

**Errata for: *Applied Time Series Analysis with R, second edition***  
**by Woodward, Gray, and Elliott**

page 33: Theorem 1.4, part 1:  $P(f)$  should be changed to  $P_X(f)$

page 41: `plots.true.wge` has temporary software issues that will be corrected in the next version. Currently, there are two errors:

(a) If you use `phi=0` and `theta=0` then you get the error “Error in `arma.sim(n)`: ‘model must be a list’”. Using the current version a fix would be to enter some small positive value for `phi`. For example `phi=.00001` when you want to generate white noise. This will no longer be necessary in the next version.

(b) The program as it currently stands generates a realization with  $\sigma_a^2 = 1$  no matter what you enter for `vara`. Note that the true autocorrelations and spectral density should (and do) remain the same no matter the value of `vara`.

page 43: At the top of the page, the correct name of the `tswge` command is `plots.sample.wge`.

page 50: Currently, when using function `gen.sigplusnoise.wge` with `plot=FALSE`, the noise is plotted. This was unintentional and will be corrected in the next version of `tswge`.

page 55: Exercise 1.6

- The  $a(t)$  in the signal-plus-noise model should be changed to  $a_t$ .
- In part d, the word “estimator” should be replaced by “estimate”.

page 84: Equation 3.3. Add a line that says  $= -\sigma_a^2 \theta_q$ , if  $k = q$

page 87: Example 3.1. The two MA(1) models at the beginning of the example should be labeled a and b instead of 1 and 2.

page 109: The third condition immediately preceding Section 3.2.7.4 should be  $\phi_2 - \phi_1 < 1$

page 135: Figure 3.23(c) is incorrect. If you run `plots.true.wge(n=200,phi=.95,theta=.8)` you will see that the peak in the spectral density has a value greater than 10.

page 215: Part (2) of the Findley-Quin theorem should begin “Of the  $d$  roots in (1),  $j$  have highest”

page 215 Three lines above Example 5.7 should begin: “where  $j$  is specified in (2). The roots”

page 232 The line before Equation 6.6 should read, “ $X_{k-1}, \dots$  is equivalent to knowing”

page 293 Equation 7.47 should have  $\mu(1-1.2+.6)$  added to the right-hand side of the equation.

page 387 Line below Equation 9.14.  $g_t = (1 - \phi_1 B)$  at the end of the line should be replaced by

$$g_t = (1 - \hat{\phi}_1 B)$$