exact values for the upper 5 and 1 percentage points of $U^{(2)}$ for several values of $m = (n_1 - s - 2)/2$ and $n = (n_2 - s - 2)/2$. The approximations for the upper 5 and 1 percentage points of $U^{(3)}$ and $U^{(4)}$ are given to 3 or 4D for $m = 0, 5$, $n = 15(5)50, 60(20)100$.

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77[K].—J. G. Saw, "Estimation of the normal population parameters given a singly censored sample," *Biometrika*, v. 46, 1959, p. 150–159.

As estimators of the mean and variance of a normal distribution, given an ordered sample $x_1 < x_2 \cdots < x_n$ censored above x_r, the author proposes

$$\mu^* = \bar{x}_{r-1} + (1 - \epsilon)x_r, \quad \text{where} \quad \bar{x}_{r-1} = \sum_{i=1}^{r-1} x_i/(r - 1),$$

$$\eta^* = \alpha \sum_{i=1}^{r-1} (x_i - x_r)^2 + \beta \sum_{i=1}^{r-1} (x_i - x_r)^2,$$

respectively, where ϵ is chosen to make μ^* unbiased, and α and β are chosen to make η^* unbiased and of minimum variance. To facilitate use of these estimators, three tables are appended. Table 1 consists of entries of the weight factor ϵ and Var (μ^*/σ) to 10D for $1 < r < n \leqq 20$. Table 2 contains coefficients of $(n + 1)^{-i}$ in series approximations to ϵ and to Var (μ^*/σ). Weight factors α and β are not tabulated directly, and consequently routine application of the author's estimates may be hampered. However, in order to permit calculation of these factors, Table 3, containing coefficients of $(n + 1)^{-i}$ in series approximations to them, has been included. These entries are given to 6D for $p_r = .50(.05).80$, where $p_r = r/(n + 1)$.

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78[K].—Minoru Siotani, "The extreme value of the generalized distances of the individual points in the multivariate normal sample," *Ann. Inst. Statist. Math. Tokyo*, v. 10, 1959, p. 183–208.

Let $x_\alpha' = (x_{1\alpha}, \cdots, x_{p\alpha})$, $\alpha = 1, \cdots, n$, be n independent observations from a p-variate normal population with mean vector $m' = (m_1, \cdots, m_p)$ and covariance matrix Λ, and let $\bar{x}' = (\bar{x}_1, \cdots, \bar{x}_p)$. The upper 5, $2\frac{1}{2}$, and 1 percentage points of the extreme deviate $\hat{\chi}^2_{\max D} = \max_i[(x_i - \bar{x})'\Lambda^{-1}(x_i - \bar{x})]$ is given to 2D for $n = 3(1)10(2)20(5)30$, $p = 2, 3, 4$. When Λ is unknown, let L be a $p \times p$ matrix whose elements, l_{ij}, are unbiased estimates of λ_{ij}, and have a Wishart distribution with ν degrees of freedom. The upper 5, $2\frac{1}{2}$, and 1 percentage points of the Studentized extreme deviate $\hat{T}^2_{\max D} = \max^i [(x_i - \bar{x})'L^{-1}(x_i - \bar{x})]$ is given to 2D for $n = 3(1)12, 14$, $\nu = 20(2)40(5)\ 60, 100, 150, 200$.

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