

Abbreviations:

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648 BC April 6

Archilochos, Fragment 122, 1-4

Χρημάτων ἄελπτον οὐδέν ἐστιν οὐδ' ἀπώμοτον οὐδὲ θαυμάσιον,
ἐπειδὴ Ζεὺς πατὴρ Ὀλυμπίων ἐκ μεσημβρίας ἔθηκε νύκτ',
ἀποκρύψας φάος ἡλίου λάμποντος· λυγρὸν δ' ἦλθ' ἐπ' ἀνθρώπους
δέος.

Nickel (2003), p. 107

Nothing can be surprising any more or impossible or miraculous,
now that Zeus, father of the Olympians has made night out of
noonday, hiding the bright sunlight, and fear has come upon
mankind.

585 BC May 28

Herodot I 74

διαφέρουσι δέ σφι ἐπὶ ἴσης τὸν πόλεμον τῷ ἔκτω ἔπει συμβολῆς
γενομένης συνήνικε ὥστε τῆς μάχης συνεστεώσης τὴν ἡμέρην
ἐξαπίνης νύκτα γενέσθαι· τὴν δὲ μεταλλαγὴν ταύτην τῆς ἡμέρης
Θαλῆς ὁ Μιλήσιος τοῖσι Ἴωσι προηγόρευσε ἔσεσθαι, οὐρον
προθέμενος ἐνιαυτὸν τοῦτον, ἐν τῷ δὴ καὶ ἐγένετο ἡ μεταβολή.

Feix (2006;1), p. 71

As, however, the balance had not inclined in favour of either nation,
another combat took place in the sixth year, in the course of which,
just as the battle was growing warm, day was on a sudden
changed into night. This event had been foretold by Thales, the
Milesian, who forewarned the Ionians of it, fixing for it the very year
in which it actually took place.

585 BC May 28

Plinius, Natural History II, IX.53

*Apud Graecos autem investigavit primus omnium Thales Milesius
Olympiadis XLVIII anno quarto praedicto solis defectu, qui Alyatte
rege factus est urbis conditae anno CLXX (variants CLXXX, CXX).*

Rackham H., LCL, Pliny Natural History I, London 1979, p. 203

The original discovery was made in Greece by Thales of Miletus,
who in the fourth year of the 48th Olympiad (=585/4 BC) foretold
the eclipse of the sun that occurred in the reign of Alyattes, in the
170th year (variants: 180th, 120th) after the foundation of Rome
(=584/3 BC).

557 BC May 19

Xenophon, Anabasis III, IV.8

ταύτην δὲ πόλιν (Λάρισσαν) βασιλεὺς ὁ Περσῶν, ὅτε παρὰ Μήδων
τὴν ἀρχὴν ἐλάμβανον Πέρσαι, πολιορκῶν οὐδενὶ τρόπῳ ἐδύνατο
ἐλεῖν· ἡλίον δὲ νεφέλη προκαλύψασα ἠφάνισε μέχρι ἐξέλιπον οἱ
ἄνθρωποι, καὶ οὕτως ἐάλω.

Brownson C. L., LCL, Xenophon Anabasis, London 1922, p. 227

This city (Larissa = Assyrian city of Calah) was besieged by the
king of the Persians (= Cyrus the Great) at the time when the
Persians were seeking to wrest from the Medes their empire, but
he could in no way capture it. A cloud, however, overspread the
sun and hid it from sight until the inhabitants abandoned their city;
and thus it was taken.

480 BC October 2

Herodot IX 10

ἀπῆγγε δὲ τὴν στρατιὴν ὁ Κλεόμβροτος ἐκ τοῦ Ἰσθμοῦ διὰ τόδε·
θυομένω οἱ ἐπὶ τῷ Πέρσῃ ὁ ἥλιος ἀμαυρώθη ἐν τῷ οὐρανῷ.

Feix (2006;2), p. 1177

A prodigy had caused him to bring his army home; for while he was offering sacrifice to know if he should march out against the Persian, the sun was suddenly darkened in mid sky.

478 BC February 17

Herodot VII 37

ἄμα τῷ ἔαρι παρεσκευασμένος ὁ στρατὸς ἐκ τῶν Σαρδίων ὀρμητοῦ
ἐλῶν ἐς Ἄβυδον· ὀρμημένω δὲ οἱ ὁ ἥλιος ἐκλιπὼν τὴν ἐκ τοῦ
οὐρανοῦ ἔδρην ἀφανῆς ἦν οὕτ' ἐπινεφέλων ἐόντων αἰθρίης τε τὰ
μάλιστα, ἀντὶ ἡμέρης τε νύξ ἐγένετο.

Feix (2006;2), p. 909

then at length the host, having first wintered at Sardis, began its march towards Abydos, fully equipped, on the first approach of spring. At the moment of departure, the sun suddenly quitted his seat in the heavens, and disappeared, though there were no clouds in sight, but the sky was clear and serene.

488 BC September 1? / 463 BC April 30?

Pindar, Paean IX, 14-21

ἦ καπροῦ φθίσιν, ἦ νιφετοῦ σθένος ὑπέρφατον, ἦ στάσιν
οὐλομέναν, ἦ πόντου κενέωσιν <ἄρ'> ἄμ πέδον, ἦ παγετὸν χθονός,
ἦ νότιον θέρος ὕδατι ζακότῳ ῥέον, ἦ γαῖαν κατακλύσαισα θήσεις
ἀνδρῶν νεὸν ἐξ ἀρχῆς γένος· ὀλοφύ[ρομαι οὐ]δέν, ὃ τι πάντων
μέτα πείσομαι.

probably no eclipse citation at all!

Sandys J. E., LCL, The Odes of Pindar, London 1937, p. 549

But art thou bringing a sign of some war, or wasting of produce, or an unspeakably violent snow-storm, or fatal faction, or again, some overflowing of the sea on the plain, or frost to bind the earth, or heat of the south wind streaming with raging rain? Or wilt thou, by deluging the land, cause the race of men to begin anew? I in no wise lament whate'er I shall suffer with the rest!

431 BC August 3

Thucydides II, XXVIII

Τοῦ δ' αὐτοῦ θέρους νομηνία κατὰ σελήνην ... ὁ ἥλιος ἐξέλιπε
μετὰ μεσημβρίαν καὶ πάλιν ἀνεπληρώθη, γενόμενος μηνοειδῆς καὶ
ἀστέρων τινῶν ἐκφανέντων.

Smith C. F., LCL, Thucydides. History of the Peloponnesian War, London 1969, p. 309-311

The same summer, at the beginning of a new lunar month, the only time by the way at which it appears possible, the Sun was eclipsed after noon. After it had assumed the form of a crescent and some of the stars had come out, it returned to its natural shape.

424 BC May 21

Thucydides IV, LII

Τοῖ δ' ἐπιγιγνομένου θέρους εὐθύς τοῦ τε ἡλίου ἐκλιπές τι ἐγένετο
περὶ νομηγίαν ...

Smith C. F., LCL, Thucydides. History of the Peloponnesian War, London 1975, p. 299

At the very beginning of the next summer a partial eclipse of the sun took place at new moon, and in the early part of the same month an earthquake.

404 BC September 3

Xenophon, Hellenica II 3.4

Κατὰ δὲ τοῦτον τὸν καιρὸν περὶ ἡλίου ἔκλειψιν Λυκόφρων ὁ
Φεραῖος, βουλόμενος ἄρξαι ὅλης τῆς Θεσσαλίας, τοὺς
ἐναντιομένους αὐτῷ τῶν Θεσσαλῶν, Λαρισαίους τε καὶ ἄλλους,
μάχη ἐνίκησε καὶ πολλοὺς ἀπέκτεινεν.

Brownson C. L., LCL, Xenophon Hellenica, London 1985, p. 115

It was near this date, and at about the time of an eclipse of the sun, that Lycophron of Pherae, who wanted to make himself ruler of all Thessaly, defeated in battle those among the Thessalians who opposed him, namely the Larisaeans and others, and slew many of them.

400 BC June 21

Cicero, de re publica I Paragraph 25, 3-4

Id autem postea ne nostrum quidem Ennium fugit, qui ut scribit, anno trecentesimo quinquagesimo fere post Romam conditam Nonis Iunis soli luna obstitit et nox. Atque hac in re tanta inest ratio atque sollertia, ut ex hoc die, quem apud Ennium et in maximis annalibus consignatum videmus, superiores solis defectionis reputatae sint usque ad illam, quae Nonis Quinctilibus fuit regnante Romulo; quibus quidem Romulum tenebris etiam si natura ad humanum exitum abripuit, virtus tamen in caelum dicitur sustulisse.

Keyes (1994), p. 47

But later even our own Ennius was not ignorant of it, for he wrote that, in about the three hundred and fiftieth year after Rome was founded: "In the month of June – the day was then the fifth – the moon and night obscured the shining sun." And now so much exact knowledge in regard to this matter has been gained that, by the use of the date recorded by Ennius and in the Great Annals, the dates of previous eclipses of the sun have been reckoned, all the way back to that which occurred on July fifth in the reign of Romulus. For even though during the darkness of that eclipse, Nature carried Romulus away to man's inevitable end, yet the story is that it was his merit that caused his translation to heaven.

394 BC August 14

Xenophon, Hellenica IV 3.10

ὄντος δ' αὐτοῦ (Ἀγησιλάου) ἐπὶ τῇ ἐμβολῇ (εἰς τὰ Βοιωτῶν ὄρια) ὁ ἥλιος μηνοειδῆς ἔδοξε φανῆναι.

Brownson C. L., LCL, Xenophon Hellenica, London 1985, p. 297

When he was at the entrance to Boeotia, the sun seemed to appear crescent-shaped.

364 BC July 13

Diodor XV 80.2

Τοῦ δὲ Πελοπίδου ταχέως μετὰ τῆς δυνάμεως ἐξιόντος συνέβη τὸν ἥλιον ἐκλιπεῖν.

Sherman C. L., LCL, Diodorus of Sicily, London 1971, p. 173

But as Pelopidas was hastening to leave with his army, the sun, as it happened, was eclipsed.

364 BC July 13

Plutarch, Vita Pelopidae XXXI.2

Ψηφισαμένων δὲ τῶν Θηβαίων προθύμως καὶ ταχὺ πάντων ἐτοίμων γενομένων καὶ τοῦ στρατηγοῦ περὶ ἔξοδον ὄντος, ὁ μὲν ἥλιος ἐξέλιπε καὶ σκότος ἐν ἡμέρᾳ τὴν πόλιν ἔσχεν.

Perrin B., LCL, Plutarch's Lives Vol. 5, London 1961, p. 421

The Thebans readily decreed what they desired, and soon everything was in readiness and the commander about to set out, when the sun was eclipsed and the city was covered with darkness in the day-time.

361 BC May 12

Plutarch, Vita Dionis XIX.4

Οὕτω δὲ διακειμένων πρὸς ἀλλήλους καὶ λανθάνειν πάντας οἰομένων, Ἐλίκων ὁ Κυζικηνὸς, εἷς τῶν Πλάτωνος συνήθων, ἡλίου προεῖπεν ἔκλειψιν· καὶ γενομένης, ὡς προεῖπε, θαυμασθεὶς ὑπὸ τοῦ τυράννου δωρεὰν ἔλαβεν ἀργυρίου τάλαντον.

Perrin B., LCL, Plutarch's Lives Vol. 6, London 1961, p. 39-41

But while matters stood thus between them, and no one knew of it, as they supposed, Helicon of Cyzicus, one of Plato's intimates, predicted an eclipse of the sun. This took place as he had predicted, in consequence of which he was admired by the tyrant and presented with a talent of silver.

310 BC August 15

Diodor XX 5.6

Τῇ δ' ἰστεραία τηλικαύτην ἔκλειψιν ἡλίου συνέβη γενέσθαι, ὥστε ὀλοσχερῶς φανῆναι νύκτα θεωρουμένων τῶν ἀστέρων πανταχοῖ.

Geer R. M., LCL, Diodorus of Sicily, London 1971, p. 155-157

On the next day there occurred such an eclipse of the sun that stars appeared everywhere, it was like at a complete night.

217 BC February 11

Livius XXII, I.8

Augebant metum prodigia ex pluribus simul locis nuntiata : in Sicilia militibus aliquot spicula, in Sardinia autem in muro circumeunti vigilias equiti scipionem quem manu tenuerat arsisse, et litora crebris ignibus fulsisse, et scuta duo sanguine sudasse, et milites quosdam ictos fulminibus, et solis orbem minui visum, et Praeneste ardentem lapides caelo cecidisse, et Arpis parmas in caelo visas pugnantemque cum luna solem, ...

Foster B. O., LCL, Livy V, London 1963, p. 201

Men's fears were augmented by the prodigies reported simultaneously from many places : that in Sicily the javelins of several soldiers had taken fire, and that in Sardinia, as a horseman was making the round of the night-watch, the same thing had happened to the truncheon which he held in his hand ; that many fires had blazed up on the shore ; that two shields had sweated blood ; that certain soldiers had been struck with lightning ; that the sun's disk had seemed to be contracted ; that glowing stones had fallen from the sky at Praeneste; that at Arpi bucklers had appeared in the sky and the sun had seemed to be fighting with the moon; ...

203 BC May 6

Livius XXX, XXXVIII.8

Prodigia quoque nuntiata sub ipsam famam rebellionis terrorem attulerant : Cumis solis orbis minui visus et pluit lapideo imbri et in Veliterno agro terra ingentibus cavernis consedit arboresque in profundum haustae.

Gardner Moore F., LCL, Livy VIII, London 1962, p. 511

Reports of prodigies also at the very time when there were rumours of fresh hostilities had inspired alarm. At Cumae the sun was partially eclipsed and it rained stones, and in the district of Velitrae the ground settled in huge cavities and trees were swallowed in the depths.

190 BC March 14

Livius XXXVII, IV.4

Per eos dies, quibus est profectus ad bellum consul, ludis Apollinaribus ante diem quintum idus Quinctiles caelo sereno interdium obscurata lux est, cum luna sub orbem solis subisset.

Sage E. T., LCL, Livy X, London 1965, p. 301

About the time the consul departed to the war, during the *ludi Apollinares*, on the fifth day before the Ides of July, in a clear sky during the day, the light was dimmed since the moon passed before the circle of the sun.

188 BC July 17

Livius XXXVIII, XXXVI.4

Priusquam in provincias novi magistratus proficiscerentur, supplicatio triduum pro collegio decemvirorum imperata fuit in omnibus compitis, quod luce inter horam tertiam ferme et quartam tenebrae obortae fuerant ; et novemdiale sacrificium indictum est, quod in Aventino lapidibus pluvisset.

Sage E. T., LCL, Livy XI, London 1965, p. 119

Before the new magistrates departed for their provinces a threeday period of prayer was proclaimed in the name of the college of decemvirs at all the street-corner shrines because in the day-time, between about the third and fourth hours, darkness had covered everything. Also a nine-day sacrifice was decreed because there had been a shower of stones on the Aventine.

104 BC July 19

Julius Obsequens, Prodigiorum liber, c. 43.10-43a.2

*C. Mario C. Flavio coss. [A.U.C. 650 / 104 B.C.]
Cimbri Alpes transgressi per Hispaniam vastatam iunxerunt se Teutonibus. Lupus urbem intravit. Fulminis ictu vultures super turrem exanimati. Hora diei tertia solis defectus lucem obscuravit.*

Own translation

C. Marius and C. Flavius consuls
The Cimbri, who transgressed the Alps, allied with the Teutones after the devastation of Spain. A wolf entered the city. Vultures were killed above a tower by a stroke of lightning. During the third hour of the day a solar eclipse dimmed the light.

62 BC October 1

Julius Obsequens, Prodigiorum liber, c. 62

*Quinto Metello L. Afranio coss. [A.U.C. 694 / 60 B.C.]
62. Die toto ante sereno circa horam undecimam nox se intendit, deinde restitutus fulgor.*

Brind'Amour P., Le calendrier romain, Ottawa 1983, p. 112

Quintus Metellus and L. Afranius consuls
The whole day it was quiet until about the 11th hour, when it became dark night until the brightness reappeared.

51 BC March 7

Cassius Dio XLI, 14.3

ὁ τε ἥλιος σύμπας ἐξέλιπε.

Cary E., LCL, Dio's Roman History VI, London 1968, p. 27

The Sun, too, suffered a total eclipse.

5 AD March 28

Cassius Dio LV, 22.3

Τότε δ' οὖν ἐπὶ τε τοῦ Κορνηλίου καὶ ἐπὶ Οὐαλερίου Μεσσάλου ὑπάτων σεισμοὶ τε ἐξαισίοι συνέβησαν ... τοῦ τε ἡλίου τι ἐκλιπῆς ἐγένετο.

Cary E., LCL, Dio's Roman History VI, London 1968, p. 451

At this time, in the consulship of Cornelius and Valerius Messalla, violent earthquakes occurred and the Tiber carried away the bridge and made the city navigable for seven days; there was also a partial eclipse of the sun, and famine set in.

29 AD November 24

Africanus, Chronology, in: Synkellos, Chronographia 391

Φλέγων ἱστορεῖ ἐπὶ Τιβερίου Καίσαρος ἐν πανσελήνῳ ἔκλειψιν ἡλίου γεγενῆσθαι τελείαν ἀπὸ ὥρας ἑκτῆς· δῆλον ὡς αὐτὴν ...

Adler & Tuffin (2002), p. 466

Phlegon records that during the reign of Tiberius Caesar there was a complete solar eclipse at full moon from the sixth to the ninth hour; it is clear that this is the one...

29 AD November 24

Eusebios 2.174 in Synkellos, Chronographia 394

Ἰησοῦς ὁ Χριστὸς, ὁ υἱὸς τοῦ θεοῦ, ὁ κύριος ἡμῶν, κατὰ τὰς περὶ αὐτοῦ προφητείας ἐπὶ τὸ πάθος προῆει ἔτους ιθ' τῆς Τιβερίου βασιλείας, καθ' ὃν καιρὸν καὶ ἐν ἄλλοις μὲν Ἑλληνικοῖς ὑπομνήμασιν εὔρομεν ἱστορούμενα κατὰ λέξιν ταῦτα· ὁ ἥλιος ἐξέλιπε· Βιθυνία ἐσεισθη· Νικαίας τὶ πολλὰ ἔπεσεν· ἃ καὶ συνᾶδει τοῖς περὶ τὸ πάθος τοῦ σωτῆρος ἡμῶν συμβεβηκόσι· γράφει δὲ καὶ Φλέγων ὁ τὰς Ὀλυμπιάδας γράψας περὶ τῶν αὐτῶν ἐν τῇ ιγ' ῥήμασιν αὐτοῖς τάδε. Τῷ δ' ἔτει τῆς σβ' ὀλυμπιάδος ἐγένετο ἔκλειψις ἡλίου μεγίστη τῶν ἐγνωρισμένων πρότερον, καὶ νύξ ὥρα ἕκτη τῆς ἡμέρας ἐγένετο ὥστε καὶ ἀστέρας ἐν οὐρανῷ φανῆναι. Σεισμός τε μέγας κατὰ Βιθυνίαν γενόμενος τὰ πολλὰ Νικαίας κατεστρέψατο· καὶ ταῦτα μὲν ὁ δηλωθεὶς ἀνήρ· τεκμήριον δ' ἂν γένοιτο τοῦ κατὰ τὸδε τὸ ἔτος πεπονθέναι τὸν σωτῆρα ἢ τοῦ κυρίου κατὰ Ἰωάννην εὐαγγελίου μαρτυρία, ἥτις μετὰ τὸ ιε' ἔτος Τιβερίου πριετὴ χρόνον τῆς διδασκαλίας αὐτοῦ διαγενέσθαι μαρτυρεῖ ...

Adler & Tuffin (2002), p. 471-472

In accordance with the prophecies about him, Jesus Christ, the son of God, our Lord, went forth to his passion in the 19th year of the reign of Tiberius. At that time, we have found the following events recounted verbatim in other Greek historical records as well: "There was a solar eclipse. Bithynia was awoken by an earthquake. Many sites in Nikaia collapsed." These reports also correspond with the events associated with the passion of our Saviour. Phlegon, who composed a record of the Olympiads, also writes about these same events in his 13th book, with the following words: "In the fourth year of the 202nd Olympiad, there was an eclipse of the sun, greater than any that had been previously known. And night fell at the sixth hour of the day, so that the stars appeared in the sky. A great earthquake occurring throughout Bithynia overturned many sites in Nikaia." This is the witness of the man just mentioned. But let the witness of the gospel according to John be proof of the fact that the Saviour suffered in that year. It attests that after the fifteenth year of Tiberius the duration of his teaching was three years...

45 AD August 1

Cassius Dio LX 26.1

Καὶ ἐπειδὴ ὁ ἥλιος ἐν τοῖς γενεθλίοις αὐτοῦ (Κλαυδίου) ἐκλείψει
ἔμελλεν, ἐφοβήθη τε μή τις ἐκ τούτου ταραχὴ γένηται, ἐπεὶ ἄλλα
ἄττα τέρατα συνεβέβηκει, καὶ προέγραψεν οὐ μόνον ὅτι τε ἐκλείψει
καὶ ὅποτε καὶ ἐφ' ὅπόσον, ἀλλὰ καὶ τὰς αἰτίας δι' ἃς ἀναγκαίως
γενήσεσθαι τοῦτ' ἔμελλεν.

Cary E., LCL, Dio's, Roman History VII, London 1961, p. 433

Since there was to be an eclipse of the sun on his birthday, he
feared that there might be some disturbance in consequence,
inasmuch as some other portents had already occurred; he
therefore issued a proclamation in which he stated not only the fact
that there was to be an eclipse, and when, and for how long, but
also the reasons for which this was bound to happen.

59 AD April 30

Plinius, Natural History II, LXXII.180

*Ideo defectus solis ac lunae vespertinos orientis incolae non
sentiunt, nec matutinos ad occasum habitantes, meridianos vero
serius nobis illi. apud Arbilam Magni Alexandri victoria luna
defecisse noctis secunda hora est prodita eademque in Sicilia
exoriens. solis defectum Vipsano et Fonteio cos., qui fuere ante
paucos annos, factum pridie kalendas Maias Campania hora diei
inter septimam et octavam sensit, Corbulo dux in Armenia inter
horam diei decimam et undecimam prodidit visum, circuiti globi alia
aliis detegente et occultante.*

Rackham H., LCL, Pliny Natural History I, London 1977, p. 313

Consequently inhabitants of the East do not perceive evening
eclipses of the sun and moon, nor do those dwelling in the West
see morning eclipses, while the latter see eclipses at midday later
than we do. The victory of Alexander the Great is said to have
caused an eclipse of the moon at Arbela at 8 p.m. while the same
eclipse in Sicily was when the moon was just rising. An eclipse of
the sun that occurred on April 30 in the consulship of Vipsanus and
Fonteius a few years ago was visible in Campania between 1 and 2
p.m. but was reported by Corbulo commanding in Armenia as
observed between 4 and 5: this was because the curve of the globe
discloses and hides different phenomena for different localities.

59 AD April 30

Tacitus, Annales XIV.12

*Prodigia quoque crebra et inrita intercessere: anguem enixa mulier
et alia in concubitu mariti fulmine exanimata; iam sol repente
obscuratus et tactae de caelo quattuordecim urbis regiones. quae
adeo sine cura deum eveniebant ut multos post annos Nero
imperium et scelera continuaverit.*

Woodman (2004), p. 280

There occurred too a thick succession of portents, which meant
nothing. A woman gave birth to a snake, and another was killed by
a thunderbolt in her husband's embrace. Then the sun was
suddenly darkened and the fourteen districts of the city were struck
by lightning. All this happened quite without any providential
design; so much so, that for many subsequent years Nero
prolonged his reign and his crimes.

59 AD April 30

Cassius Dio LXI 16.4

ὁ μέντοι ἥλιος σύμπας ἐν μέσαις ταῖς θυσίαις ταῖς ἐπὶ τῇ Ἀγριππίνῃ κατὰ τὸ ψήφισμα γενομέναις ἐξέλιπεν, ὥστε καὶ ἀστέρας ἐκφανήναι.

Cary E., LCL, Dio's Roman History VIII, London 1961, p. 73

Nevertheless, in the midst of the sacrifices that were offered in Agrippina's honour in pursuance of a decree, the sun suffered a total eclipse and the stars could be seen.

67 AD May 31

Philostratus, The life of Apollonius of Tyana IV, 43

Γενομένης γάρ ποτε ἐκλείψεως ἡλίου καὶ βροντῆς ἐκδοθείσης ὅπερ ἤκιστα ἐν ἐκλείψει δοκεῖ συμβαίνειν, ἀναβλέψας ἐς τὸν οὐρανὸν „ἔσται τι“ ἔφη „μέγα καὶ οὐκ ἔσται.“ Ξυμβαλεῖν μὲν δὴ τὸ εἰρημένον οὕτω εἶχον οἱ παρατυχόντες τῷ λόγῳ. Τρίτῃ δ' ἀπὸ τῆς ἐκλείψεως ἡμέρᾳ ξυνῆκαν τοῦ λόγου πάντες.

Jones Ch. P., LCL, Philostratus. The life of Apollonius of Tyana Books I-IV, 2005, p. 413

An eclipse of the sun occurred together with a clap of thunder, something considered very unusual in an eclipse. Apollonius looked up at the sky and said: "Something momentous is going to happen and not to happen". Those present when he said this could not immediately interpret his words, but three days after the eclipse they all understood the meaning.

71 AD March 20

Plutarch, de facie in orbae lunae XIX

ὅτι μὲν γὰρ οὐδὲν οὕτως τῶν περὶ τὸν ἥλιον γενομένων ὁμοίων ἔστιν ὡς ἐκλείψις ἡλίου δῦσει, δότε μοι, ταύτης ἕναγχος τῆς συνόδου μνησθέντες, ἢ πολλὰ μὲν ἄστρα πολλαχόθεν τοῦ οὐρανοῦ διέφηνεν, εὐθύς ἐκ μεσημβρίας ἀρξαμένη, χραῖσιν δὲ, οἷαν τὸ λυκαυγες, τῷ ἀέρι παρέσχευεν.

Cherniss & Helmbold (1957), p. 117-119

Now grant me that nothing that happens to the Sun is so like its setting as a solar eclipse. You will if you call to mind this conjunction recently which, beginning just after noonday, made many stars shine out from many parts of the sky and tempered the air in the manner of twilight. If you have forgotten it ...

75 AD January 5

Plinius, Natural History II, IX.56-57

Defectus CCXXIII mensibus redire in suos orbis certum est, solis defectus non nisi novissima primare fieri luna, quod vocant coitum, lunae autem non nisi plena, semperque citra quam proxime fuerint; omnibus autem annis fieri utriusque sideris defectus statis diebus horisque sub terra nec tamen, cum superne fiant, ubique cerni, aliquando propter nubila, saepius globo terrae obstante convexitatibus mundi.

Intra ducentos annos Hipparchi sagacitate compertum est et lunae defectum aliquando quinto mesne a priore fieri, solis vero septimo, eundem bis in XXX diebus super terras occultari, sed ab aliis hoc cerni, quaeque sunt in hoc miraculo maxime mira, cum conveniat umbra terrae lunam heetari, nunc ab occasus parte hoc ei accidere, nunc ab exortus, quam ratione, cum solis exortu umbrae illa hebetatrix sub terra esse debeat, semel iam acciderit ut in occasu lunae deficeret utroque super terram conspicuo sidere. nam ut XV diebus utrumque sidus quaereretur, et nostro aevo accidit imperatoribus Vespasianis patre III. filio consulibus.

Rackham H., LCL, Pliny Natural History II, London 1979, p. 205-207

It is certain that eclipses recur in cycles of 223 months - eclipses of the sun only when the moon is in her last or first phase (this is called their 'conjunction'), eclipses of the moon only at full moon - and always within the period of their last occurrence; but that yearly at fixed days and hours eclipses of either star occur below the earth, and that even when they occur above the earth they are not visible everywhere, sometimes owing to clouds, more often because the earth's globe stands in the way of the world's curvature. Less than 200 years ago the penetration of Hipparchus discovered that an eclipse of the moon also sometimes occurs four months after the one before and an eclipse of the sun six months, and that the latter when above earth is hidden twice in thirty days, but that this eclipse is visible to different nations, and - the most remarkable features of this remarkable occurrence - that when it comes about that the moon is obscured by the shadow of the earth, this sometimes happens to it from the west side and sometimes from the east; and he also discovered for what exact reason, although the shadow causing the eclipse must from sunrise onward be below the earth, it happened once in the past that the moon was eclipsed in the west while both luminaries were visible above the earth. For the eclipse of both sun and moon within 15 days of each other has occurred even in our time, in the year of the third consulship of the elder Emperor Vespasian and the second consulship of the younger.

118 AD September 3

Fasti Vindobonenses priores cum excerptis Sangallensibus
(ed. Mommsen, MGH Chronica Minora Vol. I, München 1981, p. 285)

118 Adriano et Salinatore.
his cons. sol eclipsim passus est.

Newton (1972), p. 451

118 Hadrian and Salinator.
Under these consuls an eclipse of the sun took place.

164 AD September 4

Proclus IV, 98 (ed. Manitius, Procli Diadochi. Hypotyposis Astronomicarum Positionum, Leipzig 1909, p. 130)

ὦ και δῆλον ὅτι, εἰ τοῦτο ἀληθές, οὐκ ἔστιν ἀληθές, ὃ ἰστόρησε Σωσιγένης ὁ Περιπατητικὸς ἐν τοῖς περὶ τῶν ἀνελιπτουσῶν σφαιρῶν, τὸ τὸν ἥλιον ἐν ταῖς περιγεῖοις ἐκλείψεσιν ὄρασθαι μὴ ὄλον ἐπιπροσθούμενον, ἀλλὰ τοῖς ἄκροις τῆς ἑαυτοῦ περιφερείας ὑπερβάλλειν τὸν κύκλον τῆς σελήνης καὶ φωτίζειν οὐκ ἐμποδιζόμενον.

ed. Manitius, Procli Diadochi. Hypotyposis Astronomicarum Positionum, Leipzig 1909, p. 131

If this is correct, it is thus clearly proven, that it is not correct, what the Peripatetic Sosigenes told in his script "On the retroactive spheres", that the Sun is not seen fully covered if the eclipse happens close to its perigee, but that the Sun protrudes with its outermost rim above the lunar disk and shines unobstructed.

186 AD December 28

Aelius Lampridius, Commodus Antonius, XVI

Prodigia ... vestigia deorum in foro visa sunt exeuntia. et ante bellum desertorum caelum arsit. et repentina caligo ac tenebra in circo Kalendis Januariis oborta.

Magie D., LCL, Historia Augusta, Vol. I, London 1921, p. 300-302

Prodigies ... footprints of the gods were seen in the Forum departing from it. Before the war of the deserters the heavens were ablaze. On the Kalends of January a swift coming mist and darkness arose in the Circus.

197 AD June 3? / 211 AD March 2? / 212 AD August 14?

Tertullian ad Scapulam III.25-29

Nam et sol ille in conventu Uticensi, extincto plene lumine, adeo portentum fuit, ut non potuerit ex ordinario deliquio hoc pati, positus in suo hysomate, et domicilio. Habetis astrologos.

Quacquarelli (1957), p. 61

That sun, too, in the metropolis of Utica, with light all but extinguished, was a portent which could not have occurred from an ordinary eclipse, situated as the lord of day was in his height and house. You have the astrologers, consult them about it.

218 AD October 7

Cassius Dio LXXVIII 30.1

ἡλίου τε γὰρ ἔκλειψις περιφανεστάτη ὑπὸ τὰς ἡμέρας ἐκείνας
ἐγένετο, ...

Cary E., LCL, Dio's Roman History IX, London 1961, p. 407

For a very distinct eclipse of the sun occurred just before that time
...

240 AD August 5

Julius Capitolinus, Gordiani III, XXIII

*Et hic finis belli intestini fuit, cum esset delatus Gordiano puero
consulatus. sed indicium non diu imperaturi Gordiani hoc fuit, quod
eclipsis solis facta est, ut nox crederetur neque sine luminibus
accensis quicquam agi posset.*

Magie D., LCL, Historia Augusta, Vol. II, London 1921, p. 422

And an end of the civil war strife was made when the boy Gordian
was given consulship. There was an omen, however that Gordian
was not to rule for long, which was this: there occurred an eclipse
of the sun, so black that men thought it was night and business
could not be transacted without the aid of lanterns.

292 AD May 4

**Consularia Constantinopolitana (ed. Mommsen, MGH Chronica
Minora Vol. I, München 1981, p. 230)**

Tiberiano et Dione.

1. *His cons. tenebrae fuerunt inter diem*
2. *et eo anno leuati sunt Constaninus. et Maximinus Cesares
die kal. Mart.*

Burgess (1997), p. 234

Tiberianus and Dione consuls.

1. Under these consuls there was a darkness in the middle of
the day,
2. and this year Constantius and Maximinus were elevated to
Caesars on the calends of March.

316 AD July 6

Sextus Aurelius Victor, De Caesaribus, 41.5-8

Licinio ne insontium quidem ac nobilium philosophorum servili more cruciatus adhibiti modum fecere. Quo sane variis proeliis pulso, cum eum prorsus opprimere arduum videretur, simul affiniatis gratia reffectum consortium, ascitique imperio Caesarum communes liberi Crispus Constantinusque Flavio geniti, Licinianus Licinio. (315 n. Chr.) Quod equidem vix diurtumum neque his, qui assumebantur, felix fore defectu solis foedato iisdem mensibus die patefactum.

Groß-Albenhausen & Fuhrmann (2009), p. 134

Licinianus carried out tortures reserved for slaves in unlimited numbers even on innocent philosophers of noble rank. He was, indeed, defeated in various battles but, since it seemed difficult to suppress him completely and at the same time because of their marriage ties, the partnership was renewed and their respective children, Crispus and Constantine, the son of Flavius, and Licinianus, the son of Licinius, were admitted to the rank of Caesar. It was, in fact, made clear that this would hardly be a long-lasting agreement, or propitious for those who were adopted, since daylight was obliterated by a solar eclipse during those same months.

319 AD May 6

Consularia Constantinopolitana (ed. Mommsen, MGH Chronica Minora Vol. I, München 1981, p. 232)

Licinio V et Crispo Caes.

1. *His cons. tenebrae fuerunt inter diem hora VIII.*

Burgess (1997), p. 236

Licinio V and Crispo Caesars

1. Under these consuls there was a darkness at the 9th hour of the day.

324 AD August 6? / 306 AD July 27?

Georgii Hamartoli, Chronic IV.180

Ἐγένετο δὲ καὶ σεισμὸς ἐν Καμπανίᾳ, καὶ κατέπεσαν πόλεις ιγ'. Καὶ ἔκλειψις ἡλίου γέγονεν ὥρα γ' τῆς ἡμέρας, ὥστε καὶ ἀστέρας ἐν οὐρανῷ φανῆναι.

Newton (1972), p. 533

An earthquake happened in Campania, and 13 cities were struck down; and an eclipse of the sun occurred in the 3rd hour of the day, so that stars appeared in the sky.

334 AD July 17

Firmicus, Maternus astron. I 4, 10

Ecce aliud maius addiscimus quod, cum acciderit, imperitos homines monstruosa semper timiditate perturbat, cum Sol medio diei tempore Lunae radiis quasi quibusdam obstaculis impeditus cunctis mortalibus fulgida splendoris sui denegat lumina (quod Optatii et Paulini consulatu, ut de recentioribus loquar, cunctis hominibus futurum Mathematicorum sagax praedixit intentio), quando rursus luna, terrenarum altitudinum adumbrata regionibus, simili ratione deficiat, quod frequenter fieri lucidae noctis serenitate peruidimus.

Monat (1992), p. 63

Now we learn about a more awesome phenomenon which always strikes ignorant men with fear: when the Sun at midday is impeded by the Moon, as if by some obstacle, and denies his brightness to all mortals. (This to speak of recent occurrences, was predicted by astrologers for the consulship of Optatus and Paulinus.) Or again the Moon, shadowed by Earth, fails in the same way - a thing we have often seen in the stillness of a bright night.

346 AD June 6

Theophanis Chronographia (ed. De Boor, Theophanis Chronographia Vol. I, Leipzig 1883, p. 39)

Τῷ δ' αὐτῷ ἔτει ἔκλειψις ἡλίου ἐγένετο, ὥστε καὶ ἀστέρας φανῆναι ἐν τῷ οὐρανῷ ἐν ὥρᾳ τρίτῃ τῆς ἡμέρας, μηνὶ Δαισίῳ ἔκτης.

Newton (1972), p. 534

In the same year an eclipse of the Sun occurred, so that stars appeared in the sky, in the third hour of the day, on the sixth of the month Daisios.

348 AD October 9

Theophanis Chronographia (ed. De Boor, Theophanis Chronographia Vol. I, Leipzig 1883, p. 38)

Τῷ δ' αὐτῷ ἔτει ὁ ἥλιος πάλιν ἀυχρότερος γέγονεν, ἐν ὥρᾳ δευτέρᾳ τῆς Κυριακῆς ἡμέρας.

Newton (1972), p. 536

In the same year the Sun again became impoverished in the second hour of the Lord's Day.

360 AD August 28

Ammianus Marcellinus XX 3.1

Eodem tempore per eos tractus caelum subtextum caligine cernebatur obscura, et a primo aurorae exortu ad usque meridiem intermicabant iugiter stellae hisque terroribus accedebat, quod, cum lux caelestis operiretur, e mundi conspectu penitus lance abrepta defecisse diutius solem pavidae mentes hominum aestimabant: primo adtenuatum in lunae corniculantis effigiem, deinde in speciem auctum semenstrem posteaque in integrum restitutum.

Rolfe J. J., LCL, Ammianus Marcellinus, London 1963, p. 7-9

At that same time, throughout the regions of the East the heaven was seen to be overcast with dark mist, through which the stars were visible continually from the first break of day until noon ... men thought that the darkening of the sun lasted too long, but it thinned out at first into the form of the crescent moon, then growing to the shape of the half moon, and was finally restored.

364 AD June 16

Theon Alexandrinus, Commentarii magni in tabulas faciles Cl. Ptolemaei, Basel 1538, p. 332

... τὸν πρὸς τὰ καιρικὰ νυχθήμερα καὶ ὥρας ἰσημερινὰς χρόνον τῆς ἡμῖν ἀκριβῶς ἐκλειπτικῆς συζυγίας γεγεννημένης κατ' Αἰγυπτίους τῷ ἀριθμῷ ἔτει ἀπὸ Ναβονασσάρου βασιλείας μετὰ βςγ' ὥρας ἰσημερινὰς τῆς ἐν τῇ κδ' τοῦ θῶθ μεσημβρίας, κατὰ δὲ Ἀλεξανδρέας πρὸς τὰ καιρικὰ καὶ ἀπλῶς λαμβανόμενα νυχθήμερα αριθμῷ τῆς αὐτῆς βασιλείας μετὰ τὰς ἴσας ἀπὸ μεσημβρίας ὥρας ἰσημερινὰς βςγ' τῆς ἐν τῇ κβ' τοῦ Παῦνι μεσημβρίας· καὶ τὸν μὲν τῆς ἀρχῆς τῆς ἐμπώσεως χρόνον ἀσφαλέστατα ἐτηρήσαμεν γεγεννημένον πρὸς τὸν καιρικὸν καὶ φαινόμενον χρόνον μετὰ βςγ' ὥρας ἰσημερινὰς τῆς μεσημβρίας, τὸν δὲ τοῦ μέσου τῆς ἐκλείψεως μετὰ ὥρας γςδκ, τὸν δὲ τοῦ τέλους τῆς ἀνακαθάρσεως μετὰ ὥρας δς' ἔγγιστα τῆς εἰρημένης κατὰ τὴν κβ' τοῦ Παῦνι μεσημβρίαν.

Fotheringham (1920), p. 114

... the time reckoned by civil days and equinoctial hours of the exact ecliptic conjunction which we have discussed, and which took place according to the Egyptian calendar in the 1112th year from the reign of Nabonassar, 2⁵/₆ equal or equinoctial hours after midday on the 24th of Toth, and according to the Alexandrian calendar reckoned by simple civil days in the 1112th year of the same reign, 2⁵/₆ equal or equinoctial hours after midday on the 22nd of Payni [...]. And moreover we observed with the greatest certainty the time of the beginning of contact, reckoned by civil and apparent time, as 2⁵/₆ equinoctial hours after midday, and the time of the middle of the eclipse as 3⁴/₅ hours, and the time of complete restoration as 4¹/₂ hours approximately after the said midday on the 22nd of Payni.

393 AD November 20

Consularia italica, Fasti Vindobonensis priores cum excerptis Sangallensibus (ed. Mommsen, MGH Chronica Minora Vol. I, München 1981, p. 298)

AD 393. Theodosio III et Abundantio.

His cons. tenebre facte sunt die Solis hora III [III] VI kal. Novemb.

Newton (1972), p. 452

Theodosius III and Abundantius.

Under these consuls was darkness on the day of the Sun at the 3rd [2nd] hour on the 6th calends of November (=Oct 27th).

393 AD November 20

Marcellini V. C. comitis chronicon (ed. Mommsen, MGH Chronica Minora Vol. II, München 1981, p. 63)

Tunc quipped hora diei tertia tenebrae factae sunt.

Newton (1972), p. 537

At that time indeed there was darkness at the third hour of the day.

400 AD July 8

S. Eusebii Hieronymi Stridonensis presbyteri contra Joannem Hierosolymitanum Episcopum ad Pammachium 42

Quis scindit ecclesiam? nos, quorum omnis domus Bethleem in ecclesia communicat? an tu qui aut bene credis, et superbe de fide taces: aut male, et vere scindis ecclesiam? nos scindimus ecclesiam, qui ante paucos menses circa dies Pentecostes cum obscurato sole, omnis mundus jamjamque venturum judicem formidaret, quadraginta diversae aetatis et sexus, presbyteris tuis obtulimus baptizandos?

Own translation

Who splits the Church? Do we communicate in the Church as one complete household at Bethlehem? Or is it you, being either orthodox and refusing through pride to speak concerning the faith, or being heterodox, who split the Church? Do we split the Church, who, a few months ago, about the day of Pentecost, when the sun was darkened and all the world feared the immediate coming of the Judge, presented forty candidates of different ages and sexes to your presbyter for baptism?

402 AD November 11

Hydatii episcopi chronicon CCLXLV Olympi II

CCLXLV OLYMPI II, Archadius et Honorius VII

Solis facta defectio III idus Nouembris.

Burgess (1997), p. 79

OI.295.2, 7th regnal year of Arcadius and Honorius.

There was an eclipse of the sun on 11th November.

418 AD July 19

Philostorgius, Historia ecclesiastica XII.8 (ed. Migne, Patrologiae graeca Vol. 65, Paris 1864, p. 616)

Ὅτι Θεοδοσίου τῆς τῶν μαιρακίων ἡλικίας ἐπιβεβηκότος, καὶ τοῦ μηνὸς Ἰουλίου εἰς ἑννέα ἐπὶ δεκάτῃ διαβαίνοντος, περὶ ὀγδόῃ τῆς ἡμέρας ὥραν, ὁ ἥλιος οὕτω βαθέως ἐκλείπει, ὡς καὶ ἀστέρας ἀναλάμψαι. Καὶ αὐχμὸς οὕτω τῷ πάθει συνείπετο, ὡς πολλῶν ἀνθρώπων καὶ τῶν ἄλλων ζώων ἀσυνήθη φθορὰν πανταχοῦ φέρεσθαι. Ἐκλείποντι δὲ τῷ ἡλίῳ, φέγγος τι κατὰ τὸν οὐρανὸν συναεφάνη, κώνου σχῆμα παραδιδόμενον, ὃ τινες ἐξ ἀμαθίας ἀστέρα κομήτην ἐκάλουν· καὶ γὰρ ὧν ἐκεῖνος ἐδείκνυ, οὐδὲν ἦν κομήταις παράσημον οὔτε γὰρ τὸ φέγγος εἰς κόμην ἀπέβαινε, οὔτε ἀστέρι ὅλως ἐώκει. ἀλλ' οἷον λύχνου τις μεγάλη φλὸξ ὑπήρχε καθ' ἐαυτὴν ὀρωμένη, μηδενὸς ἀστέρος θρυαλλίδος αὐτῷ τινος μορφὴν ἵποτρέχοντος.

Newton (1972), p. 538

When Theodosius had entered the years of boyhood, on the 19th of July, a little after noon-day, the sun was so completely eclipsed that the stars appeared ; and so great a drought followed on this eclipse that a sudden mortality carried off great multitudes both of men and of beasts in all parts. Moreover, at the time that the sun was eclipsed, a bright meteor appeared in the sky, in shape like a cone, which some persons in their ignorance called a comet, for there was nothing like a comet in the phenomena of this meteor as it appeared. For its light did not end in a tail, nor had it any of the characteristics of a star, but it seemed like the flame of a huge lamp, subsisting by itself, with no star below it to answer to the appearance of a lamp. Its track, too, was far different from that of comets. For it arose first in the east, just where the sun rises at the equinox, and then passing across the lowest star in the constellation of the Bear, crossed gradually over to the west.

421 AD May 17

Agapius, Kitab al-'Unvan (Vasiliev (1912), p. 408)

[Syriac text printed in Vasiliev (1912), p. 408]

Schove (1984), p. 74

Then Warahran, his son, who succeeded him, persecuted and oppressed the Christians. That year there was an eclipse of the Sun. The same year there was a battle between the Greeks and the Persians, and many were killed on both sides; the Persians were routed, and the persecution of the Christians ceased.

447 AD December 23

Hydatii episcopi chronicon CCCVI Olympi IIII

CCCVI OLYMPI IIII, Theodosius XXIII

Solis facta defectio die [diei] X [nono] kl. Ianuarias, qui fuit tertia feria.

Burgess (1997), p. 99

Ol.306.4, 23rd regnal year of Theodosius.

There was an eclipse of the sun on 23 [24] December which was a Tuesday.

458 AD May 28

Hydatii episcopi chronicon CCCX Olympi I

CCCX OLYMPI I, Maiorianus in Italia et Constantinopolim Leo II Quinto kal. [Idus] Iun., die quarta feria, ab ora [hora] quarta in horam sextam, ad speciem lunae quintae uel sextae, sol de lumine orbis sui minoratus apparuit.

Burgess (1997), p. 111

Ol.310.1, 2nd regnal year of Maiorian in Italy and Leo in Constantinopolis
On Wednesday, May 28th, from the forth hour to the sixth, the sun appeared to be diminished in the light of its orb to the appearance of a crescent moon on the fifth or sixth day.

464 AD July 20

Hydatii episcopi chronicon CCCXI Olympi III

CCCXI OLYMPI III, Severus III XIII kal. Aug., die, secunda feria, in speciem [speciae] lunae quintae [quinta] sol de lumine suo [tercia usque nona obscuratus] ab hora tertia in horam sextam cernitur minoratus.

Burgess (1997), p. 111

Ol.311.3, 3rd regnal year of Severus
On Monday, July 20th, from the third hour to the sixth, the sun was perceived to be diminished in its light to the appearance of the moon on the fifth day.

484 AD January 14

Marinus, Life of Proclus, Chap. 37

Ἐγένοντο δὲ καὶ διοσημεῖαι πρὸ ἐνιαυτοῦ τῆς τελευτῆς, ὡς ἡ ἔκλειψις ἢ ἡλιακὴ, οὕτως ἐναργῆς, ὥστε καὶ νύκτα μεθ' ἡμέραν γενέσθαι. Σκότος γὰρ ἐγένετο βαθὺ καὶ ἀστέρες ὥφθησαν. Αὕτη μὲν οὖν ἐν αἰγοκέρωτι ἐγένετο κατὰ τὸ ἀνατολικὸν κέντρον. Ἀνεγράψαντο δὲ καὶ ἕτεραν οἱ ἡμερογράφοι, ὡς ἐσομένην καὶ αὐτὴν πληρουμένου τοῦ πρώτου ἐνιαυτοῦ.

Rosán (1949), p. 34

A year before his death there were various omens. There was an eclipse of the Sun which was so pronounced as to turn day into night and the darkness was deep enough for the stars to become visible; it occurred in the eastern horn of the sign of Capricorn. And the almanacs predicted another eclipse that would occur after the first year. They say that such events that are observed to happen in the heavens are indicative of things that happen on the earth; so that these eclipses clearly foretold us of the privation and departure as it were of the light of philosophy.

485 AD May 29

Gregorii Turonensis, Historiarum Libri Decem II.3

Tunc et sol teter apparuit, ita ut vix ab eo pars vel tertia eluceret;

Buchner (1977), p. 71

The sun appeared hideous in a way that barely her third part was still visible;

497 AD April 18

**Marcellini V. C. comitis chronicon (ed. Mommsen, MGH
Chronica Minora, Vol. II, München 1981, p. 94)**

(A. C. 497.) *Ind. V, Anastasio Aug. [Al. II] solo cos.
Solis defectus apparuit.*

Newton (1972), p. 541

497 ... Indiction year 5, Anastasius Aug. consuls
An eclipse of the sun appeared.

512 AD June 29

**Paschale Campanum year 512 (ed. Mommsen, MGH Chronica
Minora Vol. I, München 1981, p. 330)**

*512 p.c. Felicis
Hoc anno in k. Iul. sol eclipsin passus est, et monte Besuvio
ardente VIII id. Iulias. tenebrae factae sunt per vicinium montis.*

Newton (1972), p. 455

512. Felix
This year on the calends of July the sun suffered an eclipse, and
when Vesuvius erupted on the 8th ides of July, there was darkness
in the vicinity of the mountain.

526 AD September 22

Elia of Nisibis, French translation by Delaporte (1910), p. 75
CCCXXVI^e Olympiade. - An 837. En lequel le soleil s'éclipsa au
milieu du jour.

Schove (1984), p. 94

Year 837. In this year the sun was eclipsed in the middle of the
day.

534 AD April 29

Agapius, Kitab al-ʿUnvan (Vasiliev (1912), p. 428)
[Syriac text printed in Vasiliev (1912), p. 428]

Schove (1984), p. 95

In the eighth year of his [Justinian] reign, there was an eclipse of
the Sun, on the 29th of Nisan (April), at two hours in the afternoon.

538 AD February 15

Beda Venerabilis, Ecclesiastical History V.24.1
*Anno DXXXVIII eclipsis solis facta est XIV Kalend. Mart. (16 Febr.)
ab hora prima usque ad tertiam.*

Newton (1970), p. 76

In the year 538, there happened an eclipse of the sun, on the 16th
of February, from the first to the third hour.

540 AD June 20

Beda Venerabilis, Ecclesiastical History V.24.1

Anno DXL eclipsis solis facta est duodecimo Kalendas Julii et apparuerunt stellae pene hora dimidia ab hora diei tertia.

Newton (1970), p. 76

In the year 540, an eclipse of the sun happened on the 20th of June, and the stars appeared during almost half an hour after the third hour of the day.

547 AD February 6

Cosmas Indikopleustes, Topographia Christiania VI. (ed. Migne, Patrologiae graeca Vol. 88, Paris 1864, p. 321-322)

Ὅθεν ἀπαιτηθεὶς τῷ Θῶθ μηνί, τῆς παροίσης δεκάτης ἰνδικτιῶνος, παρὰ ἀνδρὸς ἐπιστήμονος, Ἀναστασίου τοῦνομα, μηχανικοῦ ἀνδρὸς λογίου καὶ ὑπὲρ πολλοὺς ἐμπείρου, προειπεῖν ἔκλειψιν ἡλίου, ἔφη γενέσθαι ἐν αὐτῷ τῷ καιρῷ κατὰ τὴν δωδεκάτην τοῦ Μεχίρ μηνός· ἥτις καὶ γέγονε· καὶ σεληνιακὴν Μεσορί κδ' πάλιν τῷ αὐτῷ καιρῷ. Καὶ ὁ θαυμάσας, πάλιν ἀπήτησε γεγонуίας ἐκλείψεως· καὶ ταύτας πάλιν ἐξειπόντος ἐθαύμασεν ὁ ἀνήρ.

Own translation

When he (Stephanus), in the month of Thoth of the 10th indiction, was asked by the scholar Anastasius, an insightful and very skilled physicist, to predict a solar eclipse, he said, that one is due at a certain hour on the 12th day of the month Mechir (this happened indeed) and a lunar eclipse at a certain hour on the 24th day of the month Mesore. And surprised he asked again for already happened eclipses and when he (Stephanus) determined them, he was amazed.

563 AD October 3

Gregorii Turonensis, Historiarum Libri Decem IV.31

Quadam tamen vice Kalendis Octobribus ita sol obscuratus apparuit, ut nec quarta quidem pars in eodem lucens remaneret, sed teter atque decolor apparens, quasi saccus videbatur. Nam et stilla, quam quidam comiten vocant, radium tamquam gladium habens, super regionem illam per annum integram apparuit et caelum ardere visum est, et multa alia signa apparuerunt.

Buchner (1977), p. 237-239

Once on the first day of October, the sun was in eclipse, so that less than a quarter of it continued to shine, and the rest was so dark and discoloured that you would have said that it was made of sackcloth. Then a star, which some call a comet, appeared over the region for a whole year, with a tail like a sword, and the whole sky seemed to burn and many other portents were seen.

566 AD August 1

Agapius, Kitab al-ʿUnvan (Vasiliev (1912), p. 435)

[Syriac text printed in Vasiliev (1912), p. 435]

Schove (1984), p. 100-101

In the first year of his (Justin the Second's) reign, there was an eclipse of the Sun, on Sunday the first of Ab (August).

590 AD October 10

Theophylacti Simocattae, Historiarum V.16 (ed. Bekker, Corpus Scriptorum Historiae Byzantinae, Theophylacti Simocattae, Bonn 1834, p. 236)

ἐξεχώρει τῶν βασιλείων ὁ αὐτοκράτωρ Μαυρίκιος παρασάγγην ἓνα καὶ ἡμιόλιον· Ἔβδομον δὲ ἄρα τοῦτο τοῖς Βυζαντίοις ὠνόμασται. Κατ' ἐκείνην γοῦν τὴν ἡμέραν ἡλίου μεγίστη γέγονεν ἔκλειψις. ἔννατον δὲ ἄρα τοῦτο ἔτος ἐτύγχανεν ὄν Μαυρικίου τοῦ αὐτοκράτορος. ἐπεγένοντο δὲ καὶ ἐξαισίων πνευμάτων φυσήματα, νότος τε βίαιος, ὡς μονονουχὶ καὶ τὴν ἐπιβύθιον ψηφίδα ἀναρρίπτειν τῷ θόλῳ τοῦ σάλου.

Newton (1972), p. 542

Not moved by their entreaties, the emperor Mauricius went out of the palace and proceeded one and one-half pasarangs to the Hebdomon, as it is called by in Byzantium. That day there happened a very great eclipse of the sun. Then there arose a violent roaring south wind, that almost tore the pebbles from the depths of the sea.

592 AD March 19

Chronicon quae dicuntur Fredegarii Scholastici Libri IV cum continationibus, 13 (ed. Krusch, MGH Scriptorum rerum Merovingicarum II, Hannover 1888, p. 127)

Anno 32. regni Gunthramni, ita a mane usque media diee sol minoratus est, ut tertia pars ex ipso vix adpareret.

Newton (1972), p. 323

In the 32nd year of the reign of Guntram, the sun was eclipsed from morning to midday, so that hardly a third of it was seen.

601 AD March 10

Coptic Ostracon 38 in Egyptian Museum of Turin (Allen (1947), p. 268)

ΖΝ ΣΟΥ ΜΝΤΑϞΤΕ Μ ΦΑΜΕΝΩ ΤΗΣ ΤΕΤΑΡΤΗΣ ΙΝΔΙΚ
Α ΠΡΗ ΡΚΑΚΕ Ν ΧΠ ϞΤΟ Μ ΠΕΖΟΟΥ ΔΥΩ ΖΝ ΤΕΡΟΜΠΕ
ΕΤΕΡΕ ΠΕΤΡΟΣ Μ ΠΑΛΟΥ Ο ΝΛΑΨΑΝΕ Ε ΧΗΜΕ ΝΖΗΤΣ.

Schove (1984), p. 111

On the fourteenth of Phamenoth of the fourth indiction, the sun was eclipsed in the fourth hour of the day and in the year in which Peter, son of Palu, was made village officer of Djême.

617 AD November 4

Stephanus Alexandrinus (Usener (1914), p. 293)

Ἴνα δὲ καὶ ἐπὶ ὑποδείγματος φανερὰ ἡμῖν γίνηται τὰ λεγόμενα, παρειλήφαμεν τὴν γενομένην τοῦ ἡλίου ἔκλειψιν τῷ τιδ ἔτει ἀπὸ τῆς ἀρχῆς τῆς βασιλείας τοῦ τῆς θείας λήξεως Κωνσταντίνου, κατ' Ἀλεξανδροεῖς ἀθύρ ἦτοι κατὰ Ῥωμαίους νοεμβρίου τετάρτη.

Own translation

But there and via the example the above mentioned became visible for us. We had witnessed an eclipse of the Sun in the 314th year after the beginning of the kingship, the divine allotment, of Konstantin; certainly in Athyr in the Alexandrian calendar, on November 4th in the Roman calendar.

632 AD January 27

Al-Sijzī, Kitāb al-Qirānāt Wa Tahāwīl Sinī al-ʿĀlam (*non vidit*)

De Meis (2002), p. 85

[The solar eclipse indicating the death of the Prophet and the accession of Abū Bakr.]

644 AD November 5

Theophanes Chronographia, p. 524-525 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Vol. I, Bonn 1839)

Καὶ ἔκλειψις τοῦ ἡλίου γέγονεν μηνὶ Δίῳ πέμπτη, ἡμέρα ἕκτη, ὥρα ἑννάτη.

Newton (1972), p. 543

3rd year of Constans II

And an eclipse of the sun occurred month Dios fifth, day sixth, hour ninth.

671 AD December 7

Chronicle of Michael the Syrian, Book XI, Chap. 8, p. 456

[Syriac text printed in Chabot (1904)]

Schove (1984), p. 132

In the year 983 there was an eclipse of the Sun on a Sunday in the month of Kanūn I (December), a Sunday.

693 AD October 5

Theophanes Chronographia, p. 561 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Vol. I, Bonn 1839)

Τούτῳ τῷ ἔτει ἔκλειψις ἡλίου γέγονεν μηνὶ Ὑπερβερεταίῳ πέμπτῃ, ἡμέρᾳ πρώτῃ, ὥρᾳ τρίτῃ, ὥστε φανῆναί τινας λαμπροὺς ἀστέρας.

Newton (1972), p. 543-544

Year 8 or 9 of Justinian II

That year an eclipse of the sun happened month Hyperberetaeus fifth, day first, hour third, such that some stars shone out.

753 AD January 9

Beda Venerabilis, Ecclesiastical History of the English people Continuations (Colgrave & Mynors (1969), p. 574)

Anno DCCCLIII, anno regis Eadberti quinto idus Januarias eclipsis solis facta est, et nec mora, postea eodem anno et mense, hoc est nona kalendarum Februariarum, luna eclipsim pertulit, horrenda et nigerrimo scuto, ita ut sol Paulo ante, cooperta.

Colgrave & Mynors (1969), p. 175

753. In the 15th year of King Eadbert's reign an eclipse of the sun took place on the 9th of January, and very shortly afterwards, in the same year and month, that is the 24th of January, there was an eclipse of the moon. It was covered with a dreadful black shield, just as the sun had been, shortly before.

760 AD August 15

Theophanes Chronographia, p. 665-666 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Vol. I, Bonn 1839)

ἐγένοντο δὲ καὶ ἐν Ἀφρικῇ ἀκαταστασίαι καὶ πόλεμοι, ἡλιακῆς γεγούσας ἐκλείψεως μηνὶ Αὐγούστῳ πεντεκαίδεκάτῃ, ἡμέρᾳ ἕκτῃ, ὥρᾳ δεκάτῃ.

Newton (1972), p. 544

Year 21 of Constantine V Copronymus

A rebellion broke out in Africa, and a solar eclipse happened, month August 15th, day sixth, hour tenth.

787 AD September 16

Theophanes Chronographia, p. 716 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Vol. I, Bonn 1839)

Τῇ δὲ θ' τοῦ Σεπτεμβρίου μηνὸς τῆς ια' ἰνδικτιῶνος ἡμέρᾳ κυριακῇ, ἔκλειψις γέγονεν ἡλίου, ὥρᾳ ε' τῆς ἡμέρας, τῆς θείας λειτουργίας ἐπιτελουμένης, μεγίστη.

Newton (1972), p. 544-545

Year 7 of Constantine VI

Ninth of September month, Indiction 11, day of the Lord, a very great eclipse of the sun happened at the 5th hour of the day, during mass.

807 AD February 11

Annales Farfenses, (ed. Pertz, MGH Scriptorum 11, Hannover 1854, p. 588)

808 Defectio solis fit ab hora 3. usque 6.

Own translation

808 From the third to the sixth hour the sun suffered an eclipse.

812 AD May 14

Chronicle of Michael the Syrian, Book XII, Chap. 7, p. 494

[Syriac text printed in Chabot (1905)]

Chabot (1905), p. 26

In the year 1123 (Seleucid), on the 14th day of Ayyar (=May) there was a total eclipse of the Sun from the 9th to the 11th hours. The darkness was as profound as night; the stars were seen and people lit torches. The Sun eventually reappeared over about an hour.

813 AD May 4

Theophanes Chronographia, p. 780 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Vol. I, Bonn 1839)

Τῇ δὲ δ' τοῦ Μαΐου μηνὸς ἔκλειψις ἡλίου γέγονεν περὶ τὴν ὠδεκάτην μοῖραν τοῦ Ταύρου ...

Newton (1972), p. 547

On the 4th of May month an eclipse of the sun happened near the 12th degree of Taurus.

829 AD November 30

Ibn Yūnus, al-Zīj al-Kabīr al-Ḥākīmī (*non vidī*)

Said & Stephenson (1997), p. 30

Ahmad b. ʿAbd Allāh known as Habash said: "There was a lunar eclipse ... in the year 198 of Yazdijerd ... As for the solar eclipse, which (occurred) in this year at the end of the month of Ramadān, all calculations were in error. The altitude of the Sun at the beginning of the eclipse was 7° as they (the astronomers) claim. The eclipse ended when the altitude of the Sun was about 24°, as though it was 3 hours of day (i. e. after sunrise)".

840 AD May 5

**Andreas Bergomatis Chronicon XI.21 (ed. Pertz, MGH
Scriptores Vol. III, Hannover 1839, p. 235)**

Indictione tertia sic fuit sol obscuratus in hoc mundo, et stellas in cello apparebant, 3. Nonas Magias, ora nona, in laetaniis Domini, quasiamedia ora. Facta est tribulatio magna. Cumque hoc populus intenderent, multi extimabant, quod iam amplius hoc speculum non staret; sed dum haec angustia contemplant, refulsit sol et quasi tremidus in antea umbraculum fugire cepit.

Newton (1972), p. 465

In the third year of the Indiction, the Sun was hidden from this world and stars appeared in the sky as if it were midnight, on the third day before the Nones of May (May 5th) during the Litanies of Our Lord. There was great distress, and while the people beheld it, many thought that this age would last no longer. But while they were contemplating these simple things, the Sun shone again and trembling as it were began to escape from its former shade.

866 AD June 16

Ibn Yūnus, al-Zīj al-Kabīr al-Ḥākīmī (*non vidī*)

Said & Stephenson (1997), p. 32

This solar eclipse was mentioned by al-Māhānī. He said: "The Sun is to be eclipsed on Sunday the 28th of (the month of) Jumādā al-Ūlā in the year 252 of al-Hijrah ... [date on the Persian calendar] ... It was found (by observation) that this eclipse began (a little) more than a third of an hour after Zawāl; the middle of the eclipse, as we estimated, was at 7 hours and $\frac{1}{3}$ and $\frac{1}{10}$ (i.e. 7;26 h after sunrise); then the eclipse cleared at 8 hours $\frac{1}{2}$ (i.e. 8;30 h) ... [calculated details] ... The eclipsed part of the Sun's diameter as we estimated, was more than 7 digits and less than 8 digits".

873 AD July 28

Al-Bīrūnī, al-Qānūn al-Mas'ūdī (*non vidī*)

Said & Stephenson (1997), p. 45

This solar eclipse was observed by Abū al-ʿAbbās al-Irānshahrī at Nīshāpūr early in the morning on Tuesday the 29th of the month of Ramadān in the year 259 of al-Hijrah ... [date on Persian calendar] ... He mentioned that the Moon's body was in the middle of the Sun's body. The light from the remaining uneclipsed portion of the Sun surrounded it. It was clear from this that the Sun's diameter exceeded in view that of the Moon.

882 AD August 17

Abū Ġa‘far Muḥammad b.Ġarīr b.Yazīd aṭ-Ṭabarī, *Tarikh al-Ṭabarī (non vidi)*

Stephenson (1997), p. 449

(269 AH.) In (the month of) Muharram in this year ... the Sun was eclipsed at the time of sunset on Friday, when two nights remained to the completion of Muharram, and set eclipsed ...

891 AD August 8

Al-Battānī, *al-Zij al-Sābi’ (non vidi)*

Said & Stephenson (1997), p. 43

This solar eclipse was observed by us at the city of al-Raqqah on the 8th of (the month of) Āb in the year 1202 of Dhū al-Qarnayn, which is the year 1214 after the death of al-Iskandar. The middle of the eclipse was at one seasonal hour after midday. (A little) more than $\frac{2}{3}$ of the Sun (i.e. of the surface) was eclipsed in view ... [calculated details] ...

901 AD January 23

Al-Battānī, *al-Zij al-Sābi’ (non vidi)*

Said & Stephenson (1997), p. 43-44

This solar eclipse was observed by us at the city of Antakyah on the 23rd of (the month of) Kānūn al-Thānī in the year 1212 of Dhū al-Qarnayn which is the year 1224 after the death of al-Iskandar. The middle of the eclipse was about $3\frac{2}{3}$ equal hours before midday. (A little) more than $\frac{1}{2}$ of the Sun (i.e. Sun’s surface) in sight was eclipsed ... [calculated details] ...

This eclipse was observed by someone on our behalf at the city of al-Raqqah. The middle of the eclipse was (a little) less than $3\frac{1}{2}$ equal hours before midday. (A little) less than $\frac{2}{3}$ of the Sun (i.e. Sun’s surface) in view was eclipsed ... [calculated details] ...

912 AD June 17

Ibn Hayyān, *Al-Muqtabis fi Tarikh al-Andalus (non vidī)*

Stephenson (1997), p. 438

(299 AH.) In this year, the Sun was eclipsed and all of it disappeared on Wednesday when one night remained to the completion of (the month of) Shawwāl. The stars appeared and darkness covered the horizon. Thinking it was sunset, most of the people prayed the Maghrib (Sunset) Prayer. Afterwards, the darkness cleared and the Sun reappeared for half an hour and then set.

923 AD November 11

Ibn Yūnus, *al-Zīj al-Kabīr al-Ḥākīmī (non vidī)*

Said & Stephenson (1997), p. 33-34

This solar eclipse was calculated and observed by Abū al-Hasan ʿAlī ibn Amājūr, who used the *al-Zīj al-ʿArabī* of Habash. “This eclipse was at the conjunction of (the month of) Shaʿbān in the year 311 (AH.). We as a group observed (this eclipse) and clearly distinguished it. The estimate of all (observers) for the middle of the eclipse was that it occurred when the altitude of the Sun was 8 degrees in the east; its clearance was at $2\frac{1}{5}$ seasonal hours (after sunrise), when the altitude of the Sun was 20°. We observed this eclipse at several sites on the Tarmah (an elevated platform on the outside of the building). The estimate of Abū al-Hasan for the middle of the eclipse at his house was when the altitude of the Sun was 8 degrees, as I estimated myself at my house before he arrived. The magnitude of the eclipse was $\frac{1}{2}$ and $\frac{1}{4}$ (i.e. $\frac{3}{4}$) of the Sun’s diameter; the middle of the eclipse, which we estimated when the Sun’s altitude was 8°, would be when the elapsed time (after sunrise) was 0;50 seasonal hours, and the (celestial) sphere had revolved (through) 10;40°. (The interval) between the middle of the eclipse and its clearance in this observation was 1;22 seasonal hours ... [alternative times in equal hours] ...

928 AD August 18

Ibn Yūnus, *al-Zīj al-Kabīr al-Ḥākīmī* (*non vidī*)

Said & Stephenson (1997), p. 35

This solar eclipse was calculated and observed by ʿAli ibn Amājūr. (According to calculation), the beginning was to be at ... [calculated details] ... on Monday. He said: “I observed this eclipse with my son Abū al-Hasan and Muflih and (found) that the Sun rose (already) eclipsed by less than $\frac{1}{4}$ of its surface. The eclipse continued to increase by an amount that we could perceive until $\frac{1}{4}$ (of its surface) was eclipsed. We observed the Sun distinctly (by reflection) in water. We (found) that it cleared and nothing of the eclipse remained and we distinguished the (full) circle of the Sun’s body in water; (that was) when the altitude was 12° in the east, less $\frac{1}{3}$ of a division of the al-halaqa (i.e. the ring), whis is graduated in thirds (of a degree), that is (less by) $\frac{1}{9}^\circ$... [comparison with calculation] ...

939 AD July 19

Ibn Hayyān, *Al-Muqtabis fi Tarikh al-Andalus* (*non vidī*)

Stephenson (1997), p. 443

(327 AH.) The Caliph al-Nasir li Din Allah advanced (northwards from Cordoba) heading for his holy battle until he reached Toledo on Thursday, when seven nights (sic) remained to the completion of (the month of) Ramadān. He stayed there for six days and left on Thursday, when two nights remained to the completion of Ramadān, for Welmish fortress and on Friday to Khalifah Castle. During the forenoon of that day (Friday) the Sun was eclipsed totally and its disk became dark except for a slight portion as seen by eye.

961 AD May 17

Continuator Reginonis Trevirensis, (ed. Pertz, MGH Scriptores 1, Hannover 1826, p. 624)

961.

Eclipsis solis 16. Kal. Iunii.

Schove (1984), p. 231

961.

An eclipse of the Sun on 16. Kal. Jun. (= May 17th).

963 AD September 20

Lupus, (ed. Pertz, MGH Scriptores 5, Hannover 1844, p. 54-55)

963. obit Romano imperator, et elevantus est Nichiphorus, qui regnavit ann. 7 ; et Otto rex intravit Romam, et obscuratos est sol.

Schove (1984), p. 231

963. The emperor Romanus died, and Nicephorus succeeded, and reigned for 7 years; and king Otto entered Rome, and the Sun was obscured.

966 AD July 20

Skene (1867), p. 151

Duf mac Malcolm iiii. annis regnavit et mensibus sex et interfectus in Fores et absconditus est sub ponte de Kynloss et sol non apparuit quamdiu ibi latuit et inventus est et sepultus in Iona insula.

Schove (1984), p. 232-233

Dub, Malcom's son, reigned for four years and six months; and he was killed in Forres, and hidden away under the bridge of Kinloss. But the sun did not appear so long as he was concealed there; and he was found and buried in the island of Iona.

968 AD December 22

Leonis Diaconis, Historiae IV.11 (ed. Niebuhr, Corpus Scriptorum Historiae Byzantinae, Leo Diaconus, Bonn 1828, p. 72)

Ἐν ᾧ δὲ ταῦτα τῷ βασιλεῖ κατὰ τὴν Συρίαν ἐπράττετο, ἔκλειψιν συνέβη γενέσθαι τὸ πρότερον, πλὴν ἐκείνην τὴν ἐπὶ τοῦ δεσποτικοῦ πάθους προβάσαν διὰ τὴν τῶν Ἰουδαίων ἀπόνοιαν, ... Τὸ δὲ τῆς ἐκλείψεως εἶδος τοιοῦτον συνέβαινε. Εἰκάδα δευτέραν ἤλαυνεν ὁ Δεκέμβριος, τετάρτη δὲ τῆς ἡμέρας ὥρα, σταθηρᾶς αἰθρίας οὐσης, σκότος ἐπέσχε τὴν γῆν, καὶ οἱ διαφανεῖς τῶν ἀστέρων ἅπαντες κατεφαίνοντο. ἦν δὲ ὄρᾳ τὸν τοῦ ἡλίου δίσκον ἀλαμπῆ καὶ ἀφώτιστον, αἴγλην δὲ τινα ἀμυδρὰν καὶ ἰσχνὴν, ταινίας δίκην λεπτῆς, κατὰ τὸ ἄκρον κυκλόθεν τὸν δίσκον περιουγάζουσιν. Κατὰ μικρὸν δὲ τὴν σελήνην παραμείβων ὁ ἥλιος (ὠρᾶτο γὰρ αὕτη κατὰ κάθετον αὐτὸν ἀντιφράπτουσα) τὰς ἰδίας ἀκτῖνας ἐξέπεμπε, καὶ φωτὸς αὖθις ἐπλήρου τὴν γῆν.

Newton (1972), p. 549

When the Emperor was waging war in Syria, at the winter solstice there was an eclipse of the Sun such as has never happened apart from that which was brought on the Earth at the Passion of our Lord on account of the folly of the Jews ... The eclipse was such a spectacle. It occurred on the 22nd day of December, at the 4th hour of the day, the air being calm. Darkness fell upon the Earth and all the brighter stars revealed themselves. Everyone could see the disc of the Sun without brightness, deprived of light, and a certain dull and feeble glow, like a narrow headband, shining round the extreme parts of the edge of the disc. However, the Sun gradually going past the Moon (for this appeared covering it directly) sent out its original rays and light filled the Earth again.

970 AD May 8

Michael Glyca, Annales IV P.309 (ed. Bekker, Corpus Scriptorum Historiae Byzantinae, Michaelis Glycae, Bonn 1836, p. 575-576)

Κατὰ τοῦτον μέντοι τὸν καιρὸν ἔκλειψις ἡλίου γέγονεν, ὥστε καὶ ἄστρα φανῆναι.

Own translation

In addition - admittedly in the right moment - an eclipse of the Sun happened, such that the stars appeared.

977 AD December 13

Ibn Yūnus, al-Zij al-Kabīr al-Ḥākīmī (*non vidī*)

Said & Stephenson (1997), p. 37

This solar eclipse was in the early morning of Thursday the 28th of the month of Rabi ʿal-Ākhīr, in the year 367 of al-Hijrah ... [date on Persian calendar] ... We, a group of scholars [ten names are given], attended at al-Qarāfah (a district of Cairo) in the Mosque of Abū Jaʿfar Ahmad ibn Nasr al-Maghribī to watch this eclipse. Everyone waited for the beginning of this eclipse. It began to be perceived when the altitude of the Sun was more than 15° but less than 16°. (Those) present all agreed that about 8 digits of the Sun's diameter were eclipsed, that is (a little) less than 7 digits of surface. The Sun completely cleared when its altitude was more than 33° by about $\frac{1}{3}$ of a degree, as estimated by me, and agreed by all those present ... [calculated details] ...

978 AD June 8

Ibn Yūnus, al-Zij al-Kabīr al-Ḥākīmī (*non vidī*)

Said & Stephenson (1997), p. 37

This solar eclipse was on Saturday the 29th of (the month of) Shawwāl in the year 367 of al-Hijrah ... (date on Persian, Syrian and Coptic calendar) ... A maximum of 5 $\frac{1}{2}$ digits of the Sun's diameter were eclipsed, according to estimation, that is 4 digits 10 minutes (i.e. 4 $\frac{1}{6}$ digits) of surface. The altitude of the Sun when a portion of the eclipse began to be perceived was 56° approximately. The completion of the clearance was when the altitude of the Sun was 26° or about so ... [calculated details] ...

979 AD May 28

Ibn Yūnus, *al-Zīj al-Kabīr al-Ḥākīmī* (*non vidī*)

Said & Stephenson (1997), p. 38

This solar eclipse was in the late afternoon of Wednesday 23rd (read: 28th) of (the month of) Shawwāl in the year 368 of al-Hijrah, which is the 8th of (the month of) Khurdād in the year 348 of Yazdijerd ... The eclipse was perceptible when the altitude of the Sun was 6 ½°. About 5 ½ digits of the Sun's diameter were eclipsed, as I estimated, that is 4;10 digits of surface. The Sun set eclipsed. I estimated that what was eclipsed of the Sun in this year, I mean the year 368 of al-Hijrah at the end of Shawwāl, was similar in view to that at the end of Shawwāl of the preceding year, I mean the year 367 of al-Hijrah.

985 AD July 20

Ibn Yūnus, *al-Zīj al-Kabīr al-Ḥākīmī* (*non vidī*)

Said & Stephenson (1997), p. 40

This solar eclipse was in the late afternoon on Monday at the end (of the month) of Safar in the year 375 of al-Hijrah. The altitude of the Sun when I perceived its eclipse by eye was 23° approximately. The altitude was 6° when nothing of its eclipse remained to be perceived by the eye. A maximum of ¼ part of the Moon's diameter was eclipsed.

990 AD October 21

Thietmari *Chronicon Libri III*, (ed. Pertz, *MGH Scriptores 3*, Hannover 1839, p. 772)

Anno dominicae incarnationis 989. Sol defecit 12. Kalend. Novembris et V. diei hora.

Own translation

In the year 989 of the incarnation of our lord, around the 5th hour of the day, the sun was obscured on 12. Kal. Nov. (= October 21st).

993 AD August 20

al-Maqrizi, *Itti'az al-Hunafa bi Akhbar al-A'imma al-Fatimiyyin al-Khulafa*, Vol. I, p. 280 (*non vidi*)

Stephenson (1997), p. 444

(383 AH.) In this year the Sun was eclipsed totally at the end of (the month of) Jumada al-Ukhra. It was so dark that the stars appeared and people could not see the palms of their hands. The eclipse cleared at the end of the day.

