ANALYSIS OF THE 19TH JULY 2006 STORMS IN BASQUE COUNTRY AREA.

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I. INTRODUCTION

The afternoon of July 19th, storm cells are generated in the centre of the Iberian Peninsula due to thermal and dynamical instability conditions. The southwest fluxes, in medium and high levels, move the storm cells towards the Basque Country area.

Some cells are activated in our region promoting very heavy showers in some locations. These storms also produce strong winds, hail and strong gusts that produce some damages in the region. In this work we focus on synoptic and mesoscale analysis to improve knowledge on these particular events. During this event a localized area of damaging winds was reported.

II. PRESENTATION OF RESEARCH

A study of the synoptic situation was made to characterize the patterns that generate this particular event. Some relevant synoptic fields are used; 500 hPa topography, sea level pressure and some instability indexes are taking into account.

Numerical results coming from a non-hydrostatic limited area model, running in an operative-basis in the Basque Country Meteorological Agency, and all available data from different sources, such as: Automatic Weather stations, Satellite images, lightning maps etc. are used in order to validate results and characterize this event.

III. RESULTS AND CONCLUSIONS

The final aim of the study is to characterize July 19th situation as representative of a severe storm case with reported damages from wind gusts at surface.

IV. AKNOWLEDGMENTS

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V. REFERENCES

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