

The Sumatra super great earthquake and the seismic gap

Yuzo Ishikawa[1]

[1] Matsushiro, JMA

The seismicity was analyzed using PDE catalogue (USGS) from 1964 and Utsu catalogue from 1800. The low seismicity region was found in the source region. It was difficult to find before the occurrence of the mainshock, because the high seismicity in Andaman sea masked it. This low seismicity region is smaller than the source region of the Sumatra super great earthquake, but the second kind of the seismic gap was formed for about 14 years before the occurrence. Other seismic gaps also checked.

The seismic activity along the plate boundary between India-Australian and Eurasian plates was analyzed. The active and quiet period were repeated and the most recent active period started in 1995.

The super great earthquakes M bigger and equal 9.0 in 20 century occurred in only 13 years, so such huge events may have the tendency to occur concentrated in time.

