DTU Compute

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DTU Compute PhD School
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Att. The RJournal Editor-in-Chief

January 19, 2023

Dear RJournal Editor in Chief

We have the prepared the attached manuscript describing the functionalities in the onlineforecast R package, which is available on CRAN. We have developed the package during several research projects in the past years and have applied it for various forecasting – mostly related to integration and optimization of renewable energy. We believe that the package can find important applications in the coming decade, where the value of forecasting will increase, especially in the energy transition.

The package contains functionalities not directly available elsewhere:

- Use of forecasts, e.g. NWPs, as input to multi-step forecast models.

- Application of non-linear models with non-parametric and coefficient varying techniques.

- Optimal tuning of models for multi-step forecasts.

- Recursive estimation for tracking time-varying systems.

The package also provides a framework for handling data and setting up models, which makes it easy to apply in a wide range of forecasting applications.

We have created the website `onlineforecasting.org`, where additional vignettes and examples are gathered in the hope that users can get inspired and easier learn how to use the package. We have run university courses and workshops, where we use the package and it has been used for producing research results.

It is very important for us to publish the manuscript serving as a reference and deeper mathematical description of the package. Therefore we hope that you will consider sending it for review and well be highly dedicated to meet the reviews and improve the quality be able to publish it in RJournal.

Best regards on behalf of the authors

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