

## Tsunami Warnings

March 11, 2011 14:49 JST, JMA\* issued Tsunami warnings as follows.

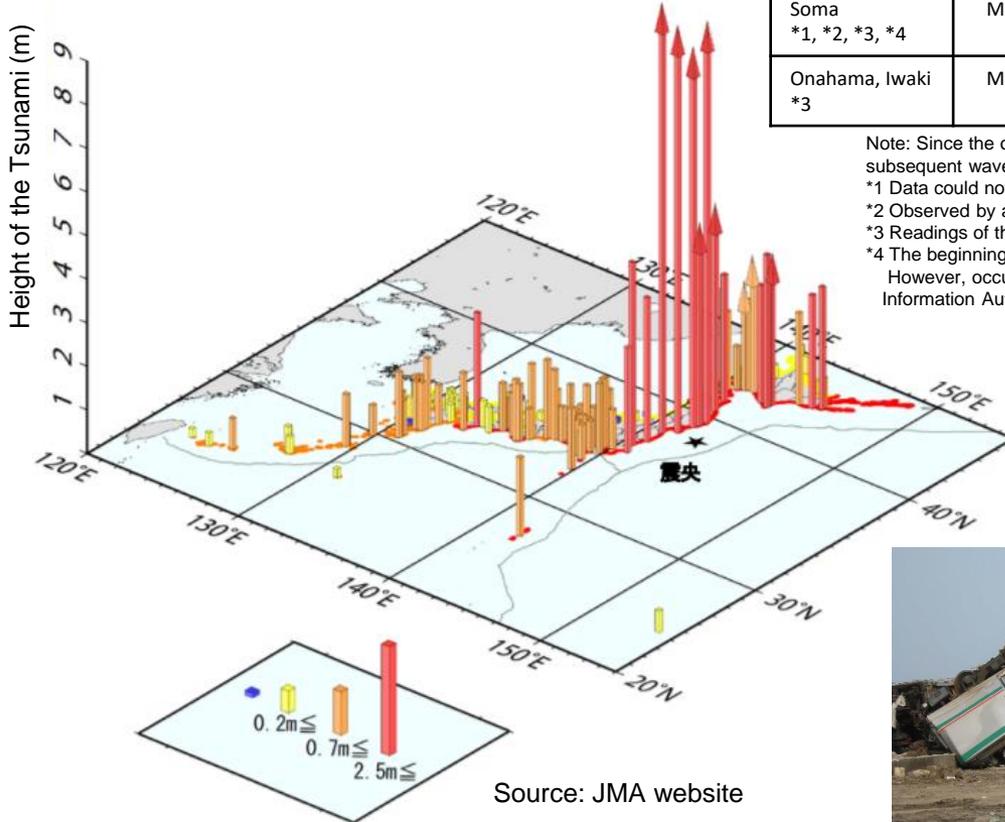
### Tsunami Warning (Major Tsunami):

Iwate, Miyagi and Fukushima prefectures

### Tsunami Warning (Tsunami):

Central Pacific coast of Hokkaido, Pacific coast of Aomori, Ibaraki prefecture etc.

\*JMA: Japan Meteorological Agency



## Overview of the Tsunami

The tsunami which followed the earthquake caused much more damage. In a wide area from Hokkaido to Okinawa, particularly along the Pacific coast mainly from Tohoku to North Kanto, the tsunami was observed; it inundated as wide as 112km<sup>2</sup> and caused enormous damage. In Fukushima, the maximum height of the tsunami observed was higher than 9.3m.

The tsunami data observed at the observation stations in Fukushima Prefecture are as follows:

(Translation of JMA report, 2011)

Area	First wave				Maximum Height		
	Date	Time	Type	Height	Date	Time	Height
Soma *1, *2, *3, *4	Mar 11, 2011	14:--	Backwash	1.2m	Mar 11, 2011	15:51	>=9.3m
Onahama, Iwaki *3	Mar 11, 2011	15:08	Anaseism	2.6m	Mar 11, 2011	15:39	3.3m

Note: Since the observation stations were damaged by the tsunami, data could not be retrieved for some time and the subsequent waves may have been higher than the data listed.

\*1 Data could not be retrieved for some time.

\*2 Observed by a massive tsunami observation instrument (per 0.1m).

\*3 Readings of the first wave may have been inaccurate due to the land subsidence effect.

\*4 The beginning time of the first wave could not be identified due to the sea-level fluctuations caused by the earthquake.

However, occurrence of land subsidence along the Pacific coast after the earthquake has been assumed by Geospatial Information Authority of Japan. Therefore, the coast was presumably included in the source area of tsunami.



[Photo: JRCS]

A JRCS staff member looking at damaged gymnasium (Above: Soma, Fukushima)

A train destroyed by the Tsunami (Left: Shinchi, Fukushima)