

# The Great East Japan Earthquake: General Conditions and Extent of the Disaster

At 14:46 on Friday, March 11, 2011, a magnitude 9.0 earthquake with a seismic center 24 km deep around 130 km east-southeast of the Oshika Peninsula (off the coast of Sanriku) occurred. The greatest seismic intensity of 7 was observed in Kurihara City in Miyagi Prefecture. Over a wide area of the prefecture the earthquake measured a 5 strong to a 6 strong on the Japanese seismic intensity scale. This earthquake triggered a massive tsunami on the Pacific coast, and all homes in coastal villages in our prefecture were subjected to some tsunami damage. A wide area of the inland Sendai Plain, even areas several kilometers from the coast, was flooded. The tsunami flooded areas next to rivers extending quite far inland.

Date and time:  
**14:46, Friday, March 11, 2011**

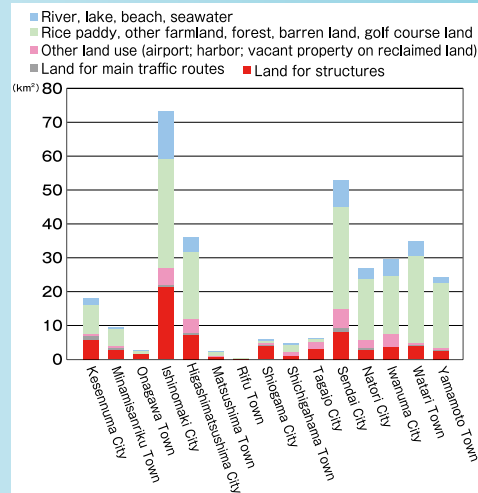
Site:  
**Off the coast of Sanriku (38.1 degrees north latitude, 142.5 degrees east longitude)**  
※ **Around 130 km east-southeast of Oshika Peninsula**

Maximum seismic intensity:  
**Intensity 7 (Kurihara City)**

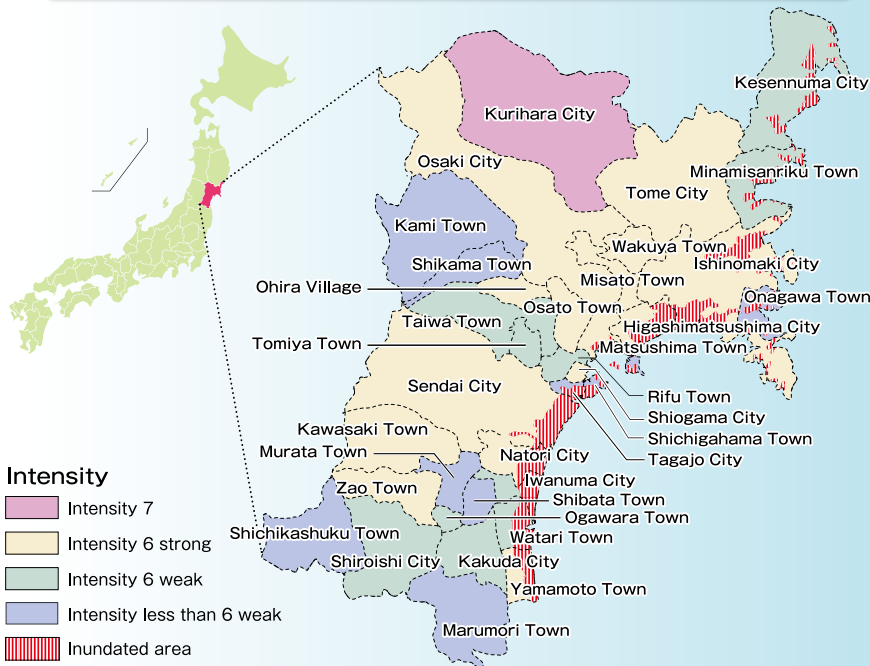
Scale:  
**Magnitude 9.0**

Depth of hypocenter:  
**24 km**

■ Extent of tsunami inundation according to land use, by municipality



Inundated area  
**327 km<sup>2</sup>**  
※ Equivalent to about 60% of the total area (561 km<sup>2</sup>) inundated in the Great East Japan Earthquake



## Intensity

- Intensity 7
- Intensity 6 strong
- Intensity 6 weak
- Intensity less than 6 weak
- Inundated area

## A closer look at the disaster area



Kesennuma City  
(fire on sea surface, Kesennuma Bay)



Shiogama City  
(tsunami flooding pier for sightseeing boat)



Sendai City  
(stranded Arahama Elementary School)



Iwanuma City  
(tsunami surging against the Kennan Purification Center)



Yamamoto Town  
(tsunami-damaged farmland around Sakamoto Station)



Minamisanriku Town  
(massive amounts of debris in urban district around Shizugawa Public Hospital)



Ishinomaki City  
(burned cars and other wreckage in the neighborhood of Kadowaki Elementary School)



Tagajo City  
(fire at a petrochemical complex)



Onagawa Town  
(Government Office Building flooded to third floor)

## Extent of Damage

▶ See more details at <http://www.pref.miyagi.jp/site/ej-earthquake/km-higaizyoukyou.html>

### ● Casualties

(as of March 31, 2014; subject to ongoing investigation)

Deaths (including attributable deaths)	10,483
Missing persons	1,282
Injuries	502 serious, 3,615 minor

### ● Residential and non-residential damage

(as of March 31, 2014; subject to ongoing investigation)

Completely destroyed	82,914
Half destroyed	155,085
Partially destroyed	222,858

### ● Population living in temporary emergency housing

(as of March 31, 2014)

Residents in prefabricated housing	42,310 (53,301 maximum)
Residents in private rental housing	40,812 (71,033 maximum)
Residents in other temporary housing	2,271 (2,614 maximum)

### ● Public utilities related damage (at peak)

Electricity	Service interruption	Approx. 1.42 million houses
General water supply	Service interruption	35 municipalities
Gas	Service interruption	13 municipalities

### ● Evacuation centers (at peak)

Number of evacuation centers	1,323
(as of 11:00 a.m., March 15, 2011)	(in 35 municipalities)
Number of residents at evacuation centers	320,885
(as of March 14, 2011)	

### ● Financial cost (subject to ongoing calculation)

9,166.3 billion yen (as of March 10, 2014)

Transit-related	10.3 billion yen
Public utility facilities	186.5 billion yen
Health, medical care & welfare related institutions	51.6 billion yen
Residential housing	5,090.4 billion yen
Private facilities and the like	990.6 billion yen
Agriculture, forestry and fisheries	1,295.2 billion yen
Civil engineering & road infrastructure	1,256.8 billion yen
Educational facilities	201.0 billion yen
Waste & sewage treatment facilities	6.9 billion yen
Other public facilities	76.9 billion yen

## A closer look at the disaster area



Higashimatsushima City  
(vehicles on the Senseki Line washed away by the tsunami)



Matsushima Town  
(Zuigan-ji Temple Gate covered with mud)



Shichigahama Town  
(Shobuda Beach littered with containers)



Iwanuma City  
(evacuating victims by lifeboat near Sendai Airport)



Watari Town  
(strawberry cultivation greenhouse destroyed by tsunami)



Kesenuma City  
(large fishing boat stranded by the tsunami)



Rifu Town  
(inhabitants wait in line for emergency water supplies)



Sendai City  
(collapsed retaining wall)



Natori City  
(school gymnasium used as shelter)