

蕁麻疹就診人數資料

資料來自高雄榮民總醫院(皮膚科)，為2017年1月1日至2017年12月31日診斷ICD-9代碼為995.3(過敏)每日就診人數資料，此篇為過敏的結果。

univariate gam by smooth function

Generalized additive Poisson model

$$\ln(patient) = Intercept + s(Airpollution) + s(temperature) + s(humidity) + s(time)$$

s= a cyclic cubic regression splines

CO

Table 1: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.076	0.096	0.500	0.703	0.598	0.378	0.164
2	0.069	0.392	0.723	0.380	0.772	0.294	0.187
3	0.821	0.445	0.244	0.585	0.274	0.363	0.284
4	0.174	0.330	0.289	0.773	0.315	0.126	0.256
5	0.334	0.134	0.577	0.504	0.591	0.226	0.068
6	0.297	0.027	0.045	0.081	0.033	0.179	0.113
7	0.004	0.666	0.248	0.248	0.546	0.291	0.759
8	0.060	0.060	0.400	0.549	0.468	0.722	0.526

row:lag days,col:moving average for the n days

SO2

Table 2: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.087	0.100	0.521	0.828	0.970	0.954	0.529
2	0.072	0.044	0.020	0.075	0.078	0.297	0.101
3	0.584	0.031	0.440	0.008	0.067	0.331	0.241
4	0.024	0.510	0.102	0.308	0.036	0.195	0.338
5	0.005	0.055	0.436	0.044	0.211	0.010	0.020
6	0.202	0.252	0.380	0.779	0.192	0.409	0.029
7	0.121	0.063	0.983	0.273	0.891	0.500	0.855
8	0.313	0.268	0.814	0.359	0.172	0.535	0.044

row:lag days,col:moving average for the n days

O3

Table 3: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.534	0.090	0.042	0.359	0.331	0.523	0.598
2	0.110	0.132	0.013	0.004	0.060	0.121	0.201
3	0.606	0.467	0.669	0.159	0.060	0.223	0.191
4	0.001	0.140	0.315	0.292	0.146	0.038	0.127
5	0.028	0.376	0.438	0.309	0.310	0.103	0.035
6	0.589	0.006	0.040	0.101	0.082	0.093	0.053
7	0.065	0.026	0.013	0.168	0.209	0.146	0.130
8	0.165	0.356	0.542	0.310	0.543	0.526	0.491
row:lag days,col:moving average for the n days							

PM2.5

Table 4: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.011	0.099	0.100	0.252	0.024	0.127	0.232
2	0.422	0.378	0.740	0.109	0.079	0.001	0.007
3	0.030	0.979	0.332	0.936	0.323	0.328	0.023
4	0.000	0.020	0.004	0.475	0.118	0.020	0.040
5	0.291	0.002	0.339	0.009	0.393	0.160	0.036
6	0.982	0.191	0.164	0.290	0.059	0.518	0.313
7	0.260	0.082	0.393	0.292	0.127	0.044	0.271
8	0.011	0.236	0.024	0.906	0.469	0.393	0.274
row:lag days,col:moving average for the n days							

PM10

Table 5: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.094	0.253	0.234	0.265	0.075	0.367	0.633
2	0.001	0.107	0.969	0.481	0.235	0.055	0.162
3	0.003	0.459	0.144	0.879	0.661	0.412	0.298
4	0.016	0.553	0.902	0.540	0.816	0.450	0.275
5	0.432	0.114	0.882	0.813	0.464	0.783	0.446
6	0.901	0.783	0.923	0.900	0.870	0.367	0.851
7	0.037	0.252	0.995	0.913	0.939	0.997	0.662
8	0.048	0.827	0.478	0.960	0.952	0.825	0.790
row:lag days,col:moving average for the n days							

NO

Table 6: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.335	0.563	0.804	0.773	0.340	0.006	0.014
2	0.870	0.956	0.872	0.654	0.340	0.194	0.034
3	0.846	0.595	0.913	0.805	0.653	0.211	0.138
4	0.318	0.452	0.422	0.642	0.259	0.071	0.006
5	0.408	0.019	0.222	0.445	0.425	0.383	0.233
6	0.054	0.044	0.001	0.007	0.006	0.006	0.036
7	0.274	0.125	0.486	0.035	0.241	0.100	0.065
8	0.138	0.967	0.383	0.833	0.097	0.454	0.251
row:lag days,col:moving average for the n days							

NO2

Table 7: smooth term p-value with lag and moving average data

	s.pv	mv2	mv3	mv4	mv5	mv6	mv7
1	0.002	0.128	0.861	0.905	0.949	0.971	0.725
2	0.001	0.778	0.630	0.276	0.852	0.813	0.594
3	0.098	0.100	0.589	0.466	0.193	0.651	0.598
4	0.008	0.537	0.284	0.452	0.195	0.079	0.302
5	0.072	0.000	0.185	0.129	0.162	0.058	0.023
6	0.442	0.009	0.006	0.045	0.074	0.214	0.163
7	0.000	0.001	0.275	0.037	0.244	0.433	0.517
8	0.394	0.155	0.006	0.415	0.087	0.251	0.260
row:lag days,col:moving average for the n days							