

MyWay : a real time vessel tracking and cruise events system

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SCENARIO

ENEA is a member of the **PNRA** (National Programme of Antarctic Research) funded by the Italian Ministry of Education, University and Research (MIUR). The government program has made 34 national **oceanographic campaigns in Antarctica** and has developed many scientific and technological activities in which participate research centres and universities. The scientific personnel on board belongs to different research institutes and organizations. The teams are involved in project related to various disciplines such as meteorology, geology, physical and chemical oceanography, geological and marine biodiversity.

MYWAY has been used during different oceanographic cruises of the Italian Antarctic Expedition.

OBJECTIVES OF THE MYWAY SYSTEM

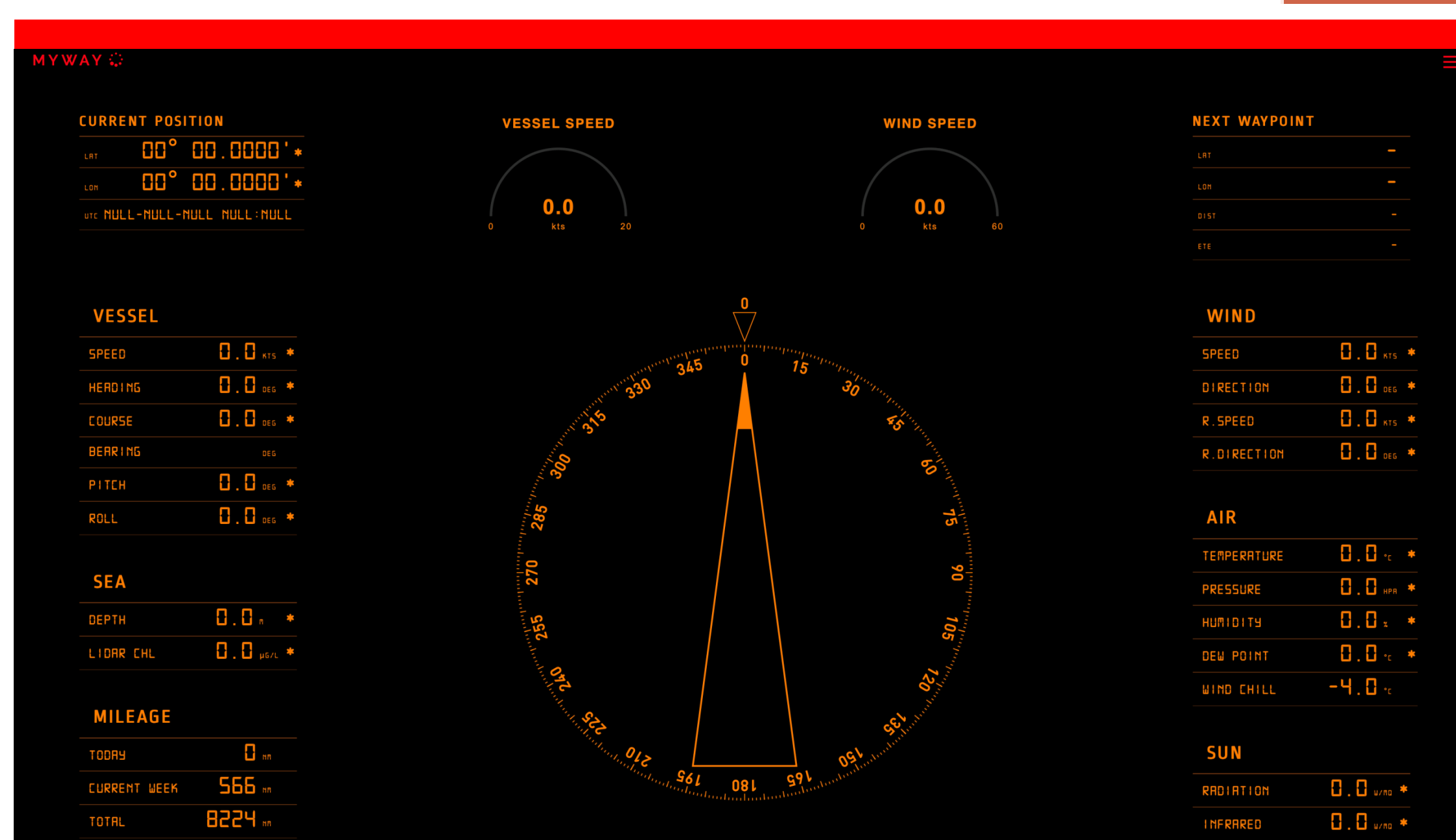
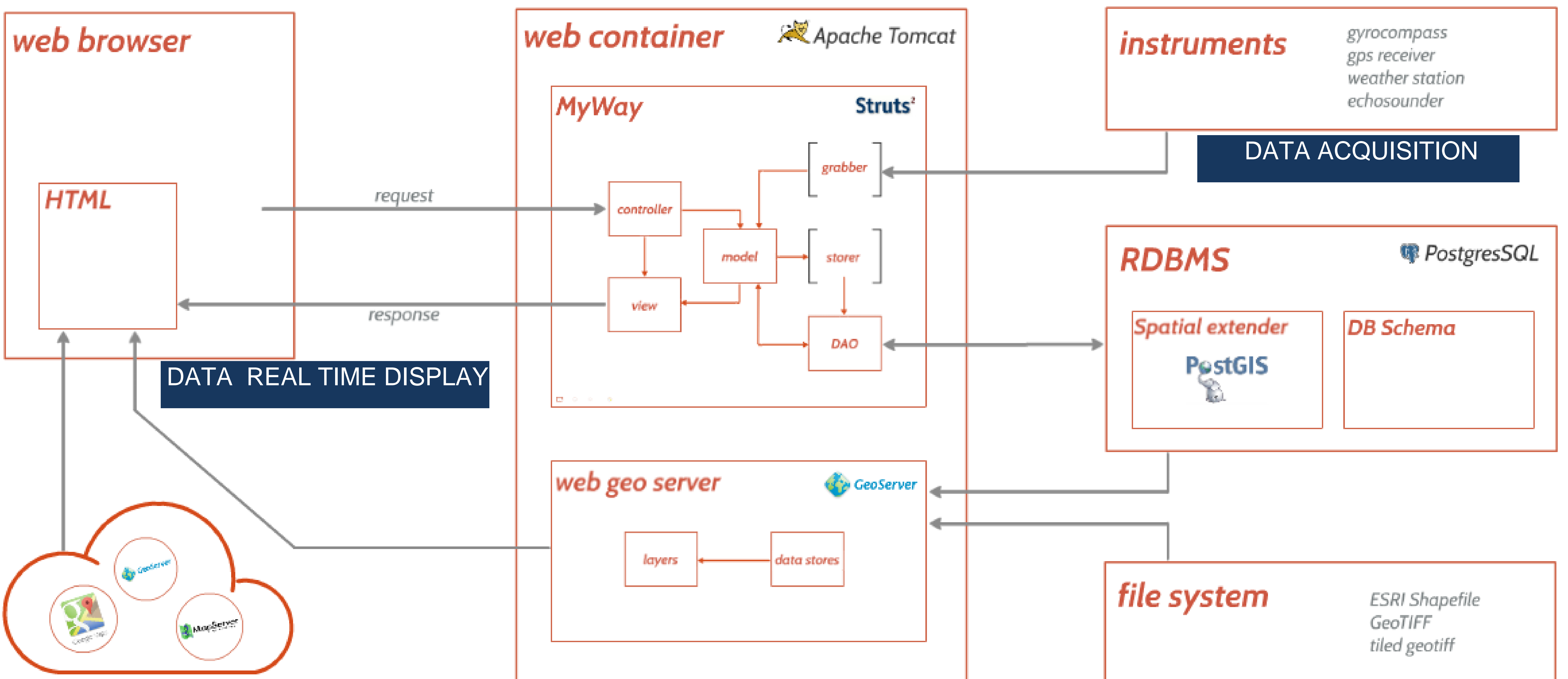
- TO VISUALISE AND TO RECORD NAVIGATION, METEOROLOGICAL AND ATMOSPHERIC DATA
- TO SUPPORT THE PLANNING OF THE CRUISE
- TO RECORD THE RESEARCH ACTIVITIES

My Way is a system that comprises a website that gives cruise information, sampling waypoints, weather statistics as well as map reports of the current track of the ITALICA ship in a geo-referred map with other useful data such as current ice concentration and bathymetric curves, below are described the features.

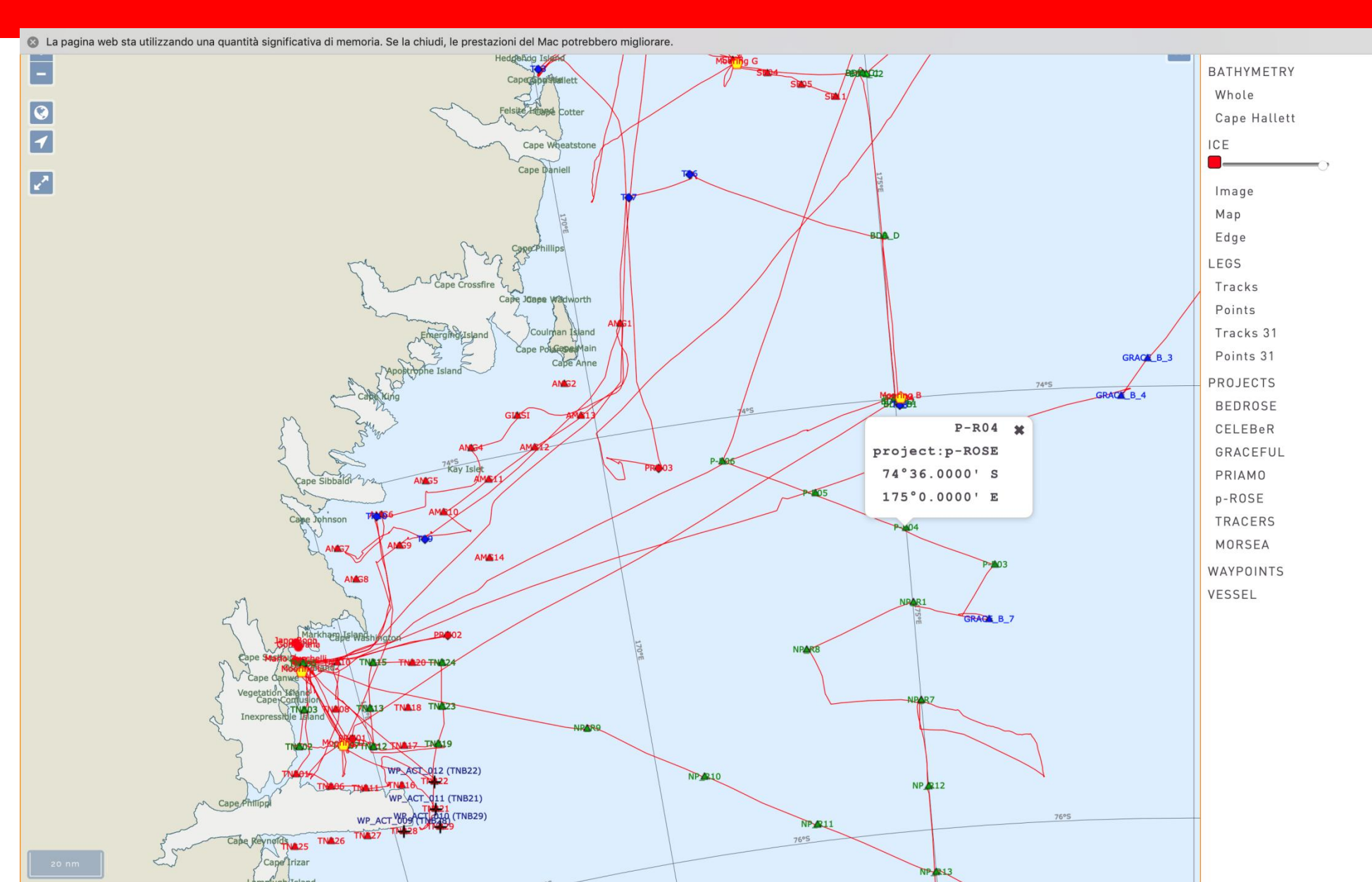
NAVIGATIONAL AND VESSEL DATA	CRUISE RECORD ACTIVITY	WEATHER CONDITIONS
Vessel position Vessel point Vessel Speed Herding Course Bearing Pitch Roll	Route history shows the sampling points of each project Navigation, meteorological and atmospheric parameters during the navigation Events management system describing the sampling activity	ATMOSPHERIC PARAMETERS Temperature Pressure Humidity, etc WIND OBSERVATIONS Speed Direction SUN CONDITIONS Sun radiation Wind Chill
REAL TIME SUPPORT TO SAMPLING WAYPOINTS PLANNING	ADMINISTRATION	
Meteorological forecast Planned WayPoints Distance to WayPoints	Users registration Events definition	

Myway architecture

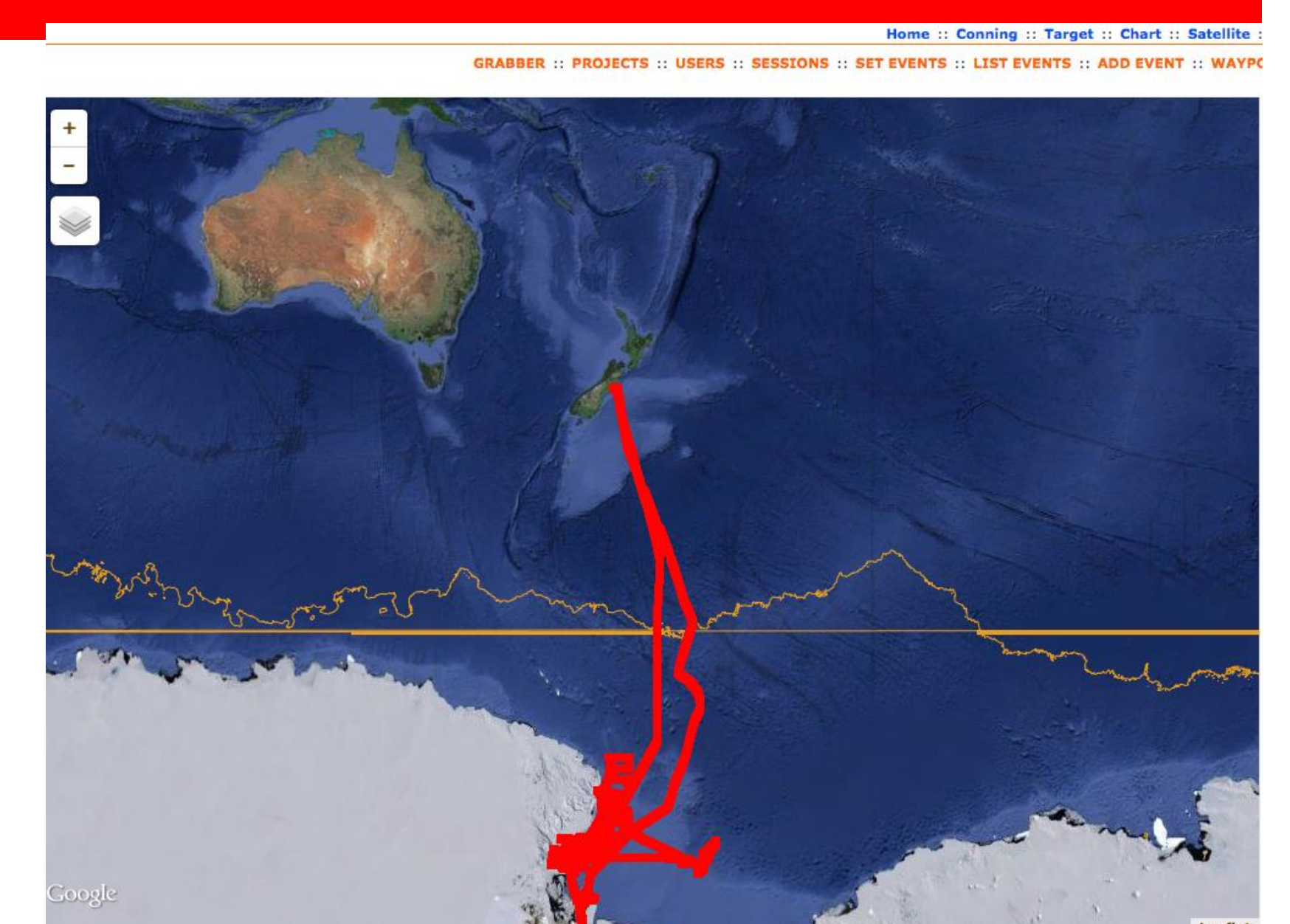
It is based on web technologies and it has been developed by ENEA using only open source software



The navigation console



Visualisation of the sampling points of each project



Visualisation of the ship tracks and ice map



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<http://sysnav.bologna.enea.it/Myway>