Figure 1. Haar wavelet filters for scales $\tau_j = 2^{j-1}$, $j = 1, 2, \ldots, 7$. 
Figure 2. D(4), C(6) and LA(8) wavelet filters for scales $\tau_j = 2^{j-1}$, $j = 1, 2, \ldots, 7$. 
Figure 3. Haar scaling filters for scales $\lambda_{J_0} = 2^{J_0}$, $J_0 = 1, 2, \ldots, 7$. 
Figure 4. \(D(4), C(6)\) and \(LA(8)\) scaling filters for scales \(\lambda J_0 = 2^{J_0}, J_0 = 1, 2, \ldots, 7.\)
Figure 5. LA(8) DWT coefficients for simulated FD(0.4) time series and sample ACSs.
Figure 6. SDFs for an FD(0.4) process (top plot) and for nonboundary LA(8) wavelet coefficients in $W_1$, $W_2$, $W_3$ and $W_4$. The vertical axes are all in units of decibels (i.e., we plot $\log_{10}(S_X(f))$ versus $f$). The vertical lines in the top plot denote the nominal pass-bands for the four $W_j$. 
Figure 7. ACSs at $\tau = 1, \ldots, 4$ for Haar, D(4) and LA(8) wavelet coefficients $W_{j,t}$, $j = 1, \ldots, 4$, of an FD(0.4) process. The ACS values are plotted as deviations from zero (some are not visible because they are so close to zero).
Figure 8a. Correlation between the Haar wavelet coefficients $W_{j,t}$ and $W_{j',t'}$ formed from an FD(0.4) process and for levels satisfying $1 \leq j < j' \leq 4$.

Figure 8b. As in Figure 8a, but now using the LA(8) DWT.
Figure 9. Simulated FD(0.4) time series $X$ of Figure 5 (bottom panel), above which are five series that were bootstrapped from $X$ using an LA(8) DWT.
Figure 10. SDFs for AR(1) processes (top plot) with $\phi = 0.9$ (thick curve) and $-0.9$ (thin) and for corresponding nonboundary LA(8) wavelet coefficients in $W_1$ to $W_4$ (bottom four plots). The vertical axes are in decibels, and the vertical lines in the top plot denote the nominal pass-bands for the four $W_j$. 
Figure 11. Flow diagram illustrating the analysis of $X$ into $W_{3,0}, \ldots, W_{3,7}$ (recall that $N_j \equiv N/2^j$).
$j=0 \quad W_{0,0} = X$

$\downarrow \quad G\left(\frac{k}{N}\right) \quad H\left(\frac{k}{N}\right)$

$1/2$

$\downarrow \quad W_{1,0} \quad W_{1,1}$

$\downarrow \quad G\left(\frac{k}{N}\right) \quad H\left(\frac{k}{N}\right)$

$1/4$

$\downarrow \quad W_{2,0} \quad W_{2,1}$

$\downarrow \quad G\left(\frac{k}{N}\right) \quad H\left(\frac{k}{N}\right)$

$\downarrow \quad W_{3,0} \quad W_{3,1}$

$0 \quad 1/16 \quad 1/8$

Figure 12. Flow diagram illustrating the analysis of $X$ into $W_{3,0}$, $W_{3,1}$, $W_{2,1}$ and $W_{1,1}$, which is identical to a partial DWT of level $J_0 = 3$. 
Figure 13. Flow diagram illustrating the analysis of $X$ into $W_{2,0}$, $W_{3,2}$, $W_{3,3}$ and $W_{1,1}$, an arbitrary disjoint dyadic decomposition.