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Oral
(Virtual Talk)
Most of the existing skill scores for probabilistic S2S forecasts focusing either on the mean squared error in probabilistic space (Brier score) or degree of correspondence between issued forecast probabilities and relative observed frequencies (reliability diagrams) or the degree of correct probabilistic discrimination in a set of forecasts. In this study, we will introduce the use of point-biserial correlation (rpb) coefficient to verify probabilistic forecasts for measuring the strength of association between issued forecast probabilities and actual observed events. The point-biserial correlation (rpb) coefficient is a measure of the strength of association between a continuous-level variable and a dichotomous (“naturally” or “artificially” dichotomized) variable. The rpb is mathematically equivalent to Pearson correlation but has a more intuitive formula which provides insights on what constitutes a “good” association between continuous and dichotomous variable. In the probabilistic forecasts verification system, skill scores are estimated between issued forecast probabilities (continuous variable) and relative observed category (whether or not the event;
dichotomous variable). The proposed method will be demonstrated in experimental evaluation with synthetic and real precipitation forecasts
Presentation file
Acharya-Nachiketa.pdf
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S2S Community Workshop
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