

interview

Meeting innovators in the global cruise industry



interview
International Cruise Ship Industry

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Amy Buhl, Weathernews Group General Manager, Americas and Europe



Weathernews Group General Manager for the Americas and Europe, about what is available to the cruise ship sector by way of weather forecasting.

Q: Has Weathernews any cruise ship operator clients or has undertaken any studies for the cruise ship operator sector?

A: Weathernews has provided ad hoc support for cruise ship operator clients; the core of our business involves route and speed optimisation for vessel safety and efficiency.

With sea conditions becoming worse and weather patterns more unpredictable, cruise ship operators have to be alert to potential threats to their schedules, to damage to their ships and injuries to guests on board.

The resulting bad publicity can be detrimental to their operations, mainly affecting future bookings, which are the mainstay of cruise ship economics.

In addition, carrying such as valuable cargo as people can have insurance and liability issues should a cruise ship's Master and officers be found negligent, following a major weather-related incident on board.

Indeed during the middle of December, the Caribbean and the US East Coast, from Florida to New York, witnessed particularly bad weather in which wave heights hit 10 m.

This resulted in cruise ships being re-routed north from New York in the winter season instead of enjoying the warm weather normally associated with the Caribbean region this time of year.

International Cruise Ship Industry (ICSI) spoke with Amy Buhl,

The fact that cruises are more or less fixed port rotations, short hops between ports, with strict schedules, means that the type of service we provide does not match as well with their needs, although we are evaluating what types of services we could provide that might match those needs.

Our services have been used more for cross-ocean voyages, such as repositioning a vessel from the Mediterranean to the Caribbean.

Q: Does the cruise industry use weather service providers, or do the operators have their own connections to large meteorological service providers?

A: My understanding is that in many cases, on board systems are the main way that cruise operators and captains evaluate weather, as opposed to, for example, receiving an alerting or route planning service.

On board systems are usually software applications available on the bridge of the vessel (and/or shoreside for operators) that display weather information.

In some cases, the systems allow the

captain to plot a course and overlay weather layers, such as wind speed, wave height, currents, etc, for evaluation; those systems may also have a capability to simulate the vessel's position along the route that has been input (based on the intended speed for the voyage leg), which then can allow the viewer to analyse the vessel's expected future DR position against the weather conditions at a future time.

In other cases, they may use freely available websites that provide weather information to assess the weather risks. Usually, the weather information in these cases are global scale model data available from national weather service sources, such as NOAA.

Q: How seriously are the operators taking the threat of weather disrupted cruises? Do they take advice before planning cruise itineraries?

A: I do believe operators take this threat seriously; one of the biggest weather issues for cruising in certain parts of the world is the threat of tropical cyclone development, which can significantly effect itineraries in popular cruise destinations, and is often one of the weather issues that operators can reach out to weather service providers, such as Weathernews, for information and support.

Probabilistic forecasting (Weathernews' latest service offering) is a relevant topic for these discussions, since decisions about itinerary changes involve the type of risk analysis probabilistic forecasting can provide. Probabilistic forecasting also allows for analysis of the likelihood of the conditions being acceptable at a port of call.

So this type of information would be a helpful tool for risk analysis and decision support, and would be one way to use this information to support decision making.

Even now, I have seen reports in social media of cruise itineraries being adjusted for weather conditions - just recently a change in the itinerary for a scheduled cruise to the Bahamas out of New York changed to a tour of ports in New England and Canadian Maritimes, due to weather forecast along the US East Coast recently (a strong low with 8-10 m seas forecast along the route from New York to the Bahamas) - a pretty major change, and I imagine not taken lightly, although also likely the right call for the safety of the passengers, as disappointing as it may have been.

So anecdotal evidence suggests that this is a consideration.

Q: In general, with the probabilistic forecasts, does Weathernews take into account currents and tides and are they changing as well?

A: Yes, current forecasts and tidal forecasts (as well as tidal currents) are included in the suite of weather and oceanographic data used by Weathernews when developing route optimisations, or supporting ontime arrival for vessels under our service, in addition to wind and wave forecast information.

Probabilistic data is mainly available for variables, such as wind, wave height, precipitation, but the real value of this data is that it can be developed to understand specific risks (such as Tropical Cyclone Strike Probability, re: the previous question, something that Weathernews provides as part of our suite of services) to support a specific sector's concerns.