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# CHRONOLOGICAL CATALOG OF REPORTED LUNAR EVENTS


*by*

*Barbara M. Middlehurst*
*University of Arizona*

*Jaylee M. Burley*
*Goddard Space Flight Center*

*Patrick Moore*
*Armagh Planetarium*

*and*

*Barbara L. Welther*
*Smithsonian Astrophysical Observatory*



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Barbara M. Middlehurst
University of Arizona
Tucson, Ariz.

Jaylee M. Burley
Goddard Space Flight Center
Greenbelt, Md.

Patrick Moore
Armagh Planetarium
Armagh, Northern Ireland

and

Barbara L. Welther
Smithsonian Astrophysical Observatory
Cambridge, Mass.

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ABSTRACT

A catalog of reports of lunar events, or temporary changes on the moon, has been compiled based on literature covering more than four centuries. In most cases, the original reference has been consulted; Houzeau and Lancaster's *Bibliographie Général d'Astronomie* and the *Astronomischer Jahresbericht* were useful secondary sources. Each entry includes a brief description and date of the observation, the name of the observer(s), where these are known, and the reference.

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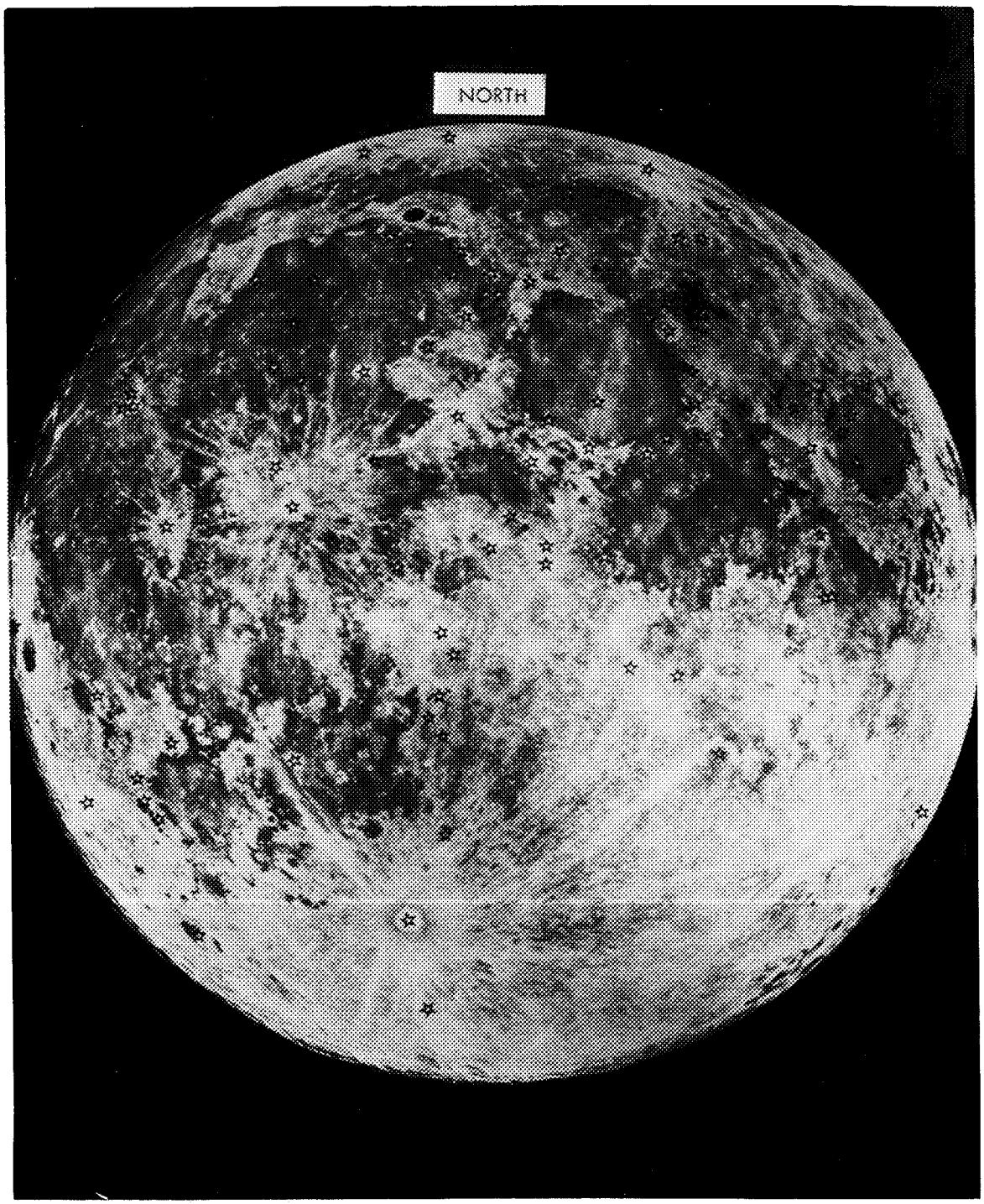


Frontispiece—Topographical distribution of reported lunar event sites indicated by stars.
[After Middlehurst and Moore, 1967, *Science 155*, 449.]

# CHRONOLOGICAL CATALOG OF REPORTED LUNAR EVENTS

by
Barbara M. Middlehurst,* Jaylee M. Burley, Patrick Moore,†
and Barbara L. Welther‡

## INTRODUCTION

A catalog of reports of lunar events, or temporary changes on the moon, has been compiled based on literature covering more than four centuries. In the majority of cases the original reference has been consulted; secondary sources such as the new (1964) edition of Houzeau and Lancaster's *Bibliographie Général d'Astronomie* and the *Astronomischer Jahresbericht* were also used. Each entry includes a brief description and date of the observation, the name of the observer(s), where these are known, and the reference. The purpose of this catalog is to provide a listing of historical and modern records that may be useful in investigations of possible activity on the moon.

## DESCRIPTION OF THE CATALOG

A lunar event is defined here as a temporary change, other than that due merely to conditions of illumination, in the appearance of a lunar feature involving a limited area, generally a few kilometers in dimension. Reports of observations of temporary bright spots, as well as veils, obscurations, and brightening of the floors of craters and other small areas have been included. No reports of apparently long-term changes are given; many of these have been reported for sites such as Messier, Linné, and Bartlett, but in most cases, the evidence is not conclusive for real changes, as it involved conflicting reports of the craters' appearances over periods of years, rather than changes actually in progress.

The catalog contains all information available to us through October 1967; many of the reports listed are taken from publications that are not now generally available. Column 1 gives a running number, column 2 the date of the occurrence, Gregorian except for the first entry which predates

*Lunar and Planetary Laboratory, University of Arizona, Tucson, Arizona.
†Armagh Planetarium, Armagh, Northern Ireland.
‡Smithsonian Astrophysical Observatory, Cambridge, Massachusetts.

the use of the Gregorian calendar* and the time at 0° longitude except where otherwise noted, column 3 the site and duration of the event, column 4 a short description of the phenomenon, column 5 the observer, and column 6 the reference. The references are given alphabetically following the catalog. Where permanent records (e.g., photographs, spectra, or photometric or spectrometric records) exist, a footnote is given.

Due to the form of the data presentation the maximum duration of the changes as listed covers a few hours only; nevertheless, it may not properly represent the total period of activity in the site. Many cases of reports for the same site on consecutive or nearly consecutive nights are given, and weather and other factors may have limited the observing period within a single night.

Throughout the catalog the use of the terms "east" and "west" follows the convention adopted by the International Astronomical Union (IAU) in 1961 in which the classical, or astronomical, "east" was changed to the astronautical "west", which is in agreement with ordinary terrestrial mapping with east at right and west at left.

As far as possible, we eliminated reports of events that, for one reason or another (e.g., possibly because of special lighting effects, multiple reflections, and changes of appearance caused by libration), are considered to be spurious. Reports of this type are discussed in the following section. In a large number of the historical cases, the high stature of the observer as a scientist inspires confidence in the reliability of the report and, for the rest, we saw no reason to dismiss the observation except in the cases listed in the next section. Almost certainly some doubtful cases remain listed in the catalog. However, their distribution with respect to almost any non-observational lunar variable is probably random, and we believe that statistically they are unimportant.

The fraction of past events which is recorded in the available literature is difficult to assess. Over the years, interest in lunar matters, and particularly in changes and events, has waxed and waned. Wars have intervened, and bad weather cycles have undoubtedly reduced the amount of observing at times. The number of observed lunar events is influenced by many other factors, such as the light-gathering power and resolution of the telescope used, the amount of time devoted to observation, and the skill and experience of the observers. It is notable that a marked increase in the frequency of the reports occurs from 1783 to 1800 following Herschel's observations of "lunar volcanoes" on May 4, 1783. This increase is almost certainly due to the interest generated among astronomers in England, France, and Germany. The gap between 1800 and 1821 correlates with unrest in Europe where most astronomers of that period lived. In 1813 the Napoleonic armies returning from Moscow overran and destroyed Schröter's observatory, home, and many of his later manuscripts. The time was a difficult one for science, and few advances in astronomy were made.

Reports of dark-side events are more frequent among the earlier observations, when the light-gathering power of most telescopes was relatively small and the field often included the image of

*Adopted in 1582 in Catholic countries, but not until 1752 in England and her colonies, and in 1923 in Russia and other Eastern Orthodox countries.

the whole moon. Operation Moon Blink (described elsewhere, e.g., Association of Lunar and Planetary Observers (ALPO) reports) and similar undertakings in other countries helped increase the frequency of reports of lunar events during the last few years. The frontispiece shows the topographical distribution of sites of reported lunar events.

## REPORTS OMITTED FROM THE CATALOG

We attempted to eliminate all doubtful reports from this catalog. Less than full realization by the observers of the effects of changing conditions of illumination and other factors may have resulted in erroneous reports. Hazards of illumination include earthshine (strongest during the first and last three days of a lunation), sunshine on peaks just beyond the terminator, differences in albedo and color in small regions, and multiple reflections from crater walls. Careless reporting has been discovered in one case only (Hammes 1878, see below).

The following records are reports in which special appearances may be due to unusual lighting conditions or other temporary effects external to the moon, or which are unacceptable for other reasons. These reports are not included in the catalog.

1789 July 30. J. H. Schröter (1791, *Selenotopographische Fragmente)* "soon after sunrise" saw a kind of ferment on the floor of Plato which clearly resembled a kind of twilight.

1856 April 8, and 1860 April 24. J. Schmidt (1879, *Vierteljahrschrift für Astronomie, 14,* 265) noted weak glows in the crater Boussingault, but he doubted that these were more than sunlight on the walls re-reflected from the floor.

1878 November 12, 8:30 local time. John Hammes and friends in Iowa reported seeing a lunar "volcano." Correspondence in *Scientific American* (Dec. 21, 1878, *39,* 385) includes drawings, an identification by Admiral Rogers of the supposed location, and a certification of John Hammes' respectability and good standing by the Mayor and three other citizens of Koekuk, Iowa. On investigation, it became clear that some of Hammes' details were incorrect, and since his drawings showed such poor detail, the site identification is questionable.

1899 August 29. P. Fauth (1899, *Astr. Nach., 151,* 219) noted that the inner parts of Copernicus glowed in weak phosphorescent light though not directly lighted by the sun. The observer noted, however, that the effect was probably due to multiple reflection, as the sun was then shining on the walls of the crater.

1909 January 24 and 25. Krebs (1909, *Astr. Nach., 181,* 45) and Nicolis noted that the non-illuminated part of the moon glowed red. These observations may have been due to special effects in the earth's atmosphere. Some eclipse reports originally included have been omitted from the list for similar reasons. Only where the observers described clearly bounded bright areas or rapid changes in brightness have eclipse observations been listed.

1964 - . Where the observations record progressive changes (on a number of occasions) by a succession of observers, apparently without adequate checks on subjectiveness, we felt sufficient doubt of the reality of a lunar event to omit the report.

In spite of the care taken, we may have wrongly included (or excluded) a number of items, but we believe that the total of these is quite small. For additional evidence in regard to the list of reported events, the following critical discussions and references are given:

Burley, J. M., and Middlehurst, B. M., 1966, "Apparent Lunar Activity: Historical Review," *Proc. Nat. Acad. Sci., 55,* No. 5, 1007-1011.

Chapman, W. B., 1967, "Tidal Influences at the Lunar Crater Aristarchus," *J. Geophys. Res., 72,* No. 24, 6293-6298.

Middlehurst, B. M., and Moore, P. A., 1967, "Topographical Distribution of Lunar Transient Phenomena," *Science, 155,* No. 3761, 449-451.

Middlehurst, B. M., 1967, "An Analysis of Lunar Events," *Reviews of Geophysics, 5,* No. 2, 173-189.

Middlehurst, B. M., 1967, "A Note on Lunar Transient Phenomena," *Icarus, 6,* No. 1, 140-142.

## ACKNOWLEDGMENTS

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CHRONOLOGICAL CATALOG OF REPORTED LUNAR EVENTS[1]

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 1 | 1540 Nov 26, ~$05^h00^m$ | Region of Calippus[2] | Starlike appearance on dark side. | Observers at Worms | Hess 1911 |
| 2 | 1587 Mar 5[2] | Dark side | "A sterre is sene in the bodie of the mone vpon the (blank) of Marche, whereat many men merueiled, and not without cause, for it stode directly betwene the pointes of her hornes, the mone being chaunged, not passing 5 or 6 daies before." | Anonymous | Harrison 1876; Lowes 1927 |
| 3 | 1650 | Aristarchus | "Red hill." Mons Porphyrites. | Hevelius | B.A.A. Lunar Sec. Circ. 1967, 2, No. 8 |
| 4 | 1668 Nov 26[2] | Dark side | Bright starlike point. | Several New Englanders | Josselyn 1675; Mather 1714; Lowes 1927 |
| 5 | 1671 Oct 21 | Pitatus | | | Bode 1792a; Lalande 1792 (1966) |
| 6 | 1671 Nov 12 | Pitatus | Small whitish cloud. | D. Cassini | Bode 1792a; Lalande 1792 (1966) |
| 7 | 1672 Feb 3 | Mare Crisium | Nebulous appearance. | D. Cassini | Bode 1792a; Lalande 1792 (1966) |
| 8 | 1673 Oct 18 | Pitatus | White spot. | D. Cassini | Bode 1792a; Lalande 1792 (1966) |
| 9 | 1685 Dec 10, ~$22^h28^m$ | Plato | Reddish streak on crater floor seen during eclipse (lunar). | Bianchini | Bianchini 1686; Klado 1965 |
| 10 | 1706 May 12 | | Three sparkling spots. | | Bode 1792a |
| 11 | 1715 May 3, ~$09^h30^m$ | | "Lightning" on the face of the moon. De Louville explained this as storms. Halley reference uses Old Style date. | Louville, Halley | Louville 1715; Halley 1715; Schröter 1791; Houzeau 1882; Houzeau and Lancaster 1964 ed. |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 12 | 1725 Aug 16 | Plato | A track of ruddy light, like a beam, crossing the middle of the obscure (shadowed) area (crater in darkness). | Bianchini | Hesp. Phos. Phaenom. 1728; Sirius 1887; Wilkins 1958 |
| 13 | 1738 Aug 4, $16^h 31^m$ | | During solar eclipse, appearance like lightning on the face of the moon. (Partial eclipse.) | Friend of Weidler | Phil. Trans. 1739 |
| 14 | 1751 Apr 22 | Plato | Yellow streak of light across crater floor while crater was in darkness. | Short, Stephens, Harris | Sirius 1887 |
| 15 | 1772 Oct 11, $\sim 17^h 13^m$ | | Bright spot on disk of fully eclipsed moon. | Beccaria's nephew and niece | Beccaria 1781; Klado 1965 |
| 16 | 1774 Jul 25 | Mare Crisium | Four bright spots. Peculiar behavior of terminator. | Eysenhard | Webb 1962 ed., pp. 106-107 |
| 17 | 1778 Jun 24, $\sim 15^h 38^m$ | 1½ min | During solar eclipse, observed spot near lunar limb almost as bright as sun. | Ulloa | Ulloa 1779, 1780; Houzeau and Lancaster 1964 ed.; Klado 1965 |
| 18 | 1783 Mar 18 or Sep 10 | | Moving glows around middle of disk during lunar eclipse. | Messier | Liais 1865; Pop. Astr. 1894-95 |
| 19 | 1783 Mar | Near Aristarchus | Bright points seen during observation of star occultation. | W. Herschel | Schröter 1791 |
| 20 | 1783 May 4 | Aristarchus, vicinity | Red spot, 4th mag, diameter <3". | W. Herschel, Mrs. Lind | Herschel 1912 |
| 21 | 1784 | Aristarchus | Nebulous bright spot of light. | Schröter | Schröter 1791 |
| 22 | 1785 | Aristarchus | Nebulous bright spot of light. | Schröter | Schröter 1791 |
| 23 | 1786 Dec 24 | Aristarchus | Extraordinarily bright. | Schröter | Schröter 1791 |
| 24 | 1787 Mar | Dark side | Three bright spots. | W. Herschel | Schröter 1791 |
| 25 | 1787 Apr 19 | Dark side | Three "volcanoes." The brightest, 3'57".3 from N limb, the other two much farther toward the center of the moon. | W. Herschel | Herschel 1787, 1912 |
| 26 | 1787 Apr 20 | Dark side | Brightest "volcano" even brighter and at least 3 mi in diameter. | W. Herschel | Herschel 1787, 1912 |
| 27 | 1787 May 19-20 | Aristarchus | Extraordinarily bright. | von Brühl | Bode 1790; Schröter 1791; Herschel 1912 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 28 | 1787 May 22 | Helicon | | Villeneuve | Lalande 1792 (1966) |
| 29 | 1788 Jan 11 | Near Plato | Bright spot on dark side. | Observers in Mannheim | Schröter 1791 |
| 30 | 1788 Mar 9-10 | Dark side | Bright spot. | Schröter | Schröter 1791 |
| 31 | 1788 Mar 13 | Riccioli | Bright spot. | Schröter | Schröter 1791 |
| 32 | 1788 Mar 13 | Helicon | Lunar volcano like 6th mag star. | Nouet | Schröter 1791; Bode 1792a; Lalande 1792 (1966) |
| 33 | 1788 Apr 9 | Aristarchus; 1 hr | Extraordinarily bright. | Bode | Bode 1792b |
| 34 | 1788 Apr 9-11 | Aristarchus | Bright spot 26" N of crater rim. | Schröter, Bode | Schröter 1789, 1791, 1792a, 1792b |
| 35 | 1788 May 8 | | Bright spots. | Mechain | Lalande 1792 (1966) |
| 36 | 1788 May 8-9 | | Bright spots. | Bode | Bode 1792b |
| 37 | 1788 Aug 27 | | Bright spot. | Schröter | Schröter 1791 |
| 38 | 1788 Sep 26, 4:25 am[3] | N edge of Mare Crisium | Small nebulous bright spot. | Schröter | Rozier 1788, 1792; Schröter 1791 |
| 39 | 1788 Sep 26 | 1'18" SE of Plato; 15 min | Whitish bright spot shining somewhat hazily and 4" to 5" in diameter, 5th mag, SE of Plato in bright mountainous region bounding Mare Imbrium. | Schröter | Schröter 1789, 1792a, 1792b; Sirius 1888 |
| 40 | 1788 Sep 26 | Near Aristarchus; 30 min | Bright spot 26" N of main crater. | Schröter | Rozier 1788, 1792; Schröter 1791 |
| 41 | 1788 Dec 2, 5:35 am[3] | Aristarchus | Extraordinarily bright, like star. | Schröter | Schröter 1791 |
| 42 | 1788 Dec 11 | Plato | Bright area, like thin white cloud. | Schröter | Klein, Woch. für Astr.; Sirius 1878 |
| 43 | 1788 | Aristarchus | Brilliant spots. | Bode | Bode 1792b; Houzeau and Lancaster 1964 ed. |
| 44 | 1789 Jan 10 | | Lunar volcano. | Seyffer | Seyffer 1789; Houzeau and Lancaster 1964 ed. |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 45 | 1789 Mar 29-30 | Grimaldi, and near Riccioli | Two flickering spots on E edge of Grimaldi, and near Riccioli on dark side of moon a bright spot. | Schröter | Schröter 1789, 1791; Houzeau and Lancaster 1964 ed. |
| 46 | 1789 Mar 29-31 | Aristarchus | Nebulous bright area. | Schröter | Schröter 1791 |
| 47 | 1789 Mar | Near Aristarchus | Brilliant spots near Aristarchus; luminous spots on dark side. | Bode | Bode 1788-89, 1789, 1793; Houzeau and Lancaster 1964 ed. |
| 48 | 1789 Apr | Near Aristarchus | Brilliant spots near Aristarchus; luminous spots on dark side. | Bode | Bode 1788-89, 1789, 1793; Houzeau and Lancaster 1964 ed. |
| 49 | 1789 May | Near Aristarchus | Brilliant spots near Aristarchus; luminous spots on dark side. | Bode | Bode 1788-89, 1789, 1793; Houzeau and Lancaster 1964 ed. |
| 50 | 1789 Sep 26 | Mont Blanc; 15 min | Small speck of light at foot of mountain, like 5th mag star. | Schröter | Pickering 1902; Webb 1962 ed., p. 113 |
| 51 | 1790 Jan 17 | Aristarchus region | Small, hazy spot of light. | Schröter | Schröter 1791 |
| 52 | 1790 Feb 15-18 | Aristarchus region | Small, hazy spot of light. | Schröter | Schröter 1791 |
| 53 | 1790 Mar 19 | Aristarchus region | Small, hazy spot of light. | Schröter | Schröter 1791 |
| 54 | 1790 Oct 22 | | During total eclipse, Herschel saw at least 150 small, round, bright, red luminous points. (Mid-eclipse, lunar, Oct 23, $00^h41^m$.) | W. Herschel | Herschel 1912 ed.; Klado 1965 |
| 55 | 1792 Feb 24 | | Cusps of moon showed signs of atmosphere. | Schröter | Webb 1962 ed., p. 97 |
| 56 | 1792 | Aristarchus | Many occasions; special appearance. | Bode | Bode 1792a |
| 57 | 1792 | Dark side | Brilliant spots. | Schröter | Schröter 1792a, 1792b |
| 58 | 1794 Mar 7 | Dark side; 15 min | Appearance of light like a star seen in dark part of the moon. | W. Wilkins, Stretton | Wilkins 1794; Stretton 1794; Maskelyne 1795; Moore 1953; Houzeau and Lancaster 1964 ed. |
| 59 | 1797 Mar 2 | Promontorium Heraclides, vicinity | "Observations of a volcano on the moon." | Caroché | Caroché 1799; Houzeau and Lancaster 1964 ed. |
| 60 | 1797 Jul 2 | Mare Vaporum | Vapors resembling mountain. | Schröter, Olbers | Klein 1879 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 61 | 1799 | Dark side | Bright spots on dark side, seen during five different lunations. | Piazzi | Piazzi 1800; Houzeau and Lancaster 1964 ed.; Treanor and O'Connell 1965 |
| 62 | 1820 Oct 17 | S of Sinus Iridum | Brilliant spots in Mare Imbrium S of Sinus Iridum. | Luthmer | Luthmer 1824 |
| 63 | 1821 Feb 5-6 | Aristarchus, vicinity | Luminous appearance on dark side; 6th to 7th mag, 3' to 4' diameter. | Kater, Olbers, Browne | Kater 1821; Olbers 1822, 1824; Gauss 1874; Houzeau and Lancaster 1964 ed. |
| 64 | 1821 Apr 7 | Posidonius | Appeared without shadow. | Gruithuisen | Webb 1962 ed., p. 110 |
| 65 | 1821 May 4-6 | Aristarchus, vicinity | Bright spot on dark side, <1' diameter. | Ward, Baily | Ward 1822; Baily 1822 |
| 66 | 1821 Jul 25 | Dark side | Brilliant flashing spots. | Gruithuisen | Gruithuisen 1824 |
| 67 | 1821 Nov 28, $\sim 20^h 00^m$ | Dark side | Variable bright spot like 6th mag star. | Fallows | Fallows 1822 |
| 68 | 1822 Jan 27 | Aristarchus, vicinity | Bright spot like 8th mag star. | F. G. W. Struve | Struve 1823 |
| 69 | 1822 Jun 22-23 | Aristarchus | Lunar "volcano." | Rüppell | Rüppell 1822 |
| 70 | 1822 | | "Volcanoes" on the moon; several occasions. | Flaugergues | Flaugergues 1822 |
| 71 | 1822 | | Lunar "volcano." | Zach | Zach 1822 |
| 72 | 1824 May 1 | Near Aristarchus | Blinking light, 9th to 10th mag on dark side. | Göbel | Göbel 1826 |
| 73 | 1824 Oct 18 | Aristarchus, vicinity | Mingling of all kinds of colors in small spots in the W and NW of Aristarchus. | Gruithuisen | Gruithuisen 1824; Fauth 1899 |
| 74 | 1824 Oct 20, $05^h 00^m$ | Dark side, Mare Nubium | Bright area 100 x 20 km. | Gruithuisen | Flammarion 1884; Azevado 1962 |
| 75 | 1824 Dec 8 | Plato | Bright fleck in SE part of crater. | Gruithuisen | Sirius 1879 |
| 76 | 1825 Apr 8 | Plato | W part of crater brighter than E part. | Gruithuisen | Sirius 1879 |
| 77 | 1825 Apr 22 | Aristarchus and vicinity | Periodic illumination. | Argelander, Göbel | Argelander 1826; Göbel 1826 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 78 | 1825 Dec 1, $23^h45^m$ | Ptolemaeus | Bright spot. | Schwabe | Sel. J. 1880 |
| 79 | 1826 Apr 12, $20^h00^m$ | Mare Crisium | Black moving haze or cloud. | Emmett | Emmett 1826; Capron 1879 |
| 80 | 1826 Apr 13, $20^h00^m$ | Mare Crisium; 1 hr | Cloud less intense. | Emmett | Capron 1879 |
| 81 | 1832 Jul 4 | Mare Crisium | Speckled with minute dots and streaks of light. | T. W. Webb | Astr. Reg. 1882; Webb 1962 ed., p. 105 |
| 82 | 1832 Dec 25 | Aristarchus, vicinity | Bright spot. | C. P. Smyth | Smyth 1836 |
| 83 | 1835 Dec 22, $18^h30^m$ | Near Aristarchus | Bright spot, 9th to 10th mag. | C. P. Smyth | Smyth 1836 |
| 84 | 1836 Feb 13 | Messier | Two straight lines of light; a band between covered with luminous points. | Gruithuisen | Sci. Amer. Supp. Vol. 7 |
| 85 | 1839 Jun 24 | Grimaldi | Smoky-gray mist. | Gruithuisen | B.A.A. Mem. 1895 |
| 86 | 1839 Jul 7 | South Pole | Twilight. | Gruithuisen | B.A.A. Mem. 1895 |
| 87 | 1839 Jul 19 | Schröter | Dark mist. | Gruithuisen | B.A.A. Mem. 1895 |
| 88 | 1842 Jul 8, $07^h02^m$ | | During solar eclipse, moon's disk occasionally crossed by bright streaks. | | Wullerstorff 1846; Zantedeschi 1846 |
| 89 | 1843 Jul 4 | Peak S of Alps | On terminator saw an unusually bright spot that glowed like a fixed star. | Gerling | Gerling 1845; Sirius 1888 |
| 90 | 1844 Apr 25 | SW of Pico | A bluish glimmering patch of light, not quite within the night side of the moon. | J. Schmidt | Sel. J. 1878 |
| 91 | 1847 Mar 18, 19 | Dark side | Large luminous spots on dark side. | Rankin, Chevalier | Rankin 1847; Houzeau and Lancaster 1964 ed. |
| 92 | 1847 Dec 11, $18^h00^m$ | Teneriffe Mts. | A bright spot about 1/4-ang diam of Saturn was perceived which, though it varied in intensity like an intermittent light, was at all times visible (dark side). | Hodgson | Hodgson 1848 |
| 93 | 1848 Mar 19, | | During eclipse, rapid changes in | Gorjan | M. N. 1847-48; |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 94 | 1849 Feb 11 | Posidonius | Without normal shadow. | J. Schmidt | Webb 1962 ed., p. 110 |
| 95 | 1854 Dec 27 | Teneriffe Mts. (near Plato): 5 hr | Two luminous fiery spots on bright side. "...an appearance I had never seen before on the surface of the moon though I have observed her often these last 40 years .... It appeared to me from the brightness of the light and the contrast of colour, to be two active volcanoes or 2 mouths of one in action." | Hart | Hart 1855 |
| 96 | 1855 Jun 20 | | Traces of twilight seen. Webb gives low weight to observation "for want of better optical means." | Webb | Webb 1962 ed., p. 97 |
| 97 | 1862 Jun 12, $06^h 19^m$ | | "During [lunar] eclipse, the E [IAU: W] side dark brick red and something seemed to oscillate before it." At mid-eclipse on the S side, "a very small meniscus was seen nearly the color of the uneclipsed moon." | | Liais 1865 |
| 98 | 1864 May 15 and Oct 16 | Mare Crisium, E of Picard | Bright cloud. | Ingall | Ingall 1864 |
| 99 | 1864 | | Bright spot. | Birt | Birt 1864 |
| 100 | 1865 Jan 1 | SE of Plato; 30 min | Bright spot like 4th mag star slightly out of focus. Bright speck remained changeless for 30 min, and its light was steady. | Grover | Grover 1866; Webb 1962 ed., p. 114 |
| 101 | 1865 Apr 10 | Mare Crisium, E of Picard | Point of light like star. Whole of Mare Crisium intersected with bright veins, mixed with bright spots of light. Aperture 4-1/2 in.; 4 hr before full moon. | Ingall | Astr. Reg. 1866 |
| 102 | 1865 Sep 5 | Mare Crisium, E of Picard | Point of light like star, with misty cloud. | Ingall | Astr. Reg. 1866 |
| 103 | 1865 Nov 24 | Carlini; 1 hr 30 min | Dark side, distinct bright speck like 8th mag star. | Williams and two others | Webb 1962 ed., p. 125 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 104 | 1865 | Mare Crisium | Dots and streaks of light. | Slack, Ingall | Webb 1962 ed., p. 105 |
| 105 | 1866 Jun 10 | Aristarchus | Starlike light. | Tempel | Denning, Tel. Work, p. 121 |
| 106 | 1866 Jun 14-16 | Aristarchus, vicinity | Reddish-yellow. | Tempel | Tempel 1867 |
| 107 | 1866 | Dark side | Bright spots. | Hodgson | Hodgson 1866 |
| 108 | 1867 Apr 9, $19^h 30^m$ - $21^h 00^m$ | Aristarchus, vicinity; 1 hr 30 min | Bright spot on dark side, 7th mag, becoming fainter after $20^h 15^m$ UT. | Elger | Elger 1868 |
| 109 | 1867 Apr 12, $07^h 30^m$ - $08^h 30^m$ | Aristarchus, vicinity; 1 hr | Bright spot on dark side, 7th mag. | Elger | Webb 1962 ed., p. 93 |
| 110 | 1867 May 6-7 | Aristarchus; at least several hours each night | Left side of crater, very bright luminous point, appearing like a volcano. | Flammarion | Flammarion 1884 |
| 111 | 1867 May 7 | Aristarchus, vicinity | Reddish-yellow, beacon-like light. | Tempel | Tempel 1867; Astr. Reg. 1868 |
| 112 | 1867 Jun 10 | Sulpicius Gallus | Three blackish spots. | Dawes | The Student Vol. 1 |
| 113 | 1867 | Dark side | Bright spots. | W. O. Williams | Williams 1867 |
| 114 | 1870 May 13 | Plato | Bright spots, extraordinary display. | Pratt, Elger | Rept. Brit. Assn. 1871 |
| 115 | 1870 | | White spots on the moon: "lightning". | Birt | Birt 1870 |
| 116 | 1870 | Godin | Purplish haze illuminating floor of crater, still in shadow. | Trouvelot | Trouvelot 1882; Moore 1963 |
| 117 | 1871 | Plato | Streak of light across floor while crater in shadow. | Elger | Sirius 1887 |
| 118 | 1871 | W of Plato | Fog or mist. | Elger, Neison | Flammarion 1884 |
| 119 | 1872 Jul 16 | Plato | NE portion of floor hazy. | Pratt | Capron 1879 |
| 120 | 1873 Jan 4 | Kant | Luminous purplish vapors. | Trouvelot | Trouvelot 1882; Flammarion 1884; Moore 1963 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 121 | 1873 Apr 10 | Plato | Under high sun, two faint clouds in W part of crater. | Schmidt | Sirius 1879 |
| 122 | 1873 Nov 1 | Plato | Unusual appearance. | Pratt | Capron 1879 |
| 123 | 1874 Jan 1 | Plato | Unusual appearance. | Pratt | Capron 1879 |
| 124 | 1877 Feb 20, $09^h30^m$-$10^h30^m$ | Eudoxus; 1 hr | Fine line of light like luminous cable drawn W to E across crater. | Trouvelot | Flammarion 1884; l'Astron. 1885 |
| 125 | 1877 Feb 27, $19^h19^m$ | | Lunar eclipse. Flickering light on lunar surface. | Dorna | l'Opin. Nazion. 1877 |
| 126 | 1877 Mar 17, $06^h45^m$ | | Moon's horns showed trace of atmosphere. Moon $2^d16^h$ old (2.75-in. reflector). | Dennett | Eng. Mech. 1882 |
| 127 | 1877 Mar 21 | Proclus | Brilliant illumination. | Barrett | Eng. Mech. 1882 |
| 128 | 1877 May 15, $20^h30^m$ and May 29, $00^h35^m$ | E of Picard | Bright spot. | | Eng. Mech. 1882 |
| 129 | 1877 Jun 17, $22^h30^m$ | Bessel | Minute point of light (seen with 2.75-in. reflector). | Dennett | Eng. Mech. 1882 |
| 130 | 1877 Jul 29 | Plato | S of center of crater, bright streak, disappeared at 2:30 a.m. | Gray | Flammarion 1884 |
| 131 | 1877 Aug 23-24, $23^h10^m$ | | Lunar eclipse. (1) Unusual spectrum with strong absorption in yellow. (2) Two patches of crimson light of short duration. | (1) Airy; (2) Capron, Pratt | (1) Sirius 1878; (2) Capron 1879 |
| 132 | 1878 Feb 2, $08^h16^m$ | At limb | Changes in spectrum during solar eclipse suggesting lunar atmosphere. | Observers at Melbourne, Australia | Sirius 1878 |
| 133 | 1878 Mar 10, $19^h20^m$ | Mare Crisium | White patch E of Picard badly defined. | Noble | Sel. J. 1878 |
| 134 | 1878 Oct 5, $21^h40^m$ | Plato | Faint bright shimmer like thin white cloud. | Klein | Klein, Woch. für Astr.; Sirius 1878 |
| 135 | 1878 Oct 21 | 3 hr | Half of moon's terminator obliterated. | Hirst | Capron 1879 |
| 136 | 1878 Nov 1 | Messier | Obscuration of Messier. | Klein | Pop. Astr. 1902 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 137 | 1878 Nov 9, $21^h00^m$ | Plato | Faint but unmistakable white cloud, not seen before. | Klein | Sirius 1879 |
| 138 | 1878 Dec 4 | Agrippa, Klein's Object and the oval spot nearby | "Odd misty look as if vapour were in or about them." | Capron | Capron 1879 |
| 139 | 1878 | E of Picard | White patch. | Birt | Eng. Mech. Vol. 28 |
| 140 | 1878 | Interior of Tycho | Cloudy appearance. | Birt | Eng. Mech. Vol. 28 |
| 141 | 1880 Jan 18 | Whole of Mare Nectaris | Foggy. Fog extended into the floor of Fracastorius. Gruithuisen said that the seeing was unsatisfactory. | Gaudibert | Gaudibert 1880 |
| 142 | 1881 Feb 3, $19^h00^m$ | Aristarchus (on dark side, limb area) | Very bright (~8.0 mag star) with pulsations. | "Gamma"[6] | Sirius 1881 |
| 143 | 1881[2] Jul 4, $00^h30^m$ | | "Two pyramidal luminous protuberances appeared on the moon's limb .... These points were a little darker than the rest of the moon's face. They slowly faded away...." | Several observers | Sci. Amer. 1882 |
| 144 | 1881 Aug 6-7 | Aristarchus region | Whole region between Aristarchus and Herodotus and S part of Great Rille (Schröter's Valley) appeared in strong violet light as if covered with fog. | Klein | Klein 1902 |
| 145 | 1881 Dec 5, $17^h09^m$ | Aristarchus | During eclipse, Aristarchus was a white spot in the coppery disk and continued so. (Lunar eclipse.) | S. J. Johnson | Johnson 1882; Fisher 1924 |
| 146 | 1882 Jan 29, $17^h00^m$-$17^h30^m$ | Eudoxus; 30 min | Unusual shadow. | | Sirius 1882 |
| 147 | 1882 Feb 27, $18^h30^m$-$19^h30^m$ and $20^h30^m$-$20^h45^m$ | Eudoxus; 1 hr, and 15 min | Unusual shadow (on Feb 25, the shadow was normal). | | Sirius 1882 |
| 148 | 1882 Mar 27, $18^h45^m$ | Plato | Floor glowed with milky light. | A. S. Williams | Williams 1882 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 149 | 1882 Apr 24 | Near Godin and Agrippa | Shadows blurred and oscillating. Shadows in Aristoteles steady. Intervals between obscurations, ~10 min. | Ridd | Proc. Liverpool Astr. Soc. 1883 |
| 150 | 1882 May 19 | Just E of Mare Crisium against Prom. Agarum | Cloud, not less than 100 mi x 40 or 50 mi; no trace seen on May 20. | J. G. Jackson and friends | Eng. Mech. 1882; Strol. Astr. 1966; B.A.A. Lunar Sec. Circ. 1966, 1, No. 8 |
| 151 | 1882 Jul 17 | Just E of Mare Crisium, against Prom. Agarum | Feathery mist or cloud. | J. G. Jackson | Strol. Astr. 1966 |
| 152 | 1882 Nov 7, $09^h 00^m$ | Dark limb | Line of light around dark limb, attributed to atmosphere, well seen, equally bright throughout length. Age of moon 26.5 days. | Hopkins | Sirius 1884 |
| 153 | 1883 Mar 12, $20^h 00^m$ | Dark limb | Line of light (see 1882 Nov 7), well seen. | Hopkins | Sirius 1884 |
| 154 | 1883 Mar 12 | Taruntius and environs | Peculiar blurred appearance. Unmistakable variations in the sharpness of the shadows of the ring plain. | Davies | Proc. Liverpool Astr. Soc. 1883; B.A.A. Lunar Sec. Circ. 1966, 1, No. 10 |
| 155 | 1883 May | Edge of Mare Crisium | Light mist or cloud. | J. G. Jackson | Flammarion 1884 |
| 156 | 1883 Nov 5, $\sim 18^h 00^m$ | Aristarchus | Very bright (~7.0-8.0 mag star). | "$R_r$"[6] | Sirius 1883 |
| 157 | 1884 Feb 5 | Kepler | Illumination in Kepler. | Morales | l'Astron. Vol. 9 |
| 158 | 1884 Oct 4, $\sim 22^h 03^m$ | Tycho | During eclipse, bright spot like a star of the 2nd mag. (Lunar eclipse.) | Parsehian | Parsehian 1885; Fisher 1924 |
| 159 | 1884 Nov 29, $19^h 00^m$–$21^h 00^m$ | Aristarchus; 2 hr | Nebulous at center; elsewhere features well defined. | Hislop | Sirius 1885 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 160 | 1885 Feb 19 | Small crater near Hercules | Small crater was dull red with vivid contrast. | Gray | l'Astron. Vol. 4; Knowledge Vol. 7 |
| 161 | 1885 Feb 21 | Cassini | Red patches. | Knopp | l'Astron. Vol. 4 |
| 162 | 1886 Jun 10 | Aristarchus | Starlike light. | Tempel | Pop. Astr. 1932 |
| 163 | 1886 Sep 6 | Plato | Streak of light on dark floor of crater in shadow. (67 mm refl.) | Valderama | Sirius 1887 |
| 164 | 1887 Feb 1, $\sim 17^h 00^{m4}$ | Plato | Appearance of light in crater. | Krüger | Sirius 1887 |
| 165 | 1887 Feb 2 | La Hire | Intense yellow streak that cast shadows around neighboring features. | Klein | Sirius 1903 |
| 166 | 1888 Jul 15 | S edge of Alps on dark side of moon | "Lunar volcano"; ~1 mag star. Yellow light tinged with red from refractor's secondary spectrum. | Holden | Sirius 1888 |
| 167 | 1888 Nov 23, $17^h 15^{m4}$ | 45 min | A triangular patch of light (seen with 3 1/2-in. refractor and 180X mag). | von Speissen and others | Sirius 1888 |
| 168 | 1889 Mar 30 | Copernicus | Black spot. | Gaudibert | l'Astron. 1889 |
| 169 | 1889 May 11 | Gassendi | Black spot on rim. | | l'Astron. 1889 |
| 170 | 1889 Jun 6, $22^h 00^m$ | Plato B and D (Schmidt's designation) | Two extremely bright spots (8-in. refractor). | Evon Lade | Sirius 1889 |
| 171 | 1889 Jul 12, $\sim 20^h 52^m$ | Aristarchus | During lunar eclipse, brilliance in surrounding gloom was striking. | Krueger | Krueger 1889; Fisher 1924 |
| 172 | 1889 Sep 3 | Alpetragius; 30 min | "Central peak, its shadow and all the floor seem to be seen through haze." | Barnard | Barnard 1892 |
| 173 | 1889 Sep 13 | Plinius | White spot over central peak. | Thury | Thury 1889a, 1889b |
| 174 | 1889 Oct 3-4 | Alpetragius | Hazy. | Barnard | Barnard 1892 |
| 175 | 1890 Oct 3, $\sim 22^h 00^m$ | Posidonius | Unusual shadow. | Meller | Sirius 1890 |
| 176 | 1891 May 23, $\sim 18^h 20^m$ | Aristarchus region | Lunar eclipse, half hour before end of totality, Aristarchus and region immediately N of it became conspicuous and increased in brightness from that time on. | W. E. Jackson | Jackson 1890-91; Fisher 1924 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 177 | 1891 Sep 16 | Schröter's Valley | "Dense clouds of white vapour were apparently arising from its bottom and pouring over its SE [IAU:SW] wall in the direction of Herodotus." | W. H. Pickering | Pickering 1903 |
| 178 | 1891 Sep 17, 18, 23, 25 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 179 | 1891 Oct 14 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 180 | 1891 Nov 7 | Aristarchus | Very distinct luminous point. | d'Adjuda | l'Astron. Vol. 11 |
| 181 | 1892 Mar 31 | Thales | Pale luminous haze. | Barnard | Barnard 1892 |
| 182 | 1892 May 10 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 183 | 1892 May 11, $\sim 22^h 53^m$ | | During partial lunar eclipse, extension of earth's shadow beyond the cusps. | | Sirius 1892 |
| 184 | 1893 Jan 30 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 185 | 1893 Apr 1 | | Shaft of light. | de Moraes | l'Astron. Vol. 13 |
| 186 | 1894 Feb 23 | Henke (now Daniell) and N wall of Posidonius | Strong brownish-red coppery hue in Henke and also on N wall of Posidonius. | Krieger | Sirius 1895 |
| 187 | 1895 Mar 11, $03^h 42^m$ | | During lunar eclipse, very striking color in SE quadrant. | Foulkes | B.A.A. Mem. 1895 |
| 188 | 1895 May 2, (1) $\sim 20^h 45^m$; (2) $\sim 23^h 30^m$ | Plato; (1) ~12-14 min | (1) Streak of light. (2) Bright parallel bands in center. | (1) Brenner; (2) Fauth | (1) Sirius 1895, 1897; (2) Sirius 1896, 1897 |
| 189 | 1895 Sep 25 | | Shaft of light. | Gaboreau | l'Astron. Vol. 13 |
| 190 | 1896 | Macrobius | Penumbral fringe to shadow. | Goodacre | Firsoff 1962 ed., p. 90 |
| 191 | 1897 Jun 14 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 192 | 1897 Sep 21, $23^h 00^m$ | Aristarchus | Glimmering streaks. | Molesworth | Goodacre 1931 |
| 193 | 1897 Oct 8, 10, 13, 15 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 194 | 1897 Dec 9 | Wm. Humboldt | Light chocolate border to shadow on E wall. | Goodacre | B.A.A. Mem. 1898 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 195 | 1898 Jan 8, $00^h30^m$ | Tycho region | About mid-eclipse, shadow so dense that details of surface disappeared entirely, except that bright ray extending SSW from Tycho was clearly visible throughout its whole extent and continued so throughout eclipse. (Lunar eclipse.) | Chevremont | Chevremont 1898; Fisher 1924 |
| 196 | 1898 Apr 6-8 | Schröter's Valley | Apparent volcanic activity. | W. H. Pickering | Pickering 1903 |
| 197 | 1898 Jul 3 $21^h47^m$ | Proclus | Half hour after mid-eclipse, the crater shone with reddish light in shadow. (Lunar eclipse.) | Moye | Moye 1898; Fisher 1924 |
| 198 | 1898 Dec 27, $\sim 23^h38^m$ | Aristarchus | During eclipse, Aristarchus brilliant. (Lunar eclipse.) | Stuyvaert | Niesten and Stuyvaert. 1898-99; Fisher 1924 |
| 199 | 1901 Oct 25 | Marius | A number of light streaks noticed on the crater floor. (Usually none are seen.) | Bolton | Bolton 1901 |
| 200 | 1902 Aug 13, $00^h50^m$ | Near Lambert | (1) Brilliant starlike point; (2) completely round bright area, on dark side of moon's terminator, mag 3 or 4. | Jones | (1) Pickering 1902; (2) Sirius 1903 |
| 201 | 1902 Oct 16 | Theaetetus | Cloud near Theaetetus. | Charbonneaux | Charbonneaux 1902 |
| 202 | 1903 Mar 1 | Aristarchus | Intermittent light "like a little star." | Rey | Rey 1903 |
| 203 | 1903 Mar 3 | Aristarchus | Intermittent light "like a little star." | Gheury | Bull. Soc. Astr. France 1903 |
| 204 | 1904 Jul 31 | Plato | Bright hazy object 2" diameter on crater floor. | Pickering | Pickering 1906 |
| 205 | 1904 Oct 2, $13^h00^m$; $16^h00^m$ | Plato | Total or partial obscuration of crater floor. | Elger, Klein, Hodge, Goodacre | Goodacre 1931; Webb 1962 ed.; Green 1965 |
| 206 | 1905 Feb 19, $\sim 19^h03^m$ | Aristarchus | During eclipse, bright spot shining in the dark as a little star. (Lunar eclipse.) | Moye | Moye and Russell 1905; Fisher 1924 |
| 207 | 1905 Aug 15, $\sim 03^h39^m$ | Tycho | Visible, even brilliant during eclipse. | Rey | Sforza 1905; Fisher 1924 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 208 | 1906 Aug 4, ~$12^h58^m$ | Aristarchus | Shone conspicuously during lunar eclipse. | Ward | Ward 1906-07; Fisher 1924 |
| 209 | 1906 | Mare Humorum | | Flammarion | Azevado 1962 |
| 210 | 1906 | Mare Serenitatis | | Dubois, Flammarion | Azevado 1962 |
| 211 | 1906 | Lichtenberg | | Flammarion | Azevado 1962 |
| 212 | 1906 | Alphonsus | | Flammarion | Azevado 1962 |
| 213 | 1907 Jan 22 | Plato | Glow of light in part of Plato. | Fauth | Fauth 1907 |
| 214 | 1909 | Tycho | False dawn. | Mellish | Mellish 1909 |
| 215 | 1909 | Mersenius | Dimly lighted zone W of shadow. | Merlin | Merlin 1909 |
| 216 | 1912 Apr 1, ~$22^h15^m$ | Tycho | Visible like a bright spot standing out in the dark slate-gray shadow. Only Tycho was seen during lunar eclipse. | LeRoy | LeRoy 1912; Fisher 1924 |
| 217 | 1912 May 19 | Dark side | Small red glowing area noticed on shadow side of moon. | Valier | Valier 1912 |
| 218 | 1912 May 20 | Leibnitz Mts. area | Glowing line of light into dark side. | Franks | Franks obs. book |
| 219 | 1912 Sep 25 | Pico B | Haze spreading from W end of crater. | Pickering | Rawstron 1937 |
| 220 | 1913 Mar 22, ~$11^h57^m$ | | During eclipse totality, there remained visible to the NW only a luminous point not much larger than the planet Mars and of the same color. (Lunar eclipse.) | G. Jackson | Jackson 1913; Fisher 1924 |
| 221 | 1913 Jun 15 | South | Distinct small reddish spot. | Maw | Webb 1962 ed. |
| 222 | 1915 Jan 31 | Littrow | Seven white spots arranged like a Greek gamma. | Burgess | Eng. Mech. Vol. 101 |
| 223 | 1915 Apr 21 | S of Posidonius | Noticed special occurrence S of large circle Posidonius which he took as evidence of water vapor. | Houdard | Houdard 1917 |
| 224 | 1915 Apr 23 | Clavius | Narrow, straight beam of light from crater A to crater B. | Cook | B.A.A. Mem. 1916 |
| 225 | 1915 Dec 11 | Mare Crisium | Particularly bright spot like star on N shore. | Thomas | Eng. Mech. Vol. 103 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 226 | 1916 Oct 10 | Plato | Pickering's craterlet No. 59 involved in reddish shadow and disappeared. Usually distinctly seen under similar illumination. | Maggini | Sci. Amer. 1919 |
| 227 | 1917 Jan 8, ~$07^h45^m$ | Dionysius | Point on rim of crater shone like a small star for sometime after entering the eclipse shadow. (Lunar eclipse.) | W. F. A. Ellison | Ellison 1917; Fisher 1924 |
| 228 | 1919 Nov 7, ~$23^h45^m$ | Tycho, vicinity | Long ray in direction of Longomontanus remained visible glowing in weak gray-green light during whole eclipse (until clouds stopped observation). (Lunar eclipse.) | Fock | Fock 1920; Fisher 1924 |
| 229 | 1920 | Near Vitruvius | Some peaks varied considerably in brightness. | Franks | Wilkins and Moore 1958 |
| 230 | 1922 Nov 28 | La Hire; 20 min | Shadow cut through by white streak. | H. P. Wilkins | Wilkins 1954 |
| 231 | 1927 May 12 | Peirce A (Wilkins' Graham) | Complete obscuration of crater. | H. P. Wilkins | Moore 1953; Green 1965 |
| 232 | 1927 Dec 23, $22^h00^m$ | Peirce A (Wilkins' Graham) | Invisible. | H. P. Wilkins | H. P. Wilkins obs. book |
| 233 | 1931 Feb 22 | Aristarchus | Reddish-yellow. | Joulia | Joulia 1931 |
| 234 | 1931 Mar 27 | Tycho | Central mountain gray although crater interior was in full shadow. | Barker | Moore 1953; Green 1965 |
| 235 | 1931 | Aristarchus | Bluish glare. | Goodacre, Molesworth | Goodacre 1931 |
| 236 | 1932 Apr 15, $06^h57^m$ | Plato | Sudden appearance of white spot like cloud. | Goddard and friend | Pop. Astr. 1932 |
| 237 | 1933 Mar 30 | Aristarchus region | White. | Douillet | Douillet 1933 |
| 238 | 1933 Sep 1 | Neighborhood of Pico, and Pico B | Haze observed. | Rawstron | Rawstron 1937 |
| 239 | 1933 Oct 1 | Neighborhood of Pico, and Pico B | Haze observed. | Rawstron | Rawstron 1937 |
| 240 | 1936 May 4 | Eratosthenes | Detected small bright spots on crater floor. | Martz | Haas 1942 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 241 | 1936 Oct 4 | Eratosthenes | Many small bright spots on crater floor, some of which Martz detected, but Johnson drew bright bands in their positions. | Haas | Haas 1942 |
| 242 | 1936 Oct 25 | Eratosthenes | Small bright spots on floor of crater. | Haas | Haas 1942 |
| 243 | 1937 Feb 14 | Cassini | Bright spot. | Andrenko | Azevado 1962 |
| 244 | 1937 Sep 17 | Aristarchus | Bright streak. | H. M. Johnson | Haas 1942 |
| 245 | 1937 Sep 28 | Riccioli | Color of dark area was deep purple; next night same with vivid hue. | Haas | Haas 1942 |
| 246 | 1937 Oct 26 | Alphonsus, Herschel, and Ptolemaeus | Milky floors. | Alter | Alter 1959 |
| 247 | 1937 Dec 12 | Plato | Strongly marked streak of orange-brown on E wall. | Barker | Barker 1940 |
| 248 | 1938 Jan 16-17 | Plato | Brownish gold-veined surface of color irregularly laid on smooth floor of crater. | Barker | Barker 1940 |
| 249 | 1938 Feb 14 | Plato | Golden-brown spot on E wall very prominent, with a yellowish glow without a definite boundary spreading over floor of crater. | Fox | Barker 1940 |
| 250 | 1939 Feb 23 | Aristarchus | Bright spot. | Andrenko | Azevado 1962 |
| 251 | 1939 Mar 29, $19^h00^m$ | Copernicus: 15 min | Central mountain group seen distinctly as diffuse light spot. Sunrise on peaks did not begin until $22^h00^m$. | Wilkins | Wilkins 1954 |
| 252 | 1939 Aug 2, $00^h10^m$ | Schickard | Dense fog. | Moore | Wilkins and Moore 1958; Firsoff 1962 ed., p. 80 |
| 253 | 1939 Oct 19 | Macrobius | Floor of crater reddish-brown, a hue ordinarily absent. | Barcroft | Haas 1942 |
| 254 | 1939 Dec 27 | Aristarchus | Slight bluish tinge on the still brilliant W wall. | Barcroft | Haas 1942; Firsoff 1962 ed., p. 84 |
| 255 | 1940 May 20, $20^h00^m$ | Schickard | Whitish obscuration; less dense than 1939 Aug 2. | Moore | Moore obs. book |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 256 | 1940 Jun 14 | Plato | Two hazy streaks of medium intensity, much complex detail. | Haas | Haas 1942 |
| 257 | 1940 Jul 14 | Tycho | Curious faint milky-looking luminosity seen. Luminous marks in shadow were ragged-edged and irregularly shaped. | Haas | Haas 1942 |
| 258 | 1940 Oct 19 | Lichtenberg area | Pronounced reddish-brown or orange color around area. Found color less marked next night, and slight by Oct 22. | Barcroft | Haas 1942; Strol. Astr. 1951 |
| 259 | 1940 Oct 29 | Cusps | Prolongation of N horn by 15 degrees. | Vaughan | Firsoff 1962 ed., p. 127 |
| 260 | 1940 Dec 2 | Aristarchus | Distinguished crater in dark hemisphere as a bright spot. | Vaughan | Haas 1942 |
| 261 | 1940 Dec 9 | Tycho | Found some luminosity on W crater rim of W outer slope. | Barcroft | Haas 1942 |
| 262 | 1940 Dec 25 | Cusps | "Each horn appeared prolonged by about 10 degrees." | Haas | Firsoff 1962 ed., p. 127 |
| 263 | 1941 Jan 6 | Arzachel | Anomalous shadow. | Barcroft | Azevado 1962; Wilkins 1954 |
| 264 | 1941 Feb 6 | Conon | Faint bright spot, not too definite in outline, seen on crater floor. | Vaughan | Haas 1942 |
| 265 | 1941 Mar 6 | Cusps | Prolongation suspected. | Barcroft | Firsoff 1962 ed., p. 127 |
| 266 | 1941 Mar 31 | Aristarchus | Crater perceived by earthshine (Haas thought it must have been unusually brilliant). | Barcroft | Haas 1942 |
| 267 | 1941 Jul 10 | Gassendi, and near Hansteen | Moving luminous speck near Hansteen; estimated diameter 0.1", mag +8 (lunar meteor?). | Haas | Wilkins and Moore 1958, p. 281; Azevado 1962 |
| 268 | 1942 Feb 2, $18^h20^m$–$19^h15^m$ | W of Kepler; 55 min | Whitish glow near earthlit limb. | Y. W. I. Fisher | Wilkins and Moore 1958, p. 271 |
| 269 | 1942 Aug 26 | Atlas | Dark areas faded in crater. | Haas | Haas 1965 |
| 270 | 1944 Apr 4 | Hyginus N (Klein N) | Much darker than usual. | Wilkins | Moore 1953, p. 144; Green 1965 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 271 | 1944 Aug 12, $23^h 00^m$ | Plato | Exceptional darkness of crater floor, three light spots noted at foot of E wall. Although no light streaks were visible, there was a large and conspicuous spot near the center. Since this spot has been noted as slightly but definitely rimmed all round, Wilkins suggested that temporary dark cloud or vapor may have covered true floor up to level of rim. | Wilkins | Wilkins 1944 |
| 272 | 1944 Aug 31 | Schickard | Mist on crater floor. | Wilkins | Wilkins and Moore 1958 |
| 273 | 1945 Oct 19, $11^h 23^m 50^s$ | Plato | Bright flash on crater floor near E Wall. | Thornton | Green 1965; Thornton 1945 |
| 274 | 1945 Oct 19 | Darwin | Three brilliant points of light on wall. | Moore | Wilkins 1954 |
| 275 | 1947 Jan 30 | Eratosthenes | Without normal shadow. | H. Hill | Wilkins and Moore 1958 |
| 276 | 1947 Aug 28 | SE of Langrenus | Mountain on limb very decidedly bluish. | Baum | Wilkins 1954 |
| 277 | 1947 Nov 30 | Aristarchus | Bright spots on inner W slopes. | Favarger | Wilkins 1954 |
| 278 | 1948 Feb 17 | Dawes | Central peak not seen, but cleft-like marking from SW crest towards E shadow. | Thornton | Contrib. by Moore |
| 279 | 1948 Apr 14 | | Prolongation of southern cusp. | Wilkins | Wilkins 1954 |
| 280 | 1948 Apr 15 | 30 degrees N of Grimaldi on W limb | Bright spot on earthlit W limb 30 degrees N of Grimaldi and estimated equal to a 3rd mag star. | Vince | J.B.A.A. 1948 |
| 281 | 1948 May 20 | NE of Philolaus; 15 min | Red glow. | Baum | Firsoff 1962 ed., p. 82 |
| 282 | 1948 Jul 21-22 | Mare Crisium; several hours | Almost featureless apart from Picard, Peirce. | Moore | Moore obs. book |
| 283 | 1948 Jul 27 | Promontorium Heraclides | Blurred and misty. | Moore, Docherty | Moore obs. book |
| 284 | 1948 Aug 8 | Dark side | A small bright flash on earthlit portion . . . like a bright sparkle of frost on the ground. | Woodward | Moore 1953 |
| 285 | 1948 Aug 16 | E of Picard; several hours | Two areas E of Picard appeared featureless. | Moore | J.B.A.A. 1949 |
| 286 | 1948 Oct 8 | Barker's Quadrangle | Nebulous white patch in place of Quadrangle. | Moore | Moore obs. book |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 287 | 1948 Oct 19 | Promonotirum Heraclides | Blurred. | Docherty | Contrib. by Moore |
| 288 | 1949 Feb 7, $18^h 00^m$ | Kepler | White glow near Kepler. | Y. W. I. Fisher | Contrib. by Moore |
| 289 | 1949 Feb 9 | Barker's Quadrangle | Quadrangle not seen . . . appeared misty. | Moore | Moore obs. book |
| 290 | 1949 Feb 10 | Schröter's Valley, near Cobrahead | Diffuse patch of thin smoke or vapor from W side of Schröter's Valley near Cobrahead, spreading into plain; detail indistinct, hazy (surrounding area clear). | Thornton | Wilkins and Moore 1958, p. 263 |
| 291 | 1949 Mar 3, $20^h 00^m$ | Barker's Quadrangle | Whole area hazy. | Moore | Moore obs. book |
| 292 | 1949 May 1 | Aristarchus | Visible in earthshine, glowing suddenly as diffuse light patch. | Wilkins | Wilkins 1954 |
| 293 | 1949 Oct 7, $\sim 02^h 54^m$ | Aristarchus | Abnormally bright during lunar eclipse. | G. Brown, Hare | Contrib. by Moore |
| 294 | 1949 Nov 3, $01^h 06^m$ | Aristarchus | Blue glare, base inner W wall. | Bartlett | Bartlett 1967 |
| 295 | 1950 Jun 27, $02^h 30^m$ | Aristarchus | Blue glare, base inner W wall. | Bartlett | Bartlett 1967 |
| 296 | 1950 Jun 27 | Herodotus | Bright point in crater. | Bartlett | Strol. Astr. 1962 |
| 297 | 1950 Jun 28, $03^h 27^m$ | Aristarchus | Blue glare, rim of W wall. | Bartlett | Bartlett 1967 |
| 298 | 1950 Jun 29, $05^h 30^m$ | Aristarchus | Strong bluish glare; E, SE wall. | Bartlett | Bartlett 1967 |
| 299 | 1950 Jul 26, $02^h 52^m$ | Aristarchus | Blue glare, base inner W wall. | Bartlett | Bartlett 1967 |
| 300 | 1950 Jul 31, $04^h 50^m$ | Aristarchus | Violet glare, E, NE rim. | Bartlett | Bartlett 1967 |
| 301 | 1950 Aug 28, $04^h 25^m$ | Aristarchus | Intense blue-violet glare; E wall bright spot, E, NE rim. | Bartlett | Bartlett 1967 |
| 302 | 1951 Jan 21 | E of Lichtenberg | Red patch. | Baum | Strol. Astr. 1951 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 303 | 1951 Feb 4, $21^h 00^m$–$23^h 00^m$ | W of Endymion; 2 hr | Mist over peak. | Baum | Baum 1966 |
| 304 | 1951 May 17 | Gassendi | Bright speck of short duration. | Wilkins | Moore 1953, p. 118 |
| 305 | 1951 Aug 20 | W. H. Pickering (Messier A) | Brilliant white patch inside crater. | Moore | Moore 1953, p. 147 |
| 306 | 1951 Oct 20 | W. H. Pickering (Messier A) | Bright circular patch. | Moore | Moore obs. book |
| 307 | 1952 Apr 3 | | Twenty-one spots were charted, one surrounded by a light area, while three streaks were seen in the NW quarter. | Wilkins, Moore | Wilkins and Moore 1958 |
| 308 | 1952 Apr 4 | Plato | Obscuration of crater floor. | Cragg | Moore 1953, 1965 |
| 309 | 1952 Sep 9, $23^h 00^m$ | Calippus | Broad hazy band of light across floor (observer gave observation low weight). | Moore | Moore obs. book |
| 310 | 1952 Dec 24 | Theaetetus | Hazy line of light. | Moore | Wilkins and Moore 1958, p. 238 |
| 311 | 1953 Apr 18 | | Faint extension of cusps. | Wilkins | Wilkins 1954 |
| 312 | 1953 Nov $15^5$, $02^h 00^m$ | Near Pallas | Very bright spot on illuminated part near terminator seen and photographed. | Stuart | Strolling Astr. 1956; Stuart 1957 |
| 313 | 1954 Mar 23 | Atlas | Violet tint in Atlas. | Delmotte | Delmotte |
| 314 | 1954 May 10 | Crater in Ptolemaeus | Flash. | Firsoff | Firsoff 1962 ed., p. 53 |
| 315 | 1954 May 11, $20^h 00^m$ | Eratosthenes | Central mountain group invisible, though surrounding details were clear. | Cattermole | Contrib. by Moore |
| 316 | 1954 Jul 14, $04^h 39^m$ | Aristarchus | E wall bright spot; violet glare. | Bartlett | Bartlett 1967 |
| 317 | 1954 Jul 16, $05^h 35^m$ | Aristarchus | Whole interior of strong violet tint; violet tint in nimbus and N and NE of crater. | Bartlett | Bartlett 1967 |
| 318 | 1954 Jul 17, $07^h 05^m$ | Aristarchus | Pale violet tint on surface NE of crater; no color elsewhere. | Bartlett | Bartlett 1967 |
| 319 | 1954 Jul 24, $07^h 19^m$ | Aristarchus | Crater filled with pale violet light. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 320 | 1954 Aug 11, $22^h 00^m$ | Aristarchus | Brilliant in red (filter), variable. | Firsoff | Firsoff 1966 |
| 321 | 1954 Aug 18 | Aristarchus | Brilliant blue-violet glare over E and NE walls. | Bartlett | Contrib. by Moore |
| 322 | 1954 Sep 8, $20^h 00^m$ | Proclus | Brightness variation in blue light. | Firsoff | Firsoff 1962 ed., p. 83 |
| 323 | 1954 Oct 8,10 | Timocharis | Red glow. | Firsoff | Firsoff 1962, 1966 |
| 324 | 1954 Oct 11, $04^h 57^m$ | Aristarchus | Violet tint on floor, E wall and central peak; intermittent. | Bartlett | Bartlett 1967 |
| 325 | 1954 Oct 12, $01^h 32^m$ | Aristarchus | Pale violet radiance; S wall, SE, E, NE walls; central peak. | Bartlett | Bartlett 1967 |
| 326 | 1954 Oct 12, $04^h 09^m$ | Aristarchus | Strong violet tint E half of floor; very faint W half of floor and W wall. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 327 | 1954 Oct 13, $02^h 00^m$ | Aristarchus | Bright blue-violet glare, E rim; pale violet radiance within crater and around S wall bright spot. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 328 | 1954 Oct 13, $05^h 15^m$ | Aristarchus | Scarcely perceptible violet radiance within crater; wall bands look faint. | Bartlett | Bartlett 1967 |
| 329 | 1954 Oct 18, $06^h 47^m$ | Aristarchus | Strong blue-violet glare, E wall bright spot, E wall and on central peak. | Bartlett | Bartlett 1967 |
| 330 | 1954 Nov 5 | Copernicus | Bright point. | Johnstone | Strol. Astr. 1962 |
| 331 | 1954 Nov 7, $23^h 20^m$ | Kepler | Bright point just outside E wall. | Lugo | J.B.A.A. 1955 |
| 332 | 1954 Nov 12, $02^h 42^m$ | Aristarchus | Blue-violet glare; E wall bright spot and whole length of E wall. Suspected violet tint in N and NE of crater; certain on plateau. Greatly faded by $05^h 07^m$. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 333 | 1954 Dec 12, $02^h44^m$ | Aristarchus | Strong violet glare, E rim, changing to brown. | Bartlett | Bartlett 1967 |
| 334 | 1955 Jan 8, $00^h46^m$ | Aristarchus | Strong violet glare whole length of E rim; brightest SE and around E wall bright spot. | Bartlett | Bartlett 1967 |
| 335 | 1955 Jan 12, $04^h54^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE rim. | Bartlett | Bartlett 1967 |
| 336 | 1955 Apr 2, $03^h20^m$–$05^h00^m$ | Straight-wall region; ~1 hr 40 min | Small craters between Birt and fault invisible at times under excellent seeing conditions, while craterlets on E side were continually observed. | Capen | Capen 1955, 1967 |
| 337 | 1955 Apr 5, $03^h20^m$ | Aristarchus | E wall and glacis; violet; uncertain. | Bartlett | Bartlett 1967 |
| 338 | 1955 Apr 24 | Near Posidonius | White flash of short duration N of Mare Serenitatis near Posidonius. | Wykes | Strol. Astr. 1955 |
| 339 | 1955 May 5, $03^h30^m$ | Aristarchus | Pale violet tint in E half of floor; violet band at base, E side of central peak. | Bartlett | Bartlett 1967 |
| 340 | 1955 May 7–8 | Lichtenberg | | Nicolini | Azevado 1962 |
| 341 | 1955 May 24 | Near South Pole | "Glitter" suggesting electrical discharge. | Firsoff | Firsoff 1962 ed., p. 131 |
| 342 | 1955 Jun 25, $20^h30^m$ | Theophilus | Mistiness; absent the next night. | Firsoff | Firsoff 1962 ed., p. 84 |
| 343 | 1955 Jul 3, $22^h00^m$ | Schröter's Valley | Starlike point. | Firsoff | Firsoff 1962 ed., Pl. X |
| 344 | 1955 Jul 13 | Aristarchus | Brilliant in blue and green. | Firsoff | Firsoff 1966 |
| 345 | 1955 Aug 3, $04^h50^m$ | Aristarchus | Plateau only; pale violet tint. | Bartlett | Bartlett 1967 |
| 346 | 1955 Aug 3 | Manilius, Timocharis | Manilius extraordinarily brilliant; Timocharis bright in blue, appears large and diffuse. | Firsoff | Firsoff 1966 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 347 | 1955 Aug 26 | Near Carpathians; ~35 sec | Bright flare on dark side similar to 2nd mag star. | McCorkle | Sky and Tel. 1955 |
| 348 | 1955 Aug 30, $03^h40^m$ | Aristarchus | Floor, base inner W wall, NW wall; faint bluish glare. | Bartlett | Bartlett 1967 |
| 349 | 1955 Sep 7, $03^h20^m$ | Copernicus | Brightened in blue. | Firsoff | Firsoff 1966 |
| 350 | 1955 Sep 7, $04^h52^m$ | Aristarchus | Strong blue-violet glare; E, NE rim; also E base of central peak. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 351 | 1955 Sep 8, $04^h32^m$ | Aristarchus | Strong bluish glare on E, NE wall, on S edge of E wall bright spot, and bordering both edges of the bright floor band, passing around W of central peak. Dark violet tint in nimbus. | Bartlett | Bartlett 1967 |
| 352 | 1955 Sep 8 | Taurus Mountains | Two flashes from edge of Taurus Mountains. | Lambert | Sky and Tel. 1955 |
| 353 | 1955 Sep 9, $02^h58^m$ | Aristarchus | Floor; blue clay color. | Bartlett | Bartlett 1967 |
| 354 | 1955 Sep 28, $23^h00^m$ | Cobrahead | Obscured by brown patch. | Bestwick | Contrib. by Moore |
| 355 | 1955 Oct 2, $05^h42^m$ | Aristarchus | Violet glare, E, NE rim. Over E wall bright spot resembled a violet mist. Crater itself was hazy; could not get sharp focus. | Bartlett | Bartlett 1967 |
| 356 | 1955 Oct 4, $04^h55^m$ | Aristarchus | Pale violet tint; E wall bright spot and whole length of E rim; dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 357 | 1955 Oct $4^5$ | Aristarchus | Spectrum enhanced in H and K region. | Kozyrev | Kozyrev 1957 |
| 358 | 1955 Oct 5, $03^h44^m$ | Aristarchus | Intensely bright blue-violet glare; E wall bright spot, E, NE wall. | Bartlett | Bartlett 1967 |
| 359 | 1955 Oct 31, $00^h40^m$ | Aristarchus | Bright blue-violet glare, E, NE rim; dark violet hue in nimbus; pale violet radiance over plateau. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 360 | 1955 Oct 31, $04^h50^m$ | Aristarchus | Intense blue-violet glare, E, NE rim. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 361 | 1955 Oct 31, $19^h00^m$ | Cobrahead | Dark blue obscuration. | Milligan | Contrib. by Moore |
| 362 | 1955 Nov 1, $03^h18^m$ | Aristarchus | Pale violet tint; E wall bright spot, E, NE rim, dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 363 | 1955 Nov 6, $05^h50^m$ | Aristarchus | Strong blue-violet glare, E, NE wall. Dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 364 | 1955 Nov 27, $02^h48^m$ | Aristarchus | Floor; blue clay color. | Bartlett | Bartlett 1967 |
| 365 | 1955 | Plato | | Sytinskaya | Azevado 1962 |
| 366 | 1955 | Aristarchus | | Sytinskaya | Azevado 1962 |
| 367 | 1955 | Tycho | | Sytinskaya | Azevado 1962 |
| 368 | 1956 Jan 24 | W edge of Cavendish; ~10 min | Variable point of light. | Houghton, Warner | Strol. Astr. 1955 |
| 369 | 1956 Jan 27, $01^h18^m$ | Aristarchus | Violet glare whole length of E wall and around E wall bright spot; violet tint N and NE of crater. | Bartlett | Bartlett 1967 |
| 370 | 1956 Jan 28, $02^h33^m$ | Aristarchus | Pale violet radiance; E, NE rim. | Bartlett | Bartlett 1967 |
| 371 | 1956 Mar 14, $19^h00^m$ | | Twilight at S cusp traced 400 mi. beyond cusp. No trace of twilight at N pole. 6½ inch reflector used. Moon 2½ days old. | Firsoff | J.B.A.A. 1956 |
| 372 | 1956 Mar 18 | | Anomalous dimming of ι Tau and 105 Tau before occultation. | Firsoff | J.B.A.A. 1956 |
| 373 | 1956 Jun 20, $03^h39^m$ | Aristarchus | Blue glare, base inner W wall. | Bartlett | Bartlett 1967 |
| 374 | 1956 Jun 26, $07^h42^m$ | Aristarchus | Intense blue-violet glare; on E wall bright spot. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 375 | 1956 Jun 28, $05^h35^m$ | Aristarchus | Intense blue-violet glare, E wall bright spot. Dark violet, nimbus. Pale violet N and NE of crater and on plateau. | Bartlett | Bartlett 1967 |
| 376 | 1956 Jun 29, $06^h10^m$ | Aristarchus | Faint, blue-violet tint; E wall bright spot. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 377 | 1956 Jun 30, $06^h55^m$ | Aristarchus | Vivid blue-violet glare; E wall bright spot, E, NE wall. | Bartlett | Bartlett 1967 |
| 378 | 1956 Jul 28, $05^h40^m$ | Aristarchus | Vivid blue-violet glare on central peak, band across E floor to E wall bright spot; on E wall bright spot, and E, NE wall. Absent by $07^h20^m$. | Bartlett | Bartlett 1967 |
| 379 | 1956 Oct 16, $02^h34^m$ | Aristarchus | Blue glare, base inner W wall. | Bartlett | Bartlett 1967 |
| 380 | 1956 Oct 20, $00^h45^m$ | Aristarchus | Bright blue-violet glare on E wall bright spot, E, NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 381 | 1956 Oct 26[5] | Alphonsus | A suspected partial obscuration of the floor based on differences in detail in infrared and ultraviolet photographs. | Alter | Alter 1956, 1959 |
| 382 | 1956 Nov 15, $01^h17^m$ | Aristarchus | Faint blue radiance, base inner W wall. | Bartlett | Bartlett 1967 |
| 383 | 1956 Nov 16, $03^h33^m$ | Aristarchus | Floor; bright bluish tint E of central peak; blue-gray W of central peak. | Bartlett | Bartlett 1967 |
| 384 | 1956 Nov 17-18 | Aristarchus, Tycho, Kepler, Proclus, Manilius, Byrgius | Extraordinarily bright. | Argentière, et al. | Azevado 1962 |
| 385 | 1956 | Tycho | | Dubois | Azevado 1962 |
| 386 | 1956 | Mare Humorum | | Vigroux | Azevado 1962 |
| 387 | 1957 Mar 17, $06^h24^m$ | Aristarchus | Strong violet glare; E wall bright spot and whole length of E wall. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 388 | 1957 Mar 18, $06^h43^m$ | Aristarchus | Strong violet glare; E wall bright spot, E wall. Very strong violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 389 | 1957 Jun 11, $04^h48^m$ | Aristarchus | Floor; uniform bluish radiance. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 390 | 1957 Jul 11, $05^h40^m$ | Aristarchus | Pale violet radiance in crater and on plateau. | Bartlett | Bartlett 1967 |
| 391 | 1957 Aug 18, $06^h58^m$ | Aristarchus | Pale blue tint on all walls; floor dazzling white. | Bartlett | Bartlett 1967 |
| 392 | 1957 Oct 11, $03^h15^m$ | Aristarchus | Bright blue-violet; E wall bright spot, E, NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 393 | 1957 Oct 12, $02^h40^m$ | Aristarchus | Bright blue-violet glare; E wall bright spot, E, NE, N, NW walls. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 394 | 1957 Oct 12 | Aristarchus; 1 hr | Bright flash; then brownish eccentric patch. | Dachille and daughter | Cameron 1965 |
| 395 | 1957 Oct 13, $04^h00^m$ | Aristarchus | Weak violet glare; whole length of E wall. | Bartlett | Bartlett 1967 |
| 396 | 1957 Oct 13 | In or near Aristarchus | Bright spot of light ("explosion"). | Haas | Haas 1957 |
| 397 | 1957 Oct 15, $05^h45^m$ | Aristarchus | Strong blue-violet glare, whole length of E wall. | Bartlett | Bartlett 1967 |
| 398 | 1957 Oct 16, $06^h00^m$ | Aristarchus | Faint blue-gray tint; N, NW, W floor and walls. | Bartlett | Bartlett 1967 |
| 399 | 1958 May 1, $03^h00^m$ | Aristarchus | Entire sunlit area of floor, bluish. | Bartlett | Bartlett 1967 |
| 400 | 1958 May 4, $06^h28^m$ | Aristarchus | Blue-violet glare S side of E wall bright spot; dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 401 | 1958 May 31, $03^h40^m$ | Aristarchus | Pale blue-gray floor; violet band E base of central peak. | Bartlett | Bartlett 1967 |
| 402 | 1958 Jun 29, $04^h04^m$ | Aristarchus | Floor; very pale bluish tint. | Bartlett | Bartlett 1967 |
| 403 | 1958 Jul 2, $06^h29^m$ | Aristarchus | Strong violet glare whole length of E wall, involving E wall bright spot; dark violet, nimbus. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 404 | 1958 Jul 3, $07^h06^m$ | Aristarchus | Bright blue-violet glare; E, NE rim. Dark violet, nimbus; pale violet, plateau. | Bartlett | Bartlett 1967 |
| 405 | 1958 Aug 2, $06^h15^m$ | Aristarchus | Strong violet glare; E wall bright spot, NE wall. Dark violet, nimbus. Strong violet, plateau. | Bartlett | Bartlett 1967 |
| 406 | 1958 Sep 1, $07^h27^m$ | Aristarchus | Whole crater filled with pale violet radiance, especially bright on walls. Pale violet N and NE of crater and on plateau. | Bartlett | Bartlett 1967 |
| 407 | 1958 Sep 23 | Piton | Became enveloped in an obscuring cloud-like mist. | Moore | Moore obs. book |
| 408 | 1958 Oct 16 | N of Mare Crisium | Bright spot in dark area of moon. | Mayemson | Mayemson 1965 |
| 409 | 1958 Nov 3[5] $03^h00^m$ | Alphonsus | Reddish glow, followed by effusion of gas. | Kozyrev | Kozyrev 1959, 1963; Green 1965 |
| 410 | 1958 Nov 19, $04^h00^m$–$04^h30^m$ | Alphonsus; 30 min | Diffuse cloud over central mountain. | Poppendiek, Bond | Alter 1959; Poppendiek and Bond 1959 |
| 411 | 1958 Nov 19, $22^h05^m$ | Alpetragius | Portion of shadow in crater vanished. | Stein | Stein 1959 |
| 412 | 1958 Nov 19 | Alphonsus | Reddish patch close to central peak. | Wilkins, Hole | Wilkins 1959; Hole 1959 |
| 413 | 1958 Nov 22 | Alphonsus | Gray spot. | Bartha | Moore 1965 |
| 414 | 1958 Dec 19 | Alphonsus | Reddish patch close to central peak. | Wilkins, Hole | Wilkins 1959; Hole 1959; Moore 1965 |
| 415 | 1959 Jan 22 | Aristarchus | Interior, light brilliant blue, later turning white. | Alter | Alter NASA Report |
| 416 | 1959 Jan 23 | Aristarchus | Brilliant blue interior. | Alter | Cameron 1965 |
| 417 | 1959 Feb 18 | Alphonsus | Red patch. | Hole | Moore 1965 |
| 418 | 1959 Mar 24, $02^h33^m$ and $04^h55^m$ | Aristarchus | Strong blue and blue-violet glares; E wall, E wall bright spot, S wall bright spot; intermittent display. Observation at $04^h55^m$ of same phenomena. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 419 | 1959 Mar 25, $05^h24^m$ | Aristarchus | Intense blue-violet glare on whole length of E rim and on E wall bright spot; dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 420 | 1959 Apr 19 | W of Mare Humorum | Bright point to W of mare. | Mcfarlane | Strol. Astr. 1959 |
| 421 | 1959 Sep 5 | Aristarchus | Irregular, intermittent starlike point of light, 8th to 9th mag, appeared within bright area. No color seen. | Rule | Rule 1959 |
| 422 | 1959 Sep 13 | Littrow | Obliterated by a hovering cloud (Feist disagrees with Bradford). | Bradford | Contrib. by Moore |
| 423 | 1959 Oct 23[5] | Alphonsus | Red glow seen. Spectrum showed unusual features. | Kozyrev | Kozyrev 1962 |
| 424 | 1960 Jan 6 | Alphonsus | Red spot. | Warner | J. Int. Lunar Soc. 1960 |
| 425 | 1960 Nov | Piton; ~30 min | Red obscuration concealing peak. | Schneller | Cameron 1965 |
| 426 | 1960 Dec | Piton | Red obscuration less intense than in November. | Schneller | Cameron 1965 |
| 427 | 1961 Jan | Piton | Red obscuration less intense than in November. | Schneller | Cameron 1965 |
| 428 | 1961 Feb 15[5], $\sim 08^h11^m$ | Aristarchus, Plato | Seen as bright features during solar eclipse (on film of eclipse shown by BBC May 6, 1966). | Sartory, Middlehurst | Contrib. by Middlehurst |
| 429 | 1961 May 30-31[5] | Aristarchus | Enhancement of spectrum in UV. | Grainger, Ring | Grainger and Ring 1963 |
| 430 | 1961 Jun 27-28[5] | Aristarchus, ray near Bessel | Enhancement of spectrum in UV. | Grainger, Ring | Grainger and Ring 1963 |
| 431 | 1961 Jun 29-30[5] | E of Plato | Enhancement of spectrum in UV. | Grainger, Ring | Grainger and Ring 1963 |
| 432 | 1961 Oct 18 | Eratosthenes | Bright spot in crater. | Bartlett | Strol. Astr. 1962 |
| 433 | 1961 Nov 26[5] | Aristarchus region | Red glow seen. Anomalous spectra in red and blue. | Kozyrev | Kozyrev 1963 |
| 434 | 1961 Nov 28[5] | Aristarchus region | Red glow seen. Anomalous spectra in red and blue. | Kozyrev | Kozyrev 1963 |
| 435 | 1961 Dec 3[5] | Aristarchus region | Red glow seen. Anomalous spectra in red and blue. | Kozyrev | Kozyrev 1963 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 436 | 1962 Sep 5 | Region of Walter near terminator; 7 min | Faint point of light. | Chalk | Cameron 1965 |
| 437 | 1962 Sep $16^5$ | "Whole moon" | Spectrum showed UV emission, particularly in region of H and K lines by comparison with spectra of Sun, Mars, and Jupiter. | Spinrad | Spinrad 1964 |
| 438 | 1962 Oct 8 | Aristarchus; ~1 hr | Activity. | Adams | Cameron 1965 |
| 439 | 1963 Oct $5^5$ | Aristarchus region | Enhancement of 30 percent at 5450 Å. | Scarfe | Scarfe 1965 |
| 440 | 1963 Oct 30 | Aristarchus region | Color changes: reddish-orange to ruby patches. | Greenacre, Barr | Greenacre 1963 |
| 441 | 1963 Oct 30 | Cobrahead; 7 min | Brightened area, 7th to 11th mag. | Budine, Farrell | Cameron 1965 |
| 442 | 1963 Nov $1^5$, $23^h00^m$ | Near Kepler; ~20 min | Enhancement of large area in red light. | Kopal, Rackham | Kopal and Rackham 1964a, 1964b |
| 443 | 1963 Nov 11 | Aristarchus | Color changes. | Jacobs | Shorthill 1963; Green 1965, p. 409 |
| 444 | 1963 Nov 28 | Aristarchus, Schröter's Valley; 1 hr 15 min | Red spots, then violet, blue haze. | Greenacre, et al. | Greenacre 1963 |
| 445 | 1963 Nov 28 | Cobrahead; 35 min | Pink spot on W side. | Tombaugh | Cameron 1965 |
| 446 | 1963 Nov 28 | Aristarchus, Anaximander; ~1 hr | Red spot in Aristarchus and also on N edge of Anaximander. | W. Fisher | Cameron 1965 |
| 447 | 1963 Dec 28, $15^h55^m$-$16^h26^m$ | Aristarchus-Herodotus; 31 min | Extensive red area. | 9 students at Hiroshima, Japan | Sato 1964 |
| 448 | 1963 Dec 29-30, $22^h00^m$-$03^h00^m$ | Aristarchus region; 5 hr | Purplish-blue patch. | Doherty and others | Contrib. by Moore |
| 449 | 1963 Dec $30^5$, ~$11^h00^m$ | NE limb; ~20 min | During eclipse, anomalous reddish glow inside umbra. (Lunar eclipse.) | Many observers | Sky and Tel. 1964 |
| 450 | 1964 Feb 25 | Cobrahead; 3 min, Aristarchus; 1 min | Red flashes, > 12 mag. | Budine | Cameron 1965 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 451 | 1964 Mar 16 | Aristarchus | Sudden red glow on SW rim. | Lecuona | Cameron 1965 |
| 452 | 1964 Mar 18 | Aristarchus | Flash. | Earl and brother | Cameron 1965 |
| 453 | 1964 Mar 26, $00^h37^m$ | Aristarchus | Floor; blue clay color. | Bartlett | Bartlett 1967 |
| 454 | 1964 Mar 28, $01^h59^m$ | Aristarchus | Blue-violet glare, E wall and N wall; E wall bright spot; violet tinge in nimbus. | Bartlett | Bartlett 1967 |
| 455 | 1964 Apr 22 | Near Ross D | Bright spot. | Cross and others | Harris 1967 |
| 456 | 1964 Apr 26 | Region of Censorinus | Surface brightening somewhat similar to Kopal-Rackham (1963 Nov 1) event. | Hopmann | Hopmann 1966 |
| 457 | 1964 May 17 | Theophilus | Crimson color on W rim, ~10 mag. | Dieke | Cameron 1965 |
| 458 | 1964 May 18, $03^h55^m$–$05^h00^m$ | SE of Ross D; 1 hr, 5 min | White obscuration moved 20 mph, decreased in extent. Phenomenon repeated. Newtonians 8" f/7 and 9" f/7 used. | Harris, Cross and others | Cameron 1965; Harris 1967 |
| 459 | 1964 May 20 | Plato; ~10 min | Strong orange-red color on W rim of crater, >10 mag. | Bartlett | Greenacre 1965 |
| 460 | 1964 May 26, $04^h22^m$ | Aristarchus | Strong blue-violet glare, E wall and E wall bright spot; strong violet tinge in nimbus. | Bartlett | Bartlett 1967 |
| 461 | 1964 May 28, $05^h38^m$ | Aristarchus | Blue-violet glare; E, NE wall. Dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 462 | 1964 May 30, $07^h31^m$ | Aristarchus | Bright blue-violet glare; E wall bright spot, E, NE walls. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 463 | 1964 Jun 6 | Aristarchus area; 50 min | Spur between Aristarchus and Herodotus; red spots (glow) in Schröter's Valley. | Schmidling, St. Clair, Platt | Cameron 1965 |
| 464 | 1964 Jun 17 | SE of Ross D | Moving bright spot; 2 brief obscurations of part of wall. Newtonian, 19" f/7. | Cross, Harris | Harris 1967 |
| 465 | 1964 Jun 20, $06^h00^m$ | Aristarchus | Nimbus only; dark violet hue. | Bartlett | Bartlett 1967 |
| 466 | 1964 Jun 21, $03^h43^m$–$05^h44^m$ | S of Ross D; 2 hr, 1 min | Moving dark area. Newtonian 19" f/7. | Harris, Cross, Helland | Harris 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 467 | 1964 Jun 23, $04^h55^m$ | Aristarchus | Blue-violet glare, NE rim; strong violet tinge in nimbus. | Bartlett | Bartlett 1967 |
| 468 | 1964 Jun 25 [5], $\sim 01^h07^m$ | Aristarchus | Very bright during eclipse (direct photograph, lunar eclipse). | Titulaer | Hemel en Dampkring 1967 |
| 469 | 1964 Jun 25, $01^h07^m$ | Grimaldi | During lunar eclipse, white streak from Grimaldi toward limb. | Azevado | Letter to Moore |
| 470 | 1964 Jun 26, $05^h24^m$ | Aristarchus | Dark violet in nimbus; pale violet on plateau. Absent from crater. | Bartlett | Bartlett 1967 |
| 471 | 1964 Jun 27, $05^h48^m$ | Aristarchus | Bright blue-violet; E wall bright spot, E, NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 472 | 1964 Jun 28, $06^h44^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE, N, NW walls. | Bartlett | Bartlett 1967 |
| 473 | 1964 Jun 28 | S region of Aristarchus | Reddish-brown tone observed. | Bartlett | Greenacre 1965 |
| 474 | 1964 Jul 16 | SE of Ross D | Temporary "hill," est 3 km diam and shadow seen. | Cragg | Harris 1967 |
| 475 | 1964 Jul 17 | Plato | Faint pink bands at base of inner W wall and on rim of N wall. | Bartlett | Greenacre 1965 |
| 476 | 1964 Jul 18 | SE of Ross D | Bright area moved and shrank. Extent greater with amber filter. | Harris | Cameron 1965; Harris 1967 |
| 477 | 1964 Jul 18 | Plato; some minutes | Pink tinge to W wall, 10th mag. | Bartlett | Cameron 1965 |
| 478 | 1964 Jul 28, $04^h43^m$ | Aristarchus | Blue-violet glare; E wall bright spot. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 479 | 1964 Jul 29, $05^h50^m$ | Aristarchus | Nimbus only; dark violet hue. | Bartlett | Bartlett 1967 |
| 480 | 1964 Jul 31, $05^h28^m$ | Aristarchus | Pale blue tint; NE, N, NW walls and floor. | Bartlett | Bartlett 1967 |
| 481 | 1964 Aug 16, $04^h18^m$–$05^h20^m$ | SE of Ross D; 1 hr, 2 min | Bright area. Condensations varying with time. | Harris, Cross | Harris 1967 |
| 482 | 1964 Aug 24, $04^h22^m$ | Aristarchus | Bright blue-violet; E wall bright spot, E, NE wall. | Bartlett | Bartlett 1967 |
| 483 | 1964 Aug 25, $04^h58^m$ | Aristarchus | Bright blue-violet; E wall bright spot, E, NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 484 | 1964 Aug 26, $04^h16^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE rim. Dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 485 | 1964 Aug 26 | Aristarchus; ~1 hr | Red and blue bands. | Genatt, Reid | Cameron 1965 |
| 486 | 1964 Aug 27, $04^h37^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE wall. Dark violet, nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 487 | 1964 Aug 28, $04^h40^m$ | Aristarchus | Faint blue-violet radiance, E wall bright spot and NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 488 | 1964 Sep 18, $01^h15^m$ | Aristarchus | Craterlet, base NW wall; bluish. | Bartlett | Bartlett 1967 |
| 489 | 1964 Sep 20 | Aristarchus-Herodotus | Several red spots in area. | Crowe, Cross | Cameron 1965 |
| 490 | 1964 Sep 20 | SE of Ross D | Bright obscuration. | Cross | Cameron 1965; Harris 1967 |
| 491 | 1964 Sep 22, $03^h03^m$ | Aristarchus | Bright blue-violet glare; E wall bright spot and NE rim. Dark violet in nimbus. | Bartlett | Bartlett 1967 |
| 492 | 1964 Sep 22 | Kunowsky; > 1 hr | Red area blinked in blinker. | Gilheaney, Hall, L. Johnson | Cameron 1965 |
| 493 | 1964 Sep 23, $03^h30^m$ | Aristarchus | Blue-violet flare [glare?]; E wall bright spot, E, NE, N, NW wall. | Bartlett | Bartlett 1967 |
| 494 | 1964 Sep 25, $04^h05^m$ | Aristarchus | Blue-violet glare; E wall bright spot. Dark violet on nimbus. | Bartlett | Bartlett 1967 |
| 495 | 1964 Sep 25, $04^h43^m$ | Aristarchus | Blue-violet glare; E wall bright spot. Dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 496 | 1964 Sep 26, $05^h07^m$ | Aristarchus | Moderately intense; E wall bright spot. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 497 | 1964 Oct 19, $02^h02^m$ | Aristarchus | Strong blue tint E half of floor; blue-violet glare, base E side central peak. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 498 | 1964 Oct 22, $02^h12^m$ | Aristarchus | Blue-violet glare, E wall bright spot, E, NE wall. Dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 499 | 1964 Oct 24, $04^h02^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE rim. Dark violet hue in nimbus. | Bartlett | Bartlett 1967 |
| 500 | 1964 Oct 25, $04^h17^m$ | Aristarchus | Nimbus only; dark violet hue. | Bartlett | Bartlett 1967 |
| 501 | 1964 Oct 25, $04^h37^m$ | Aristarchus | Blue-violet glare; E wall bright spot, E, NE wall. Faint violet tinge in nimbus. | Bartlett | Bartlett 1967 |
| 502 | 1964 Oct 26, $04^h22^m$ | Aristarchus | Nimbus only; dark violet hue. | Bartlett | Bartlett 1967 |
| 503 | 1964 Oct 27 | Alphonsus | Reddish-pink patch at base of sunlit central peak. | L. Johnson, et al. | Cameron 1965 |
| 504 | 1964 Nov 14 | Plato | Peak on W wall very brilliant white. At foot of peak on inner side, strong blue band. Immediately adjacent, on SE was a small, bright, red spot. | Bartlett | Greenacre 1965 |
| 505 | 1964 Nov 21, $01^h57^m$ | Aristarchus | Bright blue-violet glare; NE, N, and NW rims. | Bartlett | Bartlett 1967 |
| 506 | 1964 Nov 23, $03^h29^m$ | Aristarchus | Strong blue-violet glare; N, NE, NW walls. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 507 | 1964 Nov 24, $04^h50^m$ | Aristarchus | Blue-violet glare, N rim. Dark violet in nimbus; pale violet N and NE of crater. | Bartlett | Bartlett 1967 |
| 508 | 1964 Dec 19 | Aristarchus; 1 min | Brightened by a factor of 5. | Budine, Farrell | Cameron 1965 |
| 509 | 1964 Dec 19, $\sim 02^h35^m$ | | Anomalous bright area during lunar eclipse. | S. Hill and student | Hill 1966 |
| 510 | 1964 Dec 19[5], $\sim 02^h35^m$ | Edge of Mare Nubium | Photoelectric photometry showed strong anomalous enhancement of radiation during lunar eclipse. | Sanduleak, Stock | Sanduleak and Stock 1965 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 511 | 1965 Mar 14, $07^h40^m$ | SE of Ross D | Crater wall partially obscured. Bright area. Cassegrain 12", f/15. | Cross | Harris 1967 |
| 512 | 1965 Jul 1 | Aristarchus, dark side | Starlike image. | Emanuel | Cameron 1965 |
| 513 | 1965 Jul 2 | Aristarchus; 1 hr 21 min | Bright spot like star on dark side, estimated mag 4. | Emanuel, et al. | Greenacre 1965 |
| 514 | 1965 Jul 3 | Aristarchus; ~1 hr 10 min | Pulsating spot on dark side. | Emanuel, et al. | Greenacre 1965 |
| 515 | 1965 Jul 4 | Aristarchus; 1 hr | Bright spot, no pulsations, on dark side. | Emanuel, et al. | Greenacre 1965 |
| 516 | 1965 Jul 7 | Grimaldi | White streak extended toward limb. | Azevado, et al. | Revista Astr. 1965 |
| 517 | 1965 Jul 8 | Theophilus; 10 min | Bright spot. | Cross | Cameron 1965; Greenacre 1965 |
| 518 | 1965 Jul 9 | Aristarchus; 2 hr 6 min | Starlike image. | Emanuel | Cameron 1965 |
| 519 | 1965 Jul 31 | Aristarchus | Starlike image. | Welch | Cameron 1965 |
| 520 | 1965 Aug 2 | Aristarchus; ~1 min | Starlike brightening, 8th to 9th mag. | Bornhurst | Cameron 1965 |
| 521 | 1965 Aug 3 | Aristarchus; ~6 min | Starlike image, 6th to 7th mag. | Bornhurst | Cameron 1965 |
| 522 | 1965 Aug 4 | Aristarchus; ~2 min | Starlike image, 6th to 7th mag. | Bornhurst | Cameron 1965 |
| 523 | 1965 Sep 3 | SE of Ross D | Ridge obscured. | Harris | Harris 1967 |
| 524 | 1965 Sep 9, $13^h20^m$ | Aristarchus | Orange-red strip on floor. | Presson | Contrib. by Moore |
| 525 | 1965 Oct 10, $06^h07^m$ | Aristarchus | Pale violet radiance; whole of W interior; dark violet, nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 526 | 1965 Oct 11, $01^h47^m$ | Aristarchus | Whole crater, exclusive of S area, pale violet; dark violet in nimbus; pale violet on plateau. | Bartlett | Bartlett 1967 |
| 527 | 1965 Oct 12, $02^h20^m$ | Aristarchus | Nimbus only; dark violet hue. | Bartlett | Bartlett 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 528 | 1965 Oct 13, $03^h02^m$ | Aristarchus | Pale, blue-violet tint on E wall bright spot and whole length of E wall; pale violet radiance in crater, exclusive of S region. Dark violet, nimbus. | Bartlett | Bartlett 1967 |
| 529 | 1965 Nov 15 | Aristarchus | Bright spots. | L. Johnson | Phys. Today 1966 |
| 530 | 1965 Dec 1 | | Reddish glow followed by black obscuration. | Evrard and others | Gingerich 1966 |
| 531 | 1965 Dec 4, $04^h25^m$ | Ross D | Obscuration of part of rim, also bright area 7-10 km diameter, not seen on following night ($04^h00^m$ - $07^h30^m$). | Cross (Harris, Cragg on Dec 5) | Harris 1967 |
| 532 | 1966 Feb 7, $01^h10^m$ | Aristarchus | Nimbus only; intense violet hue. | Bartlett | Bartlett 1967 |
| 533 | 1966 Mar 29, $21^h00^m$ | Archimedes | Floor bands brilliant. | E. G. Hill | B.A.A. Lunar Sec. Circ. 1966, 1, No. 6 |
| 534 | 1966 Apr 2, $23^h30^m$ | Aristarchus; 20 min | Central peak very bright. | M. Brown | B.A.A. Lunar Sec. Circ. 1966, 1, No. 7 |
| 535 | 1966 Apr 3, $23^h00^m$ | Aristarchus; 30 min | Central peak very bright. | M. Brown | B.A.A. Lunar Sec. Circ. 1966, 1, No. 7 |
| 536 | 1966 Apr 12, $01^h05^m$ | Gassendi; 18 min | Abrupt flash of red settling immediately to point of red haze near NW wall. Continuous until $01^h23^m$. | Whippey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 5 |
| 537 | 1966 Apr 30-May 2 | Gassendi | Red glows. | Sartory, Moore, Moseley, Ringsdore | J.B.A.A. 1966; B.A.A. Lunar Sec. Circ. 1966, 1, No. 6 |
| 538 | 1966 May 1, $21^h55^m$-$22^h45^m$ | Aristarchus; 50 min | Red patch. | Patterson | B.A.A. Lunar Sec. Circ. 1966, 1, No. 6 |
| 539 | 1966 May 1, $22^h10^m$ | Aristarchus; 15 min | Small intense white spot NW of crater wall. | M. Brown, Sartory | B.A.A. Lunar Sec. Circ. 1966, 1, Nos. 6, 7 |
| 540 | 1966 May 27, $21^h10^m$ | Alphonsus; 50 min | Faint red patches. | Sartory, Moore, Moseley | B.A.A. Lunar Sec. Circ. 1966, 1, No. 6 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 541 | 1966 May 30, $20^h52^m$ | Gassendi; 7 min | Blink, orange patch and obscuration. | Sartory | B.A.A. Lunar Sec. Circ. 1966, 1, No. 6 |
| 542 | 1966 Jun 1, $03^h20^m$ | Aristarchus | Entire sunlit area of floor, bluish. | Bartlett | Bartlett 1967 |
| 543 | 1966 Jun 3, $06^h10^m$ | Aristarchus | Nimbus only, violet hue. | Bartlett | Bartlett 1967 |
| 544 | 1966 Jun 26, $04^h30^m$ - $04^h40^m$ | Alphonsus; 10 min | Absorption band (4880 ± 50Å) seen in spectrum of central peak. | Harris, Arriola | Harris 1967 |
| 545 | 1966 Jun 27 | Plato; 15 min | Inside SW wall of crater, blink. | Hedley-Robinson, Sartory | B.A.A. Lunar Sec. Circ. 1966, 1, No. 11 |
| 546 | 1966 Jul 10, $02^h00^m$ | Triesnecker; 1 hr | Bright streak in crater. | Allen | B.A.A. Lunar Sec. Circ. 1966, 1, No. 10 |
| 547 | 1966 Aug 4-5 $22^h37^m$ - $23^h30^m$ and $02^h32^m$ - $02^h58^m$ | Plato; 53 min, 26 min | Red color, NE wall and floor. | Corvan, Moseley | B.A.A. Lunar Sec. Circ. 1966, 1, No. 10 |
| 548 | 1966 Sep 2, $00^h00^m$ | Gassendi; 3 hr | Reddish patches. | Moore, et al. (8 observers) | B.A.A. Lunar Sec. Circ. 1966, 1, No. 10; ibid. 1966, 1, No. 11 |
| 549 | 1966 Sep 2, $03^h16^m$ | Alphonsus; intermittent, 1 hr 02 min | A series of weak glows; Final flash observed at $04^h18^m$. | Whippey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 12 |
| 550 | 1966 Sep 3, $03^h55^m$ | Gassendi | Blinks on NE, ENE walls and SW and W of central peak. | Moseley | B.A.A. Lunar Sec. Circ. 1966, 1, No. 10 |
| 551 | 1966 Sep 25, $20^h20^m$ | Gassendi; 30 min | Reddish patches. | Moore, Moseley | B.A.A. Lunar Sec. Circ. 1966, 1, No. 11 |
| 552 | 1966 Sep 25, $23^h12^m$ | Plato; 3 min | Blinks in crater. | Moseley | B.A.A. Lunar Sec. Circ. 1966, 1, No. 11 |
| 553 | 1966 Oct 25, $03^h46^m$ | SE of Ross D | Large bright area obscuring half of crater wall. Not present Oct 24. Newtonian 19" f/7. | Cross | Harris 1967 |
| 554 | 1966 Oct 25, $22^h30^m$ | Gassendi | Red blinks, N wall. | Moore, Moseley, Sartory | B.A.A. Lunar Sec. Circ. 1967, 2, No. 1 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 555 | 1966 Oct 29, $00^h45^m$ - $01^h30^m$ | Copernicus, N rim; 45 min | Red spot. | Walker | Walker 1966 |
| 556 | 1966 Dec 22, $06^h00^m$ - $06^h30^m$ | Messier-W. H. Pickering; 30 min | Blinks on floors of both craters. | Kelsey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 4 |
| 557 | 1966 Dec 23, $05^h15^m$ - $07^h10^m$ | Plato; 55 min | Numerous light streaks on floor, three bright spots on floor, all showed blinks. | Kelsey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 4 |
| 558 | 1966 Dec 27, $06^h30^m$ - $07^h05^m$ | Gassendi; 35 min | Very faint blink on SW floor and another N of it on NW floor (observer considers observation very suspect). | Kelsey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 4 |
| 559 | 1967 Jan 21, $19^h35^m$ | Gassendi | Small blink and suspect faint colored patch in outer W wall in position of original observation of 1966 Apr 30. | Sartory, Moore, Moseley, Duckworth, Kilburn | B.A.A. Lunar Sec. Circ. 1967, 2, No. 3; ibid. 1967, 2, No. 4 |
| 560 | 1967 Feb 17, $17^h47^m$ - $18^h12^m$ | Alphonsus; 25 min | Blink just inside the SW floor of crater suspected on elevation NW of dark patch. | Moore, Moseley | B.A.A. Lunar Sec. Circ. 1967, 2, No. 4 |
| 561 | 1967 Feb 19, $20^h30^m$ - $20^h40^m$ | Alphonsus; 10 min | Bright red glow in position of suspected blink of 1967 Feb 17. Fading by $20^h37^m$. | Moseley, Moore | B.A.A. Lunar Sec. Circ. 1967, 2, No. 4 |
| 562 | 1967 Mar 22, $19^h40^m$ | Gassendi | Red color and blink. | Moseley | B.A.A. Lunar Sec. Circ. 1967, 2, No. 5 |
| 563 | 1967 Mar 23, $18^h40^m$ | Gassendi | Red color under S wall. | Sartory, Farrant | B.A.A. Lunar Sec. Circ. 1967, 2, No. 5 |
| 564 | 1967 Mar 23, $19^h45^m$ | Cobrahead | Red color outside SE wall. | Moore, Moseley, Farrant | B.A.A. Lunar Sec. Circ. 1967, 2, No. 6 |
| 565 | 1967 Mar 23, $19^h05^m$ - $19^h55^m$ | Aristarchus | Red glows. | Sartory, Moore, Moseley, Farrant | B.A.A. Lunar Sec. Circ. 1967, 2, Nos. 5, 6 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 566 | 1967 Apr 15, $19^h15^m$ - $21^h00^m$ | Aristarchus (on dark side); 1 hr 45 min | Aristarchus very bright. Seeing very good until $21^h00^m$ UT, after which seeing too bad to continue observing. On April 16 and 17 nothing special was to be seen. | Classen | Hopmann 1967 |
| 567 | Apr 21, $19^h16^m$ - $21^h15^m$ | Aristarchus; 1 hr 59 min | Bright points on S wall. Red patch to NE. | Darnell, Farrant | B.A.A. Lunar Sec. Circ. 1967, 2, No. 7 |
| 568 | 1967 Apr 21, $21^h20^m$ | Schröter's Valley, Cobrahead | Red color. | Darnell, Farrant | B.A.A. Lunar Sec. Circ. 1967, 2, No. 7 |
| 569 | 1967 Apr 22 | Aristarchus (on bright side) | Aristarchus so bright that it could be seen with the naked eye. | Classen | Hopmann 1967 |
| 570 | 1967 May 20, $20^h15^m$ and $21^h05^m$ - $21^h20^m$ | Aristarchus; 15 min | Red spots on south rim. Moon low. | Darnell | B.A.A. Lunar Sec. Circ. 1967, 2, No. 8 |
| 571 | 1967 May 20 | Gassendi | Elongated blink in crater, SW part of floor. | Kelsey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 8 |
| 572 | 1967 May 29, $06^h40^m$ - $07^h25^m$ | Aristarchus; 45 min | Red-brown color. | C. A. Anderson | B.A.A. Lunar Sec. Circ. 1967, 2, No. 8 |
| 573 | 1967 Jun 18, $21^h10^m$ - $22^h30^m$ and $22^h50^m$ - $23^h59^m$ | Gassendi; 1 hr 20 min and 1 hr 9 min | Faint redness outside the NW and SW wall of Gassendi. | Whippey | B.A.A. Lunar Sec. Circ. 1967, 2, No. 8 |
| 574 | 1967 Aug 13, $21^h00^m$ | Alphonsus; 15 min | Glow in interior of crater. | Horowitz | B.A.A. Lunar Sec. Circ. 1967, 2, No. 10 |
| 575 | 1967 Sep 11, $00^h32^m$ | Mare Tranquilitatis; 8-9 sec | Black cloud surrounded by violet color. | Montreal group | B.A.A. Lunar Sec. Circ. 1967, 2, No. 12 |
| 576 | 1967 Sep 11, $00^h45^m$ | Sabine | Bright yellow flash visible a fraction of a second. | Mrs. P. Jean & Montreal group | B.A.A. Lunar Sec. Circ. 1967, 2, No. 12 |
| 577 | 1967 Sep 17, $02^h05^m$ | Aristarchus | Red color observed. | Delano | Kelsey 1967 |

| No. | Date and Time | Feature or Location; Duration | Description | Observer | Reference |
|---|---|---|---|---|---|
| 578 | 1967 Oct 10, $02^h15^m$ | SE of Ross D | Bright area moved 80 km/hr toward SSE and expanded as contrast reduced. | Harris | Harris 1967 |
| 579 | 1967 Oct 19, $05^h00^m$ | Kepler, Aristarchus | High moon, $19^h$ after full, apogee. Kepler appeared at least one mag brighter than Aristarchus. On Oct 20 and 22 at $05^h$ UT, relative brightness returned to normal. | Classen | Classen 1967 |

[1] See text for critique of reports believed to be doubtful.

[2] Deduced from available data.

[3] Probably eastern European or Berlin time.

[4] Berlin time.

[5] Objective (permanent) record made.

[6] Pseudonym.

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