87[K].—MINORU SIOTANI & MASARU OZÄWA, "Tables for testing the homogeneity of k independent binomial experiments on a certain event based on the range," Ann. Inst. Stat. Math., v. 10, 1958, p. 47–63.

Let k series of N trials each of a certain event be performed with the outcome of  $\nu_i$  occurrences in the *i*-th series in which the fixed probability of occurrence was  $p_i$ ,  $i = 1, 2, \dots, k$ . To test the null hypothesis of homogeneity:

$$p_1 = p_2 = \cdots = p_k = p_j$$

Siotani had previously proposed the statistic,  $R_k(N, p)$ , the range of the  $\nu_i$  [1]. The tables in this paper give for N = 10(1)20, 22, 25, 27, 30; k = 2(1)15;

p = .1(.1).5;

 $\alpha = .001, .005, .01(.01).06, .08, .1$ , the greatest  $r_k$  for which

$$\Pr\{R_k(N, p) \geq r_k\} < \alpha + .0005.$$

The cases in which for the  $r_k$  given,  $\alpha < \Pr\{R_k(N, p) \ge r_k\} < \alpha + .0005$  or

$$\alpha - .005 < \Pr\{R_k(N, p) \ge r_k\} < \alpha$$

are indicated by attaching a + or a - respectively to the value of  $r_k$ .

C. C. CRAIG

University of Michigan Ann Arbor, Michigan

1. MINORU SIOTANI, "Order statistics for discrete case with a numerical application to the binomial distribution," Ann. Inst. Stat. Math., v. 8, 1956, p. 95-104.

88[K].—P. N. SOMERVILLE, "Tables for obtaining non-parametric tolerance limits," Ann. Math. Stat., v. 29, 1958, p. 599–601.

Let P be the fraction of a population having a continuous but unknown distribution function that lies between the r-th smallest and the s-th largest values in a random sample of n drawn from that population. Then for any  $r, s \ge 0$  such that r + s = m, Table I gives the largest value of m such that with confidence coefficient  $\ge \gamma$  we may assert that 100P% of the population lies in the interval (r, s) for  $\gamma = .5, .75, .9, .95, .99$  and n = 50(5)100(10)150, 170, 200(100)1000. Table II gives  $\gamma$  to 2D for the assertion that 100P% of the population lies within the range, (r, s = 1), in a sample of n for P = .5, .75, .9, .95, .99 and

$$n = 3(1)20, 25, 30(10)100.$$

C. C. CRAIG

University of Michigan Ann Arbor, Michigan

89[K].—G. P. STECK, "A table for computing trivariate normal probabilities," Ann. Math. Stat., v. 29, 1958, p. 780-800.

Let X, Y, Z be standardized random variables obeying a trivariate normal dis-