Synoptic characteristics of extreme low temperatures episodes in the Basque Country.

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In winter season the situations of extreme low temperatures can cause many different problems all over the world. In the Basque country case, mainly related with car accidents due to ice formation on roads.

In this work a preliminary study on temperature minimum episodes in the last years in the Basque Country is made. Temperature data from the AWS network of the Basque Country are used to carry out this study. To define the extreme temperature episodes temperature thresholds are used. These thresholds are chosen taking into account the geographical situation of each station.

Synoptic patterns are associated to the temperature extreme episodes by means of a subjective classification. The main characteristics of the events are detailed, with the analysis of the main fields in the levels of 500 hPa, 850 hPa and surface.