



What are the odds of a correct forecast – a comparison of meteorological and other forecasts.

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Every meteorologist has experienced a reaction like “oh yes, you are the people who have no real clue about the future”. In such situations it is advisable to ask for the profession of the person, which often allows to return the slanderous remark. This poster is meant to deliver some ammunition for such situations. In order to do so, a comparison of forecasts and diagnosis from other fields of life is performed. The most prominent example is medical diagnosis’, but also forecasts from economy, sport, law or politics are interesting.

Obviously, this has to be a comparison of apples and oranges. Yet “the odds” can be used as a unifying, albeit purely statistical metric. The “a priori odds”, i.e. the odds that an event can happen at all (“climatology”) acts as a reference for the measurement of the skill of the forecast. The skill is then given as the ratio of the odds for a correct forecast to the a priori odds. Furthermore it has to be taken into account that there are two kinds of correct forecasts: the correct forecast of the occurrence and the non-occurrence of an event.

Although this type of comparison is not meant to be taken too serious, the metric is well established in gambling. It turns out, that in the above defined sense, meteorological forecast have large skill, especially for extreme events. This distinguishes them from many other forecasts.