

FIG. W3. Banded structure for H3N2 influenza HI data. The high reactors are predominantly in the diagonal zone, and the low reactors and the missing values appear more approaching the two corners. The sparse-learning method used in this study derived the long-distance matrix by using a temporal model and the short-distance matrix without using a temporal model. The long-distance matrix was used to learn the long-weight matrix, and the short-distance matrix was used to learn the short-weight matrix.

