

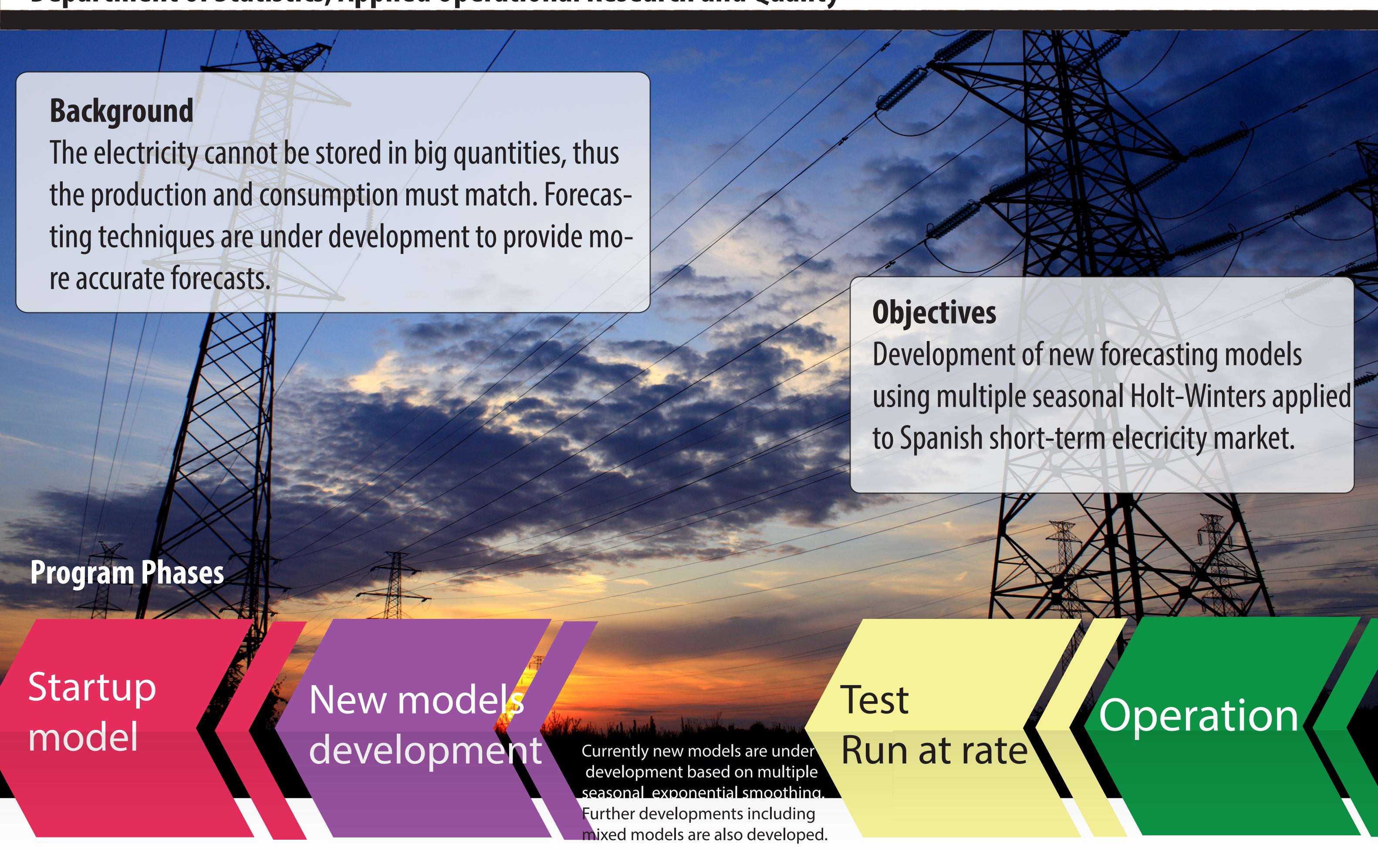
Short-Term hourly electricity demand forecasting in Spain using optimised multiple seasonal Holt-Winters modeling



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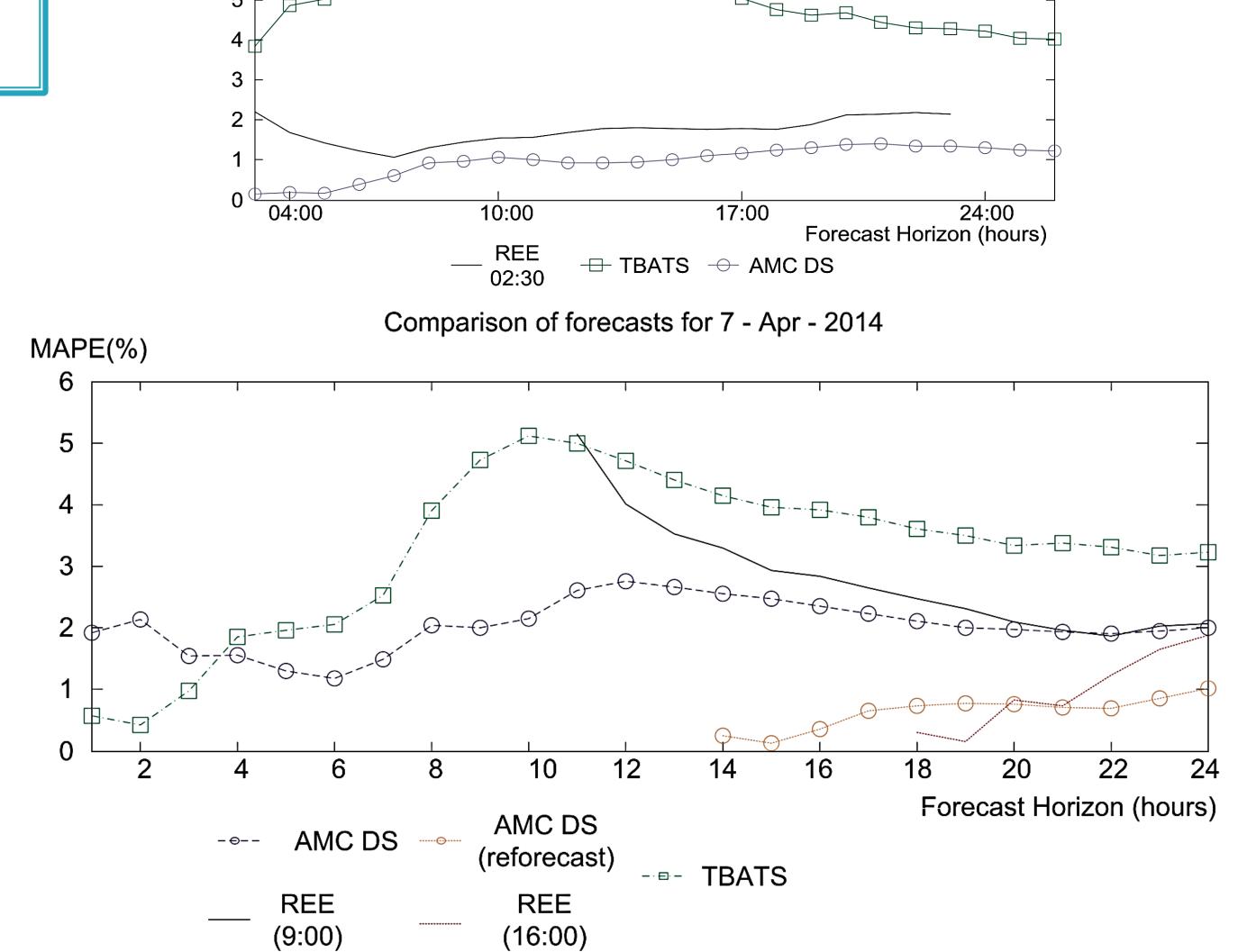
Programa de doctorado en estadística y optimización Department of Statistics, Applied Operational Research and Quality



Checking procedure for in-development models

RED ELÉCTRICA DE ESPAÑA Triple Double Models Seasonal Seasonal 7 weeks **Accuracy Indicators** Full Data Full Data length **sMAPE** MAPE 30 models Winter Spring Summer Autumn Several time windows in 2013

Summary of the first results MAPE(%) Comparison of forecats for 9 - Apr - 2014



Main bibliography

Muñoz, A., Sánchez-Úbeda, E.F., Cruz, A., Marín, J., Short-term Forecasting in Power Systems: A guided Tour, Handbook of Power Systems II, Editores Pardalos (2010), P.M., Rebennack S., Pereira M.V.F. & Iliadis, N.A., Ed. Springer. Berlin, Germany.

Weron, R., Electricity price forecasting: A review of the state-of-the-art with a look into the future. International Journal of Forecasting 30(2014), 1030-1081. Taylor J.W., Short-term electricity demand forecasting using double seasonal exponential, Journal of Operational Research Society. 54(2003), 799–805. Taylor J.W., Triple seasonal methods for short-term electricity demand forecasting, European Journal of Operational Research. 54(2010), 139–152. Cancelo J.R., Espasa, A., Grafe, R., Forecasting the electricity load from one day to one week ahead for the Spanish system operator, Int. J. Forecast. 24(2008), 588–602.