

December 25, 2025

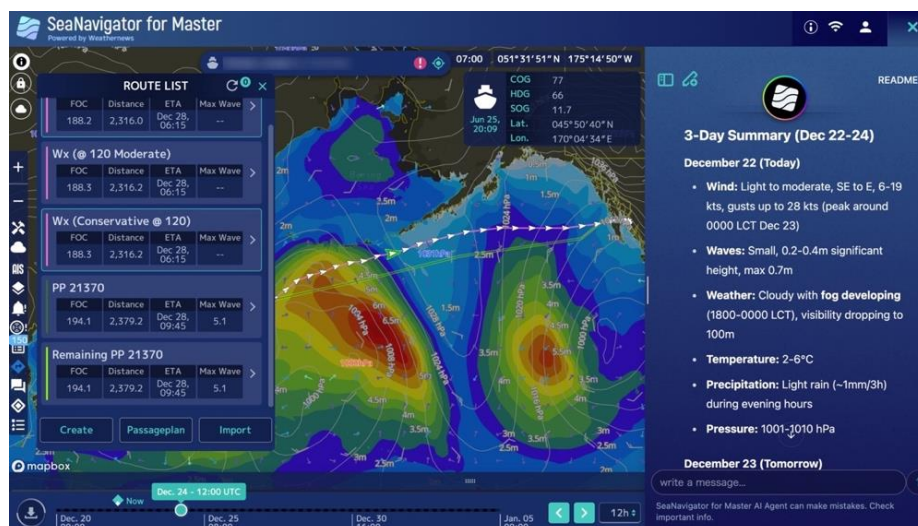
The Debut of a Brand New, Next-Generation Operations Support Service for Captains:  
**Weathernews Launches “SeaNavigator for Master”,**  
**the World's First Conversational AI for Captains**  
 Advanced Wave and Wind Forecast Graphics and High-Performance,  
 Real-Time Optimal Route Searches, All While Onboard

Weathernews Inc. (Headquarters: Chiba, Japan; President and Representative Director: Tomohiro Ishibashi) has launched “SeaNavigator for Master”, a next-generation, world-first support platform that uses AI-powered chat to assist captains in making operational decisions, enabled by recent advances in maritime communications.

This service features the world's first commercial conversational AI Agent for captains, allowing them to ask AI for information directly relevant to voyage planning, such as weather risks along routes and at ports, as well as fuel consumption and speed forecasts, just as if they were speaking with a Weathernews expert. Captains can also view the latest high-resolution forecast in real time, including wave, wind and tropical cyclone track forecasts, which are among the most in-demand data sets. The Voyage Route Simulation feature allows captains to instantly search for optimal voyage routes onboard, based on wave height and historical routing track records. Whereas conventional communications have been limited to email and satellite phone, this service allows voyage plans to be smoothly reviewed and approved via chat between captains at sea and shore-based operations managers.

By sharing timely weather, marine, and operational data essential to decision-making through this onboard system, the service resolves the long-standing issue of information disparity between sea and shore. This enables captains to independently select more optimal routes using rich, up-to-date data sets. Going forward, Weathernews will leverage its experience supporting a cumulative total of one million voyages to further expand functionality and enhance the accuracy of the AI Agent and Voyage Route Simulation.

Inquiries about this service	The service website
<a href="https://sea.weathernews.com/contact">https://sea.weathernews.com/contact</a>	<a href="https://sea.weathernews.com/seanavigator/">https://sea.weathernews.com/seanavigator/</a>



Voyage Route Simulation route search results (left side of the screen) and AI Agent response for wave and wind forecasts along the voyage route (right side of the screen)

## ◆Development of a Next-Generation, Captain-First Support Service Enabled by Faster Maritime Communications

For nearly 40 years, Weathernews has provided marine weather services that support vessel safety, economic efficiency, and environmental performance. In 1994, Weathernews developed the world's first offline onboard system, establishing a long-standing track record of empowering captains to make informed decisions based on predicted weather conditions. However, due to limitations in maritime communications and security, delivering large volumes of data in real time has historically been challenging. While shore-based operations managers were able to verify detailed, up-to-date data in real time, captains onboard vessels were restricted to receiving information via email only a few times per day. This resulted in significant disparities in both the timeliness and volume of information available between ship and shore.

In recent years, substantial improvements in maritime network infrastructure have created a technical foundation for securely handling data at a level comparable to that available on shore. In response to these advancements, Weathernews has renewed its onboard systems for the first time since 2012. Prioritizing the needs of ship captains, the company developed “SeaNavigator for Master” with a clear focus.

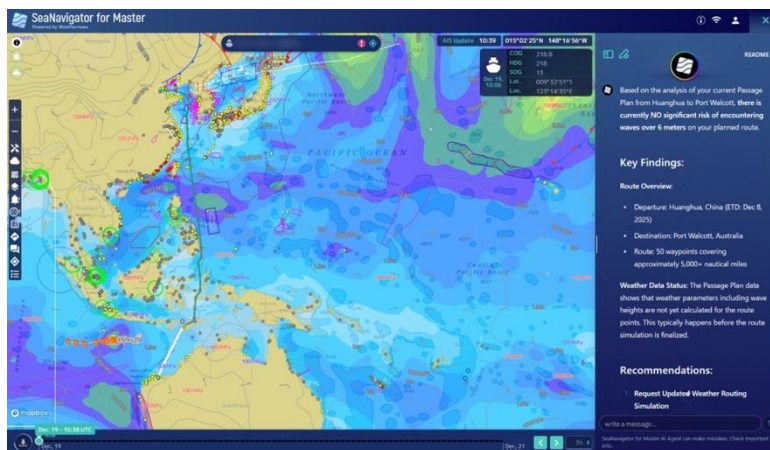
SeaNavigator for Master is a marine weather service in which AI supports captains in making operational decisions at sea. Through this next-generation operational support platform, captains can access the latest wave and wind forecasts, grounding risk information, voyage route simulations, and other critical data directly onboard. By combining captains’ professional experience with a rich set of real-time data and AI-driven recommendations, the service enables more optimal operational decisions that balance safety, economic performance, and schedule reliability.

### Key Points

1. Use of the world's first AI service that helps make operational decisions aboard ships through dialogue
2. Timely access to the latest high-resolution wind and wave forecasts while at sea
3. Update voyage plans with Voyage Route Simulation, which allows captains to search for optimal routes at any time
4. Move beyond email and approve voyage plans through chats between the sea and shore

### 1. Use of the world's first AI service that helps make operational decisions aboard ships through dialogue

The most significant feature of this service is the AI Agent, which specializes in supporting captains’ operational decision-making at sea. The AI Agent (\*1), which SeaNavigator for Master has provided since October 2025, has been further enhanced to address the unique needs of captains. Captains can ask questions at any time about the latest weather conditions, wave and wind risks along voyage routes, as well as fuel consumption, speed trends and forecasts



Weather risk analysis results and advice along the route  
(right side of the screen)  
AI response to the question, "Are there any hazards along the route?"

based on historical routing service track records. This interactive dialogue experience allows captains to obtain relevant operational insights as naturally as if they were consulting experts from Weathernews Inc.'s Marine Weather Division.

For questions such as, "Summarize the weather risks along the planned route," or, "Tell me the wind speed and wave height forecast for the Port of Osaka in 48 hours," the AI references Weathernews's marine and operational data and responds in a chat-based format. This enables captains to instantly obtain the latest information required for voyage decision-making simply by asking the AI.

Going forward, Weathernews plans to further enhance the AI Agent to handle complex consultations that have traditionally required confirmation with experts from the Marine Weather Division, providing immediate responses 24 hours a day, 365 days a year. For example, when a captain currently asks, "I'm considering this route; are there any alternative routes that might be better?" Weathernews experts may respond with guidance such as, "The forecast for the latter half of the voyage is likely to change, so wait until tomorrow. If conditions worsen, consider switching to a plan with a slightly lower latitude." At present, captains review such recommendations and the underlying reasoning before making final route adjustments. Going forward, we will enhance the system so that captains can consult directly with the "AI Agent" to receive information and advice equivalent to that provided by our experts. This will support the captain's judgment and enable faster, more precise decision-making.

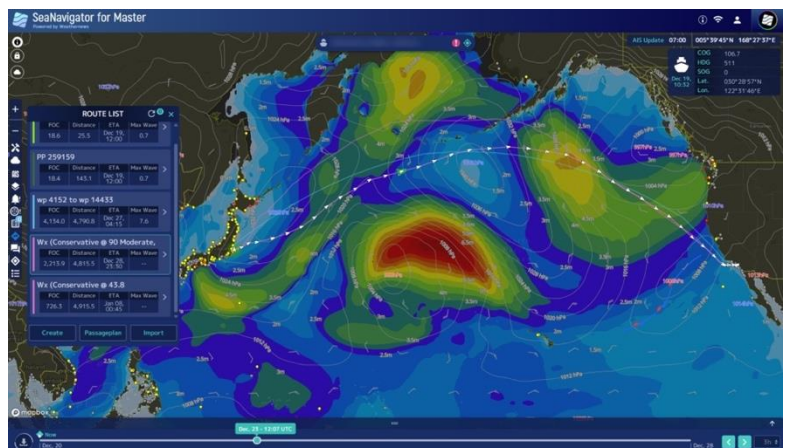
## 2. Timely access to the latest high-resolution wind and wave forecasts while at sea

Bandwidth constraints on conventional onboard systems have historically limited marine data to narrow areas and lower resolutions than those available to shore-based operations managers, with updates typically received only once per day. With SeaNavigator for Master, vessels can now access high-resolution marine data for all sea areas directly onboard, overlaid on nautical chart-style displays that include wind direction and speed, wave height and period, currents, and tropical cyclone track forecasts. This capability empowers captains to make more informed operational decisions based on a comprehensive set of the latest available information.

## 3. Update voyage plans with Voyage Route Simulation, which lets captains search for optimal routes at any time

Weathernews has developed our proprietary Voyage Route Simulation to meet the needs of international shipping markets where captains are responsible for everything from information gathering to final operational decision-making. This feature enables captains to independently search for voyage routes and review the results in detail.

With Voyage Route Simulation, captains simply enter the departure and arrival ports, scheduled times, and a reference threshold



Displays fuel, distance, arrival time, and maximum wave height; wave and wind forecasts for each route can also be viewed on a map

wave height. The system then automatically calculates voyage routes and proposes multiple options, ranked by the degree of weather-related risk. These options are further refined based on severe weather threats such as tropical cyclones and low-pressure systems, as well as ship report data. Captains can review estimated voyage time, distance, and fuel consumption for each route and select the most appropriate option according to their priorities for safety, economic efficiency, and schedule reliability.

Simulations can also be performed from the vessel's current location using the latest available data after departure, making the feature particularly useful for updating voyage plans while at sea.

#### 4. Move beyond email and approve voyage plans through chats between the sea and shore

SeaNavigator for Master enables the workflow, from route selection to approval between sea and shore, to be conducted via chat. Voyage plan approvals that were previously handled through email can now be discussed in real time while both parties view the same screen, dramatically accelerating decision-making.



People on ships and on shore can contact one another via chat at any time

The service also includes the NAR (Navigation Assessment & Routing) (\*2) grounding prevention support feature, which was previously available only to shore-based operations managers. NAR alerts users to grounding risks when vessels plan to approach high-risk areas such as shallow waters or waters congested with fishing vessels. This makes it possible for both onboard and shore-based personnel to review voyage plans and verify grounding risks using the same data, while accounting for operational factors beyond weather conditions.

Early adopter shipping companies in Europe, Japan, and Asia have highly praised the system, describing it as a tool that drives digital transformation (DX) in day-to-day operations. One user commented, "We used to exchange large files via email to obtain approval for voyage plans, but now we can discuss them almost in real time. Improving the onboard network environment has resulted in significant operational benefits."

Inquiries about this service: <https://sea.weathernews.com/contact>

Weathernews positions AI technology at the core of its services as a powerful partner that enhances captains' experience and expertise. In pursuit of its mission to "Saving the lives of sailors. Saving the future of our planet too", Weathernews will continue to promote environmental digital transformation while harnessing the potential of AI.

\*1 Oct 09, 2025

Marine Weather Service SeaNavigator Equipped With AI Engine for Swift Decision-Making on Ship Operations

<https://global.weathernews.com/news/18536/>

\*2 Apr 06, 2021

Weathernews Announces Launch of Navigation Assessment and Routeing (NAR) Service in May 2021

<https://global.weathernews.com/news/16014/>