

Appendix B: Commentary on historical events between 150BC and 1900AD, associated with the geographical boundaries 27N-36N and 31E-39E.

Table B.1 Commentary on historical events between 150BC and 1900AD, associated with the geographical boundaries 27N-36N and 31E-39E. Italics font-style indicates events, which in fact occurred outside our investigated area, while brackets indicate that the event is considered spurious. The letter “H” before the date indicates that the event has been assigned with an ID (Appendix D). All dates are AD, except where specified. Curly braces indicate confidence intervals; “ σ ” is the standard deviation. The abbreviations are listed in Appendix A. Additional metadata about the events can be found in Appendix D.

[139BC]	[S Lebanon]
<p>The event is sometimes reported in year 140BC. Am09 argues that there was no seismic event, only a sea wave that killed several soldiers. He notes that “assuming that such a large event in fact occurred, it should have caused havoc in the coastal area of southern Lebanon and Palestine, for which there is not a hint in the sources.”. A primary source mentions “when suddenly a wave from the ocean lifted itself to an extraordinary height and dashed upon the shore, engulfing all the men and drowning them beneath the waters”. Although it is unclear how such large wave can be created without an earthquake, indeed the primary sources do not mention any effects of an earthquake. The word “suddenly” is perhaps key.</p> <p>Agn06 has correlated this event with a seismite that Ken01 found in the Dead Sea lake (DSL). Kag11 has also found two seismites in different sites of DSL, which correlate well with this event (within the 1σ range).</p> <p>Even though this event requires further research, it is outside our investigated time period.</p>	
[94BC]	[Egypt]
<p>The date of the event is uncertain; around 97BC till 94BC. Am09 argues that the analysis of Am94 is false and that in fact there was no earthquake.</p>	
[92BC February 28]	[E Mediterranean]
<p>Oberhammer (1904) notes that von Hoff (1840) created a spurious event. Am09 also does not consider it to be a real event. Kar04 analyzed the chronicle Megillat Taanit (the Scroll of Fasting) (Noam 2006) and concluded the same. He notes that “it most unlikely that a day on which a severe earthquake hit the Holy Land would be observed as a joyous day on which fasting and mourning are prohibited. [...] the scholion should not be used to document any damaging earthquake intensities and tsunami damage in Israel, whether in circa 90BC or circa 140BC. Festive commemoration [...] would make sense, if the earthquake affected a more distant region in Syria, without harming the dilapidated and oppressed Jewish communities there.”</p> <p>Nevertheless, Kag11 correlated this event with a seismite in DSL; range is 126BC - 76BC $\{1\sigma\}$. Moreover, Wech14 found geological evidence in the Jordan Gorge fault that can be correlated with 92BC but the constraint is poor, i.e. 392BC - 91AD $\{2\sigma\}$.</p> <p>Given the significant error margin in the dating of seismites, we believe that the analysis of Kar04 is still valid.</p>	
69BC	Antioch
<p>The date of the event is uncertain; around 69BC - 64BC. Kar04 argues that there was no damage in Jerusalem. He notes that Arvanitakis (1904) wrongly assumed that the Temple and city walls were damaged. He adds that classical texts record the war between the last Hasmoneans at that time without mentioning the earthquake. Therefore, a magnitude above 7 seems unlikely. Ken01 and Kag11 correlated this event with seismites in DSL (both within the 1σ range). Agn06 however argue that Ken01’s seismite is in fact from the event in 139BC, otherwise the deposition rate would be excessive (i.e. $24\text{mm}\cdot\text{yr}^{-1}$). In any case the 69BC event most probably occurred north of our zone.</p>	
H31BC	Jordan Valley
<p>Kar04 analyzed the original reports and concluded that “the earthquake magnitude is overestimated and that at least some of the interdisciplinary correlations are incestuous”. He disputed several archaeological findings of extended damage and assigned M 6.0-6.5.</p> <p>Ken01 and Kag11 (twice) have correlated this event with seismites in DSL. All correlations are within the 1σ range.</p>	
26BC	Offshore Cyprus
<p>Am09 notes that there were probably two smaller events, since there is no evidence for a single very large one.</p>	
H17BC	Cyprus
<p>This event occurred between 15BC - 17BC. Am09 notes that it was a destructive event. There is only one available magnitude estimate by Ben-Menahem.</p>	
17	Asia Minor
<p>Am09 notes it occurred in Asia Minor and not close to Sidon as BM91 mentions.</p>	

[30]	[Jerusalem]
Ami94 lists an earthquake in Jerusalem, which is probably a duplicate of the potential earthquake in year 33, again in Jerusalem. Am09 does not mention the event. Two seismites in DSL could be correlated with this event, within the 1σ range.	
[33]	[Jerusalem]
<p>The events of 33 are reported by a single source (Saint Matthew), who, more likely than not, created them for religious purposes. "The first, which occurred at the time of the Crucifixion, caused the rock tombs to break open, revealing the bodies of the Just, who then rose after Christ's resurrection. The second earthquake occurred after the Resurrection and thus permitted the women to enter into the tomb and verify the absence of Christ's body" (Am09). Am09 argues that "had there been an earthquake with coseismic faulting of the Golgotha Hill, the causative earthquake should have been strong enough to destroy Jerusalem, for which there is no evidence. [...] The 33 earthquake in Jerusalem could have been borrowed from a surrogate destructive earthquake that took place about the same time elsewhere, most probably in Bithynia" (NW of Asia Minor).</p> <p>Wech14 found geological evidence in the Jordan Gorge fault that can also be correlated with 92BC but the constraint is very loose, 392BC - 91AD $\{2\sigma\}$. Moreover, Kag11 have correlated these events with seismites in DSL $\{1\sigma\}$. Given the possibility that the events of 33 are indeed spurious, it is odd that a matching seimite was found in at least two sites within the 1σ range. The historical and geological evidence do not match. One possible explanation is that the SSDS were misinterpreted as seismites, while in fact their origin was non-seismic. The alternatives in the historical records are a slight shock in Jerusalem in year 30 (Ami94), a slight shock in year 48 close to the Dead Sea lake (Arvanitakis 1904) or H112.</p> <p>Williams et al. (2012) have analyzed the event without reaching a definite conclusion. This issue requires further research; we cannot be sure whether it is spurious or not.</p>	
37 April 9	Antioch
47	Antioch
Am09 reports that one event occurred in Antioch between 41 and 54. It is probably duplicated in year 53.	
[48]	[S of Dead Sea]
The event is reported by Wil28, who cites Arvanitakis (1904), Ami94 and BM81. Wil28 and Ami94 mention that it was a slight event. This event is probably confused with another one that happened outside our investigated zone.	
H76	Cyprus
Am09 reports that this large event occurred in Cyprus, destroyed three cities, created a tsunami and it was felt in Antioch. INGV94 places it in year 77.	
[94]	[N Syria]
BM81 reports that an event occurred in the N Levant rift in 94; no sources are cited. Zuh15 mentions an event between 82-94. No parametric catalogue mentions this event.	
H112	Jordan
Am09 notes that there were either multiple events or a single large one between 110 and 114. The only source is archaeological evidence by Rus85. Two seismites in DSL could be assigned to this event.	
H115	NW Syria
<p>Meg03 have found geological evidence indicating that this large event ruptured the Missyaf segment; the correlation is weak (100-750). Kag11 have correlated this event with seismites in DSL, which seems unlikely since $MSK_{DSL}=III$. Meg03 has assigned a M_w 7.3-7.5 to that event. Similar values have been reported by BM81 and AmJa98. The M_e 6.6 value of INGVweb is based only on maximum observed intensity and seems less probable. Goodman-Tchernov et al. (2009) found geological evidence of a tsunami that hit the harbor of Caesarea (N Israel) that could be dated around the year 115.</p>	
130	N Turkey
<p>Am09 argues that the event occurred in Pontus (N Turkey) and not in Palestine.</p> <p>Wech14 have correlated this event with the Jordan Gorge Fault. However, the year of the event falls outside the modeled calibrated age of their sample (137-206).</p>	
[175]	
Mig04 have correlated a seimite in DSL with an event in circa 175AD. No historical sources are available for this event. The model of Mig04 is questionable.	
[220]	[Antioch]
The main modern reference of this event is Sieb32, who does not cite any primary sources. The exact location is unknown. Am09 does not mention the event.	

[233]	[Damascus]
Am09 argues that the event is perhaps spurious. Its exact location is unknown. Wech14 have found a sample from the Jordan Gorge Fault with modeled calibrated age 165-236 {2 σ }.	
[245]	[N Syria]
Am09 does not mention the event. The main modern reference is Sieb32, who does not cite his source. In any case, the epicenter is most probably outside our zone.	
[272]	[N Syria]
Am09 does not mention the event. The main modern reference is Sieb32, who does not cite his source.	
H303	S Lebanon
Am09 argues that Syria and Gush Halav (Jish) were in fact not affected, therefore several magnitude estimates are probably overestimated. The lack of correlated seismites in DSL endorses that idea. According to historical sources the epicenter of H303 was along the Lebanese coast in N of Sydon. Wech14 identified the event in N Sea Galilee (250-310) {2 σ }. For both historical and geological evidence to be valid, the earthquake must have ruptured a fault between Sea of Galilee and Beirut, passing east of Mountain Hermon. That description matches with the trace of the Roum fault. It is unclear whether the Roum fault reaches Beirut and connects with the Lebanon thrust fault (NeMeg06).	
[315]	[Palestine]
The event is only reported by NOAA, who do not cite their sources. The lack of correlated seismites in DSL endorses the idea that the event is indeed spurious.	
[320]	[Offshore Egypt]
Am09 argues that it is perhaps a spurious event.	
H332	Cyprus
Am09 argues that Theophanes re-dated the event to link it with religious purposes, hence the exact date is uncertain.	
[334]	[N Levant rift]
Am09 does not mention the event. The main reference for this event is BM79. The epicenter is unknown.	
H342	Offshore E Cyprus
Am09 argues that INGV94 duplicated the event in year 293, based on a dating error of Malalas. He also argues that the event occurred close to Cyprus and not in Antioch, where it was just felt.	
H347	Lebanon
According to historical sources the epicenter of H347 was in Beirut. Dae07 and Wech14 identified the event East of Beirut, in the Yammouneh and Jordan Gorge segments respectively. The correlation by Wech14 is rather poor since the date of the event is outside the 2 σ range. The two investigated fault sites are about 130km away, indicating a very long rupture, compatible with a M 7.4-7.6 event (Wells & Coppersmith 1994; AmJa98). The historical data do not support such large size however. The main source for this event is Theophanes who mentions that most of Beirut was destroyed, but does not reference any other affected localities. BM79 has assigned M _L 7 to this event based only on the maximum observed intensity (assumed equal to the epicentral intensity); he cites Wil28, Sieb32 and PlKo81. Sieb32 is the only one who reportedly mentions a tsunami further north in Tablus, but he does not cite his source. INGVweb has assigned M _e 5.8, based only on the maximum observed intensity. Given Wech14's calibrated age range and the lack of supporting evidence for a M 7.4-7.6 event, we find the correlation with H347 unlikely. Kag11 have correlated H347 with a seismite in DSL, but the dating constraint is poor (296-548) {2 σ }. It is very hard to estimate the magnitude of the event because even though the maximum observed intensity is large, only one affected city is mentioned. This event requires further research.	
H363a & H363b	Dead Sea
Am09 concludes that two events happened the same day with a difference of 6 hours, contrary to Am06 who assigned a single M _s 7.4 event. Sb05 and INGV94 also assumed only one event. The two earthquakes caused the destruction of 22 towns in Palestine and W Syria. It is very hard to separate the effects of the two shocks and the issue of damage accumulation has to be noted. Furthermore, several sources amalgamate the effects of these events with those of a large earthquake in the Hellenic arc in 365. Kag11, in agreement with Kli15, argue that H363a occurred in Northern Palestine and H363b more south. Wech14 assigned a sample from the Jordan Gorge fault (N Palestine) to the year 363, however the match is outside the 1 σ range. Ken01 have correlated a seismite in DSL with H363a or H363b or H418 (358-580). Agn06 argue that Ken01's seismite in fact matches best with H418. A seismite that Kag11 have assigned to H347, correlates with greater statistical significance with either H363a or H363b. We should expect to find seismites associated with the shocks of year 363, since a seiche is reported in DSL (Am09).	

H375	Cyprus
The exact date of this event is unresolved. It probably occurred between 370 and 375.	
396	Antioch
The event is often duplicated in year 394.	
H418	Jerusalem
Kag11 found two seismites in different sites around DSL, which correlate well with H418, having 1σ dating constraint 386-519 and 408-515. Ken01 have correlated a seimite in DSL with H363a or H363b or H418 (358-580). Agn06 argue that Ken01's seimite in fact matches best with H418. Since the magnitude of the event is not very large, the findings in the sediments of Dead Sea, imply a local event. EMEC have mistaken the year to 448.	
[425]	[Palestine]
Kh00 cites NEIC (Masse & Needham 1989) as their source, which seems unlikely. NOAA also list the event, without citing any source. Am09 does not mention the event.	
[447]	[Palestine]
Kh00 cites NEIC (Masse & Needham 1989) as their source, which seems unlikely. Am09 does not mention the event.	
H455	Tripoli (Lebanon)
458 September 14	Antioch
H476	NW Syria
494	Denizli, Turkey
Am09 notes that Grumel (1958) confused Tripoli (Phrygia) with Tripoli (Lebanon) and that the event in fact was near Denizli (Turkey).	
[500]	
Wil28 mentions that the earthquake affected N Greece, Turkey, Syria, Palestine. These obviously amalgamated reports might belong to the September 499 in N Turkey, the October 499 event in Urfa (SE Turkey), the circa 500 event in SW Turkey and finally the August 502 event in Palestine (Am09).	
H502	Sea of Galilee?
Wech14 found geological evidence in the Jordan Gorge fault that can be correlated with the 500 or H502 or H551 events. The latter fits best the probability density function. The location is unclear. Am09 suggests an offshore epicenter, near Acre. Kag11 found two seismites with modeled age within the 1σ range, i.e. 467-606 and 439-542, in Ze'elim and EF site respectively; H502 seems like a good match for both.	
520 October 14	Egypt
Am09 describes the event as "a damaging local event", whose exact year is uncertain. He also notes that later sources have erroneously associated this event with the formation of Lake Tinnis. The exact location and size of the event are unknown.	
[522]	[Antioch]
This event is perhaps a duplicate of the earthquake of 526. NOAA and Zuh15 are the only modern sources that mention this event. They do not cite their sources.	
[525]	[Lebanon]
Am09 argues that it is a duplicate of other major events.	
526 May 29	N Antioch
H528	Antioch
Am09 notes that event was smaller than the 526 earthquake and that often reports amalgamate the effects of these two events.	
532	Antioch
Malalas reports no damage. In any case, the event most probably occurred outside our zone.	
H551	Offshore Lebanon
Eli07 attributed H551 to the Lebanon thrust, thus explaining the origin of the destructive sea wave (Sal07). It is very hard to comment on his dating scheme, since it was based on radiocarbon dating on vermetid samples indicating that a shoreline-fringing bench suddenly emerged by about 80cm (see their Data Repository). We should however mention an alternative scenario. Darawcheh et al. (2000), after analyzing the historical data attributed the event to the strike-slip Roum fault. Wech14's evidence of rupture in the Jordan Gorge fault (dating range 505-593) supports Darawcheh et al.'s conclusion. The peak probability of Wech14's range is in year 551, which seems like a remarkable coincidence. The sea wave in that case can be explained by the slumping of part of the Libanus mountain called Lithoprosopon in the sea as Malalas reports. Am09 notes that the latter explains better the	

<p>damage distribution along the coast, namely great damage near field and rapid attenuation with distance. We should also note that Malalas and John of Ephesus, both contemporary sources, date the event differently, September 550 – August 551 and October 558 – September 559 respectively (INGV94, Am09). Am09 notes that although not impossible, “it would be odd for John to have multiplied a well-known earthquake in his own lifetime”. However, they both describe very similar effects (coastal destruction, sea wave, aid from Emperor). Nevertheless, only Malalas mentions the slumping of Lithoprosopon. We should highlight that John in fact mentions a second destructive shock that flattened Beirut probably several minutes or hours after the first one. He interprets the latter however as God’s punishment against those who stole dead men’s treasures, thus we cannot be sure if it was indeed a severe aftershock.</p> <p>Goodman-Tchernov et al. (2009) found geological evidence of a strong tsunami that hit the harbor of Caesarea (N Israel) that could be dated around the year 551.</p> <p>Combining the current historical and paleoseismic data leads to the following, plausible but far from definite, conclusion: a large earthquake ruptured the Lebanon thrust in 551 causing Lithoprosopon to fall into the sea, while a severe aftershock occurred on the Jordan Gorge fault. The latter would explain Rus85’s claim that Pella (Tabqet Fabel, 50km S of Jordan Gorge) was also damaged in the same year.</p> <p>A seismite in DSL correlates well {1σ} with the year 551 (Kag11).</p>	
[553]	[Antioch]
Am09 does not mention the event. Main modern reference is Sieb32, who does not cite his primary sources.	
[557]	[Antioch]
Am09 mentions that no details are known. Main modern reference is Sieb32, who does not cite his primary sources.	
565	Antioch
Am09 notes that INGV94 merged two different events into one. In any case, the “event” most probably occurred outside our zone.	
577	Antioch
588 October 31	Antioch
Am09 mentions that most of Antioch was levelled to the ground. This event most probably occurred outside our zone.	
<597	Dead Sea
Am09 notes that an earthquake occurred before the year 597 close to Rabbat-Moab (Jordan) damaging only one building.	
H634	Palestine
<p>Hay06 found field evidence in N Wadi Araba that could be correlated with H634, but the dating constraint is rather poor (<687).</p> <p>Wech14 identified an event in Jordan Gorge fault between 619-684 {2σ}, however the apparent epicenter of H634 is quite far from that site.</p> <p>Russell (1985) argues that there is archaeological evidence related to H634 in Scythopolis, which Am09 disputes, Pella and Jerash. The last two cases are probably related to the 659 events, since the spatial distribution of the historical records fits better.</p> <p>A seismite in DSL correlates well {1σ} with the year 634 (Kag11).</p> <p>Sb05 has amalgamated this event with the circa 639 earthquake in Aleppo.</p>	
639	Aleppo
[658]	[Palestine]
Am09 argues that it is a duplicate of the event(s) of 659.	
H659a & H659b	West Bank
<p>Russell (1985) claims that there was only one event in 659, which caused damages in Pella and Jerash. Am09 and INGV94 however conclude that there were more than one events in 659.</p> <p>Hay06 (N Wadi Araba fault) found geological evidence (641-700) that could be correlated with year 659.</p> <p>Wech14 identified an event in Jordan Gorge fault between 619-684 {2σ}, however the events of 659 are quite far from that site.</p> <p>A seismite in DSL correlates well {1σ} with the year 659 (Kag11).</p>	
713 February 28	Aleppo
717 December 24	E Syria
Am09 argues event was in Syria, but there was no damage in Edessa or Batna Sarug.	
H747	Jordan Valley
The exact year of this large event is a subject of debate. It is often reported in the year 746, 747, 748 or 749. More	

<p>clear information is known about the month and the day (January 18). H747 is different from the 749/750 event that hit NE Syria.</p> <p>Theophanes the Confessor, who was born a few years later, mentions an earthquake that affected Palestine, Jordan and Syria on January 18 746/747. He mentions widespread damage just east of DSL. For the debate over the exact dating of Theophanes, see Am05a. Later Arab chronicles mention an earthquake in May 4 747 – June 2 748 in Jerusalem that was felt in Damascus. Other later chronicles indicate damage in Tiberias and Mount Tabor around that period.</p> <p>ReHo81 and Fer11 assigned H746 to the Jordan Valley fault system, Marc03 assigned to a fault below the Sea of Galilee. Am09 concluded that the event ruptured a fault that passes through Jerusalem, Tiberias and Baalbek. Sal07 reports a tsunami in an unknown location.</p> <p>Two seismites in different sites of DSL can be correlated with this event; 699-848 {1σ} and 666-747{1σ}.</p>	
750	N Syria
<p>This event is often amalgamated with H746 and/or the shock of 756. The exact year of the event is uncertain; probably 749 or 750.</p> <p>Theophanes mentions an event in early 749/750 in Syria and Mesopotamia; he notes evidence of surface faulting. Dionysius of Tel Mahre (9th century) mentions that the temple of Mabug (Manbij) collapsed in September 747 - August 748.</p>	
757 March	Al-Hasakah?
<p>This event is often amalgamated with H746 and/or the event of 749/750. Little is known about the exact location of the event and the names of the affected localities. The reference of Am09 in al-Suyuti is confusing since the year does not match. ING94 and Am05a provide more relevant information. Theophanes is the contemporary source of the event and characterizes it “not small” (and not “powerful” as INGV94’s translation mentions). Theophanes mentions that it struck Palestine and Syria on March 9 756/757, while Dionysius of Tel Mahre mentions that three villages collapsed in Khabura on March 3 756. The latter interprets the destruction as punishment for their sins. Am05a place Khabura in the modern city of Al-Hasakah, well beyond our investigated area.</p>	
[775]	[Antioch]
<p>Am09 does not mention the event. Main modern reference is Sieb32, who does not cite his primary sources.</p>	
796 April	Greece
<p>Am94 argues that the event occurred in Greece and that it is duplicated in year 1375.</p>	
[835]	[Antioch]
<p>Am09 argues that the event is spurious.</p>	
[844 September 18]	[Damascus]
<p>Am09 and Sb05 do not mention the event.</p>	
847	N Antioch
<p>Am09 mentions "extensive damage and considerable loss of life over a large area in Antioch". Damascus might have been also affected. This event most probably occurred outside our investigated area. The dating of the event is uncertain (August 847 - August 848).</p>	
H847	W Syria
<p>Am09 notes that INGV94, Sb05 and other catalogues have syncretized this earthquake (November 847) with the Mesopotamian (not listed here) and N Antioch earthquakes of the same year.</p> <p>Kag11 have correlated a seismite in DSL with this moderate and distant event (MSK_{DSL}=III). This match seems unlikely, unless the magnitude of the event is underestimated.</p>	
H854	Sea of Galilee
<p>The contemporary source of this event is unknown. The dating is also vague, i.e. 850-854 (Am09). A seismite in DSL correlates well {1σ} with the event (Kag11).</p>	
H857	Egypt
<p>Am09 reports that the event was damaging. The magnitude is unknown.</p>	
H860	NW Syria
<p>Am09 reports a relatively large event, even though several sources have amalgamated damage reports. Aky06 have assigned the event to the N Yammouneh fault; the correlation is not well constrained. Kag11 have correlated a seismite in DSL with this large but very distant event (MSK_{DSL}=III). This match seems unlikely, unless the magnitude of the event is underestimated.</p>	
873	Saudi Arabia
<p>Am94 argues that the event occurred in Saudi Arabia. Agn14 agrees that the event probably did not occur in DSL. Hay06 found geological evidence in the N Wadi Araba fault that can be correlated with the year 873, even though</p>	

the dating constraint is poor, i.e. 641-1115. They note that perhaps the event occurred in Wadi Arabia but it was not reported there because of lack of populated cities.	
Kag11 have correlated this very distant event with a seismite in DSL. Instead, the seismite could be correlated with H854 (both fit within the one standard deviation range).	
881	Hellenic Arc
H885	Egypt
Am09 mentions that the event was local.	
[935 October 4]	[Egypt]
Am09 notes that the event is perhaps a duplicate of an event in 899, which could have been spurious.	
H950	Cairo
Am09 notes that it was a local event that ruined most houses in old Cairo.	
951 September 15	Alexandria
952	Maras (SE Anatolia)
Am09 argues that the event occurred in SE Anatolia.	
H956	SW Cyprus
H956 was a moderate event in SW Cyprus. The seismite that Kag11 assigned to it, in our opinion, could be correlated with H991 instead, even though the MSK intensity in DSL must have been <5. Agn14 points out that H956 is often confused with the event of 952.	
963 May 12	Hellenic Arc
Am09 notes that this doubtful event perhaps occurred in the Hellenic Arc. It was felt in Egypt.	
973	N Syria
This rather large event affected Antioch and another city which is perhaps Azaz. It is not clear whether the tremor felt in Damascus the same year was from this event. Am09 notes that “modern authors (e.g. INGV94, Sb05) extend the effects of this earthquake from Antioch to Damascus and omit Azaz”.	
[974]	[Damascus]
If we accept that the reports from Damascus are related to 973, then the 974 event is a duplicate.	
H991	SW Syria
Am09 reports that 1000 houses collapsed in Damascus and the damage extended over an area with a radius of about 40km; aftershocks lasted for a month. Only Sieb32 mentions a tsunami. Am09 and INGV94 do not confirm that the event was felt as far as Egypt. Given that, apparently there was no tsunami and the event was not felt in Egypt (as Sb05 adopts), a magnitude ≥ 7 seems unlikely.	
A seismite in DSL can be assigned to this event, even though the MSK intensity in DSL must have been <V.	
1003	N Syria
Am09 notes that INGV05 duplicated the event in Edessa (Urfa).	
[1016 August 27]	[Jerusalem]
Am09 notes that perhaps this was not an earthquake. The lack of correlated seismites in DSL endorses that idea.	
[1029]	[Damascus]
Neither INGV94 nor Am09 mention this event. Its exact location is unknown.	
1033 March 6	Istanbul
Am09 argues that the event occurred in Istanbul and not close to Cyprus.	
H1033	Jordan Valley
AmJa98 have assigned M_s 7.0-7.8 to this event (December 5 1033), acknowledging that the observed damage might have been accumulative from previous shocks. Based on similar data, INGV05 originally assigned M_e 6.0, even though the points with reported intensities were several. This value was later revised to M_e 7.3 in the online compilation of the book (Guidoboni et al. 2019), for undocumented reasons. Am09 mentions that “the damage in Jerusalem was widespread but there is no evidence that the city was destroyed as some authors allege”. He also mentions that “the earthquake was felt all along the fortified towns on the Mediterranean coast, from Gaza to Acre, and probably in the Negev and Egypt in the south”. There are also reports about tsunami on the Mediterranean coast (Sal07).	
Fer11 assigned the event to the Jordan Valley fault, the correlation is very loose (560-1640).	
A seismite in DSL can be assigned to this event, the dating constraint is within 1σ .	
H1042	Palmyra
Al-Suyuti (writing in the 16 th century) mentions “an earthquake occurred at Tadmur and at Baalbek: most of the population of Tadmur died under the ruins” (Tadmur is another name for Palmyra). Am09 states that probably the earthquake did not cause any damage in Baalbek. Guidoboni et al. (2007) assigned M_e 6 based on Al-Suyuti. This	

value was later revised to M_e 5.6 in Guidoboni et al. (2019). BM91 have assigned M_L of 7.2, but on the false report of Sieb32 who states that the event was felt also in Lebanon, Tabriz (N Iran?) and Egypt. The size of the H1402, in our opinion, remains an unresolved issue.	
H1047	Ramla
A seismite in DSL can be assigned to this event, the dating constraint is within 1σ is 1013-1051.	
[1060]	[Jerusalem]
Am09 mentions "a description of Jerusalem mentions the fall of a great lantern from the roof of the Dome of the Rock, in 1060. Le Strange (1890) notes that no earthquake is mentioned for this. Either the lantern fell through some other cause or the source makes a dating error".	
H1063	Offshore Lebanon
Am09 argues that Matthew of Edessa exaggerated in his reports for personal reasons. He also concludes that Antioch suffered no noteworthy damage and points out that aftershocks lasted only few days. Maximum intensity was reported in Tripoli (Lebanon), while Acre, Tyre and Latakia suffered damages. INGV05 and Am09, contrary to Sieb32 and Sb05, do not mention Damascus. Sb05 assigned M_s 6.9 and INGV05 (with only 4 reported intensities) M_e 5.6. We believe that these values present the upper and lower bounds of the possible size of this event. The widespread damage indicates a large event, while the relatively low maximum reported intensity and the very short duration of aftershocks indicate moderate size. The magnitude of the event, in our opinion, remains an unresolved issue. Kag11 have correlated this large event with seismites in DSL within the 1σ range, even though the MSK intensity in DSL must have been $<V$.	
H1068a	S Wadi Araba
Zilb05 and Kli15 correlated the event with geological evidence in S Wadi Araba. The magnitude estimation of Am94 (M_s 7) is consistent with the findings of Zilb05 (M 6.6-7.0) and Kli15 ($M>6.5$). INGV05 originally assigned an unprecedented magnitude (M_e 8.1) to the event, but this value was later revised to M_e 7.2 in the online compilation of the book (Guidoboni et al. 2019), for undocumented reasons.	
H1068b	Palestine
Am09 mentions that the event is often duplicated as having occurred in April 20 1067 or November 11 1067 or February 2 1070. Several tsunami reports are available (Sal07). A seismite in DSL can be assigned to this event; the dating constraint is within 1σ .	
[1076]	[N Syria]
Only NOAA report this event, without citing their source. Am09 mentions that it is perhaps a duplicate of the 1086–87 shock in E Anatolia.	
[1089]	[Palmyra]
Am09 does not mention the event. Main modern reference is Sieb32, who does not cite any primary sources.	
1091 September 26	Antioch
1094	W Syria
EMEC has assigned M_w 7 without citing their source of magnitude. Am09 concludes that there was in fact no damage, even though aftershocks followed for weeks.	
1097 December 30	Antioch
H1105	Jerusalem
Am09 notes that there was no damage. The lack of correlated seismites in DSL endorses the idea of an event of $M<5.5$.	
H1111	Lower Egypt
H1113	Jerusalem
Am09 notes that it was a local shock in Jerusalem. The only available epicentral location comes from Zuh15, who for some reason place the event in N West Bank. A seismite in DSL assigned to another event, might actually be related to H1113 (within the 1σ range).	
1114 August 10	E Anatolia
Am09 argues that the event occurred on the E Anatolian Fault and not in Jerusalem. The lack of correlated seismites in DSL supports that argument.	
1114 November 19	N Antioch
This large event probably occurred outside our zone.	
H1117	Jerusalem
Am09 mentions an earthquake struck the region of Jerusalem and it may have caused structural damage. The epicenters assigned by INGV05 and EMEC are quite far from that area.	

1138 October 11	N Syria
[1140/1141]	[W Syria]
Only modern source is Sb05, who cites Al-Dawadari.	
1149	Iran
[1150]	[West Bank]
Am09 notes that the reports that INGV05 mention, correspond to damage from previous earthquake. The lack of correlated seismites in DSL endorses that idea.	
H1151	W Syria
H1152	W Syria
[1155]	[Syria]
Only modern references are BM81 and NOAA who do not cite their sources.	
H1156	N Syria
Aleppo and Hama (N of Homs) were heavily damaged. A tower in Afamia (N of Missyaf) collapsed. It is likely that many more towns in the area were damaged and there is evidence that many aftershocks occurred. The earthquake was strongly felt in Damascus.	
1156 December 8	N Syria
Am09 reports several shocks. Many houses in Aleppo were damaged, killing many inhabitants, however the nearby town of Shaizar suffered no destruction. The earthquakes was strongly felt in Damascus.	
H1157a	N Syria
The shock had considerable effects in N Syria, the exact nature of which is unknown; it was probably damaging. The earthquake was strongly felt in Damascus.	
1157 July 5	W Syria
Little is known about this earthquake. Am09 reports some damages in Damascus.	
H1157b	W Syria
Homs, Hama, Shaizar and Kafr-tab were badly damaged. It seems that damage in Apamea was less serious. The earthquake did some slight damage in Aleppo and it was felt in Damascus and Tayma. Am09 (July 13) and Guid04a (July 5) are in disagreement regarding the date of the event.	
H1157c	NW Syria
The September 1156 – May 1159 seismic sequence in NW Syria, N Lebanon and the region of Antioch (modern Antakya, in S Turkey) has been studied in detail by Guid04a (and INGV05). They concluded that the cumulative effects of the events between August 9 and September 7 1157 cannot be separated and thus provide no location or magnitude solutions for that period. They do state however that Damascus must have not suffered any serious damages as a result of the sequence. On the other hand, Am09 analyzed the August 12 event (H1157c) separately in great detail and produced an isoseismal map for it. The most severe damages were concentrated in NW Syria, N of Missyaf in a zone about 120km long. The earthquake caused the total destruction of towns, great loss of life, heavy damages to castles and city walls, few landslides and liquefaction (in Latakia). The shocks was felt as far as Acre and Iraq (Rahba). For undocumented reasons, Guidoboni et al. (2019) changed the estimated M_e from 6.4 (Guidoboni et al. 2007) to 7.2. The new value is in agreement with the estimate of Am09.	
[1157 September 15]	[W Syria]
Only modern source for this event is PoTa80 who reports MMI VIII at Damascus.	
H1160	Cyprus
EMEC has duplicated the event following the different dating of INGV05 and Kh00.	
1162 August	N Antioch
H1170	NW Syria
This is probably the largest earthquake within our zone. Thirty towns and fortified sites, from Tyre (also called Sur) till Antioch, have reported damages. Tripoli was apparently destroyed with very few survivors, while Aleppo (more than 150km to the North) also suffered severe damages with great loss of life. Even though INGV05 and Am09 agree on the affected localities, the assigned intensities by the former are, in general, significantly higher. Palestine did not suffer any notable damage and the reports by Ben-Menahem regarding the effects of the event in Caesarea and Egypt are not confirmed by INGV05 and Am09. The aftershocks lasted up to 4 months (William of Tyre), without causing further destruction. Guidoboni et al. (2004b) examined the hypothesis that there were in fact two different events, one close to Tripoli and one in the Ghab basin, and concluded that all but one primary sources hint to a single event. As far as the field evidence are concerned, Meg03 found geological evidence that correlate H1170 with the Missyaf segment $\{2\sigma\}$ and Kag11 have correlated this distant event with a seismite in DSL $\{1\sigma\}$. The latter rules indeed in	

<p>favor of a very large event. Indeed, almost all magnitude estimates are in the range of M 7.0-7.9. The M 6.6 value of Hough and Avni (2009) seems less probable. Lastly, for undocumented reasons, Guidoboni et al. (2019) changed the estimated M_e from 7.7 (Guidoboni et al. 2004b) to 7.4.</p>	
[1182]	[West Bank]
<p>EMEC and EMME report an event in year 1182, based on parametric values, provided by BM79. The latter assigned epicenter (32.6N, 36.7E) and magnitude (M_L 6.7), citing Willis (1928), Sieberg (1932a) and Amiran (1950). Willis, on the authority of Perrey (1850), mentions "Syria and Judea; several towns thrown down", while Amiran notes "Judea and Galilee- moderate to severe. Nablus" citing Al-Suyuti, Perrey, Milne (1911) and Willis. Milne mentions "Asia Minor, Syria, Judea" citing Mallet and Mallet (1858). The latter mention that "very many buildings &c. overthrown" in "Syria and Judea" on the authority of von Hoff (1840).</p> <p>Our two most reliable sources for that period, i.e. Am09 and INGV05, do not mention this event. Even if the earthquake is not spurious, the available information is not enough to assign magnitude and location. This event requires further research.</p>	
[1183]	[Cyprus]
<p>Am09 and INGV05 do not mention the event. Main modern reference is Galanopoulos and Delibasis (1965).</p>	
H1202	Lebanon
<p>A large amount of historical data is available for this very large event. Daeron et al. (2005; 2007) and Marc05 have found geological evidence that correlate H1202 with the S Yammouneh and Jordan Gorge fault respectively, indicating a long rupture. A significant tsunami is reported in the Levant coast (Sal07). The M_e 7.6 estimate by INGV05 was updated in Guidoboni et al. (2019) to M_e 7.7, making this event the largest within our investigated zone, together with H1170.</p> <p>A seismite in DSL can be assigned to H1202 or H1212; the dating constraint is in both cases within 1σ (Kag11).</p>	
H1212	S Wadi Araba
<p>This large event reportedly caused damage even at locations hundreds of km away from the epicenter. INGV05 seem to underestimate the size of the event due to the few points with reported intensities that are available. Kli00 have found archaeological evidence that correlate H1212 with S Wadi Araba Valley.</p> <p>A seismite in DSL can be assigned to H1202 or H1212; the dating constraint is in both cases within 1σ (Kag11).</p>	
H1222	Cyprus
<p>Am09 notes that the event has been duplicated in the year 1227. A tsunami is reported (Sal07).</p>	
H1259	W Syria
<p>INGV05 mention that Sieb32 probably misdated event in 1254. This event, which occurred in March 22, is often amalgamated with another shock of the same year in Egypt.</p>	
1259 June 6	Cairo
<p>Am09 notes that duplicates of this small event (only felt in Cairo) appear in May 28 1260 and February 21 1263.</p>	
[1261]	[Offshore Acre]
<p>Am09 notes that 7 islets sank, but no earthquake is mentioned and details are not known.</p>	
1261/1262	
<p>INGV05 note that "there was an earthquake among the Syrians" between October 1 1261 and September 30 1262. Am09 mentions that perhaps this report is connected with an earthquake in Lower Iraq. The details of this event are unknown. Thus we can assume that it was not a significant earthquake.</p>	
[1262]	[Egypt]
<p>The only modern source is PoTa80 who mention a very destructive event in Cairo and Alexandria. Exact location and size are unknown. INGV05 and Am09 do not mention this event. The authenticity of this report requires further research.</p>	
1264 February 20	Egypt or Syria
<p>According to Am09 this very strong earthquake hit Egypt or Syria, destroying houses; further details are not known. The location and size of this event require further attention.</p>	
H1284	Damascus
H1287a	W Syria
H1287b	NW Syria
H1287c	NW Syria
[1287 April 2]	[Sea of Galilee]
<p>EMEC, on the account of Gil, is the only parametric catalogue that lists this event (M_w 6.5).</p>	
H1293	Dead Sea

<p>Hay06 and Kli15 did not find geological evidence of the rupture in the Wadi Araba fault and thus concluded that the rupture was limited to the Dead Sea basin and did not propagate to other segments further south. Ken01 and Kag11 have correlated this large event with two different seismites in DSL {1σ}. Am09 mentions that the event has been probably duplicated as a shock in Cairo later in the year.</p>	
1299 January 8	Egypt
Am09 mentions that this was a strong local event. No damages were reported.	
1303 August 8	Crete
<p>A very large earthquake occurred in Crete (GuidCo97; INGV05; Am09). El-Sayed et al. (2000) concluded that there must have been a second local (after)shock in Cairo. Tsunami waves reached as far as Acre (Sal07). The event is sometimes duplicated in the year 1341 (May). For undocumented reasons, Guidoboni et al. (2019) changed the estimated M_e from 8.0 (INGV05) to an unprecedented value of 8.8.</p>	
1307 August 10	Egypt
H1313	Egypt
<p>Kag11 found a seimite in DSL that correlates with H1313, even though the event occurred in Egypt, more than 400km away. It is unclear how such distant event, to which Am94 assigned maximum MSK intensity of VI, could form a seimite in the sediments of Dead Sea. Perhaps the sediment deformation was caused by an unknown earthquake or a non-seismic event.</p>	
H1322	Damascus
H1339	Tripoli (Lebanon)
1344 January 3	Gaziantep (Turkey)
Am09 argues that the event actually occurred in Gaziantep (Turkey) and not in Damascus.	
H1347	Cairo
H1350	Cyprus
Am09 notes that 2 shocks totally destroyed Paphos.	
H1352	Cairo
Am09 notes that H1352 might be a duplicate of an earthquake in Crete in October 1353.	
H1354	W Syria
<p>Am09 considers the primary source of this event trustworthy and mentions that walls collapsed. It affected Hama and Homs (Syria) and Baalbek (Lebanon). Sb05 do not mention this event. The only parametric catalogue listing the event is NOAA, but they do not provide any magnitude. This event requires further research since it was strong enough to kill people in cities more than 100km away (Am09).</p>	
H1366	Safed (Sea of Galilee)
H1373	Lower Egypt
H1385	Lower Egypt
H1386	Lower Egypt
H1392	Cyprus
H1395	Egypt
H1399	Damascus
H1404	W of Aleppo
Am09 mentions that the effects of H1404 are often confused with the ones from H1408 (e.g. Sb05).	
1404 November 7	W of Aleppo
1407 April 9	NW Syria
<p>INGV05 note that the event affected only N Antioch (outside our zone) and was not felt in Cyprus as Ambraseys claims. INGV05 argue that the contemporary Cypriot marginal note refer to the event of 1397 (Wirth 1966) and not of 1407. The confusion is due to handwriting issues. AmBa89 and BM91 have assigned M 7 to this event. AmBa89 claimed that the estimation is based on an isoseismal map which they do not show and note that the event was still under investigation. BM91 provide no justification for their assigned magnitude. INGV05 estimated M_e 5.8. It is impossible to choose which interpretation of the partly illegible note is correct. Including Cyprus in the affected areas however would shift the epicenter southwest, inside our zone.</p>	
H1408	NW Syria
<p>Aky06 and Alt09 have found geological evidence that correlate H1408 with the N Yammouneh fault and Amik Basin (S Turkey) respectively. A small tsunami reached Latakia.</p>	
H1422	Cairo

H1425	Gulf of Suez
H1434	Cairo
1437 February	Cairo
A small local event of unknown exact magnitude is only reported by PoTa80.	
1437 November 7	Cairo
A small local event of unknown exact magnitude is only reported by PoTa80.	
1438	<i>E Hellenic Arc</i>
Am09 mentions that the event took place in E Hellenic Arc, and not in Egypt.	
H1455	Cairo
H1458	Wadi Araba
Kli15 have found geological evidence in Wadi Araba that correlate well with H1458 (1434-1459). Similarly to H1212, INGV05 seem to underestimate the size of the event due to limited amount of reported intensities. The modeled age of a seismite in DSL (1400-1650) fits the date of the event.	
H1467	Cairo
H1476	Cairo
1477 October 12	Cyprus
H1479	Cyprus
H1481	W of Cyprus
March 18 1481.	
1481 April 23	Cyprus
1481 July	Cairo
A small local event of unknown exact magnitude is only reported by PoTa80.	
1481	<i>Rhodes</i>
H1483	Cairo
1484 April	<i>Aleppo</i>
H1491	W of Cyprus
1497	Cyprus
H1498	Cairo
1523 April 4	Cairo
Am09 describes the event as a "slight local shock". The exact size of the event is unknown.	
1529 November 12	Cairo
Am09 describes the event as a "slight shock". The exact size of the event is unknown.	
1537 January 8	Cairo
A slight shock was felt in Cairo. The primary source is al-Suyuti. The exact size of the event is unknown.	
1537 March 9	Damascus
A slight shock was felt in Damascus. The primary source is al-Suyuti. The exact size of the event is unknown. The events of March 9 and January 8 1537 are often reported as one very small event with unreasonable area of perceptibility. The description in Am94 and Am09 is rather confusing.	
H1546	Dead Sea
Am05b concludes that this not very significant event reflects the "desire of contemporary writers to draw theological and political morals from a natural disaster, particularly when the earthquake happens to be in the Holy Land". Am09 and several modern sources (see Sal07) mention a tsunami in the coast of Palestine. Kli15 did not find geological evidence in S Wadi Araba that correlate with H1546, while Hay06 found loose evidence in N Wadi Araba (1515-1918). The rupture most probably started from the Dead Sea and was discontinued in N Wadi Araba.	
H1567	Offshore Cyprus
EMME, on the account of Soysal81, has probably duplicated this event in December 1567.	
H1568a	Cyprus
H1568b	Offshore Syria
[1573]	[<i>Hellenic Arc</i>]
PoTa80 placed the event (February 4) in Cairo. However, Am09 describes it as a "light shock", which is perhaps a duplicate of an earthquake on March 6 1573 in the Aegean Sea.	
1576 April 4	Cairo
Am09 describes the event as a "strong shock". No specific damages are reported. The exact size of the event is	

unknown.	
H1577	Cyprus
H1588a	Gulf of Aqaba
Kli15 did not find geological evidence in S Wadi Araba that correlate with H1588a. They thus concluded that the rupture was limited to the Gulf of Aqaba. The epicenter of this rather large earthquake is hard to be defined. The isoseismal map of Am06 indicates an epicenter which is far away from any major fault. EMME do not justify why they modified the coordinates assigned by Am06. The location of this large event is unresolved.	
H1588b	Cairo
1626 January 21	NW Syria
[1640]	[N Levant rift]
Am09 does not mention the event. Main modern reference is Sieb32, who does not cite his source.	
[1656]	[N Levant rift]
Am09 notes that Sieb32 misplaced event in "Tripoli (Palestine)", probably means in Lebanon, while the primary source mentions Tripoli (Libya).	
1694 December 21	Egypt
Am09 describes the event as a "local shock that destroyed some houses". The exact size of the event is unknown.	
H1698	E Mediterranean
H1705	W Syria
Gom03 found geological evidence in the Serghaya fault branch (Lebanon, Syria) that correlate with H1705 or H1759a or H1759b. H1759b seems like the most likely match (Dae05).	
H1710	N Red Sea
[1712 June 16]	[Jerusalem]
The main modern reference is Ami94. Amiran's intensities indicates a M<5.5 event. Am09 does not mention this event.	
H1718	Cyprus
H1735	Cyprus
Am09 mentions two severe shocks in the same day. Therefore, perhaps the reports refer to cumulative damages.	
1735 November 27	Damascus
Am09 mentions that an earthquake was felt in Damascus. No damages are reported. The exact size of the event is unknown.	
H1746	Damascus
1752 July 21	Italy
Am09 argues that the event in fact occurred in Italy and not in NW Syria.	
[1752]	[Egypt]
Only reference is NOAA, who do not cite their source.	
H1753	SW Syria
H1754	Gulf of Suez
H1756	Cyprus
H1759a	S Lebanon
Marc05 found with geological evidence that correlate 1759a with the Jordan Gorge fault. Nem08 assigned H1759a to either the Serghaya or the Rachaiya fault (both next to Jordan Gorge). The dating constraint of both findings is rather loose. Dae05 proposes that H1759a (foreshock) ruptured the shorter Rachaiya fault, while the larger H1759b event ruptured the Serghaya fault. Tsunami waves reached the coast from Israel through Lebanon (Sal07).	
H1759b	Lebanon
Nem08 assigned H1759a to either the Serghaya or the Rachaiya fault (both next to Jordan Gorge). The dating constraint of both findings is rather loose. Gom03 found geological evidence in the Serghaya fault that correlate with an event after year 1700. Dae05 proposes that H1759a (foreshock) ruptured the shorter Rachaiya fault, while the larger H1759b event ruptured the Serghaya fault. Tsunami waves reached the Nile Delta and Acre (Sal07).	
H1764	N Lebanon
1785	Latakia, Syria
This event was listed in Zohar 2019. There is only one primary source.	
H1796	W Syria
1801 October 10	Gulf of Suez
There is no available estimate for the size of the event. Only minor damages are reported (Am09).	
1802	Aleppo

Am09 argues that the event took place in Aleppo and was not felt in Palestine as some reports mention (confusion with event of 1822). The lack of correlated seismites in DSL supports that argument.	
H1814	Suez
1822 August 13	SE Turkey
1825 June 21	Cairo
There is no available estimate for the size of the event. It was only felt in Cairo, without causing damage (Am09).	
H1834	Palestine
Kli15 did not find geological evidence that correlate H1834 with the S Wadi Araba fault. They argue that the epicenter of the event is not well constrained. A seismite in DSL correlates well {1 σ } with H1834.	
H1837	S Lebanon
NeMeg06 geological evidence that correlate H1837 with the Roum fault. The constraint is very poor, i.e. after year 84.	
H1845	Offshore Cyprus
1846 June 15	Cairo
There is no available estimate for the size of the event. It was only felt in Cairo, without causing damage (Am09).	
1847	Egypt
H1850	Beirut
1850 October 27	Egypt
There is no available estimate for the size of the event. It was felt strongly in Cairo, without reported damage (Am09).	
H1868	Offshore Egypt
Am09 notes that there was no damage.	
1870 June 24	Mediterranean
Am09 describes a large deep earthquake in the Mediterranean Sea. He adds that Sieberg erroneously mentions that it was felt in Aden, leading BM to an unreasonable radius of perceptibility and estimated magnitude. Tsunami waves reached Alexandria causing damages (Sal07).	
1872 April 3	S Turkey
A small tsunami reached Antioch (Sal07).	
1874 February 13	Palestine
This event was listed in Zohar 2019. There is only one primary source, reporting that it was felt in Jerusalem.	
H1879	Gulf of Suez
H1894	Cyprus
H1895	Alexandria
[1896 May 2]	[Lebanon]
Am09 does not mention this anyhow small event.	
H1896a	Cyprus
H1896b	Cyprus