10.4 COVARIANCE MODELING

The PRISM is a two-dimensional array of certain partial regression plots. More specifically, it is the graphical equivalent of a matrix of certain partial correlations, where the plot in row $j$ and column $k$ $(j \geq k)$ of the array is the partial regression plot of standardized response (or residual) variables at times $k$ and $(j + 1)$, adjusted for all standardized responses (or residuals) at intervening times $k + 1, \ldots, j$. Random scatter in the $(j, k)$th plot indicates that the responses (or residuals) at times $k$ and $(j + 1)$ are conditionally independent, given the intervening responses (or residuals), whereas departures from random scatter indicate conditional dependence. A layout of the PRISM is shown in Figure 10.2. As will be illustrated in later sections (see, e.g., Section