

78[8].—ROBERT R. BRITNEY & ROBERT L. WINKLER, *Tables of n th Order Partial Moments about the Origin for the Standard Normal Distribution, $n = 1(1)6$* , ms. of four typewritten pp. + 10 computer sheets deposited in the UMT file.

These unpublished tables consist of 11S floating-point decimal values of the integral $(2\pi)^{-1/2} \int_{-\infty}^z x^n e^{-x^2/2} dx$ for $z = 0(0.01)5$ and $n = 1(1)6$. The underlying extended-precision computer calculations utilized data from the 15D NBS tables [1] of the normal probability function.

The introductory text cites several applications of such tables, with corresponding references to the literature.

These tables supersede the corresponding 7D table of Pearson [2], which is not mentioned by the authors.

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1. NATIONAL BUREAU OF STANDARDS, *Tables of Normal Probability Functions*, Applied Mathematics Series, v. 23, U. S. Government Printing Office, Washington, D. C., 1953.

2. K. PEARSON, EDITOR, *Tables for Statisticians and Biometricians, Part I*, third edition, Biometric Laboratory, University College, London, 1930, pp. 22–23 (Table 9).

79[8].—IRWIN GREENBERG, *Tables of the Compound Poisson Process with Normal Compounding*, ms. of 10 pp. + 15 computer sheets, deposited in the UMT file.

These manuscript tables give the cumulative distribution function of a compound Poisson process with normal compounding. This c. d. f. may be expressed as

$$F(z) = e^{-\lambda} + \sum_{n=1}^{\infty} \frac{\lambda^n}{n!} e^{-\lambda} N(z | 0, n)$$

for $z \geq 0$, where $\lambda > 0$ and $N(z | 0, n)$ denotes the c. d. f. of a normally distributed random variable Z with mean 0 and variance n . For $z < 0$, the relationship $F(z) = 1 - F(-z)$ holds. The tables give $F(z)$ to 5D for 15 values of λ (1(1)5, 10, 15, 20, and their reciprocals) with $z = 0.00(0.01)4.99$.

The manuscript describes some properties of the probability function and gives two approximation formulas. A brief table indicates that for selected values of z and λ a simple approximation to the c. d. f. gives values which differ from the exact values by less than 0.01. Two errors were found in this table. For $z = 5.0$ and $\lambda = 20$, the approximation formula gives 0.8682 (not 0.8708) and the exact value is 0.8708 (not 0.8683).

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80[10].—C. J. BOUWKAMP, A. J. W. DUIJVESTIJN & P. MEDEMA, *Table of c -Nets of Orders 8 to 19, Inclusive*, Philips Research Laboratories, Eindhoven, Netherlands, 1960. Ms. of trimmed and bound computer output sheets in two volumes each of 206 pp., 24 × 30 cm., deposited in the UMT file.