REGRESSION EQUATION FOR THE 'AS' CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	2853
Number of Observations Used	2853

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	37773891983	5396270283	13387.7	<.0001
Error	2845	1146751045	403076		
Corrected Total	2852	38920643027			

Root MSE	634.88262	R-Square	0.9705
Dependent Mean	1370.33474	Adj R-Sq	0.9705
Coeff Var	46.33048		

Parameter Estimates

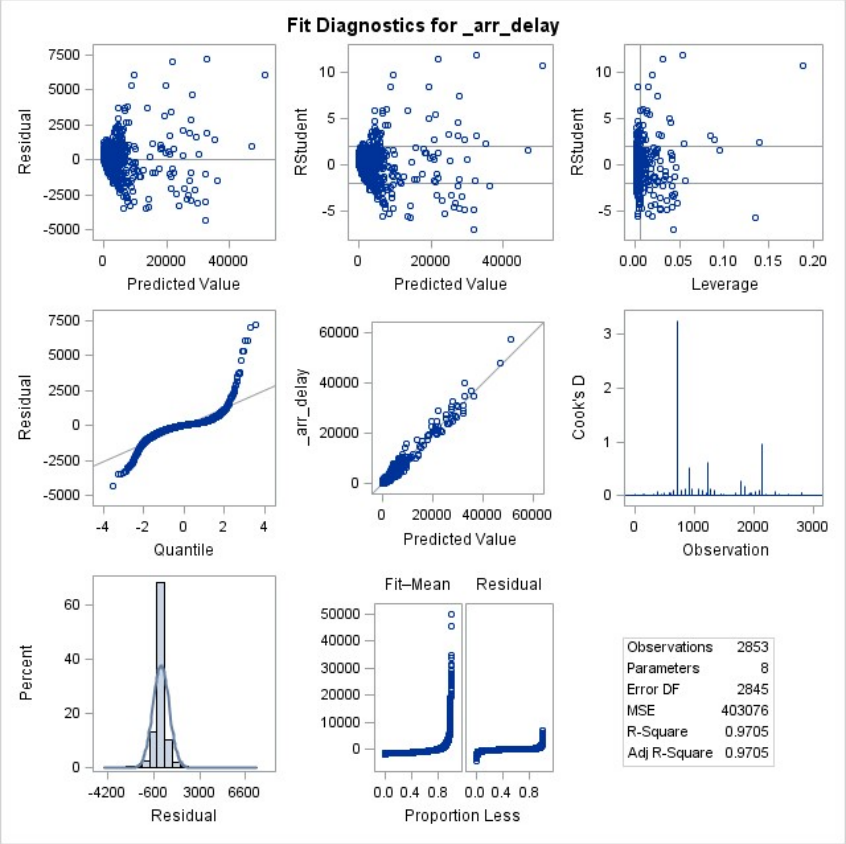
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-245.31577	25.46577	-9.63	<.0001	0	0
carrier_ct	1	94.49661	1.93870	48.74	<.0001	0.39861	6.45759
_weather_ct	1	236.30115	9.03496	26.15	<.0001	0.12265	2.12337
nas_ct	1	52.94171	0.76825	68.91	<.0001	0.51372	5.36615
security_ct	1	25.75450	17.63628	1.46	0.1443	0.00616	1.72084
D1	1	80.70629	33.69895	2.39	0.0167	0.00974	1.59548
D2	1	97.64171	34.21977	2.85	0.0044	0.01157	1.58799
D3	1	102.76736	34.76854	2.96	0.0031	0.01187	1.55799

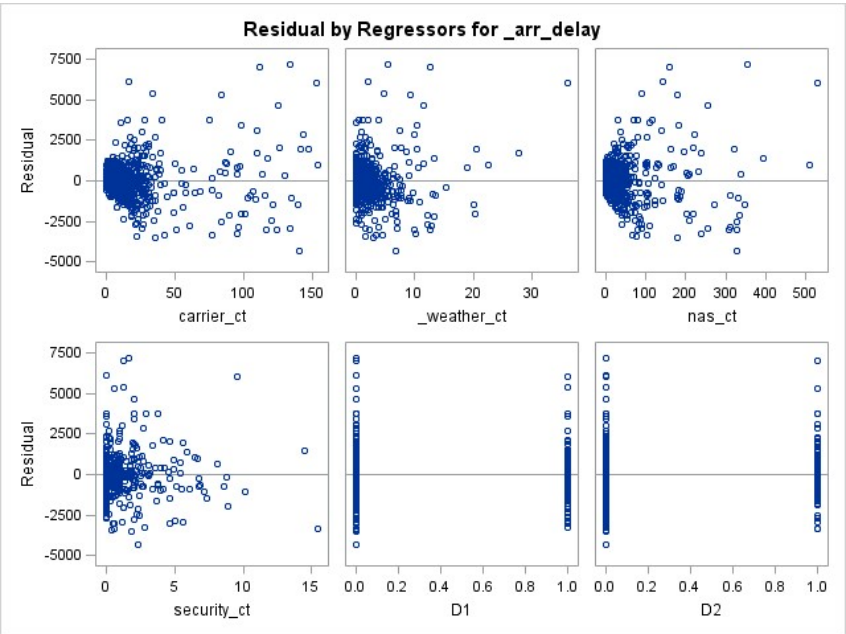
Collinearity Diagnostics

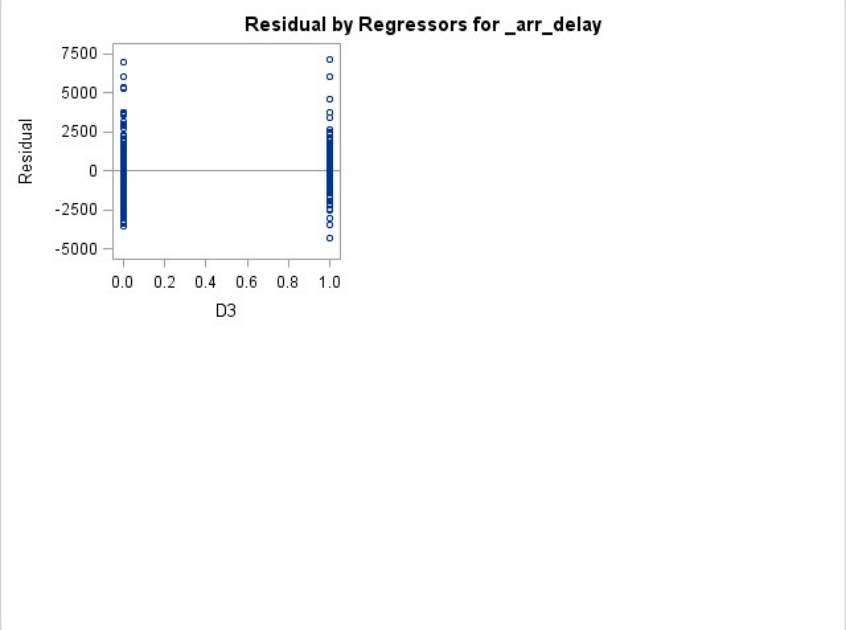
Number	Eigenvalue	Condition Index	Proportion of Variation							
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	D1	D2	D3
1	3.55597	1.00000	0.00725	0.00863	0.02153	0.01007	0.02091	0.00427	0.00496	0.00447
2	1.41649	1.58443	0.05601	0.00360	0.01090	0.00787	0.03423	0.05153	0.03861	0.04339
3	1.00172	1.88411	5.87015E-8	0.00000116	0.00041454	1.061927E-7	0.00168	0.16096	0.01014	0.30233
4	1.00025	1.88549	0.00004616	4.969498E-7	0.00000335	0.00028492	0.00007062	0.12710	0.30695	0.03003
5	0.54746	2.54860	0.00110	0.00079675	0.20617	0.01143	0.67992	0.00005634	0.00110	0.00752
6	0.27698	3.58307	0.00056223	0.05713	0.74882	0.16958	0.17676	0.00026154	0.00048054	7.137812E-7
7	0.12058	5.43052	0.91513	0.00188	0.00464	0.00274	0.00056303	0.65343	0.63559	0.61220
8	0.08055	6.64430	0.01991	0.92796	0.00753	0.79802	0.08587	0.00239	0.00217	0.00006371

REGRESSION EQUATION FOR THE 'AS' CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
7500
5000
2500
0
-2500
-5000
0.0
0.2
0.4
0.6
0.8
1.0
D3

REGRESSION EQUATION FOR THE 'B6' CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	2855
Number of Observations Used	2855

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	3.219346E11	40241819445	13890.3	<.0001
Error	2846	8245199278	2897119		
Corrected Total	2854	3.301798E11			

Root MSE	1702.09239	R-Square	0.9750
Dependent Mean	5149.45814	Adj R-Sq	0.9750
Coeff Var	33.05382		

Parameter Estimates

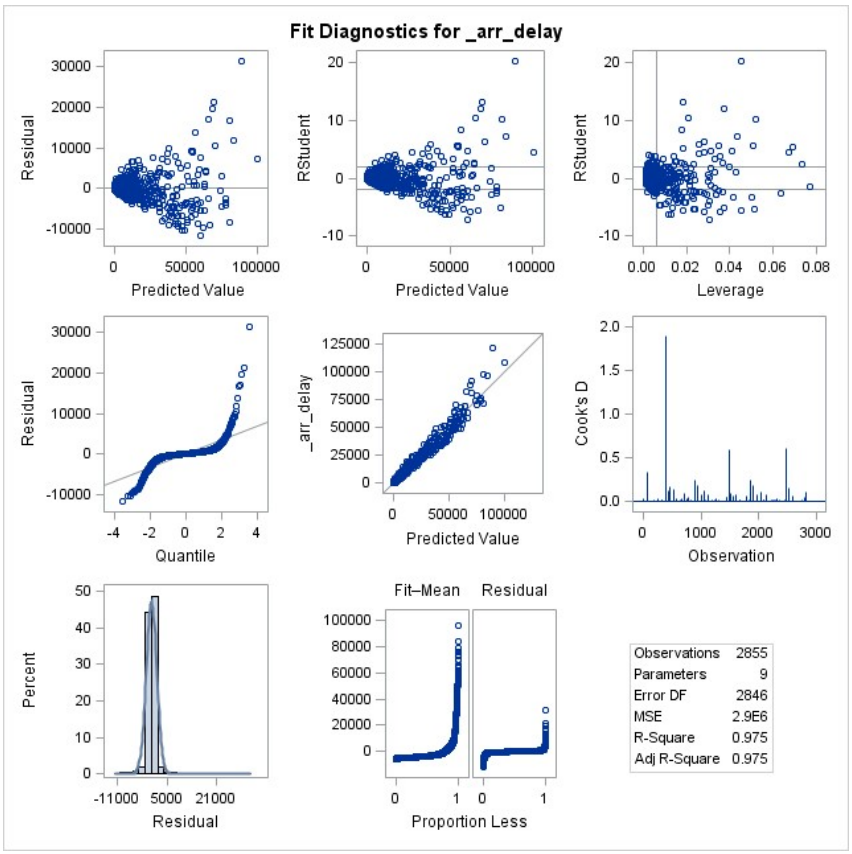
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-92.23453	70.14819	-1.31	0.1887	0	0
carrier_ct	1	27.44575	2.35482	11.66	<.0001	0.10698	9.60140
_weather_ct	1	292.01669	14.95735	19.52	<.0001	0.09223	2.54321
nas_ct	1	61.54494	1.26265	48.74	<.0001	0.32646	5.11250
security_ct	1	-187.33702	55.79452	-3.36	0.0008	-0.01303	1.71632
late_aircraft_ct	1	85.46239	1.53581	55.65	<.0001	0.51798	9.87504
D1	1	274.03396	91.13289	3.01	0.0027	0.01131	1.61204
D2	1	-53.18794	92.25331	-0.58	0.5643	-0.00215	1.58605
D3	1	-247.78790	93.15080	-2.66	0.0079	-0.00992	1.58556

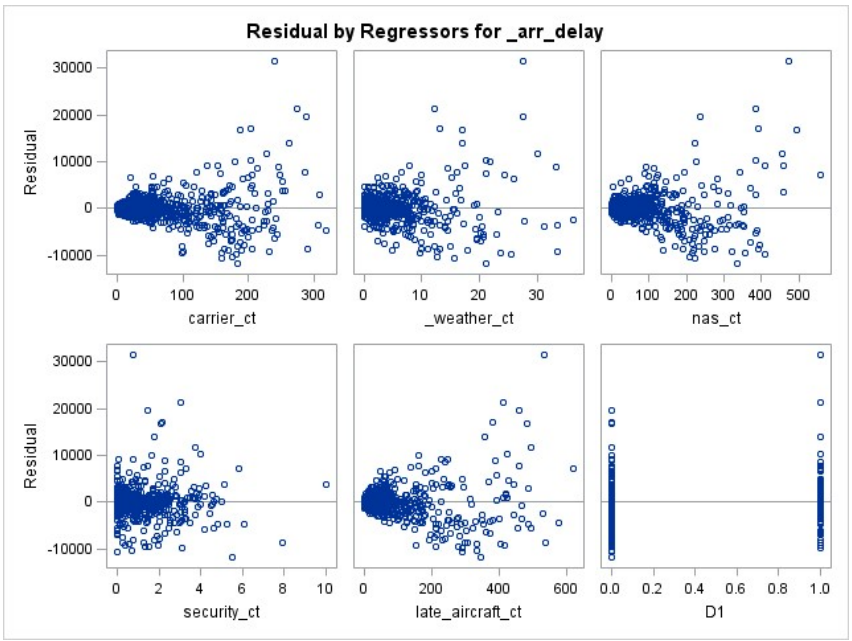
Collinearity Diagnostics

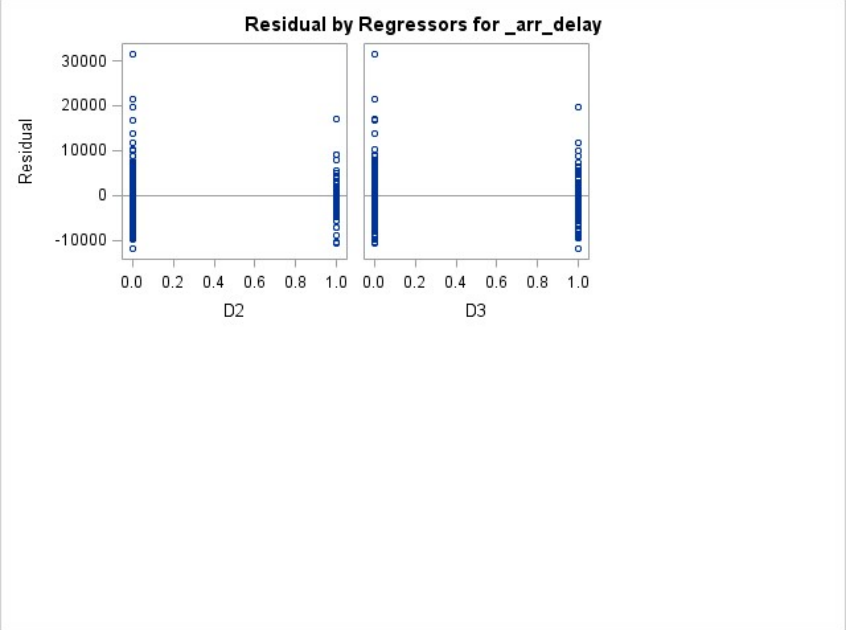
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	4.67468	1.00000	0.00420	0.00314	0.01074	0.00595	0.01272	0.00324	0.00291	0.00268	0.00246
2	1.29395	1.90072	0.06052	0.00124	0.00614	0.00593	0.00697	0.00465	0.04646	0.05228	0.05903
3	1.00267	2.15922	0.00008375	0.00003468	0.00065623	0.00034113	0.00031118	1.569263E-7	0.20556	0.00187	0.25395
4	1.00002	2.16208	4.435013E-7	2.478404E-7	9.229539E-8	9.31699E-7	0.00001239	3.832006E-8	0.09502	0.31375	0.05889
5	0.49961	3.05887	7.753946E-7	0.00015322	0.08170	0.00959	0.80243	0.00506	0.00241	0.00077216	0.00016869
6	0.25444	4.28627	0.01319	0.01979	0.85166	0.07808	0.07844	0.02406	0.00605	0.00343	0.00122
7	0.11848	6.28130	0.82981	0.00392	0.04266	0.01470	0.00000122	0.02631	0.58191	0.59332	0.61123
8	0.10892	6.55126	0.03508	0.12480	0.00074300	0.88122	0.02415	0.12933	0.05915	0.03190	0.01272
9	0.04722	9.94949	0.05711	0.84693	0.00571	0.00418	0.07496	0.80736	0.00051918	0.00000143	0.00032717

REGRESSION EQUATION FOR THE 'B6' CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
30000
20000
10000
0
-10000
0.0
0.2
0.4
0.6
0.8
1.0
D2
D3

REGRESSION EQUATION FOR THE HA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	816
Number of Observations Used	816

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	6687873360	835984170	2011.69	<.0001
Error	807	335359296	415563		
Corrected Total	815	7023232656			

Root MSE	644.64172	R-Square	0.9523
Dependent Mean	1331.49877	Adj R-Sq	0.9518
Coeff Var	48.41474		

Parameter Estimates

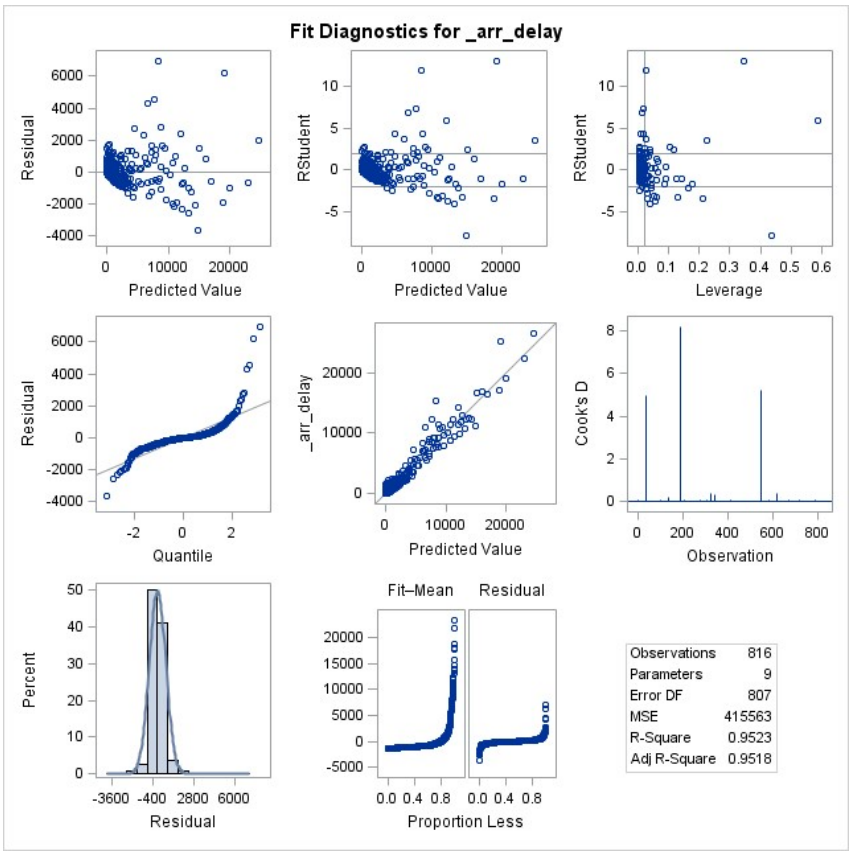
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	123.31741	47.13452	2.62	0.0091	0	0
carrier_ct	1	41.67292	1.73344	24.04	<.0001	0.47155	6.50239
_weather_ct	1	48.34556	7.23821	6.68	<.0001	0.07266	2.00006
nas_ct	1	58.73715	7.15411	8.21	<.0001	0.07857	1.54773
security_ct	1	182.56932	84.37865	2.16	0.0308	0.01969	1.39902
late_aircraft_ct	1	41.42499	2.05787	20.13	<.0001	0.42277	7.45453
D1	1	-180.07390	64.26862	-2.80	0.0052	-0.02658	1.52073
D2	1	-243.21136	64.30935	-3.78	0.0002	-0.03590	1.52266
D3	1	-129.38655	64.05906	-2.02	0.0437	-0.01910	1.51083

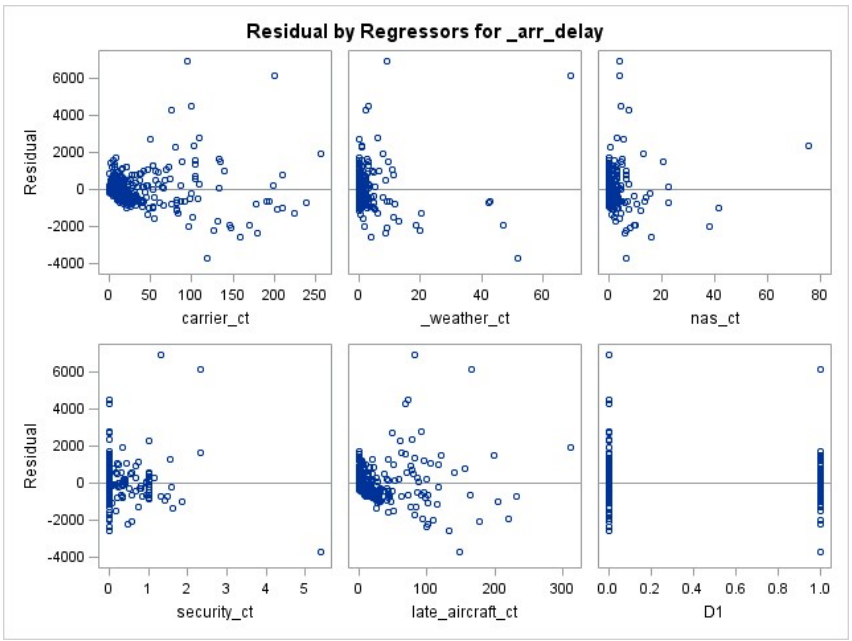
Collinearity Diagnostics

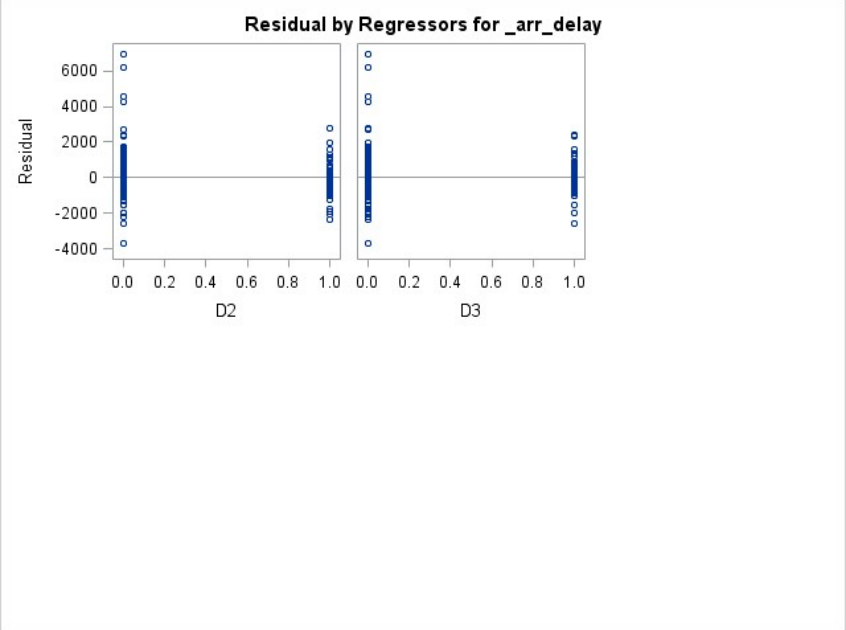
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	3.69893	1.00000	0.00677	0.00732	0.01752	0.01765	0.01811	0.00682	0.00506	0.00581	0.00333
2	1.41954	1.61423	0.05846	0.00079848	0.03867	0.00808	0.02932	0.00355	0.02875	0.02827	0.07941
3	1.05402	1.87333	0.00188	0.00125	0.00317	0.04330	0.05769	0.00184	0.27601	0.01838	0.07703
4	1.00539	1.91810	0.00105	0.00002169	0.00125	0.02369	0.00238	0.00002011	0.00988	0.31342	0.14328
5	0.78839	2.16604	0.00072098	0.00113	0.07857	0.30000	0.21009	0.00274	0.05577	0.00080391	0.07743
6	0.52491	2.65457	0.00007502	0.01050	0.16872	0.22679	0.62261	0.01339	0.01064	0.02154	0.00013916
7	0.31273	3.43918	0.00011868	0.08156	0.64573	0.34423	0.04877	0.04952	0.01425	0.02309	0.01630
8	0.13289	5.27592	0.84240	0.00195	0.02536	0.01532	0.00231	0.02181	0.58685	0.57550	0.59943
9	0.06320	7.65045	0.08853	0.89548	0.02102	0.02094	0.00871	0.90032	0.01279	0.01320	0.00364

REGRESSION EQUATION FOR THE HA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
6000
4000
2000
0
-2000
-4000
0.0 0.2 0.4 0.6 0.8 1.0
D2
0.0 0.2 0.4 0.6 0.8 1.0
D3

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	3872
Number of Observations Used	3866
Number of Observations with Missing Values	6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	8.216875E11	1.027109E11	29291.3	<.0001
Error	3857	13524683761	3506529		
Corrected Total	3865	8.352122E11			

Root MSE	1872.57293	R-Square	0.9838
Dependent Mean	6578.83523	Adj R-Sq	0.9838
Coeff Var	28.46359		

Parameter Estimates

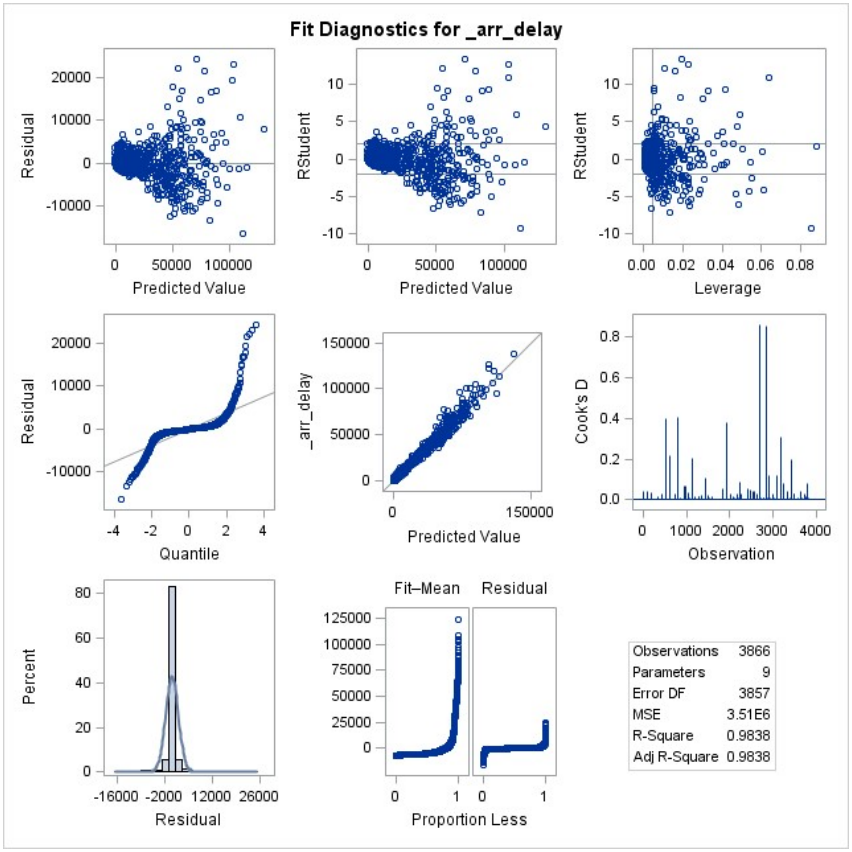
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-297.69880	63.08957	-4.72	<.0001	0	0
carrier_ct	1	-4.47696	1.93594	-2.31	0.0208	-0.02035	18.44536
_weather_ct	1	109.66391	8.64391	12.69	<.0001	0.05838	5.04371
nas_ct	1	64.82034	0.68415	94.75	<.0001	0.41252	4.51521
security_ct	1	-757.50942	127.12239	-5.96	<.0001	-0.01314	1.15742
late_aircraft_ct	1	128.52212	1.96470	65.42	<.0001	0.58260	18.89288
D1	1	607.88685	84.98458	7.15	<.0001	0.01837	1.57153
D2	1	670.81820	87.17313	7.70	<.0001	0.01968	1.55837
D3	1	-39.45975	88.13331	-0.45	0.6544	-0.00114	1.53660

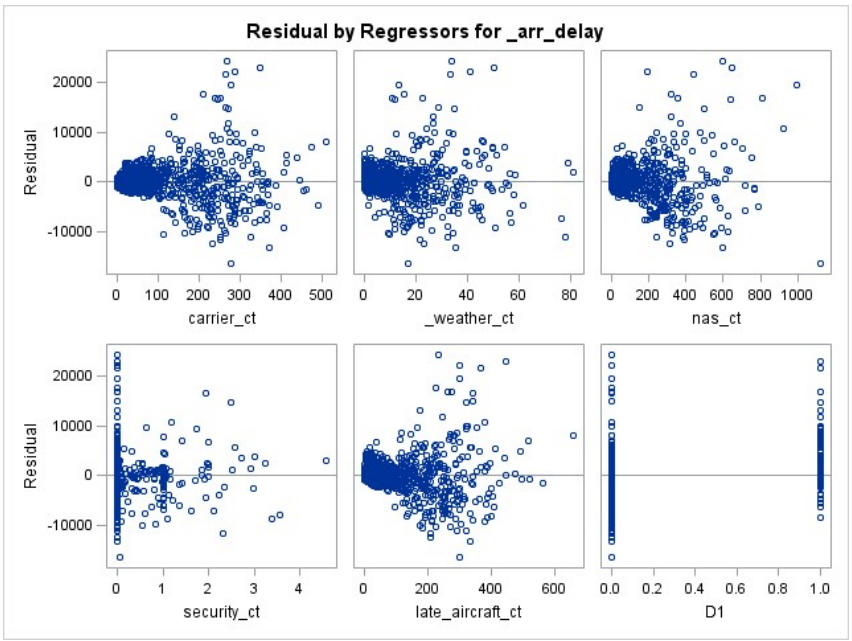
Collinearity Diagnostics

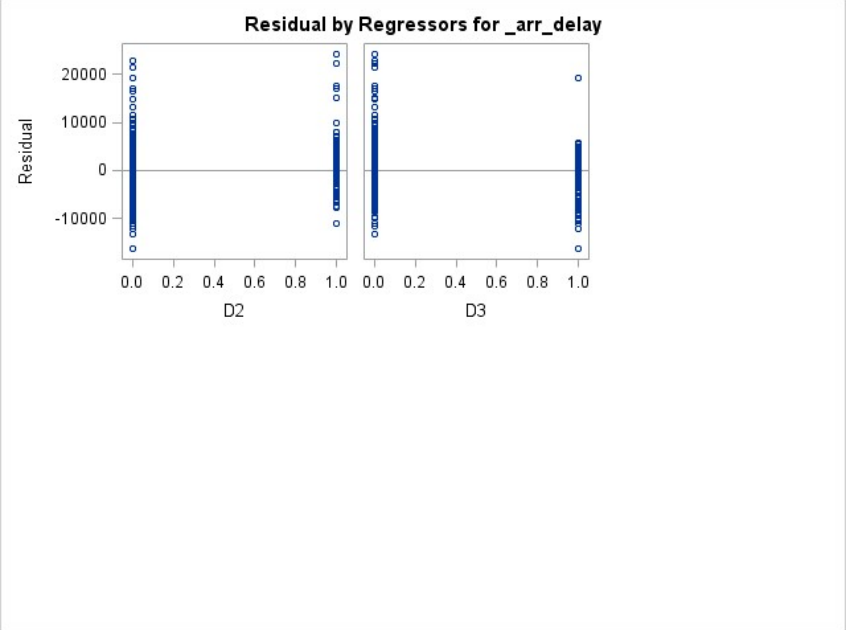
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	4.33294	1.00000	0.00487	0.00209	0.00719	0.00807	0.00711	0.00208	0.00240	0.00317	0.00324
2	1.38657	1.76775	0.06038	0.00070936	0.00233	0.00829	0.03937	0.00102	0.06789	0.04224	0.03914
3	1.00788	2.07341	0.00002866	0.00002367	0.00001220	0.00015001	0.04266	0.00000106	0.08746	0.04761	0.32538
4	1.00041	2.08114	0.00004260	0.00001371	0.00002104	0.00049366	0.00530	0.00000526	0.18527	0.28360	0.00195
5	0.83538	2.27745	0.00768	0.00079569	0.00803	0.00244	0.83472	0.00090795	0.00587	0.00027024	0.02864
6	0.19918	4.66408	0.01374	0.00216	0.33709	0.54330	0.03200	0.00000132	0.00116	0.00193	0.00391
7	0.12666	5.84881	0.87867	0.00192	0.00002994	0.02314	0.03477	0.00039065	0.62987	0.61882	0.59141
8	0.08666	7.07115	0.02694	0.11404	0.62984	0.38877	0.00408	0.12268	0.01185	0.00179	0.00467
9	0.02431	13.35062	0.00765	0.87825	0.01545	0.02534	0.00000391	0.87291	0.00824	0.00056525	0.00165

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
20000
10000
0
-10000
0.0
0.2
0.4
0.6
0.8
1.0
D2
D3

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	3872
Number of Observations Used	3866
Number of Observations with Missing Values	6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	8.216875E11	1.027109E11	29291.3	<.0001
Error	3857	13524683761	3506529		
Corrected Total	3865	8.352122E11			

Root MSE	1872.57293	R-Square	0.9838
Dependent Mean	6578.83523	Adj R-Sq	0.9838
Coeff Var	28.46359		

Parameter Estimates

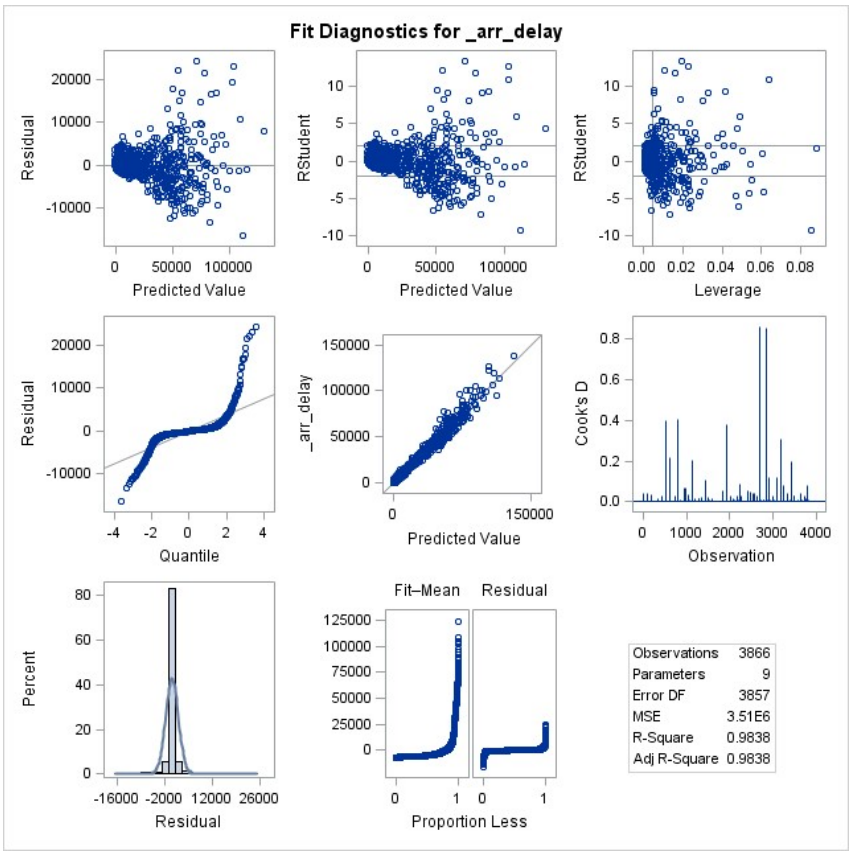
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-297.69880	63.08957	-4.72	<.0001	0	0
carrier_ct	1	-4.47696	1.93594	-2.31	0.0208	-0.02035	18.44536
_weather_ct	1	109.66391	8.64391	12.69	<.0001	0.05838	5.04371
nas_ct	1	64.82034	0.68415	94.75	<.0001	0.41252	4.51521
security_ct	1	-757.50942	127.12239	-5.96	<.0001	-0.01314	1.15742
late_aircraft_ct	1	128.52212	1.96470	65.42	<.0001	0.58260	18.89288
D1	1	607.88685	84.98458	7.15	<.0001	0.01837	1.57153
D2	1	670.81820	87.17313	7.70	<.0001	0.01968	1.55837
D3	1	-39.45975	88.13331	-0.45	0.6544	-0.00114	1.53660

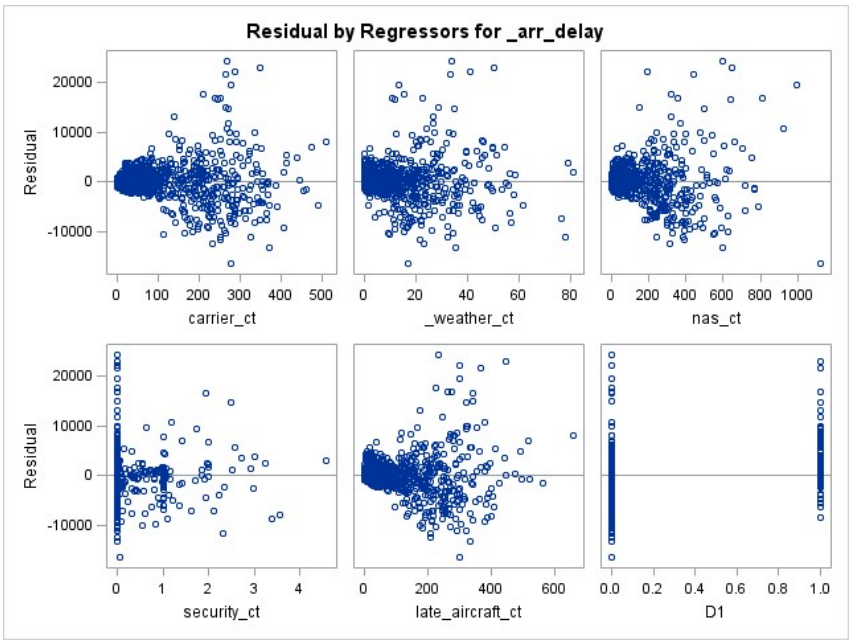
Collinearity Diagnostics

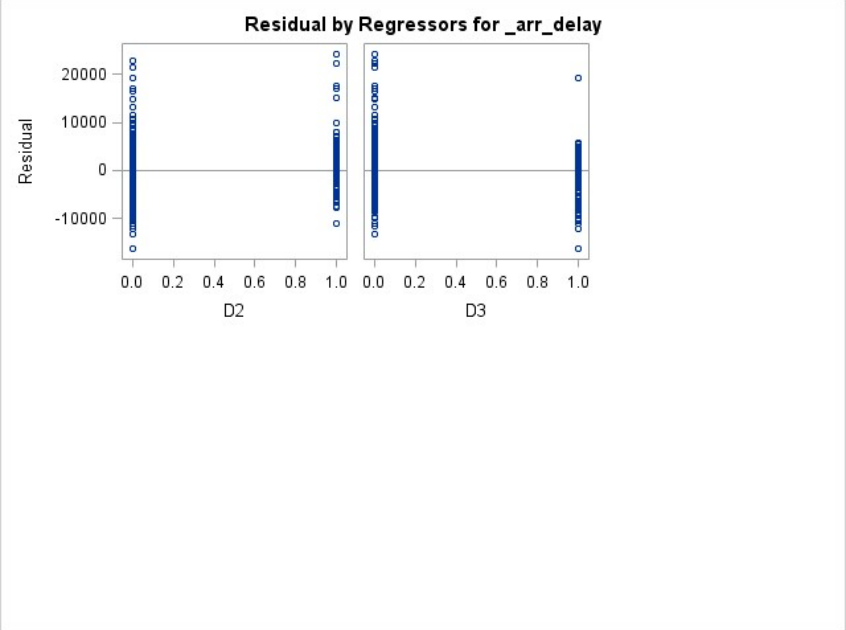
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	4.33294	1.00000	0.00487	0.00209	0.00719	0.00807	0.00711	0.00208	0.00240	0.00317	0.00324
2	1.38657	1.76775	0.06038	0.00070936	0.00233	0.00829	0.03937	0.00102	0.06789	0.04224	0.03914
3	1.00788	2.07341	0.00002866	0.00002367	0.00001220	0.00015001	0.04266	0.00000106	0.08746	0.04761	0.32538
4	1.00041	2.08114	0.00004260	0.00001371	0.00002104	0.00049366	0.00530	0.00000526	0.18527	0.28360	0.00195
5	0.83538	2.27745	0.00768	0.00079569	0.00803	0.00244	0.83472	0.00090795	0.00587	0.00027024	0.02864
6	0.19918	4.66408	0.01374	0.00216	0.33709	0.54330	0.03200	0.00000132	0.00116	0.00193	0.00391
7	0.12666	5.84881	0.87867	0.00192	0.00002994	0.02314	0.03477	0.00039065	0.62987	0.61882	0.59141
8	0.08666	7.07115	0.02694	0.11404	0.62984	0.38877	0.00408	0.12268	0.01185	0.00179	0.00467
9	0.02431	13.35062	0.00765	0.87825	0.01545	0.02534	0.00000391	0.87291	0.00824	0.00056525	0.00165

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
20000
10000
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-10000
0.0
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0.4
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0.8
1.0
D2
D3

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	3872
Number of Observations Used	3866
Number of Observations with Missing Values	6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	8.216875E11	1.027109E11	29291.3	<.0001
Error	3857	13524683761	3506529		
Corrected Total	3865	8.352122E11			

Root MSE	1872.57293	R-Square	0.9838
Dependent Mean	6578.83523	Adj R-Sq	0.9838
Coeff Var	28.46359		

Parameter Estimates

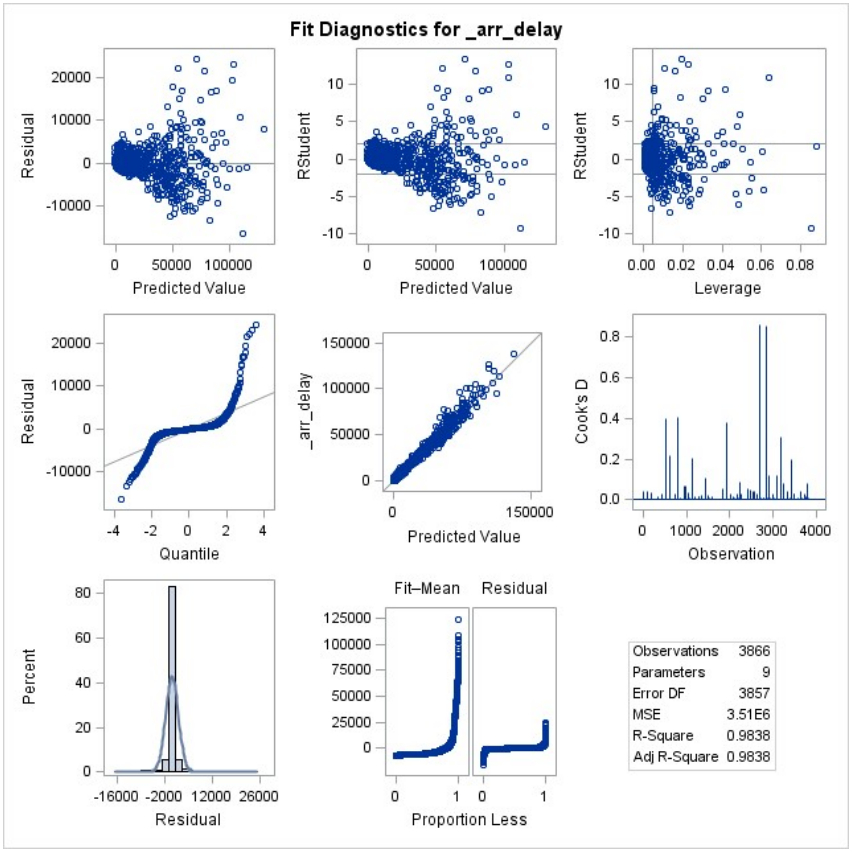
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-297.69880	63.08957	-4.72	<.0001	0	0
carrier_ct	1	-4.47696	1.93594	-2.31	0.0208	-0.02035	18.44536
_weather_ct	1	109.66391	8.64391	12.69	<.0001	0.05838	5.04371
nas_ct	1	64.82034	0.68415	94.75	<.0001	0.41252	4.51521
security_ct	1	-757.50942	127.12239	-5.96	<.0001	-0.01314	1.15742
late_aircraft_ct	1	128.52212	1.96470	65.42	<.0001	0.58260	18.89288
D1	1	607.88685	84.98458	7.15	<.0001	0.01837	1.57153
D2	1	670.81820	87.17313	7.70	<.0001	0.01968	1.55837
D3	1	-39.45975	88.13331	-0.45	0.6544	-0.00114	1.53660

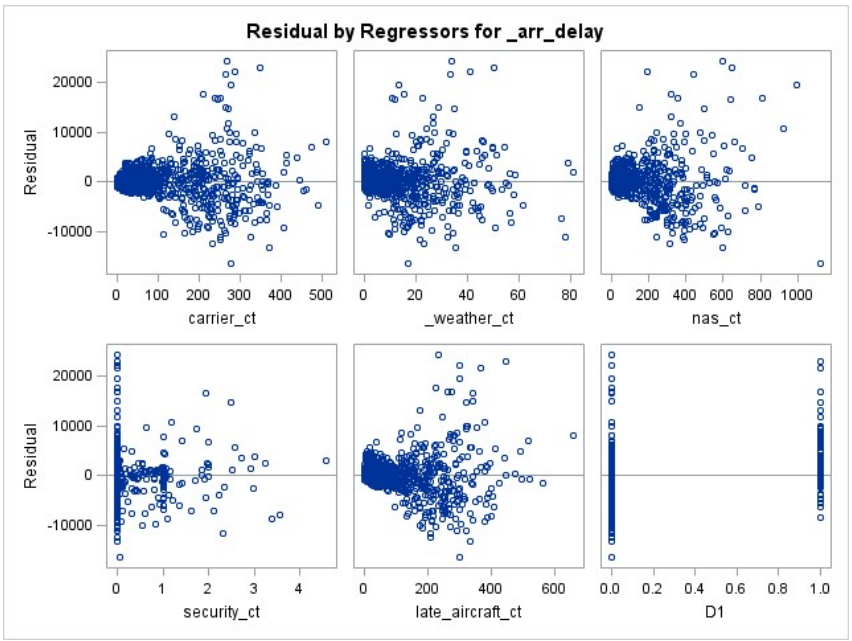
Collinearity Diagnostics

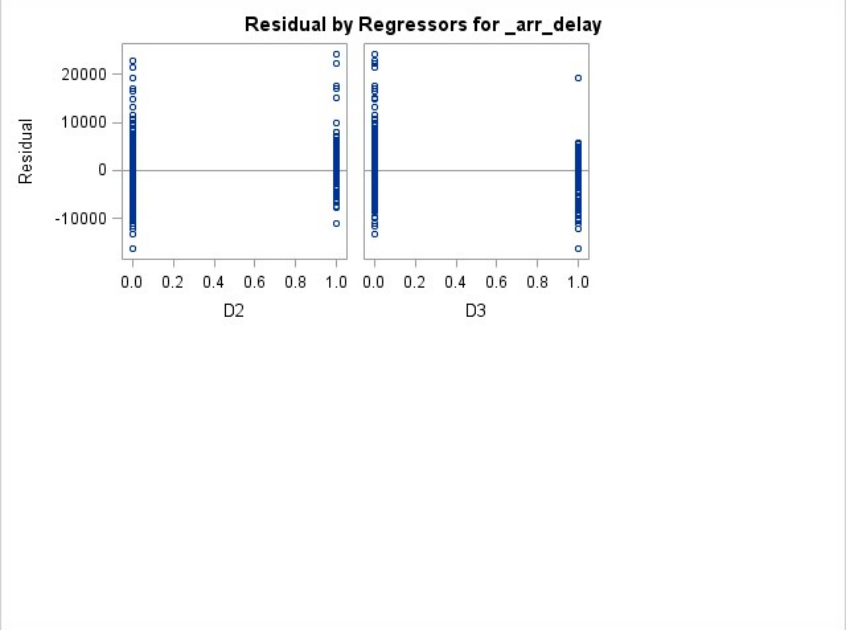
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	4.33294	1.00000	0.00487	0.00209	0.00719	0.00807	0.00711	0.00208	0.00240	0.00317	0.00324
2	1.38657	1.76775	0.06038	0.00070936	0.00233	0.00829	0.03937	0.00102	0.06789	0.04224	0.03914
3	1.00788	2.07341	0.00002866	0.00002367	0.00001220	0.00015001	0.04266	0.00000106	0.08746	0.04761	0.32538
4	1.00041	2.08114	0.00004260	0.00001371	0.00002104	0.00049366	0.00530	0.00000526	0.18527	0.28360	0.00195
5	0.83538	2.27745	0.00768	0.00079569	0.00803	0.00244	0.83472	0.00090795	0.00587	0.00027024	0.02864
6	0.19918	4.66408	0.01374	0.00216	0.33709	0.54330	0.03200	0.00000132	0.00116	0.00193	0.00391
7	0.12666	5.84881	0.87867	0.00192	0.00002994	0.02314	0.03477	0.00039065	0.62987	0.61882	0.59141
8	0.08666	7.07115	0.02694	0.11404	0.62984	0.38877	0.00408	0.12268	0.01185	0.00179	0.00467
9	0.02431	13.35062	0.00765	0.87825	0.01545	0.02534	0.00000391	0.87291	0.00824	0.00056525	0.00165

REGRESSION EQUATION FOR THE UA CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
20000
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-10000
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1.0
D2
D3

REGRESSION EQUATION FOR THE VX CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	902
Number of Observations Used	900
Number of Observations with Missing Values	2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	38406840554	4800855069	1605.49	<.0001
Error	891	2664335659	2990276		
Corrected Total	899	41071176213			

Root MSE	1729.24137	R-Square	0.9351
Dependent Mean	3230.15111	Adj R-Sq	0.9345
Coeff Var	53.53438		

Parameter Estimates

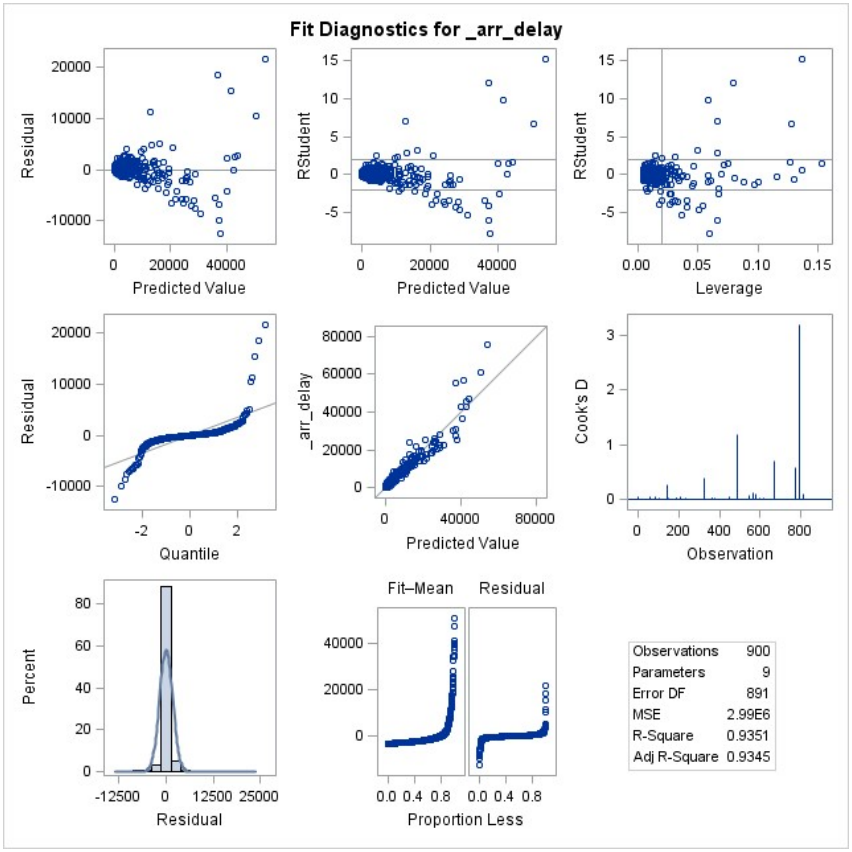
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	295.32858	123.55309	2.39	0.0170	0	0
carrier_ct	1	-8.49563	10.47962	-0.81	0.4178	-0.01964	8.05869
_weather_ct	1	66.37895	10.10698	6.57	<.0001	0.08752	2.43917
nas_ct	1	104.77962	1.71962	60.93	<.0001	0.75837	2.12763
security_ct	1	242.89088	112.70770	2.16	0.0314	0.02276	1.53256
late_aircraft_ct	1	51.98241	5.14894	10.10	<.0001	0.20848	5.85725
D1	1	-450.55244	163.46657	-2.76	0.0060	-0.02987	1.61346
D2	1	-475.64383	167.96935	-2.83	0.0047	-0.03002	1.54396
D3	1	-258.44898	165.88220	-1.56	0.1196	-0.01642	1.52488

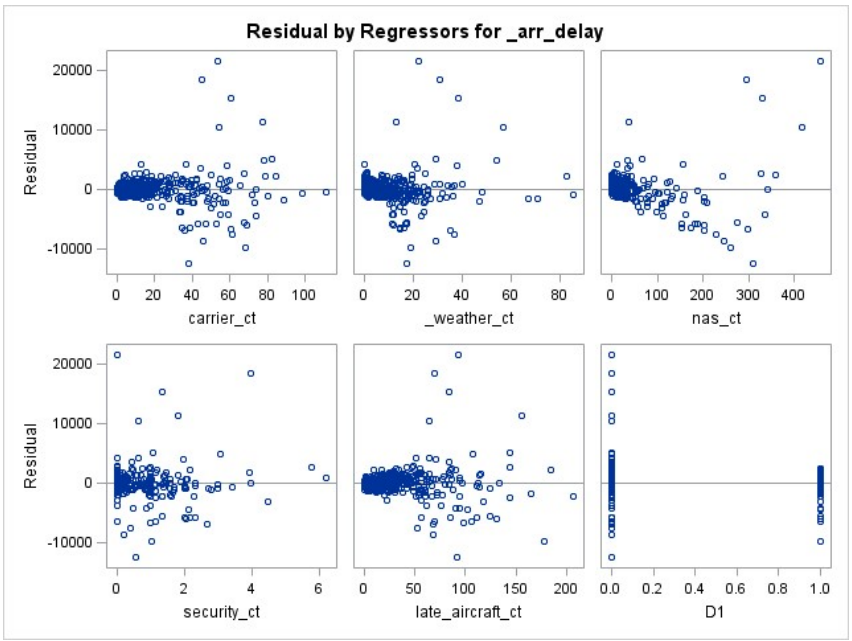
Collinearity Diagnostics

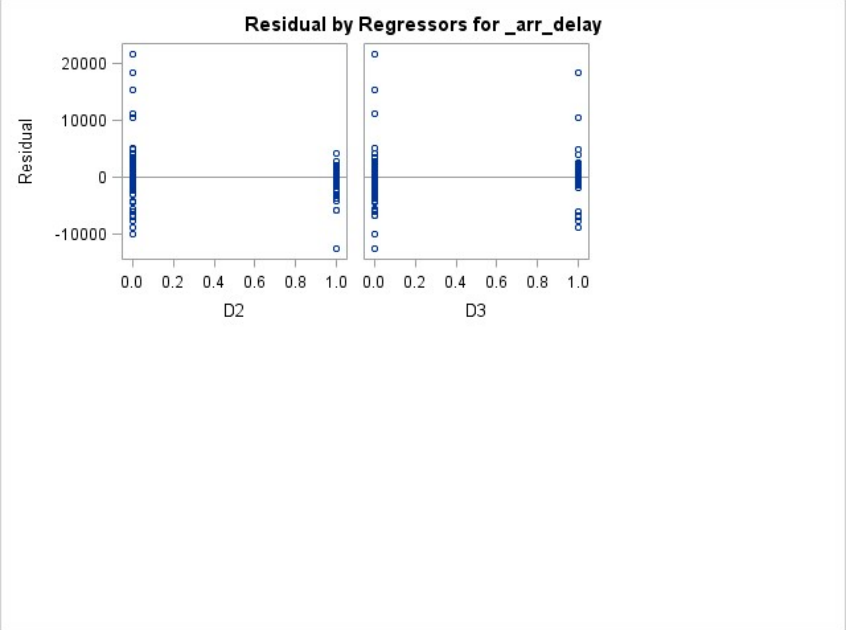
Number	Eigenvalue	Condition Index	Proportion of Variation								
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct	D1	D2	D3
1	4.55743	1.00000	0.00556	0.00364	0.01042	0.01206	0.01391	0.00483	0.00444	0.00341	0.00287
2	1.16560	1.97735	0.06058	0.00197	0.00384	0.03108	0.03248	0.00252	0.00973	0.06507	0.11700
3	1.00529	2.12919	0.00064374	0.00001930	0.00173	0.00184	0.00273	0.00022952	0.00419	0.24356	0.23381
4	0.99571	2.13941	0.00432	0.00007154	0.00512	0.00652	0.00032323	0.00000420	0.32937	0.07649	0.02937
5	0.51240	2.98234	0.00044124	0.00177	0.01584	0.13225	0.85866	0.00357	0.00103	0.00394	0.00047679
6	0.33060	3.71287	0.00006266	0.00376	0.53338	0.43351	0.02700	0.00411	0.00309	0.01313	0.02195
7	0.25483	4.22900	0.01359	0.05212	0.17376	0.38091	0.05655	0.18884	0.01729	0.00565	0.01111
8	0.12363	6.07153	0.91413	0.00011997	0.02754	0.00085961	0.00073217	0.00192	0.62986	0.58871	0.58342
9	0.05451	9.14338	0.00066861	0.93653	0.22836	0.00096885	0.00762	0.79398	0.00100	0.00004453	5.806127E-7

REGRESSION EQUATION FOR THE VX CARRIER BASED ON THE TIME

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay






Residual by Regressors for _arr_delay
Residual
20000
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-10000
0.0
0.2
0.4
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0.8
1.0
D2
D3

MAIN REGRESSION MODEL

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	902
Number of Observations Used	900
Number of Observations with Missing Values	2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	38375876252	7675175250	2545.77	<.0001
Error	894	2695299962	3014877		
Corrected Total	899	41071176213			

Root MSE	1736.34009	R-Square	0.9344
Dependent Mean	3230.15111	Adj R-Sq	0.9340
Coeff Var	53.75414		

Parameter Estimates

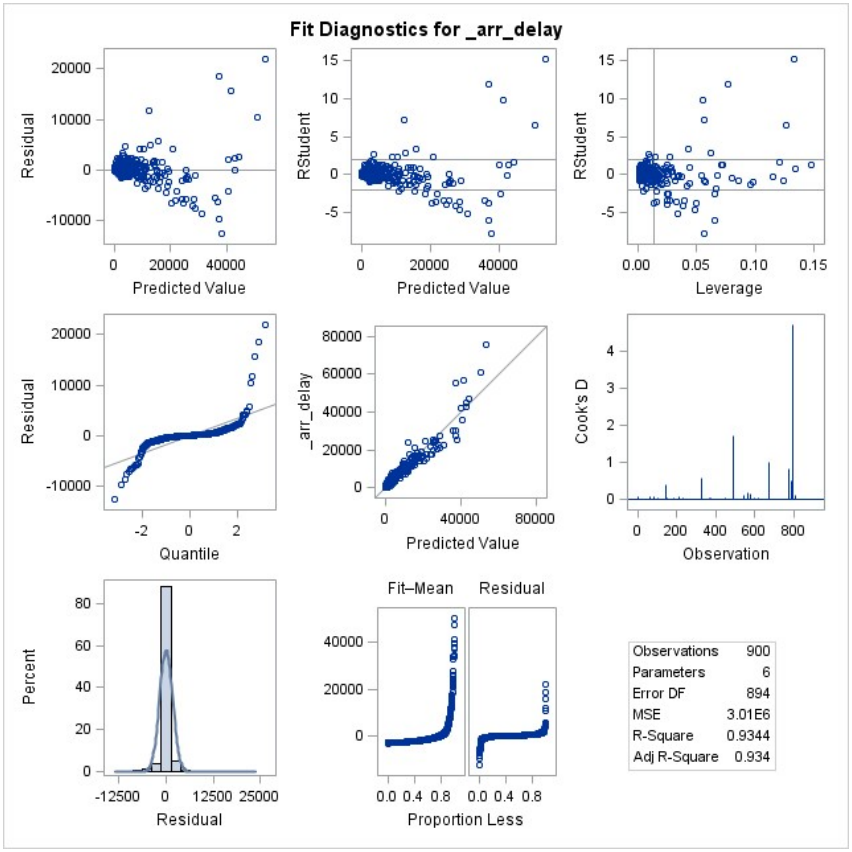
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	5.03420	71.29673	0.07	0.9437	0	0
carrier_ct	1	-10.30837	10.49284	-0.98	0.3262	-0.02383	8.01311
_weather_ct	1	69.99234	10.03331	6.98	<.0001	0.09229	2.38412
nas_ct	1	105.07862	1.72189	61.03	<.0001	0.76053	2.11585
security_ct	1	257.64656	112.95865	2.28	0.0228	0.02415	1.52683
late_aircraft_ct	1	50.80484	5.15276	9.86	<.0001	0.20376	5.81808

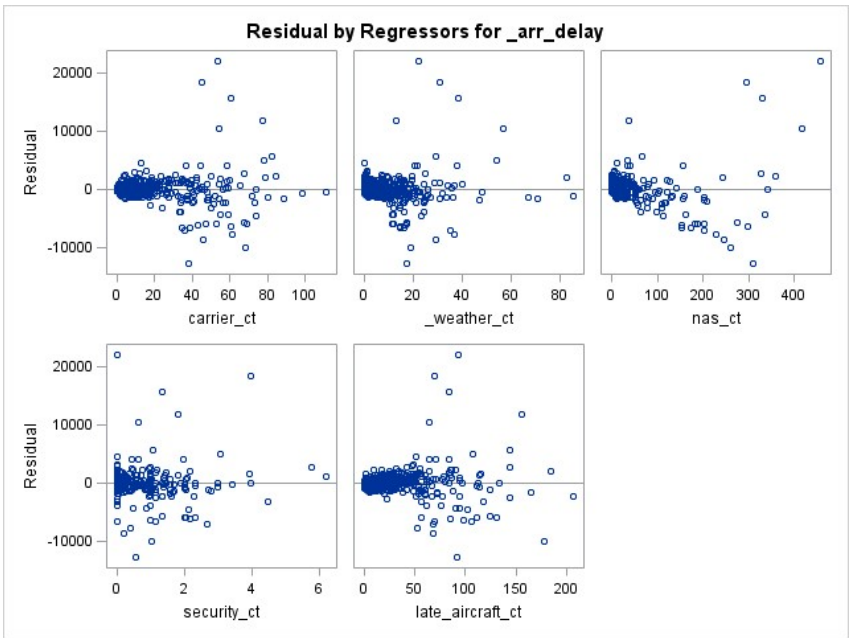
Collinearity Diagnostics

Number	Eigenvalue	Condition Index	Proportion of Variation					
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct
1	4.15597	1.00000	0.01598	0.00455	0.01340	0.01589	0.01807	0.00601
2	0.68884	2.45627	0.76009	0.00026055	0.00000314	0.06503	0.07638	0.00033340
3	0.51347	2.84498	0.01768	0.00165	0.01637	0.15786	0.81898	0.00334
4	0.32178	3.59380	0.09345	0.00114	0.65195	0.29159	0.01155	0.01463
5	0.26536	3.95748	0.11236	0.05453	0.09080	0.46850	0.06736	0.17044
6	0.05458	8.72623	0.00042964	0.93787	0.22747	0.00113	0.00766	0.80524

MAIN REGRESSION MODEL

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay





WHITE'S TEST REGRESSION

The REG Procedure

Number of Observations Read	902
Number of Observations Used	0
Number of Observations with Missing Values	902

WHITE'S TEST REGRESSION

The REG Procedure

Number of Observations Read	902
Number of Observations Used	0
Number of Observations with Missing Values	902

MAIN REGRESSION MODEL

The REG Procedure
Model: MODEL1
Dependent Variable: _arr_delay

Number of Observations Read	2853
Number of Observations Used	2853

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	38359540336	7671908067	38926.8	<.0001
Error	2847	561102692	197086		
Corrected Total	2852	38920643027			

Root MSE	443.94324	R-Square	0.9856
Dependent Mean	1370.33474	Adj R-Sq	0.9856
Coeff Var	32.39670		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	1	-20.86601	9.72270	-2.15	0.0319	0	0
carrier_ct	1	27.49522	1.82669	15.05	<.0001	0.11598	11.72496
_weather_ct	1	152.18533	6.49452	23.43	<.0001	0.07899	2.24388
nas_ct	1	46.14762	0.54865	84.11	<.0001	0.44780	5.59740
security_ct	1	10.15296	12.32283	0.82	0.4101	0.00243	1.71822
late_aircraft_ct	1	59.82775	1.09327	54.72	<.0001	0.39771	10.43043

Collinearity Diagnostics

Number	Eigenvalue	Condition Index	Proportion of Variation					
			Intercept	carrier_ct	_weather_ct	nas_ct	security_ct	late_aircraft_ct
1	4.15111	1.00000	0.00929	0.00380	0.01593	0.00796	0.01687	0.00452
2	0.84465	2.21689	0.77805	0.00006967	0.00005868	0.00202	0.04379	0.00226
3	0.55216	2.74188	0.04959	0.00013898	0.14552	0.00838	0.71019	0.00293
4	0.29783	3.73332	0.00080187	0.01875	0.81802	0.07555	0.16635	0.01917
5	0.10912	6.16789	0.00096496	0.06791	0.00835	0.86726	0.03277	0.22739
6	0.04513	9.59071	0.16130	0.90933	0.01212	0.03883	0.03003	0.74373

WHITE'S TEST REGRESSION

The REG Procedure

Number of Observations Read	2853
Number of Observations Used	0
Number of Observations with Missing Values	2853

WHITE'S TEST REGRESSION

The REG Procedure
Model: MODEL1
Dependent Variable: residsqr

Number of Observations Read	2853
Number of Observations Used	2853

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	7.764208E14	1.294035E14	84.59	<.0001
Error	2846	4.353652E15	1.529744E12		
Corrected Total	2852	5.130072E15			

Root MSE	1236828	R-Square	0.1513
Dependent Mean	196671	Adj R-Sq	0.1496
Coeff Var	628.88148		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	-20570	30507	-0.67	0.5002
carrier_ct	1	33450	4652.43600	7.19	<.0001
CARRIER_CTSQ	1	1.09734	37.66659	0.03	0.9768
_weather_ct	1	-9791.94082	25812	-0.38	0.7045
WEATHER_CTSQ	1	3893.18472	1209.23861	3.22	0.0013
security_ct	1	-255940	64973	-3.94	<.0001
SECURITY_CTSQ	1	18087	6231.27048	2.90	0.0037

YULE-WALKER WLS ESTIMATES USING PROC AUTOREG

The AUTOREG Procedure

Dependent Variable	_arr_delay

YULE-WALKER WLS ESTIMATES USING PROC AUTOREG

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	1151315782	DFE	2848
MSE	404254	Root MSE	635.80983
SBC	44962.8961	AIC	44933.1155
MAE	342.710504	AICC	44933.1365
MAPE	75.0137324	HQC	44943.8549
Durbin-Watson	1.9297	Regress R-Square	0.9704
		Total R-Square	0.9704

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	-174.0625	13.3350	-13.05	<.0001
carrier_ct	1	94.8670	1.9327	49.08	<.0001
_weather_ct	1	235.6971	9.0409	26.07	<.0001
nas_ct	1	52.8428	0.7660	68.99	<.0001
security_ct	1	23.8072	17.6450	1.35	0.1774

Estimates of Autocorrelations			
Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	403546	1.000000	||********************|
1	11729.6	0.029066	|* |

Preliminary MSE	403205

Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.029066	0.018734	-1.55

Algorithm converged.

YULE-WALKER WLS ESTIMATES USING PROC AUTOREG

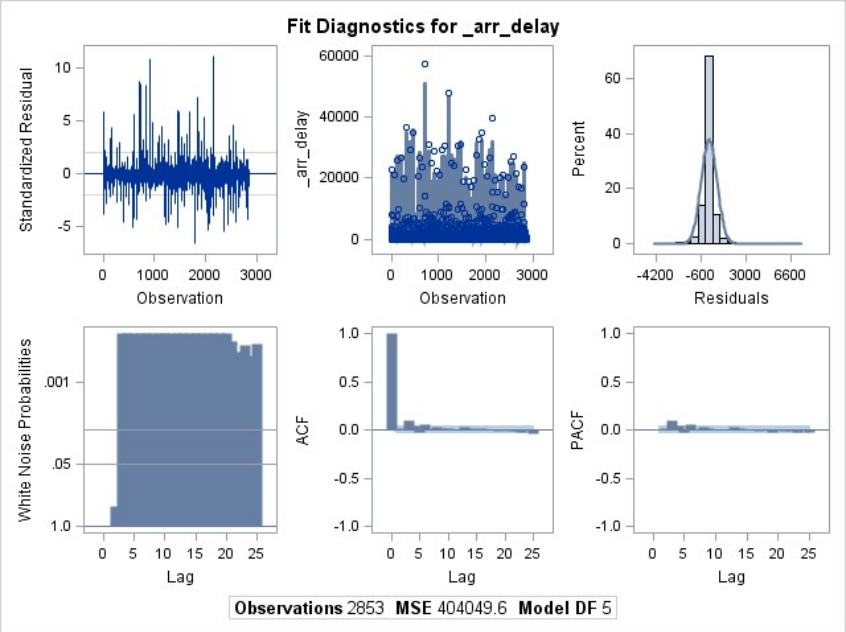
The AUTOREG Procedure

Yule-Walker Estimates			
SSE	1150329347	DFE	2847
MSE	404050	Root MSE	635.64900
SBC	44968.4076	AIC	44932.6708
MAE	342.567217	AICC	44932.7004
MAPE	75.1851393	HQC	44945.5582
Durbin-Watson	1.9889	Regress R-Square	0.9703
		Total R-Square	0.9704

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|
Intercept	1	-173.9320	13.6571	-12.74	<.0001
carrier_ct	1	94.8697	1.9364	48.99	<.0001
_weather_ct	1	235.1128	9.0578	25.96	<.0001
nas_ct	1	52.8625	0.7677	68.86	<.0001
security_ct	1	24.0650	17.6482	1.36	0.1728

YULE-WALKER WLS ESTIMATES USING PROC AUTOREG

The AUTOREG Procedure



Observations 2853 **MSE** 404049.6 **Model DF** 5