

Visual Notices to mariners & Navigational Warnings

22 MAY, 2017



Hydrographic and Oceanographic Department

JAPAN COAST GUARD

Talking about: Visual Notices to Mariners & Navigational Warning System

NAVAREA XI
NAVAREA XI
NO.17-0205 Date:2017/03/27 12 UTC
NORTH PACIFIC, NANPO SYOTO.
GUNNERY. 2300Z TO 0900Z COMM
31 MAR TO 29 APR. AREA BOUNDE
27-55-15N 144-57-48E
28-15-15N 146-29-47E
25-25-16N 147-37-47E
25-00-16N 145-35-48E.
CANCEL THIS MSG 301000Z APR.

1528 0447-3728
Weekly edition
No. 1 6 January 2017
NOTICES TO MARINERS
Japan Coast Guard
(Pars. C : 1 to 23, T & P : 5001 to 5014)

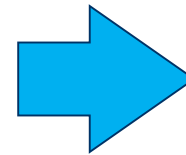
I GEOGRAPHICAL INDEX P. 2
II NOTICE FOR SMALL CORRECTION TO CHART P. 3
III TEMPORARY AND PRELIMINARY NOTICE P. 9
IV NAVIGATIONAL WARNING IN FORCE P. 15
V INFORMATION ABOUT CHARTS & PUBLICATIONS P. 16
VI OTHER INFORMATION P. 17

Mariners are requested to inform the Japan Hydrographic and Oceanographic Department (JHOD), 3-1-1, *Kanumigasehi, Chiyoda-Ku, Tokyo, 100-8922*, immediately of the discovery of new dangers, or changes or defects in aids to navigation and of shortcomings in Japanese charts or publications.
In addition to postal methods, the following additional communication facilities are available:
Fax : +81 (0) 3-3595-3371
Phone : +81 (0) 3-3595-3647
E-mail : jcg-mho@navarea11.co.jp

Notices to Mariners Website: http://www1.kaiho.mlit.go.jp/TUHO/mho/nn_en.html
Navigational Warnings Website: http://www1.kaiho.mlit.go.jp/TUHO/mho/navarea11_en.html
Chart Updates, Temporary and Preliminary NDs of this issue have the same contents that the equivalent ENC updates on the same date have.
Printed copies of the Notices to Mariners and chartlets (blocks) on the JHOD Website may be used as an equivalent to the paper version of the Notices to Mariners and chartlets (blocks).
It should be noted that the chartlets (blocks) printed from the website, may not have the same quality and accuracy as the paper version, depending on the quality and condition of the printer and ink used.
The Japan Coast Guard (JCG) does not accept any responsibility whatsoever for the accuracy and/or reliability of the information as displayed or printed by the user's equipment.

Notices to Mariners Office,
Hydrographic and Oceanographic Department,
Japan Coast Guard

Text on a paper



[NAVAREA Navigational Warnings] [Print]

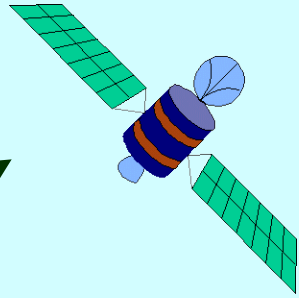
NORTH PACIFIC
NO.17-0205 Date:2017/03/27 12 UTC
NORTH PACIFIC, NANPO SYOTO.
GUNNERY. 2300Z TO 0900Z COMMENCING DAILY
31 MAR TO 29 APR. AREA BOUNDED BY:
27-55-15N 144-57-48E
28-15-15N 146-29-47E
25-25-16N 147-37-47E
25-00-16N 145-35-48E.
CANCEL THIS MSG 301000Z APR.

Text information shown on map

http://www1.kaiho.mlit.go.jp/TUHO/vpage/visualpage_en.html

What is Navigational Warning?

Inmarsat Satellite

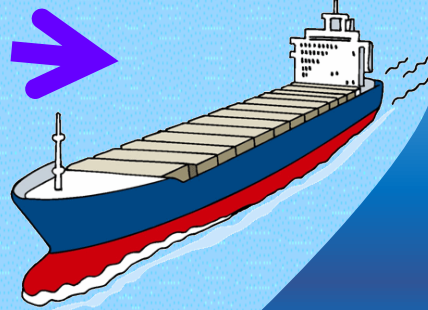
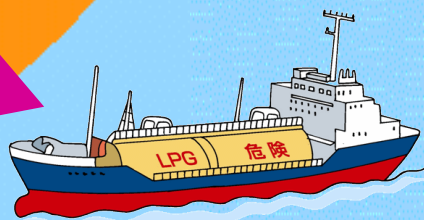


NAVAREA [Ocean]
(direct-printing telegraphy)

NAVTEX [Coastal]
(direct-printing telegraphy)



Local Warning
[around Port] (voice)



Inside of approx.
about 300 mile (550km)

The Navigational Warnings are broadcast in order to deliver
Urgent and Safety Related Messages to mariners

NAVTEX and NAVAREA paper information

/***** Urgency *****/ EGC received message ** NAVAREA/METAREA **/

NAVAREA XI WARNING
NAVAREA XI 0297/16
NORTH PACIFIC, MARIANAS.
HAZARDOUS OPERATION. 180100Z TO 180600Z
MAY. AREA BOUNDED BY 13-10N 144-43E
13-10N 144-30E 12-45N 144-30E
11-45N 143-00E 11-00N 143-00E
11-00N 144-45E.
CANCEL THIS MSG 180700Z MAY.

16-05-17 11:52

NAVAREA message

NAVAREA, NAVTEX, and Notices to Mariners are
only text information.

----- ZCZC IA71 PAGE 1 -----
080120 UTC MAR 17
JAPAN NAVTEX N.W. NR 0509/17
SHIONO MISAKI, SOUTHEASTWARD.
VESSEL, ABOUT 12 METRE LONG, ADRIFT
IN VICINITY OF 33-17N 136-09E AT 070316Z
MAR.
CANCEL 0507/17.
NNNN

---- End of Message CER= 0.0% ----

----- ZCZC IA72 PAGE 1 -----
080120 UTC MAR 17
JAPAN NAVTEX N.W. NR 0511/17
NANSEI SHOTO.
NAHA NAVTEX STATION, G, 26-05.5N
127-40.1E, TEMPORARILY REDUCED USABLE
AREA. 072330Z TO 150930Z MAR.
NNNN

---- End of Message CER= 0.0% ----

NAVTEX message

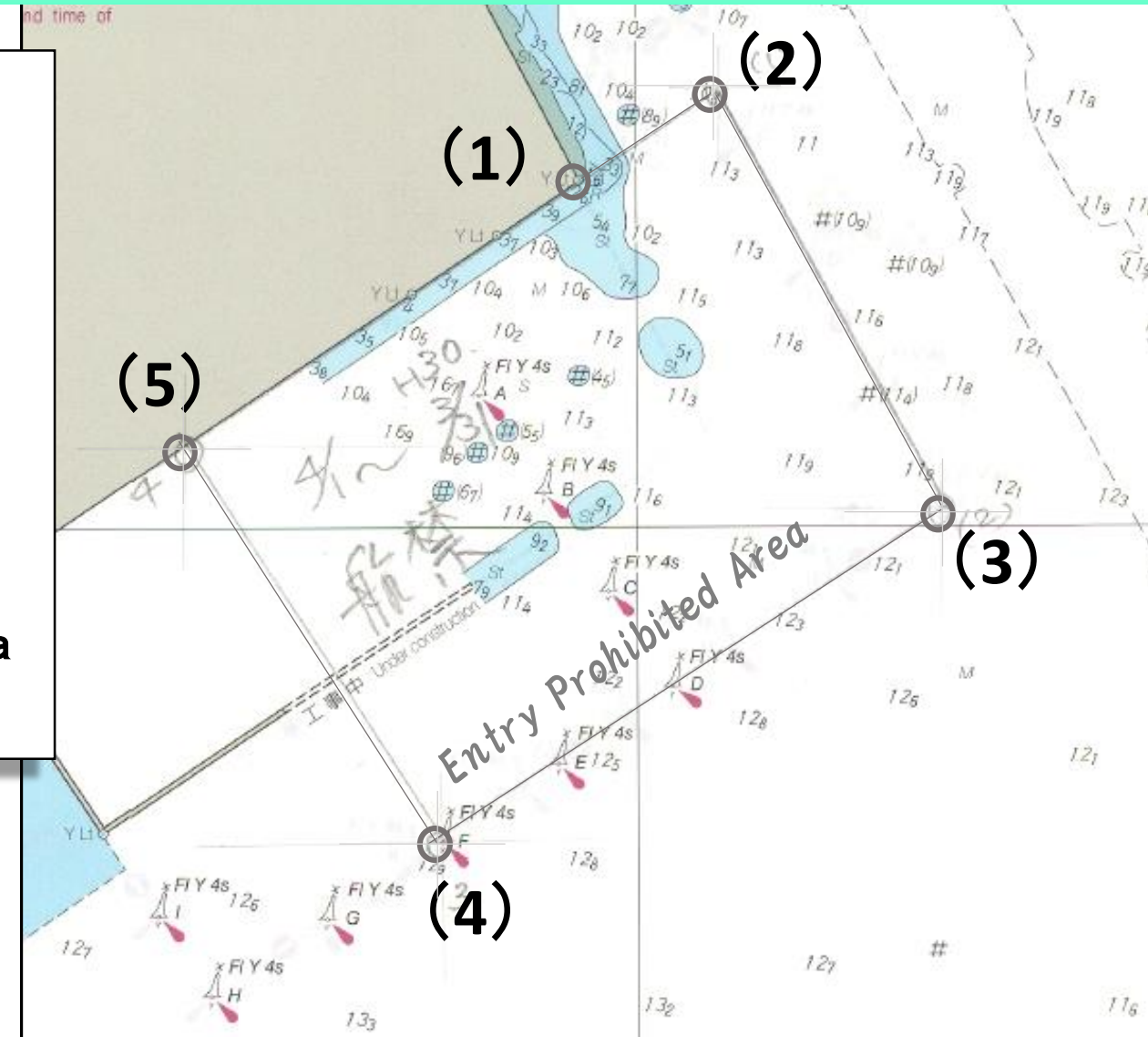
How to use text info of Navigational Warnings(NW) and Notices to Mariners(NtM)

****** (T)/17. Keihin ko, Tokyo Ku, Section 4
Entry Prohibited Area designated.
Until 31 March 2018**

Bounded by line joining five positions and by the shore

- (1) 35-35-20.2N 139-49-55.9E**
- (2) 35-35-25.6N 139-50-05.9E**
- (3) 35-35-01.0N 139-50-21.7E**
- (4) 35-34-41.6N 139-49-45.9E**
- (5) 35-35-04.6N 139-49-27.2E**

Harbour construction works are in progress in the area above.



Plotting to chart with triangles and dividers and maintenance of warnings on chart is troublesome for mariners.

Why we decided to provide visually?

11 March 2011



The Great East Japan Earthquake

A lot of things are damaged and washed away.



The earthquake and the tsunami higher than 10 m caused unprecedented damage to coastal facilities including aids to navigation

A large number of Navigational Warnings issued.

16 MAR [11-0796](#)
NAVIGATIONAL AIDS OF HONSHU, E COAST. EXTINGUISHED, MOVED,
DESTROYED AND MAY OCCUR DUE TO THE 2011 OFF THE PACIFIC
COAST OF TOHOKU EARTHQUAKE.

16 MAR [11-0779](#)
HANABUCHI LIGHT, EXTINGUISHED.

14 MAR [11-0746](#)
SHIOGAMA LIGHT BUOY NR 5, MISSING.

14 MAR [11-0737](#)
SHIOGAMA LIGHT BUOY NR 8, MOVED TO 695 METRES.

14 MAR [11-0735](#)
SHIOGAMA LIGHT BUOY NR 3, MOVED TO 2580 METRES.

14 MAR [11-0734](#)
SHIOGAMA LIGHT BUOY NR 2, MOVED TO 1000 METRES.

14 MAR [11-0733](#)
SHIOGAMA LIGHT BUOY NR 1, MOVED TO 1000 METRES.

14 MAR [11-0732](#)
TAKASHIMANE LIGHT BUOY, MOVED TO 1510 METRES.

14 MAR [11-0731](#)
MITONONE LIGHT BUOY, MOVED TO 1540 METRES.

14 MAR [11-0730](#)
HORAKAKENE LIGHT BUOY, MOVED TO 190 METRES.

14 MAR [11-0729](#)
SHIOGAMA LIGHT BUOY, MOVED TO 180 METRES.

13 MAR [11-0705](#)
SHIOGAMA KO VESSEL TRAFFIC SIGNAL STATION, UNUSABLE.

12 MAR [11-0675](#)
SHIOGAMA LEADING LIGHT, EXTINGUISHED.

16 MAR [11-0798](#)
INFORMATION PROVIDING SERVICE INOPERATIVE.
USHIKOROBASHI AIS TRANSMITTING STATION.
SHOYASAKI AIS TRANSMITTING STATION.

13 MAR [11-0706](#)
HACHINOHE KO TRAFFIC CONTROL SIGNAL STATION UNUSABLE.

12 MAR [11-0676](#)
KAWARAGI WEST BREAKWATER LIGHT, XTINGUISHED.

15 MAR [11-0767](#)
DANGEROUS AREA DESIGNNATED AT 150230Z MAR. WITHIN 30 KILO METRES
OF FUKUSHIMA NR 1 NUCLEAR POWER PLANT. VESSELS ARE ADVISED TO
KEEP ENOUGH DISTANCE CLEAR.

14 MAR [11-0740](#)
REFUGE ORDER AREA CORRECTED ON 14 MAR.
WITHIN 10 KILO METRES OF FUKUSHIMA NR 2 NUCLEAR POWER PLANT,
VESSELS ARE ADVISED TO KEEP ENOUGH DISTANCE CLEAR.

13 MAR [11-0721](#)
ONAHAMA KO EAST INNER -
BREAKWATER LIGHT, EXTINGUISHED.

13 MAR [11-0719](#)
ONAHAMA KO WEST BREAKWATER NR 1 EAST LIGHT, EXTINGUISHED.

13 MAR [11-0713](#)
ONAHAMA KO. SHOALING.

13 MAR [11-0712](#)
ONAHAMA KO.SHOALS EXIST.

[NAVTEX WARNINGS HONSHU, E COAST 17 Mar. 2011.](#)

Mariners had to check all warnings and write warnings to chart and manage them.
We worried about the case that mariners miss important information.

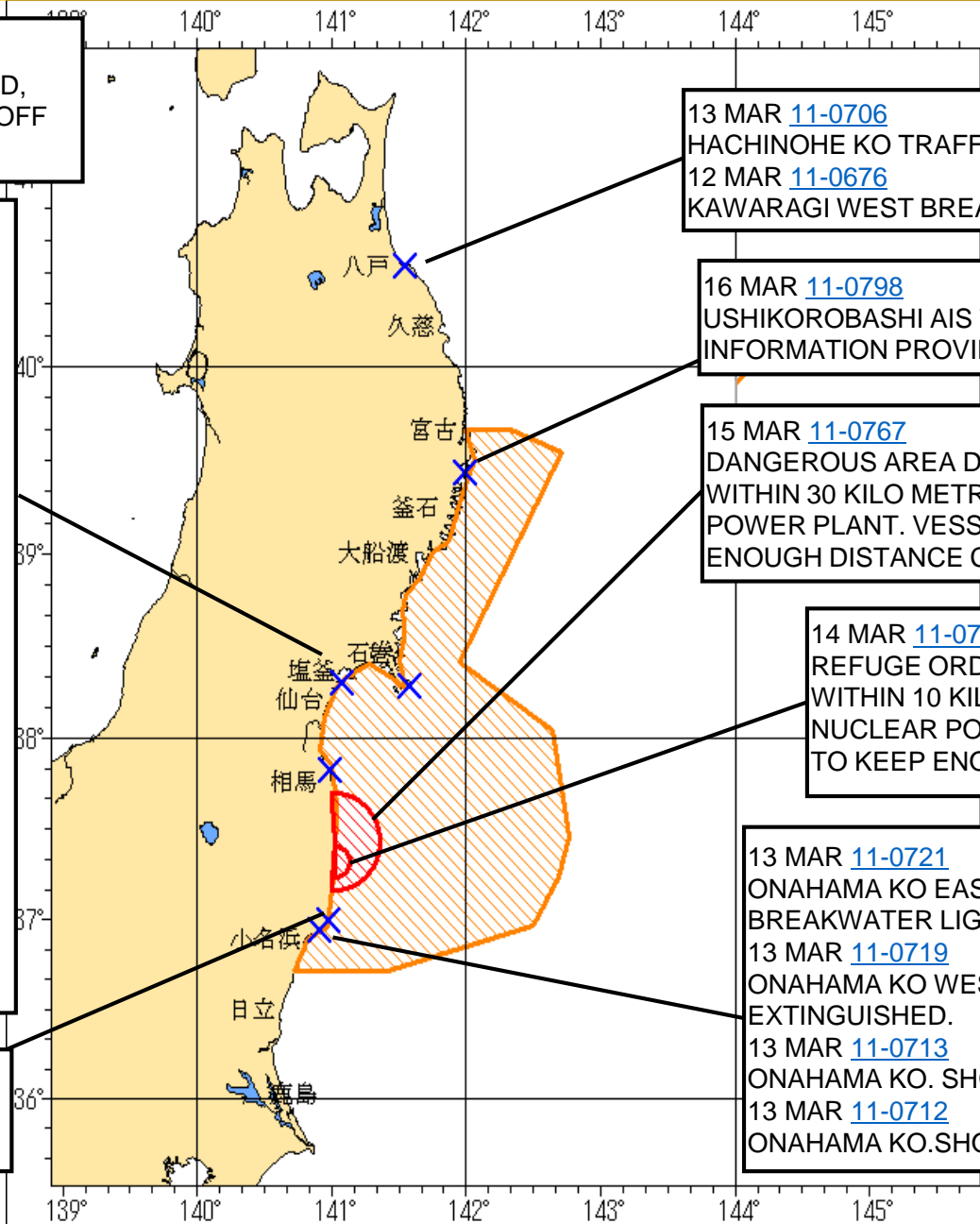
Therefore... we showed in a Figure on the website.

*PDF format

16 MAR [11-0796](#)
NAVIGATIONAL AIDS OF HONSHU, E COAST. EXTINGUISHED, MOVED, DESTROYED AND MAY OCCUR DUE TO THE 2011 OFF THE PACIFIC COAST OF TOHOKU EARTHQUAKE.

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MITONONE LIGHT BUOY, MOVED TO 1540 METRES.
14 MAR [11-0730](#)
HORAKAKENE LIGHT BUOY, MOVED TO 190 METRES.
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16 MAR [11-0798](#)
USHIKOROBASHI AIS TRANSMITTING STATION, INFORMATION PROVIDING SERVICE INOPERATIVE.

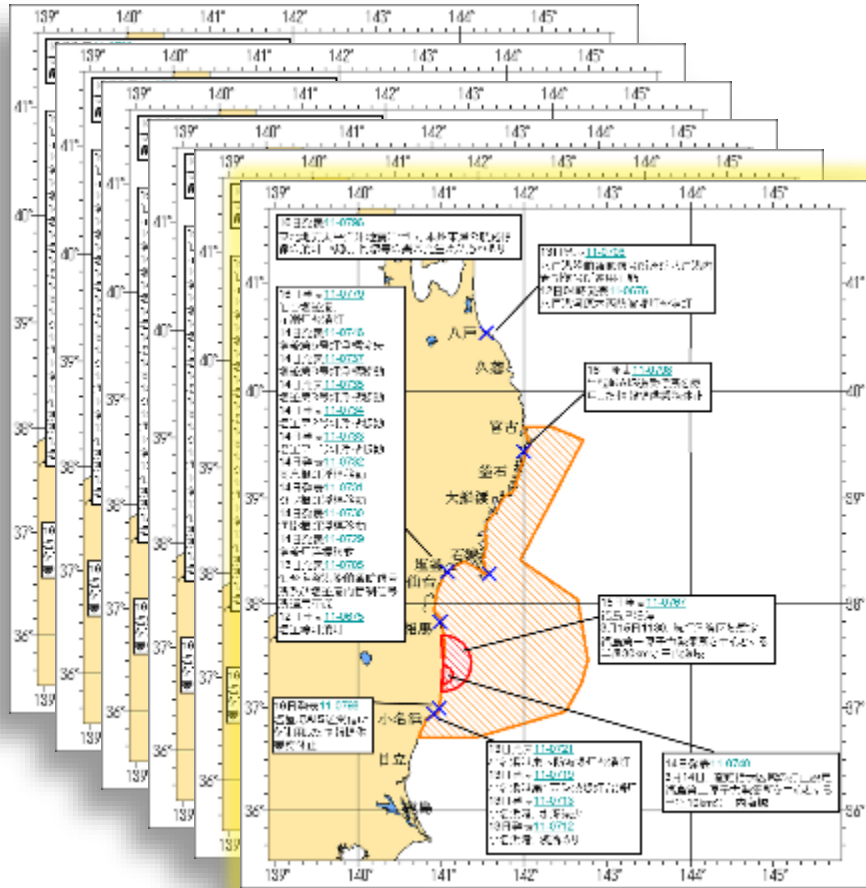
15 MAR [11-0767](#)
DANGEROUS AREA DESIGNNATED AT 150230Z MAR. WITHIN 30 KILO METRES OF FUKUSHIMA NR 1 NUCLEAR POWER PLANT. VESSELS ARE ADVISED TO KEEP ENOUGH DISTANCE CLEAR.

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13 MAR [11-0721](#)
ONAHAMA KO EAST INNER - BREAKWATER LIGHT, EXTINGUISHED.
13 MAR [11-0719](#)
ONAHAMA KO WEST BREAKWATER NR 1 EAST LIGHT, EXTINGUISHED.
13 MAR [11-0713](#)
ONAHAMA KO. SHOALING.
13 MAR [11-0712](#)
ONAHAMA KO.SHOALS EXIST.

*the mapped information was originally in Japanese

Uploading the figure daily, and good reputations.



Comments from users:

“Easy to use!”

“Easy to understand what is going on!”

We received good reputations,
but...

Officers have to spend a lot of time on
making the figure file

From this experience, we started to install
visual NW & NtM system.

Problem and way to solve

- Problem:

- Problem of the users of navigational warnings
 - It is troublesome to check a navigational warning manually.
 - It is troublesome to maintain what warning is in force or not.
- Problem of the officer of providing navigational warnings
 - The officers have to make the visual file spending a lot of time.

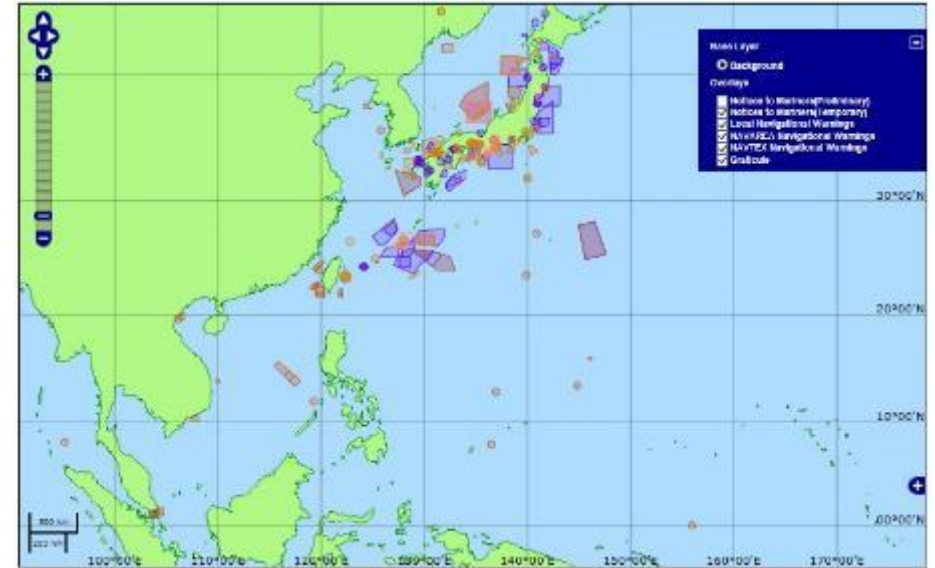


- Way to solve:

- Install a system of Navigational Warnings on a map on website easy to access with usual web browser on Internet.
- The map shows navigational warnings in force
- Design that a step to edit the location (type of shape, latitude and longitude) is just addition to the task.

The Overview of visual system

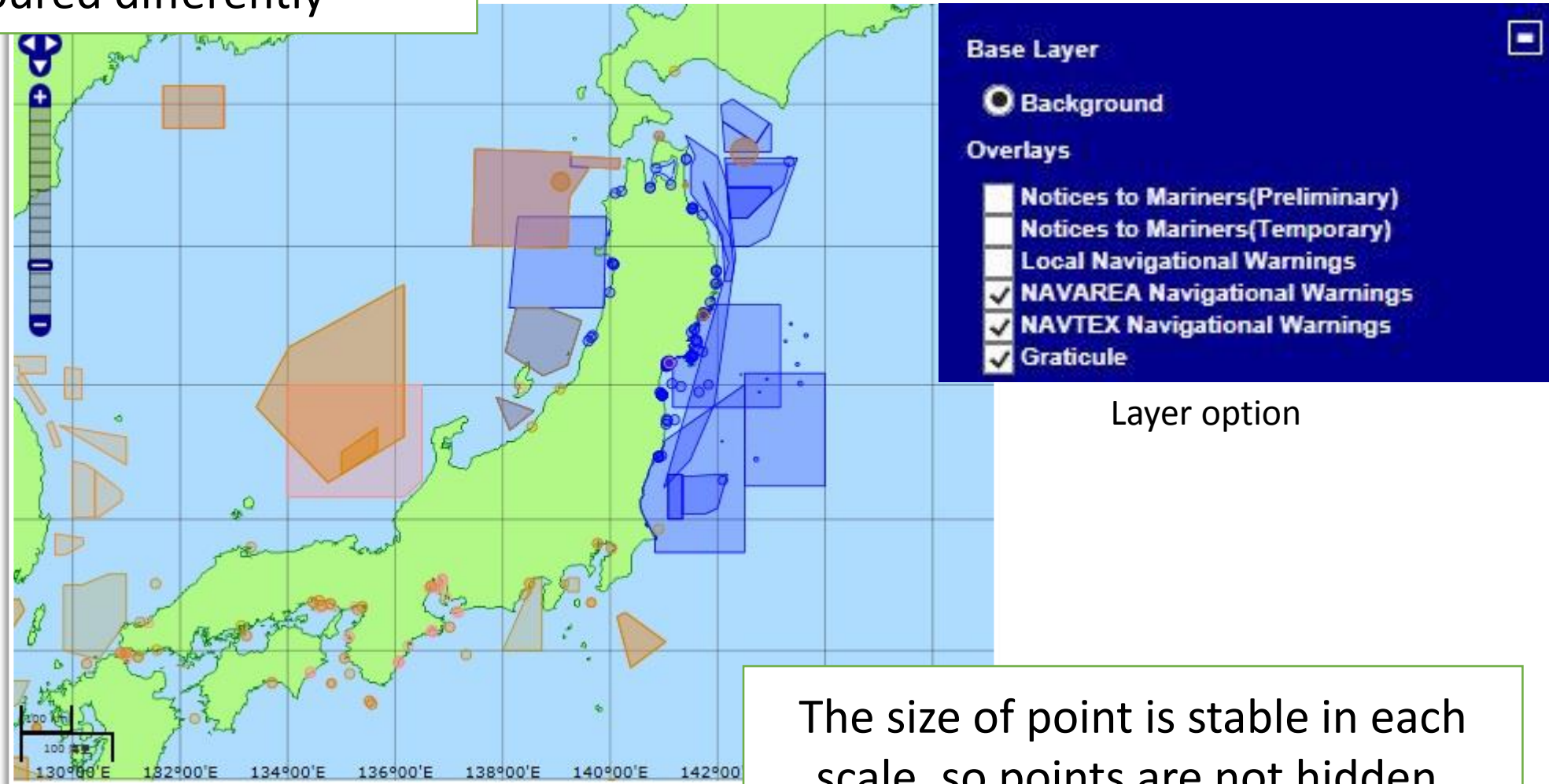
- Service area
 - NAVAREA XI area
- Providing information(English version)
 - information issued from Japan in force
 - NAVAREA (XI)
 - NAVTEX
 - Local warning
 - Notices to Mariners(T)(P)
 - We also manage a Japanese page.
- How to access the information
 - With web browser on Internet
- Service started
 - 2014 June



Service area

The characteristic of visual system

Each type of NW or NtM is a layer and coloured differently



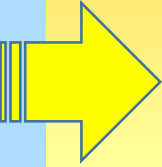
The size of point is stable in each scale, so points are not hidden.

The characteristic of visual system

Visual characteristic

Popup and Print

CLICK !



[NAVTEX Navigational Warnings]
HONSHU
NO.17-0460 Date:2017/03/01 01 UTC
HONSHU, E COAST. OFUNATO KO.
LIGHT ESTABLISHED,
A. 39-01-11N 141-43-59E,
FL R 3SEC 5 MILES,
B. 39-01-04N 141-43-56E,
FL (2) G 5SEC 7 MILES.
TEMPORARY LIGHT BUOY REMOVED.
CANCEL 1910/11.

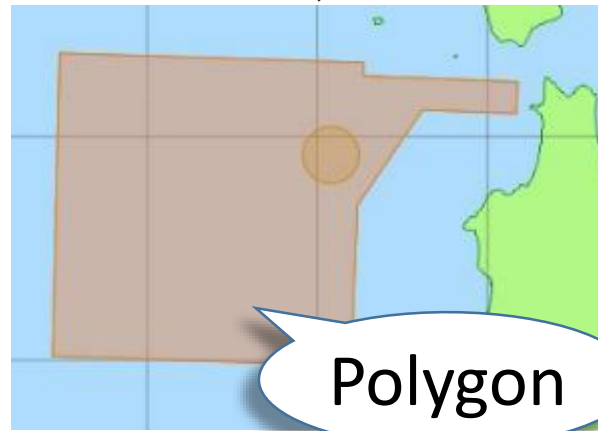
Print

Pop up

Shore option

Indicate along shore

Shape of area



The characteristic of visual system

Filtering function

Sea area

Center Sea area Term Progression The latest information

Sea area: Choose a sea area

- HOKKAIDO & APPROACHES
- HONSHU, NORTHERN PART & APPROACHES
- JAPAN SEA, SOUTHWESTERN PART
- HONSHU, SOUTH COAST & APPROACHES
- TOKYO WAN & APPROACHES
- ISE WAN & APPROACHES
- NANPO SHOTO
- SHIKOKU, SOUTH COAST
- SETO NAIKAI, EASTERN PART
- SETO NAIKAI, MIDDLE PART
- SETO NAIKAI, WESTERN PART
- OSAKA WAN & APPROACHES
- KANMON KAIKYO & APPROACHES
- KYUSHU & APPROACHES
- NANSEI SHOTO
- JAPAN SEA
- NORTH PACIFIC OCEAN
- KOREA & YELLOW SEA
- EAST CHINA SEA
- TAIWAN
- SOUTH CHINA SEA, NORTHERN PART
- SOUTH CHINA SEA, SOUTHERN PART & GULF OF THAILAND
- SINGAPORE STRAIT & MALACCA STRAIT
- PHILIPPINE ISLANDS
- BORNEO, SULAWESI & APPROACHES
- SUMATERA & JAWA
- TIMOR & ARAFURA SEA
- NEW GUINEA
- MARIANA ISLANDS

Navigation icons: Home, Search, Navigation, Zoom by r

Information: Please note and does not of other coun

Center Sea area Term Progression The latest information Location

Term

Show

Apr 2017

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Information covered are Notices to Ma
Please note that provision of Notices t
and does not mean that the Governme
of other countries.

Navigation icons: Home, Search, Navigation, Zoom by r

Center Sea area Term Progression The latest information Location Category

Check All | Uncheck All

<input checked="" type="checkbox"/> Depth	<input checked="" type="checkbox"/> Natural Phenomenon	<input checked="" type="checkbox"/> Drifting	<input checked="" type="checkbox"/> Aids to navig
<input checked="" type="checkbox"/> Exercises	<input checked="" type="checkbox"/> Port institution	<input checked="" type="checkbox"/> Submerged facilities	<input checked="" type="checkbox"/> Marine estab
<input checked="" type="checkbox"/> Research	<input checked="" type="checkbox"/> Towing	<input checked="" type="checkbox"/> Restriction	<input checked="" type="checkbox"/> Requested a:
<input checked="" type="checkbox"/> Fishing	<input checked="" type="checkbox"/> Other		

How to edit information for both existing method and “visual” web page

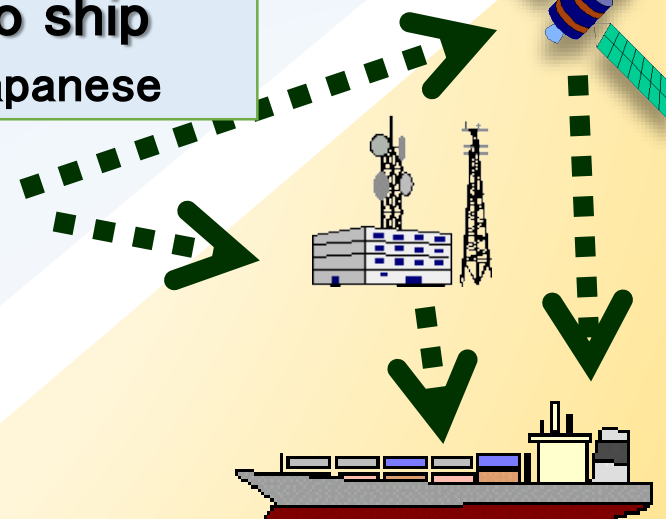


1. Text

200500UTC APR 2017 ISSUED AT
APR 2017 VOLCANIC WARNING
VOLCANO NAME:NISHINO SHIMA
LOCATION:27-14.6N 140-52.7E
WARNING WITHIN A RADIUS OF 0.9 MILES OF
ABOVE LOCATION.

Directly to ship
English & Japanese

噴火による影響が及ぶおそれ 上記位置を
中心とする半径0.9海里域内の周辺海域警戒



2. Location

Easy to
check

Our Website
English & Japanese



- Inputting the location is added to already established work flow, and data is uploaded.
- Officers can check mistyping of the location on map.
- The location data is used for NW or NtM in both Japanese and English version.

Impossible or no display case of visualization for example

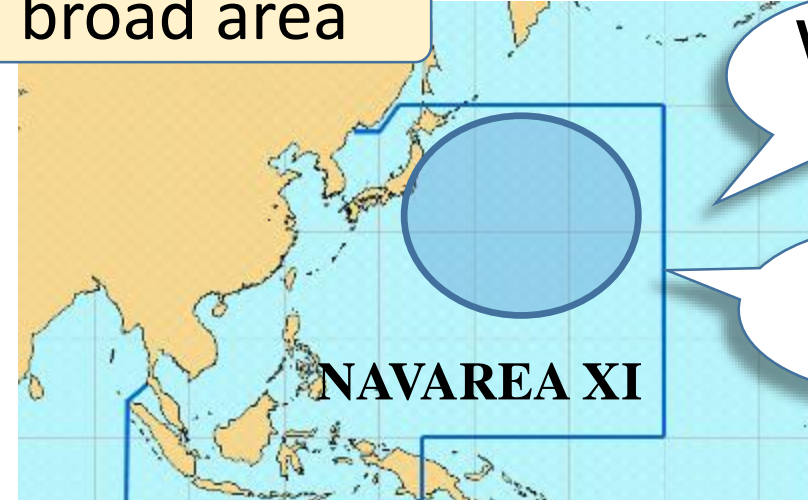
No Location

No. →

[Navigational Warnings] No.17-311
NAVAREA XI WARNING MESSAGES IN FORCE 061200Z
MAY. ONLY THOSE MESSAGES ISSUED
NO.17-0311 Date:2017/05/06 12 UTC
NAVAREA XI WARNING MESSAGES IN FORCE
061200Z MAY. ONLY THOSE MESSAGES ISSUED
DURING LAST SIX WEEKS ARE LISTED HEREIN.
0219 0221 0241 0261 0263 0278 0280 0286
0289 0294 0296 0298 0302 0308 0310/17.
THE COMPLETE TEXT OF ALL IN FORCE
NAVAREA XI WARNINGS ARE AVAILABLE FROM
THE JHOD WEBSITE "HTTP://WWW1.KAIHO.

List of Navigational Warning in force
(No. of warnings are on it)

Too broad area

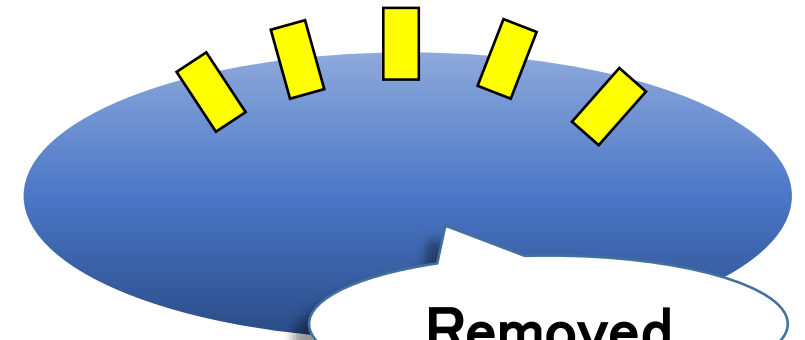
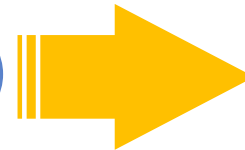
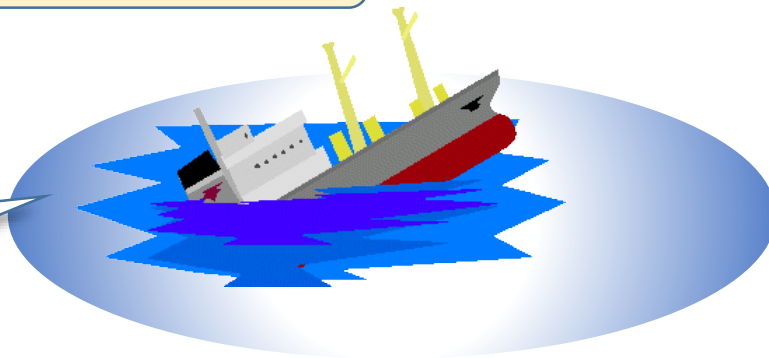


An satellite falling in
"IN THE NORTH PACIFIC OCEAN"

*We provide these case as non-visual information.

Cancelled information

Adrift



Summary of the visual NW&NtM system

- For users
 - Navigational Warnings and Notices to Mariners is displayed on map
 - You can access the information with web browser on Internet.
 - The information can be displayed with filter (broadcasting, category...)
 - -> mariners can check the NW or NtM easily.
- For officers
 - Inputting the location is added to already established work flow, and data is uploaded.
 - The location data is used for both Japanese and English navigational warnings
 - -> officers can edit information both for ship and for “visual” web page without overload.