

***Comment by EJ Wagenmakers to Data Colada “[35] The Default Bayesian Test is Prejudiced Against Small Effects”***

"In addition, I believe that if researchers were to spend more time studying the properties of frequentist confidence intervals, they would be hugely disappointed. For instance, frequentist confidence intervals fail to quantify anybody's confidence that the parameter lies in a specific range. As an alternative, one could turn to the Bayesian credible interval. However, both interval methods are misleading and inappropriate when what's at stake is the adequacy of a null-hypothesis or a near-null hypothesis. When a (near) null-hypothesis is plausible a priori, it should receive separate prior probability. This argument goes back to work by Wrinch and Jeffreys almost a century ago. A hypothesis cannot be tested without receiving prior probability, and any attempt to do so nonetheless will only result in statistical chaos. Of course, one may not desire a hypothesis test, but this is a different issue altogether. When hypothesis testing is desired, a reliance on intervals is simply a conceptual mistake."