The runway of Sendai Airport littered with the debris of cars, planes and houses as a result of the tsunami. Iwanuma City, Miyagi Prefecture (March 11, 2011)

Cars being swept towards National Route 106 as the massive tsunami assaults Shinkawa, Miyako City, Iwate Prefecture (March 11, 2011)

Utatsu Bridge, one of the many points along National Route 45, cut off by the tsunami, Minamisanriku Town, Miyagi Prefecture

Residents staring at heaps of debris in Takase, Yamamoto Town, Miyagi Prefecture (March 14, 2011)

Scars from the damage caused by the tsunami. The baggage claim area on the first floor of Sendai Airport, Miyagi Prefecture (March 17, 2011)

The blackened ruins of a gutted oil refinery in the port of Sendai, Miyagi Prefecture (March 19, 2011)

Aftermath of municipal disaster prevention office in Minamisanriku Town, Miyagi Prefecture

Utsu Bridge, one of the many points along National Route 45, cut off by the tsunami, Minamisanriku Town, Miyagi Prefecture (March 15, 2011)
CATASTROPHE

THE EARTHQUAKE

2:46 p.m. on Friday, March 11th, 2011.

The world’s fourth largest earthquake in the last 100 years, and the largest in Japan’s recorded history, hit Eastern Japan with a magnitude of 9.0.

The earthquake was caused by the consecutive rupturing of tectonic plates in the Pacific Ocean. The epicenters of 400 aftershocks with a magnitude of 5.0 or greater were widely distributed over an area 500 kilometers long and 200 kilometers wide.

Iwate, Miyagi, Fukushima, Tochigi and Ibaraki were the hardest-hit prefectures.

THE TSUNAMI

Enormous tsunamis immediately followed the earthquake.

Tsunamis already reaching over 10 meters while still off the coast swelled as they entered bays and coastal areas.

The maximum height of the tsunami waves reached 39 meters in Miyako City, Iwate Prefecture. This was the highest tsunami wave in recorded history.

An aerial view of Utatsu Bridge

National Route 45, Minamisanriku Town, Miyagi Prefecture

Utatsu Bridge after girders were washed away

National Route 45, Minamisanriku Town, Miyagi Prefecture

The world’s fourth largest earthquake in the last 100 years, and the largest in Japan’s recorded history, hit Eastern Japan with a magnitude of 9.0.

In addition to nearly 25,000 casualties, the Great East Japan Earthquake caused the greatest economic loss of any disaster in global history. Over a million houses were destroyed or damaged. 330,000 people had to evacuate to temporary shelters. Infrastructure such as roads, railways, power, water and sewage networks, and embankments were severely damaged. In some cities and towns, municipal buildings, rescue headquarters, and relief and recovery operations were annihilated by the tsunami.

THE DAMAGE

15,844 people dead; 3,468 missing.

188 billion US Dollars (17 trillion JPY) in property damage.

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The 2011 off the Pacific Coast of Tohoku Earthquake:

The 2011 off the Pacific Coast of Tohoku Earthquake:

- Major tsunami warning
- Tsunami warning
- Tsunami advisory

State of the disaster

Area flooded by tsunami

Dead or missing

Dead: 15,844 Missing: 3,468

Damage to buildings

Completely destroyed: 127,130 homes Half destroyed: 231,833 homes

Partially destroyed: 634,354 homes

Number of displaced

354,788

Damage to rivers

2,115 sites

Damage to levee revetment

199km out of 300km of the coastal levees that stretched along the coastlines of Iwate, Miyagi, and Fukushima prefectures were either fully or half destroyed.

Damage to harbors

11 international hub ports and essential ports, 18 local ports

Damage to sewerage

18 sewage treatment plants located along the coast in Iwate, Miyagi, Fukushima and Ibaraki prefectures stopped operation. Pipes and Drains: 957km out of 66,086km were damaged in 137 municipalities

Damage to roads

15 expressways, 69 sections of government-controlled national highways, 102 sections of prefecture-managed national highways, 539 sections of prefectural roads

Area flooded by tsunami

589km in Iwate Prefecture, 327 km in Miyagi Prefecture, 112 km in Fukushima Prefecture

Roads collapsed, bridges washed away

Coastal roads severed.

The earthquake and tsunami inflicted devastation on coastal roads. National Route 45 along the coast was broken into pieces as road sections collapsed and bridges were washed away.

Hundreds of cities, towns and communities were isolated.