

2018 Plan for Improvement of Maritime Safety Information

June 2018

Forecast Department,
Japan Meteorological Agency

Improvement of maritime safety information

Major changes (scheduled implementation: 19 June 2018)

1. Forecast and current wind information will both be available (except for tropical depressions (typhoons))

(a) Storm/gale warnings associated with low-pressure areas

Information in current warnings:

1. Current wind speed or maximum wind speed expected within the next 24 hours^{*1}
2. Maximum radius of ≥ 30 -kt winds ("30-kt wind radius") expected within the next 24 hours^{*2}



Information in new warnings:

1. Current wind speed
2. Current 30-kt wind radius
3. Maximum wind speed expected within the next 24 hours
4. Maximum 30-kt wind radius expected within the next 24 hours

⇒ Detailed information to be provided

(b) Storm/gale warnings for ocean areas denoted with latitudes and longitudes or geographical names such as "the Sea of Japan" (30-kt wind radius not included in current or new warnings)

Information in current warnings:

1. Current wind speed or maximum wind speed expected within the next 24 hours^{*1}



Information in new warnings:

1. Current wind speed
2. Maximum wind speed expected within the next 24 hours.

⇒ Detailed information to be provided

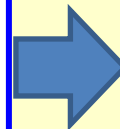
*1: Information on current wind speed is provided when: 1. the current value is 34 kt or more and the expected maximum is less than 48 kt; 2. the current value is 48 kt or more and the expected maximum is less than 64 kt; and 3. the current value is 64 kt or more. Otherwise, information on the maximum wind speed expected within the next 24 hours is provided.

*2: The 30-kt wind radius is that of the area affected by winds with speeds of 30 kt or more around a low-pressure area.

2. Information on the expected formation of low-pressure areas will be provided (except for tropical depressions (typhoons)). (In cases when a storm/gale warning is necessary for an expected low-pressure area (i.e., where the maximum wind speed is expected to exceed 34 kt within the next 24 hours))

Information in current warnings:

1. Wind speed/direction over ocean areas denoted with latitudes and longitudes or geographical names such as "the Sea of Japan"



Information in new warnings:

1. Warnings on expected winds caused by new low-pressure areas with information on position and movement
⇒ This improvement will support decisions on routing and contribute to maritime safety.

Samples of current and new bulletins

Current bulletin

WARNING AND SUMMARY 090600.
WARNING VALID 100600.
WARNING IS UPDATED EVERY 6 HOURS.
GALE WARNING.
DEVELOPING LOW 1006 HPA
AT 34N 123E YELLOW SEA MOVING EAST 15 KNOTS.
WINDS 30 TO 35 KNOTS WITHIN 600 MILES OF LOW.

cf. p. 2 1 (a)
Storm/gale warnings associated with a low-pressure are provided in these two sections.

1. Current wind speed or maximum wind speed expected within the next 24 hours (this sample: current wind speed);
2. maximum 30-kt wind radius expected within the next 24 hours

cf. p. 2 1 (b)
Storm/gale warnings on ocean areas provide information on either the current wind speed or the maximum wind speed expected within the next 24 hours (this sample: current wind speed for the Sea of Japan)

GALE WARNING.
WESTERLY TO NORTHWESTERLY WINDS 30 TO 35 KNOTS PREVAILING OVER SEA OF JAPAN.

GALE WARNING.
EXPECTED WESTERLY TO SOUTHWESTERLY WINDS 30 TO 45 KNOTS PREVAILING OVER WATERS BOUNDED BY 32N 130E 35N 140E 33N 146E 27N 141E 26N 130E 32N 130E FOR NEXT 24 HOURS.

WARNING.
DENSE FOG OBSERVED LOCALLY OVER SEA OF JAPAN.
SUMMARY.
HIGH 1020 HPA AT 36N 156E EAST 10 KT.
STATIONARY FRONT FROM 23N 111E TO 25N 120E 30N 129E 31N 130E 30N 134E 29N 138E.

cf. p. 2 2
Information on wind variables such as direction and speed is provided in warnings of storms/gales caused by low-pressure areas expected to form. The ocean area around the new low is indicated (this sample: ocean area by latitude and longitude; includes information on the expected maximum wind speed within the next 24 hours)

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New bulletin

WARNING AND SUMMARY 090600.
WARNING VALID 100600.
WARNING IS UPDATED EVERY 6 HOURS.
GALE WARNING.
DEVELOPING LOW 1006 HPA
AT 34N 123E YELLOW SEA MOVING EAST 15 KNOTS.
WINDS 30 TO 35 KNOTS WITHIN 300 MILES OF LOW.
EXPECTED WINDS 30 TO 45 KNOTS WITHIN 600 MILES OF LOW WITHIN NEXT 24 HOURS.

Information on the current wind speed and the maximum wind speed expected within the next 24 hours (underlined) is provided.
Information on the current 30-kt wind radius and the maximum 30-kt wind radius expected within the next 24 hours (underlined) is provided.

GALE WARNING.
WESTERLY TO NORTHWESTERLY WINDS 30 TO 35 KNOTS
EXPECTED WINDS 30 TO 45 KNOTS WITHIN NEXT 24 HOURS
PREVAILING OVER SEA OF JAPAN.

Information on the current wind speed and the maximum wind speed expected within the next 24 hours (underlined) is provided.

GALE WARNING.
NEW LOW
FORECAST POSITION FOR 100600UTC AT 32N 136E WITH UNCERTAINTY OF 85 MILES RADIUS MOVING ENE 25 KNOTS.
EXPECTED WINDS 30 TO 45 KNOTS WITHIN 500 MILES OF LOW WITHIN NEXT 24 HOURS.

Information on the position and movement of the low-pressure area expected to form and the maximum wind speed/maximum 30-kt wind radius expected within the next 24 hours (underlined) is provided.

WARNING.
DENSE FOG OBSERVED LOCALLY OVER SEA OF JAPAN.
SUMMARY.
HIGH 1020 HPA AT 36N 156E EAST 10 KT.
STATIONARY FRONT FROM 23N 111E TO 25N 120E 30N 129E 31N 130E 30N 134E 29N 138E.

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* Blank lines are added to the sample bulletins to compare them easily.