

moving average (with span equal to 7), the correlogram has been computed on the moving average dataset and a second periodicity has been evidenced. This time, the periodicity is related to a longer term period ($k_2 = 125$, i.e., about 4 months). Thus, the “single seasonality model” (SSM) has been improved, considering this multiple periodicity evidenced on the entire large dataset, resulting in the “double seasonality model” (DSM). Both SSM and DSM have been validated by comparing their forecasted values with a 44 actual measurement dataset (not used in the calibration phase). These validation data have been also used for a quantitative comparison between the performances of the two models, by means of error (difference between actual value and forecast) distributions. The double seasonality model showed better performances, in terms of lower standard deviation and closer to zero mean value of the error distribution. In addition, the application of normality tests confirmed the hypothesis of normal distribution for the error in the validation dataset.

ACKNOWLEDGMENT

The authors are grateful to the local government of Messina, for making available the long term noise levels measured in the city.

ERR was partially supported by the project PAPIIT-IN102713 of the Direccion General de Apoyo al Personal Academico of the Universidad Nacional Autonoma de Mexico, Mexico.

A shortened version of this work ([45]) was presented at the 2nd Int. Conf. on Acoustics, Speech and Audio Processing (ASAP '14), Salerno, Italy, June 3-5, 2014.

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