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An evaluation of the social perception of meteorological risks in Castile-León

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The diverse configuration of the geographic region of Castile-León (in the NW of the Iberian Peninsula) has a marked effect on its climatic conditions, giving it a series of highly characteristic features. The mountainous areas and their geo-morphological characteristics play a decisive role in the behaviour of the atmospheric dynamics, while the high plains, which exceed altitudes of 700 metres, are the main component of the landscape, covering extensive areas. These high plains, surrounded by a belt of mountains, isolate the region and are decisive in the configuration of its climatology.

It is also important to note that for around three quarters of the year, the region is under the influence of the jet stream of the Polar Front, leading to highly diverse dynamic situations which lead to different climatic features and their associated risks: snow, frost, cold snaps, heatwaves, drought, intense precipitation, storms, strong winds and fogs: a range of risks that affect the different provinces to a greater or lesser extent.

This study has focused on data referring to episodes of snowfall, as snow is one of the most important meteorological risks in Castile-León, so much so that more than 40 episodes are recorded each year in some mountainous zones. The social impact of these episodes is seen in aspects such as villages becoming cut off, roads becoming obstructed and an increase in road traffic accidents. This is reflected by the fact that episodes of this kind receive widespread coverage in the media, closely in line with the social perception of the risk. We also know that the effects of different risks on the population vary depending on how vulnerable different areas are.

The aim of this study was to evaluate (using direct telephone questionnaires and through information in the press) the social perception of meteorological risks in the different provinces of Castile-León. Examining the data has also allowed us to discover how the perception bias varies in the different provinces.

Finally, the data obtained from the direct questionnaires have been compared with the data from the press, with the aim of analysing the advantages and disadvantages of each of the methods in meteorological risk studies.

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