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Wave propagation in downtown Istanbul deduced from earthquake records

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Using recordings from local earthquakes by the 100-station Istanbul Earthquake Rapid Response System, we look at the characteristics of seismic wave propagation in Istanbul. The 100 stations in the system are positioned in downtown Istanbul with an interstation distance varying from 600 m to 5000 km. We utilize computer animations in displaying the wave propagation through the city, and present and discuss the issues that we had to deal with in the process. We pay particular attention to the way the ground motion is interpolated between the neighboring stations, and the correction of timing problems that occasionally arise. We use modified Krigging approach, when interpolating among the stations.