

**Supplementary Material: Statistical Appendix**  
**(Not intended for publication)**

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**Variable Definitions for Tables SA3 – SA35**

$wf(t)$  = wildfire hectares within wildfire zone, current month

$wf(t-x)$  = wildfire hectares within wildfire zone, month t-x

The above terms are also squared for quadratic specifications, as in  $wf^2(t)$

$Adj\_r\_gas\_price$  = real gasoline price, adjusted for inflation

$Mighty5$  = 0/1 dummy variable indicating active Might Five ad campaign

$Recession$  = 0/1 dummy variable indicating recession

$Const$  = intercept

**Table SA1: Corrected Akaike Information Criterion Values (AICc)**

<b>Zone, Time Lag</b>	<b>Arches</b>	<b>Bryce</b>	<b>Canyon-lands</b>	<b>Capitol Reef</b>	<b>Zion</b>	<b>Functional Form</b>
80km, 1 lag	-263.176	-74.656	-211.036	<b>-117.756</b>	-381.716	semi-log, linear
	-260.893	-70.853	-207.753	-113.193	-377.153	semi-log, quadratic
	-262.096	-73.956	-210.456	-117.696	-380.956	log-log
160km, 1 lag	<b>-264.856</b>	<b>-76.596</b>	<b>-214.596</b>	-116.116	-381.196	semi-log, linear
	-260.513	-73.053	-210.053	-112.373	-376.653	semi-log, quadratic
	-262.936	-75.916	-211.616	-116.616	-381.376	log-log
320km, 1 lag	-261.436	-73.096	-208.556	-116.296	-380.956	semi-log, linear
	-257.133	-68.653	-204.653	-111.813	-376.633	semi-log, quadratic
	-261.476	-73.496	-208.476	-116.716	<b>-381.816</b>	log-log
80km, 3 lag	-256.007	-70.767	-204.807	-111.347	-374.007	semi-log, linear
	-253.096	-67.202	-197.002	-104.422	-365.722	semi-log, quadratic
	-252.807	-68.046	-204.367	-111.887	-372.987	log-log
160km, 3 lag	-257.087	-71.866	-209.987	-109.527	-373.187	semi-log, linear
	-250.502	-64.042	-201.302	-100.842	-364.962	semi-log, quadratic
	-254.527	-71.327	-206.607	-110.867	-374.227	log-log
320km, 3 lag	-257.087	-66.987	-202.167	-109.927	-372.987	semi-log, linear
	-250.502	-57.622	-199.242	-100.522	-364.342	semi-log, quadratic
	-254.527	-69.786	-203.267	-111.367	-374.187	log-log

$$AICc = -2\ln(L) + 2k + \frac{2k(k+1)}{n-k-1}, k = \# \text{ of parameters}, n = \# \text{ of observations.}$$

“linear” means linear in fire size; “quadratic” specification adds squared fire size

**Bolded** values indicate specification with smallest AICc

**Table SA2: Evidence Ratios**

<b>Zone, Time Lag</b>	<b>Arches</b>	<b>Bryce Canyon</b>	<b>Canyon-lands</b>	<b>Capitol Reef</b>	<b>Zion</b>	<b>Functional Form</b>
80km, 1 lag	2.32	2.64	5.93	<b>1.00</b>	1.05	semi-log, linear
	7.25	17.66	30.62	9.79	10.29	semi-log, quadratic
	3.97	3.74	7.92	1.03	1.54	log-log
160km, 1 lag	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	2.27	1.36	semi-log, linear
	8.77	5.88	9.69	14.75	13.22	semi-log, quadratic
	2.61	1.40	4.44	1.77	1.25	log-log
320km, 1 lag	5.53	5.75	20.49	2.08	1.54	semi-log, linear
	47.54	53.07	144.25	19.52	13.35	semi-log, quadratic
	5.42	4.71	21.33	1.68	<b>1.00</b>	log-log
80km, 3 lag	83.51	18.45	133.62	24.65	49.65	semi-log, linear
	357.88	109.64	6615.70	786.19	3125.04	semi-log, quadratic
	413.63	71.88	166.50	18.82	82.68	log-log
160km, 3 lag	48.67	10.64	10.02	61.25	74.81	semi-log, linear
	1309.24	532.30	770.62	4708.86	4569.69	semi-log, quadratic
	175.03	13.94	54.32	31.34	44.48	log-log
320km, 3 lag	48.67	122.12	500.18	50.15	82.68	semi-log, linear
	1309.24	13189.82	2158.57	5525.90	6230.43	semi-log, quadratic
	175.03	30.11	288.58	24.41	45.38	log-log

**Table SA3: Arches NP – 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00306** (0.016)	0.10771 (0.461)	-0.01065 (0.640)
wf(t-1)	-0.00394** (0.017)	0.019056 (0.267)	-0.00396 (0.909)
wf <sup>2</sup> (t)		-0.00036 (0.319)	
wf <sup>2</sup> (t-1)		-0.000622 (0.161)	
adj_r_gas_price	-2.3398 (0.392)	2.7085 (0.350)	-2.0819 (0.449)
mighty5	0.2661*** (0.000)	0.2660*** (0.000)	0.2686*** (0.000)
T	0.00141*** (0.000)	0.00145*** (0.000)	0.00139*** (0.000)
Recession	-0.0264 (0.468)	-0.0254 (0.466)	-0.0251 (0.486)
Const	9.327*** (0.000)	9.3276*** (0.000)	9.3219*** (0.000)
N	272	272	272
F	503.44	1056.91	453.34
Adj. R <sup>2</sup>	0.977	0.978	0.978
Log lik value	150.94	152.12	150.04
AIC	-265.89	-264.25	-264.09
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA4: Bryce NP– 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00712 (0.179)	0.0212 (0.306)	-0.0080 (0.798)
wf(t-1)	-0.01315*** (0.002)	-0.01396 (0.497)	-0.0492* (0.089)
wf <sup>2</sup> (t)		-0.00187* (0.093)	
wf <sup>2</sup> (t-1)		-0.00013 (0.914)	
adj_r_gas_price	-3.3370 (0.417)	-3.5422 (0.383)	-3.0639 (0.455)
mighty5	0.2468*** (0.009)	0.2493*** (0.009)	0.2474** (0.010)
t	0.00077 (0.156)	0.00078 (0.144)	0.00075 (0.166)
recession	-0.0240 (0.562)	-0.0248 (0.546)	-0.0233 (0.576)
const	9.8028*** (0.000)	9.8073*** (0.000)	9.7973*** (0.000)
N	272	272	272
F	416.12	874.87	380.06
Adj. R <sup>2</sup>	0.9569	0.9567	0.9568
Log lik value	56.68	57.10	56.33
AIC	-77.352	-74.20	-76.65
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA5: Canyonlands NP– 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.03335 (0.159)	0.00649 (0.924)	-0.06158 (0.227)
wf(t-1)	-0.02822 (0.164)	0.0338 (0.556)	-0.04496 (0.334)
wf <sup>2</sup> (t)		-0.01536 (0.427)	
wf <sup>2</sup> (t-1)		-0.02159 (0.192)	
adj_r_gas_price	0.3243 (0.919)	-0.01863 (0.995)	0.4158 (0.897)
mighty5	0.3106*** (0.000)	0.3102*** (0.000)	0.3111*** (0.000)
t	-0.00001954 (0.952)	0.000001604 (0.996)	-0.00002482 (0.939)
recession	-0.02843 (0.495)	-0.02996 (0.459)	-0.02781 (0.506)
const	8.4849*** (0.000)	8.4921*** (0.000)	8.4829*** (0.000)
N	272	272	272
F	746.92	683.61	744.32
Adj. R <sup>2</sup>	0.9752	0.9751	0.9751
Log lik value	124.87	125.55	124.58
AIC	-213.74	-211.09	-213.17
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA6: Capitol Reef NP– 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.01365*** (0.005)	-0.005650 (0.902)	-0.05028 (0.177)
wf(t-1)	-0.01334*** (0.001)	-0.02544 (0.546)	-0.05739** (0.049)
wf <sup>2</sup> (t)		-0.0006720 (0.846)	
wf <sup>2</sup> (t-1)		0.0009943 (0.756)	
adj_r_gas_price	0.09127 (0.982)	0.09115 (0.982)	0.1782 (0.964)
mighty5	0.3508*** (0.001)	0.3505*** (0.001)	0.3489*** (0.001)
t	-0.0004985 (0.229)	-0.0004972 (0.228)	-0.0004948 (0.232)
recession	-0.04631 (0.368)	-0.04640 (0.366)	-0.04739 (0.359)
const	9.0124*** (0.000)	9.0124*** (0.000)	9.0098*** (0.000)
N	272	272	272
F	453.19	407.76	435.40
Adj. R <sup>2</sup>	0.9640	0.9638	0.9640
Log lik value	78.23	78.27	78.20
AIC	-120.46	-116.53	-120.39
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA7: Zion NP– 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.001826 (0.106)	0.0001226 (0.976)	-0.002186 (0.815)
wf(t-1)	-0.001679 (0.338)	-0.001333 (0.823)	-0.001619 (0.900)
wf <sup>2</sup> (t)		-0.0000899 (0.560)	
wf <sup>2</sup> (t-1)		-0.0000182 (0.932)	
adj_r_gas_price	-1.9174 (0.359)	-1.8805 (0.369)	-1.9438 (0.351)
mighty5	0.09200 (0.104)	0.09331 (0.108)	0.09522* (0.099)
t	0.001165*** (0.000)	0.001160*** (0.000)	0.001157*** (0.000)
recession	-0.06010** (0.024)	-0.05937** (0.028)	-0.05782** (0.033)
const	10.990*** (0.000)	10.990*** (0.000)	10.992*** (0.000)
N	272	272	272
F	639.75	619.93	665.44
Adj. R <sup>2</sup>	0.9704	0.9702	0.9703
Log lik value	210.21	210.25	209.83
AIC	-384.42	-380.51	-383.65
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01



**Table SA8: Arches NP-160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.003502*** (0.005)	-0.002070 (0.753)	-0.02365* (0.077)
wf(t-1)	-0.003283** (0.031)	0.0003848 (0.956)	-0.008624 (0.664)
wf <sup>2</sup> (t)		-0.00003568 (0.817)	
wf <sup>2</sup> (t-1)		-0.0001121 (0.560)	
adj_r_gas_price	-2.6469 (0.318)	-2.6079 (0.326)	-2.3865 (0.364)
mighty5	0.2588*** (0.000)	0.2614*** (0.000)	0.2596*** (0.000)
t	0.001444*** (0.000)	0.001440*** (0.000)	0.001418*** (0.000)
recession	-0.03026 (0.409)	-0.02865 (0.423)	-0.03021 (0.409)
const	9.3323*** (0.000)	9.3314*** (0.000)	9.3282*** (0.000)
N	272	272	272
F	477.07	547.84	527.54
Adj. R <sup>2</sup>	0.9769	0.9768	0.9768
Log lik value	151.78	151.93	150.82
AIC	-267.57	-263.87	-265.63
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA9: Bryce NP-160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.001574** (0.013)	-0.001589 (0.554)	-0.01648 (0.420)
wf(t-1)	-0.001630** (0.030)	-0.004828* (0.059)	-0.03356* (0.050)
wf <sup>2</sup> (t)		4.838e-07 (0.975)	
wf <sup>2</sup> (t-1)		0.00002231 (0.153)	
adj_r_gas_price	-2.7518 (0.502)	-2.7282 (0.507)	-3.0852 (0.448)
mighty5	0.2421** (0.011)	0.2374** (0.013)	0.2329** (0.013)
t	0.0007581 (0.160)	0.0007601 (0.168)	0.0007809 (0.154)
recession	-0.03029 (0.467)	-0.03449 (0.404)	-0.03689 (0.360)
const	9.7880*** (0.000)	9.7878*** (0.000)	9.7964*** (0.000)
N	272	272	272
F	365.54	423.50	406.91
Adj. R <sup>2</sup>	0.9572	0.9571	0.9571
Log lik value	57.65	58.20	57.31
AIC	-79.30	-76.40	-78.62
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA10: Canyonlands NP 160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.003278* (0.071)	-0.006151 (0.537)	-0.02729 (0.100)
wf(t-1)	-0.006790*** (0.000)	-0.008010 (0.345)	-0.03003 (0.240)
wf <sup>2</sup> (t)		0.00007444 (0.747)	
wf <sup>2</sup> (t-1)		0.00004547 (0.846)	
adj_r_gas_price	-0.4901 (0.877)	-0.5227 (0.867)	-0.1993 (0.949)
mighty5	0.3030*** (0.000)	0.3015*** (0.001)	0.3004*** (0.001)
t	0.00003846 (0.903)	0.00003972 (0.900)	0.00001434 (0.964)
recession	-0.03328 (0.415)	-0.03429 (0.405)	-0.03468 (0.405)
const	8.5019*** (0.000)	8.5029*** (0.000)	8.4972*** (0.000)
N	272	272	272
F	748.58	699.23	729.48
Adj. R <sup>2</sup>	0.9755	0.9753	0.9752
Log lik value	126.65	126.70	125.16
AIC	-217.30	-213.39	-214.32
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA11: Capitol Reef NP 160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0002554 (0.729)	0.001710 (0.334)	-0.01197 (0.456)
wf(t-1)	0.0002787 (0.654)	0.001656 (0.373)	-0.007727 (0.636)
wf <sup>2</sup> (t)		-0.00001503 (0.204)	
wf <sup>2</sup> (t-1)		-0.00001077 (0.366)	
adj_r_gas_price	0.4607 (0.909)	0.4991 (0.903)	0.4986 (0.900)
mighty5	0.3581*** (0.001)	0.3609*** (0.001)	0.3519*** (0.001)
T	-0.0005416 (0.191)	-0.0005414 (0.188)	-0.0005366 (0.195)
Recession	-0.04303 (0.387)	-0.04014 (0.420)	-0.04870 (0.334)
Const	0.4607 (0.909)	0.4991 (0.903)	0.4986 (0.900)
N	272	272	272
F	404.32	377.77	405.29
Adj. R <sup>2</sup>	0.9638	0.9637	0.9639
Log lik value	77.41	77.86	77.66
AIC	-118.82	-115.72	-119.33
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA12: Zion NP 160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00009784 (0.385)	0.0002607 (0.776)	0.006606 (0.520)
wf(t-1)	-0.0001409 (0.293)	-0.0001482 (0.862)	0.003039 (0.715)
wf <sup>2</sup> (t)		-0.0000014 (0.660)	
wf <sup>2</sup> (t-1)		-7.030e-08 (0.982)	
adj_r_gas_price	-1.9224 (0.358)	-1.9487 (0.365)	-1.9538 (0.355)
mighty5	0.09476* (0.092)	0.09541* (0.092)	0.1006* (0.078)
t	0.001158*** (0.000)	0.001159*** (0.000)	0.001151*** (0.000)
recession	-0.05832** (0.027)	-0.05754** (0.031)	-0.05276** (0.045)
const	10.991*** (0.000)	10.991*** (0.000)	10.992*** (0.000)
N	272	272	272
F	601.45	626.68	710.00
Adj. R <sup>2</sup>	0.9703	0.9722	0.9704
Log lik value	209.95	210.00	210.04
AIC	-383.91	-380.01	-384.08
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA13: Arches NP 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00008564 (0.878)	-0.0004264 (0.782)	-0.002889 (0.817)
wf(t-1)	-0.0002469 (0.711)	0.0006812 (0.711)	-0.005301 (0.718)
wf <sup>2</sup> (t)		0.00000176 (0.860)	
wf <sup>2</sup> (t-1)		-0.0000071 (0.505)	
adj_r_gas_price	-2.0564 (0.454)	-2.0727 (0.455)	-2.0253 (0.459)
mighty5	0.2680*** (0.000)	0.2674*** (0.000)	0.2667*** (0.000)
t	0.001394*** (0.000)	0.001400*** (0.000)	0.001392*** (0.000)
recession	-0.02591 (0.478)	-0.02600 (0.479)	-0.02630 (0.468)
const	9.3206*** (0.000)	9.3202*** (0.000)	9.3205*** (0.000)
N	272	272	272
F	485.35	450.08	466.67
Adj. R <sup>2</sup>	0.9767	0.9765	0.9767
Log lik value	150.07	150.24	150.09
AIC	-264.14	-260.47	-264.17
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA14: Bryce NP 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0001813 (0.510)	-0.00006353 (0.959)	-0.006293 (0.728)
wf(t-1)	-0.0002590 (0.300)	-0.0007432 (0.487)	-0.01648 (0.337)
wf <sup>2</sup> (t)		-3.407e-07 (0.908)	
wf <sup>2</sup> (t-1)		0.000001433 (0.619)	
adj_r_gas_price	-2.9631 (0.471)	-2.9185 (0.473)	-2.9401 (0.472)
mighty5	0.2502*** (0.009)	0.2491*** (0.009)	0.2466*** (0.008)
t	0.0007454 (0.167)	0.0007434 (0.171)	0.0007386 (0.169)
recession	-0.02462 (0.562)	-0.02607 (0.537)	-0.02913 (0.491)
const	9.7947*** (0.000)	9.7939*** (0.000)	9.7971*** (0.000)
N	272	272	272
F	349.48	485.47	374.27
Adj. R <sup>2</sup>	0.9567	0.9564	0.9568
Log lik value	55.90	56.00	56.10
AIC	-75.80	-72.01	-76.20
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA15: Canyonlands NP 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0004386 (0.432)	0.0002991 (0.844)	-0.01006 (0.418)
wf(t-1)	0.00003007 (0.963)	0.001050 (0.633)	0.005206 (0.797)
wf <sup>2</sup> (t)		-0.0000065 (0.455)	
wf <sup>2</sup> (t-1)		-0.0000078 (0.526)	
adj_r_gas_price	0.3591 (0.912)	0.3584 (0.914)	0.3490 (0.915)
mighty5	0.3132*** (0.000)	0.3136*** (0.000)	0.3134*** (0.000)
t	-0.00001798 (0.956)	-0.0000085 (0.980)	-0.000019 (0.953)
recession	-0.02891 (0.474)	-0.02781 (0.492)	-0.02841 (0.481)
const	8.4833*** (0.000)	8.4819*** (0.000)	8.4835*** (0.000)
N	272	272	272
F	735.66	679.34	741.12
Adj. R <sup>2</sup>	0.9749	0.9748	0.9749
Log lik value	123.63	124.00	123.59
AIC	-211.26	-208.00	-211.18
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01



**Table SA16: Capitol Reef NP 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0002680 (0.486)	0.00003977 (0.974)	0.003116 (0.837)
wf(t-1)	-0.0001460 (0.692)	-0.0007457 (0.636)	-0.01644 (0.329)
wf <sup>2</sup> (t)		-0.0000015 (0.800)	
wf <sup>2</sup> (t-1)		0.0000031 (0.655)	
adj_r_gas_price	0.4621 (0.908)	0.4689 (0.907)	0.4507 (0.910)
mighty5	0.3535*** (0.001)	0.3529*** (0.001)	0.3511*** (0.001)
t	-0.0005321 (0.200)	-0.0005341 (0.201)	-0.0005361 (0.194)
recession	-0.04660 (0.353)	-0.04711 (0.350)	-0.04734 (0.348)
const	9.0059*** (0.000)	9.0061*** (0.000)	9.0083*** (0.000)
N	272	272	272
F	401.74	383.45	402.17
Adj. R <sup>2</sup>	0.9638	0.9636	0.9639
Log lik value	77.50	77.58	77.71
AIC	-119.00	-115.17	-119.43
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA17: Zion NP 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00001372 (0.904)	0.0002843 (0.623)	0.006853 (0.502)
wf(t-1)	-0.00004765 (0.663)	0.00007648 (0.879)	0.006668 (0.438)
wf <sup>2</sup> (t)		-8.310e-07 (0.530)	
wf <sup>2</sup> (t-1)		-4.361e-07 (0.730)	
adj_r_gas_price	-1.9282 (0.358)	-2.0043 (0.355)	-2.0082 (0.351)
mighty5	0.09594* (0.088)	0.09669* (0.086)	0.1005* (0.072)
t	0.001155*** (0.000)	0.001159*** (0.000)	0.001157*** (0.000)
recession	-0.05751** (0.030)	-0.05580** (0.038)	-0.05148** (0.049)
const	10.991*** (0.000)	10.993*** (0.000)	10.992*** (0.000)
N	272	272	272
F	604.93	620.60	648.54
Adj. R <sup>2</sup>	0.9703	0.9701	0.9704
Log lik value	209.83	209.99	210.26
AIC	-383.67	-379.98	-384.52
No. param.	18	20	18

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA18: Arches NP 80 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.003089** (0.021)	0.01065 (0.481)	-0.009974 (0.678)
wf(t-1)	-0.003853** (0.021)	0.02293 (0.136)	-0.003624 (0.904)
wf(t-2)	-0.003239* (0.069)	0.02490** (0.049)	-0.0002284 (0.993)
wf(t-3)	-0.003023** (0.027)	0.01211 (0.265)	-0.01124 (0.548)
wf <sup>2</sup> (t)		-0.0003602 (0.338)	
wf <sup>2</sup> (t-1)		-0.0007195* (0.071)	
wf <sup>2</sup> (t-2)		-0.0007705** (0.017)	
wf <sup>2</sup> (t-3)		-0.0004312 (0.112)	
adj_r_gas_price	-2.6261 (0.338)	-3.1399 (0.246)	-2.1573 (0.435)
mighty5	0.2622*** (0.000)	0.2608*** (0.000)	0.2670*** (0.000)
t	0.001432*** (0.000)	0.001529*** (0.000)	0.001399*** (0.000)
recession	-0.02766 (0.456)	-0.02627 (0.437)	-0.02525 (0.489)
const	9.3329*** (0.000)	9.3340*** (0.000)	9.3231*** (0.000)
N	270	270	270
F	518.54	1136.9	418.96
Adj. R <sup>2</sup>	0.9767	0.9769	0.9764
Log lik value	149.69	152.997	148.09
AIC	-259.38	-257.995	-256.19
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA19: Bryce NP 80 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.007417 (0.188)	0.01999 (0.367)	-0.01004 (0.770)
wf(t-1)	-0.01219*** (0.001)	-0.007211 (0.634)	-0.04022* (0.077)
wf(t-2)	-0.01122 (0.158)	0.02427 (0.403)	-0.03688 (0.375)
wf(t-3)	-0.01354 (0.148)	0.03948* (0.090)	-0.01517 (0.790)
wf <sup>2</sup> (t)		-0.001821 (0.131)	
wf <sup>2</sup> (t-1)		-0.0005440 (0.551)	
wf <sup>2</sup> (t-2)		-0.002387 (0.146)	
wf <sup>2</sup> (t-3)		-0.003745*** (0.007)	
adj_r_gas_price	-3.7498 (0.357)	-4.8573 (0.215)	-3.1844 (0.437)
mighty5	0.2352** (0.013)	0.2464*** (0.008)	0.2390** (0.013)
t	0.0008303 (0.139)	0.0008814* (0.091)	0.0007897 (0.158)
recession	-0.02739 (0.506)	-0.02490 (0.542)	-0.02463 (0.551)
const	9.8092*** (0.000)	9.8284*** (0.000)	9.7989*** (0.000)
N	270	270	270
F	402.17	908.18	357.57
Adj. R <sup>2</sup>	0.9569	0.9572	0.9565
Log lik value	57.07	60.05	55.71
AIC	-74.14	-72.09	-71.42
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA20: Canyonlands NP 80 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.03242 (0.196)	0.01183 (0.865)	-0.05961 (0.267)
wf(t-1)	-0.02730 (0.155)	0.03569 (0.537)	-0.04264 (0.322)
wf(t-2)	-0.01042 (0.590)	0.01595 (0.770)	-0.01969 (0.630)
wf(t-3)	-0.01010 (0.402)	-0.02610 (0.507)	-0.02797 (0.306)
wf <sup>2</sup> (t)		-0.01672 (0.396)	
wf <sup>2</sup> (t-1)		-0.02265 (0.194)	
wf <sup>2</sup> (t-2)		-0.008978 (0.573)	
wf <sup>2</sup> (t-3)		0.005567 (0.636)	
adj_r_gas_price	0.1239 (0.969)	-0.3004 (0.926)	0.2270 (0.943)
mighty5	0.3056*** (0.000)	0.3049*** (0.001)	0.3058*** (0.000)
t	0.00002152 (0.948)	0.00004977 (0.881)	0.00001574 (0.962)
recession	-0.02820 (0.502)	-0.03001 (0.461)	-0.02736 (0.520)
const	8.4859*** (0.000)	8.4945*** (0.000)	8.4838*** (0.000)
N	270	270	270
F	658.01	595.81	653.48
Adj. R <sup>2</sup>	0.9750	0.9748	0.9750
Log lik value	124.09	124.95	123.87
AIC	-208.17	-201.90	-207.74
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA21: Capitol Reef NP 80 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.01282*** (0.005)	-0.003635 (0.941)	-0.04765 (0.157)
wf(t-1)	-0.01422*** (0.000)	-0.02143 (0.641)	-0.06982** (0.032)
wf(t-2)	-0.006754 (0.127)	0.04211 (0.387)	-0.01413 (0.683)
wf(t-3)	0.006544 (0.321)	0.09643 (0.162)	0.05529 (0.266)
wf <sup>2</sup> (t)		-0.001190 (0.762)	
wf <sup>2</sup> (t-1)		-0.0001425 (0.967)	
wf <sup>2</sup> (t-2)		-0.003822 (0.302)	
wf <sup>2</sup> (t-3)		-0.007230 (0.164)	
adj_r_gas_price	0.2554 (0.950)	-0.02026 (0.996)	0.4030 (0.920)
mighty5	0.3539*** (0.001)	0.3613*** (0.001)	0.3545*** (0.001)
T	-0.0005345 (0.214)	-0.0005558 (0.194)	-0.0005435 (0.209)
Recession	-0.04669 (0.368)	-0.04347 (0.403)	-0.04670 (0.368)
Const	9.0124*** (0.000)	9.0198*** (0.000)	9.0089*** (0.000)
N	270	270	270
F	408.74	1244.5	383.97
Adj. R <sup>2</sup>	0.9637	0.9635	0.9638
Log lik value	77.36	78.66	77.63
AIC	-114.73	-109.33	-115.26
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA22: Zion NP 80 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.001748 (0.137)	0.0001865 (0.965)	-0.002090 (0.829)
wf(t-1)	-0.001485 (0.367)	-0.0004875 (0.936)	-0.001183 (0.921)
wf(t-2)	-0.001425 (0.380)	0.003342 (0.501)	0.0004216 (0.969)
wf(t-3)	-0.001058 (0.524)	0.004493 (0.390)	0.003727 (0.773)
wf <sup>2</sup> (t)		-0.00008652 (0.587)	
wf <sup>2</sup> (t-1)		-0.00005806 (0.796)	
wf <sup>2</sup> (t-2)		-0.0002312 (0.211)	
wf <sup>2</sup> (t-3)		-0.0002576 (0.154)	
adj_r_gas_price	-1.8921 (0.378)	-1.7993 (0.405)	-2.0066 (0.351)
mighty5	0.08867 (0.121)	0.09534 (0.108)	0.09580 (0.101)
t	0.001178*** (0.000)	0.001160*** (0.000)	0.001165*** (0.000)
recession	-0.06183** (0.021)	-0.05756** (0.034)	-0.05669** (0.038)
const	10.988*** (0.000)	10.986*** (0.000)	10.992*** (0.000)
N	270	270	270
F	675.35	567.33	647.76
Adj. R <sup>2</sup>	0.9703	0.9699	0.9702
Log lik value	208.69	209.31	208.18
AIC	-377.39	-370.62	-376.36
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA23: Arches NP 160 km month time 3 lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.003732*** (0.006)	-0.002470 (0.725)	-0.02399 (0.124)
wf(t-1)	-0.002572** (0.020)	0.004431 (0.514)	-0.008162 (0.577)
wf(t-2)	-0.002376* (0.062)	0.006391 (0.377)	-0.0009547 (0.954)
wf(t-3)	-0.001126 (0.496)	0.005314 (0.319)	-0.01279 (0.434)
wf <sup>2</sup> (t)		-0.00003069 (0.851)	
wf <sup>2</sup> (t-1)		-0.0001976 (0.294)	
wf <sup>2</sup> (t-2)		-0.0002634 (0.171)	
wf <sup>2</sup> (t-3)		-0.0002139 (0.129)	
adj_r_gas_price	-2.8838 (0.274)	-2.9301 (0.276)	-2.4819 (0.341)
mighty5	0.2536*** (0.000)	0.2635*** (0.000)	0.2553*** (0.000)
t	0.001473*** (0.000)	0.001471*** (0.000)	0.001431*** (0.000)
recession	-0.03237 (0.386)	-0.02607 (0.468)	-0.03192 (0.398)
const	9.3362*** (0.000)	9.3352*** (0.000)	9.3313*** (0.000)
N	270	270	270
F	460.74	597.36	497.62
Adj. R <sup>2</sup>	0.9768	0.9766	0.9765
Log lik value	150.23	151.70	148.95
AIC	-260.47	-255.39	-257.89
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01



**Table SA24: Bryce NP 160 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.001578** (0.013)	-0.001716 (0.535)	-0.01494 (0.450)
wf(t-1)	-0.001611** (0.018)	-0.004190*** (0.009)	-0.02812** (0.044)
wf(t-2)	-0.001317* (0.084)	-0.0002355 (0.954)	-0.02305 (0.344)
wf(t-3)	-0.0009587 (0.341)	-0.004244 (0.112)	-0.02063 (0.256)
wf <sup>2</sup> (t)		0.0000012 (0.942)	
wf <sup>2</sup> (t-1)		0.00001795** (0.045)	
wf <sup>2</sup> (t-2)		-0.0000061 (0.803)	
wf <sup>2</sup> (t-3)		0.0000227 (0.137)	
adj_r_gas_price	-2.7118 (0.512)	-2.7023 (0.516)	-3.1218 (0.445)
mighty5	0.2302** (0.015)	0.2233** (0.022)	0.2155** (0.023)
t	0.0008068 (0.149)	0.0008095 (0.162)	0.0008318 (0.149)
recession	-0.03642 (0.382)	-0.04242 (0.313)	-0.04674 (0.249)
const	9.7827*** (0.000)	9.7858*** (0.000)	9.8046*** (0.000)
N	270	270	270
F	334.43	389.62	365.66
Adj. R <sup>2</sup>	0.9571	0.9567	0.9570
Log lik value	57.62	58.47	57.35
AIC	-75.23	-68.95	-74.71
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA25: Canyonlands NP 160 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.003606** (0.044)	-0.007047 (0.475)	-0.02667 (0.145)
wf(t-1)	-0.005876*** (0.000)	-0.002440 (0.801)	-0.03084 (0.148)
wf(t-2)	-0.002700** (0.021)	0.005556 (0.487)	0.003674 (0.849)
wf(t-3)	-0.002799*** (0.007)	-0.002330 (0.688)	-0.03220** (0.049)
wf <sup>2</sup> (t)		0.00008908 (0.698)	
wf <sup>2</sup> (t-1)		-0.00007211 (0.782)	
wf <sup>2</sup> (t-2)		-0.0002353 (0.269)	
wf <sup>2</sup> (t-3)		-0.00004386 (0.768)	
adj_r_gas_price	-1.0200 (0.742)	-1.0097 (0.746)	-0.5506 (0.856)
mighty5	0.2938*** (0.001)	0.2965*** (0.001)	0.2903*** (0.001)
t	0.0001040 (0.744)	0.0001062 (0.741)	0.00006201 (0.845)
recession	-0.03572 (0.386)	-0.03414 (0.408)	-0.03745 (0.382)
const	8.5098*** (0.000)	8.5086*** (0.000)	8.5045*** (0.000)
N	270	270	270
F	696.46	686.15	667.09
Adj. R <sup>2</sup>	0.9755	0.9752	0.9752
Log lik value	126.68	127.10	124.99
AIC	-213.35	-206.20	-209.98
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA26: Capitol Reef NP 160 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0002597 (0.727)	0.001666 (0.377)	-0.01412 (0.391)
wf(t-1)	0.0002728 (0.651)	0.001386 (0.403)	-0.004413 (0.744)
wf(t-2)	0.0004702 (0.273)	0.001033 (0.481)	-0.003728 (0.780)
wf(t-3)	0.000001140 (0.998)	-0.0001076 (0.958)	-0.01864 (0.266)
wf <sup>2</sup> (t)		-0.00001467 (0.241)	
wf <sup>2</sup> (t-1)		-0.0000089 (0.401)	
wf <sup>2</sup> (t-2)		-0.0000045 (0.660)	
wf <sup>2</sup> (t-3)		6.770e-07 (0.960)	
adj_r_gas_price	0.5780 (0.888)	0.6137 (0.884)	0.8522 (0.831)
mighty5	0.3631*** (0.001)	0.3656*** (0.001)	0.3496*** (0.001)
t	-0.0005809 (0.173)	-0.0005785 (0.175)	-0.0005814 (0.171)
recession	-0.04207 (0.402)	-0.03919 (0.435)	-0.05475 (0.282)
const	9.0079*** (0.000)	9.0060*** (0.000)	9.0082*** (0.000)
N	270	270	270
F	347.62	364.75	428.63
Adj. R <sup>2</sup>	0.9635	0.9630	0.9637
Log lik value	76.45	76.87	77.12
AIC	-112.899	-105.74	-114.24
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA27: Zion NP 160 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.000081 (0.487)	0.0002610 (0.775)	0.006187 (0.543)
wf(t-1)	-0.00014 (0.301)	-0.00001784 (0.983)	0.003049 (0.701)
wf(t-2)	-0.000053 (0.720)	0.001012 (0.331)	0.009352 (0.249)
wf(t-3)	-0.0000025 (0.988)	0.0005762 (0.498)	0.003678 (0.655)
wf <sup>2</sup> (t)		-0.0000013 (0.678)	
wf <sup>2</sup> (t-1)		-4.678e-07 (0.876)	
wf <sup>2</sup> (t-2)		-0.000004 (0.273)	
wf <sup>2</sup> (t-3)		-0.0000025 (0.403)	
adj_r_gas_price	-1.9512 (0.370)	-2.0718 (0.363)	-2.1191 (0.336)
mighty5	0.09372* (0.096)	0.09818* (0.083)	0.1040* (0.069)
t	0.001167*** (0.000)	0.001171*** (0.000)	0.001167*** (0.000)
recession	-0.05838** (0.027)	-0.05381** (0.043)	-0.04794* (0.066)
const	10.991*** (0.000)	10.992*** (0.000)	10.991*** (0.000)
N	270	270	270
F	519.48	533.90	644.47
Adj. R <sup>2</sup>	0.9702	0.9698	0.9703
Log lik value	208.28	208.93	208.80
AIC	-376.56	-369.85	-377.59
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA28: Arches NP 320 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.00006647 (0.906)	-0.0002418 (0.870)	-0.001986 (0.878)
wf(t-1)	-0.0002044 (0.749)	0.001016 (0.559)	0.001585 (0.900)
wf(t-2)	-0.0002663 (0.517)	-0.001268 (0.433)	-0.01487 (0.331)
wf(t-3)	-0.0001600 (0.714)	-0.001072 (0.431)	-0.01568 (0.348)
wf <sup>2</sup> (t)		4.748e-07 (0.960)	
wf <sup>2</sup> (t-1)		-0.0000082 (0.459)	
wf <sup>2</sup> (t-2)		0.0000085 (0.407)	
wf <sup>2</sup> (t-3)		0.0000069 (0.407)	
adj_r_gas_price	-2.0693 (0.454)	-2.0450 (0.459)	-1.8548 (0.486)
mighty5	0.2655*** (0.000)	0.2662*** (0.000)	0.2590*** (0.000)
t	0.001407*** (0.000)	0.001398*** (0.000)	0.001393*** (0.000)
recession	-0.02717 (0.464)	-0.02731 (0.468)	-0.03010 (0.415)
const	9.3200*** (0.000)	9.3223*** (0.000)	9.3332*** (0.000)
N	270	270	270
F	472.23	469.91	534.82
Adj. R <sup>2</sup>	0.9764	0.9761	0.9767
Log lik value	148.21	148.75	149.65
AIC	-256.42	-249.50	-259.30
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA29: Bryce NP 320 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0001667 (0.547)	0.00001665 (0.989)	-0.002087 (0.907)
wf(t-1)	-0.0002268 (0.313)	-0.0005152 (0.535)	-0.008880 (0.544)
wf(t-2)	-0.0002925 (0.278)	-0.0005081 (0.710)	-0.02531 (0.203)
wf(t-3)	-0.0002019 (0.400)	-0.0002703 (0.819)	-0.01962 (0.303)
wf <sup>2</sup> (t)		-5.232e-07 (0.852)	
wf <sup>2</sup> (t-1)		8.276e-07 (0.715)	
wf <sup>2</sup> (t-2)		7.210e-07 (0.836)	
wf <sup>2</sup> (t-3)		2.835e-07 (0.927)	
adj_r_gas_price	-2.8602 (0.493)	-2.8388 (0.494)	-2.5888 (0.535)
mighty5	0.2438** (0.011)	0.2429** (0.012)	0.2342** (0.012)
t	0.0007732 (0.164)	0.0007718 (0.169)	0.0007442 (0.185)
recession	-0.02806 (0.511)	-0.02932 (0.489)	-0.04081 (0.339)
const	9.7893*** (0.000)	9.7893*** (0.000)	9.8132*** (0.000)
N	270	270	270
F	309.44	375.19	332.55
Adj. R <sup>2</sup>	0.9563	0.9556	0.9568
Log lik value	55.18	55.26	56.58
AIC	-70.36	-62.51	-73.15
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA30: Canyonlands NP 320 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0004043 (0.488)	0.0007117 (0.638)	-0.008754 (0.490)
wf(t-1)	0.00004236 (0.946)	0.001791 (0.405)	0.009660 (0.637)
wf(t-2)	-0.0001234 (0.860)	-0.003626** (0.015)	-0.007143 (0.673)
wf(t-3)	0.00004063 (0.906)	-0.001408 (0.113)	-0.01379 (0.336)
wf <sup>2</sup> (t)		-0.000009 (0.293)	
wf <sup>2</sup> (t-1)		-0.0000097 (0.411)	
wf <sup>2</sup> (t-2)		0.0000269*** (0.001)	
wf <sup>2</sup> (t-3)		0.0000112** (0.033)	
adj_r_gas_price	0.1798 (0.956)	0.1971 (0.951)	0.2770 (0.931)
mighty5	0.3095*** (0.000)	0.3109*** (0.000)	0.3048*** (0.000)
t	0.00002344 (0.943)	0.000006361 (0.984)	0.00002108 (0.948)
recession	-0.02859 (0.474)	-0.02771 (0.493)	-0.03099 (0.441)
const	8.4832*** (0.000)	8.4891*** (0.000)	8.4954*** (0.000)
N	270	270	270
F	670.80	609.20	707.15
Adj. R <sup>2</sup>	0.9748	0.9750	0.9749
Log lik value	122.77	126.07	123.32
AIC	-205.53	-204.15	-206.63
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA31: Capitol Reef NP 320 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	-0.0003010 (0.440)	-0.00008928 (0.944)	0.001975 (0.898)
wf(t-1)	-0.0001005 (0.763)	-0.0006013 (0.624)	-0.01065 (0.453)
wf(t-2)	-0.0002205 (0.531)	-0.0001351 (0.914)	-0.01764 (0.224)
wf(t-3)	-0.0002713 (0.379)	0.00003168 (0.979)	-0.009859 (0.466)
wf <sup>2</sup> (t)		-9.489e-07 (0.873)	
wf <sup>2</sup> (t-1)		0.0000025 (0.650)	
wf <sup>2</sup> (t-2)		-3.381e-07 (0.957)	
wf <sup>2</sup> (t-3)		-0.000002 (0.778)	
adj_r_gas_price	0.8125 (0.842)	0.8118 (0.844)	0.8491 (0.829)
mighty5	0.3528*** (0.001)	0.3532*** (0.001)	0.3440*** (0.001)
t	-0.0005732 (0.178)	-0.0005733 (0.183)	-0.0005840 (0.163)
recession	-0.05059 (0.312)	-0.05010 (0.324)	-0.05561 (0.274)
const	9.0025*** (0.000)	9.0017*** (0.000)	9.0203*** (0.000)
N	270	270	270
F	356.68	335.46	444.02
Adj. R <sup>2</sup>	0.9636	0.9630	0.9638
Log lik value	76.65	76.71	77.37
AIC	-113.30	-105.43	-114.74
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01



**Table SA32: Zion NP 320 km 3 month time lags**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)	0.000004429 (0.969)	0.0002554 (0.614)	0.006532 (0.504)
wf(t-1)	-0.00004479 (0.651)	0.00009920 (0.823)	0.006418 (0.428)
wf(t-2)	-0.00003291 (0.800)	0.0003686 (0.472)	0.005711 (0.433)
wf(t-3)	-0.00002612 (0.806)	0.00006799 (0.854)	-0.002998 (0.669)
wf <sup>2</sup> (t)		-7.260e-07 (0.531)	
wf <sup>2</sup> (t-1)		-4.757e-07 (0.664)	
wf <sup>2</sup> (t-2)		-0.0000012 (0.348)	
wf <sup>2</sup> (t-3)		-3.767e-07 (0.648)	
adj_r_gas_price	-1.9381 (0.377)	-2.0708 (0.365)	-2.0734 (0.351)
mighty5	0.09487* (0.093)	0.09633* (0.087)	0.1001* (0.073)
t	0.001163*** (0.000)	0.001172*** (0.000)	0.001169*** (0.000)
recession	-0.05769** (0.029)	-0.05439** (0.042)	-0.05062* (0.052)
const	10.991*** (0.000)	10.993*** (0.000)	10.993*** (0.000)
N	270	270	270
F	528.62	530.73	592.05
Adj. R <sup>2</sup>	0.9702	0.9698	0.9703
Log lik value	208.18	208.62	208.78
AIC	-376.36	-369.25	-377.56
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA33: Fixed Effect Panel Model, 80 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)			
wf(t-1)			
wf <sup>2</sup> (t)			
wf <sup>2</sup> (t-1)			
adj_r_gas_price			
mighty5			
t			
recession			
const			
N			
F			
Adj. R <sup>2</sup>			
Log lik value			
AIC			
No. param.			

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA34: Fixed Effect Panel Model, 160 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)			
wf(t-1)			
wf <sup>2</sup> (t)			
wf <sup>2</sup> (t-1)			
adj_r_gas_price			
mighty5			
t			
recession			
const			
N			
F			
Adj. R <sup>2</sup>			
Log lik value			
AIC			
No. param.			

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table SA35: Fixed Effect Panel Model, 320 km, 1 month time lag**

	(1) Semi-log, linear	(2) Semi-log, quadratic	(3) Log-log
wf(t)			
wf(t-1)			
wf <sup>2</sup> (t)			
wf <sup>2</sup> (t-1)			
adj_r_gas_price			
mighty5			
t			
recession			
const			
N			
F			
Adj. R <sup>2</sup>	0.9702	0.9698	0.9703
Log lik value	208.18	208.62	208.78
AIC	-376.36	-369.25	-377.56
No. param.	20	24	20

p-values in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01