Locality A score is **'Local'** if it depends only on the forecast density of the observation[1] ($p(v)$). This concept was mentioned by McCarthy in 1956 [2] when he commented that I J Good's Ignorance skill score depends only 'on the probability assigned'. Winkler and Murphy [3] also distinguish scores which take account of all the forecasted probabilities (i.e. including $p(x)$ for $x \neq v$ and those which are concerned only with the outcome that occurred $p(v)$). The latter are Local, the former are not Local. Winkler and Murphy call these 'partial' and 'total measures' (respectively). The first paper in the reviewed literature that gives a formal definition of Local is that of Bernardo [1] where he defines a Local score as one where,

$$S(p, v) = S(p(v), v) \tag{1}$$

[1]'Observation' is used here in a broad sense which includes estimates of outcomes, for example during data assimilation.

Bibliography

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