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***k*-sample median test for vague data.** (English) Zbl 1160.62039
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Summary: Classical statistical tests may be sensitive to violations of the fundamental model assumptions inherent in the derivation and construction of these tests. It is obvious that such violations are much more probable in the presence of vague data. Thus nonparametric tests seem to be promising statistical tools. In the present paper, a distribution-free statistical test for the so-called “many-one problem” with vague data is suggested. This test is a generalization of the *k*-sample median test. In our approach, we utilize the necessity index of strict dominance, suggested by *D. Dubois* and *H. Prade* [*Inf. Sci.* 30, 183–224 (1983; [Zbl 0569.94031](#))].

MSC:

62G10 Nonparametric hypothesis testing
62F03 Parametric hypothesis testing

Cited in **12** Documents

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