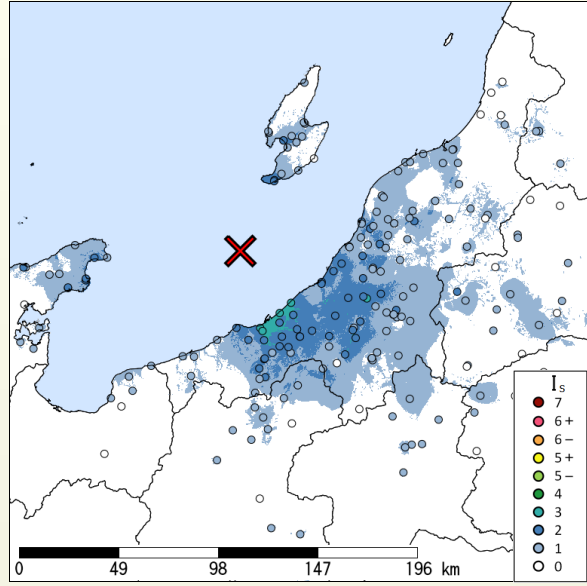


2026-06-01 05:54 (UTC+9), OFF JOCHUETSU, NIIGATA, 10km Depth, M 4.6 by JMA

I_s Distribution Maximum Observed I_s:3 Estimated I_s for Major Cities

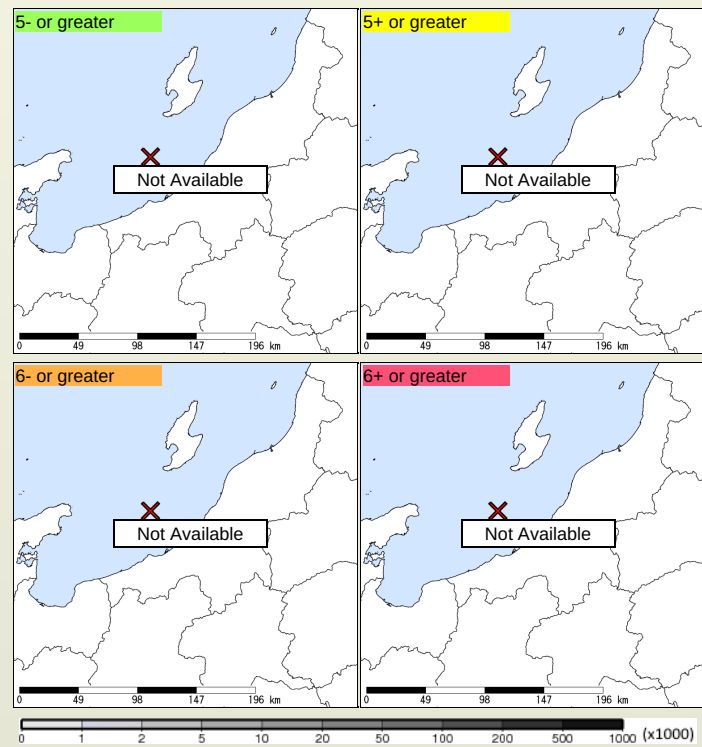


Max. Obs. I _s	Histogram of Estimated I _s	Municipality	Nighttime	
			Distance [km]	Population
3	1 2 3 4 5-5+ 6- 6+ 7	Joetsu, Niigata	200,000	40
3		Ojiya, Niigata	36,000	64

The histogram shows frequency distribution of estimated I_s derived from interpolation of the observation with 250-m mesh. The daytime and nighttime correspond to 9:00-18:59 and 19:00-8:59, respectively. The distance is measured from the epicenter to the center of the municipality.

Seismic Intensity (I_s) distribution is estimated from the observed data (circles) of NIED K-NET, KiK-net, JMA, and local governments that had been collected by 2026/06/01 06:05:02.

I_s Exposed-Population Estimates of Each City



Population exposed to I_s 5- or greater are not estimated.

Major Historical Damaging Earthquakes in This Region

Year	Region	M	Damage
1941	Northern Nagano	6.1	5 dead, 29 houses collapsed, 115 partially destroyed, 48 non-residential houses collapsed.
1943	Northern Nagano	5.9	1 dead, 14 houses collapsed, 66 partially destroyed, 20 non-residential houses collapsed.
1961	Chuetsu, Niigata	5.2	5 dead, 220 houses collapsed, 464 partially destroyed.
1965	Northern Nagano	5.4	Matsushiro Gunpatsu Earthquake, 62,821 felt earthquakes until the late 1970s. There were 9 5-I _s earthquakes, and 50 were 4-I _s . Earthquakes causing damage led to 51. 15 injuries, 10 houses collapses, 4 partially destroyed houses, 60 landslides.
2004	Chuetsu, Niigata	6.8	Niigata Chuetsu Earthquake, Many large aftershocks occurred and caused further damage. 68 dead, 4,805 injured, 3,175 houses collapsed, 13,810 partially destroyed.
2007	Off Jochuetsu, Niigata	6.8	Niigataken Chuetsu-oki Earthquake, 15 dead, 2,346 injured, 1,331 houses collapsed, 5,710 partially destroyed. The maximum I _s was 6+ (Niigata, Nagano). A tsunami, with a maximum height of 35 cm, hit the coast of the Japan Sea (Kashiwazaki).
2011	Border Between Nagano, Niigata	6.7	57 injured, 73 houses collapsed, 427 partially destroyed (Nagano and Niigata; not including related death.). The maximum I _s was 6+ in Sakae Village in Nagano. An I _s of 6- was observed in Niigata.
2014	Northern Nagano	6.7	The crustal earthquake with reverse faults, considered to have occurred in the northern part of Itoigawa-Shizuoka-kozen fault zone. 77 houses collapsed and 137 partially destroyed (as of Jan. 5, 2015). The maximum I _s was 6-.

Reference: National Astronomical Observatory of Japan, Chronological Scientific Tables, Maruzen, (2017) *partially extracted

Seismic Hazard Information of J-SHIS

J-SHIS is a Web service by NIED, to help prevent and prepare for earthquake disaster by providing a public portal for seismic hazard information across Japan.

I_s Distribution of 2% Probability of Exceedance in 50 Years I_s Distribution of Return Period of 50,000-year

