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Session 5: Advances in modelling and projections.

Title: Examination of in-situ wind station representativeness for forecast verification

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The Bureau of Meteorology forecasts winds over open terrain at 10 meters off the ground. Wind speed measured at ocean sites can be greater than winds over open terrain due to less surface roughness. Conversely, stations sheltered by tall vegetation or nearby buildings and report slower speeds. When directly comparing forecasts and observations, these representativeness issues are hard to distinguish from genuine biases in the forecasts. We apply and compare methods of manually and automatically assessing the representativeness of wind stations for use in forecast verification.