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| **University of Connecticut** | Department of Statistics  University of Connecticut  Storrs, Connecticut 06269-4120  iac25002@uconn.edu  9 October 2025 |

Dear Editor,

Thank you for considering our submission of the paper *Quantile Forecast Matching with a Bayesian Quantile Gaussian Process Model*. We affirm the originality of this work and that it has not been published elsewhere, nor is it under review elsewhere for publication.

To simplify reporting or to maintain privacy, one way to report data or a distribution is via aggregated values or quantiles. For example, in probabilistic forecast hubs where participating forecasters regularly submit predictions of future events, the standard format of predictions is a set of quantiles corresponding to given probability values. This is a simple and efficient way to report a distribution, but a set of quantiles lacks much of the information contained in a full distribution function. This limits the types of analyses or inference that can be performed on the probabilistic forecasts.

In the submitted paper, we review common methodology for estimating continuous probability distributions given quantiles as data and introduce the quantile Gaussian process model as a new method for estimation. The model is based on established asymptotic theory for sample quantiles, and it shows a strong ability to predict a continuous distribution function while quantifying the uncertainty inherent in estimating quantiles. The method is applied to quantile forecasts from the annual U.S. flu forecasting competition.

We feel this manuscript is a good fit for *Statistics and Computing*, as it contributes both a novel statistical model and a computationally practical inference approach for problems involving quantile-based data. We hope you enjoy reviewing the manuscript, and we look forward to any feedback you may have. All correspondence should be directed to me at spencer.wadsworth@uconn.edu.

Respectfully,

Spencer Wadsworth, Ph.D.