



Local wind forecast for LERS airport

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Atmospheric phenomena are involved in more than 20 % of aviation accidents in the last decade in the USA. The NTSB (National Transportation Safety Board) finds that wind accounts for half of these accidents, taking into account that in the USA there are many small airplanes that are more sensitive to cross wind. A good wind forecast system for an airport can help to improve landing and departure safety, especially for small aircrafts.

In this paper we present a wind forecast system for the Reus airport, where the CESDA college (Centre d'Estudis Superiors de l'Aviació) operates with small aircrafts, and where there are several periods per year of strong cross winds. This system can be used to forecast the ground wind one day ahead and plan with high accuracy the fleet operations and revisions for the next day.

The system is based on a statistical processing of numerical models outputs, like the GFS and the MASS, to improve the forecast. The results presented in the paper demonstrate the usefulness of such system.