Heights of the Tsunamis of the 1946 Showa-Nankai and the 1960 Chilean Earthquakes on the West Coast of Wakayama Pref.

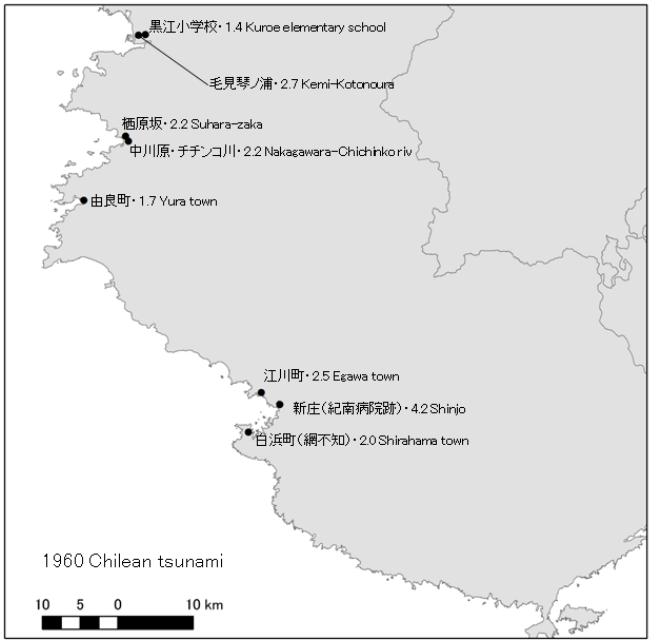
*Takashi Yanuma[1], Yoshinobu Tsuji[2], Hiroshi Kadota[1], Masami Sato[3], Yayoi Haga[3], Fumihiko Imamura[3]

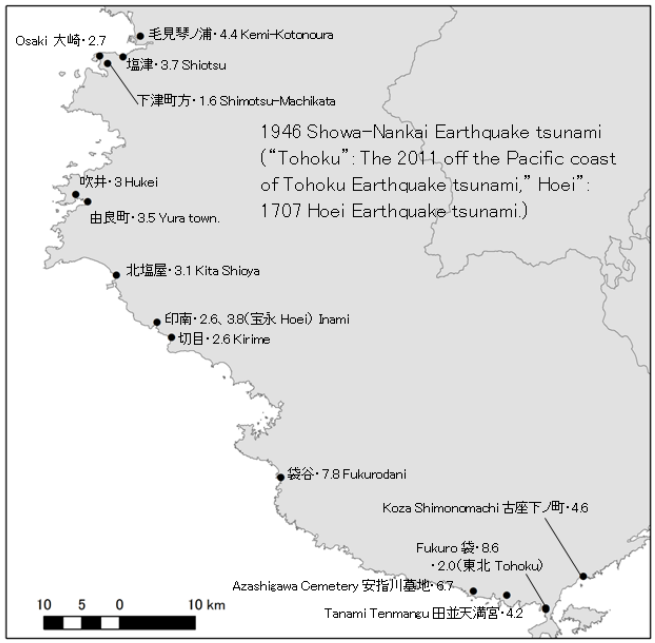
1.PASCO Corporation, 2.Fukada Geolog. Inst., 3.IRIDeS, Tohoku Univ.

The 1960 Chilean tsunami was observed along the wide coastal area of Pacific Ocean from Hokkaido through Okinawa. The tsunami was also observed at the coast of Wakayama prefecture. The dense explorations were done east of Susami town, but few explorations were done at the west coast of Wakayama prefecture (from Wakayama city through Kushimoto town). About 1960 Chilean tsunami, we can find the records in the newspapers at the day of the arrival and municipal bulletins. We surveyed these records for getting the precise records of the 1960 Chilean tsunami.
In this exploration, we also surveyed the records of 1946 Showa-Nankai earthquake tsunami that caused big damage to Wakayama prefecture. Various investigations were undertaken. In “Showa Kii Koro-no ki” (1948), a report on this earthquake, the situations of the inundation of the tsunami on the coastal villages and the reports from municipal offices and schools are described, but surveys were not taken. So, we found out the present position of inundation point from the figures in the report and measured the precise position and height.
During the exploration, we did interviews about these tsunamis from the habitants who lived along the coast. We also interviewed about 2011 off the Pacific coast of Tohoku Earthquake, and we did surveys if we could get the exact point of inundation.
The exploration was carried out from 14th of January of 2015 to 16th of January. About 1960 Chilean tsunami, we could obtain the following surveying results of tsunami height; Kemi-Kotonoura, wakayama city, 2.7m, Kuroe elementary school, Kainan city, 1.4m, Suharazaka, Yuasa city, 2.2m, Nakagawara Chichinko river, 2.2m, Yura town, Ajiro, 1.7m, Egawa town, Tanabe city, 2.5m, remained state of Kinan hospital, 4.2m, Tsuna-shirau, Sirahama town, 2.0m. As 1946 Showa-Nankai earthquake tsunami, we could obtain 1.6 –8.6m of tsunami height. Especially, by interviewing the local information, we could obtain the tsunami height of 7.8m at Fukurodani of Shirahama town and 6.7m at Azashigawa cemetery. In addition to the record of 1946 Showa-Nankai earthquake tsunami, we could obtain the record of 1707 Hoei earthquake tsunami at the Injoji temple of Inami, and the tsunami height of 3.8m was measured.
About the tsunami of the 2011 off the Pacific coast of Tohoku Earthquake, we could hear from the habitants that they felt nothing or only the quaking of sea surface. But the inundation was observed at Fukuro, kushimoto town, and we could get the tsunami height of 2.0m.
Part of this study was carried out in the commissioned project of Nuclear Regulation Authority.

Keywords: the 1960 Chilean tsunami, the 1946 Showa-Nankai earthquake tsunami, Wakayama Prefecture, Kii Peninsula

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