

# An Optimized Route for Aurora Tankers Saved Time, Money and Emissions



*StormGeo's ship routing services help Aurora Tankers Management save time, fuel and money—significantly reducing greenhouse gases in the process. Here's how weather routing saved the company 33 hours and 123 MT of CO2 during one voyage.*

Aurora Tankers Management is an established owner-operator involved in wet bulk shipping. They have a sizeable chemical/product fleet—sailing trade routes from the Middle East and U.S. to Asia.

In order to save time, minimize fuel consumption and reduce emissions, Aurora Tankers uses StormGeo's weather routing services.

## Increasing Safety and Efficiency with Weather Routing

Aurora Tankers asked for a route recommendation from StormGeo's Route Analysts for a voyage from Balboa to Ningbo.

As the vessel was a chemical tanker carrying bulk liquid chemical cargoes, it was vital that the ship took the safest possible route to minimize risk to both the cargo and crew.

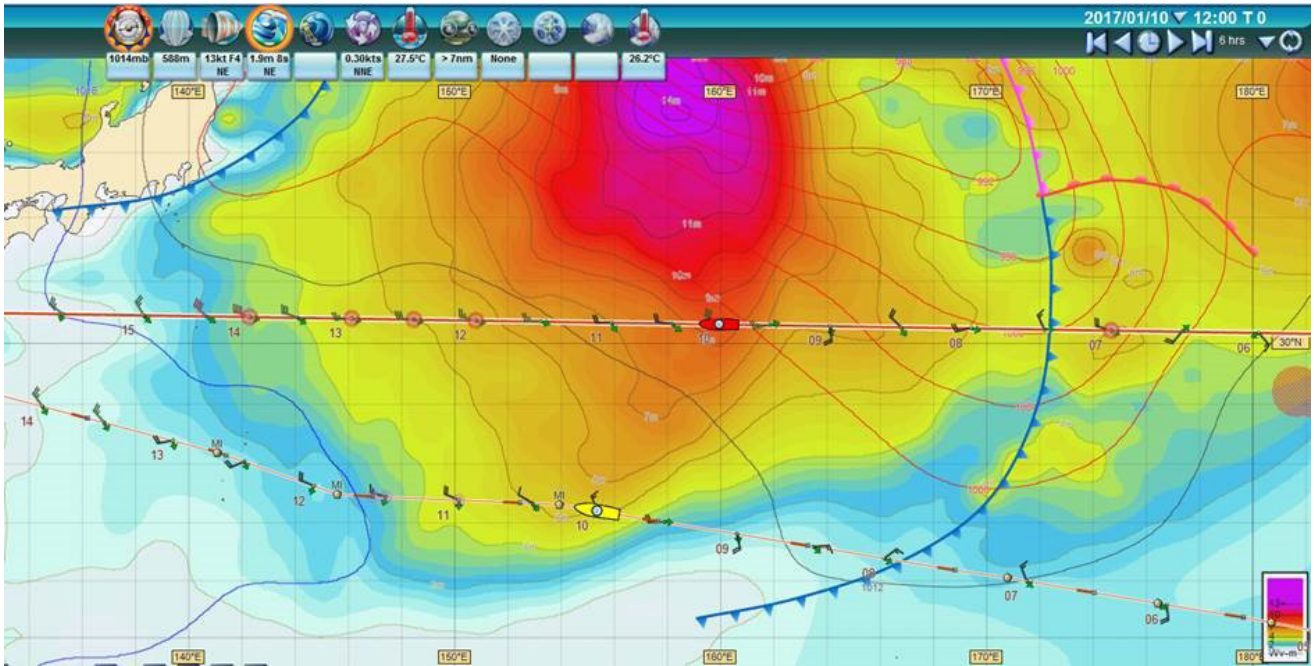
The Route Analysts closely evaluated the captain's intended route and recommended a safer and more time- and fuel-efficient route for the voyage. These analyses are based on real-time weather forecasts and incorporate known piracy areas and client-instructed arrival times.

While StormGeo's recommended route (at 9212.4 NM) was nearly 400 NM longer than the captain's intended route (8830.7 NM), it was carefully designed to place the vessel in more favorable ocean currents—south of heavier swells generated by northern Pacific Ocean storm centers.

Despite the longer distance of StormGeo's recommended route, the steaming time at sea was reduced by 33 hours. This time saving increased Aurora Tankers' potential utilization of their ship, allowing an extra 1.375 days that it could be used at sea. This was due to the vessel encountering significantly lighter weather with much better current assistance than it would have along the intended route.

The next figure is a visualization of this route, taken directly from StormGeo's Bon Voyage System (BVS), where the red ship represents the captain's intended route, and the yellow ship marks StormGeo's recommended route. The red ship would face significant eight to nine meter wave heights on the intended route, whereas the yellow ship would meet five meter waves.

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Original route shown in red. StormGeo optimized route shown in yellow.

## MINIMIZING FUEL CONSUMPTION, COSTS AND CO2 EMISSIONS

With this optimized route, Aurora Tankers saved approximately 41 MT of fuel—or 123 MT of CO2. This amount of saved emissions equates to the removal of 26 cars from the road for an entire year. Furthermore, with intermediate fuel oil (IFO) costing \$340/MT at the time, Aurora Tankers also saved \$13,940 in fuel. This serves as a great example as to how companies can increase their sustainability without sacrificing profitability and in fact, sometimes increasing profits.

Using StormGeo’s ship routing services, Aurora Tankers was able to optimize their voyage performance with tangible results, making significant savings on fuel, time and costs, and greatly reducing their impact on the environment, helping the sustainability of the planet. ♦

**41 MT**  
Fuel saved  
(with a cost  
savings of  
\$13,940)

**123 MT**  
CO2 saved

**26 Cars**  
Removed from  
the road for  
one year