EMS Annual Meeting Abstracts,
Vol. 6, EMS2009-355, 2009
9th EMS / 9th ECAM
© Author(s) 2009

9th EMS Annual Meeting
9th European Conference on Applications of Meteorology
High resolution meteorology
- applications and services

A severe wind storm affecting the Basque country: the Klaus 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) Basque Meteorology Agency (EUSKALMET) Miñano, Álava, (Spain) , (2) Meteorology Division, EUVE Foundation, Vitoria-Gasteiz, Álava, (Spain). sgaztelumendi@euve.org

This contribution deals with the study of the Klaus episode focusing on Basque Country area. On 20th January Klaus, a strong extratropical cyclone, formed in the subtropical North Atlantic, West of the Azores Islands. The system moved northeastward into the Bay of Biscay on the next days. Klaus quickly traveled over Cantabric Coast in the North of Iberian peninsula, affecting Basque Country area on late 23th early 24th January.

In the Basque country, wind gusts higher than 150 kilometers per hour were recorded in various locations across the region. A 200 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) Mesonetwork owned by the Basque Government. On the other hand, waves as high as 21 meters were recorded at the Basque coast.

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