

## Great earthquakes that hit the people of Japanese Islands

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Japanese Archipelago were formed by crustal movement,which accompanied frequent big earthquakes. Our ancestors have survived repeated disasters and overcome loss of their houses and lives up to the present.

In our country,a lot of descriptions about the damage caused by big historical earthquakes are recorded in old manuscripts,the oldest one was written one thousand and several hundred years ago. On the other hand,excavation surveys of archaeological sites have been carried out all over the country,and they revealed numerous traces of past earthquakes which enable us to study paleo-earthquake.

Kanto,Tokai and Nankai Earthquakes are caused by subduction of the northern border of Philippine Sea Plate,and they often occur relative to one another. For example,in 1703 during the shogunate of Tokugawa Tsunayoshi,Kanto Earthquake occurred,followed by contemporaneous Tokai,Tonankai and Nankai Earthquakes in 1707.

Hyohgoken-nanbu Earthquake in 1995,which is still a fresh memory,occurred by the movement of active fault called the Nojima Fault,It extends along the northwestern shore of Awaji Island. In Japan,there are many other active faults that might cause extensive damage.

During the times of well-known Toyotomi Hideyoshi,two of the biggest earthquakes caused by active faults stroke the central Japan. The first one was Tensho Earthquake in 1586 that caused severe damage in Chubu and eastern Kinki Provinces,Kaerigumo Castle in Shirakawa-Gun,Hida,suffered devastating damage from a landslide caused by earthquake. It was entirely buried under mud and rocks. Subsequently,so-called "Fushimi Earthquake" occurred in the northern border of Osaka Plain,destroying the Fushimi Castle which was built by Hideyoshi and the town of Kyoto,Osaka and Kobe.

The trenching surveys of active faults have revealed that the former earthquake was caused by Adera,Miboro and Yoro-Kuwana-Yokkaichi active fault system,and the latter was Arima-Takatuki active fault system and others. Traces of these earthquakes were found out in many archaeological sites. For example,remarkable traces of sand eruption at the Kizugawa-kasho site in Kyoto Pref.,lateral flow at the Sumiyoshi-Miyamachi site in Kobe,traces of vivid landslide on the burial mound of Imashirozuka-kofun in Osaka Pref.

Today,I will also introduce you other examples of big earthquakes,as well as interesting historical episodes related to them.