



## **Analysis of the risk of tropical cyclones over the Mediterranean Sea with ENSEMBLES climate change scenarios**

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A study by Gaertner et al. (2007) raised the possibility of tropical cyclones developing over the Mediterranean Sea under future climate change conditions. The analysis of scenario data from PRUDENCE European project for the last decades of 21st century showed a certain risk of tropical cyclone development, but with large differences among the RCMs of the ensemble. A new analysis of this risk is performed with the more recent simulations of the European project ENSEMBLES. The multi-model ensemble of ENSEMBLES project is larger and allows to explore cyclone changes for the first decades of the present century. The effect of higher horizontal resolution and the use of several different GCMs for the boundary conditions is also analysed. The new results show again a cyclone intensity increase in future decades, associated to tropical characteristics in the most intense cyclones simulated by some models, but the differences among simulations remain large.