

SOLAR ECLIPSE NEWSLETTER

Solar Eclipse Mailing List

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Dear Eclipse Chasers

Well I only just made this one in time before the end of the month, and just before Patrick gives me the files already for March. Please excuse the delay, but it was due to the special edition of the Xmas Partial Eclipse.

Please let me explain why feel I cannot download pictures and data from the internet. It is purely a question of time. I'm back to being

an undergraduate again, work related and have to spend a great deal of time studying. I hope that producing the newsletter for Patrick frees up some time for him to write articles for the newsletter and research for the calendar.

Time spent downloading files from web sites will eat away at study time. I hope everyone understands.

I also figured that you all have the files already and can send them to

me just as easy at joanne_edmonds@hotmail.com

But, the more articles you send will make the newsletter more interesting and varied from the emails exchanged over the month, and therefore a more valuable document and resource for everyone.

So please send me articles that you think would be of interest to the rest of the eclipse fans.

Joanne

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 (patrick_poitevin@hotmail.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.

SUBSCRIBING TO THE SOLAR ECLIPSE MAILING LIST

THE SOLAR ECLIPSE MAILING LIST IS MAINTAINED BY THE LIST OWNER PATRICK POITEVIN AND WITH THE SUPPORT OF JAN VAN GESTEL

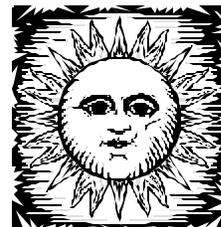
HOW TO SUBSCRIBE:

IN THE BODY OF THE MESSAGE TO listserv@Aula.com SUBSCRIBE SOLARECLIPSES name, country.

ECLIPSE CALENDAR



FEBRUARY



Please find herewith February's solar eclipse calendar.
If you have remarks or additional items, please send me a message.

February 02, 1907 Death of Dmitri Ivanovich Mendeleeff (1834-1907), Russian. Uses a balloon to ascend above the cloud cover to an altitude of 11.500 feet (3.5 km) to observe an eclipse in Russia. (Ref Rc 1999)

February 05, -0001 (2 BC) A Partial Solar Eclipse on Feb. 5 of the year 2 BC in Chang-An, the capital of the Han Dynasty in China, was seen as a good omen for Confucianist Wang Mang, who would soon wrest control of the government from the reigning emperor. Ref. Rudi Thomsen, Ambition and Confucianism, A Biography of Wang Mang. And F.R. Stephenson, Atlas of Historical Eclipse Maps, East Asia 1500 BC to AD 1900. (Ref. ENB10)

February 07, 1834 Birth of Dmitri Ivanovich Mendeleeff (1834-1907), Russian. Uses a balloon to ascend above the cloud cover to an altitude of 11.500 feet (3.5 km) to observe an eclipse in Russia. In the Royal Society they mention as well 7 as 8 February 1834. (Ref. Rc 1999).

February 08, 1984 Chant 3315 (1984 CZ): Minor planet discovered February 08, 1984 by E. Bowell at Anderson Mesa. Named in memory of Clarence Augustus Chant (1865-1956), generally referred to as the "father of Canadian astronomy". He participated in five Solar Eclipse expedition, the most important being the one he led to Australia in 1922 to test Einstein's prediction of the deflection of starlight by a massive body.

February 11, 1868 Death of Jean Bernard Leon Foucault (1819-1868), French physicist. Photographed the sun and measured the speed of light together with (Armand) Hippolyte Louis Fizeau (1819-1896). (Ref. Rc 1999)

February 12, 1831 The black slave preacher Nat Turner witnessed an annular solar eclipse. It was a vision from God of a "black angel" overtaking a "white angel". The fomenting slave rebellion gained impetus and on August 13 Turner saw another spectacle - a naked eye sunspot. The rebellion began on August 21 but was quickly crushed and Turner hanged.

February 12, 1893 Marcel Minnaert (1893 - 1970) 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. He gave a lot of explanations in regard of effects with solar eclipses.

February 14, 1779 Death 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)

February 14, 1953 Last solar eclipse on Valentine's Day. This century was blessed with Valentine's Eclipses. There was a partial solar eclipse in 1953, a total solar eclipse in 1934 and an annular eclipse in 1915. Unfortunately, we do have to wait till 2306 and 2325 for the next Valentin Solar eclipses. Both will be Total Solar Eclipses.

February 14, 1980 Launch of Solar Maximum Mission, American Solar mission which achieved important results.

February 14, 1996 SOHO, European Solar mission reaches observation place: lagrangepoint L1.

February 14, 2325 A region near 29 degrees East and 23.5 degrees North, in the dessert of southern Egypt, will see five total so-

(Continued on page 3)

ECLIPSE CALENDAR

lar eclipses in a span of 31.8 years during the 24 th century: 14 February 2325, 20 June 2327, 5 February 2334, 31 July 2353, 23 November 2356. (Ref. JM 9/99)

February 15, 0538 The first solar eclipse recorded in Britain, described in the Anglo-Saxon Chronicle; it occurred four years after the death of Cerdic, first king of the West Saxons. The Sun was two-thirds eclipsed in London.

February 15, 1564 Birth of Galileo Galilei. During a short stop of his parents in Piza, Galileo was born. His father, Florentine Vincenzo Galilei was musician. (ref. De jonge Galilei, Davidfonds nr. 341)

February 15, 1858 Birth of W. Pickering, American astronomer. Discovered satellite of Saturn Phoebe. Predicted in 1909 the existence of Pluto, observed also the Moon, Mars and Solar Eclipses.

February 15, 1961 The first attempt to show a total solar eclipse on television from several stations along the track was made by the BBC at the eclipse of February 15, 1961. The track passed from France through Italy and former Yugoslavia, and thence into Russia. The attempt was successful and totality was shown from France, Italy and Yugoslavia. In eastern Yugoslavia, the place Nis, a TV camera was placed at 4900 foot. Patrick Moore failed to broadcast the event. (ref. S&T 4/61 p 203)

February 15, 1961 Dr. Menzel notes that television coverage was excellent, and almost everyone in Europe could view the eclipse in one way or another. It was Galileo's birthday, and a 45 minute television program reviewed his contributions and those of other Italian and European scientists toward our present understanding of the sun. (ref. S&T 4/1961p191)

February 15, 1961 Widely viewed through southern Europe. Observed Total Eclipse by W. Carton, J. Meeus, Partial phase observed by F. Verbelen. F. Schmeidler (Germany) tried again in Italy on deflection of starlight (relativity tests). Sun was too low. Tried in earlier and later Eclipses. Poland observed during Part (94%) with reaction of bees, masse, moths, butterflies (confirmation of earlier Eclipse observations) by Wojtusiak and Majlert.

February 15, 1961 Russians studied for the first time the solar corona and upper-atmosphere phenomena during an eclipse from high-altitude stabilized platforms. On eclipse day, about noon, Russian scientists launched a series of rockets from an undisclosed base in the zone of totality. (ref. S&T 6/1961p328)

February 15, 1961 The German astronomer K. O. Kiepenheuer, who was director of the Fraunhofer Institute at Freiburg, went to Laiguera, Italy, a little village not far from Imperia. He had 3 small cameras for studying the structure of the inner corona, which he wished to correlate with surface features on the sun. His party had a dictaphone on which to record their impressions, but during totality the observers were so preoccupied they forgot to talk! Later, when the recording was played back, it had one startling feature: Birds twittered distinctly in the background up to the beginning of totality, when these sounds stopped suddenly. Immediately after totality, the birds became active again. (ref. S&T 5/1961p264)

February 15, 1973 Launch of Prognoz 3, Russian mission for research of Solar and röntgenrays.

February 16, 1980 The only cricket match to have been interrupted by an Eclipse of the Sun was the Jubilee test between India and England on February 16, 1980. A Solar Eclipse was due that afternoon, and the Indian Board, in agreement with the English team, did not want the responsibility of a crowd of 50.000 damaging their eyes by looking at the Sun when the Eclipse began. The Test Match continued on the next morning.

February 22, 1824 Birth of Pierre Jules Cesar Janssen (1824-1907, France), French astronomer and physic. Studied the Sun. Co-discoverer of the lines of Helium in the Sun, that time on Earth not yet discovered. Observed solar eclipses of which one from Algeria when he escaped Paris with a balloon during the war. (ref Rc 1999)

February 23, 1938 1722 Goffin 1938 EG. Minor Planet discovered 1938 February 23 by E. Delporte at Uccle. Named in honor of the Belgian amateur astronomer Edwin Goffin, who has made extensive computations involving minor planet orbits. Goffin chased quite a few eclipses as well.

February 24, 1938 1552 Bessel 1938 DE. Minor Planet discovered 1938, February 24 by Y. Väisälä at Turku. Named in honor of the eminent German astronomer Friedrich Wilhelm Bessel (1784-1846). (Ref. Sc 1999)

(Continued on page 4)

ECLIPSE CALENDAR

February 24, 1996 Launch of Polar, American satellite. Studied Solarwind in polar orbit around the Earth.

February 26, 1786 Birth of Dominique Francois Jean Arago (1786-1853), French astronomer. Studied solar eclipse of 8 July 1842 and noted it exists of gas. (Ref. Rc 1999)

February 26, 1878 Death of Angelo Secchi (1818-1878), Italian astronomer. Photographed solar eclipse of 18 July 1860. Studied the sun and sunspots. (Ref. Rc 1999)

February 26, 1979 Total Solar Eclipse in Pacific Northwest. Passes through parts of Washington, Oregon, Montana and Manitoba. Observed total by G. Vandenbulcke (Gerard Deman?). Picture Bryan Brewer/Eclipse 1991 p. 37. See graph brightness from jet in Total Eclipse's of the Sun/J. Zirker 1995 p. 71+72 and p. 121+125 on F corona and interplanetary dust.

February 27, 1897 Birth of Bernard Ferdinand Lyot in Paris, French astronomer. Studied polarization of moonlight en planets. Later mainly Solarresearch. Constructed chronograph and the 'lyot-filter' or monochromatic polarizing filter.

February 27, 1906 Death of Samuel Pierpont Langley (1834-1906), American astronomer. Founded in 1922 SAO (observatory), measured the solarconstant, studied aerodynamics. The Royal Society does also mention 22 February 1906. (Ref. Rc 1999)

February 29, -0356 (357 BC) Last total solar eclipse on February 29. This 5 minutes total solar eclipse started off in the Atlantic (near the NE coast of South America), through Africa and ending in Asia. Partial solar eclipse on February 29, 128. It takes only 76 years before we have a next solar eclipse on this date, namely in 184. This is again a partial solar eclipse. This eclipse of 128 was visible in South America and Africa. February 29, 0184 Partial solar eclipse on February 29. The eclipse of 184 was visible in Europe, Eurasia and North Africa. February 29, 648 Annular eclipse on February 29 in the Antarctic and the coast of Australia. This is 464 years after previous eclipse on February 29 in 184. February 29, 1188 Last solar eclipse on February 29. Between 0 and 3000, there are 6 solar eclipses on February 29. This eclipse was an annular eclipse, visible in Australia, Papua New Guinea and Hawaii. It will be 1228 before there is another solar eclipse on February 29, namely in 2416.

February 29, 2416 Next solar eclipse on February 29. February 29, 2872 Last solar eclipse on February 29, before 3000. This partial solar eclipse will be visible in Alaska and Siberia.

Best regards, Patrick

ECLIPSE CALENDAR

Solar eclipse calendar for January

From: Evan Zucker To: SOLARECLIPSES@AULA.COM Sent: Sunday, January 14, 2001 8:44 Subject: Re: [SE] **Solar eclipse calendar for January**

At 03:57 PM 12/13/2000, Patrick wrote: January 24, 1925 Famous New York Eclipse. Northern limit passed somewhere through Manhattan: exact line between 95 and 97th Streets. Observers stationed at every intersection between 72nd and 135th Streets. Path New York and Connecticut clear skies. Millions of people witnessed the Eclipse.

I posted several messages about this very same entry in last year's January solar eclipse calendar, which resulted in a series of messages regarding this eclipse. Rather than post them all again here, I will briefly summarize:

1. Observers were stationed every OTHER block (every 2 blocks), not on every block. That's part of the reason they could only determine the edge of the path to within 2 blocks.

2. It was the southern edge of the totality path that crossed northern Manhattan, not the northern edge. Consequently, most of New York City was unable to view totality that cold clear morning. (I've read that the subways that morning were jammed with people riding uptown to get within the zone of totality.) See for yourself at <http://www.earthview.com/timetable/NorAmerTSE1901.htm>.

Patrick subsequently posted the following article I had sent him from the New York Times:

August 8, 1999, Sunday The City Weekly Desk

F.Y.I. By DANIEL B. SCHNEIDER Eclipsing the City

Q. When was the last time a total solar eclipse was visible from New York City?

A. On the morning of Saturday, Jan. 24, 1925, just after 9 o'clock. It was a cold, clear day, and the city was covered by snow.

A front-page article in The New York Times said: "Downtown Manhattan at 8 o'clock -- even at 9 o'clock, and for a good half-hour thereafter -- was not a bit like its usual self. The financial district had the appearance of a Sunday afternoon in Summer, although groups of clerks strained their necks from eastward-facing windows or tried to catch glimpses of the sky spectacle from the small open spaces between the tall buildings."

New York City was at the southern edge of the eclipse's path. In fact, the "belt of totality" reached only as far south as 96th Street in Manhattan, so residents of Brooklyn, southern Queens, Staten Island and much of Manhattan missed the full spectacle. They crowded onto roofs, bridges and the upper floors of skyscrapers nonetheless. Open spaces in the city's northern reaches were mobbed by eclipse gazers, who braved the 9-degree cold to watch as the moon's shadow gradually cast the city into morning twilight. Streetlights across the city flickered to life. Skyscrapers blinked in empty streets. At the Bronx Zoo, herds of deer raced in panic.

At 9:11, the sun disappeared completely. "As the black ball of the moon settled over the fiery sphere of the sun, the brilliantly shimmering corona came into sharp relief against the dull sky," The Times wrote. The sun reappeared about 30 seconds later.

The next total eclipse to be visible from New York City will occur on May 1, 2079, reports James Rao, a lecturer at the Hayden Planetarium. Others will follow shortly thereafter, on Oct. 26, 2144 and April 14, 2200.-- EVAN W is

(Continued on page 6)

Millions of people witnessed the Eclipse.....

Rather than post them all again here, I will briefly summarize:



ECLIPSE CALENDAR

Solar eclipse calendar for January...cont.

the first President-select since 1876.

From: Glenn Schneider

Evan, et al., I received a first-hand account of this eclipse from my late grandfather, Max Wenig, before I saw my first total solar eclipse. I remember his awed description vividly. I cannot say that this is what prompted me to my life of eclipse-chasing, but it certainly contributed. He was 17 at the time (1925), and he, his siblings (all six of them), and his parents took a "long trip up to the country - Vancortland park in the Bronx to see the full eclipse" (his words from an old journal of mine). He was living in southern Brooklyn at the time. He related that the park in the north Bronx (I am bemused today as he refereed to this as being in the "country") was jammed with people from all over the city, and indeed the subways were running at capacity AND had augmented service for the anticipated flow of people. Sadly, this was the first, and only TSE he was ever to see, but it was such a memorable event he had spoken of it often until his passing.

By the way, for completeness, I understand the observers stationed every two-blocks were mostly drawn from the Navy, and they were spaced on ODD number blocks, so the "96th" street attribution for this eclipse must have come from interpolation ;-). Cheers, Glenn Schneider

From: Gerard M Foley

Southern limit in Manhattan. This eclipse was quite a puzzle to me. For years I thought I had witnessed it. In 1920 we lived in Katonah, N.Y., and I had a distinct "recollection" of my father taking me down to New York City to see it. As is correctly noted above, however, NYC's total eclipse was in 1925, when we lived in Chattanooga TN. The date is around the time of year the American Institute of Mining Engineers (later Mining and Metallurgical Engineers), held its annual meeting, usually in New York City. It is possible that my father was in NYC for that meeting and able to witness the eclipse, and transferred the memory to me. So, alas, I can only claim to have been on the centerline of eight total eclipses (four near perfect views, two fair views, one spotty and one no view at all). Gerry K8EF

From: Evan Zucker

As is correctly noted above, however, NYC's total eclipse was in 1925, when we lived in Chattanooga TN. I'm familiar with Katonah -- I'm a native of New York City. Although I haven't checked precisely, I think it's quite possible that Katonah was within the 1925 totality zone. It's about 40 miles to drive from the southern totality limit in Manhattan to Katonah, and it's even less as the crow flies. Too bad you moved 5 years too early. By the way, I enjoyed your web site. There aren't too many people around who saw their first TSE in 1932. Evan H. Zucker

From: Evan Zucker

Thanks a lot for the personal background. I was always a bit surprised that none of my relatives who lived in NYC in 1925 remember seeing it, especially because they lived in northern Manhattan or the Bronx. (Of course, my father had a good excuse because he was only 18 months old at the time.) -- EVAN



From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Monday, January 22, 2001 9:11 PM Subject: [SE] **Ref. Astronomia Y Universo**

Dear All, The January 2001 issue of the Spanish astronomical magazine Astronomia y Universo has following solar eclipse related items:

Overview of 2001 solar eclipses

Eclipses solares en Espana en el siglo XXI

Heliofisica by Al Fargani Ben Azahara

La MIR que no cayo sobre Paris (picture) by Miguel Angel Perez Oca

Best regards, Patrick

GENERAL TOPICS

Coronal sketches of 6 eclipses

From: Chris Malicki To: SOLARECLIPSES@AULA.COM Sent: Monday, January 15, 2001 6:11 AM Subject: [SE] coronal sketches of 6 eclipses

Dear SE list, I've finally posted sketches that I made of coronas and prominences from 6 of the 8 totals that I've seen (1991 was largely clouded out, and 1979 was my first and too emotional to do sketching). The totals of July 1990 and June 1992 were observed by very few people and I have never seen drawings or photos of these eclipses. I'm therefore especially happy that I can finally post my drawings of these eclipses on my website (address below) Regards, Chris Malicki

From: Evan Zucker

Nicely done. Thanks for sharing it. I also really enjoyed reading your reports on various eclipses. On 4 Jan 92, you were especially fortunate to have selected Point Loma in San Diego as your viewing site after fleeing the clouds in Los Angeles. I was living in San Diego at the time (and still do), and it turns out that Point Loma had one of the very best views in terms of avoiding the worst of the clouds. The increasing clouds scared me several hours before sunset, and so I exercised my backup plan and viewed the eclipse from a private plane several thousand feet over the Pacific. What I didn't learn until later was that our view was no better than the view on the ground (because the clouds in question were so distant and/or high), but the important thing is that we were able to see annularity, unlike the millions of people north of Camp Pendleton and San Clemente. Evan H. Zucker

From: Glenn Schneider

Chris et al., Thanks very much for posting these sketches. They bring back some wonderful memories. Digital enhancement and "Photoshopping" has come a long way toward better representing the full dynamic range of coronal phenomena, but somehow sketches such as these which convey an albeit more subjective rendering are more personalized and heart-felt. Unfortunately, my artistic talent ends at paint-by-numbers, and so this is much appreciated.

W.r.t. the 1992 eclipse, which we shared by air, I had received a wonderful rendering by Osamu Oogoe of Japan, who joineded us on the DC-10. I thought, in light of your recent offering, you and others might like to see it: http://nicmosis.as.arizona.edu:8000/ECLIPSE_WEB/ECLIPSE_92/OO_DRAWING.jpg

A full accounting (some say too long) of that eclipse endeavor is recounted at: http://nicmosis.as.arizona.edu:8000/ECLIPSE_WEB/ECLIPSE_92/ECLIPSE92_REPORT.html and I would like to add a link to that page to yours, if you don't mind. Cheers, Glenn Schneider

From: Chris Malicki



IMPORTANT.....ADDRESS CHANGES

From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Friday, January 05, 2001 12:36 PM Subject: [SE] **Address changes**

Dear All, In case of address changes, please unsubscribe with your old address and re-subscribe with your new address. Too often are we confronted with subscribers' address changes and are asked to change.

To subscribe send E-mail to listserv@Aula.com with in the body SUBSCRIBE SOLARECLIPSES name, country

To unsubscribe : send E-mail to listserv@Aula.com, with in the body : unsubscribe solareclipses

Thank you for your understanding. Best regards, Patrick



GENERAL TOPICS

Delta T

From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Monday, January 15, 2001 8:36 PM Subject: [SE] Fw: Delta T

For the solar eclipse calculators: From: Jean Meeus

On 2000 December 1 the value of Delta T was 64.07 seconds.

The yearly increase of Delta T continues to decrease slowly :

2000 Aug 1	63.98 seconds	0.30 sec larger than on 1999 Aug 1
2000 Sep 1	63.99 seconds	0.30 sec larger than on 1999 Sep 1
2000 Oct 1	64.01 seconds	0.30 sec larger than on 1999 Oct 1
2000 Nov 1	64.04 seconds	0.29 sec larger than on 1999 Nov 1
2000 Dec 1	64.07 second	0.28 sec larger than on 1999 Dec 1

The International Earth Rotation Service (IERS) announces that *no* leap second will be introduced at the end of June 2001. Jean Meeus



From: Jean Meeus <JMeeus@compuserve.com> To: Solar Eclipses <solareclipses@aula.com> Sent: Friday, January 19, 2001 12:27 PM Subject: [SE]
Double messages

I receive most messages from SOLARECLIPSE as *doubles* : one "normal" readable message, and the other as a file containing a lot of codes or being even in binary or something like that.

Please send your ordinary messages as "**text only**". For just "ordinary" messages, this is quite sufficient: No things such as Greek letters, letters with accents, words in italics and bold, etc., are needed! Thanks. Jean Meeus



From: christian viladrich <viladric@club-internet.fr> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Tuesday, January 23, 2001 9:06 PM Subject: [SE]

Total eclipse and exposure time for CCD camera

I am considering CCD imaging for the next total and I would like to find some indications for CCD exposures time successfully used for previous total eclipses.

Does anybody have some experience in this part ?
Best regards Christian Viladrich



GENERAL TOPICS

An unusual solar eclipse

From: Larry Klaes <lklaes@bbn.com> Cc: <patrick_poitevin@HOTMAIL.COM> Sent: Monday, January 29, 2001 2:01 PM Subject: An unusual solar eclipse

Would one call this an annular? :^) <http://antwrp.gsfc.nasa.gov/apod/ap010129.html> Larry

From: <badastro@badastronomy.com> Cc: <patrick_poitevin@HOTMAIL.COM> Sent: Monday, January 29, 2001 5:02 PM Subject: Re: An unusual solar eclipse

>Would one call this an annular? :^) No, it's planar. -P

An unusual solar eclipse

Astronomy Picture of the Day: Discover the cosmos! Each day a different image or photograph of our fascinating universe is featured, along with a brief explanation written by a professional astronomer. 2001 January 29

An Airplane in Front of the Sun Credit & Copyright: Thierry Lagault Explanation: Sometimes, good planes come to those who wait. Experienced solar photographer Thierry Lagault had noticed planes crossing in front of the Sun from his home in suburban Paris. He then got the idea for the above photograph, but had to wait through many near misses. About two weeks ago, he got his wish: a jet crossed directly in front of the Sun when his solar imaging equipment was set up. The resulting image, shown above, was taken in a specific color of red light called Hydrogen-Alpha, and the picture's contrast has been digitally enhanced. Dark prominences can be seen lacing the Sun's busy surface. The airplane is an MD-11.



GENERAL TOPICS

Article in Weather magazine

From: Patrick Poitevin <patrick_poitevin@hotmail.com>
 To: SE Mailing List <SOLARECLIPSES@AULA.COM>
 Sent: Friday, January 19, 2001 7:10 PM Subject: [SE] Article in Weather magazine

Hi, The Royal Meteorological Society's magazine, Weather, of December 2000, Vol 55, No 12 was following article: Meteorological effects of the solar eclipse of 11 August 1999 by Edward Hanna (Department of Meteorology, University of Reading. (pages 430 to 446) Best regards, Patrick

From: Dale Ireland <direland@drdale.com>

Is that on-line somewhere? If not would you post a synopsis of the article to the list here?

From: Patrick Poitevin <patrick_poitevin@hotmail.com>

The WebPages of the association is <http://www.royal-met-soc.org.uk>

Unfortunately, there is no synopsis on these WebPages.

The article is a detailed report of all measurements performed by automatic weatherstations during the total solar eclipse of 11 August 1999. Best regards, Patrick



From: F.Podmore <podmore@science.uz.ac.zw> To: <solareclipses@aula.com> Sent: Tuesday, December 12, 2000 4:57 PM Subject: [SE]

Frequency of lunar & solar eclipses

Following the BEAUTIFUL total lunar eclipse last Tuesday, someone asked, "Are solar or lunar eclipses more common?"

Could someone with better eclipse software than mine tell me the relative frequency of penumbral, partial and total lunar and partial, hybrid (i.e. annular/total), annular and total solar eclipses as percentages for a typical century or millenium?

Are the frequencies/proportions changing over the millenia? Any trends? Thanks folks. Francis Podmore

From: Peter Tiedt <rigel@stars.co.za>

Hi Francis I know Fred has all this on his pages have a look there. but lunar eclipses are less frequent because of the smaller eclipse window during a season. but - because of the greater visibility of lunars there is a perception that they are more frequent. Peter

From: Carton, WHC <Wil.Carton@corusgroup.com>

Francis, All these details, their periodicity and variation are studied extensively and accounted for, in the monumental books "Periodicity and Variation of Solar (and Lunar) Eclipses", author G. van den Bergh, published in 1955 by Tjeenk Willink, Haarlem, Netherlands: two volumes, the first with texts and the second with large tables and diagrams (called "Panoramas"). George van den Bergh (1890-1966) was Professor of Constitutional Law, but also a involved amateur astronomer whose fascination was appealed by his observation of the "diamond necklace Solar Eclipse" of 17 April 1912 in Beek, near Maastricht (Netherlands), and total solar eclipses of 30-06-1954 in S-Norway, and 15-02-1961 in SE-France. I hope for you that these volumes are in a University Library in your country. As far as I know, the company Tjeenk Willink does not exist any more since about 1970, and then they transported their last stocks of these books to the Library of the Amsterdam Astronomical Institute "Anton Pannekoek", Kruislaan, Amsterdam, that distributed them to seriously interested requesters in these professional volumes (the contrast of popular books). G. van den Bergh received for this study the "Van der Bilt Price" of the Dutch Amateur Astronomical Society in one of the years between 1955 and 1959.

GENERAL TOPICS

1948 eclipse comet

From: ccmlt <ccmlt@wanadoo.fr> To: <SOLARECLIPSES@AULA.COM> Sent: Wednesday, January 03, 2001 6:48 PM Subject: [SE] 1948 eclipse comet ...

Hi all ! I was just looking at some very strange photos of comet C/1965 S1 Ikeya-Seki when passing very near the sun and observed in a coronagraph from Japan on october 21 1965. It was amazing to see this very bright comet in the sun corona ... And then, I remembered the well know eclipse comet of november 1948. I have an old french astronomical periodic from 1948 relating this event and the discovery of the great 1948 austral comet 1948 I. How it has been wonderfull for those people observing the eclipse and discovering the comet ... The account says that some photos of the comet were taken during the eclipse, but, I calculate with Emapwin that the eclipse lasted about 49 sec. It seems to be very short to record a comet, regarding to the possibilities of the old film used in 1948 ... In fact, the magazin show some picture of the comet a few days after the eclipse but none during the eclipse. I thing comparing coronagraph picture of Ikeya Seki and eclipse comet photos should be very interesting at least ! I performed a little calculation and found comet 1948 was at least mag -6 during the eclipse.

Unfortunately there was an eclipse (annular only) just one month after the Ikeya-seki perihelion passage ... Comet 1910a (the great january comet) was also seen and discovered at mag -6 -7 near the sun (about 3°). There was not eclipse this month.

Is someone knows where to see a photo of the eclipse comet ? Best regards, Christophe, France.

From: Gerard M Foley <gfoley@columbus.rr.com>

I remembered the well know eclipse comet of november 1948. I have an old french astronomical periodic from 1948 relating this event and the discovery of the great 1948 austral comet 1948 I. How it has been wonderfull for those people observing the eclipse and discovering the comet ... The account says that some photos of the comet were taken during the eclipse, but, I calculate with Emapwin that the eclipse lasted about 49 sec. It seems to be very short to record a comet, regarding to the possibilities of the old film used in 1948 ...

At this time Kodak 35mm monochrome film with a standard speed of ASA100 (before ISO) was widely used. I am sure we could force it to much higher speeds.

Fred Espenak <http://sunearth.gsfc.nasa.gov/eclipse/SEcat/SE1901-2000.html>

gives the duration of the total eclipse of 1 November 1948 as 01m56s. Happy New Year Gerry K8EF

From: ccmlt <ccmlt@wanadoo.fr>

Hi all ! For sure, only professionnal had good optics with good film able to take good photos of the comet ... But they were looking for the corona, I think, and with any long focal optics it was not so easy to take pictures of an unexpected object appearing about 1.5 to 2° from the sun ? Was it possible to record the corona and the comet with an amateur camera and a short focal ? I check one more time the wonderfull Emapwin and found that the max length for the totality was 51.3 sec about 150 km north of Monbasa Kenya. There was (I think) no other emerged land on the eclipse path than Zaire, Ouganda and Kenya ... Almost the entire path was on seas ...

Another question came in my mind : how many seconds were needed for people to see the comet from the second contact ? Was the comet visible 10 seconds after last bright diamond light disappear ? Was it possible to see the comet before 2° contact ? Maybe 10 sec before ? Maybe 1 minute before ? Was it an eclipse in the few last decade where venus was just near the sun in order to compare the two effects comet/venus ? In fact, the 2 celestial body would have been about the same brightness ...

(Continued on page 12)

GENERAL TOPICS

Well, we're in third millenium now, and we only need to check the soho photos on the net just before the eclipse beging to know if there is a comet near the sun ! Christophe NB : please forgot my bad english ...

From: Patrick Poitevin <patrick_poitevin@hotmail.com>

All eclipse comets are listed in the pages at: <http://www.MrEclipse.com/SENL/SENLinde.htm> Best Regards,
Patrick

From: J.P. van de Giessen <jpvdgiessen@gelrevision.nl>

Christophe, I found the following link with photo's about this eclipse comet: <http://www.ozemail.com.au/~lovejoyt/sungrazers/sungrazers2.htm> see also <http://members.wri.com/terryr/> for a plot of the eclipse Jan Pieter van de Giessen

From: Patrick Poitevin <patrick_poitevin@hotmail.com>

>From Dietmar Staps, Germany: Hello the following publications show pictures of the comet and the solar corona :

1. S. Guenther, Ueber eine erstaunliche Kometen-Aufnahme, die Sterne, Vol.25, page 117-120 (1949)
 2. K.O.Kiepenheuer?, Zu einer sehr seltenen Aufnahme eines Kometen, Atlantis, Vol. 21, Issue No.3(march), page 120-121, (1949)
- greetings and best wishes for 2001 dietmar staps



Eclipse observed from South Africa in ... 1940

The total solar eclipse in South Africa was on 1 October 1940. The eclipse was total. For Vanrhynsdorp, near Calvinia (with co-ordinates 31 36S and 18 45E), the eclipse was as follows:

First contact 12h51m14s at altitude 47 degrees

Second contact 14h03m38s at 33 degrees altitude

Maximum at 14h05m25s

Third contact at 14h07m11s

Fourth contact at 15h12m13s at altitude 19 degrees

Totality had a duration of 03m33s

All times in universal time.

Tertia Watson observed the eclipse. Here's her account:

I was just 6 years old and remember the following about this event :

My father had vivid recollections of Halley's comet as a child and was determined that we should see something worthwhile! So parents and 6 children travelled in our Hudson Terraplane from Franschoek to Vanrhynsdorp. Travelling up the steep pass was most frightening as we were on the unprotected side. I remember many big buses on the pass. The actual setting on the top of the mountain were we watched the event was spectacular in itself with the wide panorama of the surrounding plains. I was not used to the big crowd gathered there. Someone impressed on me the danger of looking at the sun without the smoked glass or whatever we were using to watch the event so there was an element of anxiety. I do not remember gradually changing stages in the appearance of the sun , but the sensation of darkness at the unusual time in the afternoon was most impressive. I clearly remember quite a number of birds flying around and behaving in a confused manner during these changes in light.

Regards Tertia Watson (le Roux)

GENERAL TOPICS

Eclipses' cycle and ramadhan

From: <Dorjenyma@aol.com> Cc: <eclipse@hydra.carleton.ca> Sent: Wednesday, January 10, 2001 10:43 AM Subject: [eclipse] Eclipses' cycle and ramadhan

Hello everybody I'm new on this list. I live in France and observed three total solar eclipses. I wrote the book "Les éclipses mythes et symboles" (Peuples du Monde, Paris 1999) and I am very interesting to share opinions and datas about eclipse specially the mythological aspect. The Christmas eclipse which corresponded to the end of Ramadhan make me wonder why this event will occur four years running, and I have proceeded to compare both Moslem lunar year and eclipses year. One should bear in mind that there exist two different Moslem calendars : the lunar one as set by the Prophet (the most widely known and commonly used) and the solar one used in Iran and Afghanistan, influenced by Zoroastrian tradition. In the latter the solar year starts at Spring equinox but people who use it also refer to lunar year to practise Ramadhan. In lunar calendar the year consists of 12 months of either 29 or 30 days, which eventually amounts to 354 days, that is 12 times 29,5 days. But as the moon cycle is a little shorter (354,357 days) the result of that is a lag which is compensated by adding up a 30th day to the 12th month 11 times within a period of 30 years. These are known as "years of plenty" made up of 355 instead of 354 days. The Moslem lunar year is therefore shifted each year by 10 or 11 days in comparison with the solar year (which means that New Year's Day and the end of Ramadhan will be retrograded accordingly). This delay is never made up for as it is with Chinese or others soli-lunar calendars, so that Moslem era slowly "eats up" Christian era : a Moslem who is said to be 34 years old is in fact only 33 years old by the Christian calendar.

The so-called "eclipse year" is the time spent by the sun to shift back to any lunar node. The apparent revolution of the

sun is approximately 365 days long, but as the lunar nodes axis retrogrades each year by a little more than 19 days, the eclipse year is only 346 days long. If those two years differ by about 9 days, how is it that the 25 12 00 solar eclipse which corresponds to the end of Ramadhan will occur again in 2001, 2002 and 2003 ? This may be so because eclipses do not necessarily occur on the very node but rather within a zone through which the sun comes in (which accounts for the fact that there may be 2 or 3 eclipses at this time, but if there are 3 the first and third have to be only partial). Given the lag of about 11 days between solar and lunar years the 2000 Christmas eclipse will "occur again" on 14 12 2001 (annular), on 04 12 2002 (total) and 23 11 2003 (total). In 2004 the sun eclipse will occur on october 14 (partial) that is not 11 days earlier but one month and 11 days because after 4 years the eclipse "switches over" to the previous new moon. You just have to look up in the astrological or astronomical tables or else to inquire at the Longitude Office to realize that.

This series of eclipses corresponding to the end of Ramadhan should logically be followed by another series corresponding to the beginning of Ramadhan which also starts at the new moon. As a result there is a period of 8 years during which Ramadhan is "affected" by sun and moon eclipses. Moslem historians may wonder whether there are any correlations with particular events in Moslem societies. Given the awe inspired by eclipses with Moslem people and the psychological impact born on anyone as a rule, could it be any different at a collective level if an eclipse should occur within a fast period ?

I am looking forward to hearing from you again ...
Christophe Lanier

From: Evan Zucker To: SOLARECLIPSES@AULA.COM Sent: Monday, January 22, 2001 7:42 AM Subject: [SE]

Solar eclipse eye damage

I'm sure this article will be of interest to many members of the SEML:

Some Get Away with Staring at a Solar Eclipse NEW YORK (Reuters Health) - Although people who value their eyesight should avoid directly gazing at a solar eclipse, there is some good news for those determined to try it anyway. The eye damage may be neither extensive nor permanent, new research findings suggest.

You can read the rest of the article at http://dailynews.yahoo.com/h/nm/20010119/hl/eclipse_1.html

On an unrelated note, if any of you are on Sky Publishing's e-mail list, please be advised that an e-mail I received on that list today had an attachment named "DMCAHBDM.EXE" that was infected with the "W95.Hybris.Gen.dr" virus. Fortunately, it was detected and quarantined by Norton Anti-Virus. Evan H. Zucker

From: Don Estes

Don't believe it, unless you are already damaged and want some hope. I'm permanently damaged in one eye, fortunately not significantly so, but I guarantee it is permanent. Don

GENERAL TOPICS

WHAT WOULD HAPPEN IF.....

From: Dribalz@aol.com To: SOLARECLIPSES@aula.com
Sent: Thursday, January 25, 2001 1:54 PM Subject: [SE]
What would happen if...

We all know Solar Eclipses happen at 2 eclipses seasons during a calendar year--when the Moon crosses thru the nodes. What would happen if the orbital eccentricity of the Moon were exactly 0.0 degrees? I know we would have Solar and Lunar eclipses once a month, but would they still vary in location on the face of the Earth? If not, can it be predicted what spot on the face of the Earth would be the favored spot? Would they all have the same time of totality? Would there be any other unusual circumstances? Andrew Hans

From: Govert Schilling <mail@govertschilling.nl> To: <SOLARECLIPSES@AULA.COM> Sent: Thursday, January 25, 2001 2:25 PM Subject: RE: [SE] What would happen if...

You probably mean 'what would happen if the inclination of the moon were exactly 0.0 degrees'. First of all, TSE's would only occur in the tropics (their geographical latitude depending on the season). Second, since the Earth's rotation period is not an integral part of the orbital period of either the moon or the Earth, there would not be a favored spot. However, in the distant future, tidal effects will result in the Earth and the moon always facing each other the same way (just like Pluto and Charon). If that happens, TSE's will of course only be visible on the part of the Earth from which the moon is eternally visible in the sky... --Govert Govert Schilling

From: Gerard M Foley

This is not so. The eccentricity of the Moon's orbit is not the reason that there is not an eclipse every month. The moon's orbit is inclined about 5 degrees with respect to the ecliptic (the plane of the earth's orbit around the sun). An eclipse every month requires the inclination, not the eccentricity, to be zero (or small).

> but would they still vary in location on the face of the Earth?

Yes. The moon's period is not an integral number of days.

> If not, can it be predicted what spot on the face of the Earth would be the favored spot?

If the inclination were exactly zero, the favored places would be along the equator.

> Would they all have the same time of totality? Would there be any other unusual circumstances?

The eclipses would still vary among annular, short or long total

because of the eccentricity of both the lunar and terrestrial orbits. Gerry K8EF

From: Govert Schilling <mail@govertschilling.nl>

Gerhard K8EF wrote: If the inclination were exactly zero, the favored places would be along the equator.

No, this is not true, since the inclination of the moon is measured with respect to the ecliptic. So if it were exactly 0.0 degrees, totality could occur everywhere between the tropic of Cancer and the tropic of Capricorn.

Moreover, in my earlier mail I suggested that in the distant future, TSE's would be visible from one side of the Earth only. However, Michael Gill pointed out correctly that by then there won't be any TSE's at all, since this situation will only occur when the moon has drifted much farther from the Earth than where it is now... --Govert Schilling

From: Marc Weihrauch <marc.weihrauch@student.uni-halle.de>

Hello, That's right, and beside that: I heard it won't come that far. I can't tell you any numbers, but as far as I know the sun will have become a Red Giant by then, so there might not be an earth or moon anymore. Best regards Marc

From: Marc Weihrauch <marc.weihrauch@student.uni-halle.de>

Dear list members, all of us know the meaning of the lunar nodes for eclipses, and probably most of us know the astronomical symbol for the ascending, respective descending nodes. But can anyone tell me where these symbols come from? Why do they look the way they look? I've got a hunch, but I'd like to hear your opinion. Best regards Marc

From: Bryan Brewer <bryanb@earthview.com>

I've read that the each node symbol represents a dragon (connected with the common mythology concerning a dragon devouring the Sun or Moon during an eclipse).

I know we would have Solar and Lunar eclipses once a month, but would they still vary in location on the face of the Earth?



GENERAL TOPICS

Eclipse chaser Menzel symposium

From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Sunday, January 28, 2001 8:32 PM Subject: [SE] Eclipse chaser Menzel symposium

Hi, From Solar News: The Menzel Centennial Symposium

From Jay.M.Pasachoff@williams.edu 22 Jan 2001

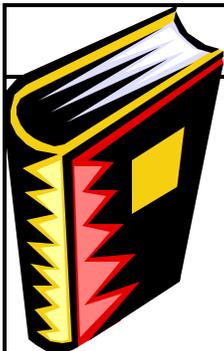
On Friday, 11 May 2001, "Donald H. Menzel: Scientist, Educator, Builder," a symposium in honor of the 100th anniversary of the birth of Donald H. Menzel, will take place at the Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts. Menzel was known especially for his studies of the solar chromosphere, for his research at total solar eclipses, for his theoretical work on gaseous nebulae, and for his role in founding solar observatories (including the High Altitude Observatory and the Sacramento Peak Observatory), for his role in bringing the Smithsonian Astrophysical Observatory to Cambridge, where it is now operated as part of the Harvard-Smithsonian Center for Astrophysics, and for his years as Director of the Harvard College Observatory.

Speakers on Menzel's life, times, and scientific legacy will include: Donald Osterbrock: Don Menzel's Amazing Adventures with Lick Observatory: From Stranger in a Strange Land through Nebular Theorist to Old Licker; David DeVorkin: On the Border of Physics and Astronomy: Menzel at Princeton; David Layzer: The Introduction of the New Quantum Mechanics into Astronomy; Jay Pasachoff: Menzel and Eclipses, Barbara Welther: Resources for Research: From Private Patrons to Federal Funding in the Menzel Era; Thomas Bogdan: Founding the High Altitude Observatory; and Jack Zirker: Menzel and the Sacramento Peak Observatory.

The one-day symposium will be preceded by a colloquium on TRACE results by Alan Title on May 10. It will be concluded with a dinner at the American Academy of Arts and Sciences on May 11.

See <http://cfa-www.harvard.edu/menzel> . The organizing committee includes Owen Gingerich, David Layzer, Robert Noyes, William Parkinson, Jay Pasachoff, and Barbara Welther.

New book on 2001 & 2002 eclipses



From: F.Podmore <podmore@science.uz.ac.zw> To: <solareclipses@aula.com> Sent: Tuesday, December 12, 2000 10:36 PM Subject: [SE] **New book on 2001 & 2002 eclipses**

The 2001 Handbook of the Astronomical Society of South Africa (ASSA), which has just reached me here, contains an advertisement (on the last page) for a forthcoming NEW ECLIPSE BOOK as follows:

Title: UNDERSTANDING ECLIPSES Author: Cliff Turk (longstanding member of ASSA) Publisher: Struik Publishers, Cape Town, South Africa [website: www.onwe.co.za/struik I think] [address: Struik New Holland Publishing, P O Box 1144, Cape Town, South Africa [fax: +27 21 462 4379 or +27 21 461 9378] Publication date: 2001 [It's not out yet - it goes to the printers on 22 January 2001] Price: R 29.95

[that's in South African Rands] ISBN: I don't know yet.

Contents: Includes historical perspective of eclipses; why and how eclipses happen; do's and don'ts of observing; eclipses of 2001 & 2002; best viewing sites; % totality for various places; likely impact of weather; photography

Available from leading bookstores and directly from Business manager, Astronomical Society of South Africa, P O Box 9, OBSERVATORY, South Africa 7935

['Observatory' is a suburb of Cape Town, which contains the SA Astronomical Observatory headquarters: www.sao.ac.za, but I don't have an email or web address for the ASSA itself. Cliff Turk (email: clifturk@yebo.co.za) would know. Any queries about

(Continued on page 16)

GENERAL TOPICS

the book can be sent to him. I'll try to let everyone know when the book is available, or Cliff will.]

From: Cliff Turk

Hi to Everybody This is my first message since joining SEML. Francis Podmore kindly advertised my book UNDERSTANDING ECLIPSES in his message on 2001 January 13, but did not have all the information available at that time. As he is now away for a couple of weeks, here is that info: ISBN No is: 1 86872 580 4, BarCode is: 9 781868 725809 Publication due: 2001 February 1 This is not a highly technical book. It is intended for people with an interest in seeing and perhaps photographing the eclipses in southern Africa in 2001 and 2002 and should be helpful to many amateur astronomers and those professionals who have had little to do with eclipses. Because of its (hopefully) mass appeal, it has been kept cheap at SA Rands R29.95. If anyone wants a copy, individual orders can come to me either direct or as Business Manager of ASSA (please enclose mail and packing costs which I will notify as soon as I have a copy to weigh for mail rates). Multiple orders for stores, clubs etc. to lucilleb@struik.co.za who will advise cost etc. I enjoyed the messages about IMAX and will try to persuade IMAX in Cape Town to get the show. Best wishes Cliff

From: Peter Tiedt

Hello Cliff Well done on the production of the book. I had the same idea about a year ago, but I was too busy at work to make a start. I certainly hope that the book starts getting the notoriously apathetic south africans awake and planning. Kruger Park, after months of nagging from me has at last formed a task team to plan for the eclipse. No one in Botswana seems to care, and forget Moz. Please put me down as close to the top of the list as you can for my copy. I can send a cheque as soon as you let me have an amount. Regards Peter Tiedt

Partial Eclipse Chasing !

From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: <SOLARECLIPSES@AULA.COM> Sent: Sunday, January 07, 2001 7:53 PM Subject: Re: [SE] Partial Eclipse Chasing !

Vic & Jen Winter, ICSTARS Inc. wrote: I'm sure not many people consider chasing a partial eclipse, but that's what we ended up doing.

>From PP: Chasing the partial solar eclipses of 29 April 1976 in Belgium, 20 July 1982 in Holland, 4 December 1983 in Belgium, 21 May 1993 in Spitsbergen, Svalbard, 13 November 1993 in New Zealand, 17 April 1996 Tubuai, French Polynesia, 12 October 1996 in Turkey, 2 September 1997 in Australia and 25 December 2000 in the US, I have the feeling of not loosing the hunger of chasing. Of course it is not the same appetite as my hunger for annular or even total solar eclipses... Best regards, Patrick

From: Olivier Staiger <olivier.staiger@span.ch>

yes, Patrick is 100% correct. Chasing a partial eclipse will not give the same final thrill as when you chase a total eclipse, but it is a nice way to decide to go travel the planet. I've been on the Easter Island (96), on Kangaroo Island (97) and on Baffin Island (2k), "just" for a partial eclipse. These wonderful destinations are certainly worth travelling to even without any eclipse at all, any time. The partial eclipse is just the spark that ignites the fire to make me travel. But once I am there, on the other side of the globe, and the partial eclipse occurs, it is still an interesting feeling, a sense of "satisfaction for no reason". I look at that partial eclipse and I think to my-

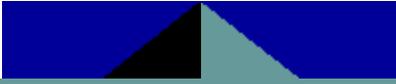
self: "lots of effort for nothing... no big deal !" and then I look around and think again: "... but , hey, I AM HERE ! ON THAT ISLAND I NEVER DREAMED I WOULD EVER TRAVEL TO IN MY LIFE !!! . ISN'T IT GREAT TO BE HERE ? So , chasing partial eclipses is more about the chase, than about the eclipse in itself. Olivier "Klipsi" Staiger

From: James R. Huddle <huddle@usna.edu>

Normally, it is difficult to see the heavens change. We all know they do change, because we've been told so since we were children, and because we have noticed differences from one night to the next. But in order to SEE the heavens change, you either have to look very carefully, or else you have to observe a meteor shower or an eclipse phenomenon such as a solar or lunar eclipse, a transit of Mercury or Venus, or a stellar occultation. There are not many other things in the heavens that change on a time scale that can be recorded by human senses. To me, that's a large part of the joy of eclipse chasing. It has to do with understanding how we know what we know. There are other things that make chasing eclipses fun, but if I were not able to experience the heavens change in real time with my own senses, I probably wouldn't do it. Jim Huddle

From: Odille Esmonde-Morgan & Warwick Lawson <analog6@ozemail.com.au>

I totally agree - eclipse chasing is a means to an end, giving you travel not just for travel's sake but travel with a wonderful added bonus at the end. If it's a total eclipse - great! If it's less - hey, still pretty darned good. Odille Esmonde-Morgan



From: Patrick Poitevin <patrick_poitevin@hotmail.com> To: SE Mailing List <SOLARECLIPSES@AULA.COM> Sent: Monday, January 22, 2001 10:36 PM Subject: [SE] **Reminder from the SEML Owner**
Just a reminder of the SEML Owner in regard of messages on the list:

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 (patrick_poitevin@hotmail.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 (listserver) 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 listserver. Only subscribers can send messages.

Status after 3 years: 298 subscribers out of 41 different countries.

Countries: Argentina, Australia, Austria, Belgium, Bolivia, Canada, Colombia, Czech Republic, Denmark, England, Finland, France, Germany, Hungary, India, Ireland, Italy, Japan, Korea, Malaysia, Mexico, Norway, Poland, Puerto Rico, Qatar, Romania, Russia, Scotland, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, The Netherlands, Turkey, UK, USA, Venezuela, Zambia, Zimbabwe.

Main purpose of this Solar Eclipse Mailing List is to share information between all Solar Eclipse enthusiasts. Our objective is to permit and encourage world wide contacts among eclipse observers, calculators, scientists, ancient researchers, etc. It is a media where you can send questions, answers, items wanted, items for sales, announcements, reports, observations, discussions, information, introductions, etc. All topics should be related to Solar Eclipses. No commercial advertisements are allowed.

Do not send large files. For the convenience of the subscribers, there is an automatic filter on the size of the messages. Send plain text, not in html or any other format. No attachments. The language is English. Unsubscribe during your holidays or do not use auto replies or confirmation of receipts. Do not send <Thank You> messages to the entire list. Personal messages should not be send to the whole list. Problems with webpages, info about virus files or any other non-solar eclipse related messages are not allowed on the SEML.

If you want to publish pictures, graphs or your reports about solar eclipses, please send them to joanne_edmonds@hotmail.com. Your contribution will be published in the monthly Solar Eclipse Newsletter (SENL). The SENL (since November 1996) is available on the internet and can be downloaded free of charge. See: <http://www.MrEclipse.com/SENL/SENLinde.htm>

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It is never the intention to announce the addresses of the members. If you are looking for somebody, write a message to the list owner and the contact person will be informed. A list of the subscribers is not available to the members. In this case we avoid junk mailers. Again: Only subscribers can send messages to the Solar Eclipse Mailing List.

If you change your e-mail address, please unsubscribe with your old address and re-subscribe with your new address. If you have problems, please feel free sending a message to the list owner.

The Solar Eclipse Mailing List is maintained by the list owner Patrick Poitevin (patrick_poitevin@hotmail.com). It is the right of the list owner to put a subscriber on READ ONLY or even abandoned completely from the list.

Keep those solar eclipse messages coming! Best regards, Patrick



GENERAL TOPICS

SELENELION

From: janita hill <janitah@senet.com.au> To: <SOLARECLIPSES@AULA.COM> Sent: Sunday, January 14, 2001 5:30 AM Subject: [SE] **SELENELION**

Ha! One for all those wordsmiths out there: (Taken from my local Society chat line) cheers, Janita Hill

This note from Duncan Steel about the lunar eclipse & sun sighting on jan 10, contains a comment by his friend Graham Waddington on the historical aspects of this type of observation. (Dr. Tony Beresford)

I am told that seeing the Sun plus eclipsed Moon in the sky is called a selenelion... The following is from my informant. GW has a DPhil in astrophysics but works in other things. Duncan

>From Graeme Waddington (Oxford, UK): I compiled a list of observations of

these selenelions. The best one was from France at the end of the 19th century (or beginning of the 20th) where the eclipsed moon was seen above the horizon with the sun still visible when the moon was something like 98% eclipsed. The most documented one was due to Payen in 1668 - I have a microfilm of the Bodlean's copy of his report. Seem to recall that Hevelius saw one from Danzig and that Kepler tried to see one when he was in Linz but failed. I am told that seeing the Sun plus eclipsed Moon in the sky is called a selenelion.

Does the pronunciation of that word resemble the name of a certain well-known Canadian singer? And can it be used legitimately in a game of Scrabble? (Fraser Farrell)

From: Jean-Paul GODARD <jean-paul.godard@noos.fr>

Hi all, Seeing the message from Janita, I had a look to "Google" and I found this reference : <http://www.comune.livorno.it/enriques/Torri/eclissi.htm> In these lines (in italian), a report in french is mentionned "Selenelion, ou apparition Lunisolaire en L'isle de Gorgone, observee par ordre du Sereniss, Prince Leopolde de Florence le 16 juin 1666 avec de reflexions de M. Payen. That stands for "Selenelion or luni-solar apparition on the island of Gorgone, observed on order of her majesty Leopold de Florence (Firenze, Italy) on 1666/6/16 with comments of M. Payen"

But unfortunately, no other reference at this time (except as a commercial name for dioxyde of titane and as a dragonfly in japan) Cordialement / Regards Jean-paul.godard@noos.fr



From: Joanne Edmonds <joanne_edmonds@hotmail.com> To: SEML Out <solareclipses@Aula.com> Sent: Tuesday, January 09, 2001 7:07 AM Subject: [SE]

January Newsletter and the partial eclipse

Dear All, I am currently working on the newsletter for January and should be ready to send to Fred after the weekend.

We have decided to separate all the correspondence concerning the partial eclipse and compile a special edition, with all correspondence, reports and any pictures you wish to send me, they can be in any format. The deadline for sending your contributions is January 26th, looking to publish in early February. Please try to keep file sizes reasonable, and be aware I don't want to download from web pages.

If anyone has any pictures from the previous partial eclipses in 2000 it would be nice to show as many as possible from the four.

So for all the fortunate souls who were so lucky to be in the right place at the right time and without frozen equipment share your pictures and experiences with the rest of us. Regards Joanne



General Topics

ECLIPSES GOES TO THE MOVIES

From: <JohnLX200@aol.com> To: <SOLARECLIPSES@aula.com> Sent: Tuesday, January 16, 2001 3:19 AM Subject: [SE]
Eclipses in Solarmax IMAX movie

Has anyone seen the Solarmax IMAX movie about the sun and eclipses?

I'm planning to see it at the Liberty Science Center in Jersey City, NJ (very near New York City, accessible by public transit) this weekend. It was quite difficult to find out where it is playing, but it is there in NJ until April, and by luck is located near where I was already going to be for a family gathering.

It has footage of the 1998 Aruba eclipse and the 1999 annular in Australia. I believe, but haven't confirmed, that this IMAX footage was shot using the 10" f/6.3 Meade Schmit-Cassegrain optical tube assembly I sold to Dr. Robert Eather. Perhaps he used it, perhaps he switched to a different scope before the shots were taken.

It will be nice to see how the eclipses look on the huge IMAX screen, and there is supposed to be much space-based coronagraph "artificial eclipse" imagery as well. John Hopper

From: Johanna Kovitz <joko@pangolyn.com>

Check out the movie's website, which includes a list of show locations and info about how the movie was made: <http://www.solarmovie.com/> Johanna in Boston

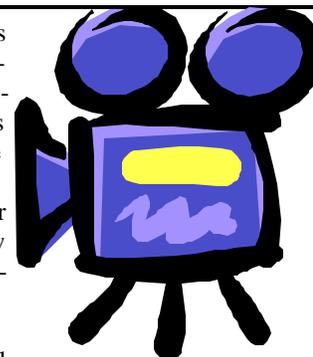
From: Evan Zucker

I would LOVE to see it, but it doesn't appear to be scheduled to play at the Omnimax theater in San Diego. It is currently playing at the Omnimax theater at the Chicago Museum of Science and Industry (among other places), which was the film's producer. This link has details about the film, although it doesn't mention anything about eclipses: <http://www.msichicago.org/omax/solarmax.html> This is the official web site for the film: <http://www.solarmovie.com>. It has lots of useful information. -- EVAN

From: Vic & Jen Winter, ICSTARS Inc.

We have the SolarMax IMAX movie here in Kansas City. It opened last Saturday and we were invited to a private screening in advance. There is something truly fitting about observing the Sun on a 6 1/2 story movie screen with

thundering sound that rumbles the seats. I found it awe-inspiring even as a serious solar observer. Many members of our local club attended the screening as well, and were suddenly envious of our knowledge of the Sun. "Now we see why you're so addicted." they said.



The film covered historical and cultural references as well as present-day sciences. It was quite lacking in the depiction of Total Solar Eclipses, though. The context of the explanation was mostly for historical and astrometry purposes... The IMAX team seemed to have been filming from England for the 1999 eclipse and was clearly clouded out. I recognized some of the local t-shirts. So, it looks like they used 1998 footage of the Aruba eclipse to demonstrate the image. Unfortunately, this meant it looked just about like every other amateur videographer's eclipse footage instead of like the great advancements in eclipse-corona image processing we have in still photography today. Once again, the picture DIDN'T DO IT JUSTICE. "I prefer the BIG SCREEN version."

One interesting effect they were quite effective in filming was some fabulous Aurora. The effect was breathtaking. The full sized screen offered the effect of true overhead Aurora running horizon to horizon in glittering, dancing color. Don't know how they did it, but we don't care.

They also used a great deal of SOHO and Trace imagery in formats yet un-exploited. My only guess is that the images were created using a monstrous animated tiling system with perhaps 50 images across by 50 images high all streaming in animation effects that lasted upwards of 60 seconds each. I reel at the amount of energy it would have taken to collect and process all of these images. I found this effect to be the most impressive and monumental detail of the entire film. The result is a surface boiling in such size and detail, that the eye can't follow all the eruptions, CME's and prominences going on at once. - I would compare this planetary scale comparison to the famous Douglas Adams 'total perspective vortex'.

Our only regret was that the film was TOO SHORT and seemed to leave some cool details un-explained for the general public leaving the movie. We'll be helping our local theater with talks and demonstrations. The producers lent no assistance to the theaters with the release of the movie,

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so community programs will be important. We found the IMAX theater bent over backwards to invite us out for a public forum, hoping it will boost ticket sales and help them look good.

The www.solarmovie.com website has show-times near you. There were a LOT of locations listed. If it isn't running in your area, call them and demand that they bring it in! It's worth it. Vic & Jen

From: <Jay.M.Pasachoff@williams.edu>

I saw it in London a couple of months ago. I supplied the images from Galileo's sunspot book, and if you look hard at the last screen of credits at the top left, you can see my name flash by, only slightly misspelled.

It is very dramatic--probably too dramatic, with swelling music--but it is very well done and the solar images from SOHO and elsewhere are fantastic.

I will check with Bob Eather about the eclipse footage. He was at our site with his own IMAX camera. Jay Pasachoff

From: <JohnLX200@aol.com>

I heard from Dr. Eather after Jay Pasachoff contacted him.

It turns out that my old 10" Meade SCT was used only for a sunrise shot over Marblehead, Massachusetts. Apparently it appears quite huge, with a lot of atmospheric effects.

The total solar eclipses were shot with a 500mm medium-format camera lens and 2x extender. John Hopper

From: Cliff Turk

I spoke to our Cape Town IMAX Theatre about booking the Solarmax/eclipse (?) show before the date of our "local" eclipse on June 21. They say they have discussed it but do not know much about it. However they may book it for March or April. I haven't seen it. If you have seen it please send me a short comment which I can pass on to our IMAX to try to encourage them. Maybe we can per-

suade them it really is a worthwhile show. My email is: cliffturk@yebo.co.za and our IMAX is leanne@IMAX.co.za Many thanks for any assistance. Cliff Turk



SOLAR PHYSICS

From: Patrick Poitevin <patrick_poitevin@hotmail.com>
To: SE Mailing List <SOLARECLIPSES@AULA.COM>
Sent: Sunday, January 28, 2001 8:27 PM Subject: [SE]
Solar Physics full text articles available

Hi, From Solar News , The Electronic Newsletter of the Solar Physics Division American Astronomical Society, Volume 2001 Number 3, Stephen R. Walton, editor

Solar Physics full text articles available in the ADS

From "Dr. Guenther Eichhorn" <gei@cfa.harvard.edu> 24 Jan 2001

Dear Colleagues, I am happy to announce that the ADS now has the full articles of Solar Physics on-line. Late last year we received permission from Kluwer to scan Solar Physics back to volume 1. We have currently on-line volumes 59 through 169 and are putting more volumes on-line regularly. I hope to have the complete Solar Physics on-line by the end of March. I am very grateful to Kluwer for granting me permission to scan their journal. They are the only commercial publisher who has done that for a current journal. I would appreciate it if you would send a note to Kluwer c/o Harry Blom (Harry.blom@wkap.nl), thanking him for their cooperation. This was an unusual step for a commercial publisher, and we should express our appreciation for that. If Kluwer sees that the astronomical community appreciates their willingness to work with us, it will help me in my further negotiations with Kluwer for scanning more of their journals and possibly conference proceedings.

As always, please don't hesitate to contact us if you have any suggestions, questions, remarks, or requests for the ADS. The ADS Web site is <http://adsabs.harvard.edu> .



General Topics

SUNSPOTS AND TELECONVERTER?

From: Eric Pauer <pauer@bit-net.com> To: Solar Eclipse Mailing List <solareclipses@aula.com> Sent: Saturday, December 23, 2000 9:35 PM Subject: [SE] Sunspots and Teleconverter question

I was dry running my setup today for my webcast on Christmas Day. I was blown away by triplet of large sunspots near center of the sun's disk, along with four other large sunspots! Very nice. We'll be able to get some nice photos of the eclipse with these sunspots.

I have a video exposure question. My camcorder (Sony Digital8 TRV-DCR720) gives a fine view of the solar disk at full 25x optical zoom through a Thousand Oaks glass solar filter (type 2+), effective focal length of 1200 mm, by adjusting the exposure level and using manual focus. However, when I added a Quantaray 1.6X teleconverter to the setup, I can't get a good image. I tried the entire scale of exposure levels but the image I get appears poor and out of focus. I tried adding a ND2 filter in series but that did not help. Any other suggestions? If I can't get this to work, I'll just use the 25X optical zoom. Thanks for any help. Eric



WHO ARE YOU?

From: Bob Morris <morris@sce.carleton.ca> To: SE from LRM <solareclipses@Aula.com> Sent: Friday, January 05, 2001 2:13 PM Subject: [SE] Who are you?

Sky & Tel has a large version of the conference picture in its current issue (p. 45). But of course no "key" to pic.

I'm sure that members of the eclipse list would like to know what their leader, and his eclipse fellow traveller Joanne, look like.

Could Patrick let us know where he and Joanne are in the pic? Bob Morris

From: <JohnLX200@aol.com>

Bob, I guess either Patrick is being shy, or February S&T hasn't made it across the Atlantic yet, so I'll answer your question.

Patrick is seated in the center, wearing a blue shirt with name tag. Joanne is to the right of him in the photo, his left.

Behind and between them is Peter Kalebwe of Zambia, and going to the left (his right) from Peter are Peter Tiedt, myself, and Pat Totten, who is standing behind Fred Espenak.

There are several others I can recognize, but fear of mis-spelling their names or simply being wrong due to the small photo scale in the magazine has me thinking I should stop right there. John Hopper

From: Patrick Poitevin <patrick_poitevin@hotmail.com>

Received S&T and I thought I am not that shy anyway ... Our picture was on the webpages of the conference for quite a while (as well as all speakers pictures). Many pictures are as well in the Solar Eclipse Newsletter of November 2000. See:

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

More pictures of the conference will be published in the coming Newsletters. Best regards, Patrick



Joanne & Patrick back in the summer

LUNAR ECLIPSE

Dear Patrick, on APOD there was this lovely image of an airplane in front of a brilliant H-alpha-sun.

By chance, Alexander Birkner Birkner and myself got a similar image on January 9! We were videotaping the lunar eclipse, and suddenly a plane crossed the partially eclipsed moon. We called it the "Prime-time-plane" later, because the clock of the camera said it happened at quarter past eight, when the prime-time-movies start on television.

Of course, our picture is not of such a high quality but rather humble. Nevertheless, it might be interesting for you, so I'll attach a small grab of it. If you like the image I'll ask Alexander for a grab in a higher resolution. The tape is at his place, and he's on a short journey, so it might take a while.

From: Marc Weihrauch <marc.weihrauch@student.uni-halle.de>To: Patrick Poitevin <patrick_poitevin@hotmail.com>
Sent: Saturday, February 03, 2001 10:12 PM

Dear Patrick, That's weird. The last message I sent you was Wednesday, January 31. It was about our "unusual lunar eclipse", the double occultation, so to say. Alexander and I would regard it as an honour if this image was included in the SENL. If you do that, please mention Alexander Birkner first, since the equipment and most of the know-how was his.

Probably I'll be able to send you a better resolved version to your work email address during the coming week Best regards
Marc (Looking forward to June)



LUNAR ECLIPSE

From: Skywayinc@aol.com To: eclipse@hydra.carleton.ca Sent: Tuesday, January 09, 2001 11:36 PM Subject: [eclipse] The lunar eclipse:

well . . . at least my sister saw it!

Two weeks before the Great East Coast Solar Eclipse of March 1970 there was a very small partial eclipse of the Moon (5%?) which occurred at around 3:30 in the morning. On that morning I awakened at the appointed time and viewed this less-than-inspiring event through a small 1.7" zoom (13-40x) terrestrial spotting scope. For whatever reason, I decided at the maximum phase of the eclipse to wake my 10-year old sister, Lisa, to have a look. Her eyes bleary and half closed, she had a 1.2 second look through my scope, turned to me and said, "nice . . ." and immediately headed back to her warm bed. I felt that it never registered in her mind at all.

Fast forward 31 years later:

Because of circumstances beyond my control, I was unable to look for the rising Moon and the residual effects of the European total lunar eclipse because I was working (we were, in fact, in the middle of our normal 4:30 newscast). I actually wondered just how many people would attempt to view it.

But just before 5:00, Lisa called to tell me that she saw the rising Moon and a small scallop of the Earth's shadow from her east-facing terrace (she lives in Throggs Neck/The Bronx). She said there was some pretty sunset colors in the west and that the Moon itself had a pinkish hue as it rose through the horizon haze.

ME: "So you saw it?"

LISA: " Yeah, I used the binoculars you got me for Christmas."

ME: "How did it look?"

LISA: "Remember when we were kids and you woke me up in the middle of the night to show me some stupid little eclipse; I was so tired and I didn't want to hurt your feelings so I said 'nice!' Remember?"

ME: "Yeah."

LISA: "Well, I saw the 'bite' on the Moon again today. It looked like that.

And to think, I didn't think she noticed! Good thing I woke her up. -- joe

From: Eli Maor <emaor@suba.com>

Joe, Nice story! At least your sister was kinder to you than mine, who still holds a grudge against me for dragging her all the way to Munich for the 1999 TSE, only to be rained out - and then caught up in a huge traffic jam on the way back to our hotel! Clear skies on 06/21/01! Best - Eli

"Remember when we were kids and you woke me up in the middle of the night to show me some stupid little eclipse; I was so tired and I didn't want to hurt your feelings so I said 'nice!'"

PARIS, FRANCE

From: Michel Andre Levy <malevy@sinopia.fr> To: <SOLARECLIPSES@AULA.COM> Sent: Wednesday, January 10, 2001 1:27 PM Subject: Re: [SE] Total Lunar Eclipse - 9 Jan 2001

From Paris : we were lucky enough to see very well the eclipse almost from the beginning to totality (about 9 pm local time, i.e. 8 pm GMT). Then, after the moon disappeared completely, it was hidden by the clouds, which made this disparition less impressive. But even before the clouds hide everything, I did not notice any color effect.

Michel-Andre Levy

**ALBORZ MOUNTAINS, IRAN**

From: Mike Simmons <msimm@ucla.edu> To: <solareclipses@Aula.com> Sent: Wednesday, January 10, 2001 7:59 PM Subject: [SE]

Lunar eclipse report from Iran

I just heard from a friend in Iran where the sky was very clear though I understand Tehran's horrible pollution reached up to their elevated observing site in the foothills of the Alborz Mountains. They had a public star party at a natural history museum overlooking Tehran with media coverage. He felt the eclipse was very bright, with a magnitude of -2 to -3 (I haven't heard a Danjon rating from them). Others outside of Tehran reported seeing a blue-green tint to the edge of the Earth's shadow on the Moon during the partial phases. Mike Simmons

LUNAR ECLIPSE

From: Johanna Kovitz <joko@pangolyn.com> To: <SOLARECLIPSES@AULA.COM> Sent: Thursday, January 11, 2001 12:07 AM Subject: [SE] **Eclipse Triggers Nigeria Riot**

The BBC's website is carrying this very sad story in the aftermath of the Jan 9 lunar eclipse:

http://news.bbc.co.uk/hi/english/world/africa/newsid_1110000/1110791.stm

I'm sorry to introduce a story about ignorance and violence, but thought people might be interested. Johanna

From: Daniel Fischer <dfischer@astro.uni-bonn.de>

Looking through reports from the 1997 lunar eclipse (which was visible throughout Europe, Africa and Asia, too), there were even more reports about bizarre incidents in several countries. And in street interviews by German TV people linked the eclipse in earnest to the nearing doomsday (this was pre-2000, after all).

Regarding the new Nigeria incident, I'd like to point out that such abuse of lunar eclipses is certainly not a Muslim tradition. Check out <http://www.jas.org.jo/lun01.html> for what the Jordanian Astronomical Society did during the eclipse. Regards, Daniel

From: Mike Zorn <rigoletto@table.jps.net>

And the BBC news story does conclude with: "Islamic leaders in Maiduguri have been quick to condemn the riot, which they blamed on poorly-educated youths who understand nothing of their own religion.

According to the scholars, Muslims traditionally greet a lunar eclipse with prayers. "

It's quite probable that the "youths" found a handy excuse for doing something they've been wanting to do for some time. Mike Zorn

From: Mike Simmons <msimm@ucla.edu>

We heard prayer during the 1999 solar eclipse in Iran. The eclipse was greeted with great celebrations and rejoicing, with thanks given to Allah for this wonderful spectacle. I never heard a bad word associated with the eclipse. I think your speculation may be correct. Mike Simmons

From: Brian Garrett <mgy1912@home.com>

<http://www.moonsighting.com/solareclipse.html> has a brief article on the significance of eclipses in Islam. It is noteworthy that Muhammad realized that solar (and lunar) eclipses were natural phenomena rather than omens, and said as much to his followers. Brian



there were even more reports about bizarre incidents in several countries

SAARBRUCKEN, GERMANY

From: <B0802Alex@aol.com> To: <SOLARECLIPSES@aula.com> Sent: Wednesday, January 10, 2001 1:10 AM Subject: [SE] January 9 2001 - TLE

Hello everybody, we have just seen the first eclipse of the millennium :)) We observed it from a place near Saarbruecken in Germany. The whole day was absolutely cloudy here, but right as the partial phase began things got much better. Instead of thick, dense clouds there was just a kind of mist, so we could watch the whole eclipse. Totality looked terrific! Perhaps we'll post some images on a website in a few days (we used both dia film and a video camera). We hope you saw it, too. Best regards Alexander & Marc



LUNAR ECLIPSE

REPORTS FROM ENGLAND

From: Yvonne Jacobs <ylj70@yahoo.co.uk> To: <SOLARECLIPSES@AULA.COM> Sent: Wednesday, January 10, 2001 2:49 PM Subject: Re: [SE] Total Lunar Eclipse - 9 Jan 2001

LONDON



From London I had a pretty good view, apart from cloud cover from about 5 minutes after totality started until 10 before it ended. I did see some colour effects in those early and late stages of totality, but it was more a pinky colour than red. The colour just before totality was the most impressive, when the moon had a deep pink glow, and a tiny bright crescent left on top. I do have a question that I hope someone out there can answer. When the moon was in it's partial phase after totality, and for about an hour after the full moon re-appeared, there was a huge white ring in the sky, which appeared similar to a white aurora, with the moon at it's centre. Can anyone explain what caused might have caused it? Yvonne Jacobs

From: Dale Ireland <direland@drdale.com>

Most likely a halo caused by high ice crystals. Usually 22 degrees from the Moon (or Sun). Here is a photo I took of one last month with a hand held digital camera <http://www.drdaile.com/cam/best/halo.jpg> If you look really close at halos you will see they are actually bright rainbows. A lunar eclipse halo would have made quite a photo. Dale

From: Manfred Rudolf <mrudolf@epo.org>

That might have been a 22° halo around the moon caused by high-atmospheric ice crystals. The pages below give an overview of some halo phenomena. Yvonne, have a look at the pictures in the pages below, maybe you can find out which halo corresponds to that which you have seen. <http://dSPACE.dial.pipex.com/lc/atoptics/phenom.htm> <http://www.netppl.fi/~jarmom/haloguid/index.htm> http://ecf.hq.eso.org/~rfosbury/home/natural_colour/sky/halos/halos.html regards, Manfred Rudolf

From: Patrick Poitevin <patrick_poitevin@hotmail.com> **ELSTREE**

From Eric Pauer: 2001 Total Lunar Eclipse from Elstree, UK A well timed business trip brought me to the UK just in time for the lunar eclipse. I successfully observed the 9 Jan 2001 lunar eclipse from Elstree, Herts, United Kingdom, about 12 miles to the northwest of central London. We had mostly clear skies in the east for U1 and leading up to totality. The skies then were 70-80% cloudy during totality and up to U3. However, I did get some good views of the eclipsed moon through breaks in the clouds. The moon appeared reddish orange, and in my opinion the eclipse was a Danjon value of 3. Shortly after U3, the skies were mostly clear, except for a high thin layer of transparent cloud, forming the infamous 22 degree halo around the moon, that grew in brightness as the moon moved out of the umbra. You can get a more detailed account and some video stills at: <http://www.bit-net.com/~pauer> . Regards Eric Pauer



DURBAN, SOUTH AFRICA



From: Peter Tiedt To: SEML (E-mail) Sent: Wednesday, January 10, 2001 5:53 AM Subject: [SE] TLE 2001.01.09.

Report from Durban, South Africa. Totally soaked in - 8/8 cloud from 4pm until well after midnight local. Not even a glimmer of moonlight. Day of 9 Jan was wall to wall blue sky, and the 10th has dawned as 100% blue sky as well. Curses Peter Tiedt

From: Winston Anderson <winston.anderson@BTGroup.co.za> To: <eclipse@hydra.carleton.ca> Sent: Wednesday, January 10, 2001 8:22 AM Subject: [eclipse] [eclipse] Total lunar eclipse 2001-01-09

Incredible view of lunar eclipse from Johannesburg, South Africa: There was a cloud free sky last night for the duration of the total lunar eclipse and its been the best lunar eclipse I've seen in my lifetime. All my photo's are all in the labs being developed. And a total solar eclipse for us in Southern Africa in just a few months! Hope to see many of you in June, in our neighbours: Zim and Zambia ...

