Clarifications, typos & corrections for Durstewitz, D. (2017), Advanced Data Analysis in Neuroscience, Springer

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Here is a list of issues that surfaced after publication of the first edition:

- In eq. 7.16 (p. 134), the offset a_0 was ignored (i.e., $a_0 = 0$).
- In eq. 7.20 (p. 134), the variance σ^2 in the denominator denotes the variance of x_t which is *not* the same as the variance of the noise process ε_t in eq. 7.12 (rather, for the AR(1) process, $\sigma_x^2 = \sigma_\varepsilon^2 / (1 - a_1^2)$).
- The *augmented* matrix $\mathbf{X}_p$ in eq. 7.23 (p. 136) has dimensions $(T - p) \times (p + 1)$, which might have been unclear from the lines directly above.
- Paragraph below eq. 7.27 on p. 138; the first sentence here is misleading: The stated condition $\left| \sum_{i=1}^{p} a_i \right| < 1$ (see also eq. 7.25 and below) assures convergence of the geometric series in eq. 7.25 and thus a finite mean, but it is by itself *not* a sufficient condition for establishing stationarity of an AR(*p*) process with *p*>1 more generally! To determine whether an AR(*p*) process is stationary, all eigenvalues of the transition matrix of the equivalent VAR(1) representation (as indicated in eq. 7.27) have to be considered, i.e. condition eq. 7.28 has to be satisfied.