

A New Edition of the Historical Events Part of the “Japanese Damaging Earthquakes List” in “Chronological Scientific Tables”

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The historical events part of the “Japanese Damaging Earthquakes List” (hereafter, “Eq. List”) in “Chronological Scientific Tables” (hereafter, “C. S. Tables”) is based on the “Nihon Higai Jishin Soran” (hereafter, “Soran”; Usami, 1975, 1987, 1995, 2003; Usami et al., 2013). Because of the multiple revision of “Soran” and accumulation of the new knowledge about the historical earthquakes, we revised historical events part of the “Eq. List” in the 2018 edition of the “C. S. Tables”.

All the historical events in the latest “Soran” have not been listed in the “Eq. List” since editorial researchers followed the old policy of event selection. Hence, we add remaining historical events (including newly found events) in the “Soran” to the new edition of the “Eq. List.” Historical events assigned serial numbers in the “Soran” are candidates for the addition (87 events). The Sep. 3rd, 1495 Kanto earthquake, which does not have a serial number, is added to the list, because this event is important to understand the recurrence of great interplate earthquakes along the Sagami trough. We postpone adding 43 events with serial numbers to the “Eq. List”, because they require reliability examination yet. Therefore, 44 reliable historical earthquakes are added to the “Eq. List.”

In addition to the 44 events, we also add four events to the list: Kyoto earthquake on Apr. 11th, 1027, Ise earthquake on Oct. 3rd, 1429, Kyotoku-Mutsu earthquake on Dec. 13th, 1454, and Suruga/Kai earthquake on Oct. 29th, 1707 (the largest aftershock of the Hoei earthquake on Oct. 28th, 1707), though they are not in the “Soran.” We consider recent studies in historical seismology, that are new interpretations of the Hizen earthquake on Nov. 14th, 1831 (Kano, 2017), and the Meio-Hyuga-nada earthquake on Jun. 30th, 1498 (Haratda et al., 2017).

Dates of the historical events in the “Eq. List” are written in the western calendar and Japanese calendar simultaneously. Since the dates of the events before 1582 are written in the Gregorian calendar in the “Eq. List” although Julian calendar was used in the world in the same period, dates in the list have to be replaced to those in the Julian calendar in the future. Event dates in the Japanese calendar are written in the old rules about the period and name of era, so that they must be rewritten in the present rules. We will revise the event dates in the “Eq. List” carefully, because changes of the dates and eras may bring confusions and misunderstandings to users.

Keywords: “Chronological Scientific Tables”, “Japanese Damaging Earthquakes List”, “Nihon Higai Jishin Soran”, Historical earthquakes, Western calendar and Japanese calendar