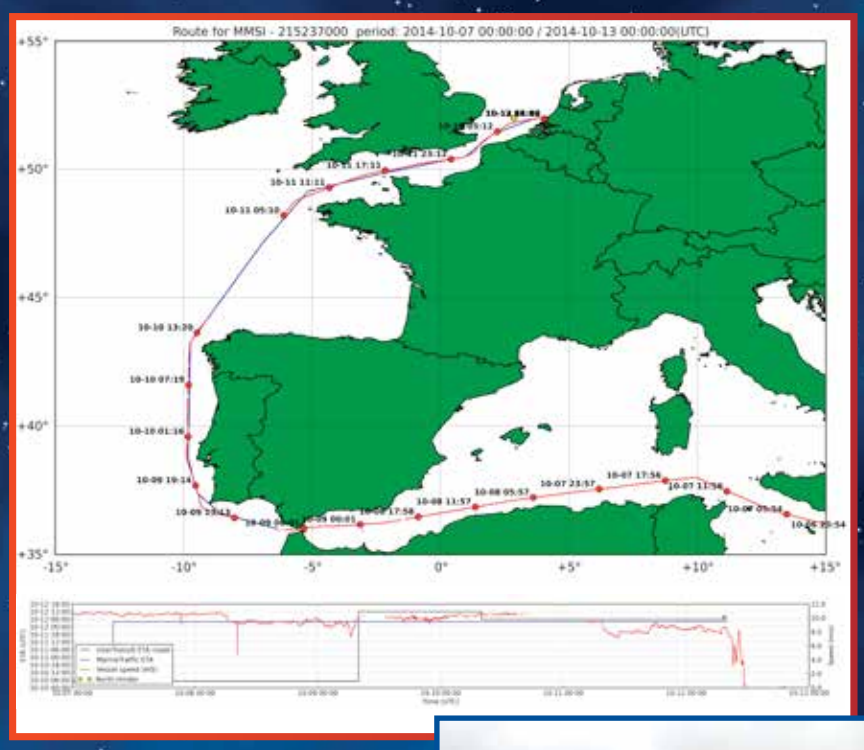
SPACE-MATCH

SPACE DATA UTILIZATION 2014

Estimated ship arrival time service



Estimated Time of Arrival (ETA) provided to ship's captain and harbour authorities

Key aspects

- The service uses MetOcean forecasts and the ship resistance model to provide Expected Time of Arrival (ETA) to harbour authorities
- Based on Required Time of Arrival (RTA) the ship's captain can be advised on optimal speed to reach his destination
- The service takes into account the wind, wave and current conditions during the trip and the effects that they have on the speed of the vessel
- The technology combines near real-time ship data, historical and forecast MetOcean data, and the ship response parameters to predict sailing times

Space context

- The service relies heavily on different satellite systems, e.g. for ship position data, environmental observations and communication
- Ship position is determined by using GNSS
- Environmental observations are obtained from Earth Observation satellites
- Weather forecasts for offshore areas rely heavily on data from meteorological satellites
- Broadcasted geo-information is received by both satellite AIS platforms and land based AIS stations and transmitted to the land based service centre

Patent position

- The technology has not yet been patented; it is a recent development

Market segments

- Maritime transport:
  - by ship owners and transport agencies
  - by harbour and transhipment businesses
  - by seaport authorities

Market potential

- Increase efficiency in the maritime transport sector and ports
- Optimize use of harbour infrastructure and increase throughput capacity including use of hinterland connections

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