SailTimer Partners with Amphitrite:
How AI Forecasts and Crowdsourcing are Changing Marine Weather

Halifax, Nova Scotia, Canada — Marine weather, charts and navigation are all evolving right before our eyes. This new technology is as close as your phone or tablet. A new partnership between SailTimer Inc. (Halifax, Canada) and Amphitrite (Paris, France) continues the transformation of industry standards for more accurate marine weather, with AI and crowdsourcing.

Amphitrite is a university spin-off company in Paris, France. The name refers to the ancient Greek goddess of the sea, but also now means cutting-edge AI marine weather models. We are pleased to announce that their animated weather maps are now available in the SailTimer app on Android and iOS.

Coming from France's top AI and oceanography laboratories, the Amphitrite R&D team have developed a cutting-edge AI system to process time-series of satellite observations. Using surface temperature, chlorophyll (plant plankton) and sea surface height, their satellite data-driven models provide higher accuracy for ocean surface currents.

The standard marine weather forecast comes in GRIB format from satellite imaging 500 to 22,000 miles up in space. It has a poor resolution for coastal navigation, with weather cells that are typically 1/4 degree (15 nautical miles) square. But using AI, the models of current from Amphitrite are more accurate and higher resolution at 1.9 nautical miles.

A new update to the SailTimer™ app adds these AI forecasts of ocean currents, and Amphitrite's full marine weather forecast including waves/swell, sea and air temperature, cloud coverage and precipitation.
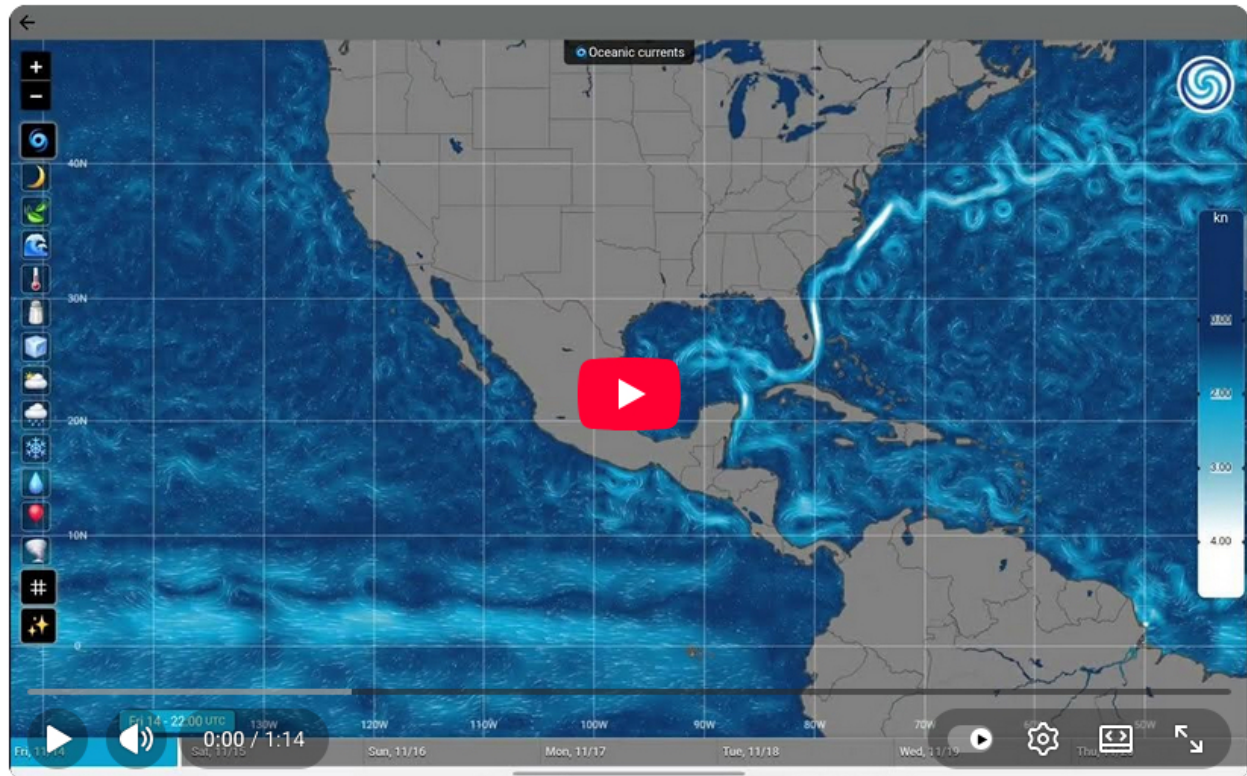
More accurate weather data helps ships use voyage optimization to reduce fuel costs and greenhouse gas emissions. And for all types of recreational boating, it is useful to check wind and sea conditions before heading out, choosing a route, a fishing location or a lunch stop.

SailTimer has built up an archive of 10 years of crowdsourced wind measurements. The company developed the first-ever sailboat Wind Instrument that could transmit to smartphones. It now also has an Ultrasonic wind sensor with no moving parts, and the low-cost Air Link™ device that crowdsources data from any brand or type of wind sensor. These actual measurements of wind have a resolution of 20 meters. If there is one thing that all AI models need, it is data to train with. SailTimer recently passed a milestone of 111-million wind measurements in its database.

The crowdsourced wind maps are far more accurate than GRIB satellite weather. SailTimer published a recent study in ECO: Environment, Coastal and Offshore showing that there was an average error of +/-35 degrees in the satellite forecast of wind direction, compared to actual wind measurements. That is terrible accuracy - an error range of 70 degrees! Crowdsourced wind measurements solve this problem. The scientists at Amphitrite and SailTimer will also be working on machine learning with crowdsourced wind data, to fill out high-resolution, accurate wind maps where crowdsourced data is sparse.

The SailTimer™ app is free, and the AI Forecast in the app is just $3 a month (and a discount of about 50% for the year). For any type of boat from kayaks, fishing boats, kite surfing, waterski boats to yachts, this gives you more accurate, high-resolution marine weather for planning your routes.

GRAPHIC:

Now in the SailTimer app: Ocean currents and the Gulf Stream are more accurate with AI marine weather from Amphitrite. Plus lots of other weather maps on the icons at at left.
https://www.youtube.com/watch?v=Ws-NYEHyM4Q
https://www.tiktok.com/@sailtimer/video/7572941282541047060

About Amphitrite:
The Amphitrite R&D team, which comes from France's top AI and oceanography laboratories, was awarded by the European Space Agency, selected by Nvidia inception program and Microsoft Gen AI studio. Amphitrite has developed specialized AI ocean models, trained specifically to process multiple satellite observations and predict ocean surface currents at high-resolution. Merging these high resolution data with the state-of-the-art of wind and waves forecasts, leads to the best quality of oceanic and weather data. This data is now used by several shipping companies to optimize their shipping routes and reduce fuel consumption. www.Amphitrite.fr

About SailTimer:
SailTimer was founded in 2005 to develop calculations for optimal tacking routes in sailboats. We developed software to learn custom performance profiles for individual boats on all points of sail. Similar methods are also used now with ship voyage optimization. Supply side: SailTimer manufactures its own wind sensors, and the Air Link to crowdsource from any brand or type of wind sensor. On the Demand side of this marketplace, the company has unique crowdsourced wind maps in the SailTimer app and available for use in 3rd-party apps. The company continues research and development on crowdsourced sensing and data to improve other types of marine weather as well — both for recreational boaters and voyage optimization to reduce fuel costs and emissions in ships. For more information, visit www.SailTimer.boats or the company's LinkedIn page.

Media Contacts: SailTimer: info@SailTimer.co   Amphitrite: contact@amphitrite.fr