



General public's preparedness and precautionary measures ahead of a severe thunderstorm outbreak in Southern Finland on 12 August 2017

Ari-Juhani Punkka (1), Heikki Laurikainen (2), Tuula Kekki (2), Reija Ruuhela (1), Karoliina Pilli-Sihvola (1), and Atte Harjanne (1)

(1) Finnish Meteorological Institute, Helsinki, Finland (ari-juhani.punkka@fmi.fi), (2) Finnish National Rescue Association, Helsinki, Finland

A severe straight-line wind producing mesoscale convective system (MCS) hit Southern Finland on the evening of 12 August 2017. The capital region and its surrounding provinces were most severely affected by the fast-moving linear MCS and in total; more than 1 000 thunderstorm-related rescue tasks were recorded and over 50 000 households were left without electricity.

Nine days after the incident Finnish Meteorological Institute and Finnish National Rescue Association assembled and opened a web survey in order to gather information on general public's ability to prepare for the recent episode of extreme weather. The survey was promoted in Twitter and the web pages of both institutes and during a two-week data collection period 1 088 responses were stored. Due to the online survey method the following results may be biased and must be interpreted cautiously.

According to the survey results about 15% of the respondents suffered from the loss of electricity which typically lasted a few minutes or hours. Structural damage to buildings and broken electric devices were reported by less than 10% of the respondents. Roughly 10% could not cope without external help during or after the incident.

The early warnings of the approaching severe weather event were well-adopted among the respondents. Less than 5% indicated that the encounter of the storm happened unexpectedly without any prior notice. Early warning information reached the attention of the respondents mostly through internet, tv and radio (10 – 30% of the respondents) but also mobile phone applications and social media were mentioned by 7% of the respondents. A vast majority received early warning information a day or two beforehand which was generally found as a sufficient lead time.

About a quarter reported that they did not perform any precautionary actions ahead of the storm. A half of the respondents unplugged electric devices and a third warned other people on the approaching storm, relocated personal property or prepared for disruptions in electricity supply. These actions were most commonly sparked by early warning information on tv, radio or internet. More than 80% of the respondents rated Finnish Meteorological Institute's weather warning service as rather or very reliable.