



A system for forecasting air pollution episode potential in the Canary Islands

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In the frame of the WMO GAW Urban Research Meteorology and Environment programme (GURME), and in response to the request of the local Government, a system for forecasting air pollution episode potential in the Canary Islands has been developed. Atmospheric parameters relevant to air quality (synoptic wind direction, wind speed, stability, temperature and height of the inversion layer) are obtained from the European Centre for Medium range Weather Forecasting (ECMWF) once a day for up to four days ahead. In addition, a model based on the analogue method using six years of historical meteorological and air quality data predicts the probability of SO₂ concentration exceeding certain thresholds for one measurement station. These parameters are utilised to predict air pollution episode potential for the forthcoming days. Meteorological results from a high resolution (2 km) local area model (MM5) adapted for the Canary Islands domain are also used to support the predictions. This poster presents the methodology used to calculate the different parameters and preliminary results of six months operational forecasting.