

Robust Multiple Regression Report

Dataset C:\Users\Dr_la\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

Run Summary Report

Item	Value	Rows	Value
Dependent Variable	sale_price	Number Processed	328
Number Ind. Variables	5	Number Used in Estimation	305
Weight Variable	None	Number Filtered Out	0
Robust Method	Huber's Method	Number with X's Missing	23
Tuning Constant	1.345	Number with Weight Missing	0
MAD Scale Factor	0.6745	Number with Y Missing	0
		Sum of Robust Weights	278.591
Run Information	Value		
Iterations	22		
Max % Change in any Coef	0.001		
R ² after Robust Weighting	0.1408		
S using MAD	45178.67		
S using MSE	49377.11		
Completion Status	Normal Completion		

Descriptive Statistics

Variable	Count	Mean	Standard Deviation	Minimum	Maximum
House_Floor_area_sqm	305	115.4108	24.30571	0	236
Bedrooms	305	2.912156	0.698105	1	5
Car_Spaces	305	1.715524	0.9465971	1	5
MinParkDist	305	2012.51	618.5031	209.2249	2990.25
DistanceMM	305	1740.318	529.7296	499.0823	3553.855
sale_price	305	77405.9	52828.28	5000	370000

Robust Iterations - Coefficients

Robust Iteration	Max Percent Change in Coefficients	b(0)	b(1)	b(2)	b(3)
0		936.9606	54.34684	17826.78	12305.44
1	762.795	-6210.131	63.36904	17783.9	10431.01
2	32.718	-4178.275	49.69748	17419.33	9379.318
3	26.324	-3078.375	40.09327	17291.31	8931.762
4	22.914	-2373.01	36.08049	17207.87	8789.327
5	9.209	-2154.471	34.37807	17182.4	8736.934
6	3.152	-2086.569	33.50821	17170.41	8709.321
7	1.906	-2046.798	33.0396	17161.71	8693.604
8	1.092	-2024.444	32.77822	17156.23	8684.516
9	0.635	-2011.583	32.62922	17152.89	8679.221
10	0.371	-2004.119	32.54314	17150.9	8676.122
11	0.217	-1999.763	32.49304	17149.71	8674.306

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Robust Iterations - Coefficients (Continued)

Robust Iteration	Max Percent Change in Coefficients	b(0)	b(1)	b(2)	b(3)
12	0.127	-1997.214	32.46376	17149.02	8673.24
13	0.075	-1995.72	32.4466	17148.61	8672.615
14	0.044	-1994.844	32.43654	17148.37	8672.248
15	0.026	-1994.329	32.43064	17148.22	8672.032
16	0.015	-1994.027	32.42717	17148.14	8671.905
17	0.009	-1993.85	32.42514	17148.09	8671.831
18	0.005	-1993.746	32.42395	17148.06	8671.787
19	0.003	-1993.685	32.42324	17148.05	8671.762
20	0.002	-1993.649	32.42283	17148.04	8671.747
21	0.001	-1993.628	32.42259	17148.03	8671.738
22	0.001	-1993.616	32.42245	17148.03	8671.732

Robust Iterations - Residuals

Robust Iteration	Max Percent Change in Coefficients	Percentiles of Absolute Residuals			
		25th	50th	75th	100th
0		17421.19	41089.63	66607.3	290972.2
1	762.795	17667.86	35777.92	60022.62	294483.1
2	32.718	18645.56	34511.9	59336.38	294474.2
3	26.324	18456.54	33679	58421.25	294608.4
4	22.914	18490.94	33501.52	58123.71	294587.3
5	9.209	18485.02	33406.27	57985.6	294617.5
6	3.152	18505.19	33324.99	57892.71	294662.5
7	1.906	18493.05	33280.42	57839.1	294689.7
8	1.092	18461.83	33254.73	57807.73	294706.3
9	0.635	18443.42	33239.83	57789.35	294716.2
10	0.371	18432.59	33231.14	57778.57	294722
11	0.217	18426.22	33226.06	57772.24	294725.5
12	0.127	18422.48	33223.08	57768.53	294727.5
13	0.075	18420.28	33221.33	57766.35	294728.7
14	0.044	18418.99	33220.3	57765.07	294729.4
15	0.026	18418.23	33219.7	57764.32	294729.8
16	0.015	18417.79	33219.35	57763.88	294730
17	0.009	18417.53	33219.14	57763.62	294730.2
18	0.005	18417.37	33219.02	57763.46	294730.3
19	0.003	18417.28	33218.95	57763.38	294730.3
20	0.002	18417.23	33218.91	57763.32	294730.3
21	0.001	18417.2	33218.88	57763.29	294730.4
22	0.001	18417.18	33218.87	57763.27	294730.4

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Regression Coefficients T-Tests Assuming Fixed Weights

Independent Variable	Regression Coefficient b(i)	Standard Error Sb(i)	Standard-ized Coefficient	T-Statistic to Test H0: $\beta(i)=0$	Prob Level	Reject H0 at 5%?
Intercept	-1993.616	19502.75	0.0000	-0.102	0.9186	No
House_Floor_area_sqm	32.42245	119.3605	0.0149	0.272	0.7861	No
Bedrooms	17148.03	4296.838	0.2266	3.991	0.0001	Yes
Car_Spaces	8671.732	3129.974	0.1554	2.771	0.0059	Yes
MinParkDist	-12.50359	4.738607	-0.1464	-2.639	0.0088	Yes
DistanceMM	20.68984	5.440758	0.2075	3.803	0.0002	Yes

Regression Coefficients T-Tests Assuming Random Weights

Independent Variable	Regression Coefficient b(i)	Standard Error Sb(i)	Standard-ized Coefficient	T-Statistic to Test H0: $\beta(i)=0$	Prob Level	Reject H0 at 5%?
Intercept	-1993.616	20158.93	0.0000	-0.099	0.9213	No
House_Floor_area_sqm	32.42245	116.7696	0.0149	0.278	0.7815	No
Bedrooms	17148.03	4416.321	0.2266	3.883	0.0001	Yes
Car_Spaces	8671.732	3217.516	0.1554	2.695	0.0074	Yes
MinParkDist	-12.50359	4.878078	-0.1464	-2.563	0.0109	Yes
DistanceMM	20.68984	5.539987	0.2075	3.735	0.0002	Yes

Regression Coefficients Confidence Intervals Assuming Fixed Weights

Independent Variable	Regression Coefficient b(i)	Standard Error Sb(i)	Lower 95% Conf. Limit of $\beta(i)$	Upper 95% Conf. Limit of $\beta(i)$
Intercept	-1993.616	19502.75	-40373.65	36386.42
House_Floor_area_sqm	32.42245	119.3605	-202.4706	267.3155
Bedrooms	17148.03	4296.838	8692.151	25603.9
Car_Spaces	8671.732	3129.974	2512.164	14831.3
MinParkDist	-12.50359	4.738607	-21.82883	-3.178339
DistanceMM	20.68984	5.440758	9.982812	31.39687

Note: The T-Value used to calculate these confidence limits was 1.968.

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Regression Coefficients Confidence Intervals Assuming Random Weights

Independent Variable	Regression Coefficient b(i)	Standard Error Sb(i)	Lower 95% Conf. Limit of $\beta(i)$	Upper 95% Conf. Limit of $\beta(i)$
Intercept	-1993.616	20158.93	-41664.96	37677.73
House_Floor_area_sqm	32.42245	116.7696	-197.3719	262.2168
Bedrooms	17148.03	4416.321	8457.018	25839.04
Car_Spaces	8671.732	3217.516	2339.887	15003.58
MinParkDist	-12.50359	4.878078	-22.1033	-2.90387
DistanceMM	20.68984	5.539987	9.787537	31.59215

Note: The T-Value used to calculate these confidence limits was 1.968.

Estimated Equation

sale_price =
 -1993.6155656636 + 32.4224486673635 * House_Floor_area_sqm + 17148.0273081391 * Bedrooms +
 8671.73269132851 * Car_Spaces - 12.5035856777079 * MinParkDist + 20.6898416318683 * DistanceMM

Robust Residuals and Weights

Row	Actual sale_price	Predicted sale_price	Residual	Absolute Percent Error	Robust Weight
1	41500	74503.77	-33003.77	79.527	1.0000
2	100000	74789.17	25210.83	25.211	1.0000
3	40000	80115.22	-40115.22	100.288	1.0000
4	18000	62282.05	-44282.05	246.011	1.0000
5	25000	78985.52	-53985.52	215.942	1.0000
6	73000	75106.93	-2106.932	2.886	1.0000
7	90000	74237.84	15762.16	17.514	1.0000
8	60000	64882.12	-4882.118	8.137	1.0000
9	30500	86094.65	-55594.65	182.278	1.0000
10	42000	68688.06	-26688.06	63.543	1.0000
11	19500	76905.02	-57405.02	294.385	1.0000
12	35000	90439.88	-55439.87	158.400	1.0000
13	50000	99656.09	-49656.09	99.312	1.0000
14	87000	70678.8	16321.2	18.760	1.0000
15	16000	122315.6	-106315.6	664.472	0.5716
16	32000	95680.32	-63680.32	199.001	0.9542
17	24000	112034.5	-88034.5	366.810	0.6902
18	32000	102426.4	-70426.43	220.083	0.8628
20	10000	56842.98	-46842.98	468.430	1.0000
21	40000	72933.51	-32933.51	82.334	1.0000
22	83500	61565.09	21934.91	26.269	1.0000
23	47000	65417.18	-18417.18	39.185	1.0000
24	20000	71550.53	-51550.54	257.753	1.0000

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Robust Residuals and Weights (Continued)

Row	Actual sale_price	Predicted sale_price	Residual	Absolute Percent Error	Robust Weight
25	26500	73383.67	-46883.68	176.920	1.0000
26	67000	99771.23	-32771.23	48.912	1.0000
27	28000	68944.23	-40944.23	146.229	1.0000
28	20000	31794.71	-11794.71	58.974	1.0000
29	13000	63975.93	-50975.93	392.123	1.0000
30	13000	29507.47	-16507.47	126.981	1.0000
31	25000	63658.02	-38658.02	154.632	1.0000
32	14000	77806.26	-63806.26	455.759	0.9523
33	10000	59690.25	-49690.25	496.902	1.0000
34	10000	66508.85	-56508.85	565.089	1.0000
35	17000	58206.13	-41206.13	242.389	1.0000
36	52000	99849.24	-47849.24	92.018	1.0000
37	25000	107810.4	-82810.37	331.241	0.7338
38	8000	77327.78	-69327.78	866.597	0.8765
39	35000	56286.59	-21286.59	60.819	1.0000
40	33000	51794.7	-18794.7	56.954	1.0000
41	11000	63210.5	-52210.5	474.641	1.0000
42	19000	61138.23	-42138.23	221.780	1.0000
43	20000	85566.75	-65566.75	327.834	0.9268
44	18000	83432.62	-65432.62	363.515	0.9287
45	21000	45750.15	-24750.15	117.858	1.0000
46	17000	28520.42	-11520.42	67.767	1.0000
47	25000	61823.47	-36823.47	147.294	1.0000
48	10000	27534.83	-17534.83	175.348	1.0000
49	38000	83141.74	-45141.74	118.794	1.0000
50	47000	82667.95	-35667.95	75.889	1.0000
51	39500	124413.3	-84913.27	214.970	0.7156
52	43000	74821.22	-31821.22	74.003	1.0000
54	35000	42715.45	-7715.445	22.044	1.0000
55	15000	50940.44	-35940.44	239.603	1.0000
56	25000	43465.63	-18465.63	73.863	1.0000
57	42000	83677.73	-41677.73	99.233	1.0000
58	10000	61343.01	-51343.01	513.430	1.0000
59	86000	67462.9	18537.11	21.555	1.0000
60	47000	66992.01	-19992.01	42.536	1.0000
61	165500	73314.23	92185.77	55.701	0.6592
62	33000	77862.39	-44862.39	135.947	1.0000
63	50000	26046.47	23953.53	47.907	1.0000
64	93000	77327.68	15672.32	16.852	1.0000
65	33000	61675.54	-28675.54	86.896	1.0000
66	72000	61547.57	10452.43	14.517	1.0000
67	90000	73624.74	16375.25	18.195	1.0000
68	109500	133515.8	-24015.81	21.932	1.0000
69	160000	62325.33	97674.66	61.047	0.6221
70	78000	107557.9	-29557.91	37.895	1.0000
71	65000	55438.34	9561.664	14.710	1.0000
72	30000	66078.13	-36078.13	120.260	1.0000

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Robust Residuals and Weights (Continued)

Row	Actual sale_price	Predicted sale_price	Residual	Absolute Percent Error	Robust Weight
73	92000	92715.28	-715.2827	0.777	1.0000
74	170000	91325.08	78674.92	46.279	0.7724
75	145000	71220.23	73779.77	50.883	0.8236
76	73000	45865.27	27134.73	37.171	1.0000
78	80000	80710.97	-710.968	0.889	1.0000
79	40000	77932.23	-37932.23	94.831	1.0000
80	51500	68688.06	-17188.06	33.375	1.0000
81	52000	67968.23	-15968.23	30.708	1.0000
82	98000	65653.74	32346.26	33.006	1.0000
83	27000	81696.88	-54696.88	202.581	1.0000
85	27000	117095.9	-90095.88	333.688	0.6745
87	50000	66208.13	-16208.12	32.416	1.0000
88	38000	95763.27	-57763.27	152.009	1.0000
90	35000	67507.72	-32507.72	92.879	1.0000
91	185000	74499.79	110500.2	59.730	0.5499
92	120000	66763.13	53236.87	44.364	1.0000
94	95000	76365.08	18634.92	19.616	1.0000
95	58000	84938.05	-26938.05	46.445	1.0000
96	72000	119614.6	-47614.61	66.131	1.0000
97	120000	72207.77	47792.24	39.827	1.0000
98	41000	71174.63	-30174.63	73.597	1.0000
99	55000	88716.6	-33716.61	61.303	1.0000
100	65000	63714.12	1285.882	1.978	1.0000
101	68000	73383.67	-5383.674	7.917	1.0000
102	72000	101230.2	-29230.25	40.598	1.0000
103	75000	81519.48	-6519.483	8.693	1.0000
104	34000	68084.49	-34084.49	100.248	1.0000
105	95000	74745.48	20254.53	21.321	1.0000
106	20000	71617.51	-51617.51	258.088	1.0000
107	130000	89091.77	40908.23	31.468	1.0000
109	15000	49467.91	-34467.91	229.786	1.0000
110	48000	57329.79	-9329.787	19.437	1.0000
111	72000	58317.2	13682.79	19.004	1.0000
112	39500	57458.58	-17958.58	45.465	1.0000
113	32000	87076.77	-55076.78	172.115	1.0000
114	80000	80213.51	-213.5065	0.267	1.0000
115	125000	76698.59	48301.41	38.641	1.0000
116	137000	94186.7	42813.3	31.251	1.0000
117	57000	53196.91	3803.096	6.672	1.0000
119	55000	76967.04	-21967.04	39.940	1.0000
120	78000	76213.49	1786.508	2.290	1.0000
121	32000	75286.79	-43286.79	135.271	1.0000
122	67000	82991.42	-15991.42	23.868	1.0000
123	95000	82991.42	12008.58	12.641	1.0000
124	50000	82039.14	-32039.14	64.078	1.0000
125	35000	70516.89	-35516.89	101.477	1.0000
126	130000	130021.2	-21.20612	0.016	1.0000

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127	38500	68143.2	-29643.2	76.995	1.0000
128	125000	77566.35	47433.65	37.947	1.0000
129	55000	94660.88	-39660.89	72.111	1.0000
130	58000	69389.06	-11389.06	19.636	1.0000
131	72000	104424.1	-32424.11	45.033	1.0000
132	5000	107034.8	-102034.8	2040.696	0.5955
133	149500	87441.27	62058.72	41.511	0.9792
134	68000	103243.9	-35243.87	51.829	1.0000
135	87500	59407.5	28092.5	32.106	1.0000
136	25500	83935.02	-58435.01	229.157	1.0000
137	35000	68909.37	-33909.37	96.884	1.0000
138	15000	93044.85	-78044.85	520.299	0.7786
139	26000	73674.24	-47674.24	183.362	1.0000
140	38800	88636.23	-49836.23	128.444	1.0000
141	128000	62850.44	65149.56	50.898	0.9327
142	135000	63082.69	71917.3	53.272	0.8449
143	75000	56247.21	18752.79	25.004	1.0000
144	68000	100278.8	-32278.76	47.469	1.0000
145	60000	78416.32	-18416.32	30.694	1.0000
146	85000	101931.9	-16931.86	19.920	1.0000
147	67000	74853.27	-7853.27	11.721	1.0000
148	30000	72053.74	-42053.75	140.179	1.0000
149	78000	86988.39	-8988.394	11.524	1.0000
150	55000	69830.87	-14830.86	26.965	1.0000
152	80000	80175.36	-175.3616	0.219	1.0000
153	25000	57761.3	-32761.29	131.045	1.0000
154	56000	49524.51	6475.492	11.563	1.0000
155	52500	59863.47	-7363.473	14.026	1.0000
157	200000	102104.2	97895.82	48.948	0.6207
158	30000	29215.82	784.1821	2.614	1.0000
159	16000	52070.54	-36070.54	225.441	1.0000
160	178000	82188.84	95811.16	53.826	0.6342
161	80000	77855.74	2144.262	2.680	1.0000
162	35000	50056.9	-15056.9	43.020	1.0000
163	46000	64799.88	-18799.88	40.869	1.0000
164	37000	44096.01	-7096.012	19.178	1.0000
166	35000	55037.63	-20037.63	57.250	1.0000
167	30000	65863.96	-35863.96	119.547	1.0000
168	15000	48218.87	-33218.87	221.459	1.0000
169	117500	92710.67	24789.33	21.097	1.0000
170	205000	59456.2	145543.8	70.997	0.4175
171	55000	85865.45	-30865.46	56.119	1.0000
172	62000	59193.92	2806.077	4.526	1.0000
173	80000	60905.11	19094.9	23.869	1.0000
174	102000	60894.86	41105.14	40.299	1.0000
176	82000	68553.29	13446.71	16.398	1.0000
177	56000	61760.52	-5760.515	10.287	1.0000

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178	67000	70432.25	-3432.248	5.123	1.0000
179	67000	59848.38	7151.62	10.674	1.0000
180	160000	61547.57	98452.43	61.533	0.6172
181	125000	92842.08	32157.92	25.726	1.0000
182	110000	86472.9	23527.1	21.388	1.0000
183	330000	110049.1	219950.9	66.652	0.2763
184	60000	101288.2	-41288.22	68.814	1.0000
185	65000	85737.41	-20737.4	31.904	1.0000
186	40000	36876.24	3123.76	7.809	1.0000
187	50000	34810.27	15189.73	30.379	1.0000
188	85000	48589.16	36410.84	42.836	1.0000
189	145000	55706.84	89293.16	61.581	0.6805
190	155000	72711.13	82288.88	53.090	0.7384
191	90000	112963.3	-22963.29	25.515	1.0000
192	80000	43936.21	36063.79	45.080	1.0000
194	130000	63656.17	66343.83	51.034	0.9159
195	190000	101131.1	88868.92	46.773	0.6838
196	97000	76213.49	20786.51	21.429	1.0000
197	103000	83060.51	19939.49	19.359	1.0000
198	82000	104547	-22547	27.496	1.0000
199	142500	80813.16	61686.84	43.289	0.9851
200	170000	104902.2	65097.82	38.293	0.9334
201	252000	112554.1	139445.9	55.336	0.4358
202	169000	77032.02	91967.98	54.419	0.6607
203	145000	80189.73	64810.27	44.697	0.9376
204	100000	38122.02	61877.98	61.878	0.9820
205	155000	66359.52	88640.48	57.187	0.6855
206	80000	59982.8	20017.2	25.022	1.0000
207	55000	73793.23	-18793.23	34.170	1.0000
208	75000	96786.34	-21786.35	29.048	1.0000
209	135000	111672	23327.97	17.280	1.0000
210	50000	75765.06	-25765.06	51.530	1.0000
211	100000	116344.8	-16344.81	16.345	1.0000
212	370000	107313.3	262686.7	70.996	0.2313
213	280000	119635.1	160364.9	57.273	0.3789
214	330000	96545.17	233454.8	70.744	0.2603
215	70000	56100.3	13899.7	19.857	1.0000
216	68000	80289.88	-12289.87	18.073	1.0000
217	25000	86108	-61108	244.432	0.9944
218	96000	91845.14	4154.856	4.328	1.0000
219	150000	80566.86	69433.14	46.289	0.8752
220	50000	107355.3	-57355.27	114.711	1.0000
221	80000	77550.43	2449.567	3.062	1.0000
222	100000	81711.6	18288.4	18.288	1.0000
223	55000	25111.51	29888.49	54.343	1.0000
224	34000	51967.76	-17967.76	52.846	1.0000
225	155000	102017.5	52982.5	34.182	1.0000

Robust Multiple Regression Report

Dataset C:\Users\Dr_la\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

Robust Residuals and Weights (Continued)

Row	Actual sale_price	Predicted sale_price	Residual	Absolute Percent Error	Robust Weight
226	160000	81706.25	78293.75	48.934	0.7761
227	70000	80125.63	-10125.63	14.465	1.0000
228	20000	56754.72	-36754.72	183.774	1.0000
229	230000	69151.34	160848.7	69.934	0.3778
231	105000	57682.29	47317.71	45.064	1.0000
232	197500	104346.2	93153.84	47.166	0.6523
233	95000	84575.55	10424.45	10.973	1.0000
234	55000	75874.01	-20874.01	37.953	1.0000
235	105000	90439.88	14560.13	13.867	1.0000
236	170000	99300.47	70699.53	41.588	0.8595
237	90000	85212.3	4787.697	5.320	1.0000
238	38000	75887.52	-37887.53	99.704	1.0000
239	60000	84620.06	-24620.06	41.033	1.0000
240	125000	75575.86	49424.14	39.539	1.0000
241	95000	84938.05	10061.95	10.592	1.0000
242	125000	72028.8	52971.2	42.377	1.0000
243	155000	67664.07	87335.93	56.346	0.6958
244	120000	109229.9	10770.08	8.975	1.0000
245	44000	68012.17	-24012.17	54.573	1.0000
246	100000	117037.4	-17037.39	17.037	1.0000
247	48750	75436.74	-26686.74	54.742	1.0000
249	85000	67641.57	17358.43	20.422	1.0000
250	70000	48511.63	21488.38	30.698	1.0000
251	99000	75490.7	23509.3	23.747	1.0000
252	60000	66309.27	-6309.265	10.515	1.0000
253	180000	86264.34	93735.66	52.075	0.6483
254	180000	94660.88	85339.12	47.411	0.7120
255	155000	78712.13	76287.87	49.218	0.7965
256	60000	69561.99	-9561.989	15.937	1.0000
257	130000	103243.9	26756.13	20.582	1.0000
258	150000	71349.09	78650.91	52.434	0.7726
259	88000	62572.09	25427.9	28.895	1.0000
260	88000	77470.28	10529.72	11.966	1.0000
261	82000	63246.39	18753.62	22.870	1.0000
262	325000	111186	213814	65.789	0.2842
263	50000	50077.01	-77.01193	0.154	1.0000
264	175000	60613.65	114386.3	65.364	0.5312
265	250000	59795.88	190204.1	76.082	0.3195
266	40000	82683.45	-42683.46	106.709	1.0000
267	100000	90980.59	9019.416	9.019	1.0000
268	110000	81948.64	28051.36	25.501	1.0000
269	320000	85193.77	234806.2	73.377	0.2588
270	275000	94243.39	180756.6	65.730	0.3362
271	120000	77578.84	42421.17	35.351	1.0000
272	125000	93369.86	31630.14	25.304	1.0000
273	50000	75842.3	-25842.3	51.685	1.0000
274	170000	73820.8	96179.2	56.576	0.6318

Robust Multiple Regression Report

Dataset C:\Users\Dr_la\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

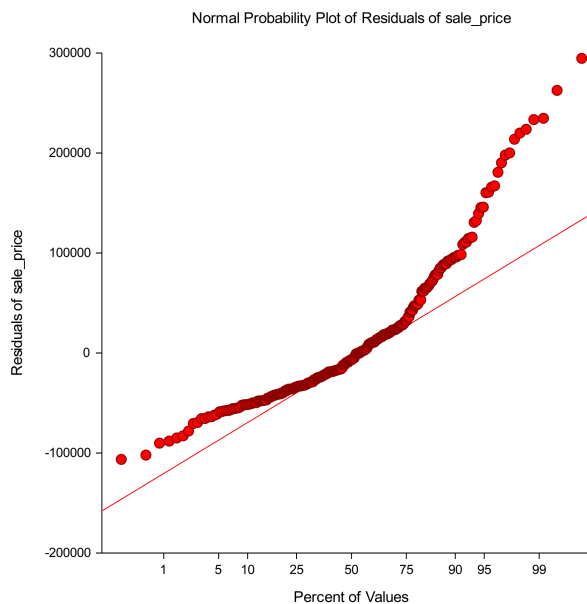
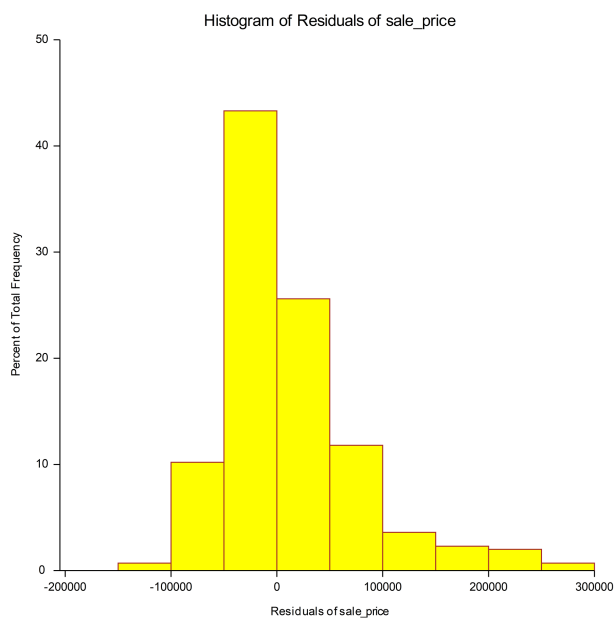
Robust Residuals and Weights (Continued)

Row	Actual sale_price	Predicted sale_price	Residual	Absolute Percent Error	Robust Weight
275	90500	61760.52	28739.48	31.756	1.0000
276	23000	54375.77	-31375.77	136.416	1.0000
277	118000	83777.63	34222.38	29.002	1.0000
278	23000	70729.69	-47729.69	207.520	1.0000
279	250000	104085.8	145914.2	58.366	0.4164
280	255000	87771.44	167228.6	65.580	0.3634
281	50000	58939.96	-8939.962	17.880	1.0000
282	40000	58837.67	-18837.67	47.094	1.0000
283	150000	122026.5	27973.52	18.649	1.0000
284	48000	71627.3	-23627.29	49.224	1.0000
285	355000	60269.63	294730.4	83.023	0.2062
286	100000	89022.15	10977.85	10.978	1.0000
287	95000	119359.8	-24359.77	25.642	1.0000
289	270000	46223.87	223776.1	82.880	0.2715
290	335000	136981.1	198018.9	59.110	0.3069
292	240000	124102	115898	48.291	0.5243
293	55000	104493.5	-49493.55	89.988	1.0000
294	45000	85721.43	-40721.43	90.492	1.0000
295	210000	94821.28	115178.7	54.847	0.5276
296	140000	117010.8	22989.25	16.421	1.0000
297	41000	103161.1	-62161.08	151.612	0.9775
298	136000	112823	23177.05	17.042	1.0000
299	237500	142256.4	95243.61	40.103	0.6380
300	58000	101519.1	-43519.14	75.033	1.0000
302	220000	89283.59	130716.4	59.417	0.4649
303	48000	96001.33	-48001.33	100.003	1.0000
304	52175	99514.63	-47339.64	90.732	1.0000
306	70000	128732.1	-58732.15	83.903	1.0000
307	325000	124843	200157	61.587	0.3036
308	37000	54713.98	-17713.98	47.876	1.0000
309	94000	81446.32	12553.68	13.355	1.0000
310	100000	91163.6	8836.398	8.836	1.0000
311	50000	73397.1	-23397.1	46.794	1.0000
312	165000	97354.49	67645.51	40.997	0.8983
313	205000	96398.09	108601.9	52.977	0.5595
314	49000	77751.23	-28751.23	58.676	1.0000
316	42500	93183.83	-50683.83	119.256	1.0000
317	83000	113091	-30091.05	36.254	1.0000
318	228000	95618.45	132381.5	58.062	0.4590
321	62000	90906.58	-28906.58	46.624	1.0000
322	195000	84145.85	110854.1	56.848	0.5482
323	58000	109755.9	-51755.87	89.234	1.0000
324	175000	90254.87	84745.13	48.426	0.7170
325	280000	114124.2	165875.8	59.241	0.3663
326	49500	89624.84	-40124.84	81.060	1.0000
327	89000	87309.83	1690.17	1.899	1.0000
328	150000	104124.3	45875.72	30.584	1.0000

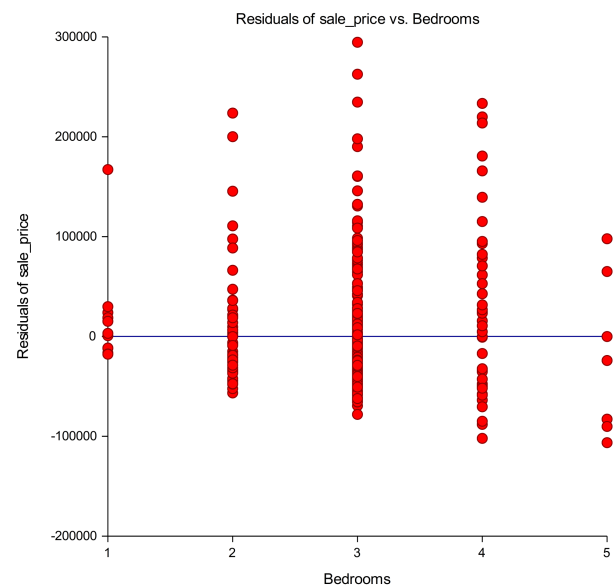
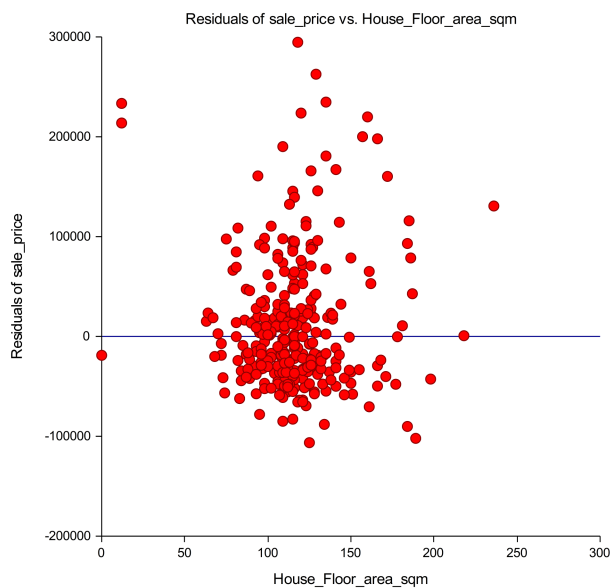
Robust Multiple Regression Report

Dataset C:\Users\Dr_la\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
Dependent sale_price

Distributional Plots of Residuals

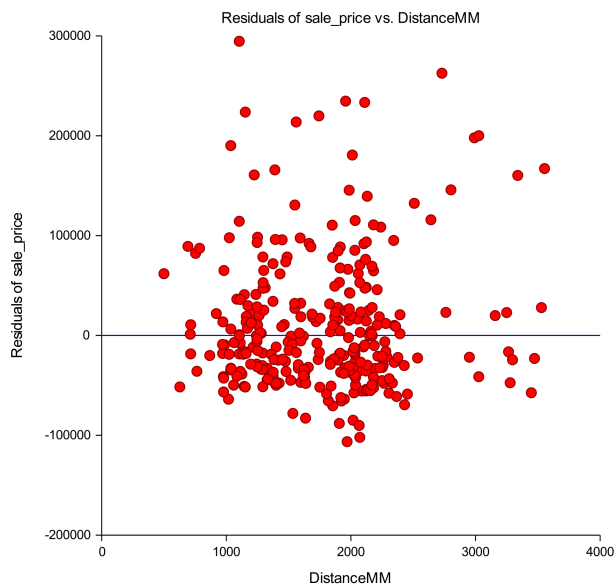
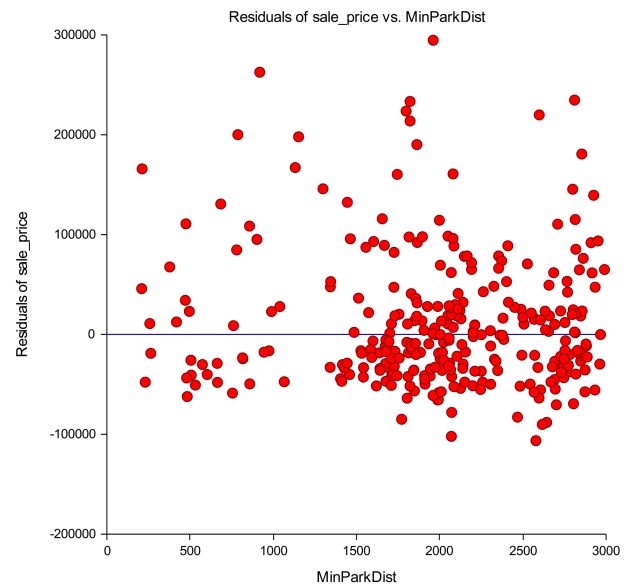
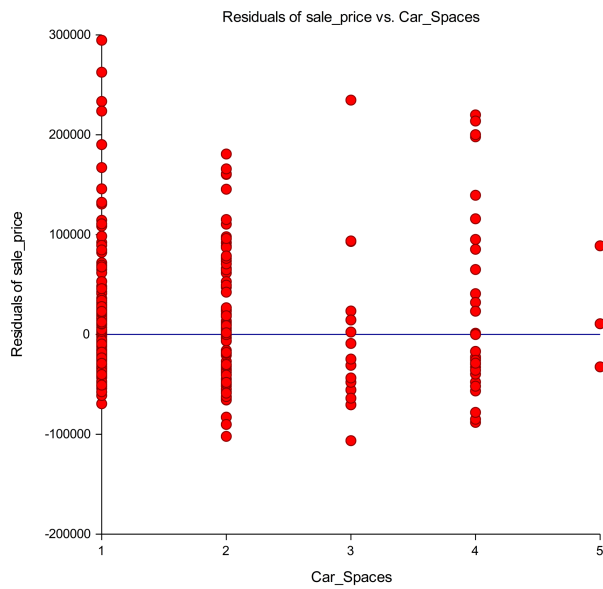


Residuals vs X Plots



Robust Multiple Regression Report

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Dependent sale_price

Residuals vs X Plots (Continued)

Robust Multiple Regression Report

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 Dependent sale_price

Procedure Input Settings**Autosaved Template File**

C:\Users\Dr_Ia\Documents\NCSS 2022\Procedure Templates\Autosave\Robust Regression - Autosaved
 2022_11_28-14_16_36.t158

Variables, Model Tab

-- Variables -----
 Y: sale_price
 Numeric X's: House_Floor_area_sqm, Bedrooms, Car_Spaces,
 MinParkDist, DistanceMM
 Categorical X's: <Empty>
 Weights: <Empty>

-- Regression Model -----
 Terms: 1-Way
 Remove Intercept: Unchecked

Robust Tab

-- Robust Regression Options -----
 .. Robust Method
 Robust Influence Function: Huber's Method
 Huber's Tuning Constant: 1.345

-- Scale Factor
 MAD Scale Factor: 0.6745

-- Stop Iterating When
 Maximum Percent Change in Beta Estimates is ≤: 0.001
 Number of Iterations is: 30

Reports Tab

-- Alphas and Confidence Levels -----
 Tests Alpha: 0.050
 Assumptions Alpha: 0.20
 Confidence Level: 95

-- Select Reports -----
 .. Summaries
 Run Summary: Checked
 Descriptive Statistics: Checked
 Correlations: Unchecked
 Iterations - Coefficients: Checked
 Iterations - Residuals: Checked

-- Regression Coefficients
 Coef T-Tests|Fixed Wts: Checked
 Coef T-Tests|Random Wts: Checked
 Coef CI's|Fixed Wts: Checked
 Coef CI's|Random Wts: Checked
 Estimated Equation: Checked
 Bootstrap CI's: Unchecked

Robust Multiple Regression Report

Dataset C:\Users\Dr_Ia\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

Procedure Input Settings (Continued)**Reports Tab (Continued)**

.. ANOVA	
ANOVA Summary	Unchecked
ANOVA Detail	Unchecked
.. Assumptions	
PRESS Statistics	Unchecked
Normality Tests	Unchecked
Durbin-Watson	Unchecked
.. X Diagnostics	
R ²	Unchecked
Variable Omission	Unchecked
Sum of Squares	Unchecked
Sequential Models	Unchecked
Multicollinearity	Unchecked
.. Eigenvalues	
Eigenvalues - Centered	Unchecked
Eigenvectors - Centered	Unchecked
Eigenvalues - Uncentered	Unchecked
Eigenvectors - Uncentered	Unchecked
.. Row-by-Row Lists	
Show:	All Rows
Predicted for Means	Unchecked
Predicted for Individuals	Unchecked
Residuals	Unchecked
Regression Diagnostics	Unchecked
DFBETAS	Unchecked
Robust Residuals	Checked
Weight Cutoff:	1

Report Options Tab

-- Labels -----	
Stagger label and output if label length is ≥	40

Robust Multiple Regression Report

Dataset C:\Users\Dr_Ia\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

Procedure Input Settings (Continued)**Report Options Tab (Continued)**

-- Decimal Places -----	
Precision:	Single
Reg Coefficients:	All
Std Error of b's:	All
Test Statistics:	3
Probabilities:	4
Percentages:	3
Means:	All
Std Deviations:	All
R ² , Correlations, Standardized Coef's:	4
Mean Squares, Sum of Squares:	All
Y's, Residuals, etc.:	All
Std Error of Y:	All
Eigenvalues:	4
Eigenvectors:	4
Diagonal of X'X Inverse:	All

Plots Tab

-- Select Plots -----	
.. Distribution of Residuals	
Histogram	Checked
Probability Plot	Checked
.. Y vs X	
Y vs X	Unchecked
.. Residual Analysis Plots	
Serial Correlation	Unchecked
Resids vs Row	Unchecked
RStudent vs Hat	Unchecked
Resids vs Yhat	Unchecked
Resids vs X	Checked
RStudent vs X	Unchecked
Partial Resids vs X	Unchecked
.. Bootstrap Histograms	
Coefficient C.I.'s	Checked

Robust Multiple Regression Report

Dataset C:\Users\Dr_Ia\Desktop\Thesis Data\Answer\BHSouthsideData.NCSS
 Dependent sale_price

Procedure Input Settings (Continued)**Storage Tab**

-- Select Items to Store with the Dataset -----	
.. Row-by-Row Items	
Predicted Y	Unchecked
Residuals	Unchecked
Standard Error of the Predicted Mean	Unchecked
Lower Confidence Limit of the Predicted Mean	Unchecked
Upper Confidence Limit of the Predicted Mean	Unchecked
Standard Error of a Predicted Individual	Unchecked
Lower Confidence Limit of a Predicted Individual	Unchecked
Upper Confidence Limit of a Predicted Individual	Unchecked
Rstudent	Unchecked
Hat Diagonals	Unchecked
CovRatio	Unchecked
Dffits	Unchecked
MSE(i)	Unchecked
Cook's D	Unchecked
Robust Weights	Unchecked
DFBETAS	Unchecked
.. Matrices	
X'X Inverse Matrix	Unchecked
VC(Betas) Matrix	Unchecked
Expanded X Matrix	Unchecked
.. Storage Options	
Storage Location:	In empty column(s) after the last column with data
Skip one or more columns before item storage	Unchecked
Rename the storage column(s) using the item name(s)	Checked
Add a Note about each stored item in the Column Info table	Checked
Overlay storage data when the Group By System is active	Unchecked