



Analysis of coastal-maritime adverse events in Basque Country

Santiago Gaztelumendi (1,2), Joseba Egaña (1,2), Ivan R. Gelpi (1,2), Sheila Carreño (1,2), Manuel Gonzalez (3), Pedro Liria (3), Ganix Esnaola (3), Jose Antonio Aranda (1,4)

(1) Basque Meteorology Agency (EUSKALMET) , (2) TECNALIA - Meteorology Area, (3) AZTI-Tecnalia, (4) Basque Government, Security Department, Directorate of Emergencies and Meteorology

In this paper we present a study of coastal-maritime adverse events in Basque Country, taking into account different meteorological and oceanographical aspects, including the study of parameters available in the area from different observation network, information from different oceano-meteorological models and damages data in Basque coastal areas. The ultimate goal of this study is to provide some background and inputs for the update of Basque Meteorology Agency (Euskalmet) coastal-maritime warnings system.

A pre-selection of events based on general criteria of adversity, considering simple significant wave height threshold, are made. From this episodes set, a selection is made based on representativeness and data availability.

This sub-set is used for an in deep study, considering different aspects:

- All the available oceanographical and meteorological registered parameters, mainly those from the Basque country network (buoys, AWS, coastal radar, etc..).
- Modelization data available for the area, including Waves and mesometeorological models provided from Euskalmet.
- Impacts information, including damages in seaside areas, harbors, marinas, and others effects in sensible areas.

Finally, some conclusions are presented for a more complete and deep characterization of coastal-maritime adverse events in Basque Country.