

**Table S3. Peak timing and intensity accuracy overall, before the predicted peak, and at or after the predicted peak in temperate regions by hemisphere, season, region, data type, and scaling.** Cells shaded in green indicate improved forecast accuracy over the reference level, while cells shaded in red indicate reduced accuracy.

Variable		Peak Timing aOR (95% CI)			Peak Intensity aOR (95% CI)		
		Overall	Before Peak	After Peak	Overall	Before Peak	After Peak
Hemisphere	Southern	2.125 (0.421, 10.684)	1.428 (0.562, 3.599)	1.134 (0.382, 3.384)	0.693 (0.269, 1.765)	0.940 (0.432, 2.052)	0.436 (0.108, 1.725)
Season	2016-17	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
	2015-16	1.252 (0.603, 2.624)	1.105 (0.552, 2.211)	0.670 (0.269, 1.693)	0.795 (0.450, 1.401)	0.764 (0.437, 1.335)	0.761 (0.223, 2.570)
	2014-15	0.997 (0.481, 2.079)	1.004 (0.470, 2.127)	1.274 (0.434, 3.736)	1.071 (0.630, 1.836)	0.958 (0.543, 1.678)	1.289 (0.327, 4.810)
	2013-14	0.963 (0.441, 2.134)	0.752 (0.347, 1.636)	0.781 (0.304, 2.014)	1.915 (0.991, 3.750)	1.841 (0.969, 3.493)	Inf (0.292, Inf)
	2012-13	1.047 (0.499, 2.200)	1.177 (0.570, 2.437)	0.985 (0.365, 2.668)	1.115 (0.638, 1.950)	1.145 (0.640, 2.030)	0.701 (0.214, 2.330)
	2011-12	0.933 (0.433, 2.013)	0.911 (0.419, 1.980)	1.141 (0.391, 3.332)	1.433 (0.869, 2.341)	1.583 (0.925, 2.678)	1.431 (0.324, 6.128)
	2010-11	1.540 (0.726, 3.306)	1.333 (0.664, 2.665)	0.783 (0.298, 2.062)	1.033 (0.619, 1.726)	0.911 (0.526, 1.577)	1.610 (0.383, 7.018)
Region	SW Europe	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
	E Europe	1.216 (0.737, 1.999)	1.045 (0.645, 1.690)	2.068 (1.095, 3.889)	0.744 (0.519, 1.067)	0.770 (0.527, 1.126)	0.962 (0.431, 2.126)
	N Europe	1.284 (0.691, 2.401)	1.286 (0.714, 2.324)	1.515 (0.718, 3.199)	1.114 (0.775, 1.605)	1.039 (0.674, 1.609)	Inf (1.034, Inf)
	N Hem (non-Europe)	0.807 (0.380, 1.736)	0.844 (0.403, 1.750)	2.036 (0.726, 5.745)	1.713 (0.835, 3.453)	1.686 (0.839, 3.356)	2.700 (0.458, Inf)
	S Hem	2.331 (0.471, 11.672)	1.475 (0.556, 3.955)	1.716 (0.548, 5.377)	0.656 (0.247, 1.743)	0.905 (0.403, 2.055)	0.548 (0.122, 2.386)
Data Type	ARI+	0.639 (0.421, 0.968)	0.645 (0.428, 0.973)	0.567 (0.334, 0.965)	0.832 (0.606, 1.132)	0.776 (0.562, 1.084)	0.741 (0.325, 1.721)
Scaling	(2, 10]	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)	1.00 (ref)
	(0, 0.5]	0.771 (0.399, 1.488)	0.920 (0.473, 1.783)	0.420 (0.181, 0.982)	0.633 (0.397, 1.007)	0.846 (0.498, 1.421)	0.170 (0.051, 0.568)
	(0.5, 1]	1.361 (0.636, 2.941)	1.452 (0.701, 3.008)	1.758 (0.618, 5.075)	0.862 (0.524, 1.412)	1.044 (0.599, 1.818)	0.374 (0.100, 1.511)
	(1, 2]	1.360 (0.705, 2.612)	1.379 (0.704, 2.686)	1.815 (0.641, 5.115)	0.957 (0.648, 1.409)	1.058 (0.631, 1.765)	2.387 (0.412, 13.290)
	(10, 20]	1.869 (0.729, 4.785)	1.441 (0.667, 3.086)	0.799 (0.286, 2.244)	0.681 (0.401, 1.153)	1.115 (0.626, 1.990)	0.145 (0.038, 0.571)
	(20, 100]	0.863 (0.449, 1.650)	0.932 (0.483, 1.801)	0.667 (0.266, 1.674)	0.609 (0.374, 1.004)	0.873 (0.519, 1.463)	0.229 (0.066, 0.801)
	(100, 500]	1.494 (0.516, 4.120)	1.227 (0.520, 2.857)	0.956 (0.274, 3.336)	0.479 (0.250, 0.909)	0.604 (0.276, 1.345)	0.147 (0.033, 0.646)