

## **Marine Pollution Incident (MPI) Area III E**

### **MPERSS National Report from Greece for MPI III E**

The Hellenic National Meteorological Service (HNMS) operates the Marine Emergency Response Support System (MPERSS) for the Marine Pollution Incident (MPI) Area III East, which includes the eastern Mediterranean Sea.

HNMS operates the sea pollution model (e.g., P. Daniel, 1996), which is applied in cases of oil spills in the Eastern Mediterranean. It is based on the Numerical Weather Predictions (NWP) of ECMWF model, either the 00:00 UTC cycle or the 12:00 UTC cycle. In particular, the surface wind and the sea surface pressure are used as input data. The location (latitude and longitude) and the time of the incident of the spilled oil are specified and the duration of the forecast for the dispersion of the oil is declared. The maximum possible forecasting period is a function of the availability of the NWP ECMWF data, the specific forecast cycle, and the time of the incident. The model calculates the maximum forecasting period automatically.

Furthermore, the type of the spilled fluid that caused the sea pollution is specified. The available types are: crude oil of low density ( $820 \text{ kg/m}^3$ ), crude oil of high density ( $930 \text{ kg/m}^3$ ), kerosene ( $780 \text{ kg/m}^3$ ), gasoil ( $850 \text{ kg/m}^3$ ), mazout ( $960 \text{ kg/m}^3$ ) and gasoline ( $720 \text{ kg/m}^3$ ). Finally, the duration of the spillage is defined. The prediction of the spillage dispersion for the next hours/days is shown in graphic files depicting the extent of the sea pollution. The percentage of the fluid that has remained on the sea surface or being under water, every time step defined, is reported in tables together with the percentage of the fluid being ashore or on seabed.

HNMS can apply the model for any specific incident of oil spillage in the Eastern Mediterranean.