CORRECTIONS TO "ESTIMATION OF THE INVERSE COVARIANCE MATRIX: RANDOM MIXTURES OF THE INVERSE WISHART MATRIX AND THE IDENTITY"

By L. R. HAFF

University of California, San Diego

An anonymous reviewer has kindly pointed out a minor error in each of Theorems 6.2 and 6.3. The required changes do not affect the substance of the arguments.

Correction to Theorem 6.2, page 1273. Condition (iv) should be changed to $Q^* \ge (1/2) (1+p^{-1})$. (Note that this condition holds in particular if Q=I.) Beginning with line 15 from the bottom, the proof is now concluded with "or, after simplification, $(4Ut'/p-4t+at^2) (1-Q^*) + (4t/p) (1+p-2pQ^*) \le 0$. The latter inequality follows from conditions (ii) and (iv), and the proof is complete."

Correction to Theorem 6.3, page 1274. Condition (ii) should be changed to "t(U) a nondecreasing solution of $at^2-2t+4Ut'/p \le 0$ and $2Ut' \le t$ where $p \ge 2$ ". Also, the second term of (6.14) should be $a(at^2-2t+4Ut'/p)$ $(p/U)^2$. Finally, following line (6.14), we conclude the proof by stating: "The first term in (6.14) is negative by hypothesis. Since $U \le 1$, we obtain an upper bound for the sum of the remaining terms: simply replace $(p/U)^2$ and (p/U) by p^2 and p respectively. A sufficient condition for this upper bound to be negative is seen to be $p \ge 2$ (by simple algebra). The proof is now complete."

REFERENCES

HAFF, L. R. (1979) Estimation of the inverse covariance matrix: random mixtures of the inverse Wishart matrix and identity. Ann. Statist. 7 1264-1276.

> MATHEMATICS C-012 University of California, San Diego La Jolla, CA 92893

Received January 23, 1981.