

## **The evaluation of strong north-east wind (bora) forecasts in the summer period**

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The wind from north-east quadrant, known as-bora, is one of the strongest winds on Adriatic coast. Bora is a katabatic wind from NNE-N, ENE or even E direction what depends upon the mountain direction. The average velocity is often greater than 15 m/s, with gusts 30 m/s and even more. The north-east wind in interior parts of country is much weaker.

The goal of this work is to give some additional information about the performance of Aladin/Alaro high resolution model. This model is in operational use since 1996. but since then it was significantly improved. The results should serve mainly as input for forecasters for the better forecasts of NE wind, especially bora.

The overview of weather situations with NE-quadrant wind on North Adriatic coast and in north-east part during the summer months 2008-2010 was done. There are two typical synoptic situations when bora blows: the passage of cold front from north-west or west Europe over the Croatia to south east and east Europe; or the passage of cyclone across the Adriatic sea to the south-east Mediterranean or to the east and north-east Europe. The situations with the cold front are more frequent.

Ten ALADIN/ALARO forecasts of strong bora episodes for the specific locations were compared with real wind data. Performance of the model is relatively good, the onset and weakling of the wind is well predicted. The wind velocity, particularly the gusts, is overestimated and forecasts are better in locations bellow the mountains. Performance of the model is also better in the case of the bora wind connected with cyclone, rather than passage of the cold front.