

Synoptic characteristics of extreme wind events in the Basque Country.

J. Egaña(1)(2), S. Gaztelumendi (1)(2), I.R. Gelpi (1)(2), K. Otxoa de Alda (1)(2).

(1) Basque Meteorology Agency (EUSKALMET). Parque tecnológico de Álava. Avda. Einstein 44 Ed. 6 Of. 303, 01510 Miñano, Álava, Spain.

(2) European Virtual Engineering Technological Centre (EUVE), Meteorology Division. Avda de los Huetos 79, Edificio Azucarera, 01010 Vitoria-Gasteiz, Álava, Spain.

jegana@euve.org

When strong wind storms affect the Basque Country, critical situations take place producing large material losses including personal losses.

Wind data from the AWS network of the Basque Country are used to carry out this study. To define extreme wind episodes, wind thresholds are used. These thresholds are chosen taking into account the geographical situation of each station, due to the complex topography of the Basque Country.

Synoptic patterns are associated to wind extreme episodes, by means of a subjective classification. The main characteristics of the events are detailed. Synoptic well-defined patterns produce wind related with deep low pressure systems and undefined configurations produce wind episodes associated to severe storms.