



A severe wind storm affecting the Basque Country: Joachim case study.

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In the early hours of December 16, 2011 a low pressure centre, with quick displacement and deepening, crosses the English Channel. This extratropical cyclone, named Joachim, generates a significant wind storm in the Bay of Biscay. The night of December 15, already are observed very intense wind, although the highest values are registered on the morning of day 16, above all in the west part of the territory with southwest hurricane gusts in numerous exposed areas and very strong gusts in non-exposed areas. From noon, the wind veers to northwest direction, coinciding with the entrance of the cold front associated to the depression, gradually decreasing the wind force. Maritime conditions worse significantly, generating heavy swell with significant wave heights around 7 m.

In this paper we present some aspects related with this severe weather episode, including synoptic and mesoscale features from numerical analysis, satellite, AWS and buoy data collected in Basque Country area.