

IOC/UNESCO Bulletin No. 8
As of 23 March 2011

Casualties by the Earthquake and Tsunami

As of 06:00z 23 Mar 2011

The National Police Agency

- Dead: 9,452
- Missing: 14,715
- Road destruction: 1,749
- Bridge destruction: 53
- Railway destruction: 36

Number of Evacuees at each Prefecture;

- Aomori: 367
- Iwate: 44,426
- Miyagi: 104,792; including from Fukushima
- Yamagata: 3,654; including from Miyagi and Fukushima
- Fukushima: 83,778
- Tokyo: 740; From Miyagi and Fukushima
- Ibaragi: 3,248; including from Fukushima
- Tochigi: 3,136; including from Fukushima
- Gunma: 3,063; including from Fukushima and Miyagi
- Saitama: 3,361; under survey
- Chiba: 1,383; including from Fukushima and Miyagi
- Kanagawa: 531; from Fukushima
- Niigata: 7,491; from Fukushima
- Yamanashi: 483; from Fukushima and Miyagi
- Nagano: 294; from Fukushima
- Shizuoka: 243; from Fukushima

As of 00:00Z 23 March 2011

The Japanese Fire and Disaster Management Agency (FDMA)

1. Dead: 8,110 persons
2. Missing: 10,944 persons
3. Injured: 3,029 persons
4. Fires: 325 events (324 fires were already extinguished)
5. Number of evacuees: 269,172

(Note: Numbers are based on the report from each Prefecture)

C: City, T: Town, V: Village

Local G: Information is taken from web of each municipality

Only municipalities located along Pacific coast are listed in the table.

Prefecture	City, Town, Village & Population	dead	missing	Note: Tsunami related disaster (Whole area / inundation area in km ²)
Hokkaido	Hakodate C 294,264	1		Local G <ul style="list-style-type: none"> One man dead by drowning 128 houses flooded 5 fishing boats; sinking Flood area; Benten, Suehiro, Toyokawa, Oote, Wakamatsu, Kaigan, Minato-Chou
Aomori	Hachinohe C 241,308	1	1	305 / 2 (FDMA) <ul style="list-style-type: none"> Wide-area are inundated
	Misawa C 42,226	2		Local G <ul style="list-style-type: none"> 30 houses: flood Evacuation shelter was closed 15 March
	Hashikami T			94 / 0.5
Iwate				<ul style="list-style-type: none"> JR Train stop: Tohoku-Akita shinkansen, Ofunato, Kitagami, Kamaishi, Yamada lines etc (Recovering; no prospect)
	Miyako C 59,118	291	1,700	1,260 / 9 (FDMA) <ul style="list-style-type: none"> Severe tsunami damages More than 10 villages are completely destroyed
	Ofunato C 40,801	222	191	323 / 6 (FDMA) <ul style="list-style-type: none"> More than 300 houses flow out Many houses are flooded 3,498 houses are completely destroyed Especially Suesaki and Hosoura regions are severely damaged. No communication system
	Kuji C 36,651	2	2	623 / 4 Local G <ul style="list-style-type: none"> 145 houses are destroyed 572 boats; damaged
	Rikuzen-Takata C	766	1,659	232 / 9 (FDMA)

	23,243			<ul style="list-style-type: none"> Extremely severe damages Widely inundation No communication system 3,600 houses are damaged
	Kamaishi C 39,294	520	540	441 / 7 (FDMA) <ul style="list-style-type: none"> Coast-Guard building inundated up to 2nd floor Fire Office building is flooded No communication system
	Otsuchi T 15,293	425	844	201 / 4 Ogasawara; Iwate U. (14 Mar) <ul style="list-style-type: none"> Whole town is severely damaged No communication system
	Yamada T 18,745	374	Un-known	263 / 4 <ul style="list-style-type: none"> No communication system
	Iwaizumi T 10,693	5	2	993 / 1 <ul style="list-style-type: none"> No communication system 40 houses are flooded
	Tanohata V 3,836	14	27	(FDMA) <ul style="list-style-type: none"> 249 houses flow out 148 houses are destroyed No communication system
	Fudai V 3,094		3	70 / 0.5 (FDMA) <ul style="list-style-type: none"> Ootanabe and Horiuchi fishing ports are severely damaged.
	Noda V 4,639	31	20	81 / 2 <ul style="list-style-type: none"> Tsunami flow over the village government building Severe damage in the central village 400 houses in the Motomura District are severely damaged No communication system
	Hirono T 17,961			303 / 1 Local G <ul style="list-style-type: none"> No dead 3 houses; flooded 98 fishing boats: flow out or damaged JR train bridge collapsed
Miyagi	Sendai C 1,046,902	90	9	(FDMA) <ul style="list-style-type: none"> 295 bodies are recovered (Not

				included in this table yet) <ul style="list-style-type: none"> 296,323 houses: power cut as of 17 March
	Sendai-Miyagino			58 / 20
	Sendai - Wakabayashi			48 / 29
	Sendai-Taihaku			228 / 3
	Ishinomaki C 160,336	1,348	1,471	556 / 40 (FDMA) <ul style="list-style-type: none"> Wide areas are inundated. Difficult for rescue work
	Shiogama C 56,325	13	40	18 / 5 Local G
	Kesennuma C 73,239	490	Under survey	333 / 15 (FDMA) <ul style="list-style-type: none"> Many people are isolated due to inundation of wide area
	Natori C 73,576	493	Under survey	100 / 27 (FDMA) <ul style="list-style-type: none"> Many areas are inundated
	Tagajo C 62,881	152	104	20 / 6
	Iwanuma C 43,921	128	Under survey	61 / 29
	Higashi-Matsushima C 42,859	655	429	102 / 36
	Watari T 34,773	188	200	73 / 35 Local G
	Yamamoto T 16,695	418	465	64 / 24 Local G <ul style="list-style-type: none"> Evacuation Order is issued at 05:52 from local G. Major tsunami attacking around 06:30 Z
	Matsushima T 16,193	1	31	54 / 2
	Shichigahama T 20,377	45	38	13 / 6 Local G <ul style="list-style-type: none"> Tsunami height was more than 10 m All facilities along coast were completely destroyed

				<ul style="list-style-type: none"> No communication system
	Rifu T 9,768	1	0	45 / 0.5 <ul style="list-style-type: none"> Tsunami sediment in Hamada and Suga district is about 3 cm thicknesses.
	Onagawa T 9,965	227	643	(FDMA) <ul style="list-style-type: none"> About 630 people need to be rescued Many areas are inundated
	Minami-Sanriku T 17,382	398	780	164 / 7 (FDMA) <ul style="list-style-type: none"> Many areas are inundated
Fukushima	Iwaki C 345,310	205	4	Local G <ul style="list-style-type: none"> Tsunami severely damaged area; from Kunohama to Onahama district Some areas of above are completely destroyed
	Souma C 37,919	221		198 / 29 (FDMA) <ul style="list-style-type: none"> Severe tsunami damages
	Minami-Souma C 70,971	217	1,260	399 / 27
	Hirono T 5,383	2	1	
	Naraha T 7,847	3	10	
	Tomiooka T 15,755	2	8	
	Okuma T 11,264	2	8	
	Futaba T 6,917	1	14	
	Namie T 20,686		270	
	Shinchi T 8,306	68	84	46 / 11
Ibaragi	Kita-Ibaragi C	5	1	Local G <ul style="list-style-type: none"> Some houses; flooded
	Hitachi C	0	0	Local G <ul style="list-style-type: none"> 35 houses: completely destroyed by tsunami, and 50 houses: partially destroyed, 556 houses; inundation

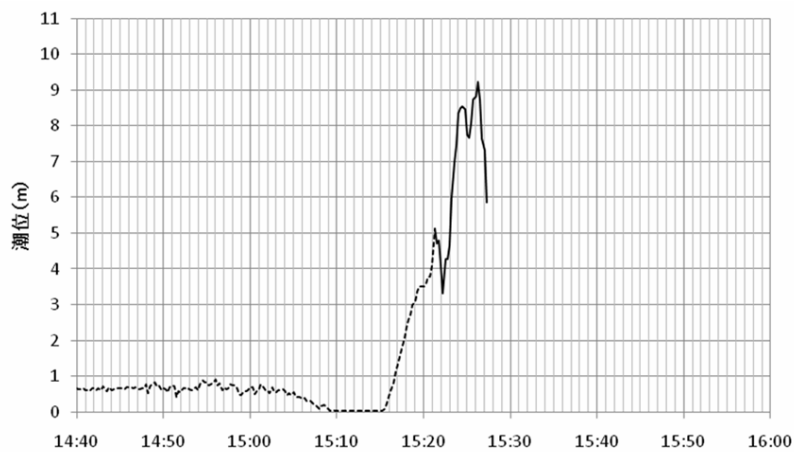
				<ul style="list-style-type: none"> Tsunami damages at Kawajiri, Aise, Kawarako and Kujihamas Ports.
	Tokai V	4		
	Oarai T 18,188	1		Local G <ul style="list-style-type: none"> About 2,000 houses; flooded
	Kamisu C			Local G <ul style="list-style-type: none"> 5 houses flooded 2 vessels: capsized 1 vessel: stranding 12 boats: sinking 5 boats: stranding on shore
Chiba	Choshi C	0	0	Local G <ul style="list-style-type: none"> 32 houses flooded
	Asahi C	12	3	Local G <ul style="list-style-type: none"> 112 houses flooded 254 houses were completely destroyed by tsunami 537 houses were partially destroyed by tsunami 85 houses were completely destroyed by earthquake 772 houses were partially destroyed by earthquake
	Sousa C			Local G <ul style="list-style-type: none"> 18 houses flooded
	Yokoshiba-Hikari T			Local G <ul style="list-style-type: none"> 14 houses flooded Boats are damaged Port facility is damaged
	Sanbu C	1		Local G <ul style="list-style-type: none"> 243 houses flooded
	Kujyukuri T			Local G <ul style="list-style-type: none"> 161 houses flooded
	Oami-Shirasato T			Local G <ul style="list-style-type: none"> No tsunami damage
	Shirako T			
	Chousei V			
	Ichinomiya C	0	0	Local G <ul style="list-style-type: none"> 58 houses flooded; Kaigan and Omura District Farm: 3 ha inundated
	Isumi C			Local G

				<ul style="list-style-type: none"> 19 houses flooded
	Onjyuku T			
	Katsuura C			
	Kamogawa C			
	Minami-Bousou C			
	Tateyama C			
	Chiba C			Local G <ul style="list-style-type: none"> 2 houses flooded
Shizuoka	Shimoda C 25,549			Local G <ul style="list-style-type: none"> 13 houses; flooded

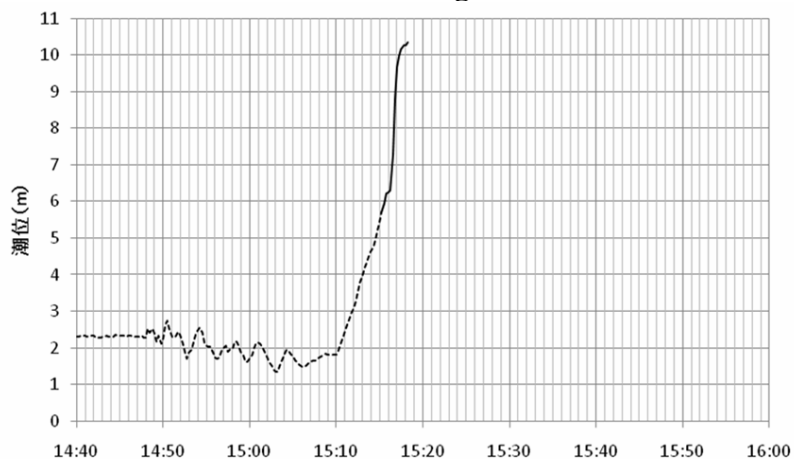
Tsunami records at Miyako and Ofunato are recovered

Tsunami wave data stored at the site are recovered from Miyako and Ofunato sea level stations. Solid line shows the recovered parts. JST (JST= UTC + 9) is used in the figure.

Miyako: Observed Maximum height is 8.5 m at 06:26Z



Ofunato: Observed Maximum height is 8.0 m at 06:18Z



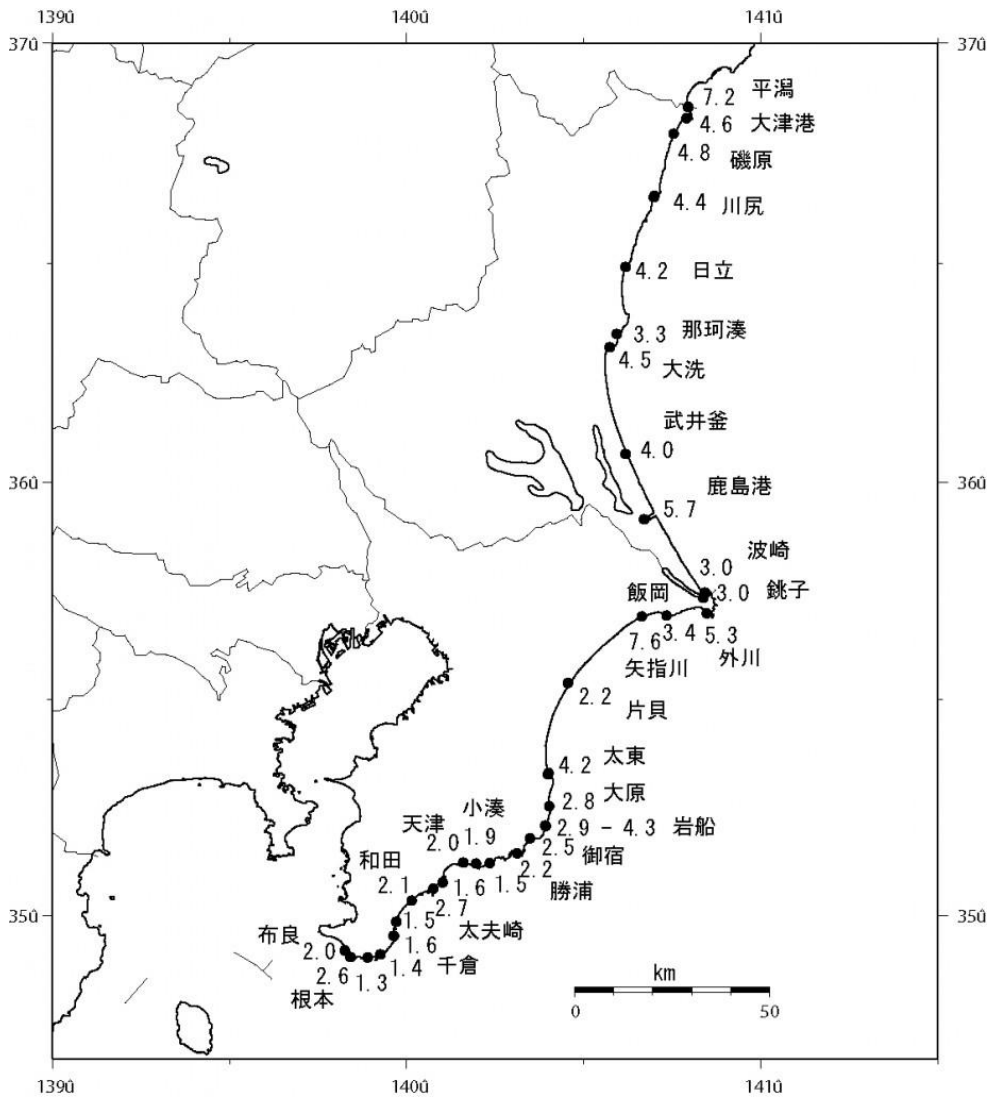
<http://www.jma.go.jp/jma/press/1103/23b/stn03231400.pdf>

Tsunami height in Ibaraki and Chiba coasts

Data of the tsunami height on the coasts of Chiba and Ibaraki, according to the research done on- site.

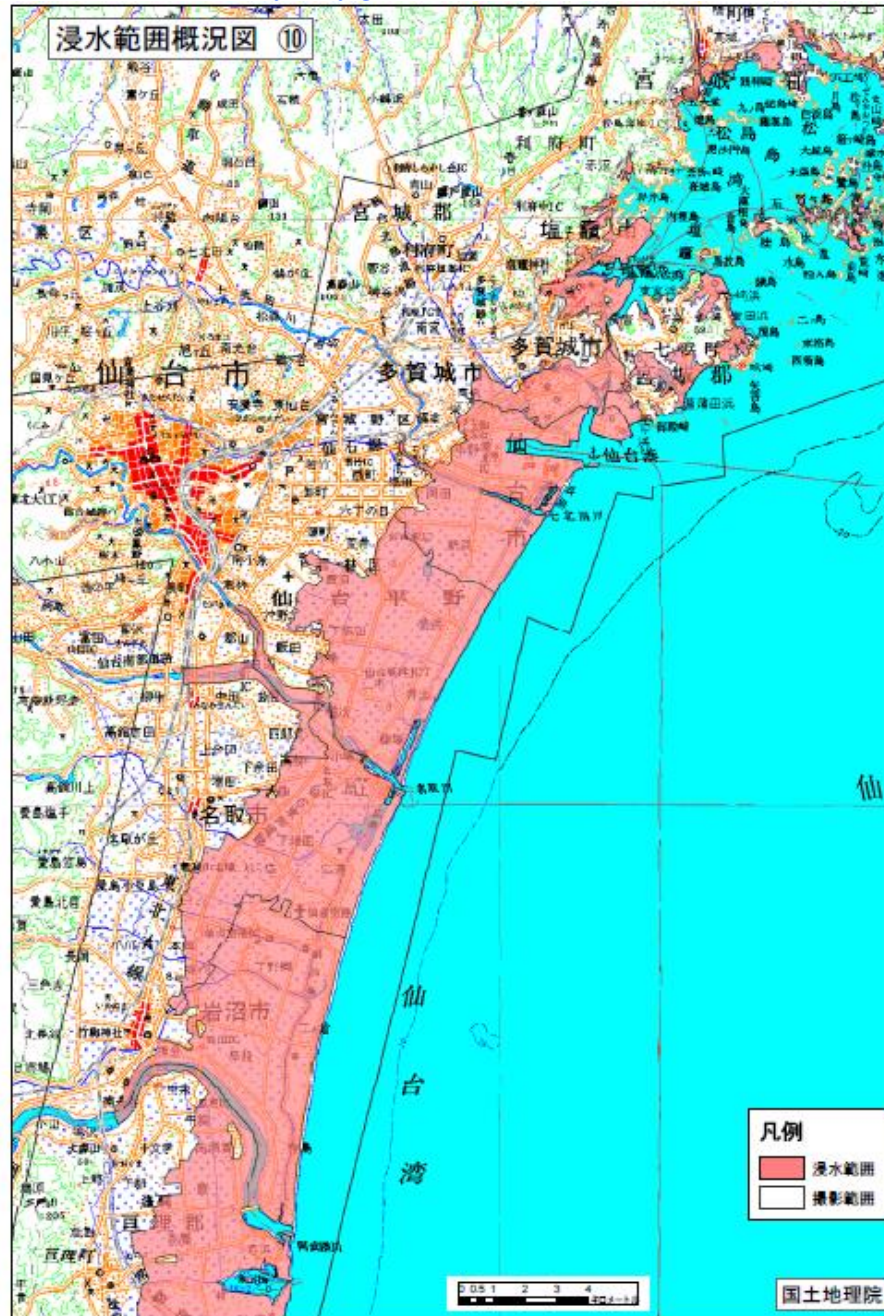
The unit of measurement is in m(metres).

(By: Tsuji et.al)



http://outreach.eri.u-tokyo.ac.jp/eqvolc/201103_tohoku/eng/#tsunamiheight

Inundation area around Sendai city. Red area in the Figure shows the inundation area by the GSI aerial photograph analysis. As the analysis is not covered whole area yet, further analysis will be carried out in later. *The scale is shown in the bottom of the figure in km.*



The detail information and other areas are here;
<http://www.gsi.go.jp/kikaku/kikaku60003.html>

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