

## **Another look at the contingency tables : Scores based on Manhattan distances in the error space**

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**Abstract :** Alternative presentation of scores is based on the Manhattan distance in the space of the forecasts. The key factor is represented by the ratio of the weights assigned to misses and false alarms. This ratio is 1 for the Heidke skill score, is equal to the ratio of the number of non-events to the number of events for the true skill statistics. A score based on the deterministic limit leads to assign this ratio to 2. Applications to the Finley tornadoes and the comparison of two quantitative precipitation forecasts show the interest of the graphical representation in this error space to collect the qualities and the drawbacks of the forecasts. The skill scores deduced from these distance help to summarize the quality of a forecast. This framework covers at the same time dichotomous and polychotomous cases.