

STATISTICAL TABLES SHOWING p-VALUES AT VARIOUS LEVELS OF STATISTICAL SIGNIFICANCE, TO FACILITATE THE 'PROBABILITY VALUE' APPROACH TO HYPOTHESIS TESTING

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Abstract

Standard textbooks on statistical theory usually include statistical tables for the Normal, t, χ^2 and F distributions. These tables are designed to test hypotheses at a fixed significance level (usually 5% or 1%), as is required for 'classical hypothesis testing', but these tables are inappropriate to test the 'p-value' at levels such as 2% or 3% as required by the 'probability value' approach. This paper presents new versions of these three tables which, if widely adopted, could allow researchers to discard classical hypothesis testing in favour of the probability level approach, as recommended by many contemporary statisticians.

Keywords and phrases: statistical tables, normal distribution, chi-square distribution, *F* distribution, *p*-value.

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