

List of Corrections to PSF-2012-13, Rattihalli R N and Raghunath M, Generalized nonparametric tests for one-sample location problem based on sub-samples, *ProbStat Forum*, **05**, October 2012, 112-123.

Page No. 115, lines 10 and 11.

**Old error expressions:**

$$E_2(x) = \{y \in R^{k-1}: \{y_m > 0\} \text{ and } \{0 < y_{(k-r+1)} < x, y_{(r)} > -x \text{ or } y_{(k-r+1)} > x, y_{(r)} > -y_{(k-r+1)}\}\}$$

$$E_3(x) = \{y \in R^{k-1}: \{y_m < 0\} \text{ and } \{0 < y_{(k-r+1)} < x, y_{(r)} < -x \text{ or } y_{(k-r+1)} > x, y_{(r)} < -y_{(k-r+1)}\}\}$$

**Correct Expressions:**

$$E_2(x) = \left\{ y \in R^{k-1}: \{y_M > 0\} \text{ and } \{0 < y_{(k-r)} < x, -\min\{x, y_{(k-r+1)}\} < y_{(r)} < 0 \text{ or } x < y_{(k-r)} < \infty, -y_{(k-r)} < y_{(r)} < 0\}\right\},$$

$$E_3(x) = \left\{ y \in R^{k-1}: \{y_M > 0\} \text{ and } \{-\infty < y_{(k-r)} < x, y_{(k-r+1)} > \max\{0, y_{(k-r)}\}, -\infty < y_{(r)} < \min\{y_{(k-r)}, -\min\{x, y_{(k-r+1)}\}\} \text{ or } y_{(k-r)} > x, -\infty < y_{(r)} < -y_{(k-r)}\}\right\},$$

Page No. 115, line 14.

**Old error statement:**

$$\text{where } y_m = \text{Med}(x, y_1, \dots, y_{k-1}).$$

**Corrected statement:**

$$\text{where } y_M = \text{Med}(x, y_1, \dots, y_{k-1}), y_{(0)} = -\infty \text{ and } y_{(k)} = \infty.$$

Page No. 115, lines 22 to 27.

**Old Expressions:**

$$P[E_2(x)] = \int_0^x \int_{-x}^0 \int_0^w f(u, v, w) dv du dw + \int_x^\infty \int_{-w}^0 \int_0^w f(u, v, w) dv du dw. \quad (3.9)$$

where  $f(u, v, w)$  is the density function of  $Y_{(r)}$ ,  $Y_m = \text{Med}(x, Y_1, \dots, Y_{k-1})$  and  $Y_{(k-r)}$  in a random sample of  $Y_1, \dots, Y_{k-1}$  from  $G(\cdot)$ . Similarly,

$$\begin{aligned} P[E_3(x)] = & \int_0^x \int_{-\infty}^0 \int_{-\infty}^{\max\{-w, v\}} f(u, v, w) dv du dw + \\ & \int_x^\infty \int_{-\infty}^{-w} \int_{-\infty}^{\min\{|z|, -x\}} \int_u^{\min\{0, z\}} f_1(u, v, z, w) dv du dz dw. \end{aligned} \quad (3.10)$$

where  $f(u, v, w)$  is defined above and  $f_1(u, v, z, w)$  is the density function of  $Y_{(r)}$ ,  $Y_m = \text{Med}(x, Y_1, \dots, Y_{k-1})$ ,  $Y_{(k-r)}$  and  $Y_{(k-r+1)}$  in a random sample of  $Y_1, \dots, Y_{k-1}$  from  $G(\cdot)$ .

**Corrected expressions:**

$$\begin{aligned} P[E_2(x)] = & \int_0^x \int_w^\infty \int_{-\min\{x, z\}}^0 \int_0^w f_1(u, v, w, z) dv du dz dw + \int_x^\infty \int_{-w}^0 \int_0^w f(u, v, w) dv du dw. \end{aligned} \quad (3.9)$$

where  $f_1(u, v, w, z)$  is the density function of  $Y_{(r)}$ ,  $Y_M = \text{Med}(x, Y_1, \dots, Y_{k-1})$ ,  $Y_{(k-r)}$  and  $Y_{(k-r+1)}$  and  $f(u, v, w)$  is the density function of  $Y_{(r)}$ ,  $Y_M = \text{Med}(x, Y_1, \dots, Y_{k-1})$ , and  $Y_{(k-r)}$  in a random sample of  $Y_1, \dots, Y_{k-1}$  from  $G(\cdot)$ . Similarly,

$$\begin{aligned} P[E_3(x)] = & \int_{-\infty}^x \int_{\max\{0, w\}}^\infty \int_{-\infty}^{\min\{w, -\min\{x, z\}\}} \int_u^{\min\{0, w\}} f_1(u, v, z, w) dv du dz dw + \\ & \int_x^\infty \int_{-\infty}^{-w} \int_0^u f(u, v, w) dv du dw. \end{aligned} \quad (3.10)$$

where  $f_1(u, v, w, z)$  and  $f(u, v, w)$  are defined above in (3.9).

Page No. 119, line 07.

**Old Expression:**

$$\begin{aligned}
 P[E_3(x)] = & \\
 & 4! \left\{ \int_x^\infty \int_{-\infty}^{-w} \int_u^0 [G(v) - G(u)] dG(v) dG(u) dG(w) + \right. \\
 & \int_0^x \int_{-\infty}^{-x} \int_u^0 [G(v) - G(u)] dG(v) dG(u) dG(w) + \int_{-x}^0 \int_u^w \int_u^0 [G(v) - \\
 & G(u)] dG(v) dG(u) dG(w) + \\
 & \left. \int_{-\infty}^{-x} \int_u^w \int_u^0 [G(v) - G(u)] dG(v) dG(u) dG(w) \right\},
 \end{aligned}$$

**Correct Expression:**

$$\begin{aligned}
 P[E_3(x)] = & \\
 & 4! \left\{ \int_x^\infty \int_{-\infty}^{-w} \int_u^0 [G(v) - G(u)] dG(v) dG(u) dG(w) + \right. \\
 & \int_0^x \int_{-\infty}^{-x} \int_u^0 [G(v) - G(u)] dG(v) dG(u) dG(w) + \\
 & \int_{-x}^0 \int_{-\infty}^{-x} \int_u^w [G(v) - G(u)] dG(v) dG(u) dG(w) + \\
 & \left. \int_{-\infty}^{-x} \int_{-\infty}^w \int_u^w [G(v) - G(u)] dG(v) dG(u) dG(w) \right\},
 \end{aligned}$$

Page No. 120, line 08.

**Old Expression:**

$$\begin{aligned}
 E_2(-t) = & \left\{ \{u_{(m)} < 0\} : u_{(r)} < 0, u_{(k-r+1)} > 0 : \{u_{(k-r)} > t\} \cap \{u_{(r)} < u_{(k-r)}\} \text{ or } \{t > \right. \\
 & \left. u_{(k-r)} < 0\} \cap \{u_{(r)} < \max\{u_{(k-r+1)}, t\}\} = E_3(t).
 \end{aligned}$$

**Correct Expression:**

$$\begin{aligned}
 E_2(-t) = & \left\{ \{u_{(m)} < 0\} : u_{(k-r+1)}, u_{(r)} < 0 : \{u_{(k-r)} > t\} \cap \{u_{(r)} < -u_{(k-r)}\} \text{ or } \{t > \right. \\
 & \left. u_{(k-r)}\} \cap \{u_{(r)} < -\min\{u_{(k-r+1)}, t\}\} = E_3(t).
 \end{aligned}$$