EMS7/ECAM8 Abstracts,
Vol. 4, EMS2007-A-00090, 2007
7th EMS Annual Meeting / 8th ECAM

Road Traffic Safety Alarm System for the Severe Wind Conditions

A. Bajic, Z. Zibrat and S. Ivatek Sahdan

Meteorological and Hydrological Service of Croatia, Zagreb, Croatia
(alica.bajic@cirus.dhz.hr)

The bora wind as a cold, strong and turbulent wind is a main characteristic of the coastal region climate in Croatia. Its maximum gusts could reach more that 200 km/h and its speed could increase for 50 km/h and more in two consecutive seconds. Therefore, the need to establish a road traffic safety alarm system becomes urgent. The aim of this study is to represent the new alarm system ANEMO ALARM that has been developed using the results of climatological analysis of extreme bora events and the possibility of the operational ALADIN numerical weather prediction mesoscale high-resolution model to forecast the strength and onset time of bora wind. The system functionality is analysed in several severe bora situations on three locations along the Adriatic coast. Special emphasis is given to the comparison of ALADIN forecast and measured data. The given results indicate how useful is the system for the road traffic safety.