

Marine Weather Products and Services Atlantic Coast

Available Forecast Products

The **Regular Forecast**, or short-term marine forecast, is issued four times per day and covers the current day and the next day. It includes detailed information on winds, and a general description of weather conditions. It also includes any wind and freezing spray warnings in effect at the time.

Issue Times:

- Maritimes: Atlantic Daylight Time / Atlantic Standard Time (ADT/AST): 3:00 a.m.; 10:00 a.m.; 3:30 p.m.; 8:00 p.m.
- Newfoundland: Newfoundland Daylight Time / Newfoundland Standard Time (NDT/NST): 3:00 a.m.; 10:00 a.m.; 3:30 p.m.; 8:00 p.m.
- Labrador (NDT/NST): 4:00 a.m.; 9:30 a.m.; 4:00 p.m.; 9:30 p.m.

The **Extended Forecast** is issued twice per day and covers the period from the end of the Regular Forecast to the end of the fifth day of the forecast period (includes day three, four and five). It includes only a general description of expected wind conditions.

Issue Times:

- Maritimes (ADT/AST): 3:00 a.m.; 3:30 p.m.
- Newfoundland (NDT/NST): 3:00 a.m.; 3:30 p.m.
- Labrador (NDT/NST): 4:00 a.m.; 4:00 p.m.

The **Technical Marine Synopsis** is issued at the same time as the Regular Forecast. It gives a general picture of the position, intensity and motion of the main weather features (lows, highs, fronts) that will affect the region during the forecast period.

Issue Times:

- Maritimes (ADT/AST): 3:00 a.m.; 10:00 a.m.; 3:30 p.m.; 8:00 p.m.
- Newfoundland (NDT/NST): 3:00 a.m.; 10:00 a.m.; 3:30 p.m.; 8:00 p.m.
- Labrador (NDT/NST): 4:00 a.m.; 9:30 a.m.; 4:00 p.m.; 9:30 p.m.

The **Marine Weather Statement** is a non-scheduled bulletin which is issued to inform the marine community of non-severe, but potentially hazardous, conditions. It may also be issued to warn mariners of very significant weather features expected in the three to five day forecast.

The **Wave Height Forecast** is issued twice per day and covers the current day and the next day. This forecast describes the expected significant wave height rather than the maximum wave height. Significant wave height is defined as the average of the highest one-third of all waves. Wave heights are described in metres and are measured from trough to crest.

Issue Times:

- Maritimes (ADT/AST): 5:00 a.m.; 5:00 p.m.
- Newfoundland (NDT/NST): 6:00 a.m.; 6:00 p.m.
- Labrador (NDT/NST): 6:00 a.m.; 6:00 p.m.

The **NAVTEX Forecast** is a shortened version of the above marine forecast products which is transmitted by the Canadian Coast Guard by NAVTEX at the respective bulletin issue times. This forecast is intended for international mariners travelling in Canadian waters.

Issue Times:

- Maritimes (ADT/AST): 3:00 a.m.; 5:00 a.m.; 10:00 a.m.; 3:30 p.m.; 5:00 p.m.; 8:00 p.m.
- Newfoundland (NDT/NST): 3:00 a.m.; 6:00 a.m.; 10:00 a.m.; 3:30 p.m.; 6:00 p.m.; 8:00 p.m.
- Labrador (NDT/NST): 4:00 a.m.; 6:00 a.m.; 10:00 a.m.; 4:00 p.m.; 6:00 p.m.; 9:30 p.m.

Ice Hazard Bulletins are issued once daily and cover the current day and the next day. These bulletins contain information on ice conditions and include any warnings related to sea ice. Detailed ice information is available on Environment and Climate Change Canada's weather Website at<u>www.weather.gc.ca</u>.

Issue Times:

• Eastern Daylight Time / Eastern Standard Time (EDT/EST): 10:00 a.m.

The **Recreational Boating Marine Forecast** is issued for Bras d'Or Lake three times daily between May 1st and October 31st. These forecasts include information on winds, precipitation and visibility but do not include wave height information. These forecasts are valid for 36-48 hours.

Issue Times:

• Maritimes (ADT/AST): 3:00 a.m.; 10:00 a.m.; 3:30 p.m.; 8:00 p.m.

Note: Updated forecasts are issued as required.

What is Included in a Marine Forecast?

Wind Speed and Direction: The **wind speed** is the average wind that is expected over the open water and is given in units of knots (1 kt = 1.852 km/h). **Wind direction** refers to the direction **from** which the wind is blowing (based on true north and not on magnetic north). Wind conditions close to shore may vary from the forecast winds due to the influence of coastal terrain on the prevailing wind pattern.

Weather and Visibility: In addition to a brief description of the weather, a statement is included in the forecast when visibility is expected to be reduced to near or below one nautical mile (1.852 km).

Freezing Spray: Freezing spray is mentioned in the forecast if conditions are likely to result in ice buildup on exposed vessel surfaces. **Air Temperature:** Air temperatures are included in the forecast only if temperatures are expected to be at or below 0° Celsius.

Marine Weather Warnings

Wind Warnings are included in the Regular Forecast when wind speeds are expected to be in the following categories:

- Strong Wind Warning 20-33 knots (Issued from April 15th to November 15th and only for coastal waters of N.S., N.B., and P.E.I.)
- Gale Warning 34-47 knots
- Storm Warning 48-63 knots
- Hurricane Force Wind Warning 64 knots or greater (This warning does not mean that an actual hurricane is expected or occurring.)

Freezing Spray Warnings are issued when ice is expected to build up at a rate of 0.7 cm per hour or greater.

Note: Strong Wind, Gale, Storm, Hurricane Force Wind and Freezing Spray Warnings are not issued as separate warning bulletins. Rather, they are mentioned or "flagged" in the Regular Forecast.

Localized Warnings and Watches are issued for any hazardous weather conditions that require the immediate attention of the mariner. High coastal waters, for example, would require a specialized warning. These warnings/watches **are** issued as separate warning bulletins, and except for the High Water Level Warning, they **are not** included as part of the Regular Forecast.

How to Get Your Marine Forecast

For complete details about how to get your marine forecast information from Environment and Climate Change Canada, visit the <u>Get Your Weather</u> section on the <u>Weather and Climate</u> page of Environment and Climate Change Canada's website.

Environment and Climate Change Canada's marine weather forecasts are also available via the Canadian Coast Guard's Continuous Marine Broadcast on your VHF radio. For information about Coast Guard's weather broadcast frequencies, visit Coast Guard's most current <u>Radio Aids to Marine Navigation</u> (<u>RAMN</u>) publication.

Marine Weather one-on-one Consultation

1-844-505-2525

Marine Forecasts and Warnings for Canada

https://weather.gc.ca/marine/index_e.html

Guide to ECCC marine weather forecasts

https://www.canada.ca/en/environment-climate-change/services/general-marine-weatherinformation/publications/guide-forecasts.html

Regional marine weather guides

https://www.canada.ca/en/environment-climate-change/services/general-marine-weatherinformation/regional-guides.html

Marine weather products and services: Atlantic coast

https://www.canada.ca/en/environment-climate-change/services/general-marine-weatherinformation/understanding-forecasts/regional/products-services-atlantic-coast.html

General marine weather information

https://www.canada.ca/en/environment-climate-change/services/general-marine-weatherinformation.html

Canadian Hurricane Centre: forecasts and products

https://www.canada.ca/en/environment-climate-change/services/hurricane-forecastsfacts/products.html

Wave Model Charts

https://weather.gc.ca/model forecast/wave e.html

Latest ice conditions

https://www.canada.ca/en/environment-climate-change/services/ice-forecastsobservations/latest-conditions.html