

The East Japan Great Earthquake

Importance of local disaster prevention capability

Sanda City Fire Headquarters

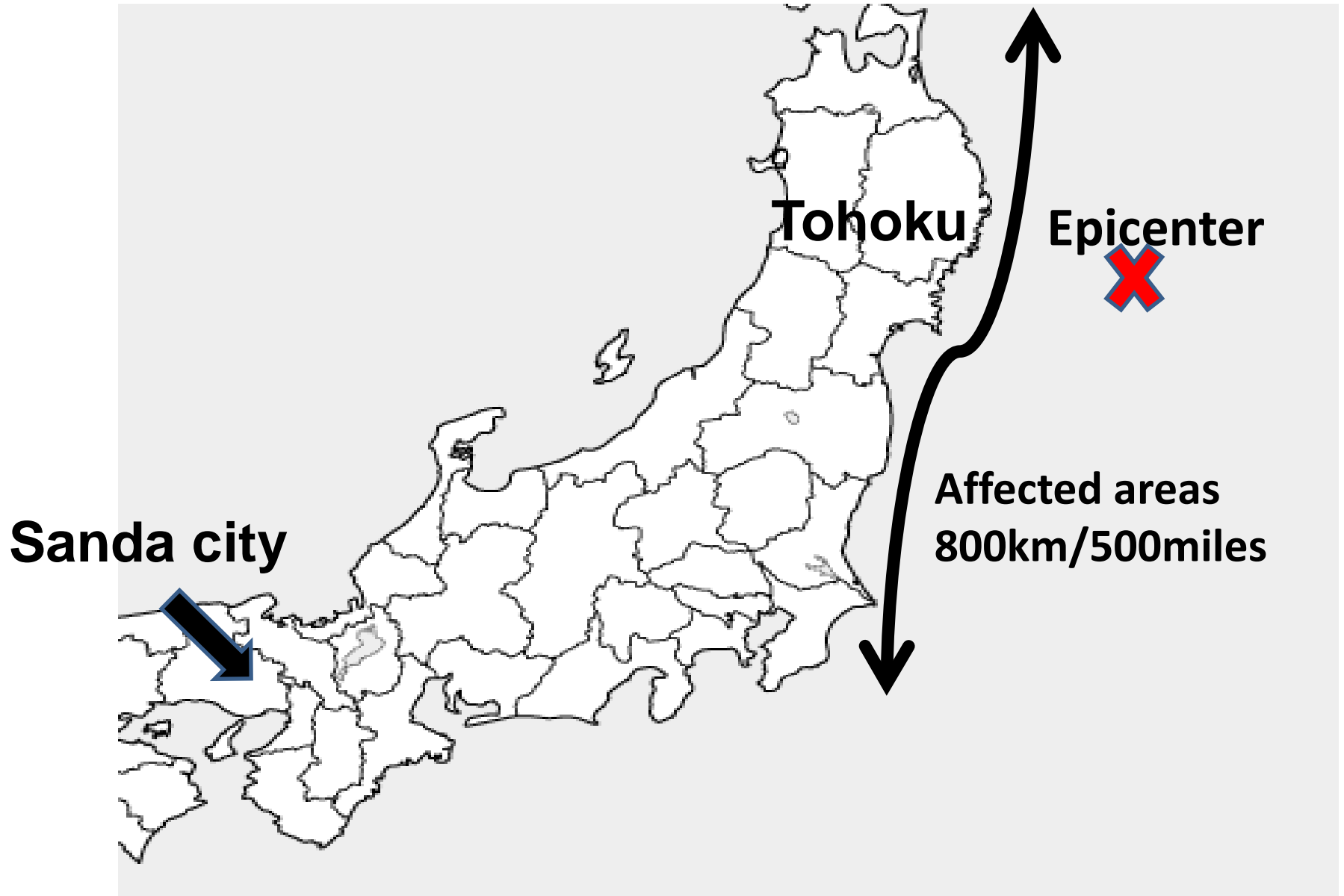
Junichi Matsuo

July.24.2014

About 1 mile from the sea



Affected Areas



The Earthquake and Damages

Time of Occurrence: **14:46, March 11, 2011**

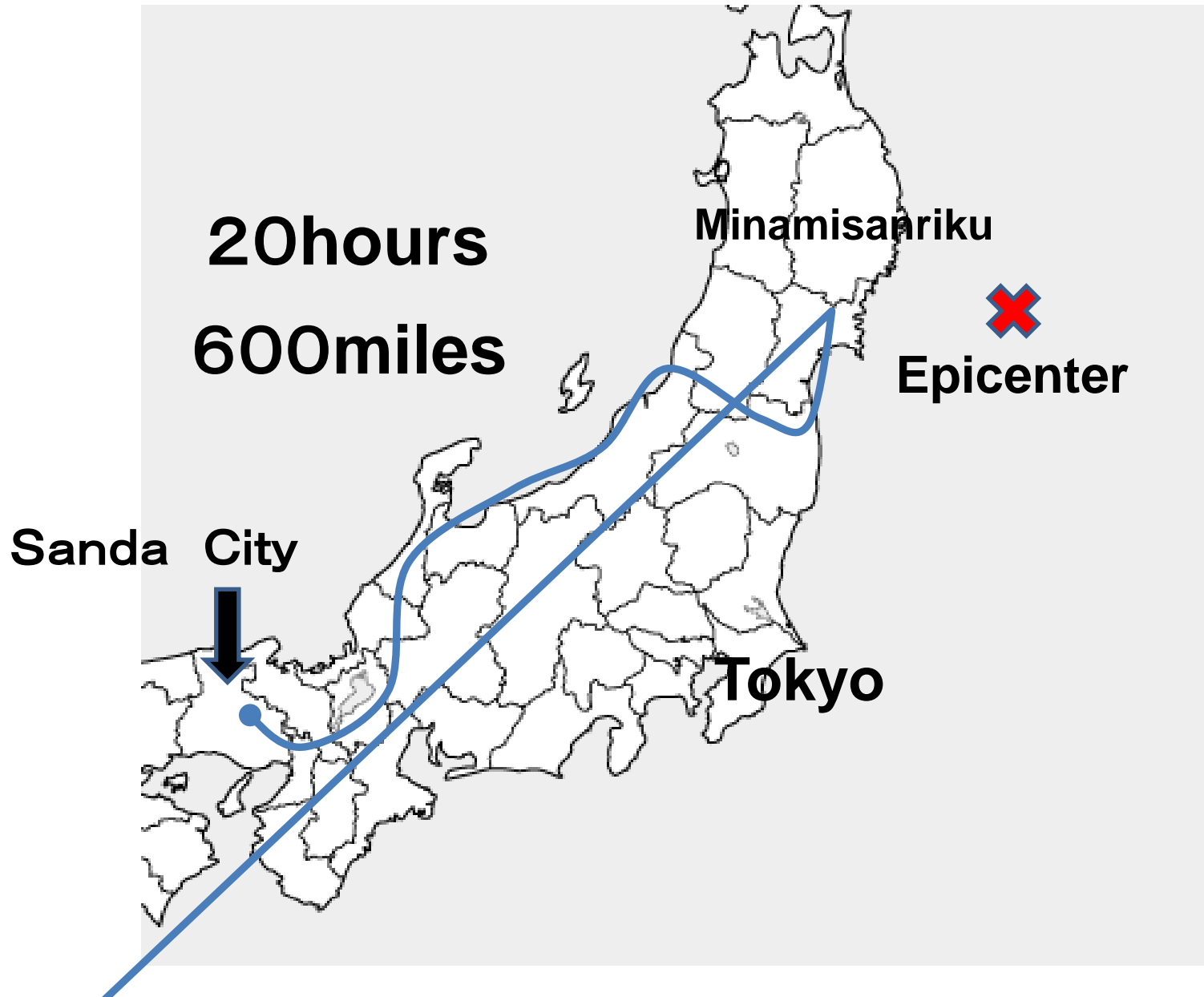
Tsunami Height: **40.4 meter/131 feet (Peak)**

Dead: **15,884 (Nation-wide)**

Missing: **2,633 (Nation-wide)**



Minamisanriku from Sanda City



Minamisanriku Fire Station



Minamisanriku Fire Station(Second floor office)



The house (Minamisanriku)



Problems in fire and rescue operations (1)

- Activity of 200 members with about 50 emergency vehicles
(vast camping space was required)
- First time to be dispatched to Northeast Japan (long distance)
(difficult to adjust to the area's climate)
- We were at a loss as the devastated area was so vast.

Camp



Refueling in the snowy day



Problems in fire and rescue operations (2)

- Roads were so narrow that only an ambulance could reach the disaster stricken area.

 - (Rescue members were transported to the area by ambulance)

 - (Impossible for heavy equipment to enter)

- Flat tires

 - (due to scattered fragments of rubble)

Search for survivors (1)



Search for survivors (2)



Activities at the shelters

The shelter with capacity of some 500

- Snow stocked in portable water tanks (for flushing the toilet, washing hair and clothes)
- Toilets were clean (well cleaned, with buckets kept full of water)
- Calm at night (only sounds of coughing and vomiting)
- People stayed in line when food was provided

Circumstances of the shelters



Receiving of relieves



The shelter with capacity of some 3000

- Residents were everywhere in the shelter
- Toilets were brimming with feces
- City government officers seemed always busy

Comparison between the two shelters

- The shelter with capacity of 500 had more unity
- It is important for residents to have good relationships with their neighbors in their daily life (Importance of the existence of a leader)

Lessons from Minamisanriku

- It is important for volunteer fire brigades and voluntary disaster prevention organizations to be constantly aware and alert. They need to be constantly training and carrying out drills.
- It is important for residents to have good relationships with their neighbors



Cascadia subduction zone

Cascadia Subduction zone

The last known great earthquake in the northwest was the 1700 Cascadia earthquake. Geological evidence indicates that great earthquakes may have occurred at least seven times in the last 3500 years, suggesting a return time of 300 to 600 years.

There is also evidence of accompanying tsunami with every earthquake and one line of evidence for these earthquakes is tsunami damage and through Japanese records of tsunamis.

The next rupture of the Cascades Subduction zone is anticipated to be capable of causing widespread destruction throughout the Pacific Northwest.

The Hanshin large-scale earthquake (in 1995)



The Hanshin large-scale earthquake (in 1995)



Prevention disaster drill (1)



Prevention disaster drill (2)



Lastly,

- We are very grateful for the support and warmhearted words from many countries in the world towards the disaster stricken area in Northeast Japan.

Thank you very much for your kind attention.

Thank you very much for listening.

Contact:

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