

SOURCE-MAP

Underwater Noise Source Map Generation

Human activities in the marine environment entails the increase in pollution by several energy sources, like acoustic, electrical or magnetic, which affect the development of marine flora and fauna. To combine economic development and environmental protection, the control of levels of radiated energy to sea is necessary.

SOURCE-MAP is a software application for estimating the noise generated by human activity, such as maritime traffic.

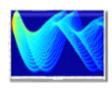
The tool performs the evaluation of underwater noise levels along time in a maritime area, by the spatial representation of the radiated energy.

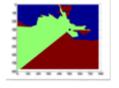




- Carrying out environmental impact studies, like those required before the construction of new offshore facilities.
- Controlling compliance of radiated anthropogenic energy regulations.
- Studying the evolution of energy in a specific area, for location of new marine farms or during the breeding season of certain species.













UW acoustic propagation



Noise Map



Noise Map Representation



FEATURES

- Storage of data that characterize acoustic sources according to relevant regulations.
- Characterization of the area under analysis: sea bottom profile, sound velocity profile, meteorological data.
- Management of noise sources in the area.
- Estimation of the propagation of the acoustical noise for each source.
- Cartographic overlay. Representation by superimposing the noise map on cartography.

Optional Features

- Interface with SOURCE-TYP tool, for using source characteristics database noise generated with that tool.
- Identification and positioning of ships by Automatic Identification System (AIS), either real system or web-based services.

