Catalogue of Tsunamis in the Eastern Mediterranean from Antiquity to Present Times

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ABSTRACT

This paper presents a systematic compilation of all data pertaining to tsunamis observed or recorded in the Eastern Mediterranean from antiquity to present times (1500 b.C. to 1980 a.D.). The first catalogue has been published by Prof. N.N. Ambraseys in the "Bulletin of the Seismological Society of America" (Vol. 52, No 4, October 1962) and this has formed the skeleton of this paper. All of the available information has been compiled from historical accounts, newspaper archives, other reports, and recent mareographic data. The earthquake data have been extracted from the Seismological Institute of Athens and relative bibliography. Most of the events listed are associated with earthquakes, but some are the result of volcanic activity. Many of the tsunamis have been generated along the coast of Greece, Albania, South Yugoslavia, Turkey, Syria and Israel. There is little doubt that the large conjugate fault system along the west coast of Greece, Crete and Rodos till the south coast of Turkey is often responsible for the earthquakes in this area and most of tsunamis in the Eastern Mediterranean.

RIASSUNTO

In questo lavoro è stata fatta una raccolta sistematica di tutti i dati relativi agli tsunamis osservati o registrati nel Mediterraneo orientale dall'antichità ad oggi (1500 a.C. al 1980 d.C.). Il primo catalogo è stato pubblicato dal Prof. N.N. Ambraseys nel « Bollettino della Società Americana » (Vol. 52, n. 4, ottobre 1962), sulla ossatura di quest'ultimo è stato costruito l'attuale lavoro. Sono state raccolte tutte le informazioni utili da resoconti storici, archivi di giornali, altre notizie, e dati mareografici recenti. I dati relativi ai terremoti sono stati estratti da quelli forniti dall'Istituto Sismologico di Atene con la relativa bibliografia. La maggior parte degli eventi in elenco, è associata a terremoti, mentre alcuni sono il risultato di attività vulcanica. Molti degli tsunamis hanno avuto origine lungo le coste della Grecia, Albania, Jugoslavia meridionale, Turchia, Siria ed Israele. Si ipotizza che il grande sistema di faglie coniugate, la costa occidentale della Grecia, Creta e Rodi fino alla costa meridionale della Turchia, sia spesso responsabile dei terremoti in questa zona e della maggior parte degli tsunamis nel Mediterraneo orientale.

1. INTRODUCTION

between 31°-44° N and 18°-36° E excluding Black Sea and the Italian coasts of the Adriatic Sea is the object of the present paper.

The first catalogue has published by N. Ambraseys in "Bulletin of the Seismological Society of America" (Vol. 52, No. 4, p.p. 895-913, October 1962) and this has formed the skeleton of this paper.

In this catalogue we have compiled and thus rendered available the mass of interesting information about seismic sea-waves which lies buried in many Greek, Byzantine, Arabic and Latin textes. As will be seen from the references, the material, both printed and manuscript, are ample. We are convinced that a systematic and scholarly investigation into so many of the manuscripts and textes which we were unqualified to render and which we left out, could easily double the entries and clarify many points in our catalogue.

Some feu of the Byzantine and Arabic sources we quote

have, it is true, been read in whole or in part by few authors of earthquake catalogues; but as far as we are aware, for one reason or another, practically none of the information supplied in these catalogues is absolutely correct or complete. Some authors erred in rendering Muslim or Byzantine chronologies with the result to date in their catalogues scores of events by as much as six centuries too early (Ambraseys, 1961). Others, owing to errors resulting from transcribing events and toponyms from Latin translations of Greek or Arabic texts, or owing to differences in chronology resulting thereof, repeat in their catalogues the same event two or more times, or enter non-existent events. In some instances also they treat the seismicity of a whole year for a given region collectively and enter it as one earthquake. The most critical of these errors where they affect our catalogue are pointed out in their appropriate place in the paper.

Actual harm has been done to the science of seismology by premature conclusions from fragmentary data, and particularly from data repeated from publication to publication with a constantly increasing number of inaccuracies with no reference to the original source of information. Under such circumstances one can hardly be unjust to those who maintain that the observations of seismic phenomena of old date are scientifically inadequate.

In preparing our catalogue we were fully aware that its outcome would be more suggestive than definitive. Also we were aware of the fact that the older historical accounts of seismic phenomena rarely include much useful information other than reports of damage and casualties. These we considered worthwhile our labours.

2. KEY TO CATALOGUE

The catalogue is arranged in the following manner.

Dates are given in headlines in the new style (Gregorian). They are followed by the name of the region in which the seismic sea-wave was felt. This is followed by the name of cities, towns

or areas which were particularly affected. The intensity, *m*, of the wave is given in small roman numerals and it refers to Sieberg's modified intensity scale where the height of the wave on land or the distance which it flooded inland is known and is inticated as (*H*=) and (*L*=) respectively in meters. Near the geographical coordinates of the epicentre of the main earthquake shock, when known are given together with the intensity of the shock (*I*=in the modified Mercalli scale), magnitude (*M*=after Gutenberg) and the focal depth (*d*=, *s*:shallow, *n*:normal, *i*:intermediate). This is followed by the references consulted which are pertinent to the Phenomenon itself, to the accompanying earthquake, and to the information necessary for the dating of the event. Numerals outside the parentheses refer to references in the Bibliography. In the parentheses, roman numerals refer to the book (liber) and the following numbers to the chapter and line respectively of the text. *P*: refers to a standard system of pagination while *p*: indicates the page. Folio is indicated by *f*. Page references to an authority is not given when the material in that authority is arranged chronologically. Entries marked with an asterisk are doubtful events quoted mostly by modern writers, which have been included for the sake of completeness.

Place names mentioned in the original suffered many changes during historical and recent times. When these differ from those of today, the former are shown in brackets where they first occur, and the modern name is used thereafter. Modern places are spelt after Lippincott.

In what follows the headlines more information is given mainly about the events from 1500 BC to 1650 AD and some of them up to the present time. For all the other events only a bare outline is given.

With so many dates, controversial points, so many foreign names and such a multitude of references as crowd this paper; though we have done our best to be as accurate as possible, many errors must necessarily have crept in. We shall feel most grateful to those who will point these out to us.

Fig. 1 - Tsunamis in the Eastern Mediterranean from 1500 BC to 1980 A.D.

Fig. 2 - o = sources of tsunamis;
o = region in which the tsunamis was felt.

C A T A L O G U E

N°	DATE	TSUNAMI DATA				EARTHQUAKE DATA				REFERENCES
		Area of origin observation place of	<i>m</i>	<i>H</i>	<i>L</i>	<i>M</i>	<i>I</i>	<i>s,n,i</i> <i>r</i>	Latitude Longitude	
1.	II millenium B.C.	Syrian coasts	VI				X		36°½N—25°½E	13.
2.	1410 ± 100	North coast of Crete. Grecian Archipelago	VI				XII			13, 23, 25, 34, 35
3.	1365 ± 5	Syrian coasts. Ugarit near Minet-el-Beida	VI							13.
4.	c. 1300	Ionian coasts and towns in Asia Minor, Troad	V							13.
5.	c. 760	Coasts of Israel, and Lebanon								13.
6.	c. 590	Coasts of Lebanon. Sur (Tyre)	VI							13, 38.
7.	c. 525*	Coasts of Lebanon. Saida (Sidon)								5, 6, 13, 38, 39.
8.	479 Winter	Chalcidice. Isthmus of Kassandra, Potidaea	III				IX		40°¼N—23°½E	2, 13.
9.	426 Summer	Euboean and Malian Gulfs, Phthiotian coasts, Euboean coasts, Island of Skopelos	V—				X		38°¾N—22°¾E	6, 7, 13.
10.	373 Winter	Gulf of Corinth. Helice	V				XI		38°¼N—22°¼E	1α, 1β, 3, 5, 6, 13
11.	c. 330*	Eastern Sporades Islands. Island of Chryse.					IX		40°N—25°E	3, 13, 31, 38.
12.	222. *	Island of Rhodes. City of Rhodes.					X		36°½N—28°E	3, 6, 13.
13.	138.	Coasts of Israel and Lebanon. Between Acre (Ptolemais) and Sur	IV							6, 13, 35.
14.	58.	Albanian coasts. Durazzo (Dyrrhachion)	II							4, 13.
15.	23 ± 3	Egyptian coasts between Alexandria and Pelusium,	III				IX		38°¼N—22°¼E	6, 13, 31.
16.	46* A.D.	South Coasts of Crete.					VII		36°¼N—25°¼E	13, 38.

17.	62	South coasts of Crete. Lebena	III			IX		35°½N—25°½E	13.
18.	76*	Cyprus. Kition, Paphos and Salamis.							13, 37, 39.
19.	142	Island of Rhodes. Rhodes (IV), Islands of Kos, Seriphos and Syme	IV			VIII	i	36°N—28°E	3, 13.
20.	262	South coasts of Asia Minor	IV						13.
21.	315	Dead Sea	III						13;
22.	342*	Cyprus. Famagusta.							18, 13, 37, 38.
23.	344	Dardanelles (Hellespontos) and Niksar (Neocaesaria), Thracian Coasts	IV			IX		36°N—28°E	8, 13.
24.	348	Syrian coasts. Beirut, Arwad Islands.	III						13, 38.
25.	362	Dead Sea, Jordanian coasts.	III						13, 38, 39.
26.	365 July 21	Eastern Mediterranean. Methone, Epidaurus, Crete, Beeotian coasts, Adriatic coasts, Epirus, Alexandria, Sicily	IV			X	i	35°N—23°E	8, 9, 13, 29.
27.	447 November	Sea of Marmara. Marmara Islands, Dardanelles, and the coasts of Marmara, Constantinople	IV—						13.
28.	450 January	Sea of Marmara, Constantinople.	III						13.
29.	542 Winter	Sea of Marmara. Thracian coasts and Gulf of Edremit	IV						8, 9, 13.
30.	551 Spring	Malian Gulf. Achinos, Tarphe							13.
31.	551* July 7	Etolia, Nafpaktos				XI		38°½N—22°½E	13, 29.
32.	551 July 9	Syrian coasts. Votrys near Jubel (Byblos), Tarabulus (Tripolis), Beirut	+III						8, 9, 13, 31.
33.	551 August 15	Southwest coasts of Asia Minor, Mandalya Bay, Island of Kos, Sporades Isls	IV—			XI		36°½N—27°½E	8, 9, 13.

cont. CAT.

34.	740 October 26	Sea of Marmara, Izmit, Iznik Lake, Thracian coasts of Marmara	III						8, 13.
35.	746 January 18	Syrian and Egyptian coasts.	III—						10 _a , 13.
36.	792	Gulf of Venice, coasts of Istria and Jugoslavian coasts of the Adriatic sea	IV						13.
37.	803 December 19	Gulf of Iskenderun. Masisa coast	III						13.
38.	859 November	Syrian Coasts, near Samandag	III						10 _a , 10 _b , 13.
39.	881*	Coasts of Israel and Egypt, from Aere to Alexandria.							13, 38.
40.	957	Caspian Sea	III						13.
41.	975 October 26	Constantinople and Thracian coasts	III						13, 17.
42.	991* April 5	Coasts of Syria.							13, 38.
43.	1034 January 4	Coasts of Lebzanon and Israel Acre	IV						13, 31.
44.	1039* January	Constantinople.							13, 17.
45.	1050*	Grecian Archipelago. Thera (Santorini). Most probably a misprint for 1650							13.
46.	1068 March 18	Coasts of Israel at Holots Ashod and Yavne	IV						13, 31.
47.	1202 May 22	Syrian coasts, Cyprus, Egypt	IV						13.
48.	1222 May. Cyprus	Limassol and Paphos	IV						13.
49.	1273 September	Albanian coasts. Durazzo	III						13.
50.	1303 August 8	Egyptian coasts, Syrian coasts Crete	v—			X	i	36°½N—27°½E	13.
51.	1303 December	Crete, Southwest coasts of Peloponnesus and Rhodes, Egyptian coasts and Adriatic Sea	IV						12, 13.
52.	1332 February 12	Sea of Marmara. Constantinople	III+						13.

53.	1344 October 14	Sea of Marmara. Thracian coasts	IV	2000				13.
54.	1389 March 20	Island of Chios. In the Allatiano Codex	III			IX	38°¼N—26°¼E	13.
55.	1403 November 16	Syrian coasts, Asia Minor south coasts	III					13.
56.	1481 May 3	Rhodes	III	1,80	60	VIII	36°N—28°E	13.
57.	1489	South coasts of Asia Minor. Antalya	III					13.
58.	1494 July 1	Crete. Herakleion (Candia)	II+					13.
59.	1508 May 29	South coasts of Crete north coasts	III			X	i	35°½N—25°½E
60.	1509 September 14	Constantinople	III					13.
61.	1534	Coasts of Israel. Jaffa. Not found in contemporary writers	III					13, 32.
62.	1546 January 14	Coasts of Israel and Lebanon. From Gaza to Jaffa.	III+			VII	38°¼N—26°¼E	13, 38.
63.	1612 November 8	North coasts of Crete	IV+			VIII	35°½N—25°½E	13.
64.	1622 May 5	Ionian Island. Zante				X	37°½N—21°E	13.
65.	1629 March 9	Islands of Cythera and Crete	III			VIII	36°N—25°E	13, 29.
66.	1633 November 5	Zante, South coasts on the promontory of Agios Sostis.	III—			X	37°½N—21°E	13.
67.	1646 April 5	Constantinople	III					13, 14.
68.	1650 October 9	Thera, west coasts of Patmos, east coasts, Ios, Sikinos, Kea, Crete	v	30		VIII	36°½N—25°½E	13, 31.
69.	1667 April 6	Dalmatian coasts. Dubrovnik (Ragusa)	III+					13.
70.	1667 November 30	Asia Minor. Smyrna	II					13.
71.	1672*	Kiklades. Thera (Santorini)				IX	36°½N—25°½E	13, 29.
72.	1672* April	Islet of Stanchio.				VIII	40°N—26°E	13, 29, 31.
73.	1688 July 10	Asia Minor, Smyrna	II					13, 31.
74.	1723 February 21	Ionian Islands, Leukas.	III			IX	38°½N—20°½E	13, 29, 42.
75.	1732	Ionian Islands. Corfu	II—					13, 14.
76.	1748 May 14	North Peloponnesus. Aigion	III			IX	38°½N—22°¼E	13, 18, 29.
77.	1750 September 17	Adriatic Sea. Fiume	IV					13.
78.	1752 July 21	Syrian coasts	III					13.
79.	1759 October 30	Coasts of Israel and Lebanon. Acre	IV—	2,4				13.
80.	1766 May 22	Constantinople	II					13, 17
81.	1791 November 2	Ionian Islands. Between Zante and the mainland	III—			X	37°¾N—21°E	13, 14, 33.
82.	1802 January 4	Adriatic Sea. Fiume	III					13.
83.	1804 June 8	Northwest coasts of Peloponnesus. Patras	III			IX	"	38°¼N—21°¾E
84.	1817 August 23	Gulf of Corinth. Aigion	III			X	"	38°¼N—22°¼E
85.	1818* January	Athens. Mallet mistakes the event before mentioned						13, 22, 27.
86.	1821 January 6	Gulf of Corinth. Alcyonic Sea	IV			X	"	37°¾N—21°¼E
87.	1823 August 20	Dalmatian coasts. Dubrovnik	IV—					13.
88.	1825 January 19	Ionian Islands. Leukas, between the islet of Sessoula and east coasts of the island	III			XI	"	38°¾N—20°¾E
89.	1829 May 23	Constantinople	II					13.
90.	1833 January 19	Albanian coasts. Valona and Sasseno Isle	IV—					13, 17.
91.	1835 July 12	Ionian Islands. Zante	II					13.
92.	1837 January 1	Syrian and Israeli coasts of Tiberias	IV					13, 14.
93.	1843 September 14	Dalmatia. Dubrovnik, Gruz (Gravosa)	IV					13.
94.	1844 March 3	Dalmatia. Dubrovnik	III					13.

95.	1844 March 23	Dalmatia. Dubrovnik	II						13.
96.	1845 August 16	Dalmatia. Dubrovnik, Gruz	III						13.
97.	1851 February 28	Asia Minor. Fetiye	III	0,60		IX	n	36°½N—28°¾E	13, 26.
98.	1851 April 3	Asia Minor. Fetiye	III	1,80					13.
99.	1851 May 23	Khalki Isle, Rhodes	II						13.
100.	1851 October 12	Albanian, coasts, Valone	III	0,60					13.
101.	1852 May 12	Asia Minor, Smyrna	III						13.
102.	1852 September 8	Asia Minor, Smyrna	III						13.
103.	1853 August 18	Euboean Gulf	III+			IX	n	38°¼N—23°½E	13.
104.	1855 February 13	Asia Minor, Fetiye	III						13.
105.	1856 November 13	Eastern Sporades. Chios	III+			IX	n	38°¼N—26°¼E	13, 21.
106.	1859* October 20	Piraeus. Most probably a strong seiche.	II—						13.
107.	1861 December 26	Corinth Gulf Northeast coasts South coasts	IV—	2,10		XI	n	38°¼N—22°¼E	13, 22, 27.
108.	1866 January 2	Albanian coasts. Valona, Himara	IV						13.
109.	1866 January 6	Albanian coasts. Valona, Narta	III						13.
110.	1866 February 2	Eastern Sporades, Chios	III			VIII	n	38°¼N—26°¼E	13.
111.	1866 February 6	South coasts of Peloponnesus. Island of Kythera	IV	7,80		VIII	n	36°N—23°E	13, 22, 26, 27.
112.	1866 March 3	Albanian coasts. Valona	III						13.
113.	1866 March 6	Albanian coasts. Himara, Kanina	IV						13.
114.	1866 March 13	Albanian coasts. Himara. Kanina	III						13.
115.	1867 September 20	South coasts of Peloponnesus, Gythion, Crete, Herakleion, Jonian Islands, Syros, Southeast coasts of Italy	IV			IX	n	36°½N—22°¼E	13, 22, 27.
116.	1869 December 28	Albanian coasts. Valone	III			XI	n	38°¾N—20°¾E	13, 20.

117.	1870 June 24	Alexandria	III						13.
118.	1870 July 29	Adriatic Sea. Island of Vis (Lissa)	III						13.
119.	1878 April 19	Sea of Marmara. Izmid	III						13, 22.
120.	1883 June 27	Ionian Island. Corfu	III			VI	n	39°½N—20°E	13, 21, 26, 27.
121.	1886 August 27	South coasts of Peloponnesus. Messenia, Pylos; Asia Minor, Smyrna	III			XI	i	37°N—21°¼E	13, 21, 26, 27.
122.	1887 October 4	Gulf of Corinth. South coasts, Xylokastro, between Xylokastro and Sykia	III	20		VIII	n	38°¼N—22°¾E	13, 21, 26, 27.
123.	1893 February 9	Sporades Islands. North coast of Samotrace, Alexandroupolis Thracian coasts	III+	0,90	400	IX	n	40°½N—25°½E	13, 22, 26, 27.
124.	1893 June 14	Albanian coasts. Valona, Himara	III						13.
125.	1894 April 27	Euboean Gulf. Atalanta Bay, West and Northwest coasts of Euboean. Gulf	IV	3,00		XI	n	38,7°N—23,1°E	13.
126.	1894 July 10	Constantinople	III						13, 17.
127.	1897 December	Ionian Island. Zante	II—						13.
128.	1898 Decembcr 3	Ionian Island. Zante	II+			VII	n	37°¾N—21°E	13, 26.
129.	1899 January 22	Messenia, Kyparissia, Marathos	III			IX	n	37°¼N—21°¾E	13.
130.	1902 July 5	Salonika	II—			IX	n	40°¼N—33°¼E	13.
131.	1908 December 28	Lybian Sea. 90 miles north of Alexandria, Egyptian coasts	V		4,6	XI	10	38°N—15°½E	13.
132.	1914 November 27	Ionian Islands. Leukas	IV+	3,30	6,2	X	n	38°½N—20°½E	13, 20, 22.
133.	1915 August 7	Ionian Islands. Between Cephalonia and Leukas	III+		4,9	IX	n	38°½N—20°½E	13, 22, 26, 27.
134.	1920 December 18	Albanian coasts. Valone, Saseno	V—		5,6	IX	n	40°½N—19°½E	13.
135.	1928 March 31	Asia Minor. Smyrna	II		4,9		n	38,1°N—27,1°E	13.

136.	1928 April 23-25	Grecian Archipelago; Piraeus, Chalkis, Nauplion, Alexandroupolis, Crete, Chania, Karystos	III+	2,10	4,6	VI	n	42,4°N—25,7°E	13.
137.	1928 May 3	Eastern Greece. Strymonic Gulf	II		4,3	VII	n	40,8°N—26,8°E	13.
138.	1932 September 26	Gulf of Hierissos. Chalcidice	II+		6,9	X	n	40°1/2N—23°3/4E	13.
139.	1947 October 6	South Peloponnesus. Methone in Messenia	II+		6,9	IX	28	36,9°N—22°E	13, 19, 27.
140.	1948 February 9	Dodecanese. Island of Karpathos	IV	1000	7,1	IX	40	35°1/2N—27°E	13, 22, 26, 27.
141.	1948 April 22	Ionian Islands. Leukas	IV—	0,90	6,4	X	n	38°1/2N—20°1/4E	13, 22, 26, 27.
142.	1949* February 9	Dodecanese. Island of Karparhos					n		13, 30.
143.	1956 July 9	Grecian Archipelago. Amorgos, Astipalaea, Pholegandros, Patmos, Kalimnos, Crete, Tinos	V	30	7,8	IX	20;	36,9°N—26°E	13, 24, 26, 27.
144.	1956 November 2	Magnessia. Volos	II+	1,20	3/4	VII	n	39°1/2N—23°E	13, 26, 28.
145.	1959* February 23	North and west coasts of the Grecian Archipelago. Salonika, Salmis, Leros, Crete. No earthquake shock was recorded. Most probably a seiche.	III	0,90					13.
146.	1961* May 23	Asia Minor. Sea of Marmara, Smyrna.			6,5	VII	n		13.
147.	1961* June 6	Grecian Archipelago. Crete, Volos, Leros. Probably strong seiche	II	0,90					13.
148.	1963 February 7	Gulf of Korinth. Possidonia, Patras.							13, 44.
149.	1965 July 6	Gulf of Korinth. Itea bay.	II+		6,9	VIII		38,4°N—22,3°E	13.
150.	1968 February 19	Island St. Eustratios, Lemnos, Lesvos, Euboea.	II+	1,20	6,7	IX	31	39,5°N—23,8°E	13.
151.*	1978 June 20	Salonica, Strymonic Gulf. Most probably a strong seiche.	II—	—	6,5	=	16	40,75°N—23,26°E	43, 45.
152.*	1979 May 15	South Coasts of Crete. Most probably a strong seiche.	II—	—	5,8	—	58	34,62°N—24,08°E	43, 45.

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REFERENCES

I. CLASSIC SOURCES

ARISTOTLE, (a) *Meteorologika*. (b) *De mundo*.

HERODOTOS, *Historiae*.

PAUSANIAS, *Graeciae descriptio*.

PLUTARCHES, *Vitae*.

SENECA, *Question. Natural*.

STRABO, *Geographica*.

THUCYDIDES, *Historiae*.

CEDRINOS, *Cedrinos Georgios compendium historiarum*.

MATALAS, *Chronographia Ioannis Malaiae*.

II. ARABIC, SOURCES

JIRGIS EL-MACIN IGN EL-'AMID, (a) in Th. Erpenius' s Latin translation: *Historia Saracena-Arbice olim extrata a Georgio Elmakina et Latina reddita opera ac studio*. Lugduni Batavorum, 1625. (b) in P. Vattier's translation: *L'histoire mahométane ou les quaranteneuf chalifes*, Paris 1657.

III. CONTEMPORARY SOURCES

AMBRASEYS N., 1960 - *The seismic sea-wave of July 1956 in the Greek Archipelago*. « Journ. Geoph. Research », 65, Nr. 4, p. 1257.

AMBRASEYS N., 1961 - *On the seismicity of Southwest Area*. « Revue pour l'Etude de Calamités », Nr. 37, Geneve.

AMBRASEYS N., 1962 - *Data for the investigation of the seismic seawaves in the Eastern Mediterranean*. « Bull. Seism. Soc. Am. », 52, No. 4, pp. 895-913, October.

- BARBIANI D., BARBIANI B., 1864 - *Mémoire sur les tremblements de terre dans l'île de Zante*. Mémoires de l'Académie de Dijon, Sci. Section, 11, Dijon.
- BERNEERTZ, Vid., 1616 - *Terrae motus, das ist gründliches Bericht von den Erdbiden, etc.* Nürnberg.
- BRASLAFSKI I., 1938 - *The 1546 earthquake and the arresting of the flow of the Jordan river*. «Zioni» 3, New Series, Jerusalem, p. 330, (in Hebrew).
- Düek J., 1904 - *Die Erdbeben von Konstantinopel*. «Die Erdbebenwarte», col. 3, Laibach.
- GALANOPOULOS A., 1938 - *La sismicité de l'Achaïe et des régions voisines de Missolonghi et de Naupacte*. «Gerl. Beitr. Geophys.», 53, Leipzig.
- GALANOPOULOS A., 1949 - *The Koroni, Messina, earthquake of October 6, 1947*. «Bull. Seism. Soc. Amer.», 39, Nr. 1.
- GALANOPOULOS A., 1952 - *Die Seismizität der Insel Leukas; Allgemeine historische Uebersicht*. «Gerl. Beitr. Geophys.», 62, Nr. 4, Leipzig.
- GALANOPOULOS A., 1953 - *Katalog der Erdbeben in Griechenland für die Zeit von 1879 bis 1892*. «Annales Géologiques» des Pays Helléniques, 5, Athens.
- GALANOPOULOS A., 1955 - *Earthquake geography of Greece*. «Annales Géologiques» des Pays Helléniques, 6, Athens (in Greek).
- GALANOPOULOS A., 1957 - *Zur Bestimmung des Alters der Santorin-Kaldera*. «Neues Jb. Geol. Paläontol. Mh.», 9, p. 419, Stuttgart.
- GALANOPOULOS A., 1957 - *The seismic sea-wave of 9th July 1956*. «Praktika Akademias Athenon», 32, p. 90, Athens (in Greek).
- GALANOPOULOS A., 1958 - *Zur Bestimmung des Alters der Santorin-Kaldera*. «Annales Géologiques» des Pays Helléniques, 9, p. 185, Athens.
- GALANOPOULOS A., 1960 - *A catalogue of shocks in Greece with $I > VI$ or $M > 5$ for the years 1801 to 1958*. Publications, Seismological Laboratory, University of Athens, Athens.
- GALANOPOULOS A., 1960 - *Tsunamis observed on the coasts of Greece from antiquity to present times*. «Annali di Geofisica», 13, 34, Rome.
- GALANOPOULOS A., 1960 - *On the origin of the deluge of Deukalion and the Myth of Atlantis*. «Archaeologiki Etairia Athenon», 3-EE, p. 226, Athens, (in Greek).
- GALANOPOULOS A., 1961 - *A catalogue of shock in Greece with $I > VII$ for the years prior to 1800*. Publications, Seismological Laboratory, University of Athens, Athens.

- CALANOPOYLOS A., BACON E., 1969 - *Atlantis, The truth behind the legend*. Thomas Nelson and Sons LTD London.
- HOFF, K. VON 1841, *Chronik der Erdbeben und Vulkan-Ausbrüche, mit vorausgehender Abhandlung über die Natur dieser Erscheinungen*. Gesch. Ueberlieferung nachgew. natürl. Veränder. Erdoberfläche, Parts 4 and 5, Gotha.
- LYCOSTHENES, C.W., 1557 - *Prodigiorum ac ostentorum chronicon*. Ed. Vid., Basel.
- MALLET R., 1850-1856 - *Report on the fact of earthquake phaenomena*. British Association for the Advancement of Science, Part 1, 1850 pp. 89, Part. 2, 1852 p. 212, Part 3, 1854 pp. 326, Part 4, 1859 pp. 136. Published by J. Taylor.
- MARINATOS S, 1934 - *Ammisos die Hafenstadt des Minos*. « Forsh. und Fortschr. », 10, Nr. 28, p. 342.
- MARINATOS S., 1939 - *The volcanic destruction of Minoan Crete*. « Antiquity », 13, Nr. 52, p. 246, Gloucester.
- MARINOS G., MELIDONIS N., 1971 - *On the strenght of seaquakes (Tsunamis) during the prehistoric eruptions of Santorin*. Institute of Geology and subsurface Research. From the acta of the Ist International Scientific Congress on the volcano of Thera, Athens 1969.
- OBERHUMMER E., 1903 - *Die Insel Cypem. Eine Landeskunde auf Historischer Grundlage*. Ed. Th. Ackermann, München.
- SIEBERG A., 1932 - *Untersuchungen über Erdbeben und Bruchschollenban im östlichen Mittelmeergebiet*. « Denkschriften der Medizinisch-Naturwissenschaftlichen Gesellschaft zu Jena », vol. 2, Jena.
- SIEBERG A., 1932 - *Die Erdbeben*. In B. Gutenberg's Handbuch der Geophysik, 4, Berlin, Ed. G. Borntraeger.
- TECHENER, vid., 1861 - *Le grand tremblement et épouvantable ruine qui est advenue en la cité de Jérusalem et par toute la province d'icelle etc...* « Bullétin du Bibliophile », Nr. January, Ed. at St. Sebastien, Paris.
- THOLOZAN J.D., 1879 - *Sur les tremblements de la terre qui ont eu lieu en l'Orient du VII^e au XVII^e siècle*. Comptes Rendus de l'Académie des Sciences, 83, p. 1063, Paris.
- TSITSELIS E., 1961 - *Cephallinian mélanges*. Ed. vid., 3, Athens (in Greek). Seismological Institute Bulletin, Athens.
- Annales Géologiques des Pays Hélieniques.
- Periodical, Publications, Press reports.