Appendix

A Visualization of the Inter-BS Proximity and Volume Graphs

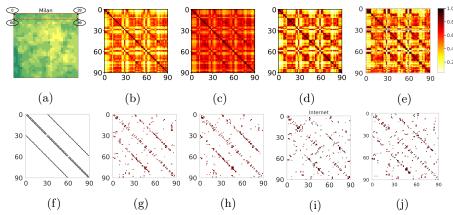


Fig. 1: (a) shows the selected region of 90 stations. (b), (c) and (d) visualize the inter-station volume similarity of SMS, Call and Internet, respectively $(M^1, M^2, \text{ and } M^3 \text{ calculated from Eq.}(1))$. (e) is the group-level inter-station proximity $\hat{M}_{ij} = h_i \cdot h_j$ in Eq.(2). (f) shows the spatial neighbor adjacency matrix of the 90 stations. (g), (h) and (i) show the adjacency matrices (A^1, A^2, A^3) of volume graphs. (j) is the adjacency matrix A^4 of the final fusion graph.