)

The 2003 ASE and visibility from Scottish locations by Sheridan Williams (UK)

Measuring the Diameter of the Sun during Solar Eclipses by Eric Jones (UK) (tbc)

The 2002 TSE in Australia by Derek Hatch/Mike Foulkes (UK)

Thermal measurements by Alan Rideley/Brian Sheen (Roseland Observatory UK)



TD2001 with Laura Appleton at the entrance of the OU in Milton Keynes

Please have a look at our Solar Eclipse WebPages at <http://solareclipsewebpages.users.btopenworld.com>

Or write us an e-mail at solareclipsewebpages@btopenworld.com

Best regards, Patrick and Joanne Poitevin

SEScannings

SENL September 2002 NOW ONLINE!

From: FRED ESPENAK To: SOLARECLIPSES@AULA.COM eclipse@hydra.carleton.ca Date: Wed, 04 Sep 2002

Joanne Poitevin has prepared a new issue of the SENL (Solar Eclipse Newsletter) for the month of September 2002.

All issues are online in pdf format and can be accessed via the SENL index page of MrEclipse.com:

<http://www.mreclipse.com/SENL/SENLinde.htm>

Other recent issues currently linked from the above page include:

SENL - January 2002 - Part A (0.7 MB pdf file*)

SENL - January 2002 - Part B (1.3 MB pdf file*)

SENL - February 2002 (1.2 MB pdf file*)

SENL - March 2002 - Part A (0.7 MB pdf file*)

SENL - March 2002 - Part B (0.8 MB pdf file*)

SENL - April 2002 (1.1 MB pdf file*)

SENL - May 2002 - Part A (1.1 MB pdf file*)

SENL - May 2002 - Part B (0.6 MB pdf file*)

SENL - June 2002 - Part A (0.5 MB pdf file*)

SENL - June 2002 - Part B (0.8 MB pdf file*)

SENL - July 2002 - Part A (0.8 MB pdf file*)

SENL - July 2002 - Part B (1.0 MB pdf file*)

SENL - August 2002 - Part A (1.2 MB pdf file*)

SENL - August 2002 - Part B (1.3 MB pdf file*)

SENL - August 2002 - Part C (0.9 MB pdf file*)

SENL - September 2002 (1.3 MB pdf file*)

Note that all these files are in Adobe pdf format and can only be read with Adobe Acrobat Reader. This software is free and can be downloaded from Adobe's web site (<http://www.adobe.com/>).

As always, thanks for the hard work Joanne! - Fred Espenak

Subject: [SE] Thanks Joanne & Fred From: rybrks1@cs.com

Thank you both for the ever improving (and certainly laborious) monthly newsletters.

The historical photos and modern graphics come through nicely.

The index is growing to be a great (facilely searchable) source of info for eclipses. Sincerely, Ray Brooks

Volume 7, Issue 3
SOLARECLIPSE NEWSLETTER
March 2002

*SOLAR ECLIPSE
NEWSLETTER*

SENL heading on the SEWP

SEScannings

SENL September Index

Please find herewith the Index of the September 2002 issue of the Solar Eclipse Newsletter (SENL). Beside the topic, the page number is listed.

.../...

See the latest SENL and also the complete SENL Index since November 1996 at <http://www.j.w.edmonds.btinternet.co.uk>

The SENL will be soon on the WebPages of Fred Espenak/NASA. See <http://sunearth.gsfc.nasa.gov/eclipse/SENL/> and the index at <http://www.mreclipse.com/SENL/SENLinde.htm> with example: SENL0011.pdf

<http://sunearth.gsfc.nasa.gov/eclipse/SENL/SENL0011.pdf>

Comments and contributions are welcome at patrick_poitevin@hotmail.com

And ... keep those solar eclipse related messages coming ... Best Regards, Patrick and Joanne

From: rybrks1@cs.com

On Page 23, how can that really be a photo from Apollo 12?

That trip was launched near a Full Moon and when around the dark side the Command/Service/LEM module was only about 60 miles above the surface. The photos seems to be at least a few moon diameters away. They were nowhere near that distance from the Moon on the far side. Ray Brooks

From: Patrick Poitevin

From the SECalendar: April 24, 1967 Images of Surveyor 3 have been made of the 24 April 1967 lunar eclipse. This was a lunar eclipse across East Asia, Australia and the Pacific. Surveyor 3 made unusual views of a lunar eclipse: A total solar eclipse as seen from the moon. (Ref. OE by R, S, 1995). The crew of Apollo 12 visited Surveyor III in 1969. They brought back the *Streptococcus mitis* bacterium which was 31 months on the moon. Surveyor III camera system operated by having a TV camera aim up through a tube to a rotating mirror, which can be turned by radio command on Earth. Because the spacecraft tilted, a view of the earth was visible (which was not foreseen). The lunar eclipse of 24 April 1967 was video filmed. Surveyor III, and Jet Propulsion Lab scientists saw a beautiful scintillating ring of sunlight, refracted through the Earth's atmosphere. Very colorful and splendid. The halo was broken into beads. These beads have been measured by filters and their colors plotted on a chromatically diagram. Temperature took a plunge from 100 Fahrenheit to - 150 Fahrenheit (minus). There was another eclipse of the sun by the Earth on October 18, 1967 and Surveyor V was functioning then. Unfortunately, the mirror could not be tilted to see the Earth, although temperature measurements were obtained. Apollo 12 also brought back its TV mirror, the first human artifact to catch light from a lunar eclipse on the moon, to its makers on Earth. (Ref. S, LE O 1943-1993, FG)

See our webpages. Best regards, Patrick



“Eclipse colors” in packaging technology

SEScannings

Address SEWP changed

Dear All, Please note the address for the Solar Eclipse WebPages (SEWP) changed.

Old address

<http://www.j.w.edmonds.btinternet.co.uk>

New address

<http://solareclipsewebpages.users.btopenworld.com>

Please have a visit and learn about the upcoming solar eclipse conferences TD2003 and SEC2004, the Solar Eclipse Newsletter (SENL), the Solar Eclipse Mailing List (SEML), the SECalendar, and many other solar eclipse related issues and links

Comments are welcome. Best regards, Patrick and Joanne

E-mail: patrick_poitevin@hotmail.com

Solar Eclipse Newsletter:

SENL: <http://sunearth.gsfc.nasa.gov/eclipse/SENL/>

Index: <http://www.mreclipse.com/SENL/SENLinde.htm>

Solar Eclipse Mailing List:

To subscribe send E-mail to listserv@Aula.com

with in the body SUBSCRIBE SOLARECLIPSES name, country

SENL Status

For those who thought SEML traffic was huge in July 2002, please see our webpages at <http://www.j.w.edmonds.btinternet.co.uk> where you will see the Solar Eclipse Newsletter Status.

The SENL July 2002 issue counted indeed 120 pages. Though July 2001, last year - including the special edition for the Africa eclipse, was 137 pages. Even more, September 1999 was 211 pages due to the August 1999 total solar eclipse.

Looking to the amount of messages a day, we can say that September 1999 is still on top with an average of 33 messages a day. This July 2002 was 11.1 messages a day and last year July 2001 had 15.6 solar eclipse related messages a day.

Please note that all solar eclipse messages are taking into account. These are not only SEML messages, but as well from other mailing lists such as Hastro or the mailing list of Brian Brewer.

Although still not the busiest SENL/Message traffic, it must be noted that September 1999 and July 2001 were "total solar eclipse related months". The latter July 2002 was not a solar eclipse related month (SENL June 2002 had all Mexico messages and reports), but solar eclipse related messages of general interest.

The SENL Status can be seen on our Solar Eclipse WebPages at <http://www.j.w.edmonds.btinternet.co.uk>

Best regards, Patrick

SETalk

New Moon September 2002

From: Rybrks1@cs.com To: SOLARECLIPSES@AULA.COM Date: Tue, 03 Sep 2002 02:23:23

New Moon this month is September 9, 2002 at 03:11 UT

Since September 9 sits almost exactly midway between the June 10 annular eclipse of Puerto Vallarta and the Dec 4 total eclipse of Africa & Australia we know that this new moon will be very high above the Sun and nearly precisely splits the ascending and descending nodes. So it must either be near the very end or very beginning of an extended saros.

It is near the end of extended Saros 28 with only 5 more high pass new moons remaining before it evolves into Saros 251. So Saros 28 has completed 98.8 percent of its 7500 year life. Saros 28 was a descending node series of all annulars, most central (smallest gamma value) in 1297BC. Saros 251 will be an ascending node series of all annulars also, arriving on Earth's arctic region July 7 4905 as a partial eclipse and being most central June 5482. The saros number jumps by 223 from 28 to 251, the number of new moons in a saros period 18 yrs 10 days.

The last new moon of Saros 28 has a gamma of 4.9703 and a relative number of positive 188. The first new moon of Saros 251 has a gamma of 4.9798 and a relative number of minus 188. These last and first new moons are, of course, separated by the saros increment of 18 years 11 days; Saros 28 ends Oct 31 2092 and 252 starts Nov 12 2110

The shadow of next week's new Moon at the Earth's Vertical Centerline, or Fundamental Plane, is 95 miles in diameter and would allow someone to witness a 2 minute 29 second total solar eclipse if positioned just less than 2 Earth diameters above the Earth's limb as the shadow rushed by at 2,305 mph. The shadow cone extends almost 10,300 miles (about 2.5 radii) beyond the center of Earth. Perigee is very close to this new moon (just a few minutes more than 24 hours later) so if this new moon were near gamma of zero a person could see a 5 minute 36 second long eclipse in a 131.5 mile diameter circular shadow southeast of the Raymond Brooks

From: 76630,2206

Raymond-- How do you derive this? --Robert B Slobins

Eclipse of 1896

From: Jay.M.Pasachoff@williams.edu To: solareclipses@aula.com Date: Thu, 05 Sep 2002 21:29:07

I have a query from a New York writer "interested in the total solar eclipse of 1896 and, more specifically, an expedition in that year led by an Amherst astronomer, David Todd. He sailed to Japan to observe the eclipse....Is there any way of telling whether that eclipse was particularly notable and whether the Amherst expedition made any important discoveries? I'm also interested in David Todd's record as an astronomer--I read somewhere that his eclipse expeditions seemed jinxed--often thwarted by cloudy skies--but am not sure that's true. "Are there any books on the history of eclipses that might be helpful?" Any comments? Jay Pasachoff jay.m.pasachoff@williams.edu

From: Patrick Poitevin

From the SECalendar: Mabel Loomis Todd, daughter of the mathematician and astronomer Elias Loomis. She was the wife of David P. Todd {see minor planet (511)}, the discoverer's professor of astronomy at Amherst College.

Also from the SECalendar: Minor planet (511) Davida Discovered 1903 May 30 by R. S. Dugan at Heidelberg. Named by the discoverer in honor of David P. Todd (1855-1939), professor of astronomy and director of the Amherst College Observatory (1881-1920). (H 55) See the remark for planet (497). Dictionary of Minor Planet Names - ISBN 3-540-14814-0 - Copyright © 1999 by Springer-Verlag Berlin Heidelberg. David Todd was the husband of Mabel Todd, who wrote books about solar eclipses. David also had a painting of a solar eclipse in one of his books.

I have a copy of this painting by the way. It was in the book A New Astronomy for Beginners (by David P. Todd, copyright 1897. The painting is by Kranz. The painting was also published by Sky and Telescope in the article of Eli Maor.

The book Corona and Coronet by Mabel Loomis Todd, copyright 1898 (also in my possession) is "a narrative of the Amherst eclipse expedition to Japan, in Mr. James's Schooner yacht Coronet, to observe the sun's total obscuration 9th August 1896".

Unfortunately, the book has 375 pages and is a bit too

(Continued on page 15)

SETalk

much to copy. Best regards, Patrick

From: John Tilley

In article <0H1Z0ICASFKJN4@williams.edu>, Jay.M.Pasachoff@williams.edu writes

Jay - I suspect that you need a copy of TODD, Mabel Loomis. CORONA AND CORONET: Being a Narrative of the Amherst Eclipse Expedition to Japan, in Mr. James's Schooner-Yacht Coronet, to Observe the Sun's Total Obscuration 9th August, 1896. Boston: Houghton, Mifflin and Company, 1898 Hard Cover. First Edition. 8vo. With illustrations. Octavo, green cloth with gilt lettering and decorations, top edge gilt, 383 pages

If you collect eclipse books - then abebooks or other sites are worth searching.

The writer could no doubt try a public library in NY. Good Luck - John

From: KCStarguy@aol.com

Jay try some of these. Thanks for pointing out the eclipse. Hope these help. Dr.Eric Flescher (kcstarguy@aol.com)

Solar Eclipse: Eclipse of 1896 ... Being a narrative of the Amherst Eclipse Expedition to Japan, in Mr. James's Schooner-Yacht Coronet, to Observe the Sun's Total Obscuration, 9th August, 1896 ... www.exploratorium.edu/eclipse/1896.html

Amherst College Biographical Record: Class of 1875 ... eclipse expedition to Japan, 1887; US scientific expedition to W. Africa, 1889-90; Amherst eclipse expedition to Japan, 1896; Lowell eclipse expedition to ... www.amherst.edu/~rjyanco/genealogy/acbiorecord/1875.html

Total Solar Eclipses of the Past ... Peru September 7, 1858. Japan 1887. West Africa 1890. Japan 9th August, 1896. Spain/ Algeria May 28th, 1900. Sumatra May 18, 1901. Travel Notes' 1999 Eclipse Report ... www.travelnotes.org/Travel/Eclipse99/past.htm

UCSC Library - Lick Archives - Preliminary Finding Aid - ... 5. Disasters 6. Groups of Visitors E. LO Expeditions (See "O" for expeditions other than LO): 1. Mina Bronces, Chile Eclipses 1893; 2. Japan Eclipse 1896; 3. ... libweb.ucsc.edu/lick/photo-class.html

Newport This Week - Calendar ... The 1896 Eclipse Expedition to Japan aboard "Coronet" to view the total eclipse of the sun features actors Walter Carroll and Ann Maggs por-

traying astronomer

...

www.newportthisweek.com/News/2000/0914/Calendar/

Eclipse Quotations - Part IV ... Being a Narrative of the Amherst Eclipse Expedition to Japan, in Mr James's Schooner-Yacht Coronet, to Observe the Sun's Total Obscuration, 9th August, 1896. ... www.mreclipse.com/Special/quotes4.html

articles on ancient observations ... Eclipses and chronology, a final rejoinder 10/1896 ... FR.Stephenson and LJ.Fatoohi, The Total Solar Eclipse ... ASTRONOMY IN CHINA, JAPAN, KOREA: FR.Stephenson, Early ... hbar.phys.msu.edu/gorm/eclipse.htm

articles on ancient observations ... 5/1896 Eclipses and chronology, a final rejoinder 10/1896 ... recorded in the "Nihongi", the ancient chronicle of Japan ... brightness when the rising sun is in eclipse ... hbar.phys.msu.edu/gorm/eclipses.htm

From: J.P. van de Giessen

Jay a.o., I have 2 articles from his wife Mabel about this eclipse in "The Atlantic Monthly" and 1 in "The Century" AND they are also on the internet!!

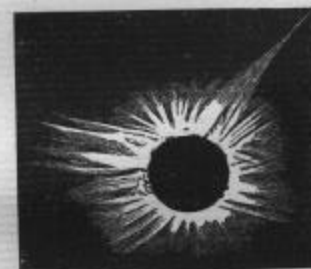
Todd, Mabel Loomis, An Astronomical Experience in Japan. The Atlantic Monthly, vol. 80, issue 479 (September 1897). (http://cdl.library.cornell.edu/cgi-bin/moa/sgml/moa-idx?notisid=ABK2934-008_0-56)

Todd, Mabel Loomis, In Quest of a Shadow: An Astronomical Experience in Japan. The Atlantic Monthly, vol. 80, issue 479 (September 1897). (http://cdl.library.cornell.edu/cgi-bin/moa/sgml/moa-idx?notisid=ABK2934-008_0-57)

Todd, Mabel Loomis, In Aino-Land. The Century, vol. 56, issue 3 (July 1898). (http://cdl.library.cornell.edu/cgi-bin/moa/sgml/moa-idx?notisid=ABP2287-005_6-78) Jan Pieter van de Giessen

From the book Corona and Coronet by Todd 1896

Eclipse drawing



SETalk

Delta T

From : Jean Meeus <JMeeus@compuserve.com> Date : Sat, 7 Sep 2002 02:19:25 -0400

On 2002 August 1 the difference Delta T between the uniform Dynamical Time and Universal Time was 64.41 seconds, the same value as one month earlier. Jean Meeus

New Moon

From: Rybrks1@cs.com To: SOLARECLIPSES@AULA.COM Date: Sat, 07 Sep 2002 08:57:12

As I mentioned last week, the recent new moon was a very high pass over the sun. This is amenable to the trivial pursuit of seeing thin very young or very old moons close to "New Moon Time" since new moon is about 5 degrees separation from the sun.

We had clear skies in USA midwest the morning of Sep 6 2002 and I was able to see a very thin crescent rise. The topocentric separation of moon-sun centers was 9.5 degrees for my long/lat. That is neither a personal record nor a world record but what was remarkable was extinction coefficient. I followed the thin arc of moon limb for forty minutes to an altitude of 7 degrees until 12 minutes before sunrise! Such a thin arc usually disappears at about 3 or 4 degrees altitude above the horizon.

The other curiosity was the arc faced slightly to the south which is unusual for a mid northern lat moonrise.

What is the record thinnest observed moon the day before or after a total solar eclipse?

WE had a lovely moonrise in Bolivia 1994 which was 27 hours from new the morning before. The dark side was quite obvious. Ray Brooks

From: Babak A. Tafreshi

Speaking of observing the new moon, there are now nearly a dozen of amateur astronomy group expecting to observe this new moon in Iran, in few hours. some of them equipped with 40*150 giant binoculars are going to hunt the new moon from high altitude sites with clear horizon and good seeing. observing youngest new moon is kind of high interest among Iranian amateur astronomers. The world record for observing youngest new moon is in hand of James Stem who observe 12 hours and 7 minute moon on Jan.21 1996 from Tuscan, Arizona. He used a 8 inches SCT. the second record is by Alireza Movahed Nezhad from Iran who observe 12 hours and 15 minutes moon last year in August. he used

40*150 binocular. Now this evening is time for breaking world record in Iran, with new moon aged at less than 12 hours in Iran. I'm sorry for of the subject is not related so much to eclipses, it was just to answer the letter by Ray Brooks. Kindest Regards Babak A. Tafreshi Editor at Nojum, Iranian magazine of Astronomy www.nojum.net

Perry - minor planet

From : Michael Gill <eclipsechaser@yahoo.com> To : patrick_poitevin@hotmail.com Date : Mon, 5 Aug 2002 08:44:07 -0700 (PDT)

Patrick Poitevin <patrick_poitevin@hotmail.com> wrote: Solar eclipse related Minor Planet names are Mitchell, Young, Menzel, Moore, Mason, McGee, Goffin, Meeus, Pasachoff, Dunham, Hiei, Steel, Bessel, Comello, Feijth, Robinson, di Cicco, Baily, de Jager, Eddington, Secchi, Dyson, Todd Mabel, Herge, Arago, Todd David and Oppolzer.

Patrick - I notice that asteroid 5529 is called 'Perry'. Is this named after Father Stephen Joseph Perry (see your eclipse calendar: December 22)?

If it is you can add another to the list. If not, then surely this person should have an asteroid named after him. Cheers, Michael

Lunar eclipses, 2003

From: Alejandra León-Castellá To: SOLARECLIPSES@AULA.COM Date: Fri, 13 Sep 2002 03:04:20

Hi all! We have started to prepare for the Total Lunar Eclipses in 2003. Our Tenth Edition of the Lunar Calendar for Costa Rica is dedicated to them, and includes a picture of the Total Lunar Eclipse in 2000 from Maui, Hawaii, thanks to Fred Espenak.

You can view it here: <http://cientec.or.cr/productos.html>

Very soon we hope to inform you on preliminary planning of the Annular Eclipse of 2005.

We look forward to the next Total Solar Eclipse, followed through your images. So keep us informed. Clear Skies, Alejandra León Castellá San José, Costa Rica



SETalk

Airports and film

From: Dale Ireland To: Solar Eclipse List
<SOLARECLIPSES@AULA.COM> Date: Fri, 06 Sep
2002 17:20:54

NBC news reported this week that they breached airport security in two ways, with false ID's and by putting banned items like blades and small scissors inside x-ray proof film carriers. I am mentioning this because you can be sure that x-ray proof film carriers will now be bring much more attention at check in. Dale

From: Cliff Turk

How can NBC News be so stupidly irresponsible? The whole lot of them deserve to be treated the same any other terrorists. In this case they have directly endangered the safety of Eclipse watchers' films. I hope members of this list will refuse to supply them when they want pictures of future eclipses. Cliff Turk

From: Evan Zucker

Don't you think it's a little more important to point our dangerous shortcomings in airport security rather than make sure that photographers aren't inconvenienced? U.S. airport security personnel for years have been supposed to be reject any baggage with lead bags or anything else they couldn't

see inside and insist on a hand inspection. All that NBC did is point out that security isn't doing what they've always supposed to have done.

I think the best advice has long been to take your film out of the boxes (and out of the plastic containers if they're not clear), put all the film in a plastic bag, and request a hand inspection. That's what I did with my 30 rolls of film last month when I flew out of Alaska. There's no guarantee they will grant the hand inspection, but they always have for me. Even if you don't always get a hand inspection, one or two carry-on X-ray screenings shouldn't harm most film. It's the cumulative effect of multiple X-raying, and the stronger X-raying of checked baggage, that I make sure to avoid. Evan H. Zucker San Diego, California

From: Joel Moskowitz

Even before this, when I have film in a lead bag, they always say "lead bag" at the xray machine and make me open it to hand inspect the contents. Joel M. Moskowitz, M.D. 7 (total)solar eclipses and counting

From: 76630,2206

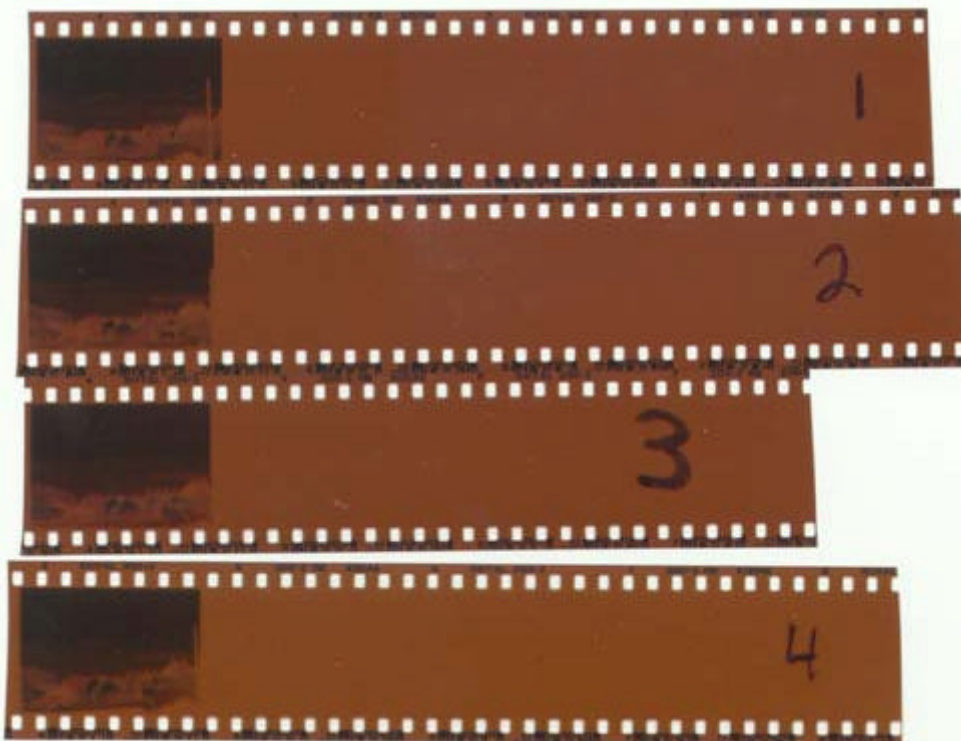
The FAA requires that upon a passenger's request, airport security MUST perform a hand inspection. So this has been my standard practise--I ask for hand inspection of film. If the personnel object, I tell them that they may not see inside the lead bag. Most of

the time this works. You can get this regulation straight from the FAA.

I do not know is European airports work the same. I have received hand inspections everywhere, even in and out of London. (I carry exposed eclipse film on me and the rolls go through inspection as so much pocket change.) London inspectors usually demand that everything gets x-rayed.

The problem is that it is easier to x-ray than hand inspect. You don't expect these security people to actually WORK for their pay, do you? ;-) cheers/Robert B Slobins

(Continued on page 18)



SETalk

From: Evan Zucker

It wasn't easy to find, but here it is:

Note: This document contains FAR Part 108 including Amendment 108-19 as published in the Federal Register on Oct. 10, 2000.

PART 108--AIRPLANE OPERATOR SECURITY SPECIAL FEDERAL AVIATION REGULATIONS

Section 108.17e No certificate holder may use an X-ray system to inspect carry-on or checked articles unless a sign is posted in a conspicuous place at the screening station and on the X-ray system which notifies passengers that such items are being inspected by an X-ray and advises them to remove all X-ray, scientific, and high-speed film from carry-on and checked articles before inspection. This sign shall also advise passengers that they may request that an inspection be made of their photographic equipment and film packages without exposure to an X-ray system. If the X-ray system exposes any carry-on or checked articles to more than 1 milliroentgen during the inspection, the certificate holder shall post a sign which advises passengers to remove film of all kinds from their articles before inspection. If requested by passengers, their photographic equipment and film packages shall be inspected without exposure to an X-ray system. <http://www.faa.gov/avr/AFS/FARS/far-108.txt>

Some other links: Carrying Film Through Airports Can Be Risky Process JANE ENGLE The Los Angeles Times Published: Jul 7, 2002 <http://tampatrib.com/Features/MGA0D03KE3D.html>

You Don't Have To Nuke Your Film! <http://home.kc.rr.com/aaronphoto/xray.html>

Evan H. Zucker San Diego, California

From: Gerard M Foley

Do the agencies operating screening stations at airports hold certificates from FAA? Or is it just airlines, pilots, and such that are certificate holders?

From: Evan Zucker

In the United States, it's now the Transportation Security Administration, <http://www.tsa.gov>. Here's a page chock-full of applicable rules and regulations: https://www.tsa.dot.gov/laws_regs/gov_index.shtm. -- EVAN

From: Vic & Jen Winter - ICSTARS Astronomy

I suspect that having this particular piece of documentation printed and on one's person could increase the odds of success with your airline screening staff. I don't agree that it would give one a 100% chance for success with every x-ray scan technician one might encounter around the world.

I'll not soon forget the chagrin of the chaser I met in Paris in 2001 who politely argued his position to the attendee about his enduring requests to check his film by hand. His requests, no matter how patient, fell upon deaf, indignant and language barred ears.

Not all baggage screeners in this wide world speak english (or your language). Not all flights route through English-first countries. We may be going to Africa and Australia, but some chasers may route through other language-speaking countries where these printed official looking regulations are meaningless.

Also..... Doesn't the word Federal in Federal Aviation Administration imply that the regulations apply to and within the United States? I see no reason why another country would have any reason whatsoever to comply with a regulation sub-

(Continued on page 19)

SETalk

scribed to by the United States FAA. I've visited many airports on eclipse trips that have no earthly idea how much radiation is being emitted from their equipment, either. Some of these operators have even been illiterate.

I suspect those who are worried about their film and X-rays are those who have a heightened concern for the slim statistical chance that X-Rays will damage their film. My expectation is that those same chasers should also be concerned over the very real statistical possibility of encountering a baggage scanner who would refuse to hand-scan their film.

Even should you refuse to employ it for regular transport, consider at least carrying a lead-bag with you so that should you be refused hand-scanning, you have recourse to protect your film.

Lead bags are cheap. They're 100% safe. * Exposed eclipse-trip film is expensive.

There is a phrase of caution used in photojournalism. "Every roll of film, until developed, could hold the next Pulitzer Prize." Clear Skies, Jen Winter - Owner

From: Donald Watrous

At 07:16 PM 9/6/02, you wrote: The FAA requires that upon a passenger's request, airport security MUST perform a hand inspection. So this has been my standard practise--I ask for hand inspection of film. If the personnel object, I tell them that they may not see inside the lead bag. Most of the time this works. Yo u can get this regulation straight from the FAA.

It wasn't easy to find, but here it is:

Note: This document contains FAR Part 108 including Amendment 108-19 as published in the Federal Register on Oct. 10, 2000.

PART 108--AIRPLANE OPERATOR SECURITY SPECIAL FEDERAL AVIATION REGULATIONS

Section 108.17e No certificate holder may use an X-ray system to inspect carry-on or

[. . .]

film packages shall be inspected without exposure to an X-ray system. <http://www.faa.gov/avr/AFS/FARS/far-108.txt>

Note that the above carries no weight even in the US anymore. From the article referred to later:

You Don't Have To Nuke Your Film! <http://home.kc.rr.com/aaronphoto/xray.html>

"Before the TSA [Transportation Security Agency] was created, the most significant security regulations that concerned flying photographers were listed in Federal Aviation Regulations (FAR) 107 and 108 (parts of title 14 CFR); they are now defunct and have been moved to several Transportation Security Regulation (TSR), that is, Title 49 CFR parts 1540, 1542, and 1544. The new federal regulations are virtually identical to the previous regulations when it comes to film and photographic equipment."

The relevant section of the new regulations is at "<http://ecfr.access.gpo.gov/otcfr/cfr/otfilter.cgi?DB=3&query=49000001544@ion=BIBSRT&action=view&SUBSET=SUBSET&FROM=1&SIZE=10&ITEM=1#Sec.1544.211>"

(Note there are two spaces in the URL.) e4 under the above item states "If requested by individuals, their photographic equipment and film packages must be inspected without exposure to an X-ray system." Safe flying! Don

From: 76630,2206

(Continued on page 20)

SETalk

It would help us all if those outside the USA can provide us with their government's regulations concerning airport inspections. cheers/Robert B Slobins

From: 76630,2206

Jen: If the flight originates in the USA, then it is under the jurisdiction of the US government. This is also why we Yanks can drag so much baggage for free, in addition to the hand- inspection of carry-ons.

Indeed, if one brings a laptop computer, it will be inspected manually. It needs to be switched on in front of the inspector. This is the legacy of the Lockerbie crash, where an electronic device hid plastic explosives. I have also had the privilege of having to open cameras and lenses for inspection.

I just allow for enough time for inspections.

What other countries do is entirely their business. It would help to know their policies and procedures. cheers/Robert B Slobins

From: Dale Ireland

Vic I agree with everything you said, well written. I have had many occasions where they would not hand check film, mostly outside the US but also inside the US. In Miami I was told that, sure, if I wanted to press the issue I could go down and wait at a screening station that was not currently being used and when a screener became "available" they would hand check me through, the very strong implication was that Hell would probably freeze over before anyone "became available". There are plenty of ways to get around regulations and having a copy of the regulations in your hand may be just a challenge to some screeners. My advice is to move away from film, go digital, or just quit worrying so much since cases of any real damage from x-rays are EXTREMELY rare.. Dale "What? Me Worry?" Alfred E. Newman

From: Mike Simmons

I had a similar experience in Paris. The young guard spoke English fine (better than my French) and there was no line but he just didn't want to bother hand inspecting my unexposed film. I was as polite as possible but he finally grabbed my film bag and threw it into the x-ray machine. That ended the conversation, which was all he cared about. Mike Simmons

From: Dale Ireland

Since we are swapping stories.. I requested a hand inspection of my film leaving Bolivia and they kindly obliged. Ten minutes later while waiting to board I was picked from the line along with 4 or 5 others and taken to a little booth for a "hand inspection" of a different kind. Not sure if there was a connection but that's the story. Dale

From: Vic & Jen Winter - ICSTARS Astronomy

They're now sending almost everyone through those little "hand inspection" booths these days. They're not quite as technically advanced there... so they do the best they can to beef up security.

We had an unusual equipment/baggage/miscommunication problem when traveling through the LaPaz airport last time. We learned a valuable lesson about checked and carry-on bags. Keep this in mind when traveling with your equipment in groups.

Vic and I always travel with no less than the exact 70lb weight limit of telescopic equipment per bag per person for eclipses or observing expeditions. We always have a small tool pouch that contains all of our cable releases, allen wrenches, electric inverters, GPS remote camera release, bolts, wrenches, X-acto's.. you get the picture. We toss the pouch in checked baggage and don't worry about the screening whatsoever. We have seen xray screeners take a guest's ticket away for a pair of childrens' scissors, so we like to be safe with.

Vic could not join the group at Southern Skies this June because he was recovering from heart surgery. (He's fine now, BFW). Good friend Tom Martinez took his place. After the Southern Skies Star Party was over, we had a tour extension by car planned. Tom was now obligated to go too. Somewhere along the way, our bags mixed and Tom became steward of my tool kit in his bags. Unaware of the content, when it was time to depart La Paz, Tom had the tools packed in his carryon. I think you can imagine the look of confusion mixed with horror when the poor screening attendant opened the tool-kit and looked inside. Wires, tools, strange electronic devices, knives, plunge-triggers, you name it. It looked even worse when Tom muttered something innocently about the bag not belonging to him.

We were very lucky. They didn't shut the airport down. They didn't take anyone's ticket. Nobody was arrested. The airport and staff were small enough to allow me to re-locate the 'dangerous' parcel to my checked luggage. I even caught the flight home. "Know thy luggage". jen

From: Joel Moskowitz

(Continued on page 21)

SETalk

(Continued from page 20)

Despite the FAA regulation, security has been routinely refusing hand inspection of film. In this atmosphere of increased "security", go argue with them. Joel M. Moskowitz, M.D. 7 (total)solar eclipses and counting

From: 76630,2206

It helps to go to the airport before departure and explain to the air carrier what will happen. I was able to work with Fort Wayne, IN security to ensure the safe passage of the film.

I also mention that the film is in lead bags, so in the interest of security, I advise a manual inspection.

This has worked for me in the USA, and most of the time in other countries. I carry eclipse images on my person in my inside wallet, with my documents. cheers/rbs

From: Geert Vandenbulcke

Before leaving home, why not rewind your film(s) in plastic cartridges that you can buy in a good photoshop (these cartridges are used when one is using bulk film) ? Just be careful when opening and removing the film from the original metal cartridges in the darkroom and replacing the film into the plastic ones - rehearse this with some scrap film under lighted conditions. Then put these cartridges with your film in your pocket, it will not trigger the alarm and they will not be x-rayed and you don't have to bother the security guys... When returning home, remember to tell the guys at the developing lab what type of film is in the cartridge. The cartridges are re-usable a few times, ask them back after development. Geert Vandenbulcke Belgium

From: 76630,2206

This is even better: When you buy film, make sure that the film canisters are opaque. In a changing bag, open the metal cartridge, wind the film really tight and place it in the canister. Ensure that the cover is tightly on the canister. Then tape the canister securely with a label identifying the film.

However, a mistake could create some interesting processing results. Personally, I would leave the film alone.

The issue is that the security people demand that the entire carry-on be x-rayed with everything in it. That is why it may be better to walk it through the metal detectors, making sure that the rolls are in the basket with your watch, jewelry, and keys. The metal detectors have magnetic fields that may harm cell phones and digital magnetic media--these items can go through x-ray. --Robert B Slobins

From: Joel Moskowitz

The last time I went through security at JFK, I placed my watch and ring in the plastic tray, then watched in fascination as they put that through the xray machine!

From: Gerard M Foley

Black plastic often transmits light. I have lens caps which look opaque, but long "dark" exposures show that they let something through which is picked up by the CCD, and I assume might be picked up by film also. Gerry <http://home.columbus.rr.com/gfoley> <http://www.fortunecity.com/victorian/pollock/263/egypt/egypt.html>

From: Dale Ireland

Because the odds of ruining your film by going through the procedure are greater than the odds of having it damaged by the x-ray machine. It's all about odds.

From: Geoff

Isn't that the whole point?? You can't wear watches, jewelry, or have coins or other metal items as you walk through the metal detector, because you will set it off! So really the only other way to get them from one side to the other, is to put them through xray. --Geoff

From: Joel Moskowitz

No, the coins, watches, rings, etc from your pocket go in a plastic tray and was passed around the metal detector, but never went through the xray machine.

From: Dribalz@aol.com

I wonder if the jewelry issue is a matter of the security team. This past week I flew domestically from JFK to upstate NY. I wear some expensive jewelry and didn't remove a single item when walking through the metal detector. Didn't set it off either. As far as the camera it was a digital camera that writes images to a CD ROM--I just put that through the belt as directed. No problems there either. About the only change I noticed in the security procedure was that they spent an inordinate amount of time looking at the images of (not just mine) but everyone else's carry on bags. Take you time I thought--don't miss anything--just make my flight safe. Andrew Hans

From: Geoff

(Continued on page 22)

SETalk

Within Australia (domestic flights), all the experience I have had with flying (which I might add isn't all that much), the jewelry, watches, belts, coins, etc that go in a plastic tray are all sent through the xray machine - always. Perhaps they do it automatically unless you ask otherwise? -Geoff

From: Joel Moskowitz

I am not now, nor have I ever been, convinced that the hoops that security makes us jump through actually makes us safe. For example, the very same security check that I am referring to have a very significant breach. In my carry-on, I had a Nikon f100 camera, a Sony VX2000 video camera, a handheld GPS receiver, batteries for the video camera, videotapes, a few other items, and film inside an xray bag. The same team that put my jewelry through the xray machine then asked me to open my carry-on case, which I fully expected. The person said a lead bag showed up, could I open it. They said that there was film inside and then said, "OK, I see you have cameras inside. You can close the case now." At no time did they look at the cameras, look through them, ask me to turn on the video camera, even ask me anything about the GPS receiver. They are supposed to check electronic devices, look through cameras, turn on electronics, etc. They did not even check my film for explosives residue (which by the way, leaving Orlando prior to 9/11 with my daughter in tow, my film was checked with a swab on the outside of the canister, inside the canister and on the roll itself--for all 25 rolls. This in an airport where people take their children to Disneyworld as I had. I certainly did not fit the profile of a terrorist then, and this was way before 9/11) I could have had explosives in my cameras or GPS and they would not have detected it because they didn't look. But they looked at my jewelry. How absurd! On this same trip, I was travelling with a friend. We both had swiss army knives with us. As per regulations, we both tossed them into our checked baggage. Since this particular airline xray screens ALL bags upon entry to the terminal, they saw the knife in my friend's bag. They asked him to take it out, walked him to the check in counter, then placed the

knife into the checked bag as it was actually checked in. OK, that's good. However, They did NOT even detect mine. That, combined with recent real breaches in security (a 357 magnum being brought onto a plane, several reporters bringing knives onto a plane, all undetected) No, I don't feel safer with the security "show" that is put on that inconveniences us in many ways. A real terrorist would only laugh at these incompetent measures.

From: Patrick Poitevin

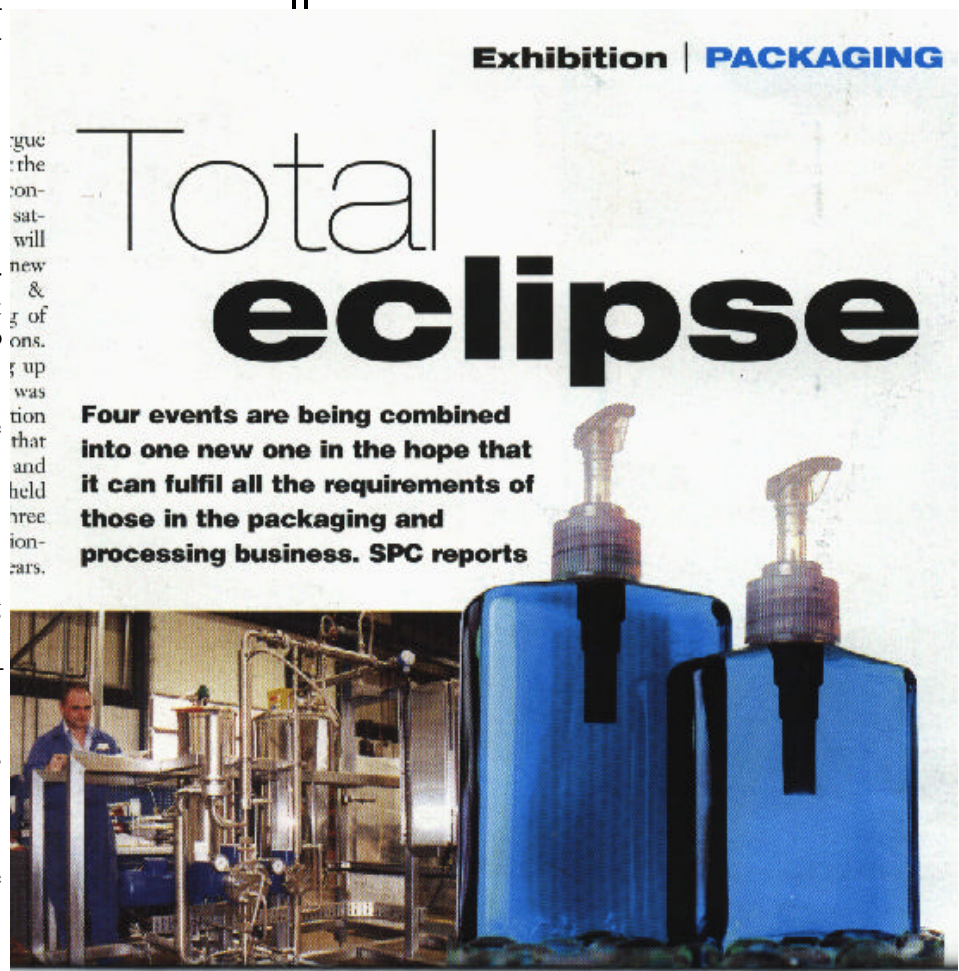
Dear all, After nearly two weeks messages about xrays and airport safety, I believe it is time to close the discussions and keep the solar eclipse mailing list "solar eclipse related". Thank you for your understanding. Best regards, Patrick, Patrick and Joanne Poitevin, solareclipsewebpages@btopenworld.com, <http://solareclipsewebpages.users.btopenworld.com>

ECLIPSES in advertisements: TOTAL ECLIPSE

Exhibition | **PACKAGING**

Total eclipse

Four events are being combined into one new one in the hope that it can fulfil all the requirements of those in the packaging and processing business. SPC reports



The advertisement features two large, blue, square-shaped bottles with pump dispensers in the foreground. In the background, a photograph shows a man in a blue uniform working in a factory setting with complex machinery.

SETalk

Eclipse Timer Software

From: Gordon Telepun To: SENL
<solareclipses@Aula.com> Date: Thu,
12 Sep 2002 04:18:43

Hello To The Group, I am happy to announce that our Eclipse Timer software product for the Windows Pocket PC 2002 operating system and the Windows laptop/desktop operating system has been fully tested, is packaged and is now for sale.

Eclipse Timer is a software product designed to help astronomers time the contact times of solar eclipses, lunar eclipses, planet transits, Jovian moon transits and occultation's. We have had very positive feedback from users who have used it thus far. We are very, very excited at our opportunity to use it to help us photograph the total solar eclipse in Africa this December. We are hopeful and excited that it will assist others in timing and photographing the December eclipse.

Our initial distribution plan was to offer the software as a downloadable product from a couple of the websites that organize the payment and distribution of software electronically. However, this method adds very high costs to the distribution and this was not in line with our goal to keep the selling price as low as possible. Therefore, we now plan to distribute the software by mail order and ship a CD-ROM to purchasers. The order form can be printed off of our website at www.ecliptimer.com.

Please look for short reviews of the software in the December issues of Sky and Telescope and Astronomy magazines.

Comments and questions concerning the software or the website are welcome to the private email addresses on the website. Thank you. Gordon and Angela www.ecliptimer.com

Saros Births and Deaths

From: Rybrks1@cs.com To: SOLARECLIPSES@AULA.COM Date: Thu, 19
Sep 2002 03:18:59

Below is a listing of solar eclipse saros series that either ended or started (as totals or annulars) from years 1950 to 2050. I ignored partials.

Did anyone see (or know of someone who saw) the last TSE Oct 23 1957 in Antarctica?

Did anyone see the first TSE Nov 2 1967 in Antarctica? (Same saros as Nov 23 2003)

I know that quite a few saw the last hybrid Oct 3 1986 near Iceland.

I assembled this list manually from EclComplete. Ray Brooks

JD d/w Gregorian Saros/r# UT(GMT) gamma type Lat. Long. Mag or date h min
Dur m:s

ends

2433359 Sat 1950 Mar 18 119 26 15:31.5 -0.9991 NC-ann. -60.92 -41.00 0.929

ends

2435958 Mon 1957 Apr 29 118 28 24:04.9 0.9990 NC-ann. 70.61 -40.25 0.967

ends

2436135 Wed 1957 Oct 23 123 20 4:53.4 -1.0022 NC-tot. -71.18 23.16 1.001

starts

2439797 Thu 1967 Nov 2 152-28 5:38.3 -1.0009 NC-tot. -62.04 27.90 1.012

ends

2444108 Wed 1979 Aug 22 125 18 17:21.7 -0.9634 Annular -59.63 108.56 6:02

ends

2446707 Fri 1986 Oct 3 124 20 19:05.3 0.9926 Ann/Tot 59.87 37.62 -0:00

starts

2456777 Tue 2014 Apr 29 148-19 6:02.9 -1.0002 NC-ann. -70.65 -131.43 0.984

ends

2463687 Wed 2033 Mar 30 120 29 18:00.3 0.9776 Total 71.29 155.39 -2:37

starts

2467349 Thu 2043 Apr 9 149-19 18:55.1 1.0030 NC-tot. 61.31 -152.22 1.010

starts

2467526 Sat 2043 Oct 3 154-28 2:59.1 -1.0106 NC-ann. -60.96 -35.51 0.943

ends

2467674 Sun 2044 Feb 28 121 28 20:21.8 -0.9954 Annular -62.18 25.21 2:27

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ends

2467851 Tue 2044 Aug 23 126 20 1:14.2 0.9609 Total 64.33 120.32 -2:04

Solar Artwork

From Stephen Walton <stephen.walton@csun.edu> 3 September 2002

Americans know that U-Haul rental trucks often have artwork on the side depicting various historic or scenic sites in the United States. While on my Labor Day vacation at the Grand Canyon, there was a U-Haul truck parked outside the lodge at which my family and I were staying. On the side of this particular truck was a large painting of a solar prominence, with the legend "NOAA Space Environment Center, Boulder, Colorado." Quite a nice little advertisement for our field, I think.

Venus and the Solar Limb Darkening

From Scholl-Faurobert <faurob@obs-nice.fr> 09 Sep 2002

Dear colleagues, This message is intended to inform the solar community about a project that we are starting at the Observatoire de la Cote d'Azur (France) and which requires an international collaboration.

VENUS AND THE SOLAR LIMB-DARKENING

On June 8th, 2004 the planet Venus will transit the solar disk. This very rare phenomenon will be completely visible from all of Europe and from a large part of Africa and Asia; north and south America will observe the end of the transit only. In Nice we wish to take advantage of this event to measure the limb-darkening of the extreme solar limb for different spectral bands in the visible. It seems that no such observations are presently available! They would provide valuable informations on the density and temperature gradients in the upper photosphere. Furthermore, the space mission (France, Belgium, Switzerland) PICARD, will measure the solar diameter in order to precise its variation with the solar cycle. Some knowledge of the expected shape of the extreme solar limb is advisory to prepare the mission.

A very simple observing set-up is being tested at the Observatory of Calern (north of Grasse).

A monochromatic image of the full solar disk is formed by a small lense of 2.5 cm and recorded on a CCD camera operated by a PC. The transit of the dark disk of Venus at the solar limb is followed with high temporal resolution allowing a spatial scanning of a small fraction of arcsec of the limb-darkening. The measurement is derived from photometric data which are independent of the image distorsions due to turbulence in the earth atmosphere, as long as the full image of the Sun is formed on the CCD frame. More details will be given to interested teams.

NEED FOR AN INTERNATIONAL COLLABORATION:

Weather conditions are always uncertain, even in June in the south of France; this is the primary reason why the same experiment should be carried out at various places. Furthermore, independent measurements allow one to increase the accuracy and reliability of the results. Due to parallax effects, the transit of Venus seen from different locations on the earth will intercept different solar latitudes, hopefully providing a set of quiet and active regions.

PROPOSAL:

We could provide some teams with the basic equipment needed for the experiment (filters, lenses...). The guiding system and the controlling PC should however be available at the observing place.

SETalk

We ask any interested persons to, please, send an e-mail to faurob@obs-nice.fr or gay@obs-nice.fr , and we shall answer any questions about this project. P. Assus, M. Faurobert, J. Gay, J.P Rivet, J.L. Schneider

Strange case

From: Jean Meeus To: Solar Eclipses
<solareclipses@aula.com> Date: Mon, 23 Sep 2002
06:42:50

A few days ago I received the following message from a Mr Simon Zoltan, of Brazil:

I am an author of several, quite unknown, books. I wonder if you would be interested to read my article about a proposed revision of the chronology of the ancient world. It is about 24 pages. It includes dozens of ignored astronomical observations from about 2500 BC and AD 59. Most of them are from Mesopotamia, Israel, China, Ireland, Italy, Egypt, and Anatolia. For example, three solar eclipses are fixing the foundation of Rome (745 BC) and the life of Romulus: June 15, 763 BC, June 25, 745 BC and July 17, 709 BC, preserved by many ancient authors.

I have immense difficulties to find any publisher that would make it available for the public. I cannot find any scholar being interested in the

ancient Chinese and Irish eclipses, etc. Let alone, to find an expert who would write a Foreward to such new publication. I would be very thankful to you if you could help me in any of these questions. Also, perhaps you would be kind enough to suggest me a website where I could find/read basic data (dates and magnitudes) of ancient Near East eclipses on the internet. Mainly from 840 to 810 BC at Nineveh. (I know Oppolzer and Prof. Kudlek-Mickler's books but there is nothing similar available in a Brazilian library.)

Did somebody ever heard of this Mr Zoltan? To me the case seems rather suspicious. A "proposed revision of the chronology of the ancient world"? Whow...! And what are those dozens of "ignored" ancient observations? How can Mr Zoltan *know* them, if they are ignored? I suspect that the reason why Mr Zoltan cannot find any publisher nor any interested scholar, is simply that what he writes is not serious. Any comment? Jean Meeus

From: Govert Schilling

Jean -- As you certainly know, hundreds of people all over the world have their own theories about Life, the Universe and Everything. They are not taken serious by the scientific community, they feel misjudged, they compare themselves to poeple like Wegener (an amateur geologist who came up with a very preliminary idea of continental drift and who was not taken serious by proffesionals for decades), and usually, they also happen to prove Einstein wrong. Most astronomers (and astronomy journalists, I can assure you) receive these kind of theories by mail or e-mail at least a couple of times per year. So I guess this is just another case, although to be fair, you can't of course draw this conclusion before you have seen the idea/theory itself. So the least you could do is ask Mr Zoltan to send you his 24-page manuscript, and to take a look at it (or let an expert take a look at it). --Govert <http://www.govertschilling.nl>

Film with eclipse feature

From: solareclipsewebpages@btopenworld.com To: SOLARECLIPSES@AULA.COM Date: Sat, 28 Sep 2002
20:28:16

Dear all, Follaowing film/vdeo has an eclipse feature as well: Lara Croft, Tomb Raider, Paramount Pictures, 2001
Best regards, Patrick

From: klipsi@bluewin.ch

and another one I just saw: LE PEUPLE MIGRATEUR , by Jacques Perrin and Jean-Marc Henchoz, beautiful nature movie showing migrating birds (geese, storchs , swans, etc) filmed in air, and there is , just during few seconds, a view of a total eclipse through clouds. I think it is the 1999 TSE , it clearly shows that detached prominence. Klipsi

**Lara Croft
Tomb Raider
with eclipse
feature**



SETalk

When I die

From: Dave Balch, The Stay-at-Home CEO To: solarE-CLIPSES@AULA.COM Date: Fri, 20 Sep 2002 14:40:25

My wife and I were talking about where we wanted to be buried (nice subject!) and it occurred to me that I would like to be buried in Carbondale, IL (if I die before 2017) because there will be two eclipses there, 2017 and 2024.

That made me wonder if there is a better place for me to be where my gravesite will be in the path of MORE than two eclipses. Any suggestions?

From: Hal Couzens

No suggestions as requested but I hope to still be alive to see those eclipses...

So... does anyone know what Carbondale is like? I've thought of buying a house there so that I will twice in my life not have to travel to see an eclipse but be able to watch it from my very own porch.

People on this list might understand, people off it will think it utterly ridiculous, but then again they're not going to read it.

From: 76630,2206

Dave: Since being dead is for eternity, I am sure that your body and bones will be in many eclipse paths.

From: Michel-André LEVY

I really don't know what Carbondale is like, but I can guess how it could become : a city with strange people, with the highest density of telescope in the world, and a cemetery full of people buried here for odd reasons. Michel-Andre Levy

From: Evan Zucker

For starters, you can check out the official web site at <http://www.ci.carbondale.il.us/Index.htm>, where it says:

"Carbondale is located in the heart of Southern Illinois and is the trade, tourism and educational center for the region. Bordered by a national forest, a national wildlife refuge, and a state park, it is also the home of Southern Illinois University. The community serves as the host and focal point for many of the region's business and recreation activities."

It seems likely that real estate is relatively inexpensive there, at least by U.S. standards. At the moment, it's 64 degrees F

and raining there. Here's the Carbondale weather page: <http://www.wunderground.com/US/IL/Carbondale.html>

Here's a map of the area: <http://www.mapquest.com/maps/m a p . a d p ? c o u n t r y = U S & a d d t o h i s t o r y = & a d d r e s s = & c i t y = c a r b o n d a l e & s t a t e = i l & z i p c o d e = & h o m e s u b m i t . x = 3 5 & h o m e s u b m i t . y = 9>

Don't be misled by www.carbondale.com -- that's for Carbondale, Colorado. There are Carbondales in 7 different U. S. states.

I traveled to the vicinity of Carbondale on May 10, 1994, to observe an annular eclipse. I flew into St. Louis and drove northeast to Springfield, IL. Carbondale is southwest of St. Louis. Evan H. Zucker San Diego, California

From: Peter Tiedt

Jean Meeus lists several places in one of his "Morsel" books where there are four (or even 5 eclipses) in a relatively short space of time. You might have to be buried at sea though ;-)

But, as you will be there forever, you should "see" quite a few ... at least until the recession of the moon stops totals .. P

From: solareclipsewebpages@btoopenworld.com

Dear All, For the convenience of all SEML readers, keep subjects and titles (and contents) solar eclipse related. Institutes and SEML subscribers bin or delete such subjects immediately.

In addition, do not change subject titles either in case of replies. Some of the SEML (including the SENL) file automatic per subject or title.

Thank you for your understanding. Best regards, Patrick

From: rybrks1@cs.com

Carbondale is a very good spot for an eclipse in 2017. It is only about 45 minute drive to the center of a 34 mile diameter ancient crater with a central peak that can be seen from Garden of the Gods park Shawnee National Forest. It is one crater of about 7 that pelted Earth in a perfectly straight line from Kentucky thru Illinois and Missouri. Weather can be hot, very hazy and humid though in August. Ray Brooks

From: 76630,2206

(Continued on page 27)

SETalk

For those of you who are planning ahead to 2017....

The MidWest can be in the 'ring of fire'. This is the area of thunderstorms and unsettled weather that runs around the Bermuda High in the summer. You can have a stationary front or trough parked in the area.

I am sure that in time Jay Anderson will have predictions for 2017. Meanwhile, I would advise staying out of the real estate market <grin>. cheers/rbs

From: Crocker, Tony (FSA)

I'm sure I'm not the only American on the list who can already figure out where to be in 2017. There are large areas in eastern Oregon, Idaho and Wyoming with desert or semidesert climates which will have excellent weather prospects.

From: Mel Bartels

Best weather prospects for that time of year will be the pacific northwest. That time of year is very dry with almost no rain or clouds. Doesn't much matter anyhow, because the road system is so good that you can travel hundreds of miles in hours if need be. There are many wide open areas and side country highways and roads that go on forever so no worries about finding a spot to setup in. Had a great view of the 1979 eclipse from north central Oregon in February and the November Leonids last year were perfect without a cloud in the sky - our two worst weather months - just to illustrate that even at the absolute low point of weather, it's not that bad here! Mel Bartels (Cottage Grove, Oregon)

From: Mike Simmons

>Had a great view of the 1979 eclipse from north central Oregon in February... Mel Bartels (Cottage Grove, Oregon)

I spent two weeks in the northwest in 1979 and managed to see the Sun only once. That was the only time it really mattered -- about 20 minutes around totality after chasing the only clear patch between two passing storm fronts. We were in southern Washington, a bit farther along the path than you, I assume. Had I known, I'd have just headed for your area! Mike Simmons

**San Diego Union-Tribune article**

From: Evan Zucker To: SOLARECLIPSES@AULA.COM Date: Mon, 30 Sep 2002 03:56:08

I was pleasantly surprised to find a large eclipse article on the front page of the Travel section of the San Diego Union-Tribune today (Sunday). The on-line version doesn't have any of the graphics but does seem to include all the text:

Chasing a shadow Special effects of a total solar eclipse are unmatched by Hollywood http://www.signonsandiego.com/news/uniontrib/sun/travel/news_mz1t29eclips.html

The primary graphic was a large photo of a total solar eclipse filling half of the front page. Evan H. Zucker San Diego, California

New astrophoto gallery!

From: 76630,2206 To: "INTERNET: SOLARECLIPSES@AULA.COM" <SOLARECLIPSES@AULA.COM> Date: Fri, 27 Sep

There is an astrophoto gallery whereby one can post images in real-time.

The site is www.spacew.com, and the gallery is www.spacew.com/gallery.html.

This site is the Solar Terrestrial Dispatch, run by Cary Oler. There is plenty of solar and spaceweather information obtainable, plus up-to-date information on aurorae, scheduled arrival time of coronal mass ejections, and auroral observations is real-time or near-real-time.

Anyone can post images, provided that the rules are followed.

Recalling a previous discussion on whether or not one can see changes in the appearance of a total solar eclipse, please see my images of a limb surge-and-spray prominence of 31 August. This prominence reached at least height of 1/4 solar radius. I say this because some portions were traveling fast enough to be shifted out of the 0.7 A bandpass.

During totality, the naked eye or lens will be able to see all of the prominence. At the prime focus of a 200mm SCT, the prominence was moving. Even in 30 seconds' time, it was changing configuration. --Robert B Slobins

SETalk

Eclipse Related Software of Interest to You

From: Bryan Brewer To: SOLARECLIPSES@AULA.COM Date: Thu, 26 Sep 2002 17:20:40

FYI -- Here is a message I received from Gordon Telepun about his new Eclipse Timer software. Perhaps it will interest some folks for the upcoming Dec. 4th event. -- Bryan

Original Message ----- From: "Eclipse Timer CustoeMr Support" <eclipsetimercust@bellsouth.net> To: "Bryan Bewer" <bryanb@earthview.com> Sent: Sunday, September 22, 2002 5:30 PM Subject: Eclipse Related Software of Interest to You

> Dear Bryan, My name is Gordon Telepun and I am a fellow eclipse chaser. My wife, Angie and I have your book and we love it.

>
> I would like to inform you about a new and unique software product that maybe of interest and maybe very helpful for your group of eclipse chasers. First time eclipse viewers and veterans as well, will recognized the benefits of this unique software. The software is called Eclipse Timer and it allows the programming of all of the contact times of the eclipse in advance and then it counts down to the contact times with an audible voice. This can increase the enjoyment for those just observing the eclipse and can be EXTREMELY helpful for people trying to photograph the eclipse. Another novel feature is that the software will remind people to observe for the natural phenomenon that occur during the initial partial phases of the eclipse before totality.

>
> The software runs on handheld devices using Pocket PC 2002 and a Strong-Arm processor, so it is portable and can easily be transported to the field.

>
> Our website with extensive information about the software is www.eclipsetimer.com.

>
> Eclipse Timer is highly recommended by Bill Kramer, a veteran of 9 total solar eclipses, as useful for eclipse photography. His website and his discussion can be seen at <http://www.eclipse-chasers.com/eclphot.htm>.

>
> I would ask that you please consider forwarding this email to all the participants in your 2002 eclipse tour and any other eclipse chasers that you know. This unique software can really help your friends and participants enjoy the event and I am sure they would be interested to hear about it. It is the only software available designed specifically for eclipse timing.

>
> Thank you very much and please do not hesitate to contact us if you have any questions. Gordon and Angela www.eclipsetimer.com



PLATE I.—TOTAL ECLIPSE OF THE SUN (from a Painting by Kranz.) (Page 298.)

Kranz' painting from Todd's book

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2**Major Update to Africlipse - detailed predictions**

From: Peter Tiedt To: Solar Eclipse Mailing List
<SOLARECLIPSES@AULA.COM> Date: Fri, 06
Sep 2002 20:57:57

I have just completed the upload of detailed predic-
tions for over 80 000 locations in southern Africa.

These locations cover Angola, Botswana, Lesotho,
Malawi, Kruger Park, Mozambique, Namibia, South
Africa, Zambia and Zimbabwe.

Predictions have been generated with Occult v2, and
are based on geographic co-ordinates downloaded
from the GeoNet Names Server.

The zipped text files can be found on http://www.eclipse.za.net/html/2002_pred.html Files are sorted by
country, with the smaller countries in a single file, and
larger countries in multiple files.

In addition, I have discovered that a jeweller in
Messina is minting a special release of gold coins for
the eclipse - these may be of interest to the group,
both as a memento or an investment. Details can be
found on the 2002 main page <http://www.eclipse.za.net/html/2002.html> (I have no commercial interest in
these coins). Direct link - <http://www.eclipse.za.net/html/2002.html#Gold>

Please advise any errors / omissions / booboos with
the prediction tables.

There have also been additions to the tours and where-to-
stay pages.

Where to Stay - http://www.eclipse.za.net/html/2002_w2s.html

2002 Tours - general: http://www.eclipse.za.net/html/2002_tours.html

Tours - Botswana and Namibia - http://www.eclipse.za.net/html/2002_tours_bots.html

Tours - South Africa - http://www.eclipse.za.net/html/2002_tours_rsa.html

Tours - Zambia and Zimbabwe - http://www.eclipse.za.net/html/2002_tours_zim.html

Tours - Mozambique - http://www.eclipse.za.net/html/2002_tours_moz.html

Wild Frontiers and Wild Life Adventures also still have a
few places left.

http://www.eclipse.za.net/html/wild_frontiers.html

<http://www.eclipse.za.net/html/wla.html>

Peter Tiedt
rigel@stars.co.za
Visit my website at
<http://www.eclipse.za.net>



4x4 in Africa?

Eclipse Australia 4 dec 2002

From: Geert Vandenbulcke To: SOLARECLIPSES@AULA.COM Date: Sat, 07 Sep 2002 08:30:27

Hi, I found this on the "Aude" list:

Message : 4 Date : Fri, 6 Sep 2002 16:28:10 +0200 De : "Patrick Martinez" <pmtz@cclub-internet.fr> Objet : Eclipse totale de Soleil du 4 decembre 2002

Bonjour, L'association ADAGIO a loue un village de vacances a Roxby Down en Australie, a proximite immediate de la zone de totalite de l'eclipse, pour la nuit du 3 decembre (veille de l'eclipse), et la nuit du 4 decembre (soir de l'eclipse). Quelques chambres ne sont pas occupees par le groupe ADAGIO et peuvent retrocedees a tout astronome amateur qui organise son propre voyage et chercherait un logement sur le lieu de l'eclipse. Me contacter en prive si interesse.

Patrick Mart inez

In translation the message says that the ADAGIO society has rented a holiday village in Roxby Down, Australia near the totality zone and this for the nights of 3 and 4 Dec 2002. A few rooms are not taken by the ADAGIO society and could be subrented to eclipse chasers travelling on their own. Contact mr Patrick Martinez pmtz@club-internet.fr Best regards, Geert

(Continued on page 30)

Vandenbulcke, Belgium

From: Fraser Farrell

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There were certainly no signs of a "vacation village" when I was in Roxby Downs on June 9 this year. Most forms of permanent or semi-permanent accommodation fill up very quickly in Roxby Downs. There's a housing shortage.

This is because all forms of development and construction in the Roxby Downs district are constrained by a vast web of laws and regulations. Including specific Acts Of (the South Australian state) Parliament that affect only this region. Collectively these amount to thousands of pages of legal dribble which would have done Sir Humphrey Appleby proud...so it takes b**** ages to get any building work approved.

So I reckon this "village" is in fact some existing place, which is being recycled for tourist use. My suspicion would be the old Single Persons Quarters #1 - or SPQ1 as we called it when I worked up there - in the Olympic Dam industrial estate. You can drive from SPQ1 to the eclipse's North Limit in about 15 minutes.

If my suspicion is indeed correct, then I hope the missing air conditioners and broken insect screens on SPQ1's rooms are replaced. Or it won't be a comfortable stay. Rooms in the (much nicer) SPQ2 & SPQ3 are unlikely to be available unless you hand over significant amounts of money to the management. These are reserved for mine employees & contractors.

OTOH perhaps there is a brand new collection of tourist cabins tucked out of sight behind the sand dunes? I shall make some enquiries.

In any event, you will need to get away from Roxby's disgusting light pollution to see the stars well at night. There are lots of dark spots off-road along the first ~10km of the Roxby to Andamooka road. The road past the Roxby cemetery is also dark but tends to attract the local kids for impromptu night races. And the Borefield Road (Olympic Dam to Marree) is within glare range (and smelter fallout) of the metallurgical plant for its first ~30km.

Andamooka Caravan Park, which is also a short drive outside of North Limit, still has vacancies available. The Andamooka Track (dirt road) goes from Andamooka itself south to and then (approximately) along centreline; joining the Woomera to Roxby Downs road (bitumen) at centreline. The Track is well worth considering as an alternative viewing location.

See the detailed topographic map and descriptions at <http://astronomy.trilobytes.com.au/2002/roxby-road.htm> cheers, Fraser Farrell



Eclipse bag from Zimbabwe (given by Julien Onderbeke – picture PP)