SUPPLEMENTARY MATERIAL
TABLES

Table S1 - Same as Table 2 in the manuscript, except for **spring**. Seasonal change in the number of occurrences (per year) of each WT in each region, 1979 to 2017. Note that regions 16 and 17 are not included (as they are south of the study domain).

	HC	H	HW	C	S	W	DC	D	DW	CFP	WFP
1	-3	-4	4	-5	-3	4	-1	0	3	1	0
2	-3	-1	1	-5	-1	3	-1	-1	6	0	0
3	-5	-5	0	-5	-5	2	0	4	10	1	0
4	-2	-3	9	-4	-2	2	-2	1	1	0	1
5	0	0	3	-1	-1	0	-1	-1	0	0	0
6	-3	-3	3	-3	-5	1	0	3	8	1	0
7	-2	-2	1	-1	1	0	-3	2	4	0	-1
8	-1	1	2	-7	3	4	-6	0	3	0	0
9	-3	1	4	-15	2	9	-7	-1	9	0	0
10	-2	1	2	-4	1	4	-3	0	1	0	0
11	-1	2	1	-6	3	4	-3	0	1	0	0
12	6	3	-1	3	-1	-5	2	-3	-7	0	0
13	3	4	1	1	-1	-2	1	-3	-5	0	0
14	4	0	-1	1	-3	-2	0	-1	-1	1	2
15	-8	-7	-5	-5	-3	1	1	6	16	1	1
18	-5	-7	-5	-3	-4	2	1	6	12	1	1
AVG	0	1	2	-4	-1	2	-2	-1	2	0	0

Table S2 - Same as Table 1 in the manuscript, except for **summer.** Seasonal change in the number of occurrences (per year) of each WT in each region, 1979 to 2017. Note that regions 16 and 17 are not included (as they are south of the study domain).

	HC	H	HW	C	S	W	DC	D	DW	CFP	WFP
1	-7	-7	1	-3	-6	3	-2	0	6	0	1
2	6	0	5	-3	-11	-2	-1	-5	-1	0	1
3	-4	-1	10	-7	-10	7	-2	-3	5	-1	0
4	-4	-6	2	-3	-3	1	-3	2	4	0	1
5	0	3	5	-4	1	2	-6	-1	1	-2	0
6	-3	-6	0	-3	-4	1	0	2	6	1	1
7	0	3	5	-7	0	3	-5	-1	4	-1	-1
8	-2	0	5	-2	-1	2	-2	-1	1	0	0
9	-2	2	7	-6	-1	3	-2	-2	-1	0	0
10	3	7	5	-3	-2	0	-3	-3	-3	0	0
11	-3	1	5	-2	-1	2	-2	-1	0	0	0
12	6	5	5	-1	-3	-2	-2	-4	-4	-1	0
13	10	11	6	-3	-2	-3	-3	-7	-7	-1	0
14	-1	0	2	-4	-2	1	-2	1	4	0	1
15	-7	-1	0	-5	1	5	-1	3	6	-1	0
18	-1	-2	0	-5	-4	3	-3	1	9	1	0
AVG	-1	2	6	-5	-5	2	-3	-3	1	-1	0

Table S3 - Same as Table 2 in the manuscript, except for **autumn**. Seasonal change in the number of occurrences (per year) of each WT in each region, 1979 to 2017. Note that regions 16 and 17 are not included (as they are south of the study domain).

	HC	H	HW	C	S	W	DC	D	DW	CFP	WFP
1	-4	-3	0	-4	-1	1	-1	3	6	0	0
2	2	6	4	-2	-3	-5	0	-2	-3	0	0
3	-2	-1	7	-5	-8	1	-1	0	2	0	0
4	-2	-3	1	-6	0	1	-2	3	6	0	0
5	-4	-1	10	-8	0	5	-6	1	4	-1	-1
6	-2	-2	4	-4	-1	1	-2	1	2	1	0
7	-8	-2	12	-13	1	8	-6	3	6	0	0
8	-3	1	4	-6	1	6	-6	-1	2	0	0
9	-6	-1	10	-14	-1	12	-8	-1	8	0	0
10	-2	1	5	-10	4	9	-7	0	3	-1	0
11	-5	0	10	-10	-1	9	-6	-1	5	0	0
12	3	3	3	0	-1	-2	-1	-3	-3	0	0
13	1	4	5	0	0	0	-4	-2	-2	0	0
14	-1	1	4	-1	-3	0	0	0	2	0	0
15	-3	-1	-1	-2	-5	2	-1	0	7	0	0
18	-3	-3	2	-4	-4	3	0	1	6	0	0
AVG	-3	1	8	-8	-3	5	-4	-2	3	0	0

Table S4 - Same as Table 3 in the manuscript, except for **winter**. Seasonal change in the number of occurrences (per year) of each WT in each region, 1979 to 2017. Note that regions 16 and 17 are not included (as they are south of the study domain).

	HC	H	HW	C	S	W	DC	D	DW	CFP	WFP
1	-3	-2	6	-2	-1	1	-2	1	1	1	1
2	0	2	6	-3	-1	1	-2	-3	-2	0	0
3	-3	-7	-1	-3	-6	1	2	6	8	1	0
4	-2	-2	5	-3	0	1	-5	2	3	0	0
5	0	1	4	-2	2	3	-8	0	3	-1	-1
6	-2	-2	1	-3	0	0	-3	4	7	1	0
7	0	1	3	-6	5	4	-11	2	4	-2	-1
8	-3	2	4	-5	0	8	-6	0	3	0	0
9	-8	3	8	-14	-1	17	-11	-7	13	0	0
10	-1	3	2	-5	3	4	-7	-1	5	0	0
11	1	0	0	0	1	-1	-2	0	0	0	0
12	0	1	1	0	1	0	-2	0	-1	0	0
13	1	2	3	-1	1	2	-8	1	1	0	0
14	2	3	1	1	1	-2	-2	-2	-3	1	0
15	-3	-6	-5	1	-4	-3	3	4	8	1	0
18	0	-5	0	0	-4	-2	2	2	4	1	0
AVG	-1	1	4	-4	-1	4	-5	-1	4	0	0

Table S5 – Spatial correlations between local Theil-Sen derived slopes of temperature (SlopeT) or dew point (SlopeD) and slopes from each GWTC WTs.

	HC	H	HW	C	S	W	DC	D	DW	CFP	WFP
SlopeT	-0.584	-0.177	0.513	-0.656	0.317	0.779	-0.679	0.197	0.566	-0.082	-0.277
SlopeD	0.029	0.419	0.536	-0.363	0.395	0.377	-0.825	-0.355	-0.149	-0.234	-0.305

FIGURES:

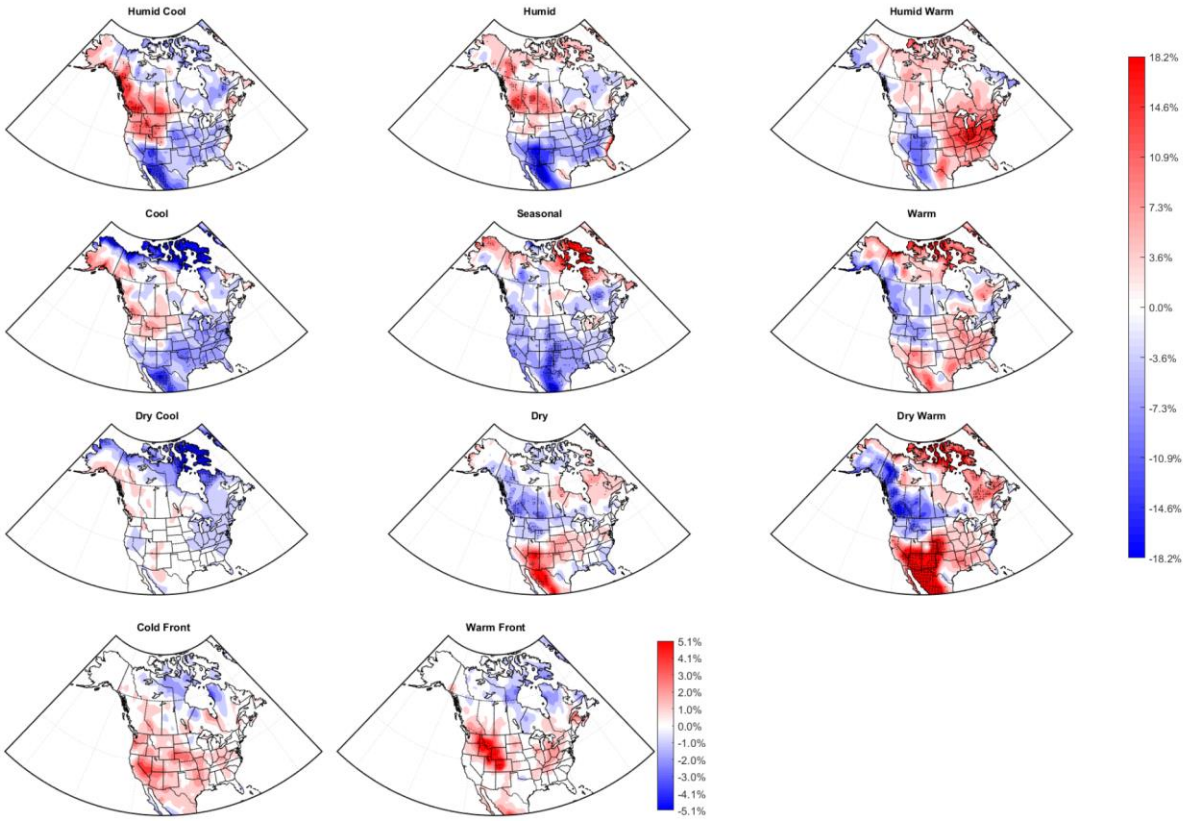

Figure S1 – Same as Figure 3 in the manuscript, except for **spring**. The average percentage-point change in the seasonal percent-frequency of occurrence of each WT, 1979-2017. Note that the 9 'core WTs' share the large color bar, while the two 'transitional WTs' share the smaller colorbar. White areas indicate areas of near-zero change. Dots show locations of statistical significance ($p<0.05$).

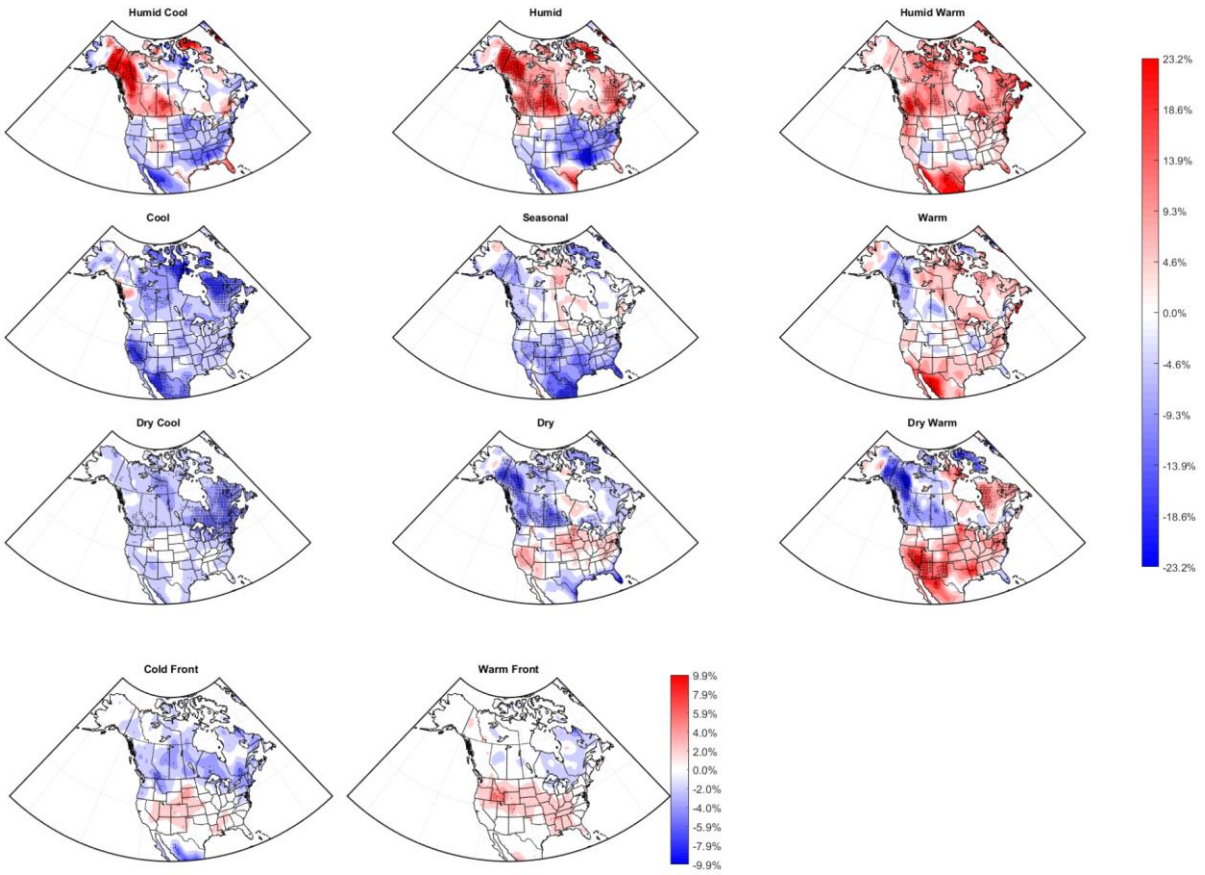

Figure S2 – Same as Figure 3 in the manuscript, except for **summer**. The average percentage-point change in the seasonal percent-frequency of occurrence of each WT, 1979-2017. Note that the 9 'core WTs' share the large color bar, while the two 'transitional WTs' share the smaller colorbar. White areas indicate areas of near-zero change. Dots show locations of statistical significance ($p<0.05$).

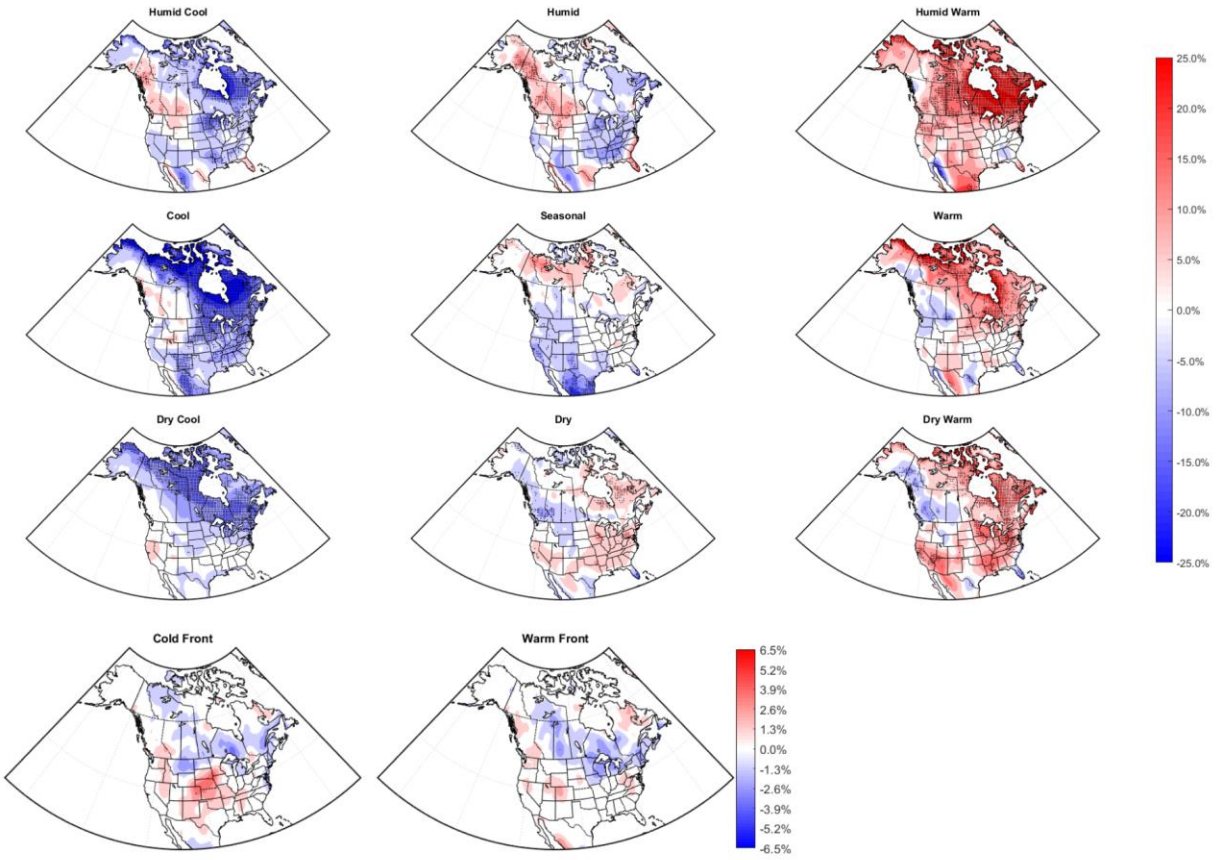

Figure S3 – Same as Figure 3 in the manuscript, except for **autumn**. The average percentage-point change in the seasonal percent-frequency of occurrence of each WT, 1979-2017. Note that the 9 'core WTs' share the large color bar, while the two 'transitional WTs' share the smaller colorbar. White areas indicate areas of near-zero change. Dots show locations of statistical significance ($p<0.05$).

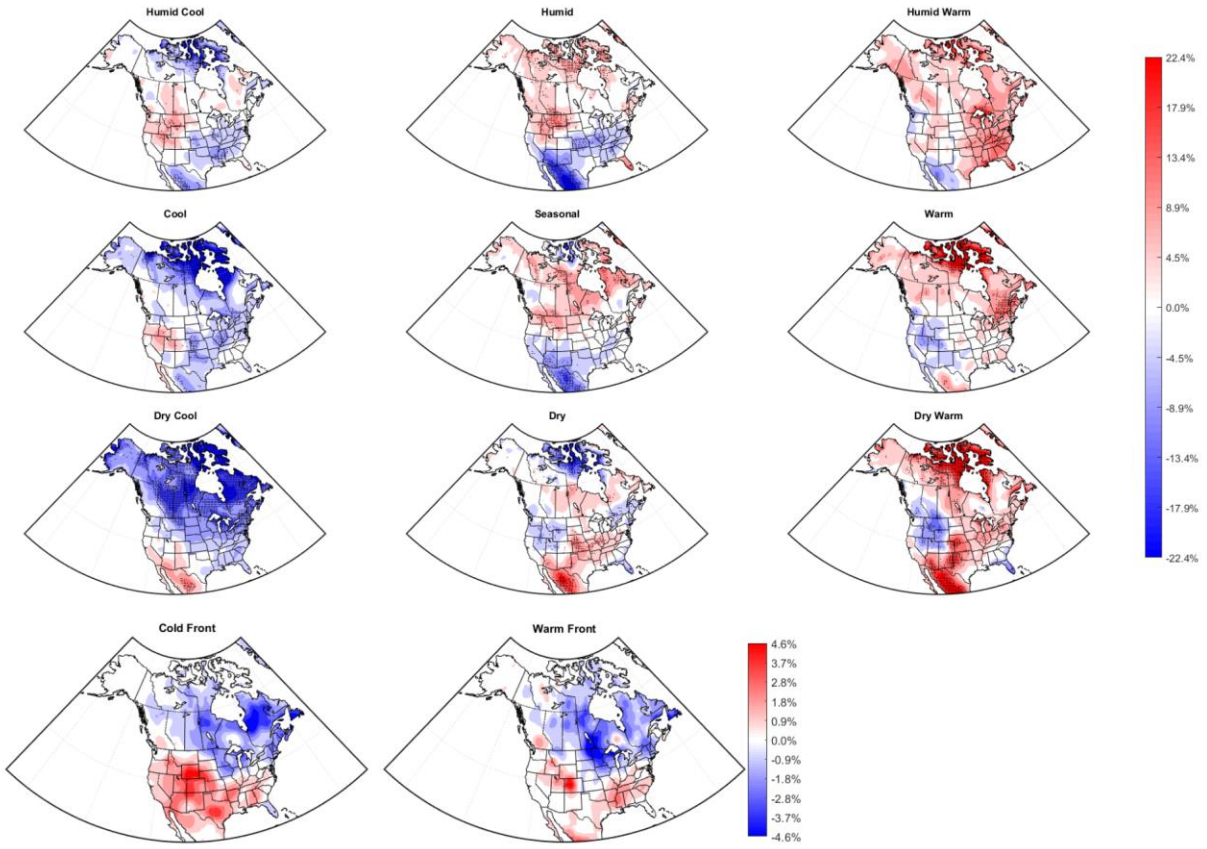

Figure S4 – Same as Figure 3 in the manuscript, except for **winter**. The average percentage-point change in the seasonal percent-frequency of occurrence of each WT, 1979-2017. Note that the 9 'core WTs' share the large color bar, while the two 'transitional WTs' share the smaller colorbar. White areas indicate areas of near-zero change. Dots show locations of statistical significance ($p<0.05$).

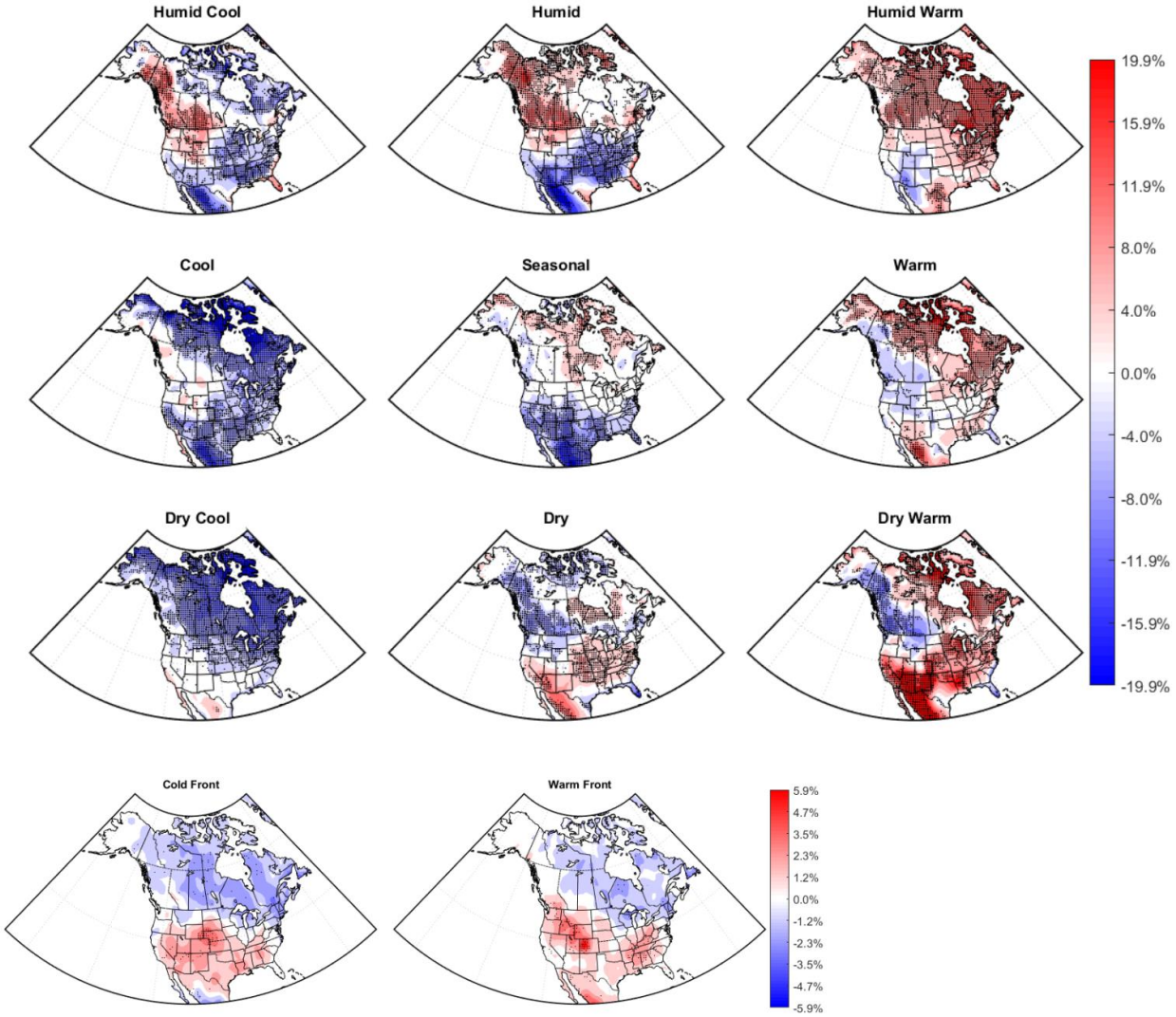

Figure S5 – Same as Figure 3 in the manuscript, except for displaying the percentage-point change from the 16 different analyses of alternate time domains (leaving out 1-3 years at the start and end of the time period). Note that the 9 'core WTs' share the large color bar, while the two 'transition WTs' share the smaller colorbar. White areas indicate areas of near-zero change. Dots show locations of statistical significance ($p<0.05$) derived from averaged p-values from the 16 different analyses.

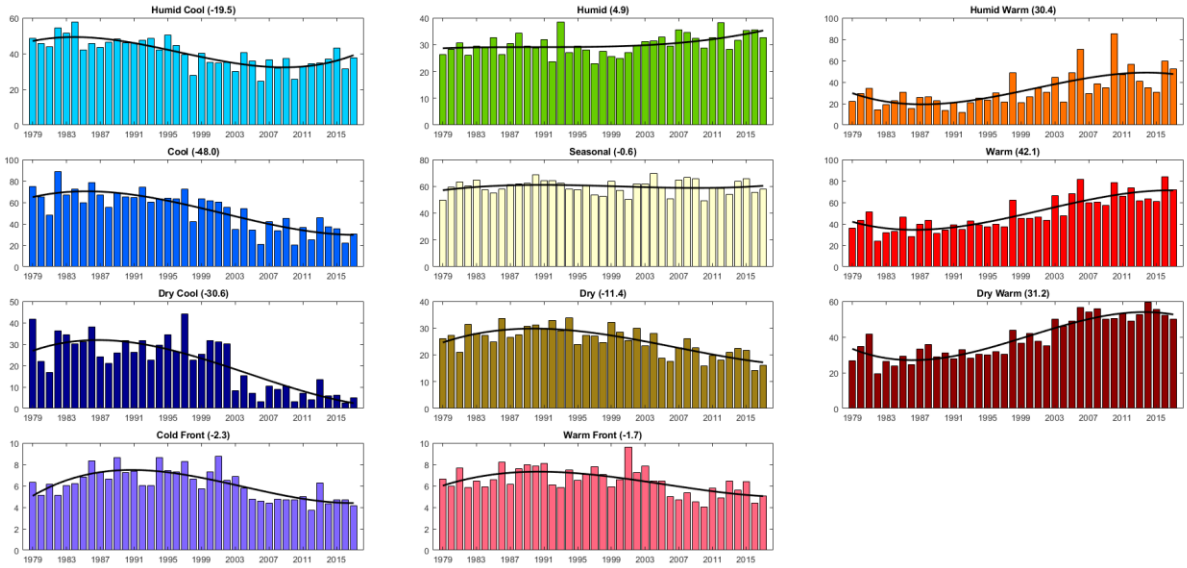

Figure S6 – Year-over-year plots of the number of occurrences of each WT averaged across **Region 9**. The black line in each plot is a third-order polynomial fit to the underlying data in the bar graphs. Numbers in the title of each subplot indicate the total number of days/year change in each WT as calculated using Theil-Sen (and thus, match the numbers in Table 2). NOTE: the y-axis in each subplot can differ.