Corrigendum to "Asymptotic results for spatial causal ARMA models"[*]

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Abstract: This note corrects a minor error in the statement of Theorem 2.3 of EJS533, [1].

There is a minor error in the definition of the covariance function in [1, Theorem 2.3][1] and elsewhere in the paper. The corrected statement is

Theorem 2.3 *Assume Assumptions 2.1.1, 2.1.2 and 2.1.4 hold. The convergence in Theorem 2.2 can be extended to*

$$W_{m,n}(\cdot) \xrightarrow{\mathcal{D}} W(\cdot)$$

in the sup norm topology on $D((-\infty, \infty))$, *where* $W(\cdot)$ *is a centred Gaussian process with*

$$\sigma(x, y) := Cov\left(W(x), W(y)\right) = \sum_{i \in \mathbf{Z}} \sum_{j \in \mathbf{Z}} Cov\left(I(X_{0,0} \leq x), I(X_{i,j} \leq y)\right).$$

Similar corrections to the summation limits apply to the expression for $\sigma^2(x)$ in Theorem 2.2 and to the expressions in (a) and (b) in the proof of Theorem 2.2 on page 22.

Additionally, to clarify the proof of Lemma 3.1 replace the final line on page 26 by

$$|U_{i,j}(h,k)| \leq \int_{\mathbf{R}} (C|a_{h,k}||\xi_{i-h,j-k} - u|) \wedge 1 \ dG(u) \leq C|a_{h,k}|^{\gamma}(1 + |\xi_{i-h,j-k}|^{\gamma}).$$

References

[1] IVANOFF, B. G. and WEBER, N. C. (2010). Asymptotic results for spatial causal ARMA models. *Electron. J. Statist.* **4**, 15–35. MR2579552