

76[K].—R. DOORNBOS & H. J. PRINS, “On slippage tests. I,” *Indagationes Mathematicae*, v. 20, 1958, p. 38–46 (*Proc. Kon. Ned. Ak. van Wetensch.*, v. 61, Sec. A, 1958, p. 38–46); “On slippage tests. II,” *Ibid.*, p. 47–55; “On slippage tests. III,” *Ibid.*, p. 438–447.

The tables, which appear in part III, are related to two of the special cases included in this series of papers. In the first, from each of k Poisson distributions, with means μ_i , a random drawing Z_i is taken ($i = 1, 2, \dots, k$). To test the null hypothesis that $u_i = u$, $i = 1, \dots, k$, for which the table is prepared, against the alternate that one of the u_i 's is greater than the others which have equal values, the authors propose the statistic, $\max Z_i$. For $k = 2(1)10$ and the sum of the k observations, $n = 2(1)25$, values of $\max Z_i$ are given for which the significance levels are near 5% and 1%. In each case the actual significance levels are given to 3D.

In the second case, each of k objects is ranked by each of m observers. The null hypothesis under test is that each of the m rankings is independently and randomly chosen from the set of permutations of the integers $1, 2, \dots, k$. As a test against the alternate that one of the objects has a higher probability of being ranked low while the others are ranked in random order, the proposed statistic is $\min S_i$ where S_i is the sum of ranks assigned the i -th object ($i = 1, 2, \dots, k$). Critical values S_α of $\min S_i$ for significance levels near $\alpha = .05, .025, .01$ are tabled for $m = 3(1)9$ and $k = 2(1)10$. Again in each case true significance levels are shown to 3D.

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77[K].—F. G. FOSTER, “Upper percentage points of the generalized beta distribution. III,” *Biometrika*, v. 45, 1958, p. 492–503.

Let θ_{\max} denote the greatest root of $|v_2B - (v_1A + v_2B)| = 0$ where A and B are independent estimates, based on v_1 and v_2 degrees of freedom, of a parent dispersion matrix of a four-dimensional multinormal distribution. Define

$$I_x(4; p, q) = \Pr(\theta_{\max} \leq k)$$

with $p = \frac{1}{2}(v_2 - 3)$, $q = \frac{1}{2}(v_1 - 3)$. Employing methods similar to those used in two preceding papers [1], [2] for the two and three-dimensional cases, the author tabulates 80%, 85%, 90%, 95%, and 99% points of $I_x(4; p, q)$ to 4D for $v_1 = 5(2)195$ and $v_2 = 4(1)11$.

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1. F. G. FOSTER & D. H. REES, “Upper percentage points of the generalized beta distribution. I,” *Biometrika*, v. 44, 1957, p. 237–247. [*MTAC*, Rev. 165, v. 12, 1958, p. 302]

2. F. G. FOSTER, “Upper percentage points of the generalized beta distribution. II,” *Biometrika*, v. 44, 1957, p. 441–453. [*MTAC*, Rev. 167, v. 12, 1958, p. 302.]

78[K].—W. HETZ & H. KLINGER, “Untersuchungen zur Frage der Verteilung von Objekten auf Plätze,” *Metrika*, v. 1, 1958, p. 3–20.

For the classical distribution problem in which k indistinguishable objects are randomly distributed into n distinguishable cells (as in Maxwell-Boltzmann