



MeteoRuta & MeteoNav: Interactive weather forecasting WEBGIS for roads and sport sailing in Spain

Jose A. Garcia-Moya (1), Jose I. Villarino (2), Jose Voces (3), Inmaculada Abia (2), Nieves Garrido (2), and Eroteida Sanchez (3)

(1) Spanish Agency of Meteorology. AEMET, Madrid, Spain, (2) Spanish Agency of Meteorology. AEMET, Castilla y Leon, Spain, (3) Spanish Agency of Meteorology. AEMET, Cantabria, Spain

Two interactive weather forecasting WEBGIS has been developed by AEMET.

The systems use open software for the browser and accessed using xml/http request object to run the server. The applications work in two different modes: MODE 1, whole road-network viewer (<http://meteoruta.aemet.es> and <http://meteonav.aemet.es>). Forecasts up to 36 hours of hourly weather forecasts are displayed using vector-polylines in different colours. The user can click on any place to get more information on weather conditions and evolution. Weather forecasting data are obtained from the operational AEMET-HARMONIE numerical model, running at 2.5 km resolution for the Iberian Peninsula and surroundings. Model runs 4 times a day (00, 06, 12 and 18 UTC) and is going to be updated up to 8 times a day this summer. MODE 2, pathfinding mode. The user, from the client browser, may choose his own way from the starting point to the final point, and one optional intermediate point. Defining the departure time, the server returns a vector-polyline fitting the shortest path, with route directions, timetables and forecast weather conditions. The forecast is obtained from AEMET-HARMONIE numerical model and, after reaching its longest forecast, from ECMWF numerical model. These new tools are being used by the general public through AEMET web page (<http://www.aemet.es>) and also the Spanish Road Authorities are going to use MeteoRuta to include weather forecasting in their contingency daily operations.