

S1 APPENDIX

Specific Humidity Model with Different Meteorological Parameters Average Periods

1 Meteorological variables averaged from previous 1 to 3 weeks

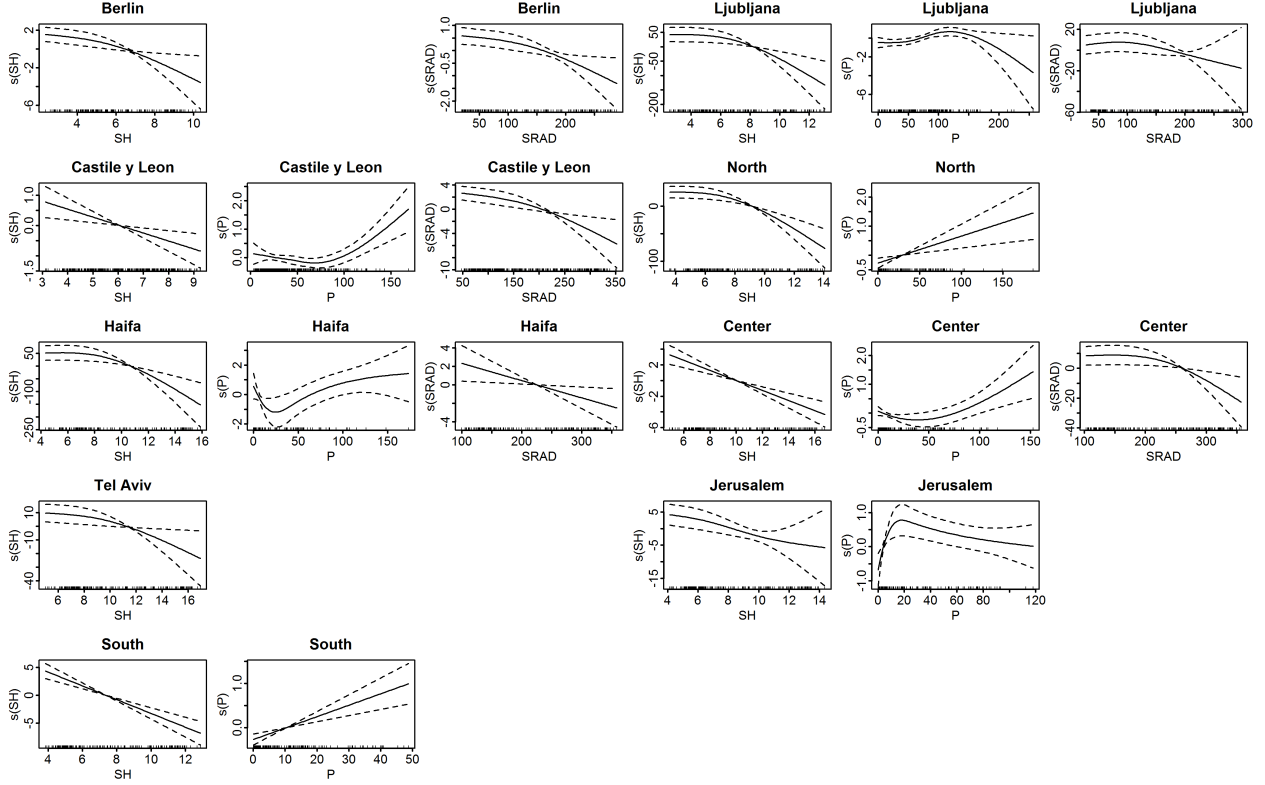


Fig. A. Resulting meteorological smooth terms. Only terms that are significant are plotted. The y-axis is in the log scale and normalized, x-axis is the value of the meteorological variable. SH = specific humidity, P = Precipitation, SRAD = Solar Radiation.

Table A. Meteorological smooth term effective degree of freedom and p-value in parenthesis

	Specific Humidity	Precipitation	Solar Radiation	Adj.Rsq	% Dev. Expl.
Berlin	1.69 (3e-05)		1.56 (0.02)	0.73	77.6
Ljubljana	1.89 (3e-05)	2.77 (0.02)	1.96 (0.02)	0.41	67.8
Castile Y Leon	1 (0.003)	2.38 (0.006)	1.75 (2e-09)	0.56	72.5
North	1.92 (4e-11)	1 (0.002)		0.45	72.2
Haifa	1.92 (6e-04)	2.82 (2e-04)	1 (0.02)	0.33	64.1
Center	1 (2e-07)	1.83 (0.006)	1.89 (0.03)	0.62	85.1
Tel Aviv	1.76 (4e-09)			0.61	77.5
Jerusalem	1.83 (2e-05)	2.89 (7e-05)		0.77	88.5
South	1 (1e-09)	1 (3e-05)		0.55	73.8

2 Meteorological variables averaged from previous 1 to 2 weeks

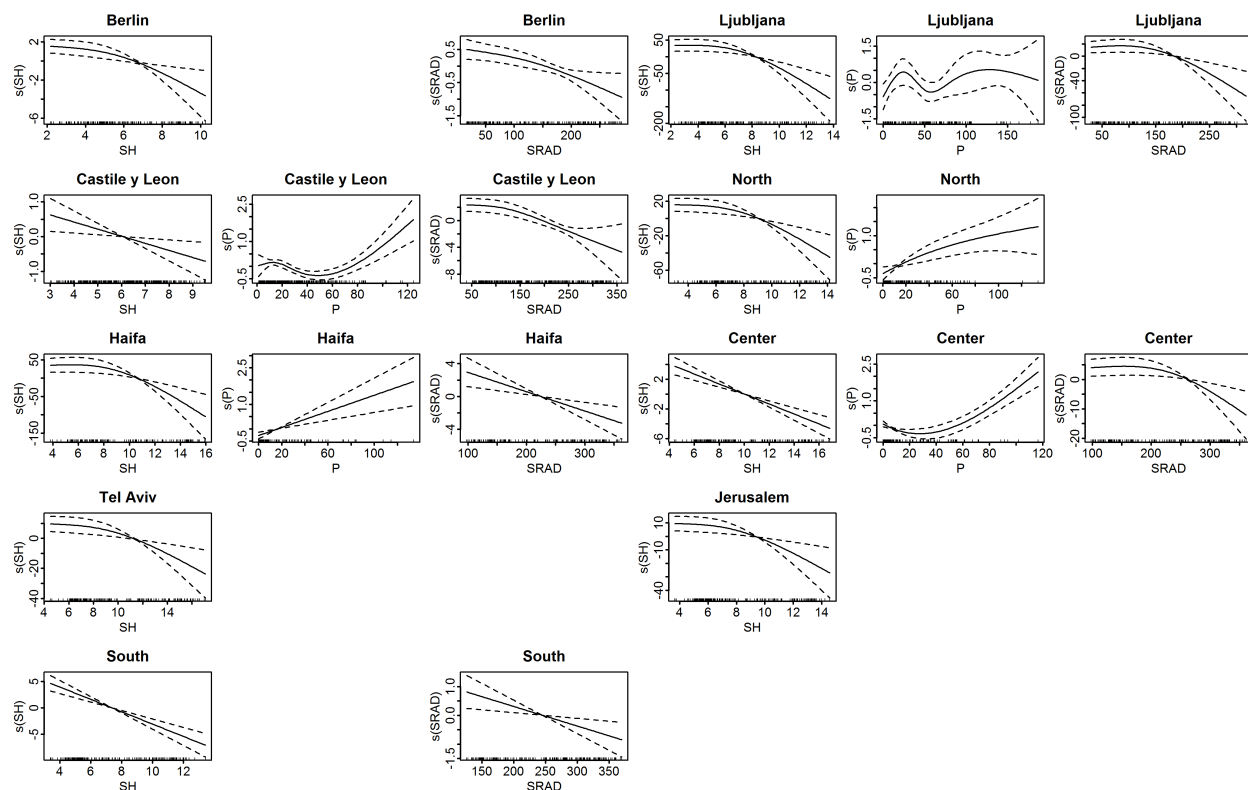


Fig. B. Resulting meteorological smooth terms. Only terms that are significant are plotted. The y-axis is in the log scale and normalized, x-axis is the value of the meteorological variable. SH = specific humidity, P = Precipitation, SRAD = Solar Radiation.

Table B. Meteorological smooth term effective degree of freedom and p-value in parenthesis

	Specific Humidity	Precipitation	Solar Radiation	Adj.Rsq	% Dev. Expl.
Berlin	1.69 (3e-05)		1.56 (0.02)	0.73	77.6
Ljubljana	1.92 (4e-04)	3.77 (0.03)	1.91 (0.007)	0.37	67.9
Castile Y Leon	1 (0.009)	2.69 (4e-05)	1.99 (1e-08)	0.57	72.9
North	1.87 (6e-11)	1.43 (0.007)		0.45	72.2
Haifa	1.91 (2e-04)	1 (1e-04)	1 (0.001)	0.36	60.7
Center	1 (2e-09)	1.96 (6e-11)	1.9 (0.01)	0.87	88.0
Tel Aviv	1.81 (2e-09)			0.64	77.6
Jerusalem	1.84 (8e-09)			0.73	86.6
South	1 (2e-09)		1 (0.005)	0.57	74.0