From Crimea to Syria.
Re-defining the alleged historical earthquake of 63 B.C.

Giusto Traina
SGA, Storia Geofisica Ambiente, Bologna, Italy

Abstract
Within the SGA research on the historical seismicity of the Crimean Peninsula (SGA Report, 1990), interest has been focused on the case of the earthquake of 63 B.C. According to regional seismic catalogues as well as to historic and archaeological literature, two late Roman sources, Dio Cassius and Paulus Orosius, allegedly give evidence of an earthquake which happened in the Crimea in this year; the event was linked to the death of Mithridates VI Eupator, eventually the king of Pontos. Local archaeologists claimed to have found evidence of this event in the excavations of Panticapaeum (present-day Keré). In fact, this is the result of a restricted analysis of the written sources. Thence stems a sort of «vulgate», currently accepted by scholarship, yet not really supported by the evidence. A re-examination of the whole question, including an analysis of all sources available on earthquakes in the Eastern Mediterranean, showed that in that period no seismic event took place in the Crimea. Dio’s and Orosius’ accounts are instead concerned with another earthquake, already known for Syria from other sources. This historical case gives a proper methodological example of the problems concerned with the analysis of the evidence in historical seismology, not only of Antiquity, but of almost any pre-modern period.

Key words historical seismology – Eastern Mediterranean – Crimea – Syria

1. A methodological example

A ten-year research on the seismicity of the Mediterranean area in Antiquity and the Early Middle Ages (main results in Guidoboni 1989; Guidoboni et al., 1994) shed light on the shortcomings of the traditional seismic catalogues concerning this sector. For Antiquity, we obviously rely on the written evidence of classical authors. Yet this evidence, which deserves special attention because of the peculiar codes of classical culture, has often been considered in a less than thorough, when not incorrect way.

However, these faults are justifiable. In fact, the most important catalogues were established, more or less, from 1850 to 1930. By this time, classical scholars did not show a real interest in earthquakes in Antiquity. The method of historical seismologists such as Mallet, Baratta or Sieberg is actually poor, for they collated the evidence, sometimes very doubtful and elusive, but they could not meet a critical verification in classical scholarship.

Otherwise, in the last two decades the collaboration between seismologists and classical scholars (and archaeologists) has notably increased. Nonetheless, many errors and idées reçues are still accepted by most scholars, because they were not deleted in the reference catalogues. Some of these mistakes depend on mere trivia, such as chronological blunders and «splittings»; they are usually originated by mistranslations, even misprints of «classic» catalogues, which were also uncritically recorded by the more recent ones. Such mistakes can be easily corrected, just by a direct
reading of the evidence, which can also reshuffle the previous superficial – and, for these periods, mostly fanciful – estimations of intensity.

However, it is more difficult to correct wrong data when they do not come from trivial mistakes, but from a vitiated methodology of research. One of the most serious methodological errors in historical seismology is a restricted – in both geographical and historical sense – perspective of the researcher. Such limitations are particularly dangerous in the regional catalogues, where historical data are concentrated on the «positive» evidence, with scarce consideration on the historical and literary context of the sources. Yet, the study of Antiquity makes it compulsory to adopt a broader perspective, in order to understand the very logic of the texts.

Moreover, methodological errors can be most dangerous when resulting from incorrect evaluations of classical historians and/or archaeologists, for the historical seismologists accept them as undisputed evidence; in fact, a limited regional perspective has often led professional scholars of Antiquity to repeat the same mistakes usually committed by scientifically-trained researchers. Since the traditional seismic catalogues have long been the most complete reference tools, not only for seismologists, but also for classical scholars. In effect, faute de mieux, ancient historians and archaeologists have uncritically relied on general and regional seismic catalogues as «scientific» evidence, actually operating an uncritical, naïve misunderstanding of historical data.

A fitting example of this methodological procedure is an earthquake recorded by the seismic catalogues of the former U.S.S.R. at Panticapaeum, now Kerč in the north-east of the Crimea (Ukraine), for the date of 63 B.C. (Smirnov, 1931; Popov, 1969; Ananyan, 1977; Kondorskaja and Šebalin, 1982). According to historical and seismological tradition, this earthquake struck the Crimea, affecting particularly the city of Panticapaeum, an important site in East Crimea, since the first half of Vth century B.C. the political centre of the Hellenic reign of Bosporus Cimmerius (Gajdukević, 1971; updated literature in Hind, 1993, pp. 102 f.; see also Gorbunova, 1972). This record, formerly considered by the ancient historians with no particular attention, has been more recently supported by the authority of the Russian archaeologist Blavatskij, the great expert of Bosporan antiquities, who led the archaeological exploration in Kerč (Blavatskij, 1964, 1977). However, in our opinion, the historical and archaeological evidence of this event is challenged by its very internal contradictions. Therefore, in the first catalogue of Mediterranean earthquakes we expressed some doubts (Guidoboni, 1989). The recent revision (Guidoboni et al., 1994) gave us the opportunity to rethink the whole question, so to change considerably the terms of the problem. This paper is a further development of the topic: we thought it useful to yield a thorough examination of the evidence, as this case is a good example of the methodological problems concerned with the modern trends of historical seismology.

2. The tradition is challenged

The tradition for this destructive earthquake in the Crimea relies on two late Roman sources, i.e. Dio Cassius (IIIrd century A.D.) and Paulus Orosius (Vth century A.D.). Yet the only alleged positive evidence is provided by Orosius, a Christian historian, who in about 420 A.D. wrote a moralistic, yet well informed History against the Pagans. In this work, Orosius took care to outline any record of bad omens, and especially calamities, known to have afflicted the Romans – or their pagan opposers – in the course of history. Earthquakes of course, played a considerable part.

The passage of Orosius we are concerned with records an earthquake in the cities controlled by Mithridates VI Eupator, king of Pontos (regnabat 120-63 B.C.) shortly before his death: «When Mithridates was in the Bosporus to celebrate the feast of Ceres, there came a sudden earthquake so violent that it is said to have had disastrous effects in town and country alike» (Orosius 6.5.1: In Bosphoro Mithridate Cerealia sacra celebrante terrae...
motus adeo gravis repente exortus est, ut magna clades ex eo urbium atque agrorum securt tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur tur t
of Pompey’s campaign is rapid and compendious; he evidently refers to the same earthquake as Dio Cassius, which surely must have occurred close to the year 63 B.C., for that was the year in which Mithridates died. Both writers situate the event within the climate of the rapid dissolution of his reign; but there is no reliable evidence to confirm that the earthquake occurred in the Bosporus (where Mithridates was indeed at the time of its occurrence); even the date is not so evident, for the sources are too abridged to fix a date by the year. Moreover, ancient historians used to consider earthquakes and other prodigies as omens of striking historical events (Guidoboni et al., 1994). The death of Mithridates was indeed an epoch-making event for the East, and it was fitting for annalistic historians such as Dio Cassius and Orosius (especially Orosius) to «shrink» the sequence of the events in order to find in it a supernatural logic. Consequently, the earthquake could have happened a while before the death of the king, even two or three years before.

As concerns its location, the evidence is too scanty to establish that the earthquake occurred in the Crimea. Paulus Orosius seems to have been relying on Livy, the great historian of Rome who died in about 17 A.D. (whose coverage of this period is unfortunately missing), and must have been summarizing a much more substantial narrative, for he simply reports, in succinct terms, that the earthquake occurred «while Mithridates was celebrating the feast of Ceres in the Bosporus» (for a criticism of late abridgements of Livy concerning this period, see McGing 1986, pp. 178 f.). Blavatskij’s argument is based principally on an archaeological examination of ruins, but it is quite impossible to accept that as convincing evidence of an earthquake, for the region concerned had long been subjected to almost continuous military destruction, partly caused by sieges and raids, and partly by landslips resulting from the exposure of city walls to intense pressure from soldiers and their siege machines (see literature in Gajdukević, 1971, passim).

The earthquake-argument seems, however, to be a favourite one for the archaeologists of Panticapaeum: according to them, another earthquake «in the early IIIrd century B.C.» has been located in the capital of the Bosporian Kingdom. This earthquake is supported only by archaeological evidence concerning a palace built in the IV century B.C. on the Acropolis of the city, in the central section of the west plateau of Mt. Mithridates at Kerč (Hind, 1993, p. 102). That is, of course, a possible hypothesis; yet we doubt it can be supported without proper enquiries based on the methodology of seismic archaeology (Guidoboni et al., 1994).

This «traditional» trend, followed by many archaeologists, must be corrected. Archaeological proofs of collapse and ruin do not imply evidence for an earthquake. To recognize a seismic event only by hypothesis, without the support of the written sources and/or without a proper analysis of the archaeological data, is a misuse of the evidence. But no less dangerous is a compulsory connection of archaeological and historical data. This forcing of the evidence is clear for the site of Panticapaeum, since there is no real proof of destruction caused by an earthquake. Blavatskij took as a final proof of the earthquake a series of works of restoration in the city; yet this restoration work dates to at least twenty-five years after the death of Mithridates (Arakeljan, 1983). Since we have historical evidence of continuity for the urban life of the city after 63 B.C., the collapse of the walls and buildings of Panticapaeum is obviously later than this date.

3. Historical facts and ideological historiography-processing

The date of 63 B.C. is then unsure. We have already seen that Reinach, by considering the context of Dio’s passage (that he apparently considered more important than Orosius’ one) (Reinach, 1895, p. 401), was inclined to date the event in 64 B.C. This was the same conclusion of Drumann (1908, p. 467), who implies that an earthquake damaged the king’s towns and villages, and that this was to be considered as an omen of the will of the Gods, yet cautiously does not say where the earthquake was supposed to have happened. McGing, the au-
tor of the most recent monograph on Mithridates (McGing, 1986), just dodges the problem.

In fact, looking at the evidence for a chronology of the Third Mithridatic War, we can see that a solid reconstruction of the events cannot be fully established. For the written evidence is fragmentary and, in any case, less than exempt of propaganda. Livy's account no longer existing, we must rely on Plutarch and Appian as the main sources of the war (fig. 2). These authors used either pro-Roman or pro-Mithridatic sources, and this increased the confusion (Rizzo, 1963). «All our sources ultimately go back to contemporary accounts of one sort of another, none of which survives» (McGing, 1986, pp. 176 ff.).

Yet, according to our data, we can establish some firm chronological points: by 66 B.C. Mithridates was expelled from Pontos, yet Pontos was reorganized as a Roman province only in 64. By 63 B.C., Mithridates was still eager to raise fresh troops, and his death was the result of a complot organised by his very family. But the sources are too scanty to explain the geographic and social background of historical events. Asia Minor was actually a mosaic of peoples and cities, where the balance of power was always oscillating (Sherwin-White, 1984, pp. 159 ff.). The long-term clash between Mithridates and Rome, could reach an end only with the death of Mithridates. Then, it is incorrect to think that the earthquake recorded by Dio and Orosius could have taken place only in the Crimea, for at that time it was the only region held by the king.

Fig. 2. Graph of the relationship among the written sources (source: SGA Report, 1990).
Actually, the following historical scenario could be sketched out: after 66 and before 64 B.C., that is to say after Mithridates' flight from Pontus and before the conference of Amisos, when Pompey finally settled the pacification of Asia Minor. Mithridates could at least hope that the Greek cities of Pontus — which effectively enjoyed as much autonomy under Mithridates as under the Romans — would continue to be his principal economic asset, and he was confident of returning to Pontus, where he had left many of his supporters, at a more suitable time.

Moreover, the rest of the written evidence concerning this context raises considerable doubts. Unfortunately, most historical works on the Mithridatic war have perished (Lasserre, 1975, for Strabo's sources); yet the surviving texts also contribute to cast a shadow on the Crimean earthquake. The Greek II century historian Appian of Alexandria (whose book on the Mithridatic war is not only reliable, but is also the lengthiest source available), in recording a revolt organised by Mithridates' own son Pharnaces, (Mithr. 108) describes the cities of the Bosporus and the Crimea which had abandoned Mithridates as being in an excellent state of preparation for war. These could not, then, have been the cities struck by the earthquake. Mithridates himself easily resisted the revolt at Panticapaeum, and the city was only taken as a result of a conspiracy and trickery (Appian, Mithr. 110). Furthermore, Appian makes no mention of any earthquake in the Crimea.

This tradition in fact confines itself to interpreting the earthquake as one of the causes of Mithridates' downfall. It is very likely that Livy himself (and he was Paulus Orosius' source, in my opinion) also made use of contemporary writers who were partisans of Mithridates, such as Timagenes of Alexandria, taking due note of the information they provided, and selecting as he thought fit. Both Dio Cassius and Paulus Orosius depend, at least in part, on a tradition hostile to Pompey, which may have come, through Livy, from an author such as Timagenes of Alexandria.

While Livy (Orosius' source) was pro-Pompey, he was also a serious historian who knew his sources, and as such he could not ignore an event of importance like this earthquake. But he placed his reconstruction of events within a context of his own design, where Mithridates appears as a man whose course is run, who is being hunted down by the Romans and his other enemies, and who is finally forced to take refuge in the stronghold of Panticapaeum, since Pontus was in the hands of the Romans. This was a schematic but effective historical interpretation, which at least in its general lines agreed with the account of Appian, but (in accordance with Livy's interest in prodigies) it included the detail of the earthquake.

It is certainly no coincidence that the Paulus Orosius tradition associated the earthquake with the time when Mithridates was celebrating the rites of «Ceres», the Roman equivalent of Demeter, the goddess of fertility and crops — a sign that the gods were depriving Mithridates of their support by removing his sources of supply. The Livy tradition had no interest at all in drawing attention to this fact, for it did not wish to diminish the extent of Pompey's achievement, and what happened was certainly to his advantage.

A point in Dio's passage deserves attention. According to this historian, the earthquake affected «their» cities, i.e. the cities of «those of Mithridates». Dio says that the seismic event was a cause of the departure of the king's allies. This implies that the earthquake did not affect exclusively the territories controlled by the kingdom of Pontos, but concerned the whole of Mithridates' allies. Moreover, if Dio does not locate the area of the earthquake, Orosius is only apparently clear, for he just says that the earthquake happened when Mithridates was in the Bosporos, not that it happened in the Bosporos.

In fact, the earthquake would therefore have helped to intensify the crisis amongst the enemies of Rome, and finally destroy the alliance between Mithridates and Tigranes. It is also reasonable to suggest that the earthquake in Syria not only created foreign policy problems for Mithridates, but also discouraged the cities from further resisting Rome. On the basis of slender historiographical evidence, historians
have claimed that the closing years of the reign of Mithridates were completely confined to the Bosporus, where he had been obliged to take refuge because of Pompey’s military campaigns between 67/66 and 65/64 B.C. Hence the view that the references by Dio Cassius and Paulus Orosius to an earthquake which had struck «the cities of Mithridates» could no longer be taken as referring to Pontos.

This argument, however, is not a decisive one. As Appian suggests (Mithr. 107-108), Mithridates had in fact good reasons for hoping that he might make a comeback up to the last moment. There is no doubt that he was obliged to retreat into the Crimea for strategic reasons, and he must have done so in about 66 B.C. He must have felt safe in the territory of his former kingdom, especially at a time when circumstances had obliged Pompey to move part of his army, in 66 B.C., for the conquest of Syria and the neutralisation of king Tigranes II of Armenia.

4. The Syrian connection: the evidence of Trogus and Malalas

Now, the most important ally of Mithridates was actually Tigranes of Armenia. His reign, in this period, extended as far as Palestine (Chaumont, 1982, pp. 97-103; see fig. 3). And there is a destructive historical earthquake, dated in this period, that took place within his area of influence, i.e. in Syria. The source is Justinus, a IIIrd century Latin writer who abridged the 1st century History of Pompeius Trogus: «Although Syria was safe from enemy attack, it was devastated by an earthquake, which killed one hundred and seventy thousand people and destroyed many cities. The haruspices declared that this prodigy foretold a change in things» (Pomp. Trog. apud Iust. Epit. 40.2.1: Sed sicut ab hostibus tuta Syria fuit, ita terrae motu vastata est, quo centum septuaginta milia hominum et multae urbes perierunt. Quod prodigium mutationem rerum portendere aruspices responderunt).

This very succinct passage, however, is not without problems. It refers to the last period of the rule of Tigranes in Syria. Tigranes was defeated by Lucullus in 69 B.C., and had to give up all regions previously under his control, except Armenia. All this suggests dating the earthquake to about 65 B.C., because Trogus twice specifies that Tigranes’ rule lasted for eighteen years, whereas the Appian tradition (Syr. 69) suggests fourteen years, hence making the end of Tigranes’ rule over Syria coincide with his defeat at the hands of Lucullus (cf. Rizzo, 1963, pp. 62 ff.).

Trogus/Justinus’ account seems to provide a different chronology from the tradition (almost certainly Livian) in Dio Cassius and Paulus Orosius, for, they mention the earthquake in Syria as occurring after Pompey’s arrival there. Pompeius Trogus is a writer who pays attention to the importance of earthquakes in history, and he tends to associate natural phenomena with historical events (Rizzo, 1963, p. 58; Alonso-Núñez, 1992, p. 88ff.; 101ff.), and he would not have hesitated to put forward the date of the earthquake in order to increase the force of his argument.

Yet Trogus’ witness cannot be easily dismissed; his stance is quite different from that of the Livy tradition (Rizzo, 1963, p. 70), which almost certainly underlies the work of Dio Cassius and Paulus Orosius. Livy probably got his information about the earthquake from official Roman sources (Rizzo, 1963, p. 74); these documents included prodigy lists, and Livy must have thought it quite natural to place the earthquake close to the time of Mithridates’ death.

Rizzo (1963, p. 77) thought that knowledge of the earthquake had passed through the filter of Strabo’s historical work (now lost). There is no way of knowing whether that it so, however, and in any case one may share Rizzo’s own view that mentioning the earthquake is a kind of two-edged historiographical weapon, intended to underline the advantages to Syria of Tigranes’ rule, which Trogus clearly regarded with favour (Rizzo, 1963, p. 63). The effect of the earthquake was thus to change the political picture.

What Pompeius Trogus has to say is of importance, anyway, because he had oral sources available for Pompey’s campaign in Syria (an uncle of his commanded a troop of cavalry in
support of Pompey) (Rizzo, 1963, p. 61; Alonso-Nuñez, 1992, p. 16). On the other hand, it seems that Appian prefers to deny that Tigranes interfered in the affairs of Syria at all. As Rizzo has pointed out (1963, pp. 64ff.), Appian is nearer the mark in dating the end of Tigranes’ dominion over Syria to 69 B.C.; but that does not necessarily mean that the date 65 which we can deduce from Trogus/Justinus is the result of a mistake on their part, because the situation in Syria continued to be very complicated until Pompey arrived. He may in fact have taken advantage of the earthquake – which would explain the passage in Appian (Syr. 60) where we are told that Pompey took control of Syria «without fighting».

Trogus, on the other hand, whether he was using Strabo or oral sources, disposed of more reliable information (fig. 2); and it is not unlikely that Livy (or Dio Cassius and Paulus Orosius after him) somehow inserted the report of the earthquake (for which, moreover, he gives no date or accurate location) into his account of the downfall of Mithridates. Without more accurate information, we think it inappropriate to integrate the two traditions, especially since they not only differ on the earthquake, but also disagree on nearly all the historical background (see Rizzo, 1963, for a general consideration of this), thereby revealing the attempts by the various historiographical trends to make the available data fit their own ideological requirements.

Further evidence of the earthquake is given by a remark of Ioannes Malalas, a VIth century
Byzantine chronicler who used first-rate sources, and who no doubt also disposed of a local chronicle of Antioch (Jeffreys, 1990; Jeffreys et al., 1986). According to Malalas, after his conquest of Syria Pompey was generous to Antioch, «and rebuilt the bouluterion, for it had fallen down» (Mal. 211.16-9: καὶ πτώσες τὸ βουλευτήριον. πειάντα ἦν γαῖ). The context justifies dating the rebuilding work of this public monument to immediately after Pompey’s conquest of 65/4 B.C. Downey (1938a, p. 107 ff., with bibliography; 1961, p. 140 ff.) has attempted to date the earthquake more accurately. On the basis of Mal. 225, he has pointed out that the Romans carried out public works at Antioch, under the supervision of Q. Marcius Rex (Downey, 1937); and since Marcius was proconsul in Cilicia in 67 B.C., he suggests dating the earthquake to c. 67-66 B.C..

This friendly act by the Romans was undoubtedly a diplomatic move in preparation for the subsequent conquest, and Downey thinks that it was a question of rebuilding after the Trogus earthquake, which he dates to 69 B.C., following the chronology in Appian, as historians usually do. This is reasonable, but it clashes with Trogus’ chronology, which Downey does not take into consideration. The fact is – as Downey himself admits (1938b, p. 145) – that Malalas’ account makes the earthquake datable to between 69 and 64, and Q. Marcius Rex (who reappeared in Italy in 63 B.C. to ask for a triumph) may have stayed in the East until at least 65 [evidence in Münzer (1930, cols. 1584-5)]. So Marcius’ mission may have taken place only shortly before Pompey’s campaign (Pompey was his direct superior), much earlier than 65 B.C. Whatever the case may be, it is interesting to note that the Romans hastened to rebuild the most important buildings for public spectacles, and only later went on to rebuild that for political assemblies.

5. Conclusions

This destructive earthquake is then likely to have occurred in Syria by 65 B.C.; with Mithridates in the Cimmerian Bosporus, it will have eliminated any possibility of his going back, deprived him of any chance of breaking the Roman naval blockade, and fomented rebellion even in the Greek cities of the Bosporus and the Crimea which, as we have seen, were not affected by the earthquake (Guidoboni et al., 1994).

There was thus no deliberate falsification, but there is very little that we can add to the available information. However, the comparison with Appian, together with archaeological evidence, confirms that there is no reason to believe that the earthquake occurred in the Cimmerian Bosporus. We therefore reject the Crimean hypothesis, as the result of a «provincial» interpretation of the evidence. This example confirms the need to reject a strict regional perspective in historical seismology, at least as far as A.D. 1500.

Acknowledgements

I wish to thank E. Guidoboni for making available the results of the SGA Report (1990) concerning the revision of the Crimea catalogues during the studies carried out with ISMES for the seismic qualification of the Cap Zluek nuclear power plant, I also thank A. Giardina for revising the text.

REFERENCES

From Crimea to Syria. Re-defining the alleged historical earthquake of 63 B.C.

MCGING, B. (1986): The Foreign Policy of Mithridates VI Eupator King of Pontus, Leiden (Mnemosyne, suppl. 89).
MUNZER, TH. (1930): s. v. Marcii 92, in Realencyclopadie der classischen Altertumswissenschaft, Stuttgart, 14/2, cols. 1584-5.
SGA REPORT (1990): Historical seismicity of the Crimean peninsula, coordinated by E. GUIDOBONI, in Evaluation of Operating and Design Earthquake for the Crimea Nuclear Power Plants Siting, ISMES, ASP 44-33, review from IAEA.

489