

Supplemental information for:

Increased trends in global extreme fire weather driven predominantly by atmospheric humidity and temperature

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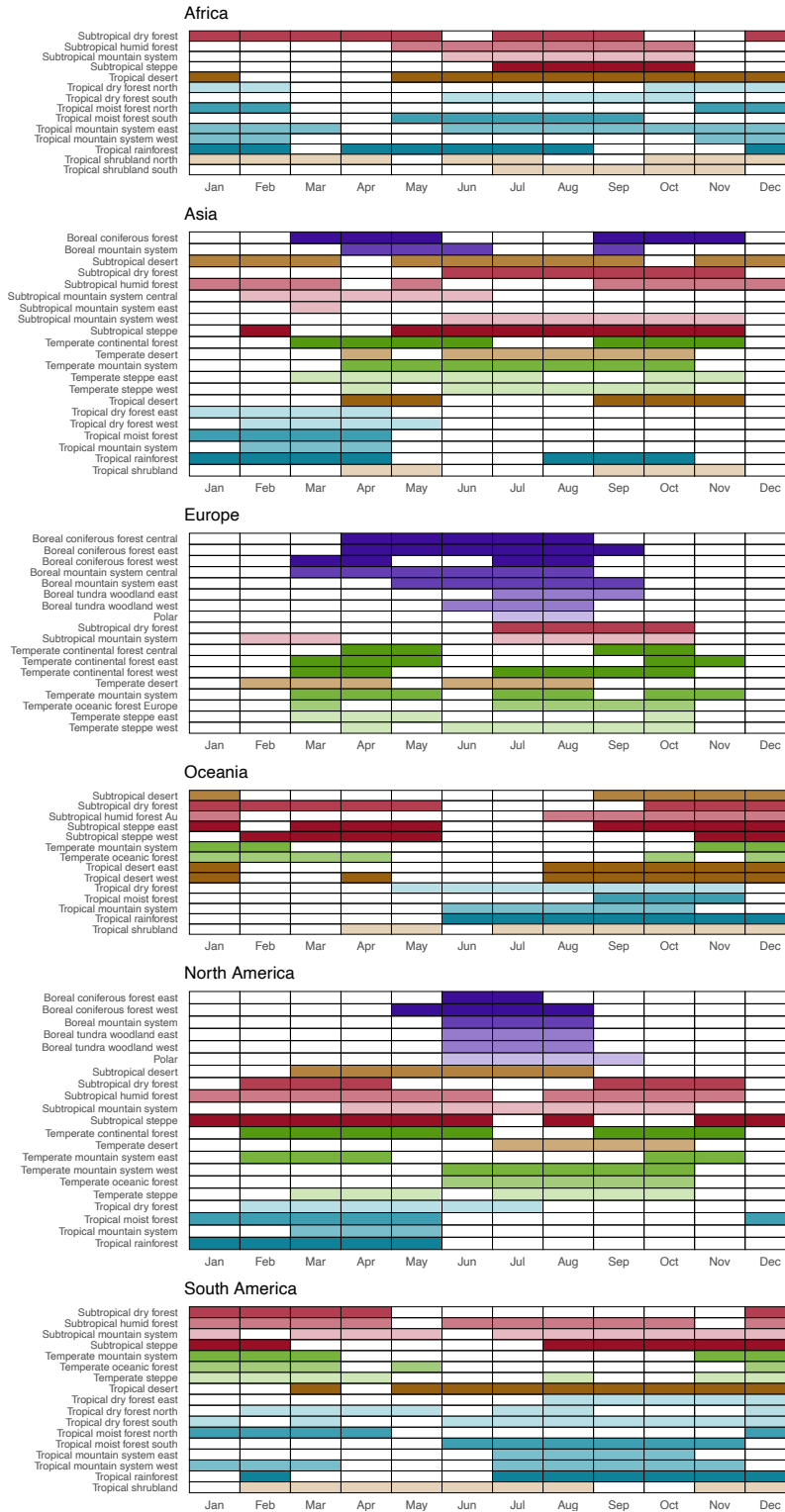
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Table S1: Observed fire season for each continent/biome combination. Highlighted months correspond to at least 90% of area burned for each continent x biome combination. See methods for details.



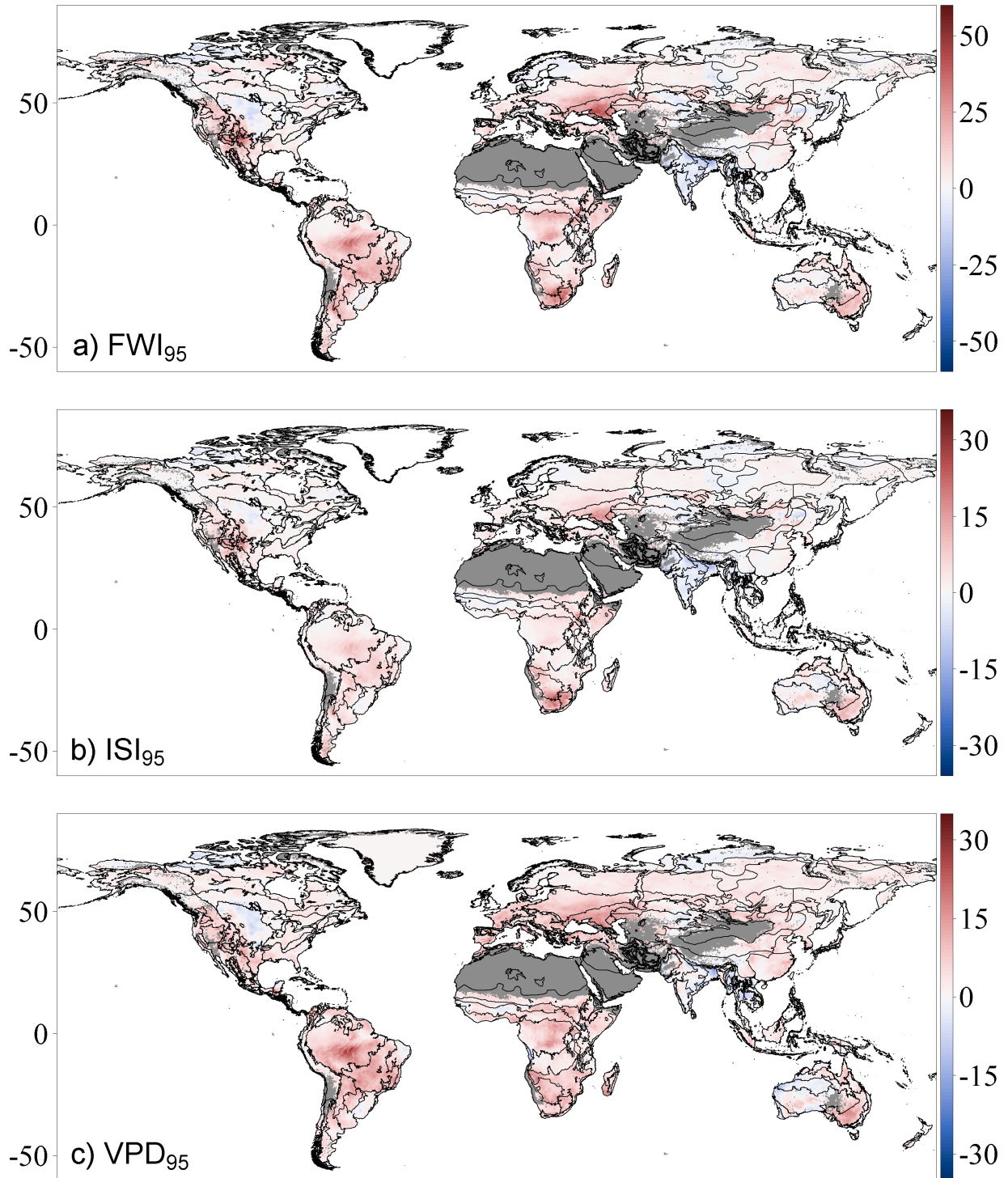


Figure S1: All trends (per 41y) in the annual 95th percentile of the Fire Weather Index (FWI₉₅) (Panel a), Initial Spread Index (ISI₉₅) (Panel b) and Vapour Pressure Deficit (VPD₉₅) (Panel c). Areas shaded dark grey are predominantly barren (i.e., without appreciable burnable biomass) and are excluded from the calculation. Displayed trends are given by the Thiel-Sen slope estimator. See methods for further details.

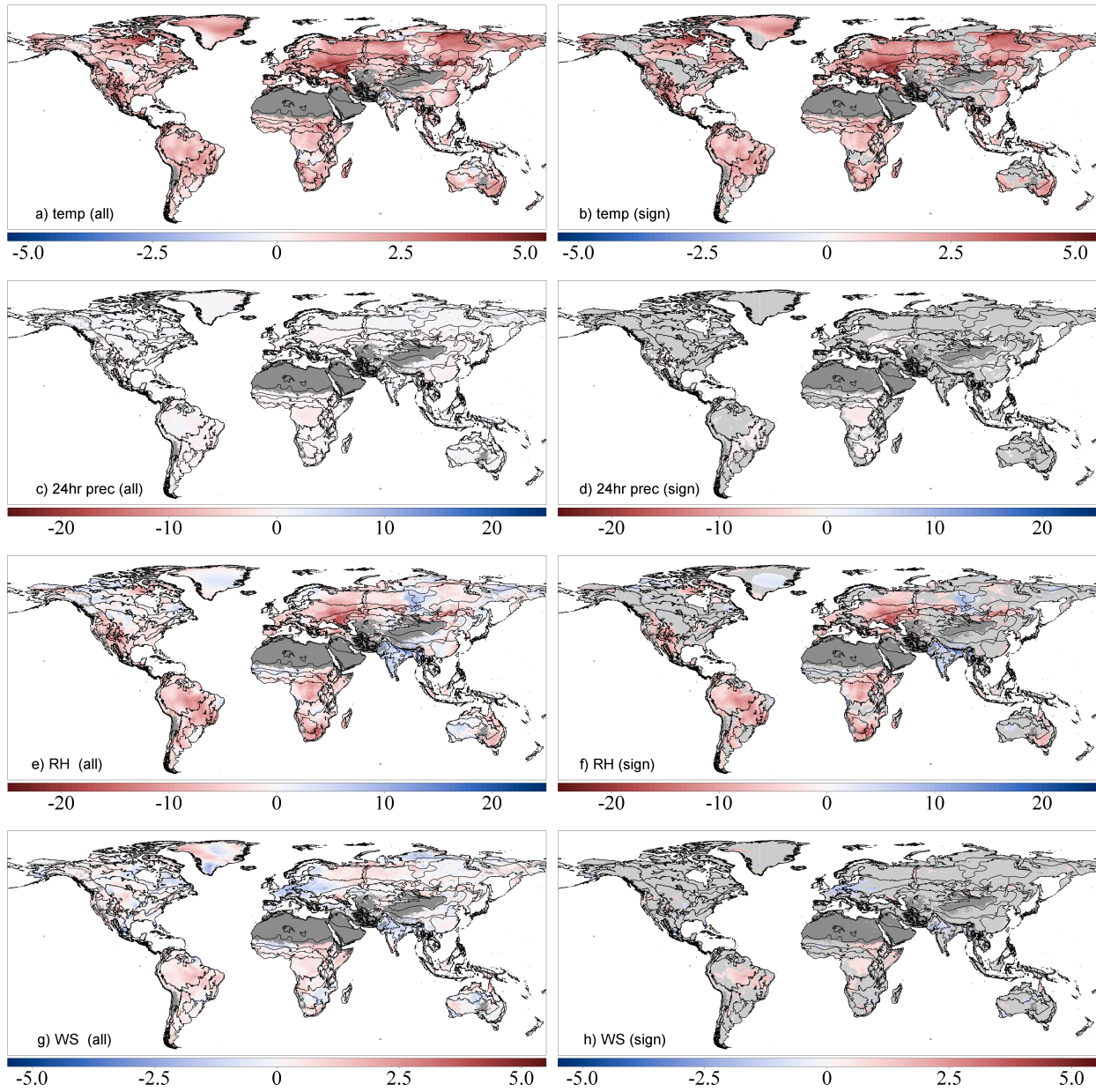


Figure S2: Trends in fire season mean of noon FWI input values; all trends for 2m temperature (T ; $^{\circ}\text{C}/41\text{yr}$), 24 hour accumulated precipitation ($\text{mm}/41\text{yr}$), relative humidity (RH ; per 41yr) and wind speed (WS ; $\text{km}/\text{hr}/41\text{yr}$) shown in panels a, c, e and g respectively; corresponding significant trends shown in panels b, d, f and h respectively.

Table S2: Percentage of significant trends (total, positive and negative) for FWI₉₅, ISI₉₅ and VPD₉₅ for each biome. For the same three variables, also shown are mean trend sizes (per 41yr) for all grid cells, positive trends only and negative trends only, summarized by biome. Values in parentheses are the corresponding mean trend sizes for significant trends only.

Percentage significant	FWI ₉₅			ISI ₉₅			VPD ₉₅		
	all	positive	negative	all	positive	negative	all	positive	negative
Boreal coniferous forest	8.4	7.2	1.1	16.0	14.0	2.0	17.1	16.8	0.3
Boreal mountain system	10.0	8.9	1.1	12.1	9.8	2.3	30.5	30.4	0.1
Boreal tundra woodland	5.1	4.0	1.1	7.7	6.8	0.8	15.1	15.1	0.1
Polar	3.7	2.9	0.9	2.9	2.0	0.9	40.1	37.6	2.5
Subtropical desert	26.8	26.6	0.2	22.4	22.1	0.3	36.6	35.4	1.2
Subtropical dry forest	45.9	44.0	1.9	51.0	48.9	2.1	72.4	70.9	1.6
Subtropical humid forest	19.0	18.9	0.0	25.8	25.7	0.1	48.6	48.6	0.1
Subtropical mountain system	39.5	37.6	1.9	40.1	37.4	2.6	54.7	53.3	1.5
Subtropical steppe	51.2	49.4	1.7	44.6	42.6	2.1	65.2	64.8	0.4
Temperate continental forest	29.3	29.3	0.1	33.2	33.1	0.2	54.2	54.2	0.0
Temperate desert	34.3	34.2	0.1	29.9	28.4	1.4	65.2	64.1	1.1
Temperate mountain system	25.8	25.2	0.7	23.3	22.4	0.9	54.1	53.7	0.5
Temperate oceanic forest	8.8	8.5	0.3	12.2	12.0	0.2	67.8	67.5	0.2
Temperate steppe	34.3	34.1	0.2	32.0	31.1	0.9	46.3	43.8	2.5
Tropical desert	37.0	28.2	8.7	37.7	27.0	10.7	40.2	36.0	4.2
Tropical dry forest	43.7	37.5	6.2	43.4	35.6	7.8	62.6	57.7	5.0
Tropical moist forest	48.4	44.8	3.6	49.0	42.5	6.5	63.1	59.3	3.8
Tropical mountain system	45.0	41.7	3.3	47.1	41.5	5.6	60.6	58.7	1.9
Tropical rainforest	54.4	52.5	1.9	53.1	50.8	2.4	73.7	72.1	1.6
Tropical shrubland	55.0	49.7	5.3	54.1	48.0	6.2	63.7	62.7	1.0
Mean trend size	all	positive	negative	all	positive	negative	all	positive	negative
	(/41yr)	(/41yr)	(/41yr)	(/41yr)	(/41yr)	(/41yr)	(hPa/41yr)	(hPa/41yr)	(hPa/41yr)
Boreal coniferous forest	2.0 (5.1)	3.2 (6.7)	-2.2 (-5.5)	0.8 (1.6)	1.2 (2.1)	-2.2 (-3.4)	2.2 (3.4)	2.4 (3.6)	-1.3 (-5.3)
Boreal mountain system	1.5 (5.1)	2.5 (6.1)	-1.4 (-3.4)	0.5 (1.6)	0.9 (2.3)	-0.6 (-1.7)	2.1 (3.5)	2.3 (3.5)	-0.7 (-1.9)
Boreal tundra woodland	1.3 (5.4)	2.6 (8.4)	-1.5 (-5.3)	0.5 (2.3)	1.0 (2.8)	-0.6 (-2.0)	1.7 (3.5)	1.9 (3.5)	-0.7 (-3.6)
Polar	0.5 (3.8)	3.0 (7.7)	-0.8 (-7.0)	0.0 (0.9)	1.3 (3.1)	-0.5 (-2.7)	0.4 (1)	1.1 (1.3)	-1.4 (-3.2)
Subtropical desert	5.8 (13.9)	7.1 (13.9)	-	2.9 (7.9)	4.1 (8.0)	-1.6 (-4.7)	3.1 (6.7)	4.9 (7.3)	-2.2 (-8.1)
Subtropical dry forest	5.0 (8.1)	5.9 (8.7)	-2.7 (-6.0)	2.0 (3.1)	2.3 (3.3)	-1.1 (-2.7)	5.4 (6.8)	5.9 (7.1)	-2.2 (-4.8)
Subtropical humid forest	3.5 (10.9)	4.7 (10.9)	-1.4 (-3.1)	1.1 (3.1)	1.5 (3.1)	-0.4 (-1.2)	3.2 (5.1)	3.6 (5.1)	-1 (-2.1)
Subtropical mountain system	5.7 (13.4)	8.9 (14.5)	-1.8 (-4.5)	2.5 (6.1)	4.1 (6.7)	-1.0 (-2.7)	3.9 (6.6)	5 (6.8)	-0.9 (-2.9)
Subtropical steppe	9.9 (16.6)	11.4 (16.8)	-3.2 (-8.0)	4.3 (8.1)	5.2 (8.3)	-1.5 (-3.9)	6.2 (8.4)	6.7 (8.5)	-2.1 (-6.3)
Temperate continental forest	5.3 (12.9)	6.6 (12.9)	-1.6 (-5.4)	1.7 (3.8)	2.1 (3.8)	-0.6 (-1.9)	4.5 (6.7)	4.7 (6.7)	-0.6 (-1.9)
Temperate desert	6.1 (13.8)	8.3 (13.8)	-	2.3 (5.6)	3.6 (6.1)	-1.6 (-4.1)	5.3 (7.6)	6.3 (7.8)	-1.9 (-4.7)
Temperate mountain system	3.8 (11.5)	5.7 (11.8)	-1.5 (-4.0)	1.1 (3.8)	1.9 (3.9)	-0.7 (-1.8)	2.9 (4.5)	3.3 (4.6)	-0.8 (-1.9)
Temperate oceanic forest	2.8 (6.1)	3.5 (6.6)	-1.6 (-7.8)	0.8 (2.1)	1.1 (2.1)	-0.5 (-2.0)	4.8 (6.4)	5.1 (6.4)	-0.6 (-0.5)
Temperate steppe	6.8 (18.5)	11.4 (18.7)	-3.9 (-12.8)	2.7 (7.2)	4.3 (7.5)	-1.6 (-5.2)	3.9 (7.8)	5.9 (8.5)	-2.4 (-5.2)
Tropical desert	3.1 (11)	7.9 (16.0)	-4.6 (-10.6)	1.6 (6.3)	5.2 (9.9)	-3.0 (-5.9)	1.8 (4.6)	4.3 (6)	-2.5 (-7.5)
Tropical dry forest	3.9 (7.9)	7.0 (10.7)	-4.6 (-9.4)	1.6 (3.1)	3.2 (4.8)	-2.4 (-4.6)	4.2 (6.5)	6 (7.6)	-3 (-6.2)
Tropical moist forest	5.6 (10.5)	8.2 (12.4)	-4.4 (-12.6)	1.8 (3.3)	3.0 (4.5)	-2.0 (-4.7)	4.5 (6.9)	6.1 (7.8)	-3.2 (-6.9)
Tropical mountain system	4.2 (7.3)	6.1 (8.6)	-3.1 (-9.1)	1.2 (2)	2.1 (2.7)	-1.5 (-3.3)	2.7 (4.3)	3.5 (4.5)	-1.6 (-4.2)
Tropical rainforest	7 (11.9)	8.9 (12.6)	-2.2 (-6.9)	1.9 (3.2)	2.4 (3.5)	-0.7 (-2.2)	5.8 (7.5)	6.6 (7.8)	-2 (-5.4)
Tropical shrubland	5.2 (8.4)	7.8 (10.5)	-5.2 (-8.9)	3.2 (4.9)	4.7 (6.2)	-2.5 (-4.1)	4 (5.8)	4.8 (6)	-2 (-5)

Table S3: Percentage of significant trends (total, positive and negative) for FWI₉₅, ISI₉₅ and VPD₉₅ for each continent/biome combination.

Continent	Biome	FWI ₉₅			ISI ₉₅			VPD ₉₅		
		all	positive	negative	all	positive	negative	all	positive	negative
Africa	Subtropical dry forest	51.4	51	0.4	55	54.6	0.4	74.1	73.9	0.2
Africa	Subtropical humid forest	56.5	56.5	0	64.9	64.9	0	77.1	77.1	0
Africa	Subtropical mountain system	90.3	90.3	0	91.4	91.4	0	96.2	96.2	0
Africa	Subtropical steppe	13.4	12.9	0.5	14.6	14.1	0.5	60	60	0
Africa	Tropical desert	78.5	76.4	2.1	78	76.1	2	85.6	84.6	1
Africa	Tropical dry forest north	32	31.3	0.7	31.5	29.5	2	63.5	63.4	0.1
Africa	Tropical dry forest south	50.6	47	3.6	48.9	45.8	3.1	92.7	89.6	3.1
Africa	Tropical moist forest north	32.8	32.5	0.3	26.7	25	1.7	52.5	50.1	2.4
Africa	Tropical moist forest south	30.7	30.1	0.6	30.4	29.6	0.8	56.6	55.5	1.1
Africa	Tropical mountain system east	58.8	58.8	0	57.9	57.9	0	79.5	79.3	0.2
Africa	Tropical mountain system west	44.7	44.7	0	39.5	38.2	1.3	65.8	65.8	0
Africa	Tropical rainforest	71.2	68.9	2.3	62.9	60.3	2.6	85.9	84.5	1.4
Africa	Tropical shrubland north	63.5	63.2	0.3	62.6	62.3	0.3	80.9	80.8	0.1
Africa	Tropical shrubland south	78.9	77.9	1	72.4	71.3	1.1	98.2	97.9	0.3
Asia	Boreal coniferous forest	0.3	0.3	0	0	0	0	68.2	68.2	0
Asia	Boreal mountain system	37.1	36.2	0.9	37.5	34.4	3.1	47.3	47.3	0
Asia	Subtropical desert	35.1	29.8	5.3	35.1	29.8	5.3	80	80	0
Asia	Subtropical dry forest	32.9	28.6	4.3	38.2	35.3	2.9	62.8	62.8	0
Asia	Subtropical humid forest	6.7	6.7	0	16.3	16.2	0.1	66.5	66.4	0.1
Asia	Subtropical mountain system central	6	1.6	4.4	6.8	0.3	6.5	18.2	14.5	3.7
Asia	Subtropical mountain system east	0	0	0	0	0	0	97	97	0
Asia	Subtropical mountain system west	56.8	55.7	1.1	58.5	57.3	1.2	87.6	87.5	0.1
Asia	Subtropical steppe	41.9	30.3	11.6	44.1	31	13.1	63	62.9	0.1
Asia	Temperate continental forest	15.9	15.9	0	12	12	0	47.6	47.6	0
Asia	Temperate desert	18.8	18.6	0.2	16.4	14.4	2	51.8	50.2	1.6
Asia	Temperate mountain system	23	21.9	1.1	18.7	17.1	1.6	58.7	58.3	0.4
Asia	Temperate steppe east	30.5	30.3	0.2	24.3	21.7	2.6	57.8	57.8	0
Asia	Temperate steppe west	16.6	16.6	0	5.5	5.1	0.4	37.3	37.3	0

Asia	Tropical desert	41.9	7	34.9	48.7	6	42.7	41.8	36.8	5
Asia	Tropical dry forest east	13	0.3	12.7	19.6	2.6	17	40.6	0.4	40.2
Asia	Tropical dry forest west	33.8	0	33.8	43	0	43	9.2	0.5	8.7
Asia	Tropical moist forest	25.7	0.1	25.6	44.5	1.1	43.4	23.4	2.2	21.2
Asia	Tropical mountain system	28.4	14.1	14.3	35.2	10.7	24.5	36.4	31.2	5.2
Asia	Tropical rainforest	9.7	4.7	5	13.6	6.9	6.7	43.9	39.6	4.3
Asia	Tropical shrubland	28.7	0.1	28.6	33.7	0.1	33.6	8.5	4.9	3.6
Europe	Boreal coniferous forest central	6.8	1.5	5.3	18.7	11.2	7.5	16.5	16.5	0
Europe	Boreal coniferous forest east	12.9	12.8	0.1	20.4	19.1	1.3	18.9	18.9	0
Europe	Boreal coniferous forest west	10.5	10.5	0	16.3	16.3	0	11.7	11.7	0
Europe	Boreal mountain system central	16.3	15.9	0.4	22.2	17.7	4.5	36.4	36.4	0
Europe	Boreal mountain system east	7.7	5.9	1.8	7.9	6.3	1.6	29.7	29.7	0
Europe	Boreal tundra woodland east	3.9	2.9	1	4.3	2.3	2	13.8	13.8	0
Europe	Boreal tundra woodland west	0.8	0.8	0	0.8	0.8	0	1.1	1.1	0
Europe	Polar	0.9	0.9	0	2.1	1.2	0.9	9.2	5.8	3.4
Europe	Subtropical dry forest	47.8	47.3	0.5	53.2	52.6	0.6	76.9	76.9	0
Europe	Subtropical mountain system	57.8	57.4	0.4	58.2	58.2	0	71.3	71.3	0
Europe	Temperate continental forest central	25.7	25.7	0	37.6	37.4	0.2	41.3	41.3	0
Europe	Temperate continental forest east	1.3	1.3	0	0.9	0.9	0	38.3	38.3	0
Europe	Temperate continental forest west	51.7	51.7	0	58.3	58.2	0.1	83.6	83.6	0
Europe	Temperate desert	94.3	94.3	0	93	93	0	100	100	0
Europe	Temperate mountain system	17	16.2	0.9	17.1	16.5	0.6	58.2	58.2	0
Europe	Temperate oceanic forest Europe	6.2	5.8	0.4	12.7	12.4	0.3	83.3	83.2	0.1
Europe	Temperate steppe east	77.8	77.8	0	44.9	44.9	0	9.1	9.1	0
Europe	Temperate steppe west	89.2	89.2	0	83.8	83.8	0	90.1	90.1	0
North America	Boreal coniferous forest east	3.6	3.6	0	10.8	10.8	0	43.4	43.4	0
North America	Boreal coniferous forest west	0.2	0.1	0.1	6.2	5.9	0.3	7.3	5	2.3
North America	Boreal mountain system	3.4	2.8	0.6	3.7	3.3	0.4	21.8	21.5	0.3
North America	Boreal tundra	4	1.5	2.5	2.9	1.9	1	20.6	20.6	0

	woodland east									
North America	Boreal tundra woodland west	8.6	7.5	1.1	15.4	14.8	0.6	20.1	20	0.1
North America	Polar	4.9	3.7	1.2	3.2	2.3	0.9	51.6	49.5	2.1
North America	Subtropical desert	59.2	59.2	0	51.1	51.1	0	66.4	66.3	0.1
North America	Subtropical dry forest	87.3	87.3	0	87.3	87.3	0	74.7	74.7	0
North America	Subtropical humid forest	10.8	10.7	0.1	22.4	22.3	0.1	24.1	24.1	0
North America	Subtropical mountain system	45.5	45.4	0.1	44.3	43.7	0.6	46.6	46.1	0.5
North America	Subtropical steppe	53.8	53.8	0	45.6	45.6	0	77.1	77.1	0
North America	Temperate continental forest	0.2	0	0.2	1	0.6	0.4	10.7	10.5	0.2
North America	Temperate desert	67.5	67.5	0	57.4	57.4	0	95.6	95.6	0
North America	Temperate mountain system east	3.9	3.9	0	2.6	2.6	0	29.9	29.9	0
North America	Temperate mountain system west	44	44	0	43.1	43	0.1	53.4	52.3	1.1
North America	Temperate oceanic forest	12.4	12.4	0	6.2	6.2	0	16.5	16.5	0
North America	Temperate steppe	7.6	7.2	0.4	11.9	10.9	1	15.1	8.2	6.9
North America	Tropical dry forest	27.6	27.2	0.4	29.1	26	3.1	25.2	21.3	3.9
North America	Tropical moist forest	42	40.4	1.6	39.4	32.2	7.2	50.3	43.5	6.8
North America	Tropical mountain system	13.6	9.4	4.2	18.3	8	10.3	35.2	27.2	8
North America	Tropical rainforest	23.3	19.9	3.4	26	20.2	5.9	33.6	26	7.6
Oceania	Subtropical desert	13.2	13.2	0	10	10	0.1	21.7	19.9	1.8
Oceania	Subtropical dry forest	25.7	14.4	11.3	34.6	20.2	14.4	47.5	33.1	14.4
Oceania	Subtropical humid forest Au	4.6	4.6	0	0.8	0.8	0	1.3	0.4	0.9
Oceania	Subtropical steppe east	78.8	78.8	0	67.4	67.4	0	71.9	71.9	0
Oceania	Subtropical steppe west	2.9	0	2.9	5.5	0	5.5	6.6	0.3	6.3
Oceania	Temperate mountain system	26.1	26.1	0	17	17	0	26.4	26.4	0
Oceania	Temperate oceanic forest	26.9	26.9	0	18.2	17.9	0.3	41.2	41.2	0
Oceania	Tropical desert east	10.6	10.6	0	1.5	1.5	0	1.9	1.9	0
Oceania	Tropical desert west	0.2	0	0.2	1.1	0.3	0.8	8.7	0.1	8.6
Oceania	Tropical dry forest	33.3	33.3	0	35.9	35.9	0	43.5	43.4	0.1
Oceania	Tropical moist forest	0	0	0	0	0	0	2.6	2.6	0
Oceania	Tropical mountain system	7.4	0	7.4	6.4	0	6.4	22.3	19.1	3.2
Oceania	Tropical rainforest	6.4	2.7	3.7	5.9	4.1	1.8	30.6	28.2	2.4
Oceania	Tropical shrubland	26.9	26.9	0	25	25	0	24.4	22.5	1.9
South America	Subtropical dry forest	41.6	41	0.6	44.1	43.5	0.6	80.7	78.8	1.9
South America	Subtropical humid forest	45.7	45.7	0	45	45	0	45.1	45.1	0

South America	Subtropical mountain system	25.1	25.1	0	22.1	22.1	0	45.7	45.7	0
South America	Subtropical steppe	43.1	43.1	0	33.9	33.9	0	58.1	58.1	0
South America	Temperate mountain system	12.1	12.1	0	17.1	17.1	0	58	58	0
South America	Temperate oceanic forest	5.9	5.5	0.4	7.1	7.1	0	34.1	32.9	1.2
South America	Temperate steppe	51.8	51.8	0	62.9	62.9	0	80.7	80.7	0
South America	Tropical desert	54.9	50	4.9	62.2	57.3	4.9	20.7	15.8	4.9
South America	Tropical dry forest east	48.9	48.4	0.5	49.9	49.2	0.7	57.9	54.3	3.6
South America	Tropical dry forest north	11.5	11.5	0	15.6	15.6	0	75.4	75.4	0
South America	Tropical dry forest south	90.9	90.9	0	74.7	74.7	0	94.4	94.4	0
South America	Tropical moist forest north	11.8	11.8	0	22.2	22	0.2	45.2	45.2	0
South America	Tropical moist forest south	90.7	90.7	0	86.6	86.6	0	97.4	97.4	0
South America	Tropical mountain system east	92.5	92.5	0	93	93	0	97.2	97.2	0
South America	Tropical mountain system west	43.1	42.8	0.3	45.3	44.8	0.5	58.9	58	0.9
South America	Tropical rainforest	70.4	70.4	0	70.7	70.7	0	86	86	0
South America	Tropical shrubland	7.5	3.8	3.8	10	6.3	3.8	20	18.8	1.2

Table S4: Mean trend size (per 41 yr) of trends (total, positive and negative) for FWI₉₅, ISI₉₅ and VPD₉₅ for each continent/biome combination. Values in parentheses are the corresponding mean trend sizes for significant trends only.

Continent	biome	FWI ₉₅			ISI ₉₅			VPD ₉₅		
		all	positive	negative	all	positive	negative	all	positive	negative
Africa	Subtropical dry forest	5.9 (8.7)	6.0 (8.7)	-2.9 (-3.6)	2.4 (3.4)	2.5 (3.4)	-0.5 (-1.0)	5.9 (71.6)	6.1 (71.8)	-0.4 (-4.9)
Africa	Subtropical humid forest	12.7 (15.7)	12.8 (15.7)	-	5.1 (6.4)	5.2 (6.4)	-	5.5 (66.2)	5.6 (66.2)	-
Africa	Subtropical mountain system	23.6 (25.8)	23.7 (25.8)	-	11.9 (12.9)	11.9 (12.9)	-	8.9 (92.1)	9.0 (92.1)	-
Africa	Subtropical steppe	3.0 (8.0)	4.0 (8.2)	-1.3 (-3.0)	1.7 (3.9)	2.3 (4.0)	-0.7 (-1.2)	5.7 (71.9)	5.8 (71.9)	-
Africa	Tropical desert	11.8 (16.5)	13.1 (16.7)	-3.6 (-5.1)	7.4 (10.1)	8.3 (10.2)	-2.2 (-1.9)	4.9 (54.9)	5.1 (56.0)	-2.0 (-43.4)
Africa	Tropical dry forest north	3.5 (8.6)	5.1 (8.9)	-1.4 (-5.1)	1.7 (4.6)	3.2 (5.2)	-1.3 (-3.6)	5.5 (76.9)	6.0 (77.3)	-1.4 (-65.9)
Africa	Tropical dry forest south	5.8 (9.0)	6.7 (10.1)	-3.2 (-6.1)	3.0 (4.8)	3.3 (5.3)	-0.9 (-1.7)	6.6 (70.2)	7.1 (74.4)	-3.6 (-53.7)
Africa	Tropical moist forest north	4.0 (9.8)	5.8 (10.0)	-1.7 (-4.5)	1.2 (3.7)	2.4 (4.2)	-1.2 (-2.6)	3.4 (56.7)	4.5 (61.0)	-1.6 (-34.7)
Africa	Tropical moist forest south	3.1 (6.2)	3.7 (6.4)	-1.3 (-5.1)	1.4 (2.9)	1.7 (3.1)	-0.6 (-1.6)	2.7 (37.9)	2.9 (39.3)	-1.4 (-35.8)
Africa	Tropical mountain system east	6.6 (9.1)	7.0 (9.1)	-	2.0 (2.7)	2.1 (2.7)	-	4.3 (51.6)	4.6 (51.8)	-0.8 (-32.2)
Africa	Tropical mountain system west	5.1 (8.8)	5.5 (8.8)	-	1.3 (2.1)	1.7 (2.3)	-0.8 (-2.4)	5.0 (65.1)	5.2 (65.1)	-
Africa	Tropical rainforest	9.6 (12.5)	10.9 (13.2)	-2.0 (-5.4)	2.3 (3.1)	2.7 (3.3)	-0.6 (-1.6)	6.3 (70.6)	6.7 (72.9)	-3.1 (-74.4)
Africa	Tropical shrubland north	6.6 (8.9)	7.0 (9.0)	-1.4 (-6.3)	4.0 (5.1)	4.4 (5.2)	-1.1 (-4.4)	4.2 (47.3)	4.2 (47.4)	-1.2 (-33.8)
Africa	Tropical shrubland south	12.1 (14.2)	12.4 (14.4)	-5.1 (-5.7)	7.2 (9.1)	7.4 (9.2)	-1.9 (-2.1)	9.5 (96.6)	9.6 (97.1)	-2.3 (-41.8)
Asia	Boreal coniferous forest	3.1 (6.4)	3.1 (6.4)	-	-	-	-	2.6 (27.7)	2.6 (27.7)	-
Asia	Boreal mountain system	4.7 (10.8)	6.1 (11.2)	-2.2 (-5.0)	1.7 (4.1)	2.6 (4.7)	-1.1 (-2.5)	3.1 (57.3)	3.7 (57.3)	-
Asia	Subtropical desert	3.2 (4.5)	6.3 (4.5)	-	2.8 (3.1)	5.6 (3.1)	-	7.6 (82.2)	7.6 (82.2)	-
Asia	Subtropical dry forest	2.4 (6.3)	5.0 (8.2)	-2.5 (-5.3)	1.5 (3.3)	2.3 (3.7)	-1.0 (-2.4)	4.4 (64.5)	5.0 (64.5)	-
Asia	Subtropical humid forest	1.7 (5.9)	2.6 (5.9)	-	0.5 (1.9)	0.9 (1.9)	-0.5 (-1.2)	3.7 (48.7)	3.9 (48.7)	-0.5 (-8.9)
Asia	Subtropical mountain system central	-0.3 (-1.4)	2.6 (10.0)	-1.7 (-4.4)	-0.5 (-2.6)	0.8 (2.7)	-1.0 (-2.7)	0.8 (34.6)	2.2 (50.9)	-0.9 (-28.3)
Asia	Subtropical mountain system east	2.5 (4.8)	5.1 (4.8)	-	2.0 (3.9)	4.1 (3.9)	-	4.4 (44.5)	4.4 (44.5)	-
Asia	Subtropical mountain system west	6.4 (9.2)	7.2 (9.3)	-3.2 (-5.2)	3.0 (4.1)	3.4 (4.1)	-1.5 (-2.0)	6.3 (70.3)	6.5 (70.4)	-1.3 (-37.8)
Asia	Subtropical steppe	1.4 (4.3)	5.1 (6.1)	-4.4 (-9.6)	1.2 (2.6)	3.7 (3.8)	-2.1 (-4.4)	4.8 (71.8)	6.2 (72.0)	-1.8 (-33.8)
Asia	Temperate continental forest	3.1 (9.0)	4.7 (9.0)	-	0.9 (3.0)	1.5 (3.0)	-	2.9 (43.9)	3.2 (43.9)	-
Asia	Temperate desert	3.6 (11.7)	6.1 (11.7)	-	1.1 (3.6)	2.7 (4.8)	-1.7 (-4.1)	4.3 (75.2)	5.7 (79.0)	-1.9 (-47.4)
Asia	Temperate mountain system	3.0 (9.8)	5.2 (10.2)	-1.7 (-4.4)	0.9 (3.2)	1.8 (3.5)	-0.9 (-2.0)	2.6 (40.1)	3.1 (40.5)	-0.7 (-15.9)
Asia	Temperate steppe east	6.7 (15.2)	9.4 (15.5)	-4.9 (-14.7)	2.0 (5.7)	4.2 (7.0)	-2.6 (-6.4)	4.5 (64.2)	5.0 (64.2)	-
Asia	Temperate steppe west	2.7 (12.2)	6.8 (12.2)	-	0.8 (4.3)	2.1 (4.8)	-1.2 (-2.9)	4.2 (83.7)	5.1 (83.7)	-
Asia	Tropical desert	-5.2 (-10.3)	4.7 (9.8)	-7.7 (-10.9)	-3.3 (-5.9)	2.6 (3.2)	-4.7 (-6.1)	3.0 (56.4)	5.2 (74.0)	-3.2 (-74.4)
Asia	Tropical dry forest east	-1.9 (-6.9)	1.7 (5.2)	-3.4 (-7.0)	-0.7 (-2.2)	0.8 (1.5)	-1.5 (-2.7)	-3.5 (-64.8)	1.4 (51.6)	-4.4 (-66.2)
Asia	Tropical dry forest west	-7.3 (-10.9)	-	-7.4 (-10.9)	-3.9 (-5.6)	-	-4.0 (-5.6)	-1.6 (-70.7)	1.4 (40.7)	-3.2 (-76.6)
Asia	Tropical moist forest	-5.5 (-13.1)	1.2 (1.6)	-6.7 (-13.2)	-2.6 (-4.9)	0.7 (1.8)	-3.2 (-5.0)	-3.0 (-69.9)	1.4 (25.5)	-4.4 (-79.8)
Asia	Tropical mountain system	-0.5 (-2.3)	3.8 (7.9)	-4.7 (-9.7)	-0.6 (-1.9)	1.7 (2.6)	-1.9 (-3.4)	0.6 (22.7)	2.3 (34.5)	-2.1 (-47.0)
Asia	Tropical rainforest	0.2 (-2.4)	2.2 (3.8)	-2.5 (-8.2)	0.1 (-0.5)	0.7 (1.5)	-0.9 (-2.6)	1.2 (20.9)	2.3 (29.1)	-2.3 (-54.4)

Asia	Tropical shrubland	-5.7 (-9.1)	-	-6.0 (-9.1)	-2.8 (-4.1)	-	-2.9 (-4.1)	0.3 (3.4)	2.3 (45.9)	-2.2 (-53.2)
Europe	Boreal coniferous forest central	1.6 (-3.1)	2.8 (6.2)	-3.5 (-5.5)	0.7 (0.3)	1.1 (2.1)	-1.5 (-2.2)	2.8 (38.4)	2.8 (38.4)	-
Europe	Boreal coniferous forest east	3.0 (6.3)	3.5 (6.3)	-1.6 (-5.4)	0.8 (1.6)	1.2 (1.9)	-0.7 (-1.7)	2.6 (39.1)	2.6 (39.1)	-
Europe	Boreal coniferous forest west	1.9 (7.2)	3.9 (7.2)	-	0.8 (2.3)	1.4 (2.3)	-	2.2 (34.1)	2.3 (34.1)	-
Europe	Boreal mountain system central	2.0 (6.2)	3.2 (6.5)	-1.7 (-5.4)	0.5 (1.6)	1.2 (2.4)	-0.8 (-2.0)	2.7 (41.5)	2.8 (41.5)	-
Europe	Boreal mountain system east	1.2 (2.6)	2.0 (4.3)	-1.5 (-3.0)	0.5 (1.0)	0.7 (1.6)	-0.4 (-1.1)	1.8 (28.5)	2.0 (28.5)	-
Europe	Boreal tundra woodland east	0.3 (1.7)	1.9 (4.2)	-1.6 (-5.9)	0.0 (0.0)	0.7 (1.5)	-0.6 (-1.6)	1.6 (32.9)	1.8 (32.9)	-
Europe	Boreal tundra woodland west	1.3 (5.8)	2.1 (5.8)	-	0.3 (2.6)	0.9 (2.6)	-	1.6 (44.3)	1.8 (44.3)	-
Europe	Polar	0.4 (2.4)	1.8 (5.2)	-1.0 (-4.3)	-0.3 (-0.7)	0.8 (2.2)	-0.8 (-2.5)	-0.2 (10.8)	1.3 (26.5)	-1.3 (-16.4)
Europe	Subtropical dry forest	5.4 (8.5)	6.1 (8.6)	-2.0 (-6.4)	2.0 (3.1)	2.2 (3.1)	-0.7 (-2.0)	6.2 (73.8)	6.3 (73.8)	-
Europe	Subtropical mountain system	6.8 (9.8)	7.6 (9.9)	-1.9 (-5.1)	2.2 (3.1)	2.3 (3.1)	-	5.8 (72.3)	5.9 (72.3)	-
Europe	Temperate continental forest central	5.3 (11.6)	6.4 (11.6)	-	2.7 (5.0)	3.2 (5.0)	-0.8 (-3.2)	4.0 (51.5)	4.0 (51.5)	-
Europe	Temperate continental forest east	1.7 (5.2)	3.2 (5.2)	-	0.7 (0.9)	1.4 (0.9)	-	1.8 (29.5)	2.3 (29.5)	-
Europe	Temperate continental forest west	8.7 (13.5)	9.2 (13.5)	-	2.5 (3.7)	2.8 (3.7)	-0.5 (-1.4)	6.9 (76.2)	6.9 (76.2)	-
Europe	Temperate desert	26.6 (28.1)	26.6 (28.1)	-	12.2 (13.1)	12.2 (13.1)	-	11.8 (118.1)	11.8 (118.1)	-
Europe	Temperate mountain system	1.8 (6.1)	3.2 (6.5)	-1.2 (-2.7)	0.5 (1.7)	0.9 (1.8)	-0.4 (-1.5)	3.1 (44.4)	3.4 (44.4)	-
Europe	Temperate oceanic forest Europe	3.4 (8.5)	4.2 (9.6)	-2.1 (-8.4)	1.0 (2.2)	1.2 (2.3)	-0.6 (-1.7)	6.3 (71.1)	6.3 (71.2)	-0.4 (-4.1)
Europe	Temperate steppe east	13.3 (15.5)	13.4 (15.5)	-	4.4 (7.0)	4.7 (7.0)	-	1.8 (39.4)	1.9 (39.4)	-
Europe	Temperate steppe west	21.4 (23.3)	21.5 (23.3)	-	7.3 (8.3)	7.3 (8.3)	-	11.3 (122.4)	11.3 (122.4)	-
North America	Boreal coniferous forest east	2.2 (5.7)	2.4 (5.9)	-0.6 (-2.0)	1.3 (2.7)	1.4 (2.7)	-	2.5 (32.5)	2.5 (32.5)	-
North America	Boreal coniferous forest west	0.6 (-3.1)	2.2 (2.7)	-1.8 (-6.0)	0.6 (2.0)	1.1 (2.2)	-0.6 (-2.0)	0.6 (5.3)	1.4 (32.5)	-1.6 (-53.2)
North America	Boreal mountain system	0.8 (4.7)	2.0 (6.5)	-1.1 (-4.1)	0.2 (1.8)	0.6 (2.1)	-0.5 (-1.6)	1.6 (31.8)	1.9 (32.5)	-0.7 (-18.9)
North America	Boreal tundra woodland east	0.6 (-0.8)	2.1 (4.6)	-1.7 (-4.8)	0.2 (0.7)	0.9 (2.5)	-0.9 (-3.0)	1.7 (30.0)	1.8 (30.0)	-
North America	Boreal tundra woodland west	2.2 (7.7)	3.3 (9.7)	-1.8 (-5.7)	0.9 (2.7)	1.3 (2.9)	-0.5 (-1.9)	1.8 (38.2)	2.2 (38.7)	-0.9 (-35.9)
North America	Polar	0.6 (3.9)	3.7 (7.9)	-0.7 (-7.3)	0.2 (1.5)	1.5 (3.3)	-0.3 (-2.9)	0.7 (9.8)	1.1 (12.0)	-1.7 (-40.4)
North America	Subtropical desert	9.5 (13.3)	9.6 (13.3)	-	4.6 (7.4)	4.9 (7.4)	-	5.0 (64.8)	5.3 (65.0)	-0.8 (-26.7)
North America	Subtropical dry forest	8.9 (9.2)	8.9 (9.2)	-	3.6 (3.7)	3.6 (3.7)	-	7.8 (89.9)	7.8 (89.9)	-
North America	Subtropical humid forest	2.8 (7.5)	3.6 (7.6)	-1.6 (-3.1)	0.9 (1.9)	1.0 (1.9)	-0.3 (-1.4)	2.8 (58.4)	3.2 (58.4)	-
North America	Subtropical mountain system	9.1 (16.0)	10.6 (16.0)	-1.3 (-3.3)	3.8 (7.3)	4.5 (7.4)	-0.5 (-1.3)	3.5 (59.4)	4.1 (60.4)	-1.1 (-33.7)
North America	Subtropical steppe	14.0 (21.2)	14.3 (21.2)	-	6.2 (10.5)	6.5 (10.5)	-	6.9 (79.6)	6.9 (79.6)	-
North America	Temperate continental forest	0.8 (-5.4)	-	-1.3 (-5.4)	0.3 (0.3)	0.6 (1.5)	-0.5 (-1.7)	1.7 (29.2)	1.8 (30.0)	-0.5 (-18.9)
North America	Temperate desert	10.3 (12.8)	10.3 (12.8)	-	4.2 (5.5)	4.3 (5.5)	-	7.0 (72.0)	7.0 (72.0)	-
North America	Temperate mountain system east	1.8 (4.0)	2.0 (4.0)	-	0.7 (1.9)	0.8 (1.9)	-	1.6 (19.9)	1.6 (19.9)	-
North America	Temperate mountain system west	7.0 (15.0)	10.0 (15.0)	-1.4 (-3.8)	2.2 (4.8)	3.2 (4.9)	-0.5 (-1.1)	3.8 (62.8)	4.6 (64.5)	-1.0 (-21.7)
North America	Temperate oceanic forest	2.1 (6.6)	2.5 (6.6)	-	0.2 (1.5)	0.5 (1.5)	-	2.4 (72.5)	2.7 (72.5)	-
North America	Temperate steppe	0.3 (14.1)	5.5 (15.4)	-4.0 (-12.2)	1.0 (6.0)	2.6 (6.9)	-1.5 (-4.0)	-0.4 (4.3)	2.7 (52.1)	-2.7 (-52.2)
North America	Tropical dry forest	3.1 (8.1)	5.3 (8.4)	-1.6 (-9.2)	1.1 (3.0)	2.1 (3.7)	-0.8 (-2.6)	1.3 (28.3)	2.8 (42.0)	-1.6 (-46.9)
North America	Tropical moist forest	4.8 (8.5)	6.2 (9.2)	-3.0 (-7.9)	0.7 (1.5)	1.6 (2.4)	-1.4 (-3.0)	2.4 (43.6)	4.0 (58.9)	-2.9 (-52.6)
North America	Tropical mountain system	1.6 (4.9)	4.9 (9.5)	-3.3 (-6.5)	-0.1 (-0.1)	1.1 (2.3)	-1.3 (-2.2)	1.1 (26.4)	2.9 (47.4)	-1.8 (-45.3)

North America	Tropical rainforest	2.8 (6.9)	5.0 (8.8)	-3.1 (-5.1)	0.5 (1.3)	1.1 (2.1)	-0.7 (-1.5)	2.2 (48.2)	3.8 (72.5)	-1.6 (-35.7)
Oceania	Subtropical desert	4.5 (14.9)	5.9 (14.9)	-	2.2 (9.1)	3.6 (9.2)	-1.5 (-4.7)	2.0 (66.8)	4.4 (80.2)	-2.3 (-83.0)
Oceania	Subtropical dry forest	2.7 (5.2)	5.8 (14.6)	-4.2 (-6.2)	1.3 (2.2)	3.0 (5.8)	-1.8 (-2.9)	1.8 (29.3)	4.6 (64.7)	-3.2 (-52.1)
Oceania	Subtropical humid forest Au	5.6 (10.1)	5.7 (10.1)	-	1.3 (1.4)	1.4 (1.4)	-	0.8 (-7.4)	1.6 (42.6)	-1.2 (-32.4)
Oceania	Subtropical steppe east	13.5 (15.1)	13.5 (15.1)	-	6.3 (8.1)	6.4 (8.1)	-	8.8 (108.9)	9.0 (108.9)	-
Oceania	Subtropical steppe west	-0.5 (-5.6)	-	-2.7 (-5.6)	-0.4 (-3.3)	-	-1.6 (-3.3)	0.0 (-59.4)	2.4 (48.3)	-2.8 (-64.2)
Oceania	Temperate mountain system	4.5 (4.0)	4.7 (4.0)	-	1.3 (1.6)	1.5 (1.6)	-	2.5 (32.6)	2.8 (32.6)	-
Oceania	Temperate oceanic forest	2.2 (3.5)	2.9 (3.5)	-	0.7 (1.4)	1.2 (1.5)	-0.7 (-3.1)	1.9 (30.2)	2.4 (30.2)	-
Oceania	Tropical desert east	3.4 (8.7)	4.2 (8.7)	-	0.6 (4.5)	1.7 (4.5)	-	1.4 (47.2)	2.0 (47.2)	-
Oceania	Tropical desert west	0.2 (-5.9)	-	-1.7 (-5.9)	-0.5 (-1.9)	1.4 (4.0)	-1.9 (-4.2)	-2.0 (-79.3)	1.2 (48.9)	-2.5 (-81.4)
Oceania	Tropical dry forest	4.9 (6.8)	5.1 (6.8)	-	2.7 (3.4)	2.7 (3.4)	-	3.2 (60.5)	4.0 (60.7)	-1.2 (-22.3)
Oceania	Tropical moist forest	-	-	-	-	-	-	-1.4 (8.8)	0.6 (8.8)	-
Oceania	Tropical mountain system	-0.4 (-1.1)	-	-0.5 (-1.1)	-0.3 (-0.6)	-	-0.3 (-0.6)	0.2 (6.5)	0.6 (10.4)	-0.7 (-16.5)
Oceania	Tropical rainforest	-0.7 (-2.6)	1.2 (2.2)	-1.6 (-6.2)	-0.2 (0.0)	0.5 (0.8)	-0.5 (-2.0)	0.4 (16.9)	1.2 (19.8)	-0.9 (-17.3)
Oceania	Tropical shrubland	5.5 (8.0)	5.6 (8.0)	-	2.5 (3.6)	2.6 (3.6)	-	2.1 (50.1)	3.1 (58.3)	-1.7 (-47.0)
South America	Subtropical dry forest	3.6 (5.6)	3.8 (5.6)	-	1.1 (1.7)	1.2 (1.7)	-0.5 (-0.8)	3.5 (40.4)	3.6 (41.5)	-0.4 (-6.3)
South America	Subtropical humid forest	6.2 (12.4)	8.0 (12.4)	-	2.0 (4.0)	2.5 (4.0)	-	2.8 (52.5)	3.7 (52.5)	-
South America	Subtropical mountain system	4.4 (8.8)	5.1 (8.8)	-	1.3 (2.5)	1.7 (2.5)	-	1.4 (23.4)	1.6 (23.4)	-
South America	Subtropical steppe	10.3 (16.9)	10.4 (16.9)	-	3.2 (6.2)	3.5 (6.2)	-	4.4 (64.0)	4.4 (64.0)	-
South America	Temperate mountain system	1.4 (4.6)	2.0 (4.6)	-	0.6 (1.8)	0.9 (1.8)	-	2.0 (26.7)	2.0 (26.7)	-
South America	Temperate oceanic forest	0.9 (5.1)	1.2 (5.4)	-0.3 (-3.3)	0.4 (2.5)	0.6 (2.5)	-	1.2 (21.9)	1.4 (22.9)	-0.1 (-5.1)
South America	Temperate steppe	7.7 (10.1)	7.8 (10.1)	-	4.9 (6.5)	5.0 (6.5)	-	3.2 (36.2)	3.3 (36.2)	-
South America	Tropical desert	2.7 (2.7)	3.7 (4.5)	-1.5 (-2.6)	1.1 (0.9)	1.6 (1.2)	-0.3 (-0.7)	0.4 (15.7)	0.9 (23.8)	-0.4 (-11.0)
South America	Tropical dry forest east	4.4 (7.6)	5.5 (7.7)	-1.5 (-3.3)	1.9 (3.3)	2.4 (3.3)	-0.8 (-1.9)	3.6 (59.7)	4.9 (65.3)	-1.3 (-23.5)
South America	Tropical dry forest north	3.1 (8.1)	4.0 (8.1)	-	0.6 (1.9)	1.0 (1.9)	-	3.7 (47.4)	4.3 (47.4)	-
South America	Tropical dry forest south	15.1 (15.8)	15.1 (15.8)	-	5.0 (5.7)	5.0 (5.7)	-	9.3 (95.4)	9.3 (95.4)	-
South America	Tropical moist forest north	3.2 (9.5)	4.1 (9.5)	-	1.0 (2.6)	1.5 (2.7)	-0.7 (-1.8)	4.1 (71.7)	4.7 (71.7)	-
South America	Tropical moist forest south	13.7 (14.6)	13.8 (14.6)	-	4.7 (5.1)	4.8 (5.1)	-	9.9 (101.2)	9.9 (101.2)	-
South America	Tropical mountain system east	14.5 (15.5)	14.5 (15.5)	-	4.6 (4.9)	4.6 (4.9)	-	9.6 (98.4)	9.6 (98.4)	-
South America	Tropical mountain system west	4.2 (6.0)	5.1 (6.1)	-1.5 (-7.2)	1.4 (2.2)	1.9 (2.2)	-1.1 (-1.8)	2.1 (30.9)	2.4 (31.9)	-0.9 (-31.4)
South America	Tropical rainforest	9.5 (12.7)	9.9 (12.7)	-	2.8 (3.7)	2.9 (3.7)	-0.4 (-1.1)	8.3 (92.9)	8.4 (92.9)	-0.7 (-25.1)
South America	Tropical shrubland	0.2 (-3.4)	-	-1.4 (-3.4)	0.0 (-0.4)	0.7 (0.4)	-0.5 (-0.8)	0.5 (19.3)	1.1 (21.0)	-0.9 (-6.4)

Table S5: Percentage of significant trends of FWI₉₅ and ISI₉₅ that are identified with changes in each input variable: temperature (T), precipitation (P), relative humidity (RH) and wind speed (WS), as well as Vapor Pressure Deficit (VPD).

Continent	Biome	FWI ₉₅					ISI ₉₅				
		T	P	RH	WS	VPD	T	P	RH	WS	VPD
Africa	Subtropical dry forest	28.7	0.8	62	7.8	35.3	21.7	4.3	62.3	5.4	33.3
Africa	Subtropical humid forest	59.5	4.1	93.2	24.3	82.4	32.9	2.4	94.1	16.5	69.4
Africa	Subtropical mountain system	16.1	0.4	85.5	5.6	40.7	7.6	0.8	69.1	3.8	16.9
Africa	Subtropical steppe	46.6	3.4	65.5	13.8	58.6	50.8	6.3	77.8	14.3	60.3
Africa	Tropical desert	8.5	0.8	49.9	3.7	18.5	10.4	0.9	58.5	3.4	19.7
Africa	Tropical dry forest north	79.1	1.9	27	49	84.1	78.3	1.8	32.6	41.8	83.6
Africa	Tropical dry forest south	37.1	6.9	82.1	6.6	57.9	39.2	8.4	85.3	7.3	58.1
Africa	Tropical moist forest north	49.8	3.6	51.4	34	78	68.7	5.3	70.4	33.5	80.5
Africa	Tropical moist forest south	38.4	8.9	67.5	28	65.7	40	10.7	68.5	28.5	61.5
Africa	Tropical mountain system east	78.2	24.8	67.4	19	87.9	72	25.5	72.4	18.4	84.3
Africa	Tropical mountain system west	85.3	11.8	88.2	23.5	97.1	83.3	10	80	13.3	96.7
Africa	Tropical rainforest	63.4	21.4	64.4	7.5	81.7	77.5	38.9	93	14.6	91.6
Africa	Tropical shrubland north	21.3	3.3	36.7	22.2	39.7	20.8	3.7	37.7	20.9	37
Africa	Tropical shrubland south	15.1	1.2	62.6	2.4	35.5	12.5	1.7	68.2	2.2	34.3
Asia	Boreal coniferous forest	100	100	100	0	100	0	0	0	0	0
Asia	Boreal mountain system	14.5	12	65.1	4.8	48.2	11.9	15.5	94	11.9	48.8
Asia	Subtropical desert	36	0	77.9	14	31.4	33.7	1.2	80.2	10.5	27.9
Asia	Subtropical dry forest	39.7	4.4	73.5	17.6	83.8	32.9	3.8	68.4	11.4	72.2
Asia	Subtropical humid forest	49.8	26.6	94.6	21.7	94.6	43.9	17.2	86.2	9.3	90.3
Asia	Subtropical mountain system central	38.4	24	84	7.2	78.4	26.2	27.7	97.2	24.1	52.5
Asia	Subtropical mountain system east	0	0	0	0	0	0	0	0	0	0
Asia	Subtropical mountain	51.7	4.6	78.7	11.3	65	42.7	4.7	78.8	8.2	62.2

	system west										
Asia	Subtropical steppe	40.1	1.6	73.8	24.6	47.6	34.7	3	76.9	20.1	45.5
Asia	Temperate continental forest	63.2	27.9	72.4	12	88.6	36.2	14	88.3	10.2	73.6
Asia	Temperate desert	33.7	9.9	80.1	7.6	67.6	43.1	11.7	92	8.4	72.1
Asia	Temperate mountain system	32.3	20.3	66.5	12.6	75.5	30.9	25.9	85.5	23.7	73.8
Asia	Temperate steppe east	19.5	17	71.2	12.6	49.7	21.6	14.7	82.6	13.4	52.1
Asia	Temperate steppe west	68.8	35.6	76.9	15.9	85.9	57.9	7.5	73.8	22.4	65.4
Asia	Tropical desert	14.9	2.1	76.5	12.3	20.6	13.1	1.6	80.2	16.9	15.9
Asia	Tropical dry forest east	17.6	5.9	97.6	27.1	57.6	22.7	6.3	91.4	21.9	57
Asia	Tropical dry forest west	10.4	6.5	94.8	47.1	33.1	6	6.7	88.8	40.1	14.2
Asia	Tropical moist forest	25.6	10.8	95.7	42.7	52.6	14.3	7.9	88.4	30.9	36.2
Asia	Tropical mountain system	38.8	17.5	80.1	28.3	50	29.9	16.9	89.3	23.2	40.7
Asia	Tropical rainforest	47.4	42.4	87.2	21.6	68	47.1	39.1	93.7	24.3	67.2
Asia	Tropical shrubland	6.2	5.3	90	32.1	23.2	8.2	3.8	88.9	23.2	21
Europe	Boreal coniferous forest central	84.3	12	97.3	13.7	36.8	46.6	7.4	93.8	10.5	53.4
Europe	Boreal coniferous forest east	81	27	89.9	8.3	83	45.2	22.2	89.4	7.1	51
Europe	Boreal coniferous forest west	67.7	25.2	86.2	5.8	69.8	47.6	25.1	79.2	21.7	51.3
Europe	Boreal mountain system central	25.3	13.1	66.3	12.7	42.8	26.1	11.4	86.5	14.8	28.2
Europe	Boreal mountain system east	80.1	27.9	84.3	12.6	80.3	56.2	29.1	91.9	19.4	71.4
Europe	Boreal tundra woodland east	73.6	42.5	95.4	13.8	80.5	52.6	31.6	96.8	18.9	54.7
Europe	Boreal tundra woodland west	88.9	5.6	77.8	11.1	94.4	100	5	90	5	70
Europe	Polar	76.9	36.9	93.8	7.7	78.5	64.1	26.9	93.6	9.6	73.7
Europe	Subtropical dry forest	29.3	3.8	80.6	10.8	63.7	28.4	4.5	84.8	7	62.7
Europe	Subtropical mountain system	26.9	6.2	92.4	9	77.9	18.5	4.1	90.4	5.5	58.9
Europe	Temperate continental forest central	26.1	11.1	86.3	19.4	50.9	21.5	7	86.2	15.1	42.8
Europe	Temperate continental forest east	0	0	100	0	100	0	0	100	0	50
Europe	Temperate continental forest west	28.2	7.3	87.5	2.1	54.7	17.7	10.5	92.7	2.2	48.8

Europe	Temperate desert	45	2	90.6	2	34.2	57.1	1.4	98	2	49.7
Europe	Temperate mountain system	45.7	20.4	74.3	11.8	68.9	34	21.3	91.8	13.5	65.2
Europe	Temperate oceanic forest Europe	36.6	8.9	97.6	4.9	91.9	51.2	24.4	90.6	13	91.3
Europe	Temperate steppe east	2.6	1.6	53.4	5.8	7.4	13.8	4.6	78.9	13.8	24.8
Europe	Temperate steppe west	19	3.4	83.1	2.2	35.5	34.1	5.7	93.3	2.4	48
North America	Boreal coniferous forest east	66	22.6	69.8	1.9	71.7	65.8	26.6	72.8	8.9	86.1
North America	Boreal coniferous forest west	71.4	14.3	100	14.3	71.4	43.5	30.6	97.9	9.3	63.7
North America	Boreal mountain system	48	8.8	91.2	10.8	79.4	36	15.3	97.3	23.4	79.3
North America	Boreal tundra woodland east	29.3	13.1	91.9	52.5	44.4	48.6	27.8	98.6	30.6	79.2
North America	Boreal tundra woodland west	52.5	9.1	90.9	7.6	81.5	50.2	7.8	91.2	8.1	66.3
North America	Polar	54.1	17.5	88.1	6.9	79.8	63.9	23.5	90.8	12.1	81.3
North America	Subtropical desert	8.6	3.3	69.6	10.4	20.3	13.9	5.2	72	8.9	24.6
North America	Subtropical dry forest	5.8	1.4	98.6	10.1	20.3	13	1.4	97.1	10.1	36.2
North America	Subtropical humid forest	49.7	15.3	97.7	5.6	89.3	45.2	3.5	71.4	8.7	74.1
North America	Subtropical mountain system	12	6.3	88.6	19.5	35.4	14.4	6.7	84	20.2	35.7
North America	Subtropical steppe	21.8	8.1	84.7	5.4	36.2	24.8	5.9	97.7	7.8	39.1
North America	Temperate continental forest	50	25	87.5	37.5	50	76.5	41.2	64.7	32.4	88.2
North America	Temperate desert	28.7	4.5	80.4	5.4	48.2	35.5	6.9	88.5	4.1	53.6
North America	Temperate mountain system east	55.9	2.9	85.3	2.9	88.2	60.9	4.3	95.7	4.3	82.6
North America	Temperate mountain system west	33	2.8	85.5	3.6	49.6	39.4	4.2	94.8	3	50.1
North America	Temperate oceanic forest	50	0	25	0	83.3	66.7	16.7	100	16.7	100
North America	Temperate steppe	19.1	6	77.9	15.7	26.4	13.3	5.6	93.1	17.2	21.9
North America	Tropical dry forest	17.4	6	69.1	22.1	31.5	19.1	7	68.8	14.6	40.1
North America	Tropical moist forest	38.9	3.5	50.6	11.7	54.1	39.8	9.1	71	24.9	58.9
North America	Tropical mountain system	65.5	31	75.9	31	75.9	71.8	25.6	89.7	28.2	87.2
North America	Tropical rainforest	72.2	17.2	71.5	17.2	77.5	65.1	18.9	79.3	20.7	79.9
Oceania	Subtropical desert	41.5	13.6	95.1	18.9	64	44.4	14	98.4	11.6	61.8
Oceania	Subtropical dry forest	54.5	10.6	97	7.6	81.8	36	4.5	89.9	2.2	69.7

Oceania	Subtropical humid forest Au	54.5	18.2	72.7	18.2	100	100	0	50	0	100
Oceania	Subtropical steppe east	51.9	1.3	97.3	3.9	72.3	44.1	1.9	99.5	2.8	68.3
Oceania	Subtropical steppe west	30	0	90	30	90	26.3	10.5	73.7	26.3	42.1
Oceania	Temperate mountain system	50.5	16.5	55.7	5.2	59.8	69.8	17.5	77.8	15.9	65.1
Oceania	Temperate oceanic forest	74	4.2	58.3	5.2	71.9	84.6	7.7	86.2	6.2	81.5
Oceania	Tropical desert east	12.5	8.9	50	46.4	30.4	12.5	12.5	100	62.5	37.5
Oceania	Tropical desert west	33.3	0	100	0	100	56.3	12.5	81.3	50	93.8
Oceania	Tropical dry forest	21.8	9	78.8	18.9	71.8	20.2	6.5	78.3	15.1	57
Oceania	Tropical moist forest	0	0	0	0	0	0	0	0	0	0
Oceania	Tropical mountain system	42.9	71.4	100	0	71.4	66.7	83.3	100	0	66.7
Oceania	Tropical rainforest	57.5	35	75	25	75	51.4	40.5	86.5	21.6	75.7
Oceania	Tropical shrubland	26.9	13.5	87.2	27.2	65.1	24.5	11.7	85.2	24.8	43.4
South America	Subtropical dry forest	35.8	0	100	6	86.6	77.5	7	98.6	2.8	95.8
South America	Subtropical humid forest	10.1	6.7	87.6	7.5	47.3	10.1	5	91.4	6.8	29.1
South America	Subtropical mountain system	23.5	8.8	61.8	16.2	45.6	15	15	78.3	18.3	40
South America	Subtropical steppe	18	8.4	54.7	6.8	42.1	8.3	10.4	64.1	16.9	24.6
South America	Temperate mountain system	64.7	17.6	88.2	23.5	82.4	54.2	16.7	83.3	4.2	70.8
South America	Temperate oceanic forest	13.8	3.4	96.6	6.9	69	34.3	2.9	91.4	11.4	68.6
South America	Temperate steppe	17.4	10.4	79.5	12.4	36.4	12.8	4.9	78.7	6.8	26.6
South America	Tropical desert	11.1	0	75.6	15.6	20	3.9	0	82.4	15.7	13.7
South America	Tropical dry forest east	59.1	14.5	38.2	21.4	53.2	62.2	16.1	42.3	17	56.6
South America	Tropical dry forest north	92.9	35.7	78.6	28.6	85.7	94.7	42.1	84.2	21.1	94.7
South America	Tropical dry forest south	32.6	15.6	59.1	5.8	61.7	63.7	30.6	86.5	25.4	79.4
South America	Tropical moist forest north	95.1	28.2	87.3	35.9	94.4	89.1	21	89.1	25.5	95.9
South America	Tropical moist forest south	47.3	3.2	75.3	2.7	68.5	48.6	4.9	78.7	2.6	64.2
South America	Tropical mountain system east	17.7	1.5	78.3	1	49	12.6	1.5	53.3	0.5	30.2
South America	Tropical mountain system west	50.9	33.3	60.9	11.3	59	51.6	31.8	64	10.3	60.6
South America	Tropical rainforest	60.4	21.1	87.8	2.1	93	62.3	25	94.2	3.4	95.1
South America	Tropical shrubland	16.7	0	50	16.7	66.7	25	0	75	37.5	75

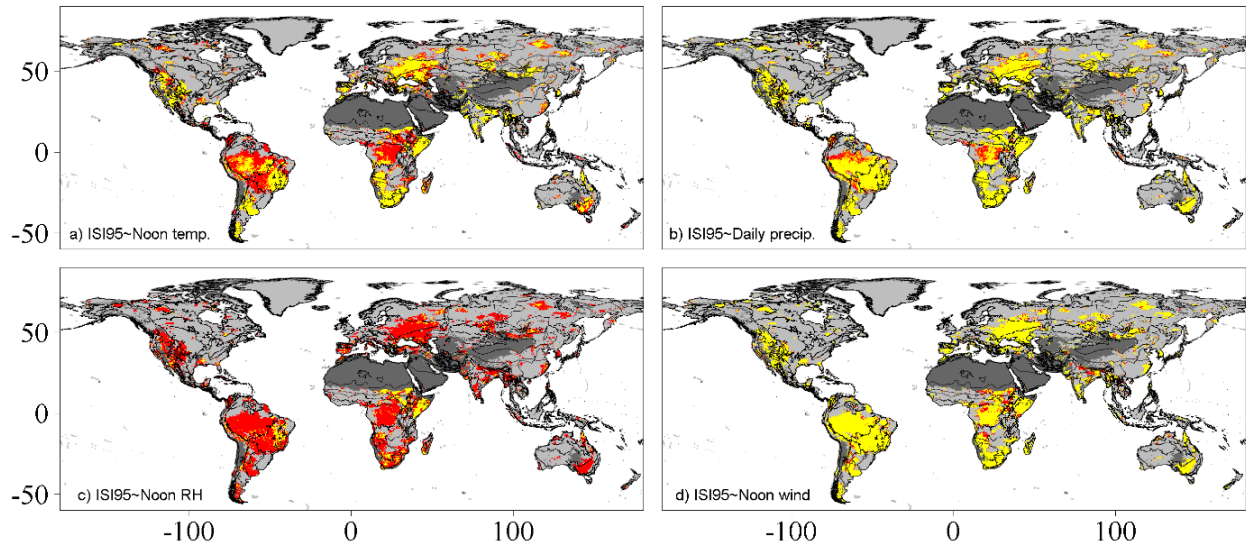


Figure S3: FWI inputs attributed as drivers of the 95th percentile of annual ISI values (ISI₉₅), as determined by the partial Mann-Kendall test (see methods). Yellow regions indicate where trends in the response variable, ISI₉₅, are significant, but where the corresponding input variable is not a driver of the observed trend. Red regions indicate where ISI₉₅ trends are significant and the corresponding input variable is a driver of the observed trend.