

Interpretation

May 20, 2020

#

Interpretation and Understanding Outputs

Notebook Outline:

An example of hedonic house price modeling using MGWR - Section 1 - Section 2 - Section 3 - Section 4

[Back to the main page](#)

1 Global Model Results

1.0.1 Global Regression Model Fit and Parameter Estimates

Two files are saved on your computer once you run the MGWR model - **MGWR_session_summary.txt** and **MGWR_session_results.csv**

2 MGWR Results - Model Fit

3 MGWR Results - Bandwidth Parameters

3.0.1 Total number of census tracts = 357

3.0.2 Visualizing bandwidths to understand scale

4 MGWR Results - Parameter Estimates

4.0.1 The new columns added to the results csv:

1. **ols_residual** - Residuals from OLS model for every location point
2. **mgwr_yhat** - yhat from MGWR for each location point
3. **mgwr_residual** - Residuals from MGWR for every location point
4. **localR2** - Explained variation at each location point
5. **beta_** - Columns starting with *beta* are parameter estimates for the covariates
6. **se_** - Columns starting with *se* are standard errors for estimates for the covariates
7. **t_** - Columns starting with *t* are t values for estimates for the covariates
8. **p_** - Columns starting with *p* are p values for estimates for the covariates
9. **sumW_** - Sum of weights for the covariates at each location

The **beta_** columns need to be filtered to have only the significant parameter estimates. This filtering is done using the **t_** value columns. The thresholds for t values are defined by the **adjusted t values** as shown below.
