

The Invention

The smartphone application, KAPTAN, gives mariners access to surface currents in the Malta-Sicily channel in real time. On the App Store is the 6th ranking weather app in Malta!

NOVELTY

The data for this integrated service to mariners is mainly derived from the Calypso HF radar observing system, consisting of HF radar CODAR SaaSonde installations on the northern Maltese and southern Sicilian shores at four selected sites. Satellite observations added to high resolution weather and marine numerical models, run at the University of Malta specifically for the Malta-Sicily Channel, provide a full suite of very local reporting, and complement other weather forecasts derived from GFS/WRF models and local weather stations.

APPLICATION FIELDS

The KAPTAN app can be downloaded by individuals and used by mariners, sportsmen and hobbyists to complement information obtained from weather forecasts.

In addition, the Physical Oceanography Unit at the University of Malta can use the CALYPSO system as well as their simulation know-how to provide services to industry, such as:

- Monitoring pollution threats, predicting the risk of oil from marine spillages beaching on shores and hitting important economic resources
- Through the Vehicle Tracking System (VTS) this information can be used to back-track the origin of spills and provide evidence to identify the source of the pollution
- Assist mariners navigating along the Maltese coast as well as through the Malta-Sicily channel in planning a safer journey
- Improved route planning could also have safety and fuel consumption benefits for shipping companies, cruises, sea-based tour companies, fisheries, etc
- Improves the capacity of search and rescue teams to respond to emergencies and make more informed decisions

The KAPTAN app can be downloaded for free for both Android and iOS devices from [Google Play](#) and [App Store](#). The same services are also available [online](#).

The CALYPSO infrastructure is also currently used by the AFM for search and rescue operations.

IP STATUS

The KAPTAN app is protected by copyright. In Malta the [Copyright Act](#) applies.

Data generated by the CALYPSO project is made available free of charge [online](#).

COMMERCIAL INTEREST

For companies wishing to work with the University or obtain a more bespoke service with respect to surface currents, we are always looking for further applications of the technology and collaborations with industry. Feel free to contact us.

LEAD INVENTOR



Prof. Aldo Drago

The development was executed at and supported by the University of Malta, sole owner of the rights. The university's IP is managed by its Knowledge Transfer Office. Inquiries shall be submitted to knowledgetransfer@um.edu.mt, or further information may be obtained on +356 2340 3466.