Severe weather phenomena: SQUALL LINES The case of July 2nd 2009

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The wind intensity plays an important role, among the dangerous meteorological phenomena, to produce negative effects on the economy and the social activities, particularly when the wind is about to turn into a storm. During the past years one can notice an increase of wind frequency and intensity due to climate changes and, consequently, as a result of the extreme meteorological phenomena not only on a planetary level but also on a regional one.

Although dangerous meteorological phenomena cannot be avoided, since they are natural, nevertheless they can be anticipated and decision making institutions and mass media can be informed. This is the reason why, in this paper, we set out to identify the synoptic conditions that led to the occurrence of the severe storm case in Bucharest on July 2nd, 2009, as well as the matrices that generate such cases. At the same time we sought to identify some indications evidence especially from radar data so as to lead to the improvement of the time interval between the nowcasting warning and the actual occurrence of the phenomenon.