S4 APPENDIX Models Trained to All Locations Simultaneously



Fig. A. Resulting meteorological smooth terms for Specific Humidity model. 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.



Fig. B. Resulting meteorological smooth terms for Minimum Temperature model. The y-axis is in the log scale and normalized, x-axis is the value of the meteorological variable. TMIN = Minimum Temperature, P = Precipitation, SRAD = Solar Radiation.

Table A. Meteorological smooth term effective degree of freedom and p-value in parenthesis. SH = Specific Humidity, TMIN = Minimum Temperature, P = Precipitation, SRAD = Solar Radiation

	SH	TMIN	Р	SRAD	Adj.Rsq	% Dev. Expl.
SH Model	$1.97 \ (< 2e-16)$			1.9 (9e-16)	0.78	78.0
TMIN Model		$2.91 \ (< 2e-16)$		2.91 (1e-09)	0.79	78.1