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A case study of heavy storms in Basque Country: 30-31 August 2015 event.

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During the 30 and 31 August 2015, in the Basque Country heavy storms occur, leaving in some places strong wind gusts and heavy showers with hail. On day 30, wind is the most relevant aspect associated with stormy activity generated due to a instability line that crosses the territory from west to east. On day 31, storms characteristics favors very heavy showers exceeding 30 mm in one hour at some points due to the formation of convective cells moving from southwest to northeast.

This episode is studied considering synoptic and mesoscale features. In order to characterize the synoptic environment during this episode, different synoptic maps are analyzed in the main levels; 300 hPa, 500 hPa and 850 hPa topographies, sea level pressure, and some instability indexes, dynamic instability and other relevant parameters are taking into account. In this analysis we use registered data from the automatic weather stations network and remote sensing data available in the area.