



A severe wind storm affecting the Basque country: the Xhyntia case study.

S. Gaztelumendi (1,2), J. Egaña (1,2), I.R. Gelpi (1,2), K Otxoa de Alda (1,2), R. Hernandez (1,2), D. Pierna (1,2)
(1) EUVE, Meteorology Division. Vitoria-Gasteiz, Spain (sgaztelumendi@euve.org), (2) EUSKALMET. Basque Meteorology Agency. Vitoria-Gasteiz, Spain

In this paper a study of the Xhintia episode focusing on Basque Country area is made. On February 27th 2010 the zonal circulation is undulated creating favorable conditions for the cyclogenesis at the southwest area of the Iberian Peninsula. The cyclone generated deeps quickly with pressure values compatible with explosive cyclogenesis definition, reaching pressure minimums of 967 mb.

The system moved northeastward into the Cantabric Sea on the next days. Xhyntia quickly travels over Bay of Biscay, affecting Basque Country area on late 27th early 28th January, surpassing the French coast at 06 UTC of 28th.

In the Basque Country, hurricane wind gusts were recorded in various locations across the region. A 226 kilometers per hour gust was recorded in a mountainous area in the interior. These are some of the strongest winds observed since records began in Basque Country Automatic Weather Station (AWS) Mesonet network owned by the Basque Government.

We present some aspects related with this severe weather episode, including synoptical and mesoscale features, satellite data, AWS and buoy data collected in the area. Finally we focus on comparisons with others situations occurred in the past in Basque Country area.