



Joachim wind storm case study

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During the afternoon of December 15 and morning of day 16, an Atlantic cyclone deepens quickly and moves from southern British Isles towards continental Europe. The synoptic pattern shows a strong pressure gradient. The surface pressure decrease about 30 mb in 24 hours, clearly satisfying the explosive cyclogenesis criteria. The cyclone is called Joachim. A minimum pressure of 964 mb is reached in its displacement eastwards on December 16 afternoon, located between Germany and Poland. Cyclone dissipates on 22 December.

In the early morning of December 16, the southwest winds intensify reaching highest values of the episode. Very strong and hurricane wind gusts are registered in western and southern non-exposed and exposed areas of Basque County.

The maritime conditions get worse, with significant wave heights about seven meters. Synoptic pattern show a strong zonal flow in area where the cyclone is generated, this pattern generates a high fetch.

In this paper we present some aspects related with this severe weather episode, including comparatives with latest similar events.