

Supplementary material

Forecasting intentional wildfires using temporal and spatiotemporal autocorrelations

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Model estimation results

Table S1. Forest districts assigned as contiguous and distant to each forest district in Galicia, used to calculate spatiotemporal lag indicator variables

District number	District name	District number of contiguous districts	District number of distant districts
I	Ferrol	II, VI, X	XIII, XIV, XV
II	Bergantiños–Mariñas Coruñas	I, III, V, X	XIII, XIV, XV
III	Santiago–Meseta Interior	II, IV, V, IX, X, XVI	XIII, XIV, XV
IV	Barbanza	III, V, XVI, XIX	VI, VII, XIII, XIV
V	Fisterra	II, III, IV	VII, XIII, XIV
VI	Mariña–Lucense	I, VII, X	XII, XIV, XV, XVII
VII	Fonsagrada–Os Ancares	VI, VIII, IX, X	IV, V, XVIII, XIX
VIII	Terra de Lemos	VII, IX, XI, XII, XIII, XVI	I, IV, V, XVIII
IX	Lugo–Sarria	III, VII, VIII, X, XVI	IV, XVII, XVIII
X	Terra Chá	I, II, III, VI, VII, IX	XV, XII, XIII, XIV
XI	O Ribeiro–Arenteiro	VIII, XII, XVI, XVII, XVIII, XIX	I, VI, X
XII	Miño–Arnoia	VIII, XI, XIII, XV, XVII	I, II, VI, X
XIII	Valdeorras–Trives	VIII, XII, XIV, XV	I, II, IV, V
XIV	Verín–Viana	XIII, XV	I, II, V, VI
XV	A Limia	XII, XIII, XIV	I, II, V, VI, VII
XVI	Deza–Tabeiros	III, IV, VIII, IX, XI, XIX	I, VI, VII
XVII	O Condado–A Paradanta	XI, XII, XVIII	I, II, VI, VII, X
XVIII	Vigo–Baixo Miño	XI, XVII, XIX	I, VI, VII, X
XIX	Caldas–O Salnés	IV, XI, XVI, XVIII	I, VI, VII

Table S2. Full PAR(P) model specifications, forest districts of Ferrol, Bergantiños–Mariñas Coruñas, Santiago–Meseta Interior and Barbanza, Galicia, Spain; models estimated for 1 January 1999–31 December 2003; forecast statistics for 1 January 2004–31 December 2006

Note: MWFI, Modified Fire Weather Index; RMSE, Root Mean Squared Error

Variable	Ferrol (I)		Bergantiños–Mariñas Coruñas (II)		Santiago–Meseta Interior (III)		Barbanza (IV)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Constant	-1.1403	0.902	4.9579	0.137	4.7022	0.229	-1.8438	0.412
Friday	-0.2220	0.306	0.2005	0.105	-0.3905	0.019	-0.0289	0.839
Saturday	0.2278	0.229	0.3108	0.010	0.3215	0.004	0.3879	0.002
Sunday	0.1707	0.360	0.2600	0.038	0.1922	0.103	0.2076	0.115
Holiday	0.6169	0.153	-0.0599	0.901	0.2313	0.604	-1.7861	0.199
January	0.3801	0.533						
February	0.5737	0.330	0.8065	0.023	0.3874	0.306	1.1933	0.000
March	1.0400	0.054	1.6924	0.000	1.3378	0.000	0.9673	0.001
April	0.5074	0.376	1.2309	0.000	1.0632	0.000	0.8178	0.008
May	0.2491	0.669	1.3148	0.000	0.5568	0.073	0.6912	0.021
June	0.6175	0.296	1.2182	0.000	0.8970	0.001	0.5348	0.035
July	-0.0364	0.954	1.4111	0.000	0.7354	0.014	0.2712	0.300
August	0.2288	0.708	1.6549	0.000	1.1665	0.000	0.4454	0.082
September	0.2537	0.682	1.6159	0.000	0.9377	0.002	0.3893	0.132
October	0.1120	0.857	0.5020	0.208	-0.5914	0.217		
November	0.2995	0.641						
MFWI _{t-1}	0.7679	0.001	0.2548	0.084	0.2896	0.048	1.0901	0.000
Minimum relative humidity _{t-1}	-1.0798	0.014	-1.0802	0.000	-1.1489	0.000	0.0592	0.888
Maximum wind speed _{t-1}	-0.7442	0.004	-0.2051	0.243	-0.3598	0.051	-0.9998	0.000
Income	-0.0309	0.922						
Income per capita	0.0592	0.926	-0.0001	0.997	0.0053	0.721	0.0161	0.313
Unemployment rate	0.0543	0.701	-0.0650	0.113	-0.0493	0.461	-0.0286	0.242

Variable	Ferrol (I)		Bergantiños–Mariñas Coruñas (II)		Santiago–Meseta Interior (III)		Barbanza (IV)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
District arrests _{$t-1$ to $t-365$}	-0.0317	0.572	-0.0436	0.091	0.0630	0.389	-0.0777	0.225
Galicia arrests _{$\tau-1$}	-0.0143	0.916	0.0355	0.323	-0.1194	0.018	-0.0174	0.624
Fires								
Contiguous districts _{$t-1$}	1.4559	0.000	1.5358	0.000	1.4245	0.000	1.4650	0.000
Distant districts _{$t-1$}	0.5025	0.059	0.4720	0.004	1.0302	0.000	0.3583	0.038
Contiguous districts _{$t-2$}	0.3162	0.089	0.2375	0.096	0.1211	0.476	0.4542	0.024
Distant districts _{$t-2$}	0.1727	0.434			0.3844	0.013		
P_1	0.3495	0.000	0.2819	0.000	0.4786	0.000	0.3624	0.000
P_2	0.0350	0.271	0.0664	0.013	0.0430	0.065	0.0622	0.027
P_3	0.0388	0.187						
P_4	0.0034	0.880						
Observations	1822		1823		1821		1823	
PAR(P) bias, in-sample	0.0373		-0.0923		-0.1860		-0.1540	
PAR(P) RMSE, in-sample	1.0285		1.5881		2.2435		1.8410	
Poisson bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Poisson RMSE, in-sample	1.0552		1.6502		2.5843		1.9462	
Constant bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Constant RMSE, in-sample	1.3277		2.1870		3.6249		3.0126	
Random-walk bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, in-sample	1.2366		1.9128		2.4640		1.9350	
PAR(P) bias, out-of-sample	0.0331		-0.1204		-0.2091		-0.2433	
PAR(P) RMSE, out-of-sample	1.0640		1.6878		2.1086		2.0073	
Poisson bias, out-of-sample	-0.0033		0.0023		-0.0100		-0.0440	
Poisson RMSE, out-of-sample	1.0828		1.7235		2.3162		2.0340	
Constant bias, out-of-sample	-0.0213		-0.0456		0.1356		-0.0856	
Constant RMSE, out-of-sample	1.3902		2.3233		3.2930		3.2571	
Random-walk bias, out-of-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, out-of-sample	1.2688		2.0326		2.3258		2.0424	

Table S3. Full PAR(*P*) model specifications, forest districts of Fisterra, Mariña–Lucense, Fonsagrada–Os Ancares and Terra de Lemos, Galicia, Spain; models estimated for 1 January 1999–31 December 2003; forecast statistics for 1 January 2004–31 December 2006

Note: MWFI, Modified Fire Weather Index; RMSE, Root Mean Squared Error

Variable	Fisterra (V)		Mariña–Lucense (VI)		Fonsagrada–Os Ancares (VII)		Terra de Lemos (VIII)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Constant	3.7964	0.191	16.5630	0.018	0.9144	0.764	−0.4666	0.891
Friday	0.1496	0.275	−0.3640	0.270	−0.0385	0.837	−0.2253	0.128
Saturday	0.2999	0.027	0.1399	0.610	0.1476	0.412	0.1304	0.305
Sunday	0.5367	0.000	0.7292	0.004	0.1992	0.264	0.1936	0.112
Holiday	0.4365	0.228	1.5162	0.001	0.3946	0.333	−0.4590	0.424
January								
February	−0.2965	0.288			0.0172	0.967	0.6676	0.037
March	0.0222	0.902			0.8016	0.002	1.0830	0.000
April	−0.6929	0.011	0.1974	0.584	−0.0856	0.769	0.6095	0.071
May	−0.4907	0.049	0.1678	0.674	−1.0182	0.006	0.0725	0.840
June	−1.2006	0.000	0.1322	0.701	−1.5966	0.000	−0.1674	0.597
July	−1.3151	0.000	−0.7227	0.124	−1.2658	0.001	0.3764	0.189
August	−0.9816	0.000	−0.1484	0.721	−0.3554	0.312	0.7876	0.009
September	−0.9699	0.000	−0.0649	0.881	−0.1008	0.779	0.7758	0.009
October	−1.5690	0.000			−1.2136	0.012	−0.3553	0.368
November								
MFWI _{<i>t</i>−1}	1.0674	0.000	1.4008	0.004	0.5406	0.083	1.0089	0.000
Minimum relative humidity _{<i>t</i>−1}	−0.6982	0.020	−1.8082	0.000	−0.9232	0.006	−0.5782	0.063
Maximum wind speed _{<i>t</i>−1}	−1.1101	0.000	−0.9218	0.065	−0.6468	0.057	−1.7710	0.000
Income							0.6096	0.145
Income per capita	0.0040	0.838	−0.0774	0.130	−0.0456	0.325	−0.3766	0.079
Unemployment rate	−0.0665	0.201	−0.2347	0.098	0.0470	0.453	0.0375	0.747
District arrests _{<i>t</i>−1 to <i>t</i>−365}	0.0288	0.418	0.4480	0.004	0.0208	0.585	−0.0251	0.648

Variable	Fisterra (V)		Mariña–Lucense (VI)		Fonsagrada–Os Ancares (VII)		Terra de Lemos (VIII)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Galicia arrests τ_{-1}	-0.0028	0.951	-0.1833	0.014	0.0426	0.478	-0.1125	0.006
Fires								
Contiguous districts τ_{-1}	1.7362	0.000	0.1714	0.538	0.8220	0.000	1.0115	0.000
Distant districts τ_{-1}	0.3498	0.080	0.6507	0.090	0.9621	0.000	0.6341	0.000
Contiguous districts τ_{-2}	0.6609	0.000	0.6862	0.011	0.6418	0.002	0.7202	0.001
Distant districts τ_{-2}	0.1449	0.403			-0.1381	0.519		
P_1	0.3057	0.000	0.2260	0.002	0.2384	0.000	0.3455	0.000
P_2	0.0418	0.076			-0.0002	0.996		
P_3					0.0142	0.693		
P_4					0.0338	0.199		
Observations	1822		1823		1822		1821	
PAR(P) bias, in-sample	-0.0622		0.0814		0.0629		-0.0132	
PAR(P) RMSE, in-sample	1.3991		0.5742		0.9621		1.4074	
Poisson bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Poisson RMSE, in-sample	1.4714		0.3798		0.9752		1.4870	
Constant bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Constant RMSE, in-sample	2.1001		0.4025		1.1899		2.2320	
Random-walk bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, in-sample	1.6848		0.5258		1.2074		1.6117	
PAR(p) bias, out-of-sample	-0.0800		0.0844		0.0599		-0.0261	
PAR(p) RMSE, out-of-sample	1.4897		0.6691		0.9887		1.4432	
Poisson bias, out-of-sample	-0.0023		0.0023		-0.0048		-0.0034	
Poisson RMSE, out-of-sample	1.5255		0.4063		1.0196		1.5520	
Constant bias, out-of-sample	-0.0648		-0.0030		-0.0506		0.0682	
Constant RMSE, out-of-sample	2.2188		0.4279		1.2912		2.2525	
Random-walk bias, out-of-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, out-of-sample	1.8136		0.5567		1.2434		1.5607	

Table S4. Full PAR(*P*) model specifications, forest districts of Lugo–Sarria, Terra Chá, O Ribeiro–Arenteiro and Miño–Arnoia, Galicia, Spain; models estimated for 1 January 1999–31 December 2003; forecast statistics for 1 January 2004–31 December 2006

Note: MWFI, Modified Fire Weather Index; RMSE, Root Mean Squared Error

Variable	Lugo–Sarria (IX)		Terra Chá (X)		O Ribeiro–Arenteiro (XI)		Miño–Arnoia (XII)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Constant	10.3381	0.077	−9.5566	0.031	2.2144	0.452	2.275	0.254
Friday	−0.2295	0.163	0.1089	0.608	−0.0719	0.603	0.1625	0.219
Saturday	0.2391	0.059	0.2452	0.245	0.2718	0.027	0.0961	0.500
Sunday	0.1450	0.278	0.1294	0.559	0.5396	0.000	0.3836	0.001
Holiday	−0.2717	0.651	0.3346	0.517	0.3043	0.330	−0.019	0.942
January					−0.4536	0.305	−0.2914	0.480
February	0.0923	0.814	0.5185	0.535	0.3915	0.282	0.4166	0.117
March	0.8395	0.004	1.4815	0.006	0.5109	0.150	0.5053	0.035
April	0.5594	0.062	1.1494	0.035	0.2348	0.512	0.1676	0.564
May	−0.1440	0.667	1.0730	0.050	−0.4051	0.301	−0.7349	0.026
June	0.2696	0.377	1.1549	0.036	−0.5457	0.168	−0.4854	0.016
July	0.1713	0.588	1.1592	0.032	−0.3576	0.373	−0.1467	0.329
August	0.8377	0.007	1.3535	0.013	0.0369	0.926		
September	0.8166	0.010	1.6676	0.002	−0.0584	0.885	−0.0782	0.577
October	−0.1991	0.620	0.5530	0.355	−1.2137	0.013	−1.1437	0.001
November					0.1043	0.791		
MFWI _{<i>t</i>−1}	0.3859	0.096	0.6515	0.029	0.6388	0.000	0.8639	0.000
Minimum relative humidity _{<i>t</i>−1}	−1.2998	0.000	−1.2912	0.005	−0.9206	0.001	−0.6274	0.031
Maximum wind speed _{<i>t</i>−1}	−0.5226	0.071	−0.6829	0.063	−1.1108	0.000	−1.572	0.000
Income	0.5617	0.413	−1.5884	0.231	7.1008	0.073	0.0062	0.471
Income per capita	−0.9564	0.388	0.9164	0.166	−3.3161	0.070		
Unemployment rate	−0.0173	0.543	0.2923	0.000	−0.1442	0.281	−0.0166	0.426
District arrests _{<i>t</i>−1 to <i>t</i>−365}	−0.0896	0.059	0.0140	0.886	−0.1259	0.041	−0.0461	0.162

Variable	Lugo–Sarria (IX)		Terra Chá (X)		O Ribeiro–Arenteiro (XI)		Miño–Arnoia (XII)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Galicia arrests τ_{-1}	-0.1140	0.036	-0.0312	0.575	-0.0563	0.127	-0.142	0.002
Fires								
Contiguous districts $_{t-1}$	0.9985	0.000	0.4924	0.090	1.2214	0.000	1.2545	0.000
Distant districts $_{t-1}$	0.7899	0.000	0.8733	0.006	0.3083	0.009	0.4226	0.010
Contiguous districts $_{t-2}$	0.3614	0.054	0.4977	0.063	0.6555	0.001	0.7419	0.001
Distant districts $_{t-2}$	0.1514	0.375			0.0489	0.668		
P_1	0.3517	0.000	0.3958	0.000	0.3033	0.000	0.2953	0.000
P_2	0.0429	0.152	0.1776	0.000	0.0547	0.071	0.1157	0.000
P_3	0.0263	0.228					0.0481	0.039
P_4								
Observations	1822		1820		1821		1821	
PAR(P) bias, in-sample	-0.0480		0.0113		-0.0752		-0.1429	
PAR(P) RMSE, in-sample	1.4488		1.1959		1.4784		1.8100	
Poisson bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Poisson RMSE, in-sample	1.5903		1.3241		1.5357		2.0395	
Constant bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Constant RMSE, in-sample	2.2734		1.7590		2.1694		2.8402	
Random-walk bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, in-sample	1.6516		1.3871		1.7887		2.0691	
PAR(P) bias, out-of-sample	-0.0693		0.0129		-0.1194		-0.1953	
PAR(P) RMSE, out-of-sample	1.4670		1.1525		1.5534		1.8200	
Poisson bias, out-of-sample	-0.0065		-0.0044		-0.0016		-0.0300	
Poisson RMSE, out-of-sample	1.6214		1.2601		1.6278		2.0773	
Constant bias, out-of-sample	0.0558		0.0588		-0.0424		0.0797	
Constant RMSE, out-of-sample	2.2704		1.6047		2.2336		2.8025	
Random-walk bias, out-of-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, out-of-sample	1.6124		1.2951		1.7713		1.9872	

Table S5. Full PAR(P) model specifications, forest districts of Valdeorras–Trives, Verín–Viana, A Limia and Deza–Tabeirós, Galicia, Spain; models estimated for 1 January 1999–31 December 2003; forecast statistics for 1 January 2004–31 December 2006

Note: MWFI, Modified Fire Weather Index; RMSE, Root Mean Squared Error

Variable	Valdeorras–Trives (XIII)		Verín–Viana (XIV)		A Limia (XV)		Deza–Tabeirós (XVI)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Constant	4.0936	0.021	10.2792	0.000	−9.0543	0.028	1.5222	0.613
Friday	0.0627	0.559	−0.0298	0.787	0.1759	0.068	0.0532	0.699
Saturday	0.3172	0.000	0.1272	0.236	0.2421	0.011	0.2272	0.064
Sunday	0.2928	0.001	0.3283	0.001	0.4183	0.000	0.4142	0.000
Holiday	0.0923	0.758	−0.0852	0.906	0.4390	0.042	−0.1227	0.700
January								
February			0.7019	0.001	0.3485	0.024	0.1975	0.432
March	0.8929	0.000	1.0676	0.000	0.2470	0.107	0.2287	0.279
April	0.3587	0.013	0.5517	0.014	−0.1925	0.310	−0.0681	0.774
May	−0.8574	0.000	−0.4172	0.254	−0.8980	0.000	−0.4799	0.068
June	−1.1907	0.000	−0.6653	0.022	−1.5217	0.000	−0.9070	0.000
July	−0.8930	0.000	−0.3787	0.181	−1.1952	0.000	−0.8676	0.001
August	0.1533	0.351	0.2886	0.306	−0.2436	0.239	−0.3522	0.177
September	0.3046	0.045	0.5540	0.033	0.1880	0.313	−0.4558	0.078
October					−1.1333	0.000	−1.0944	0.004
November								
MFWI _{t−1}	0.2620	0.091	0.9325	0.000	0.7446	0.000	0.6685	0.000
Minimum relative humidity _{t−1}	−1.3319	0.000	−1.2316	0.000	−1.1069	0.000	−1.0560	0.000
Maximum wind speed _{t−1}	−0.9042	0.000	−1.761	0.000	−1.4641	0.000	−0.8680	0.000
Income	3.1909	0.000			5.7623	0.000	0.9054	0.415
Income per capita	−1.2586	0.000	0.0708	0.064	−1.9298	0.000	−0.5978	0.448
Unemployment rate	0.0282	0.178	−0.1168	0.003	0.2342	0.000	−0.0242	0.396
District arrests _{t−1 to t−365}	−0.1730	0.000	−0.1152	0.012	−0.0960	0.000	−0.0044	0.908

Variable	Valdeorras-Trives (XIII)		Verín-Viana (XIV)		A Limia (XV)		Deza-Tabeirós (XVI)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance	Parameter	Significance
Galicia arrests _{t-1}	-0.1693	0.000	-0.0611	0.042	-0.2234	0.000	-0.1054	0.004
Fires								
Contiguous districts _{t-1}	1.2542	0.000	1.2638	0.000	1.2026	0.000	1.2041	0.000
Distant districts _{t-1}	0.4185	0.000			0.3397	0.003	0.2854	0.033
Contiguous districts _{t-2}	0.6133	0.000	0.1664	0.168	0.3742	0.004	0.7378	0.000
Distant districts _{t-2}	0.0677	0.454					0.1918	0.098
P_1	0.3571	0.000	0.3532	0.000	0.3847	0.000	0.3049	0.000
P_2	0.1146	0.000	0.1334	0.000	0.1170	0.000	0.1117	0.000
P_3			0.025	0.127				
P_4			0.0192	0.104				
Observations	1821		1821		1821		1822	
PAR(P) bias, in-sample	-0.2570		-0.2334		-0.1570		-0.2509	
PAR(P) RMSE, in-sample	3.1618		2.7036		2.6537		2.1857	
Poisson bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Poisson RMSE, in-sample	3.3824		3.0640		2.9908		2.4268	
Constant bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Constant RMSE, in-sample	4.9760		4.5049		4.7881		3.4384	
Random-walk bias, in-sample	0.0000		0.0000		0.0000		0.0000	
Random-walk RMSE, in-sample	3.7365		3.1009		2.9441		2.4179	
PAR(p) bias, out-of-sample	-0.3636		-0.4041		-0.3047		-0.3223	
PAR(p) RMSE, out-of-sample	3.0833		3.0440		3.0587		2.1913	
Poisson bias, out-of-sample	0.0144		-0.0857		-0.0577		-0.0200	
Poisson RMSE, out-of-sample	3.4033		3.4828		3.4106		2.3181	
Constant bias, out-of-sample	-0.2071		-0.2110		-0.4040		0.1403	
Constant RMSE, out-of-sample	5.1486		5.0505		5.6422		3.0660	
Random-walk bias, out-of-sample	0.0000		0.0009		0.0000		0.0000	
Random-walk RMSE, out-of-sample	3.4361		3.3682		3.3653		2.4319	

Table S6. Full PAR(P) model specifications, forest districts of O Condado–A Paradanta, Vigo–Baixo Miño and Caldas–O Salnés, Galicia, Spain; models estimated for 1 January 1999–31 December 2003; forecast statistics for 1 January 2004–31 December 2006

Note: MWFI, Modified Fire Weather Index; RMSE, Root Mean Squared Error

Variable	O Condado–A Paradanta (XVII)		Vigo–Baixo Miño (XVIII)		Caldas–O Salnés (XIX)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance
Constant	2.2015	0.445	2.7394	0.114	−0.9912	0.715
Friday	0.2758	0.008	0.0377	0.760	0.1341	0.227
Saturday	0.3557	0.001	0.3655	0.001	0.3058	0.003
Sunday	0.4366	0.000	0.2959	0.006	0.3733	0.000
Holiday	0.1135	0.683	−0.2791	0.528	−0.0201	0.976
January					−0.0691	0.813
February	0.3410	0.083	0.4415	0.068	−0.1210	0.579
March	0.5413	0.001	0.6922	0.001	0.2002	0.203
April	0.4578	0.010	0.3659	0.127		
May	−0.1714	0.395	0.3171	0.183	−0.2712	0.178
June	−0.2609	0.142	0.2974	0.135	−0.0805	0.600
July	−0.2070	0.237	0.3057	0.126	−0.2522	0.045
August	0.3371	0.034	0.7309	0.000		
September	0.0464	0.752	0.5285	0.010	−0.2563	0.042
October					−0.8437	0.003
November					−0.0714	0.764
MFWI _{t-1}	0.7139	0.000	0.7056	0.000	0.7584	0.000
Minimum relative humidity _{t-1}	−1.1609	0.000	−0.7144	0.006	−0.4497	0.021
Maximum wind speed _{t-1}	−1.0317	0.000	−0.9599	0.000	−0.9828	0.000
Income	−2.9781	0.179	−0.0058	0.075	−0.2976	0.017
Income per capita	1.6870	0.175			1.0694	0.016
Unemployment rate	0.0352	0.510	−0.0012	0.963	−0.0251	0.302

Variable	O Condado–A Paradanta (XVII)		Vigo–Baixo Miño (XVIII)		Caldas–O Salnés (XIX)	
	Parameter	Significance	Parameter	Significance	Parameter	Significance
District arrests _{t-1 to t-365}	-0.0672	0.149	-0.0114	0.380	0.0348	0.284
Galicia arrests _{t-1}	-0.0851	0.006	-0.1020	0.005	-0.0307	0.317
Fires						
Contiguous districts _{t-1}	0.9159	0.000	1.7194	0.000	1.5330	0.000
Distant districts _{t-1}	0.7197	0.001	0.1440	0.230	0.3371	0.001
Contiguous districts _{t-2}	0.2024	0.110	0.5375	0.001	0.2112	0.140
Distant districts _{t-2}			0.1139	0.303		
P_1	0.3785	0.000	0.3077	0.000	0.3015	0.000
P_2	0.1041	0.000	0.0700	0.006	0.0832	0.000
P_3						
P_4						
Observations	1821		1822		1823	
PAR(P) bias, in-sample	-0.2510		-0.1147		-0.3080	
PAR(P) RMSE, in-sample	2.2398		1.6634		2.3014	
Poisson bias, in-sample	0.0000		0.0000		0.0000	
Poisson RMSE, in-sample	2.5248		1.7733		2.4367	
Constant bias, in-sample	0.0000		0.0000		0.0000	
Constant RMSE, in-sample	3.7271		2.5410		3.4194	
Random-walk bias, in-sample	0.0000		0.0000		0.0000	
Random-walk RMSE, in-sample	2.5134		1.9782		2.5927	
PAR(p) bias, out-of-sample	-0.3701		-0.1798		-0.3959	
PAR(p) RMSE, out-of-sample	2.3728		1.8099		2.3483	
Poisson bias, out-of-sample	-0.0664		-0.0093		-0.0221	
Poisson RMSE, out-of-sample	2.5422		1.8739		2.3569	
Constant bias, out-of-sample	-0.0092		-0.0795		-0.0373	
Constant RMSE, out-of-sample	3.6932		2.7011		3.3459	
Random-walk bias, out-of-sample	0.0000		0.0000		0.0000	
Random-walk RMSE, out-of-sample	2.5665		2.1659		2.6699	