

## **The social impact of the snowfall of 8 March 2010 in Catalonia**

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The snowfall of 8 March 2010 affected almost all Catalonia, but especially the northeast where snow thickness was between 20 and 30 cm, locally with higher values up to 60 cm. Strong winds followed the event, exceeding 90 km/h in some places. As a result, infrastructures and public services, also private properties were damaged. Thousands of people were left stranded by the circulatory collapse, suspensions of railway service and by falling branches or trees on road infrastructures blocking accesses to residential areas. The regional government approved funds of 21.4 millions of Euros to mitigate the damage caused by this event, mainly invested in forest cleanup operations and in repairing road damage. The social impact of this event has been so high that 210 news have been published in a newspaper until 23 April, 190 of them during the month of March.

From the study of the characteristics of this episode it can be stated that in the coast and pre-costal area, temperature at the same moment of precipitation was between 0°C and 2°C and humidity was high. In these zones, the type of precipitation was wet snow. It has to be considered that the combination of wet snow and wind can be a risk because of the ice-weight accumulated on objects (trees, electricity pylons...). As a consequence important damage happened in power network with significant collateral effects and more than 450,000 customers were affected by a power outage during some days.

In this study we will compare the consequences of this event with others by means of information published in press. As a result, some set of consequences that are repeated regardless of the magnitude of the phenomenon will be identified. Finally, this event is also an example of the incision of social networks. This snowfall has been classified by mass media as the first “snowfall 2.0”: 81600 entrances in Google, 132 Facebook groups and 750 videos made by amateurs in internet.

From this study, we will present some reflexions that could be useful to improve the snow emergency plan in Catalonia, released in 2004, and mitigating the effects of future snow storms. A campaign focused on motivate population in order to increase more social commitment in these events, seems to be necessary to prevent avoidable risks. Information campaigns and some educational tasks have to be carried out to make warnings and forecasts reports clearer to citizens and to increase population sensitivity in emergency situations.