SORRY WRONG NUMBER: STATISTICAL BEST PRACTICE UNDER THE REALTIME CONSTRAINTS OF CLIMATEPREDICTION.NET

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The experimental design of all real-world ensemble prediction experiments is hampered by the fact that all available models are imperfect. Things are made even more interesting in the case of climate modelling, where by construction all studies are effectively evaluated in-sample, and will remain so for at least a decade or so (see L.A. Smith, (2002) What Might We Learn from Climate Forecasts? *Proc. National Acad. Sci.* **4**, 99, 2487–2492.). In addition, experiments like climate*prediction*.net face new design constraints which depend on the transfer of information across the web, require maintaining the interest of the participants, and evolve over the duration of the experiment. A number of these constraints will be explored in the context of the current experimental design. Perhaps the most urgent requirement, from a statistical design viewpoint, remains the avoidance of false positives.