



A weather information tool for Basque roads drivers

Santiago Gaztelumendi (1,2), Raul Ruiz (2), Ivan R.Gelpi (1,2), Roberto Hernandez (1,2), Iñaki Eguiara (3), Jose Antonio Aranda (1,4)

(1) Basque Meteorology Agency (Euskalmet), Vitoria-Gasteiz, Basque Country, (2) Tecnalia R&I, Energy and Environment Division, Meteorology area, Vitoria-Gasteiz, Basque Country, (3) Basque Government, Security Department, Traffic Directorate, Vitoria-Gasteiz, Basque Country, (4) Basque Government, Security Department, Emergencies and Meteorology Directorate, Vitoria-Gasteiz, Basque Country

The Basque Autonomous Community, located at the north of Iberian peninsula, has a modern road network that structures the Country and connects the Basque cities between them and with the major economic regions around us, making movement between our territories and access to the rest of the world by road, as easy as possible. Note, on one hand, that heavy industry and services plays a very important role in the Basque economy creating a high degree of mobility of people and goods, mostly catered by the road infrastructure. On the other hand the Basque Country's position as a geographical crossroads is also a great transport generator.

Severe weather, as in others parts of the world, present different challenges for road users as they can affect driver conditions reducing safety. In Basque Country case, weather related accidents and incidents, are produced not only during winter conditions but also in other seasons. Snow, ice, hail, rain and wind can affect dramatically driver experience leading to dangerous situations for road traffic and user safety. In potentially severe weather conditions one of the most important things to do before setting off a travel journey, from the point of view of drivers, should be to check weather conditions and plan ahead.

In this paper we present a tool developed for Basque Traffic Directorate (Security Department of Basque Government) in order to provide weather conditions for Basque roads users. Such tool has interactive capabilities and allows users to know in advance weather conditions among different routes in order to take better decision about travel time departure and route selection considering present and future weather. Different postprocessing tools are implemented in order to adequate information available from forecast and observation systems in Basque Country Agency (Euskalmet). Particularly using, as the base for future weather, the forecast from operational mesoscale models and, as base for present weather, the observations from Euskalmet radar and Basque Country Automatic Station mesonet network.