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## **Earthquake Effects on Bilad ash-Sham Settlements**

The purpose of this study is to observe earthquakes that hit Greater Syria during the Islamic periods, in order to present the damage they affected on urban centres, and to show their negative consequences on the architecture and domography of the region.

The author of the Arabic dictionary, al-Qamus al-Muhit, said that zalzal, from which the Arabic term zalazil (earthquakes) is derived, means "to move". He then defined earthquakes as catastrophies<sup>1</sup>. In al-Mu'jam al-Wasit, zalzal was presented as meaning "to shake strongly", and zilzal as "a natural earthquake that takes place below the surface"<sup>2</sup>.

Al-Suyuti offered a scientific explanation for earth-quakes. He said that earthquakes occur as a result of "the large movement of steam collected below the surface because of the impact of the sun. There is not enough cold in order to change the steam into water, nor does it dissolve by the available heat. Furthermore, the surface is too hard to let this steam pass through. Thus the steam would try to break through to the surface without available exit. The result would be a shake of the earth, the same as the shake of the body of a man struck by fever (as a result of the hot steam moving in his stomach). The surface of the earth might break and the stuff collected inside would come out"<sup>3</sup>.

One of the modern scientific explanations of earthquakes states that different movements take place inside the earth as well as on the surface. These activities create pressure on the rocks within their range. The rocks could usually bear such pressure to a certain limit, but in case the pressure is more than they could bear, the rocks will start to break down. Such breakages are called earth fractures. Some of these fractures are small and do not exceed a few metres. Others are huge and could measure hundreds of kilometres. And because of the swiftness of these breakages, a large amount of force would develop into a moving force in the form of waves spreading in different directions inside the earth and on the surface. These are known as earthquake waves. They cause the destruction and damage of the areas they pass through. The degree of destruction depends on the energy of these earthquake waves. The higher the energy, the higher the destruction<sup>4</sup>.

Since ancient times, Greater Syria was struck by earthquakes which contributed to the destruction of many of its urban centres, and to the death of much of the population. People thought of earthquakes as supernatural events sent, as signs, from God to His creatures when they stray away from His commands. Earthquakes, they believed, were the wrath of God and reminders for people to repent and return to the "straight path"<sup>5</sup>. Thus, when earthquakes hit, people used to attend mosques and places of worship, praying and asking God to save them from such catastrophies<sup>6</sup>. People used to explain these phenomena as God's punishment for their deeds. This belief existed among Muslims and Christians alike<sup>7</sup>.

Greater Syria was struck by different earthquakes during the period from the first to the 12th centuries AH (8th-18th AD). This affected the demography of the region and its buildings. The great number of earthquakes which hit the region also proved the geological instability of the area.

<sup>&</sup>lt;sup>1</sup>Al-Fayruzabadi, Al-Qamus al-Muḥiţ, the word zalzal.

<sup>&</sup>lt;sup>2</sup>Ibid

 <sup>&</sup>lt;sup>3</sup>Al-Suyūţi, Kashf aş-Şalşulah 'an Waşf az-Zalzalah, ed 'Abd al-Laţīf al-Sa'danī (Fez, 1971), p. 3.
 <sup>4</sup>Iraqi Istitute for Scientific Research, First Arab Symposium on Earthquakes, (Baghdad, 1978), pp. 77-78.

<sup>&</sup>lt;sup>5</sup>Al-¹Imadī, *Risālat al-Ḥawqalah fi az-Zalzalah*, Manuscript Centre, University of Jordan Micro. Fol. 75 (copy of Princeton University Copy Fol. 2085, Gareet Collection Fols. 129B, 130A). Al-¹Imadī says: "Abu Naʿīm says in al-Ḥilyah on the authority 'Aṭā' al-ʿKhuraṣanī' if five things appear, five things would follow: usury leads to destruction and earthquakes; the tyranny of the ruler leads to draught; fornication leads to the increase in death; avoiding alms would lead to the

destruction of livestock; and if Ahl adh-Dhimmah were treated unjustly, the enemy of the state would conquer it. (Fol. 130B); Al-Suyuti, op. cit., pp. 3, 4, 5, 9, 13, especially p.5 where he says that "Ibn 'Adiyy and al-Daylamī narrated, in Musnad al-Firdaws, on the authority of Ibn 'Umar, that the Prophet, peace be upon him, said: Earthquakes would strike if fornication appears; draught would hit under a tyrant ruler; and the enemy would succeed when Ahl adh-Dhimmah are mistreated"; Fulcher of Chartres, A History of the Expedition to Jerusalem, 1095-1127, trans F. Rita (New York, 1973), p. 95; H.E. Mayer, "Two Unpublished Letters on the Syrian Earthquake of 1202', Medieval and Middle Eastern Studies, ed S.A. Hanna (Leiden, 1972), p. 295.

<sup>&</sup>lt;sup>6</sup>Al-Suyūṭi, op. cit, pp. 10, 12, 15; Al-Jarraḥi, Kitāb Tarīkh as-Silsilah fima Yata'allaq bil-Zalzahah, Manuscript Centre, University of Jordan Micro. Fols. 121B, 122A.

<sup>&</sup>lt;sup>7</sup>Al-Suyutī, op. cit., pp. 9, 13; Mayer, op. cit., p. 295.

Some areas were only partially repaired to provide for the dwelling needs of the people, but it was impossible to rebuild the region the way it was before. Thus, such buildings were not accurately but randomly designed, as seen in the ruins of Qweilbeh, Beit Ras, Ṭabaqat Faḥl and Jarash, for example.

In this study, I shall list the earthquakes that hit Greater Syria during the Islamic periods, and show the scope of their destruction of Syrian cities and villages. I will be relying on Arabic and Latin primary sources. At the end of this study, I will be giving a general list of earthquakes and the scope of their destruction of urban centres. Another list will include the earthquakes that hit the southern part of Greater Syria, that is, Jordan and Palestine, and their total destruction of some of the cities and villages in that region.

Such a study, I hope, would benefit both geologists and archaeologists, by giving reasons and dates for the destructions of urban areas, in order to prove that the Arabs of Greater Syria had nothing to do with these destructions.

Some rulers, however, tried in times of need to rebuild or repair some of these buildings, especially castles, fortresses and fortification walls. But natural disasters, such as earthquakes, diseases and plagues, were greater than people. Thus, many cities and villages were deserted and neglected, becoming, as time passed, mere mounds of stone and earth.

Greater Syria was full of important urban centres, many of which were built during the Hellenistic and Roman/Byzantine presence in the region, following Greek and Roman/Byzantine styles. Jordan had its share of these urban centres. Their remains still exist in Aqaba, Madaba, Amman, Jarash, Umm aj-Jimal, Riḥab, 'Ajlun, Irbid, al-Ḥuṣn, Aidun, Beit Ras, Qweilbeh, Umm Qeis, Saḥam al-Kifarat, Tabaqat Faḥl and other places in north and south Jordan.

Greater Syria was hit by many earthquakes during the Roman and Byzantine periods. This resulted in the destruction of several of its urban centres. But the most damaging earthquakes were those of the Islamic periods, which resulted in the complete destruction of many centres. It was impossible to rebuild these centres and they were neglected and deserted. Furthermore, earthquakes killed a large part of the population, which had its effect on the economic, agricultural, social and cultural life. We must add here that Greater Syria was hit by plagues during the period from the eighth to the tenth centuries AH (14th-16th AD). The result was the death of most of the inhabitants which also affected demographical, cultural, economical, social and agricultural aspects<sup>8</sup>.

Thus, earthquakes and diseases that hit Jordan and Palestine during the Ayyubid and Mamluk periods, affected architecture and urban centres. Some of their results were the destruction of the region and the decrease of the population which happened mainly during the last part of the Mamluk and the beginning of the Ottoman periods<sup>9</sup>.

Accordingly, and depending on the available primary sources, we could come up with the following conclusions:

- 1. The city of Fihl was destroyed in 425/1033-4. The earthquake of this year was powerful in the Jordan Valley. It destroyed Jericho as well.
- 2. The city of Aqaba was completely destroyed in 460/1068 and in 462/1070. So, when Baldwin I, king of the Latin Kingdom of Jerusalem, came to Aqaba, he rebuilt its two castles and filled them with men and ammunitions leading to the presence of the crusaders in the Red Sea. Sources of the period did not mention any demographic or architectural presence worth noting. But, later on, the Ayyubids and the Mamluks gave Aqaba its economic and architectural importance<sup>10</sup>.
- 3. Many urban centres in northern Jordan were destroyed in 546/1151-2, and in 565/1170. The second earthquake lasted for three or four months. William of Tyre says that the cities, that were known for generations for their ancient buildings, were destroyed. Great walls and old towers fell down and were demolished. Fortresses that were destroyed were beyond counting. Sadness was everywhere, and earthquakes were a source of fear for all people<sup>11</sup>. Accordingly, the earthquakes of these two years destroyed the following cities: Amman, Madaba, Jarash, Fiḥl, Qweilbeh, Irbid, Beit Ras, Umm Qeis and many other urban centres in northern and central Jordan ('Ajlun and al-Balqa').
- 4. Many villages and urban centres in northern Jordan "sank" as a result of the earthquake of the year 597/1201-2. 'Abd al-Laṭif al-Baghdadī says that most places of the Hawran region were "swallowed by the earth and we do not know of any place in the region that we could talk about" There is no doubt that the impact of this earthquake was great on Jarash, Riḥab, Umm aj-Jimal, Beit Ras, Qweilbeh, Umm Qeis and other urban centres in the 'Ajlun and al-Kifarat areas. Latin sources described this earthquake as the biggest one since the crucifixion of Christ. Geoffrey of Donjon, head of the knight Hospitallers, reported to the king of Navarre that the destruction of cities and villages was so great that it might take longer than the present generation's life span to see them fully repaired. Associated with earthquakes was the spread of

<sup>&</sup>lt;sup>8</sup>Y. Ghawanmeh, 'Effect of Plague and Drought on the Environment of the Southern Levant', Studies in the History and Archaeology of Jordan II, ed A. Hadidi (Amman, 1985), pp. 316-322.

<sup>&</sup>lt;sup>9</sup>For the decrease of the population of Jordan and Palestine during the Mamluk period, see Y. Ghawanmeh, Tarīkh Niyabat Bayt al-Maqdis fil-'Aṣr al-Mamlūkī, (Amman, 1982), pp. 115-123.

<sup>&</sup>lt;sup>10</sup>For more details see Y. Ghawanmeh, Ayla (al-'Aqaba) w al-Bahr al-Ahmar, (Irbid, 1984), pp. 53-55, 72-77, 81-100.

<sup>&</sup>lt;sup>11</sup>William of Tyre, A History of Deeds Done Beyond the Sea, trans. Babcok and Krey, (New York 1943), pp. 370-371.

<sup>12.</sup> Abd al-Laţif al-Baghdadi, Al-'Ifadah w'al-I'tibar, (Damascus 1983), p. 102.

<sup>&</sup>lt;sup>13</sup>Mayer, op. cit., p. 301.

<sup>&</sup>lt;sup>14</sup>Ibid, p. 303.

plague which resulted from the putridity of dead bodies. That affected the health of the public and the demography in the region<sup>15</sup>.

- 5. Southern Jordan was hit by earthquakes in the years 608/1211, 660/1261, 672/1273, 692/1293, 102/1303 and 863/1458. Buildings in its cities and villages were destroyed. Sources, however, did not give details about the degree of damage in Jordan which resulted from earthquakes that hit Greater Syria during the 10th, 11th and 12th centuries AH (16th, 17th and 18th AD).
- 6. Some urban centres were rebuilt or repaired during the Islamic periods. However, it was impossible to restore the great buildings to what they used to be, because of technical and financial factors. They were neglected and deserted.

The city of Amman was rebuilt, but not finished, in 757/1356. It was finished in 797/1394-5 by the governor of Greater Syria (he extorted a large sum of money from the people for that purpose). The Mamluks made Amman the capital of al-Balqa'. Thus, the markets flourished in the city which became the "mother (centre) of the region as it used to be before" 16.

Other urban centres were partially rebuilt and inhabited. We notice this through the archaeological discoveries in Jordan. Ayyubid and Mamluk ruins were discovered at Ţabaqat Faḥl (Fiḥl), Jarash and other sites in Jordan.

- 7. Some great buildings existed in Jordan until the fifth century AH (11th AD). Most of the damage took place in the sixth century AH (12th-13th AD), in the years 551/1156, 552/1157, 565/1170 and 597/1200-1.
- 8. Earthquakes and plague lasted for about one and a half centuries (starting from the middle of the eighth/14th century. That resulted in the decrease of the population of Jordan, and cities and villages were deserted.
- 9. During the Islamic periods, Greater Syria was hit by earthquakes as follows:

10th	/16th century	5 times
11th	/17th century	7 times
12th	/18th century	3 times

- 10. From the preceding list, we notice that Greater Syria was hit, during the Islamic periods, by as many as 76 earthquakes; 14 of them during the Umayyad and Abbasid periods; 17 earthquakes during the Fatimid and Saljuq periods; 8 during the Zanki and Nuri periods; 6 during the Ayyubid period; 17 during the Mamluk period and 14 during the Ottoman period.
- 11. Some earthquakes were accompanied by sinking and deformation of the crust of the earth and by the shaking of the earth. That happened during the following years: 233/847, 239/853-4, 245/859-60, 296/908, 381/991, 425/1033-4, 460/1068, 462/1070, 552/1157, 565/1170, 575/1179-80, 592/1155, 597/1201-2, 811/1408 and 1075/1664.
- 12. We notice that some earthquakes were associated with many continuous tremors. Some hit the area continuously, day and night. Some lasted for more than ten months. Some were accompanied with lava. The water of the Mediterranean became low as a result of some earthquakes, and the sea floor appeared. People left their houses as a result of the fear of these quakes. Al-Jarraḥī says that people lived during the night in wooden shelters which they built in order not to be destroyed by earthquakes<sup>17</sup>.
- 13. Finally, we could say that the decrease of the population of Greater Syria resulted from unavoidable natural factors. Furthermore, war and the Tartar conquests of the region contributed to this decrease of the population and to the destruction of urban centres<sup>18</sup>, with great negative effects on the economic, architectural, cultural, social and agricultural life. All that led to the decline of Greater Syria during the later Islamic periods.
- 14. Some Arab sources pointed out that the mountainous areas were most hit by earthquakes. Earthquakes, sometimes, were so powerful that they fractured mountains, caused the water of rivers to become low and they destroyed fortresses and fortification walls<sup>19</sup>.
- 15. Arab sources described the power of earthquakes in terms of degrees. It was reported that some earthquakes were twenty degrees, three degrees, two degrees, one degree, half a degree, one fourth of a degree and one fifth of a degree<sup>20</sup>. They described these earthquakes as great, horrible, violent, vigorous and mild.

<sup>&</sup>lt;sup>15</sup>Ibid, p. 305.

<sup>&</sup>lt;sup>16</sup>Ibn Qadi Shuhba, Tarikh Ibn Qadi Shuhba, ed 'Adnan Darwish (Damascus, 1977), Vol. 3, p. 550; aslo Y. Ghawanmeh, 'Amman: Ḥaḍaratuha wa-Tarikhuha (Amman, 1977), p. 145.

<sup>&</sup>lt;sup>17</sup>Al-Jarrahi, op. cit., Fol. 123A. It is noted that, in modern times, houses are built of wood in some areas where earthquakes are frequent.

<sup>&</sup>lt;sup>18</sup>Ghawanmeh, op. cit., p. 129; Idem., Imarat al-Karak al-Ayyubiyyah, 2nd ed (Amman, 1982), pp. 306-307.

<sup>&</sup>lt;sup>19</sup>Al-Suyūṭi, op. cit., p. 60.

<sup>&</sup>lt;sup>20</sup>Ibid., pp. 62, 64; Al-Jarrāḥī, op. cit., Fols. 129B, 130B.

Table 1 List of the years of earthquakes and the degree of damage of urban centres in Greater Syria during the Islamic periods.

/ear	Urban centres that were completely destroyed	Urban centres that were partially destroyed	Degree of the earthquake	Comments
94/713		Antioch	Great	
98/716-7				No details.
9/717-8				No details.
		Damascus	Vigorous	
0/747-8			Great	
1/748-9		Damascus		
37/802-3		al-Maşşişah	Great	
9/834			Horrible	No details.
20/835	Antioch		Horrible	
30/844-5	Antioch, Mesopotamia	Damascus	Horrible	
32/846-7		Damascus, Ḥomṣ, Mesopotamia, Antioch	Vigorous	
33/847	Darayya, al-Mazzah,	Damascus, Antioch	Vigorous	A village near Damascus sank. Many casualties.
39/853-4	Beit Lahya	Tiberias	Vigorous	A mountain near Tiberias was destroyed. Great number
				of casualties.
42/856	<u></u>		Great	Deformation of the crust of the earth and of some mountains.
45/859-60	Antioch, Latakia, Jablah	Damascus, Ḥoms, Tartosa, Edessa, Ḥarran, al- Massisah, Adhanah	Terrifying	Deformation of some mountains in the Syrian coast. Great number of
96/908		Ras al-'Ain, ar-Raqqah	Powerful	casualties. The waters of the Mediter-
62/912		Antioch	Great	ranean became low. Heavy loss of lives.
81/991	Village near Ba'albak	Damascus	Great	Some villages were swallowed. Loss of lives.
93/1002-3	Unspecified fortresses and castles.	, <del></del>	Great	Loss of lives.
25/1033-4	Jericho, Acre. Several villages near Acre were swallowed, as well as the village of al-Badan near Nablus, and many other villages in Greater Syria.	ar-Ramlah (one third), 'Asqalan, Gaza, Jerusalem, Hebron, Nablus (one half)	Horrible	Was accompanied with lava, so many villages were destroyed. Loss of lives.
34/1042		Ba'albak, Tadmur	Great	Heavy loss of lives.
55/1063		Antioch, Latakia, Tyre, Acre, Tripoli	Great	Heavy loss of lives.
60/1068	Aqaba (destroyed with all its people); ar-Ramlah (swallowed by the earth)	Jerusalem, Banyas	Powerful	Deformation of the crust of the earth. Heavy loss of lives.
62/1070	Aqaba (sank completely)	ar-Ramlah and its provinces, Jerusalem	Great	Some cities and villages sank.
79/1086-7		Many areas were destroyed.	Powerful	No details.
84/1091	Antioch (90 of its towers were destroyed).	Destroyed great number of buildings.	Great	Many casualties.
87/1094			Vigorous	Many continuous tremors. Few casualties.
91/1097		Some areas of the Syrian coast were damaged.	Vigorous	Many casualties.
99/1105		Jerusalem		No details.
		Jerusalem		No details.
06/1113 08/1114	Sumaysat (sank), Mar'ash	Edessa, Ḥarran, Balis, Antioch, and surrounding	Horrible	Great number of casualties.
509/1116		areas. Antioch and surrounding		Many casualties.
532/1137	9	areas. Some parts of Greater Syria.	Great	Damage and many casualties

Year	Urban centres that were completely destroyed	Urban centres that were partially destroyed	Degree of the earthquake	Comments
533/1138	Aleppo (80 tremors in one night)	Damascus	Horrible	Was accornpanied with loud noise and powerful tremor.
546/1151-2		Buşra, Ḥawran and the areas behind it (al-Balqa' and 'Ajlun).	Horrible	Many places in Hawran and Jordan were destroyed.
551/1156		Damascus (continuous earthquakes for five months), Aleppo, Ḥamah, Afamyah, Shayzar, Kufr Tab.	Great and horrible	Hit many place in Greater Syria but no details about its effects.
552/1157	Hamah, Shayzar, Homs, Salamiyyah, Kufr Tab, Afamyah, al-Ma'arrah, Tell Harran, Husn al-Akrad, 'Arqah, Latakia, Tripoli, Antioch	Aleppo, Jablah, Damascus (continuous tremors for 10 months).	Great	The quake was accompanied by sounds that were greater than those of thunder and deformation of mountains. Heavy loss of lives.
553/1158		Aleppo and its provinces, Damascus	Horrible	No details of the casualties.
554/1159		Damascus	Great and	No details of the
565/1170	Buşra, Ḥomş, Ḥuşn al-Akrad, Kufr Ṭab, many fortresses and castles in Palestine	Damascus, Ba'albak, Ḥamah, Shayzar, Ba'rayn, Aleppo, Tripoli, al-Ma'arrah, Tell Bashar, 'Azaz, Afamyah, Abu Qubays, al-Munaytirah, Dunaysar, Mardin, Edessa, Ḥarran, Ras al-'Ain, ar-Raqqah, Qal'at Ja'bar, Qal'at Najm, Balis, Manbij, Bazagha, 'Ain Ṭab, Ḥarim, Antioch, Beirut, 'Arqah, Tartosa, Jablah, al-Marqab, Latakia, Acre, Tyre	horrible. Great and horrible.	casualties. People did not see a quake like this for years. Earthquakes lasted in Palestine for three to four months. Heavy loss of lives.
575/1179-80		Many villages and for- tresses in Greater Syria, not mentioned by names	Great	Some mountain tops fell down.
592/1195-6	Şafad, Nablus		Great	The earth was shaken as
597/1201-2	Hawran (most of its cities and villages were swallowed by the earth), Tyre, Nablus, Burj Şafiţa (swallowed), Qal'at Arsuf, Şafad, Beit Jann (swallowed), 'Arqah (swallowed)	Damascus, Ḥomṣ, Ḥamah, Ba'albak, Tripoli, 'Arqah, Sidon, Ḥuṣn al-Marqab, Latakia, Banyas, Tabnin, Jerusalem	Great	a result of this quake. Some places were swallowed, mountains were moved from their places. Heavy loss of lives (about one million and one hundred thousand).
598/1202 500/1203	Nablus (destroyed)	Homs, Husn al-Akrad Affected many places in Greater Syria, especialy the city of Tyre	Great Great	Heavy loss of lives. The quake hit the area from Morocco to Greater Syria, including the islands of
608/1211		Karak, Shobak	Powerful	the <b>Mediterranean.</b> Many casualties.
660/1261 672/1273		Karak Gaza, ar-Ramlah,	Violent Powerful	Many casualties.  Many casualties.
592/1293		Qaqun, Karak Gaza, ar-Ramlah	Great	Was accompanied with
702/1303		Qaqun, Karak Damascus, Shobak,	Great	rain and floods. Lasted 40 days.
22/1322		Karak Damascus	Great	Many casualties. No details about
39/1338		Tripoli	Powerful	the casualties.  Many casualties.

Year	Urban centres that were completely destroyed	Urban centres that were partially destroyed	Degree of the earthquake	Comments
741/1341		Affected many places	Great	Great destruction of build-
		in Greater Syria		ings, and heavy loss of lives without details.
745/1343		Affected many places in Greater Syria	Great	No details.
768/1366		Safad	Horrible	No details.
806/1403-4		Aleppo and its provinces	Powerful	Damage of buildings and many casualties.
807/1404		Aleppo and its provinces	Great	The quake lasted for the whole year. Great destruction of buildings in places near Aleppo.
809/1406		Antioch	Great	Damage of buildings and many casualties.
811/1408	Shaghir Bakkas	Aleppo, Tripoli, Latakia, Jablah, Balaṭans	Great	Heavy loss of lives.  Deformation of the crust of the earth. Water in the Mediterranean became low.
363/1458		Karak	Horrible	Many casualties.
389/1484		Aleppo	Horrible	Many casualties.
396/1491		Damascus, Tarsus		No details.
916/1510		Damascus		With thunders and heavy rain.
943/1537		Damascus and its suburbs	Powerful then mild	No details.
971/1563		Damascus	Powerful	The earth was shaken.
72/1565		Damascus		With loud noise.
076/1568		Damascus and its suburbs	Great	Reached al-Ḥijaz and destroyed Tabuk.
012/1604		Damascus, al-Biqa' Valley	Vigorous	Thunder in Damascus.
015/1606		Baʻalbak		No details.
018/1610		Aleppo and its provinces	Horrible	No details.
027/1618		Damascus and its provinces	Mild	
1035/1626		Ḥamah, Damascus	Powerful	Mild in Damascus.
037/1627		Damascus	Powerful	No details.
1075/1664		Mount Lebanon, ash-Shuf area, Şafinah	Great	Mountains moved. The village of Şafinah was moved safely from the top of the mountain to the valley.
1117/1705	The fortress and village of al-Qastal	Damascus and surrounding areas, Yabrud	Great	With loud noise and thunder, many casualties.
1124/1712		Damascus		No details.
1148/1735		Damascus and its provinces	Great	No details.

Table 2 List of the years of earthquakes and their complete destruction of urban centres in southern Syria (Jordan and Palestine) during the Islamic periods.

Year	Urban centre	Degree of the earthquake	Comments
239/853-4	Tiberias	Vigorous	A mountain near Tiberias was fractured, heavy loss of lives and buildings.
425/1033-4	Jericho, Acre, ar-Ramlah, al- Badan, <b>Nablus,</b> Jerusalem, Hebron, 'Asqalan, Gaza	Horrible	One third or half of ar-Ramlah was destroyed. The village of al-Badan near Nablus was swallowed.  Jericho, in the Jordan Valley, was destroyed. Half of Nablus was destroyed. Many villages near Acre on the Palestinian coast were destroyed.
455/1063	Acre	Great	
460/1068	Aqaba (destroyed with its inhabitants), ar-Ramlah was destroyed.	Powerful	With deformation of the crust of the earth.
462/1070	Aqaba (destroyed completely), ar-Ramlah and its provinces, Jerusalem, many places in Southern Syria were destroyed.	Great	Some cities and villages sank.
499/1105	Jerusalem		No details.
506/1113	Jerusalem		No details.
546/1151-2	Buşra, Ḥawran, the areas behind it (al-Balqa' and 'Ajlun)	Horrible	Great destruction in Ḥawran and North Jordan.
565/1170	Buşra, Acre, most cities in Palestine and Jordan, destruction of many fortresses and castles in Jordan and Palestine	Great and horrible	Nothing like it was seen for years. The quake continued in Palestine three to four months.  The earthquakes hit three or four times daily.
592/1195-6 597/1201-2	Şafad, Nablus Hawran (most cities and villages were destroyed and swallowed), Nablus, Qal'at Arsuf, Şafad, Beit Jann (destroyed), Acre, Jerusalem	Great Great	The earth was shaken several times.  Some cities and villages where destroyed. The mountains moved from their places.  Heavy loss of lives.
598/1202	Nablus (completely destroyed)	Great	Great number of casualties.
508/1211	Karak, Shobak	Powerful	Many casualties.
660/1261	Karak	Violent	Many casualties.
572/1273	Gaza, ar-Ramlah, Qaqun, Karak	Powerful	Many casualties.
592/1293	Gaza, ar-Ramlah, Karak, Qaqun	Great	Great parts of these cities and surrounding areas were destroyed.
702/1303	Karak, Shobak	Great	Lasted 40 days, many casualties.
768/1366	Şafad	Horrible	
363/1458	Karak	Horrible	Destruction, and many casualties.