

The EMME catalogue of Eastern Turkey complementing the SHEEC catalogue (8 November 2011)

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Introduction

Following the requests of SHARE (summer 2011), a catalogue covering the territory of Turkey east of 32°E has been compiled from the EMME in progress catalogue, to complement the SHEEC catalogue, v.2, released on August 2, 2011.

This catalogue covers the Area Sources (AS) covering the Turkish territory from 32°E to 45°E and about 35° N to the South, and includes the Cyprus area (Fig. 1). The time span is 1000-2006; the total number of entries is 6166; the format is the one by SHEEC.

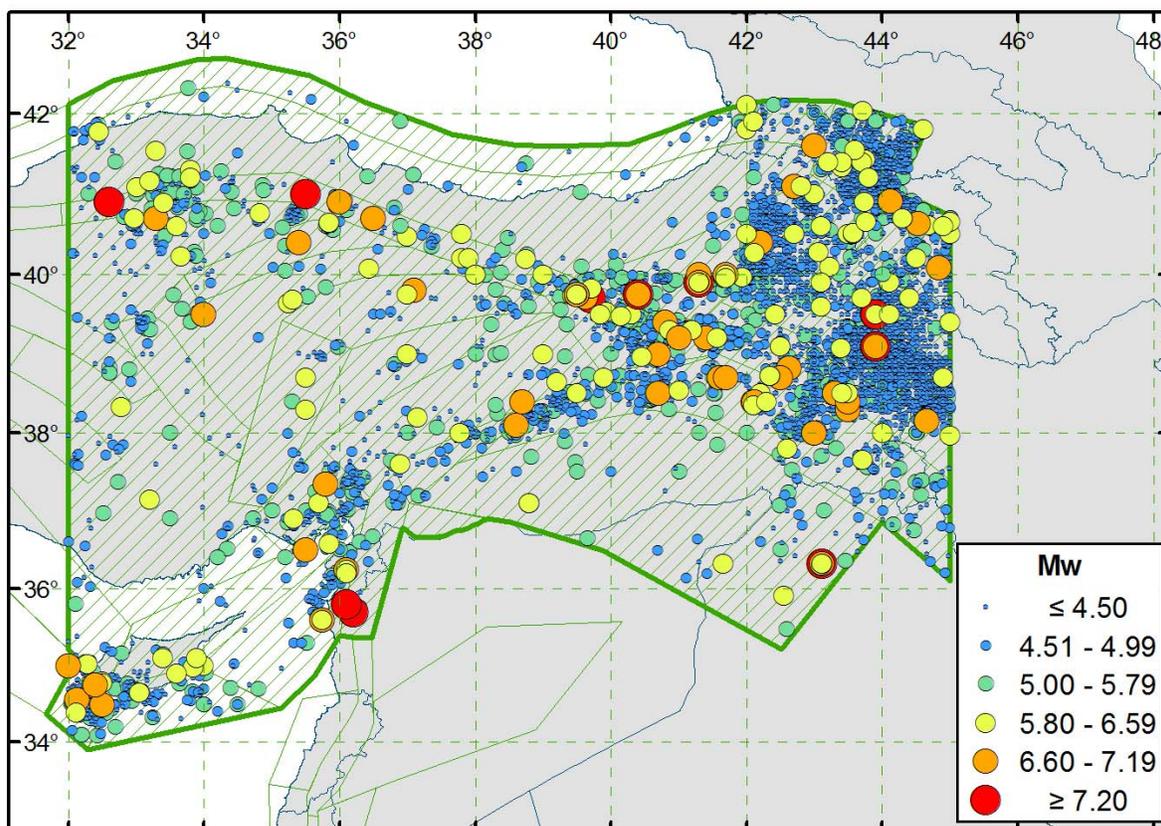


Fig. 1. Map of the area covered by the EMME catalogue of eastern Turkey.

1. Time-window before 1900

This time-window contains 240 events. The time constraints did not allow for a careful check of the reliability of the background information, with the exception of the identification and subsequent removal of some duplicated entries from the initial EMME compilation. For the same reason, out of the 240 events, only 164 have been parameterised; the others 76 have been considered not sufficiently reliable and, therefore, they have been included without parameters.

For the 107 events taken from the Turkish catalogue by Soysal et al. (1981), M_s has been determined from with the regression by KOERI, also used by SHEEC:

$$M_s = 1.39 + 0.60 * I_o$$

Then, the M_s values have been then converted to M_w with the EMME relations:

$$M_w = 2.1117 + 0.6633 * M_s \quad (2.8 \leq M_s \leq 6.1)$$

$$M_w = 0.4491 + 0.9307 * M_s \quad (6.2 \leq M_s \leq 8.2)$$

2. Time-window after 1900

This time-window contains 5926 events. Some 119 events have been identified as duplication in the initial EMME compilation and therefore removed.