

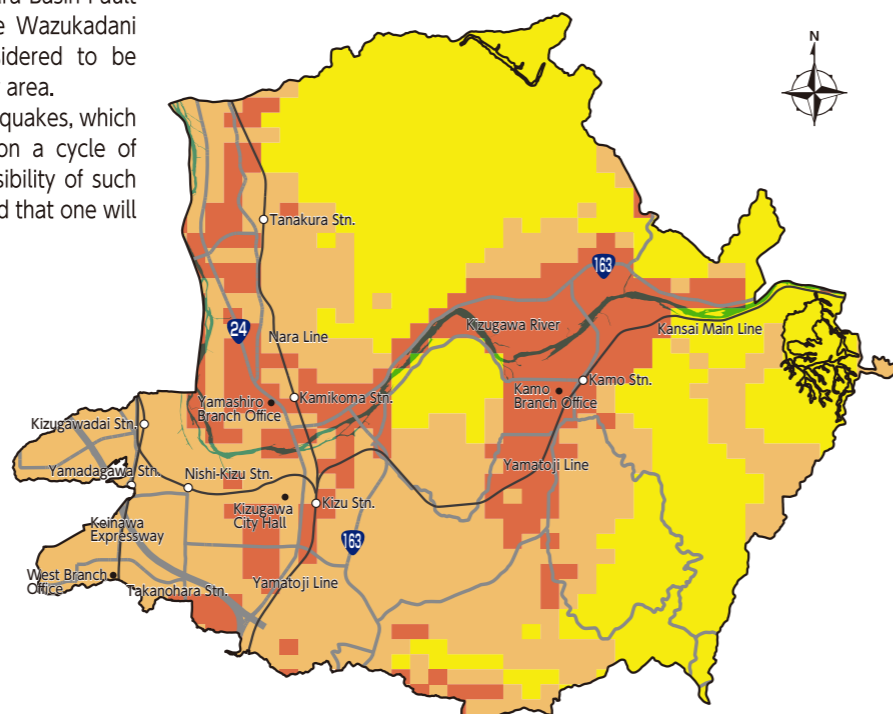
Susceptibility to Tremors and Liquefaction Danger Levels

Map showing susceptibility to tremors

In Kyoto Prefecture, earthquake damage estimation surveys are conducted for inland earthquakes and Nankai Trough earthquakes caused by active faults (22 faults) that may impact the prefecture. These surveys reveal predicted earthquakes of intensity 6-lower to 7 in active faults in the Eastern Edge of Nara Basin Fault Zone, the Kizugawa Fault Zone, and the Wazukadani Fault Zone. These fault zones are considered to be particularly dangerous to the Kizugawa City area. In addition, large-scale Nankai Trough earthquakes, which are subduction-zone earthquakes, occur on a cycle of approximately 100 to 150 years. The possibility of such events is particularly high, and it is predicted that one will occur in the near future.

Seismic Intensity and Tremor Conditions

Seismic intensity 6-lower	Difficulty in standing. Roof tiles may fall from wooden buildings with low earthquake resistance, and the structures themselves may tilt.
Seismic intensity 6-upper	Movement only possible on hands and knees. Many wooden buildings with low earthquake resistance may tilt or collapse.
Seismic intensity 7	Many reinforced concrete buildings with low earthquake resistance may collapse. In rare cases, wooden buildings with high earthquake resistance may tilt.

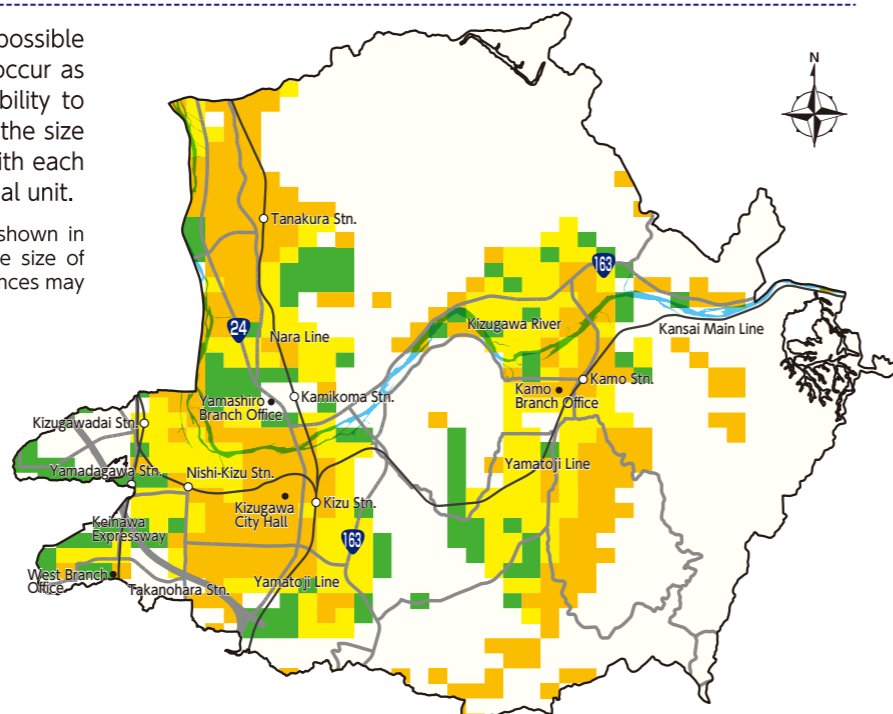


Note: This map presents seismic intensities for an earthquake caused by the active fault, which is expected to cause the great damage to the city area.

Liquefaction map

The liquefaction map shows the possible scope of liquefaction should tremors occur as shown on the Map Showing Susceptibility to Tremors. The results are derived from the size of the tremors and the local terrain, with each square of the grid being a single regional unit.

Note: The "possible scope of liquefaction" shown in this map is a simple estimate based on the size of tremors and local terrain, and actual occurrences may differ depending on conditions.



Liquefaction Danger Levels
(For an earthquake caused by the active fault)

- Liquefaction Danger Level : Low
- Liquefaction Danger Level : Medium
- Liquefaction Danger Level : High

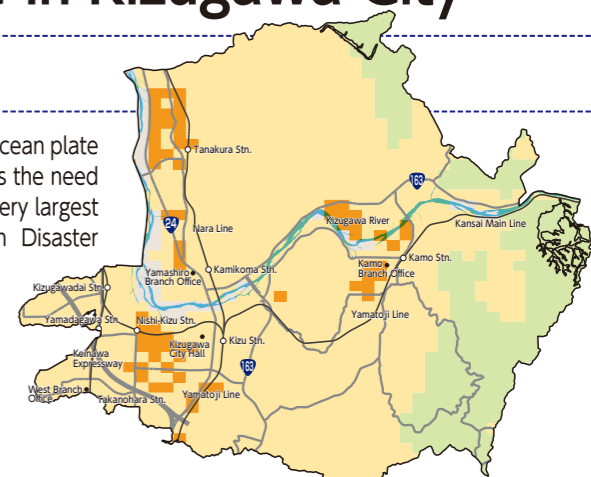
Note: This map illustrates the risk of liquefaction from earthquakes triggered by active faults, which are expected to cause significant damage in the city.

Nankai Trough Earthquake—Estimated Earthquake Damage in Kizugawa City

Nankai Trough earthquake

The Nankai Trough is formed by the collision of two plates, where the ocean plate subducted. The result is an extremely large and active seismic zone. As the need has increased to take into account all possibilities and anticipate the very largest earthquakes and tsunamis, the Committee for Policy Planning on Disaster Management (Central Disaster Management Council) announced an earthquake forecast for a giant Nankai Trough earthquake.

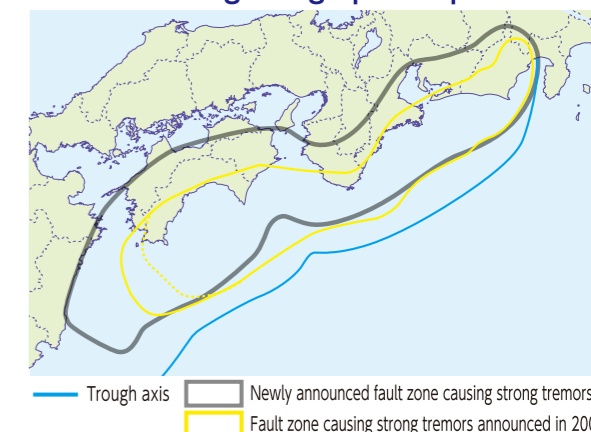
Note: For a detailed version of the forecast chart, refer to the Kyoto Prefectural Multi-Hazard Information Providing System at URL: <http://multi-hazard-map.pref.kyoto.jp/top/top.asp>.



Expected Seismic Intensity

- 5-upper
- 6-lower
- 6-upper
- Not included in calculation

Nankai Trough Megaquake Epicenter



Trough axis

- Newly announced fault zone causing strong tremors
- Fault zone causing strong tremors announced in 2003

If emergency information on a Nankai Trough earthquake (under investigation) is announced

Announcement time	Keywords	Conditions for adding each keyword
5 to 30 minutes after the occurrence of an earthquake	Under investigation	An earthquake of magnitude 6.8 or greater has occurred in the monitored area
		Strain meters have observed changes that are deemed necessary for considering a relationship with a Nankai Trough earthquake
Minimum of 2 hours after the occurrence of the earthquake, etc.	Massive Earthquake Alert	When assessed that an earthquake of magnitude 8.0 or greater has occurred at the plate boundary within the expected epicenter
	Massive Earthquake Advisory	When assessed that an earthquake of magnitude 7.0 or greater has occurred in the monitored area
	Investigation completed	When assessed that an unusual slow slide has occurred at the plate boundary within the expected epicenter
		When assessed that the phenomenon does not fall into any of the above categories

When a massive earthquake alert or advisory is issued, we will provide information on securing furniture, confirming evacuation locations and routes, coordinating safety measures with family members, and checking household stockpiles to encourage people to reassess your earthquake preparedness. Depending on the keywords in the Nankai Trough Earthquake Extraordinary Information (such as "massive earthquake alert," "massive earthquake advisory," or "investigation completed"), we will also share updates on the response determined by a coordination meeting of the Disaster Alert Headquarters staff or the meeting of the Disaster Alert Headquarters, as needed.

Damage forecast for earthquakes striking Kizugawa City

Of the possible earthquakes that could strike the city, the following six are believed to be especially dangerous and damaging.

Name of Fault/ Earthquake	Eastern Edge of Nara Basin Fault Zone	Kizugawa Fault Zone	Ikoma Fault Zone	Wazukadani Fault Zone	Tonankai and Nankai earthquakes	Nankai Trough earthquake
Fault Length (km)	35	31	38	14	—	—
Magnitude	7.5	7.3	7.5	6.7	8.5	—
Maximum Seismic Intensity	7	7	7	6-upper	6-lower	6-upper
Buildings Completely Destroyed	12,040	8,850	6,410	3,420	710	720
Buildings Partially Destroyed	8,310	8,190	7,870	5,600	2,760	—
Buildings Burned Down	3,120	2,200	1,400	780	170	20
Deaths	470	330	270	110	10	30
Persons Requiring Assistance	2,240	1,580	1,240	520	110	110
Number of Evacuees (short term)	29,720	24,550	20,620	11,370	4,790	—

Note 1: Information derived from the Kyoto Prefecture Earthquake Damage Forecast Survey Report, 2008). Deaths, residences destroyed, and evacuees are estimates for persons and buildings within the city. (Kyoto Prefecture Damage Forecast, 2008)

Note 2: Magnitude is a measure of the energy released by an earthquake. With each increase of 1.0 in M, the energy increases 32 times. However, maximum seismic intensity differs depending on distance from source and ground conditions.

Note 3: The latest damage estimates are being compiled by Kyoto Prefecture. Findings will be published in our newsletter, website, etc., as soon as being announced (around June 2025).