



Multi-parameter In-situ Open Sea Observing Platform

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The results of an assessment performed in frame of the first Black Sea GOOS project ARENA demonstrate a huge lack of operational in-situ data in the Black Sea, especially for open sea. This in-situ oceanographic data is exceedingly required for analysis of modeling results and improvement of modeling techniques and forecasts. Taking into account the suitable possibilities, the efforts were concentrated on establishing of an oceanographic and meteorological observing station with maximum use of existing facilities - a fixed, earth gas exploration platform Galata. The platform is located in the western part of the Black Sea, on the Bulgarian shelf, 26 km east from the city of Varna. The depth in the platform position is 34 m. The station consists of 24 sensors distributed in three groups: meteorological sensors, oceanographic sensors and wave and sea level recorder. This way it provides information of 33 major oceanographic and meteorological parameters. Data is collected every five minutes, with the exception of wave and sea level data, which are measured every half hour, and immediately transmitted to the shore via wireless LAN. In the shore center, data is stored in data base for further use and analysis. Both real time and historical data is accessible through internet. Real time data is also available for mobile devices through WAP. Galata platform real time data is one of the most important sources of multi-parameter operational information in the Black Sea which will serve for verification and improvement of modeling results and forecasts as well as for collecting long time series of data needed for climatic research, marine physics, chemistry and biology. It also provides useful real time information for marine industry and safety.