

## Spatiotemporal Data

These data come from the Baton Rouge housing market. To maintain confidentiality, the locational coordinates were translated and rotated (which preserves distances), and the quantitative variables were logged and mean-centered.

Specifically, `y.mat` contains the mean-centered  $\log(\text{sales price})$ . The files `ycoord.mat`, `xcoord.mat` are rotated and translated latitude and longitude where the original units were in signed decimal degrees. The matrix `tdum.mat` contains indicator variables for 1985, 1986, 1987, 1988, 1989, 1990, 1991, and 1992 with 1993 together (not much of 1993). The data are ordered by transaction date with the oldest ones in the first rows and the newest ones in the last rows. The quantitative variables appear in `xquant.mat`. This matrix contains  $\log(\text{age}+1)$ ,  $\log(\text{living square feet})$ ,  $\log(\text{other area})$ , and the number of baths with halfbaths counting as 0.5 of a full bath.

## References

Pace, R. Kelley and Ronald Barry, O.W. Gilley, C.F. Sirmans, "A Method for Spatial-temporal Forecasting with an Application to Real Estate Prices," *International Journal of Forecasting*, Volume 16, Number 2, April-June 2000, p. 229-246.