

Climate Projections for the National Capital Region

Volume 2: Plots and Tabular Data for all the Climate Indices

June 2020

Ottawa

NCC
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Appendix F - Plots of Climate Indices

Table F.1: Formulas of Temperature Indices.

	Type of Index	Index Name	Formulas (Tx = daily max. temp., Tg = daily mean temp., SN = daily snowfall, Tn = daily min. temp., RR = daily precip., SD = daily snow depth)	Unit	In-Text	App. F Plots	App. G Tables
TEMPERATURE	Maxima and Minima	Warmest Temperature of the Year	Max. Tx over each year	°C	2.3.3	F1	G1
		Coldest Temperature of the Year	Min. Tn over each year	°C		F1	G1
		Warmest Monthly Temperature	Max. Tx over each month	°C		F1	G1
		Monthly Min. of Daily Max. Temperature	Min. Tx over each month	°C			G1
		Monthly Max. of Daily Min. Temperature	Max. Tn over each month	°C			G1
		Coldest Monthly Temperature	Min. Tn over each month	°C	2.3.2	F1	G1
	Thresholds and Ranges	Number of Hot Days (Daily Max. Temperature > 30°C)	Number of days with Tx > 30 °C	# days/year	2.3.3	F1	G1
		Number of Tropical Nights (Daily. Min Temperature > 20°C)	Number of days with Tn > 20 °C	# days/year		F1	G1
		Number of Deep Freeze Events (Daily Min. Temperature < -10°C)	Number of days with Tn <-10 °C	# days/year	2.3.2	F1	G1
		Number of Days Daily Max. Temperature < -34, -5, 0, or > 0, 5, 10, 15, 20, 25, 35°C	Number of days Tx < -34, -5, 0, and Tx > 0, 5, 10, 15, 20, 25, 35 °C	# days/season			G1
		Number of Days Daily Min. Temperature < -34, -28, -20, -15, -5, 0°C	Number of days Tn < -34, -28, -20, -15, -5, 0	# days/season			G1
		Number of Days Daily Max. Temperature is between -20– -10, -10–0, 0–5, 4–10, 10–15, 15–20, 20–25, 18–34, 26–29, 22–30°C	Number of days Tx btw (-20– -10, -10–0, 0–5, 4–10, 10–15, 15–20, 20-25, 18–34, 26–29, 22–30°C)	# days/season			G1
		Seasonal Temperature Range	Difference between max. Tx and min. Tn for each season	°C			G1
	Averages, Timing and Seasons	Annual Average Temperature	Avg. of the Tg over each year	°C	2.3.1	F1	G1
		Seasonal Average Temperature	Avg. of the Tg over each season	°C		F1	G1
		Monthly Average Temperature	Avg. of the Tg over each month	°C	2.3.1	F1	G1
		Growing Season Length	Count btw first span of 6 days with Tg > 5ºC & first span 6 days Tg <5°C (after July 1st)	# days/year		F1	G1
		Frost Season Length	Max. length where [30 day-moving avg. of Tg] < 0°C	# days/year		F1	G1
		Potato Growing Season Length	Number of days Tn > 7°C and Tx < 30°C	# days/year			G1
		Corn Heat Units	Cumulative sum of corn heat units[1] over the "Growing Season" (see above)	units			G1
		Timing of Tulip Emergence and Blooming	Date when number of 5°C growing degree days* exceeds 20, 120	day		F1	G1
		Timing of First Fall Frost	First day when Tn < 0 (after July 15)	day	2.3.4	F1	G1
		Timing of Last Spring Frost	Last day when Tn < 0 (assessed backwards from July 15)	day	2.3.4	F1	G1
		Timing of Warmest Month	Month of the year with the highest avg. temp.	month		F1	G1
		Timing of Coldest Month	Month of the year with the lowest avg. temp.	month		F1	G1
	Winter Melt and Freeze-thaw	Winter Melting Episode	Number of periods more than 3 consec. days Tg > 0°C (Dec, Jan, Feb)	# days/season			G1
		Annual Freeze-Thaw Cycles	Number of days Tx > 0ºC and Tn < 0ºC	# days/year		F1	G1
		Seasonal Freeze-Thaw Cycles	Number of days Tx > 0ºC and Tn < 0ºC	# days/season	2.3.5	F1	G1
	Warm and Cold Spells	Frequency of Warm Spells (Max. Temperature > 32°C for 3 Days)	Number of periods where more than 3 consec. days Tx > 32°C	# periods/year			G1
		Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days)	Number of periods where more than 2 consec. Tx > 31 and Tn > 20°C	# periods/year	2.3.3	F1	G1
		Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C)	Number of periods Tx > 31 and Tn > 20°C	# days/year			G1
		Frequency of Cold Spells (Max. Temperature ≤ -10°C for 5 Days)	Number of periods where more than 5 consec. days Tx ≤-10°C (Aug to July)	# periods/year		F1	G1
	Design	Heating Degree Days	Annual sum of the # of the degrees C that each day's Tg < 17, 18 °C	°C days		F1	G1
		Freezing Degree Days	Annual sum of the # of degrees C that each day's Tg < 0°C	°C days			G1
		Above Freezing Degree Days	Annual sum of the # of degrees C that each day's Tg > 0°C	°C days			G1
		Cooling Degree Days (18°C)	Annual sum of the # of degrees C that each day's Tg > 18°C	°C days		F1	G1
		Winter Melting Degree Days	Winter sum of the # of degrees C that each day's Tg is > 0°C	°C days			G1
		January 2.5% Design Temperature Approximation	Monthly min. Tg in January	°C			G1
		July 2.5% Design Temperature Approximation	Monthly max. Tg in July	°C			G1

Corn Heat Units = 1.8*(Tn-4.4) + 3.3*(Tx-10) - 0.084*(Tx-10)^2]/2 (cumulative over growing season)

Table F.2: Formulas of Precipitation, Humidity, and Wind Indices.

	Type of Index	Index Name	Formulas (Tx = daily max. temp., Tg = daily mean temp., SN = daily snowfall, Tn = daily min. temp., RR = daily precip., SD = daily snow depth)	Unit	In-Text	App. F Plots	App. G Tables
PRECIPITATION	Totals	Annual Total Precipitation	Sum RR over each year	mm	2.4.1	F2	G2
		Monthly Total Precipitation	Sum RR over each month	mm	2.4.1	F2	G2
	Return Periods	1 in 100 Year 1-Day Precipitation	Extreme value analysis (100-year return period)	mm	2.4.3	F2	G2
		1 in 2, 5, 20, 50, 350 Year 1-Day Precipitation	Extreme value analysis (2, 5, 20, 50, 350-year return periods)	mm		F2	G2
		1 in 100, 350 Year (2-Day, 5-Day) Precipitation	Extreme value analysis (100, 350 -year return periods)	mm		F2	G2
		1 in 50 Year Hourly Precipitation	Extreme value analysis (50-year return period)	mm	2.4.3	F2	G2
		1 in 2, 5, 10, 20, 50, 100 Year (1, 3, 6, 12 -Hourly) Precipitation	Extreme value analysis (2, 5, 10, 20, 50, 100- year return periods)	mm		F2	G2
	Maxima	Annual Max. 1-Day Precipitation	Max. over each year	mm	2.4.3	F2	G2
		Annual Max. (2-Day, 5-Day) Precipitation	Max. over each year	mm		F2	G2
		Monthly Max. 1-Day Precipitation	Max. over each month	mm	2.4.3	F2	G2
		Monthly Max. (2-Day, 5-Day) Precipitation	Max. over each month	mm			G2
	Thresholds	Number of Days Precipitation > 20 mm	Number of days RR > 20 mm	# days/year	2.4.3	F2	G2
		Monthly Number of Days Precip > 10 mm	Sum for each month of number of days RR > 10 mm	# Days	2.4.3		G2
		Number of Days Precipitation > 1, 10, 25, 50 mm	Number of days RR > 1, 10, 25, 50 mm	# days/year		F2	G2
		Number of 2-Day Precipitation > 50 mm	Number of periods 2-day RR > 50 mm	# periods/year		F2	G2
		Number of Hours Precipitation > 25, 50 mm	Number of hours where hourly precip > 25, 50mm	# hours/year			G2
	Wet and Dry Spells	Max. Length of Dry Spell	Max. number of consec. days RR < 1mm for each year	# days		F2	G2
		Max. Length of Wet Spell	Max. number of consec. days RR ≥ 1mm for each year	# days		F2	G2
	Timing	Timing of Wettest Month	Month of the year with the greatest total precip.	month			G2
		Timing of Dryest Month	Month of the year with the least total precip.	month			G2
PRECIPITATION (SNOW)	Totals and Maxima	Annual Total Snowfall	Annual total SN (Aug - Jul)	cm	2.4.4	F2	G2
		Monthly Total Snowfall	Monthly total SN (Aug - Jul)	cm	2.4.4	F2	G2
		Annual Max. 1-Day Snowfall	Annual max. SN (Aug - Jul)	cm/day	2.4.6	F2	G2
	Thresholds	Number of Days with Snowfall	Number of days SN ≥ 1 cm/day (Aug - Jun)	# days/year	2.4.5	F2	G2
		Number of Days with Snowfall ≥ 10 cm/day	Count days SN ≥ 10 cm/day	# days/year		F2	G2
	Snow Depth	Annual Max. Snow Depth	Annual max. SD (Aug - Jul)	cm	2.4.6	F2	G2
		Number of Days with Snow Depth > 8, 21 cm	Count days SD ≥ 8, 21 cm	# days/year		F2	G2
		Annual Max. 3-Day and 7-Day Snow Melt Water Equivalent	Annual max. of the "melt" (decrease in SD) over 3 and 7 days	mm		F2	G2
	Duration	Number of Days with Snow Cover	Number of days SD ≥ 2 cm (Aug - July)	# days/year	2.4.5	F2	G2
		Duration From First to Last Day of Snow	Number of days between first and last day that SN ≥ 1 cm/day	# days		F2	G2
	Timing	Timing of Month with Max. Snowfall	Month of the year with max. total SN	month		F2	G2
		Timing of Month with Max. Snow Depth	Month of the year with max. SD	month		F2	G2
		Timing of First Snowfall	First day when SN ≥ 1 cm (after July 15)	day	2.4.5	F2	G2
		Timing of Last Snowfall	Last day when SN ≥ 1 cm (before July 15)	day	2.4.5	F2	G2
		Timing of Max. 3-Day Snow Melt Water Equivalent	Timing of max. "melt" (decrease in SD) over 3 and 7 days	day		F2	G2
HUM. /WIND	Monthly	Monthly Average Wind Speed	Wind speed ave/ over each month (based on hourly or 3-hourly data)	m/s	2.5.1	F3	G3
	Extremes	1 in 2, 5, 10, 20, 50, 100 Year 3-Hourly Wind Speed	Extreme value analysis (1, 5, 10, 50, 100-year return periods)	m/s		F3	G3
		Number of Hours Wind Speed > 10, 20, 40 km/hr	Number of hours > 10, 40 km/hr	# hours/year			G3
	Averages	Monthly Average Relative Humidity at the Time of Max. Daily Temperature	Avg. of the daily relative humidity (at the time of maximum temp.)	%	2.6.1	F4	G4

Table F.3: Formulas of Indices for Other Parameters.

	Type of Index	Index Name	Formulas (Tx = daily max. temp., Tg = daily mean temp., SN = daily snowfall, Tn = daily min. temp., RR = daily precip., SD = daily snow depth)	Unit	In-Text	App. F Plots	App. G Tables
COMBINED	Winter Precipitation & Melt	Snowfall Approximation (Based on Precipitation and Temperature)	Total precip. when Tg < -3ºC	mm			G5
		Winter Rain Approximation (Based on Precipitation From Dec.–Feb. and Temperature)	Total precip. when Tx > 0ºC (from Dec -Feb)	mm			G5
		Max. 3-Day Sum of Snow Melt and Precipitation	Max. sum of the "melt" (decrease in Sd) and RR in a 3-day period	mm		F5	G5
		Winter Rain > 10 mm and Freezing	Daily "Winter Rain Approximation" > 10 mm when Tn <0 (from Dec -Feb)	# days/year			G5
		Snow Melt Water Equivalent > 10 mm and Freezing	Melt (descrease in Sd) > 10 mm and Tn <0	# days/year			G5
	Comb. with Winds	Winds > 20 km/hr and Winter Precipitation > 1 mm	Number of days wind > 20 km/hr (Dec-Feb) and total precip. > 1 mm	# days/year			G5
		Number of Days Wind Chill is between -35°C and -25°C	Number of days wind chill[2] > -35°C & < -25°C	# days/year	2.5.1	F5	G5
		Number of Days Wind > 10, 20 km/hr and Snowfall > 1, 5 cm	Number of days daily mean wind > 10, 20 km/hr and Sp > 1,5 cm	# days/year		F5	G5
	Summer Conditions & Drought	Number of Days Humidex > 30, 35, 40°C	Number of days where humidex[3] > 30, 35, 40 °C	# days/year		F5	G5
		Number of Periods Humidex > 40°C for 2 Days	Number of periods where more than 2 consec. days humidex [3] > 40°C	# periods/year	2.6.2	F5	G5
		Number of Periods Humidex > 30, 35°C for 2 Days	Number of periods where more than 2 consec. days humidex [3] > 30, 35°C	# periods/year		F5	G5
		Number of Days Chandler Burning Index (Fire Index) > 75, 90	Number of days Chandler Burning Index[4] > 75,90	# days/year			G5
		Water Scarcity Approximation (Based on Precipitation and Temperature)	Number of periods when RR < 1mm and Tg > 20°C	# days/year			G5
EXTREME & OTHER	Extreme Events	Freezing Rain & Ice Storms	Literature	NA	2.8.1		
		Extreme Snow & Blizzards	Literature	NA	2.8.2		
		Extreme Winds & Gusts	Literature	NA	2.8.3		
		Tornadoes	Literature	NA	2.8.4		
		Hurricanes	Literature	NA	2.8.5		
		Lightning	Literature	NA	2.8.6		
	Other	Evapotranspiration, Drought, & Wildfire	Literature	NA	2.8.7		
		Air Quality	Literature	NA	2.8.8		
		Acid Rain	Literature	NA	2.8.9		
		Shorwave Radiation (UV)	Literature	NA	2.8.10		

Wind chill = 35.74 +0.6215Tg - 35.75*(V^0.16) + 0.4275Tg*(V^0.16) where V = daily mean windspeed (km/hr)
Humidex = Tx + (0.555)*(e-10), where e=6.11 exp [5417.7530*((1/273.16)-1/Tdp))] where Tdp= dew point temp. in K (Tdp = T - ((100 - RH)/5))
Chandler Burning Index = (((110-1.373*RH)-0.54*(10.20-Tx))*(124*10^(-0.0142*RH)))/60
Growing Degree Days (Base 5) = ((Tx+Tn)/2)-T_5

F1 Temperature

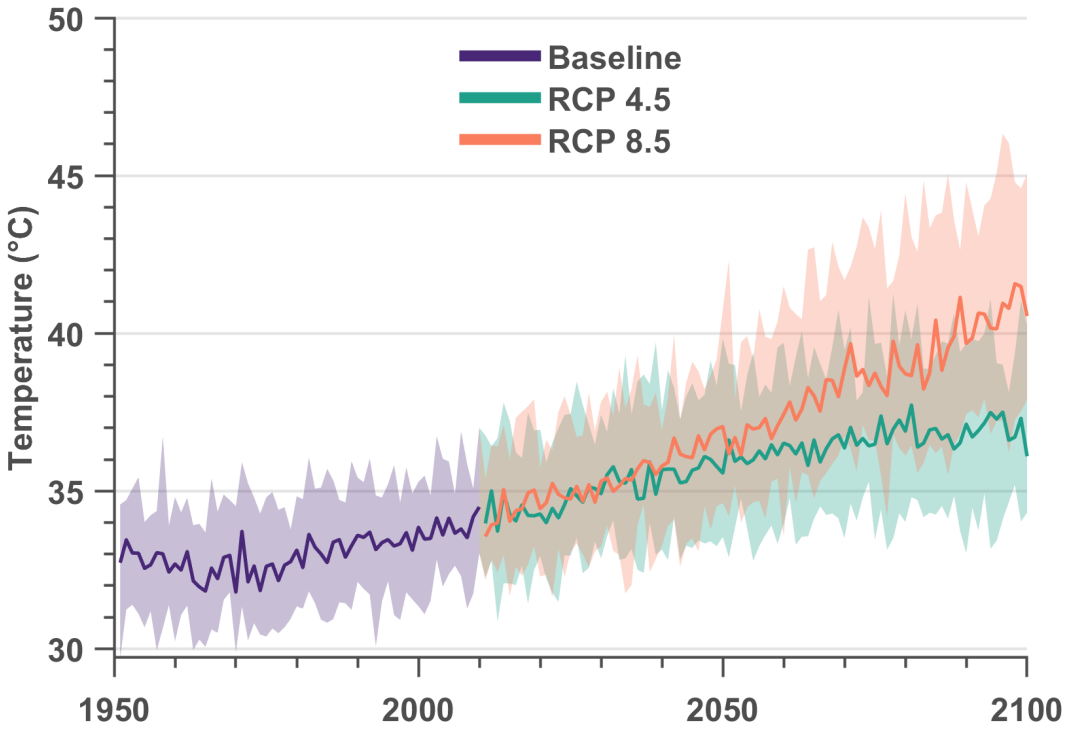


Figure F1.1: Warmest Temperature of the Year.

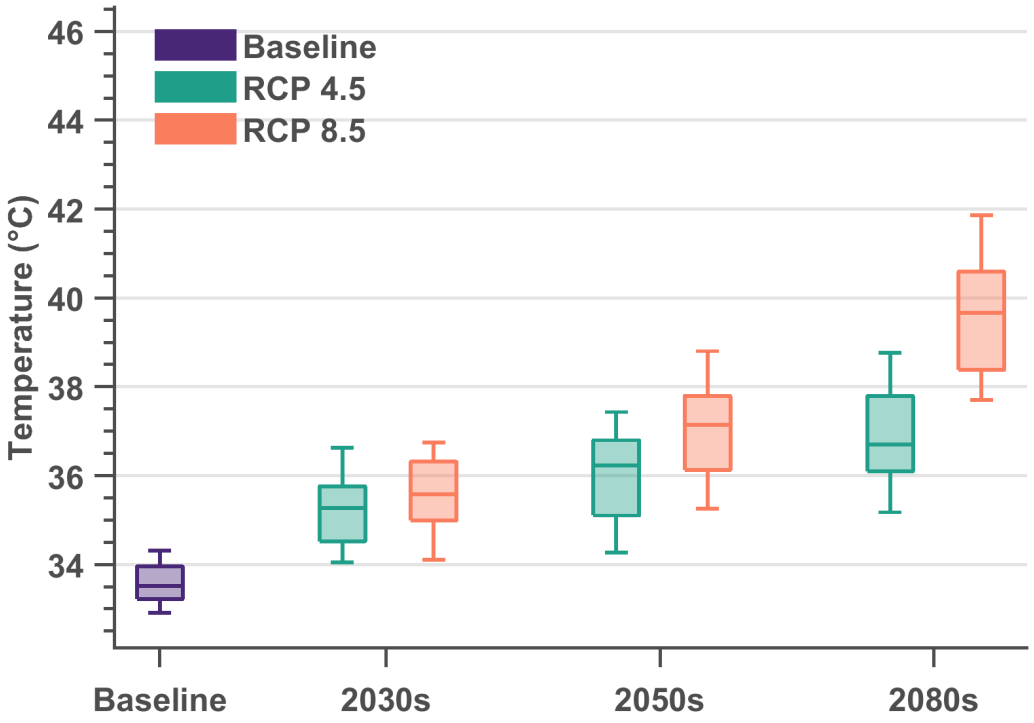


Figure F1.2: Warmest Temperature of the Year.

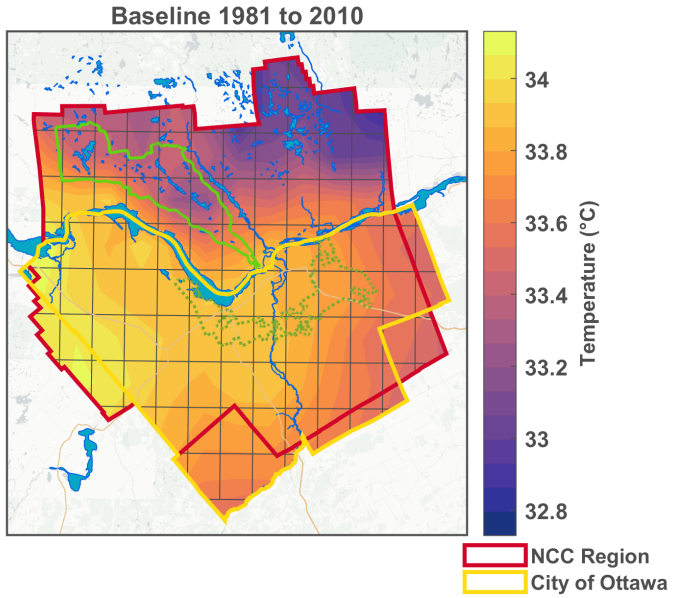


Figure F1.3: Warmest Temperature of the Year - Baseline.

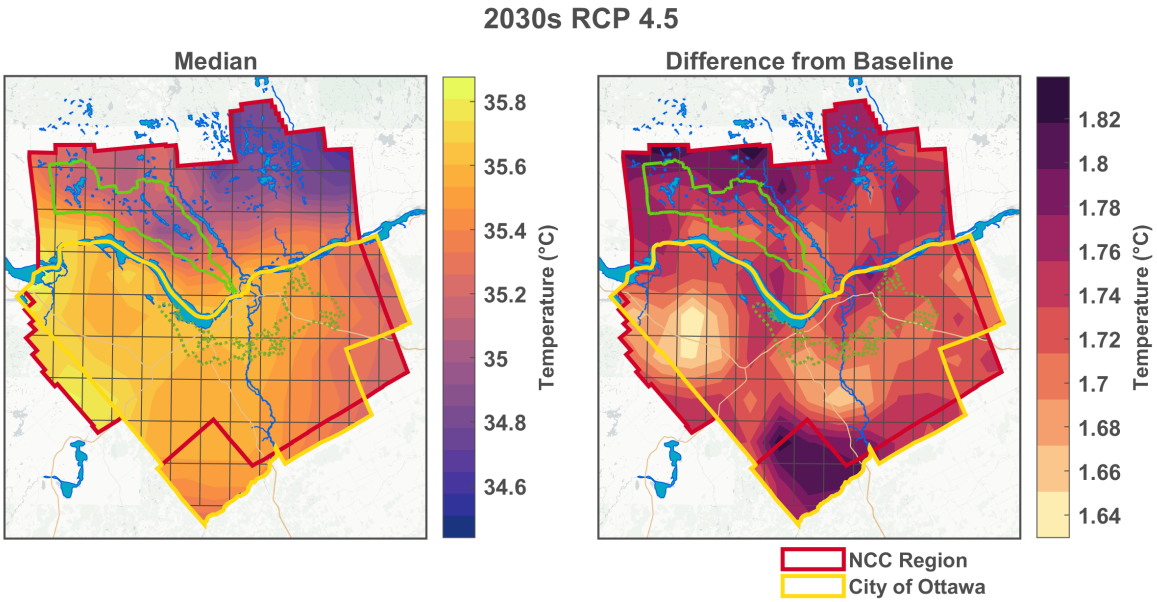


Figure F1.4: Warmest Temperature of the Year - 2030s RCP 4.5.

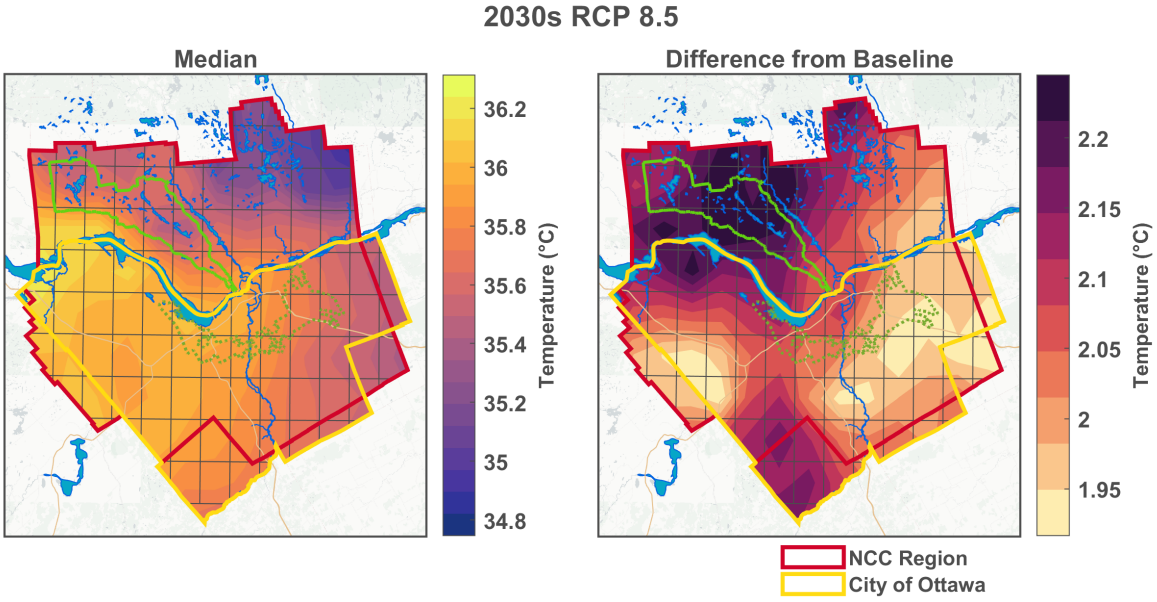


Figure F1.5: Warmest Temperature of the Year - 2030s RCP 8.5.

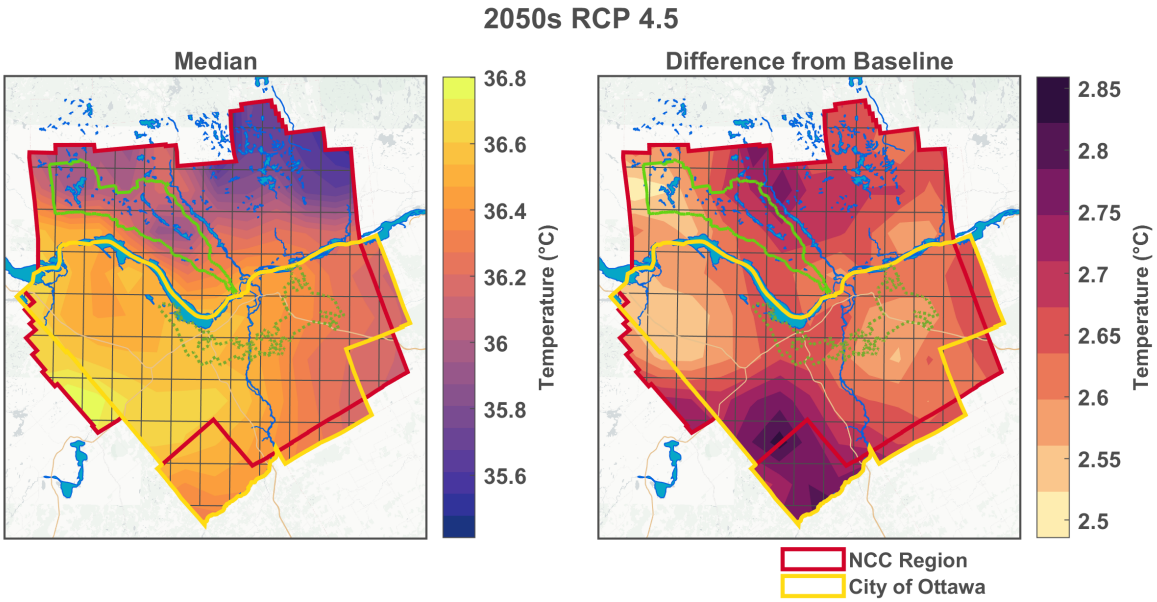


Figure F1.6: Warmest Temperature of the Year - 2050s RCP 4.5.

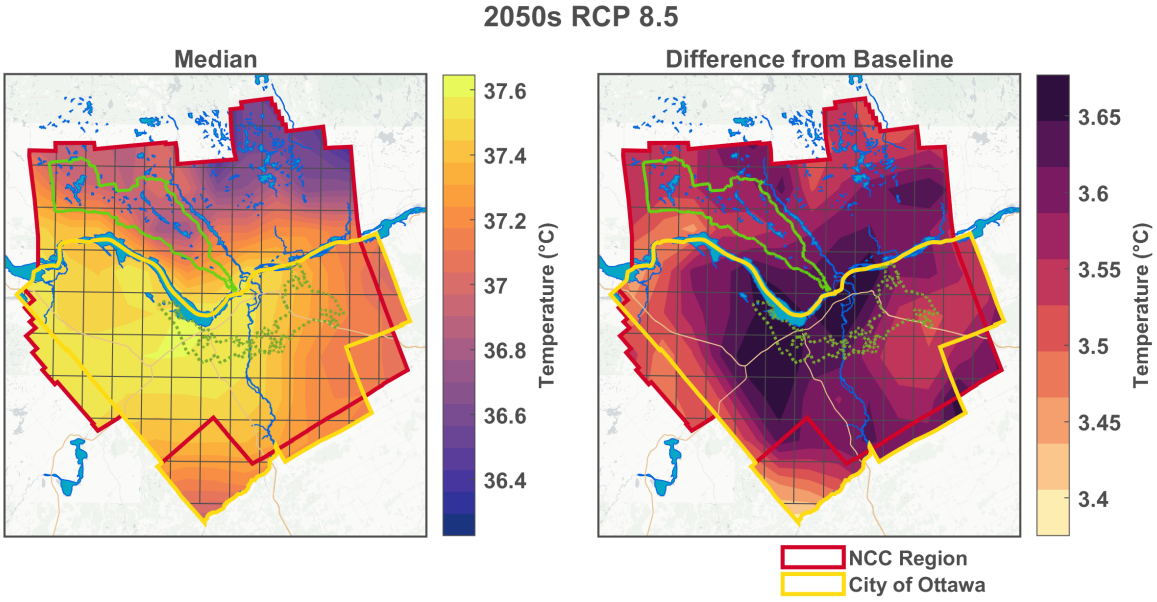


Figure F1.7: Warmest Temperature of the Year - 2050s RCP 8.5.

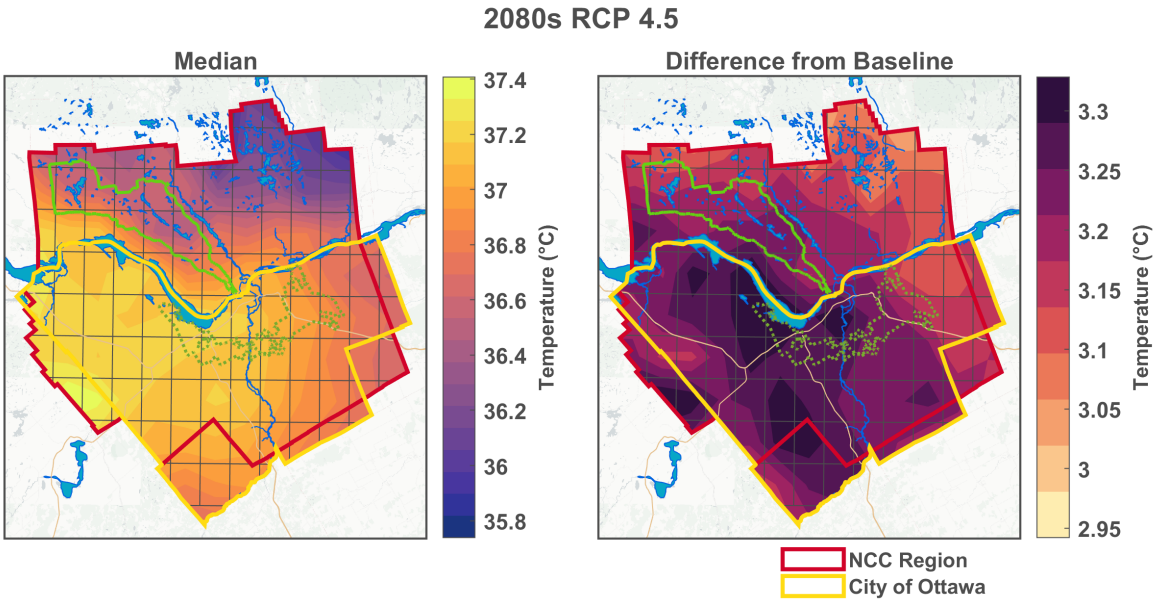


Figure F1.8: Warmest Temperature of the Year - 2080s RCP 4.5.

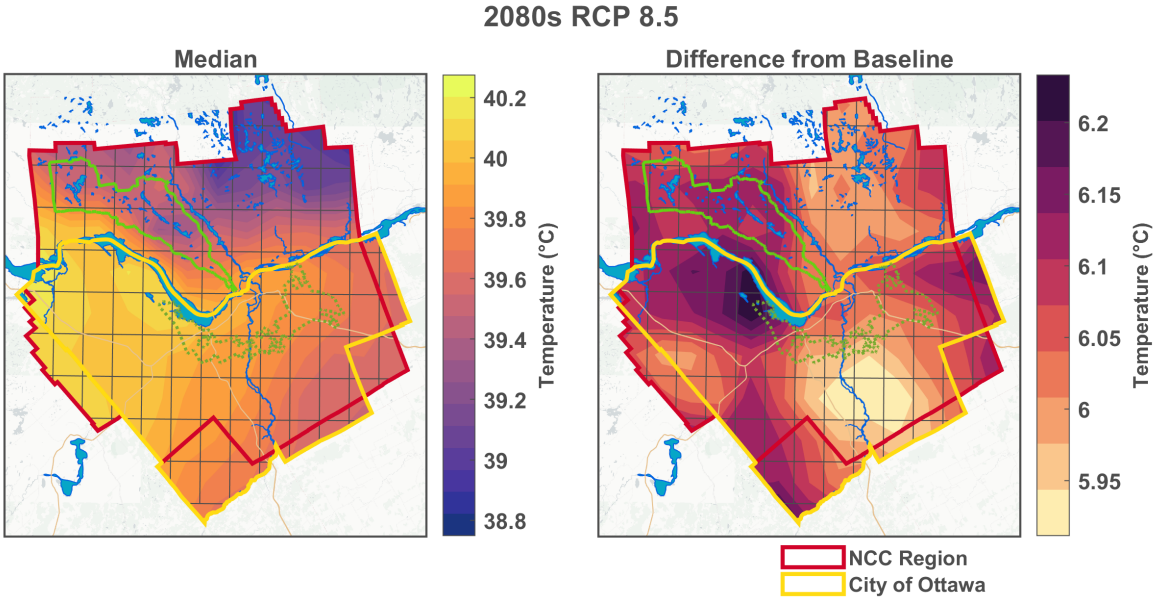


Figure F1.9: Warmest Temperature of the Year - 2080s RCP 8.5.

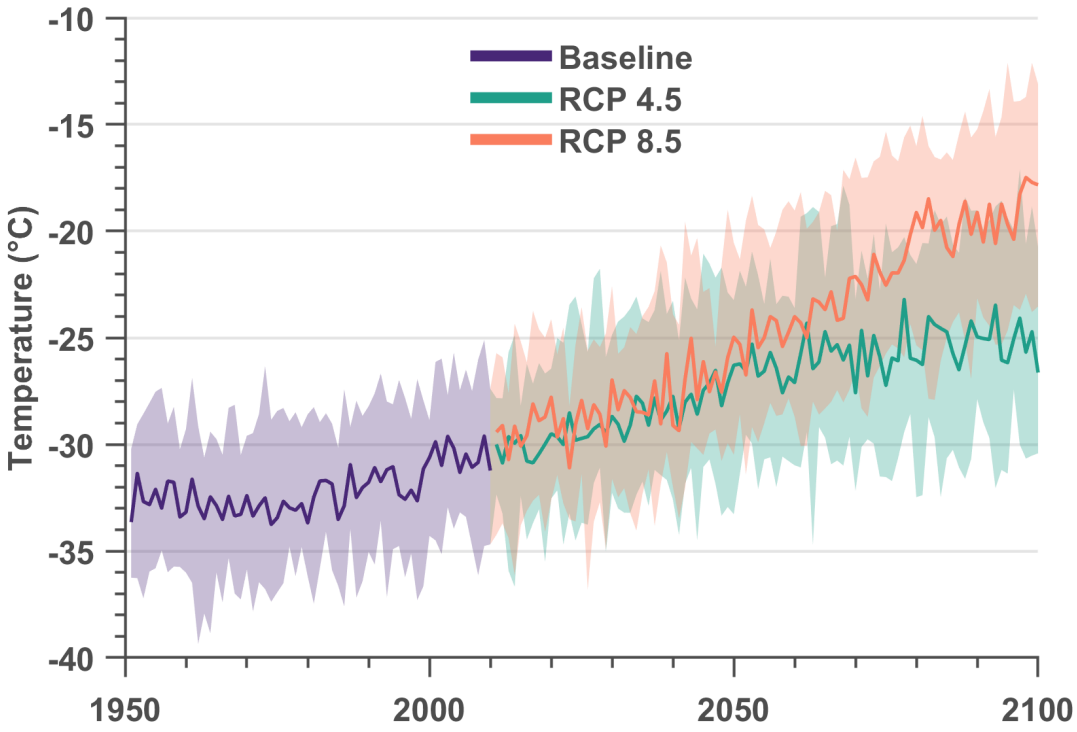


Figure F1.10: Coldest Temperature of the Year.

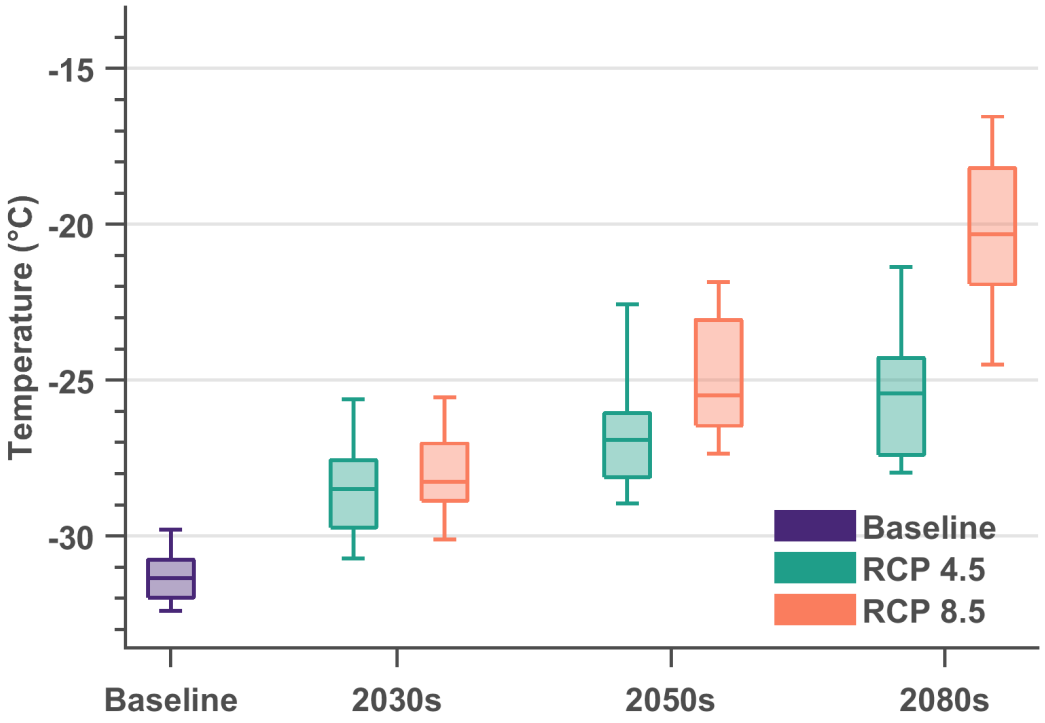


Figure F1.11: Coldest Temperature of the Year.

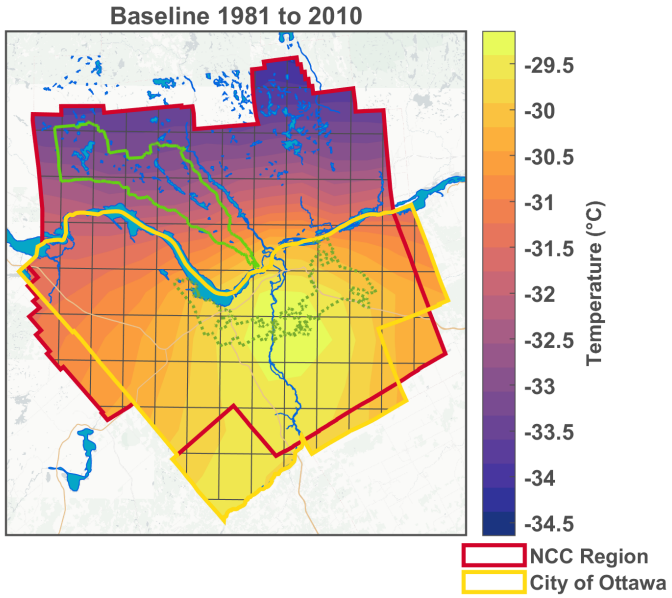


Figure F1.12: Coldest Temperature of the Year - Baseline.

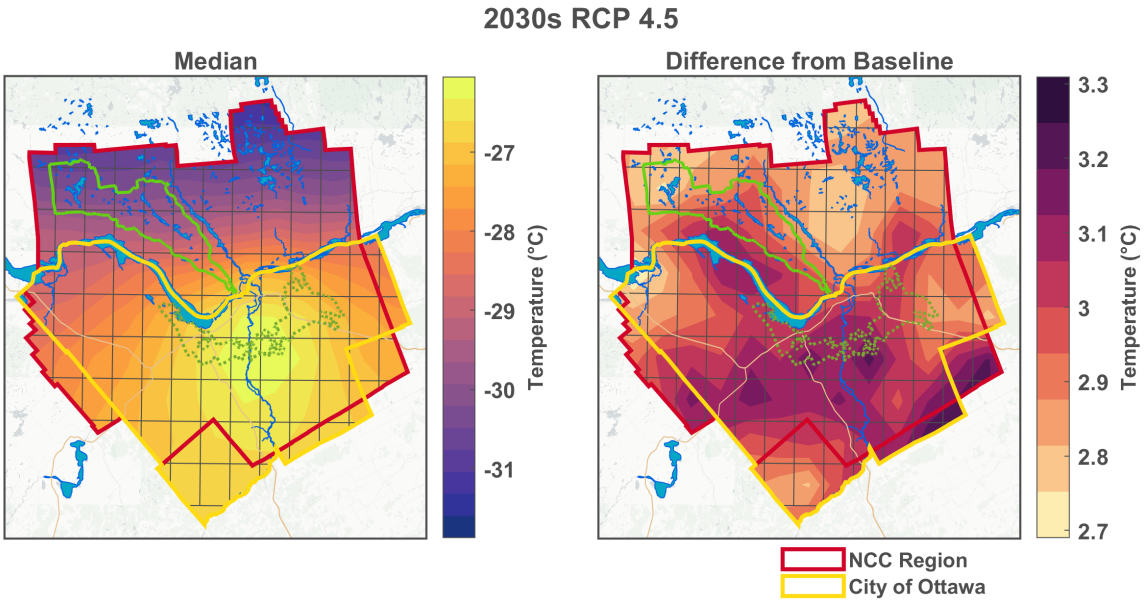


Figure F1.13: Coldest Temperature of the Year - 2030s RCP 4.5.

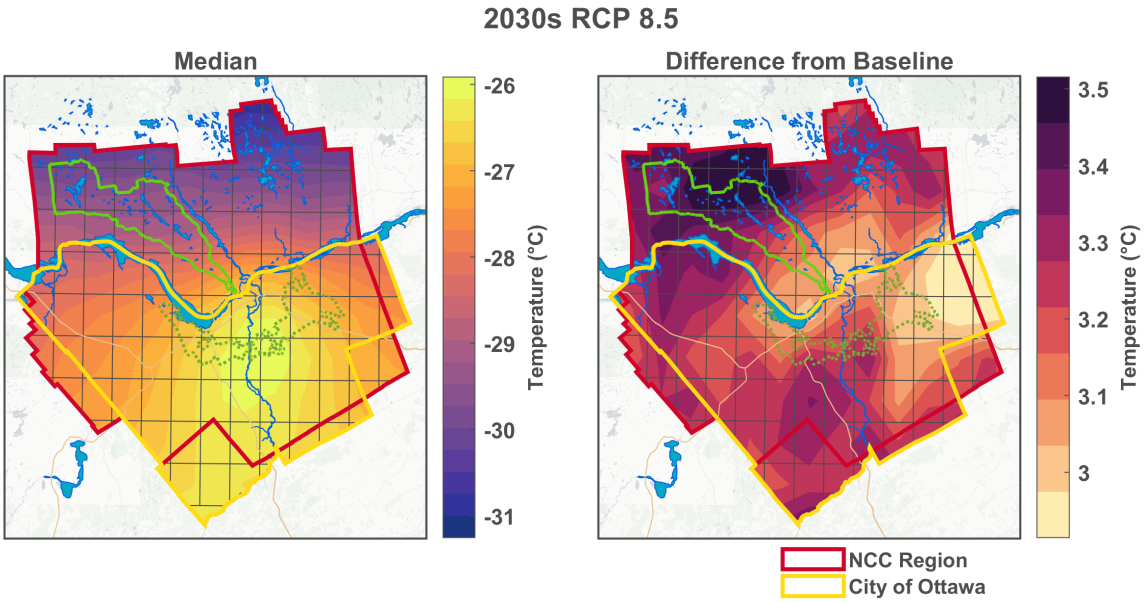


Figure F1.14: Coldest Temperature of the Year - 2030s RCP 8.5.

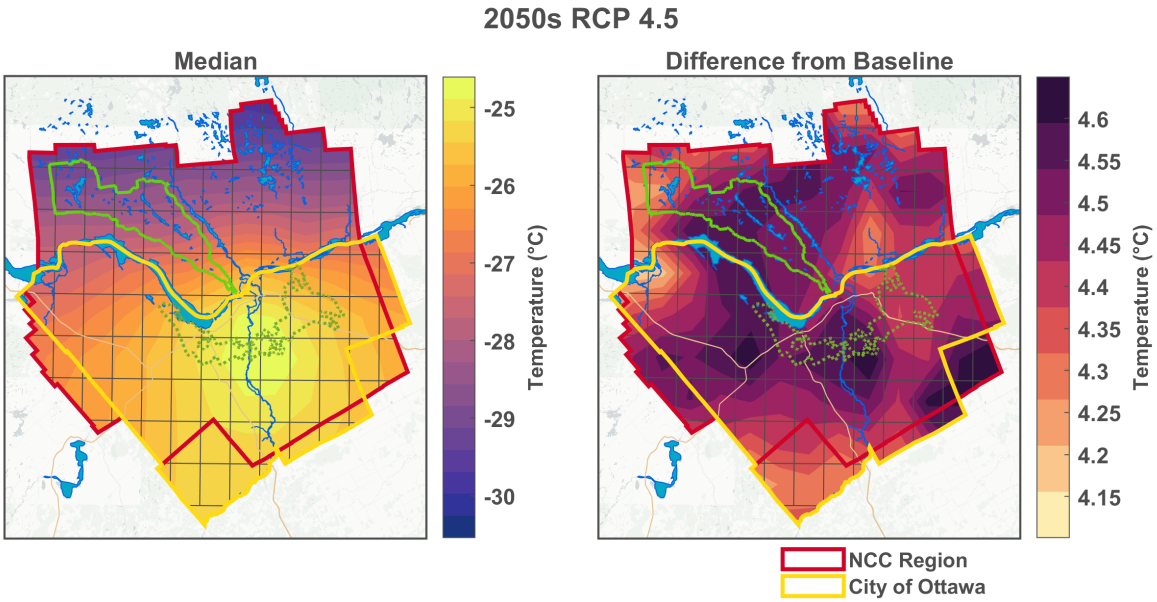


Figure F1.15: Coldest Temperature of the Year - 2050s RCP 4.5.

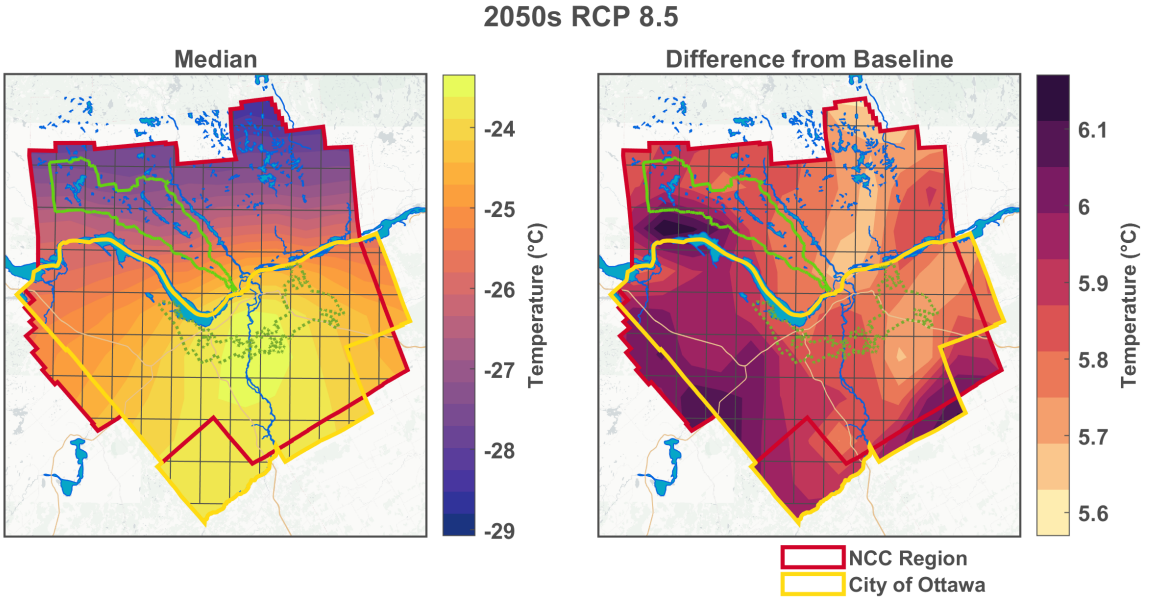


Figure F1.16: Coldest Temperature of the Year - 2050s RCP 8.5.

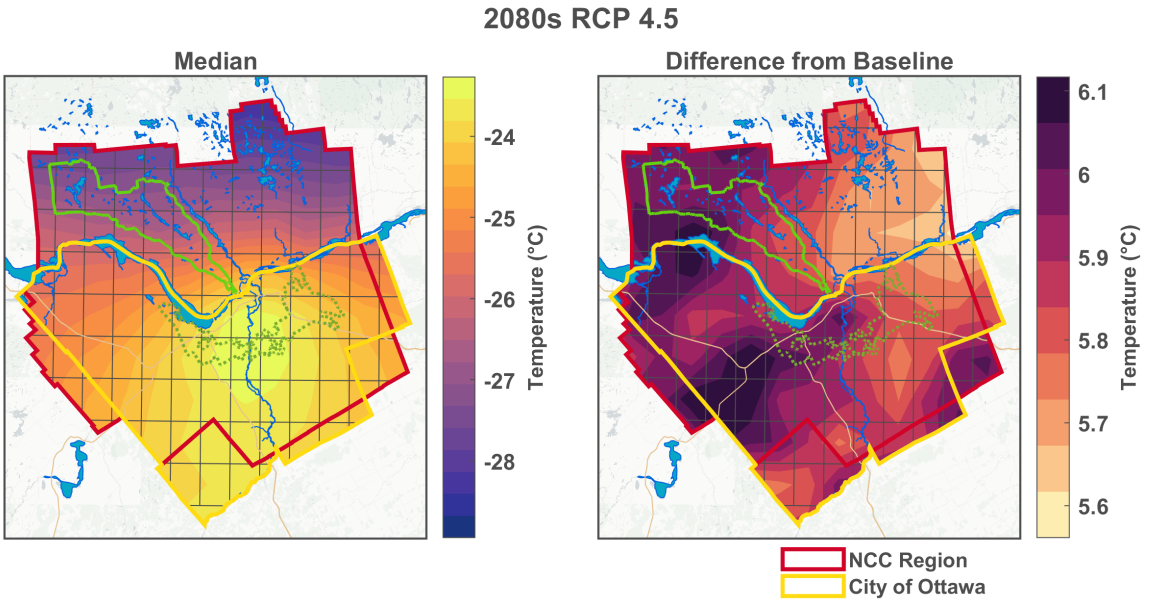


Figure F1.17: Coldest Temperature of the Year - 2080s RCP 4.5.

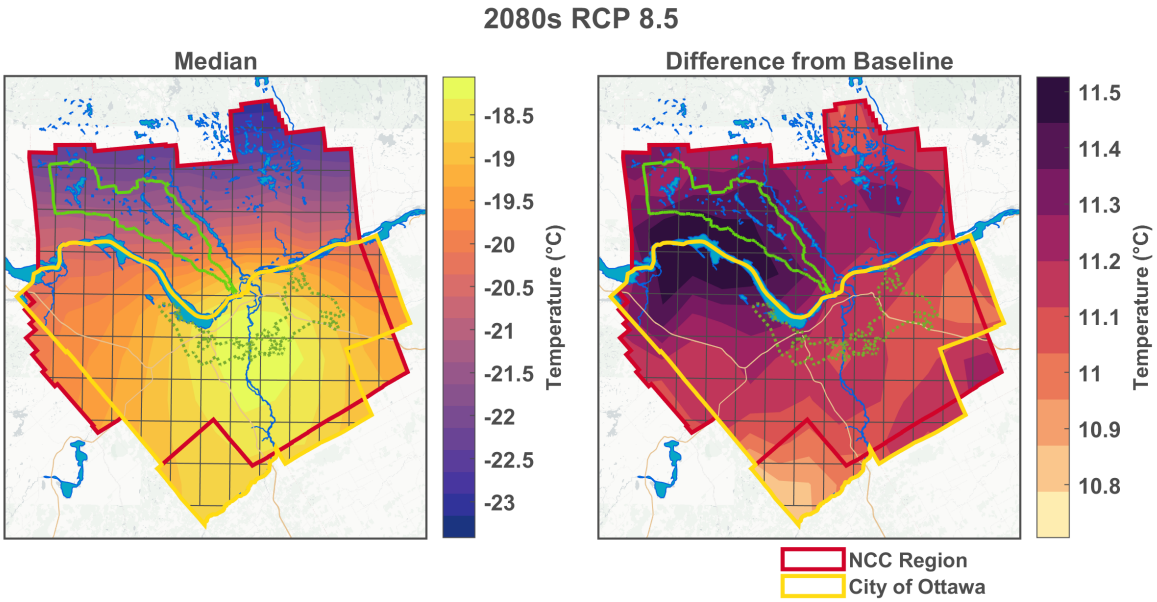


Figure F1.18: Coldest Temperature of the Year - 2080s RCP 8.5.

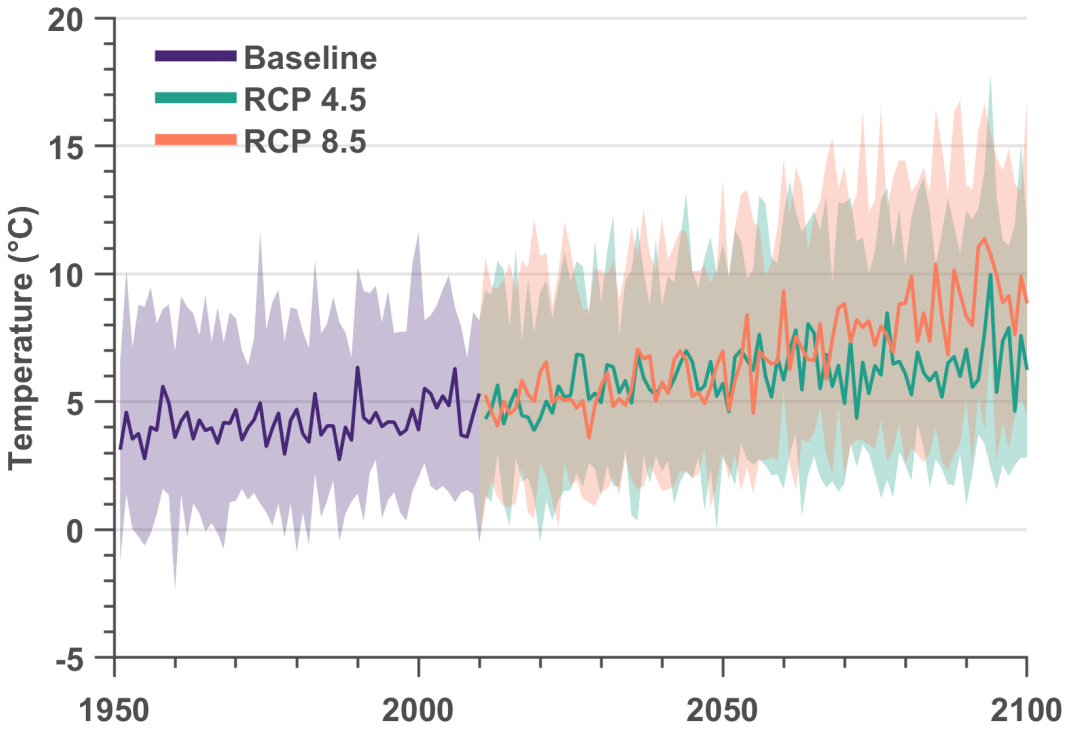


Figure F1.19: Warmest Monthly Temperature - January.

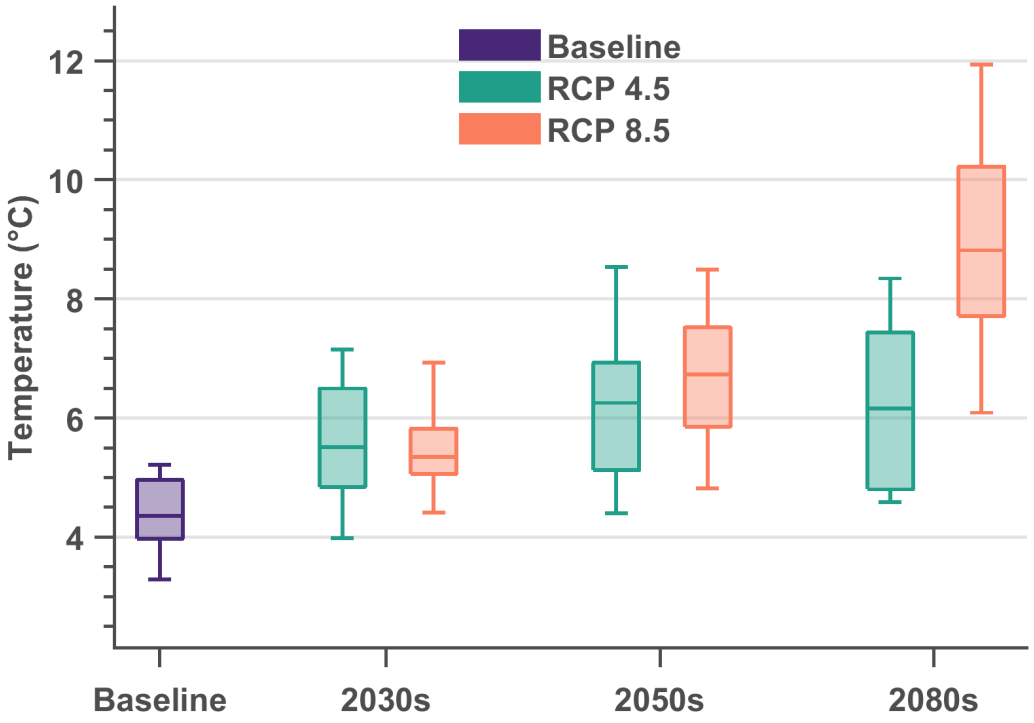


Figure F1.20: Warmest Monthly Temperature - January.

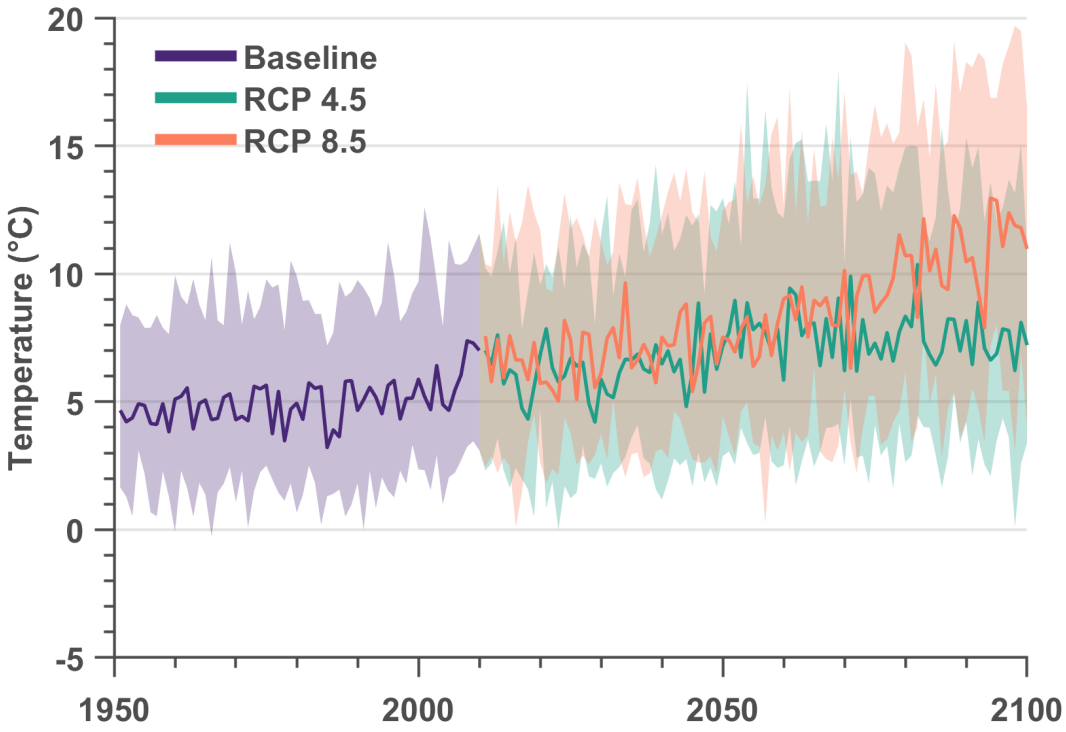


Figure F1.21: Warmest Monthly Temperature - February.

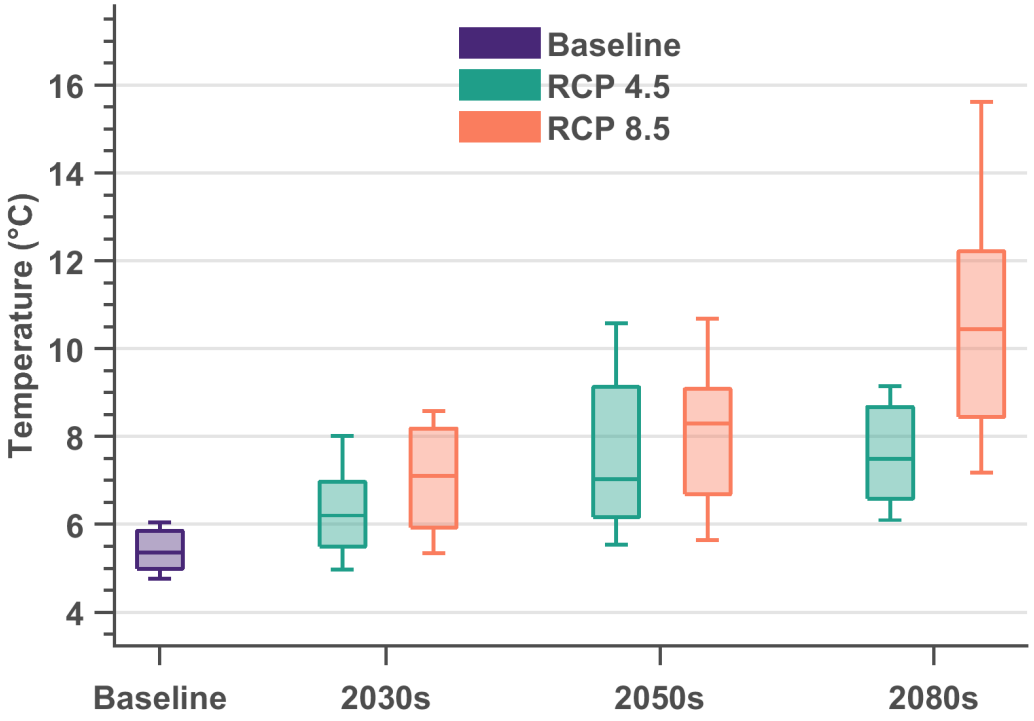


Figure F1.22: Warmest Monthly Temperature - February.

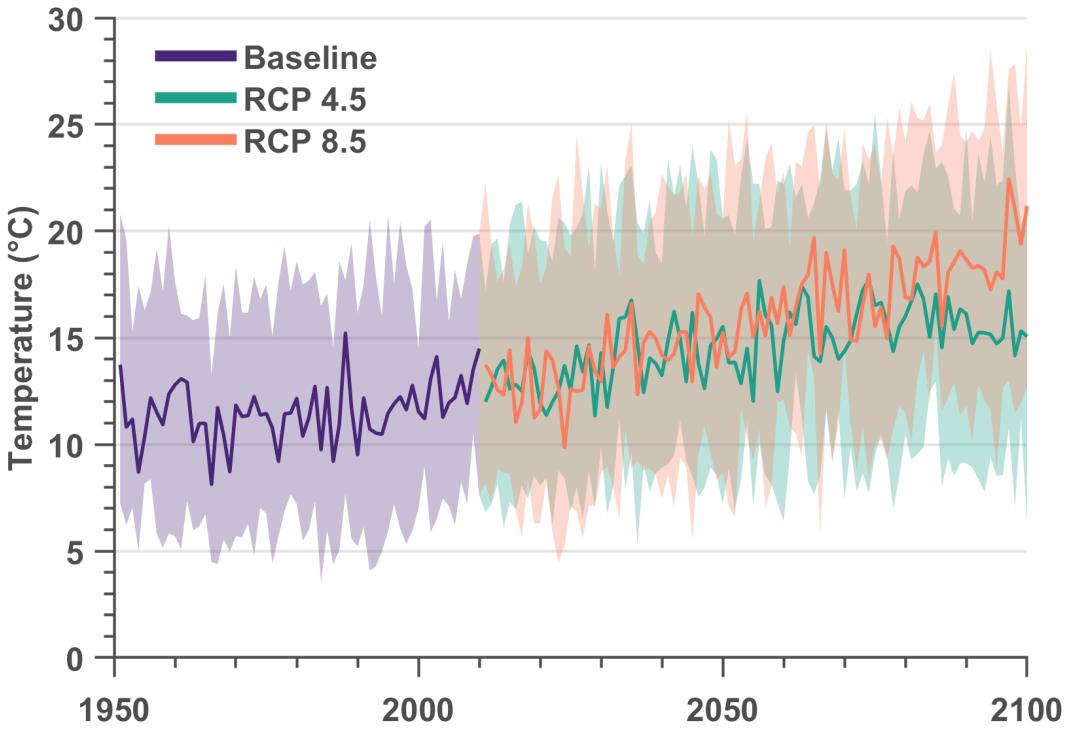


Figure F1.23: Warmest Monthly Temperature - March.

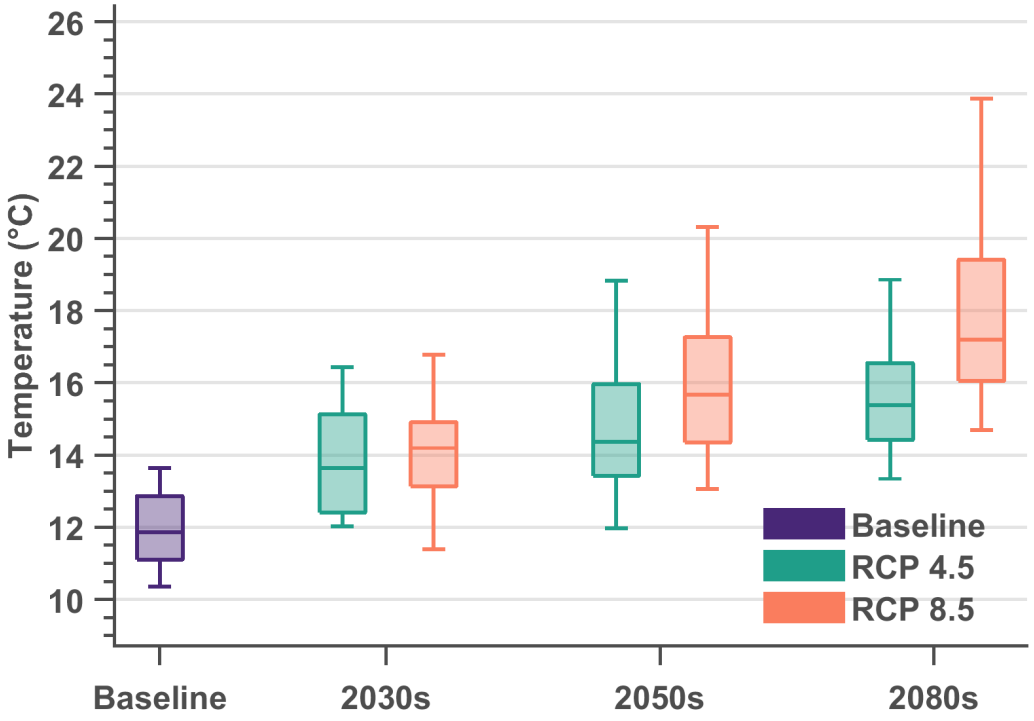


Figure F1.24: Warmest Monthly Temperature - March.

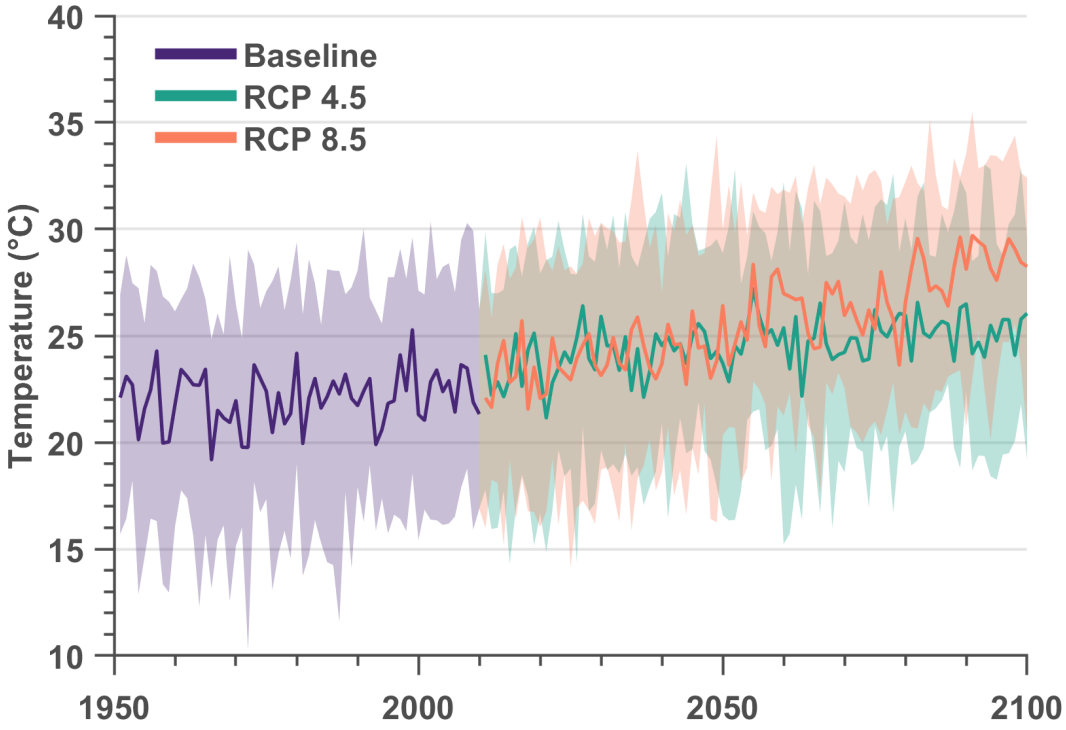


Figure F1.25: Warmest Monthly Temperature - April.

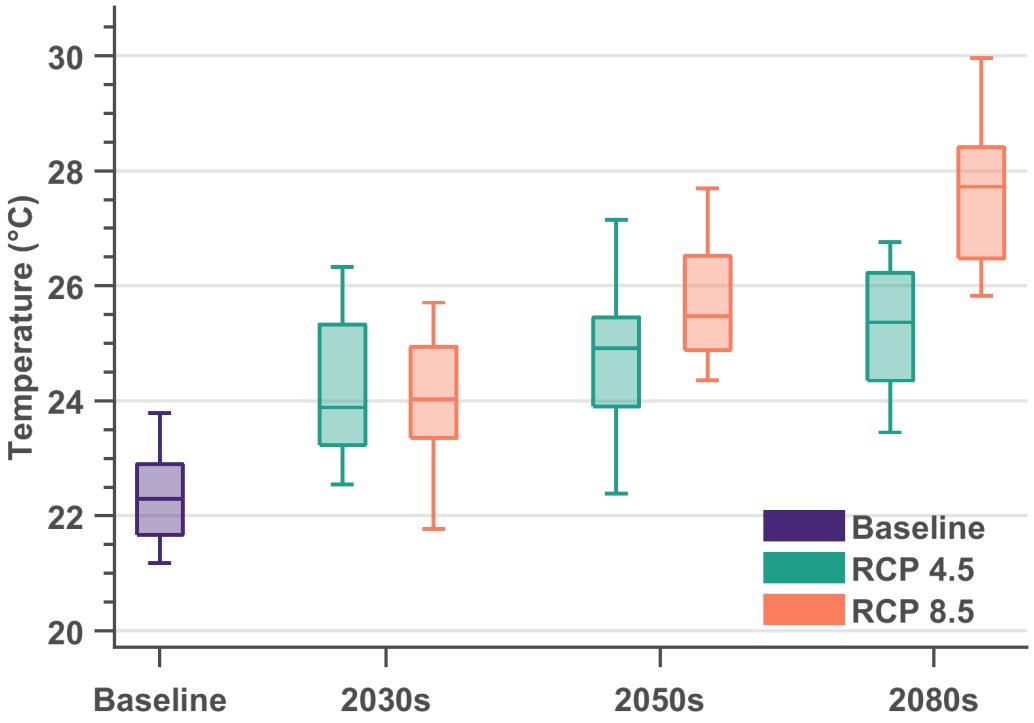


Figure F1.26: Warmest Monthly Temperature - April.

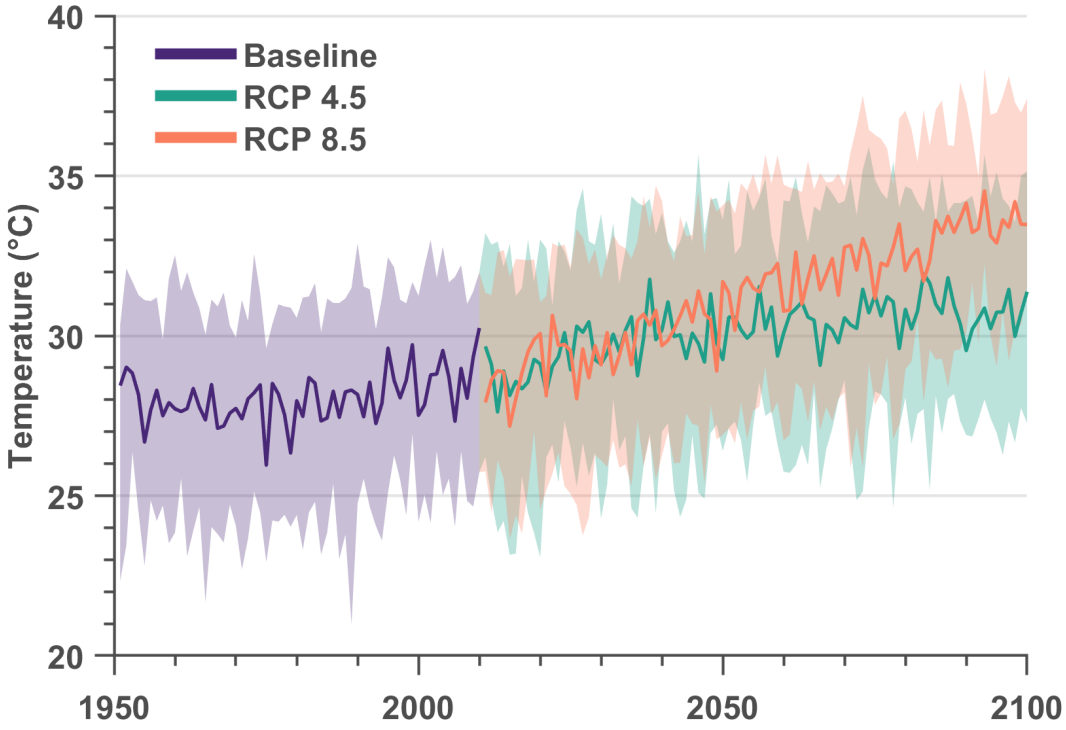


Figure F1.27: Warmest Monthly Temperature - May.

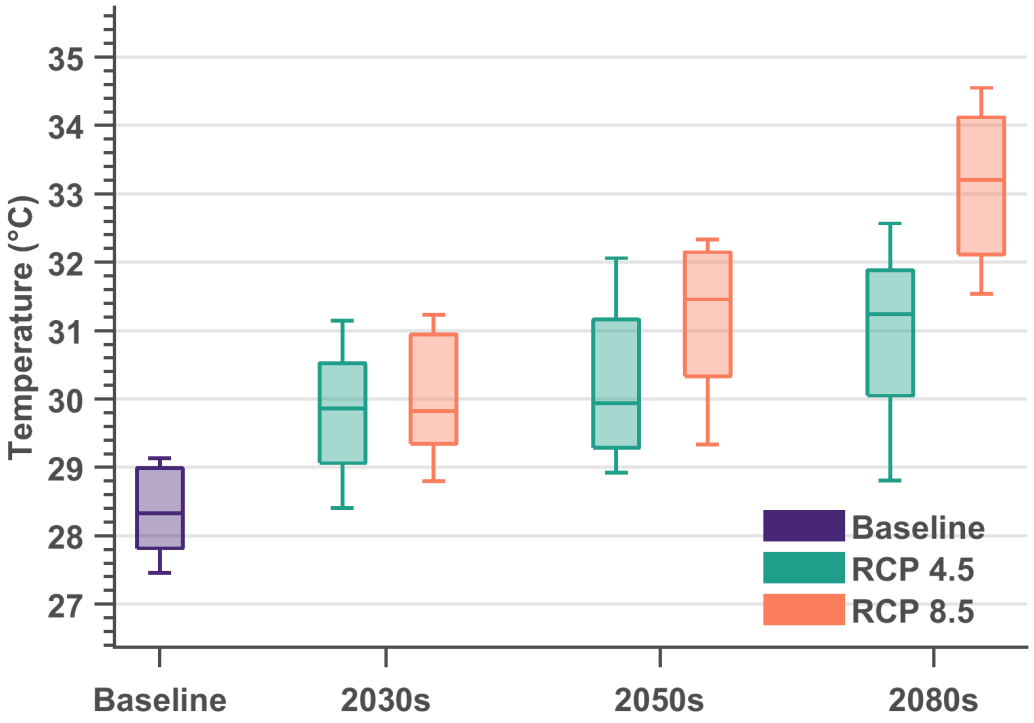


Figure F1.28: Warmest Monthly Temperature - May.

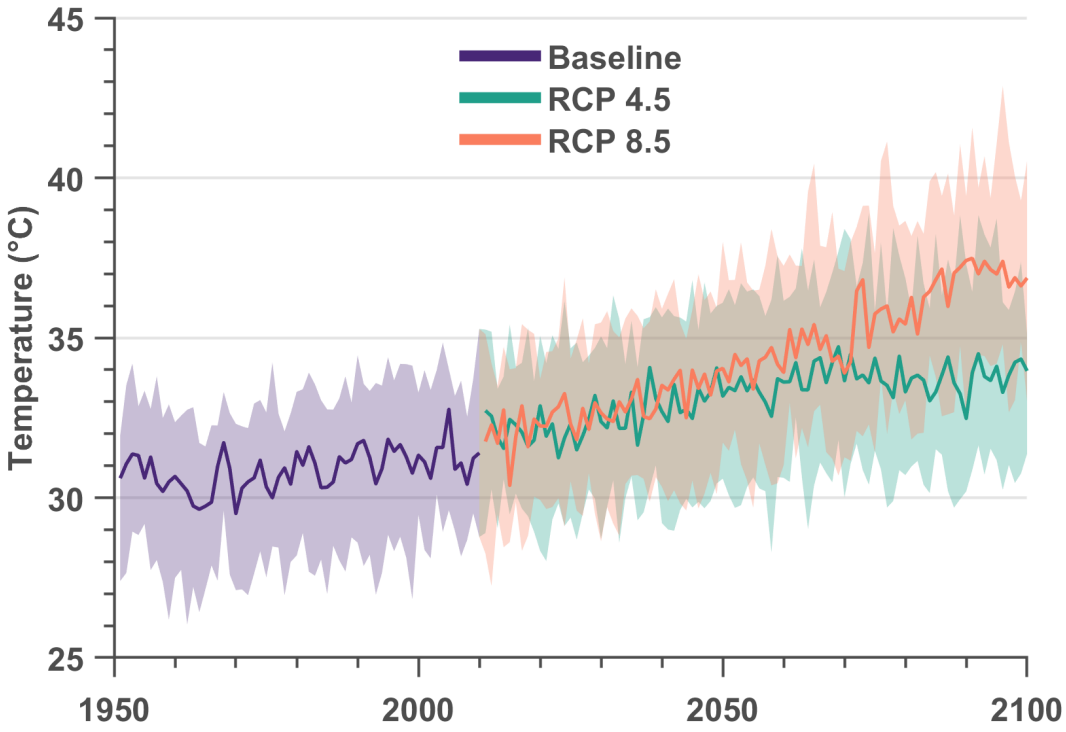


Figure F1.29: Warmest Monthly Temperature - June.

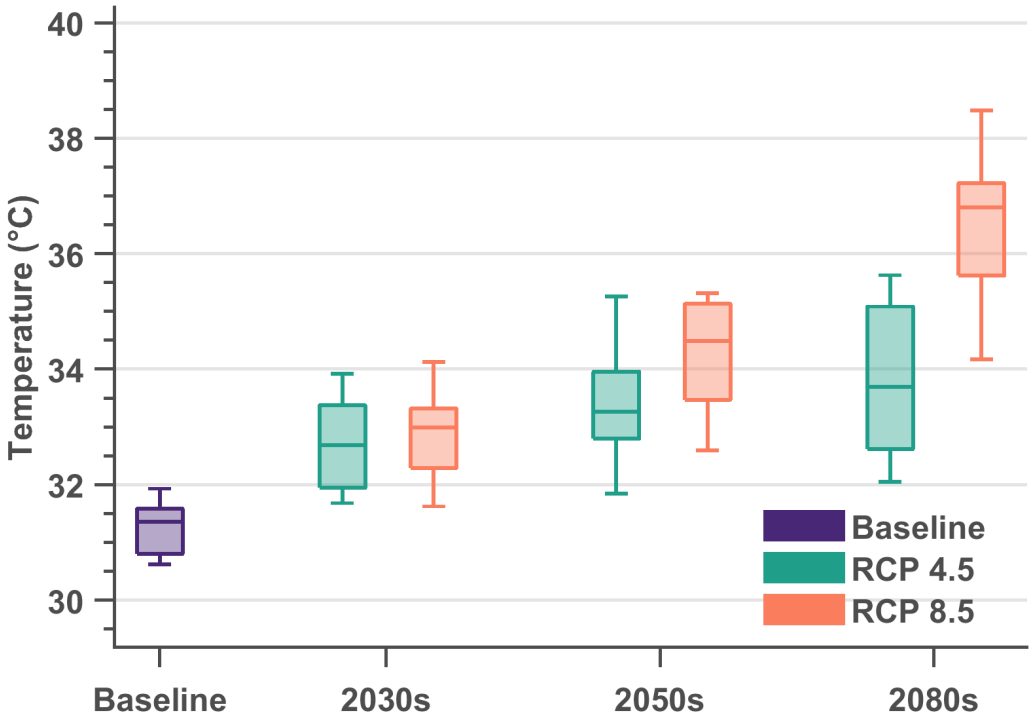


Figure F1.30: Warmest Monthly Temperature - June.

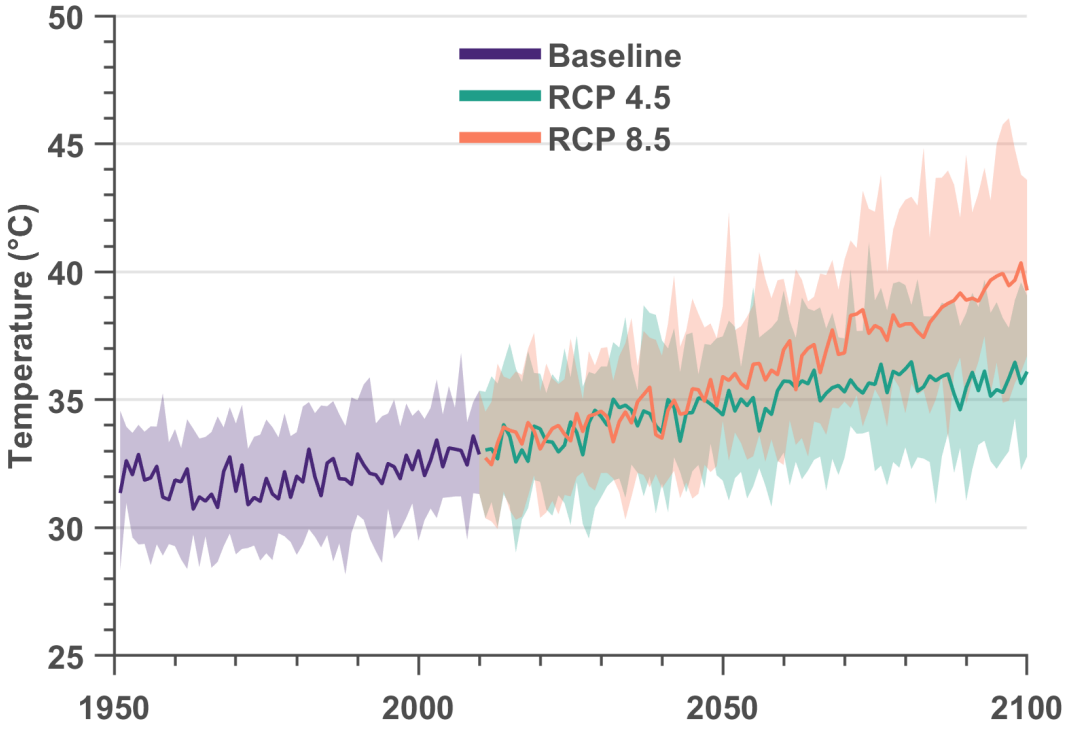


Figure F1.31: Warmest Monthly Temperature - July.

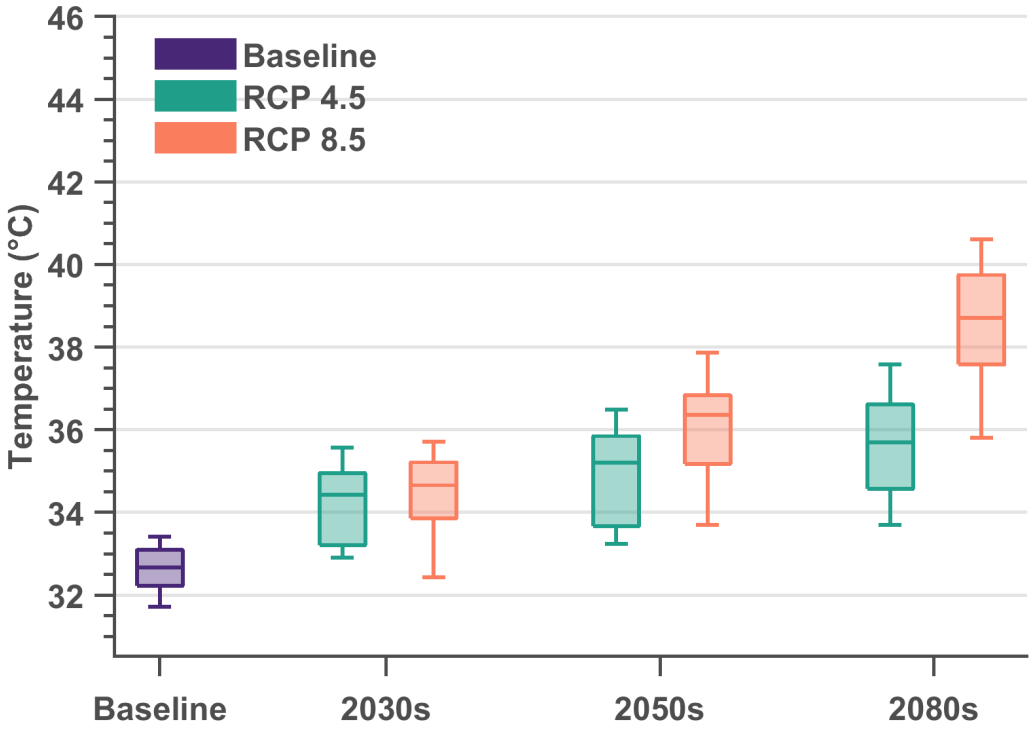


Figure F1.32: Warmest Monthly Temperature - July.

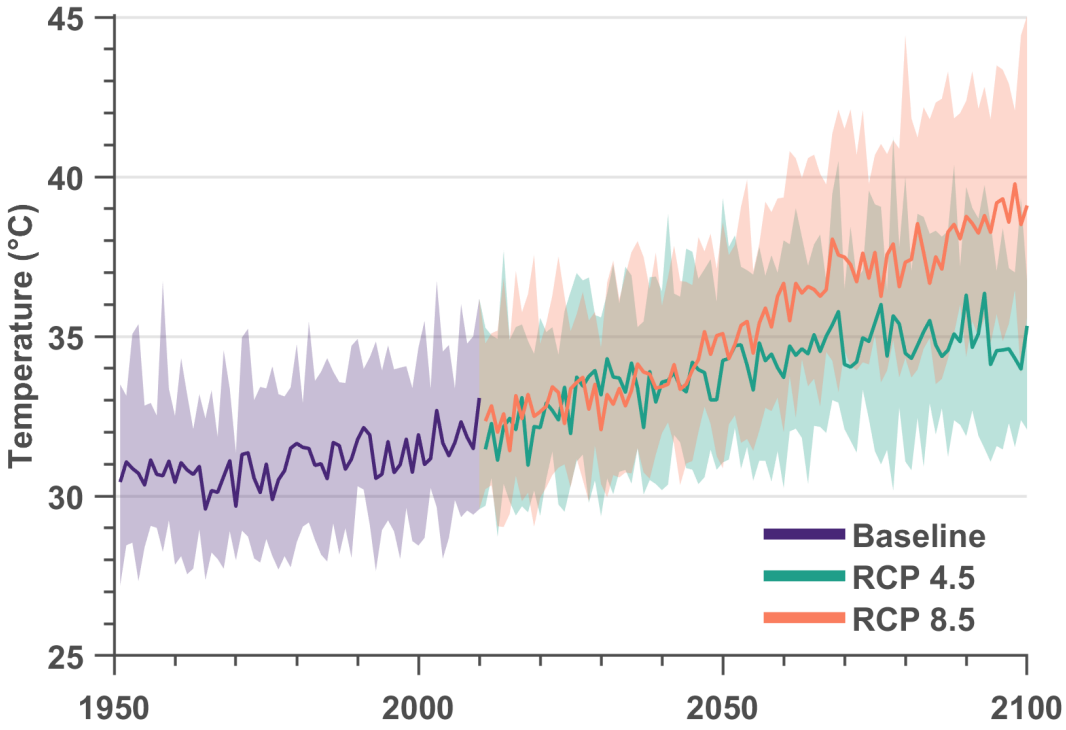


Figure F1.33: Warmest Monthly Temperature - August.

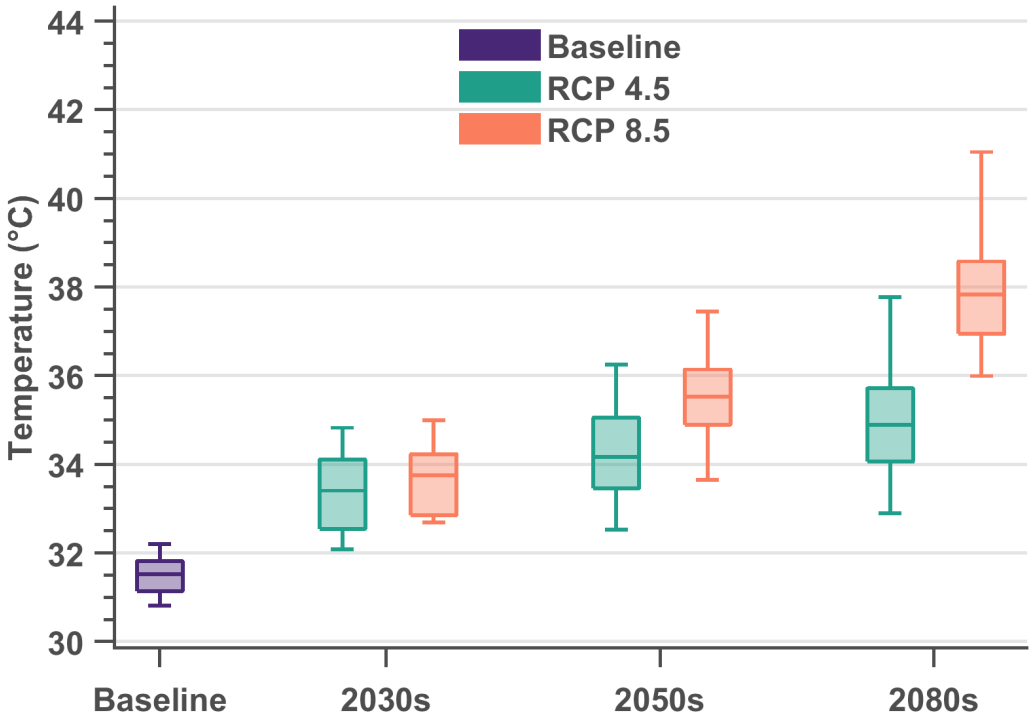


Figure F1.34: Warmest Monthly Temperature - August.

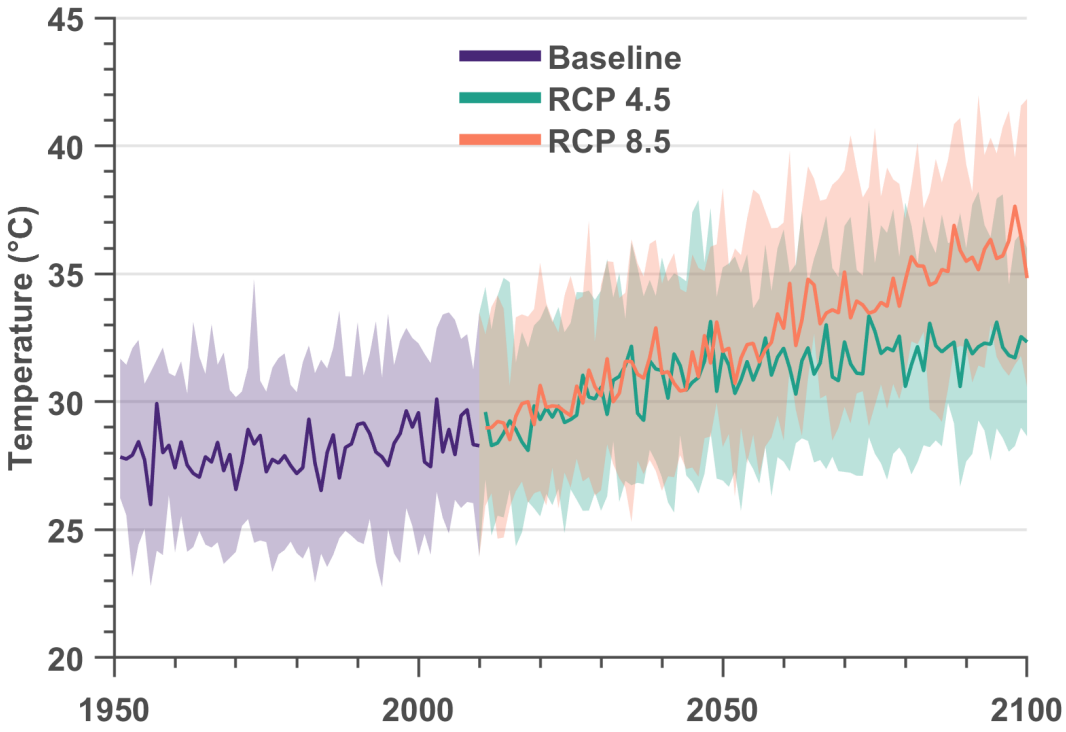


Figure F1.35: Warmest Monthly Temperature - September.

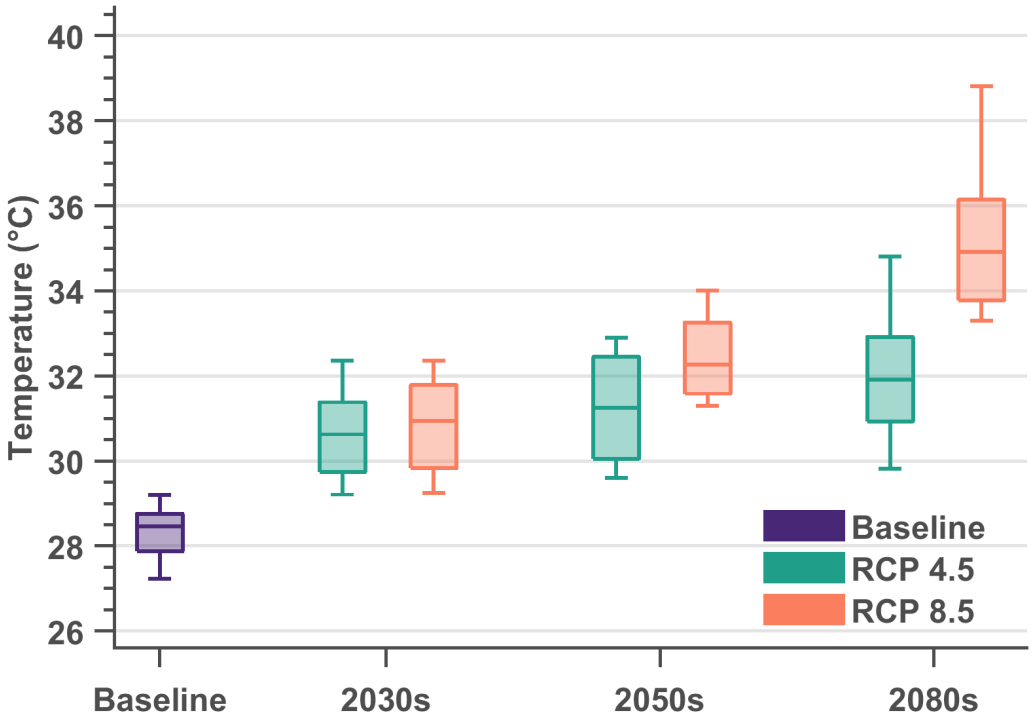


Figure F1.36: Warmest Monthly Temperature - September.

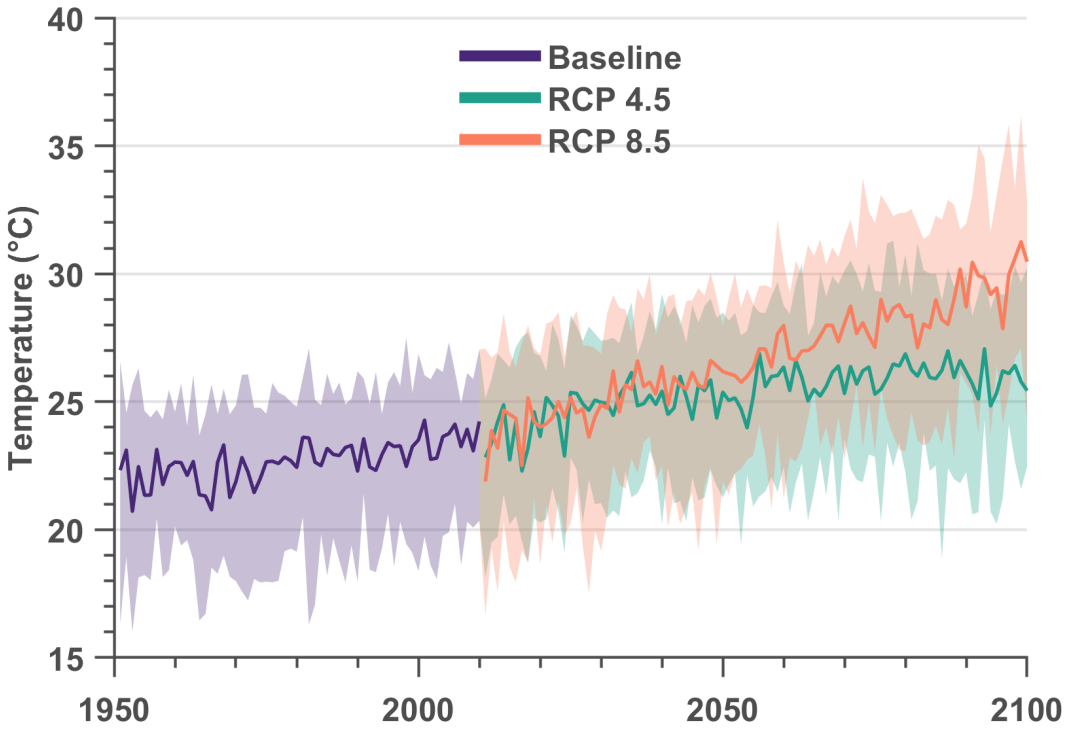


Figure F1.37: Warmest Monthly Temperature - October.

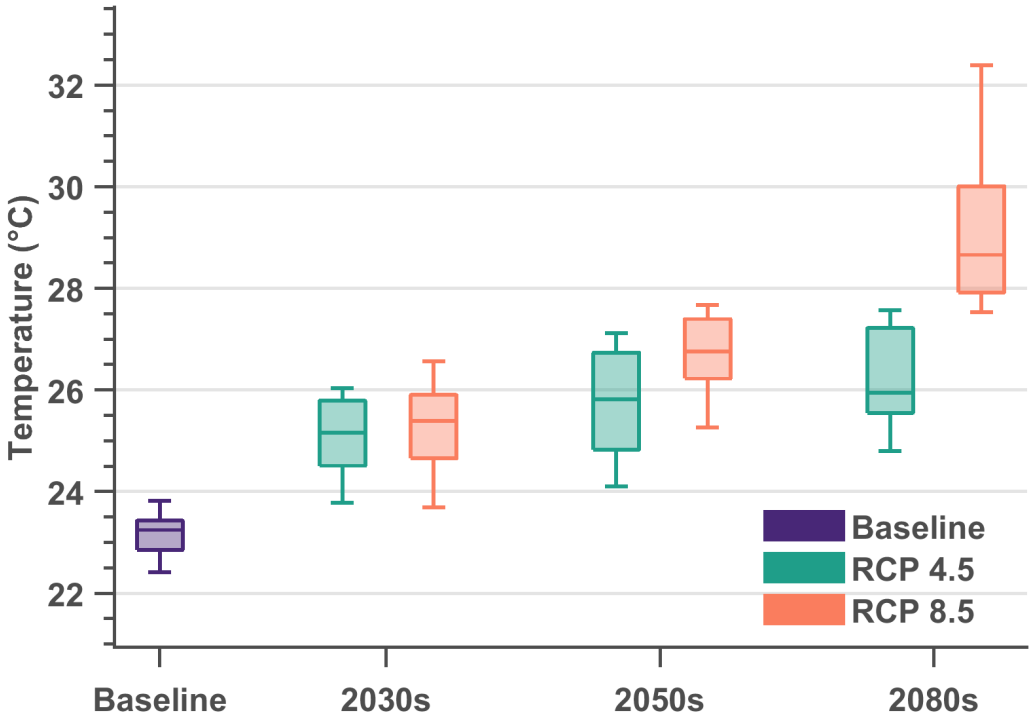


Figure F1.38: Warmest Monthly Temperature - October.

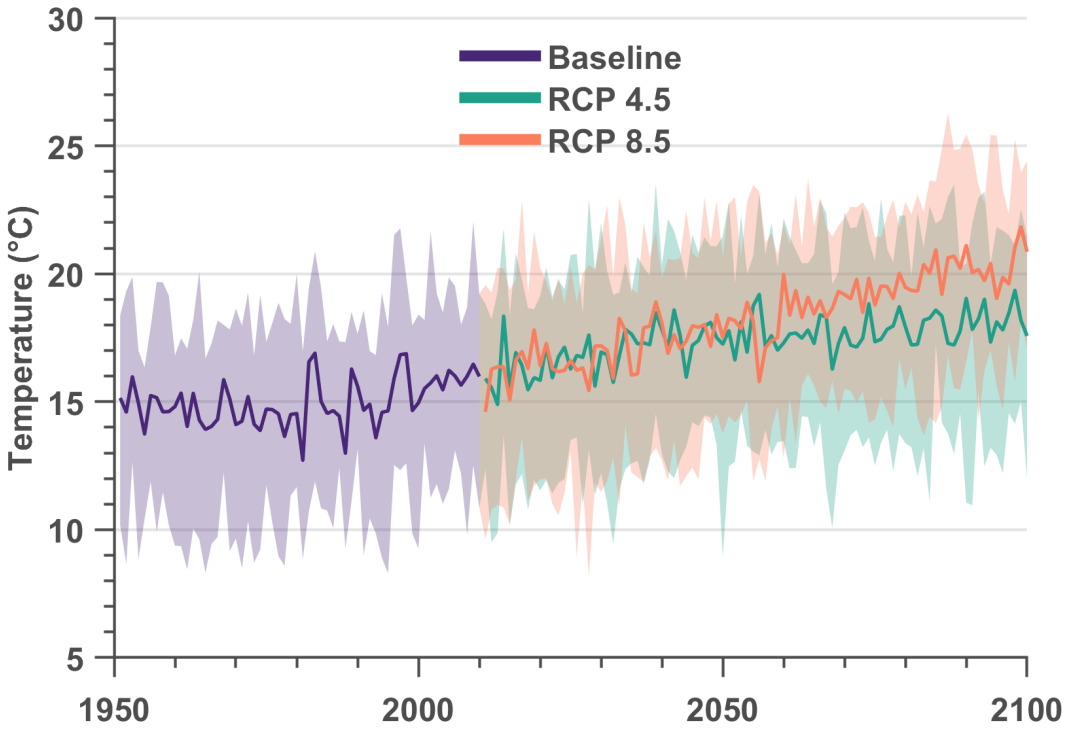


Figure F1.39: Warmest Monthly Temperature - November.

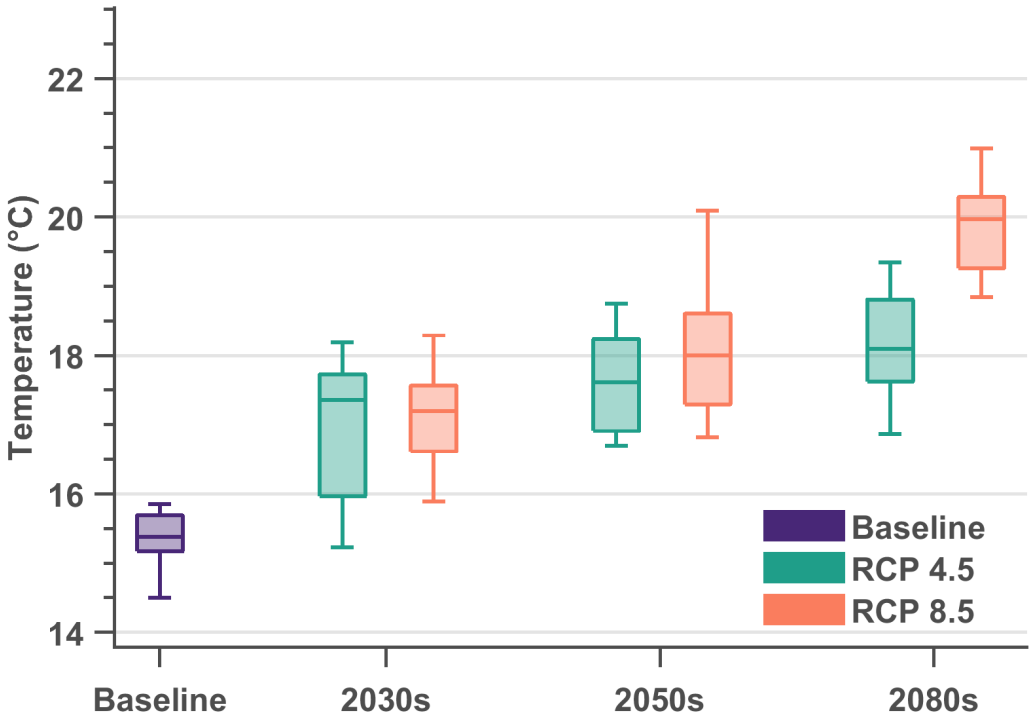


Figure F1.40: Warmest Monthly Temperature - November.

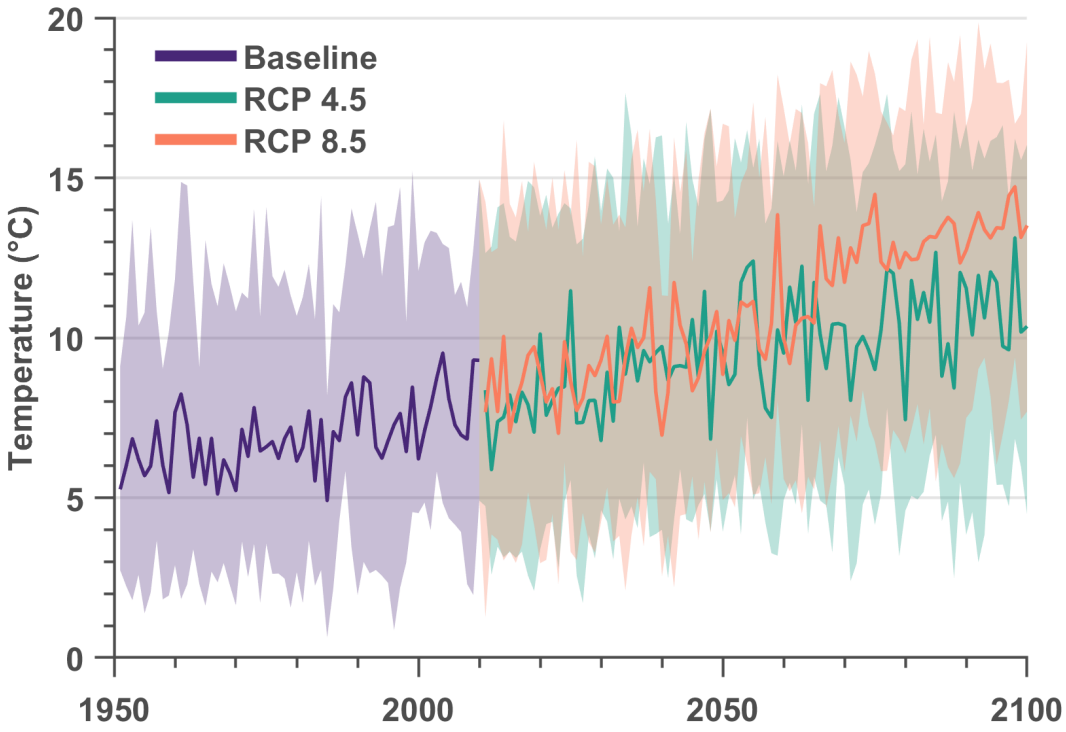


Figure F1.41: Warmest Monthly Temperature - December.

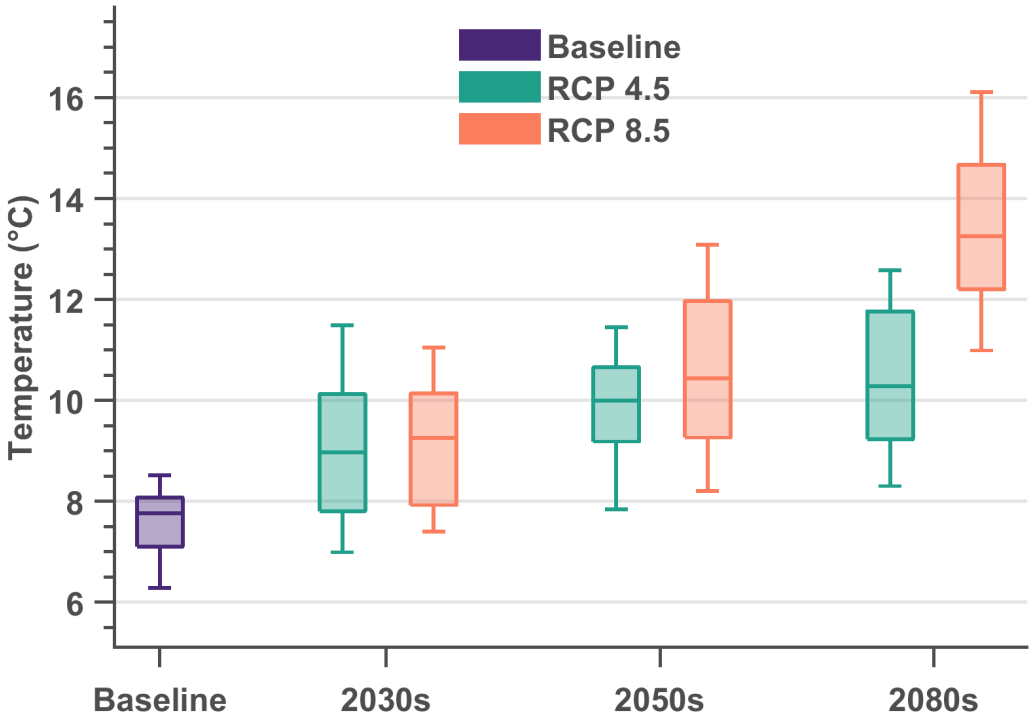


Figure F1.42: Warmest Monthly Temperature - December.

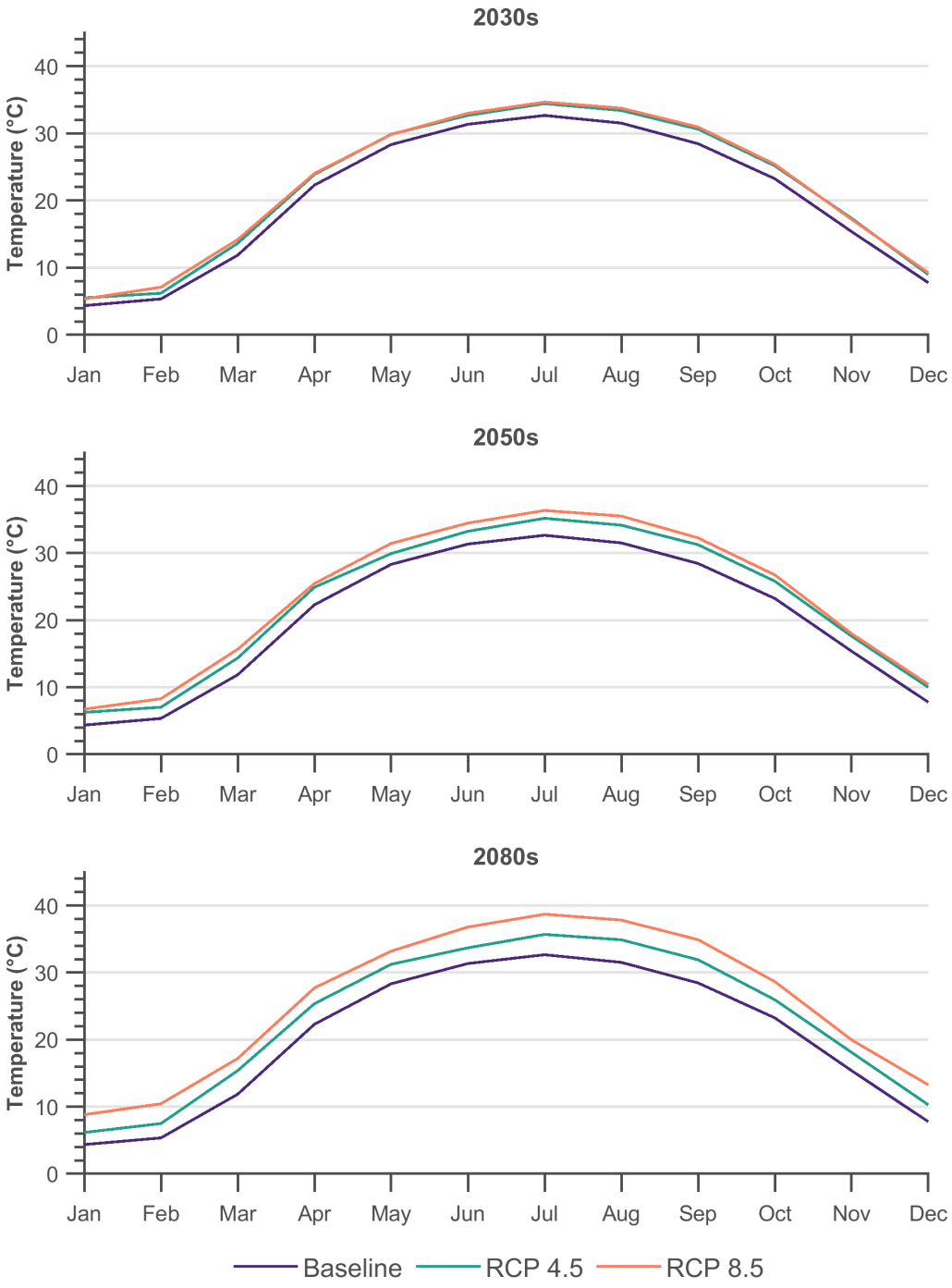


Figure F1.43: Warmest Monthly Temperature.

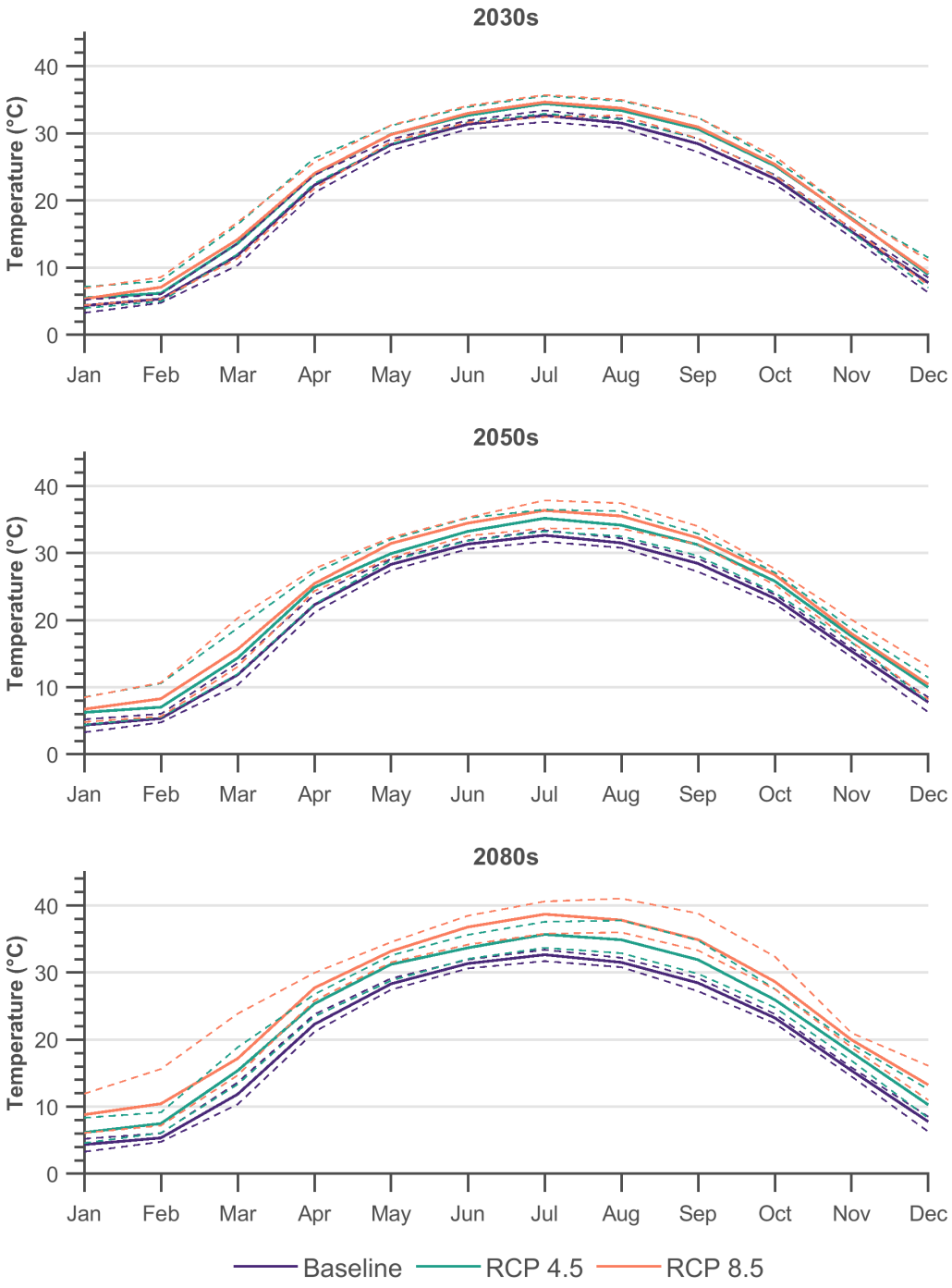


Figure F1.44: Warmest Monthly Temperature. Dashed lines indicate the 10% and 90% percentile.

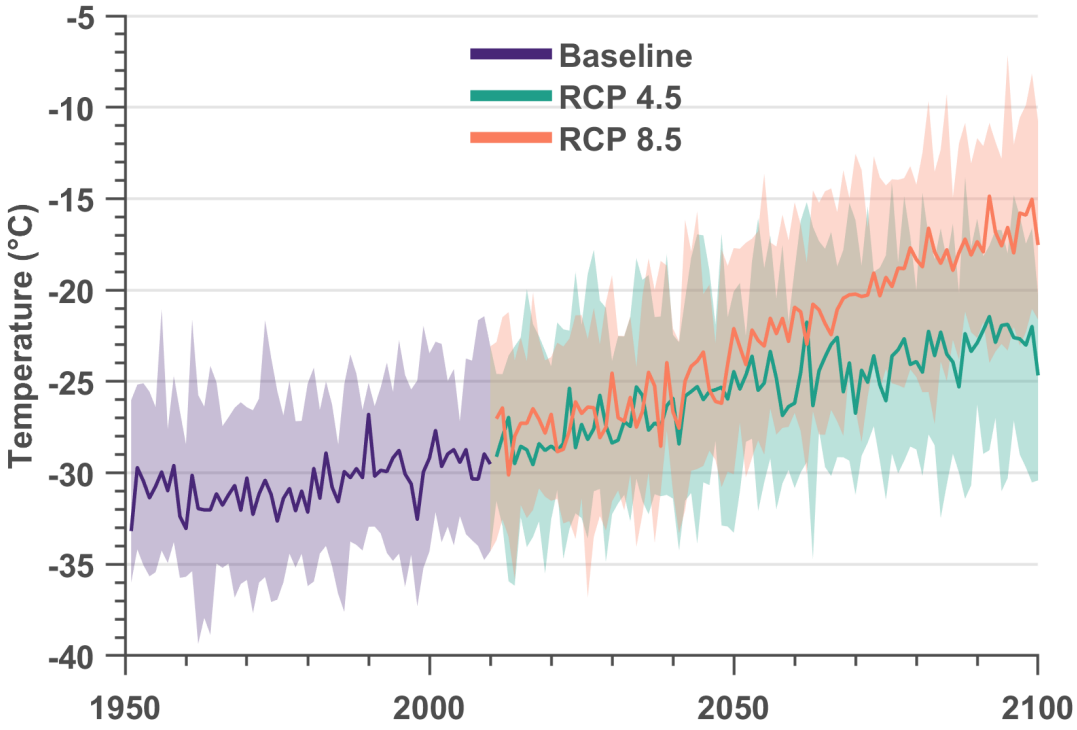


Figure F1.45: Coldest Monthly Temperature - January.

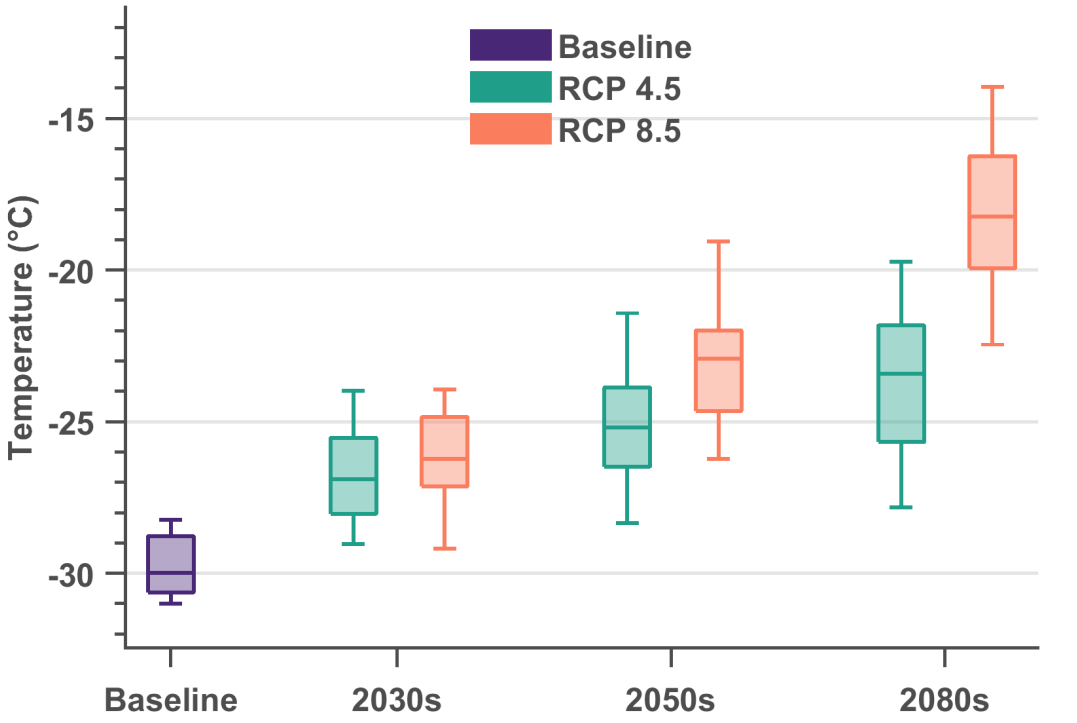


Figure F1.46: Coldest Monthly Temperature - January.

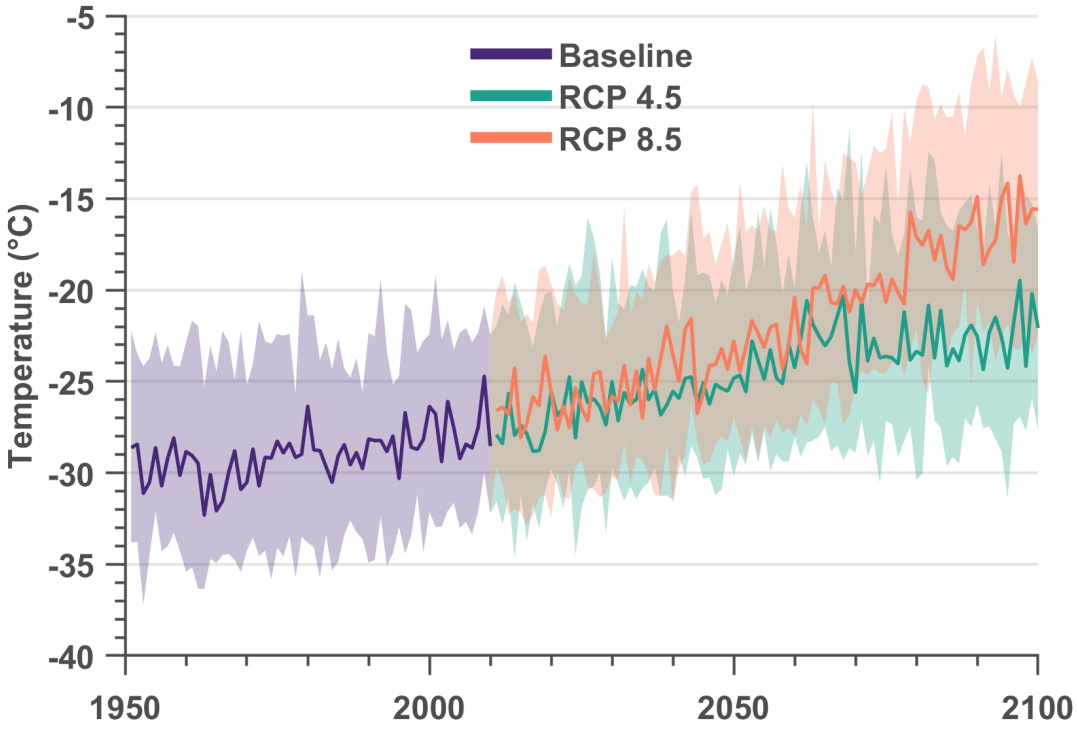


Figure F1.47: Coldest Monthly Temperature - February.

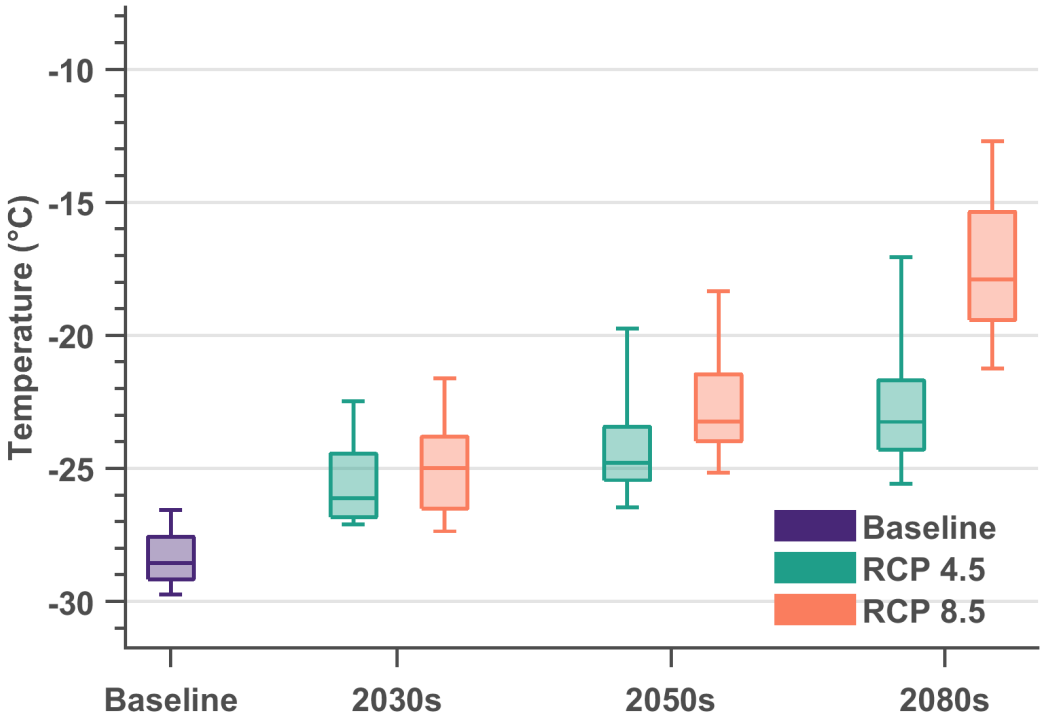


Figure F1.48: Coldest Monthly Temperature - February.

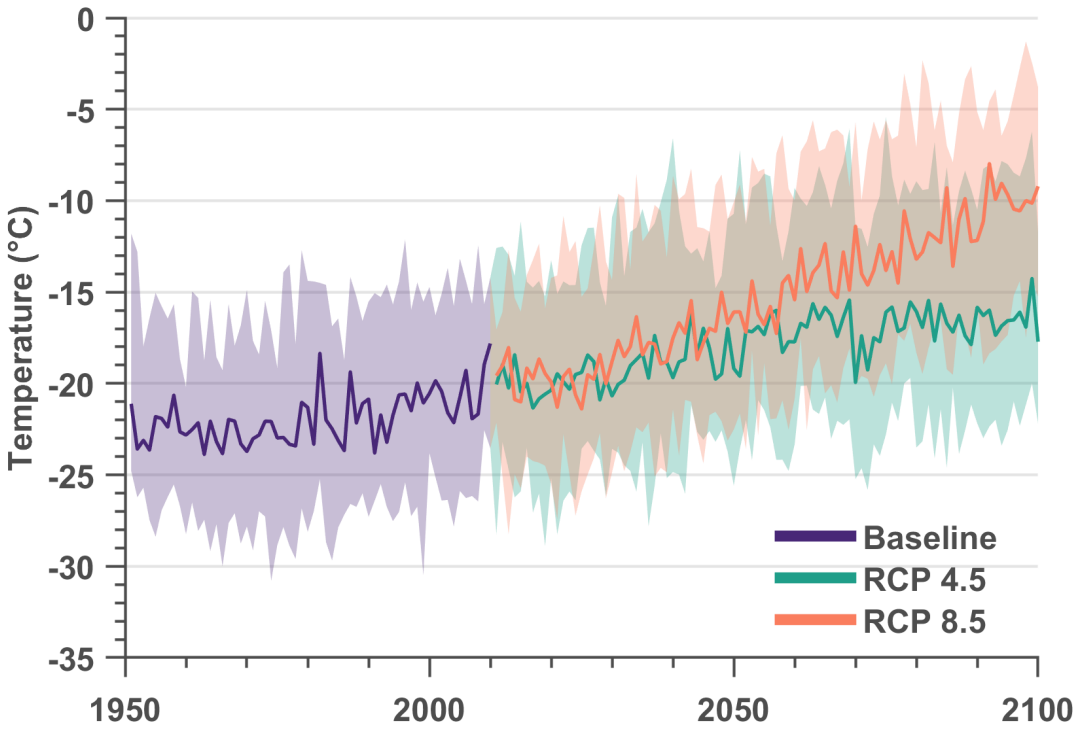


Figure F1.49: Coldest Monthly Temperature - March.

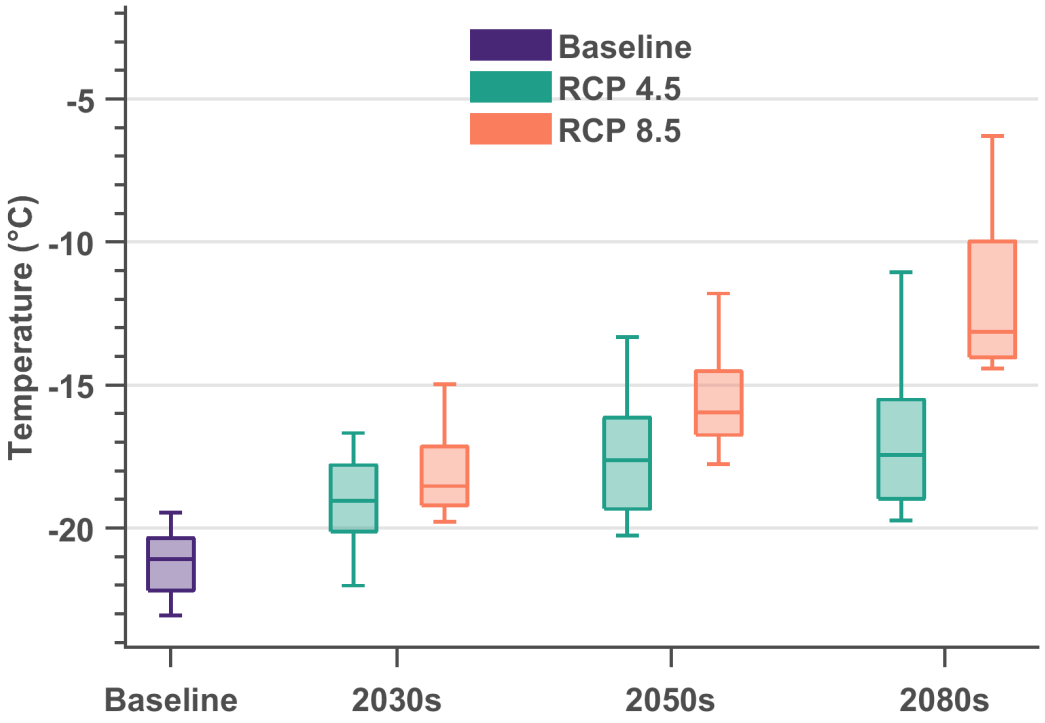


Figure F1.50: Coldest Monthly Temperature - March.

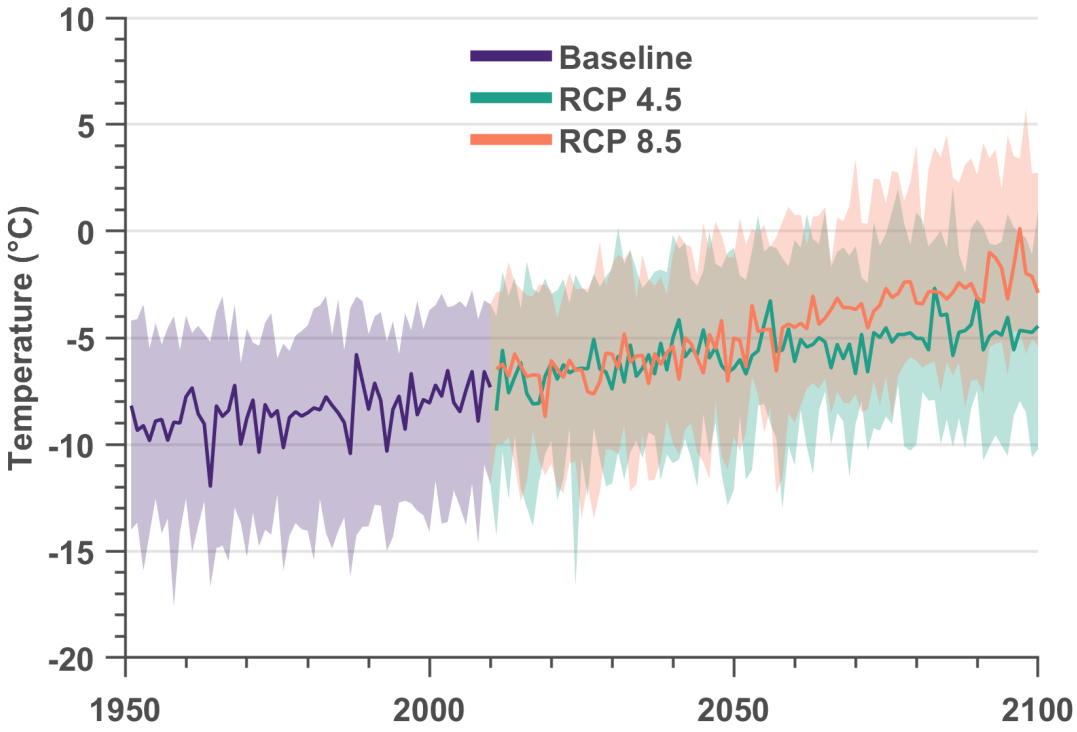


Figure F1.51: Coldest Monthly Temperature - April.

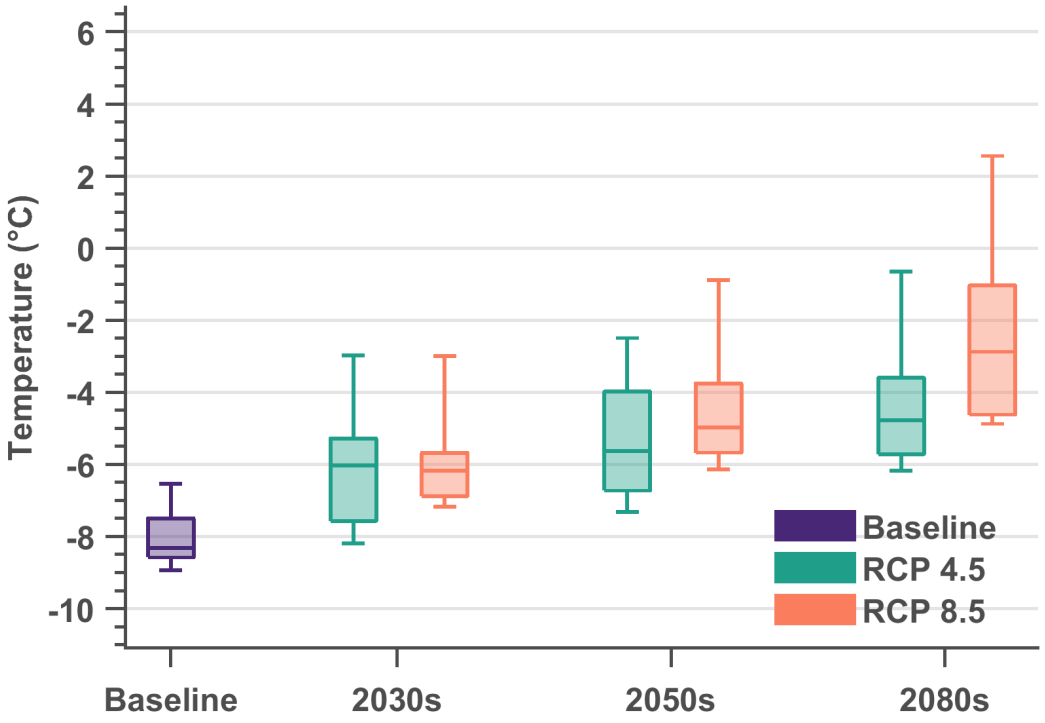


Figure F1.52: Coldest Monthly Temperature - April.

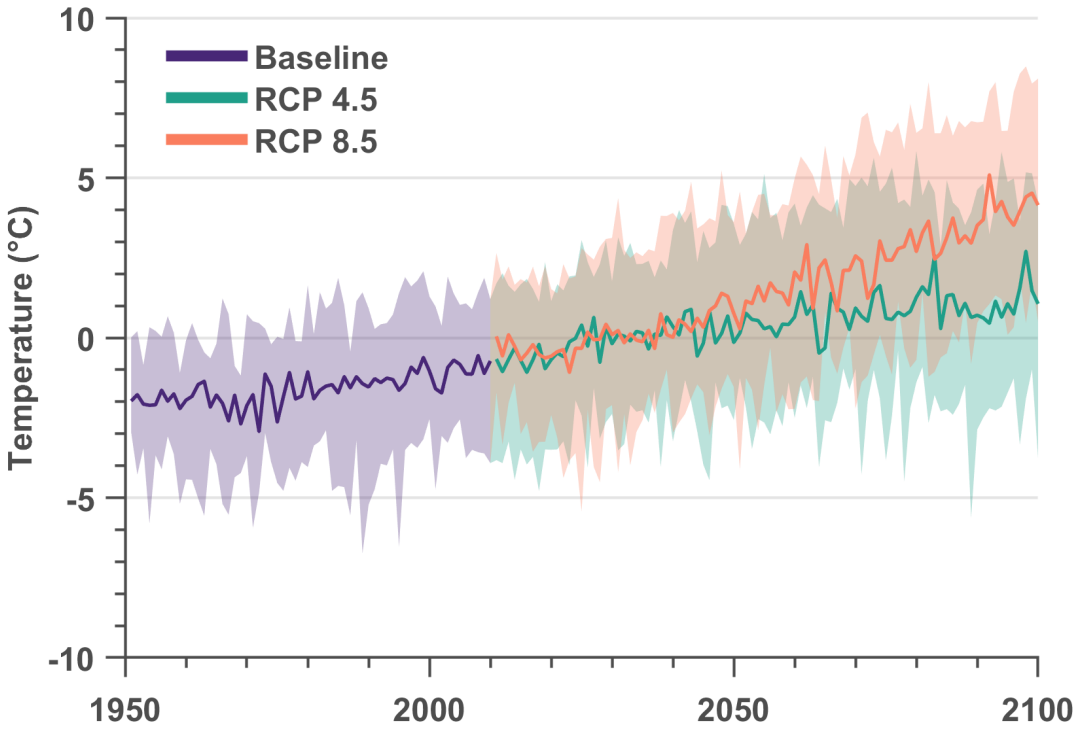


Figure F1.53: Coldest Monthly Temperature - May.

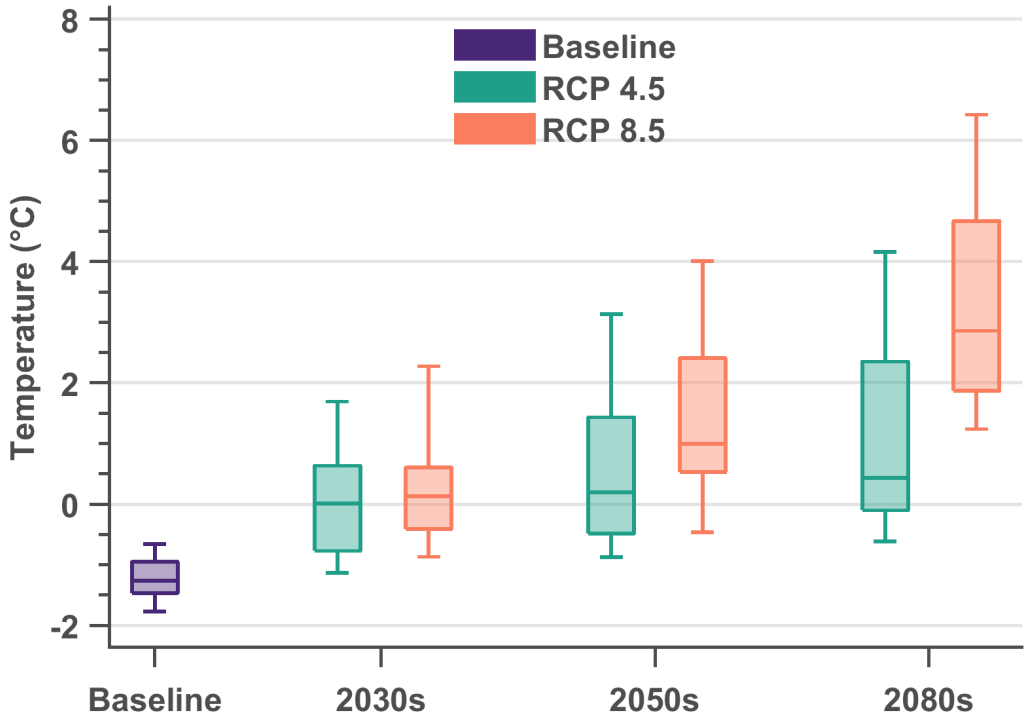


Figure F1.54: Coldest Monthly Temperature - May.

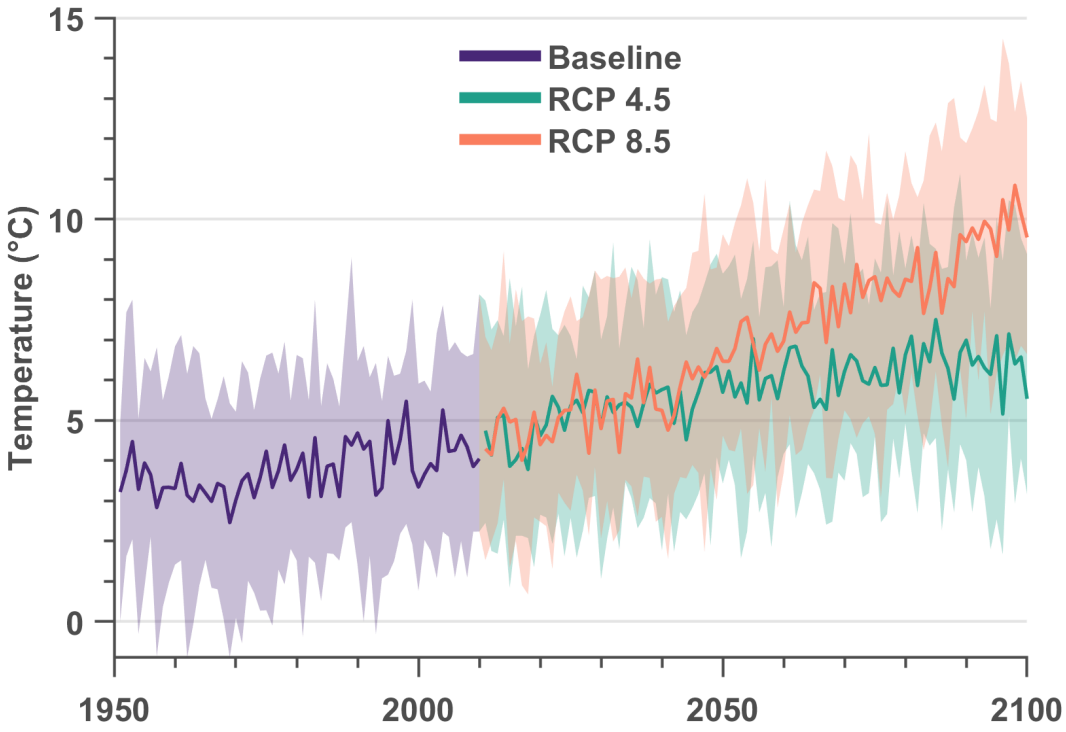


Figure F1.55: Coldest Monthly Temperature - June.

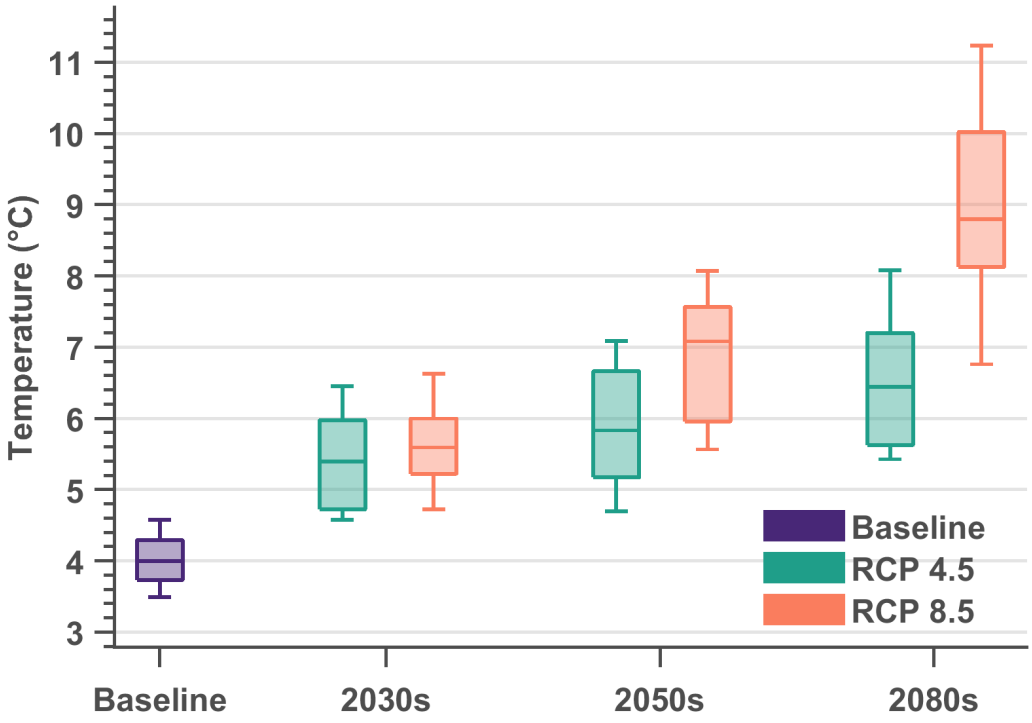


Figure F1.56: Coldest Monthly Temperature - June.

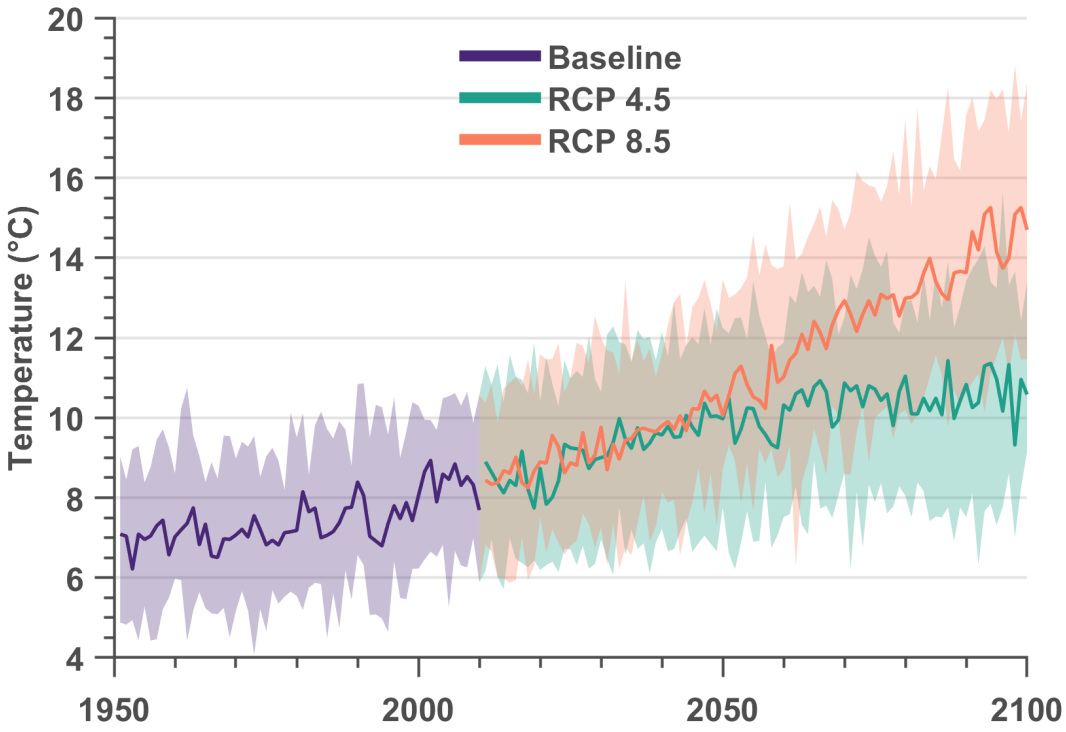


Figure F1.57: Coldest Monthly Temperature - July.

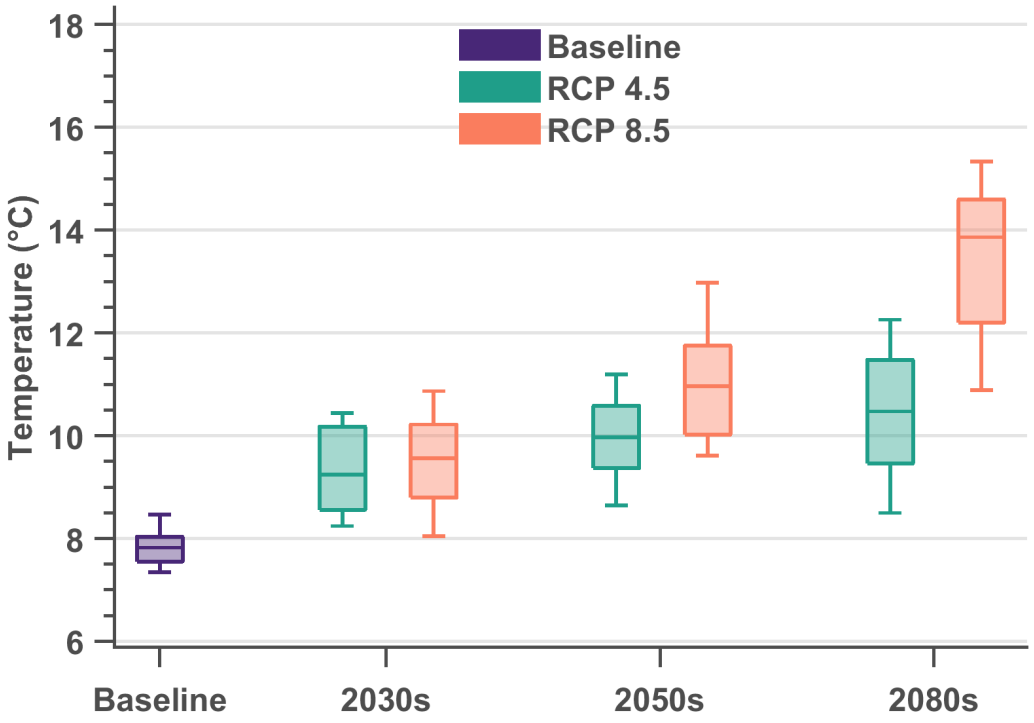


Figure F1.58: Coldest Monthly Temperature - July.

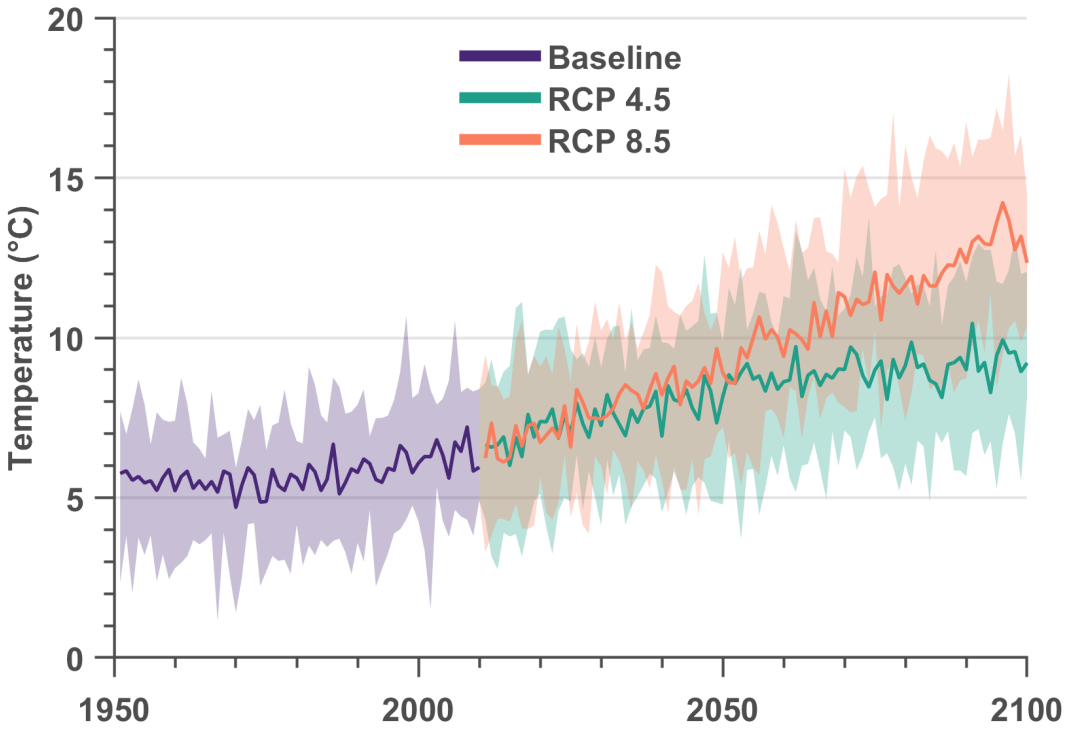


Figure F1.59: Coldest Monthly Temperature - August.

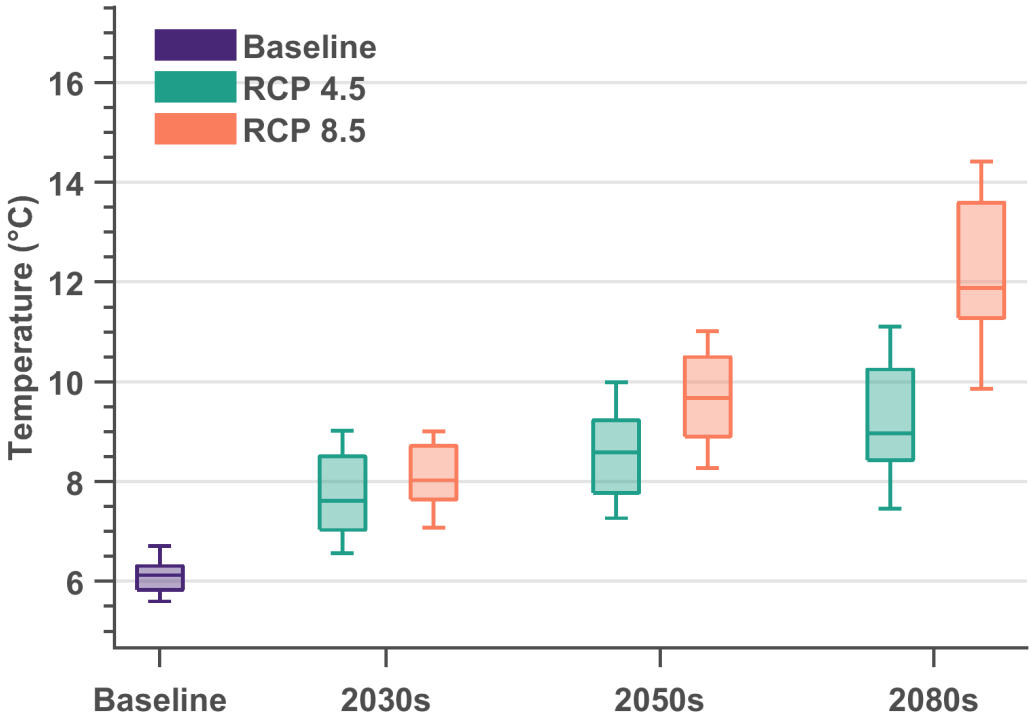


Figure F1.60: Coldest Monthly Temperature - August.

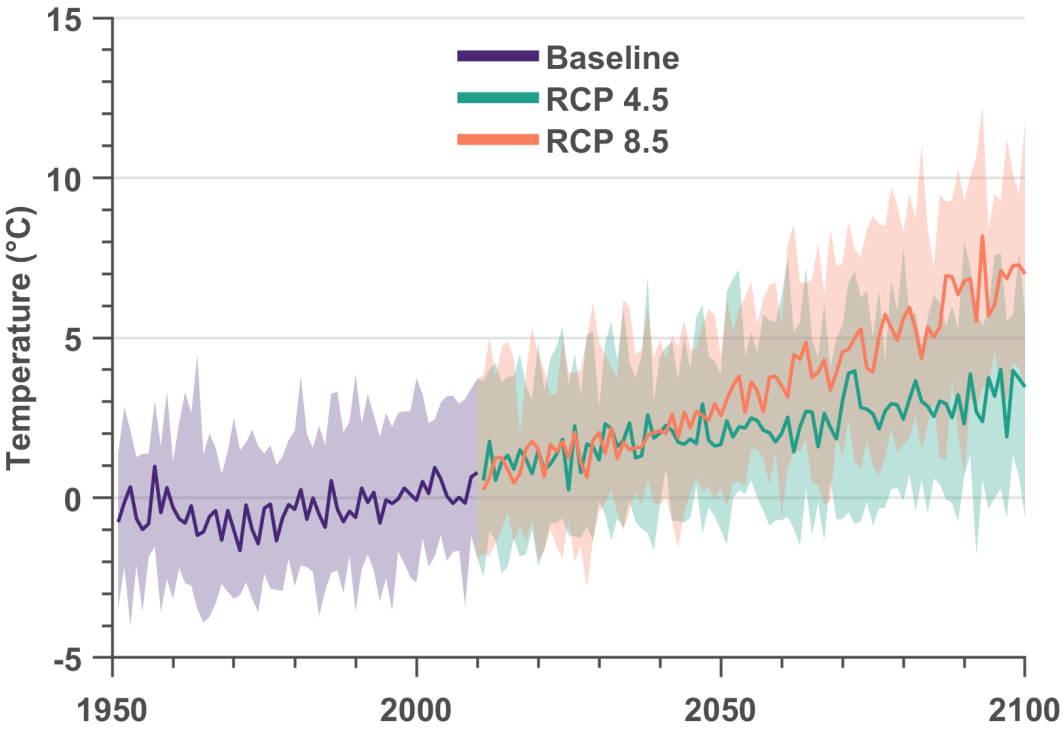


Figure F1.61: Coldest Monthly Temperature - September.

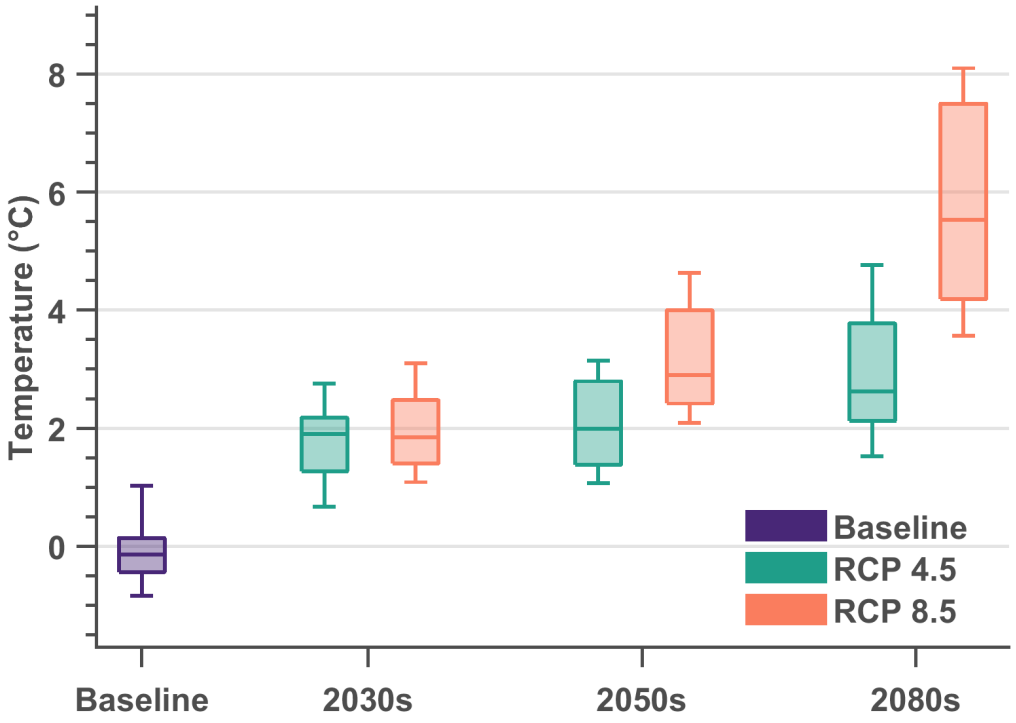


Figure F1.62: Coldest Monthly Temperature - September.

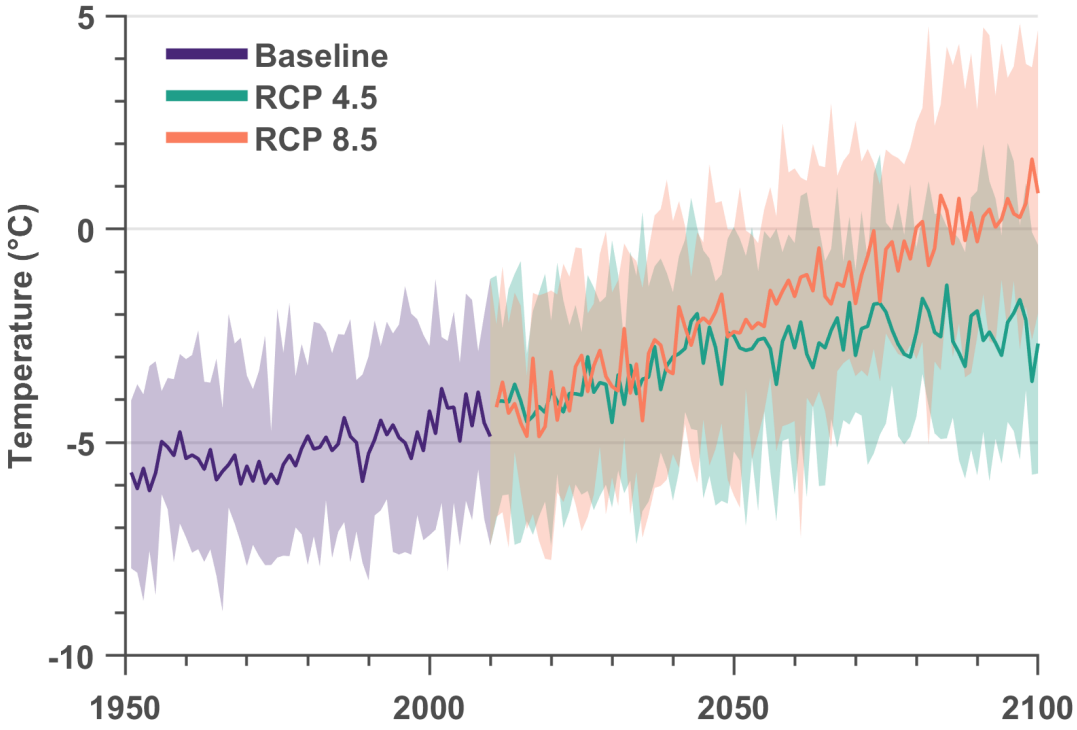


Figure F1.63: Coldest Monthly Temperature - October.

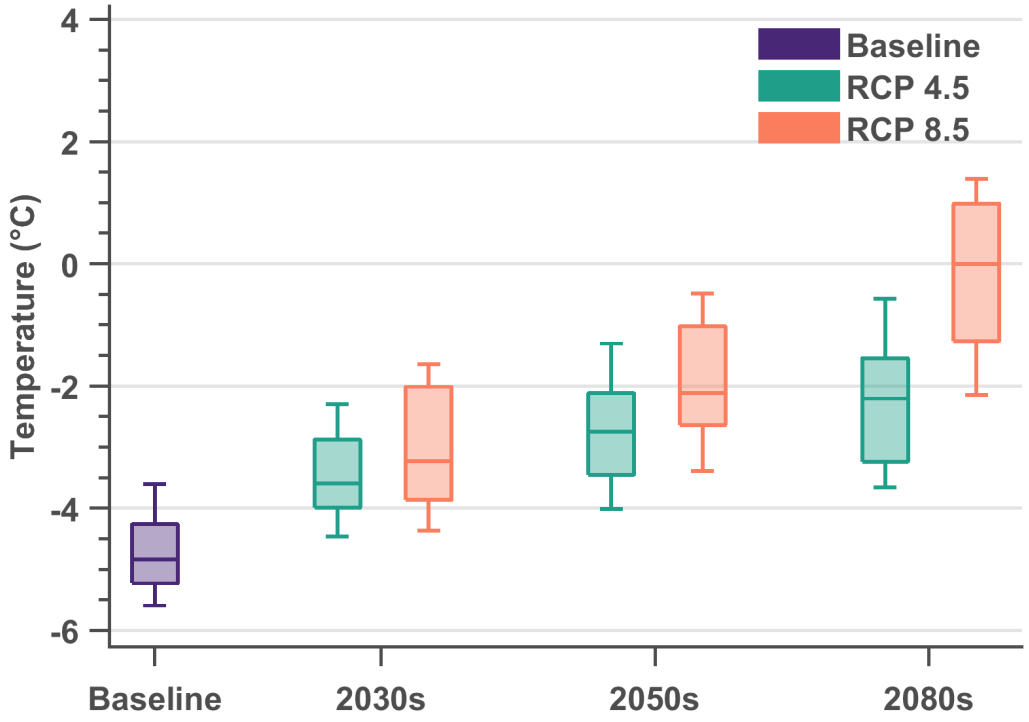


Figure F1.64: Coldest Monthly Temperature - October.

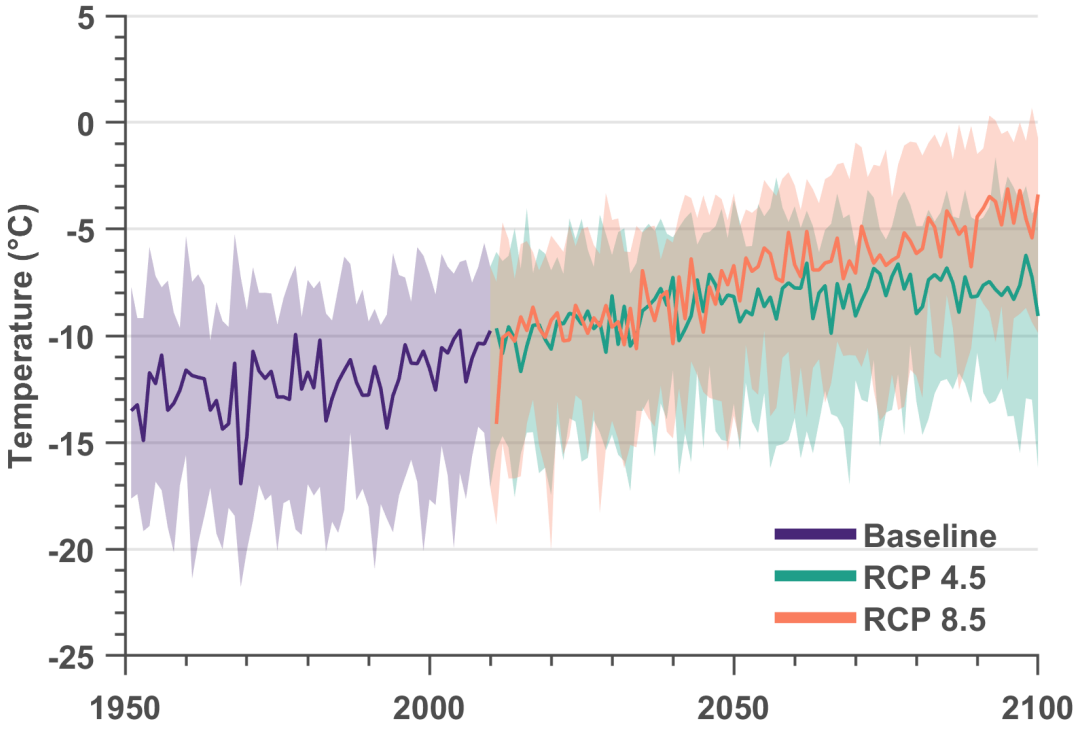


Figure F1.65: Coldest Monthly Temperature - November.

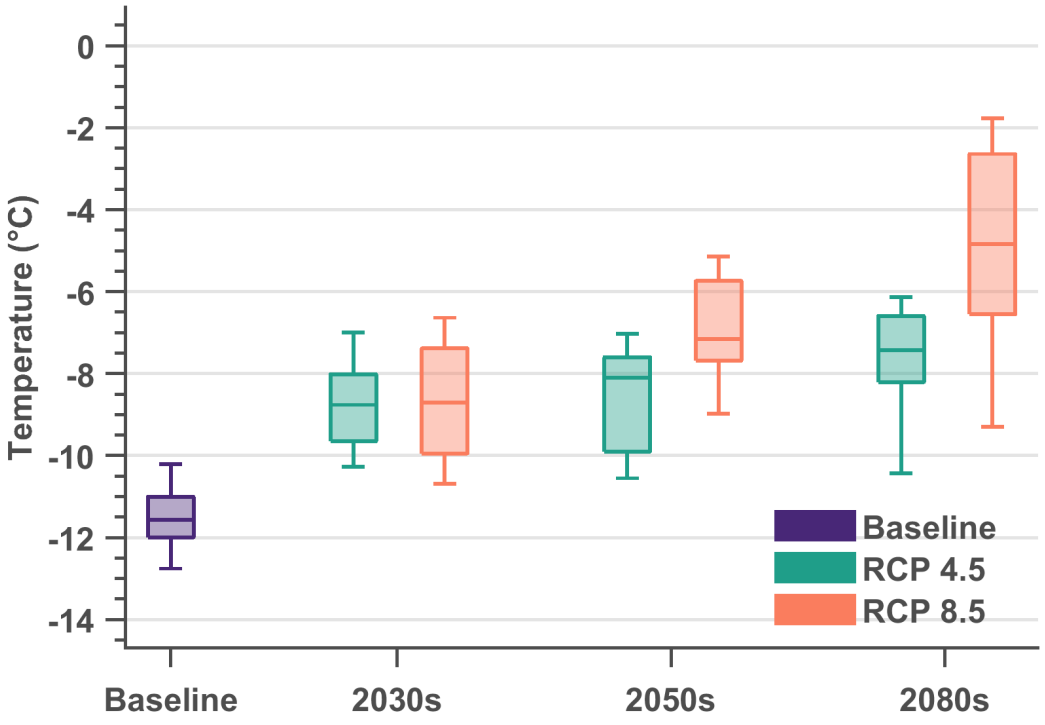


Figure F1.66: Coldest Monthly Temperature - November.

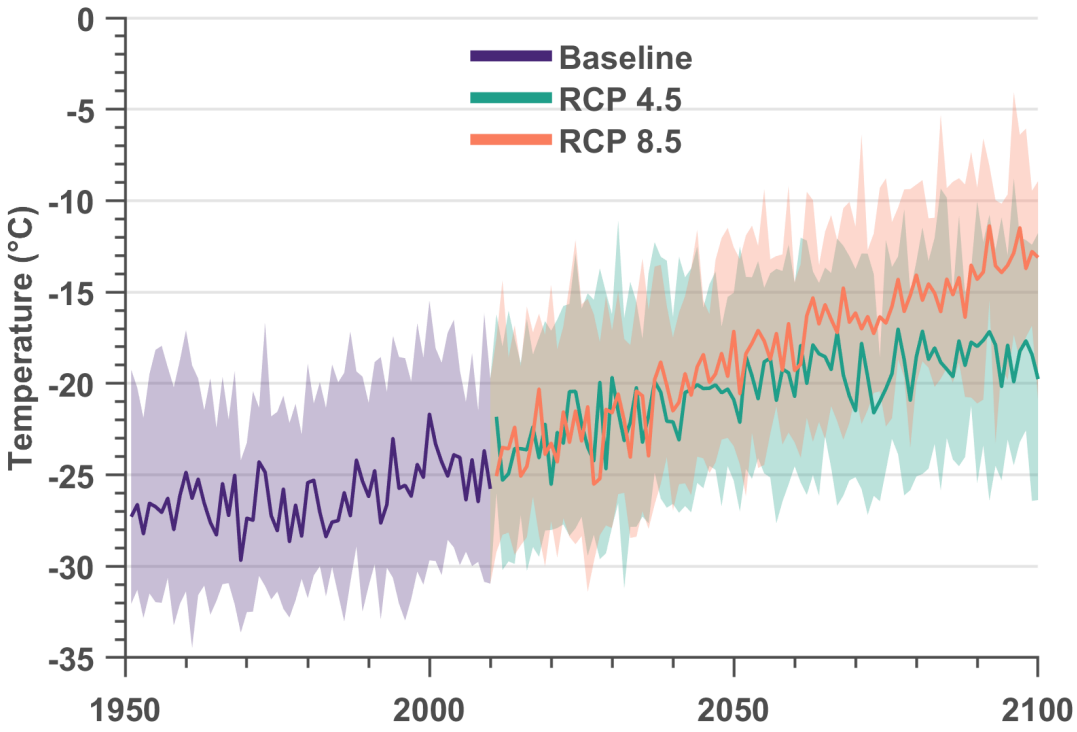


Figure F1.67: Coldest Monthly Temperature - December.

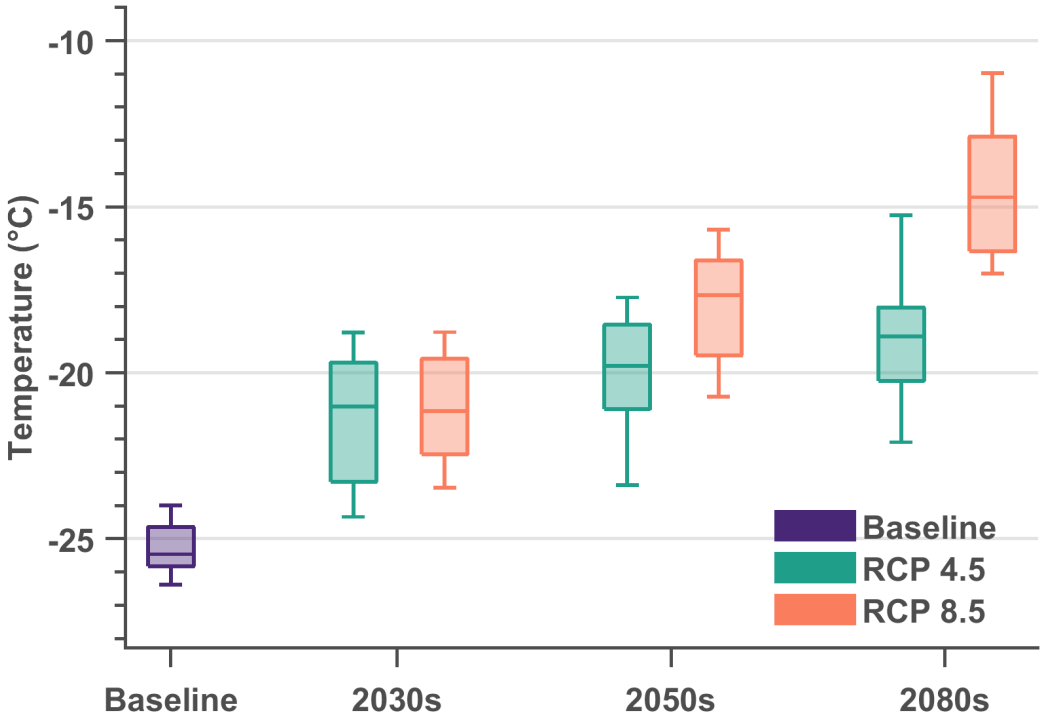


Figure F1.68: Coldest Monthly Temperature - December.

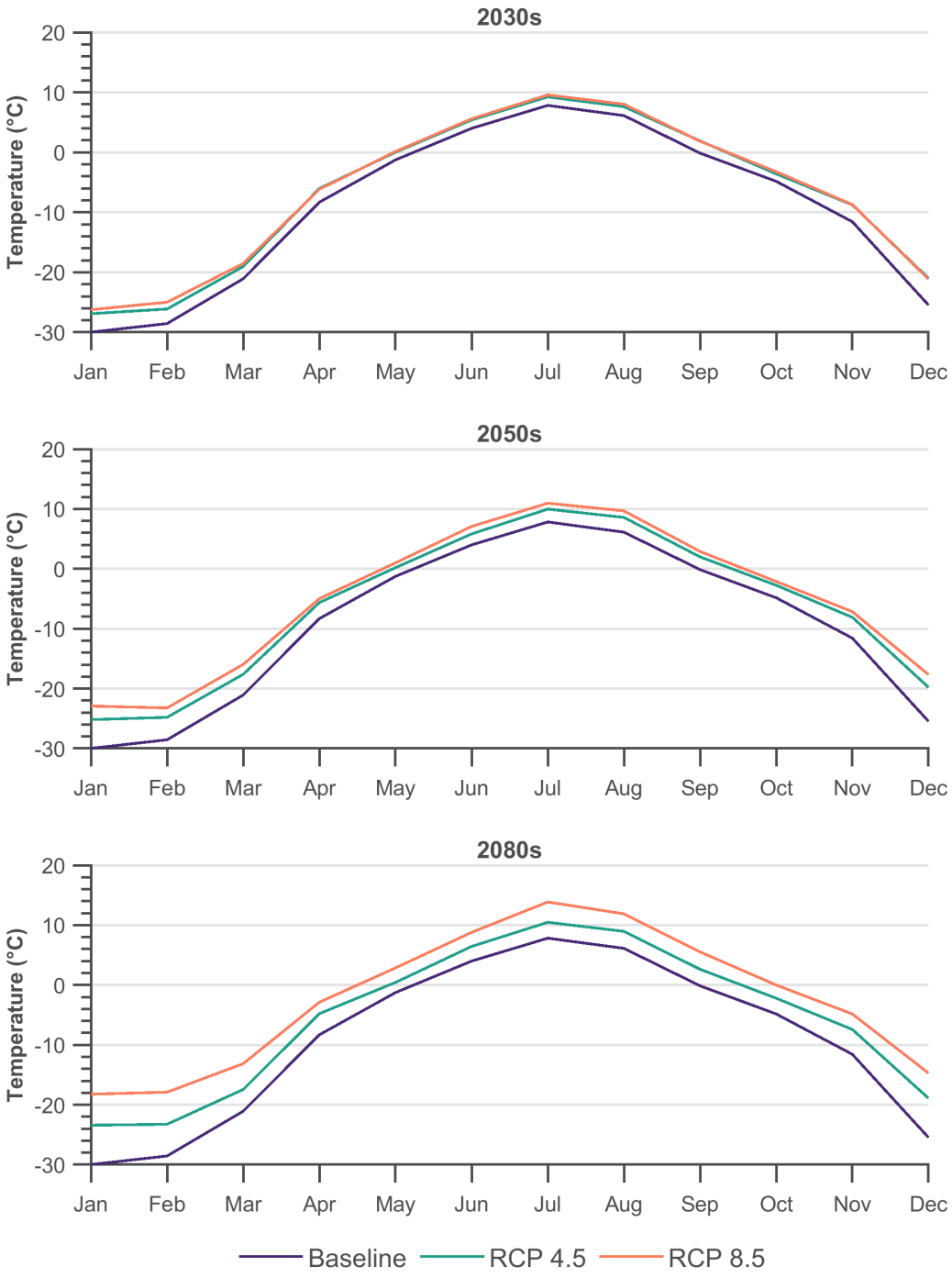


Figure F1.69: Coldest Monthly Temperature.

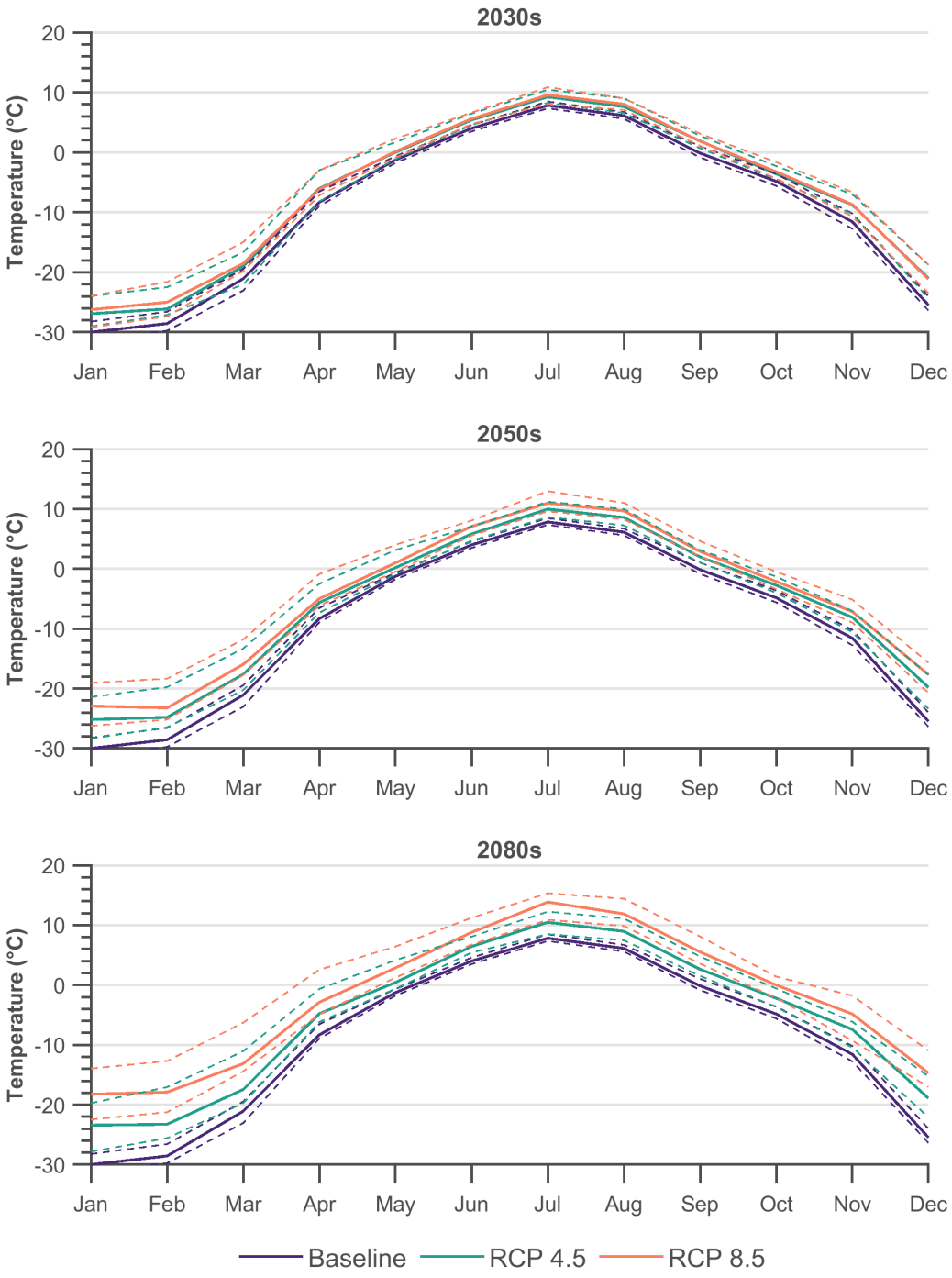


Figure F1.70: Coldest Monthly Temperature. Dashed lines indicate the 10% and 90% percentile.

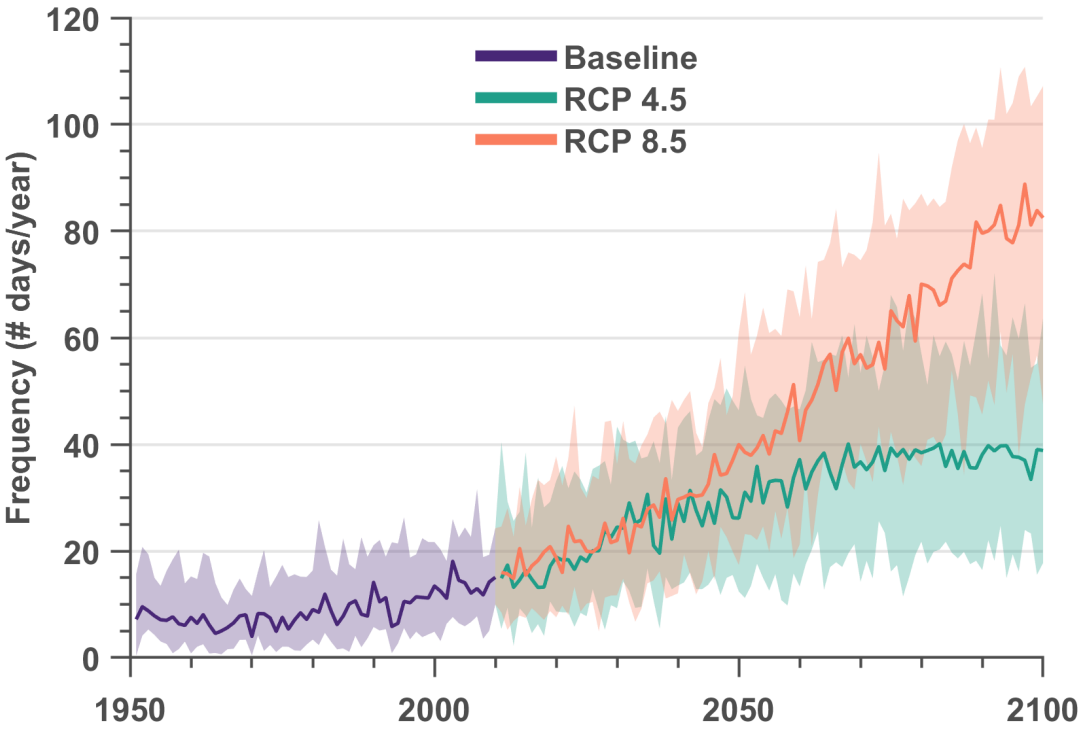


Figure F1.71: Number of Hot Days (Daily Max. Temperature > 30°C).

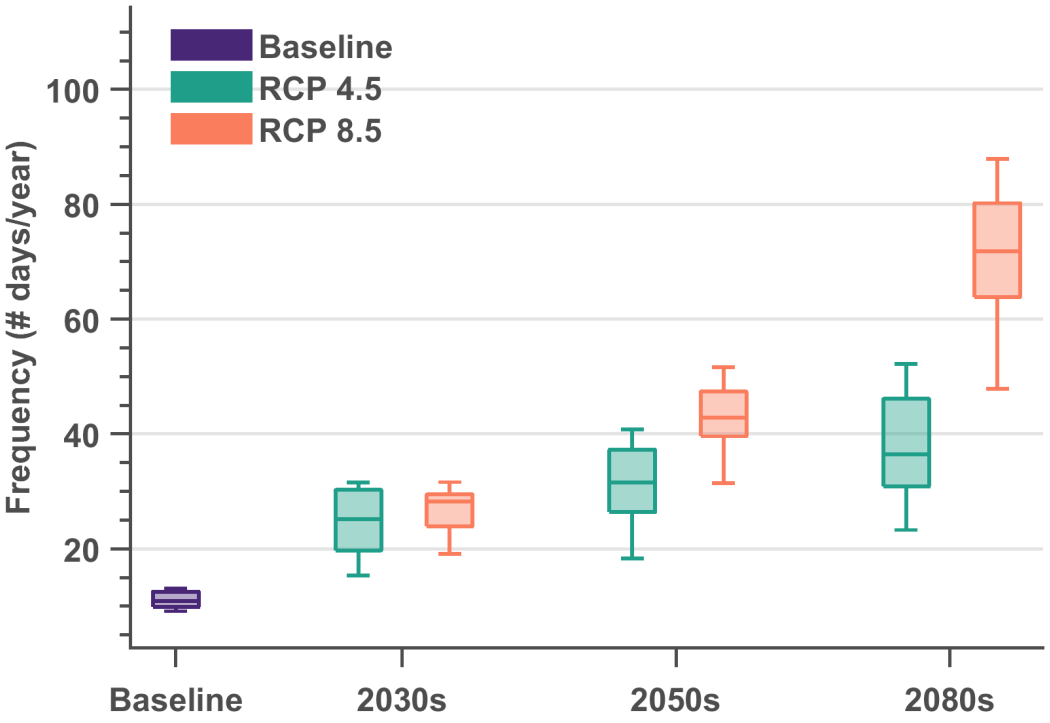


Figure F1.72: Number of Hot Days (Daily Max. Temperature > 30°C).

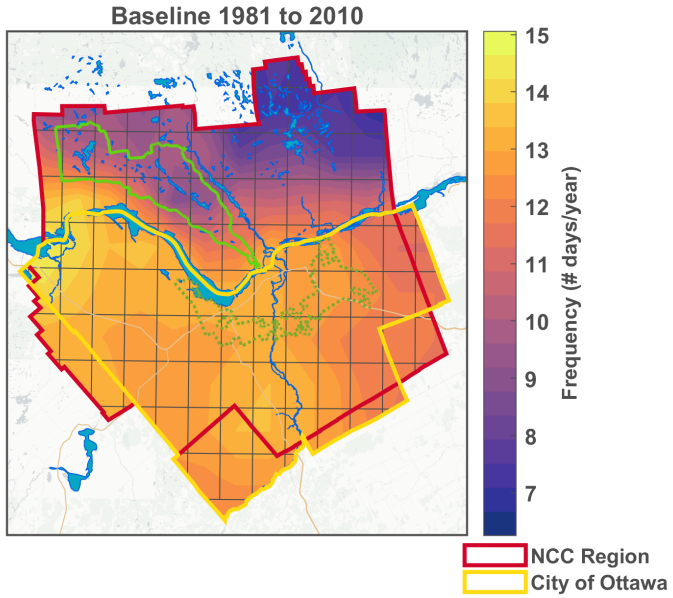


Figure F1.73: Number of Hot Days (Daily Max. Temperature > 30°C) - Baseline.

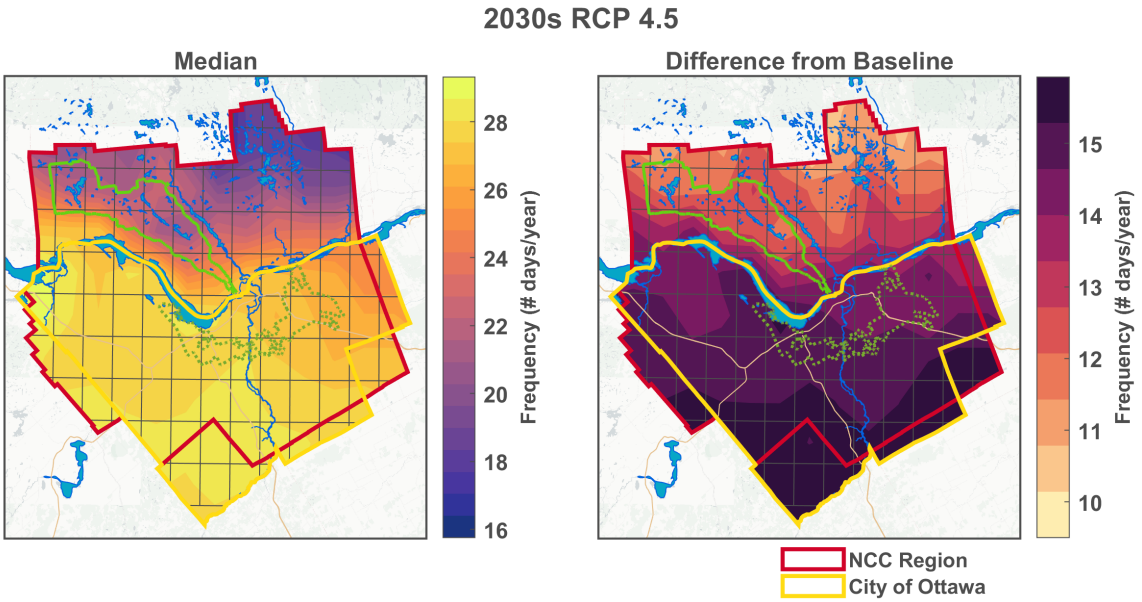


Figure F1.74: Number of Hot Days (Daily Max. Temperature > 30°C) - 2030s RCP 4.5.

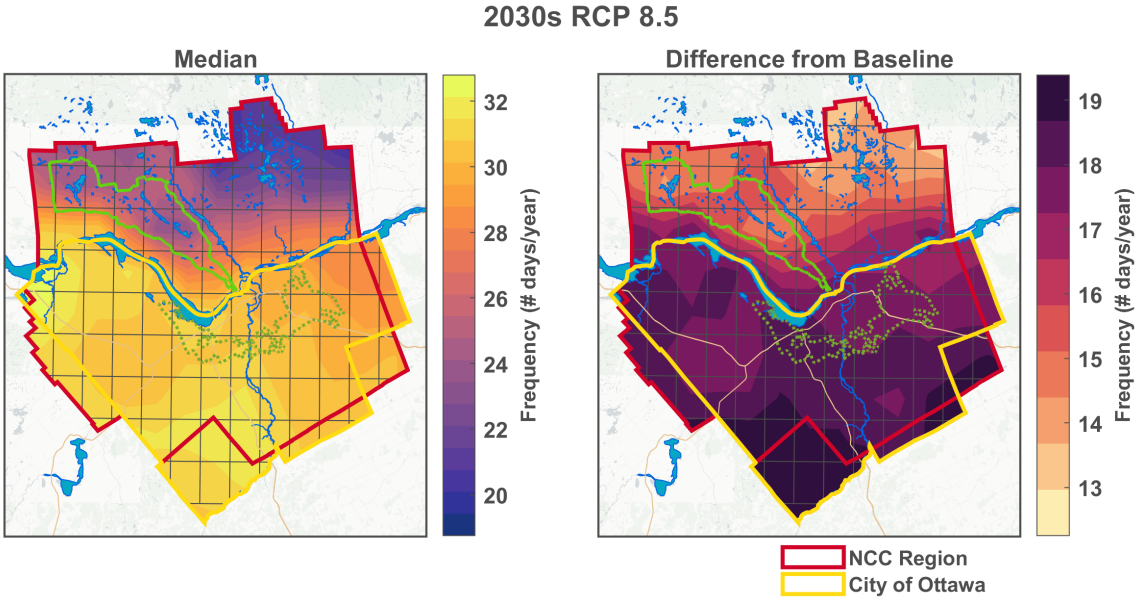


Figure F1.75: Number of Hot Days (Daily Max. Temperature > 30°C) - 2030s RCP 8.5.

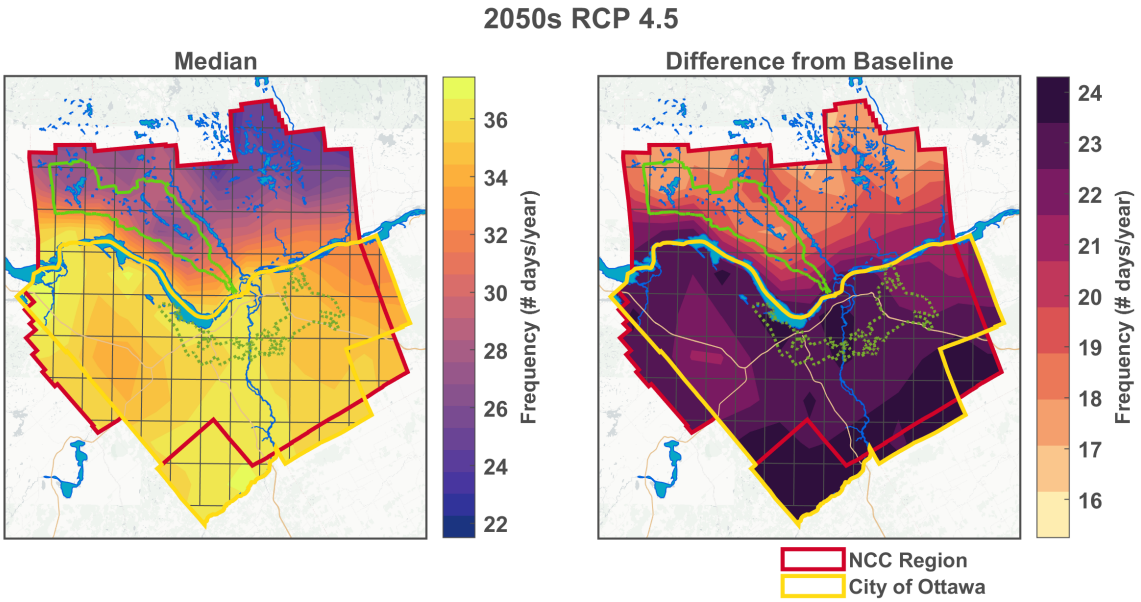


Figure F1.76: Number of Hot Days (Daily Max. Temperature > 30°C) - 2050s RCP 4.5.

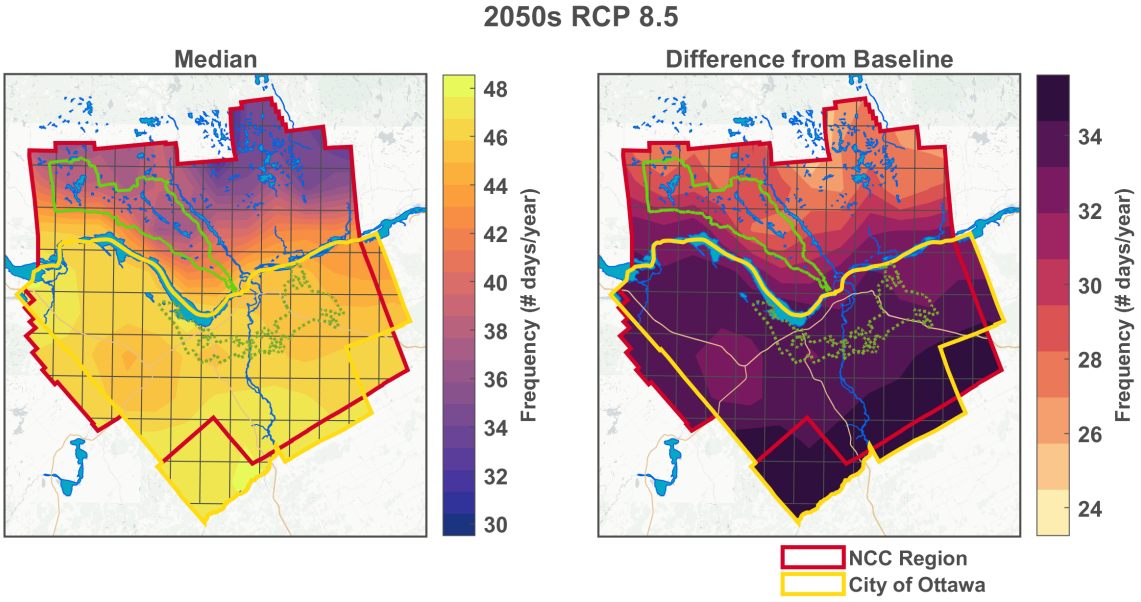


Figure F1.77: Number of Hot Days (Daily Max. Temperature > 30°C) - 2050s RCP 8.5.

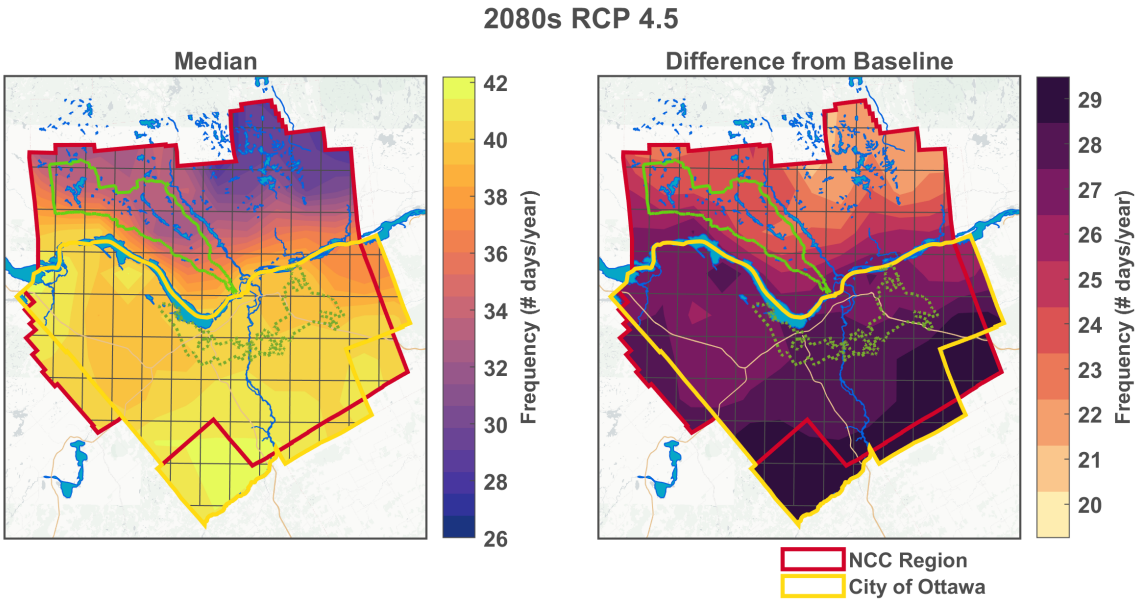


Figure F1.78: Number of Hot Days (Daily Max. Temperature > 30°C) - 2080s RCP 4.5.

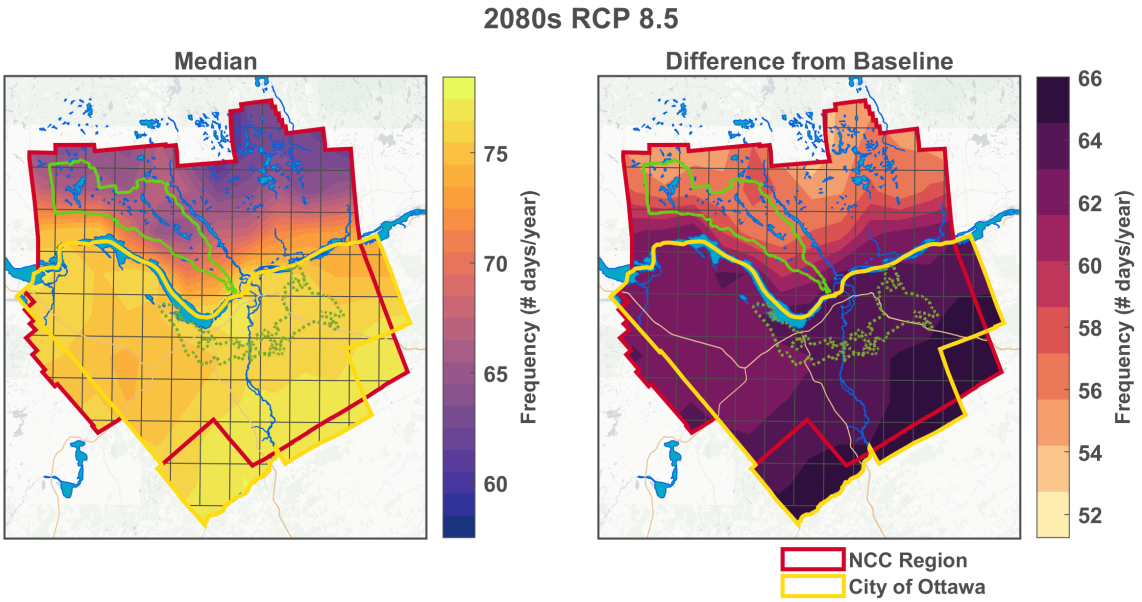


Figure F1.79: Number of Hot Days (Daily Max. Temperature > 30°C) - 2080s RCP 8.5.

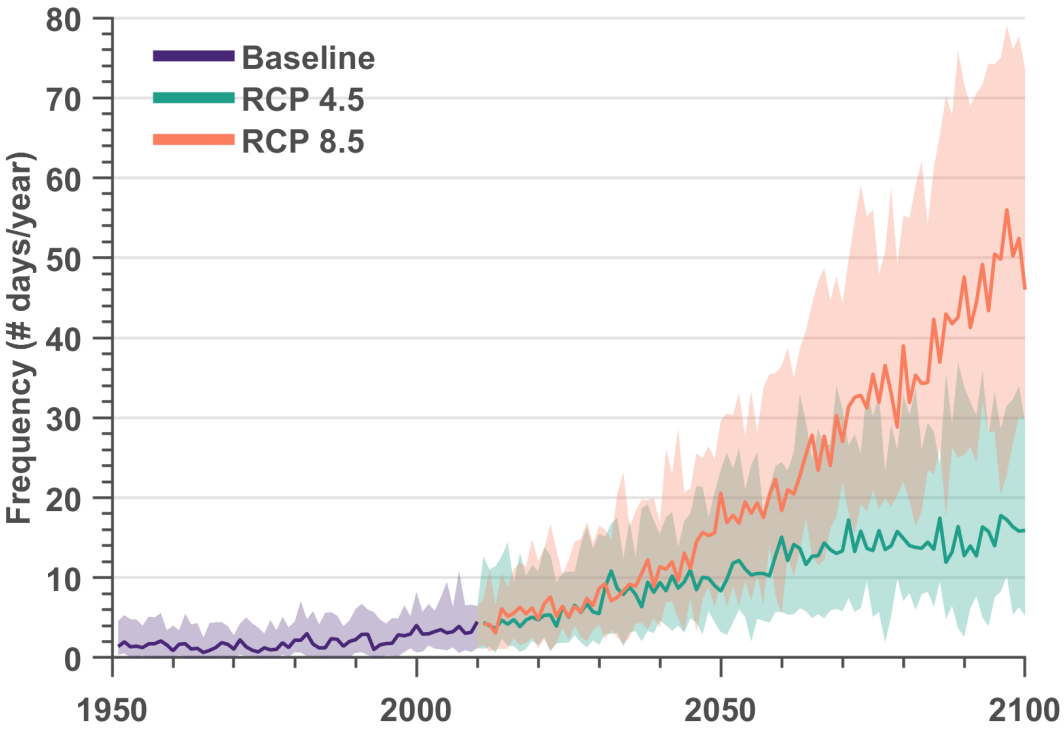


Figure F1.80: Number of Tropical Nights (Daily. Min Temperature > 20°C).

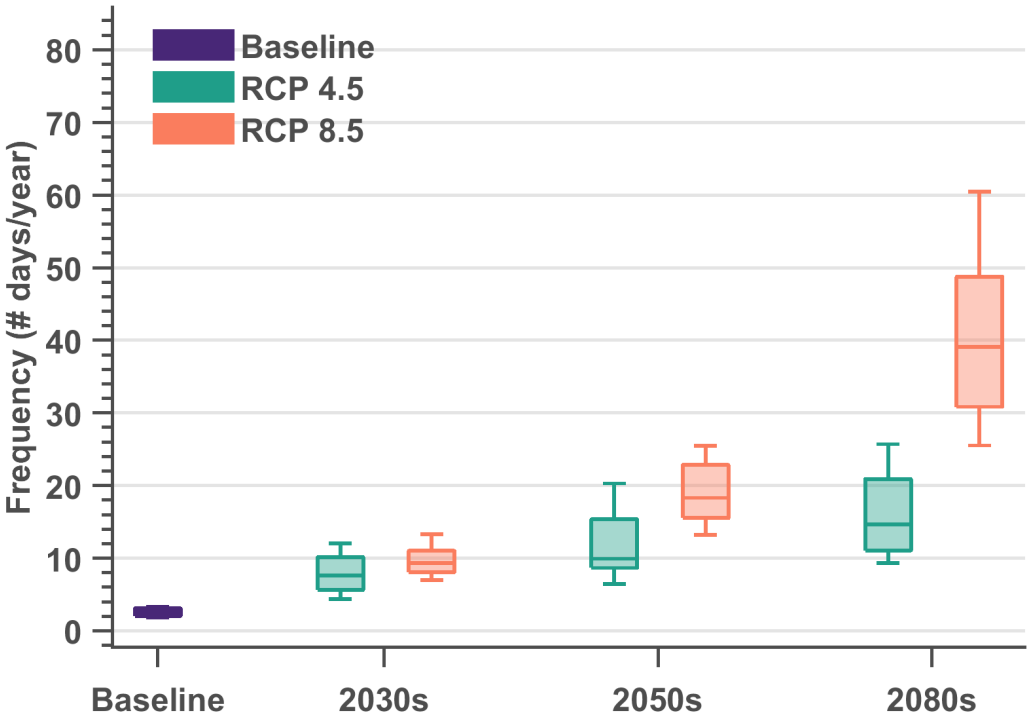


Figure F1.81: Number of Tropical Nights (Daily. Min Temperature > 20°C).

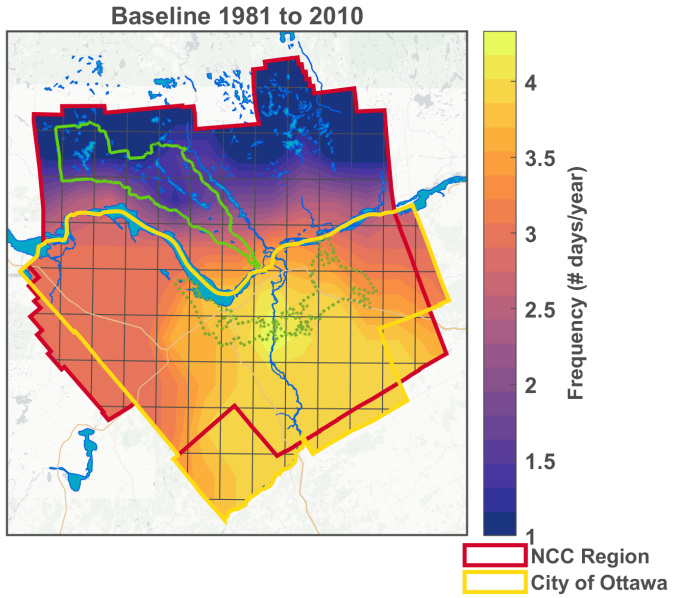


Figure F1.82: Number of Tropical Nights (Daily. Min Temperature > 20ºC) - Baseline.

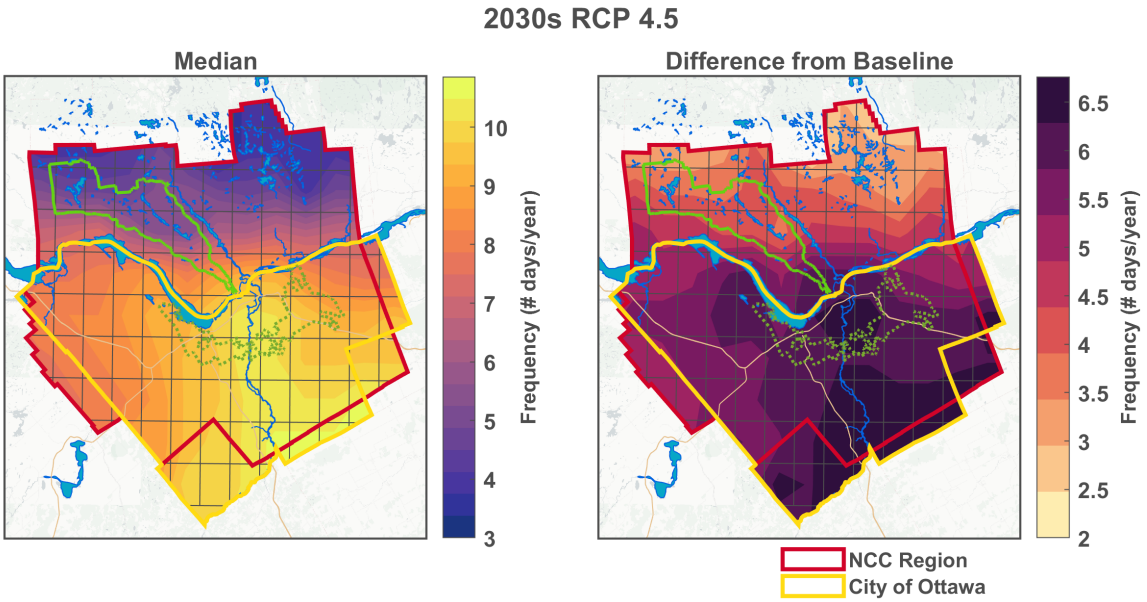


Figure F1.83: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2030s RCP 4.5.

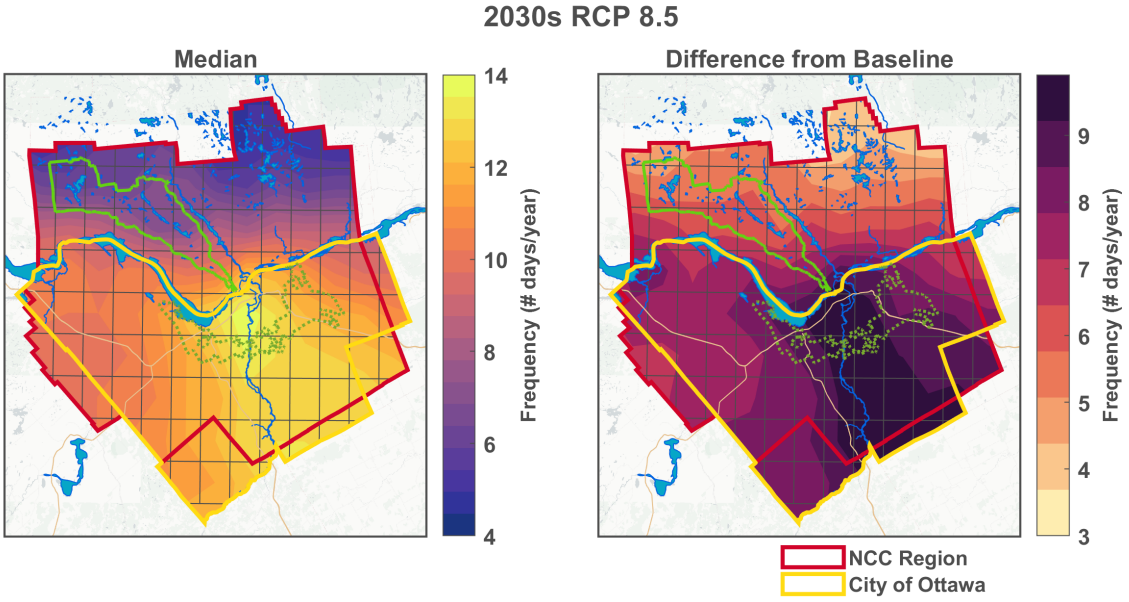


Figure F1.84: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2030s RCP 8.5.

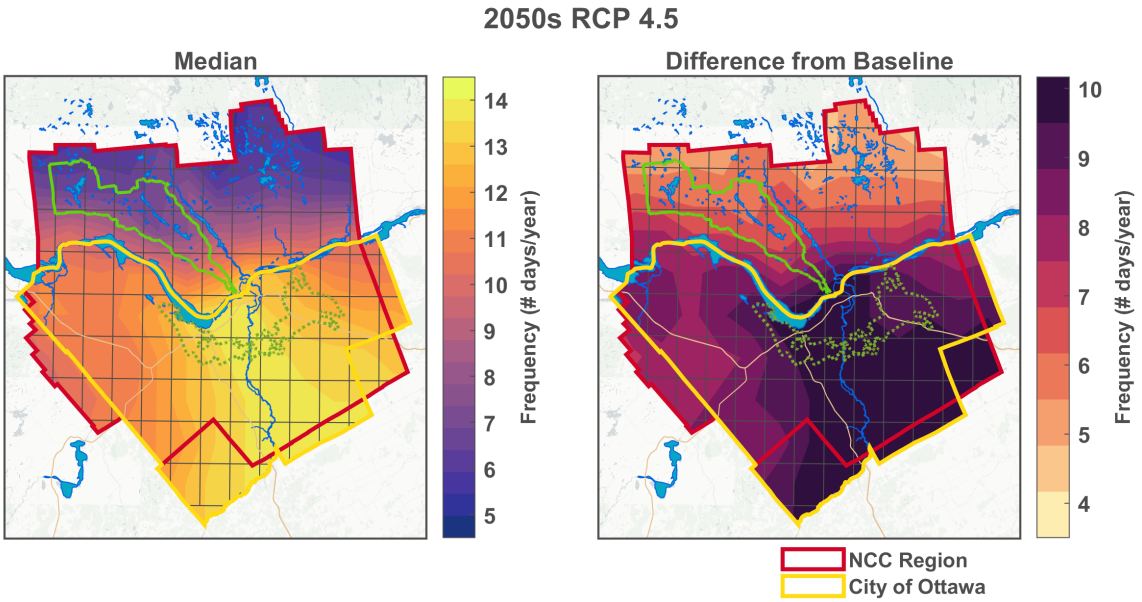


Figure F1.85: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2050s RCP 4.5.

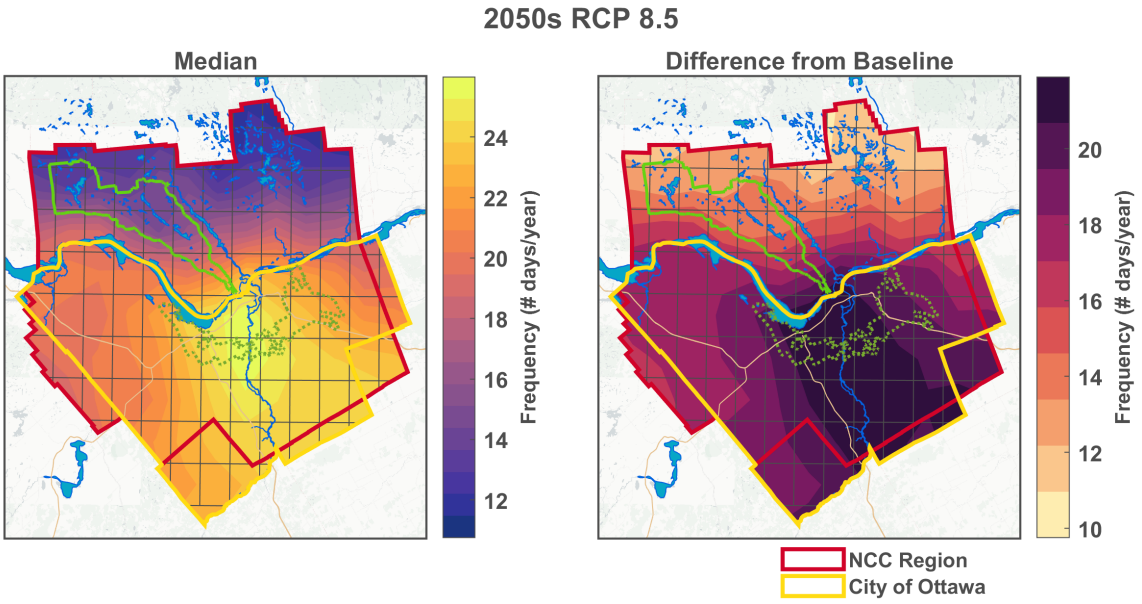


Figure F1.86: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2050s RCP 8.5.

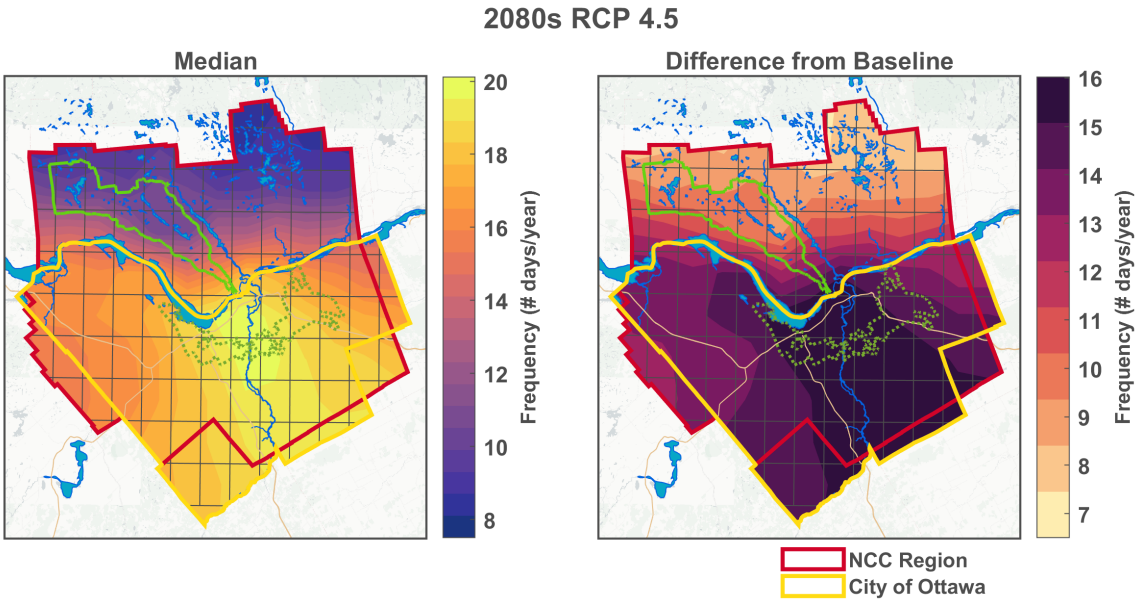


Figure F1.87: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2080s RCP 4.5.

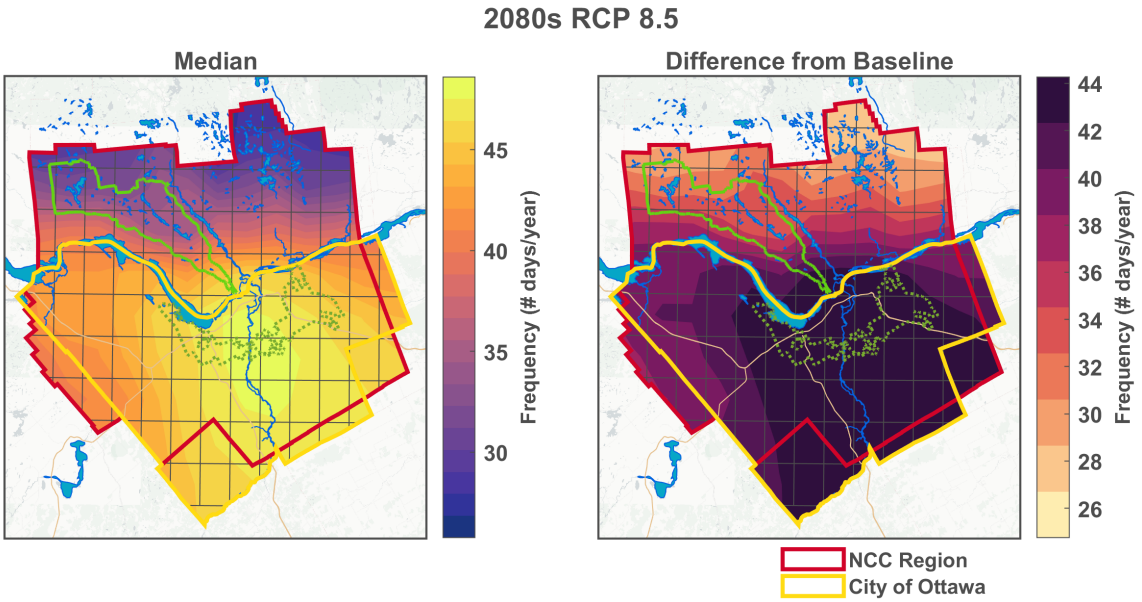


Figure F1.88: Number of Tropical Nights (Daily. Min Temperature > 20^{o}C) - 2080s RCP 8.5.

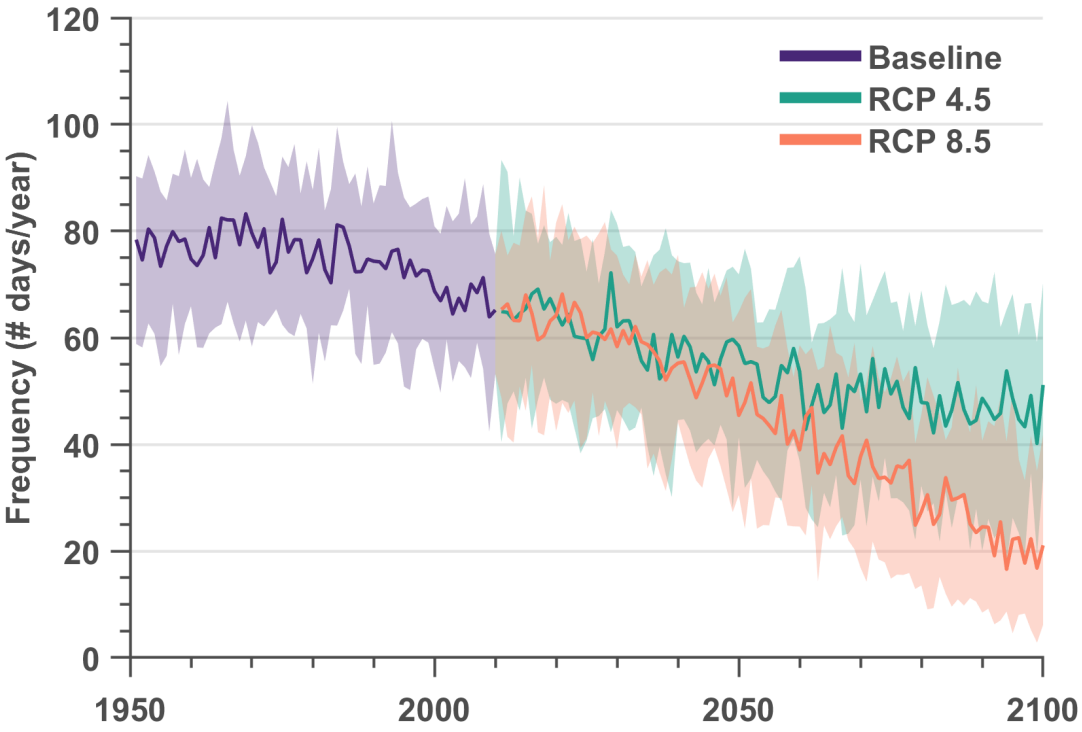


Figure F1.89: Number of Deep Freeze Events (Daily Min. Temperature < -10°C).

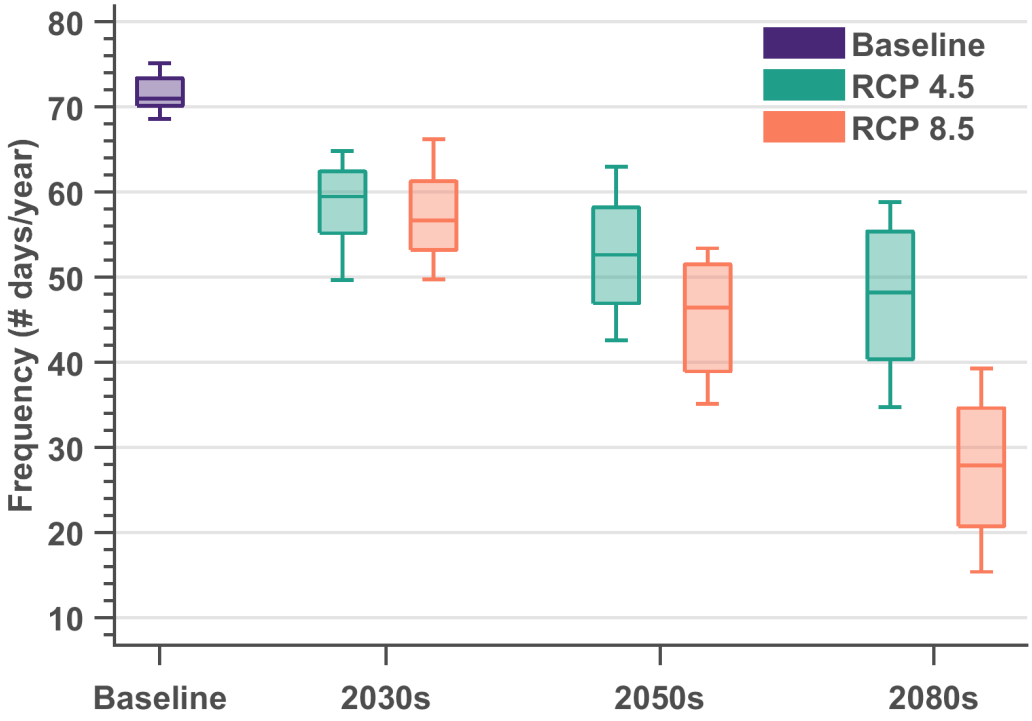


Figure F1.90: Number of Deep Freeze Events (Daily Min. Temperature < -10°C).

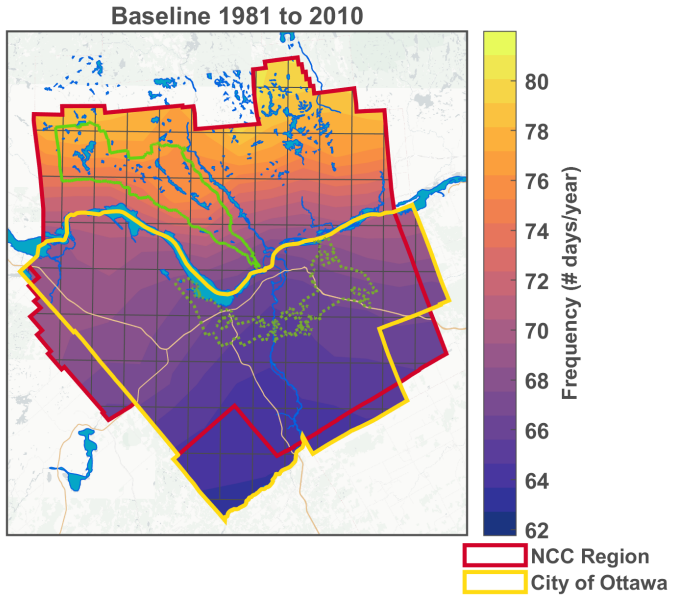


Figure F1.91: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - Baseline.

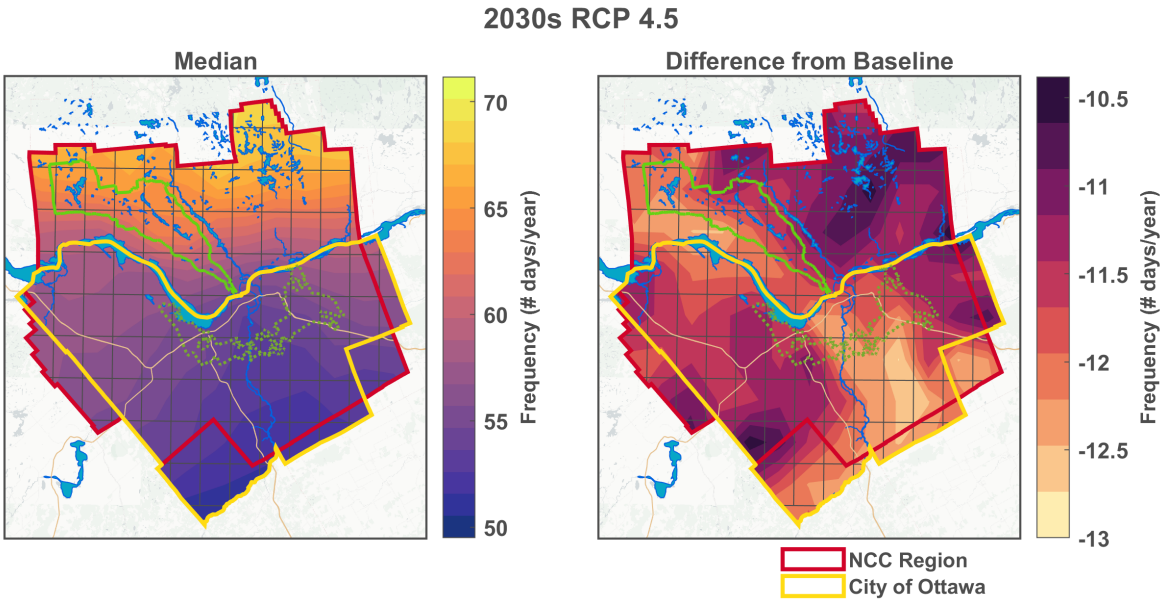


Figure F1.92: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2030s RCP 4.5.

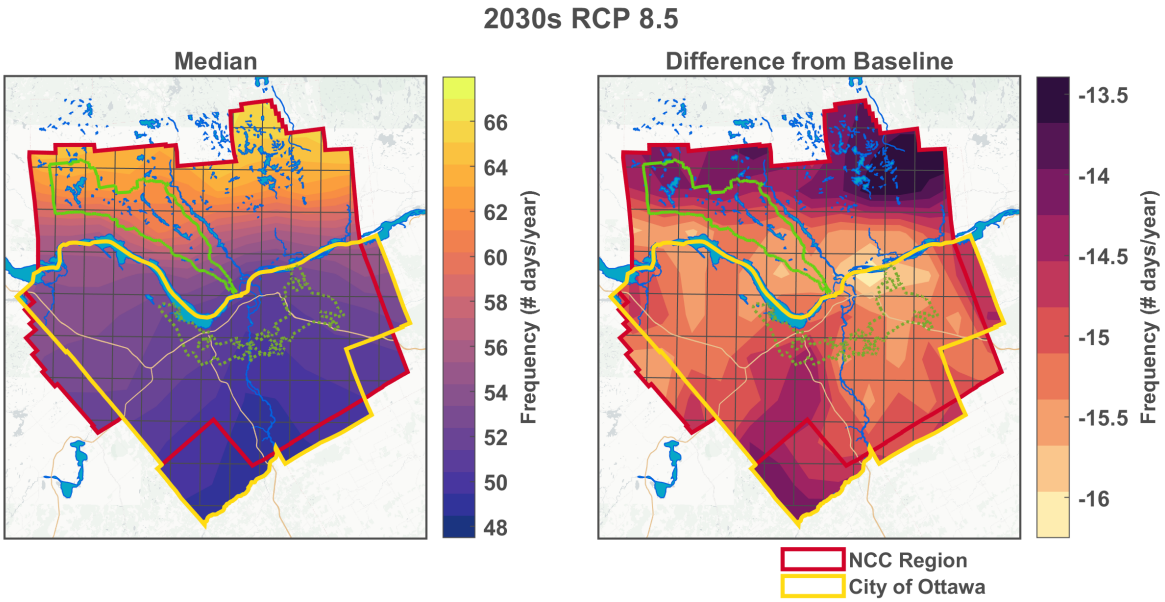


Figure F1.93: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2030s RCP 8.5.

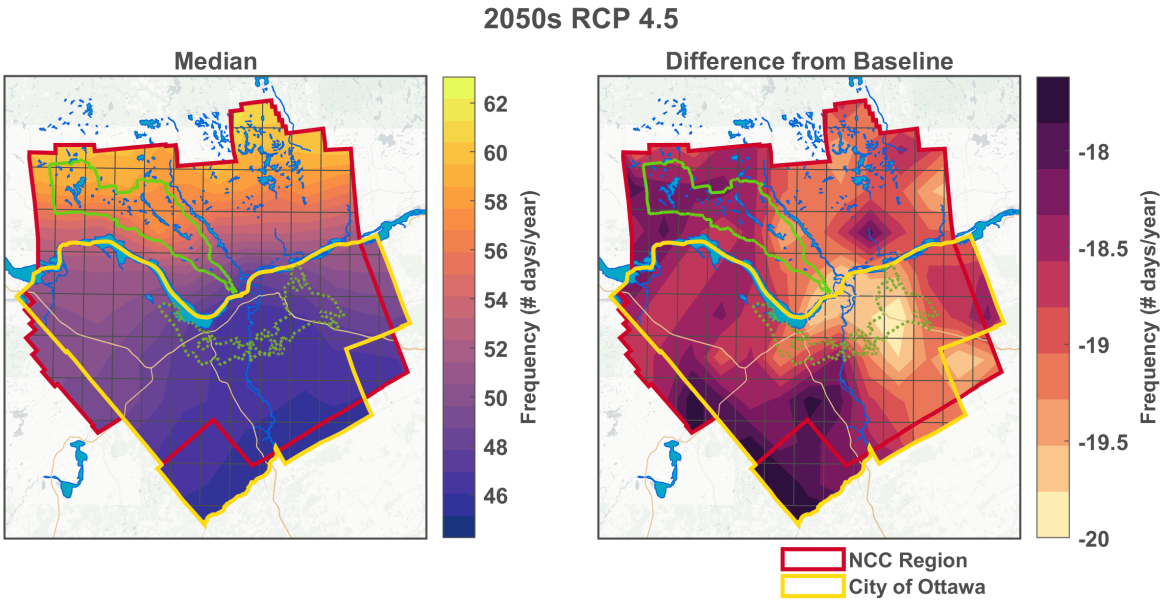


Figure F1.94: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2050s RCP 4.5.

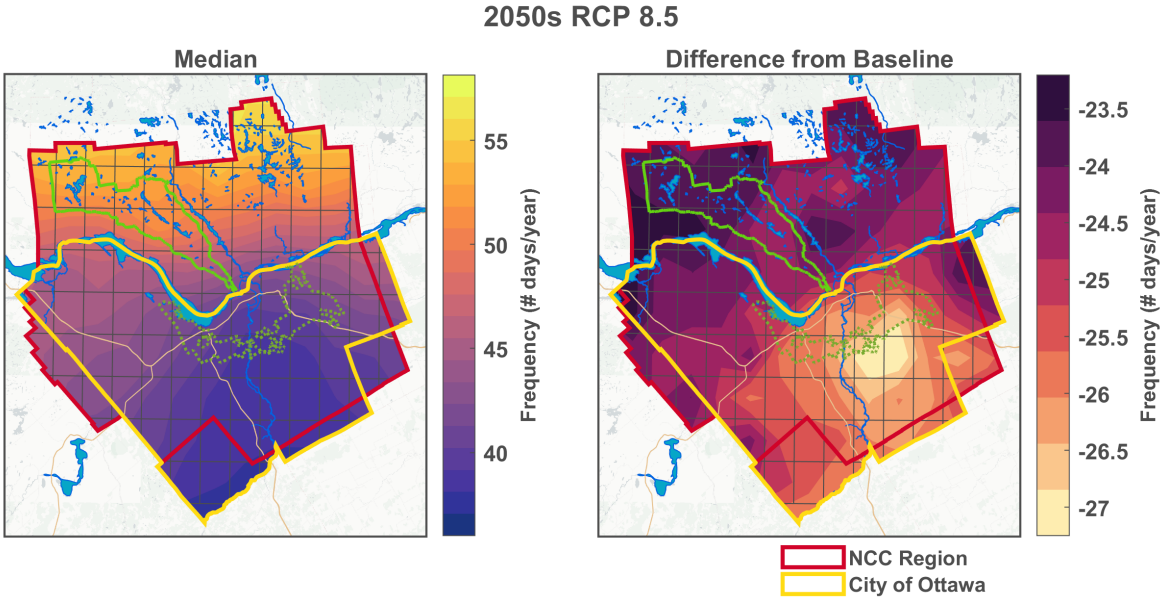


Figure F1.95: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2050s RCP 8.5.

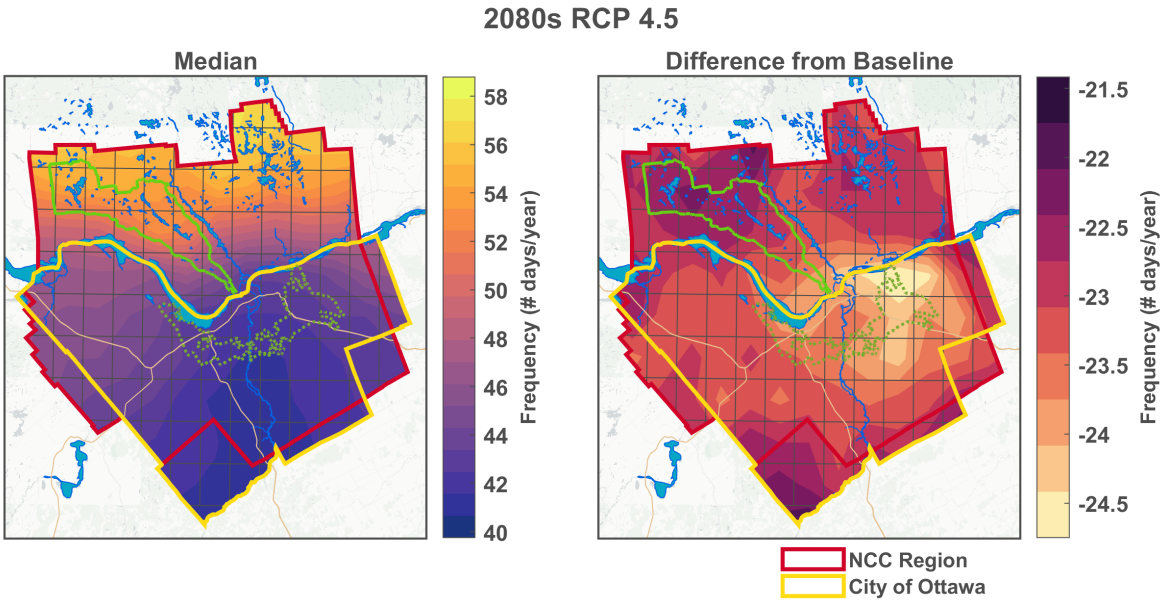


Figure F1.96: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2080s RCP 4.5.

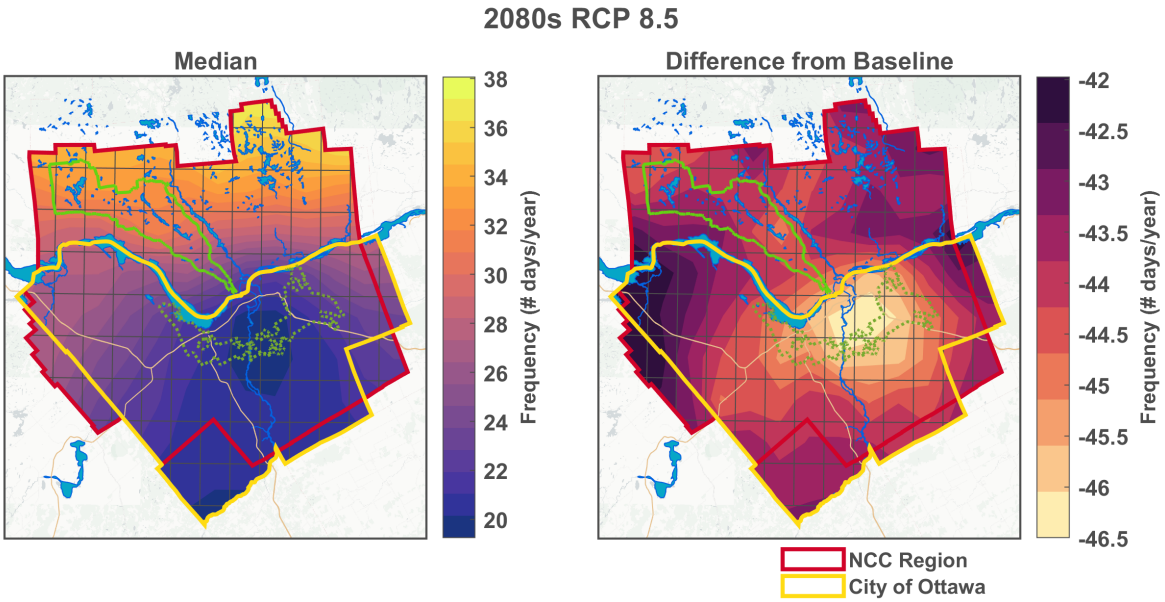


Figure F1.97: Number of Deep Freeze Events (Daily Min. Temperature < -10°C) - 2080s RCP 8.5.

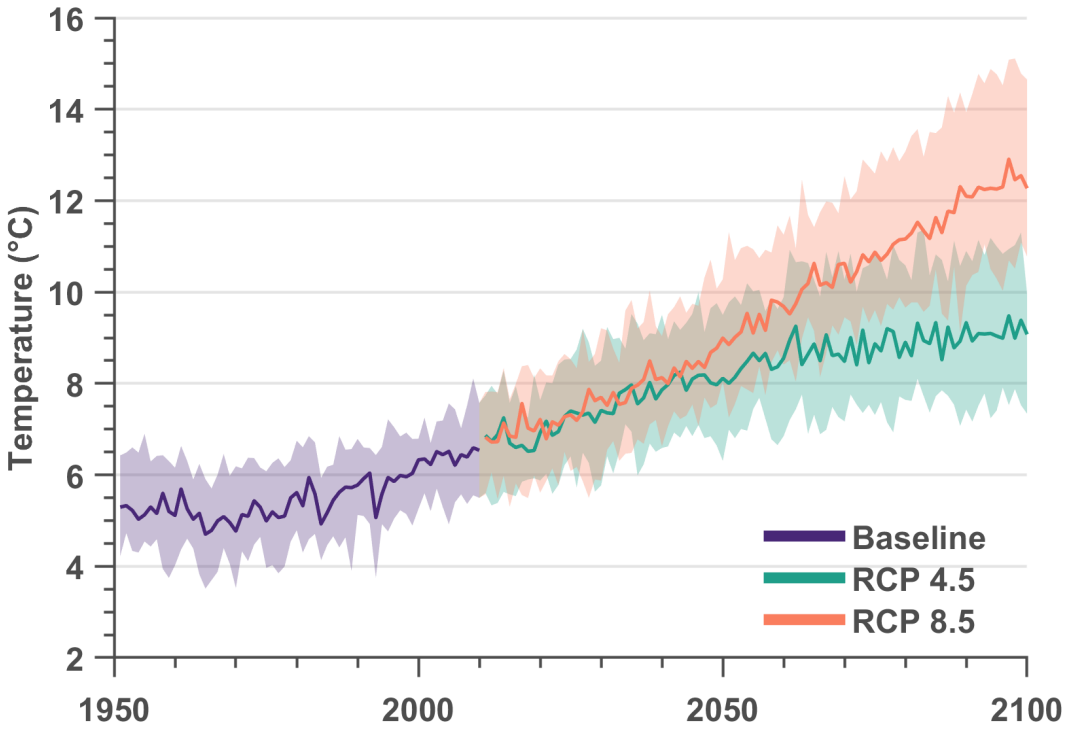


Figure F1.98: Annual Average Temperature.

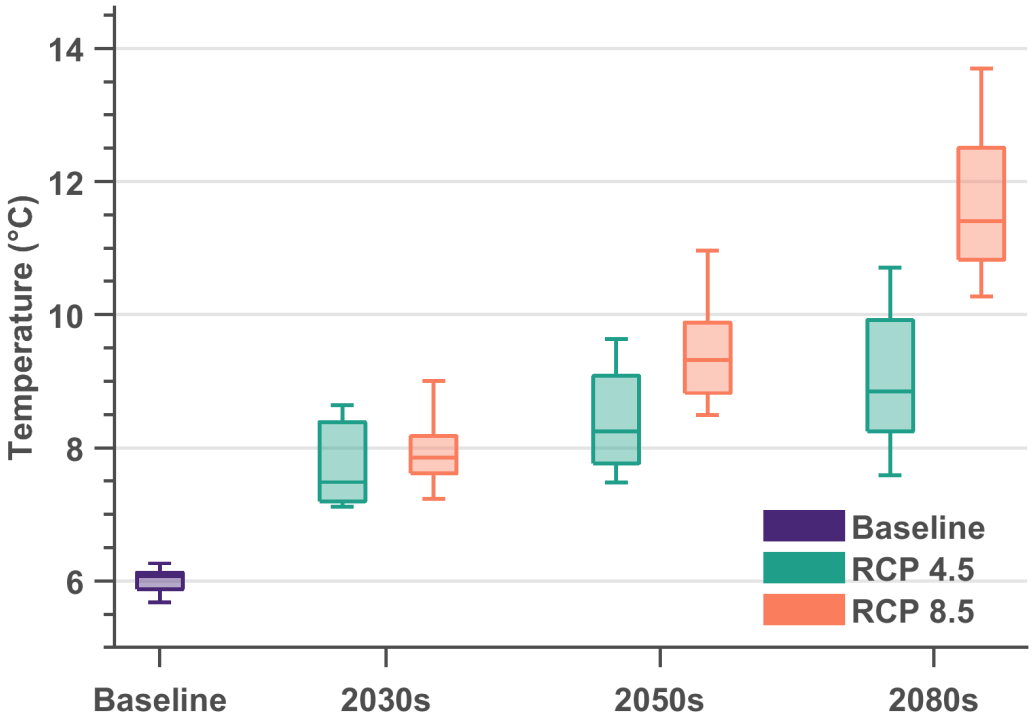


Figure F1.99: Annual Average Temperature.

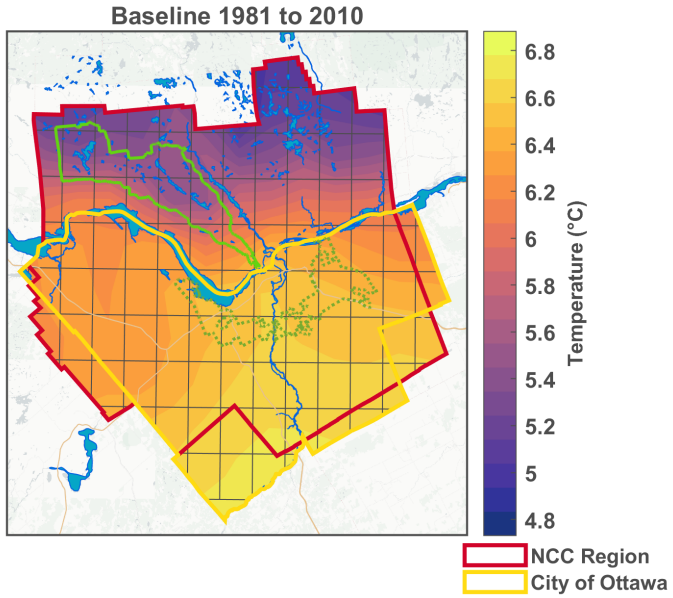


Figure F1.100: Annual Average Temperature - Baseline.

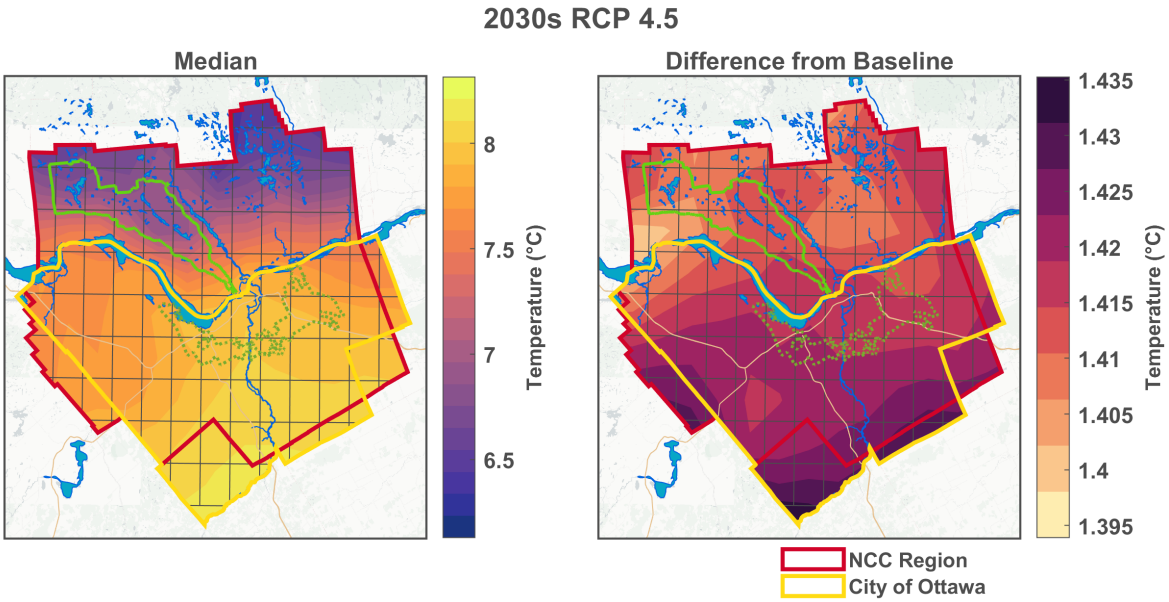


Figure F1.101: Annual Average Temperature - 2030s RCP 4.5.

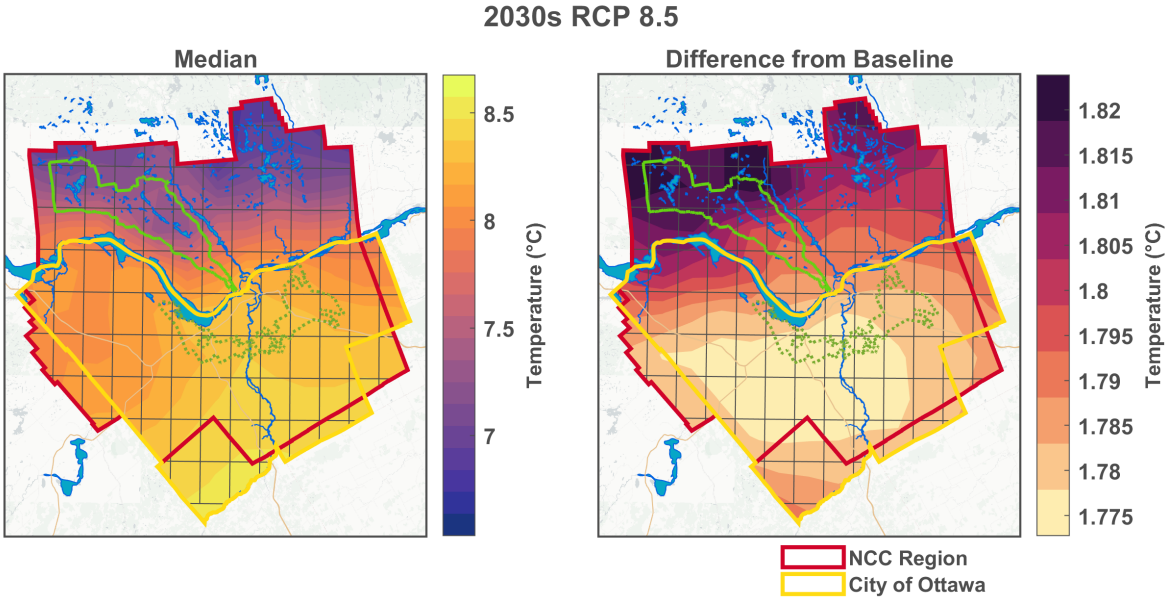


Figure F1.102: Annual Average Temperature - 2030s RCP 8.5.

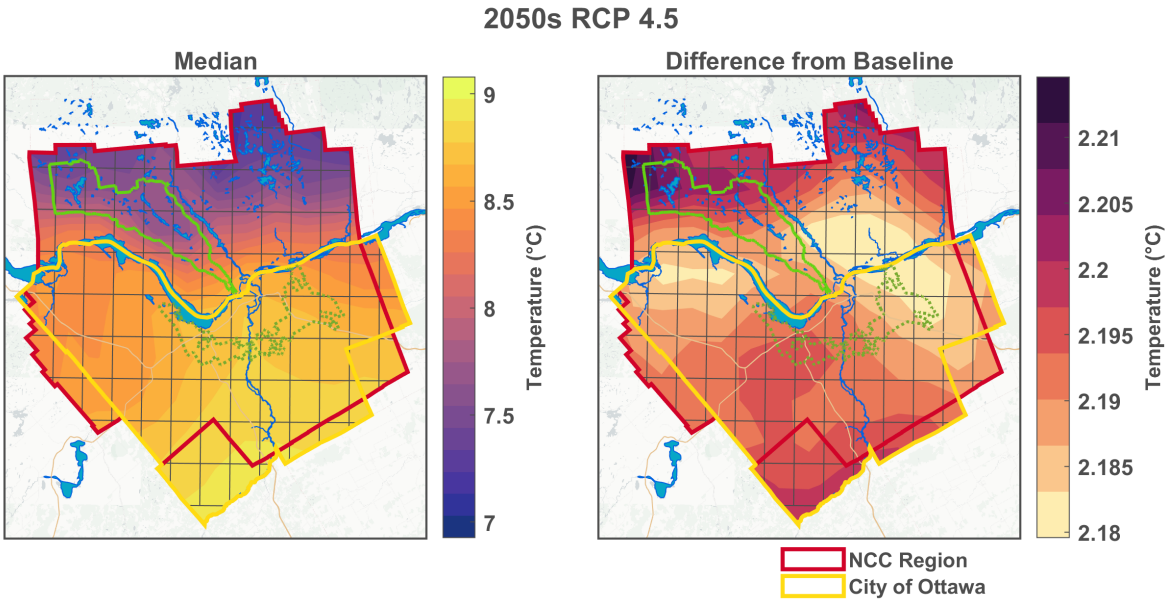


Figure F1.103: Annual Average Temperature - 2050s RCP 4.5.

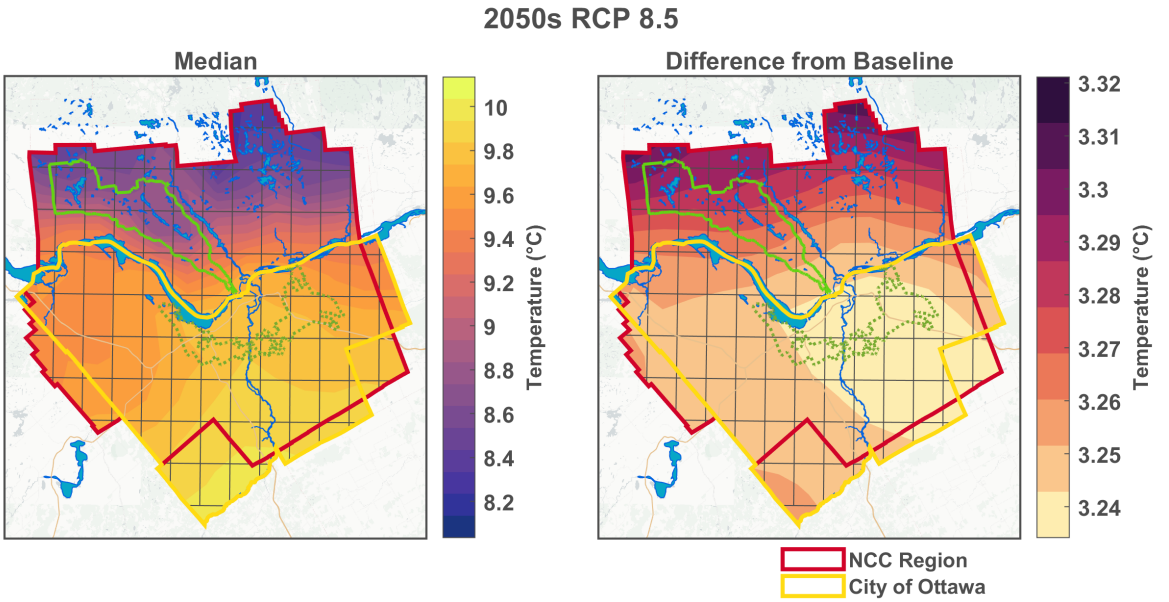


Figure F1.104: Annual Average Temperature - 2050s RCP 8.5.

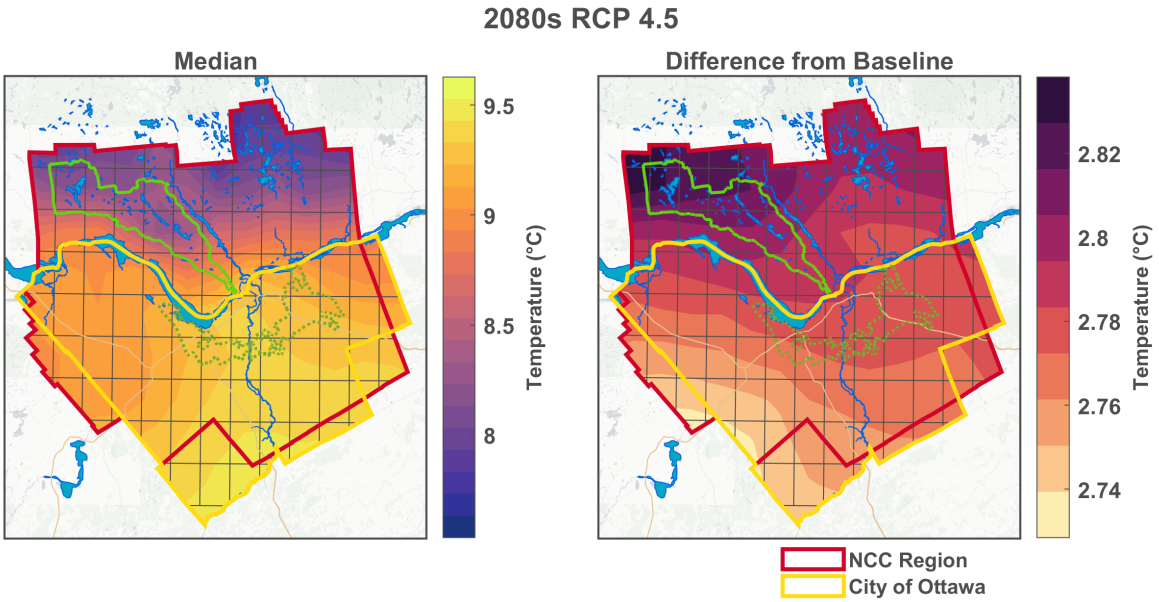


Figure F1.105: Annual Average Temperature - 2080s RCP 4.5.

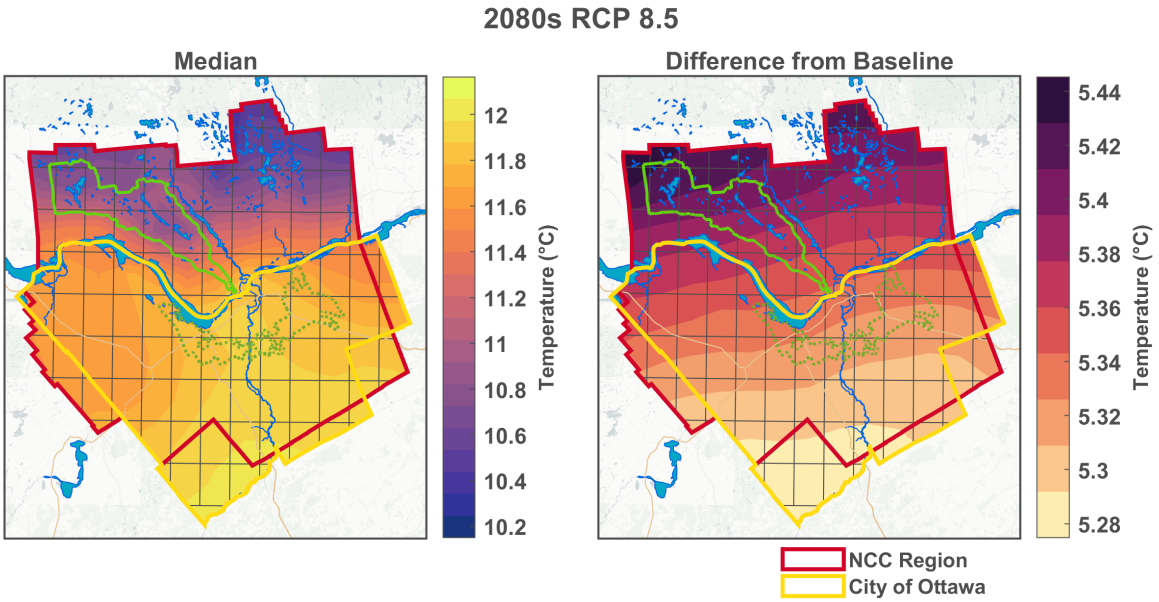


Figure F1.106: Annual Average Temperature - 2080s RCP 8.5.

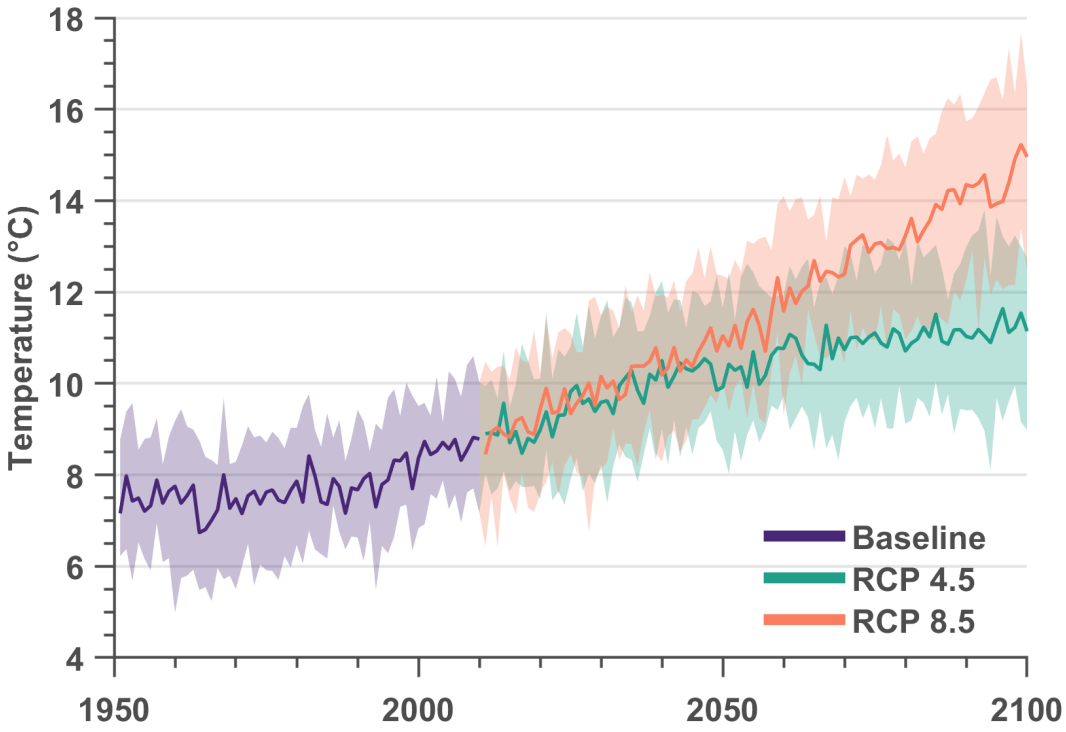


Figure F1.107: Seasonal Average Temperature - Fall.

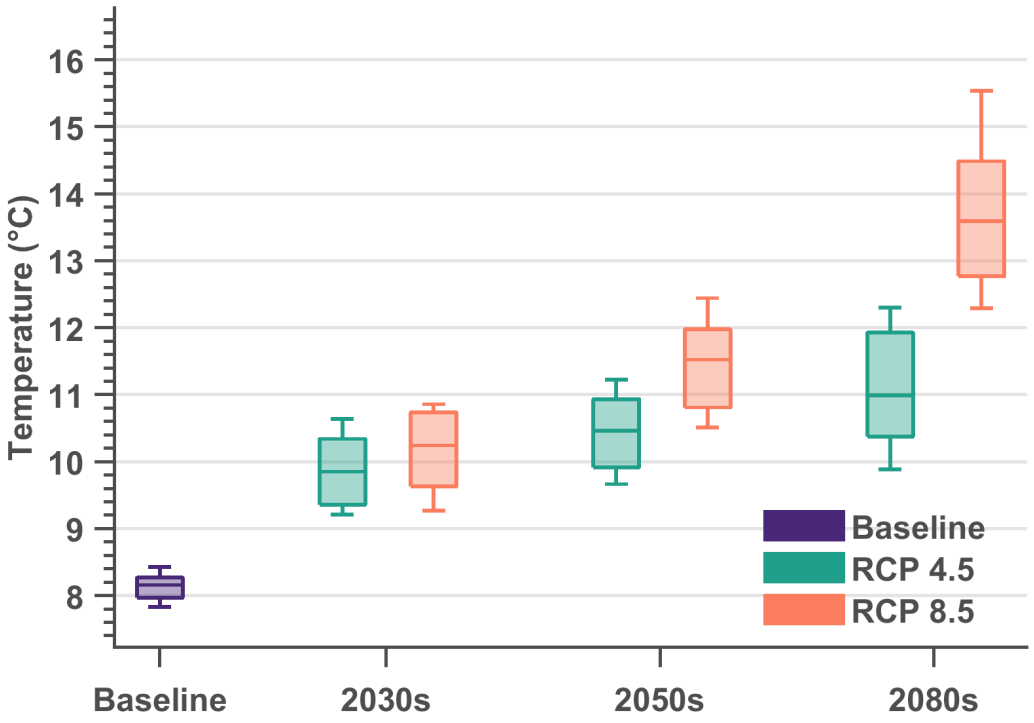


Figure F1.108: Seasonal Average Temperature - Fall.

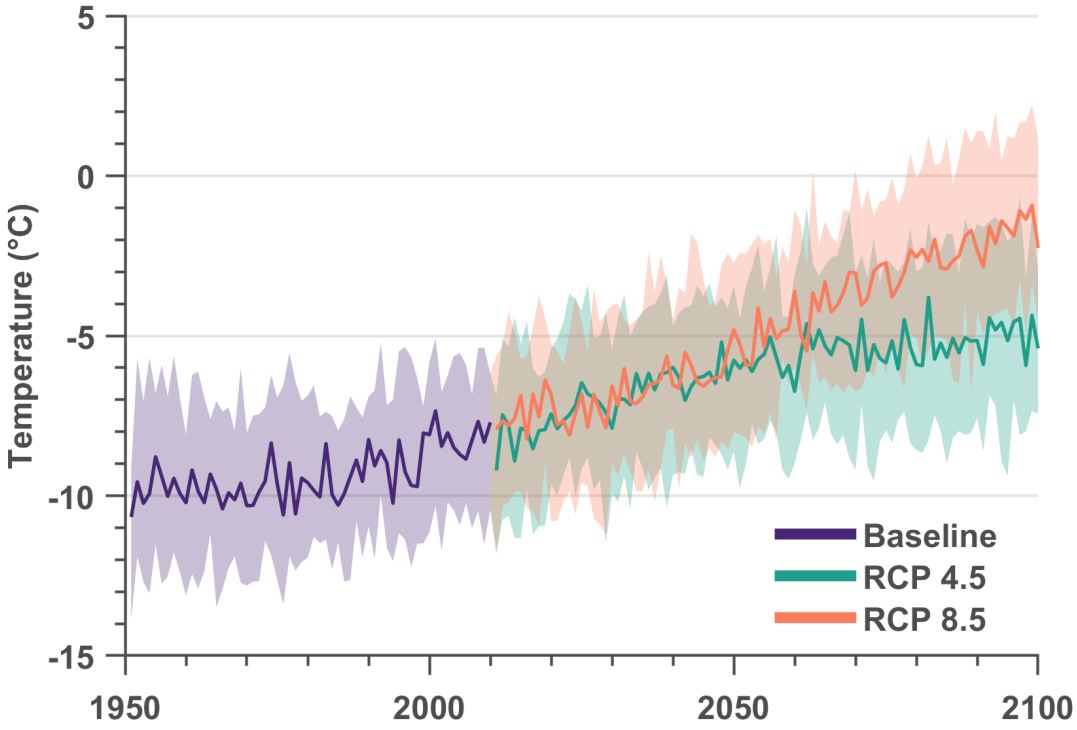


Figure F1.109: Seasonal Average Temperature - Winter.

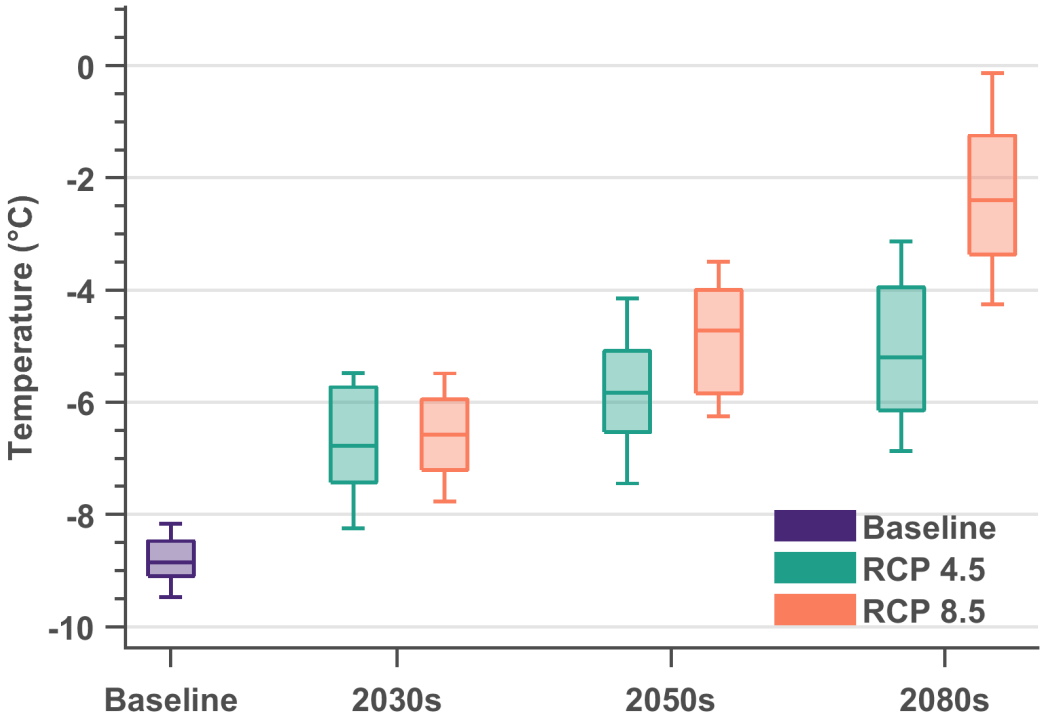


Figure F1.110: Seasonal Average Temperature - Winter.

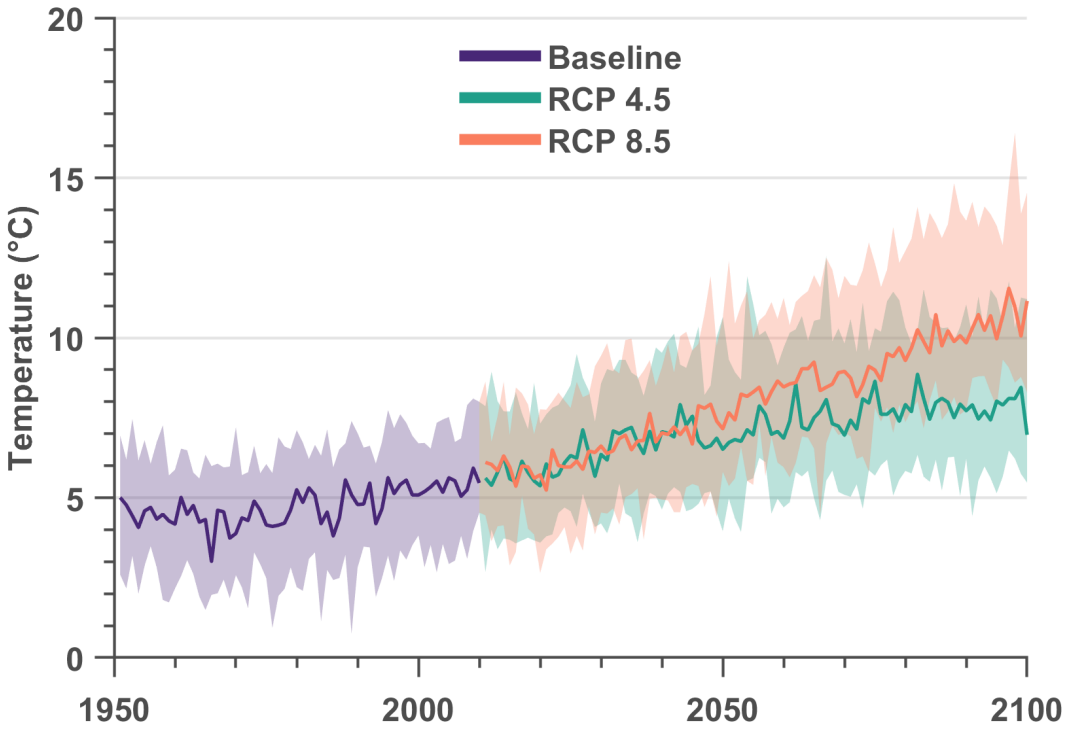


Figure F1.111: Seasonal Average Temperature - Spring.

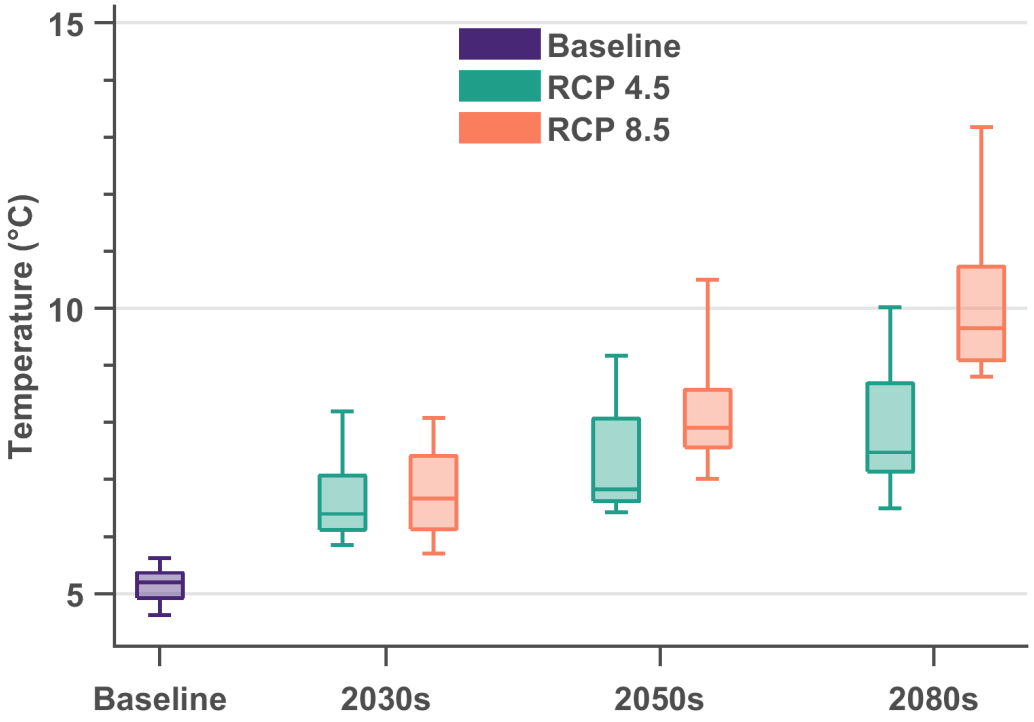


Figure F1.112: Seasonal Average Temperature - Spring.

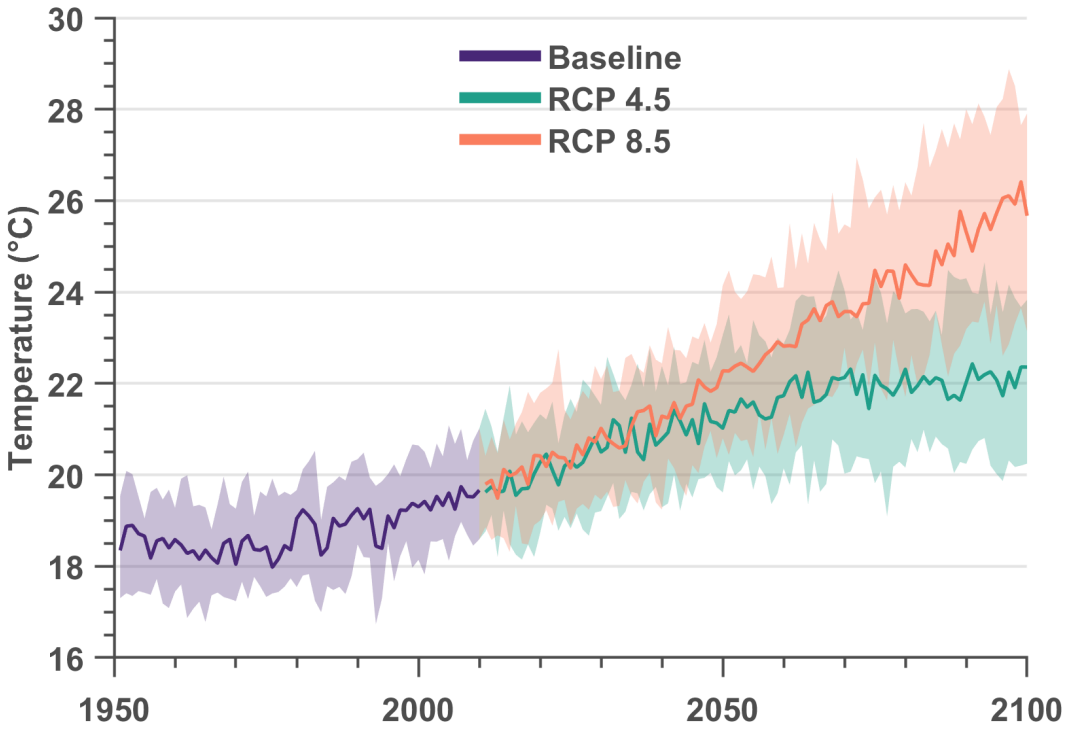


Figure F1.113: Seasonal Average Temperature - Summer.

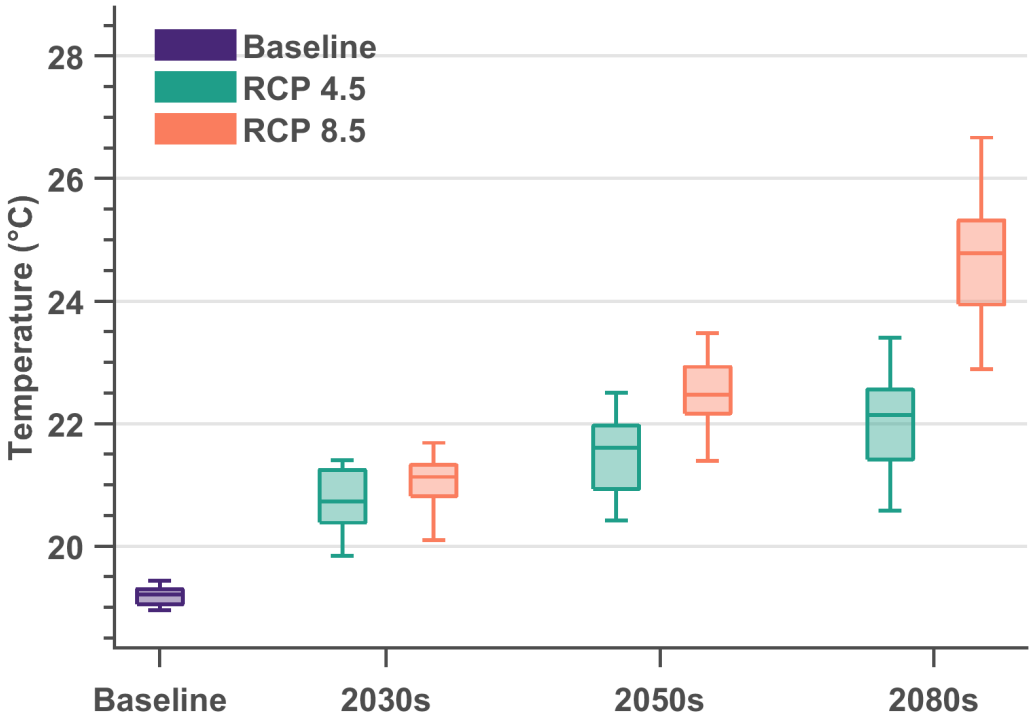


Figure F1.114: Seasonal Average Temperature - Summer.

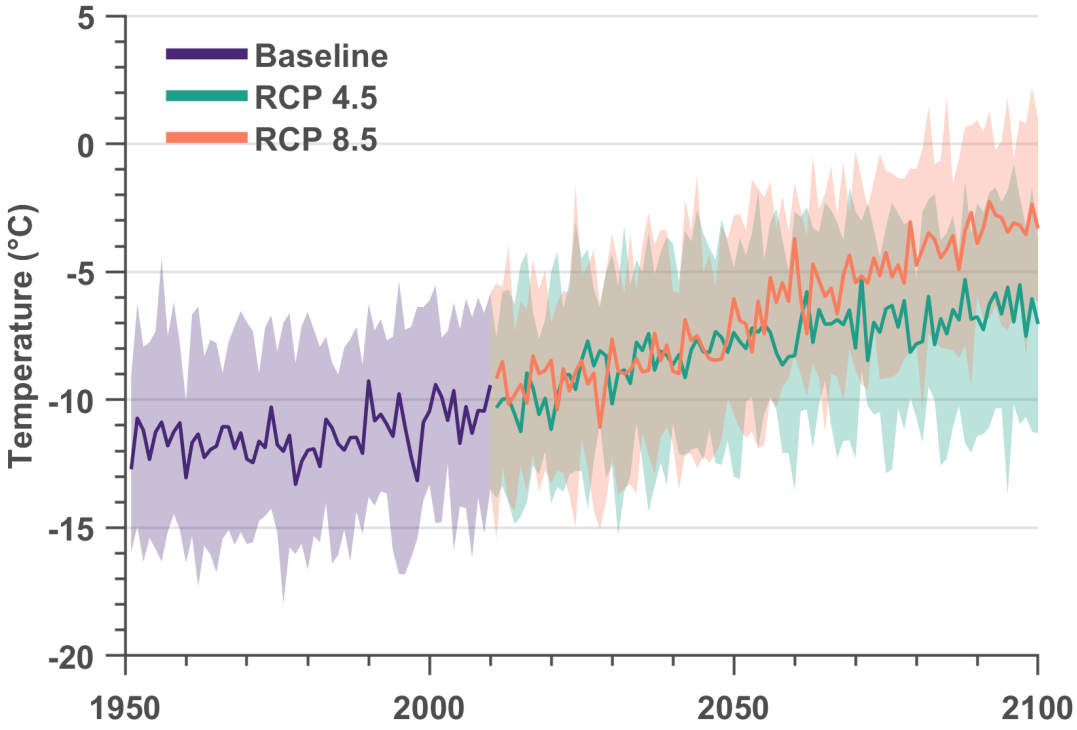


Figure F1.115: Monthly Average Temperature - January.

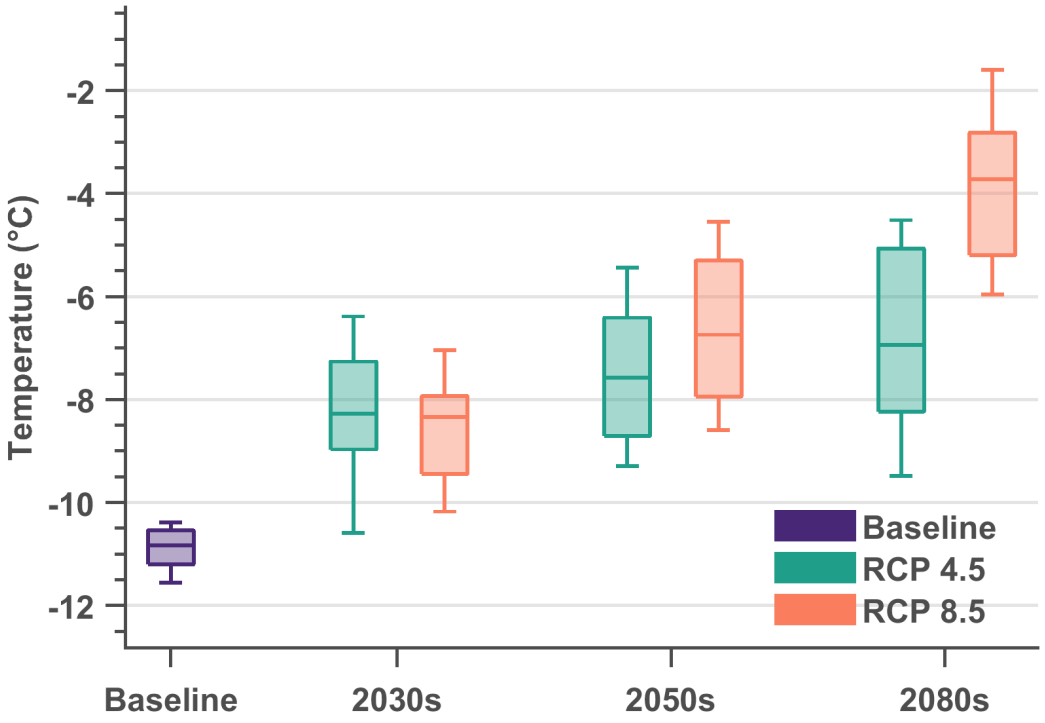


Figure F1.116: Monthly Average Temperature - January.

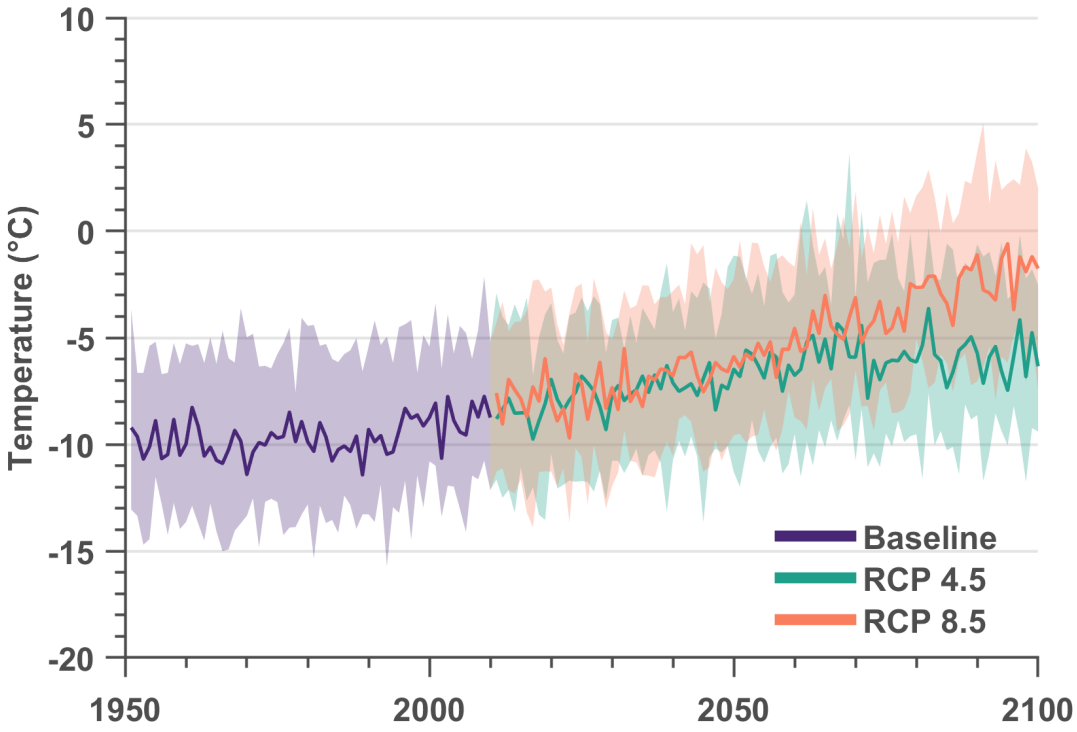


Figure F1.117: Monthly Average Temperature - February.

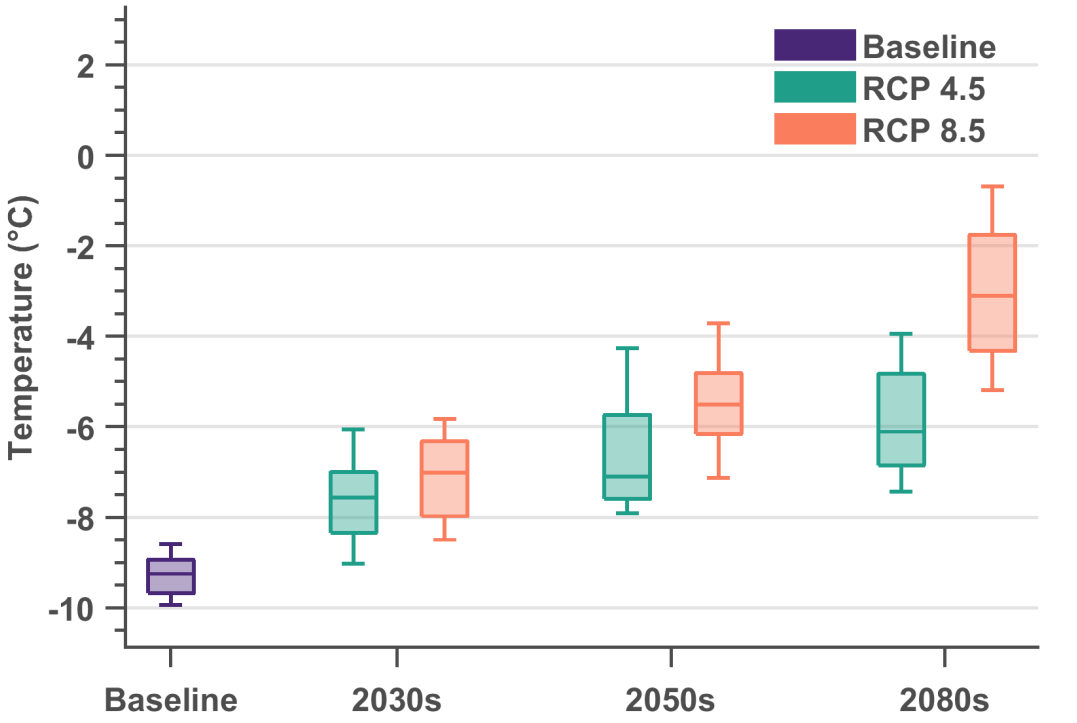


Figure F1.118: Monthly Average Temperature - February.

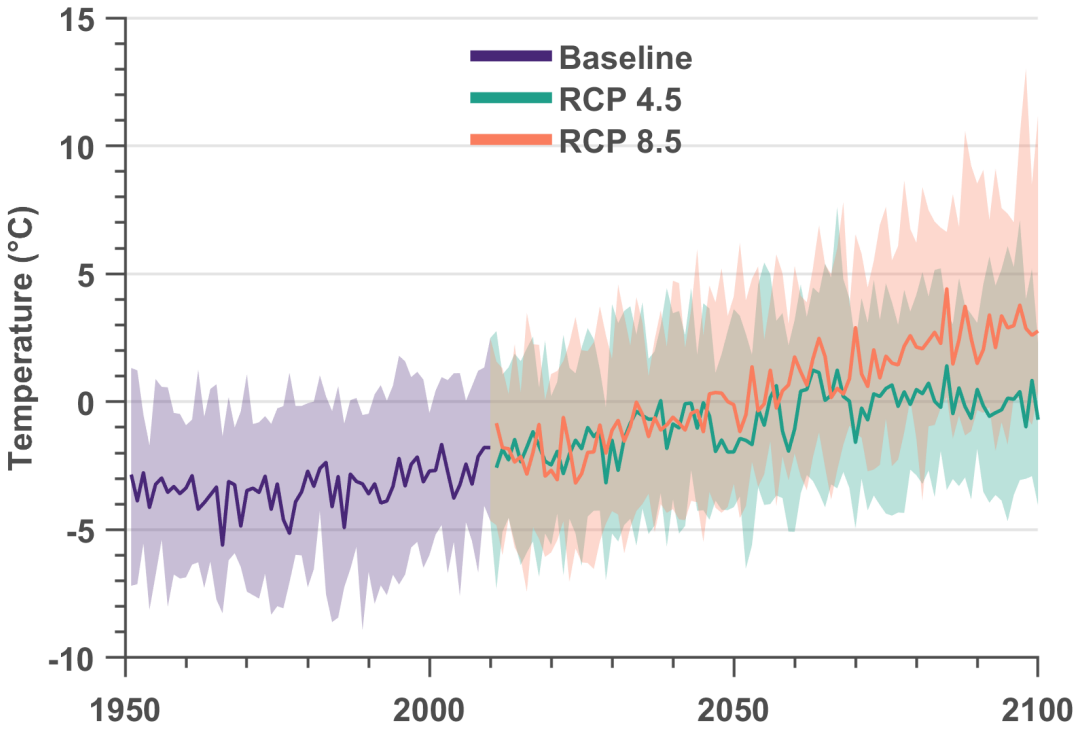


Figure F1.119: Monthly Average Temperature - March.

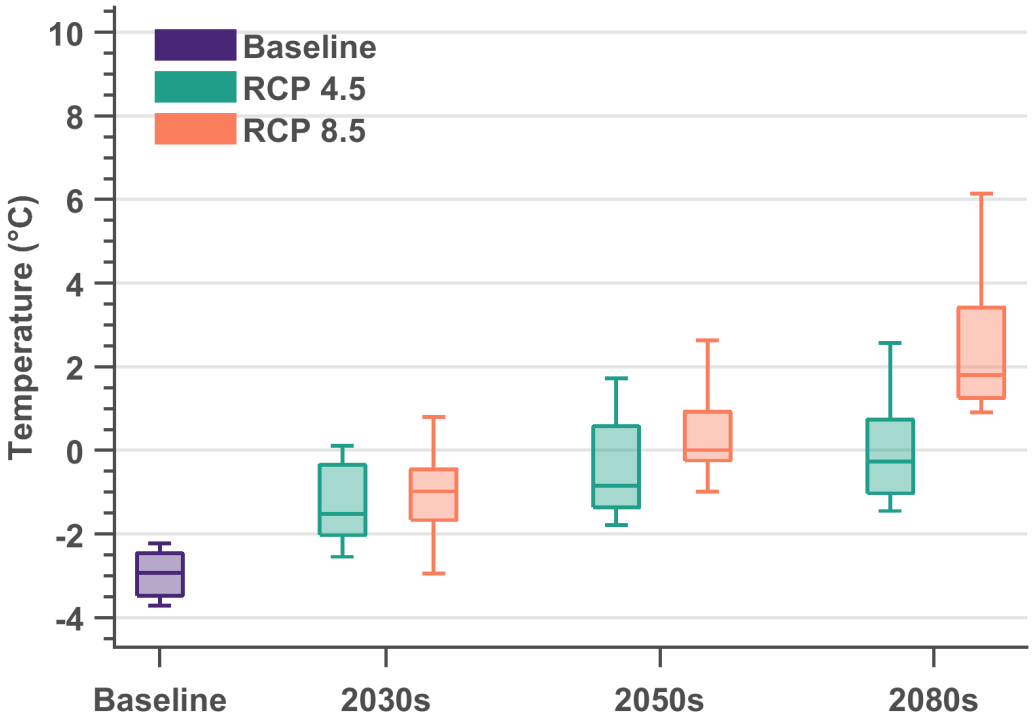


Figure F1.120: Monthly Average Temperature - March.

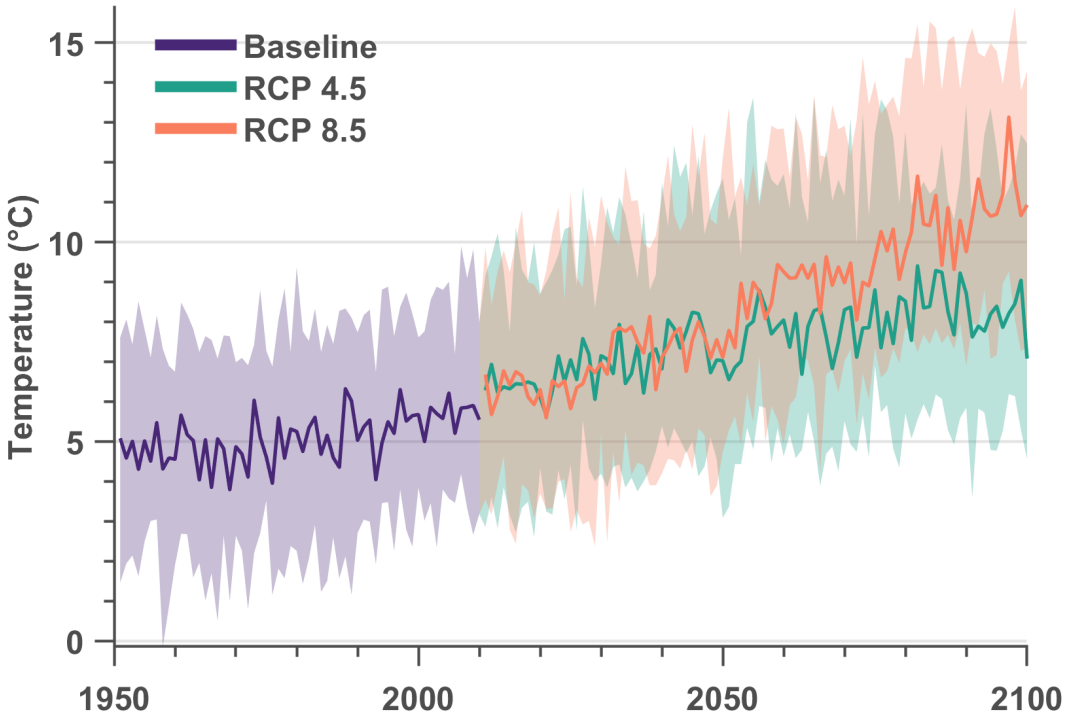


Figure F1.121: Monthly Average Temperature - April.

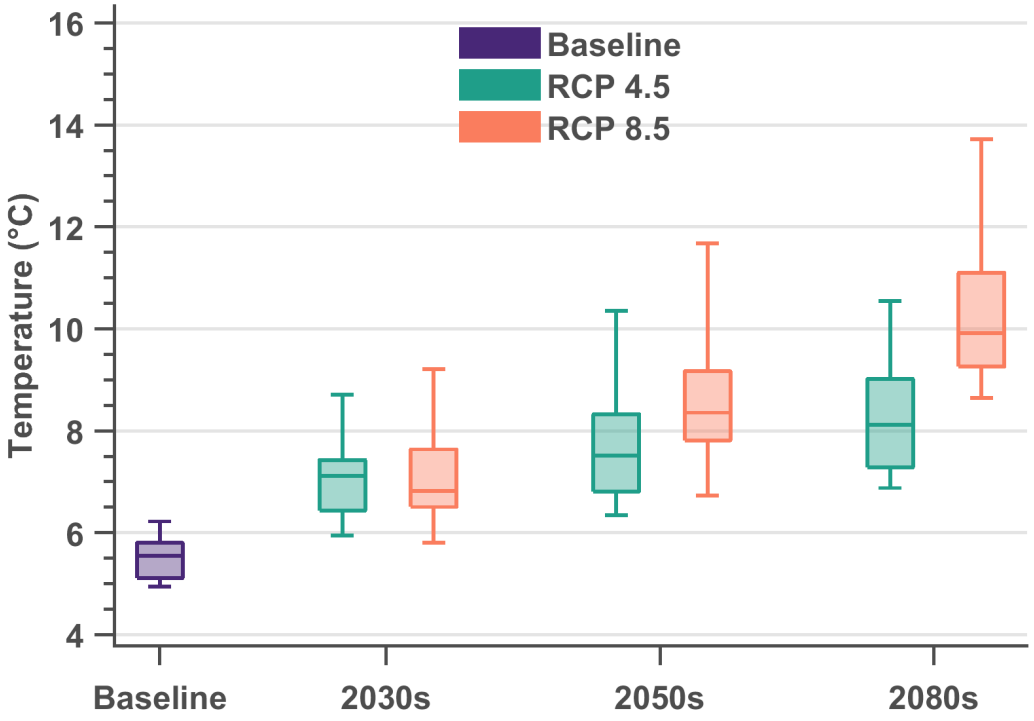


Figure F1.122: Monthly Average Temperature - April.

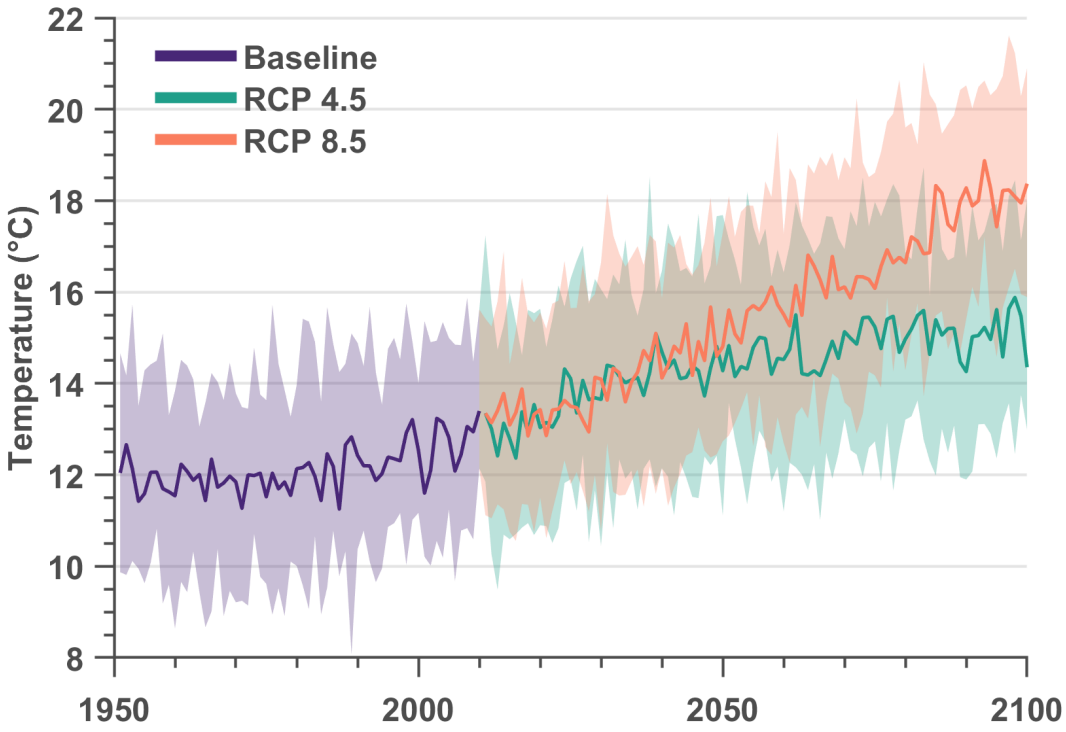


Figure F1.123: Monthly Average Temperature - May.

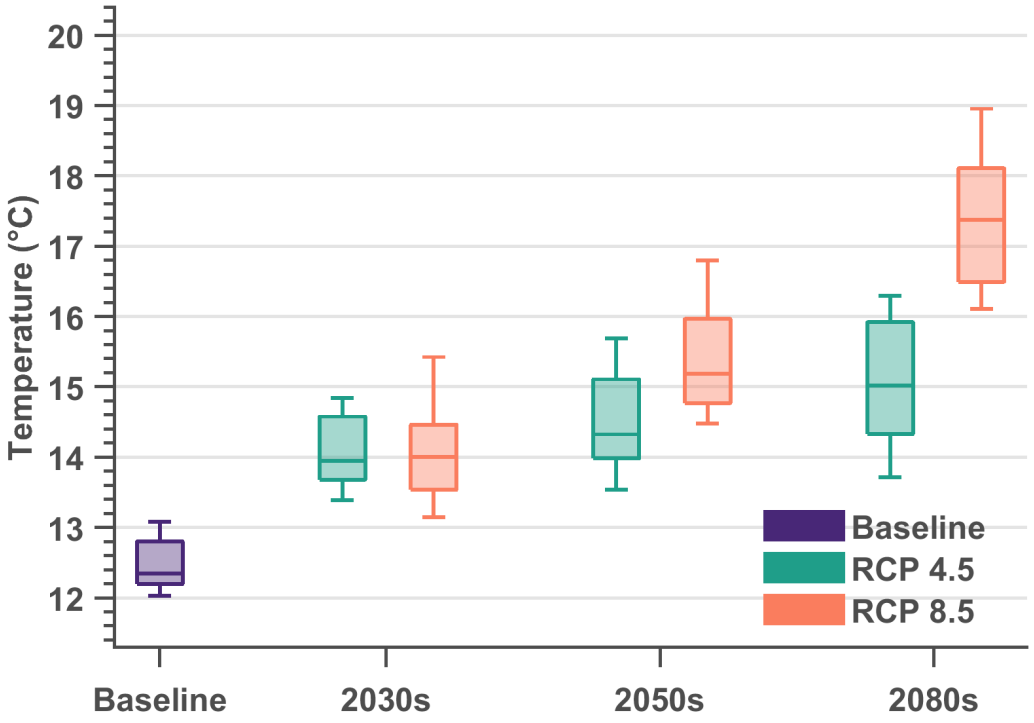


Figure F1.124: Monthly Average Temperature - May.

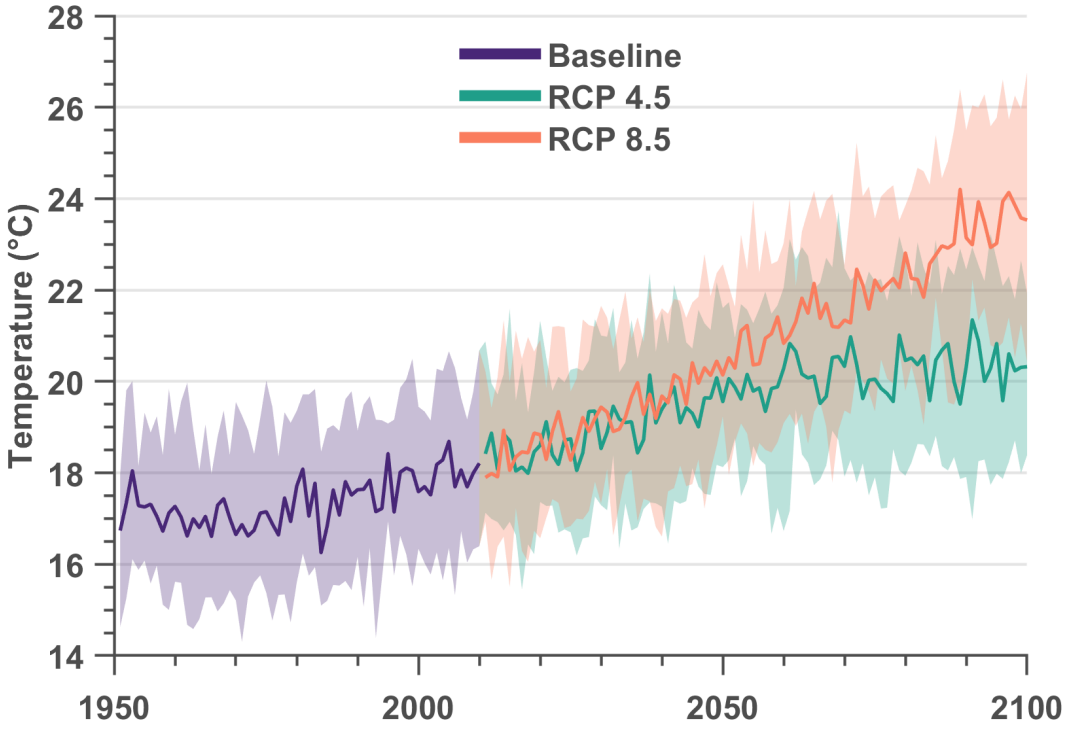


Figure F1.125: Monthly Average Temperature - June.

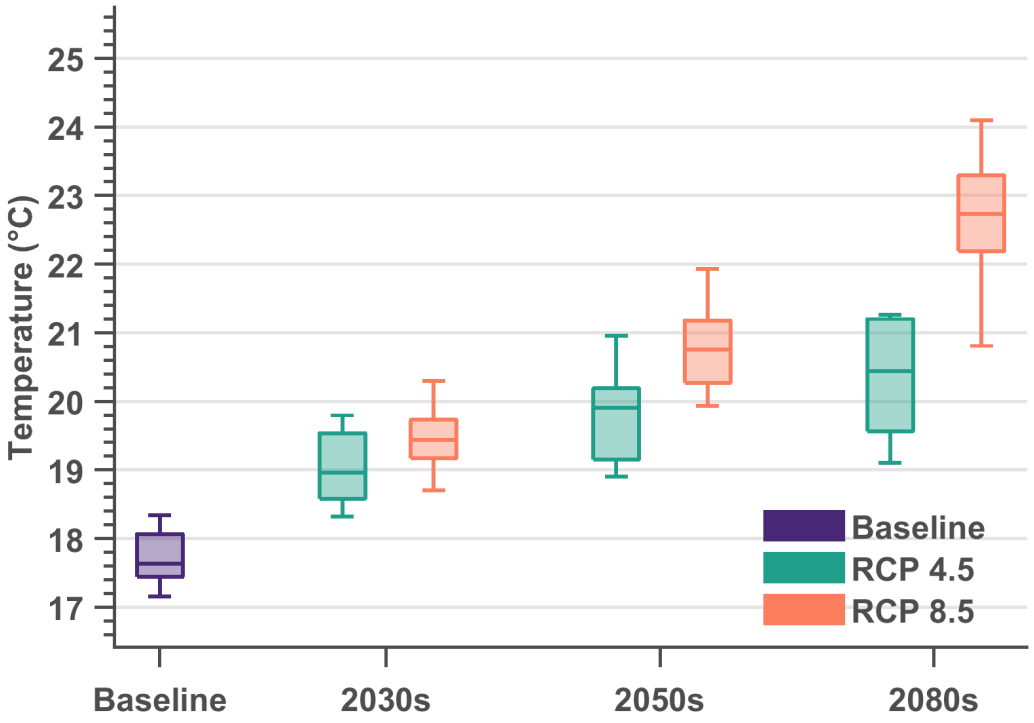


Figure F1.126: Monthly Average Temperature - June.

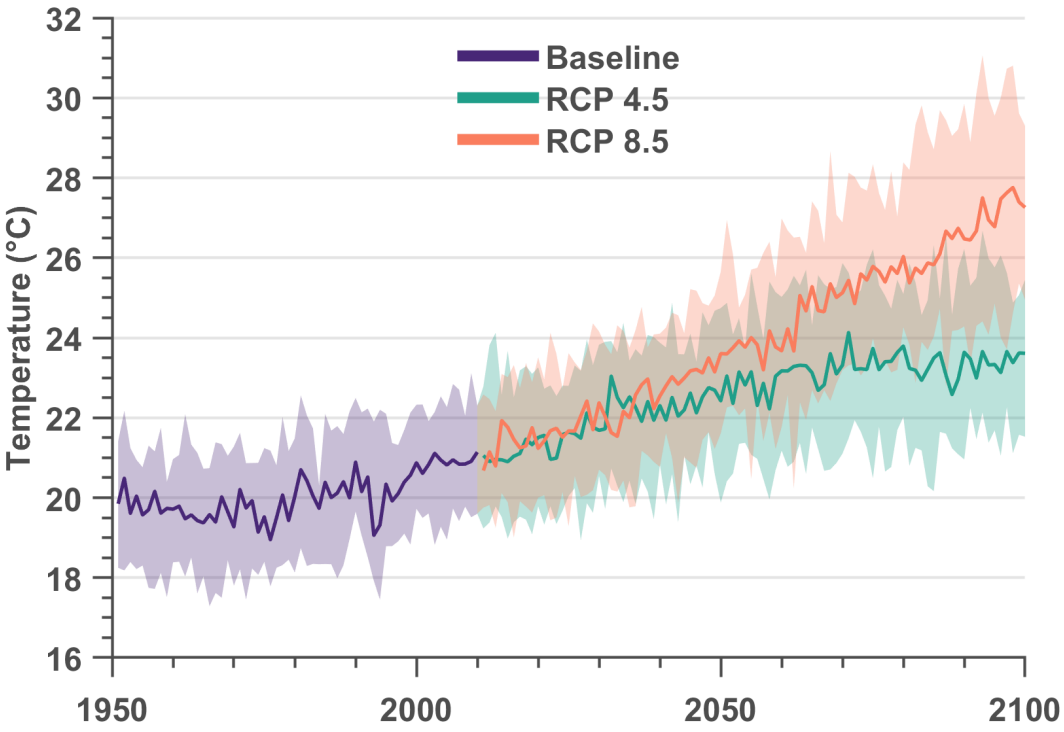


Figure F1.127: Monthly Average Temperature - July.

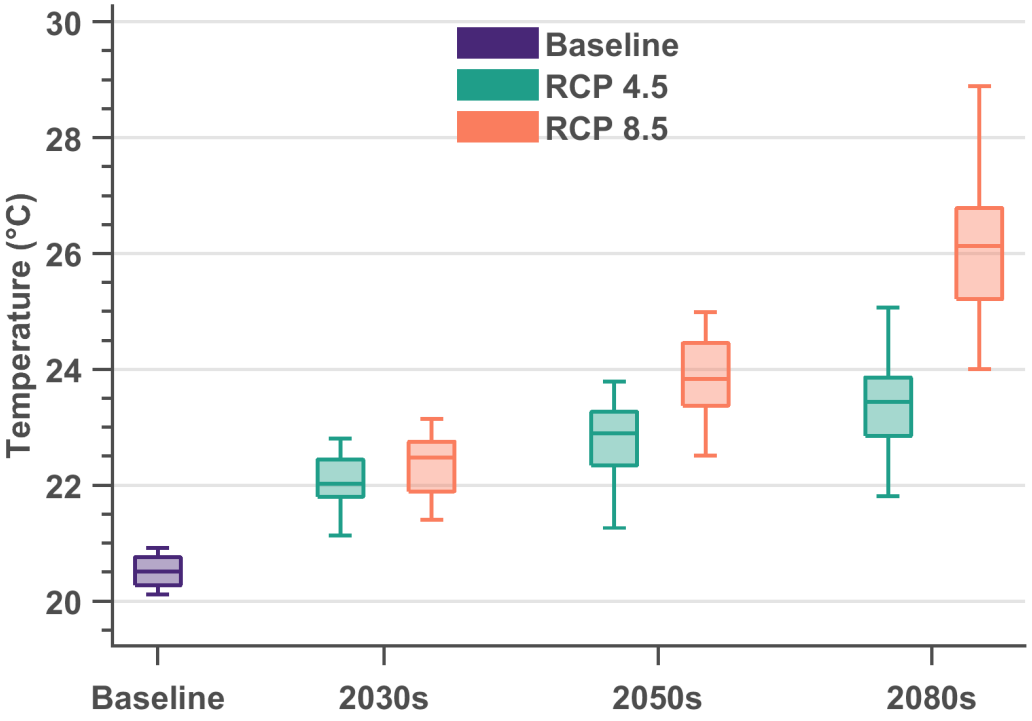


Figure F1.128: Monthly Average Temperature - July.

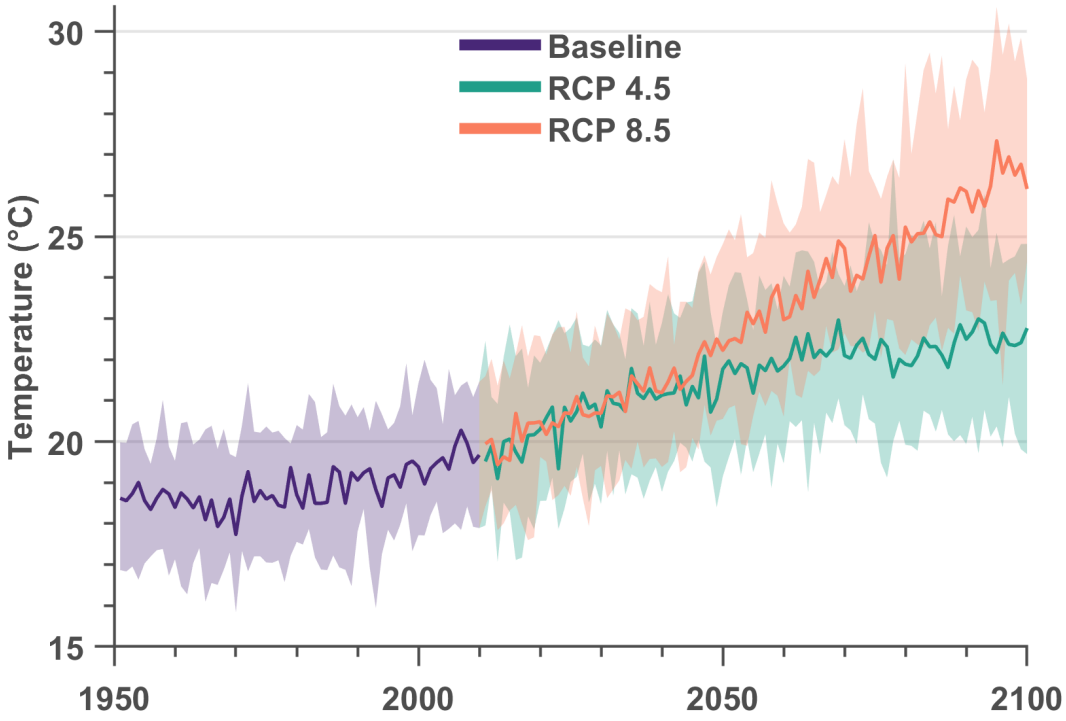


Figure F1.129: Monthly Average Temperature - August.

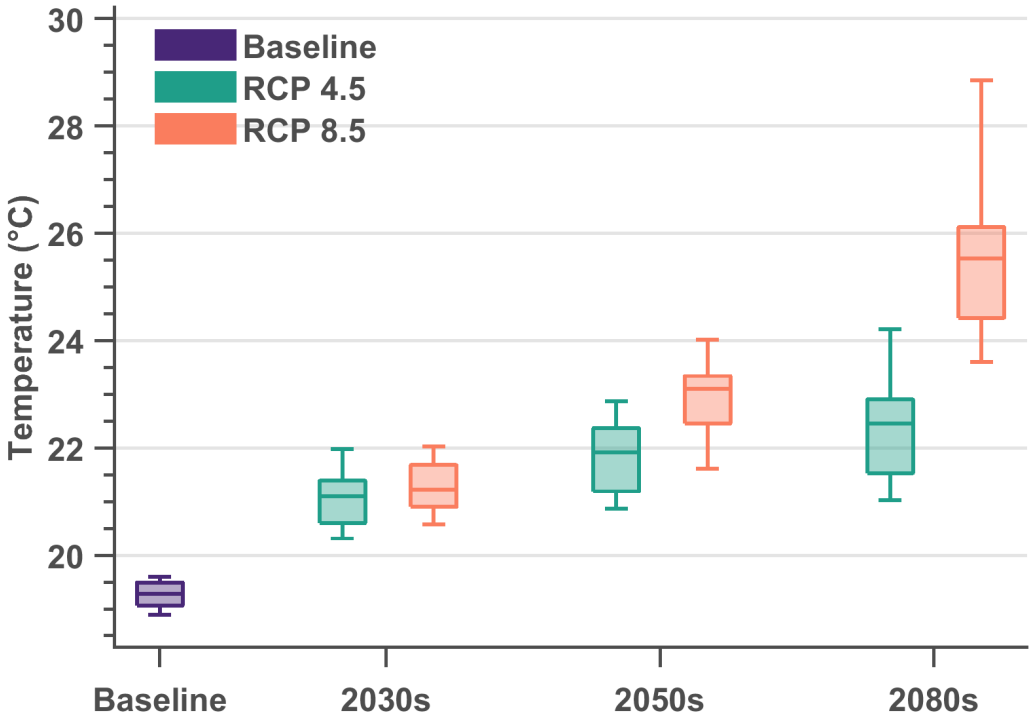


Figure F1.130: Monthly Average Temperature - August.

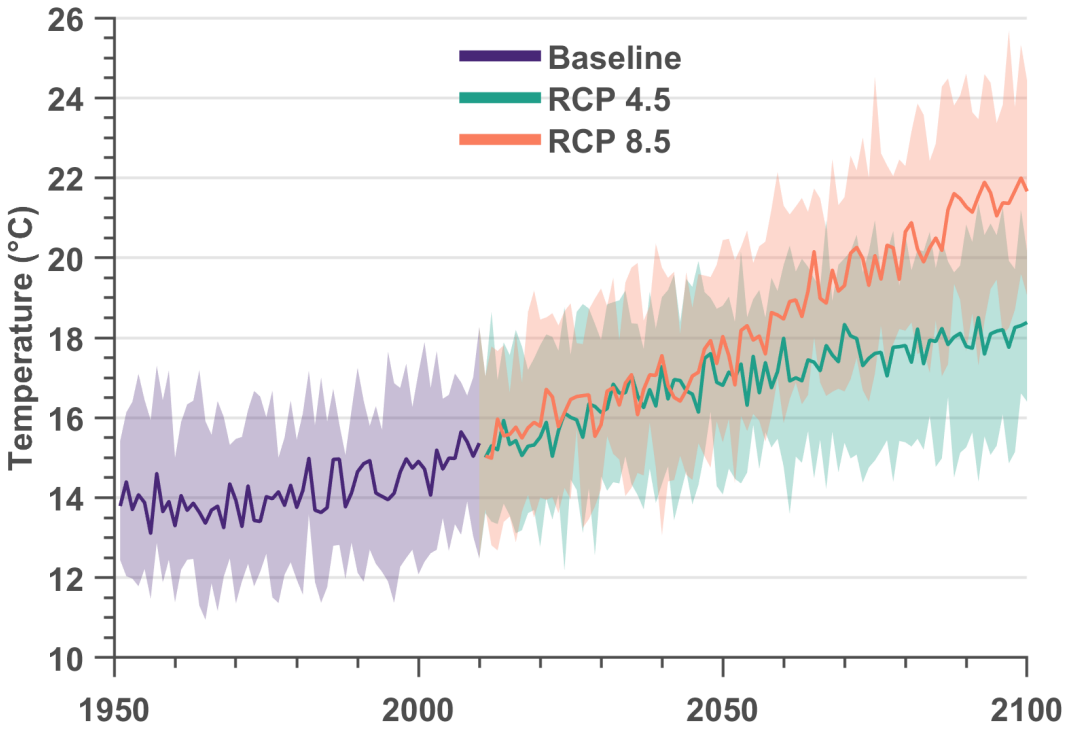


Figure F1.131: Monthly Average Temperature - September.

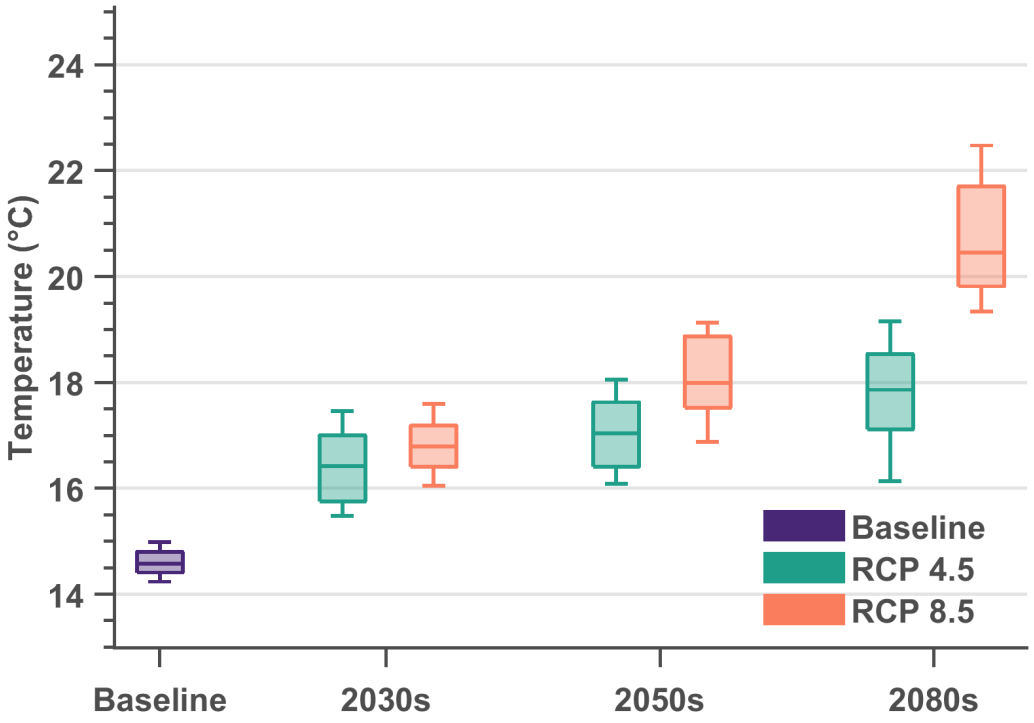


Figure F1.132: Monthly Average Temperature - September.

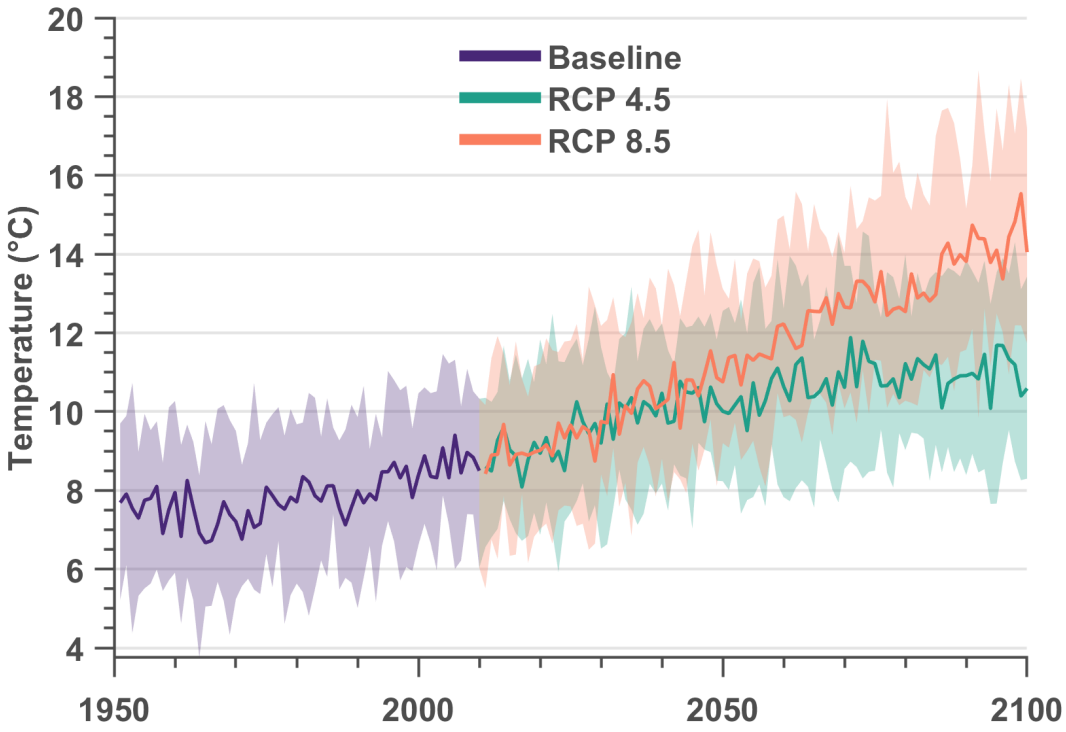


Figure F1.133: Monthly Average Temperature - October.

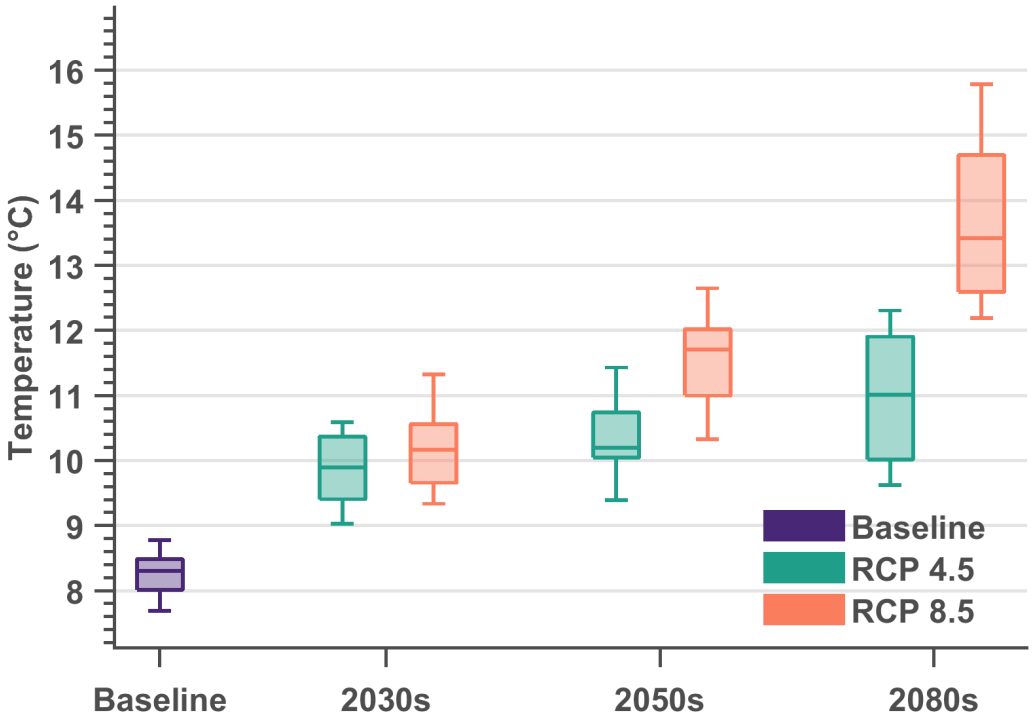


Figure F1.134: Monthly Average Temperature - October.

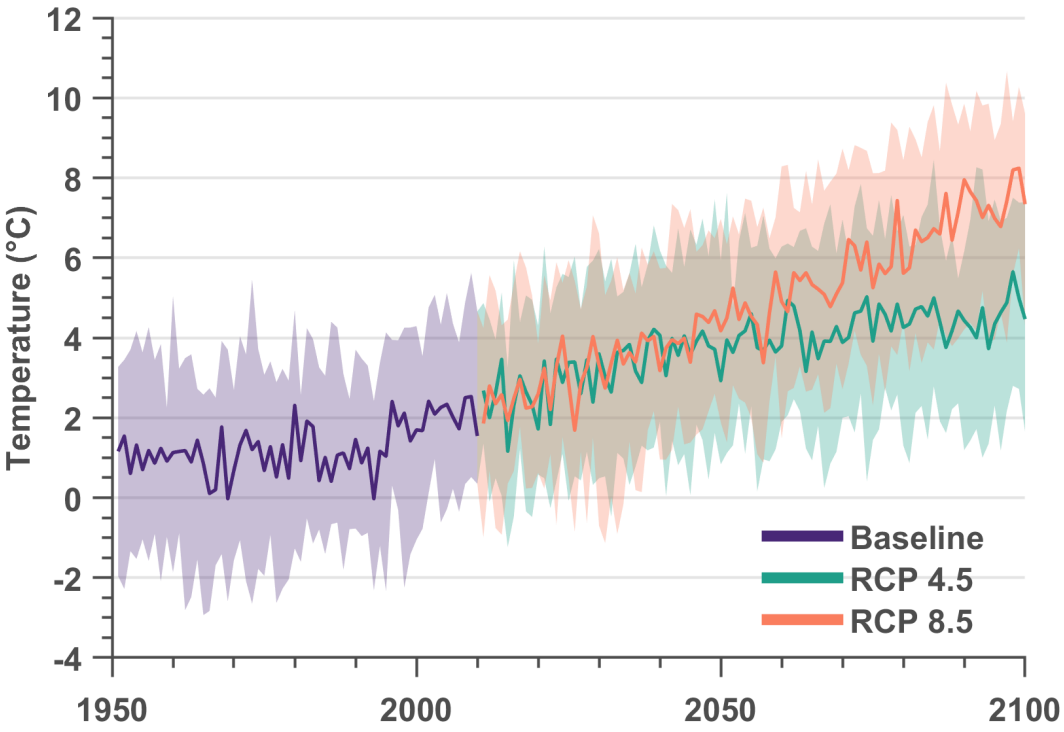


Figure F1.135: Monthly Average Temperature - November.

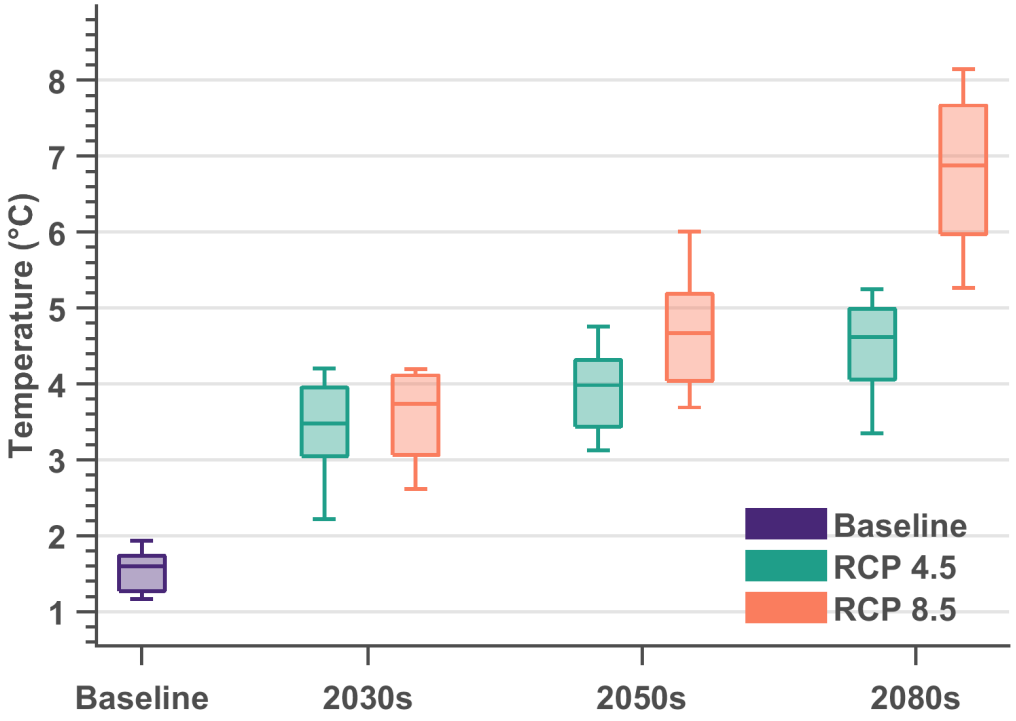


Figure F1.136: Monthly Average Temperature - November.

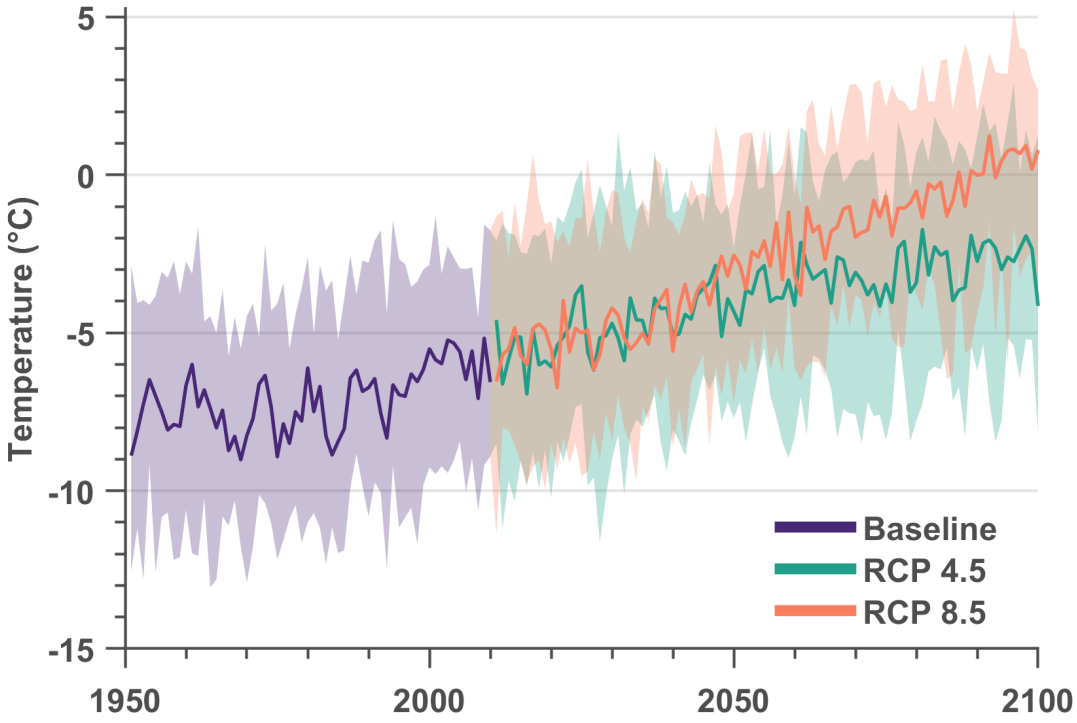


Figure F1.137: Monthly Average Temperature - December.

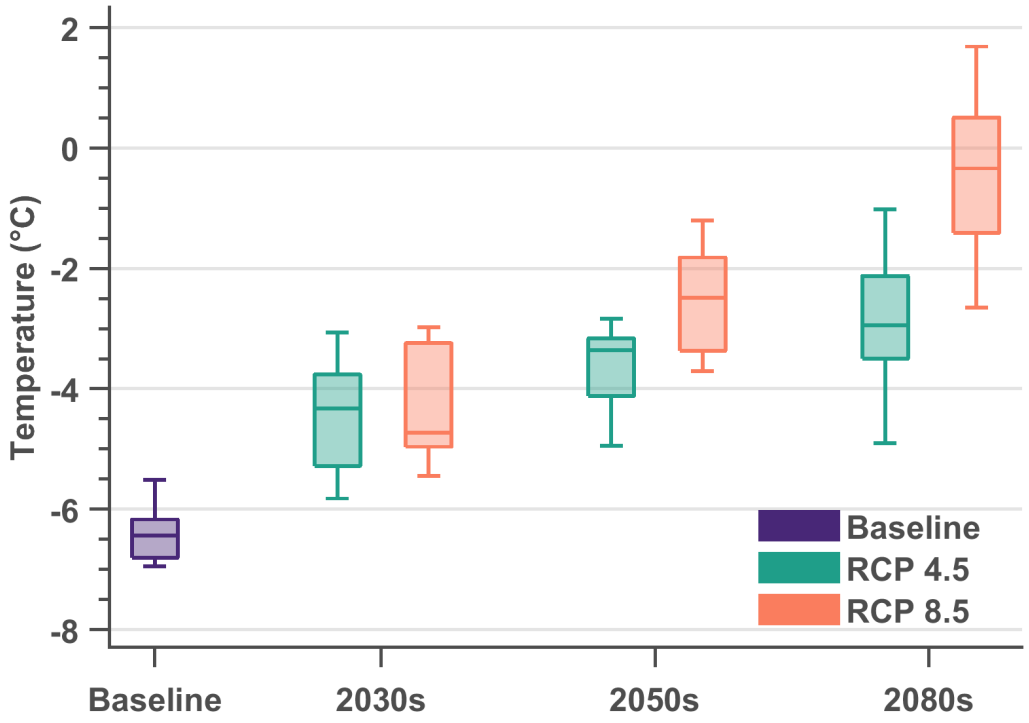


Figure F1.138: Monthly Average Temperature - December.

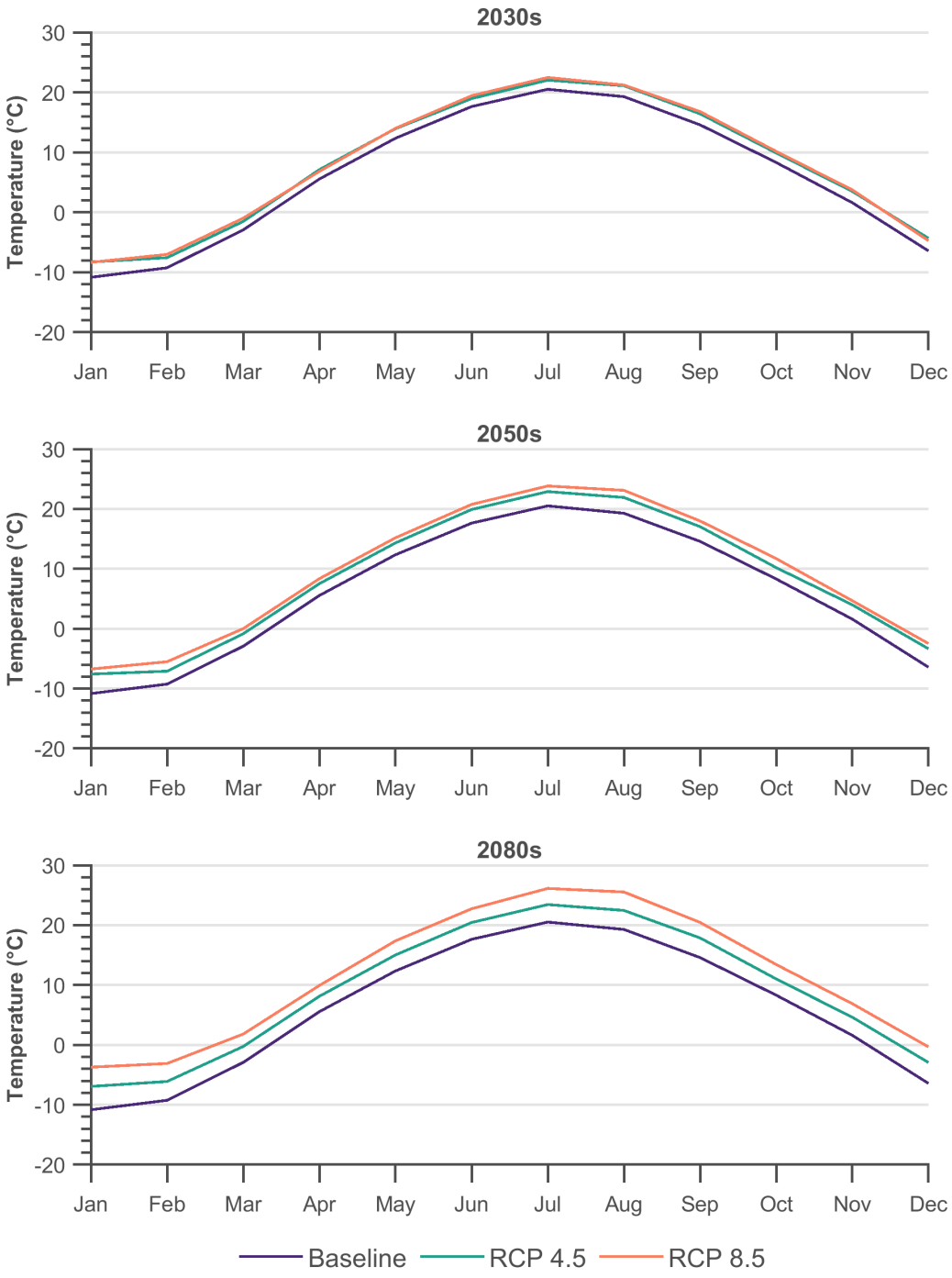


Figure F1.139: Monthly Average Temperature.

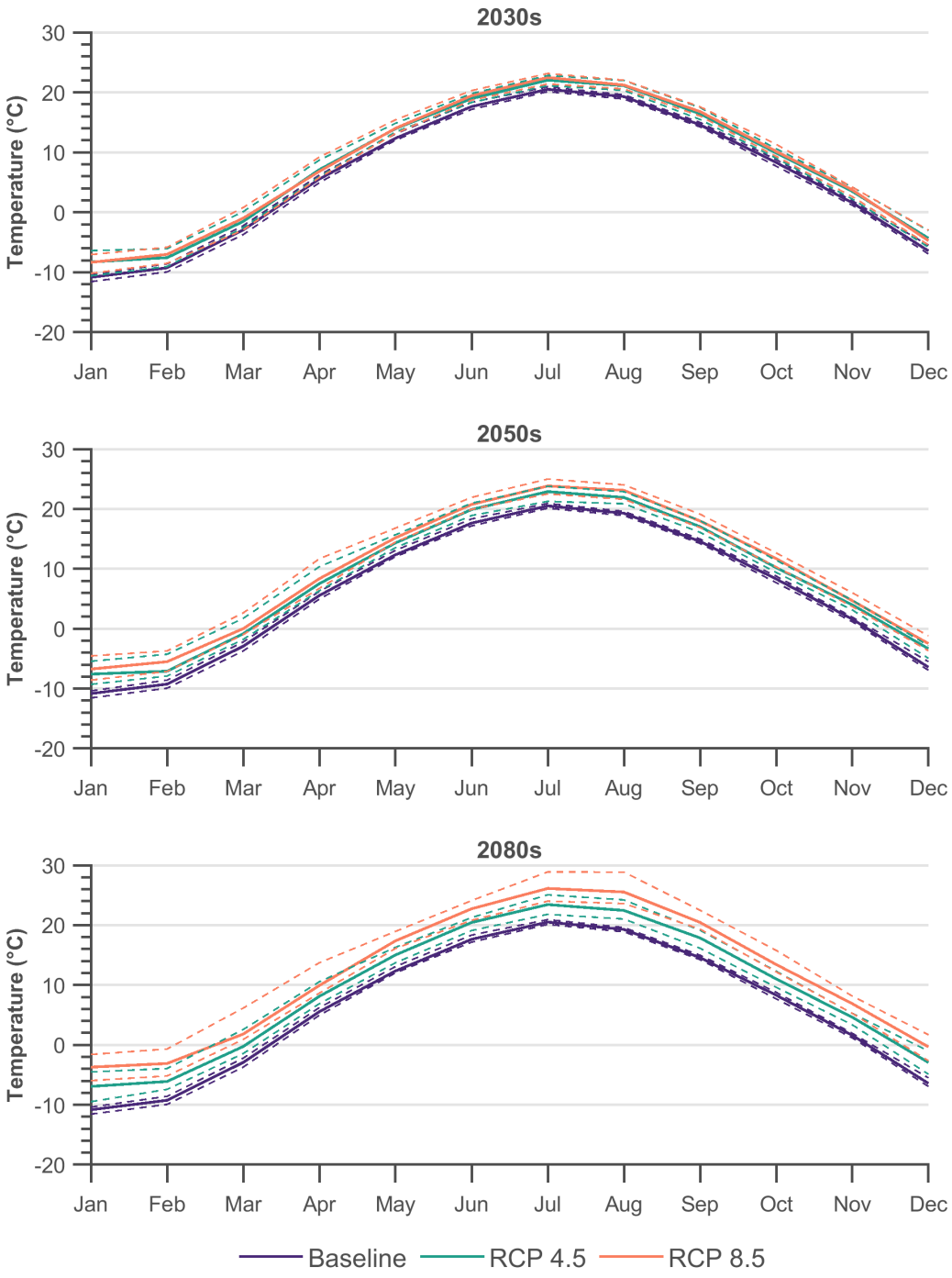


Figure F1.140: Monthly Average Temperature. Dashed lines indicate the 10% and 90% percentile.

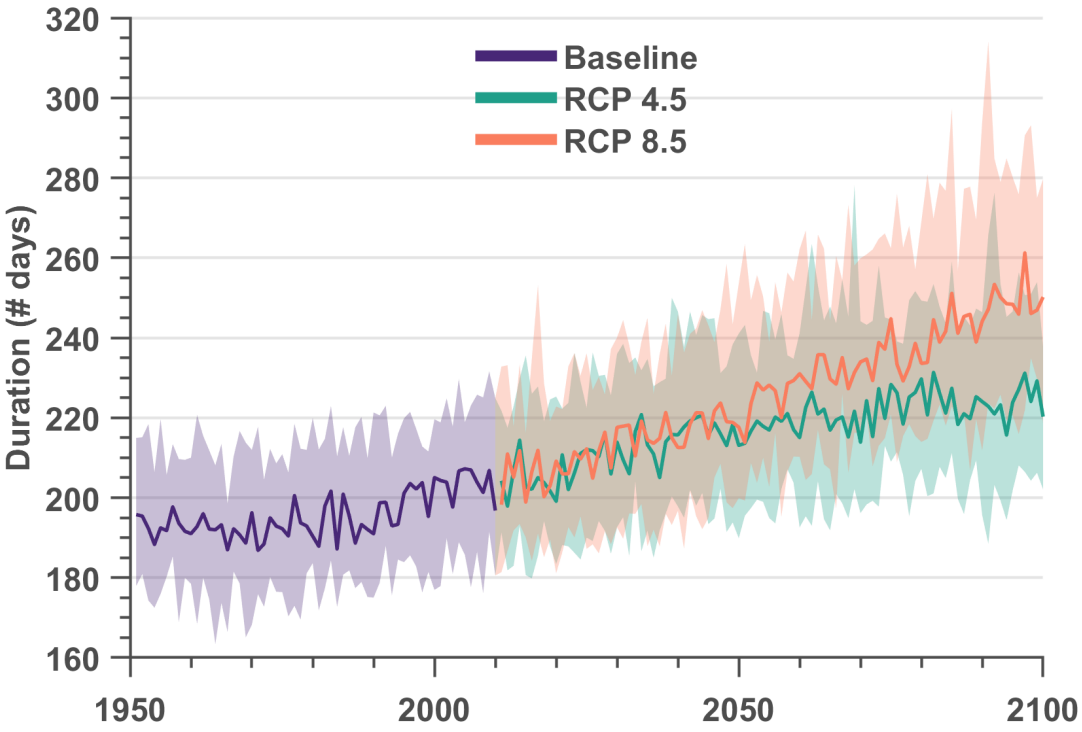


Figure F1.141: Growing Season Length.

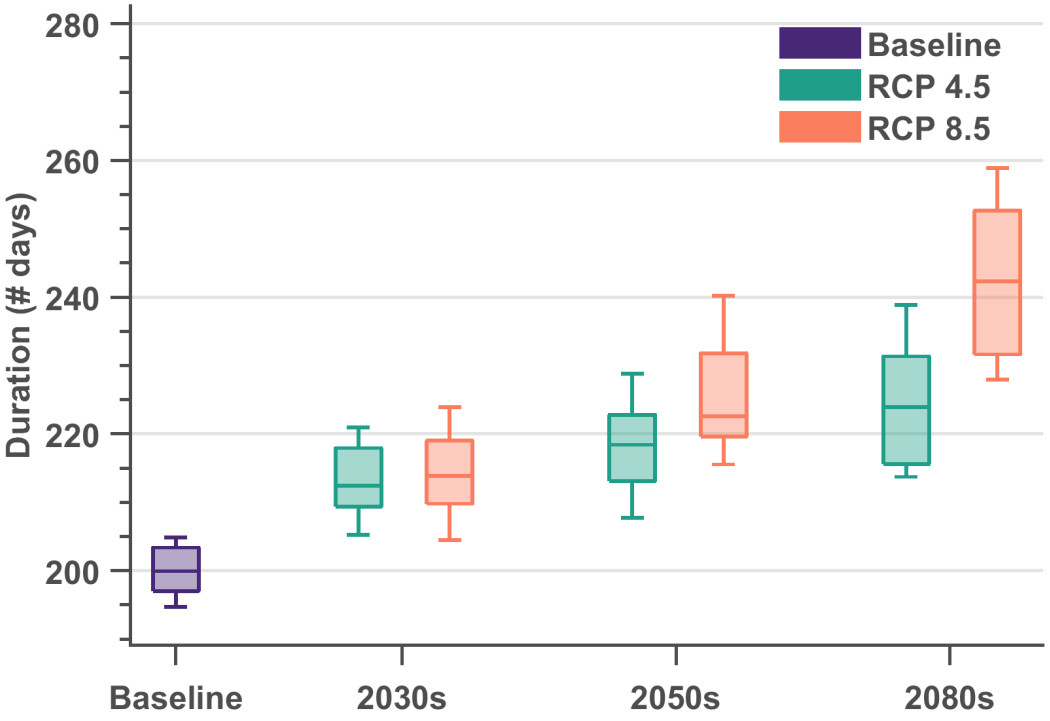


Figure F1.142: Growing Season Length.

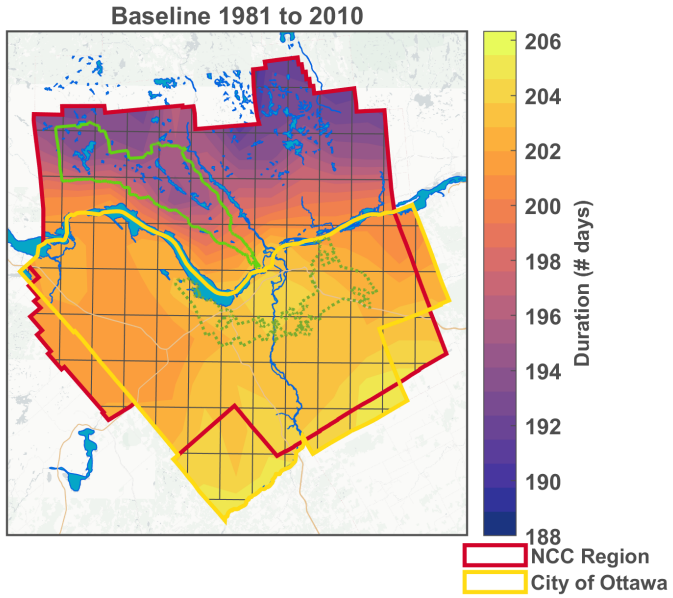


Figure F1.143: Growing Season Length - Baseline.

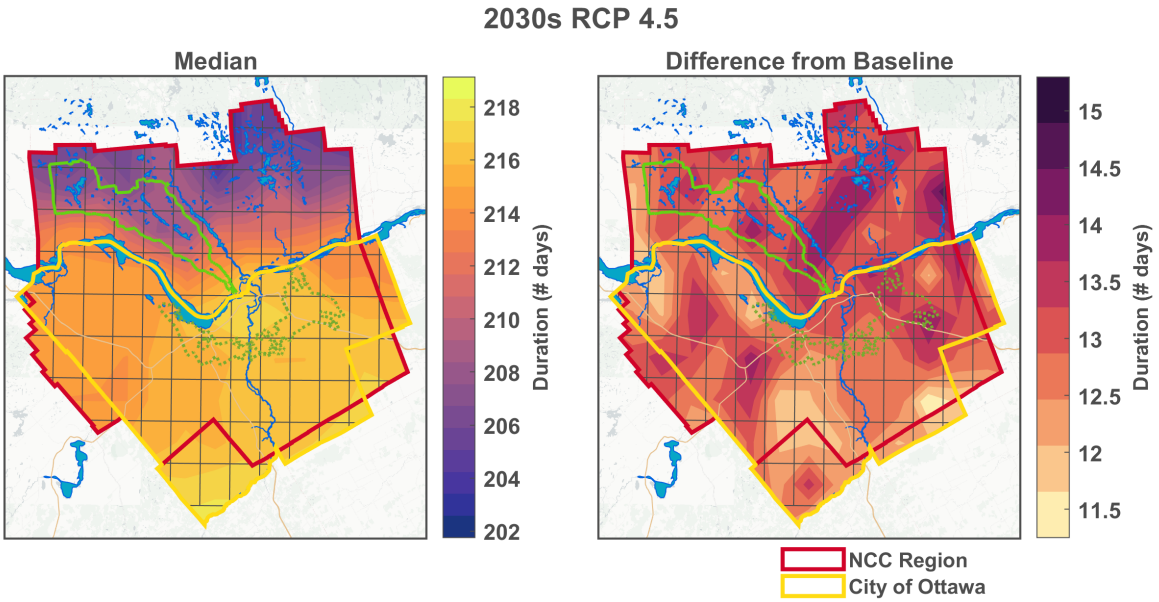


Figure F1.144: Growing Season Length - 2030s RCP 4.5.

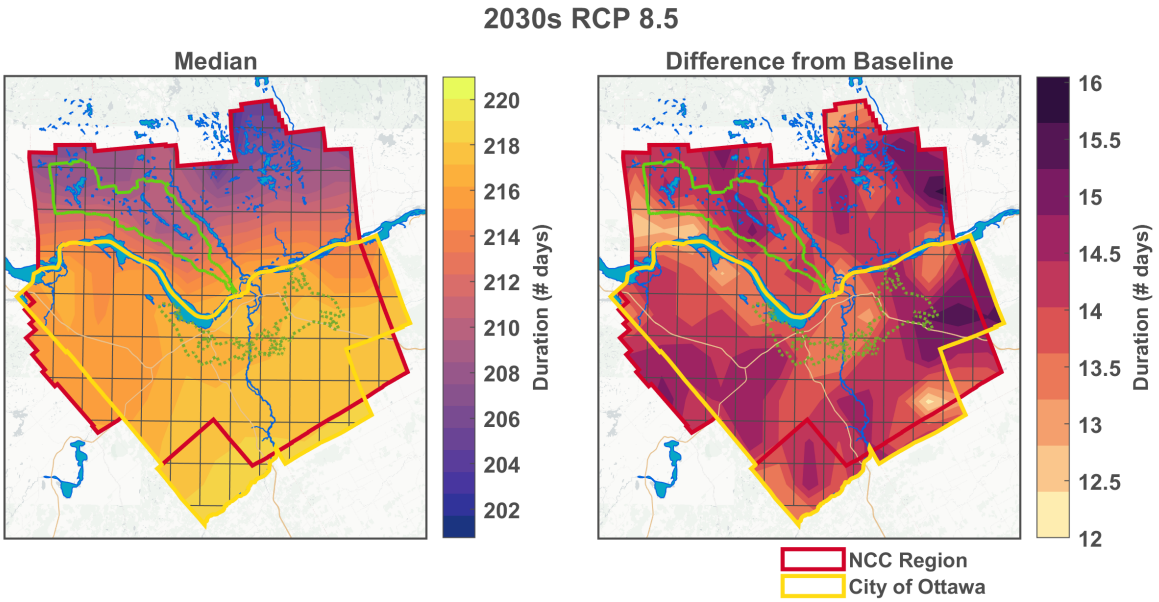


Figure F1.145: Growing Season Length - 2030s RCP 8.5.

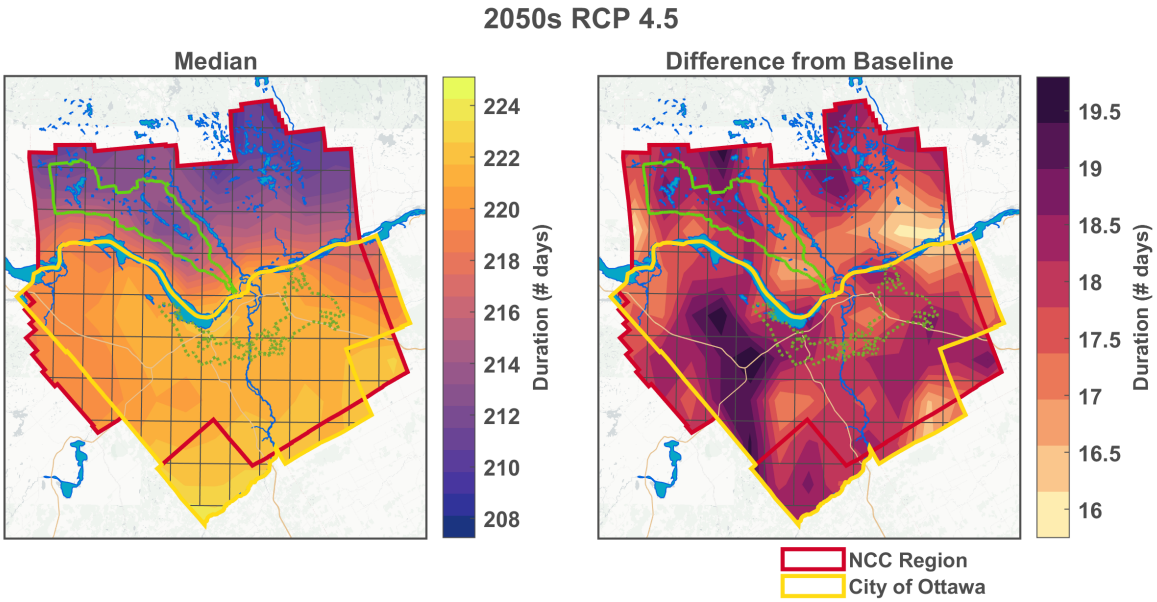


Figure F1.146: Growing Season Length - 2050s RCP 4.5.

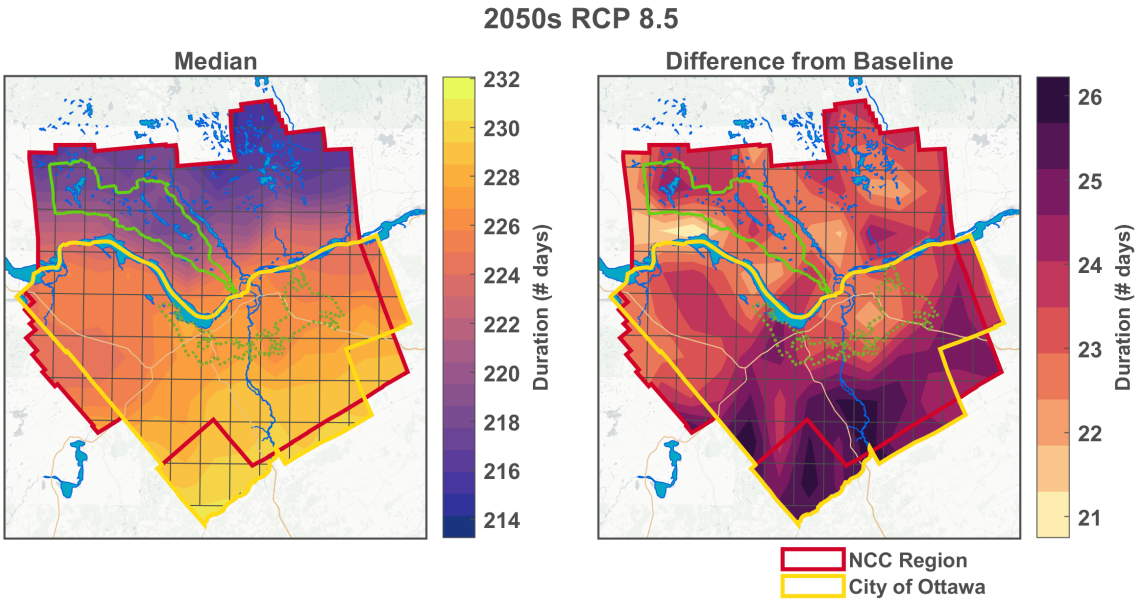


Figure F1.147: Growing Season Length - 2050s RCP 8.5.

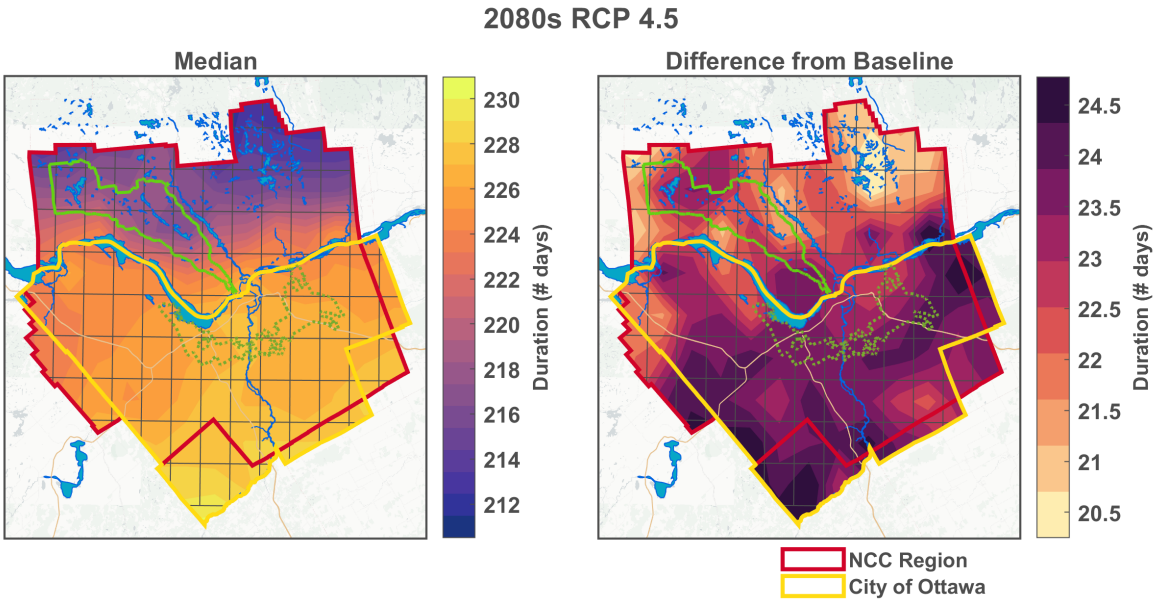


Figure F1.148: Growing Season Length - 2080s RCP 4.5.

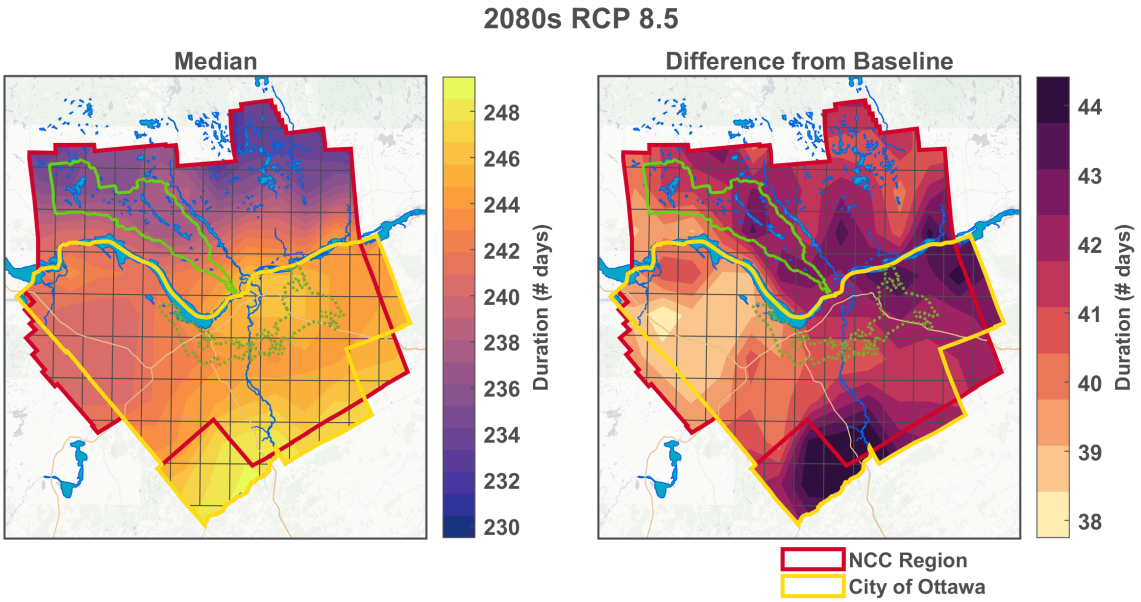


Figure F1.149: Growing Season Length - 2080s RCP 8.5.

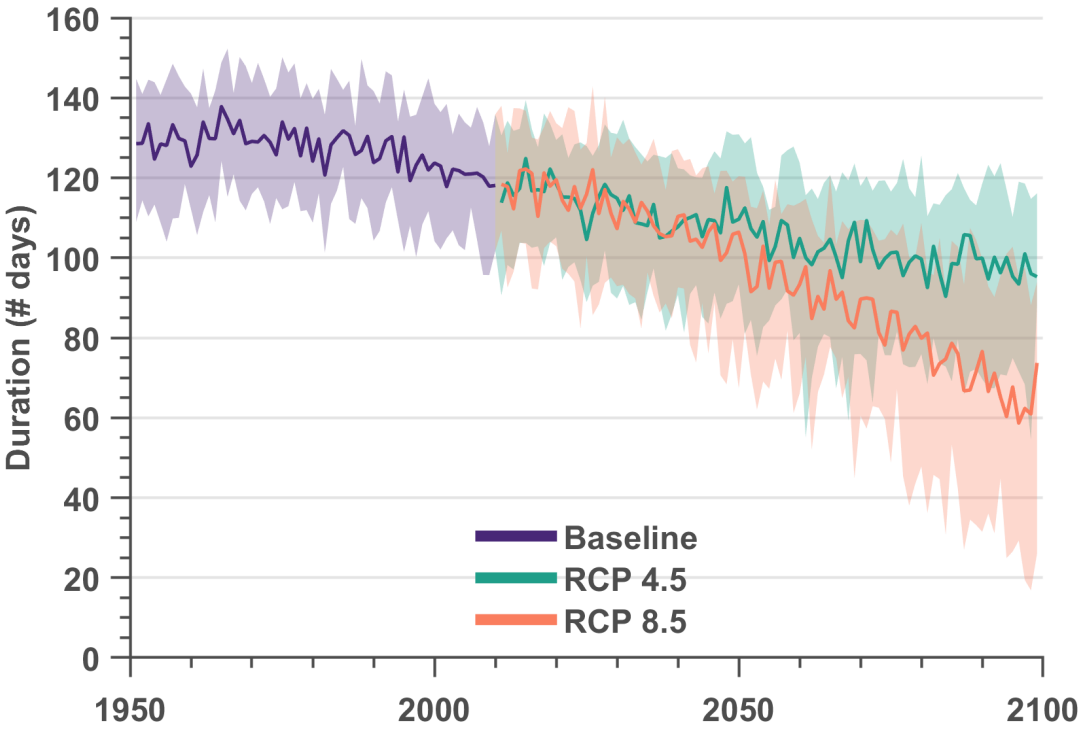


Figure F1.150: Frost Season Length.

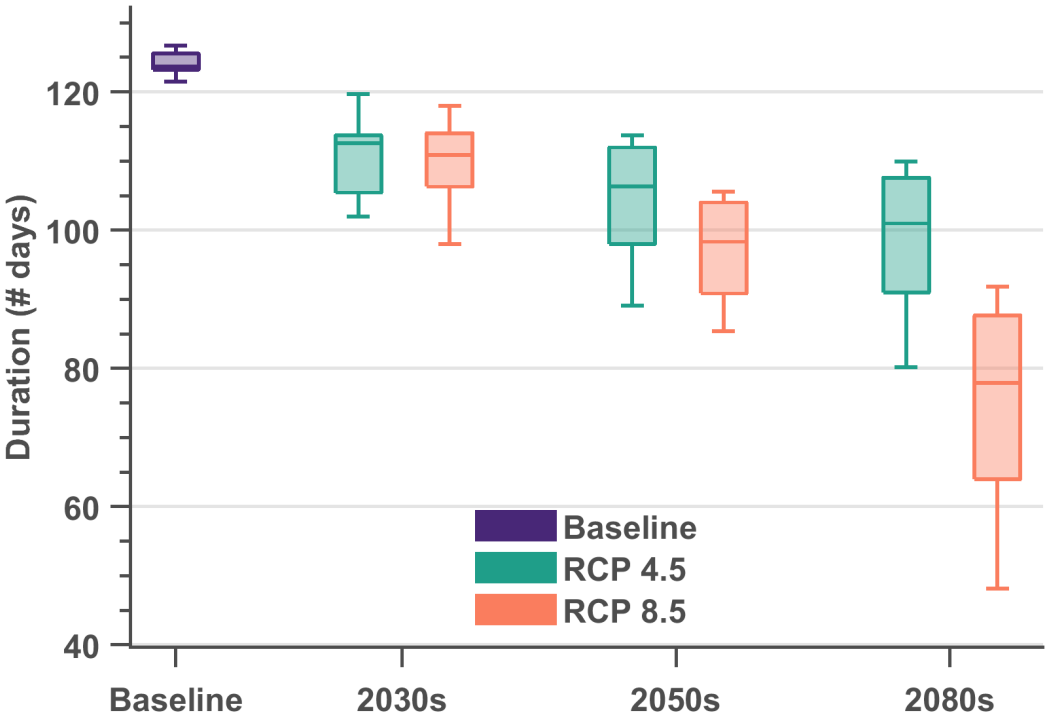


Figure F1.151: Frost Season Length.

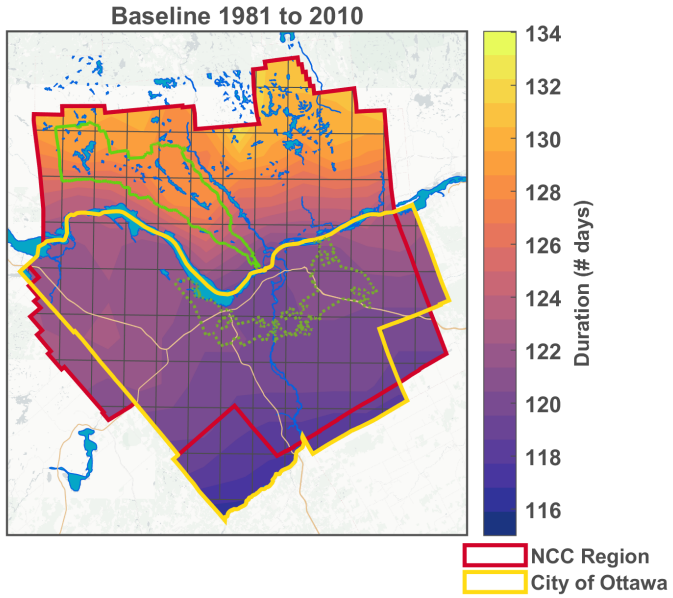


Figure F1.152: Frost Season Length - Baseline.

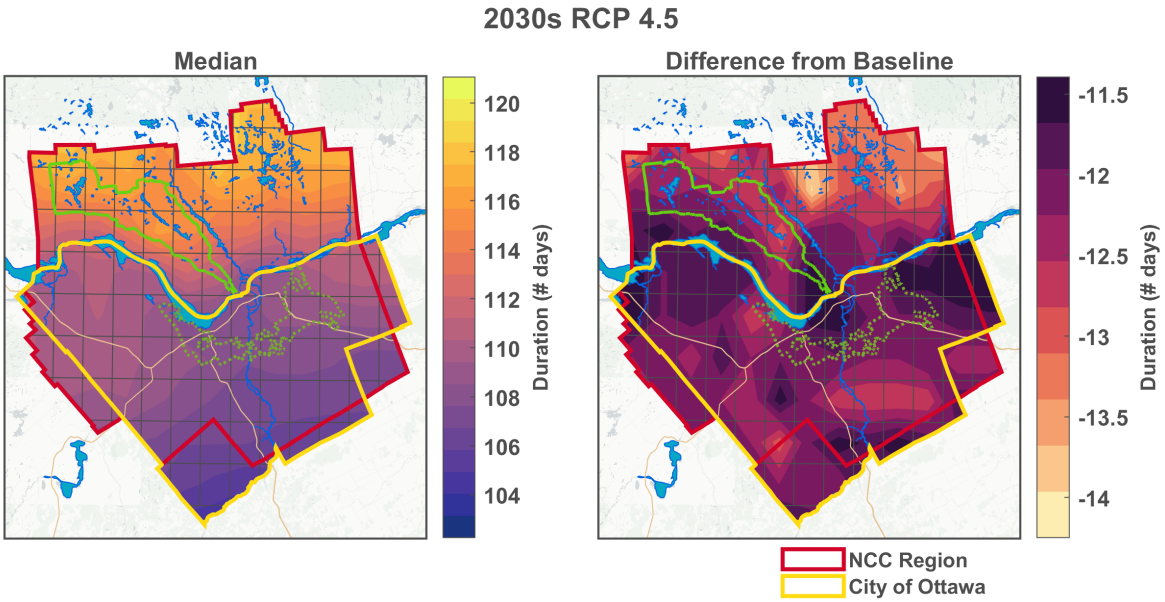


Figure F1.153: Frost Season Length - 2030s RCP 4.5.

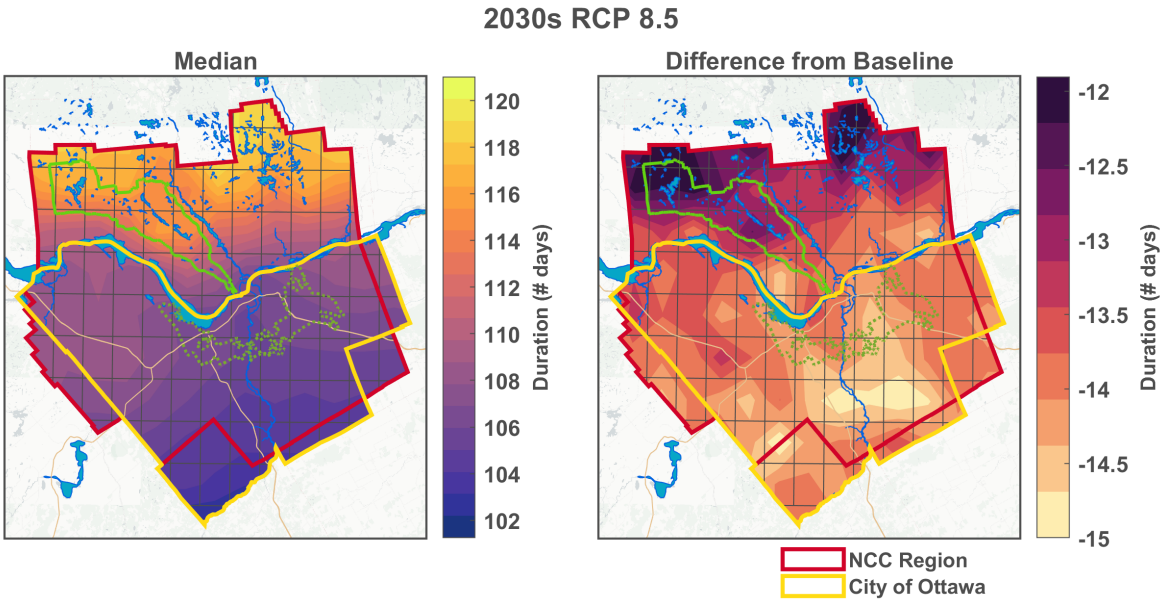


Figure F1.154: Frost Season Length - 2030s RCP 8.5.

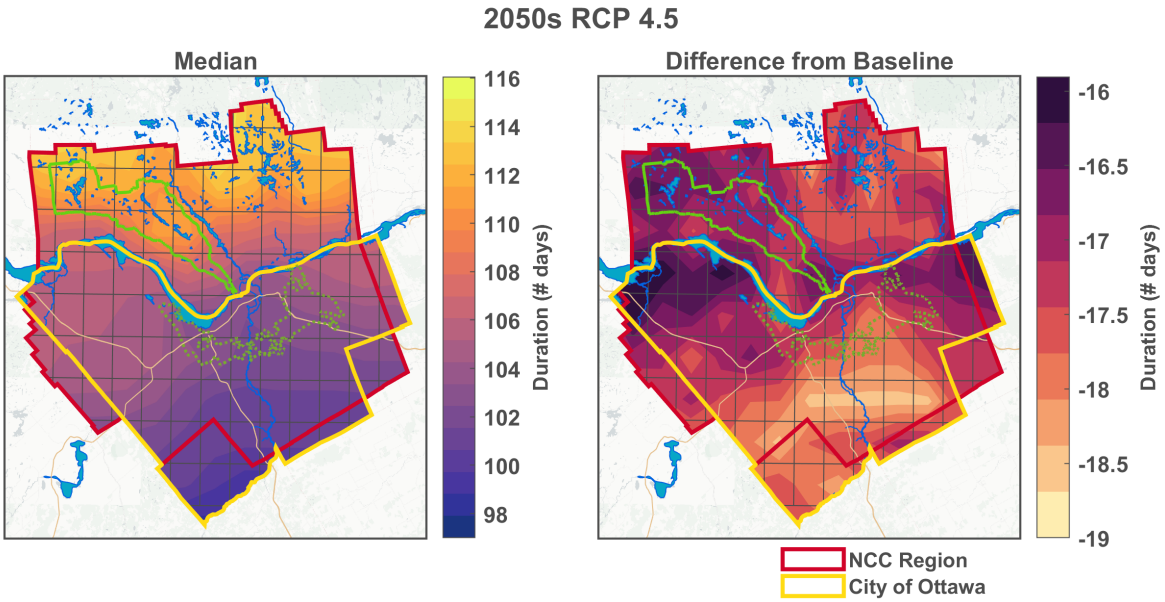


Figure F1.155: Frost Season Length - 2050s RCP 4.5.

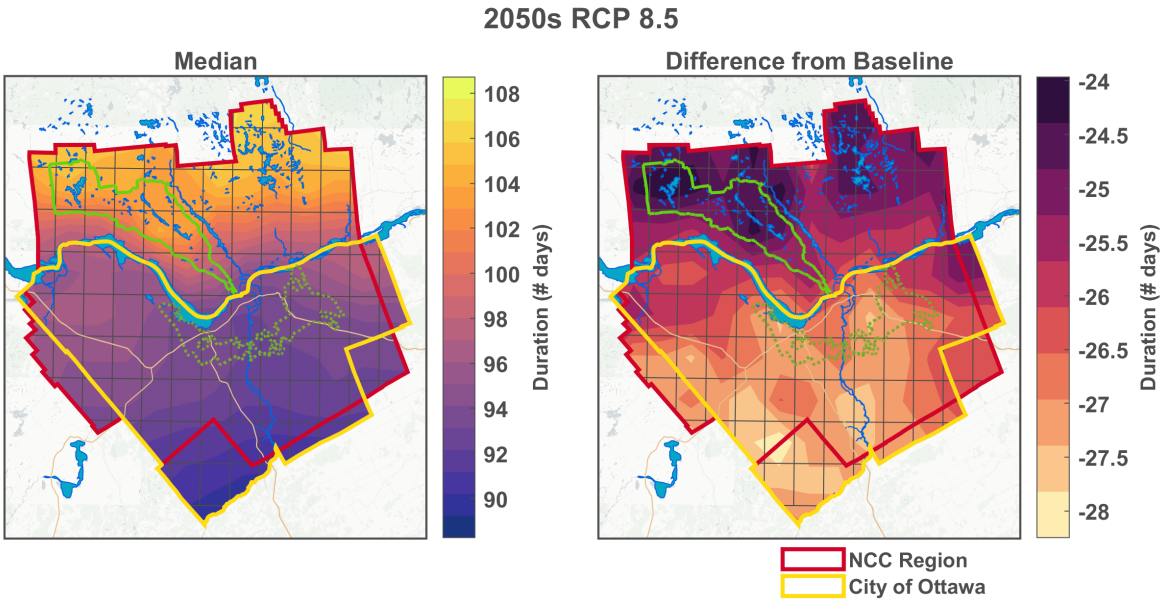


Figure F1.156: Frost Season Length - 2050s RCP 8.5.

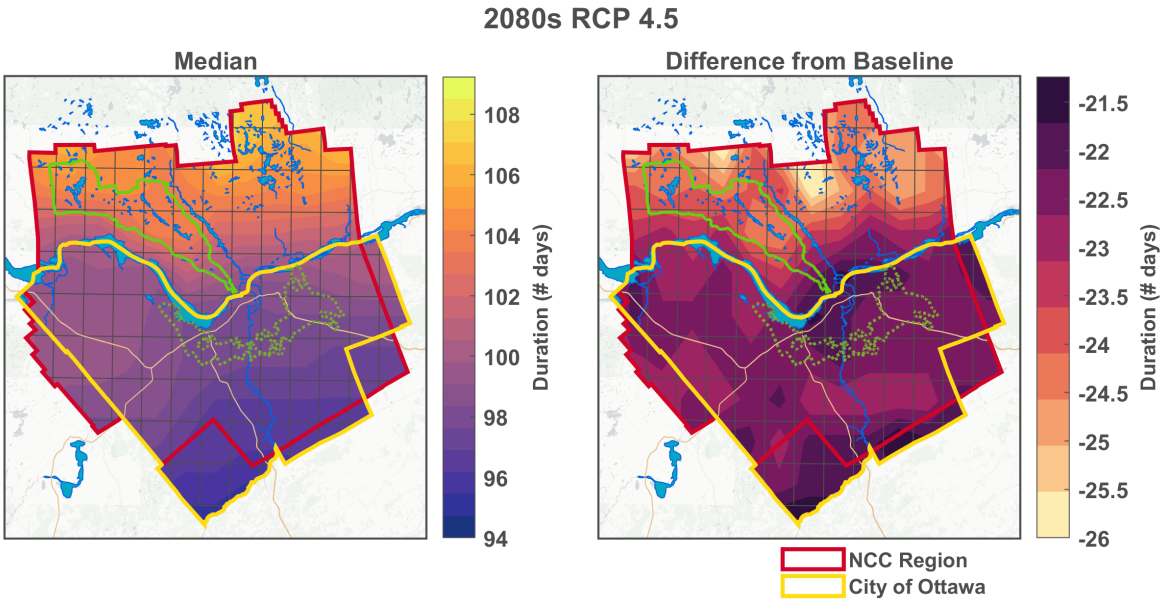


Figure F1.157: Frost Season Length - 2080s RCP 4.5.

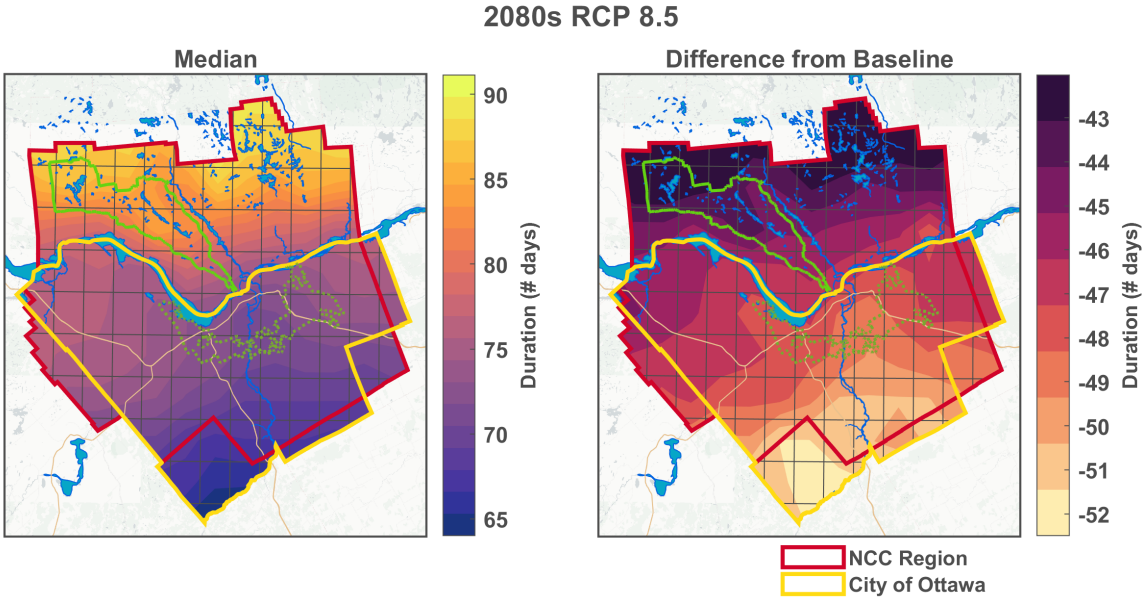


Figure F1.158: Frost Season Length - 2080s RCP 8.5.

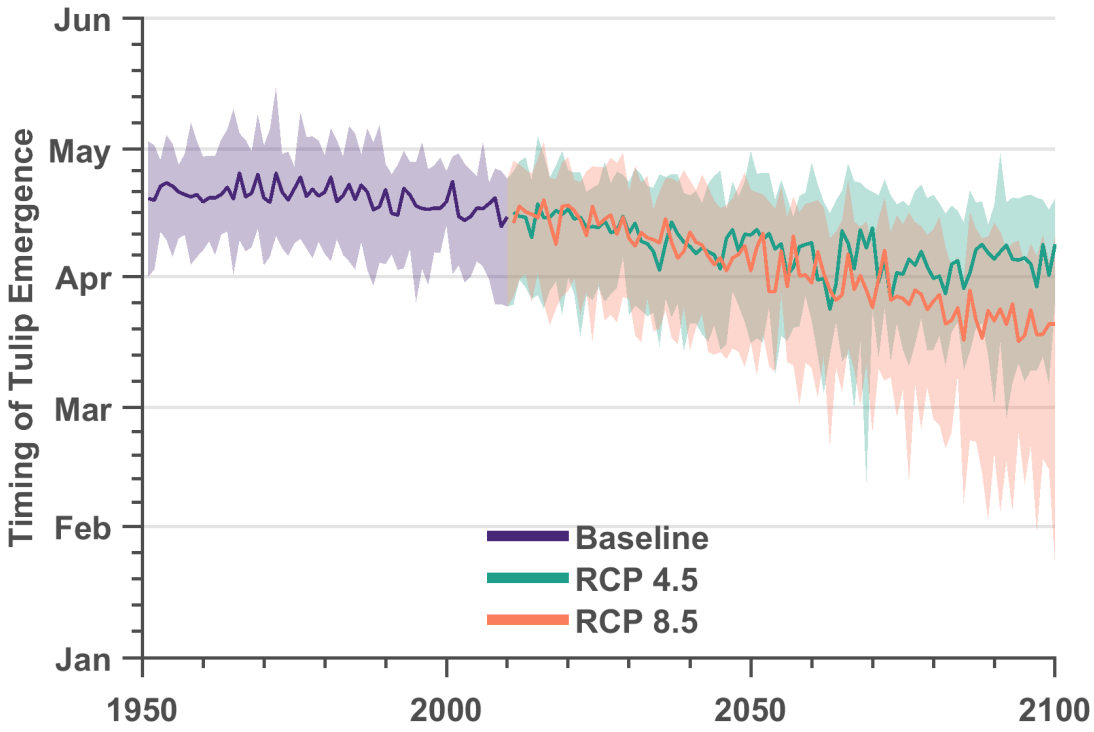


Figure F1.159: Timing of Tulip Emergence.

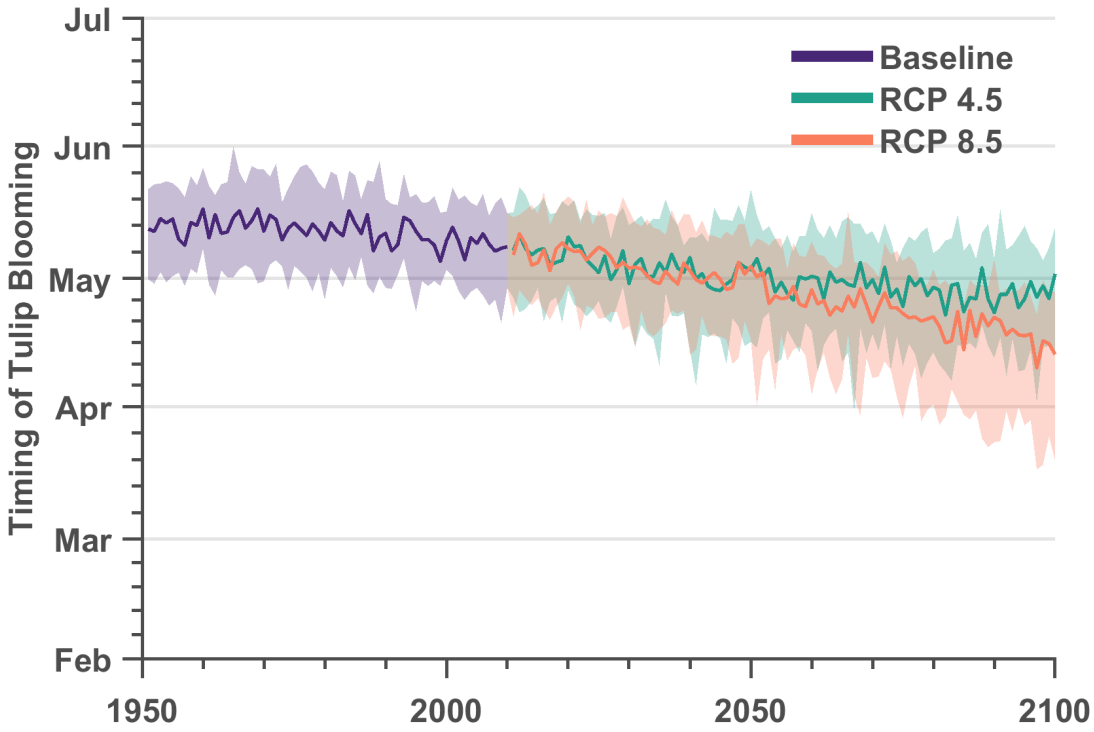


Figure F1.160: Timing of Tulip Blooming.

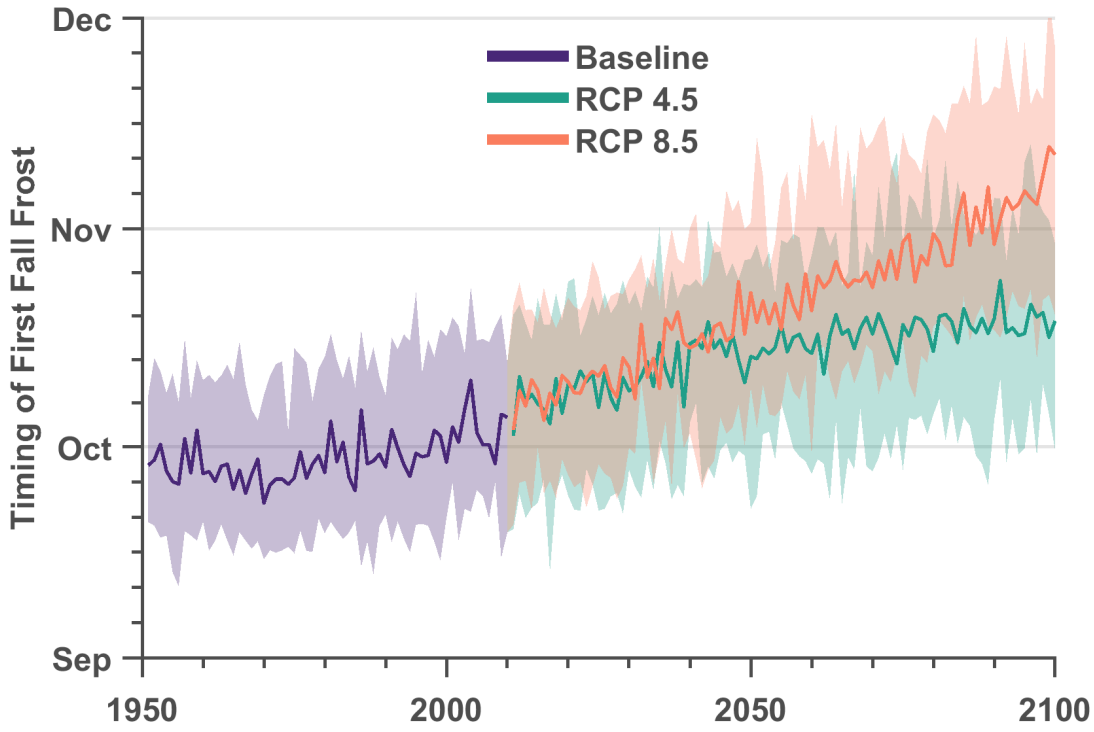


Figure F1.161: Timing of First Fall Frost.

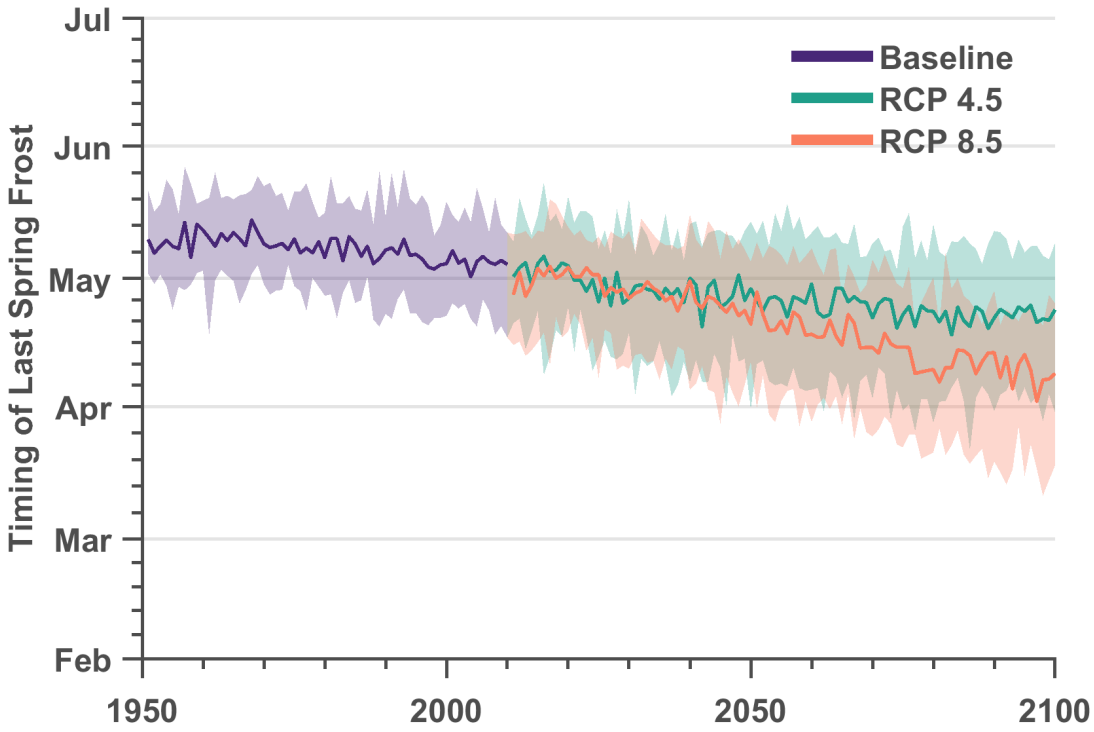


Figure F1.162: Timing of Last Spring Frost.

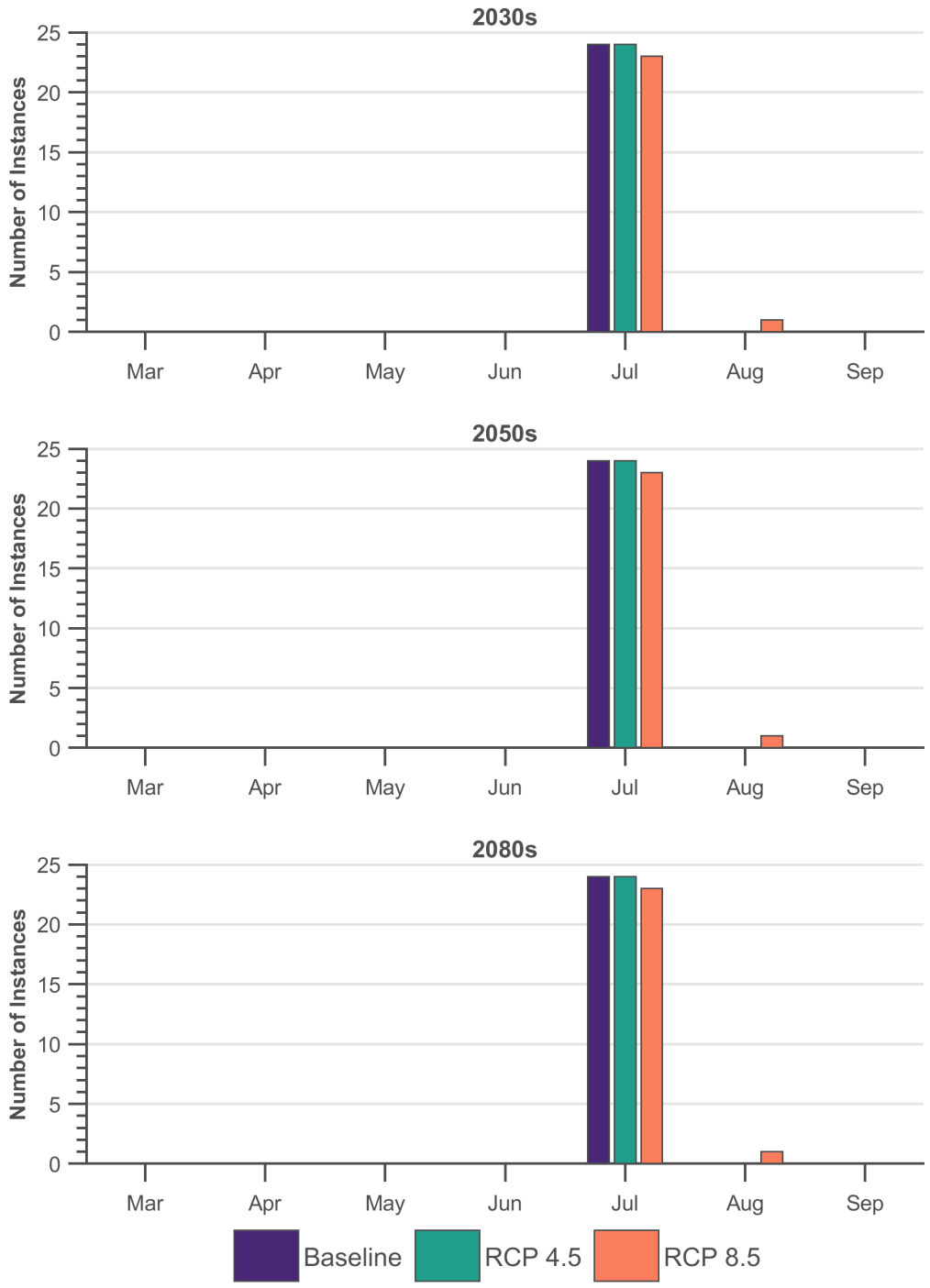


Figure F1.163: Timing of Warmest Month.

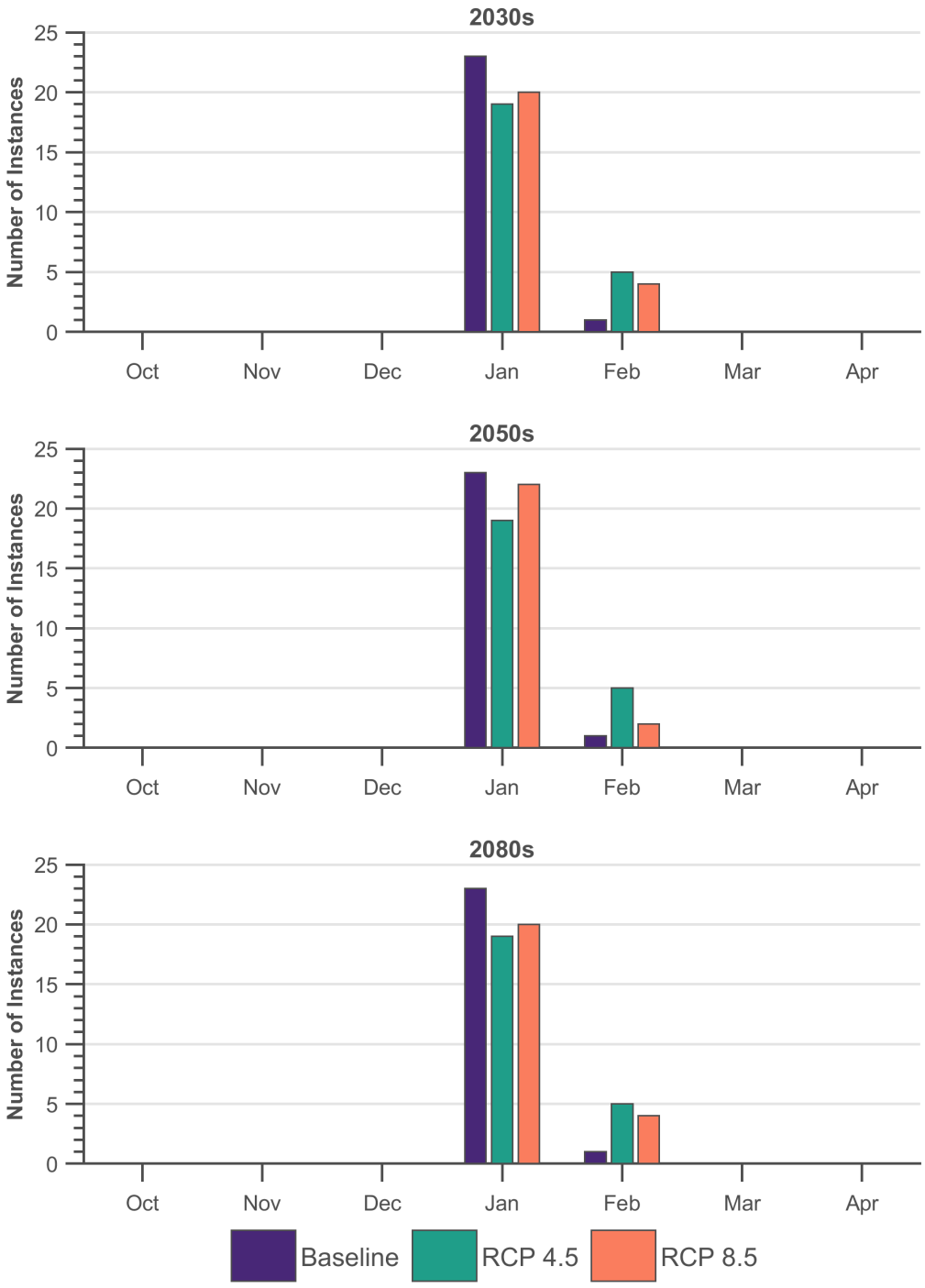


Figure F1.164: Timing of Coldest Month.

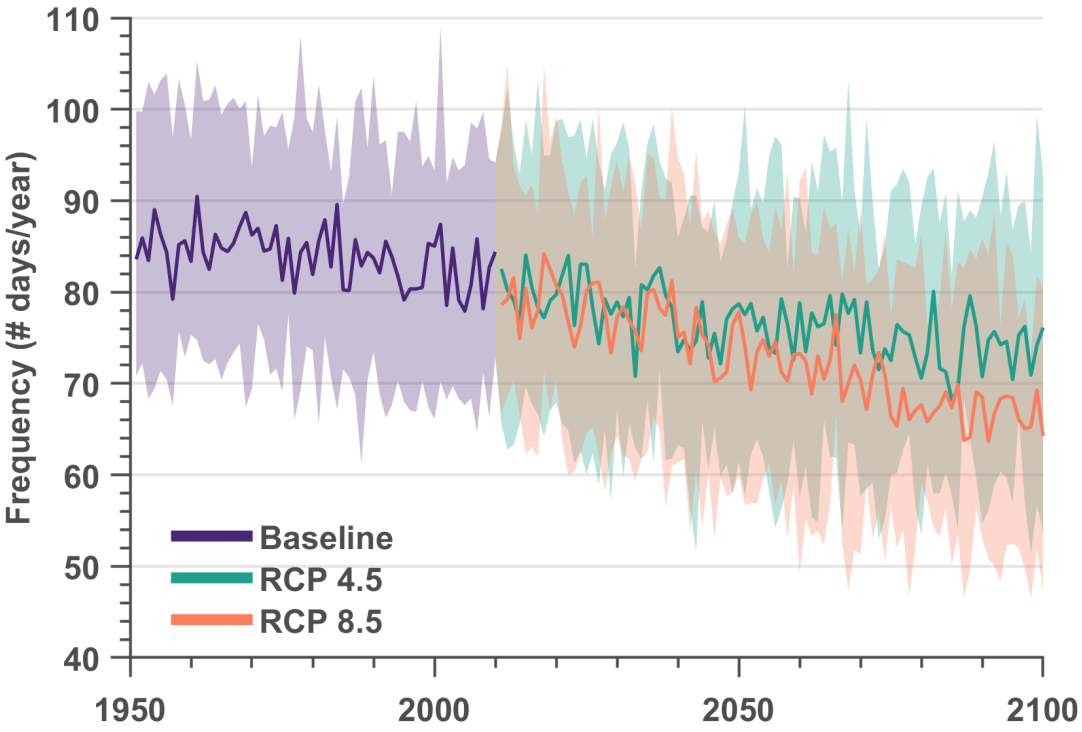


Figure F1.165: Annual Freeze-Thaw Cycles.

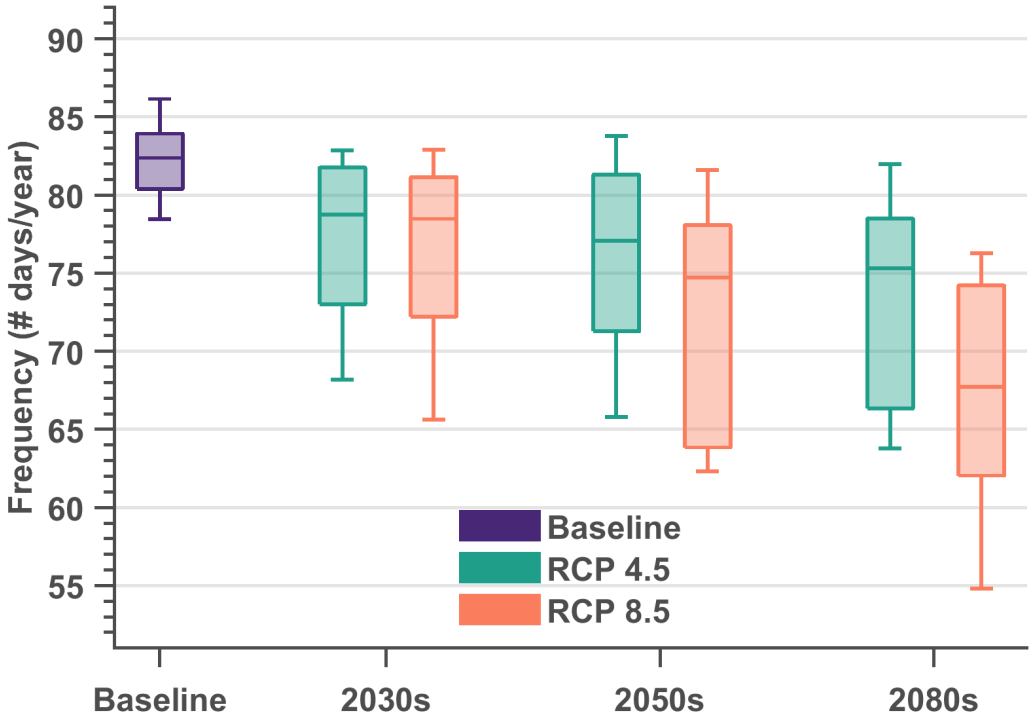


Figure F1.166: Annual Freeze-Thaw Cycles.

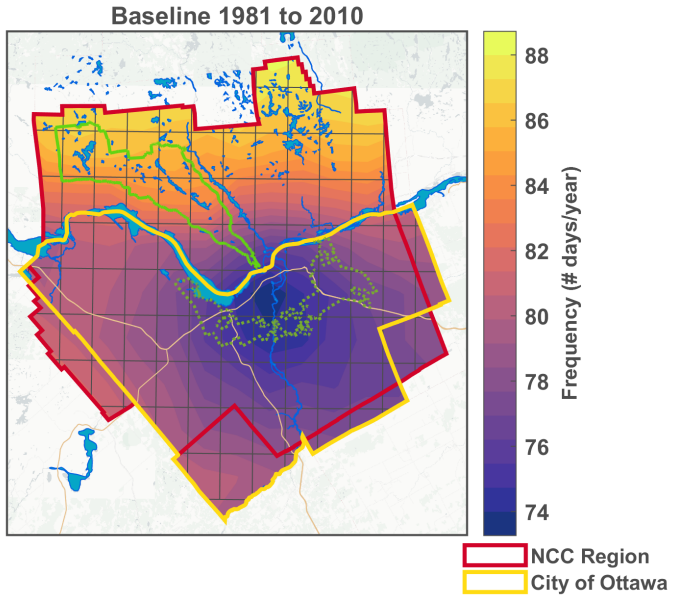


Figure F1.167: Annual Freeze-Thaw Cycles - Baseline.

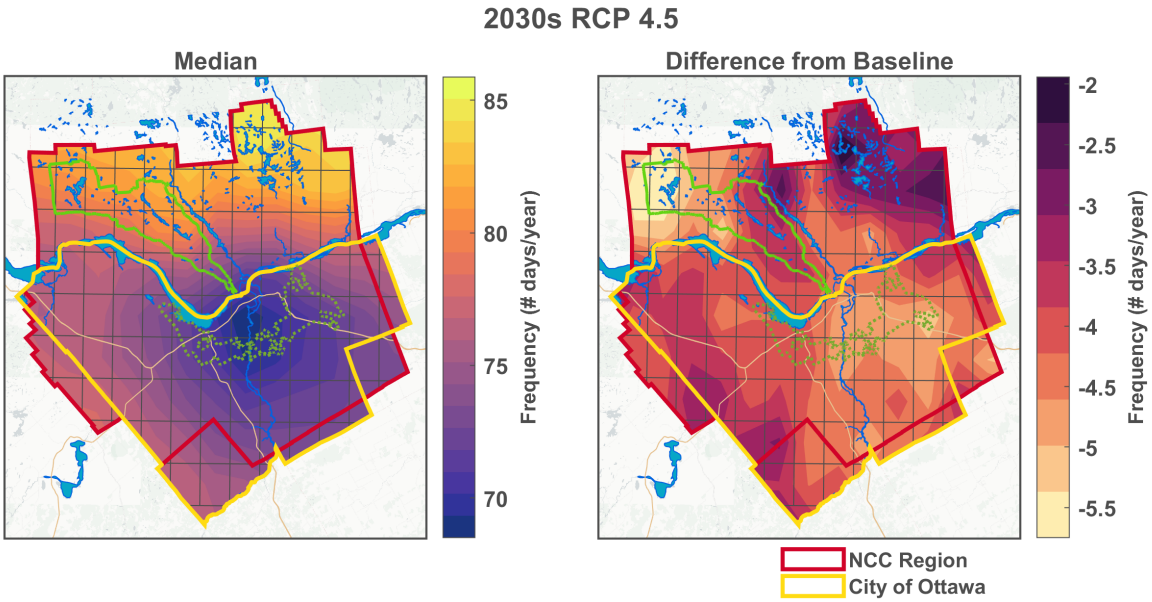


Figure F1.168: Annual Freeze-Thaw Cycles - 2030s RCP 4.5.

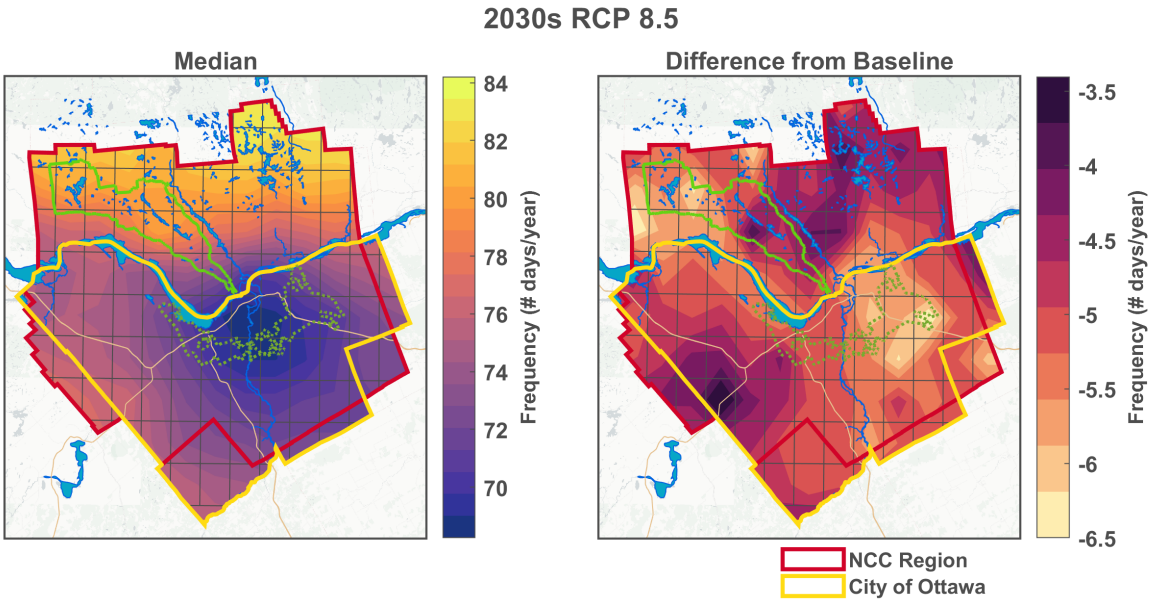


Figure F1.169: Annual Freeze-Thaw Cycles - 2030s RCP 8.5.

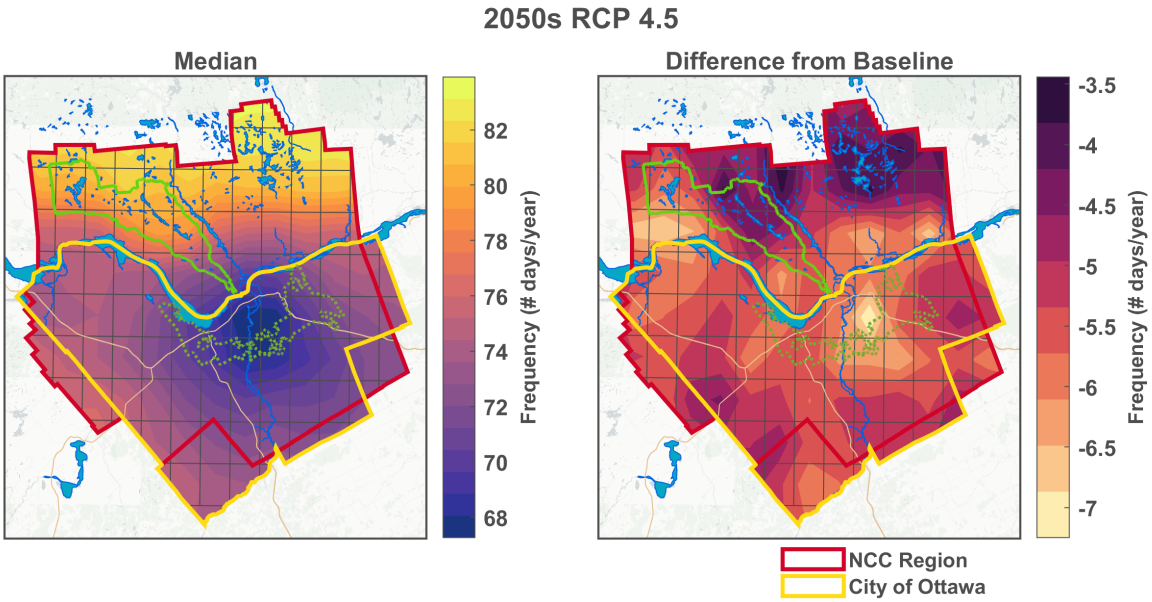


Figure F1.170: Annual Freeze-Thaw Cycles - 2050s RCP 4.5.

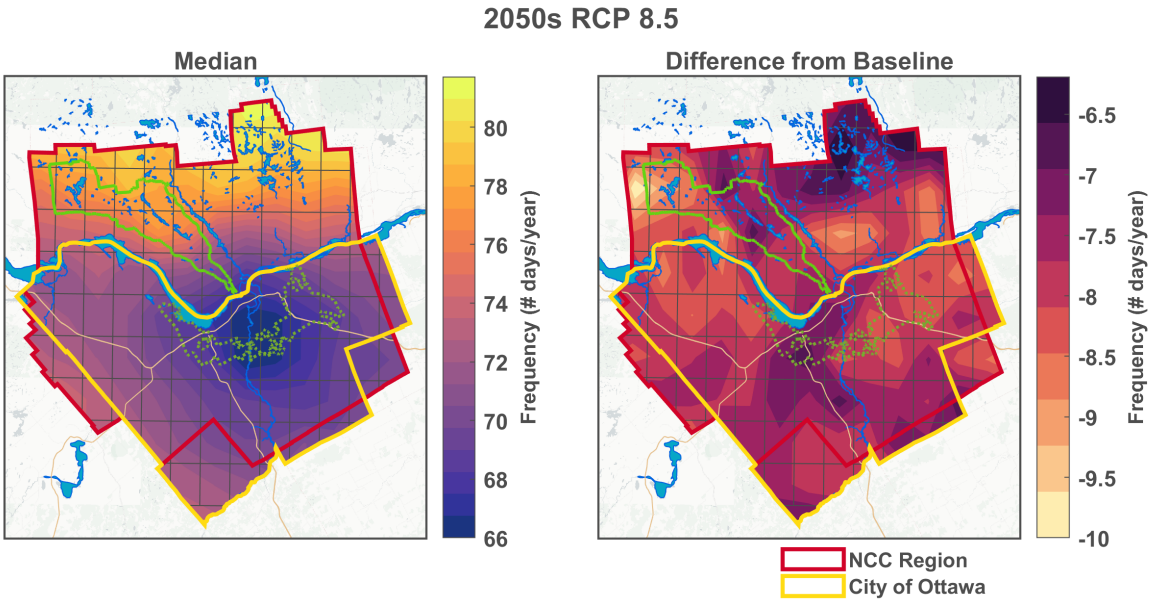


Figure F1.171: Annual Freeze-Thaw Cycles - 2050s RCP 8.5.

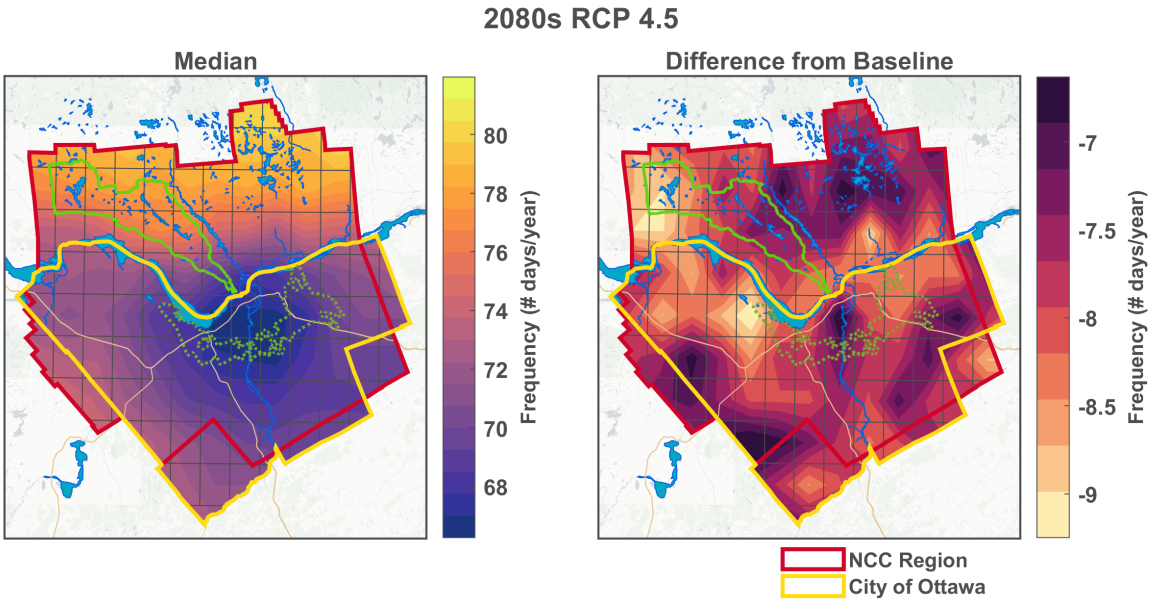


Figure F1.172: Annual Freeze-Thaw Cycles - 2080s RCP 4.5.

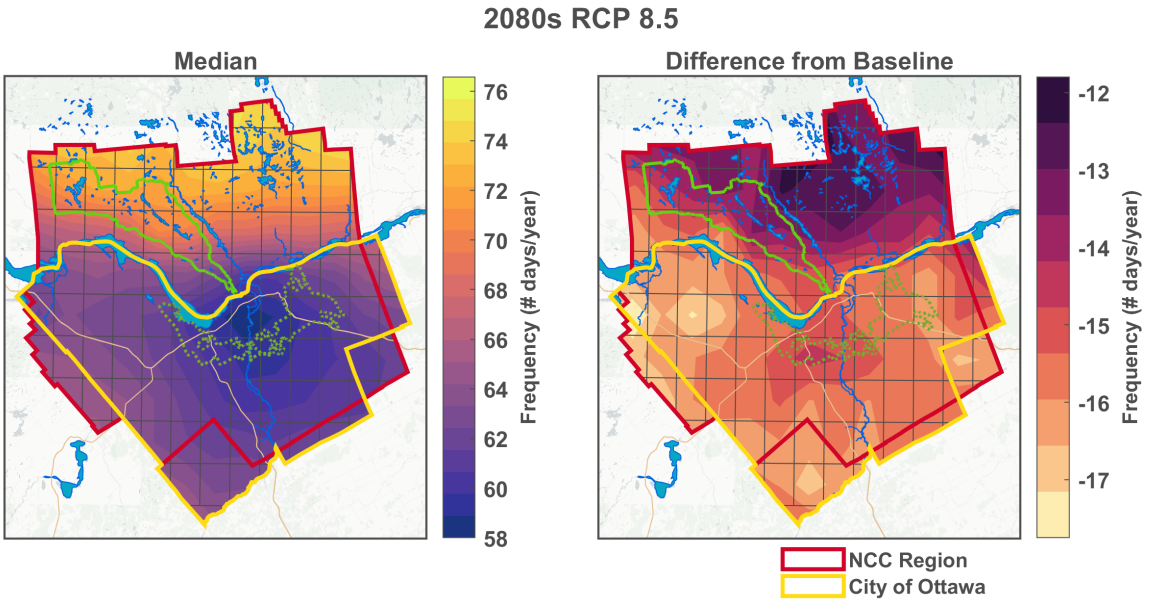


Figure F1.173: Annual Freeze-Thaw Cycles - 2080s RCP 8.5.

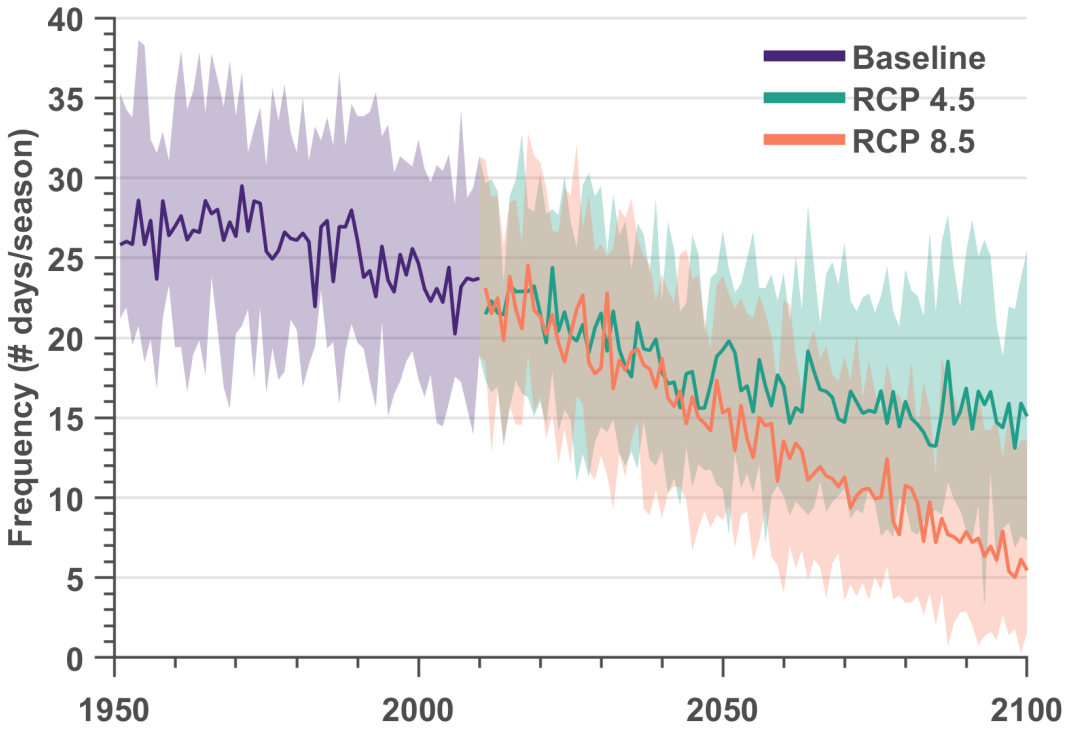


Figure F1.174: Seasonal Freeze-Thaw Cycles - Fall.

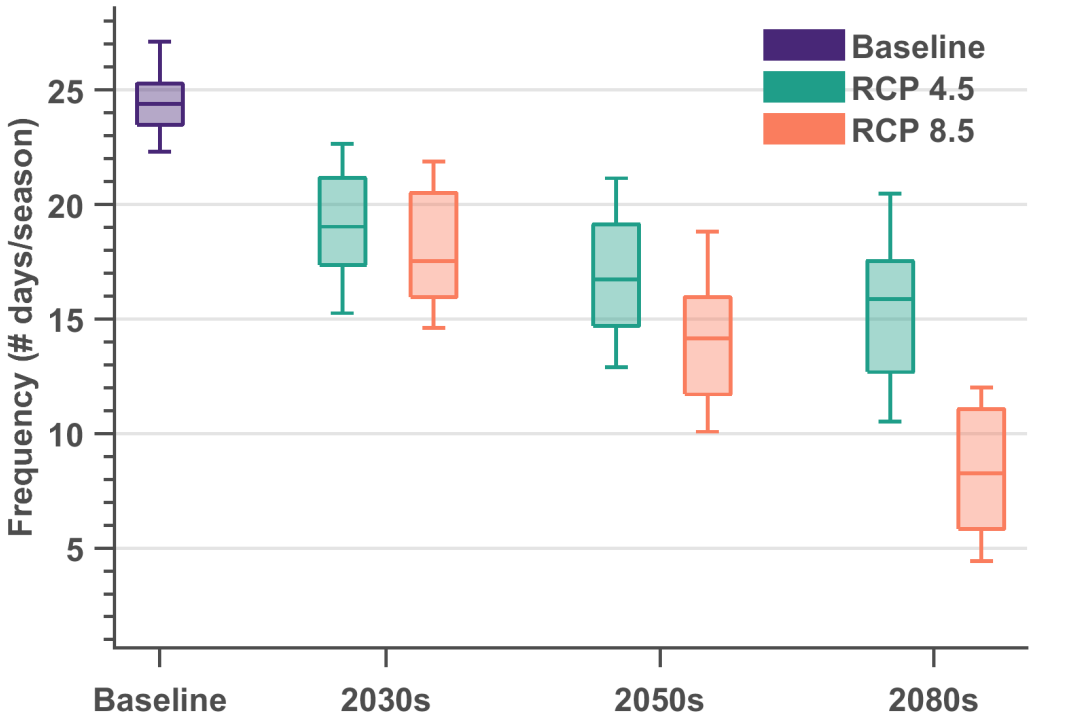


Figure F1.175: Seasonal Freeze-Thaw Cycles - Fall.

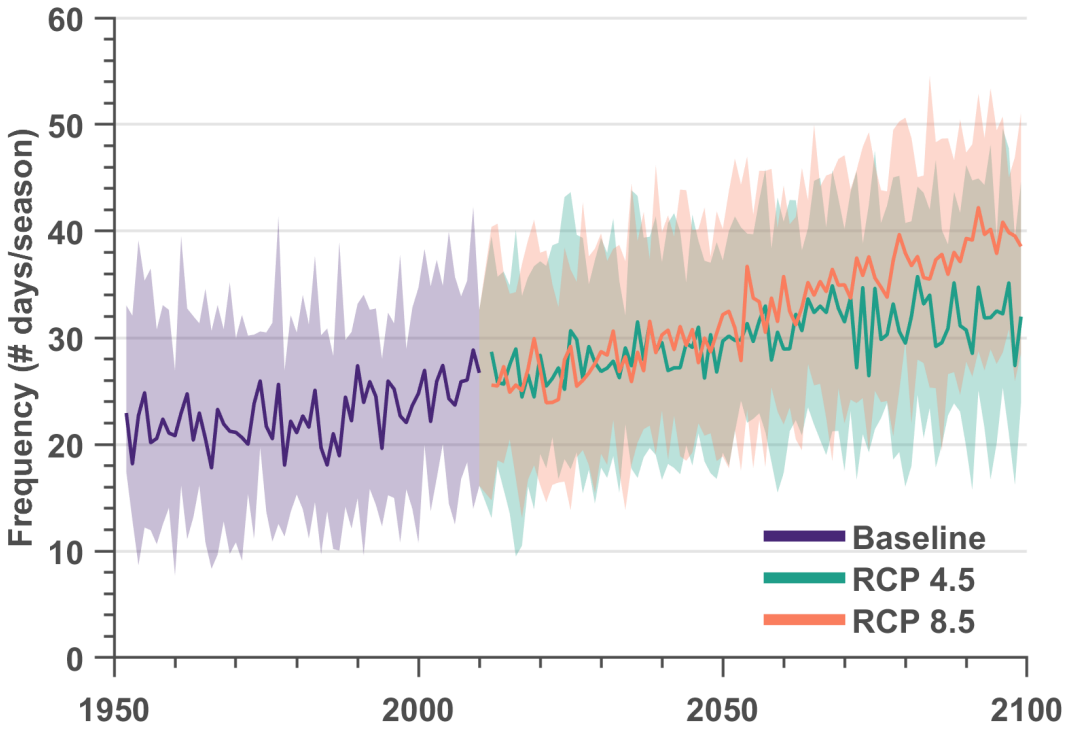


Figure F1.176: Seasonal Freeze-Thaw Cycles - Winter.

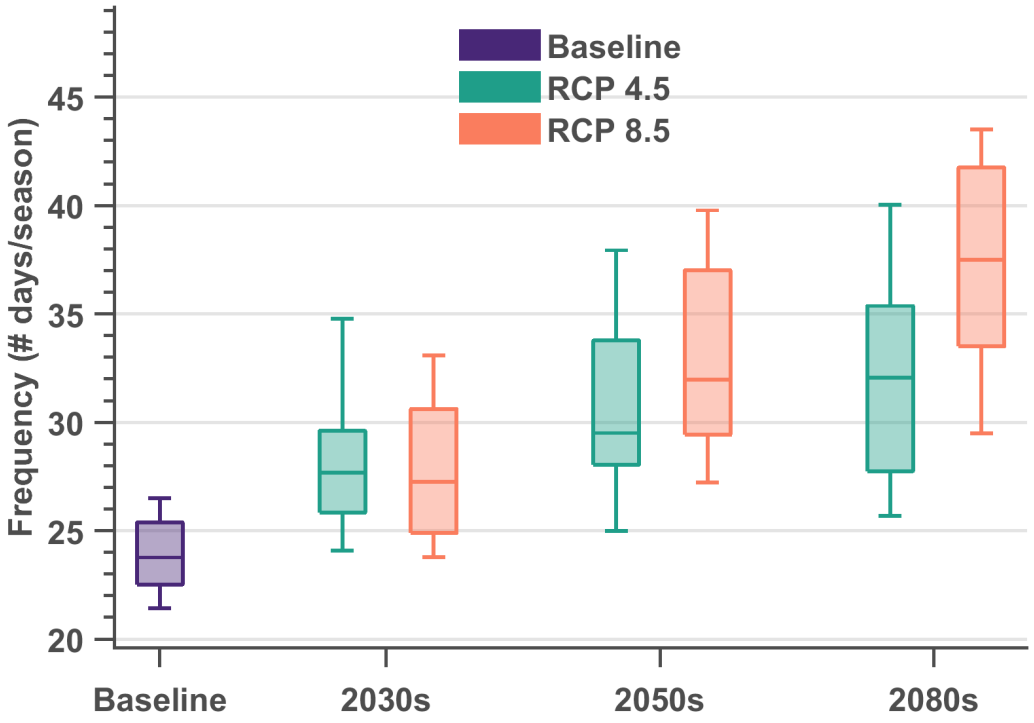


Figure F1.177: Seasonal Freeze-Thaw Cycles - Winter.

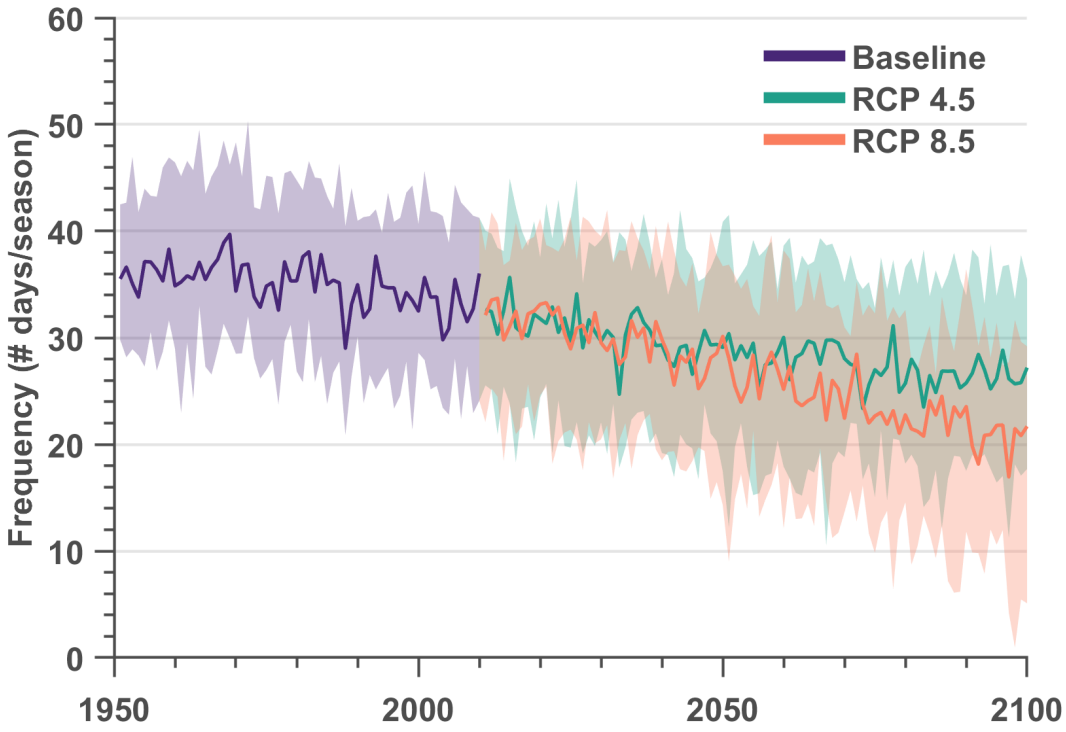


Figure F1.178: Seasonal Freeze-Thaw Cycles - Spring.

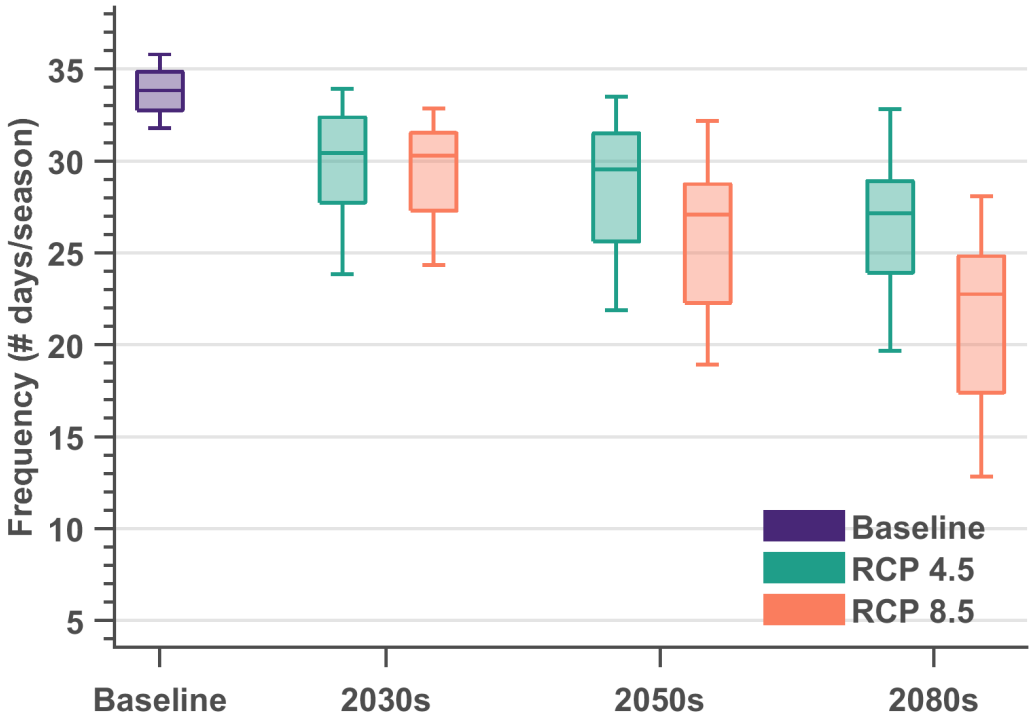


Figure F1.179: Seasonal Freeze-Thaw Cycles - Spring.

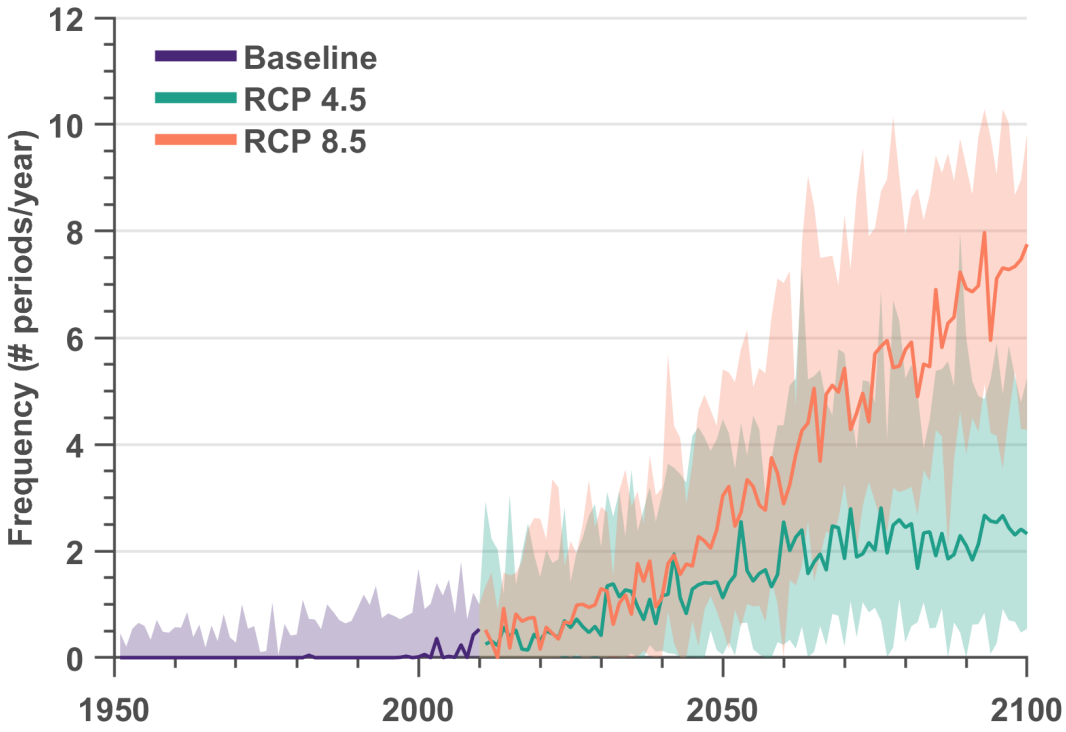


Figure F1.180: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days).

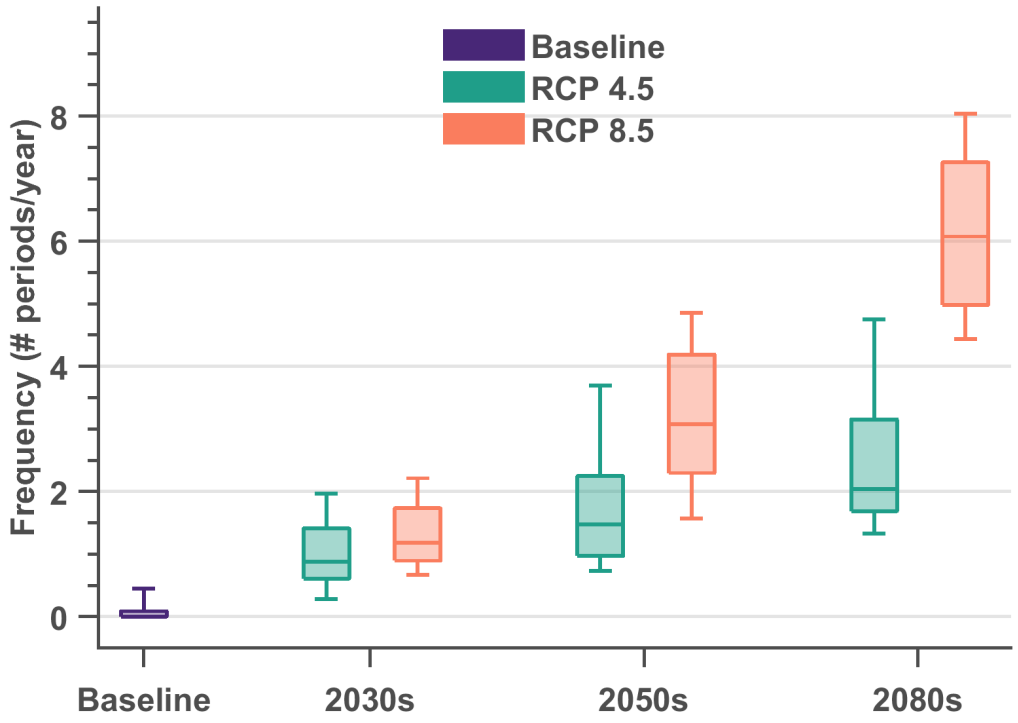


Figure F1.181: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days).

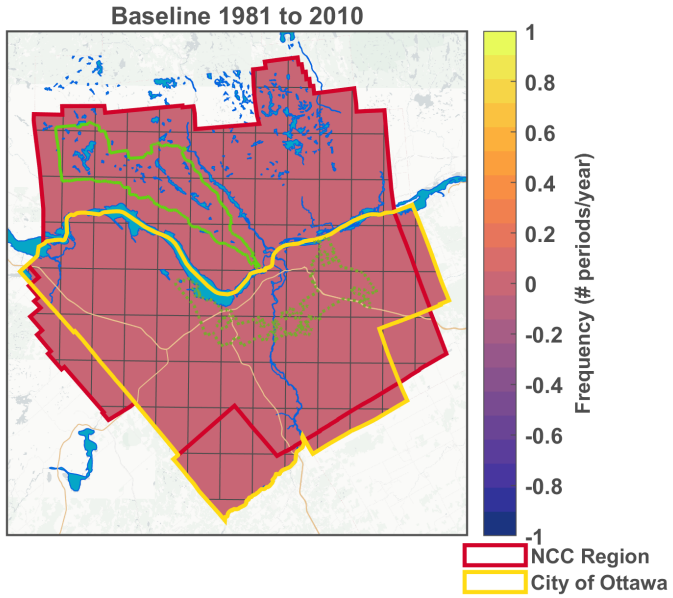


Figure F1.182: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - Baseline.

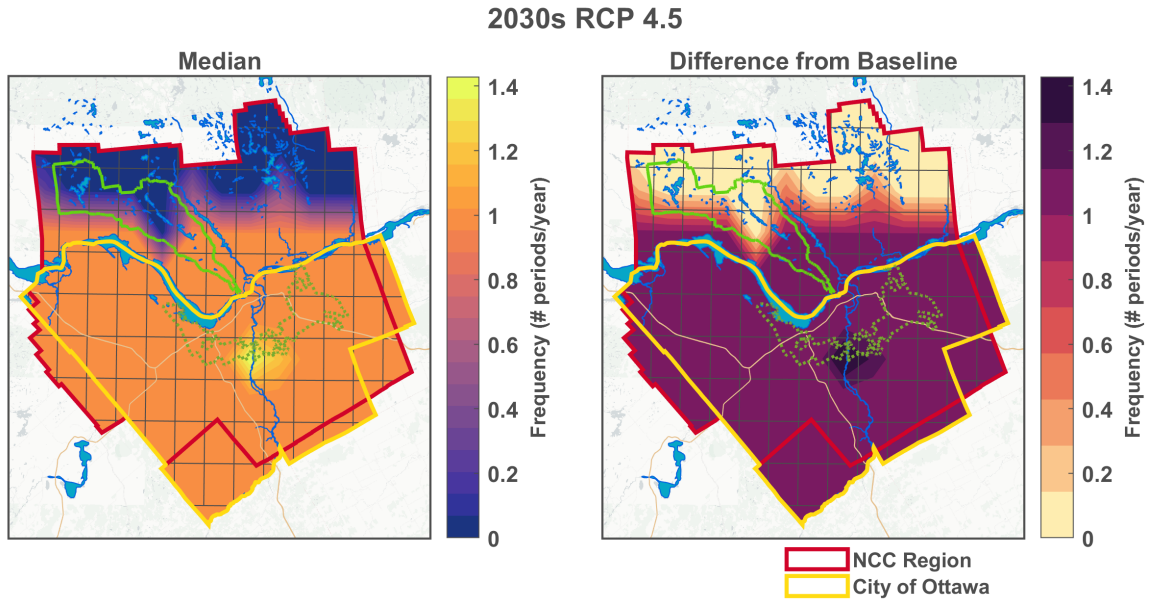


Figure F1.183: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2030s RCP 4.5.

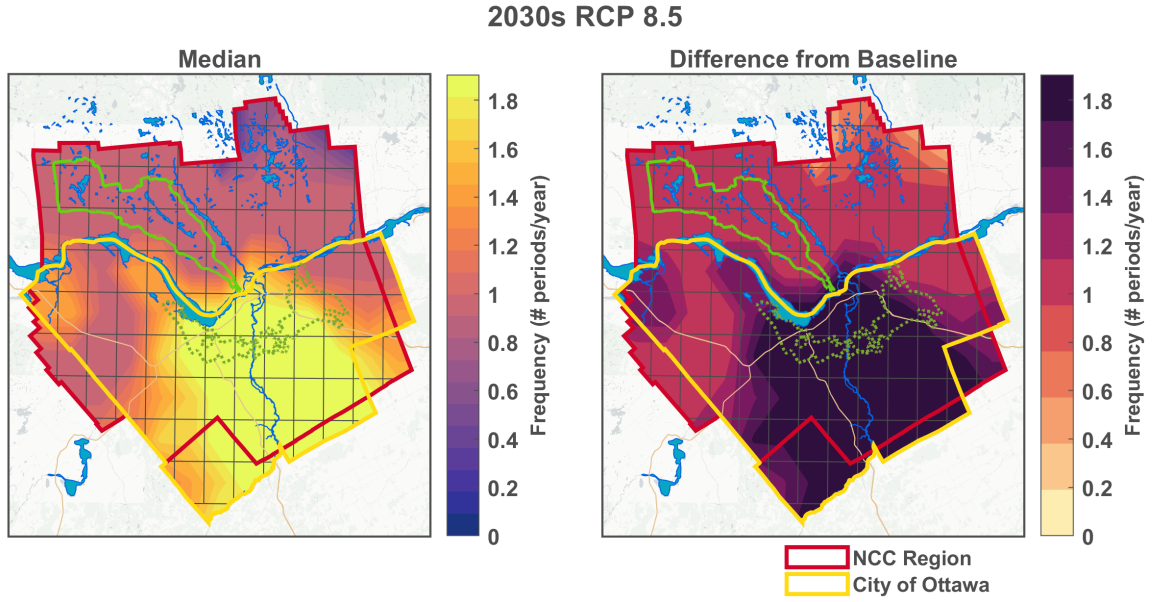


Figure F1.184: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2030s RCP 8.5.

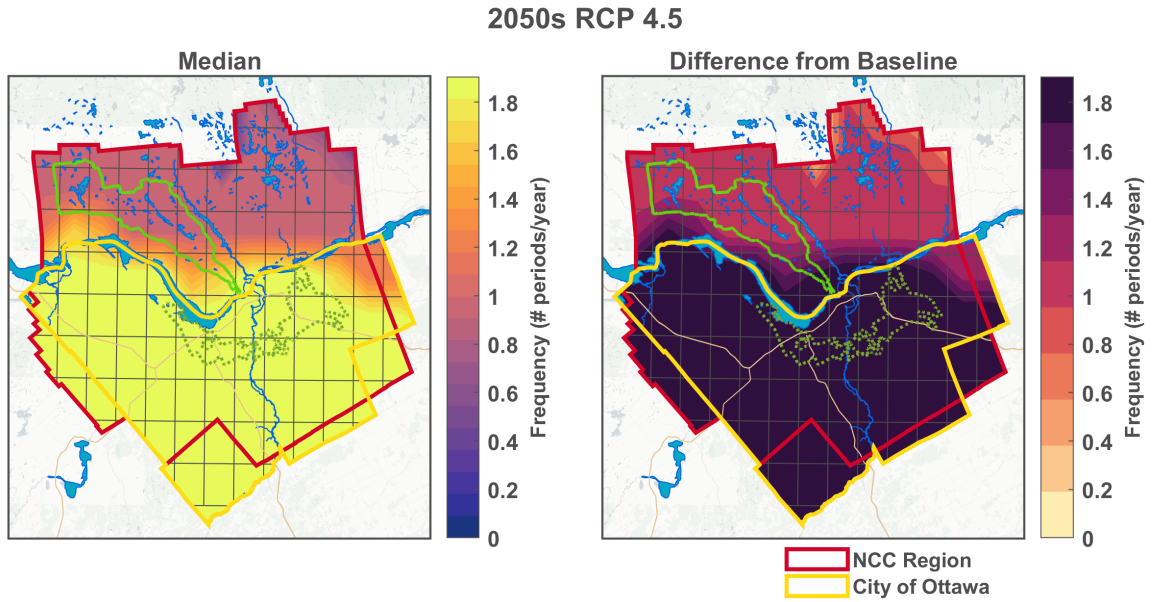


Figure F1.185: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2050s RCP 4.5.

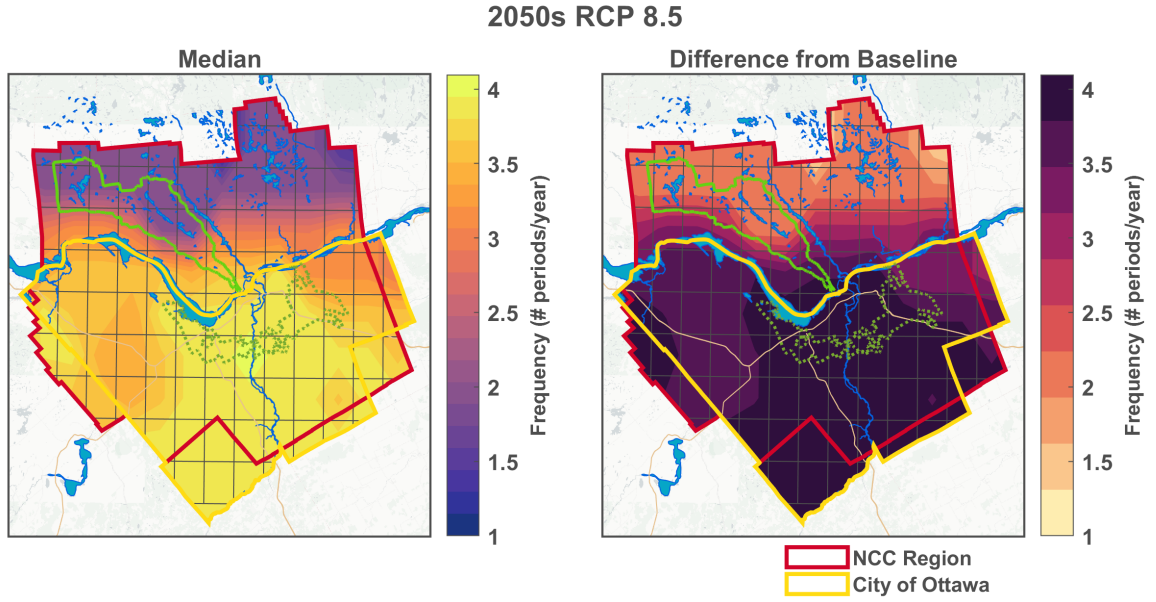


Figure F1.186: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2050s RCP 8.5.

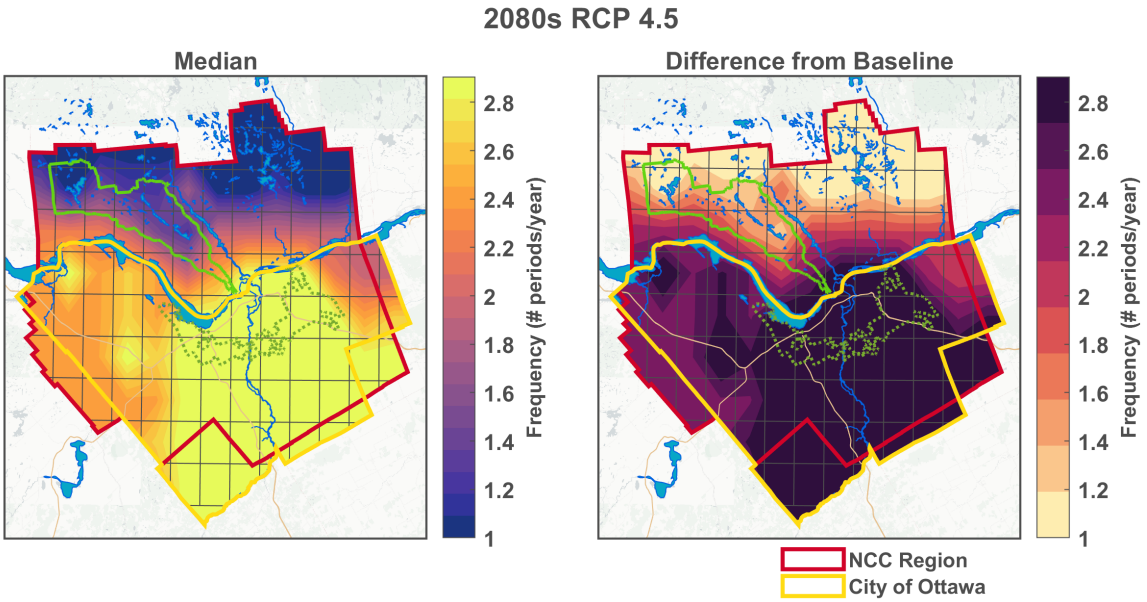


Figure F1.187: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2080s RCP 4.5.

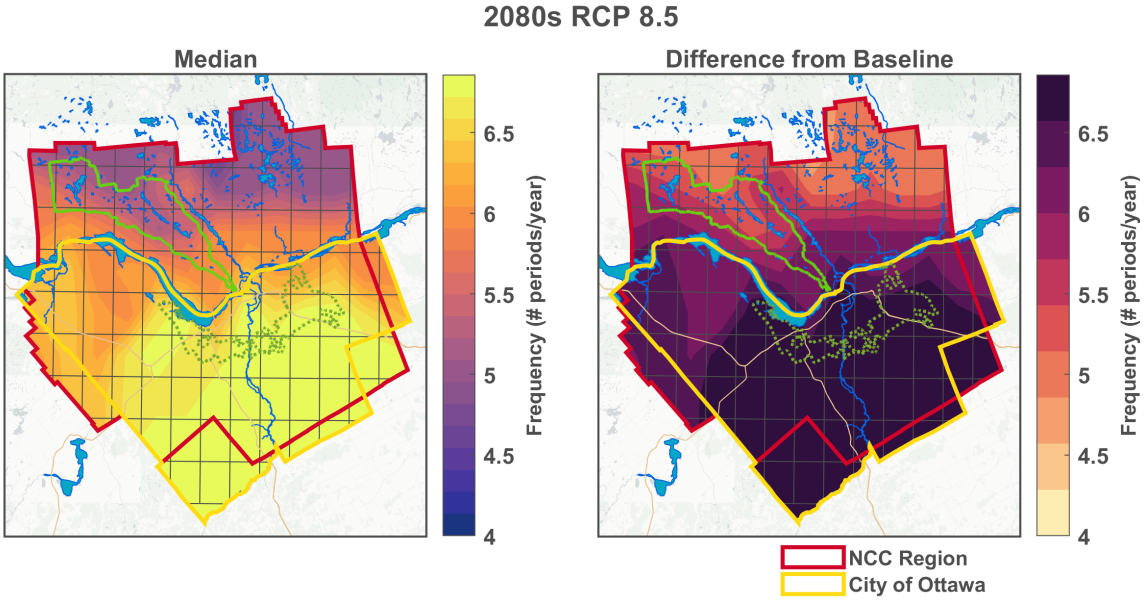


Figure F1.188: Frequency of Warm Spells (Max. Temperature > 31°C and Min. Temperature > 20°C, for 2 Days) - 2080s RCP 8.5.

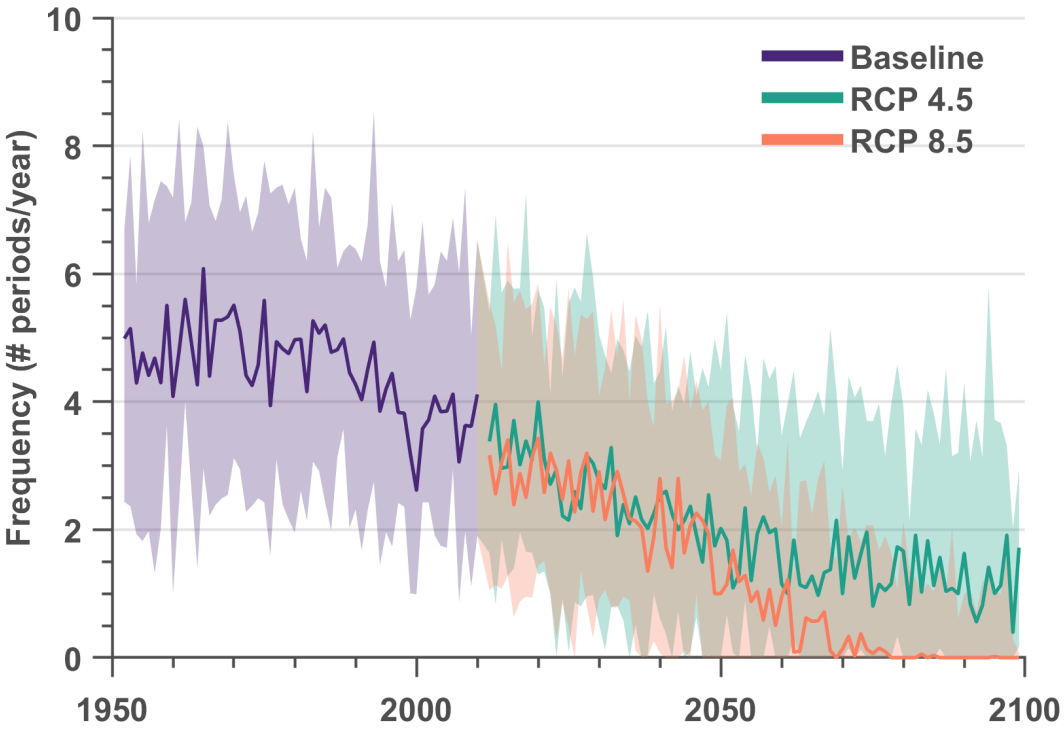


Figure F1.189: Frequency of Cold Spells (Max. Temperature <= -10°C for 5 Days).

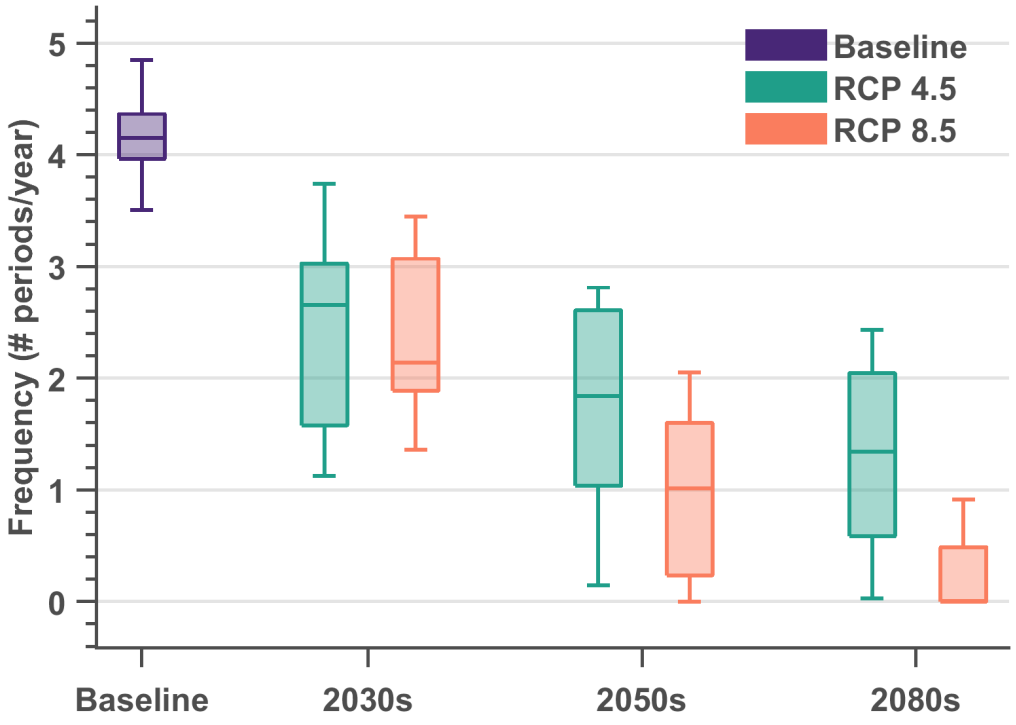


Figure F1.190: Frequency of Cold Spells (Max. Temperature <= -10°C for 5 Days).

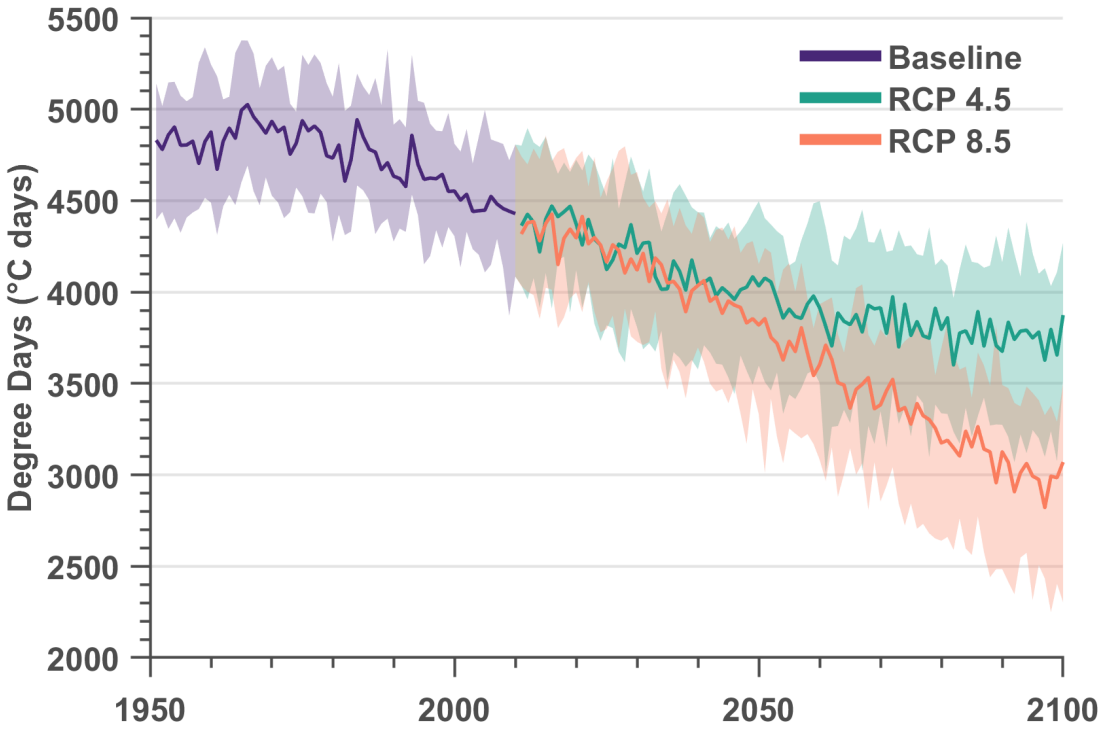


Figure F1.191: Heating Degree Days (18°C).

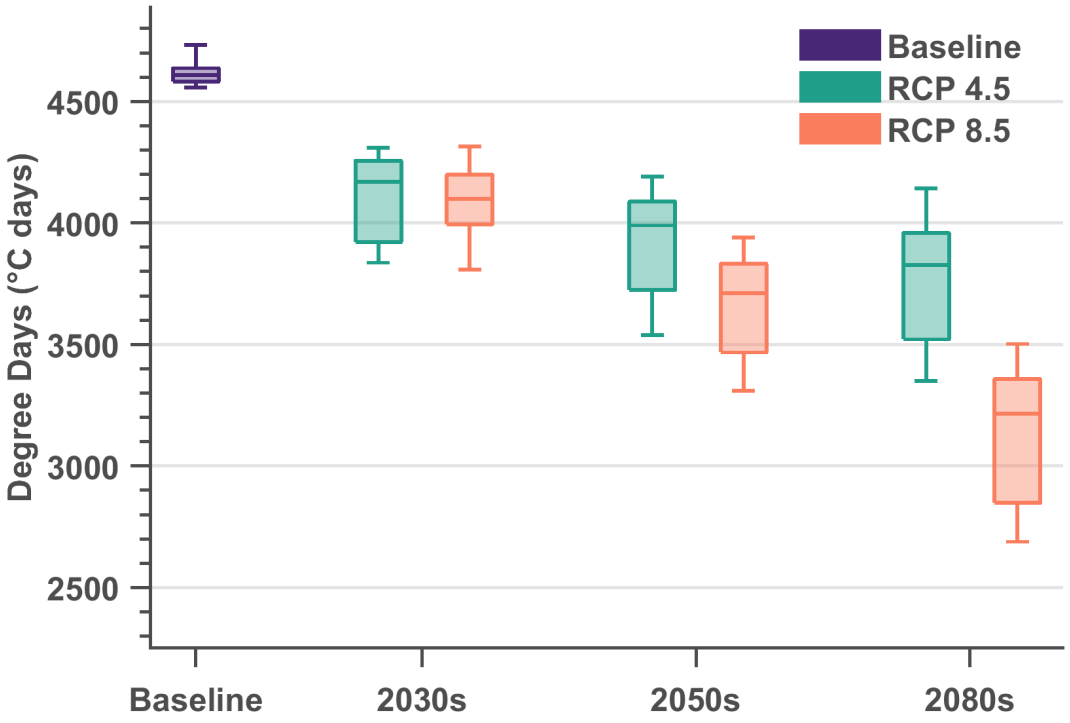


Figure F1.192: Heating Degree Days (18°C).

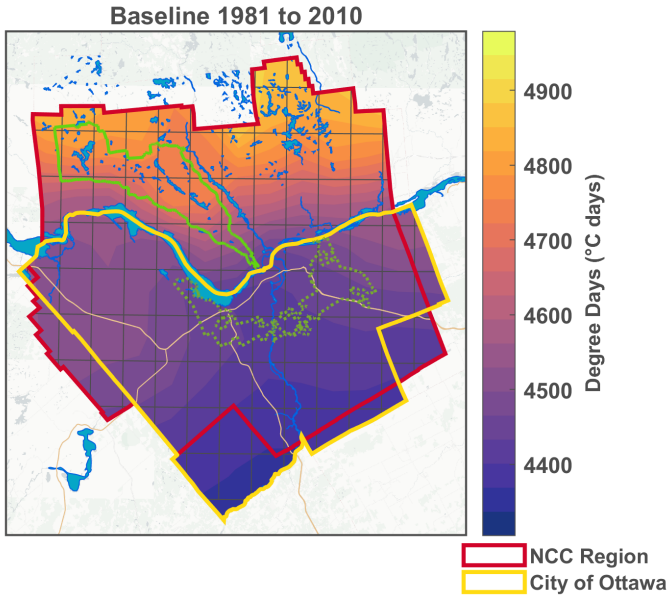


Figure F1.193: Heating Degree Days (18°C).

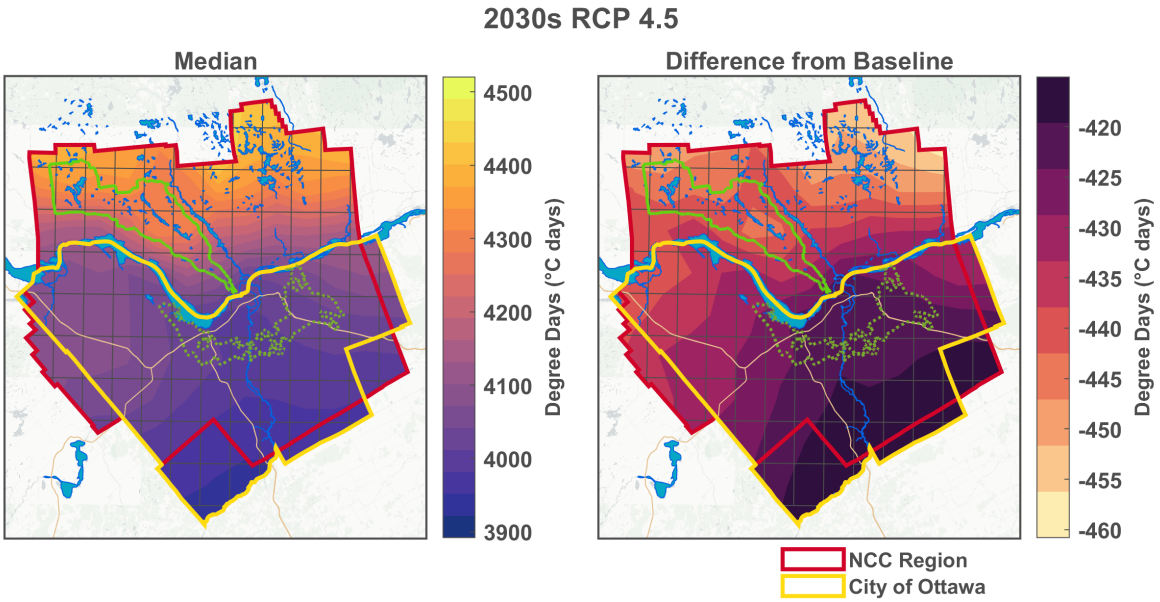


Figure F1.194: Heating Degree Days (18°C).

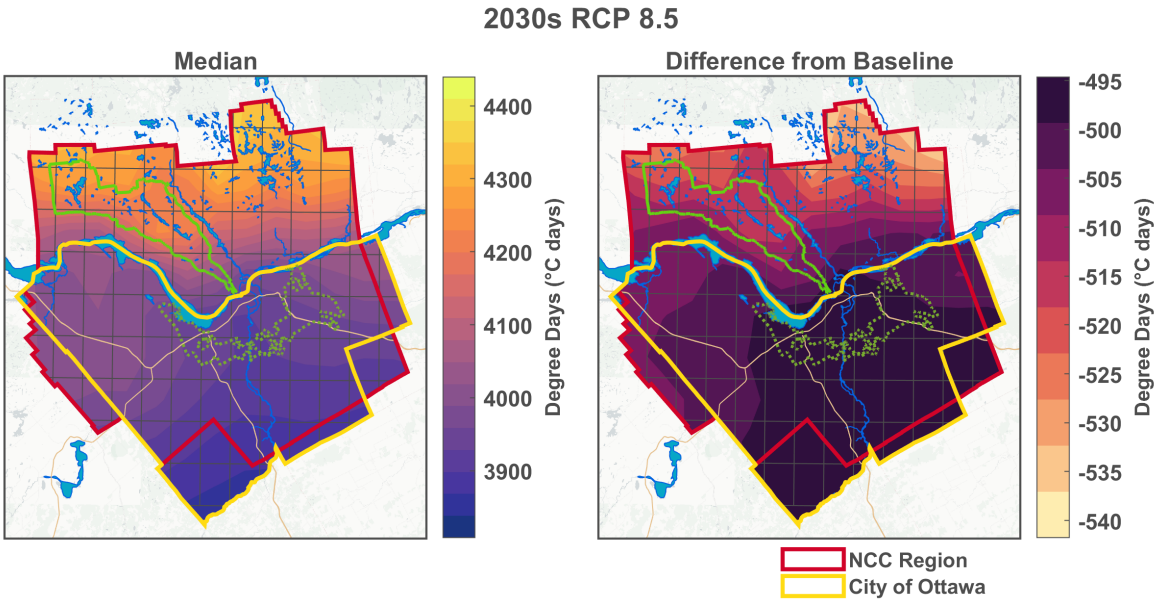


Figure F1.195: Heating Degree Days (18°C).

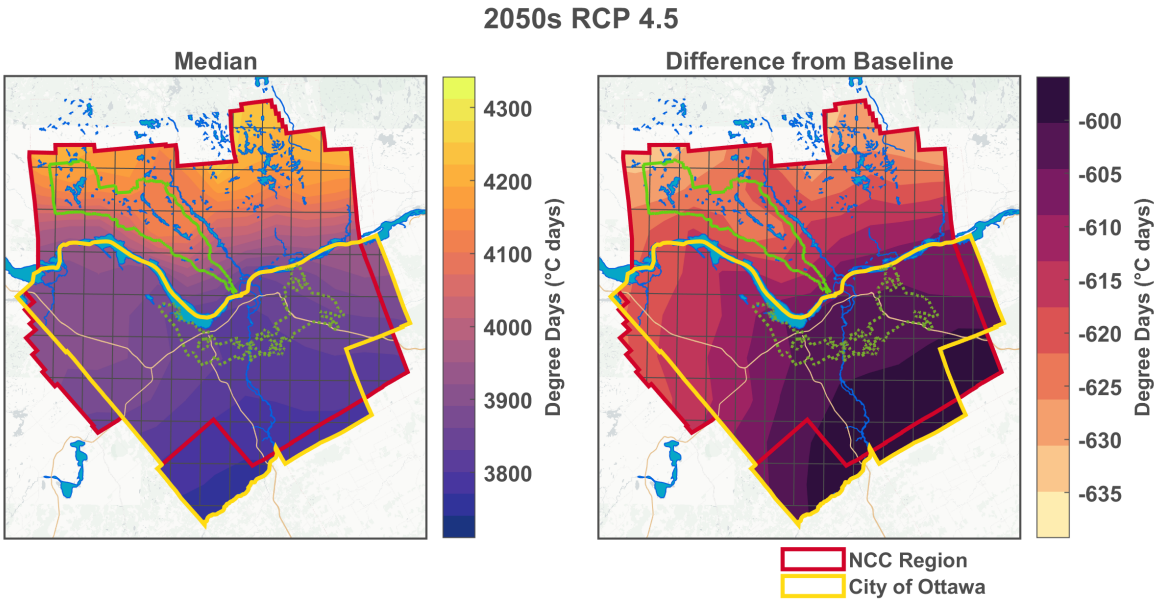


Figure F1.196: Heating Degree Days (18°C).

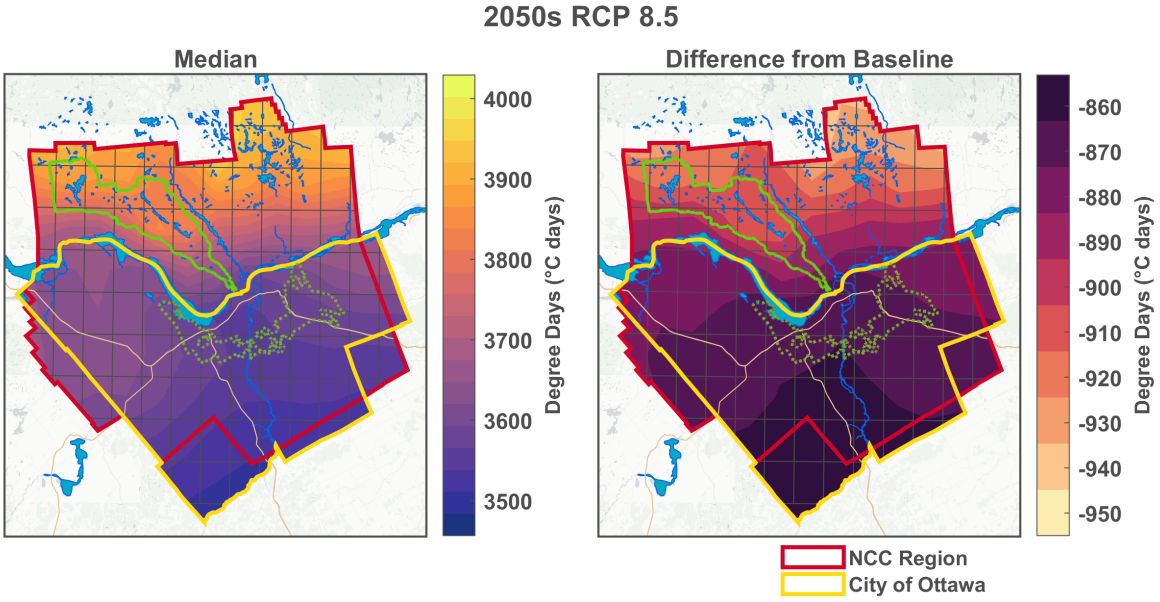


Figure F1.197: Heating Degree Days (18°C).

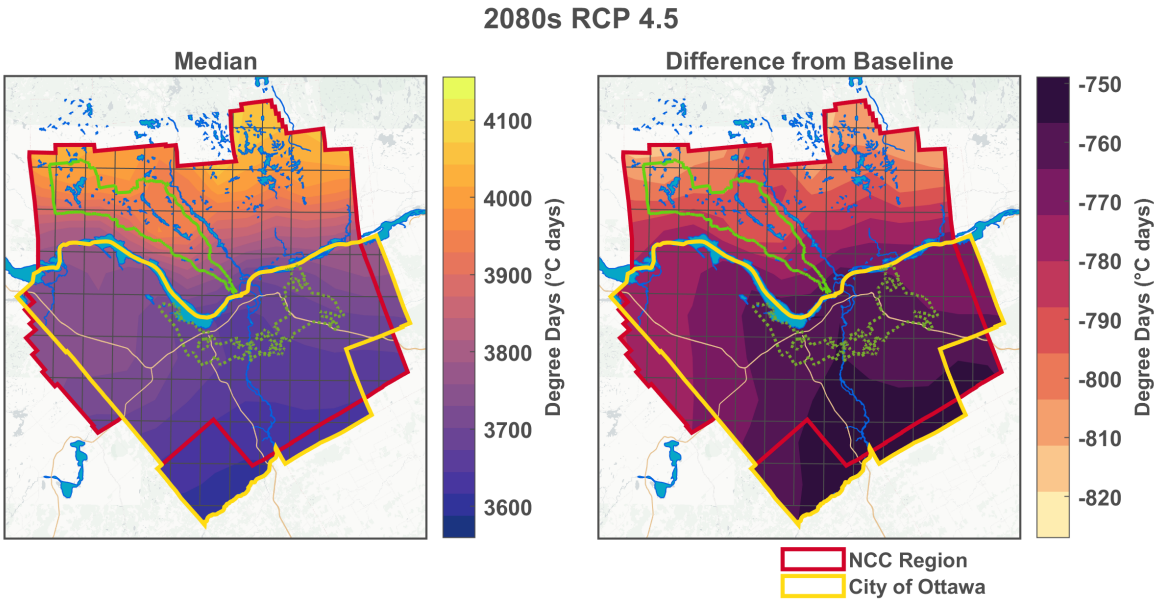


Figure F1.198: Heating Degree Days (18°C).

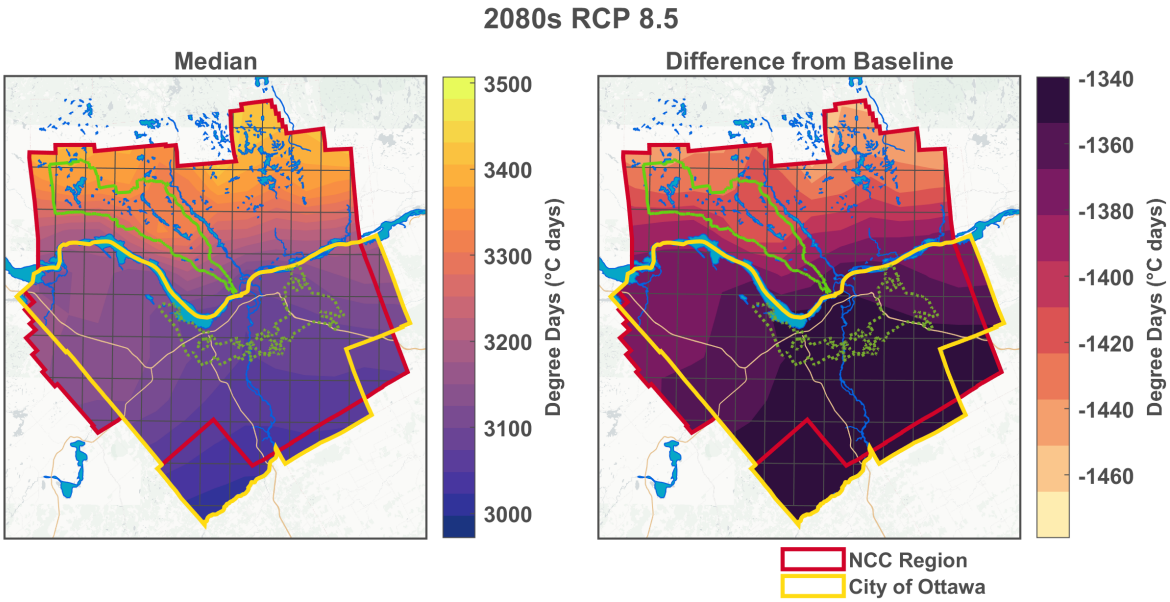


Figure F1.199: Heating Degree Days (18°C).

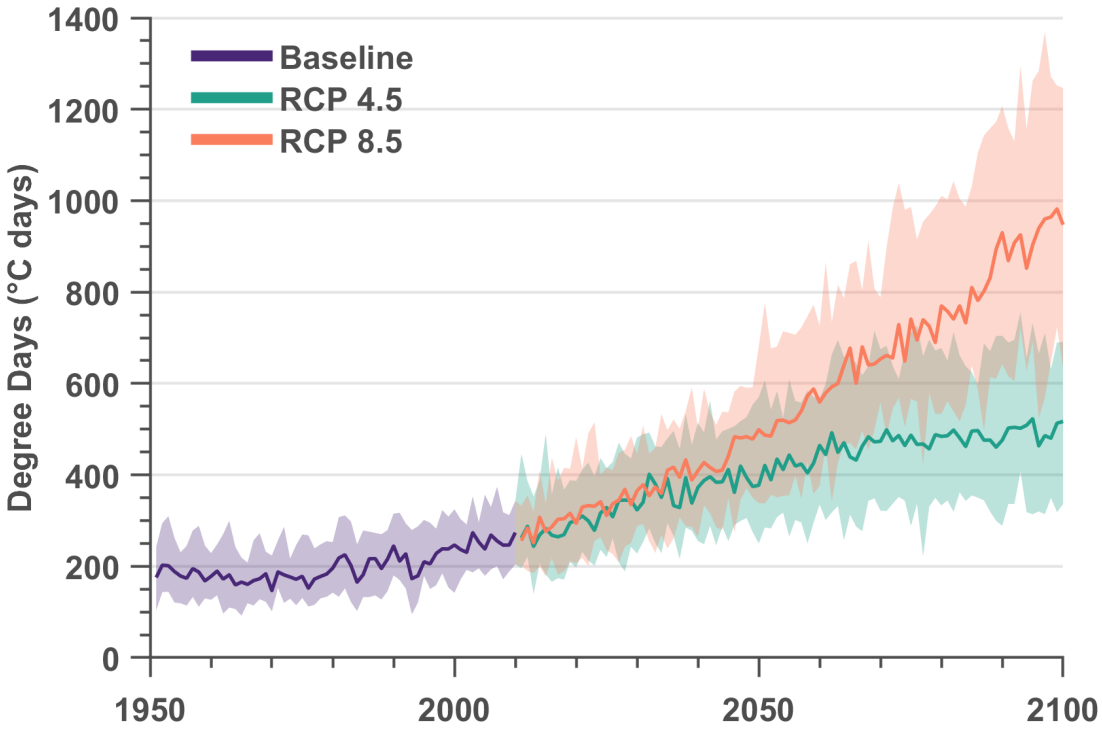


Figure F1.200: Cooling Degree Days (18°C).

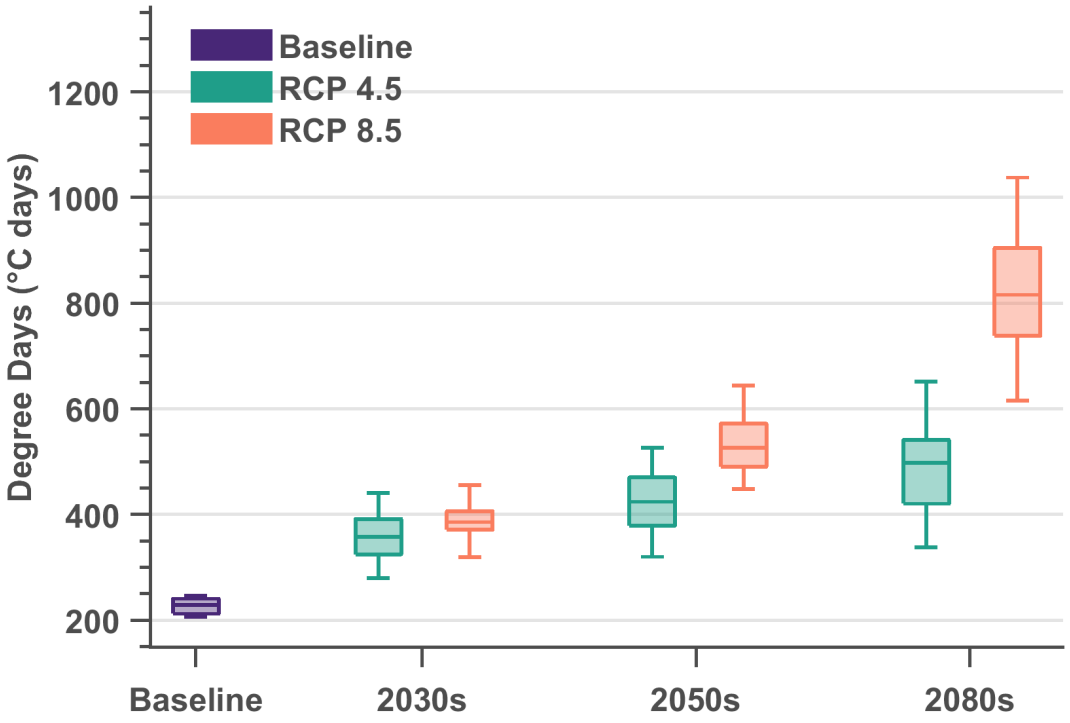


Figure F1.201: Cooling Degree Days (18°C).

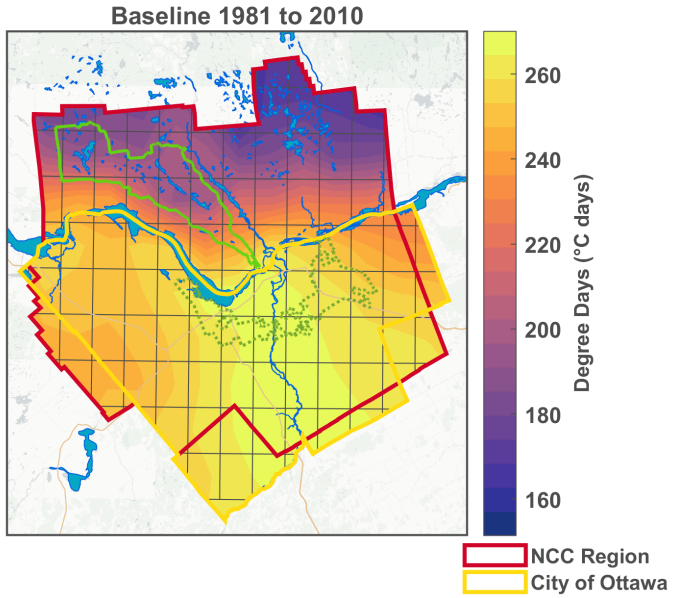


Figure F1.202: Cooling Degree Days (18ºC) - Baseline.

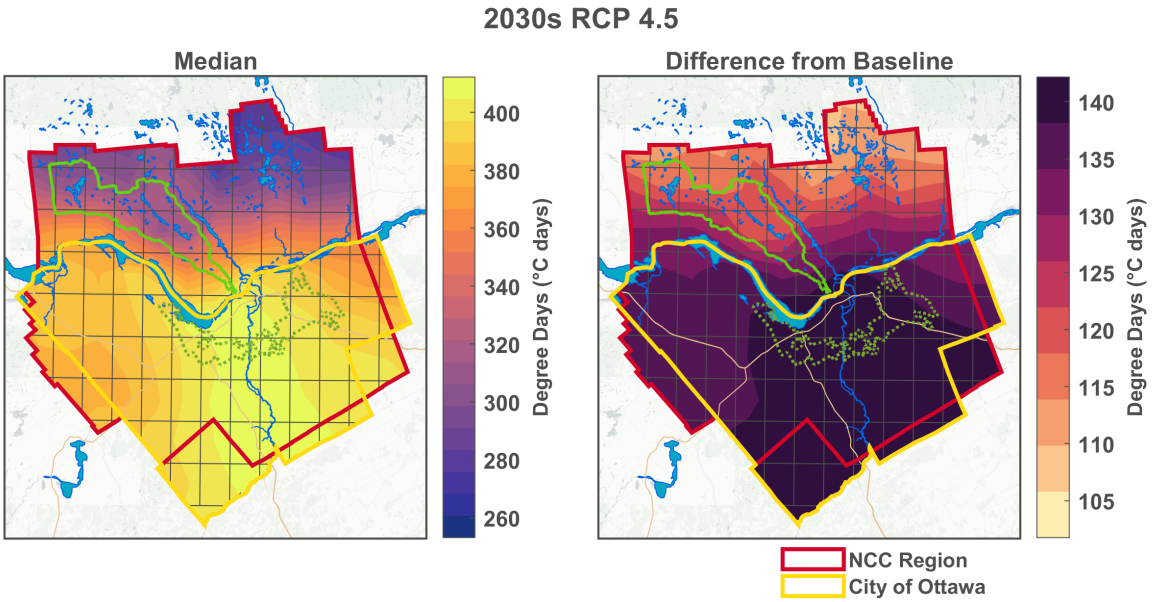


Figure F1.203: Cooling Degree Days (18°C) - 2030s RCP 4.5.

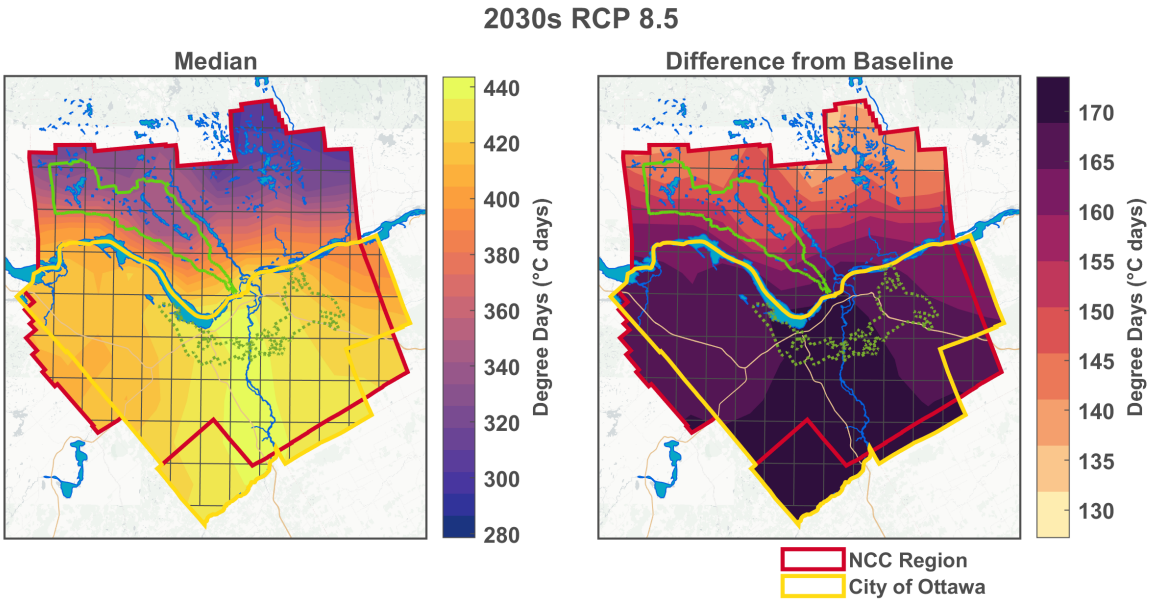


Figure F1.204: Cooling Degree Days (18°C) - 2030s RCP 8.5.

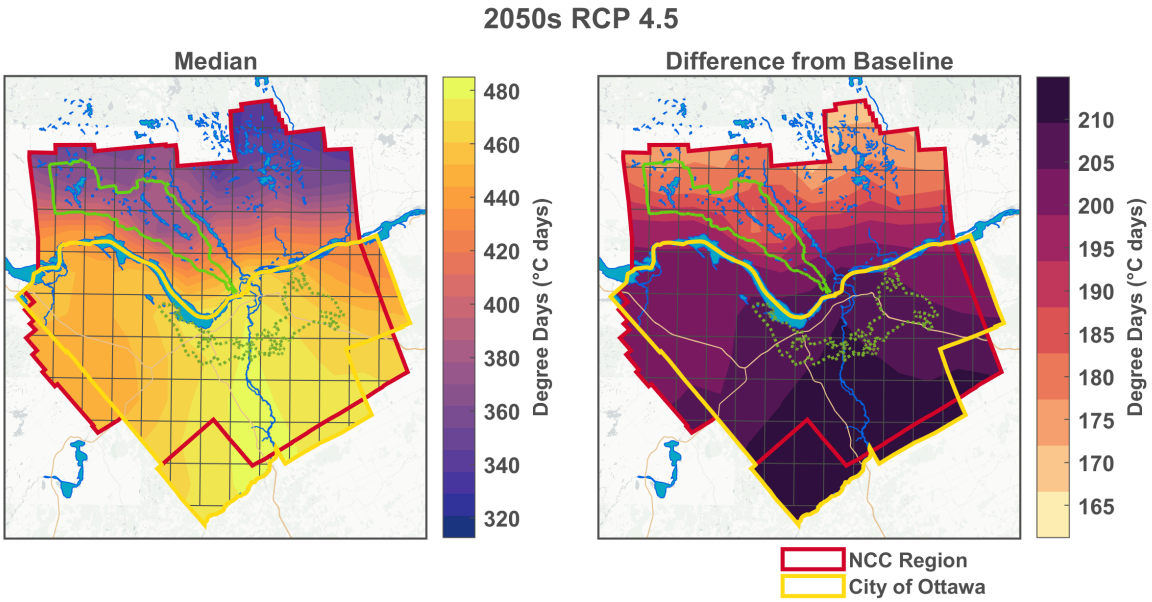


Figure F1.205: Cooling Degree Days (18°C) - 2050s RCP 4.5.

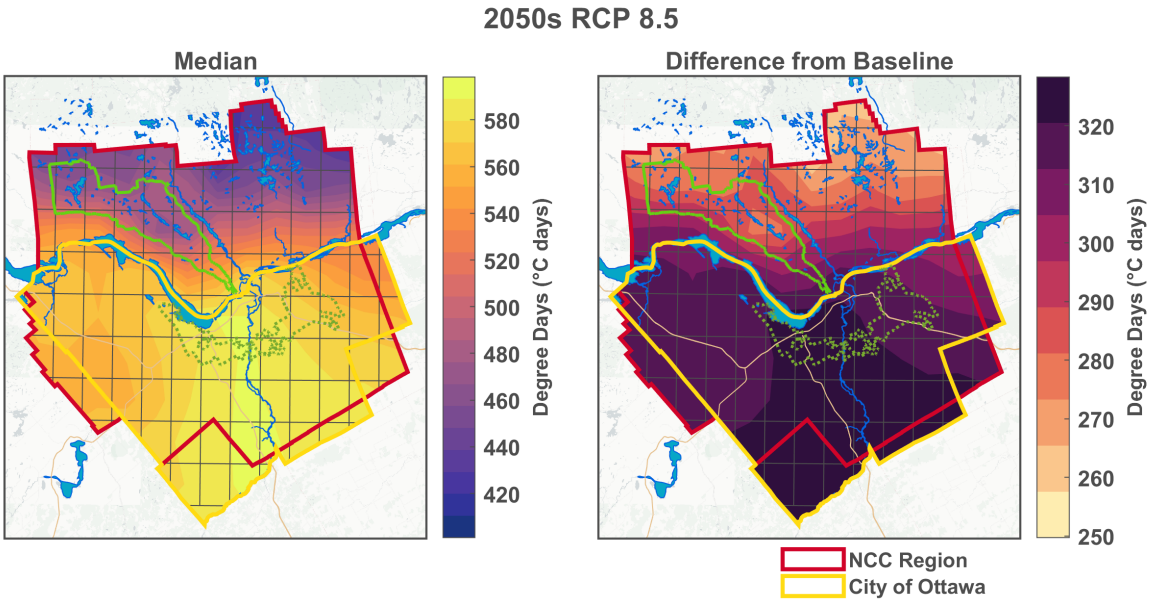


Figure F1.206: Cooling Degree Days (18°C) - 2050s RCP 8.5.

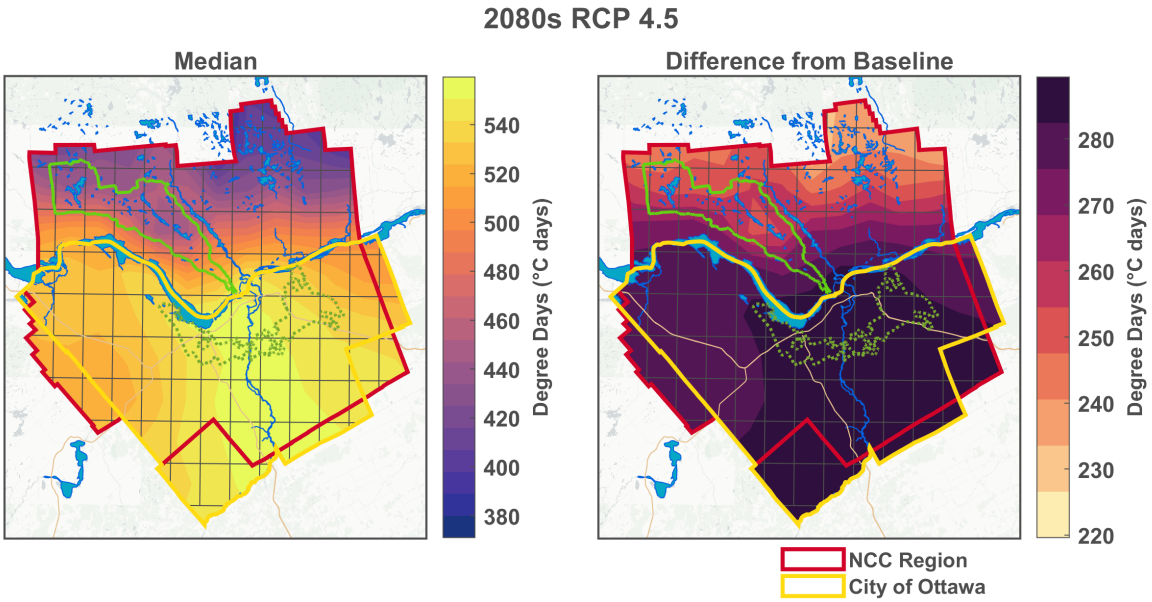


Figure F1.207: Cooling Degree Days (18°C) - 2080s RCP 4.5.

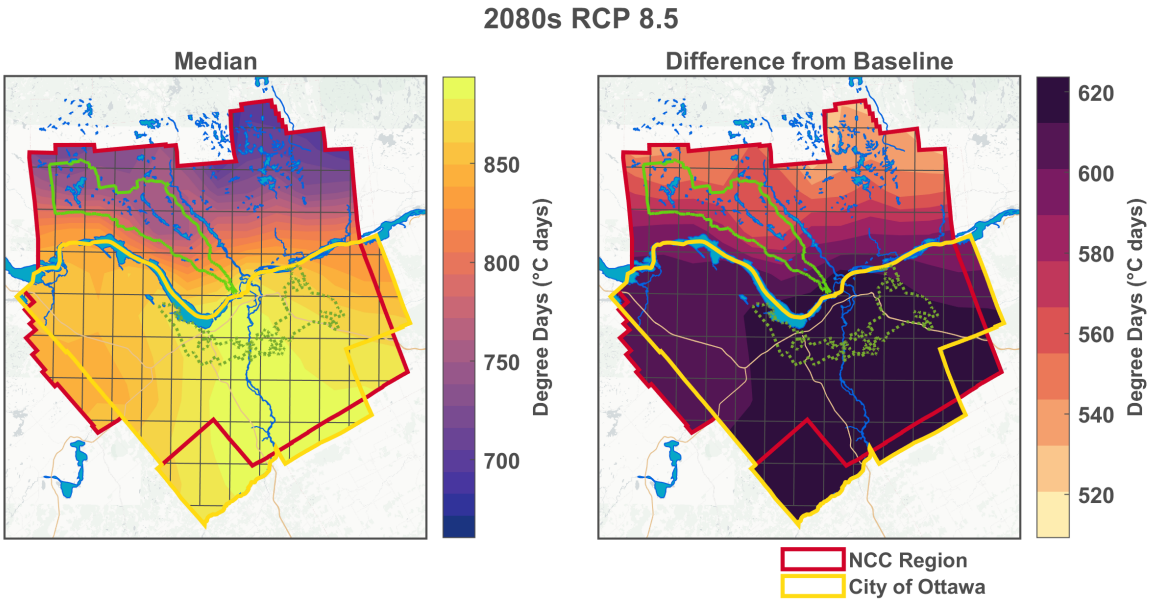


Figure F1.208: Cooling Degree Days (18°C) - 2080s RCP 8.5.

F2 Precipitation

The extreme precipitation projections shown in this appendix should not be used without consulting Appendix D - Technical Review of Methods for Extreme Precipitation Projections. The recommendation in Appendix D is that multiple methods for projecting extreme precipitation be considered, due to the limitations of each method. Consulting the plots in isolation is liable to providing false certainty in and underestimation of the projections.

Furthermore, the values provided in this report and appendix cannot be used directly in design or adaptation projects. A vulnerability/impact assessment and/or risk assessment (Phase 2) is needed to determine which values to use from the range of projections provided.

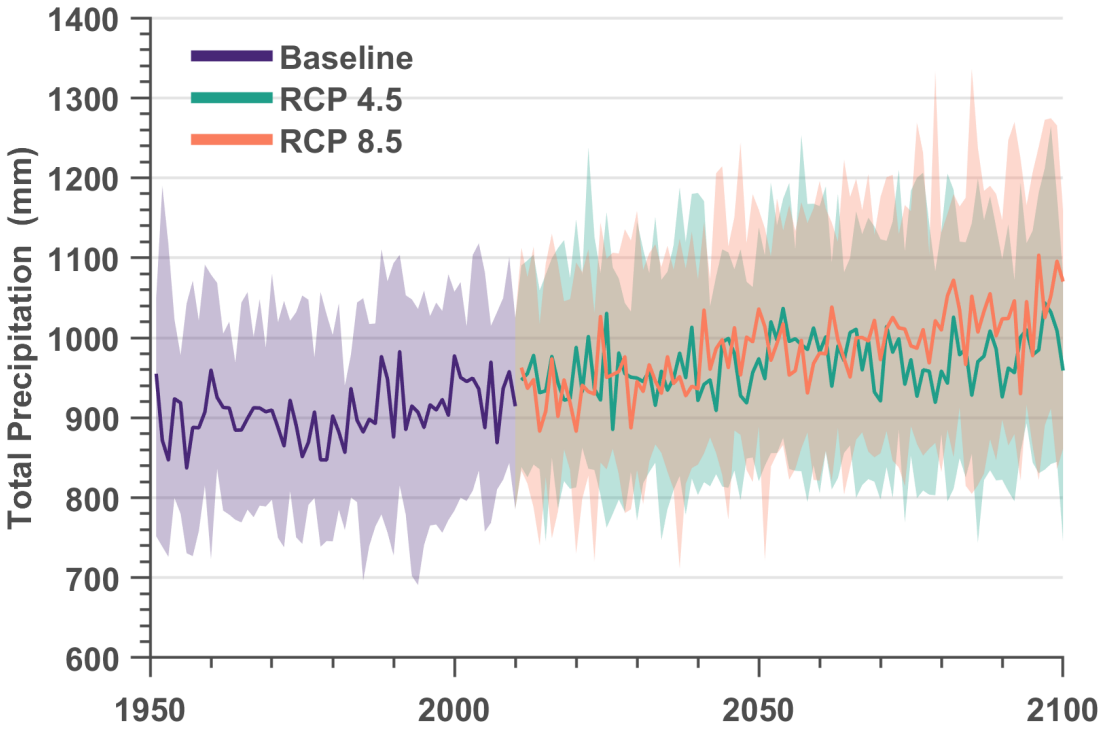


Figure F2.1: Annual Total Precipitation.

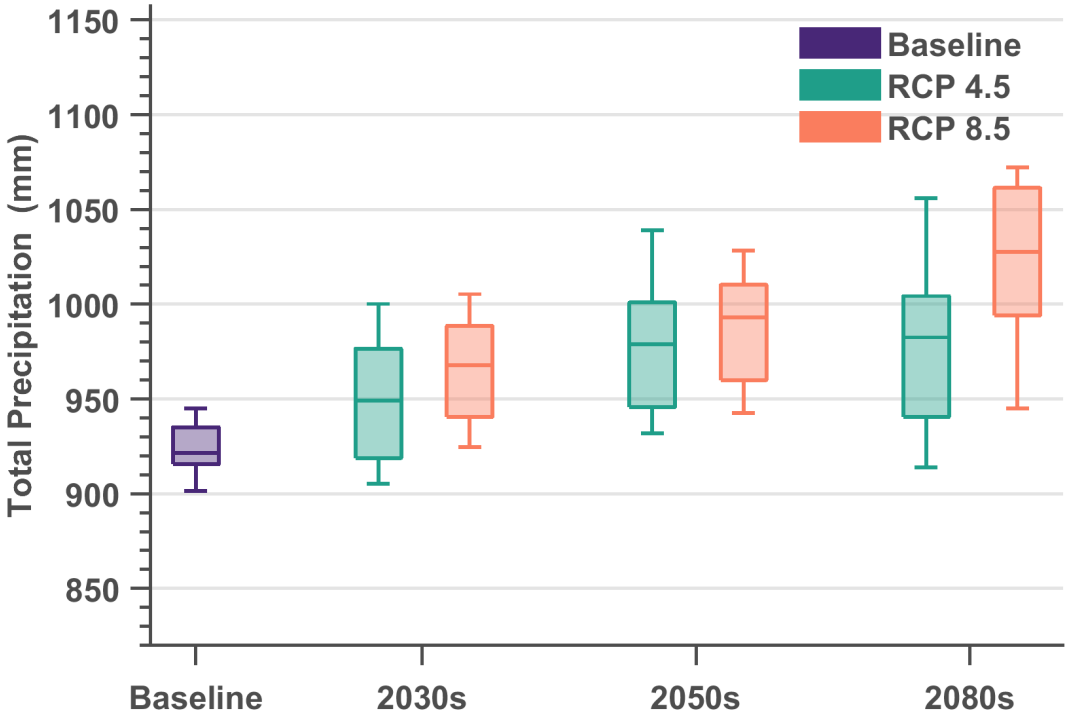


Figure F2.2: Annual Total Precipitation.

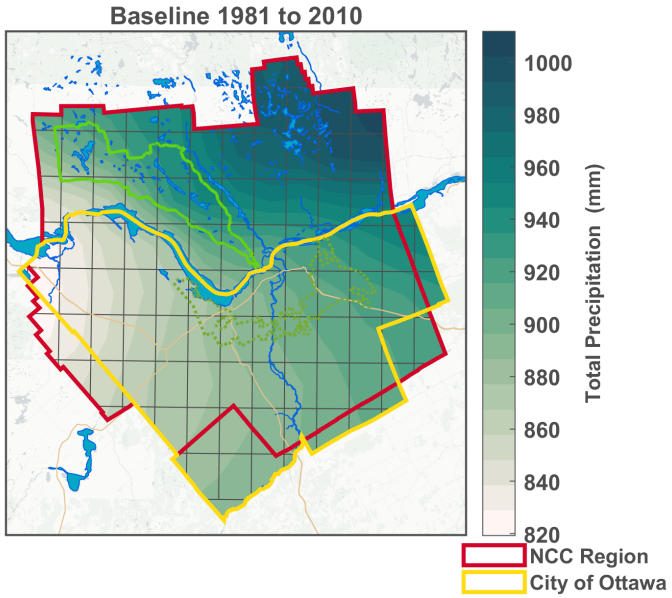


Figure F2.3: Annual Total Precipitation - Baseline.

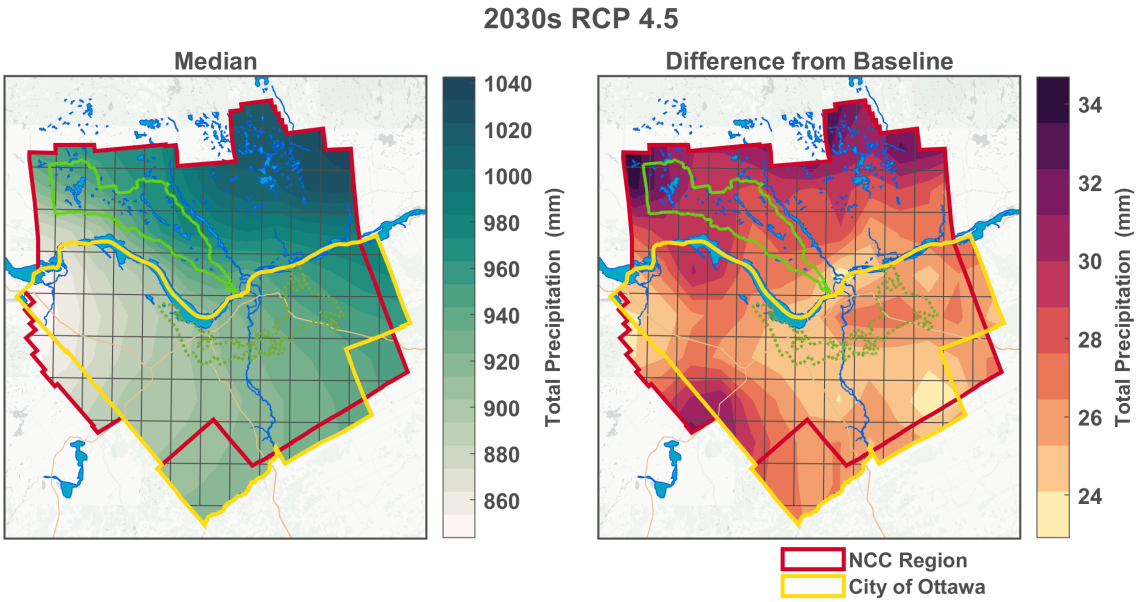


Figure F2.4: Annual Total Precipitation - 2030s RCP 4.5.

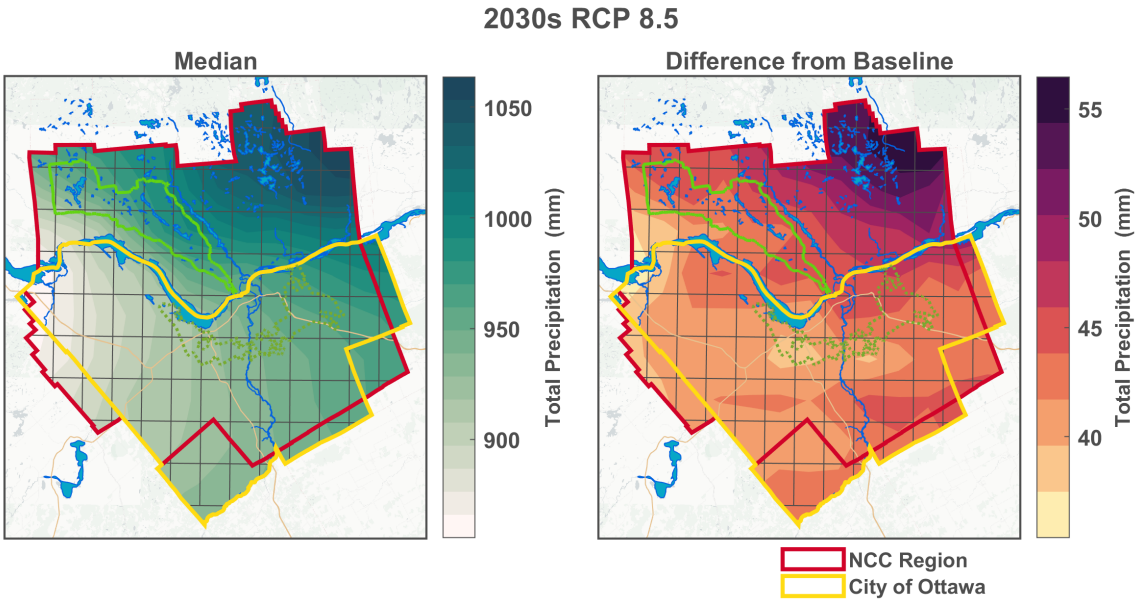


Figure F2.5: Annual Total Precipitation - 2030s RCP 8.5.

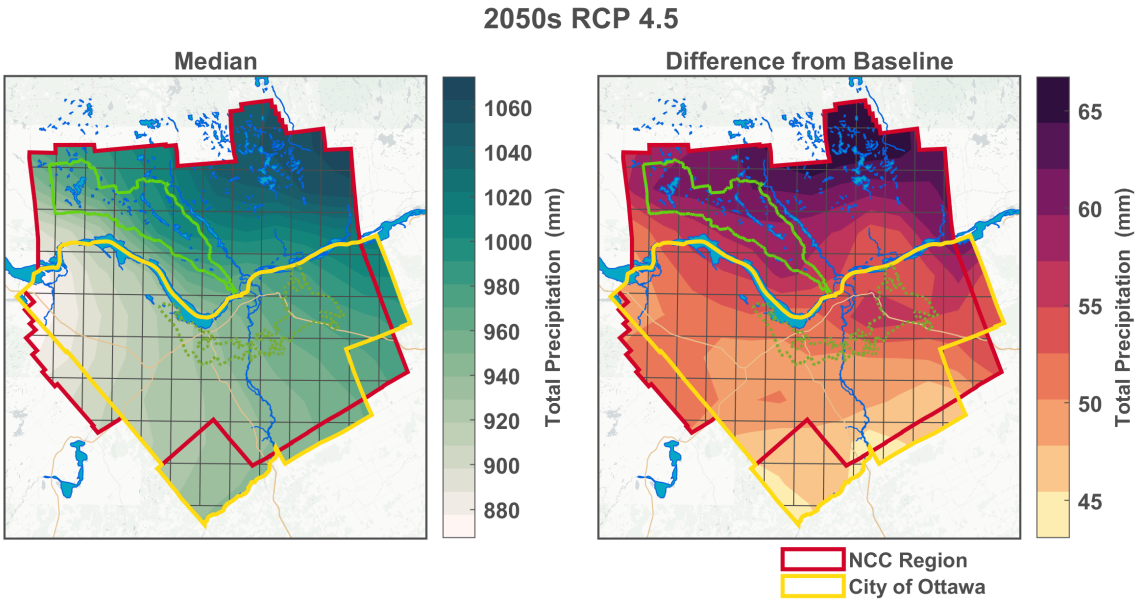


Figure F2.6: Annual Total Precipitation - 2050s RCP 4.5.

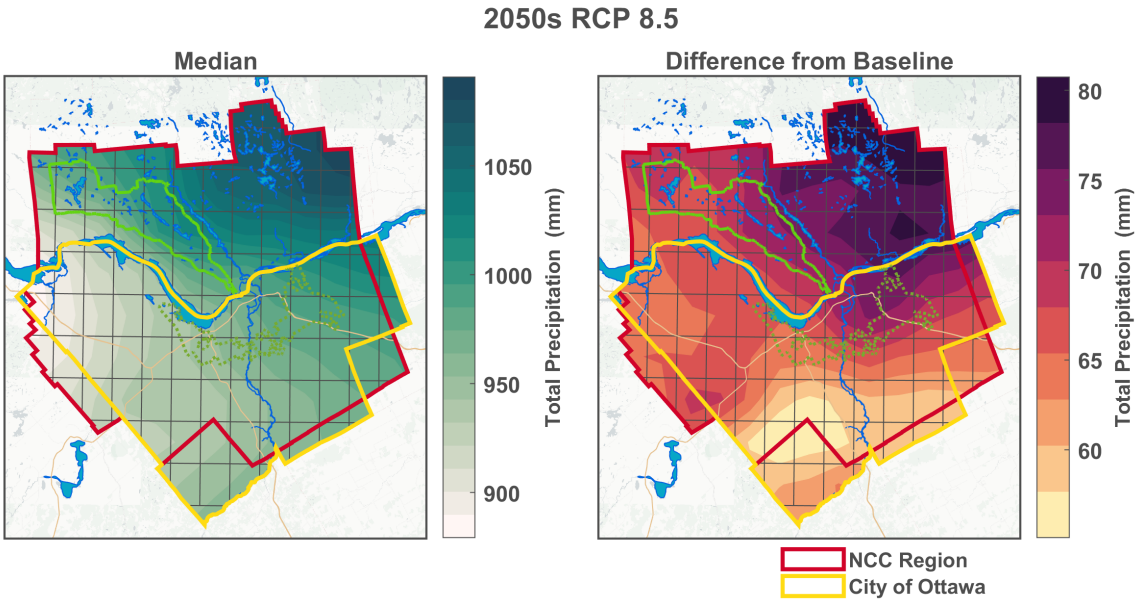


Figure F2.7: Annual Total Precipitation - 2050s RCP 8.5.

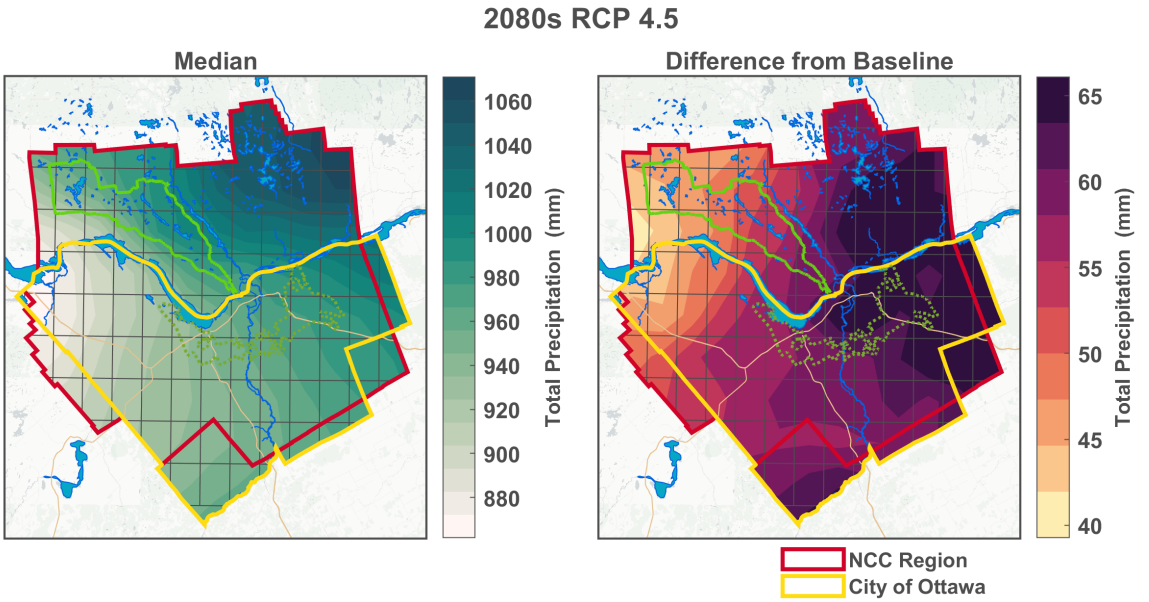


Figure F2.8: Annual Total Precipitation - 2080s RCP 4.5.

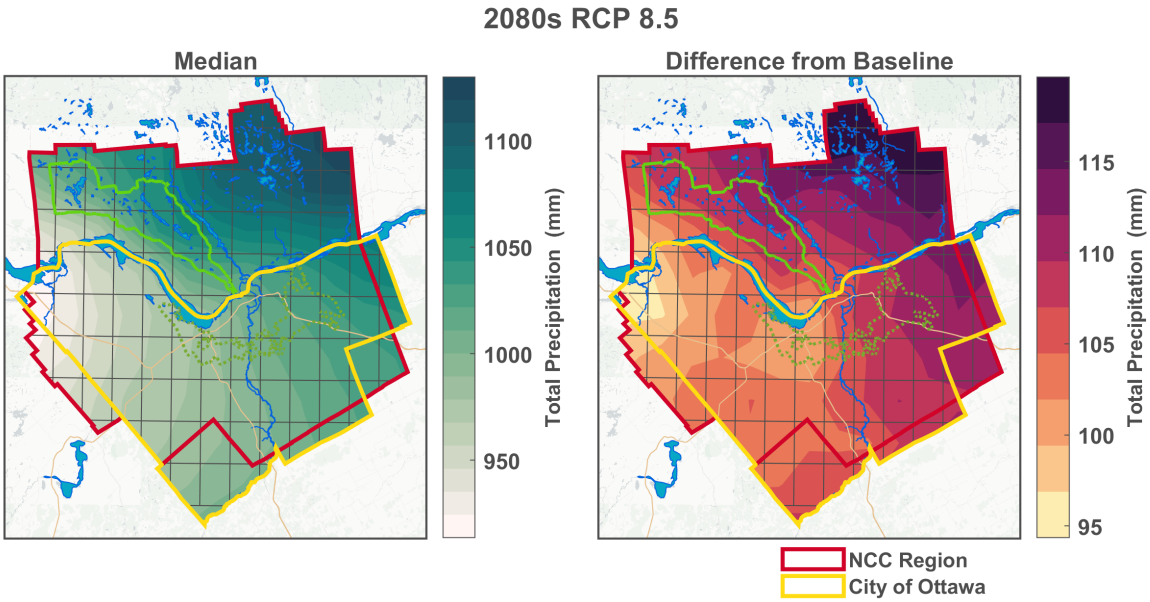


Figure F2.9: Annual Total Precipitation - 2080s RCP 8.5.

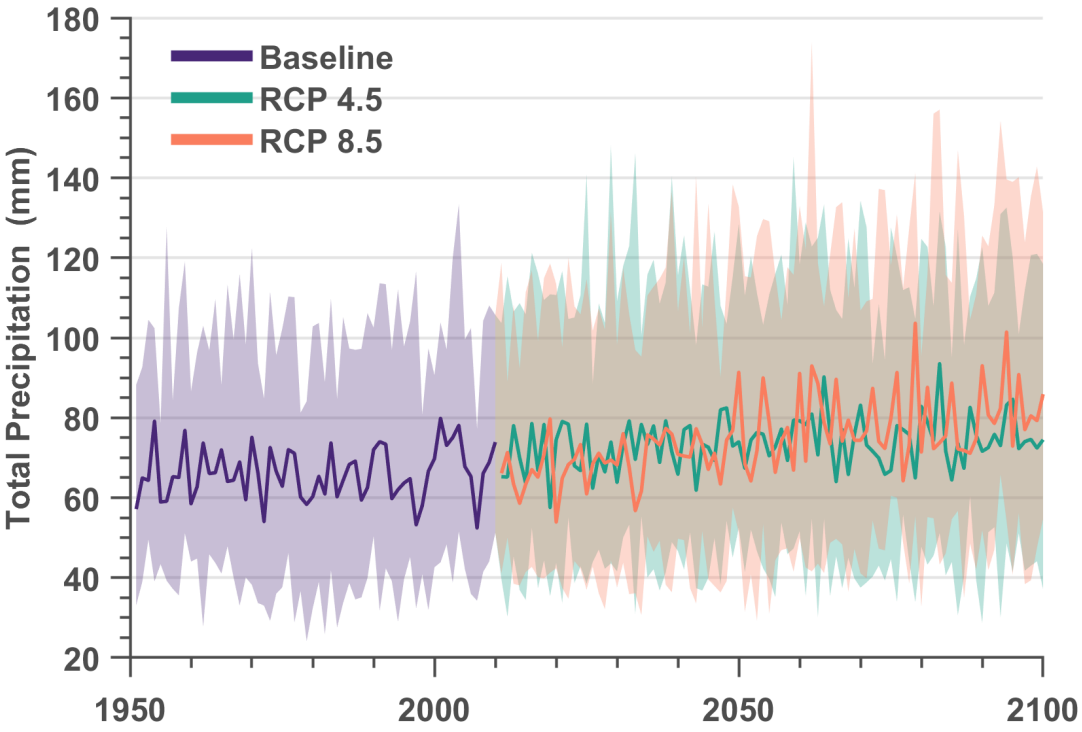


Figure F2.10: Monthly Total Precipitation - January.

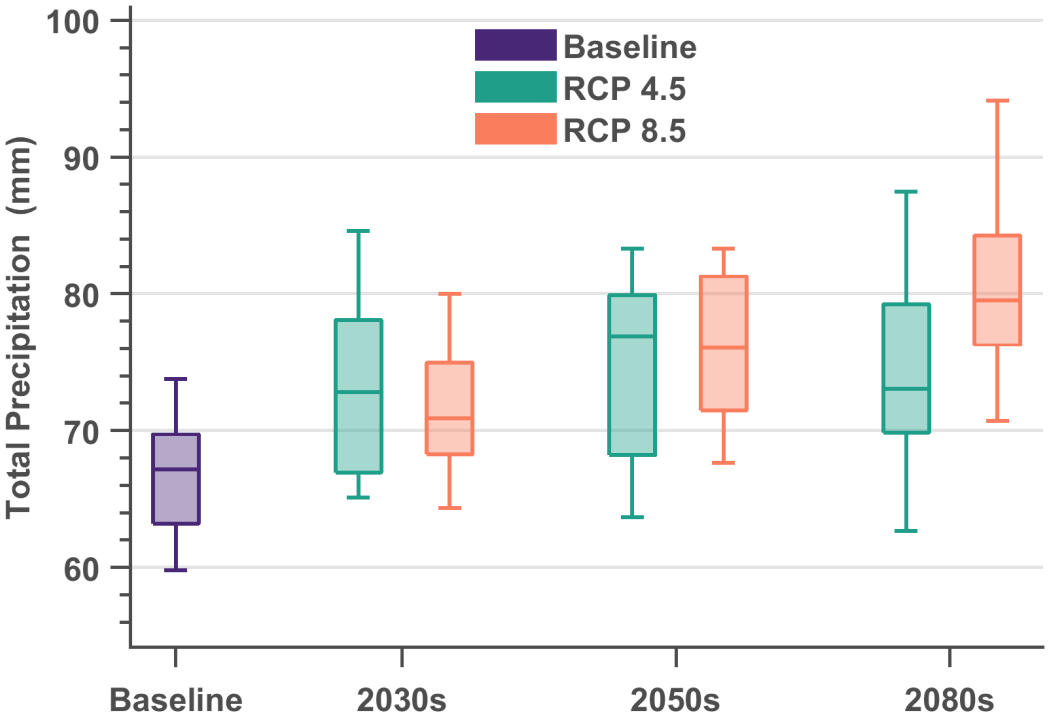


Figure F2.11: Monthly Total Precipitation - January.

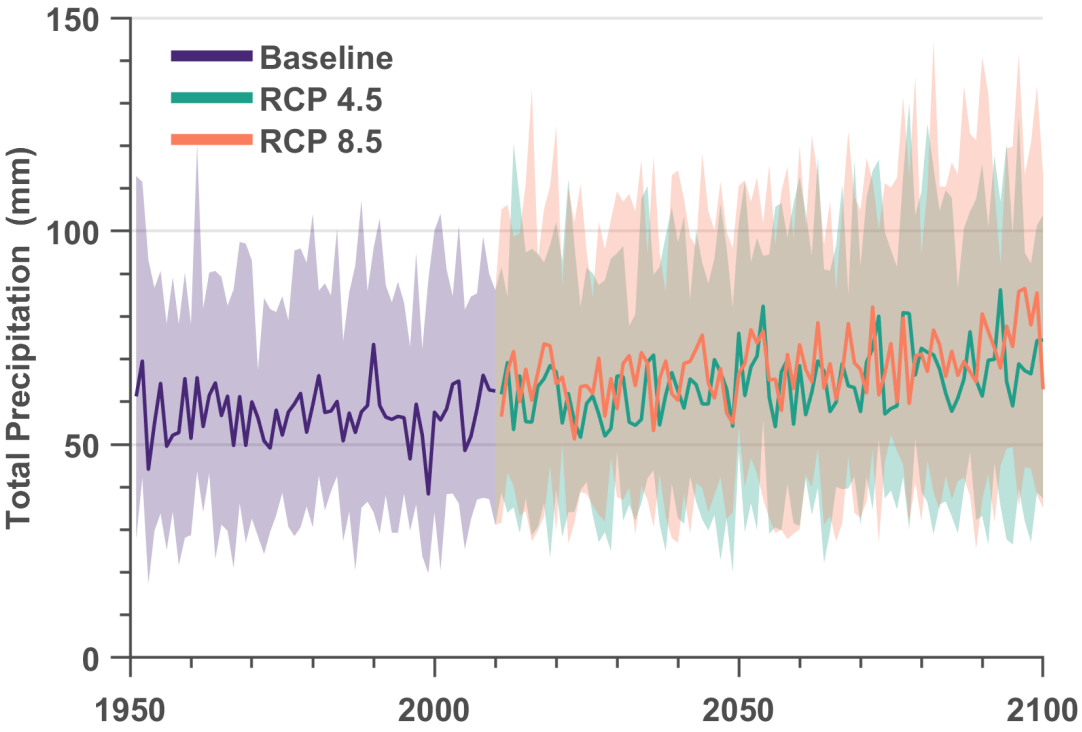


Figure F2.12: Monthly Total Precipitation - February.

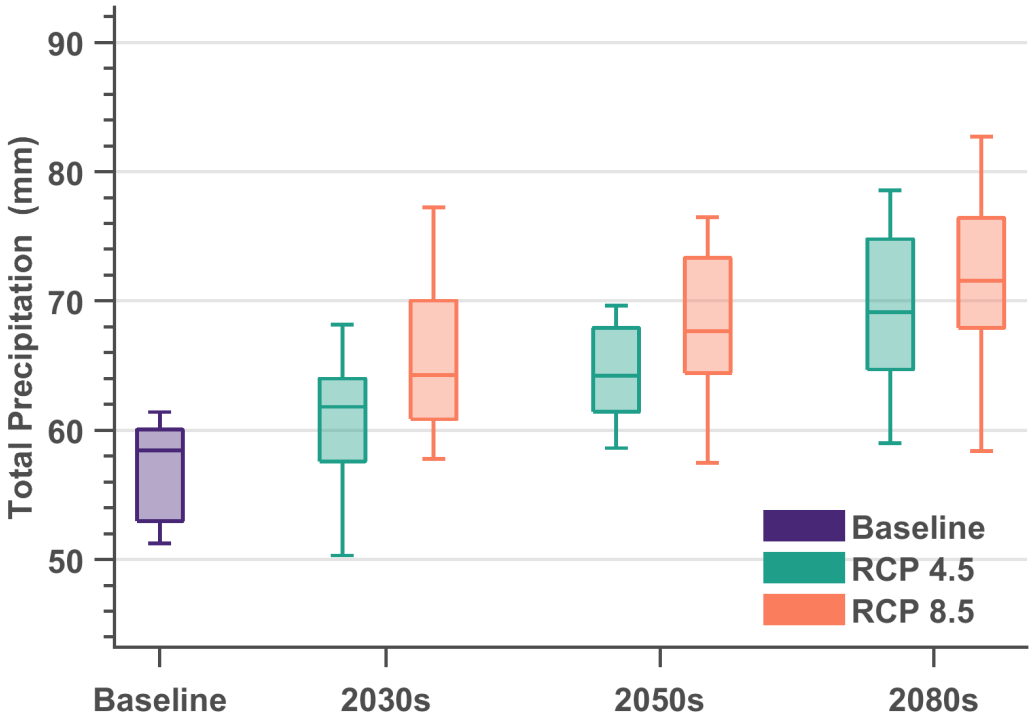


Figure F2.13: Monthly Total Precipitation - February.

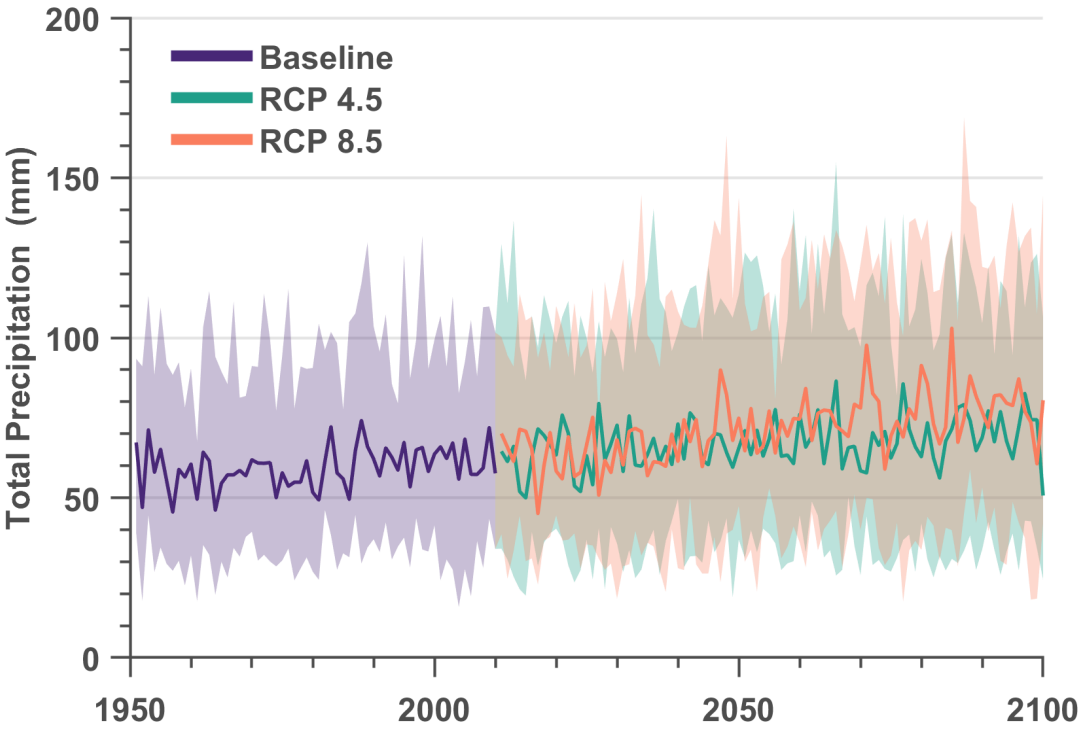


Figure F2.14: Monthly Total Precipitation - March.

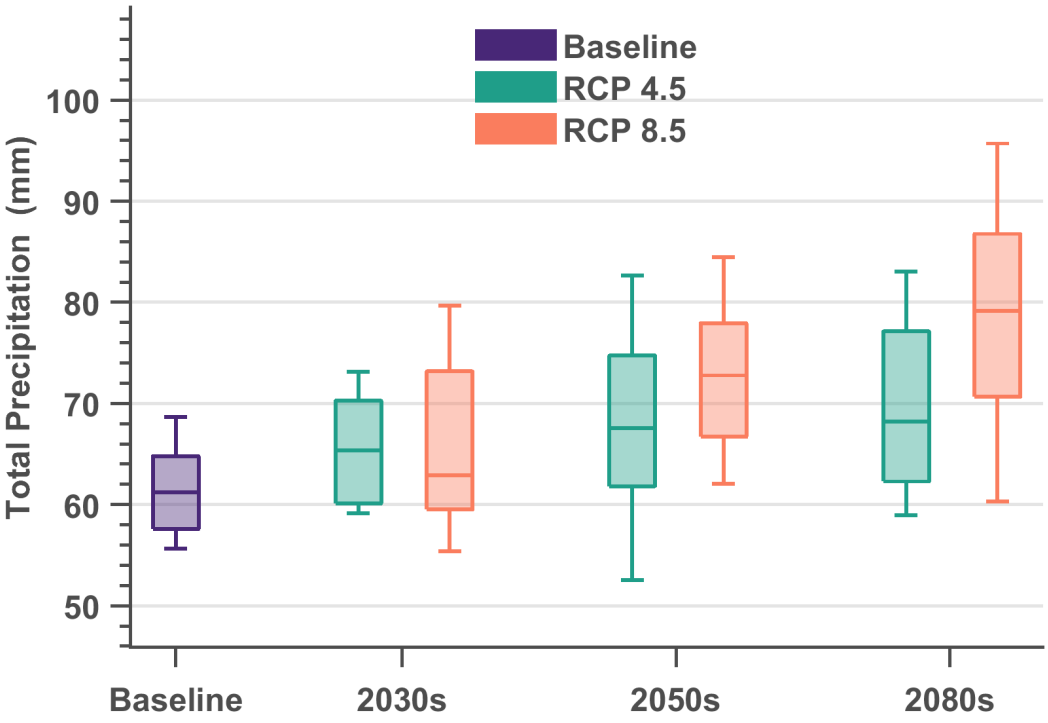


Figure F2.15: Monthly Total Precipitation - March.

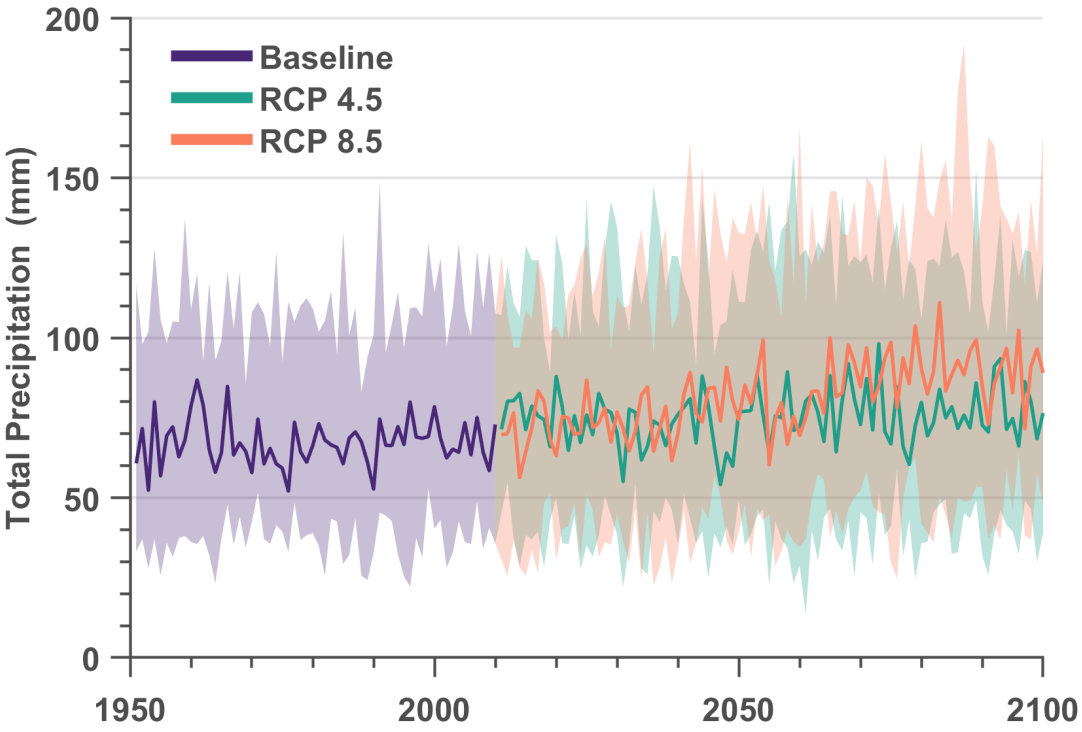


Figure F2.16: Monthly Total Precipitation - April.

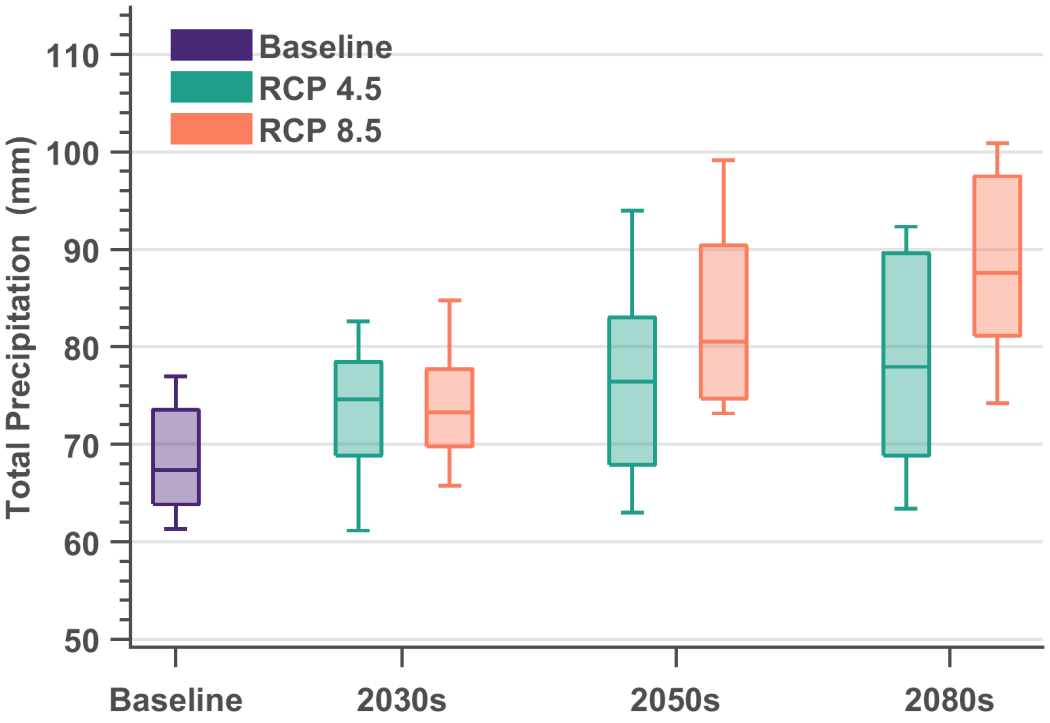


Figure F2.17: Monthly Total Precipitation - April.

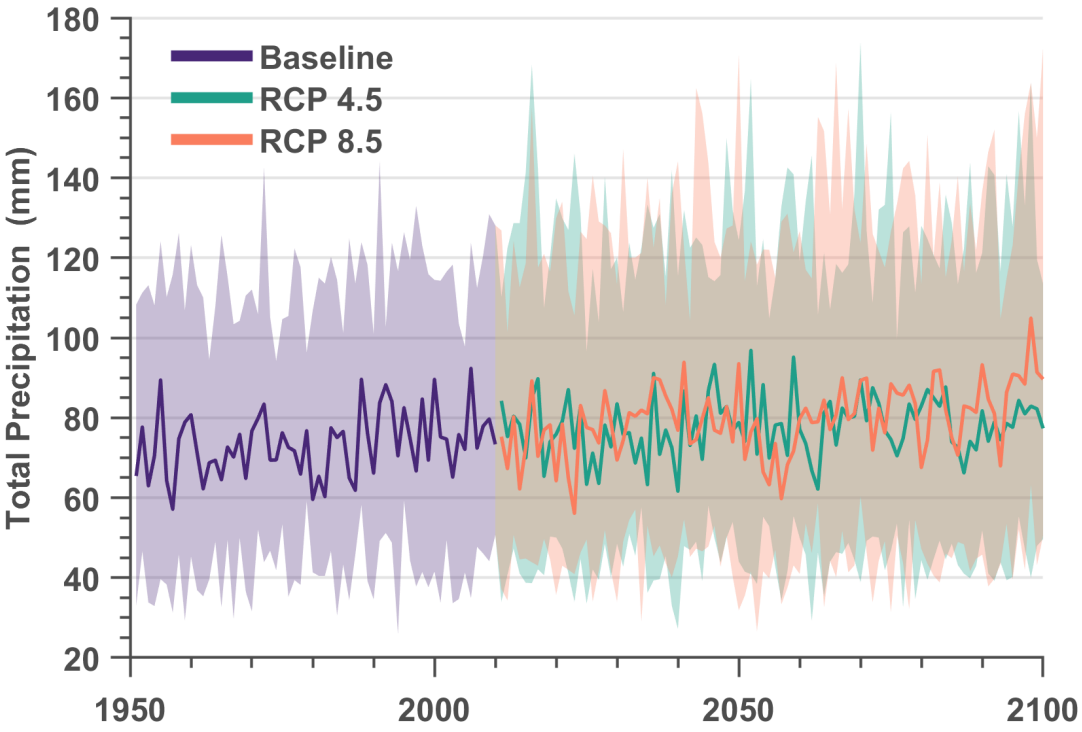


Figure F2.18: Monthly Total Precipitation - May.

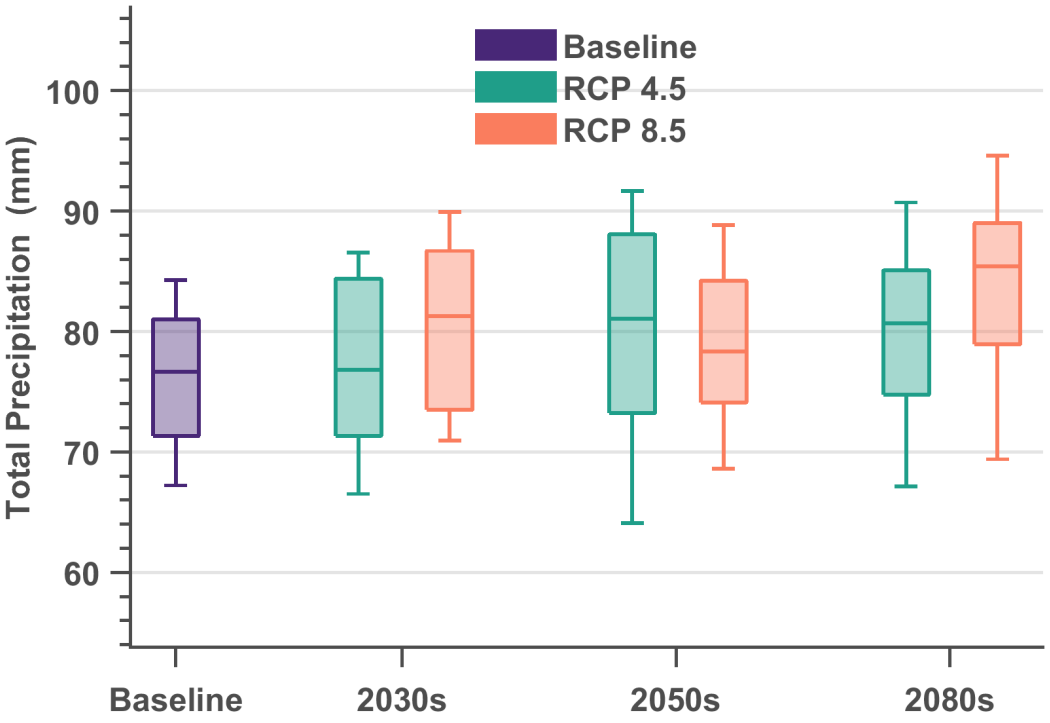


Figure F2.19: Monthly Total Precipitation - May.

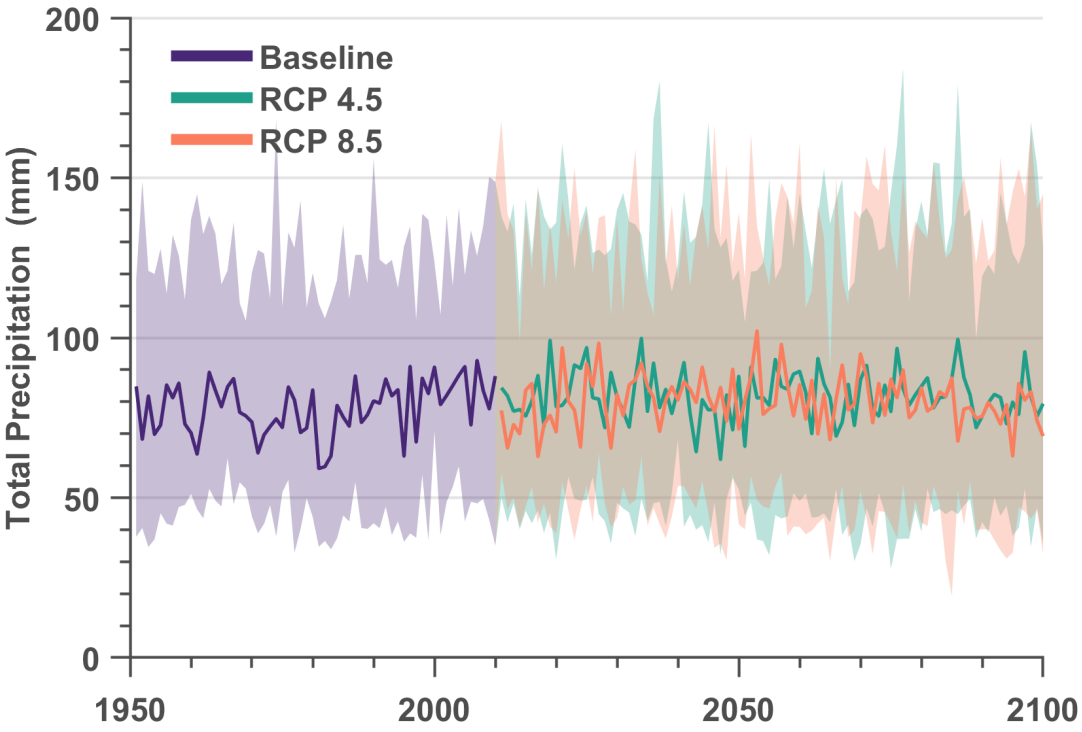


Figure F2.20: Monthly Total Precipitation - June.

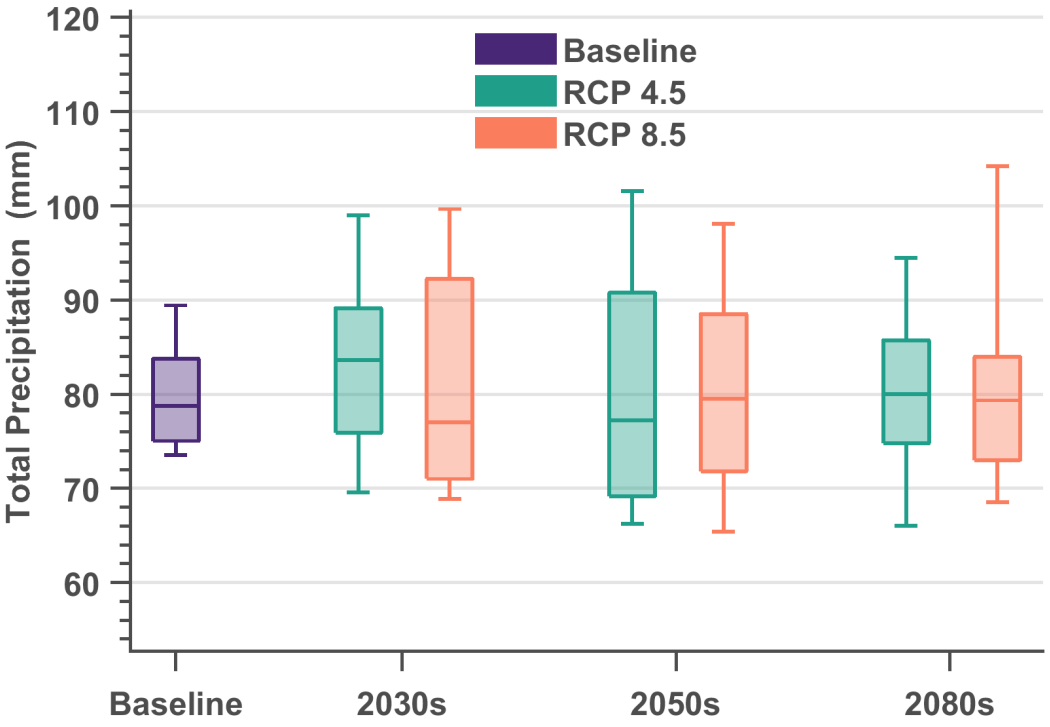


Figure F2.21: Monthly Total Precipitation - June.

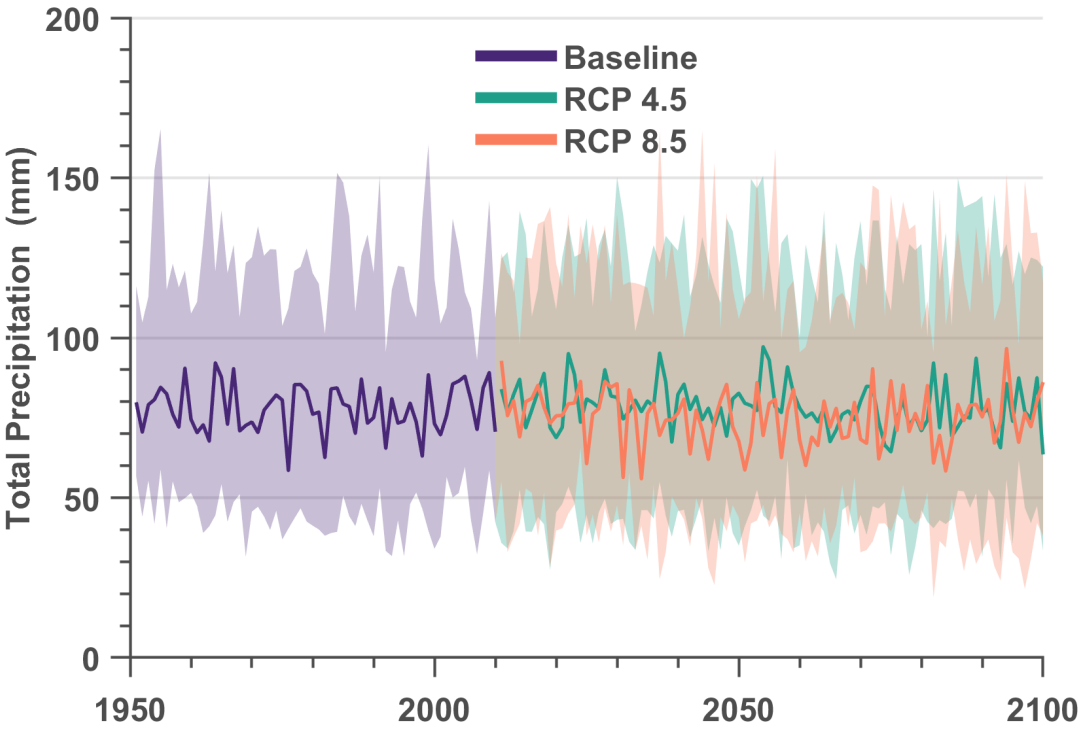


Figure F2.22: Monthly Total Precipitation - July.

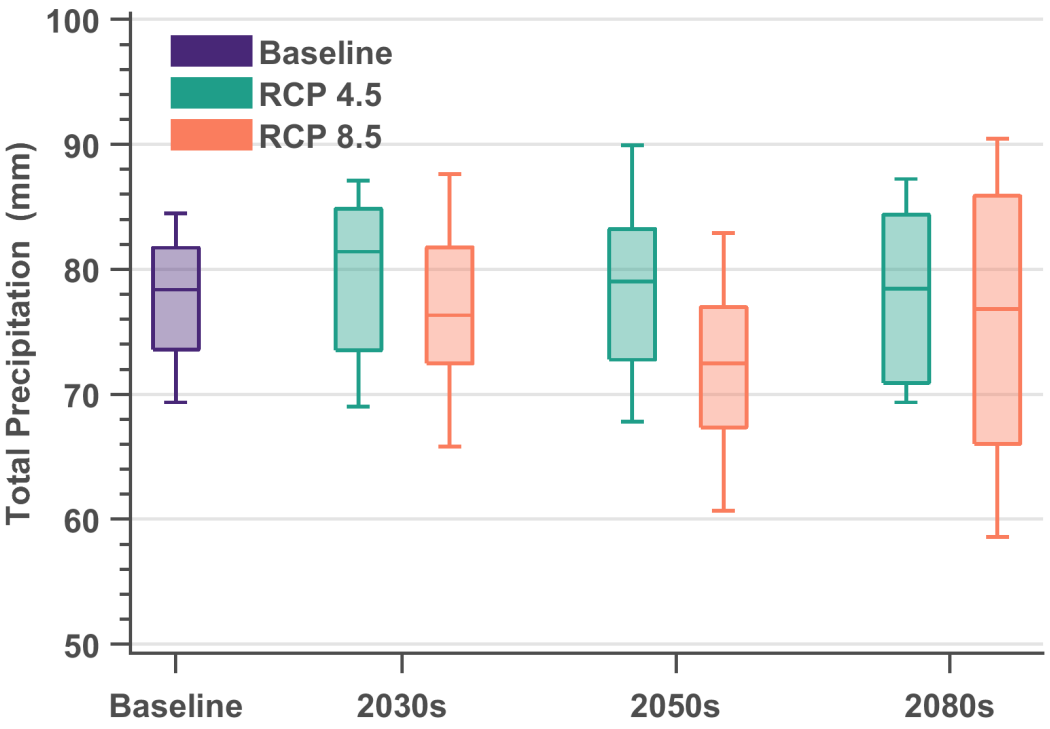


Figure F2.23: Monthly Total Precipitation - July.

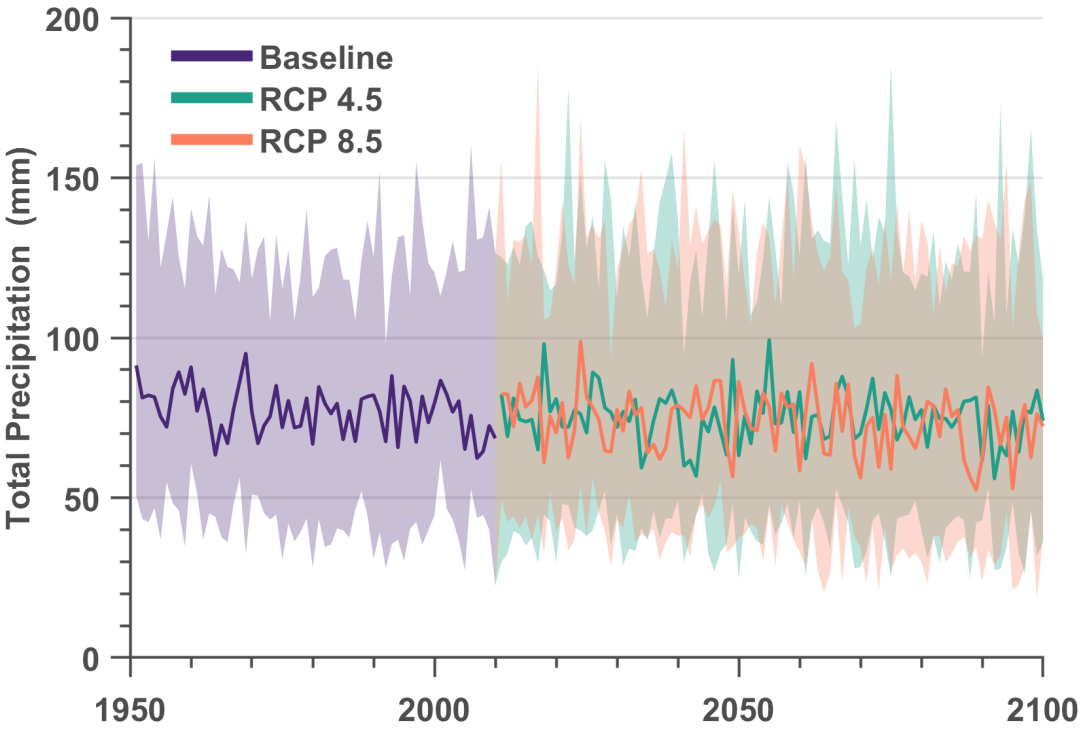


Figure F2.24: Monthly Total Precipitation - August.

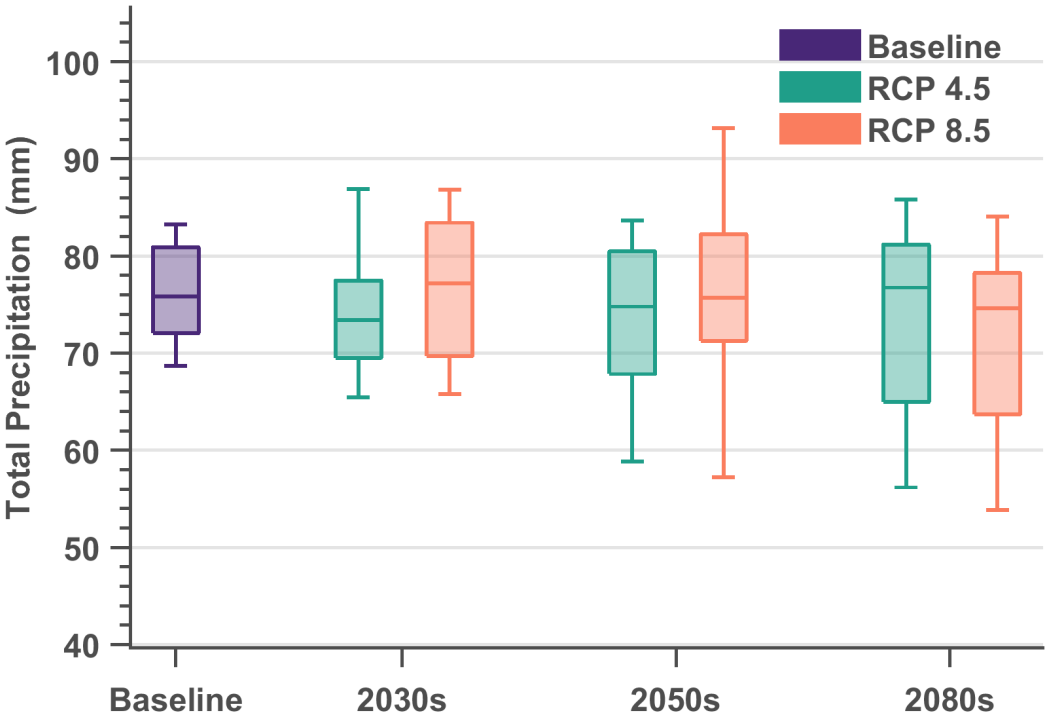


Figure F2.25: Monthly Total Precipitation - August.

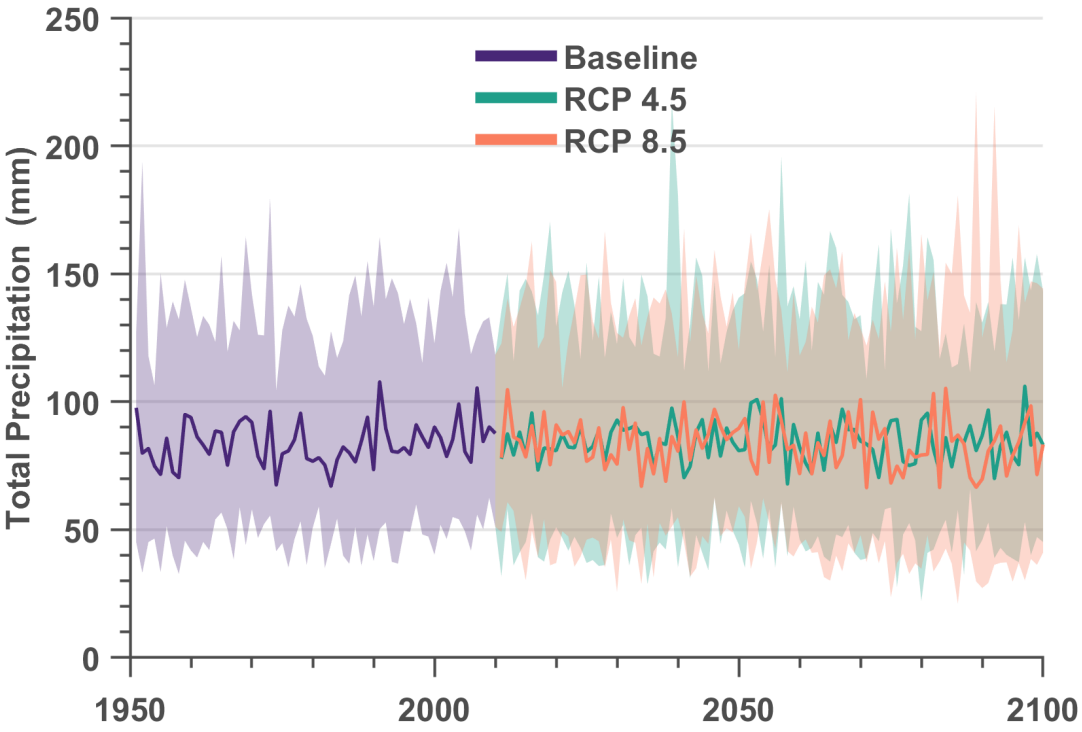


Figure F2.26: Monthly Total Precipitation - September.

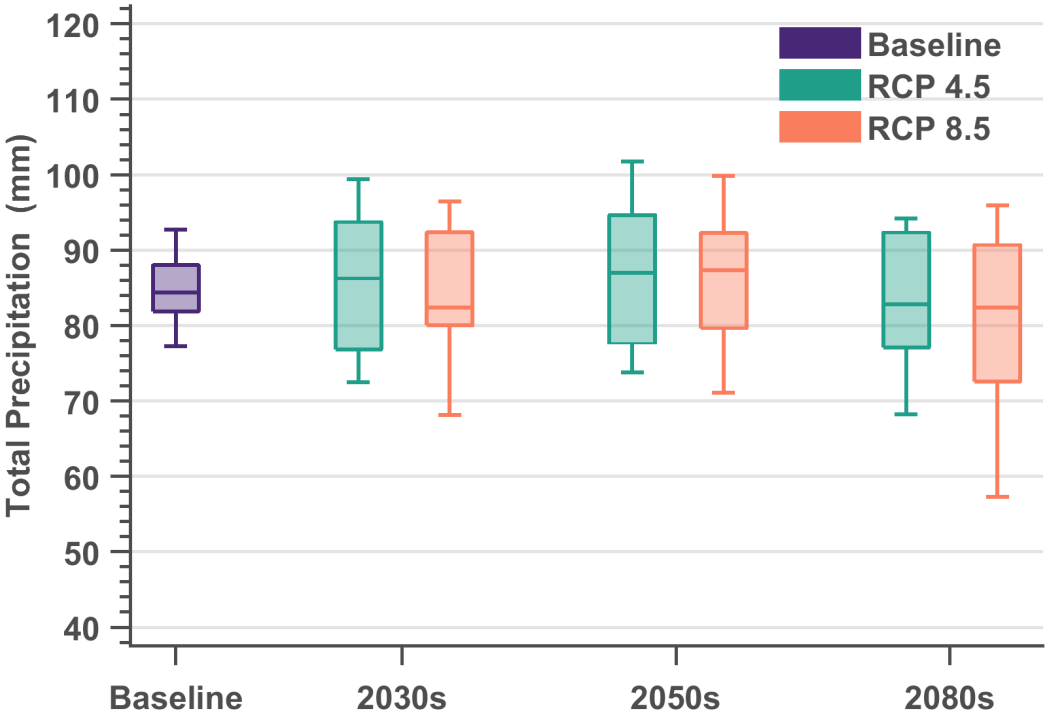


Figure F2.27: Monthly Total Precipitation - September.

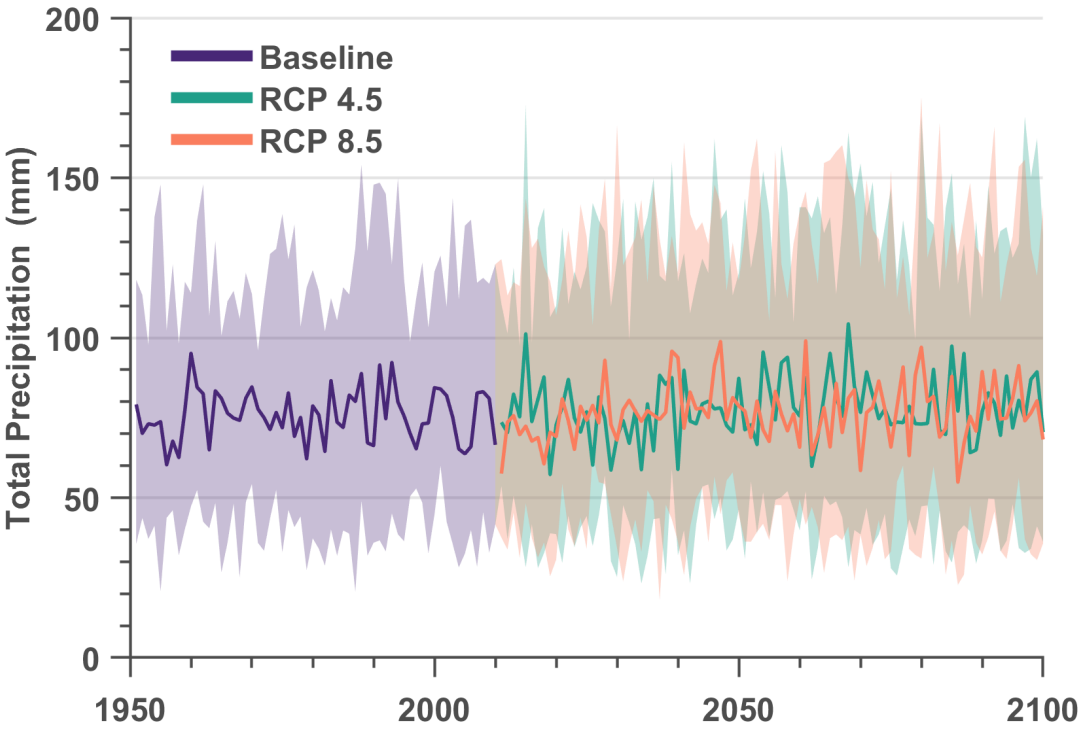


Figure F2.28: Monthly Total Precipitation - October.

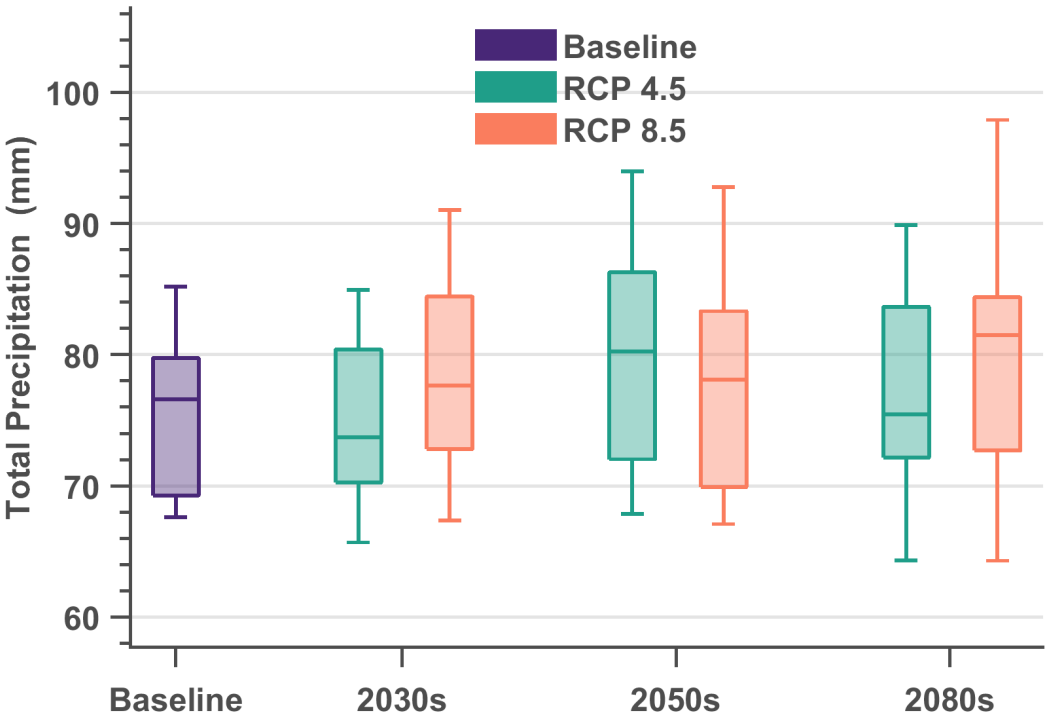


Figure F2.29: Monthly Total Precipitation - October.

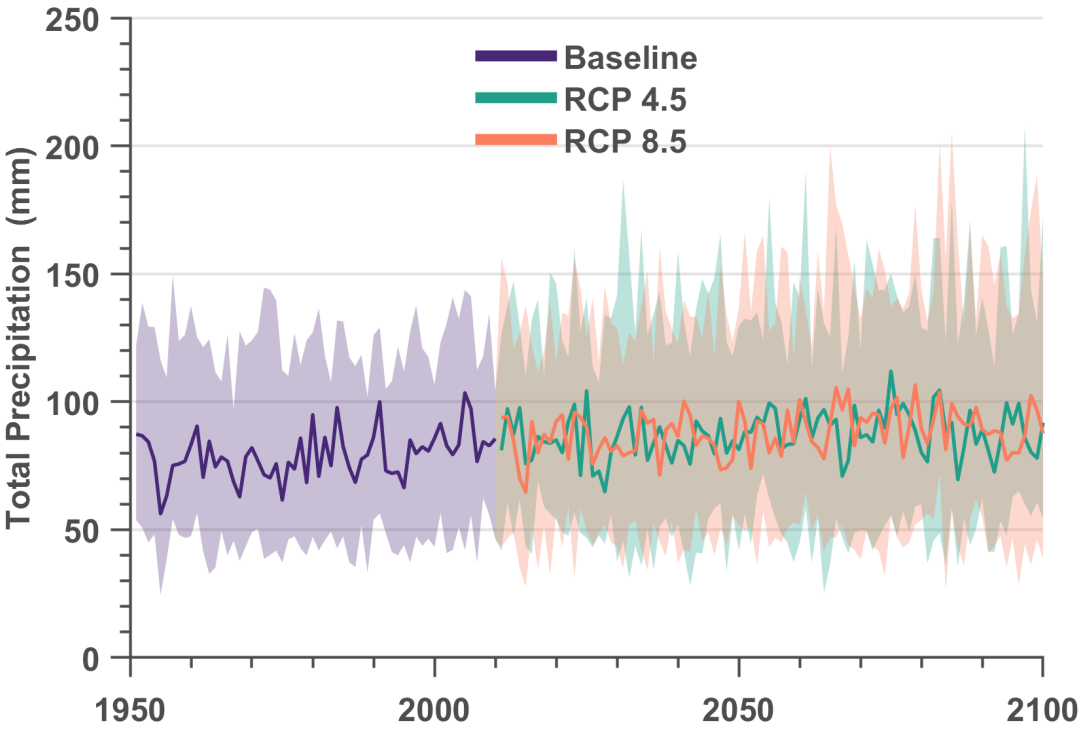


Figure F2.30: Monthly Total Precipitation - November.

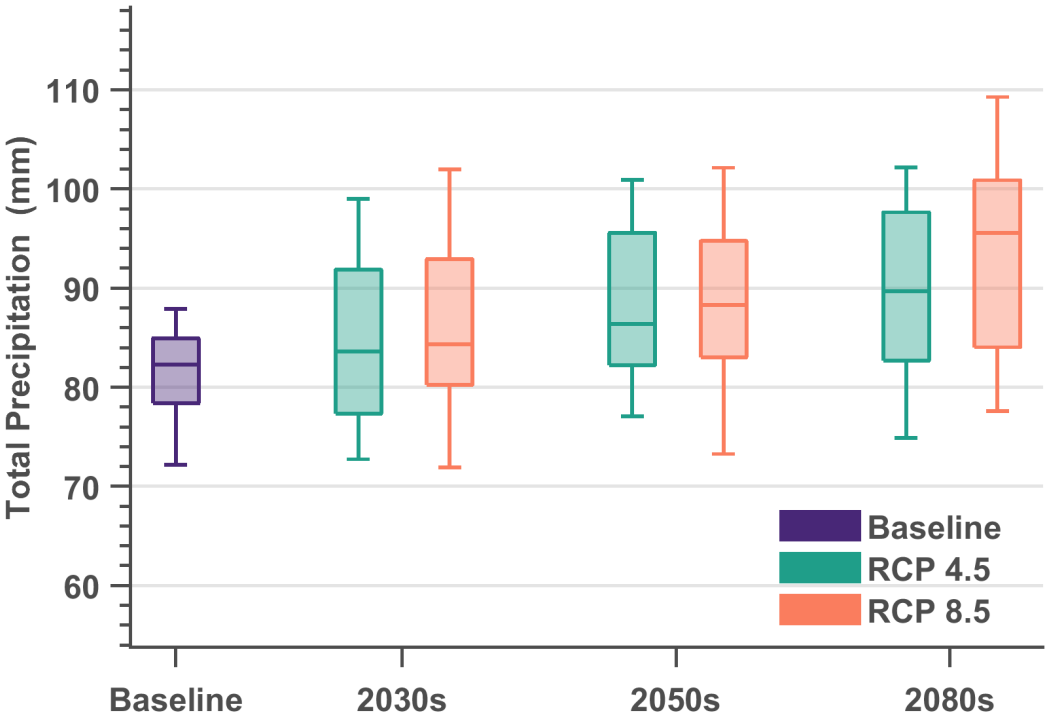


Figure F2.31: Monthly Total Precipitation - November.

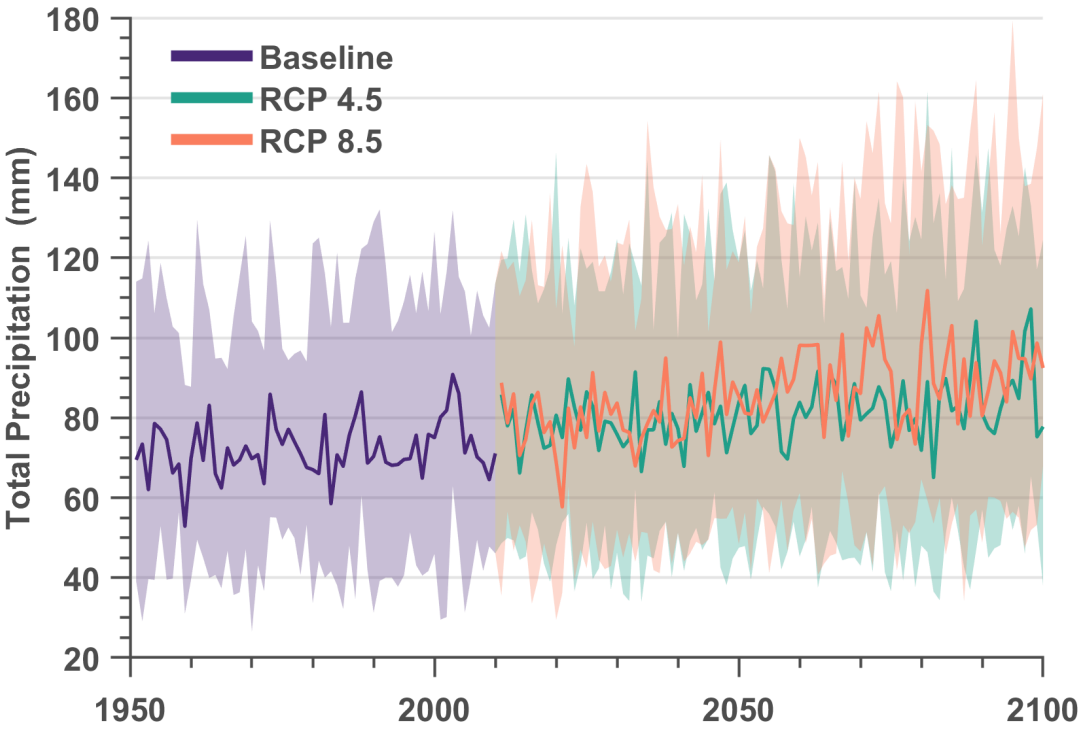


Figure F2.32: Monthly Total Precipitation - December.

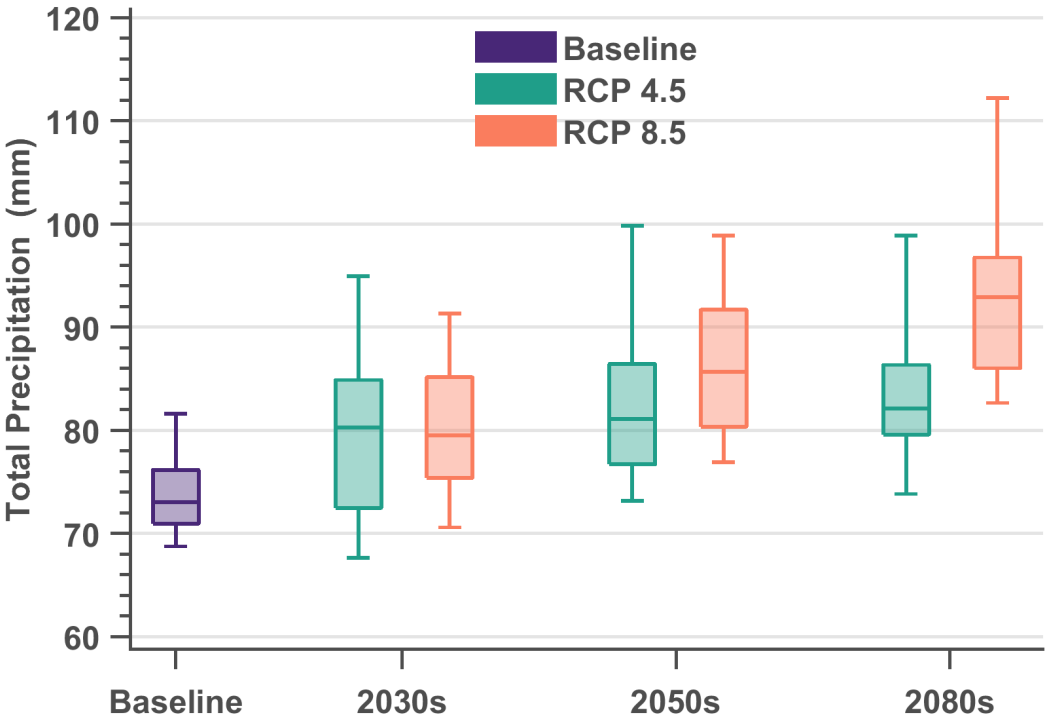


Figure F2.33: Monthly Total Precipitation - December.

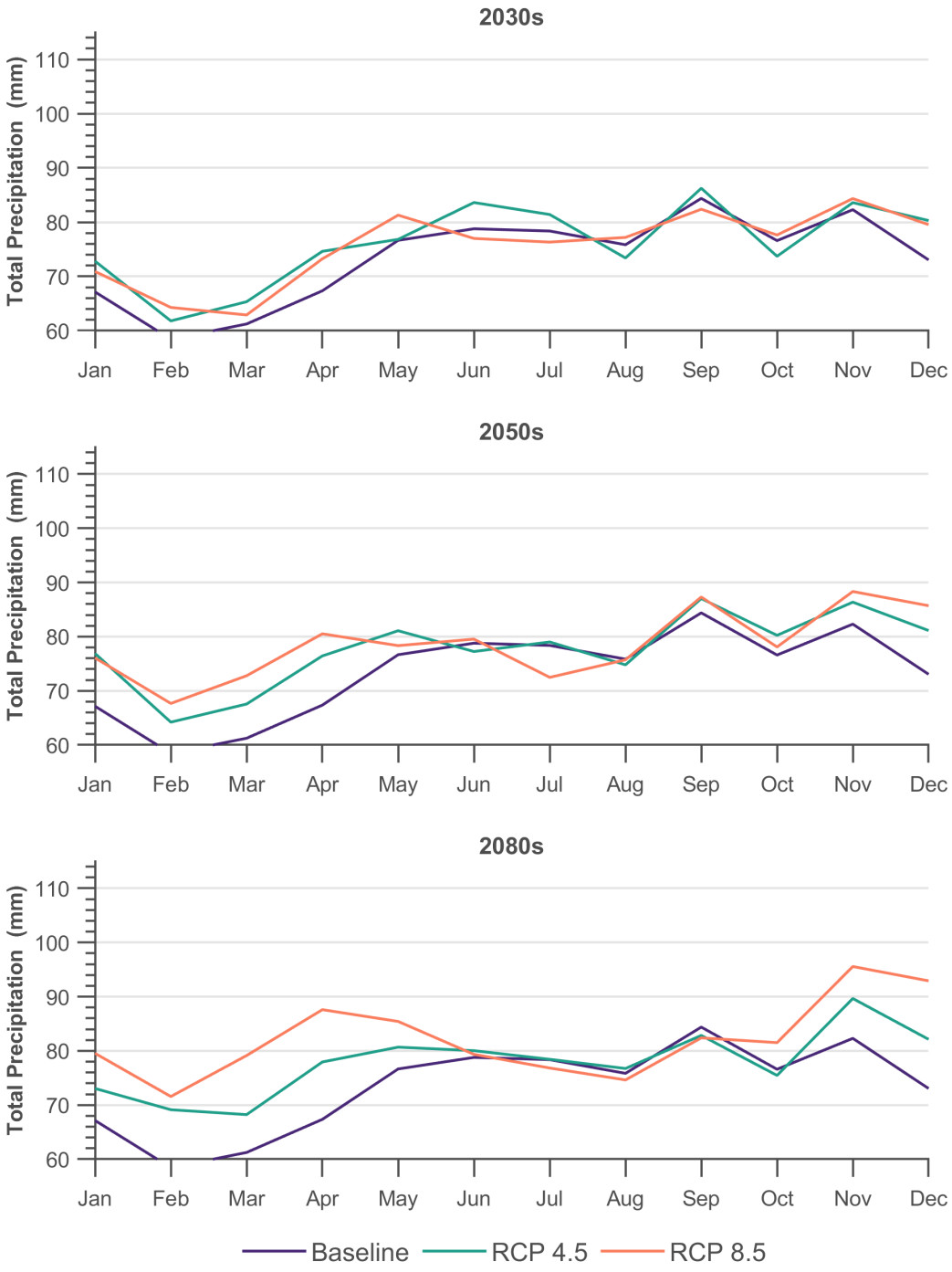


Figure F2.34: Monthly Total Precipitation.

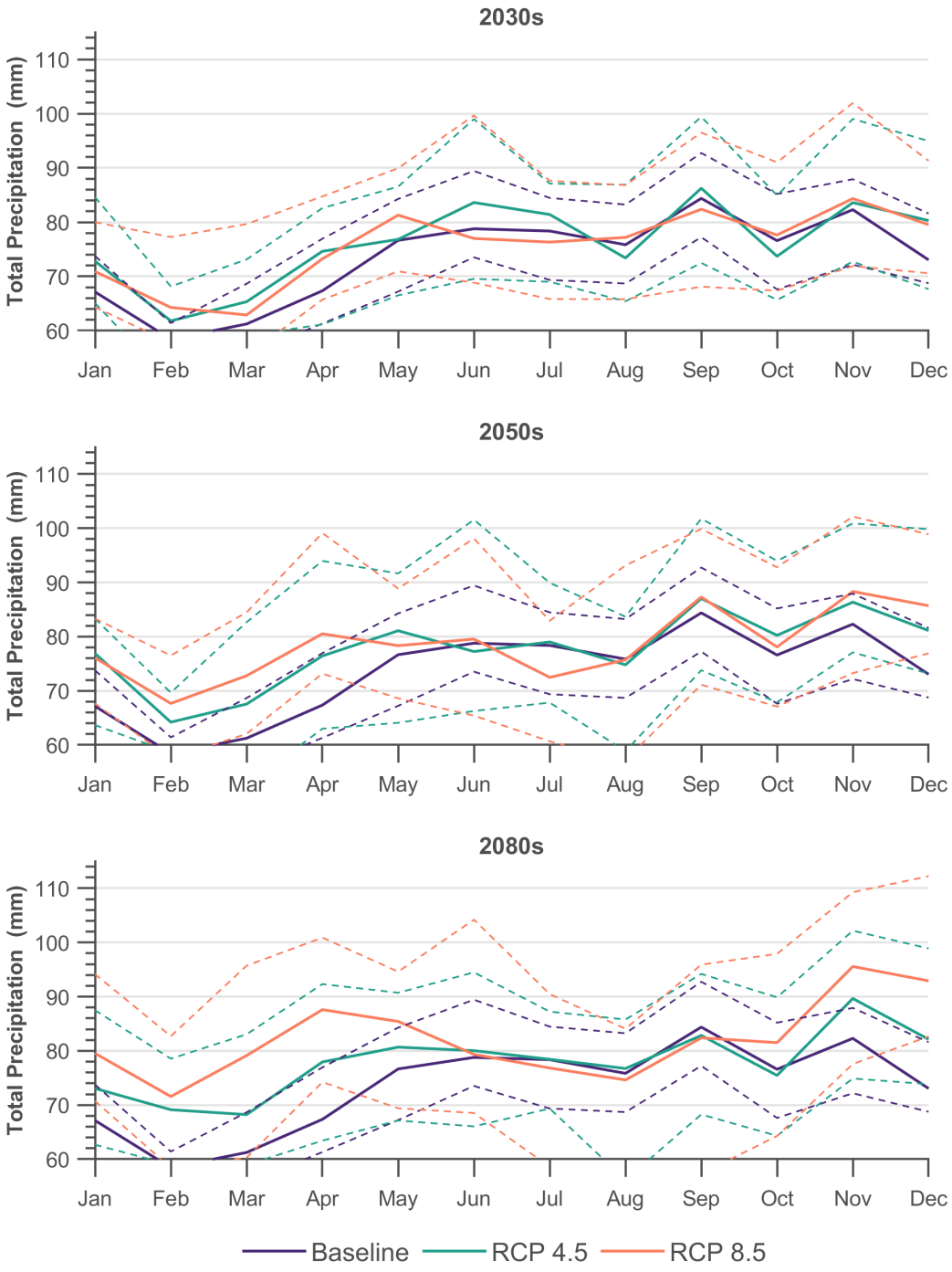


Figure F2.35: Monthly Total Precipitation. Dashed lines indicate the 10% and 90% percentile.

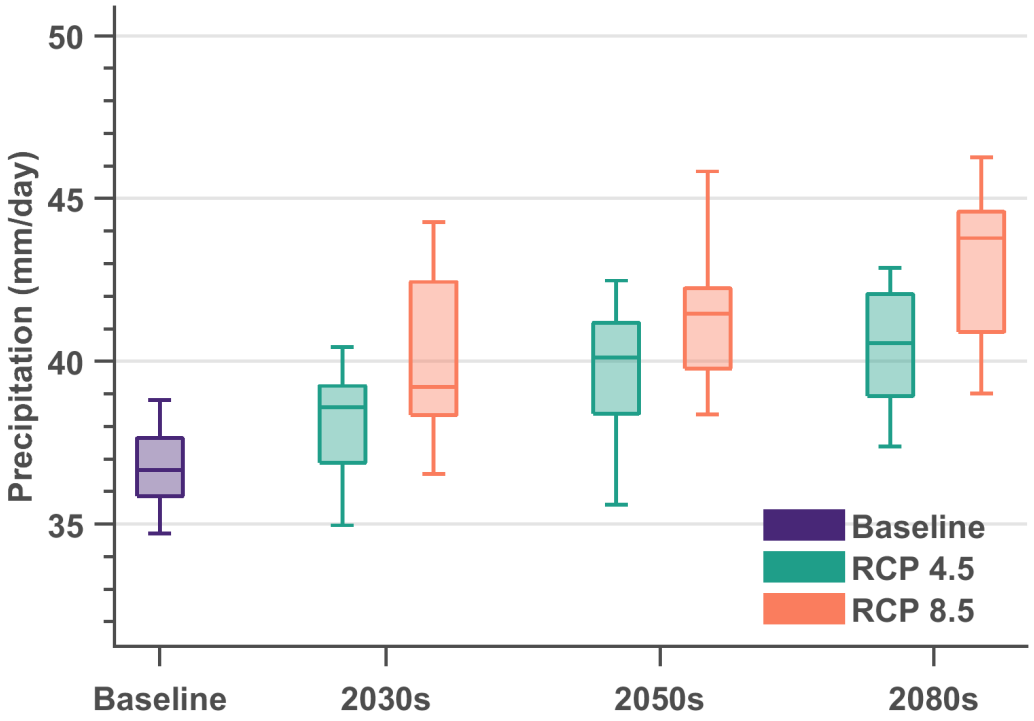


Figure F2.36: 1 in 2 Years 1-Day Precipitation.

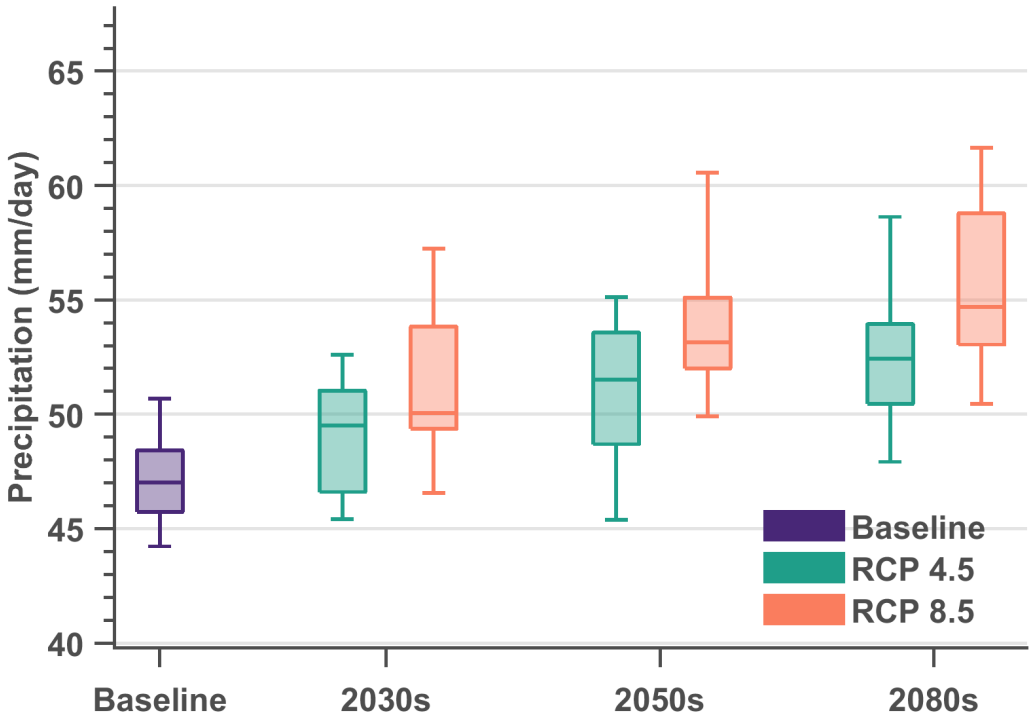


Figure F2.37: 1 in 5 Years 1-Day Precipitation.

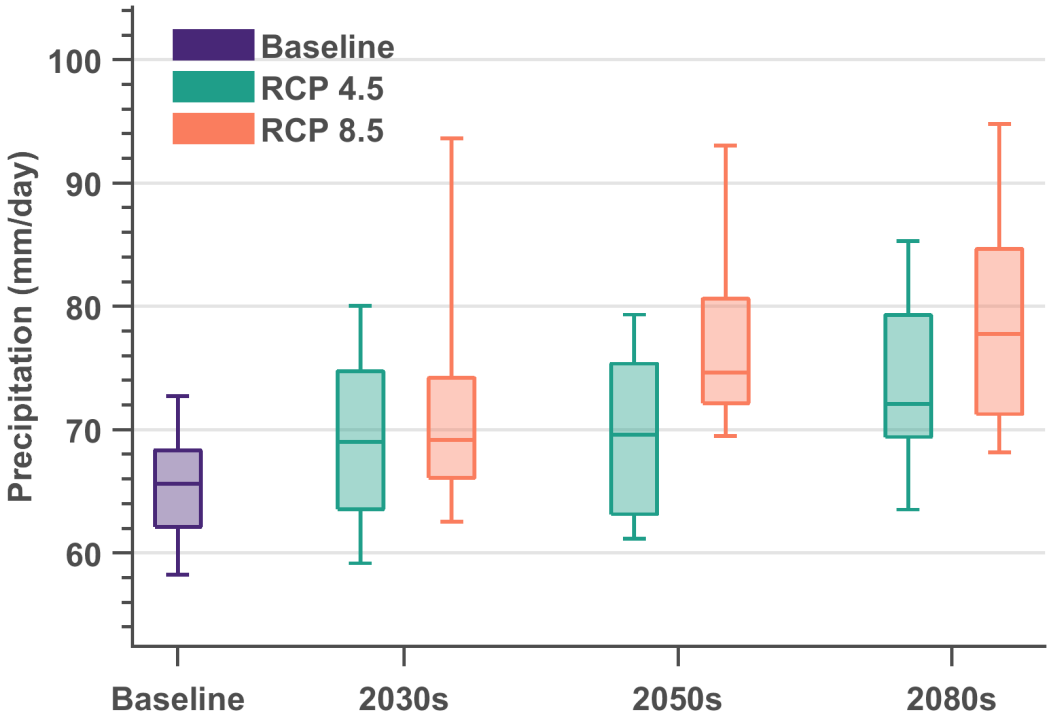


Figure F2.38: 1 in 20 Years 1-Day Precipitation.

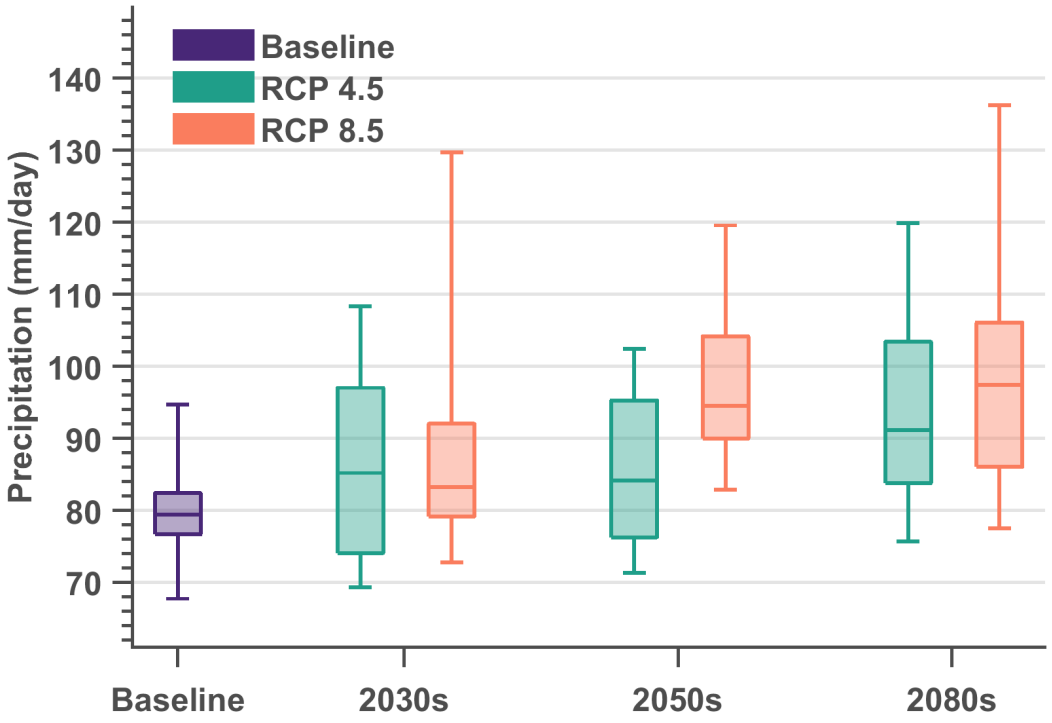


Figure F2.39: 1 in 50 Years 1-Day Precipitation.

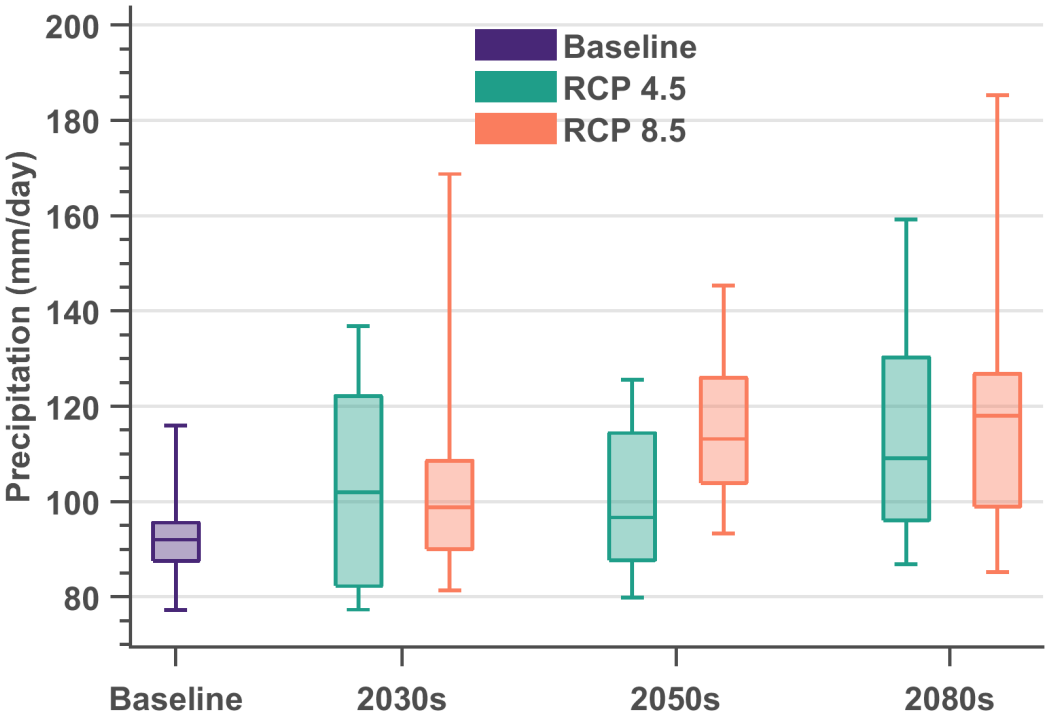


Figure F2.40: 1 in 100 Years 1-Day Precipitation.

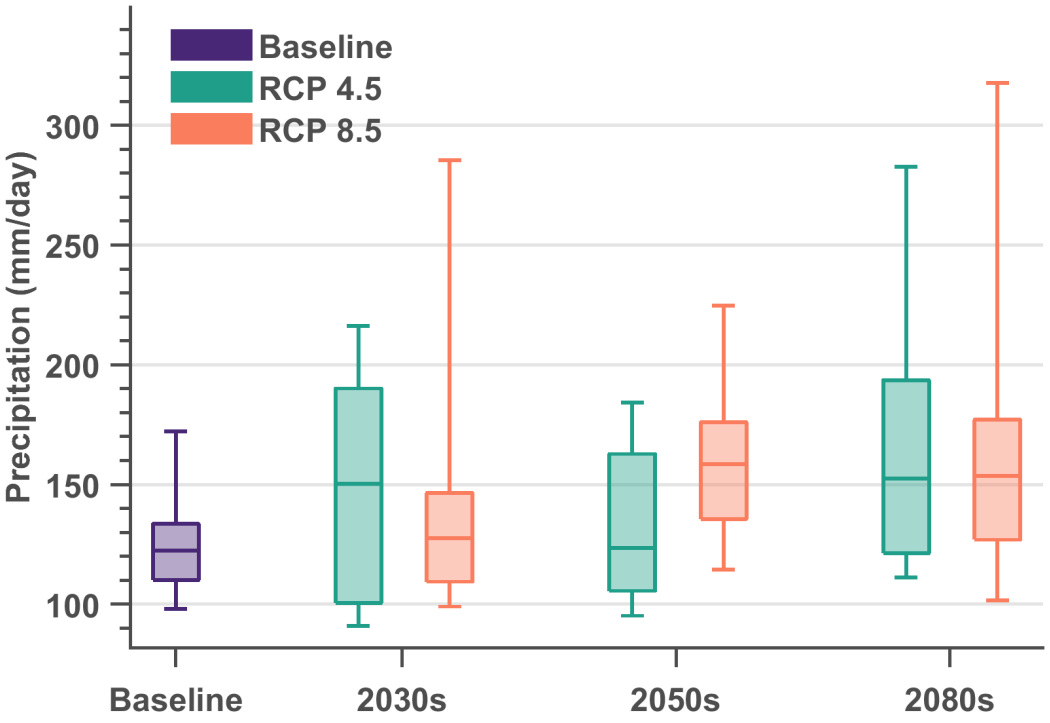


Figure F2.41: 1 in 350 Years 1-Day Precipitation.

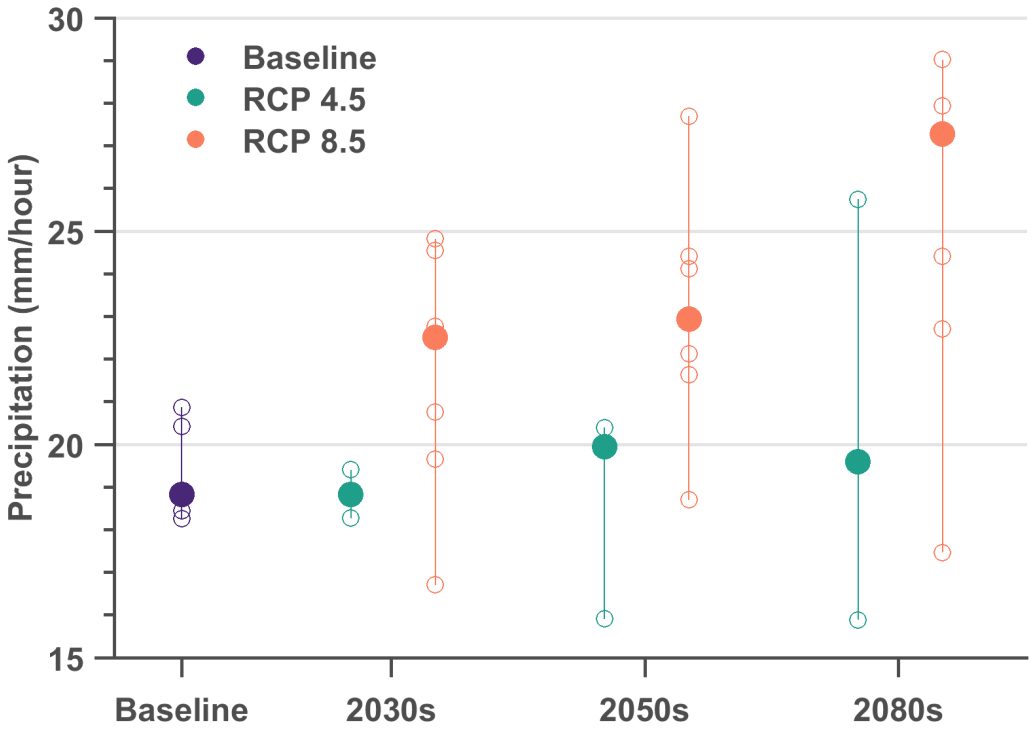


Figure F2.42: 1 in 2 Years 1-Hour Precipitation.

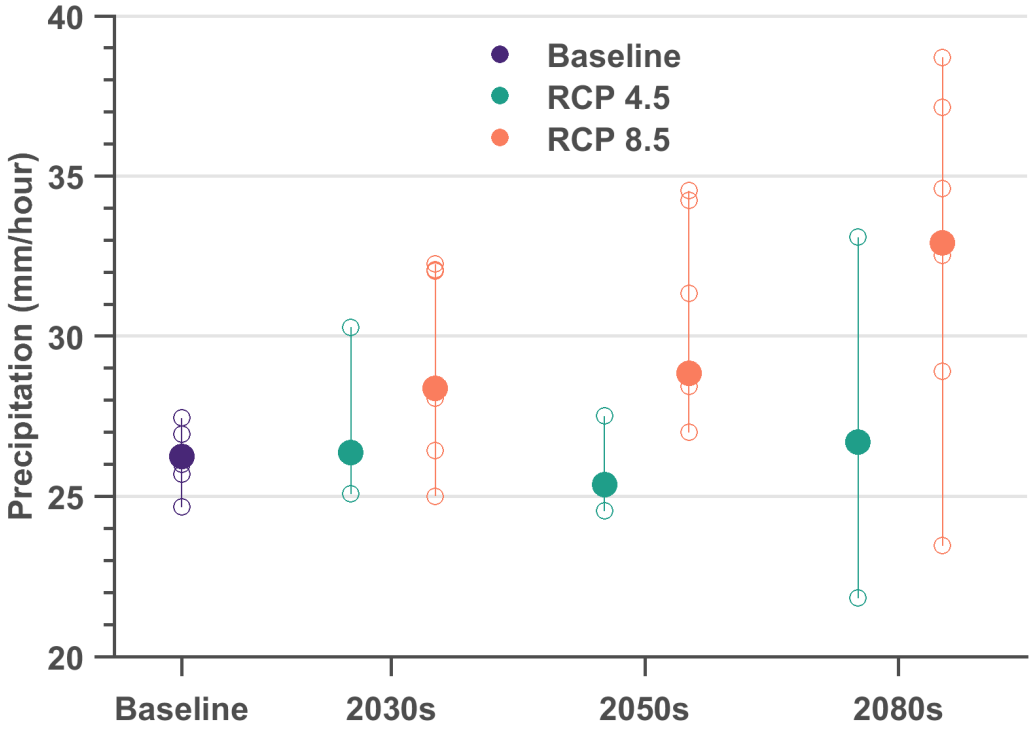


Figure F2.43: 1 in 5 Years 1-Hour Precipitation.

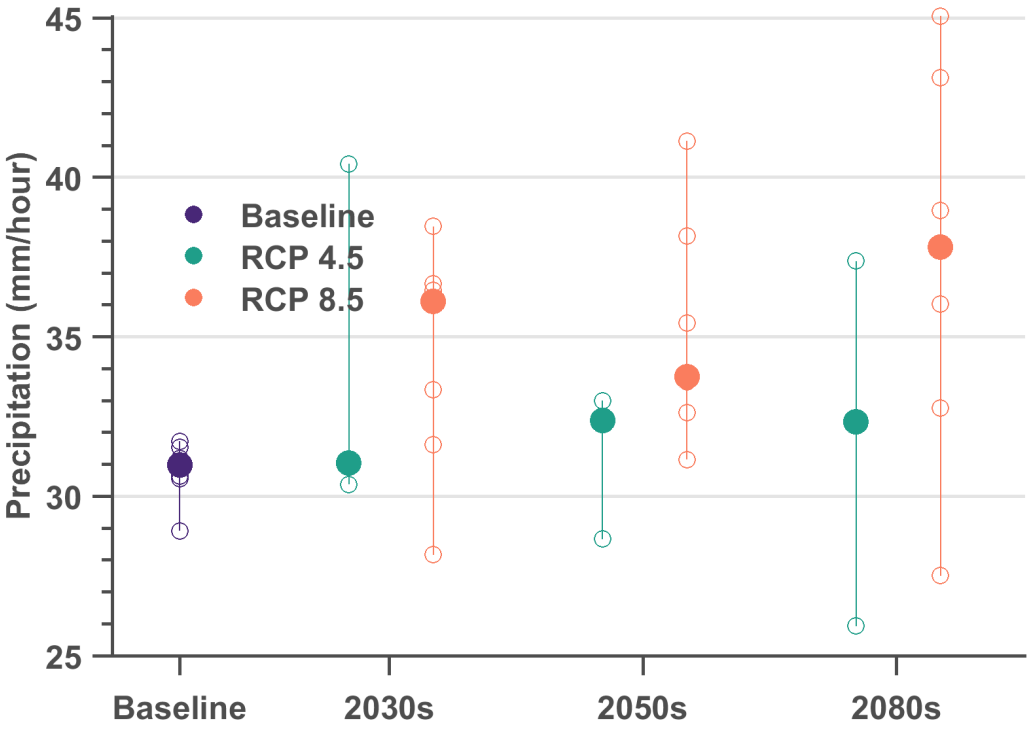


Figure F2.44: 1 in 10 Years 1-Hour Precipitation.

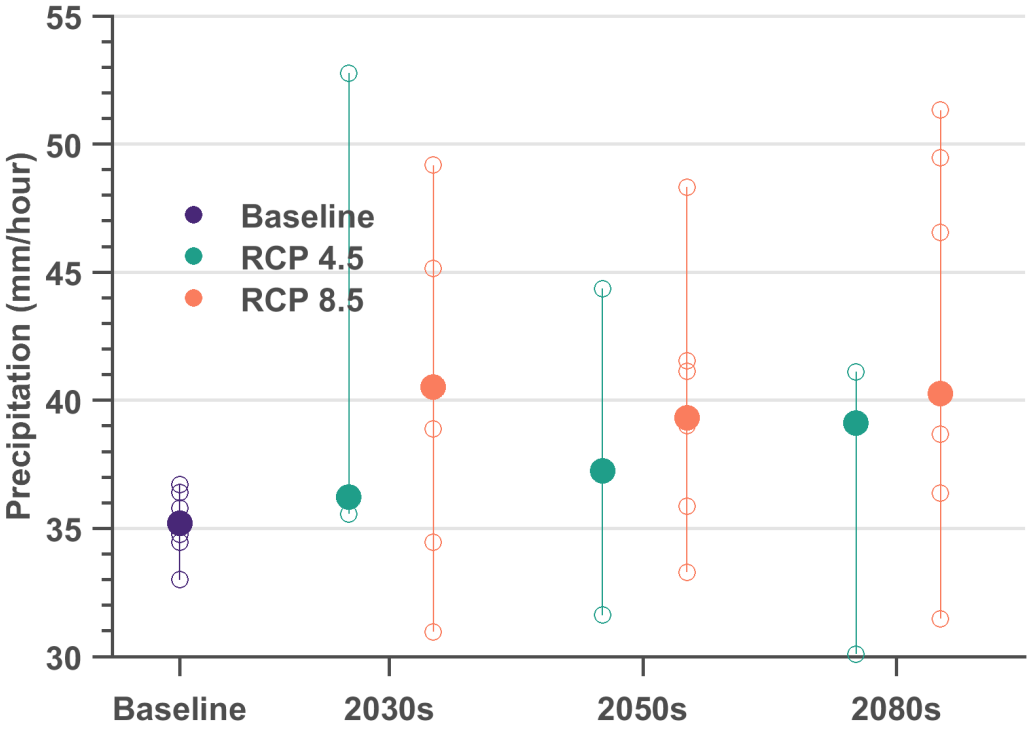


Figure F2.45: 1 in 20 Years 1-Hour Precipitation.

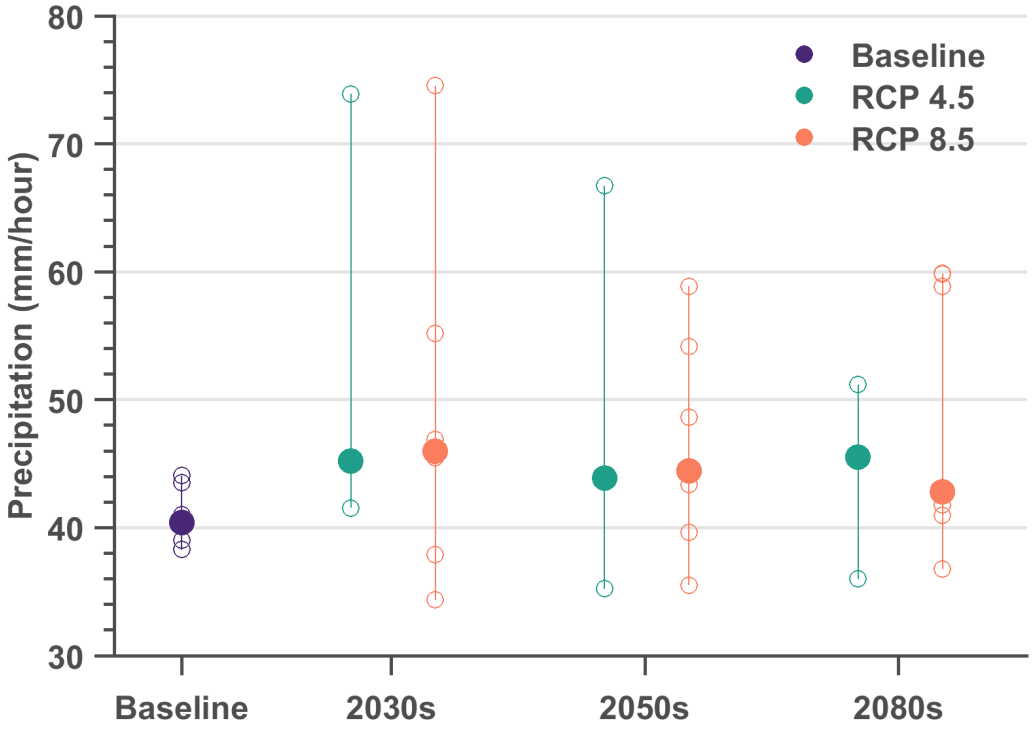


Figure F2.46: 1 in 50 Years 1-Hour Precipitation.

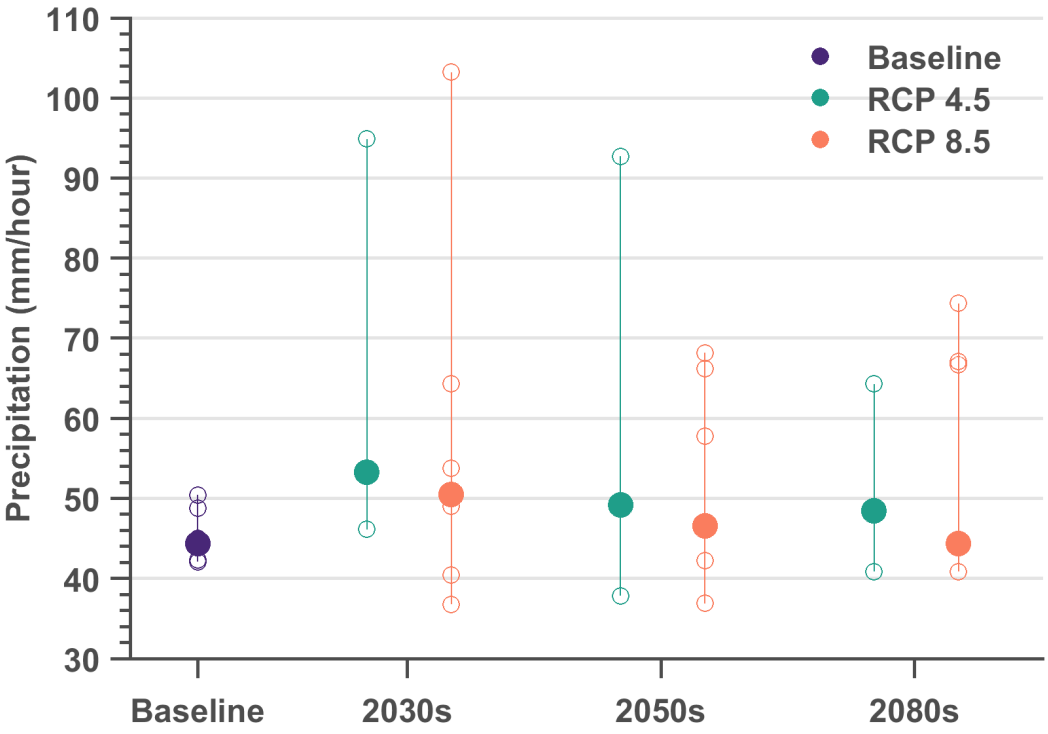


Figure F2.47: 1 in 100 Years 1-Hour Precipitation.

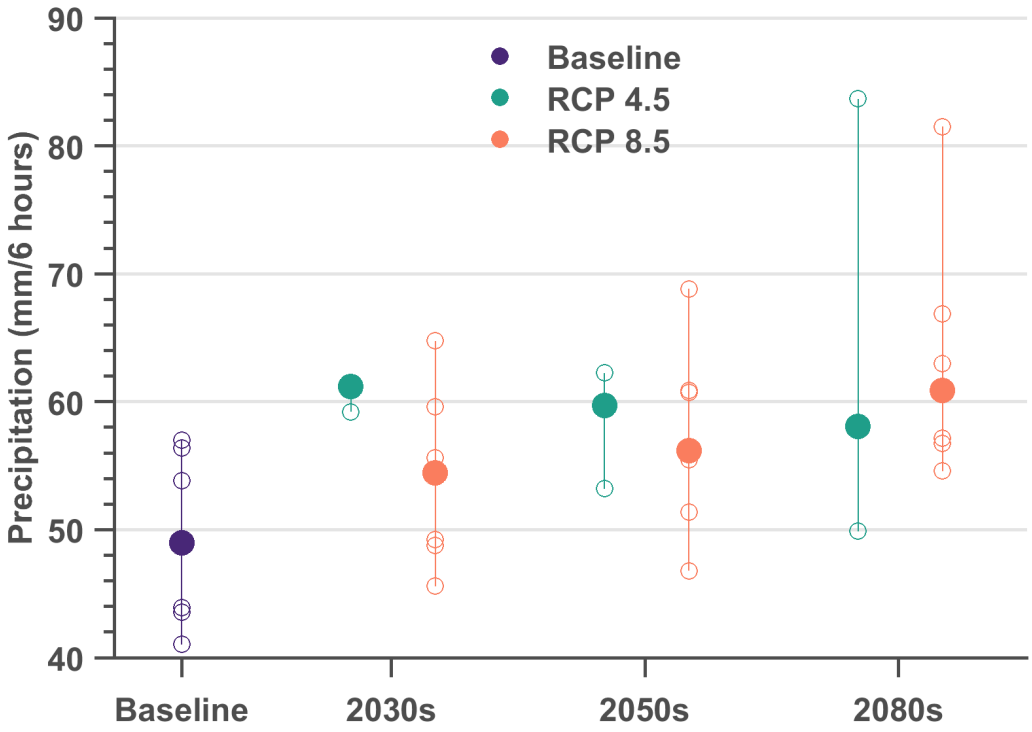


Figure F2.48: 1 in 2 Years 6-Hour Precipitation.

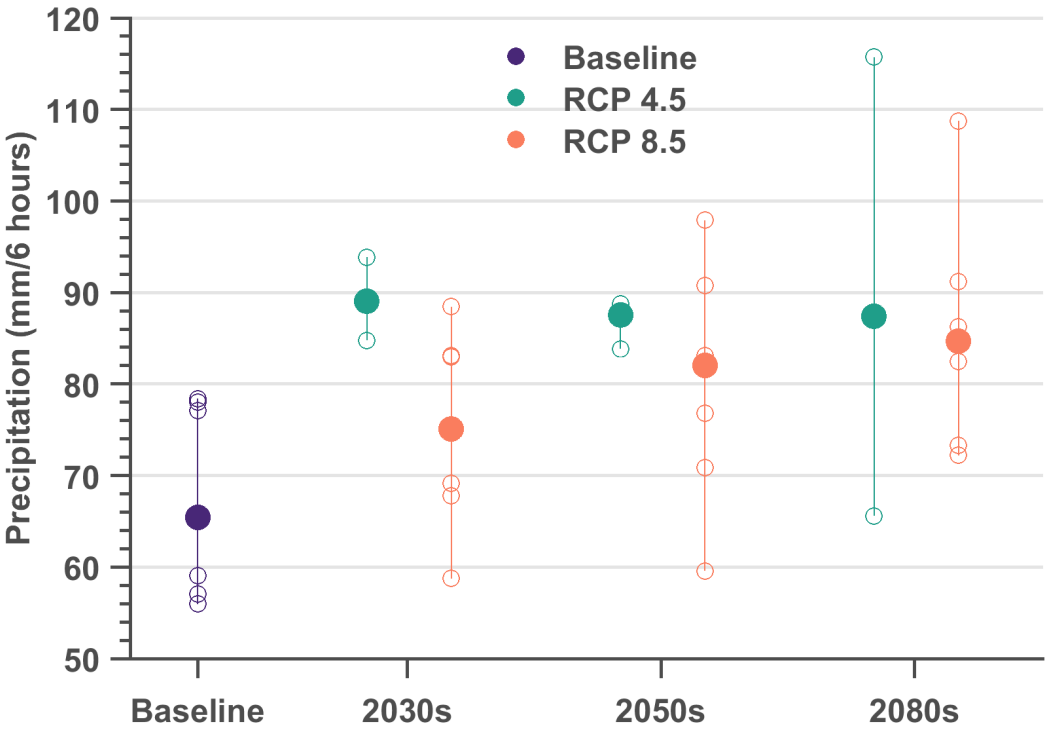


Figure F2.49: 1 in 5 Years 6-Hour Precipitation.

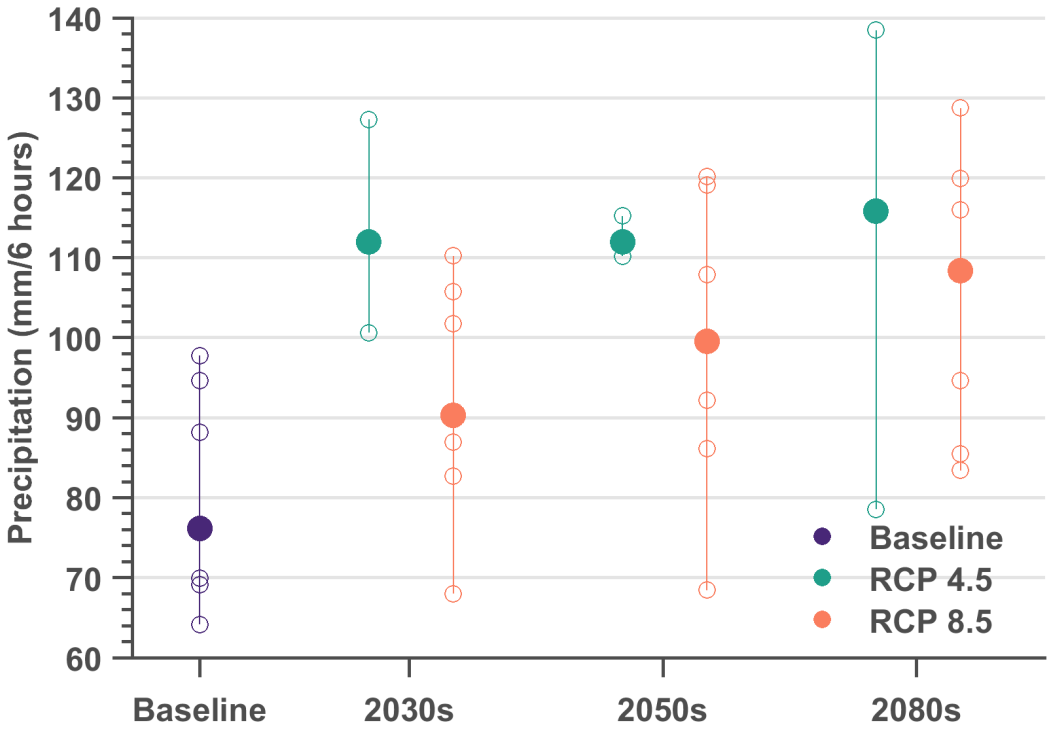


Figure F2.50: 1 in 10 Years 6-Hour Precipitation.

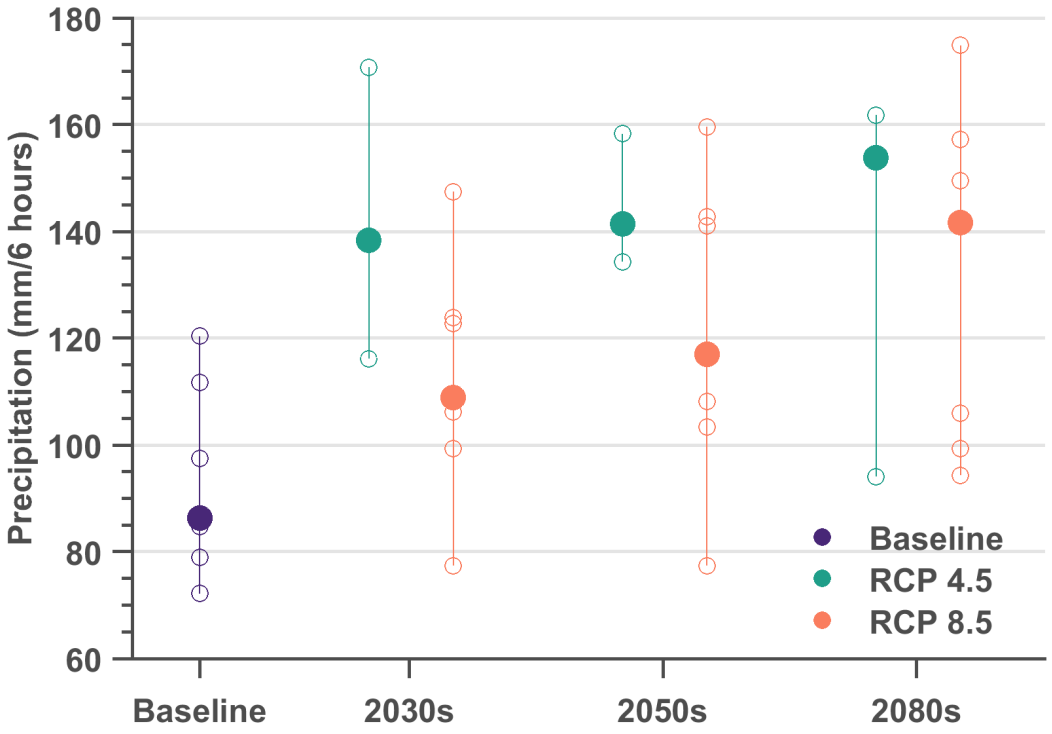


Figure F2.51: 1 in 20 Years 6-Hour Precipitation.

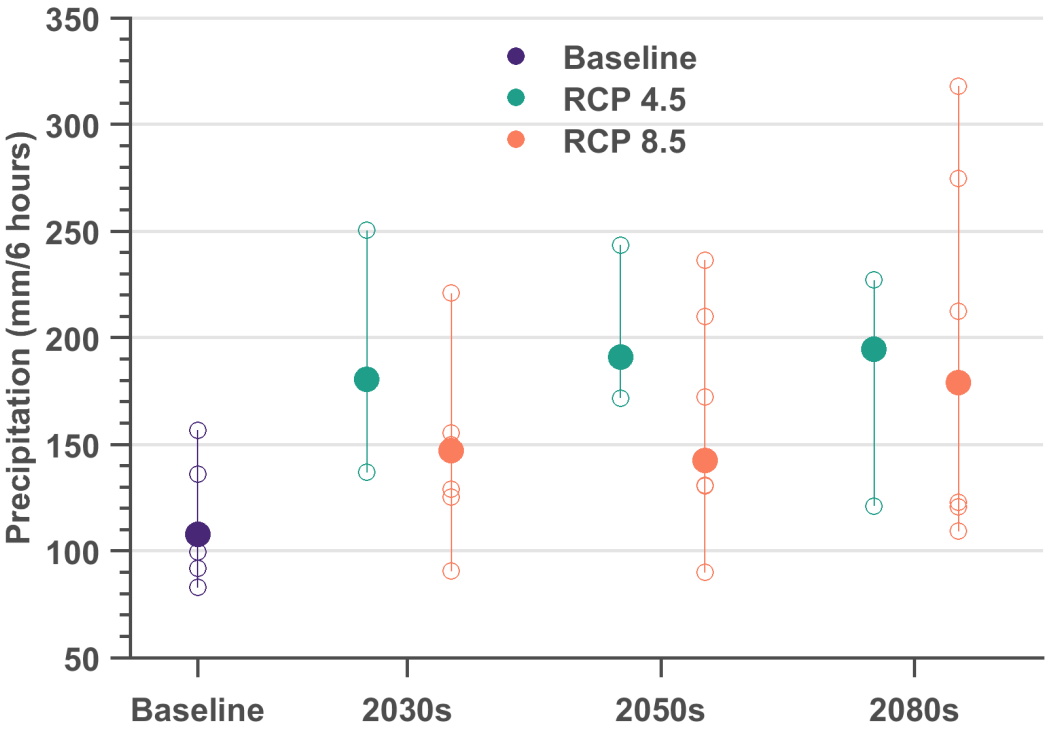


Figure F2.52: 1 in 50 Years 6-Hour Precipitation.

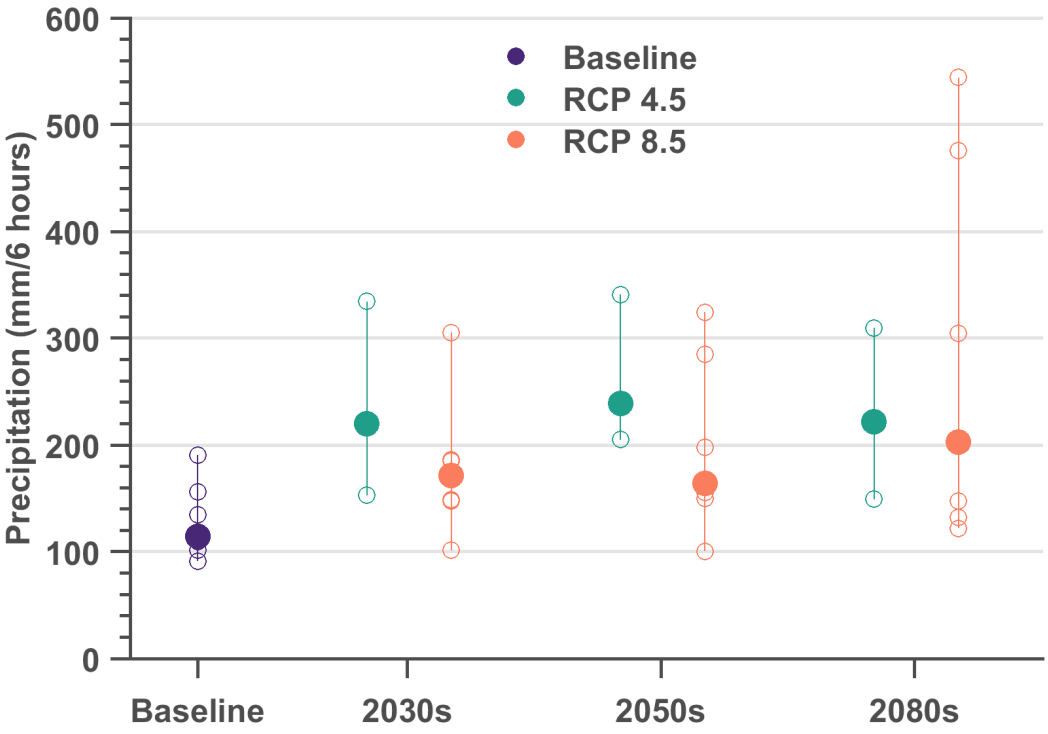


Figure F2.53: 1 in 100 Years 6-Hour Precipitation.

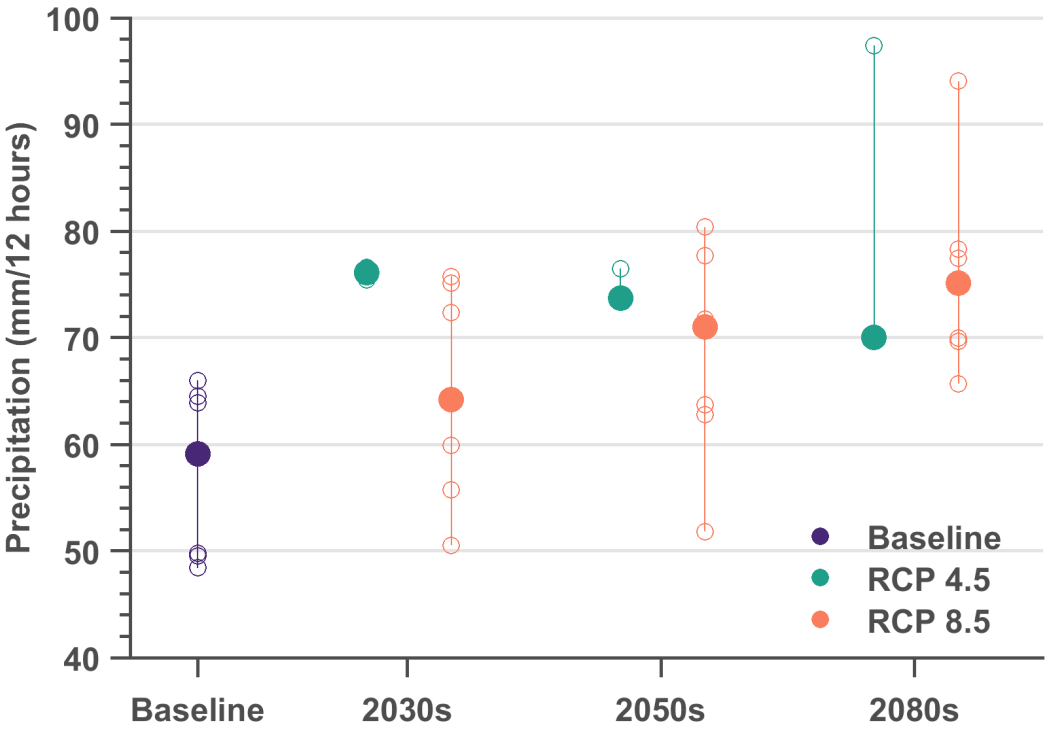


Figure F2.54: 1 in 2 Years 12-Hour Precipitation.

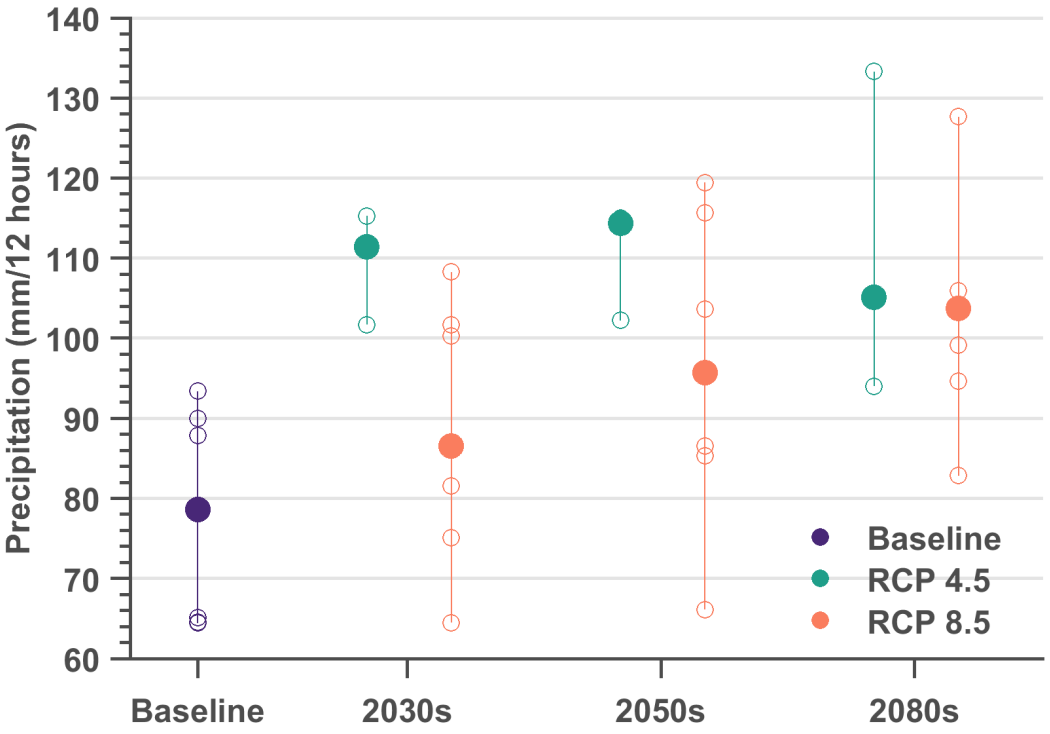


Figure F2.55: 1 in 5 Years 12-Hour Precipitation.

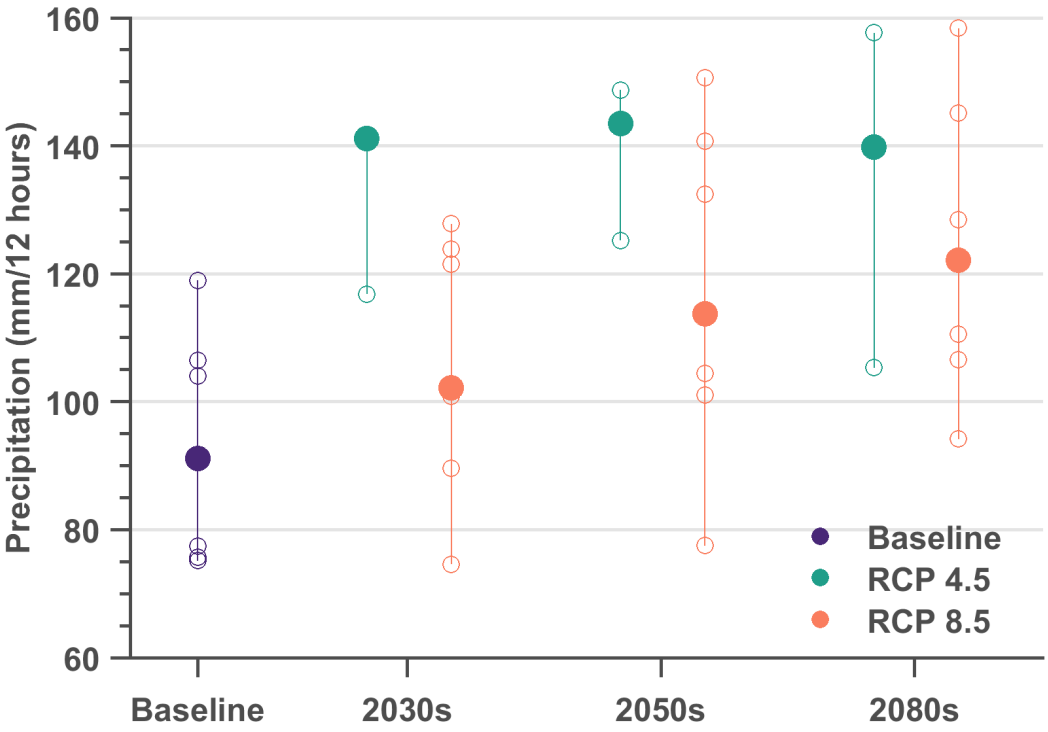


Figure F2.56: 1 in 10 Years 12-Hour Precipitation.

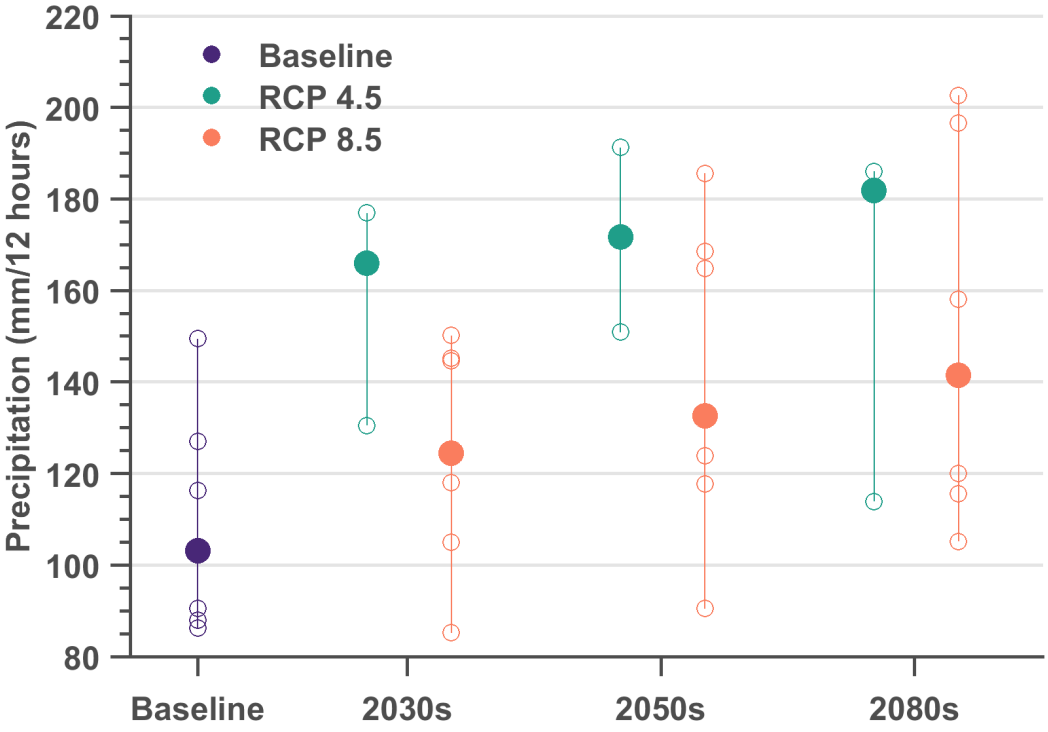


Figure F2.57: 1 in 20 Years 12-Hour Precipitation.

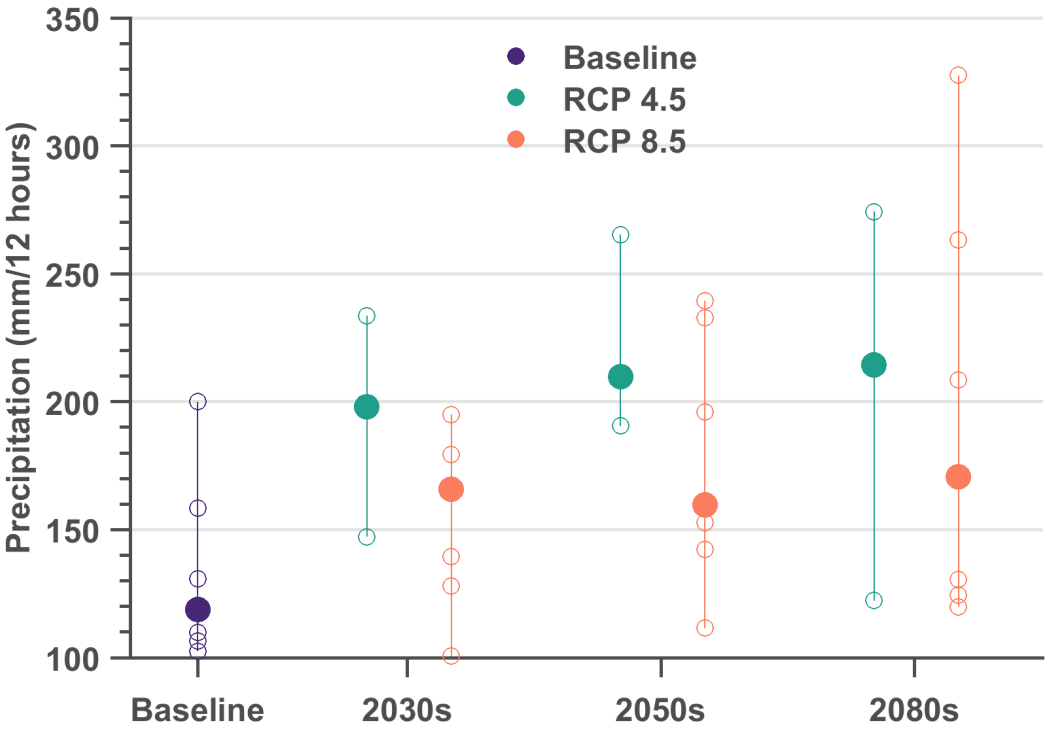


Figure F2.58: 1 in 50 Years 12-Hour Precipitation.

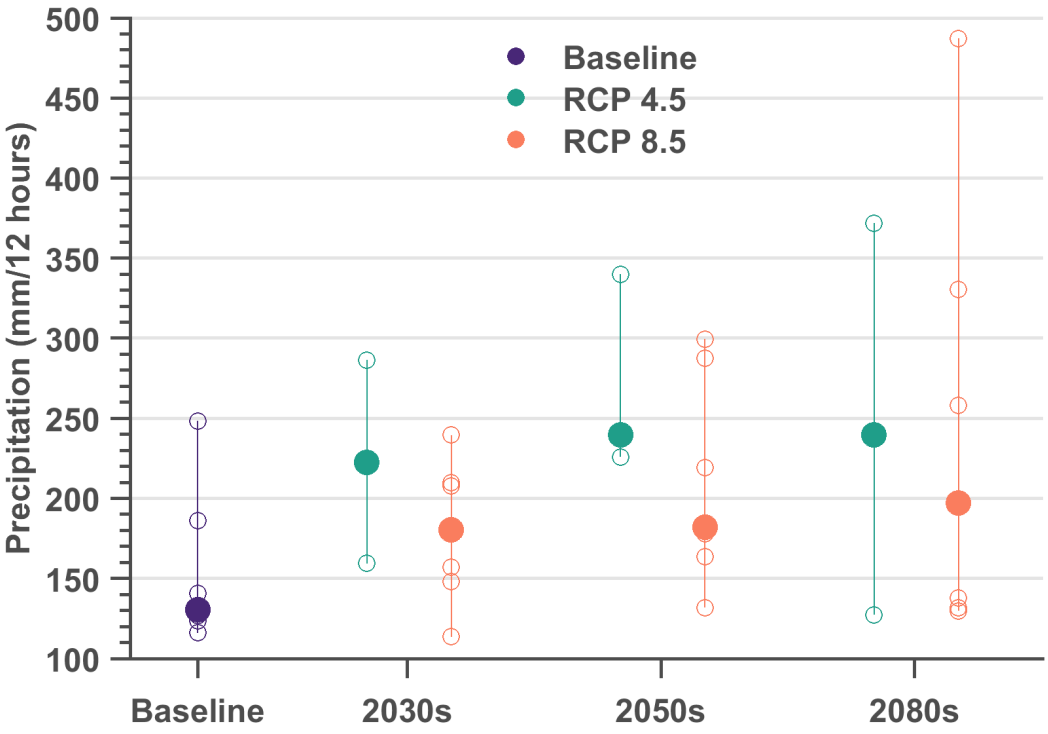


Figure F2.59: 1 in 100 Years 12-Hour Precipitation.

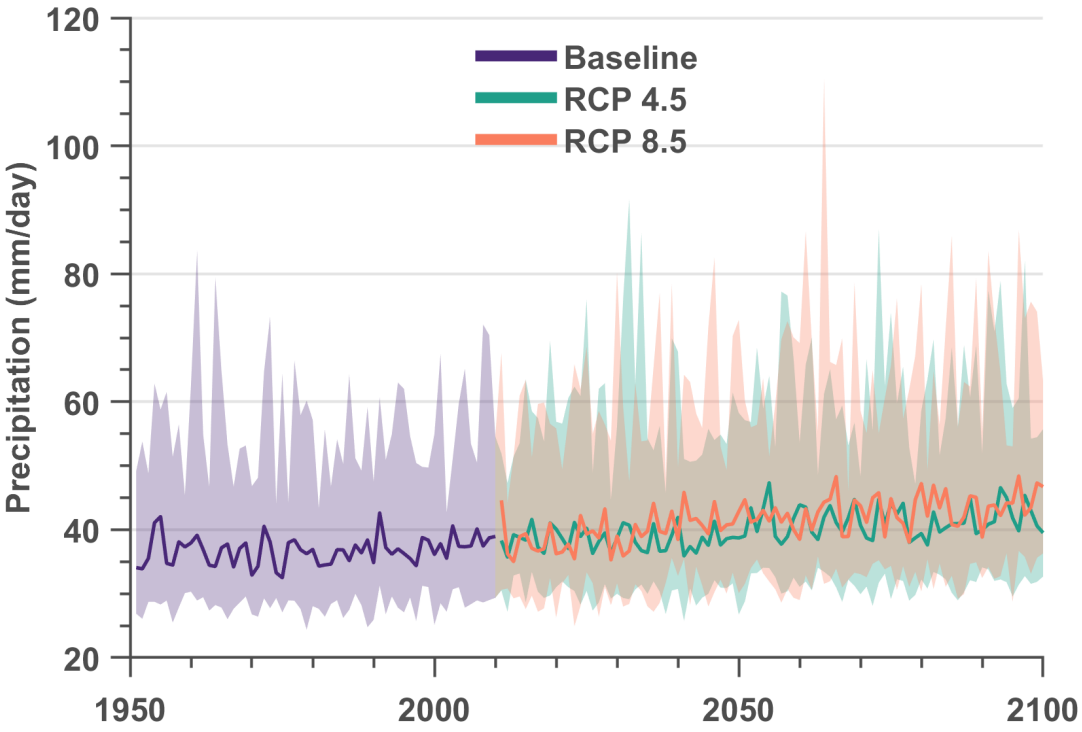


Figure F2.60: Annual Max. 1-Day Precipitation.

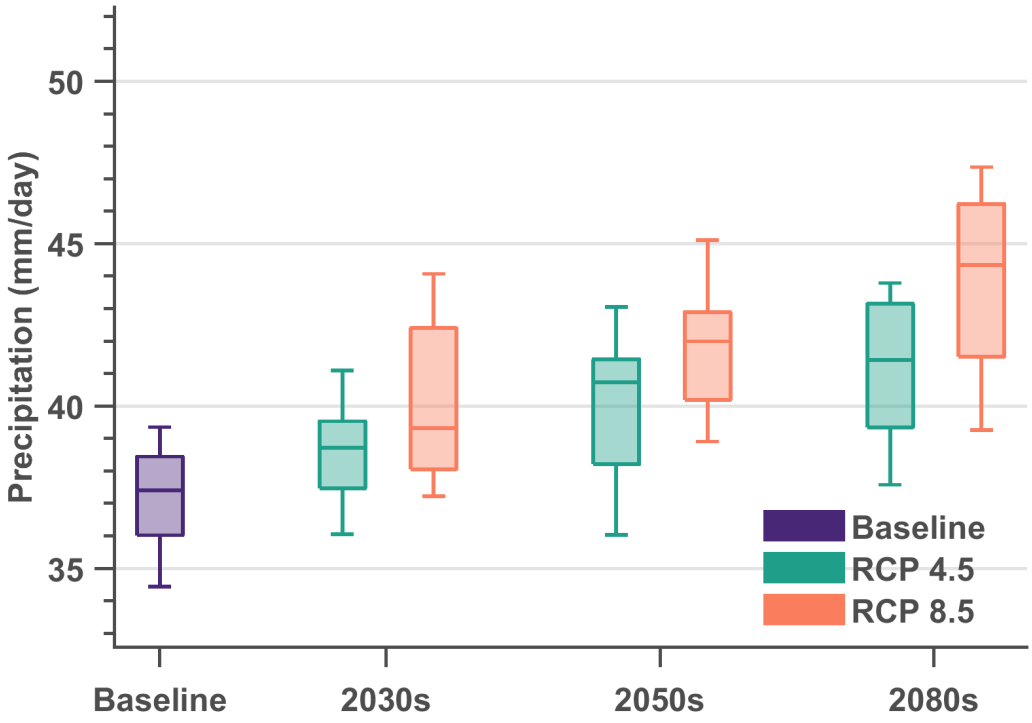


Figure F2.61: Annual Max. 1-Day Precipitation.

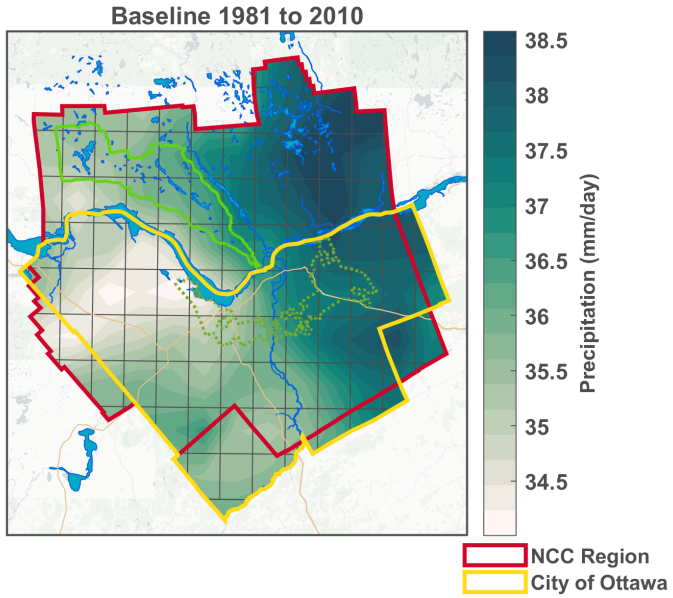


Figure F2.62: Annual Max. 1-Day Precipitation - Baseline.

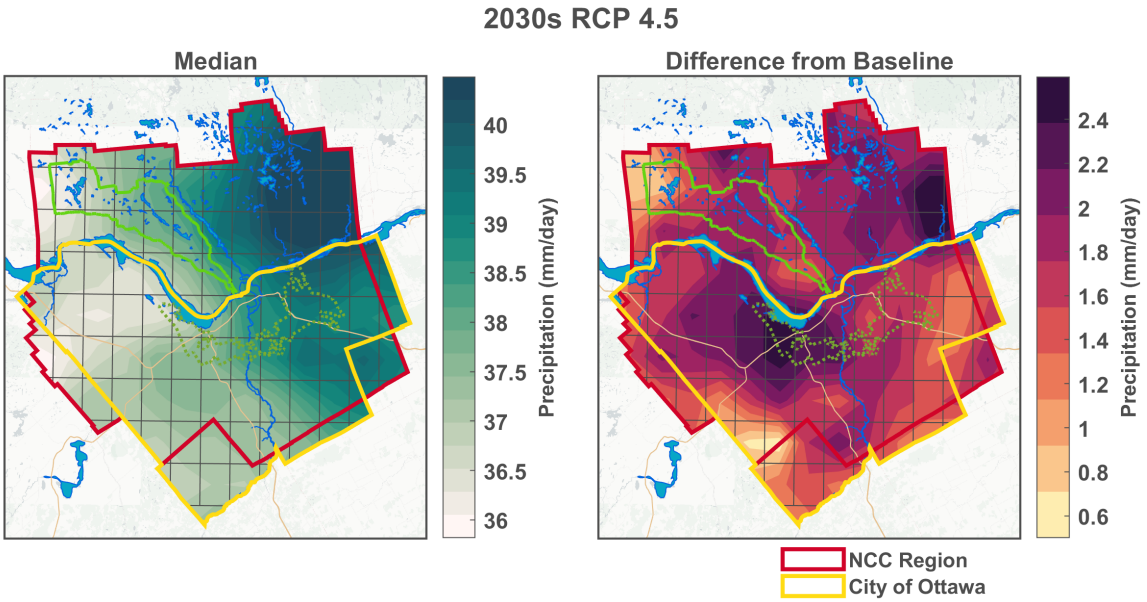


Figure F2.63: Annual Max. 1-Day Precipitation - 2030s RCP 4.5.

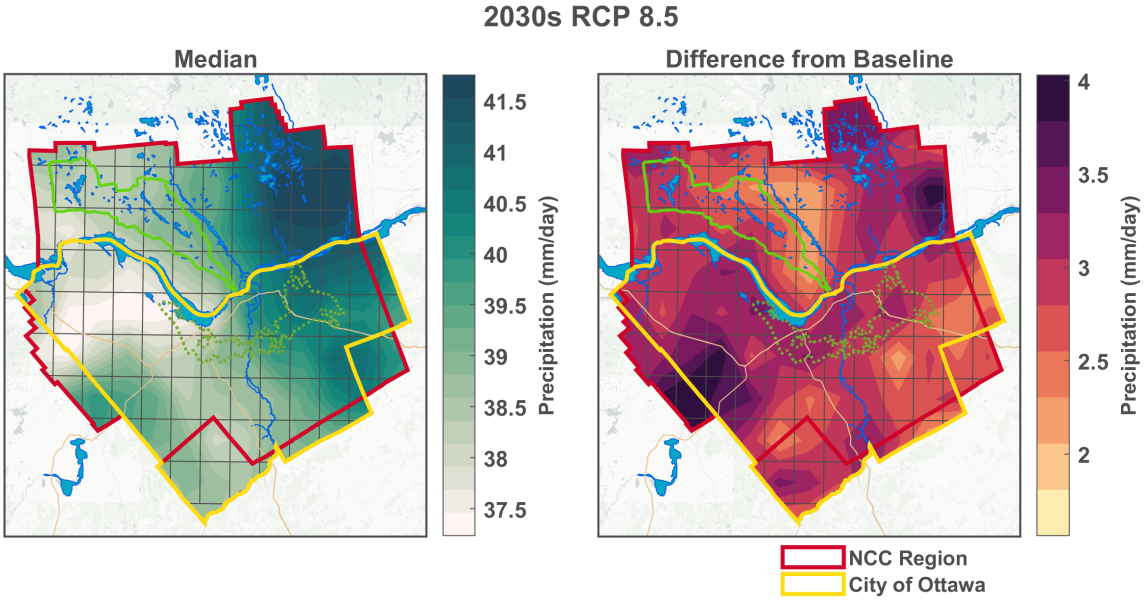


Figure F2.64: Annual Max. 1-Day Precipitation - 2030s RCP 8.5.

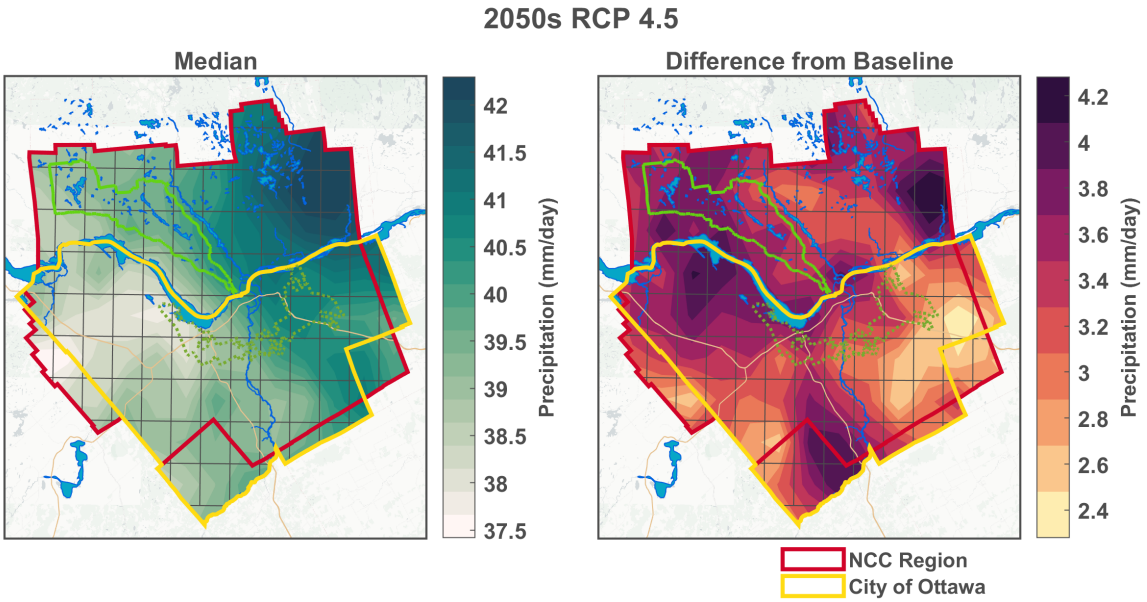


Figure F2.65: Annual Max. 1-Day Precipitation - 2050s RCP 4.5.

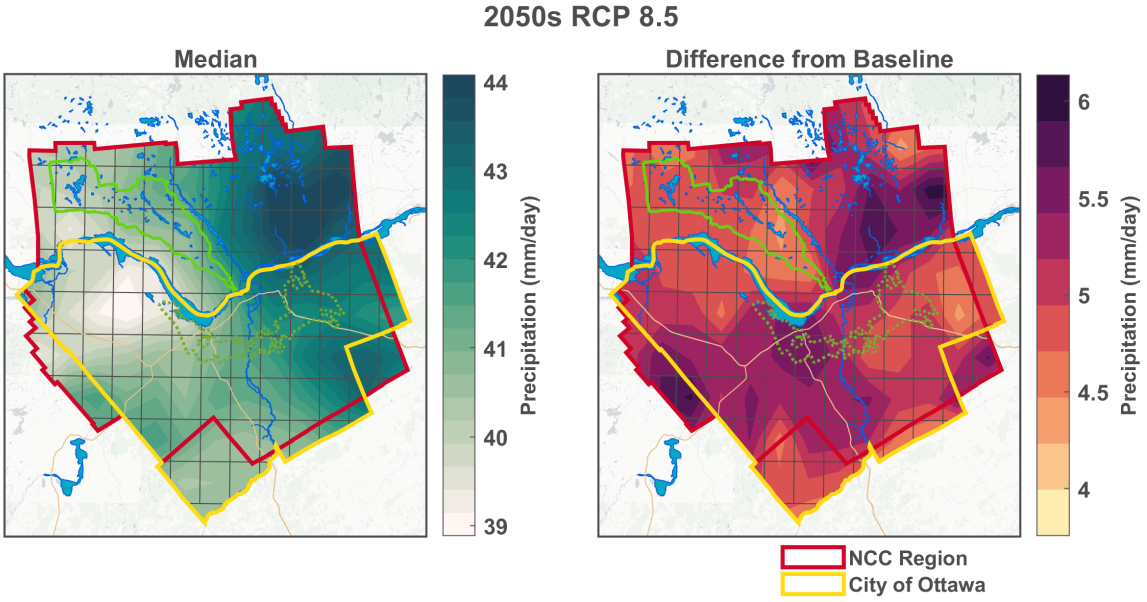


Figure F2.66: Annual Max. 1-Day Precipitation - 2050s RCP 8.5.

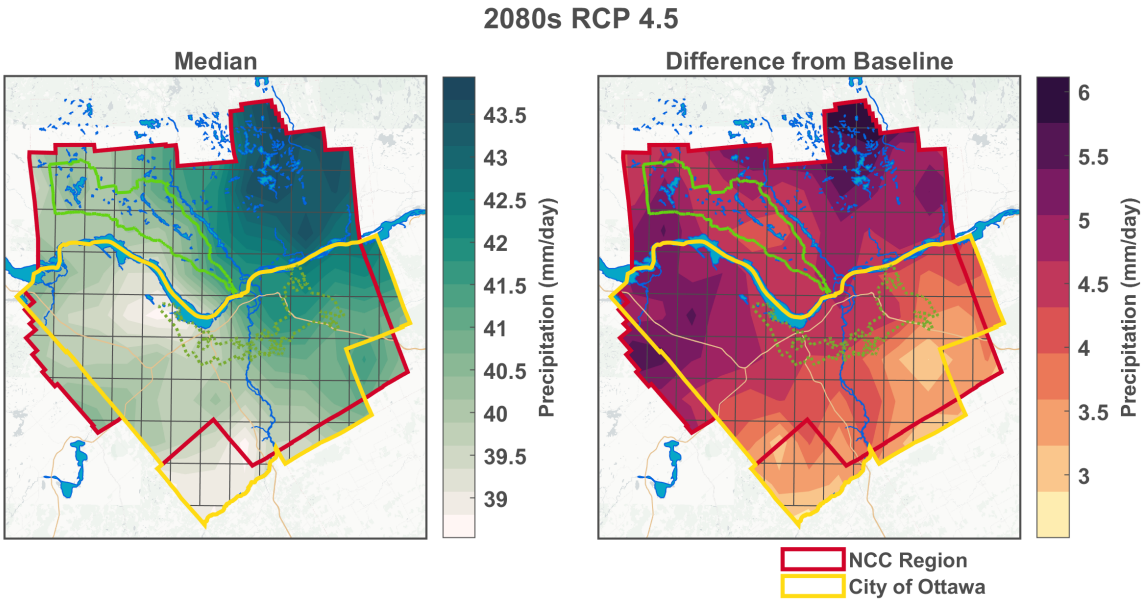


Figure F2.67: Annual Max. 1-Day Precipitation - 2080s RCP 4.5.

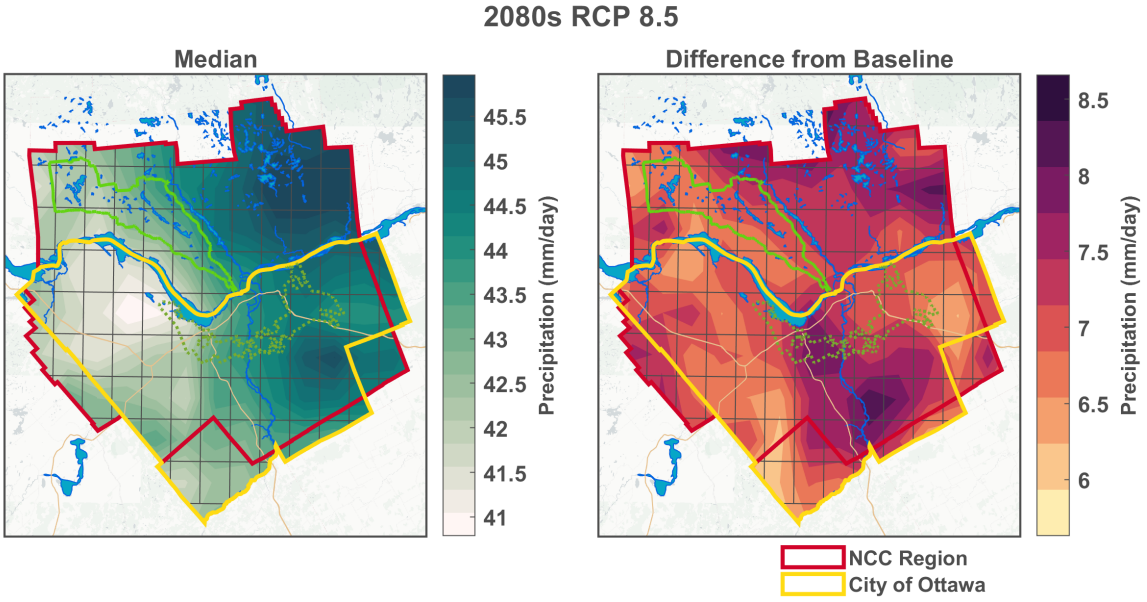


Figure F2.68: Annual Max. 1-Day Precipitation - 2080s RCP 8.5.

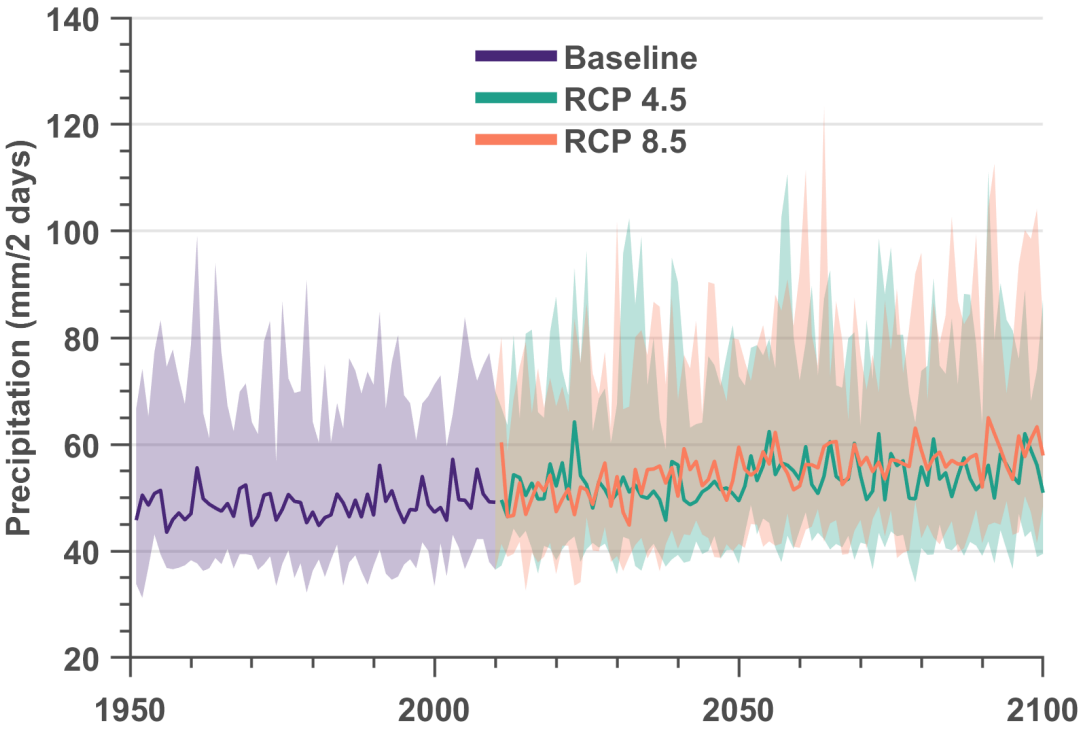


Figure F2.69: Annual Max. 2-Day Precipitation.

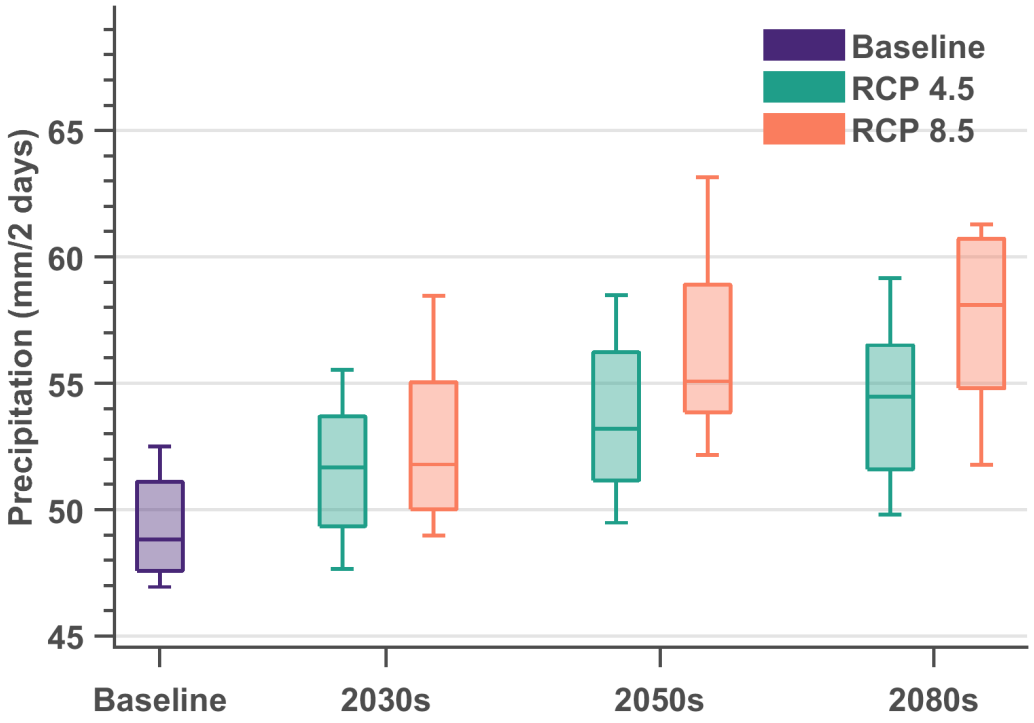


Figure F2.70: Annual Max. 2-Day Precipitation.

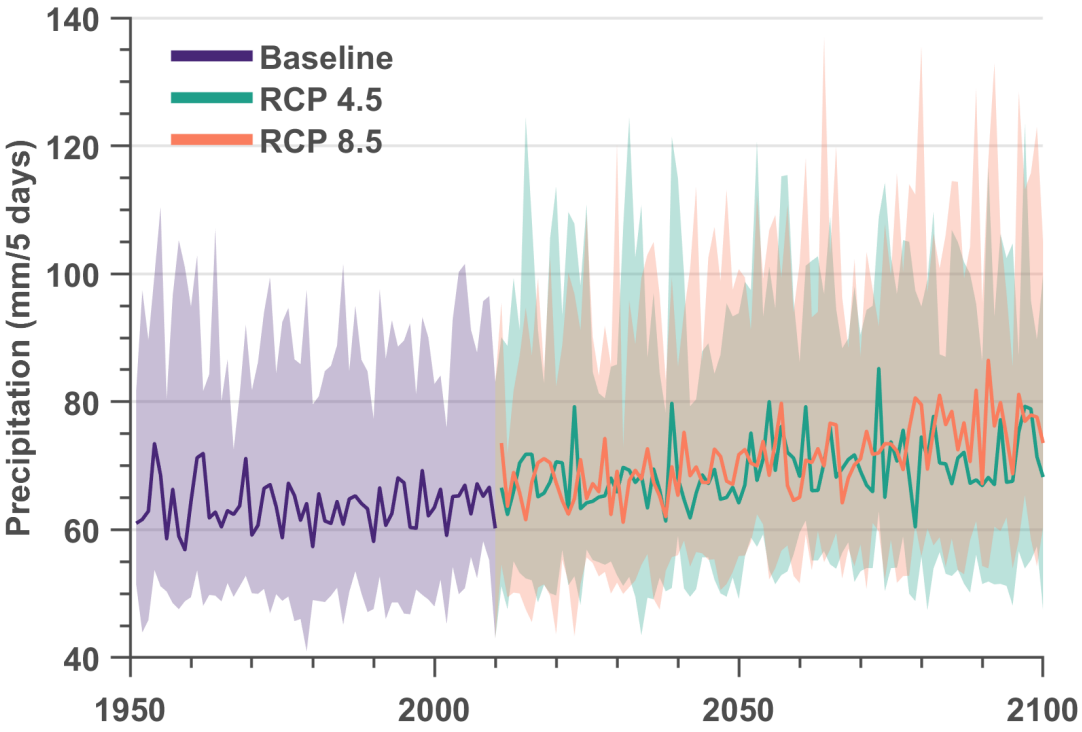


Figure F2.71: Annual Max. 5-Day Precipitation.

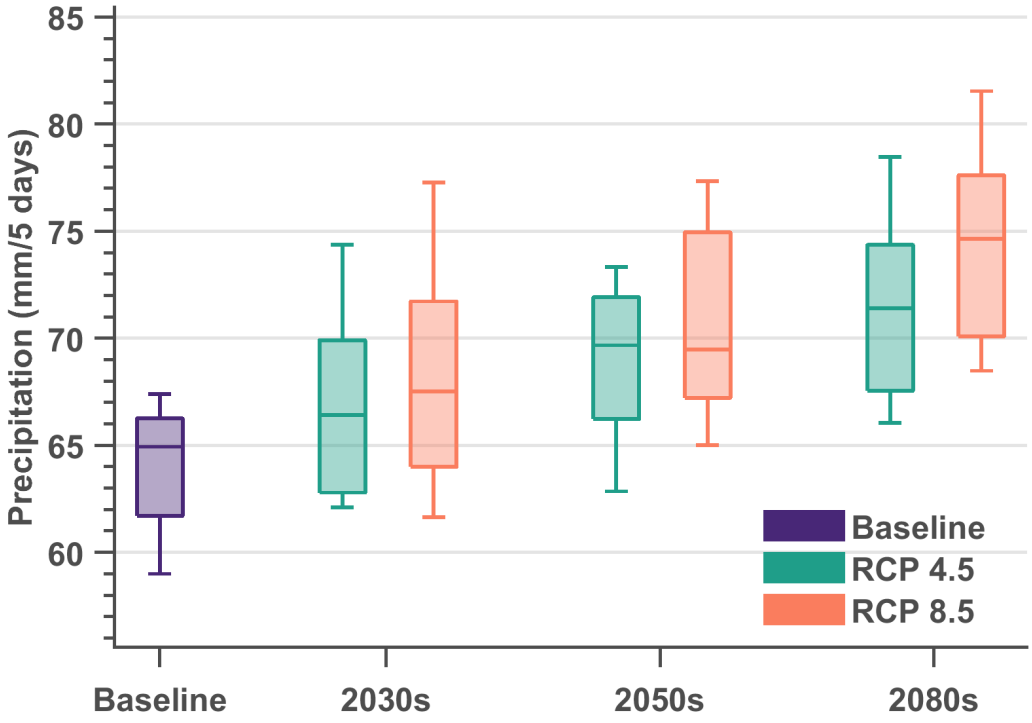


Figure F2.72: Annual Max. 5-Day Precipitation.

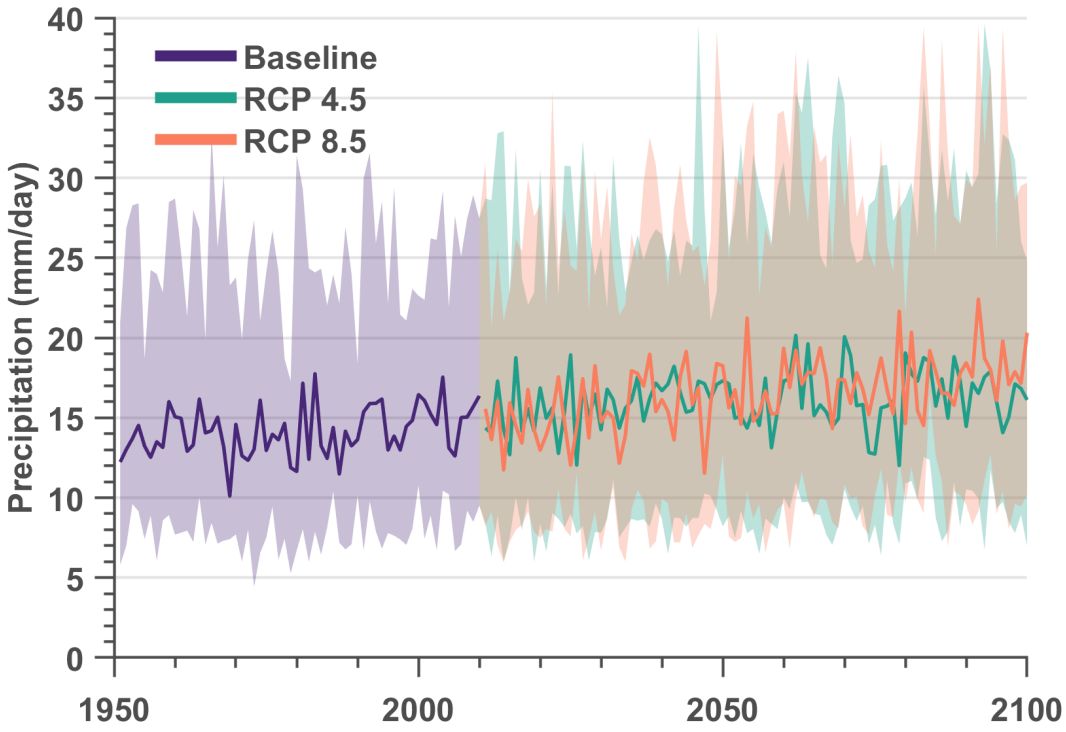


Figure F2.73: Monthly Max. 1-Day Precipitation - January.

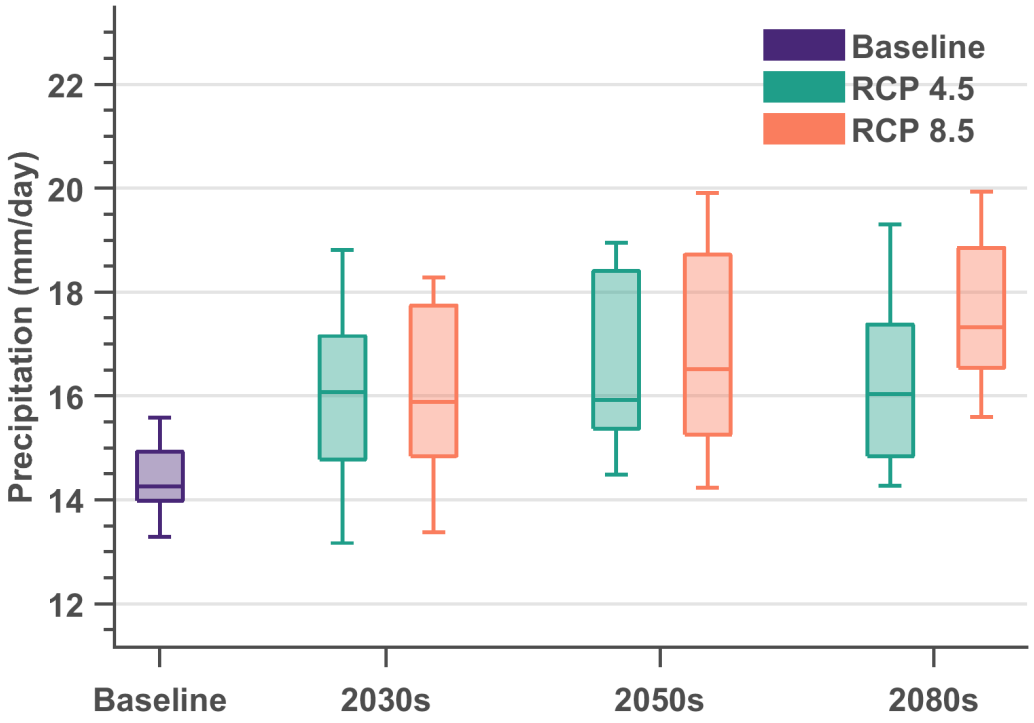


Figure F2.74: Monthly Max. 1-Day Precipitation - January.

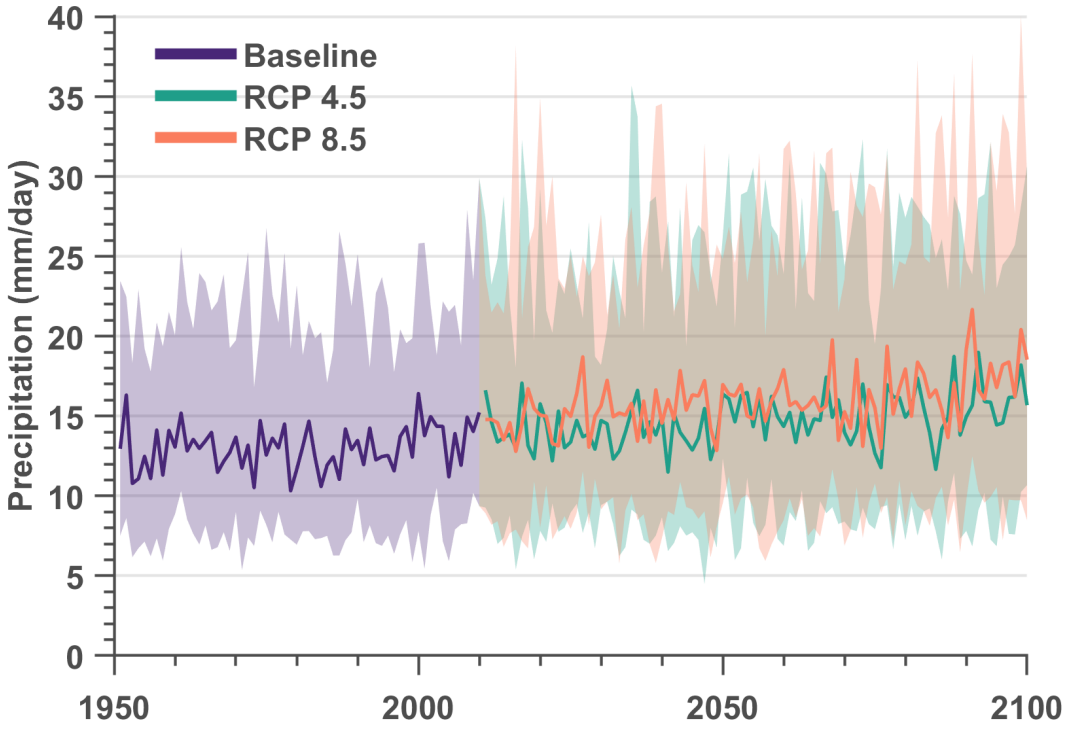


Figure F2.75: Monthly Max. 1-Day Precipitation - February.

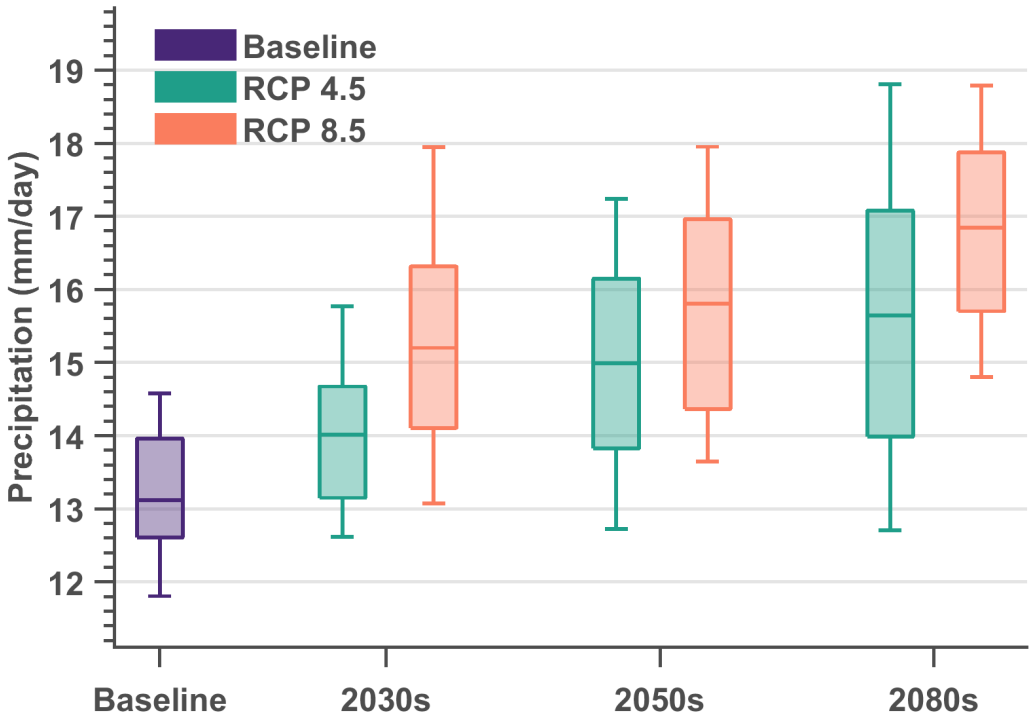


Figure F2.76: Monthly Max. 1-Day Precipitation - February.

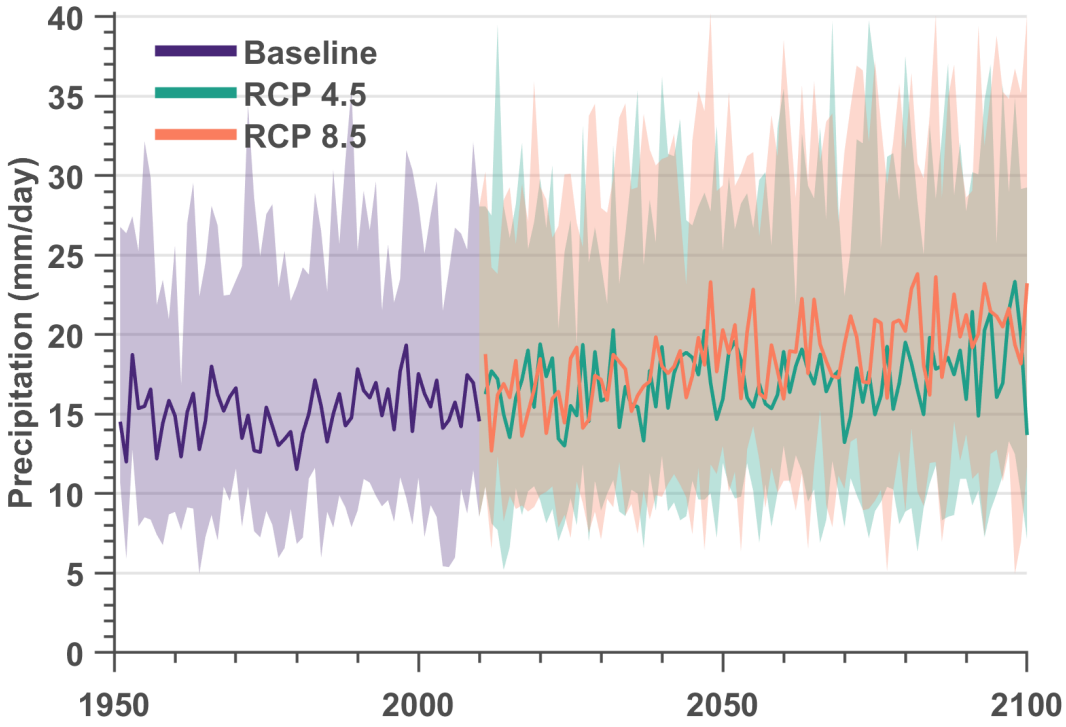


Figure F2.77: Monthly Max. 1-Day Precipitation - March.

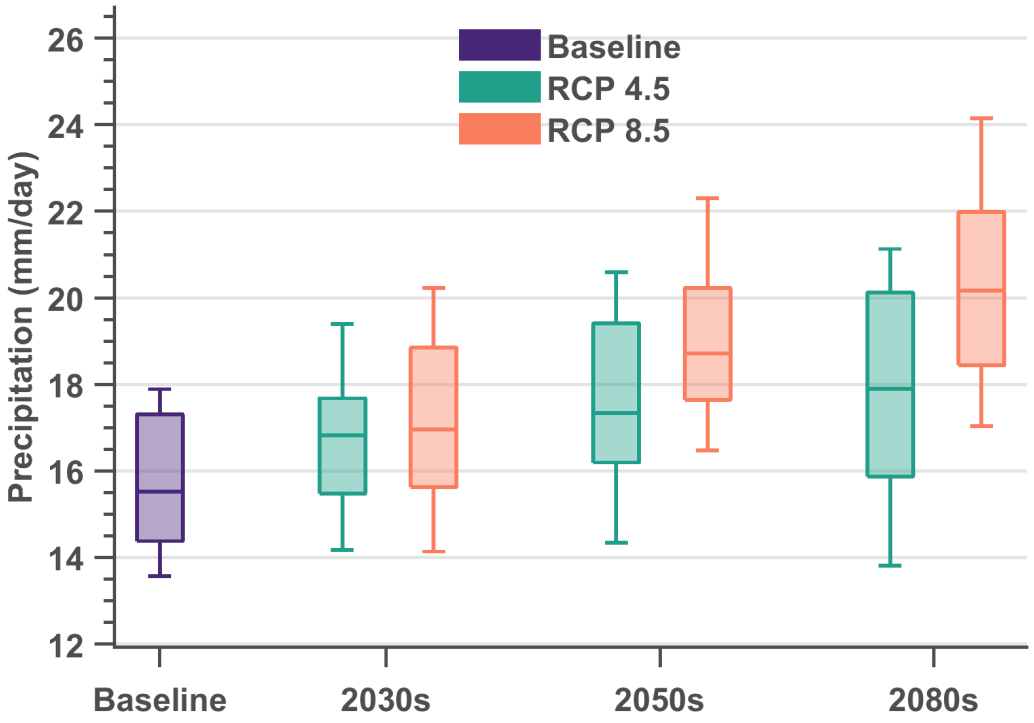


Figure F2.78: Monthly Max. 1-Day Precipitation - March.

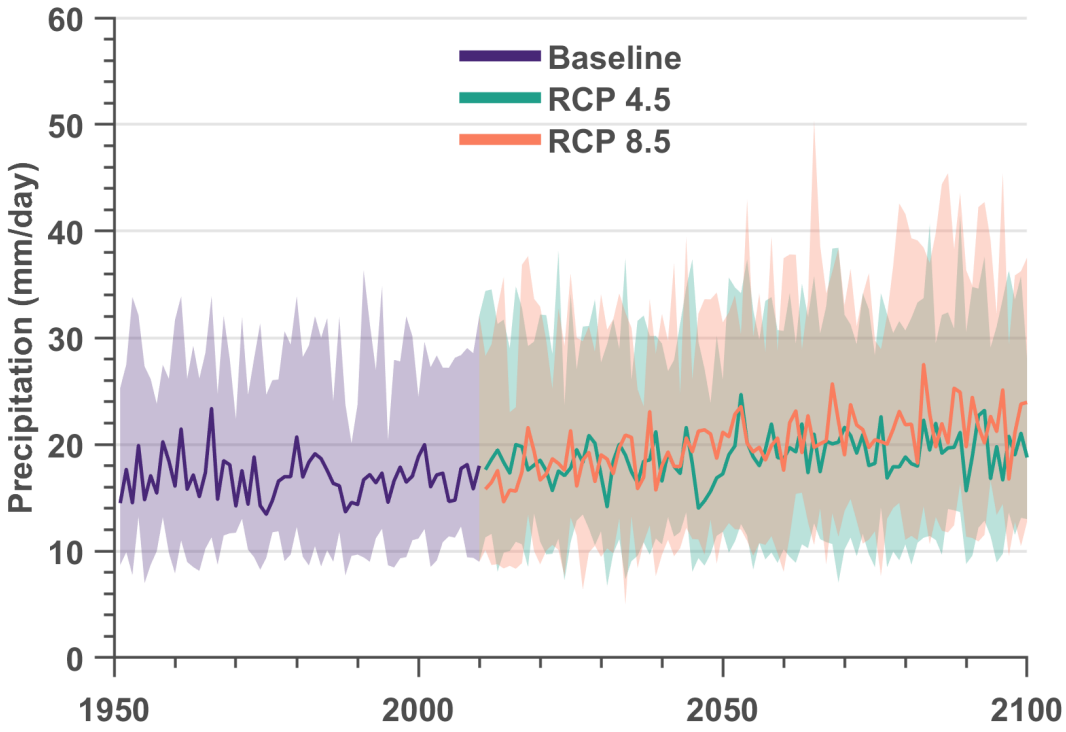


Figure F2.79: Monthly Max. 1-Day Precipitation - April.

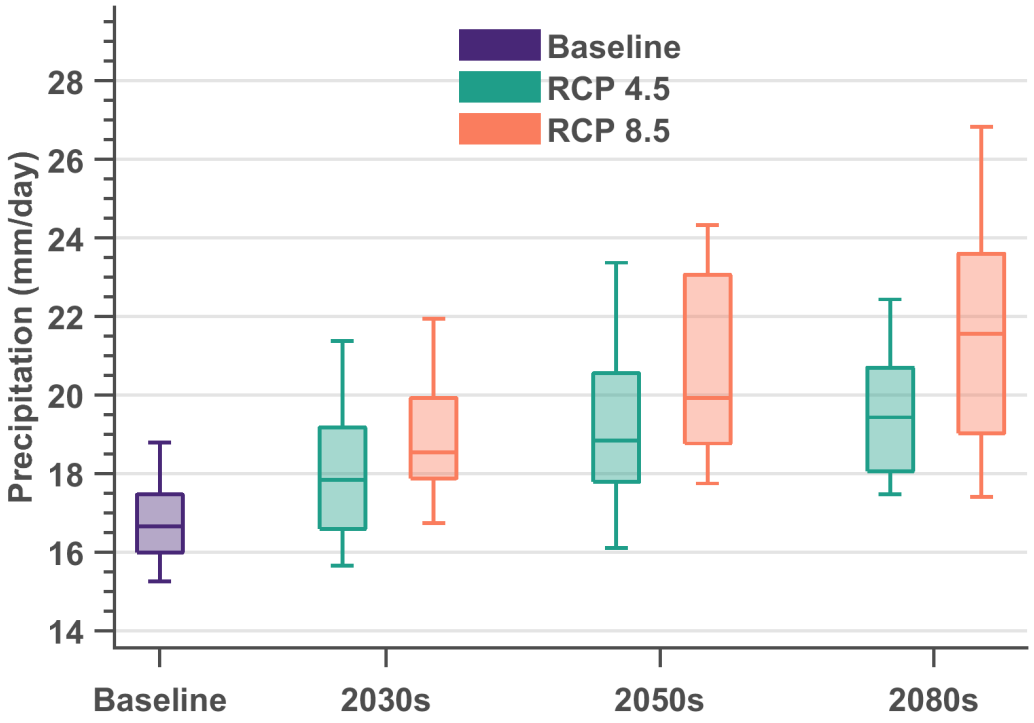


Figure F2.80: Monthly Max. 1-Day Precipitation - April.

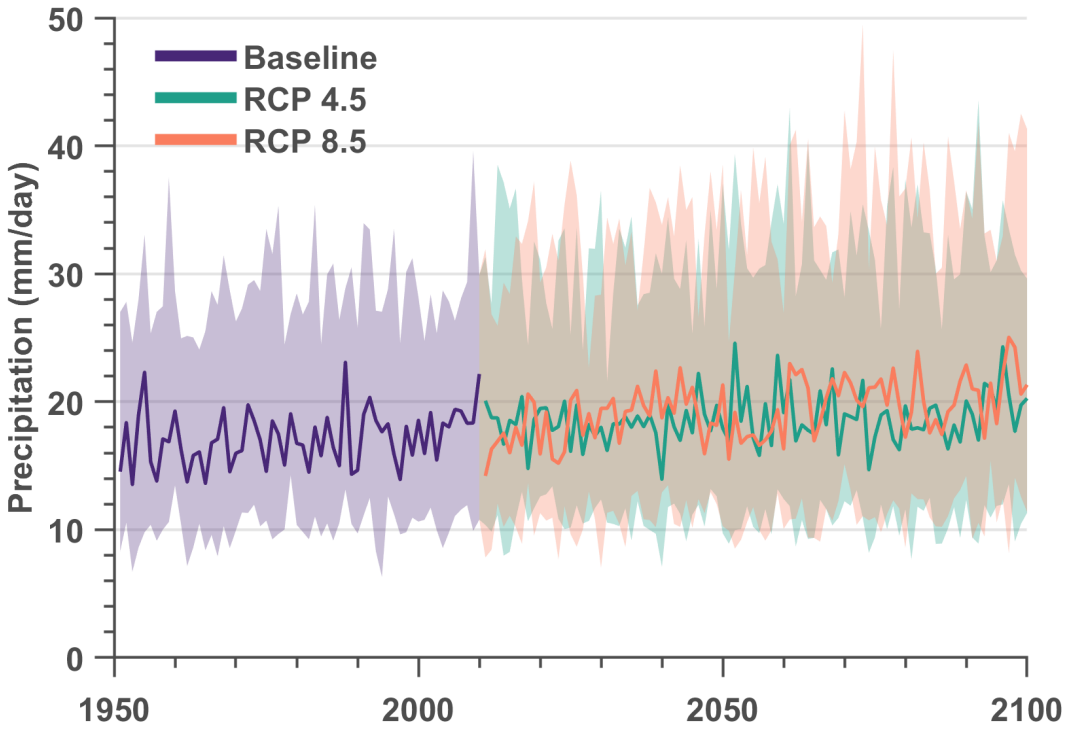


Figure F2.81: Monthly Max. 1-Day Precipitation - May.

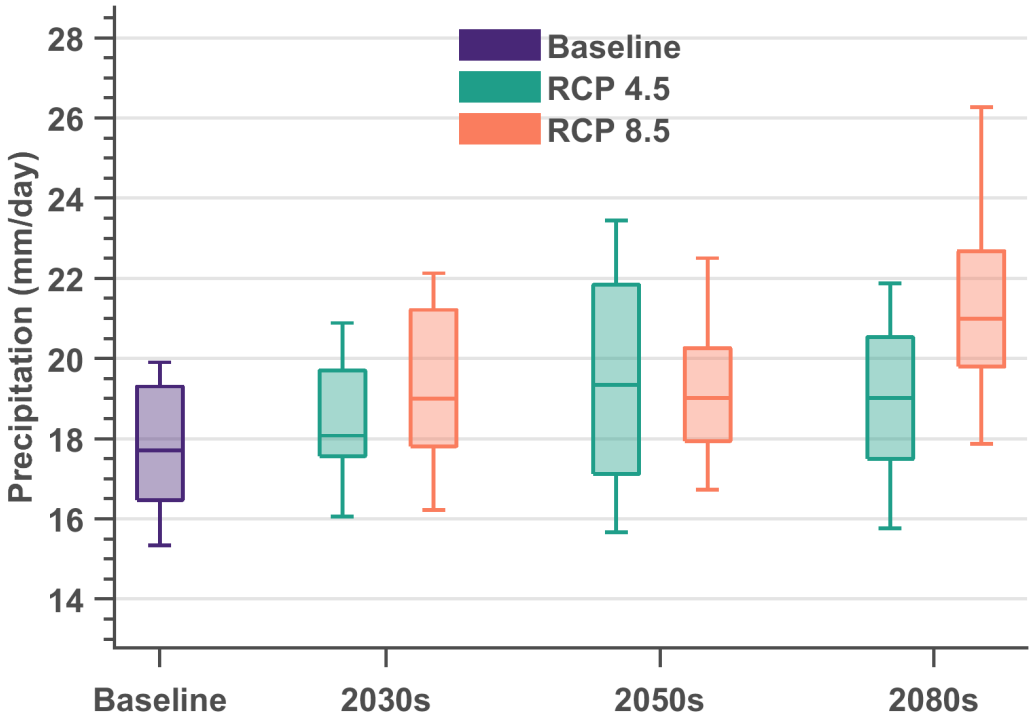


Figure F2.82: Monthly Max. 1-Day Precipitation - May.

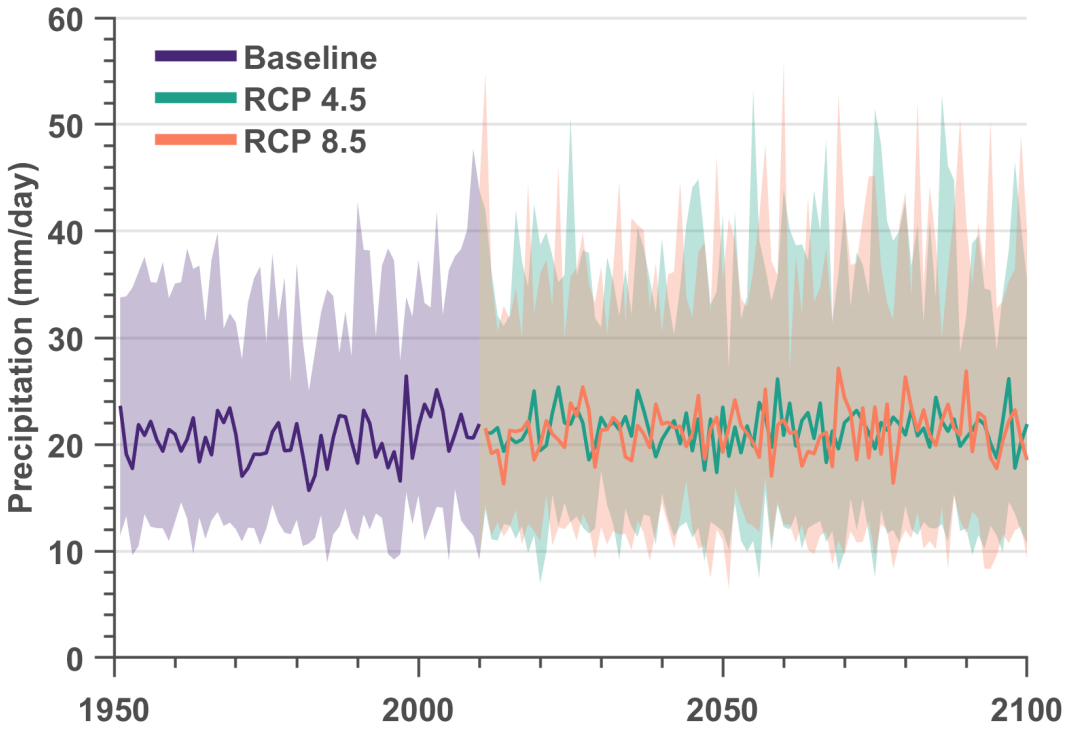


Figure F2.83: Monthly Max. 1-Day Precipitation - June.

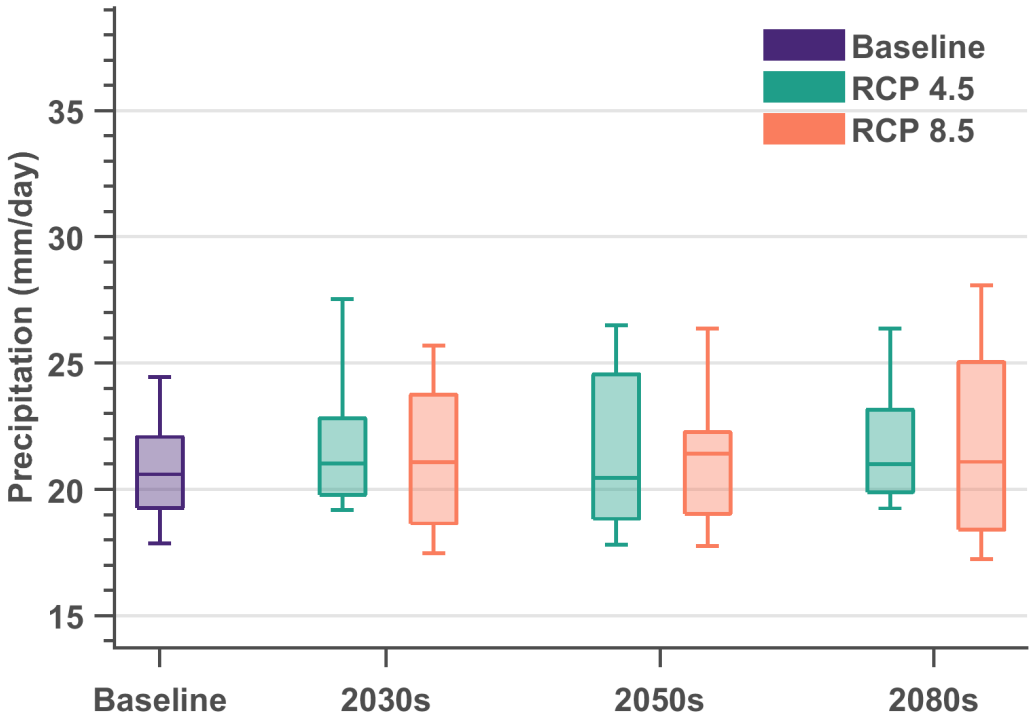


Figure F2.84: Monthly Max. 1-Day Precipitation - June.

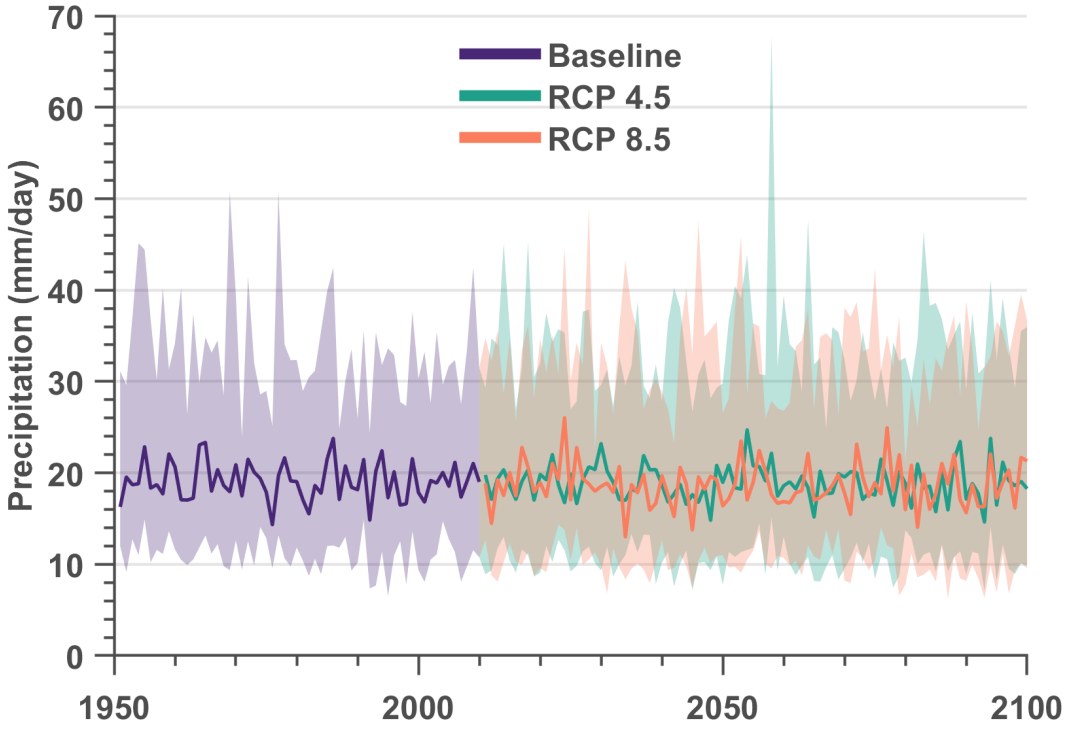


Figure F2.85: Monthly Max. 1-Day Precipitation - July.

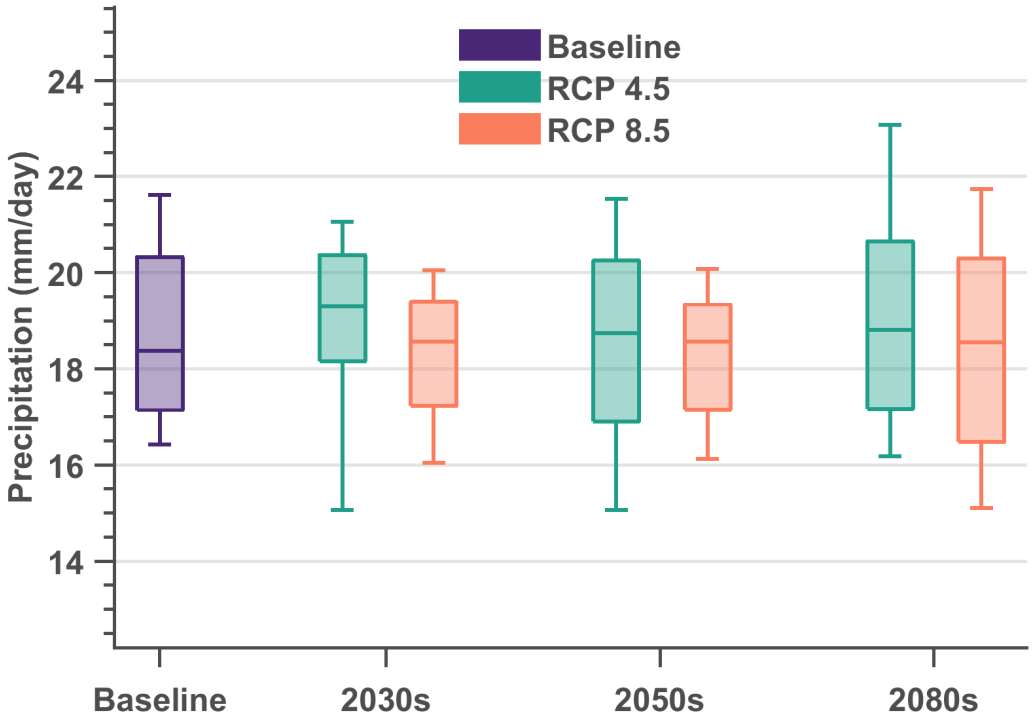


Figure F2.86: Monthly Max. 1-Day Precipitation - July.

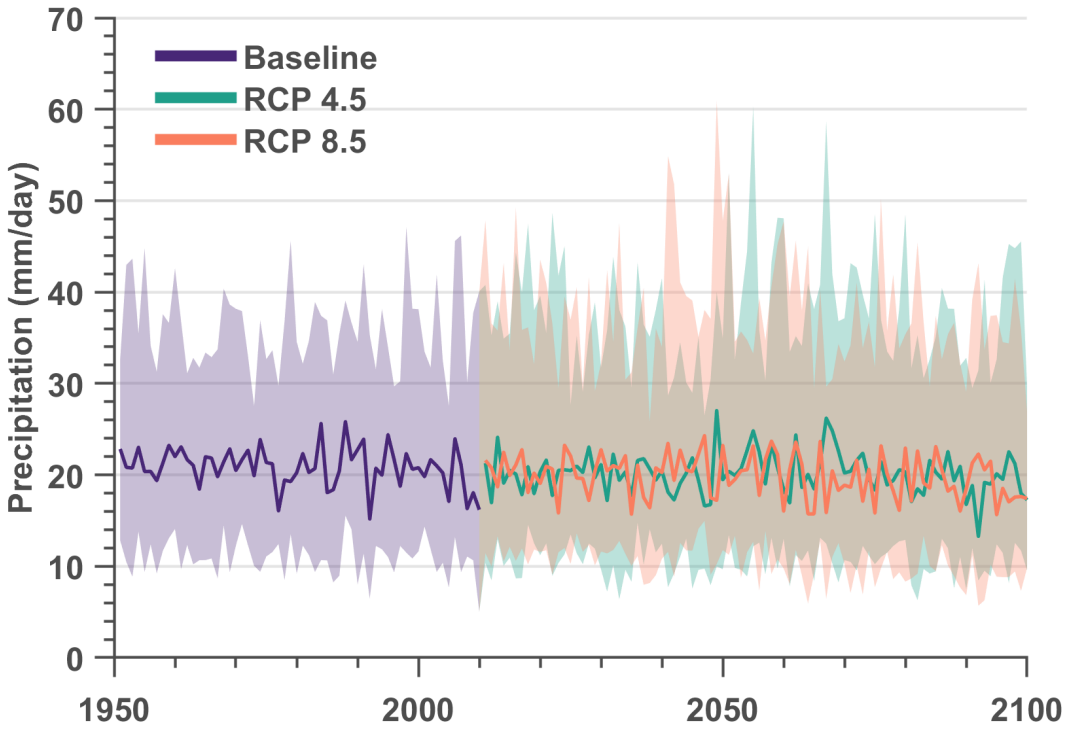


Figure F2.87: Monthly Max. 1-Day Precipitation - August.

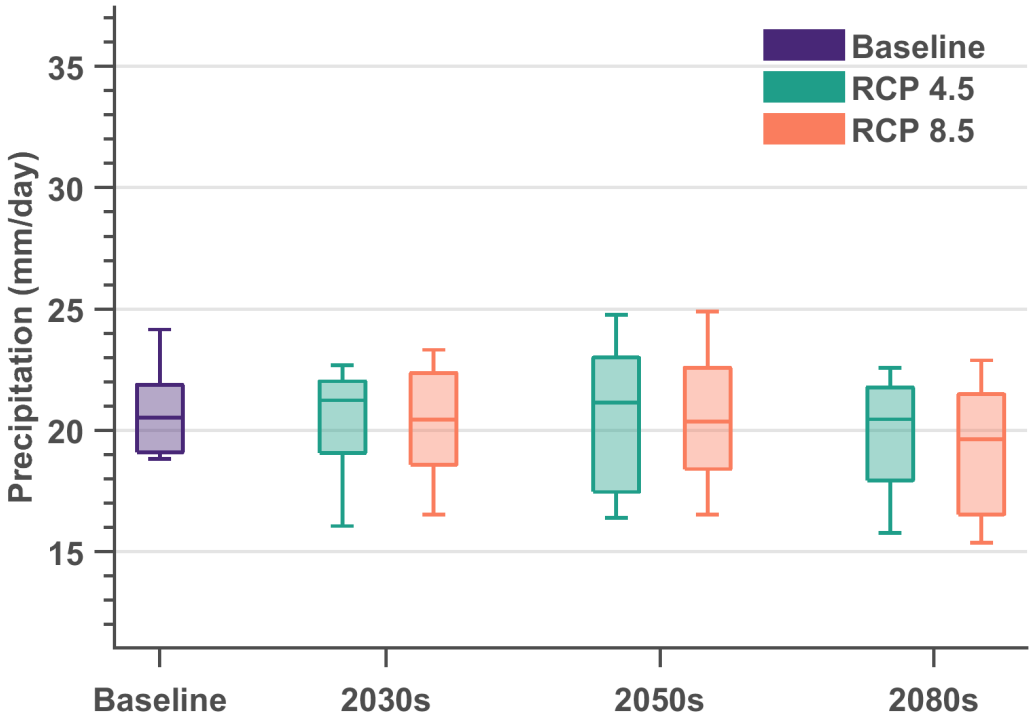


Figure F2.88: Monthly Max. 1-Day Precipitation - August.

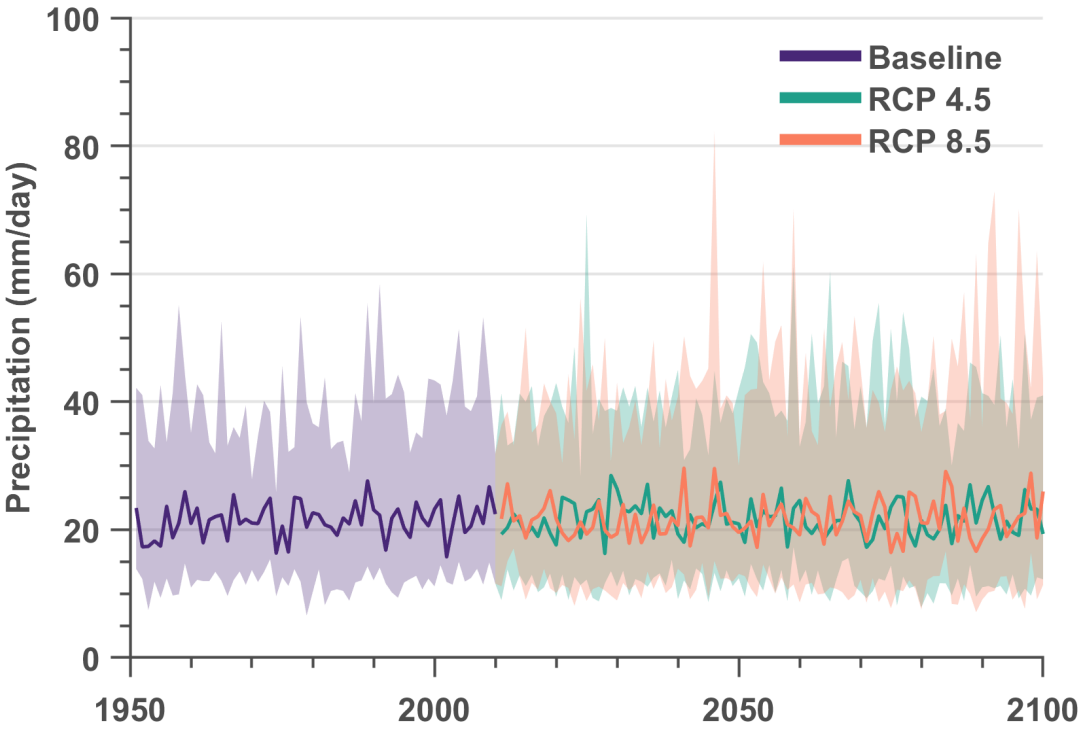


Figure F2.89: Monthly Max. 1-Day Precipitation - September.

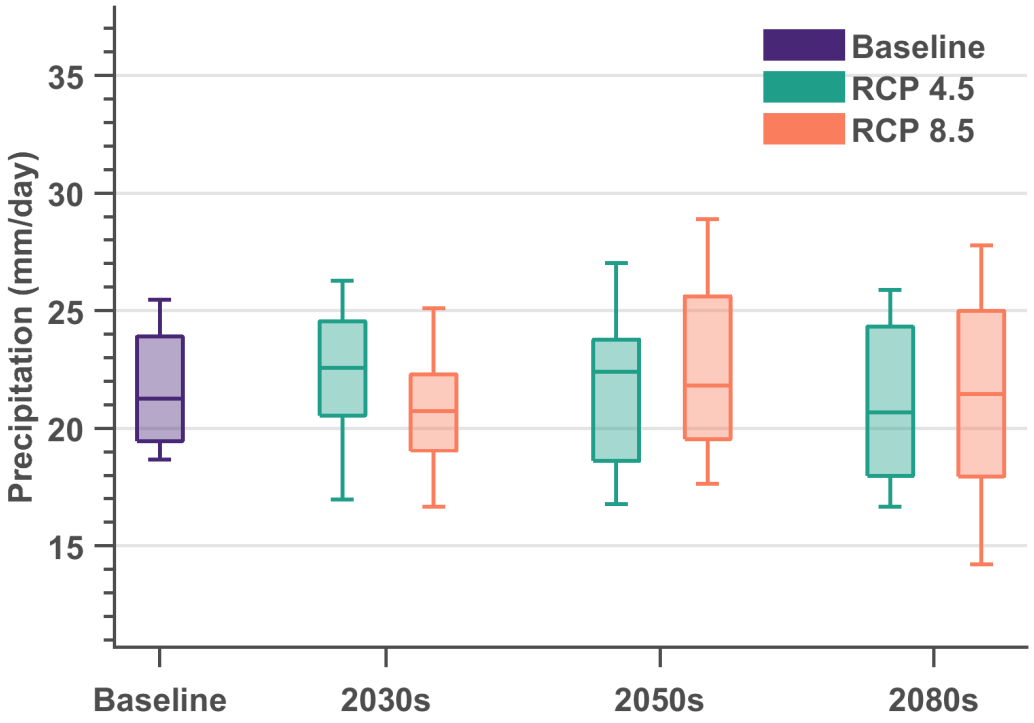


Figure F2.90: Monthly Max. 1-Day Precipitation - September.

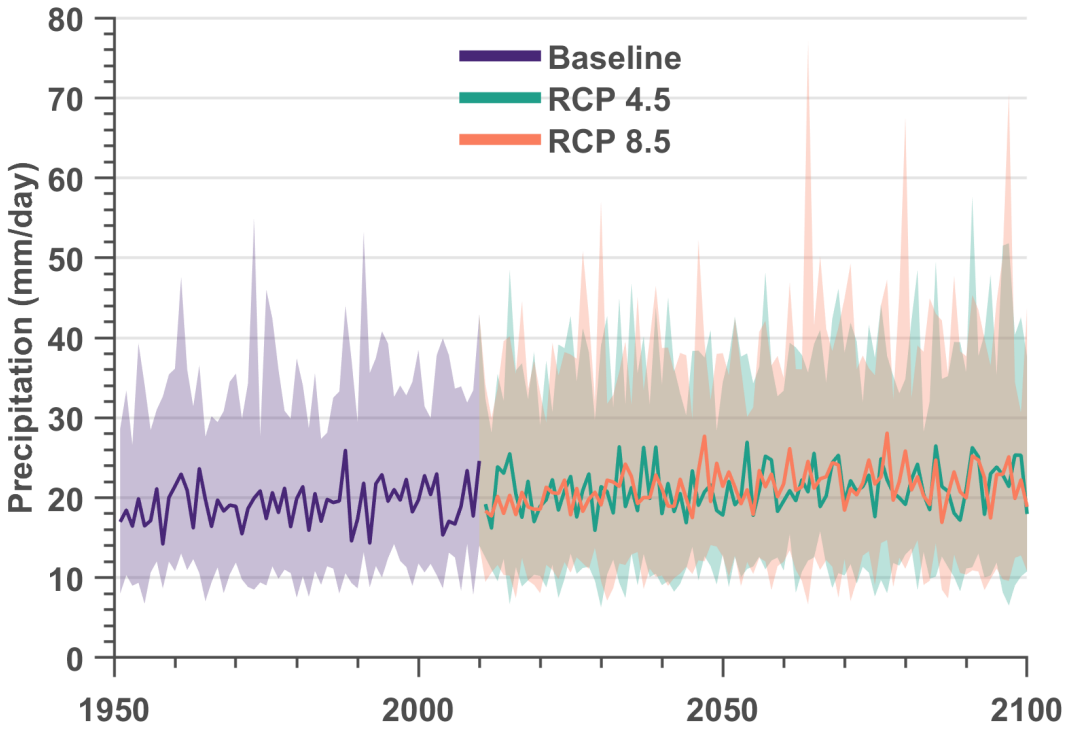


Figure F2.91: Monthly Max. 1-Day Precipitation - October.

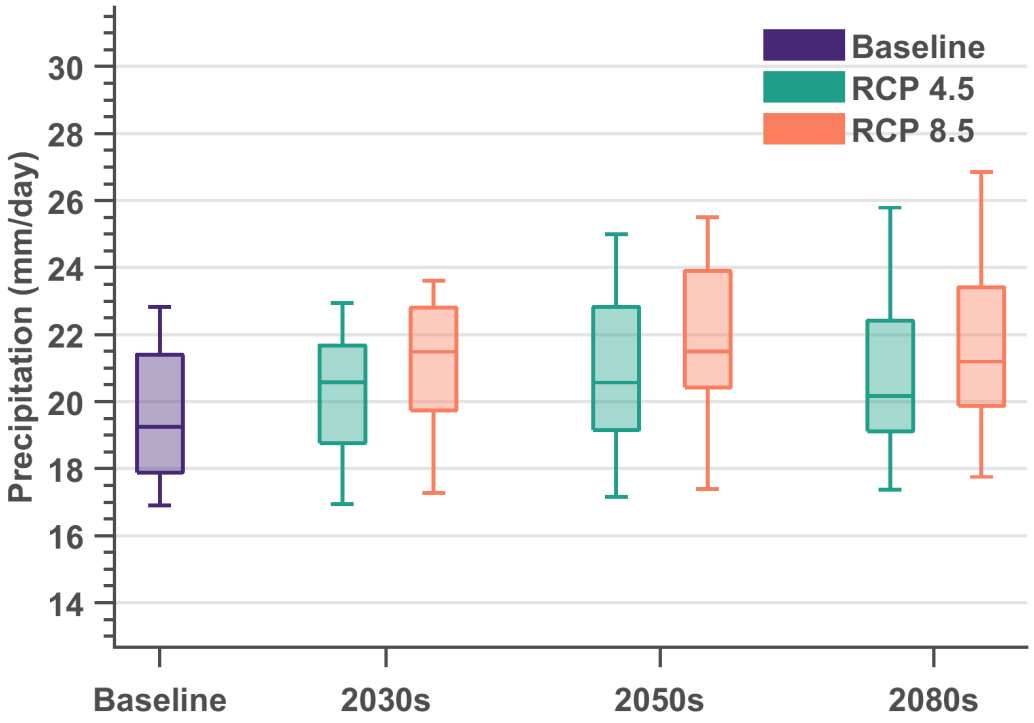


Figure F2.92: Monthly Max. 1-Day Precipitation - October.

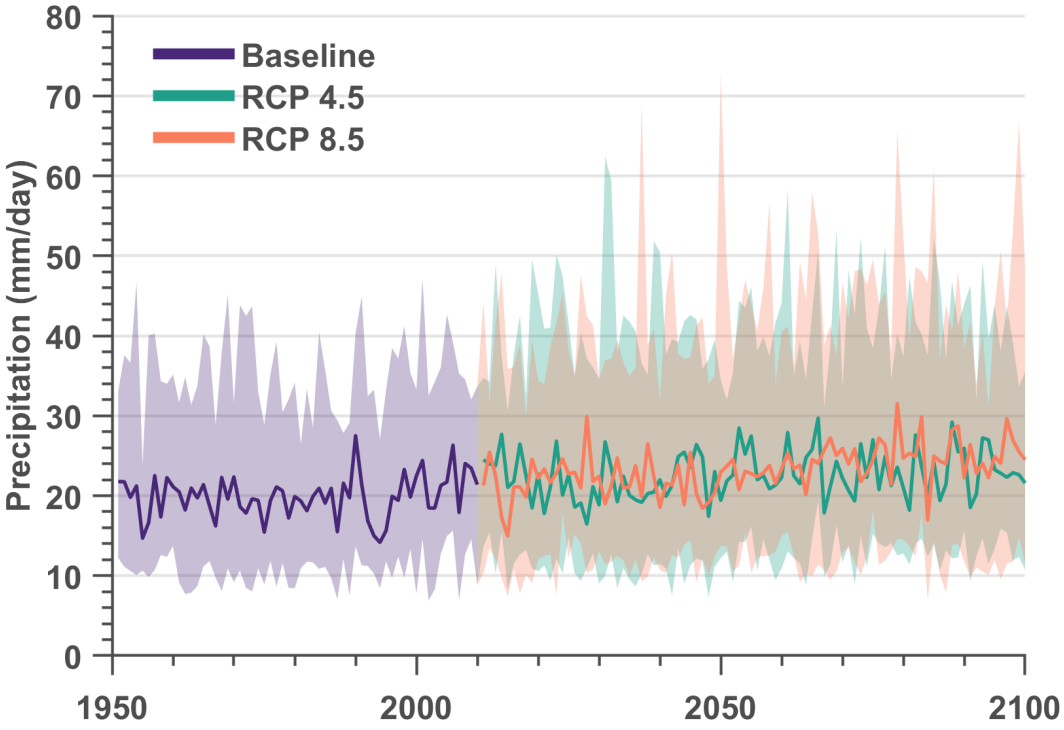


Figure F2.93: Monthly Max. 1-Day Precipitation - November.

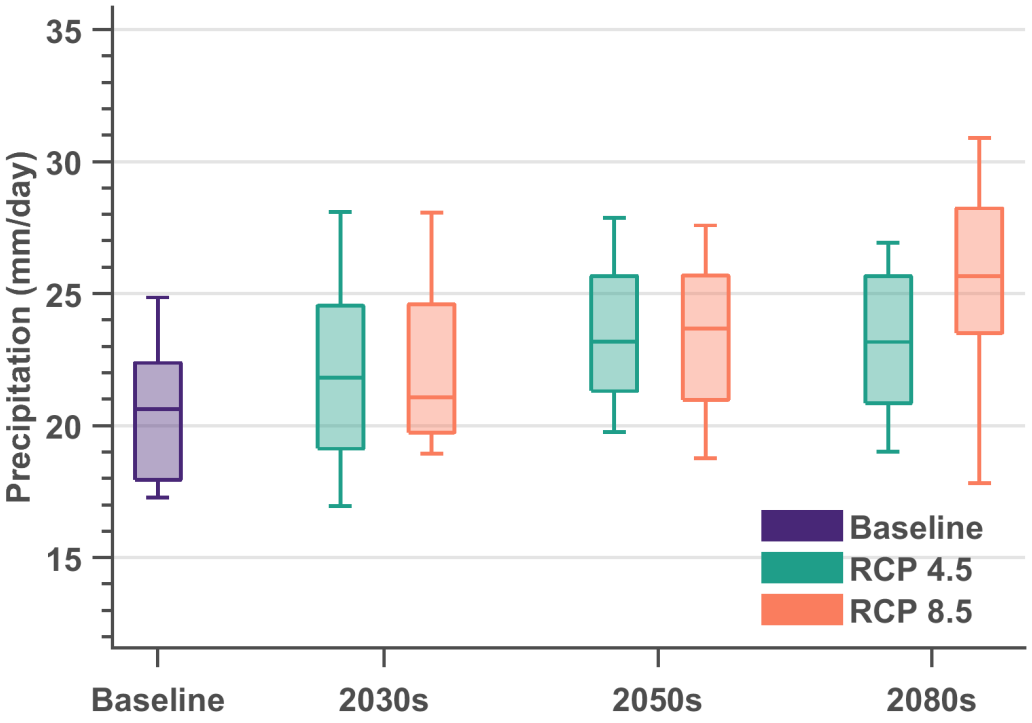


Figure F2.94: Monthly Max. 1-Day Precipitation - November.

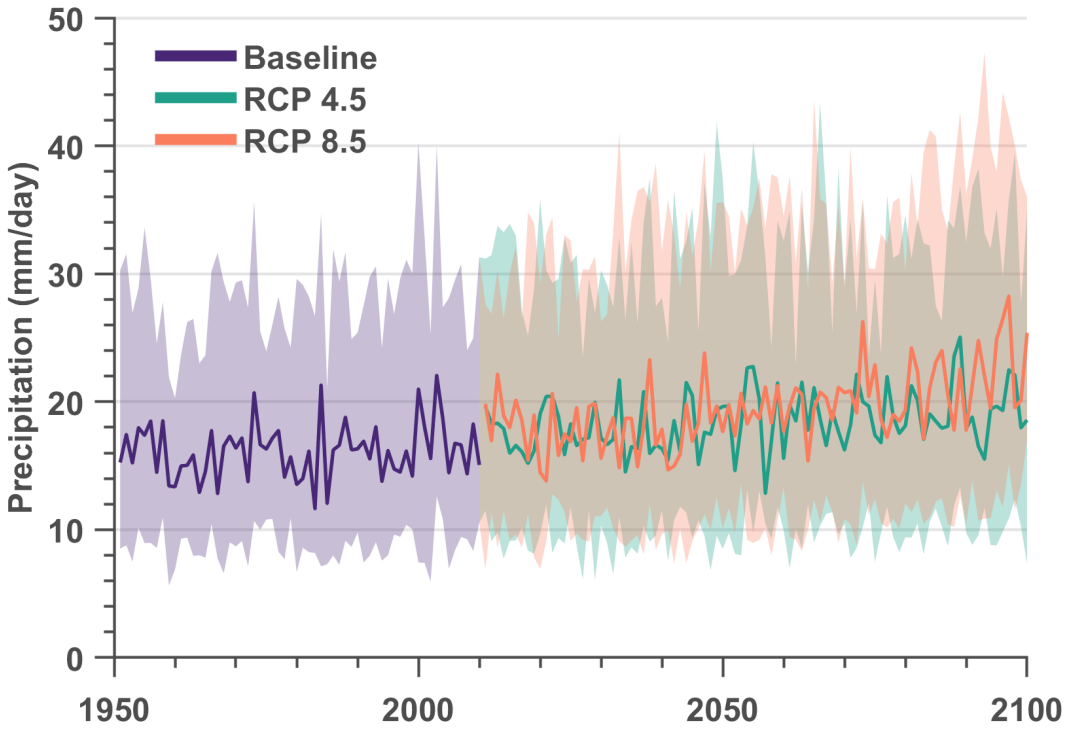


Figure F2.95: Monthly Max. 1-Day Precipitation - December.

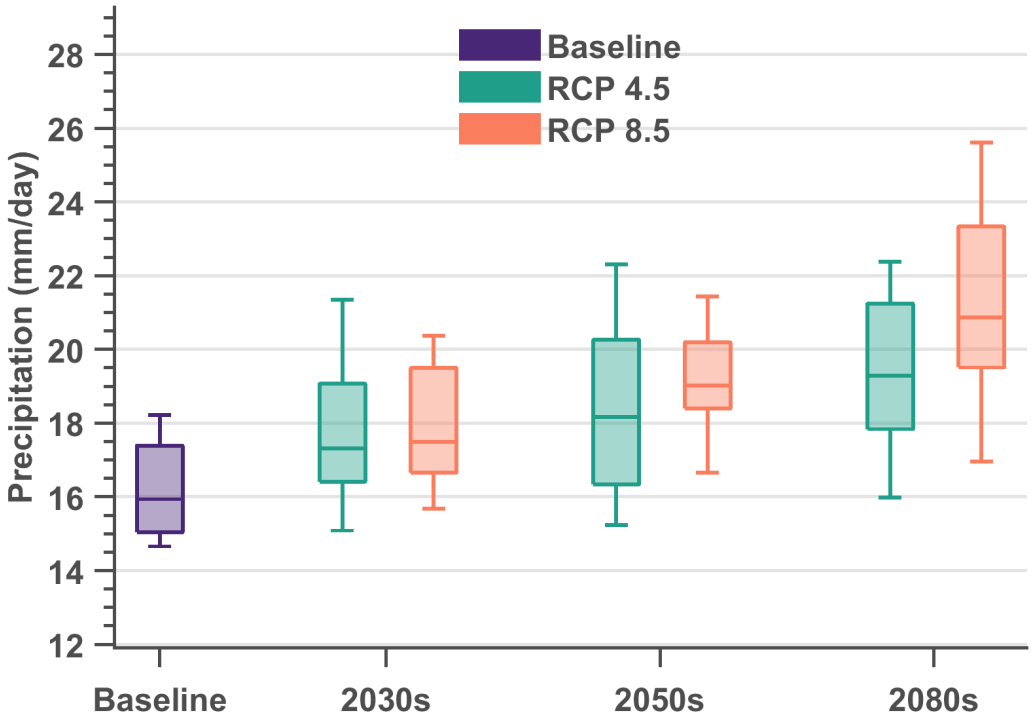


Figure F2.96: Monthly Max. 1-Day Precipitation - December.

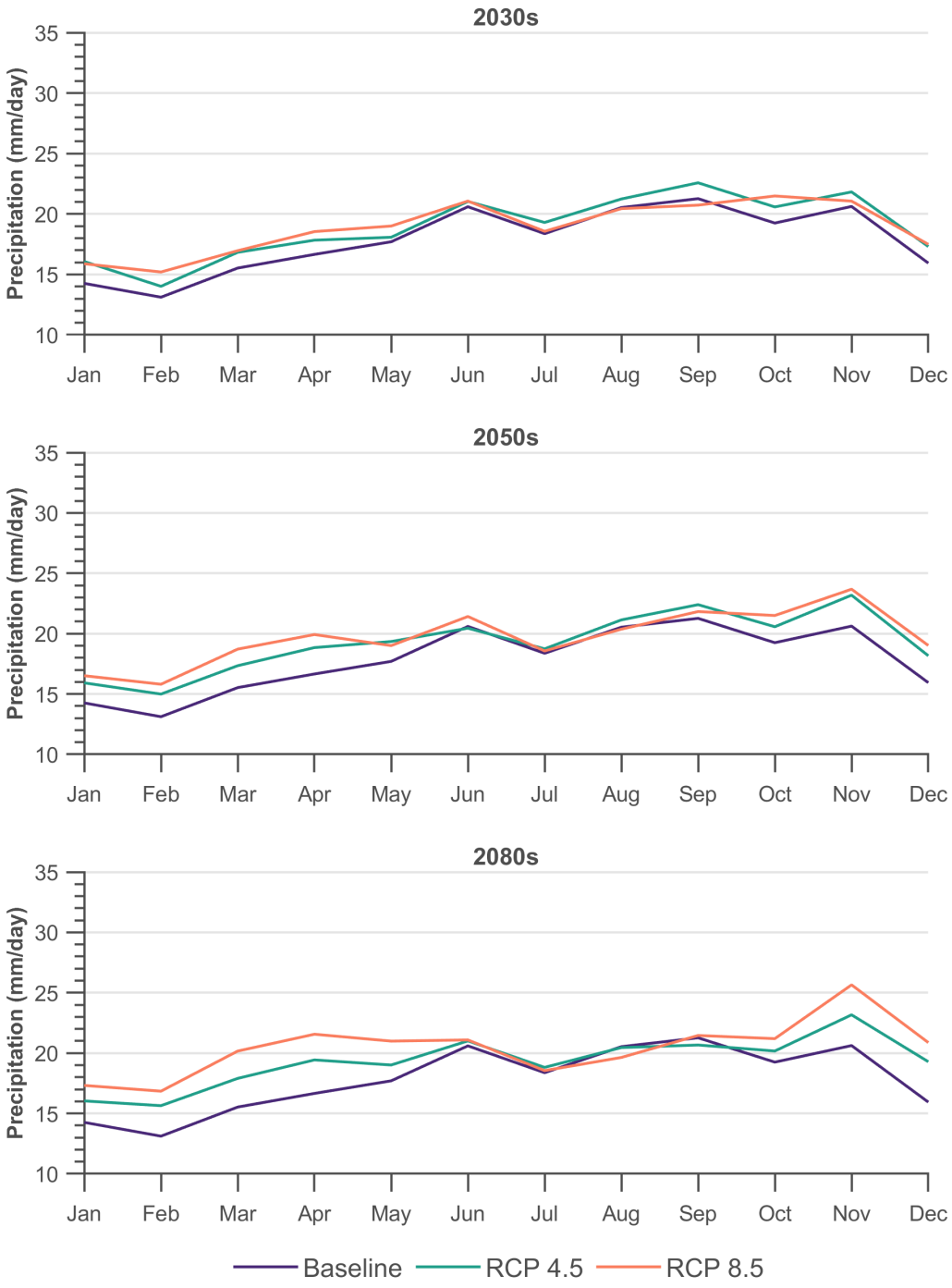


Figure F2.97: Monthly Max. 1-Day Precipitation.

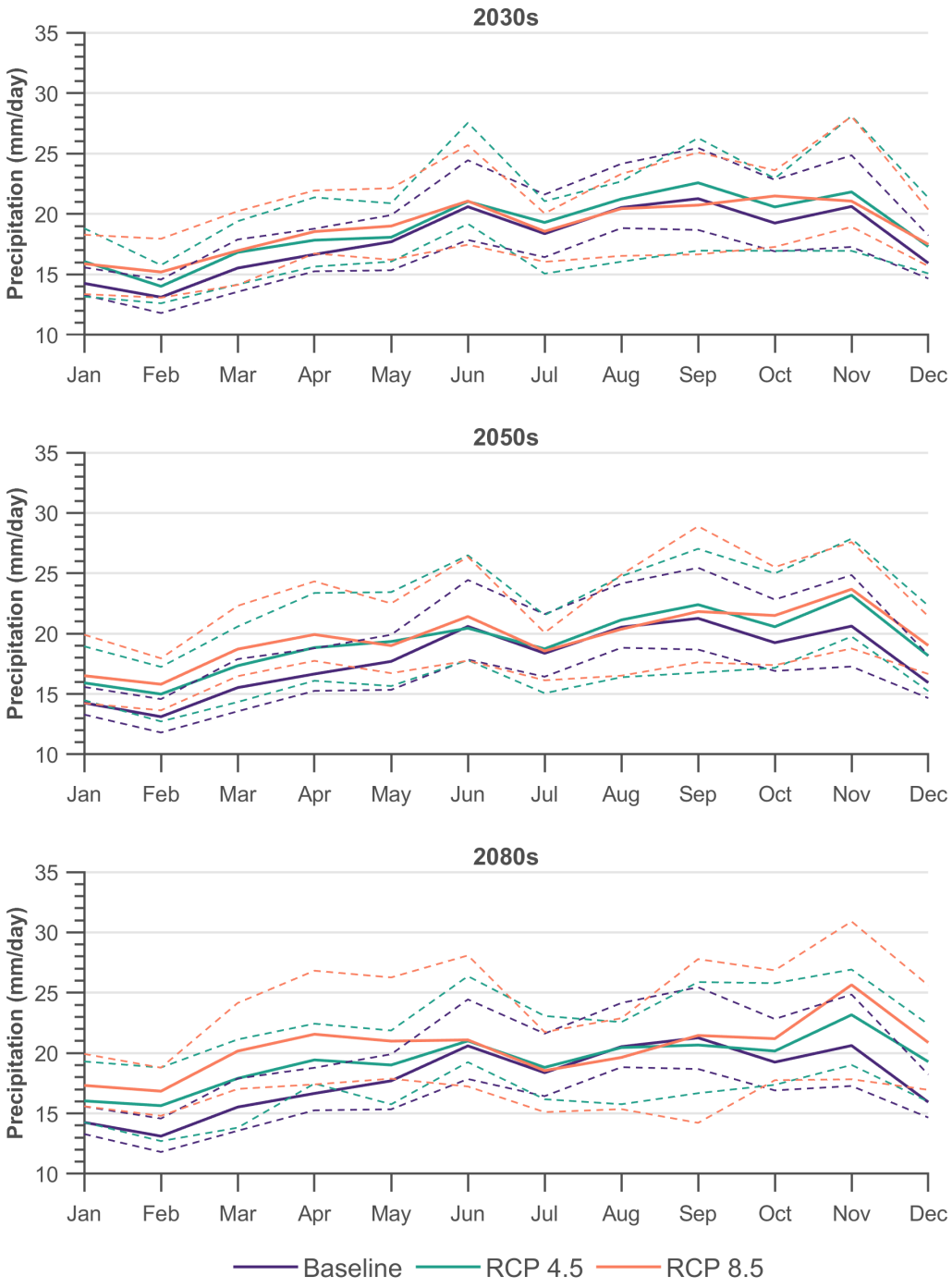


Figure F2.98: Monthly Max. 1-Day Precipitation. Dashed lines indicate the 10% and 90% percentile.

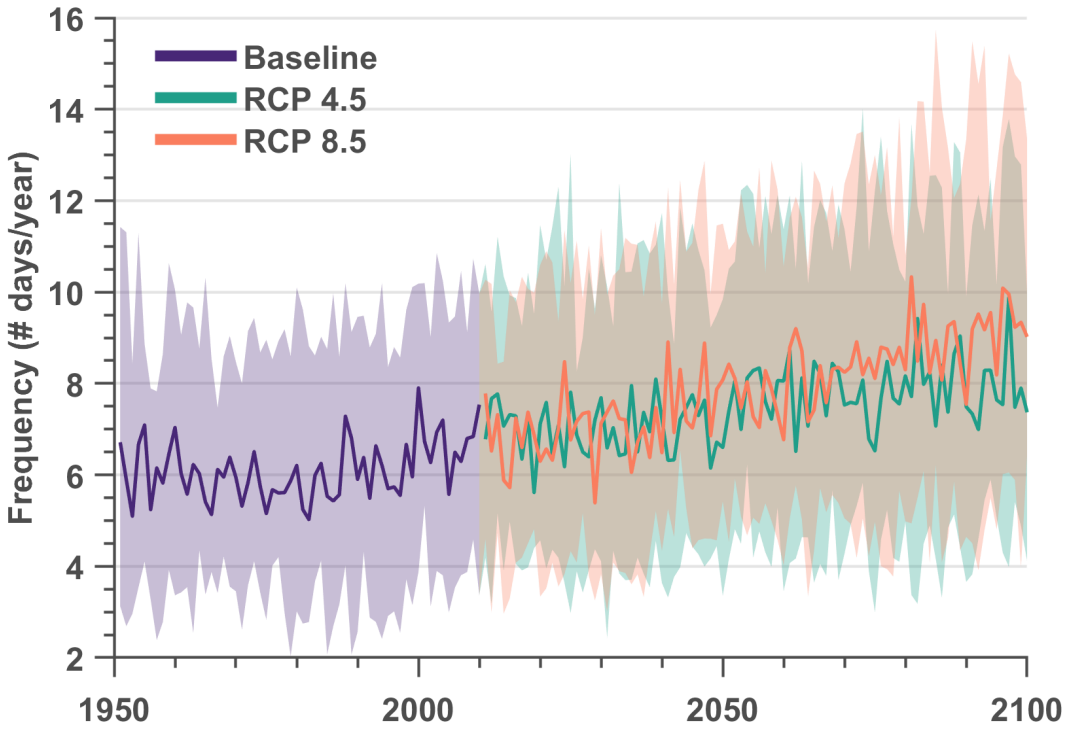


Figure F2.99: Number of Days Precipitation > 20 mm.

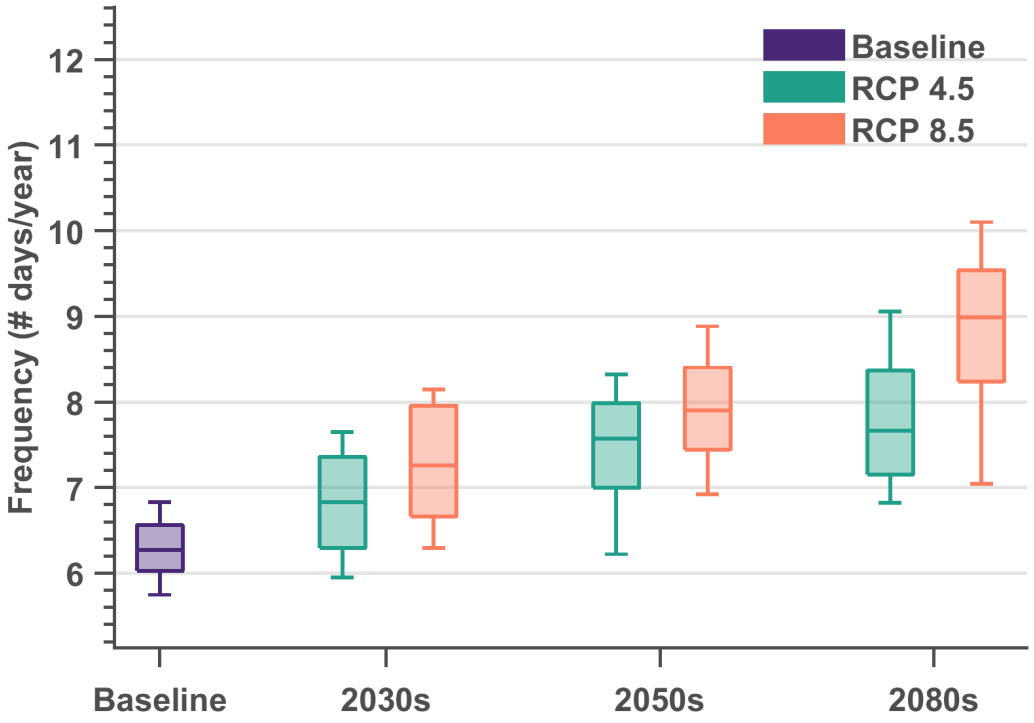


Figure F2.100: Number of Days Precipitation > 20 mm.

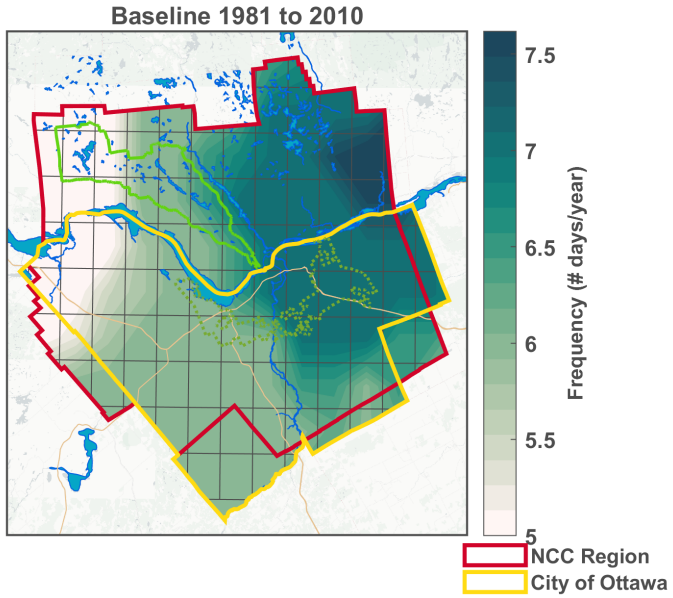


Figure F2.101: Number of Days Precipitation > 20 mm - Baseline.

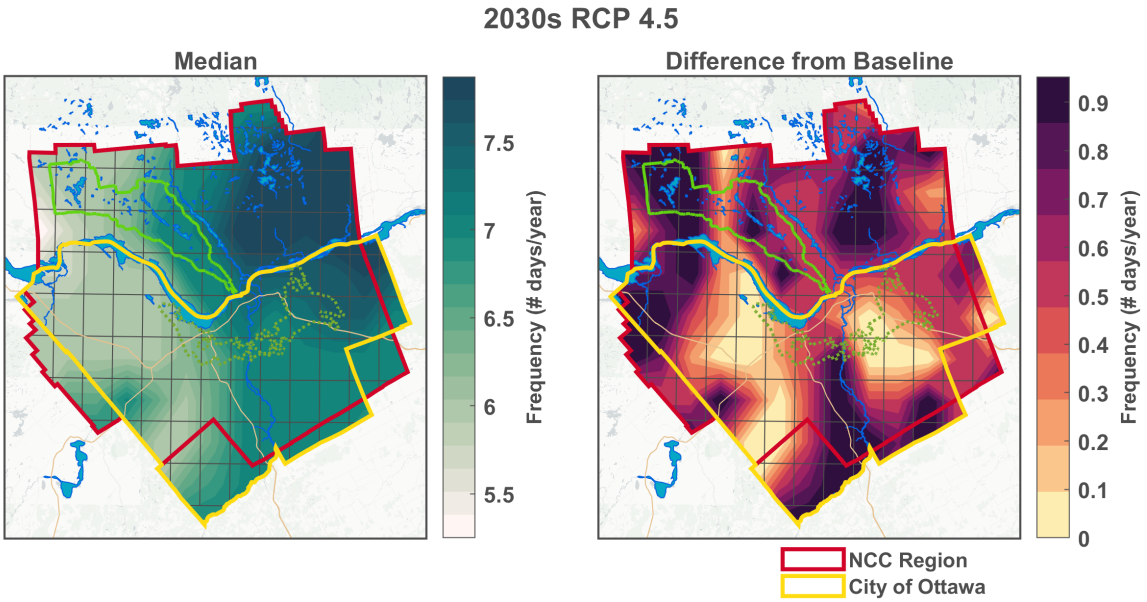


Figure F2.102: Number of Days Precipitation > 20 mm - 2030s RCP 4.5.

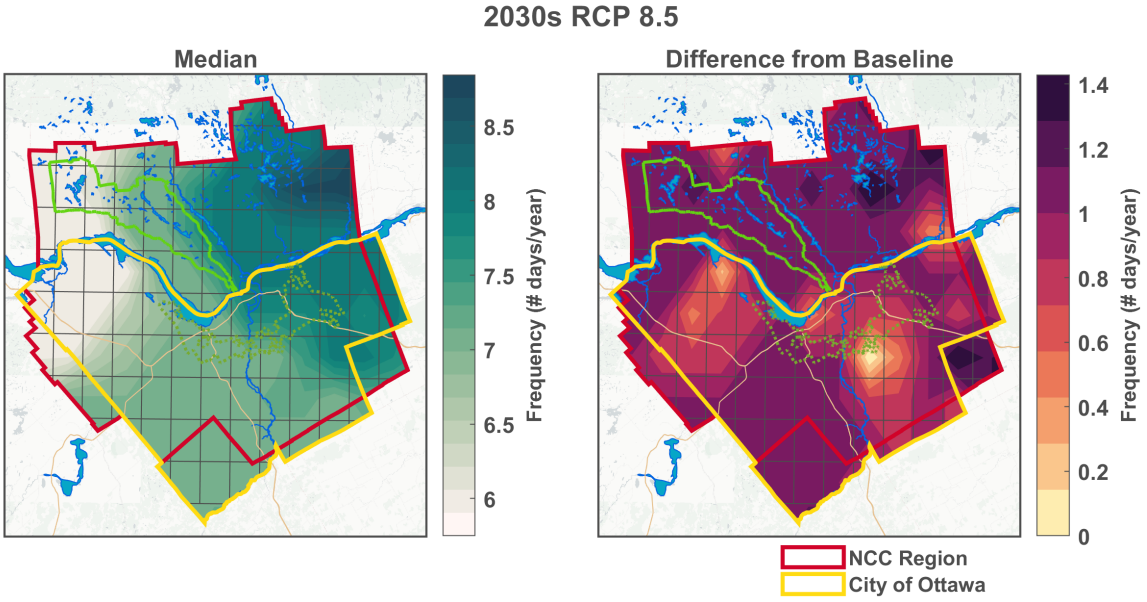


Figure F2.103: Number of Days Precipitation > 20 mm - 2030s RCP 8.5.

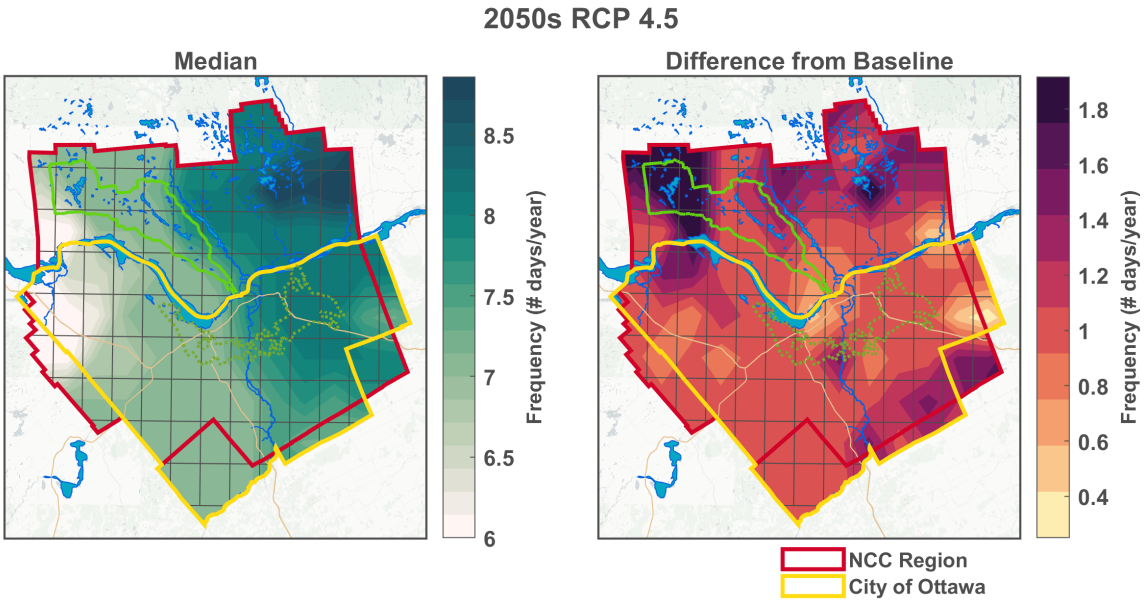


Figure F2.104: Number of Days Precipitation > 20 mm - 2050s RCP 4.5.

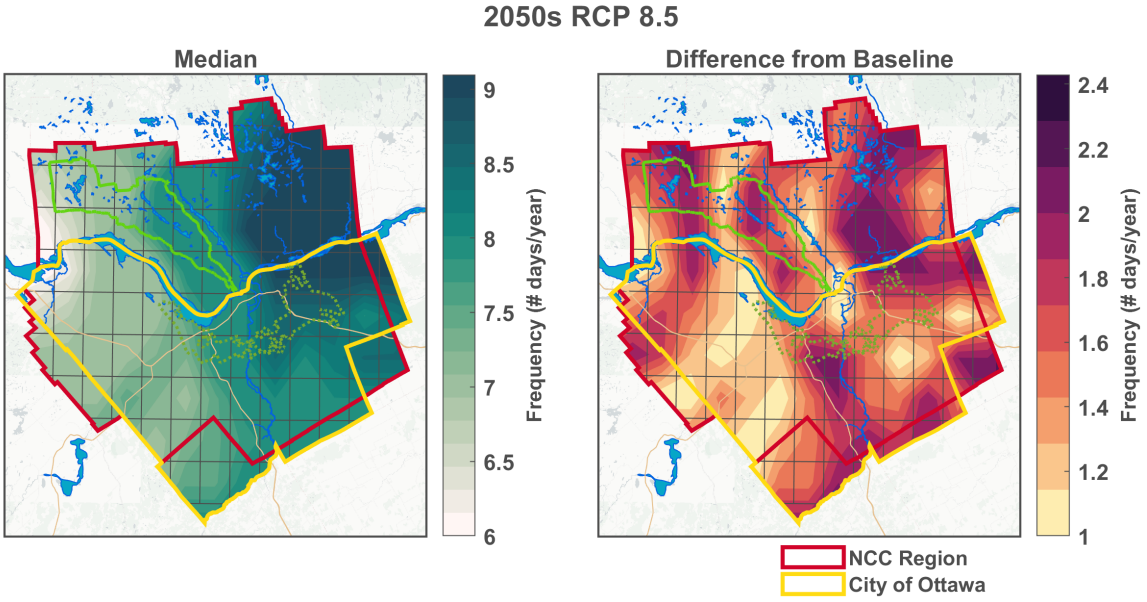


Figure F2.105: Number of Days Precipitation > 20 mm - 2050s RCP 8.5.

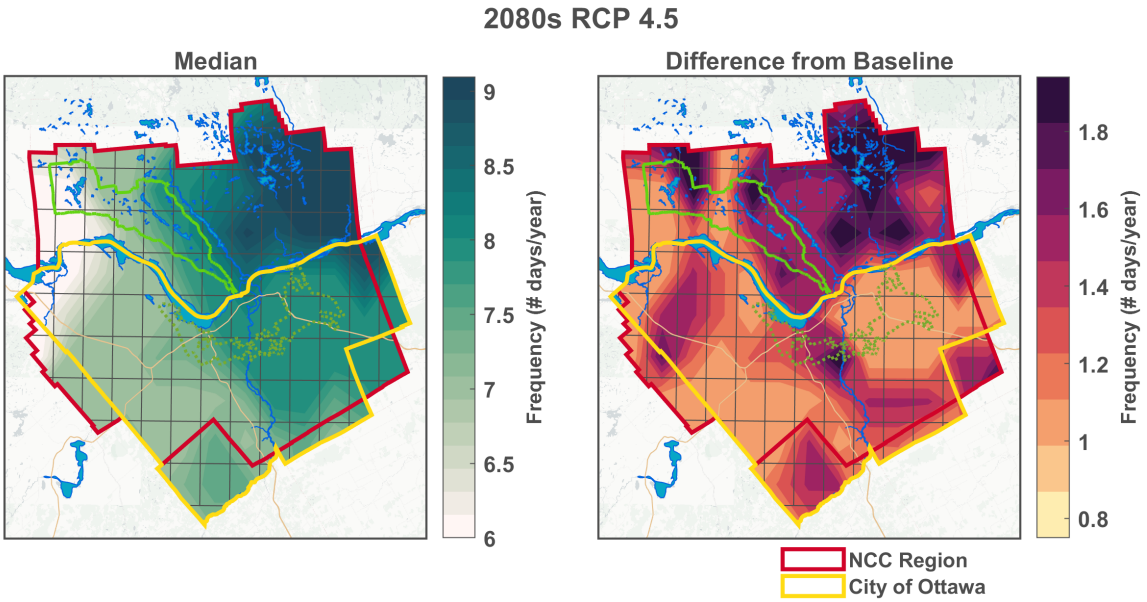


Figure F2.106: Number of Days Precipitation > 20 mm - 2080s RCP 4.5.

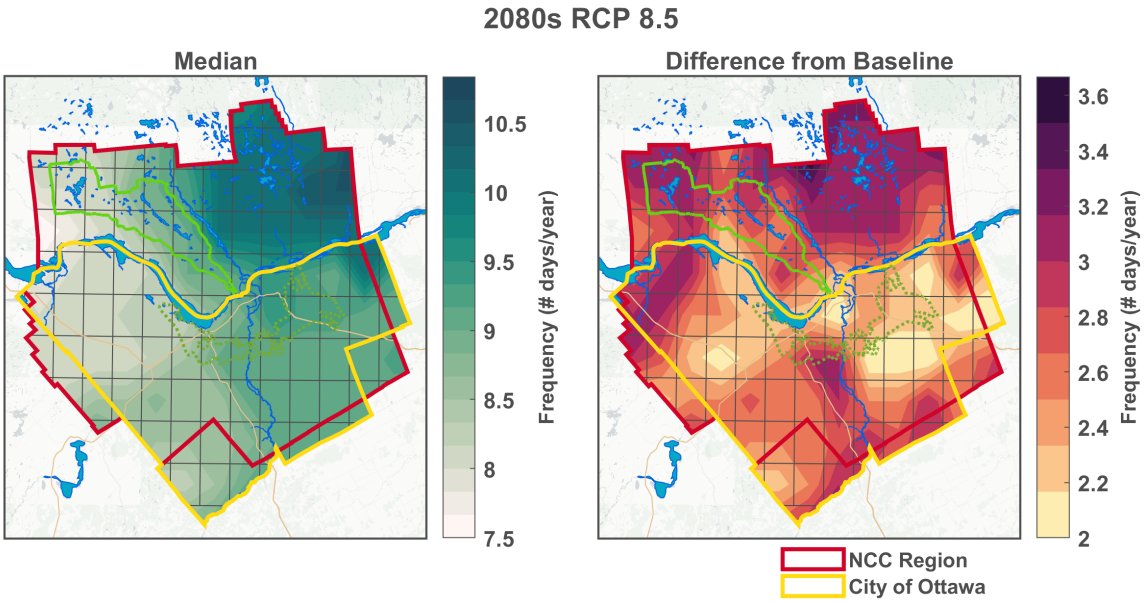


Figure F2.107: Number of Days Precipitation > 20 mm - 2080s RCP 8.5.

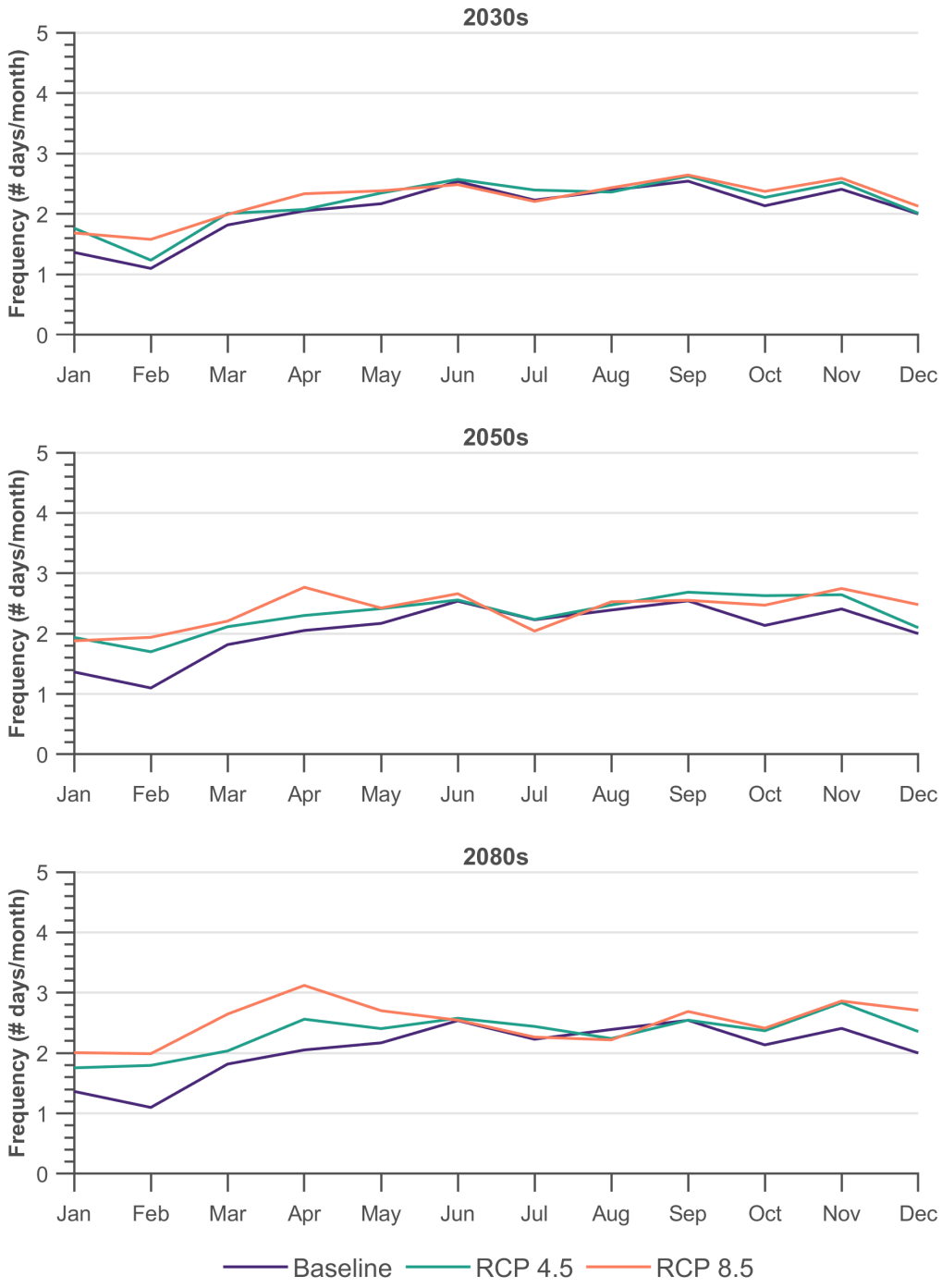


Figure F2.108: Monthly Number of Days Precipitation > 10mm.

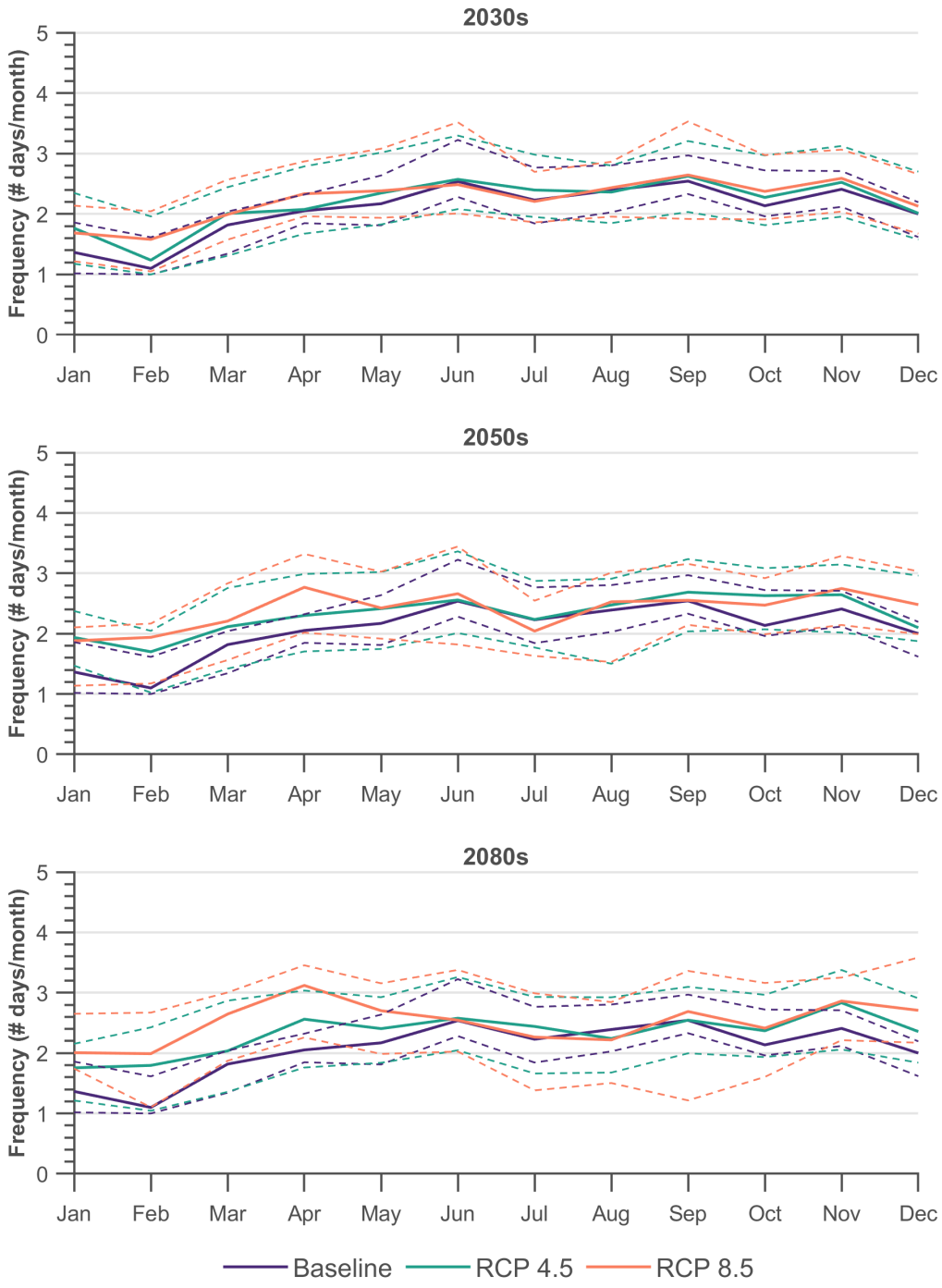


Figure F2.109: Monthly Number of Days Precipitation > 10mm. Dashed lines indicate the 10% and 90% percentile.

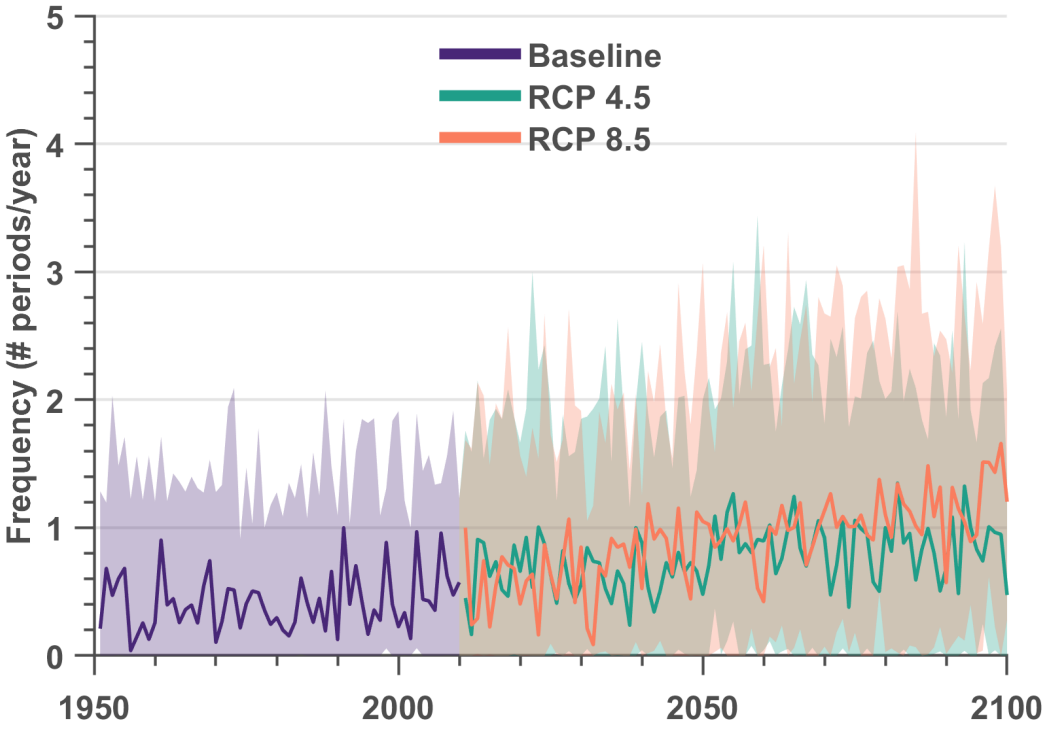


Figure F2.110: Number of 2-Day Precipitation > 50 mm.

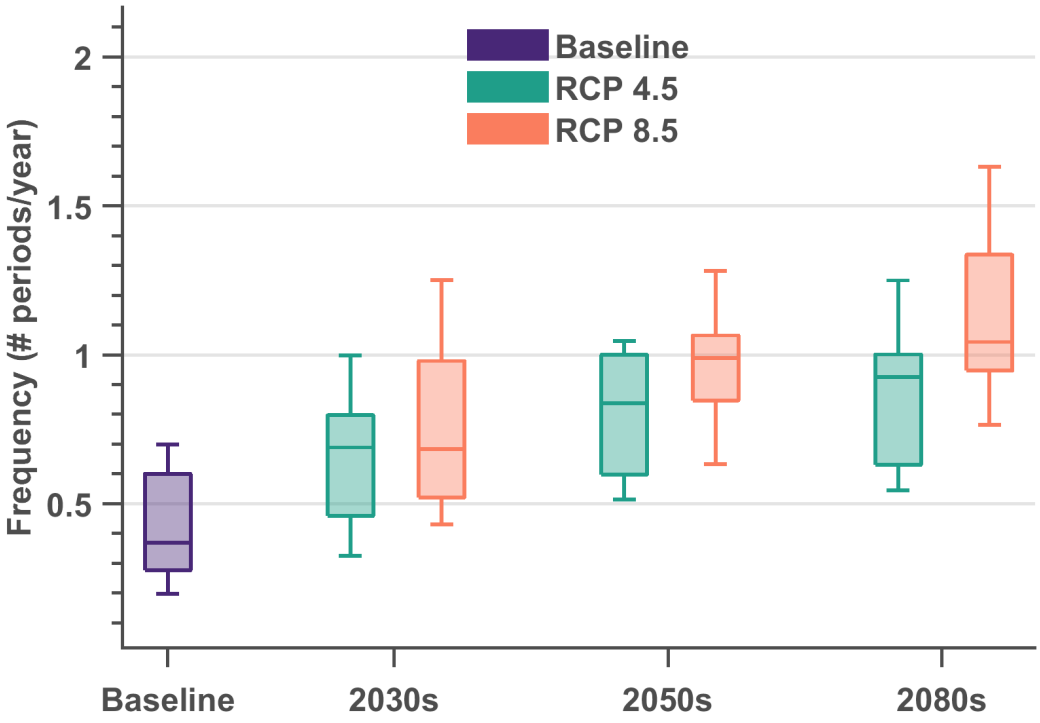


Figure F2.111: Number of 2-Day Precipitation > 50 mm.

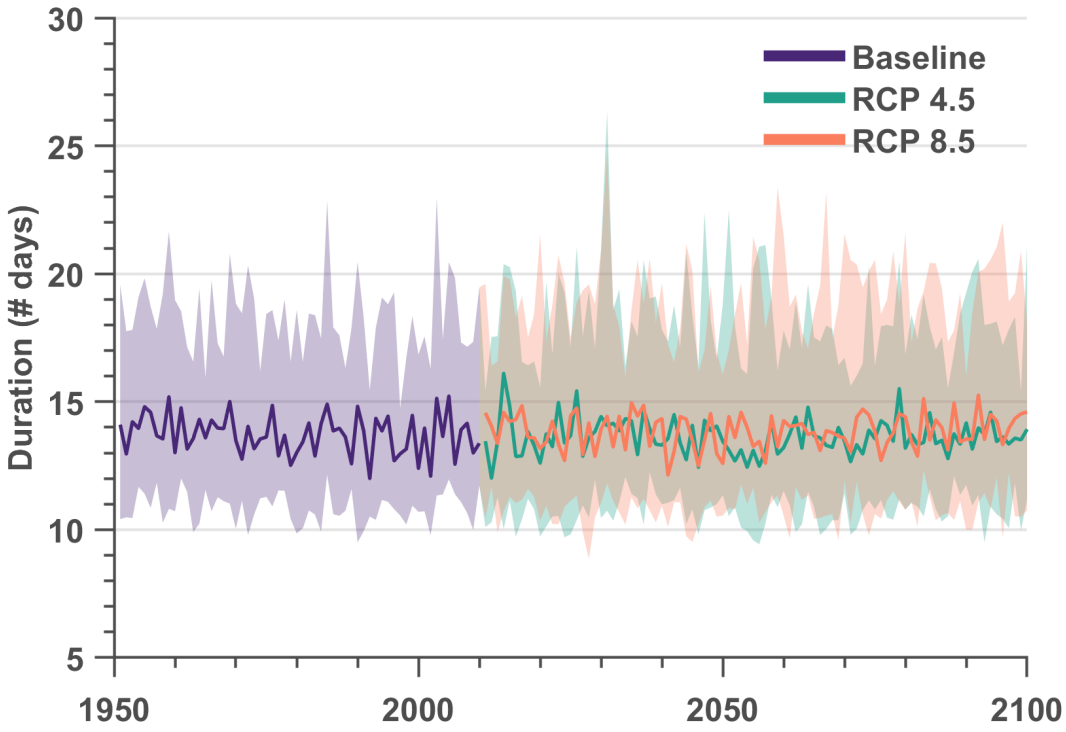


Figure F2.112: Max. Length of Dry Spell.

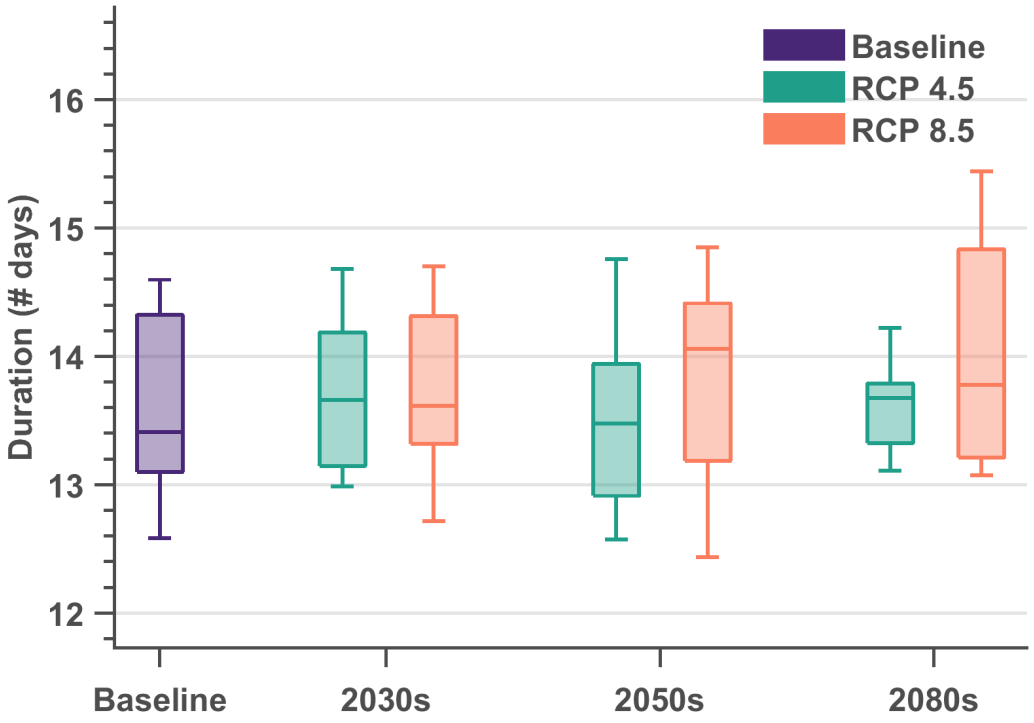


Figure F2.113: Max. Length of Dry Spell.

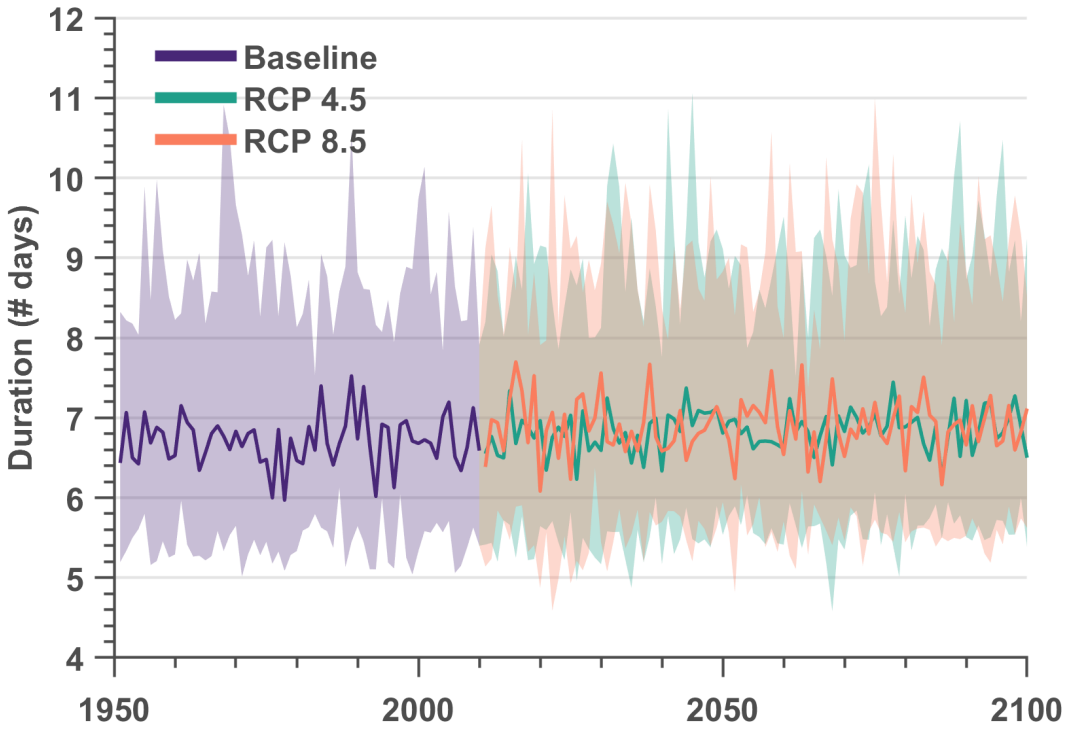


Figure F2.114: Max. Length of Wet Spell.

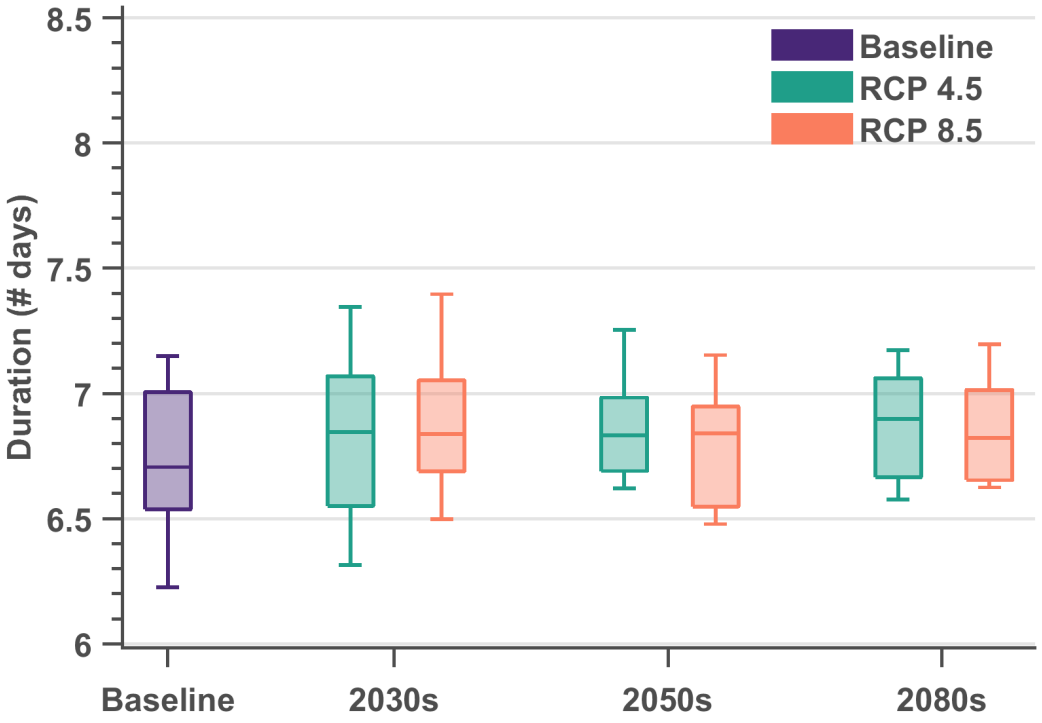


Figure F2.115: Max. Length of Wet Spell.

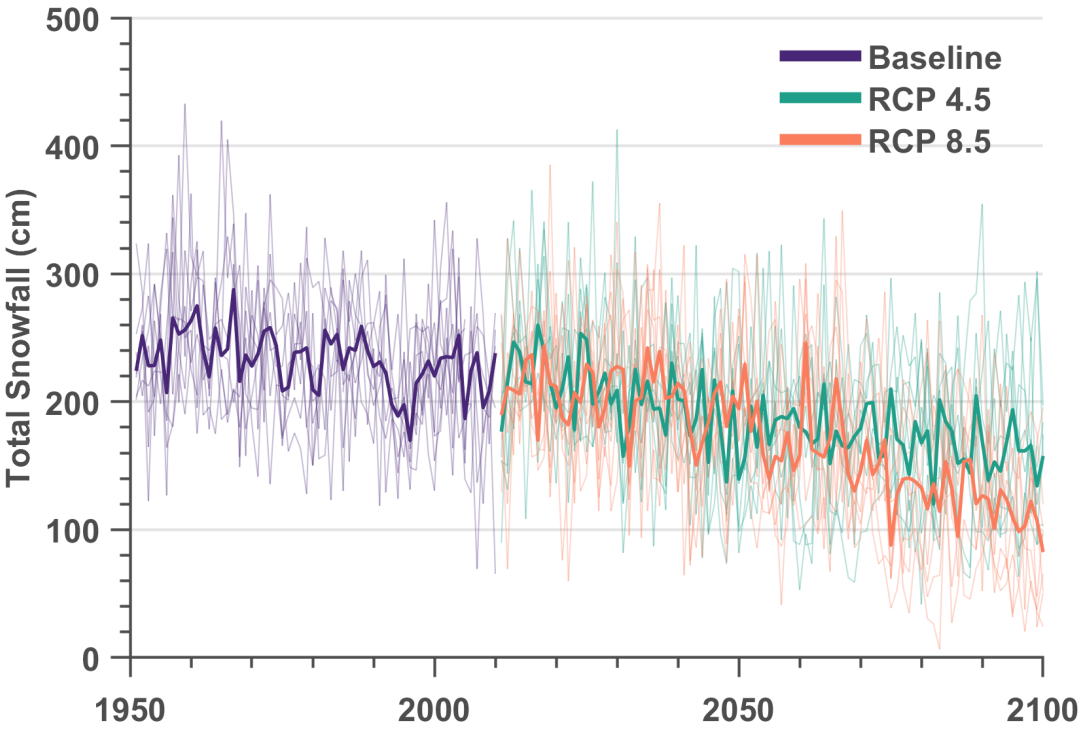


Figure F2.116: Annual Total Snowfall.

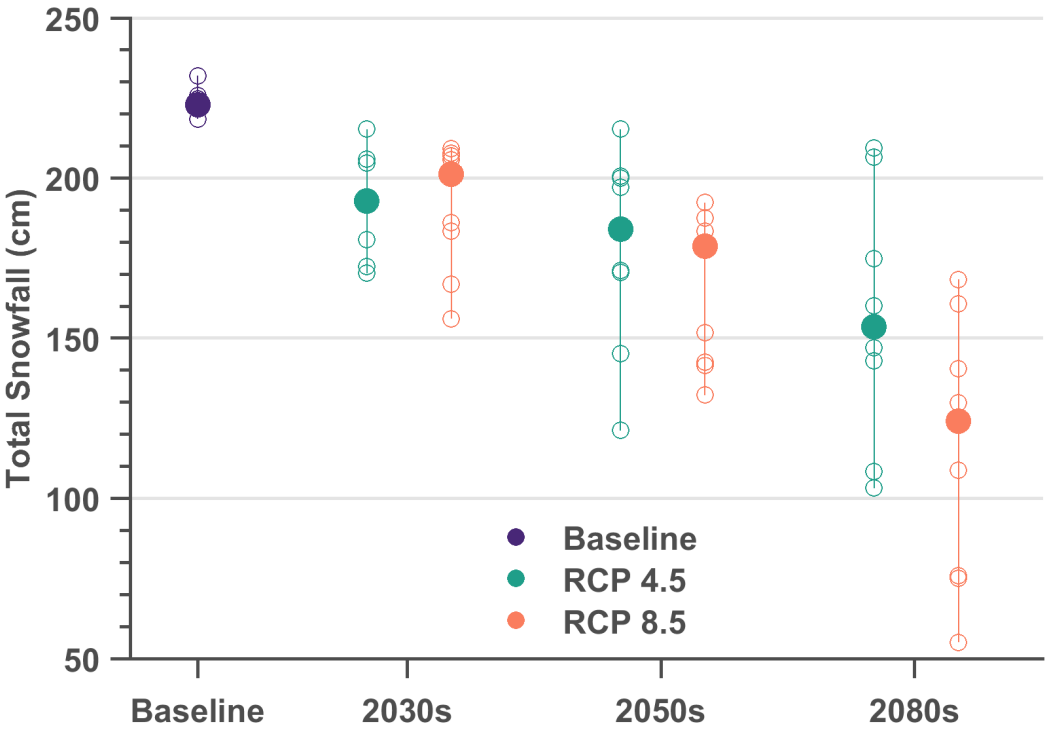


Figure F2.117: Annual Total Snowfall.

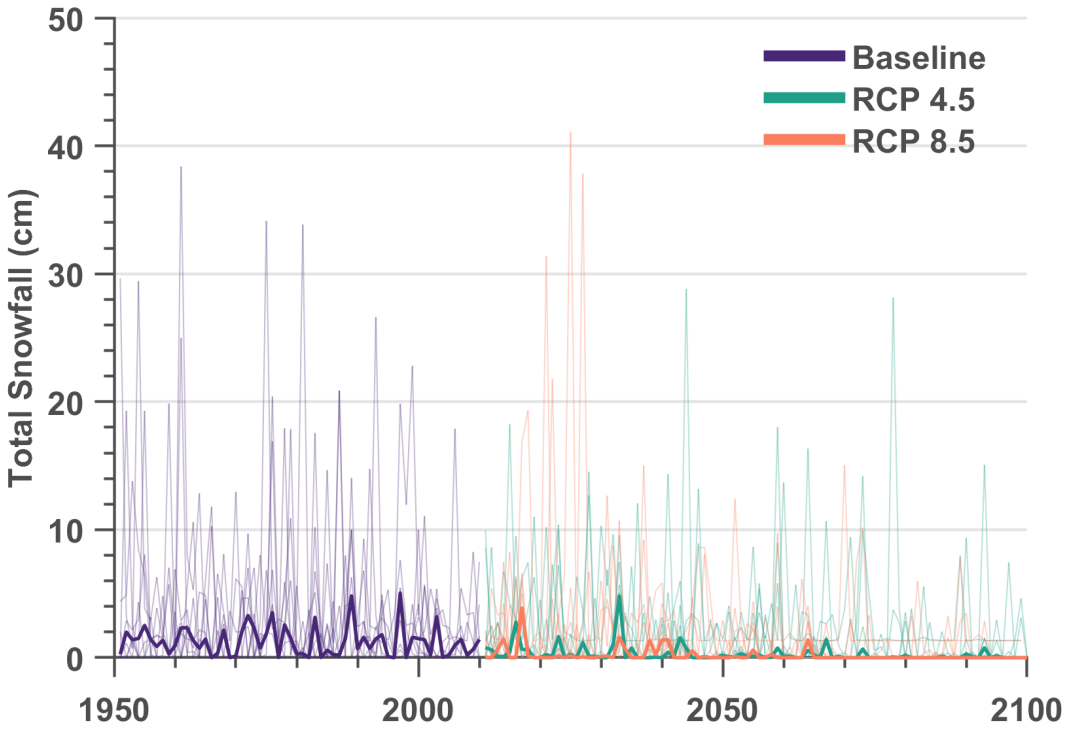


Figure F2.118: Monthly Total Snowfall - October.

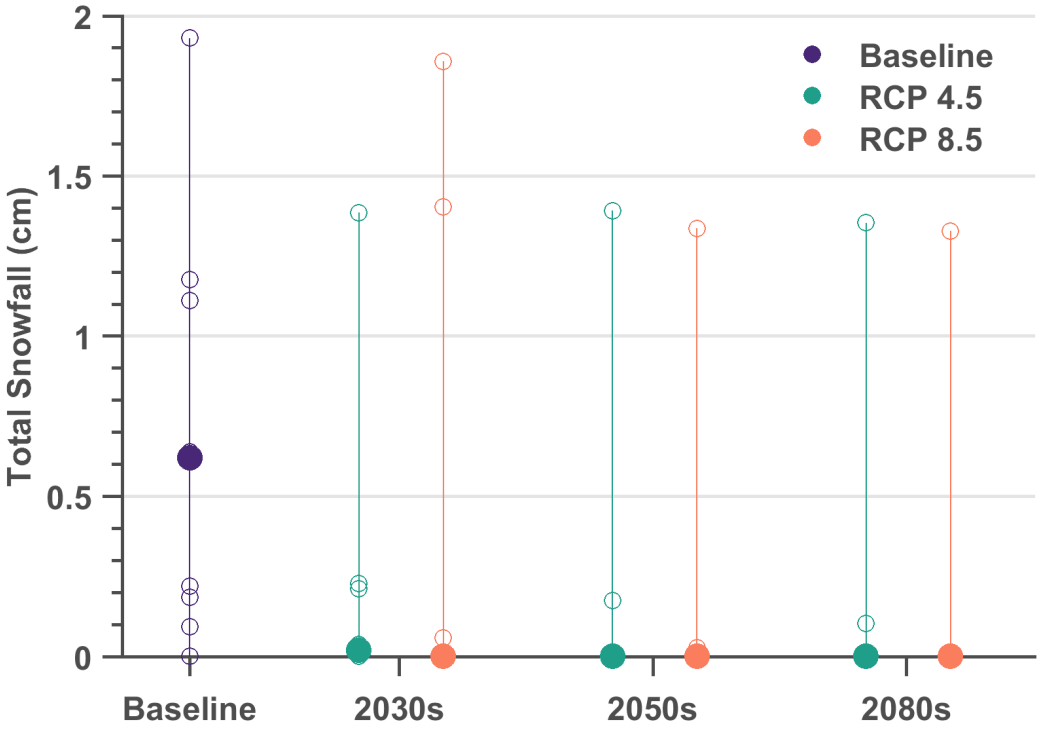


Figure F2.119: Monthly Total Snowfall - October.

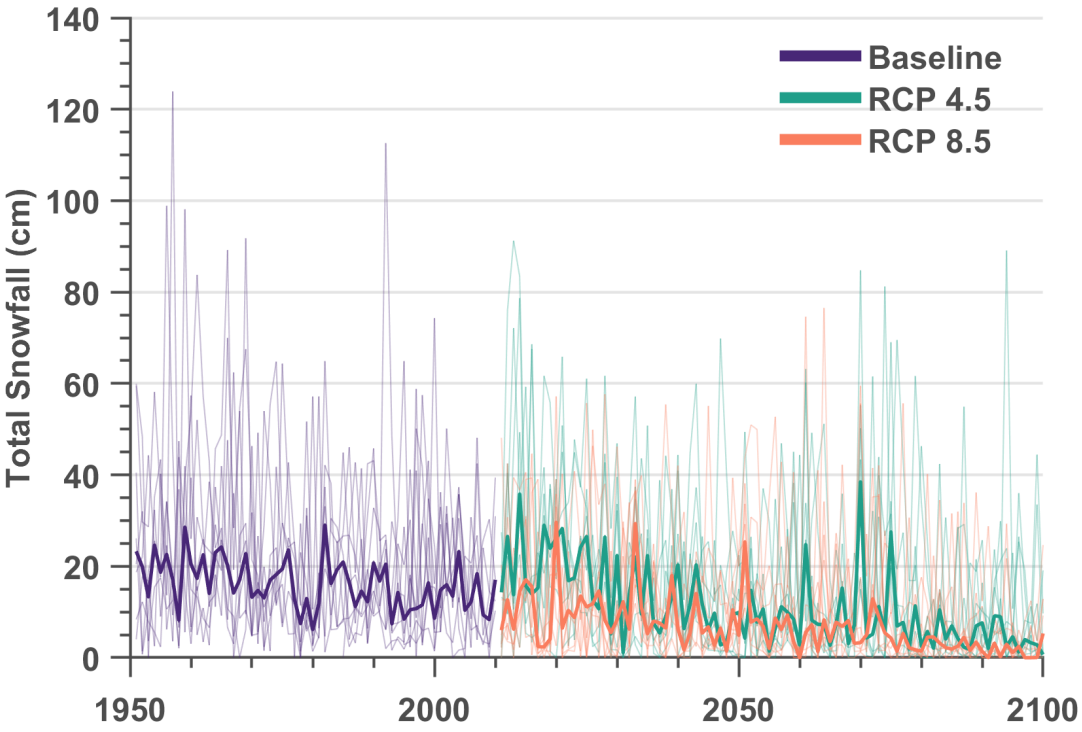


Figure F2.120: Monthly Total Snowfall - November.

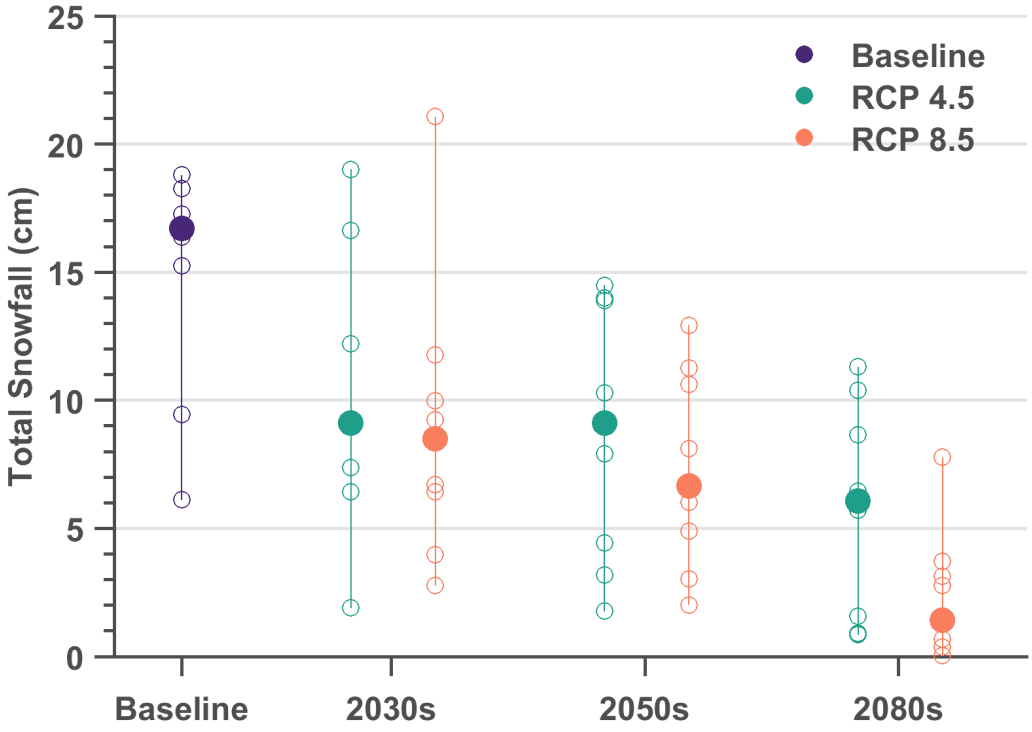


Figure F2.121: Monthly Total Snowfall - November.

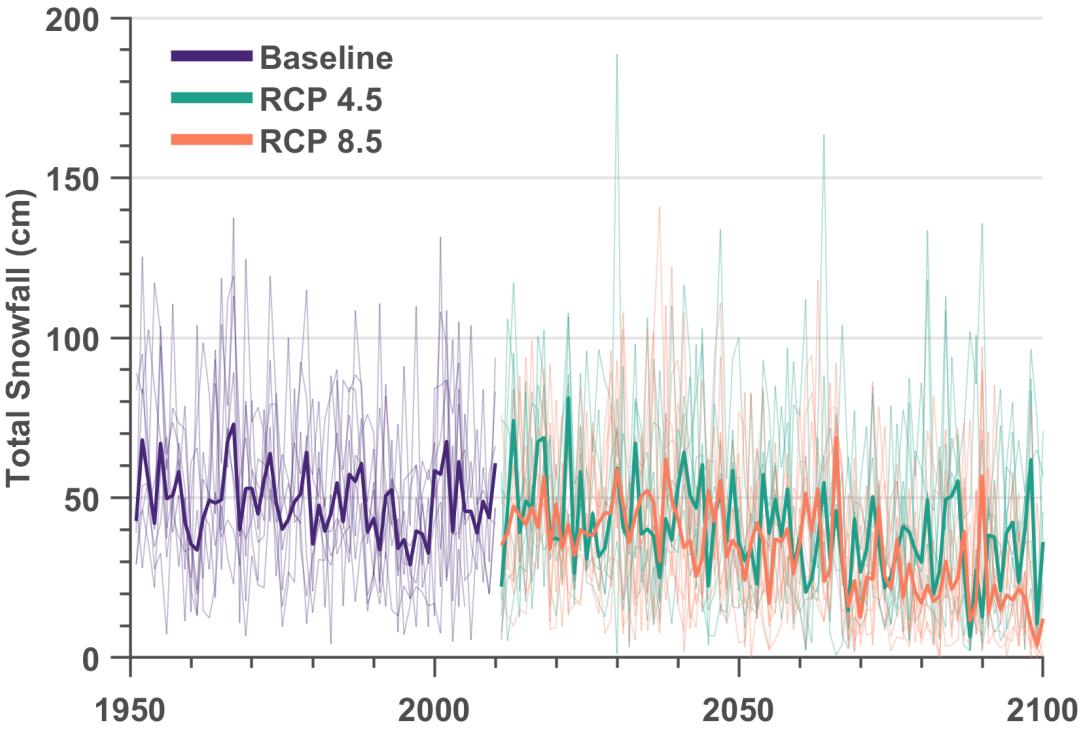


Figure F2.122: Monthly Total Snowfall - December.

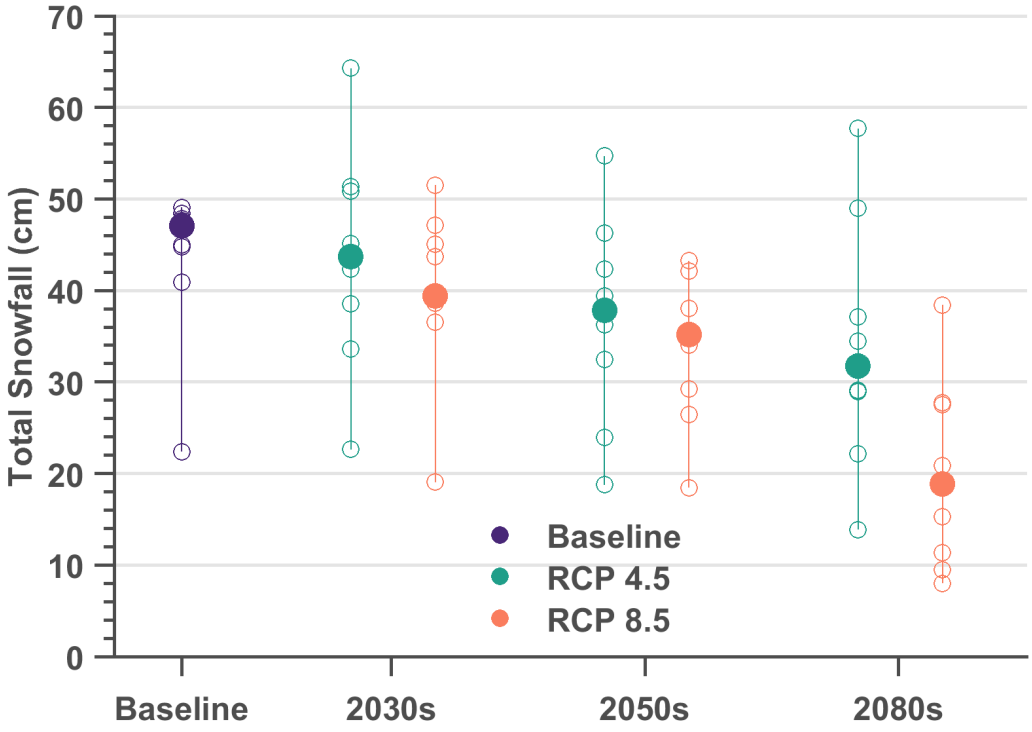


Figure F2.123: Monthly Total Snowfall - December.

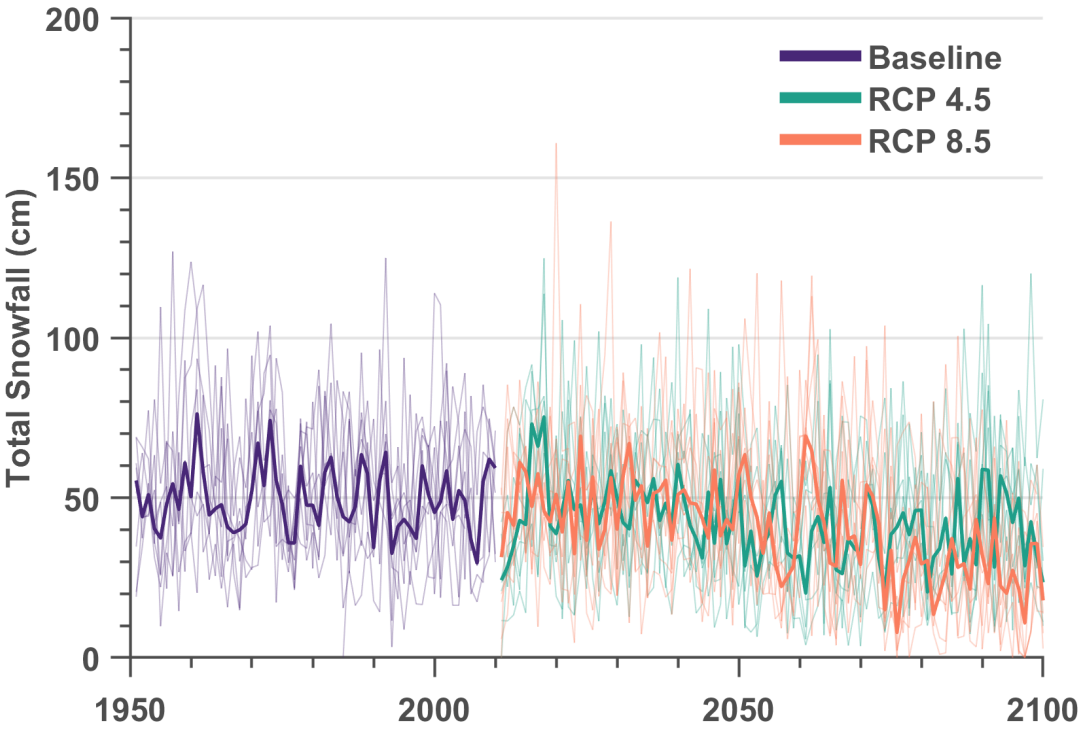


Figure F2.124: Monthly Total Snowfall - January.

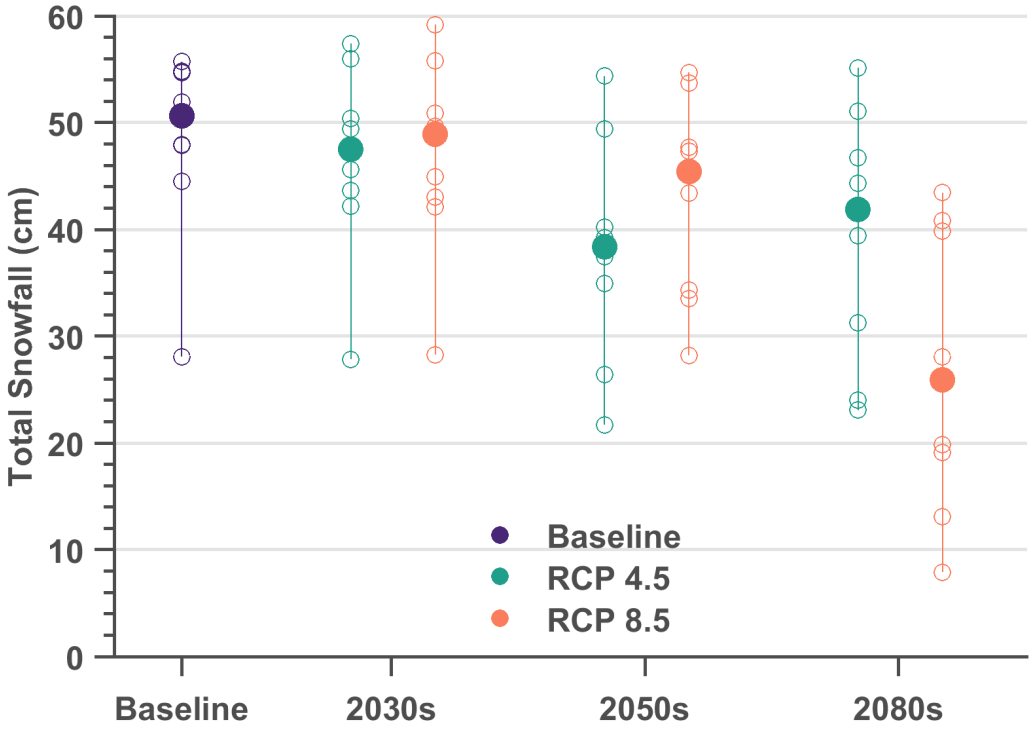


Figure F2.125: Monthly Total Snowfall - January.

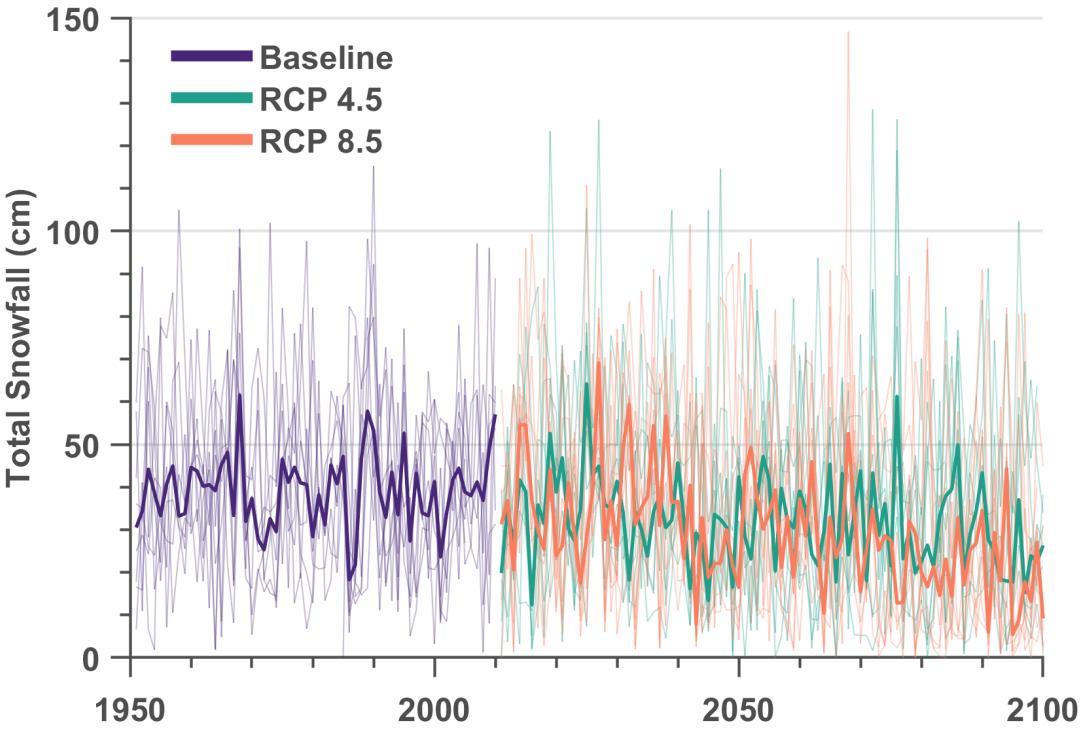


Figure F2.126: Monthly Total Snowfall - February.

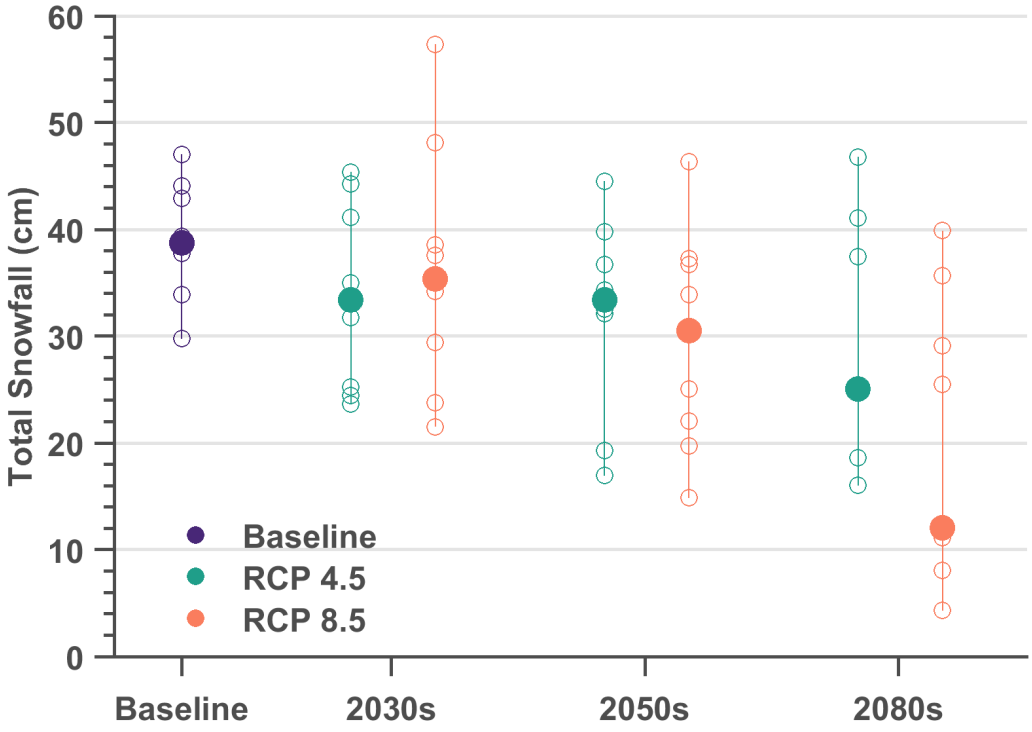


Figure F2.127: Monthly Total Snowfall - February.

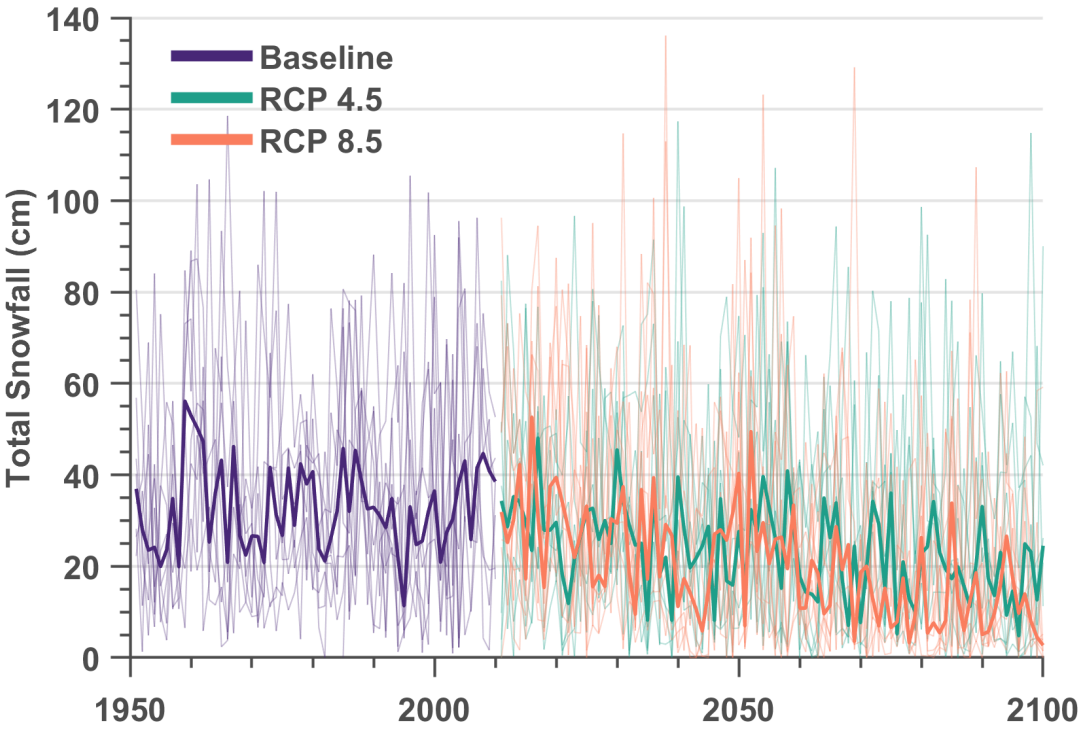


Figure F2.128: Monthly Total Snowfall - March.

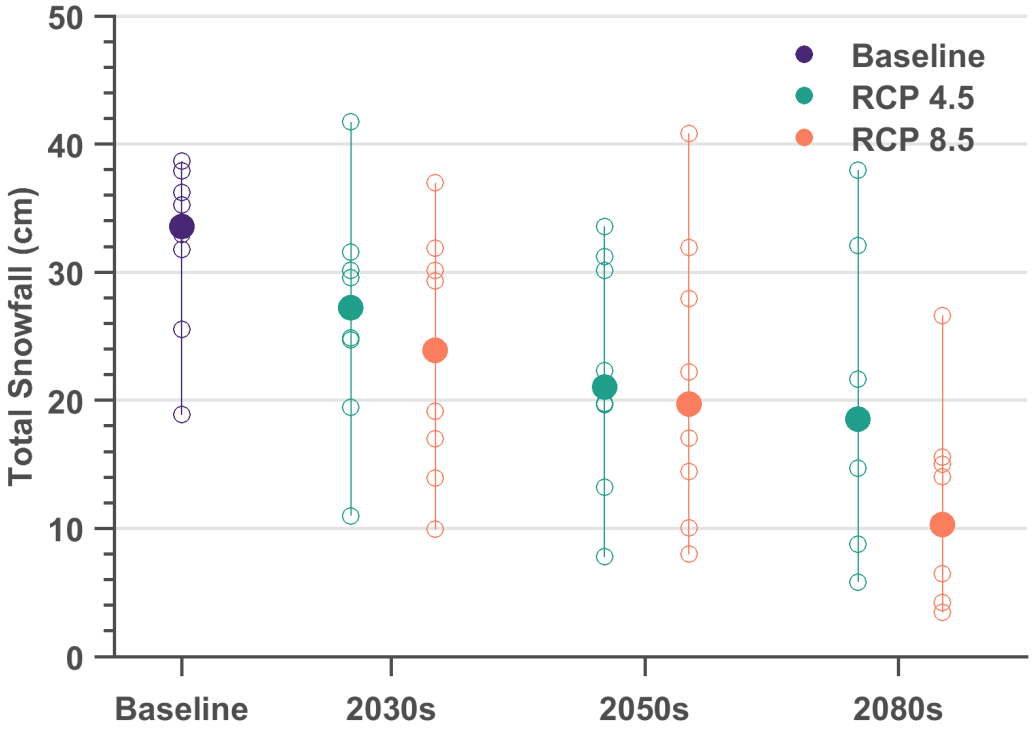


Figure F2.129: Monthly Total Snowfall - March.

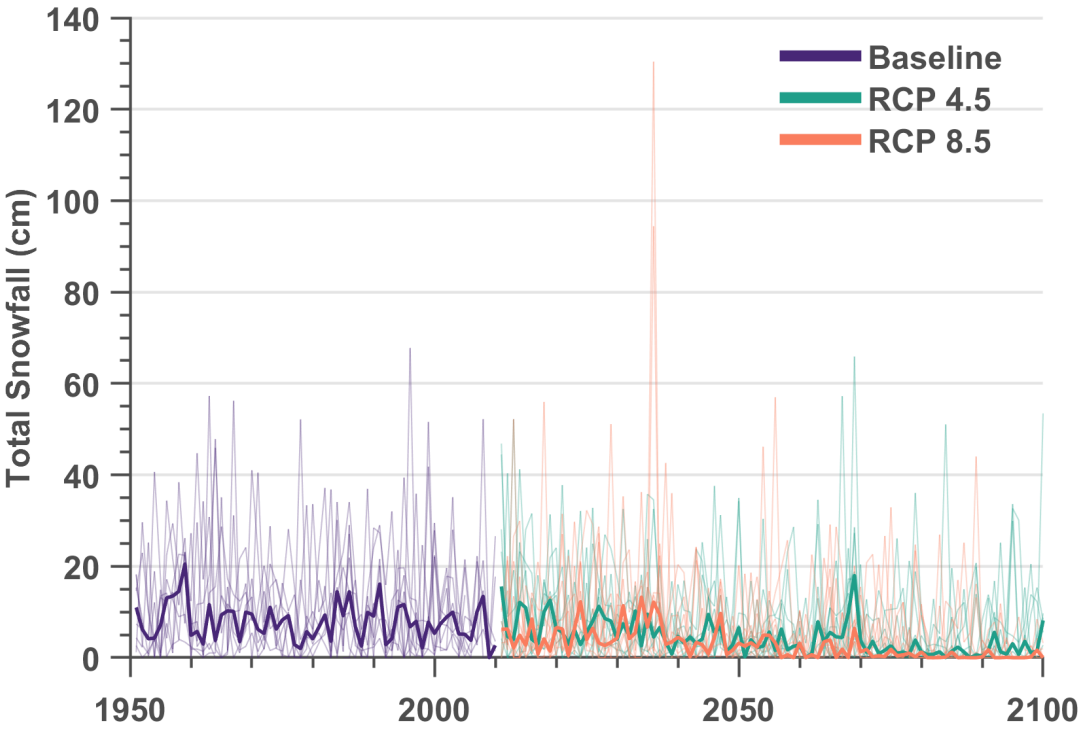


Figure F2.130: Monthly Total Snowfall - April.

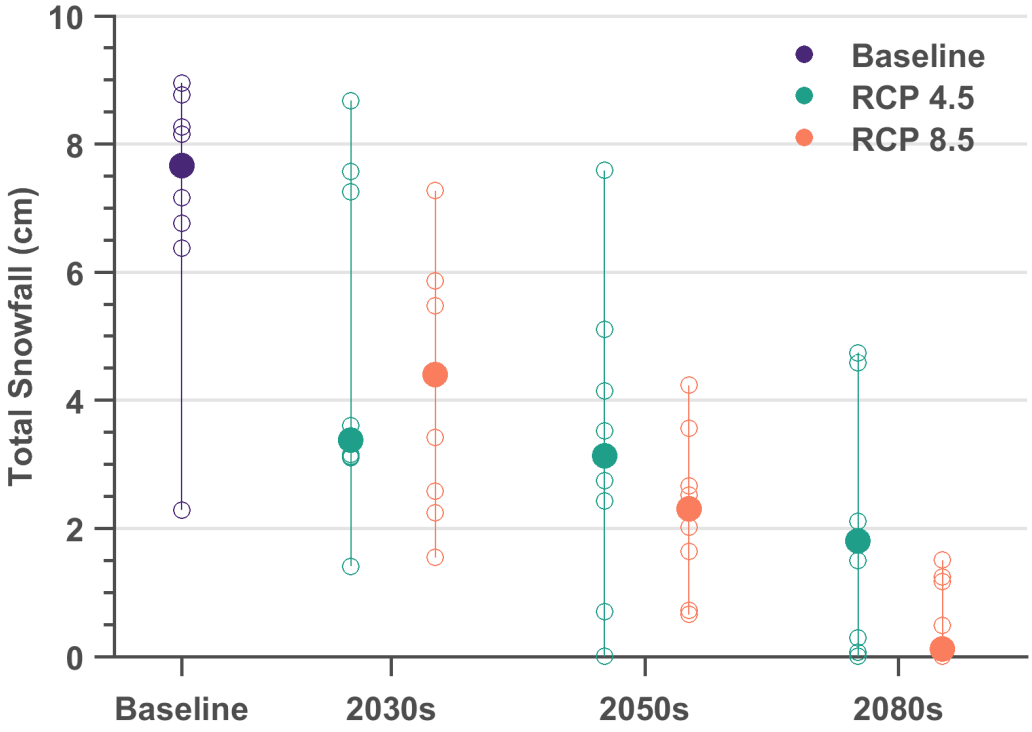


Figure F2.131: Monthly Total Snowfall - April.

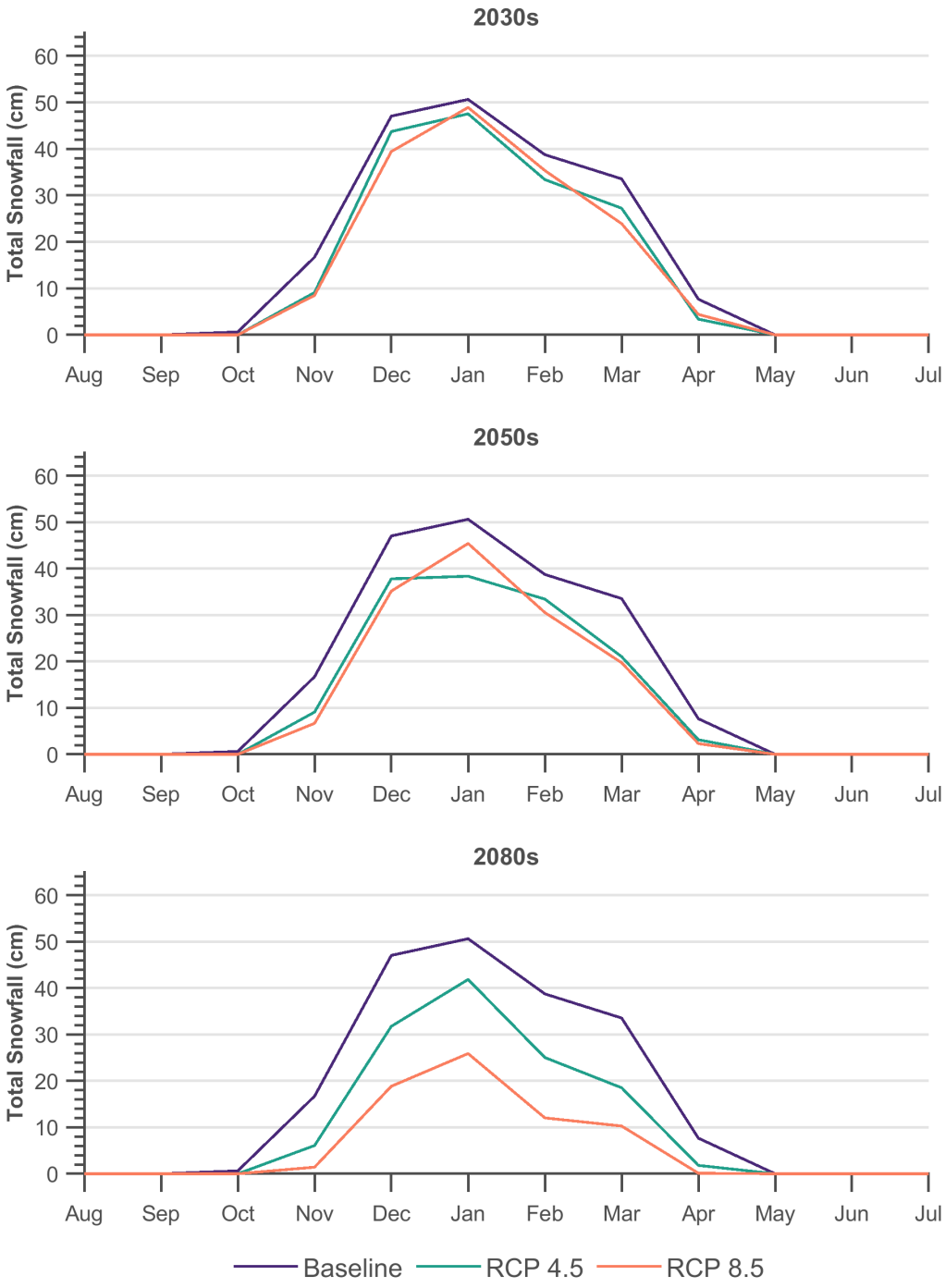


Figure F2.132: Monthly Total Snowfall.

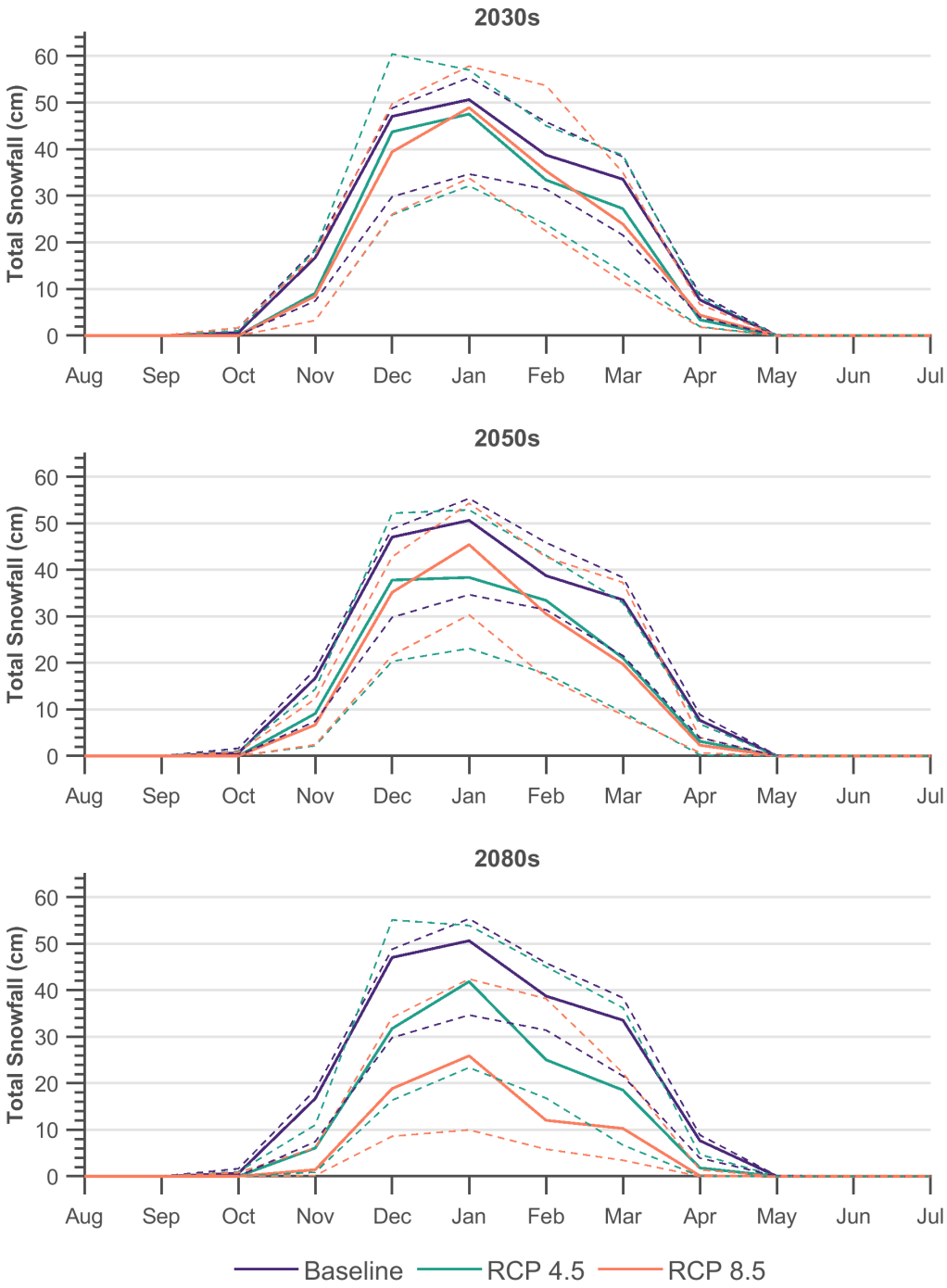


Figure F2.133: Monthly Total Snowfall. Dashed lines indicate the 10% and 90% percentile.

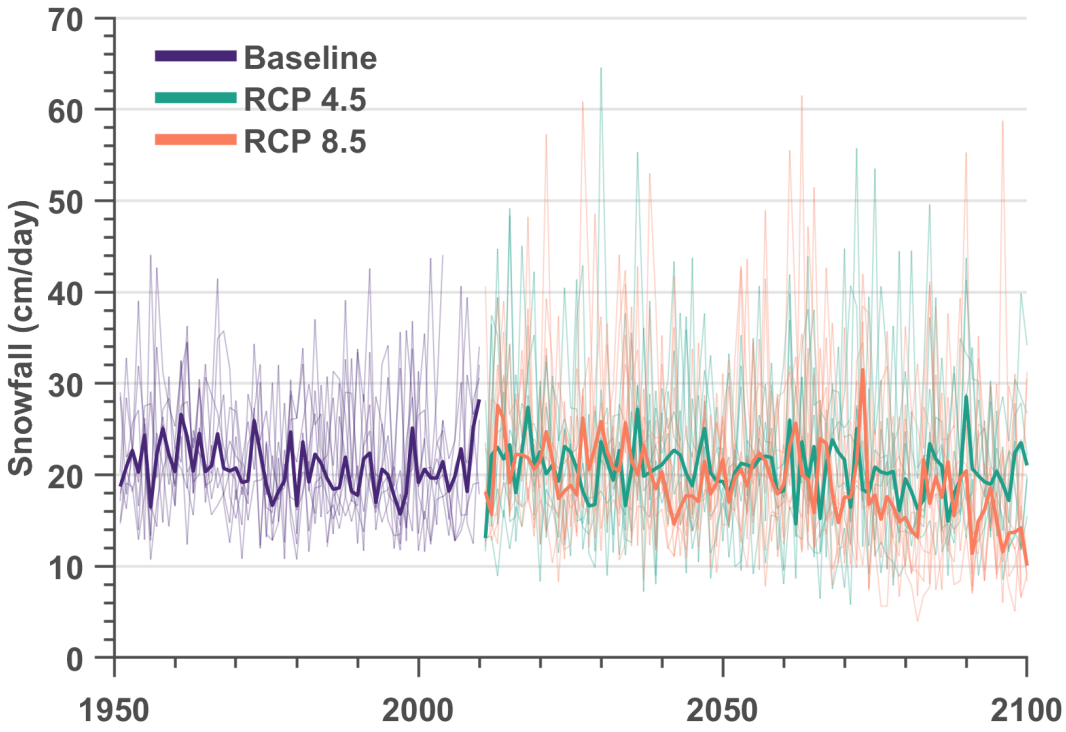


Figure F2.134: Annual Max. 1-Day Snowfall.

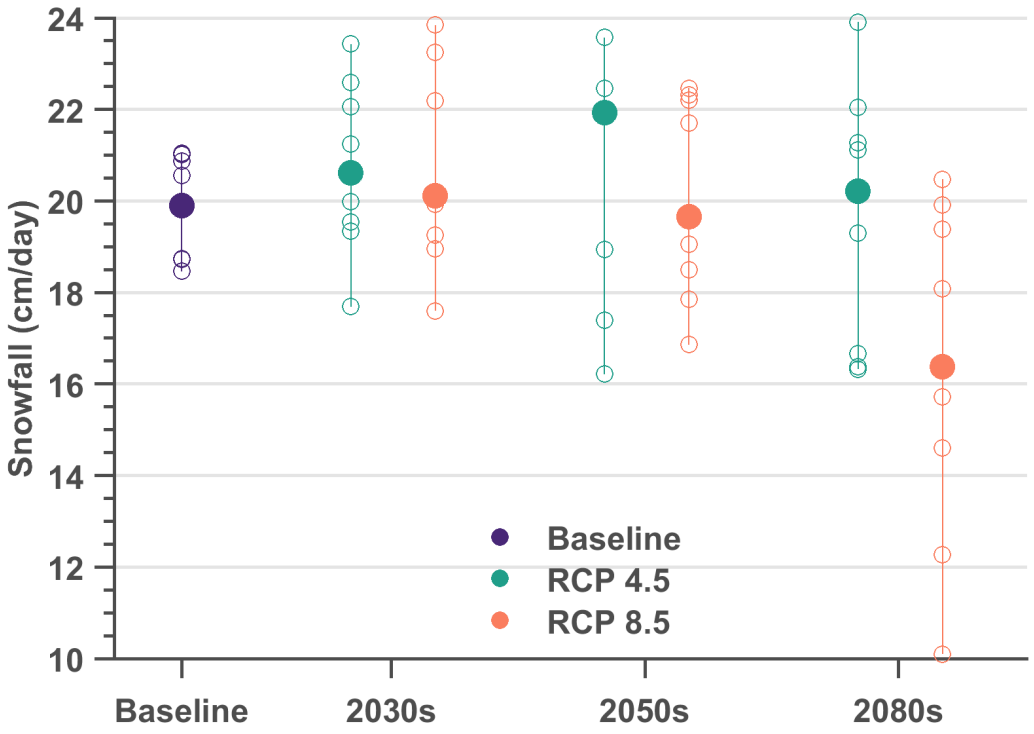


Figure F2.135: Annual Max. 1-Day Snowfall.

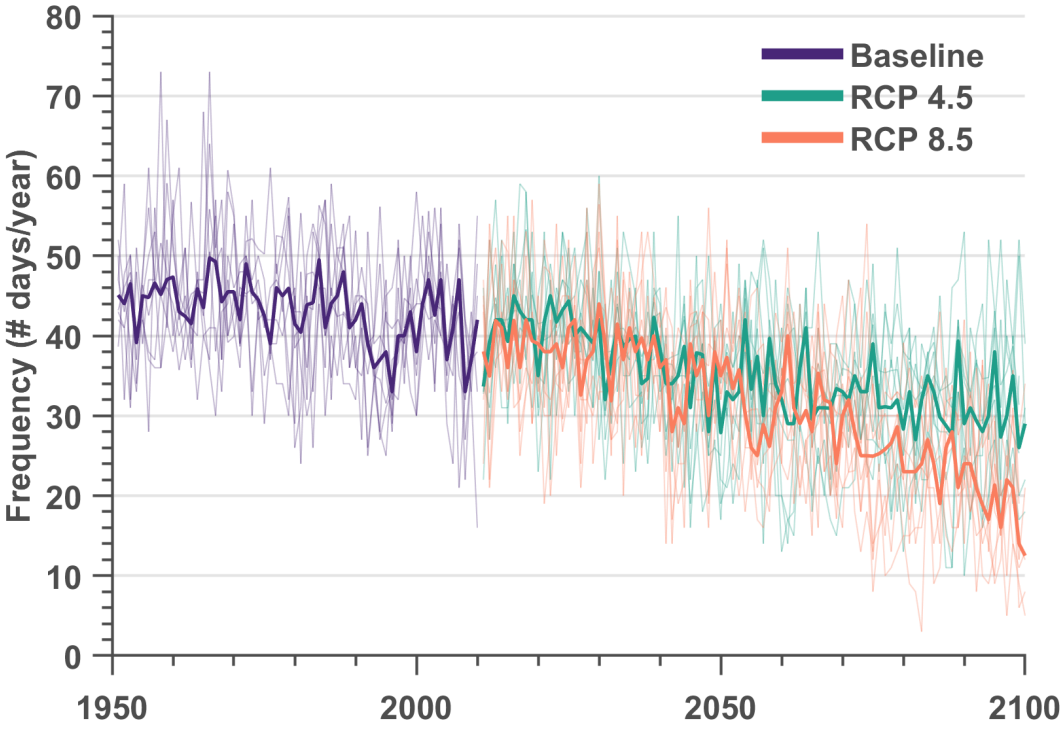


Figure F2.136: Number of Days with Snowfall.

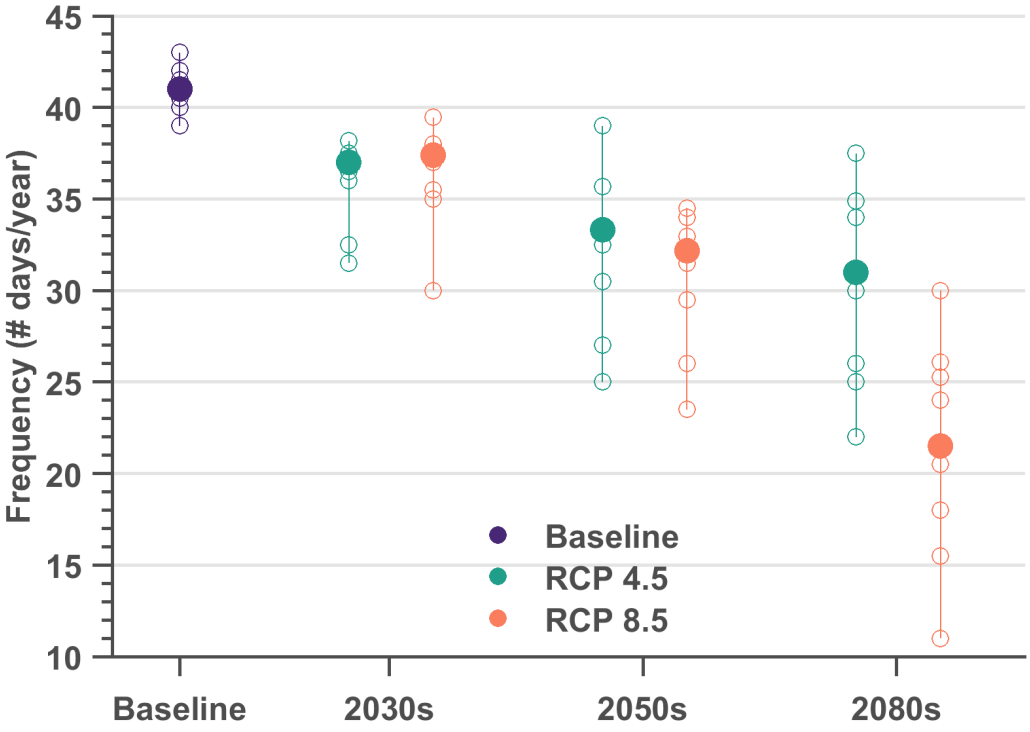


Figure F2.137: Number of Days with Snowfall.

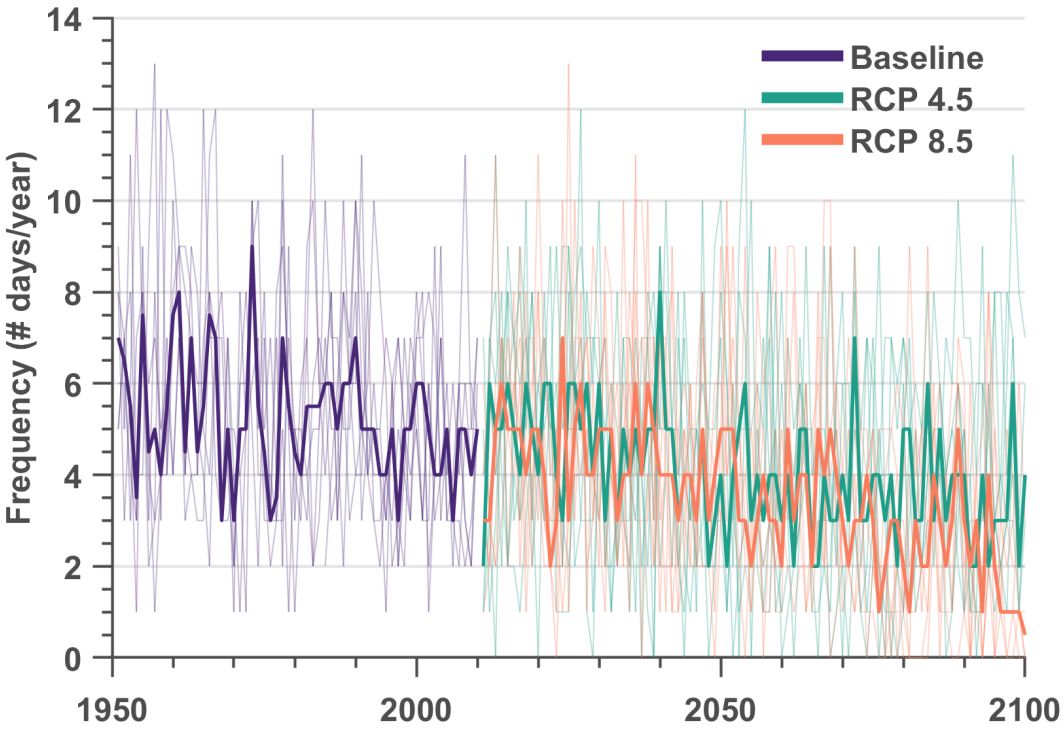


Figure F2.138: Number of Days with Snowfall >= 10 cm/day.

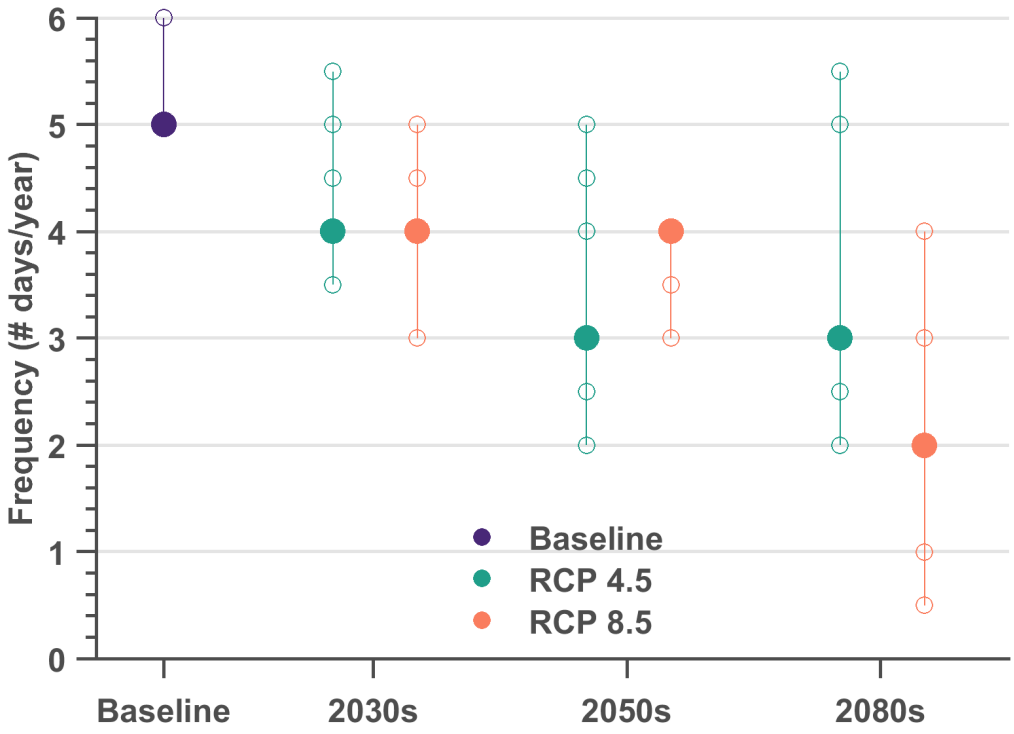


Figure F2.139: Number of Days with Snowfall >= 10 cm/day.

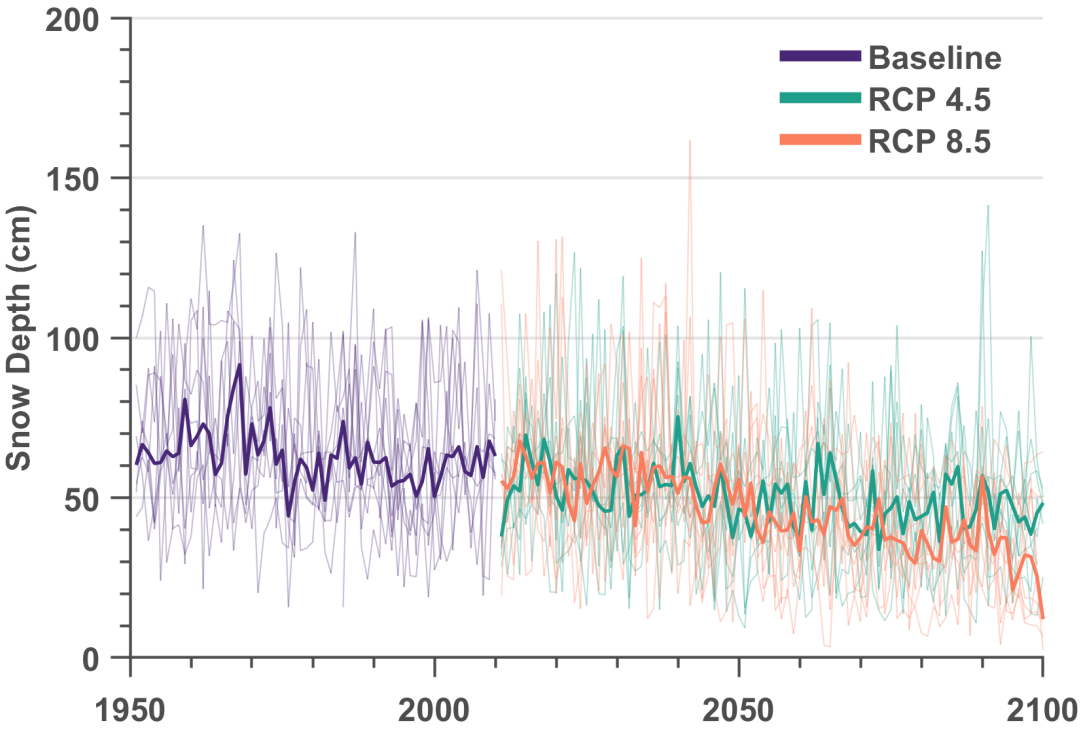


Figure F2.140: Annual Max. Snow Depth.

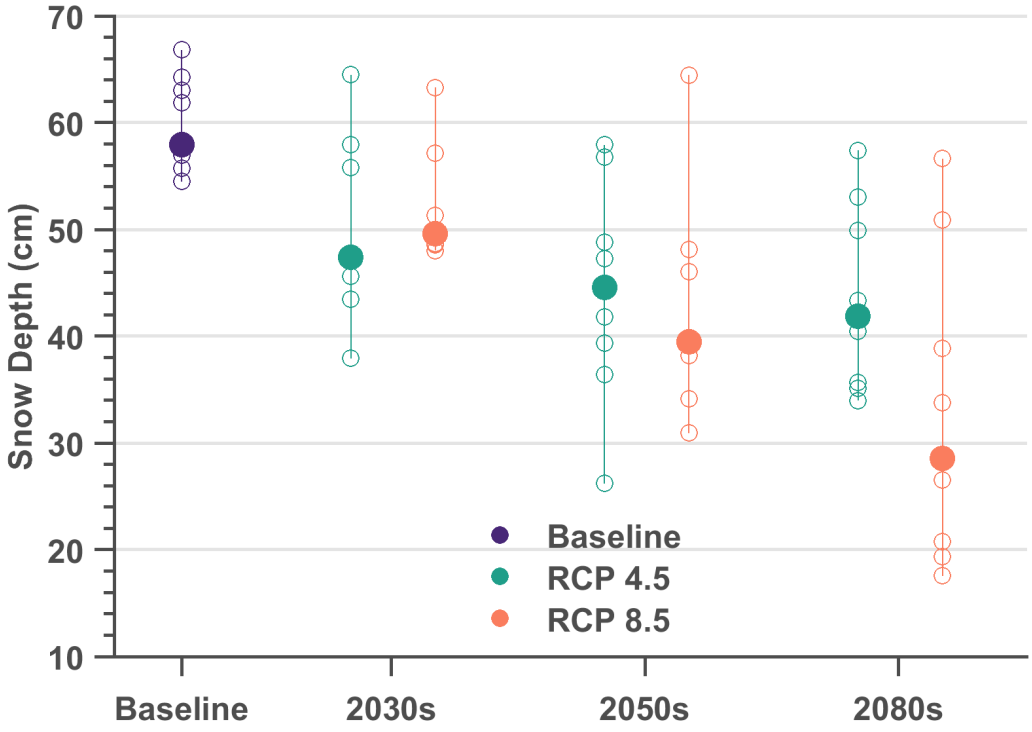


Figure F2.141: Annual Max. Snow Depth.

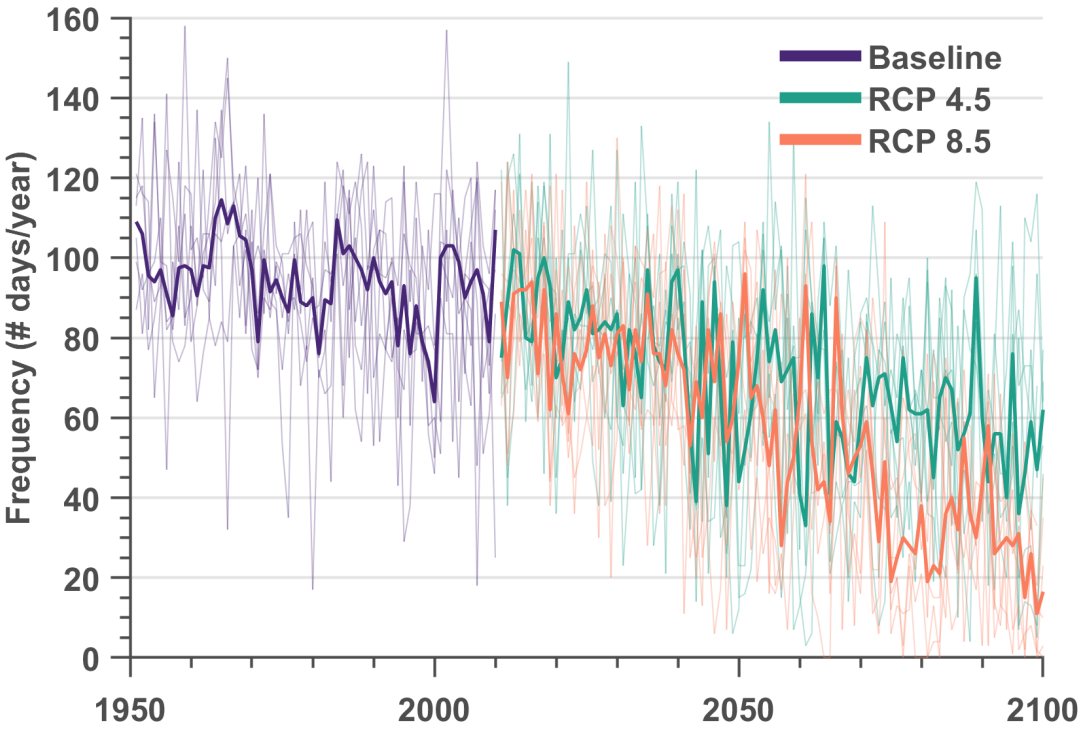


Figure F2.142: Number of Days with Snow Depth > 8 cm.

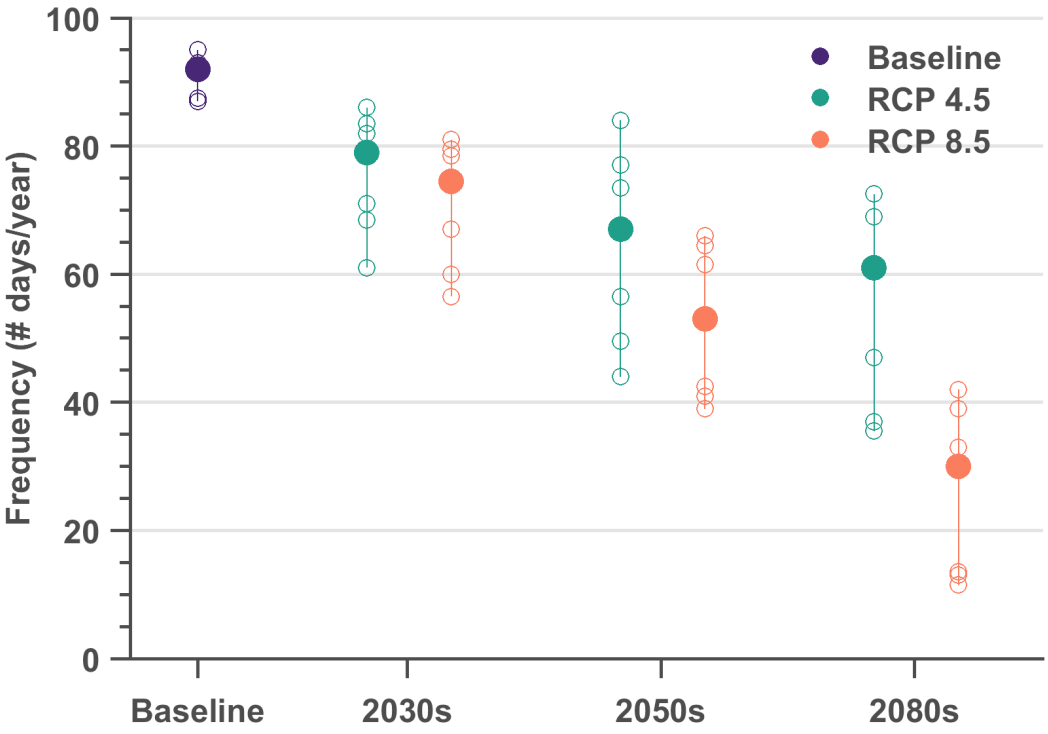


Figure F2.143: Number of Days with Snow Depth > 8 cm.

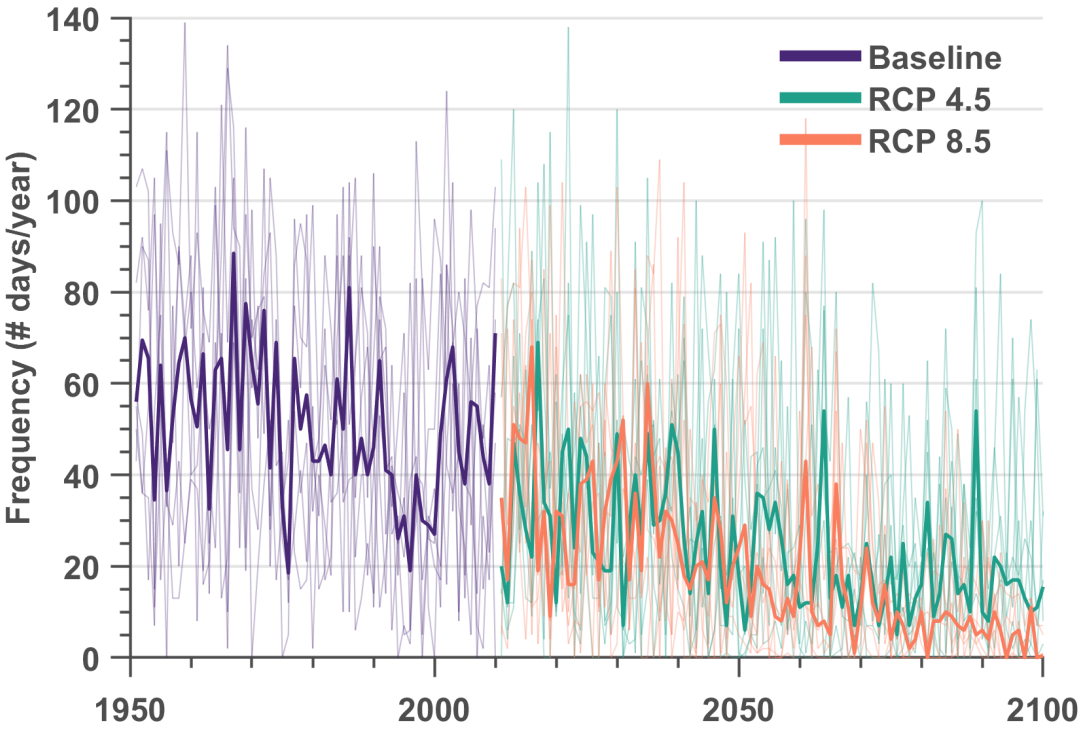


Figure F2.144: Number of Days with Snow Depth > 21 cm.

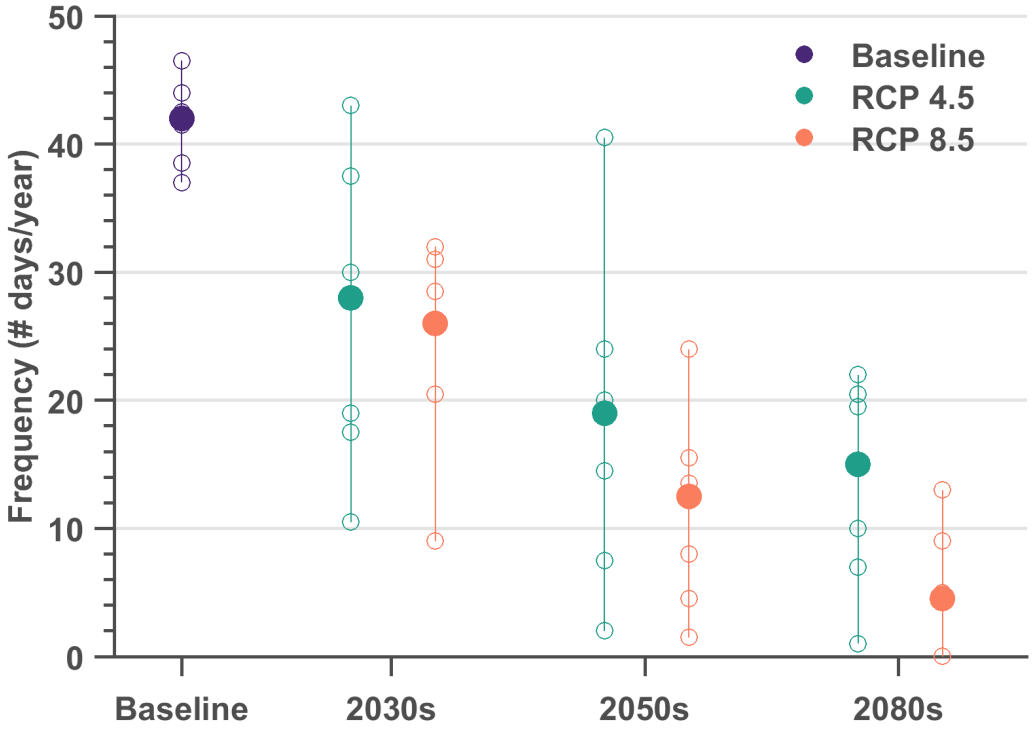


Figure F2.145: Number of Days with Snow Depth > 21 cm.

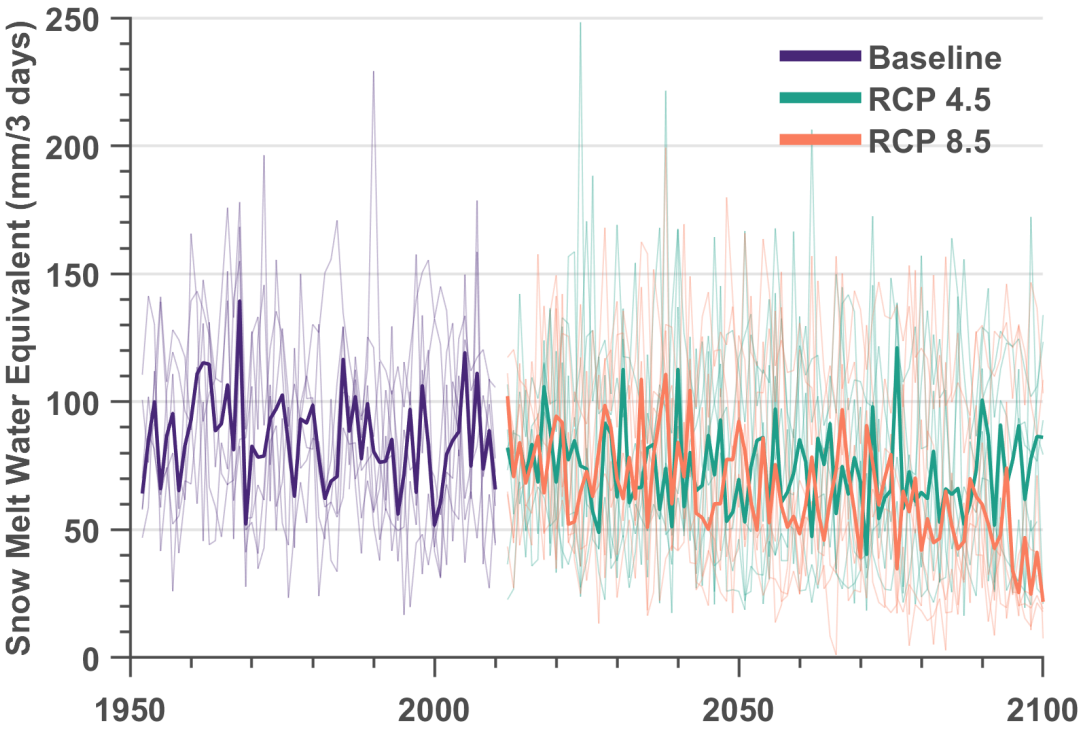


Figure F2.146: Annual Max. 3-Day Snow Melt Water Equivalent.

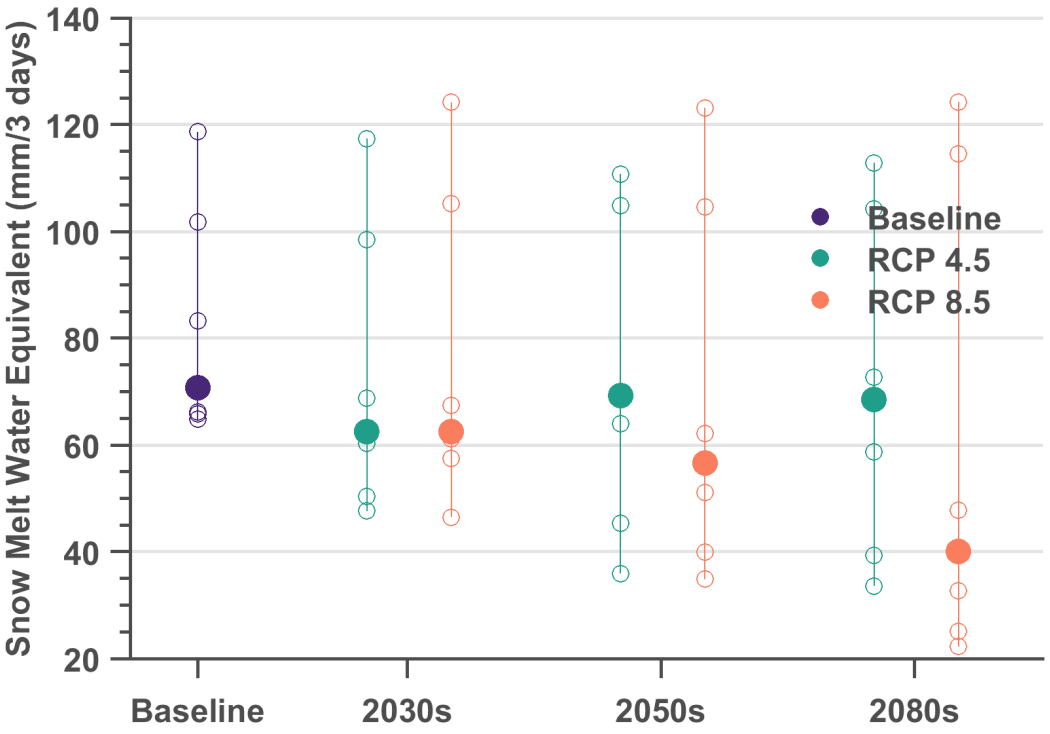


Figure F2.147: Annual Max. 3-Day Snow Melt Water Equivalent.

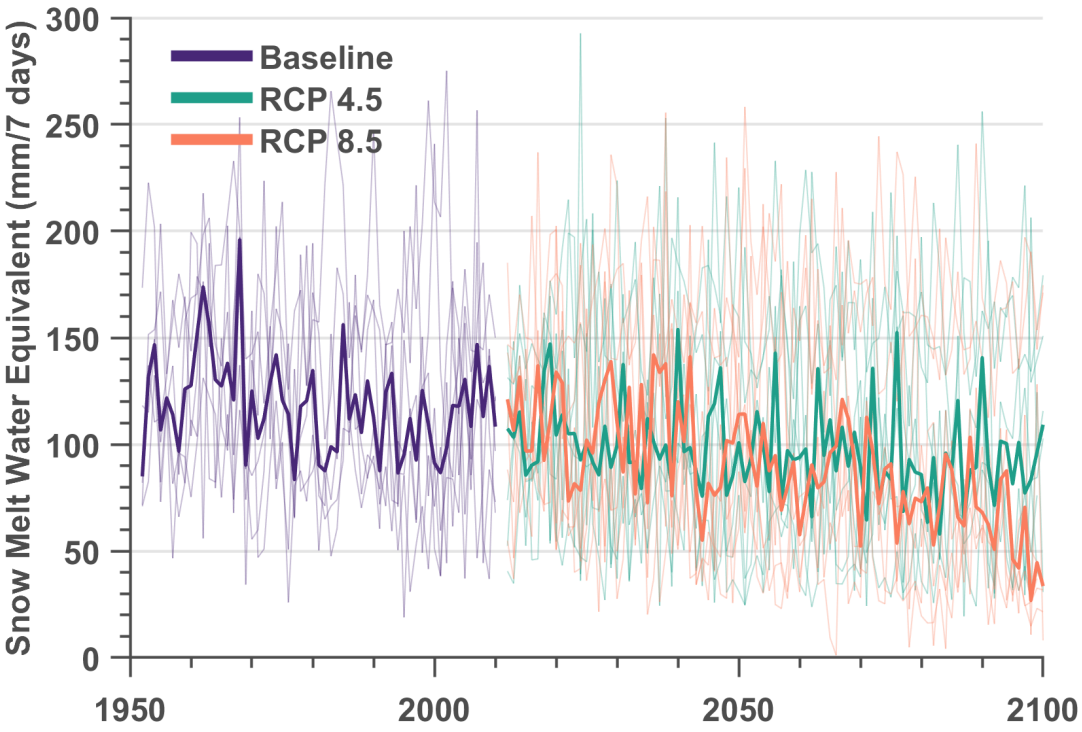


Figure F2.148: Annual Max. 7-Day Snow Melt Water Equivalent.

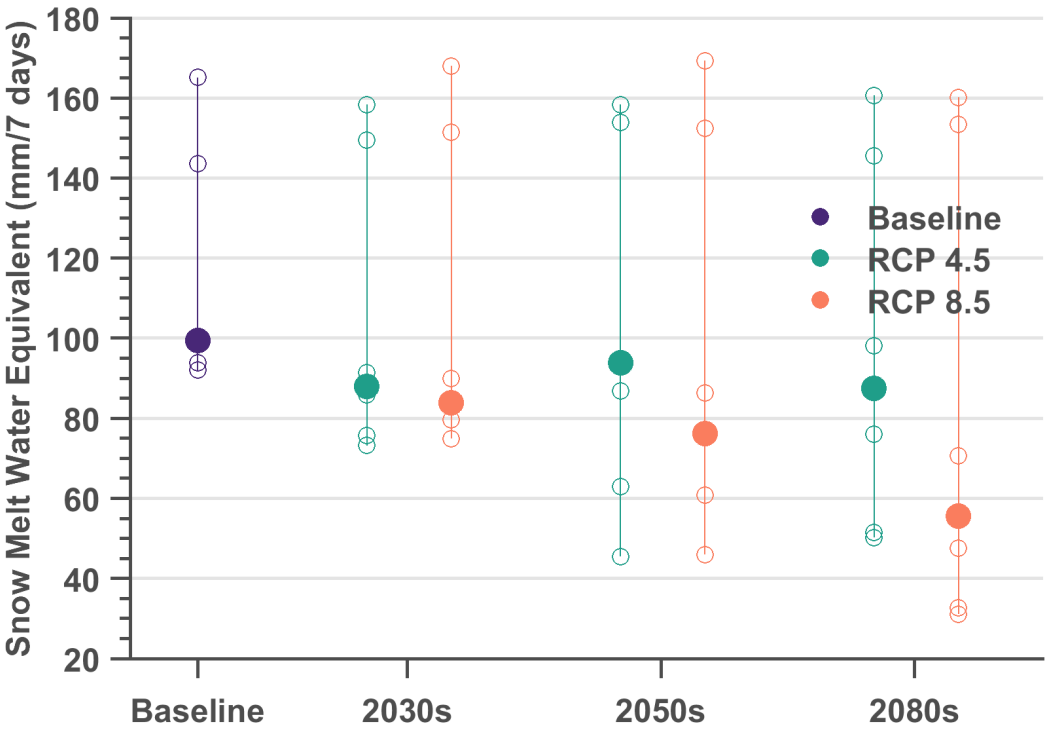


Figure F2.149: Annual Max. 7-Day Snow Melt Water Equivalent.

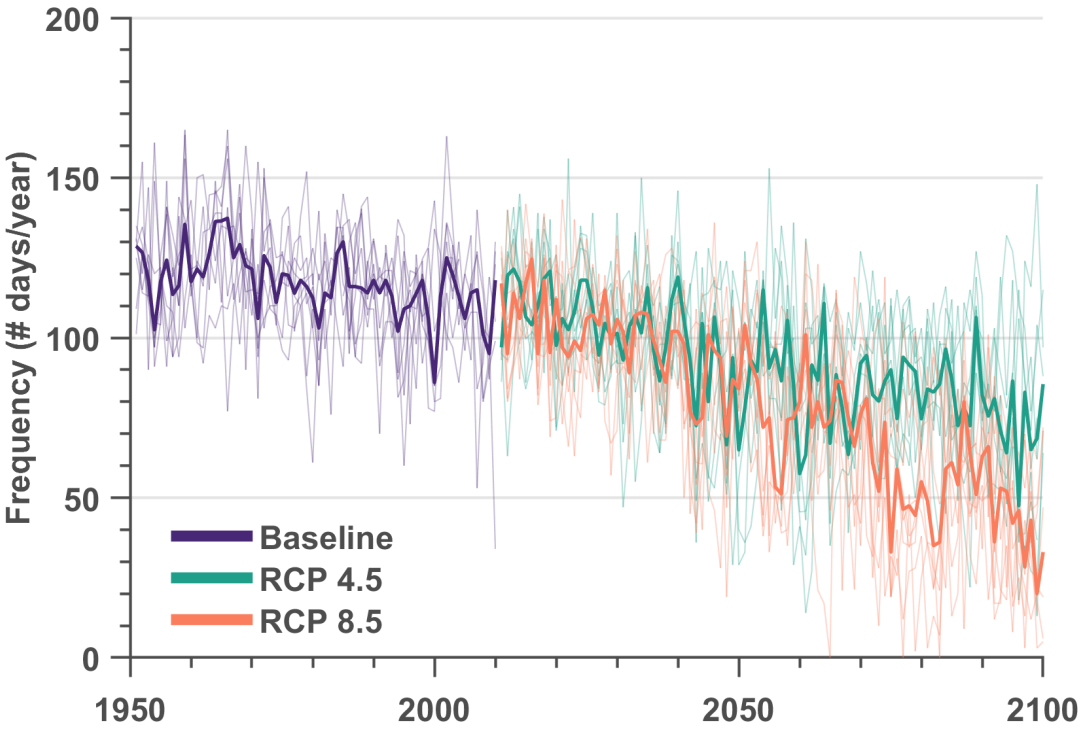


Figure F2.150: Number of Days with Snow Cover.

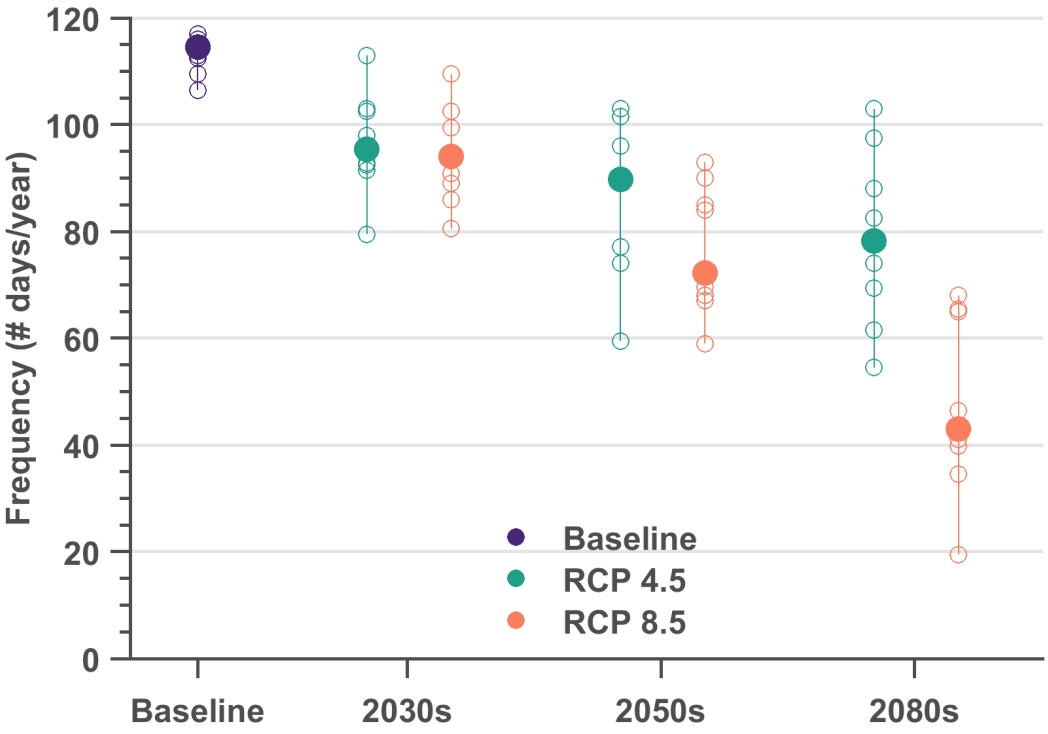


Figure F2.151: Number of Days with Snow Cover.

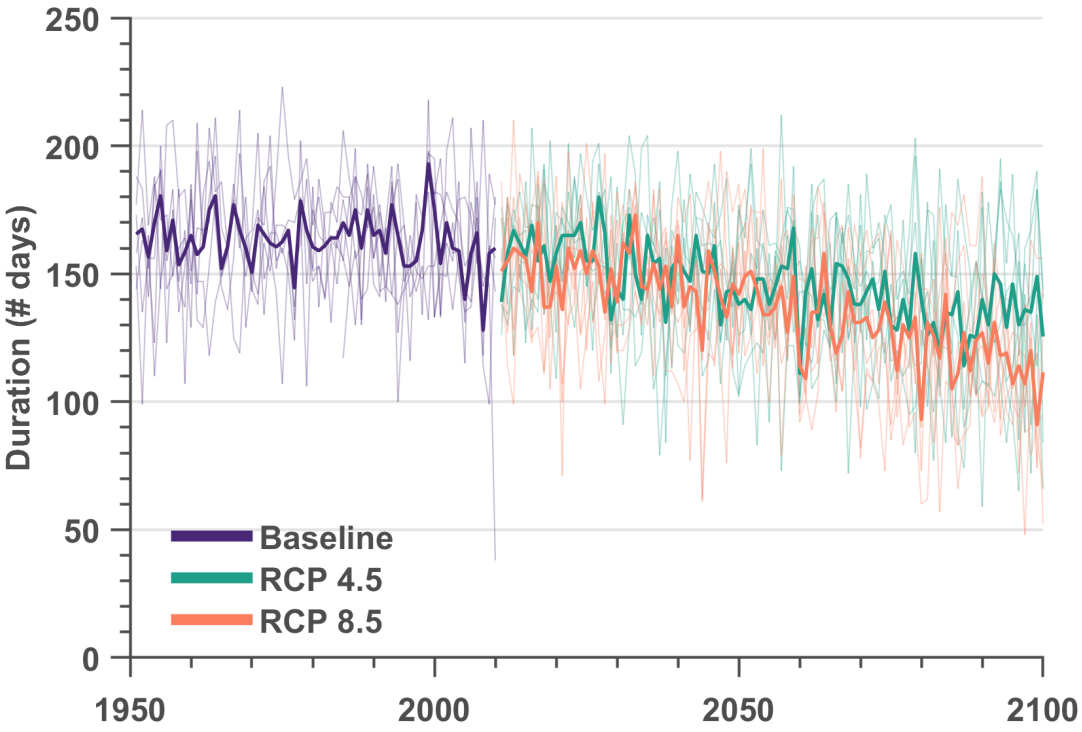


Figure F2.152: Duration From First to Last Day of Snow.

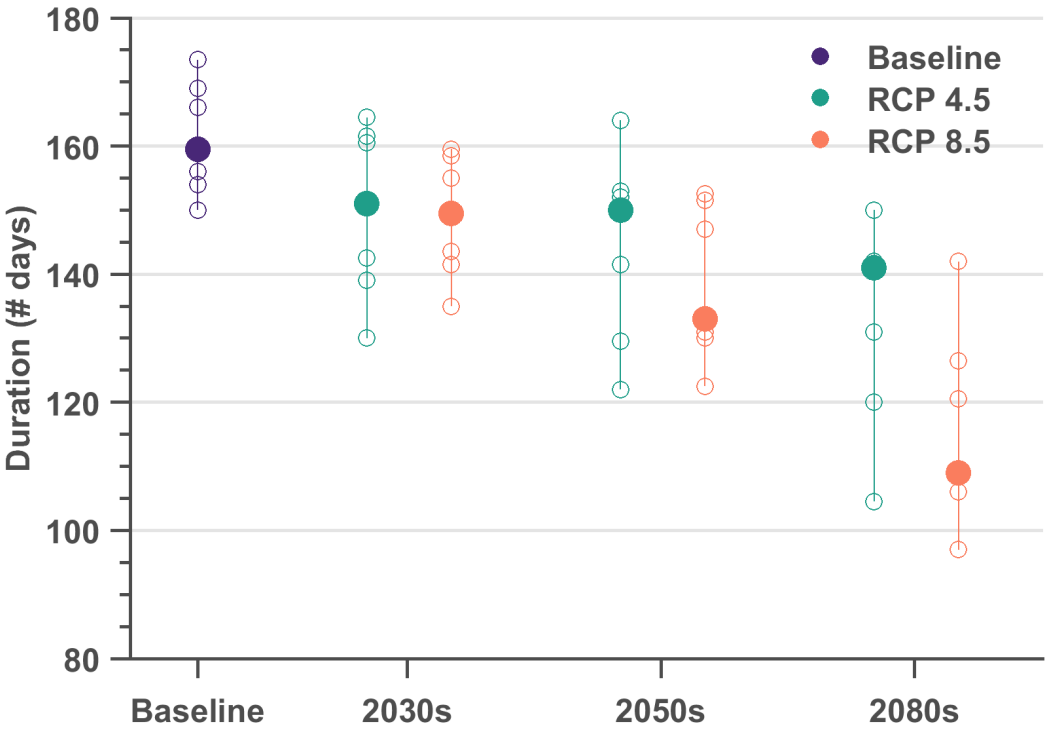


Figure F2.153: Duration From First to Last Day of Snow.

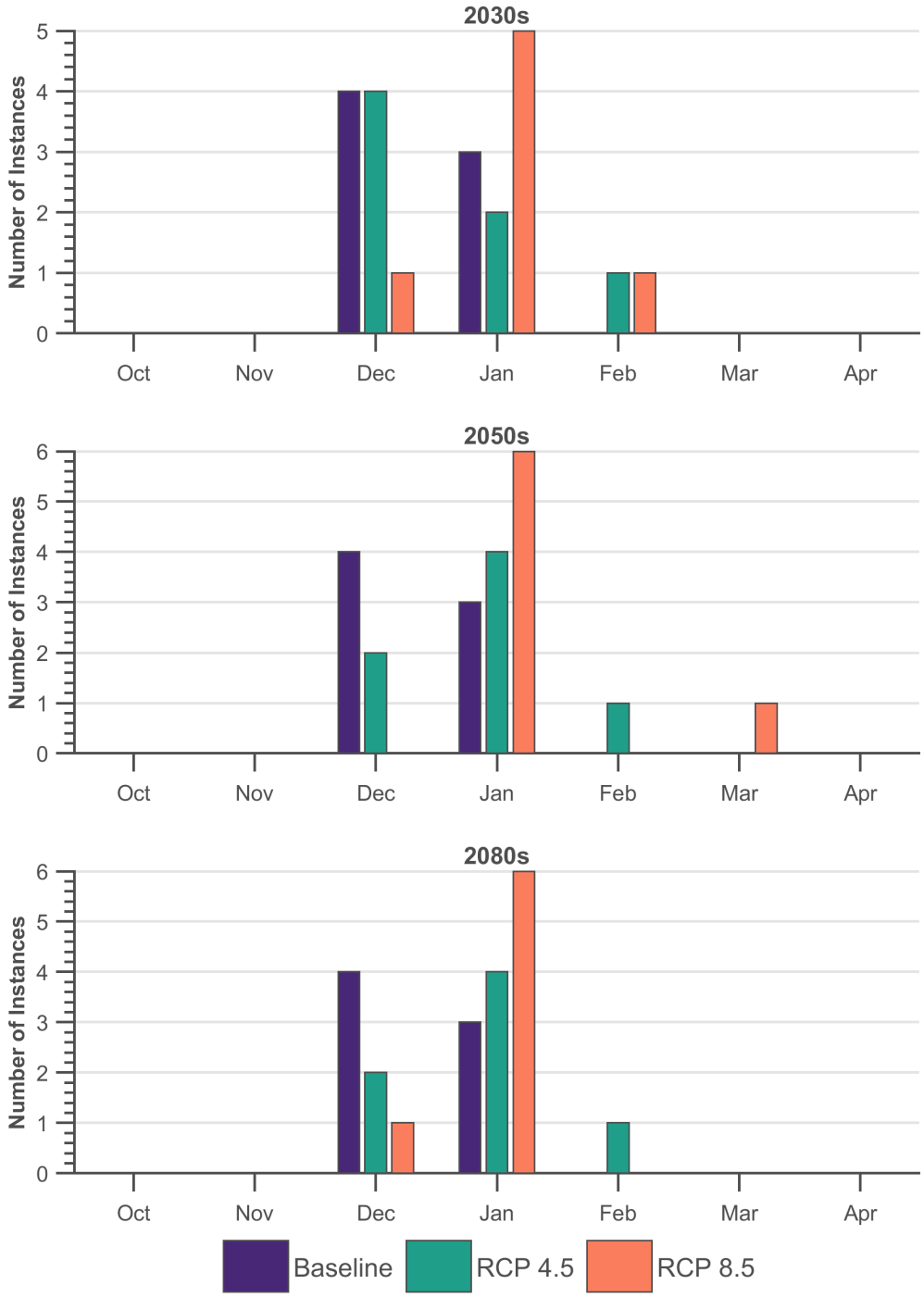


Figure F2.154: Timing of Month with Max. Snowfall.

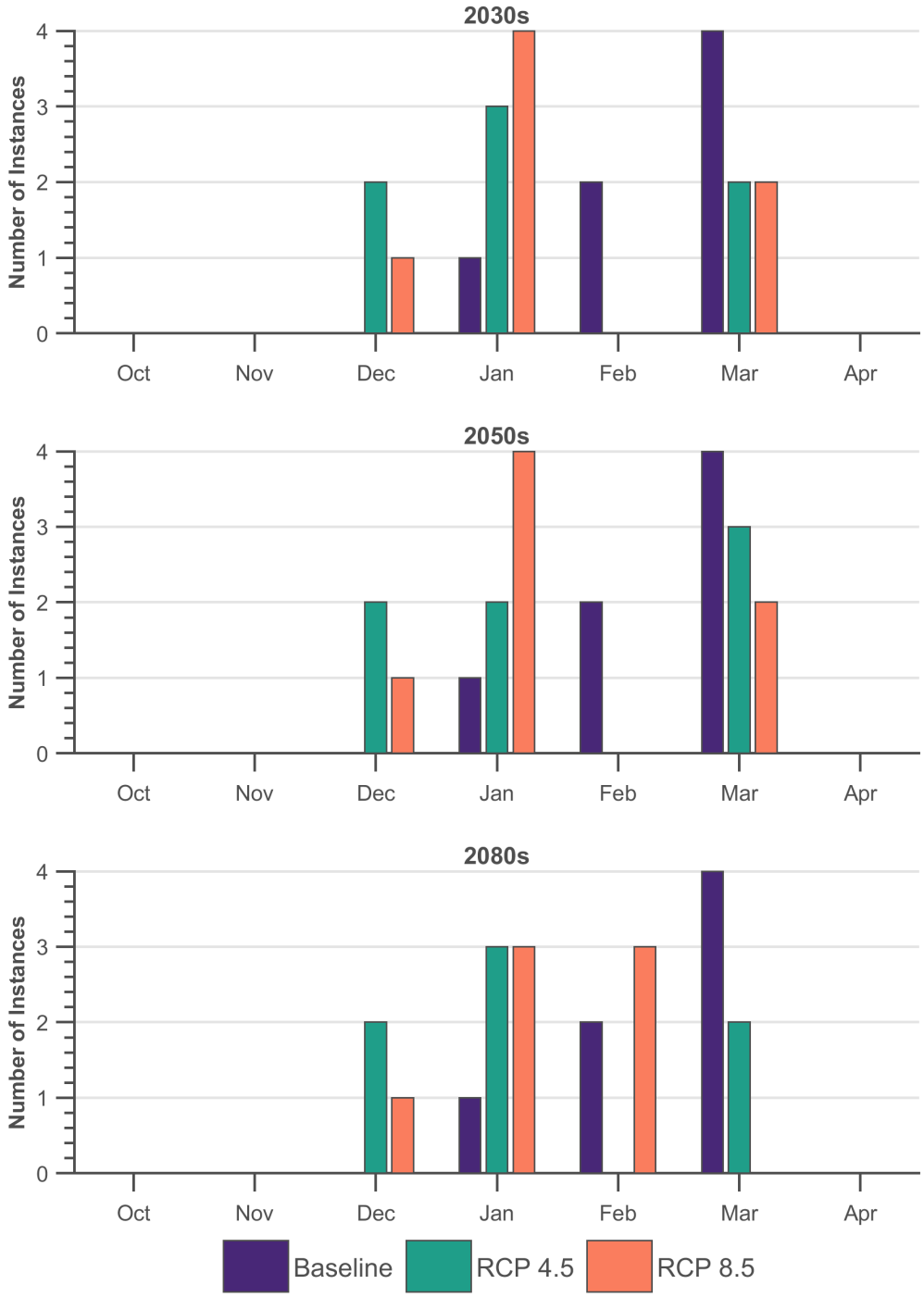


Figure F2.155: Timing of Month with Max. Snow Depth.

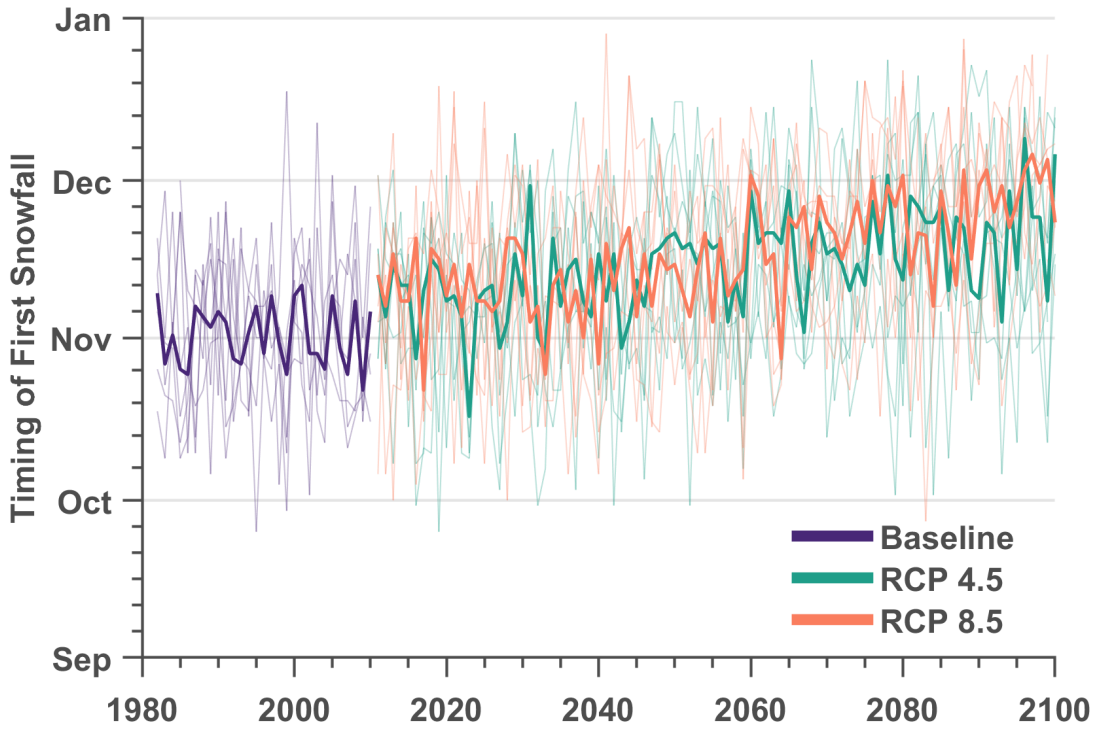


Figure F2.156: Timing of First Snowfall.

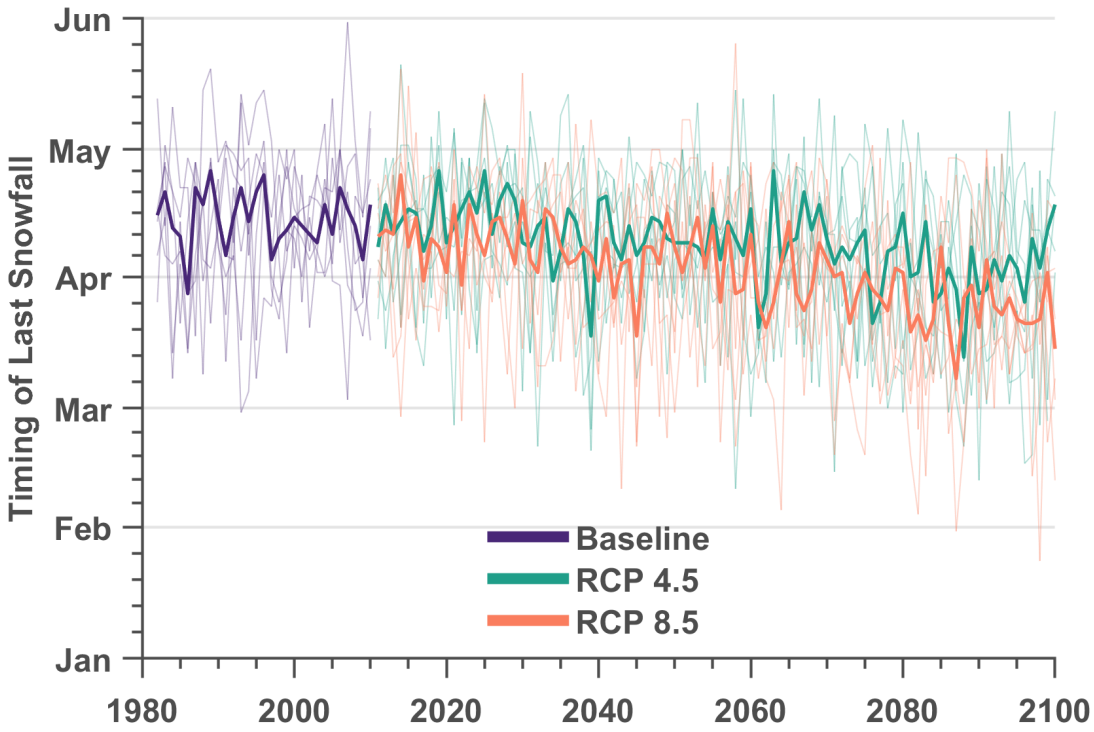


Figure F2.157: Timing of Last Snowfall.

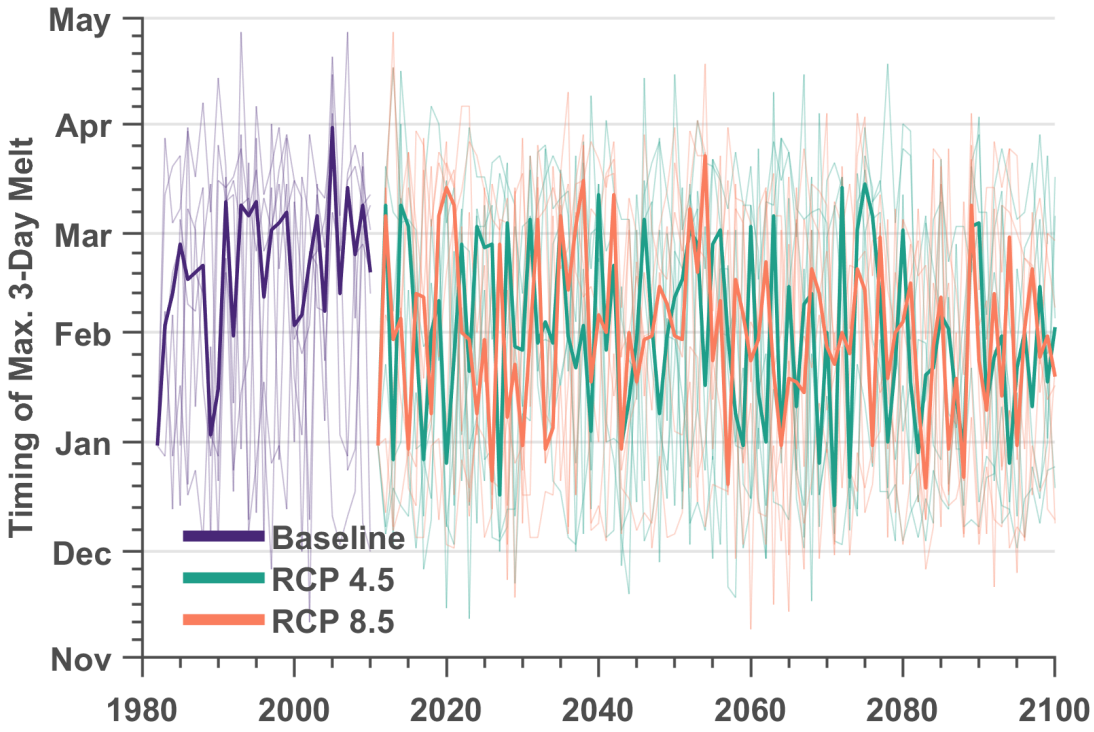


Figure F2.158: Timing of Max. 3-Day Melt.

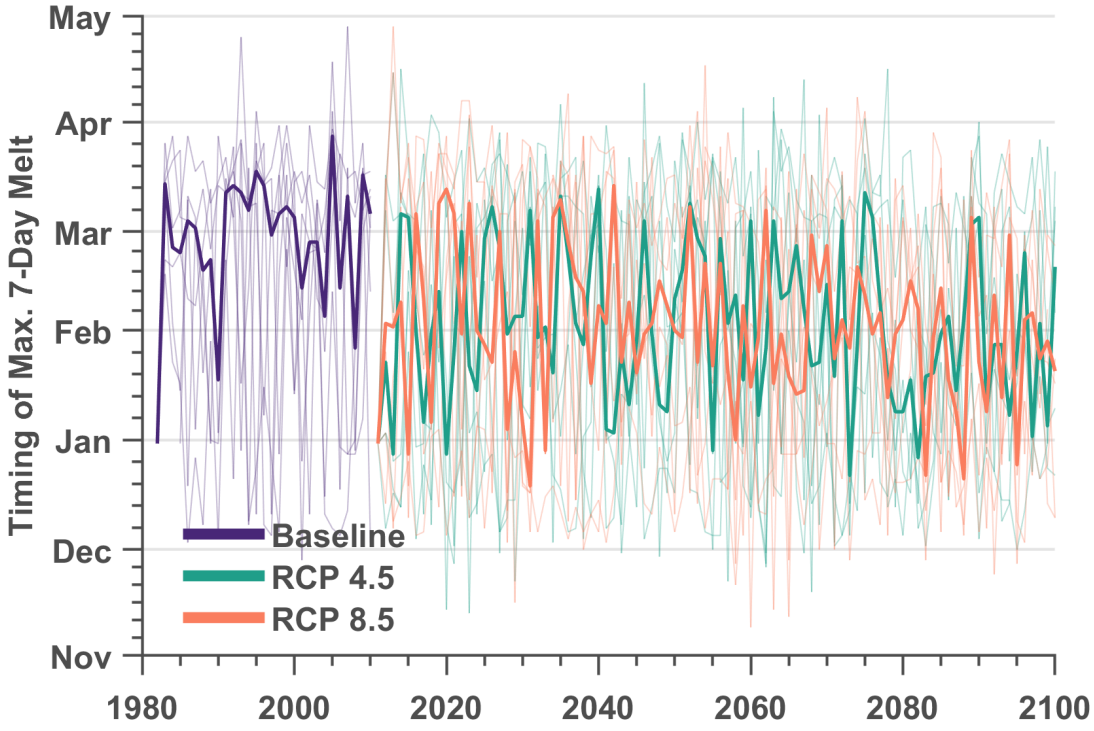


Figure F2.159: Timing of Max. 7-Day Melt.

F3 Wind

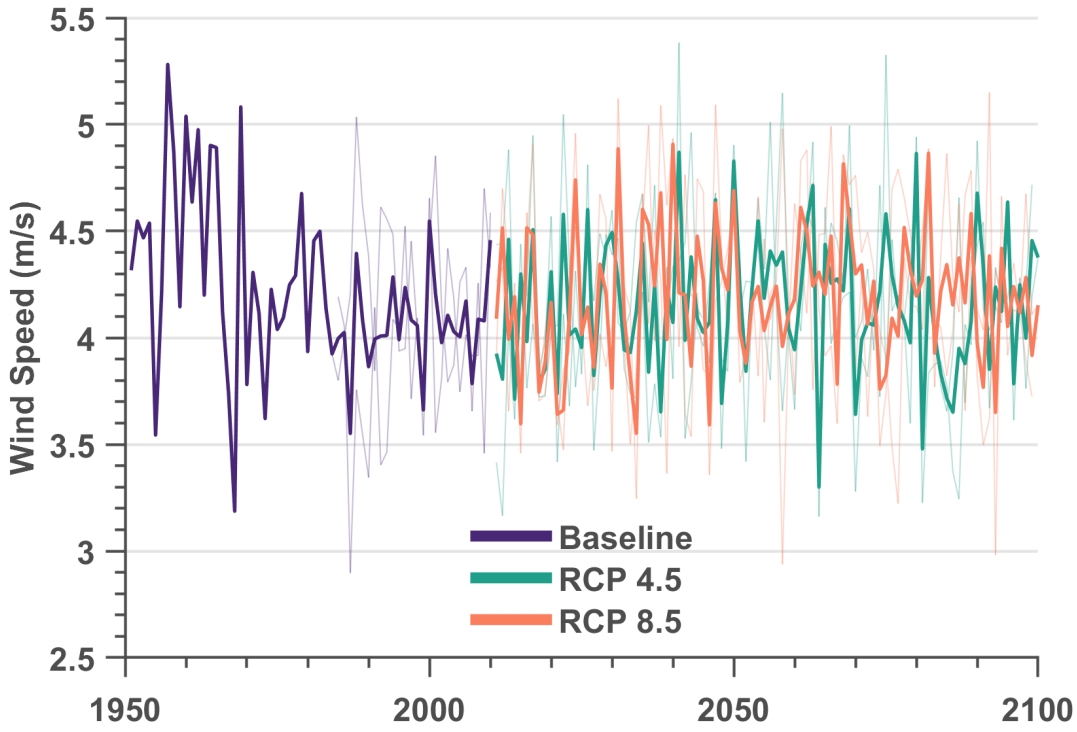


Figure F3.1: Monthly Average Wind Speed - January.

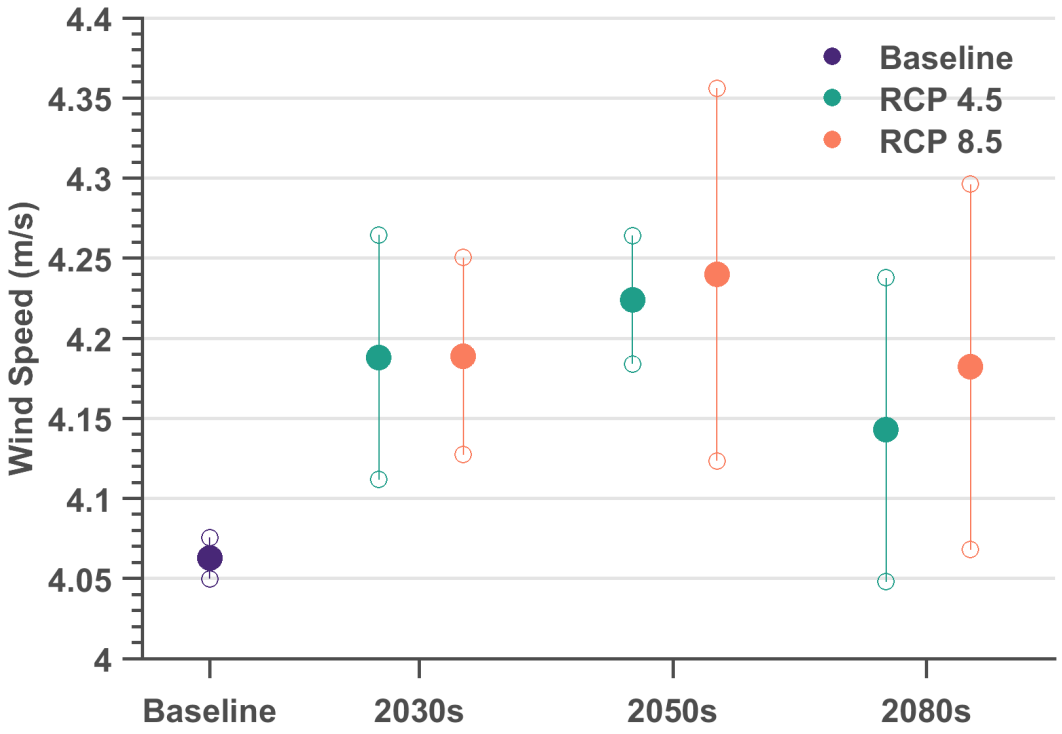


Figure F3.2: Monthly Average Wind Speed - January.

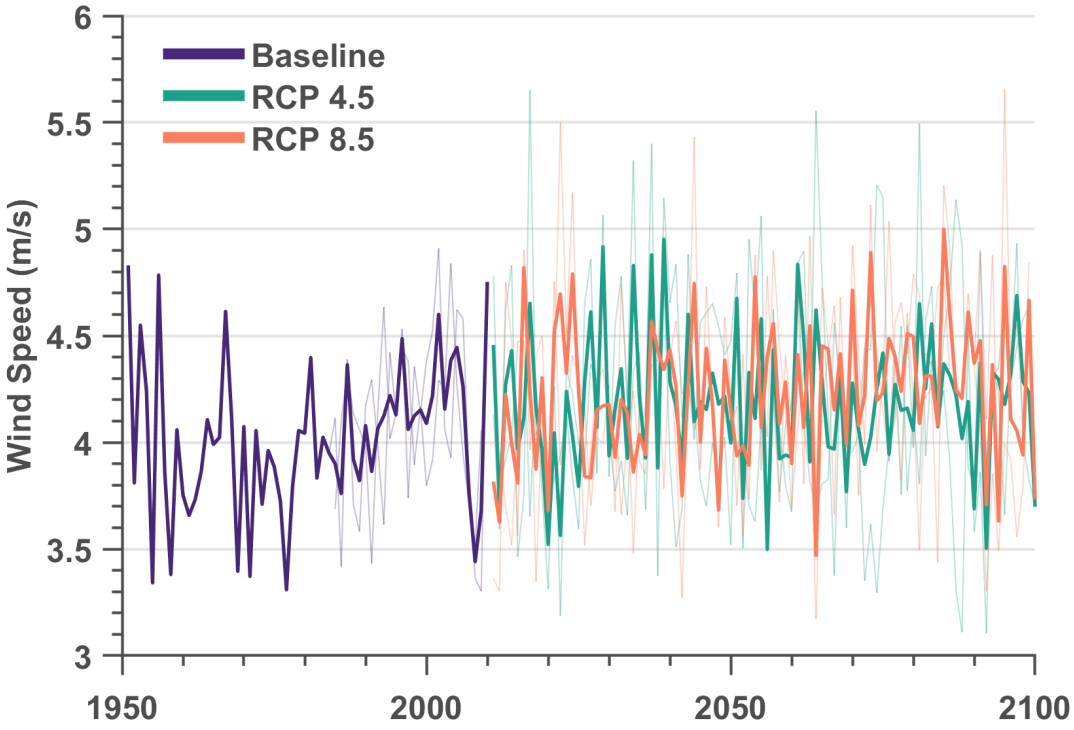


Figure F3.3: Monthly Average Wind Speed - February.

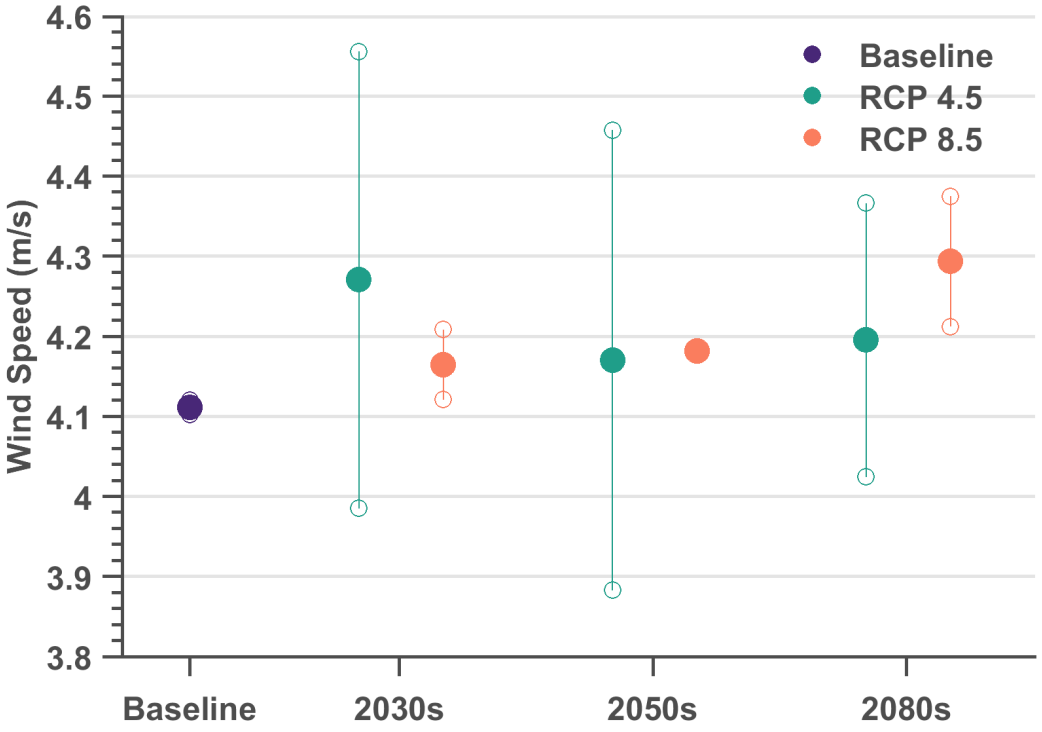


Figure F3.4: Monthly Average Wind Speed - February.

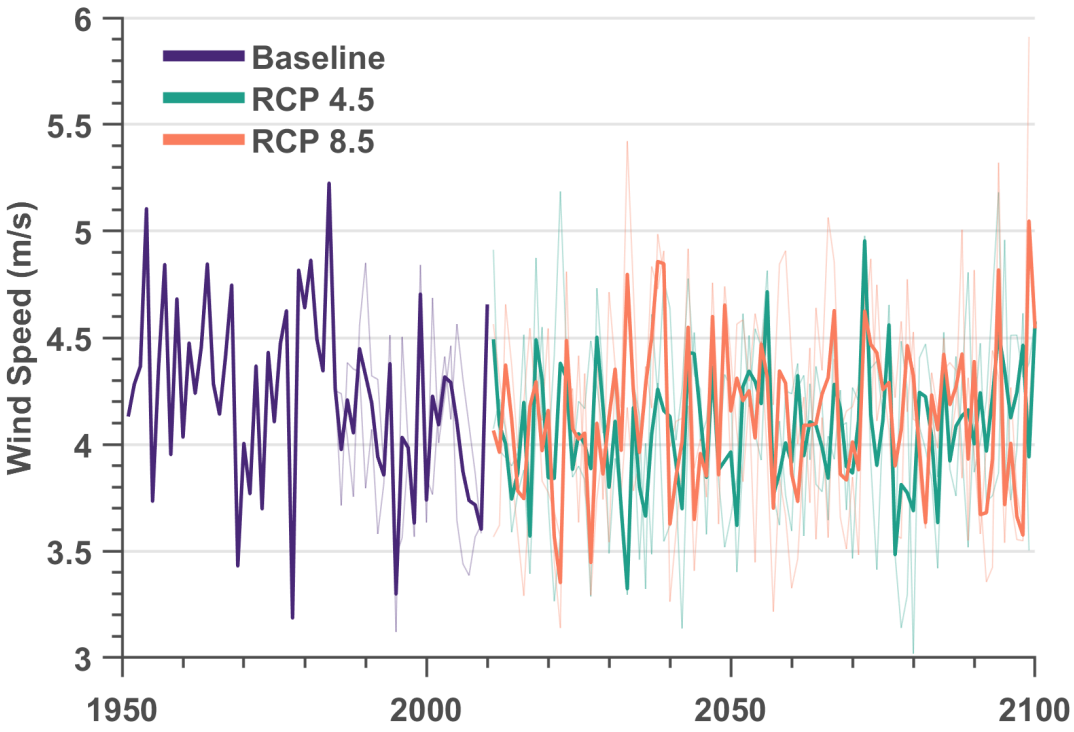


Figure F3.5: Monthly Average Wind Speed - March.

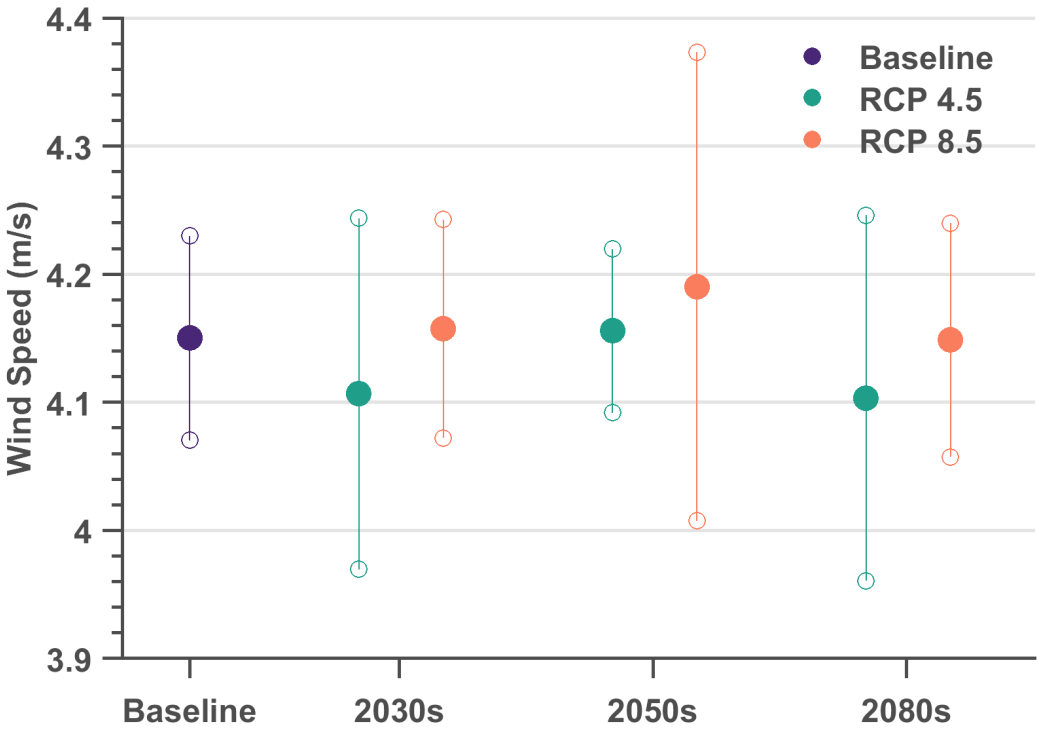


Figure F3.6: Monthly Average Wind Speed - March.

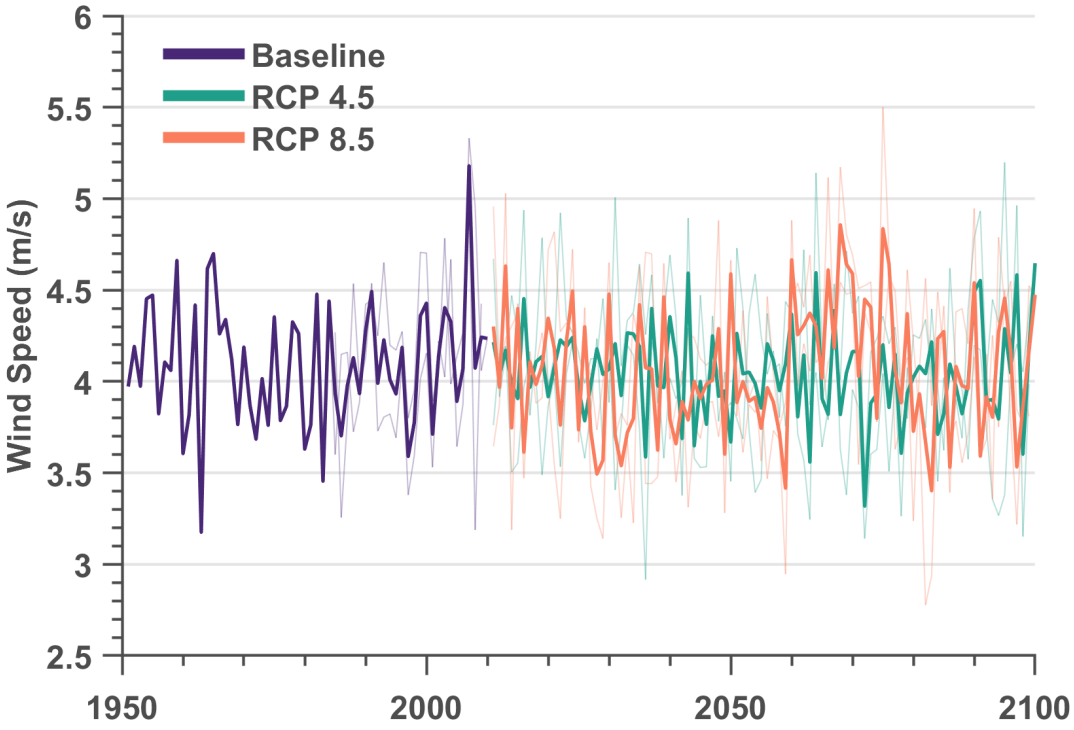


Figure F3.7: Monthly Average Wind Speed - April.

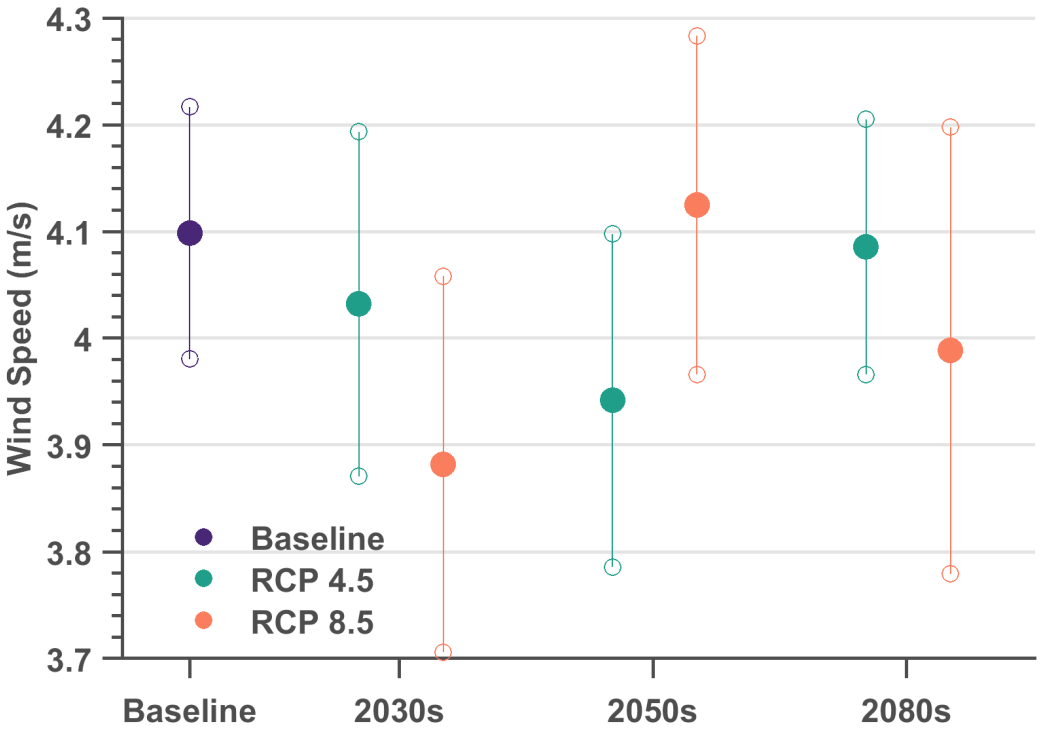


Figure F3.8: Monthly Average Wind Speed - April.

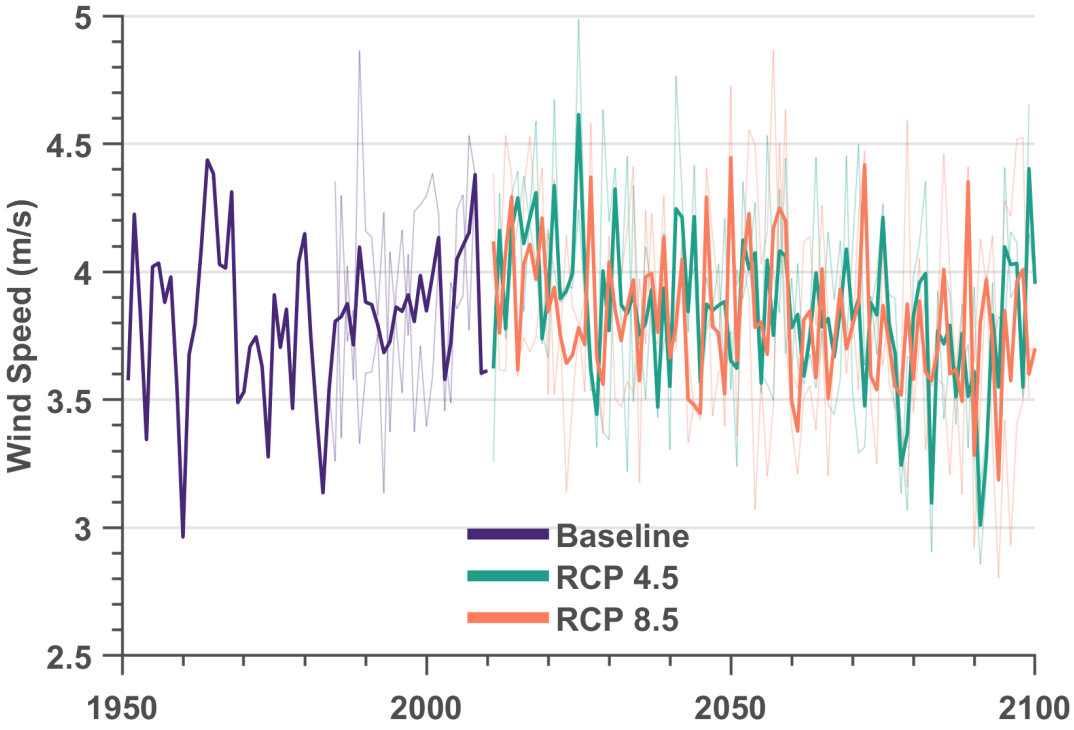


Figure F3.9: Monthly Average Wind Speed - May.

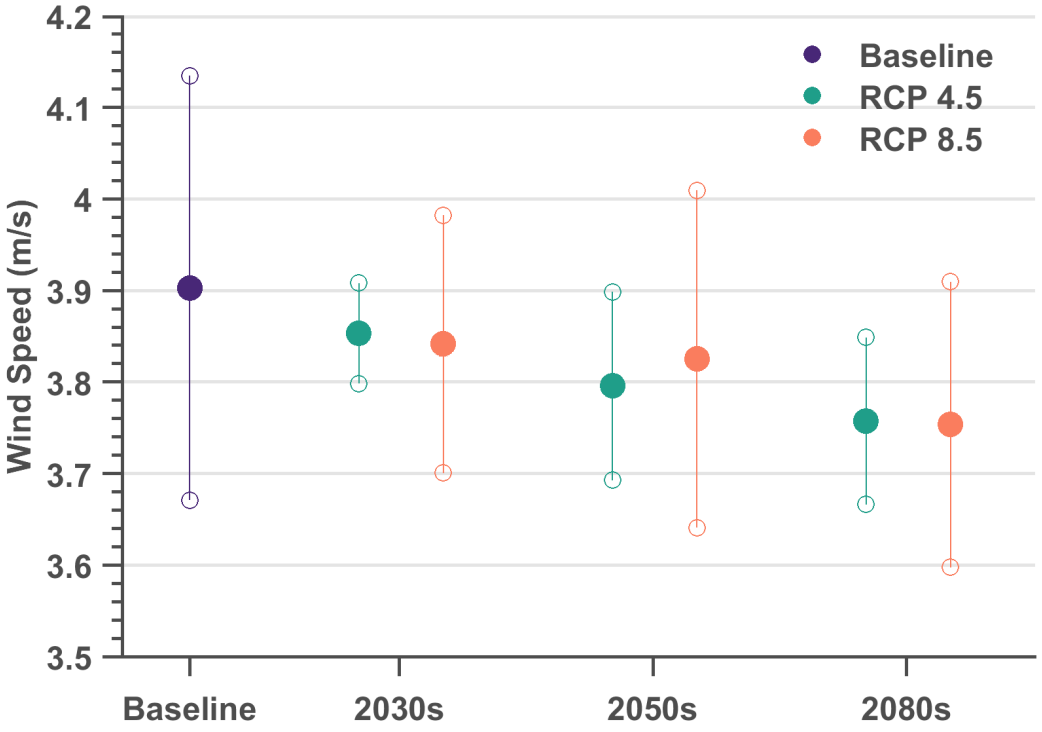


Figure F3.10: Monthly Average Wind Speed - May.

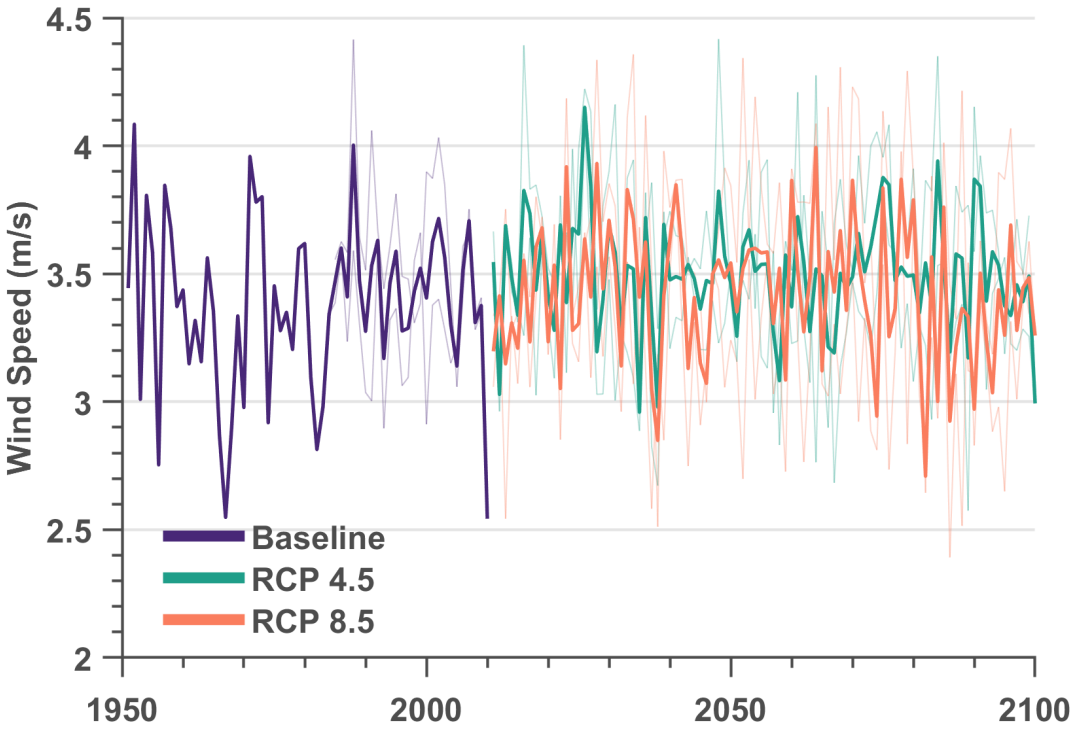


Figure F3.11: Monthly Average Wind Speed - June.

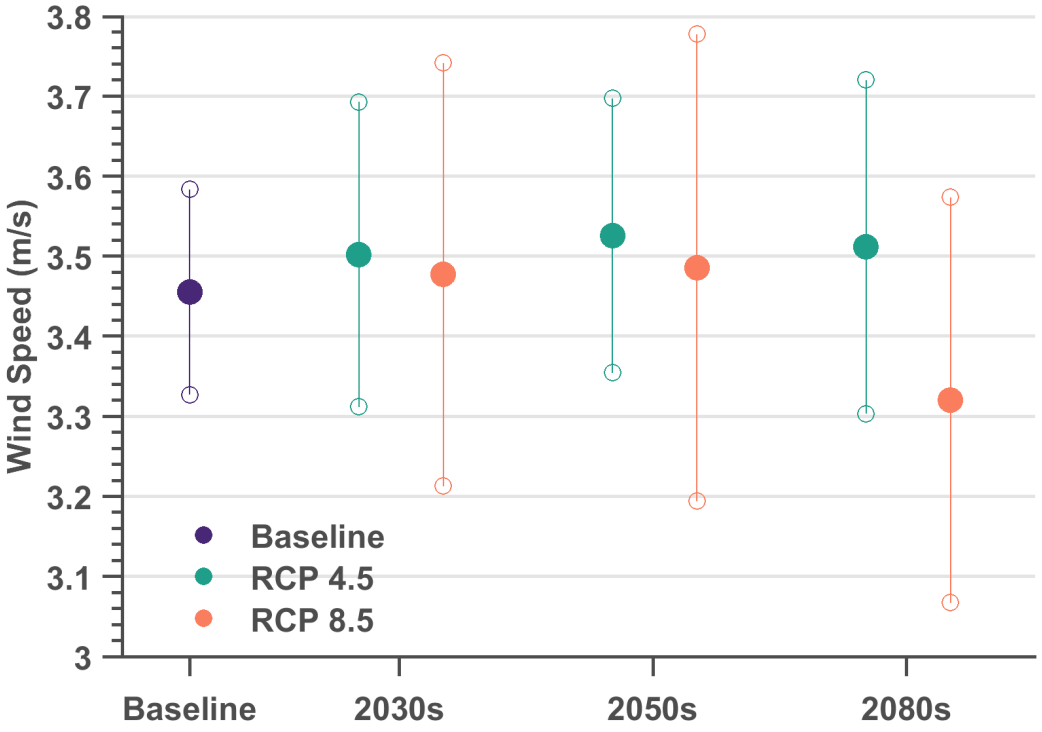


Figure F3.12: Monthly Average Wind Speed - June.

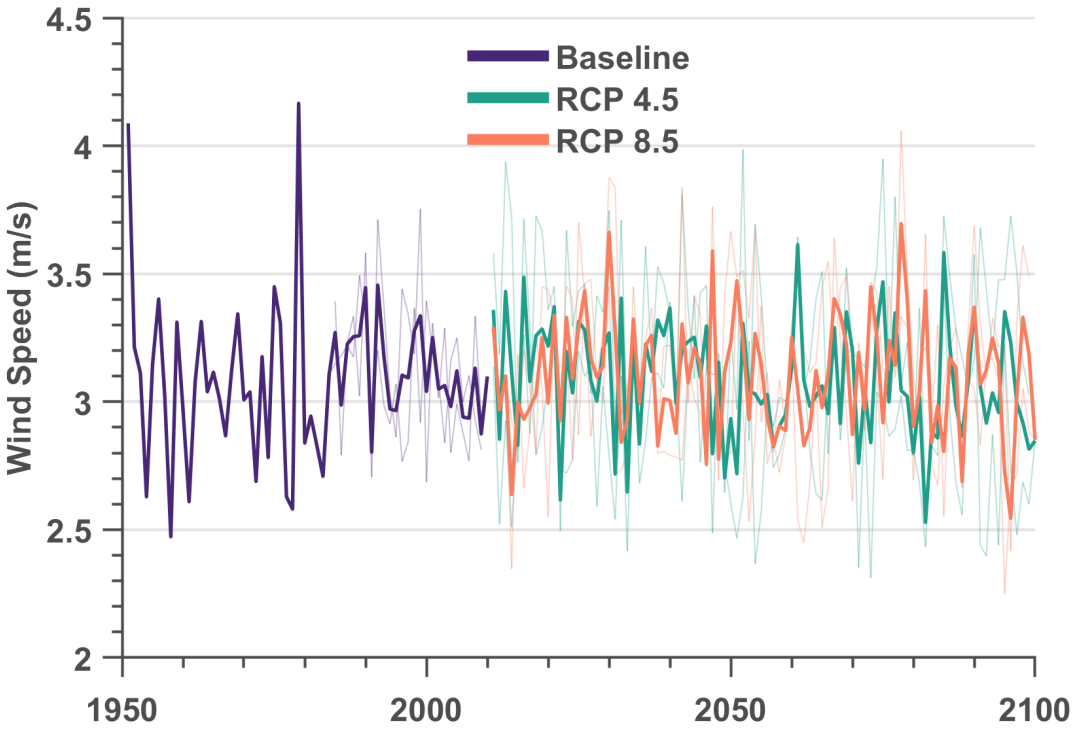


Figure F3.13: Monthly Average Wind Speed - July.

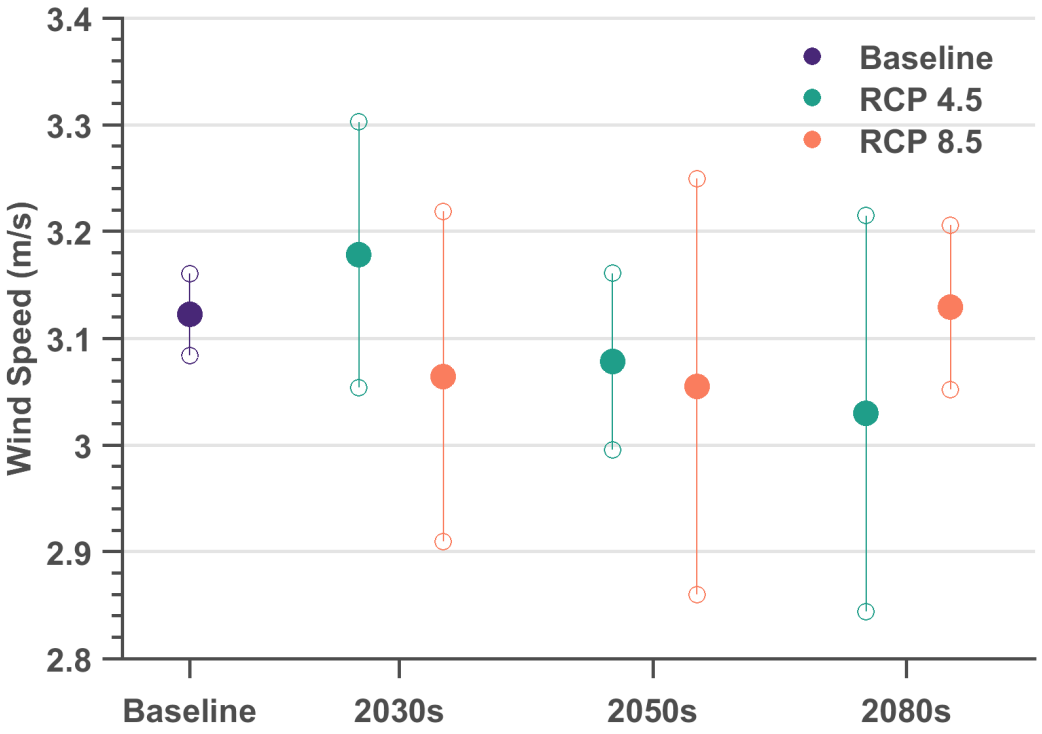


Figure F3.14: Monthly Average Wind Speed - July.

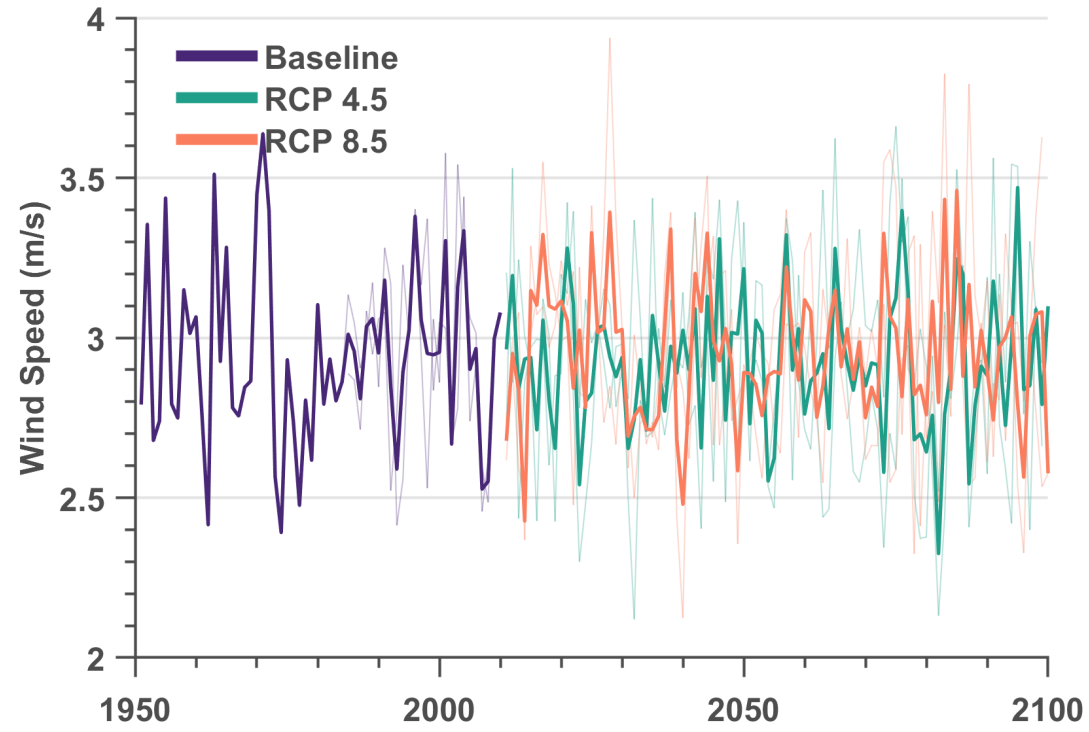


Figure F3.15: Monthly Average Wind Speed - August.

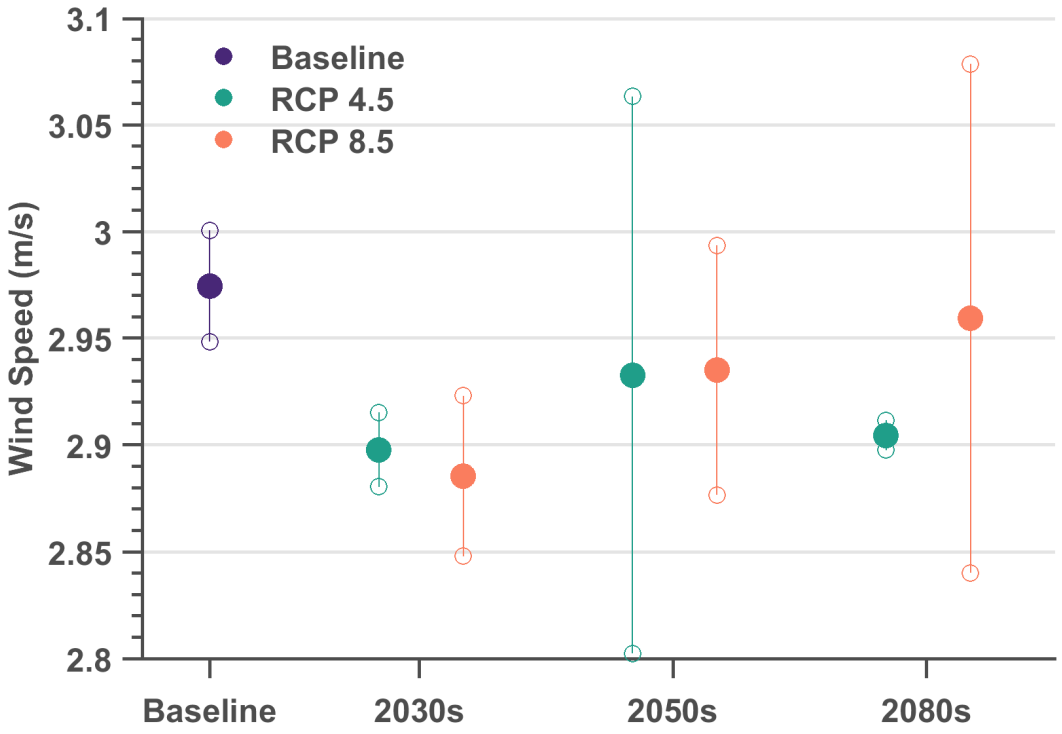


Figure F3.16: Monthly Average Wind Speed - August.

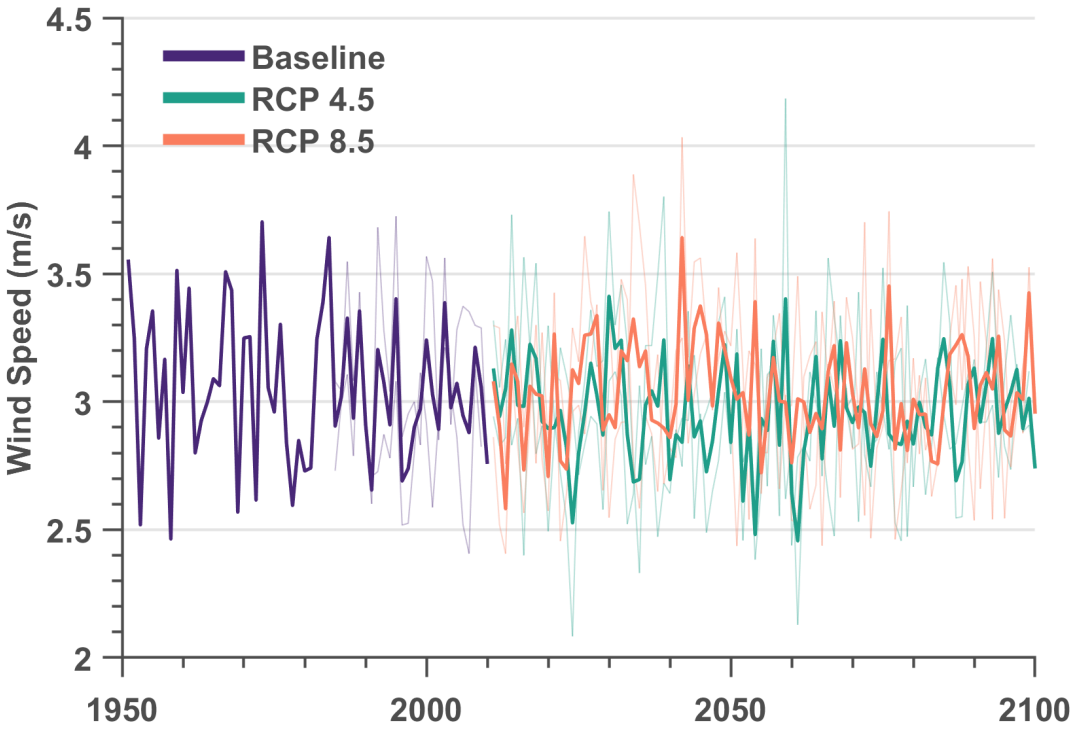


Figure F3.17: Monthly Average Wind Speed - September.

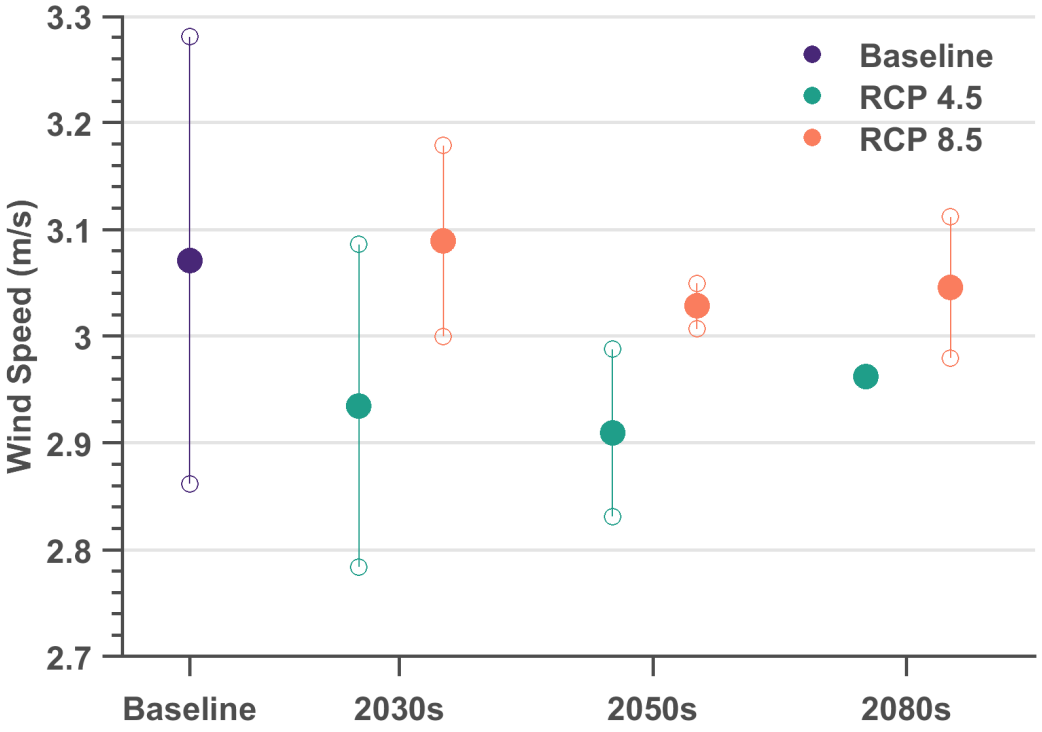


Figure F3.18: Monthly Average Wind Speed - September.

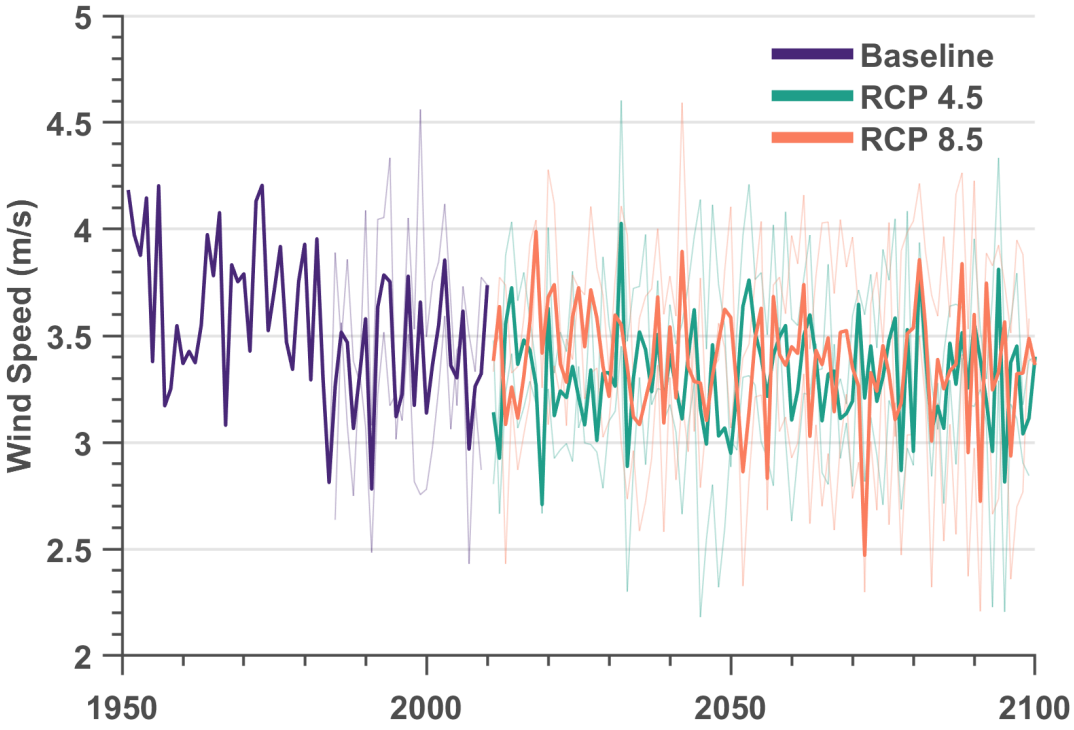


Figure F3.19: Monthly Average Wind Speed - October.

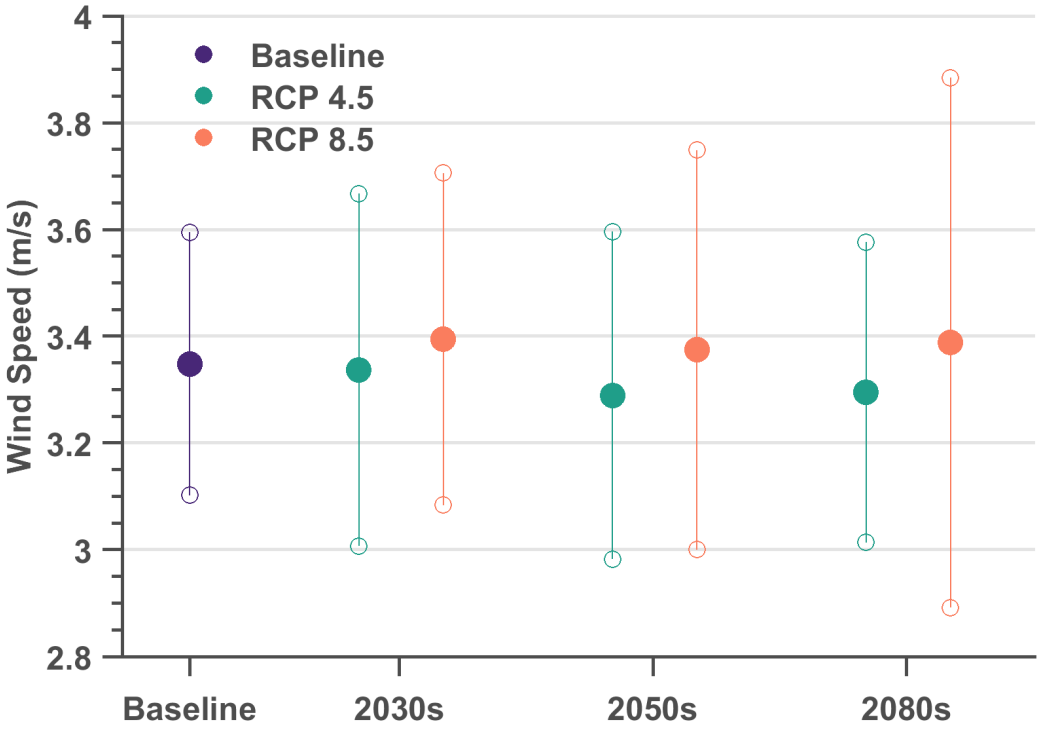


Figure F3.20: Monthly Average Wind Speed - October.

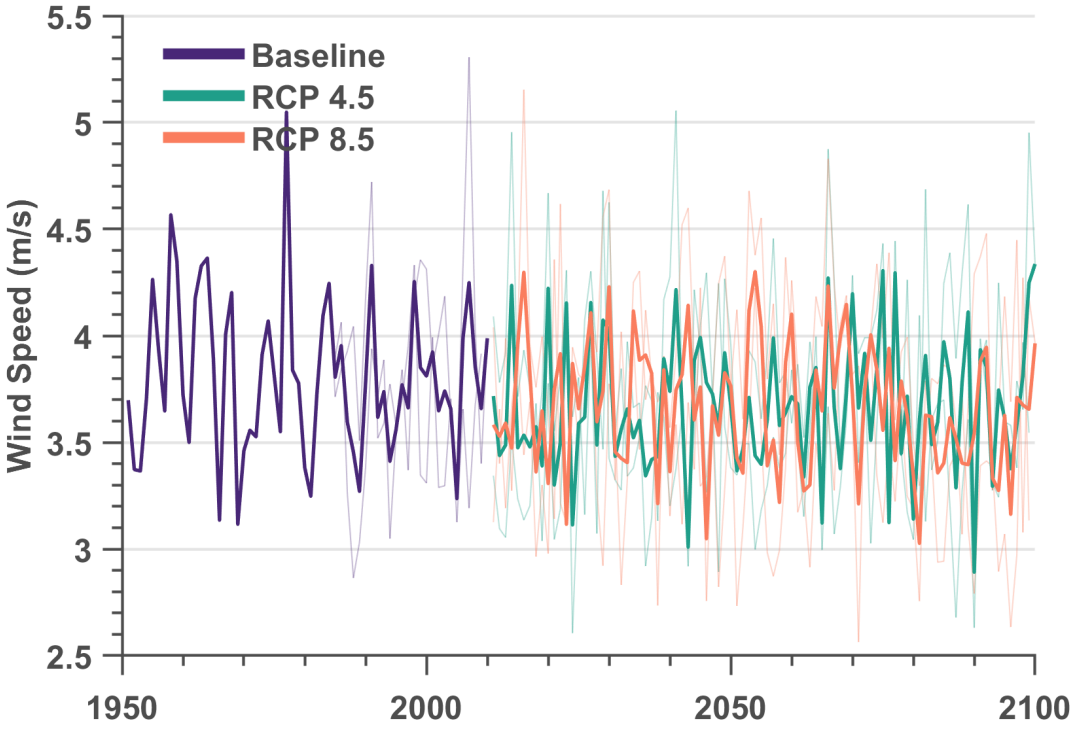


Figure F3.21: Monthly Average Wind Speed - November.

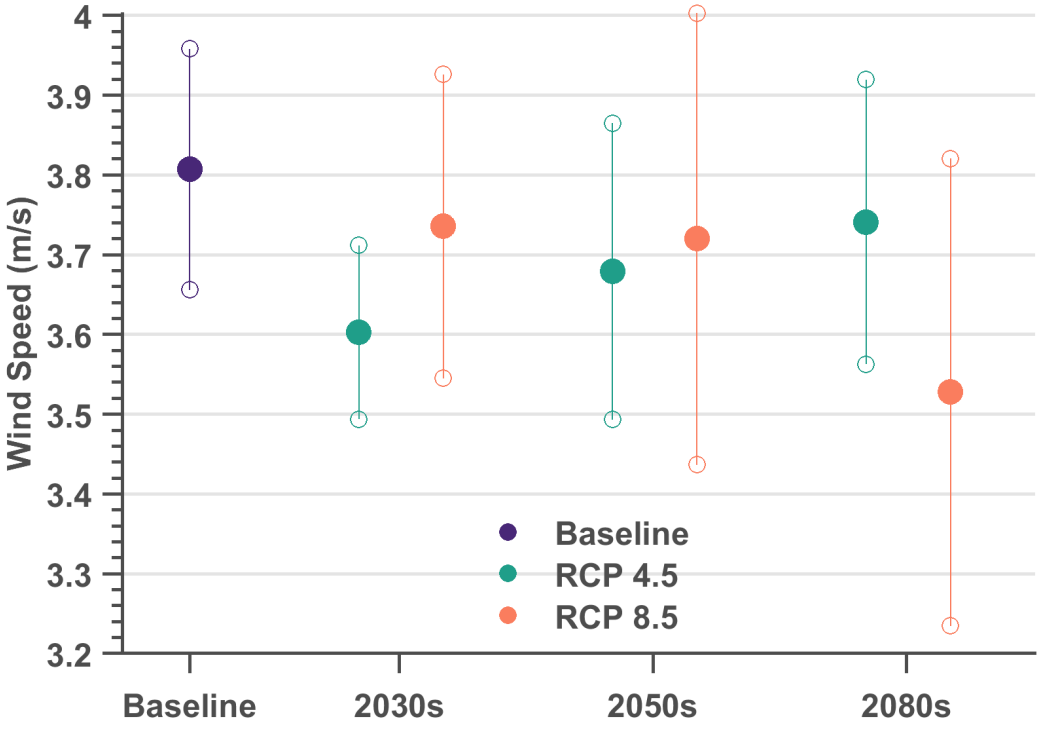


Figure F3.22: Monthly Average Wind Speed - November.

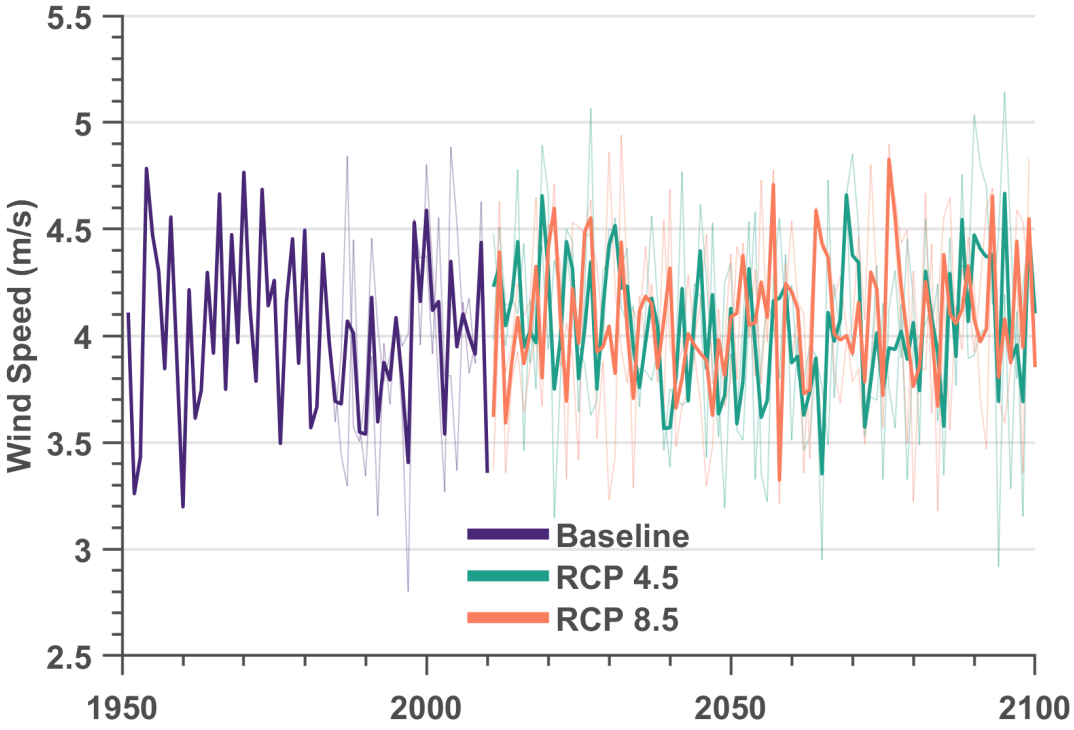


Figure F3.23: Monthly Average Wind Speed - December.

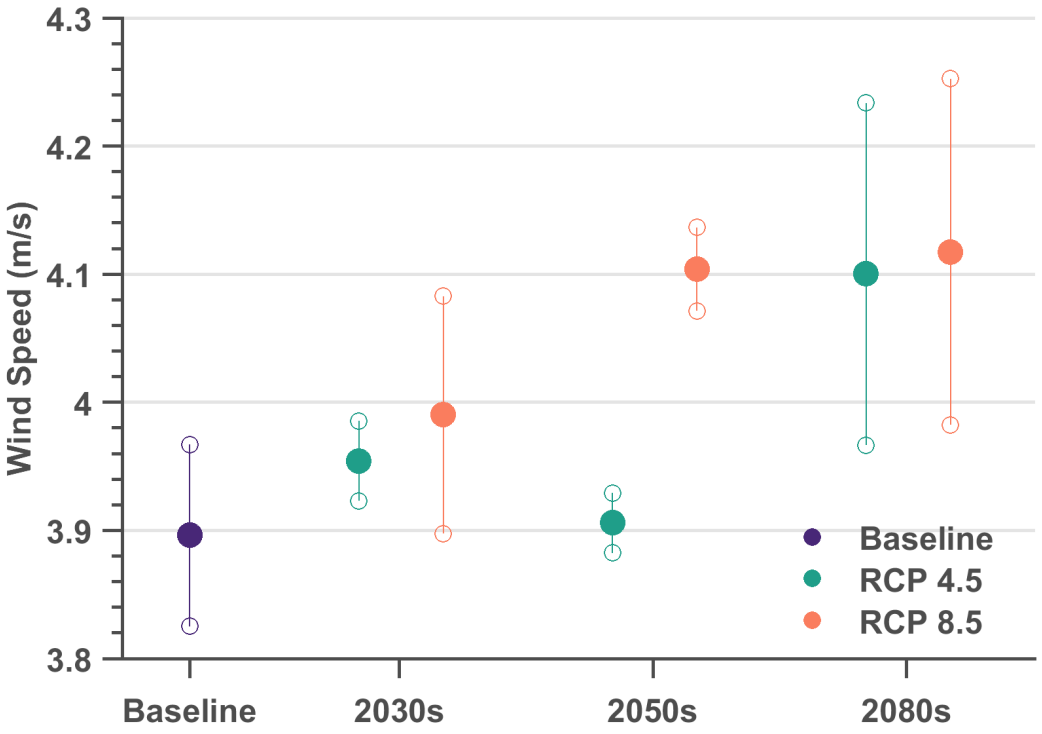


Figure F3.24: Monthly Average Wind Speed - December.

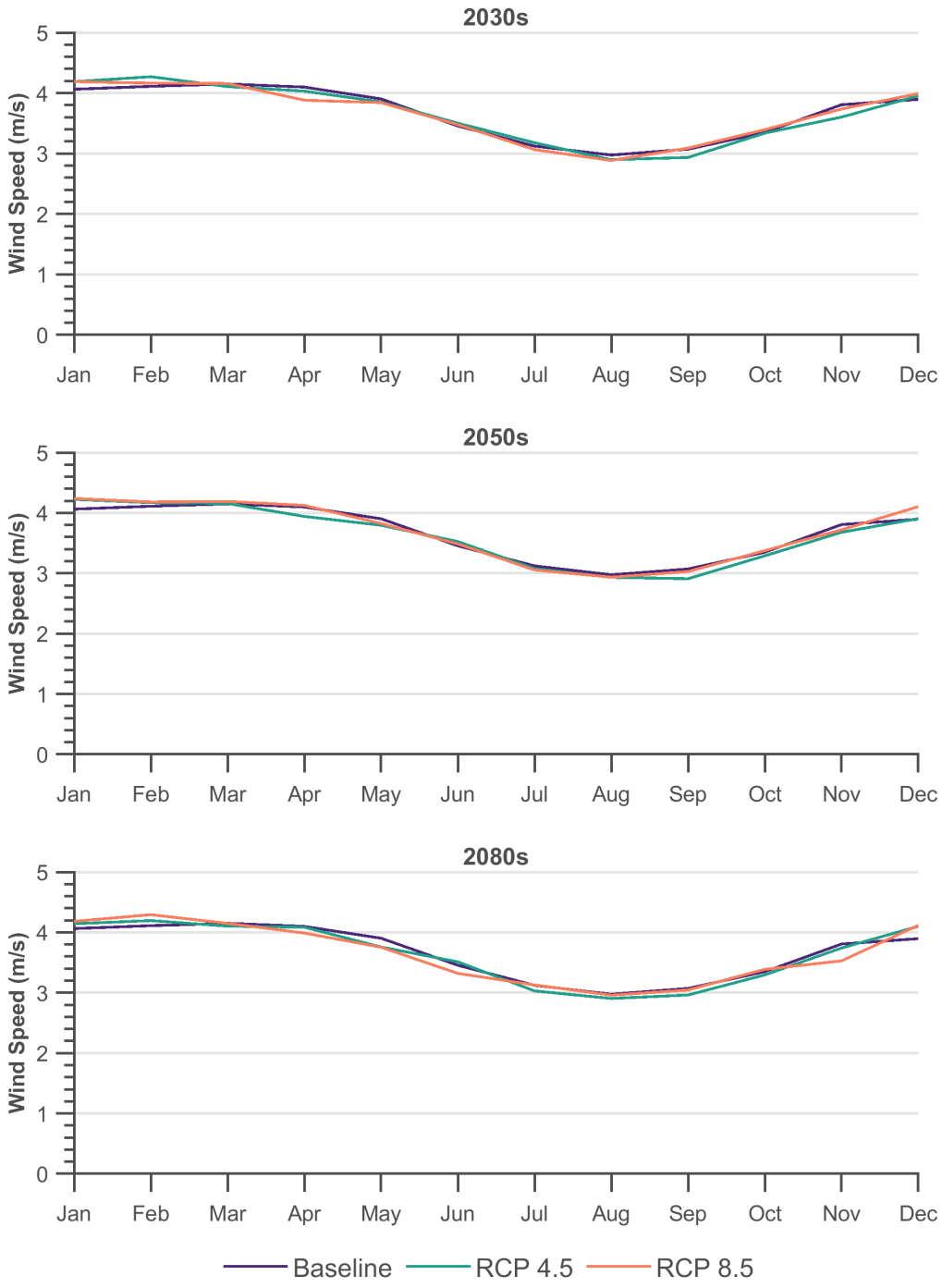


Figure F3.25: Monthly Average Wind Speed.

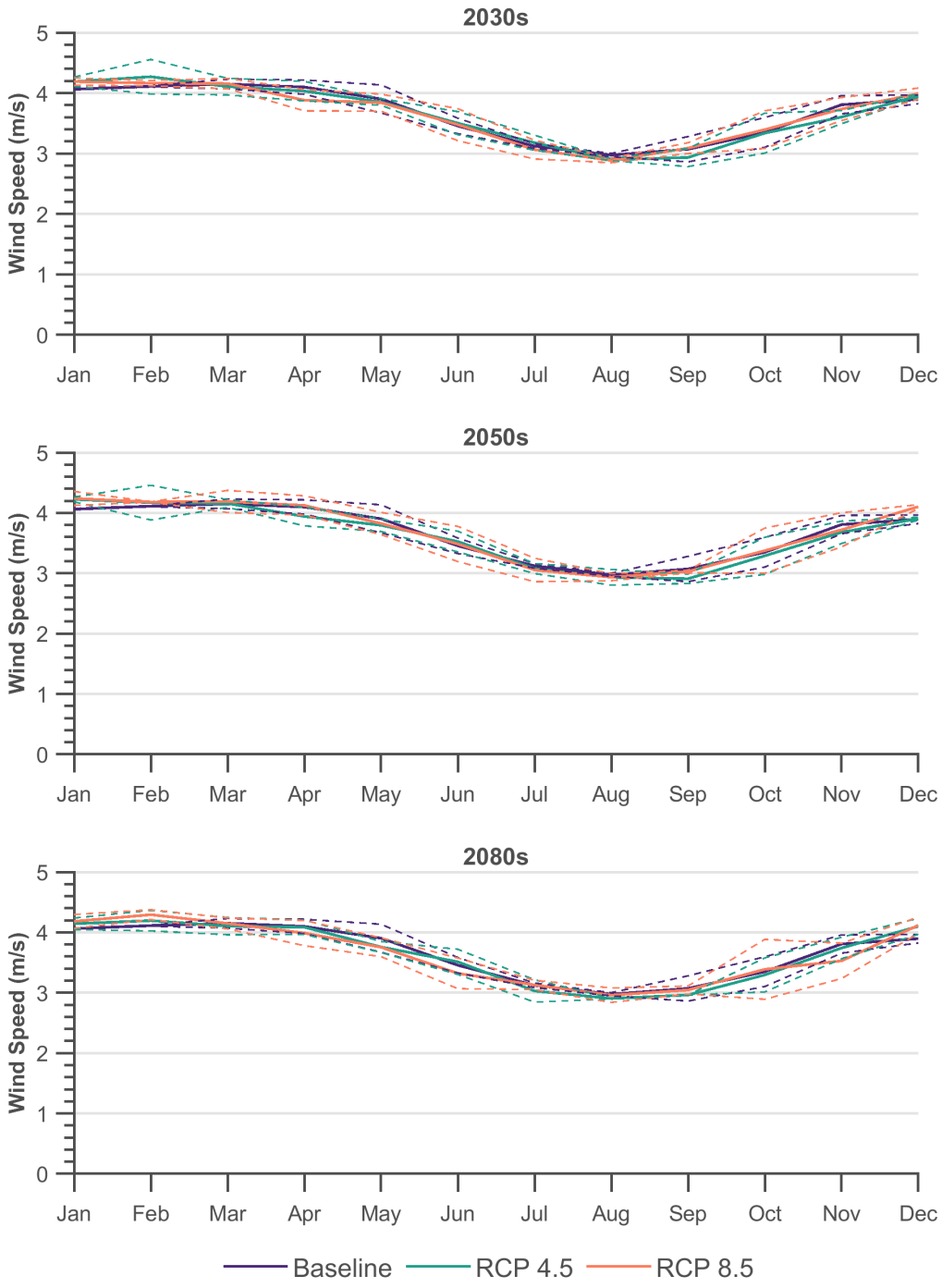


Figure F3.26: Monthly Average Wind Speed. Dashed lines indicate the 10% and 90% percentile.

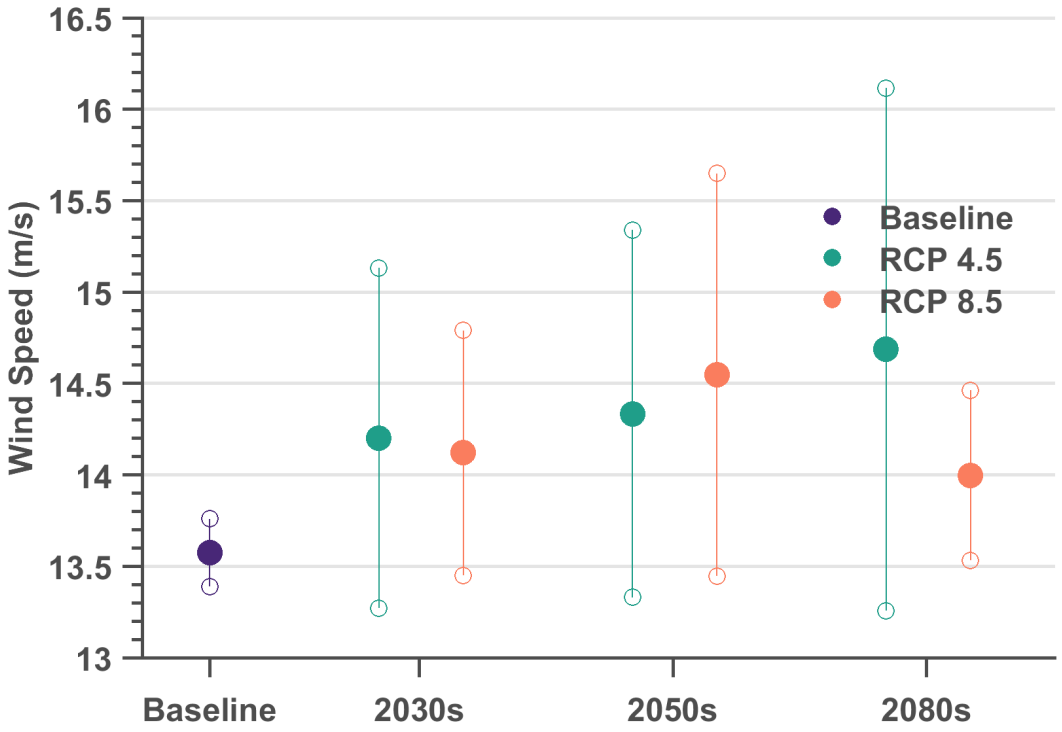


Figure F3.27: 1 in 2 Years 3-Hourly Wind Speed.

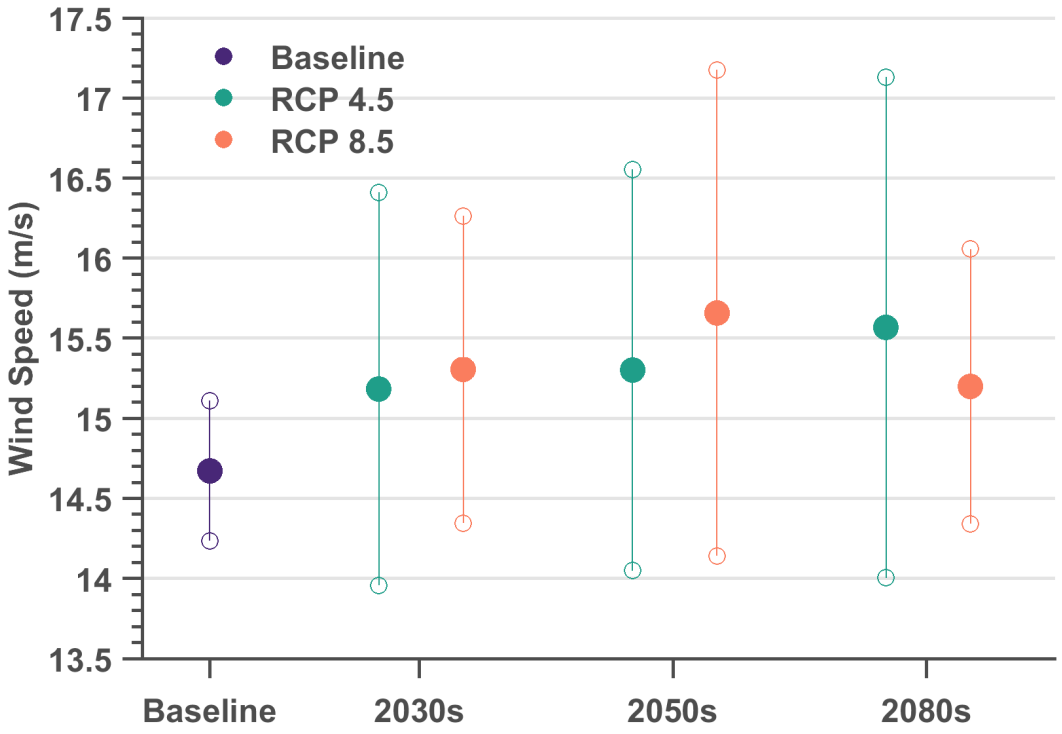


Figure F3.28: 1 in 5 Years 3-Hourly Wind Speed.

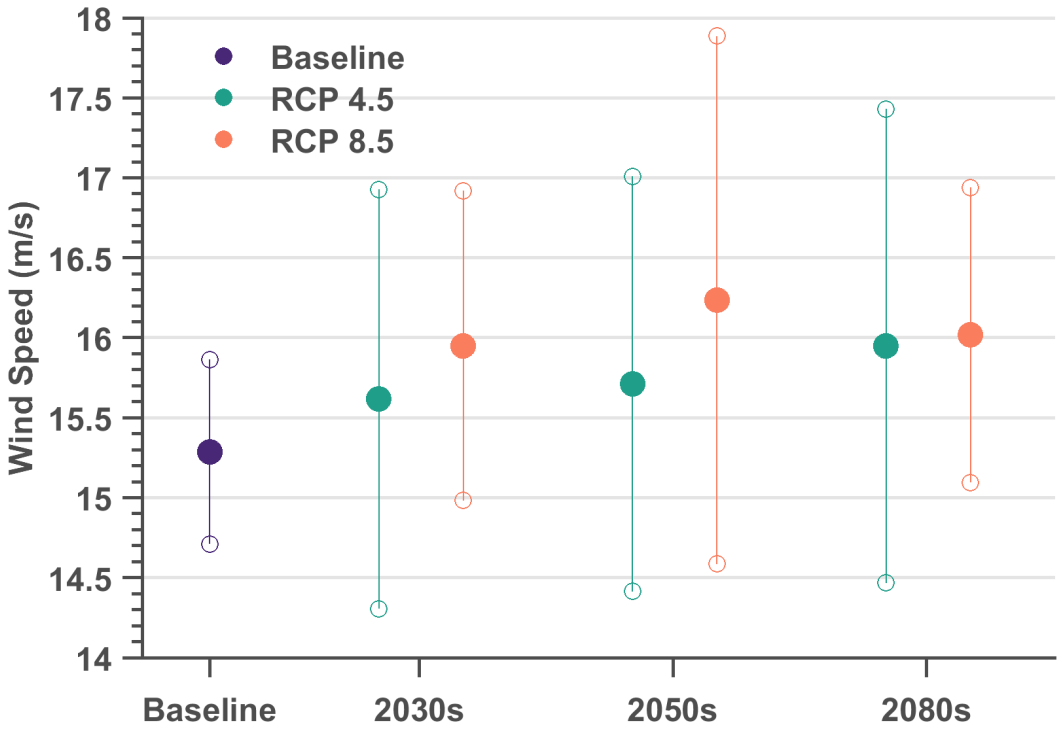


Figure F3.29: 1 in 10 Years 3-Hourly Wind Speed.

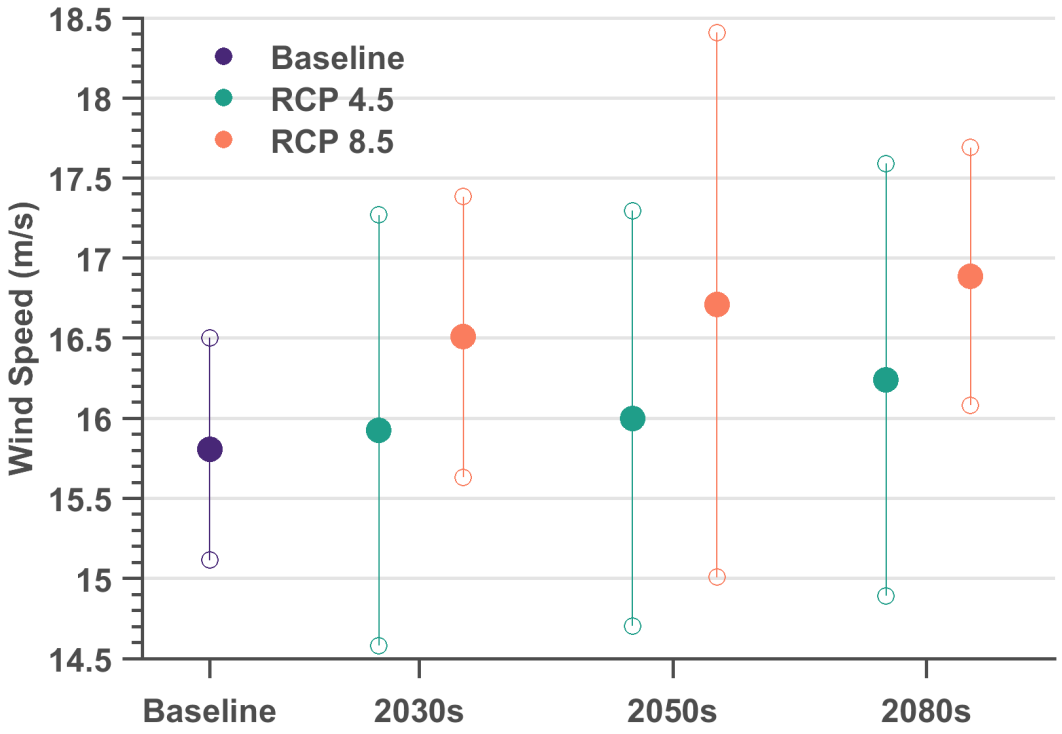


Figure F3.30: 1 in 20 Years 3-Hourly Wind Speed.

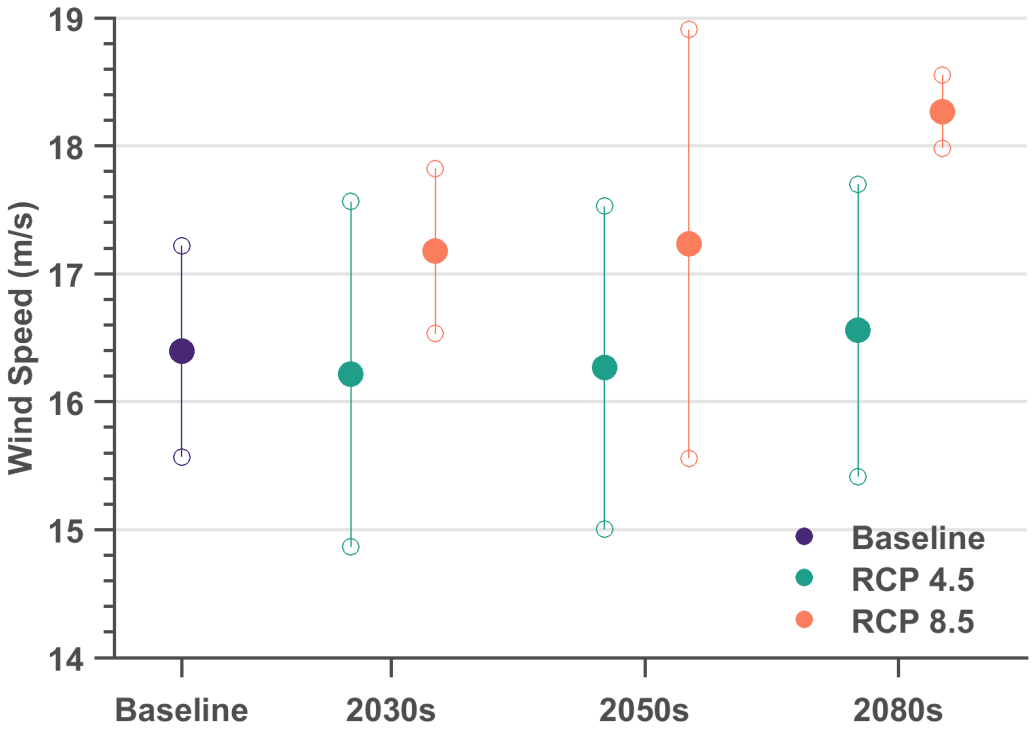


Figure F3.31: 1 in 50 Years 3-Hourly Wind Speed.

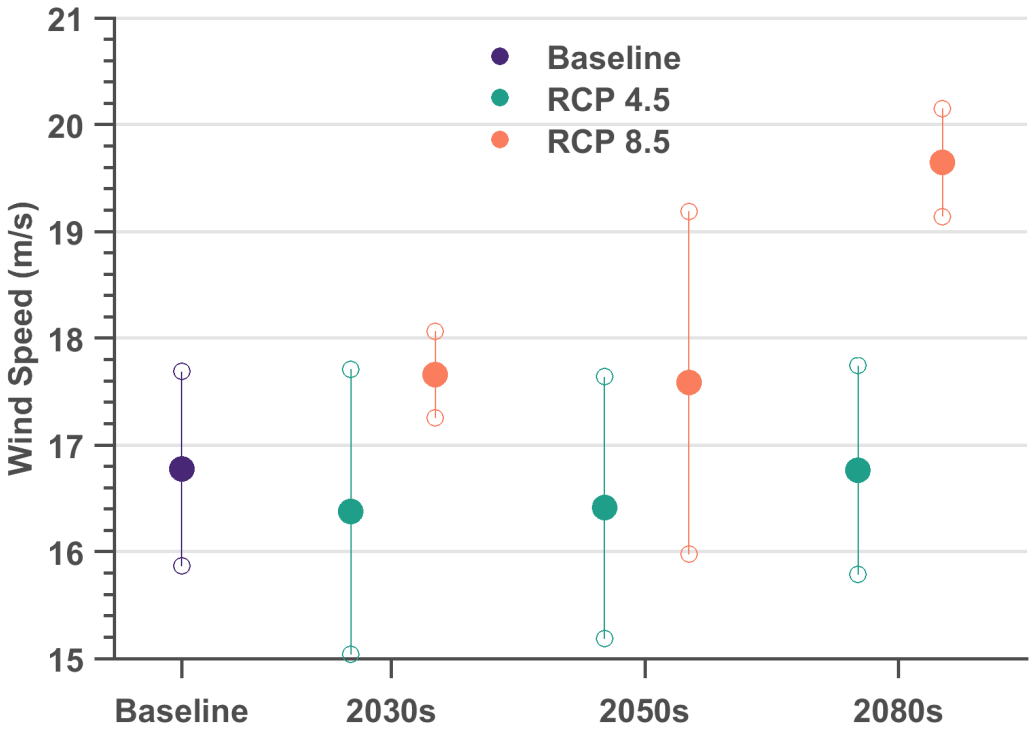


Figure F3.32: 1 in 100 Years 3-Hourly Wind Speed.

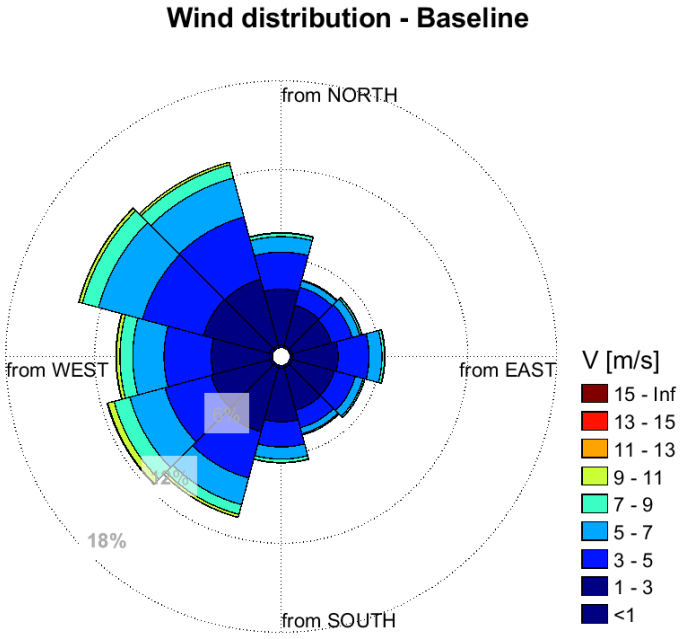


Figure F3.33: Wind Distribution - Baseline. The direction indicates where the wind comes from.

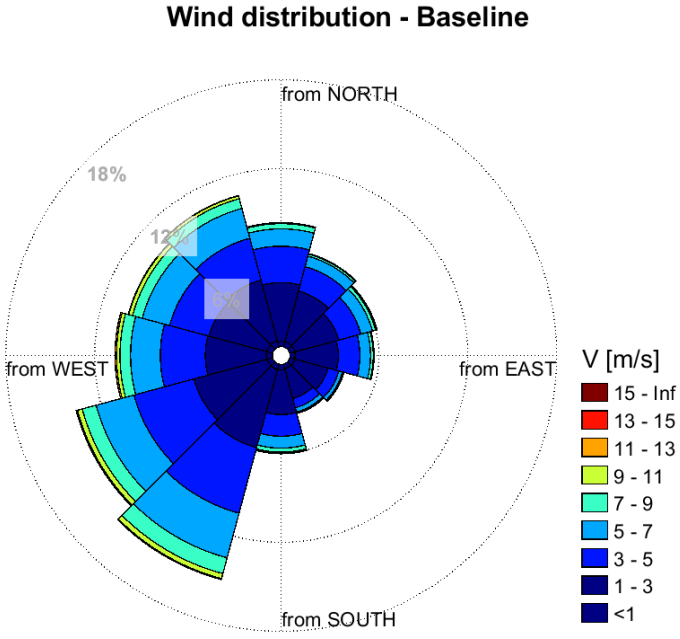


Figure F3.34: Wind Distribution - Baseline. The direction indicates where the wind comes from.

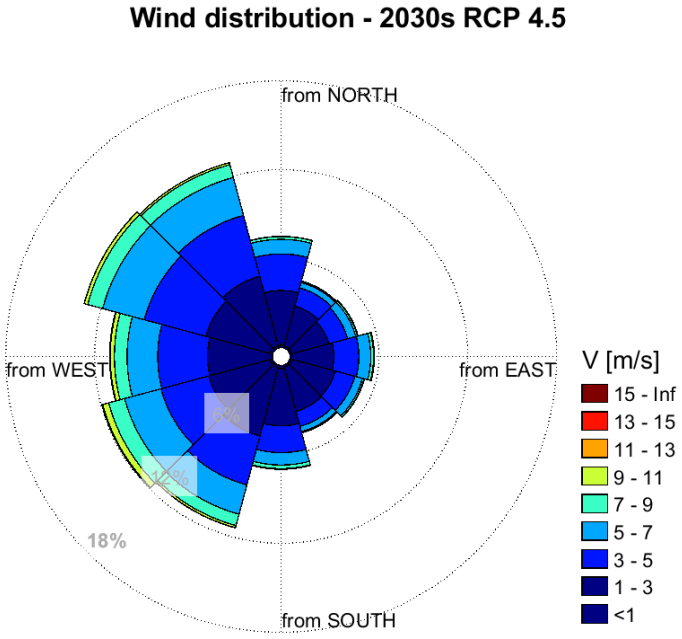


Figure F3.35: Wind Distribution - 2030s RCP 4.5. The direction indicates where the wind comes from.

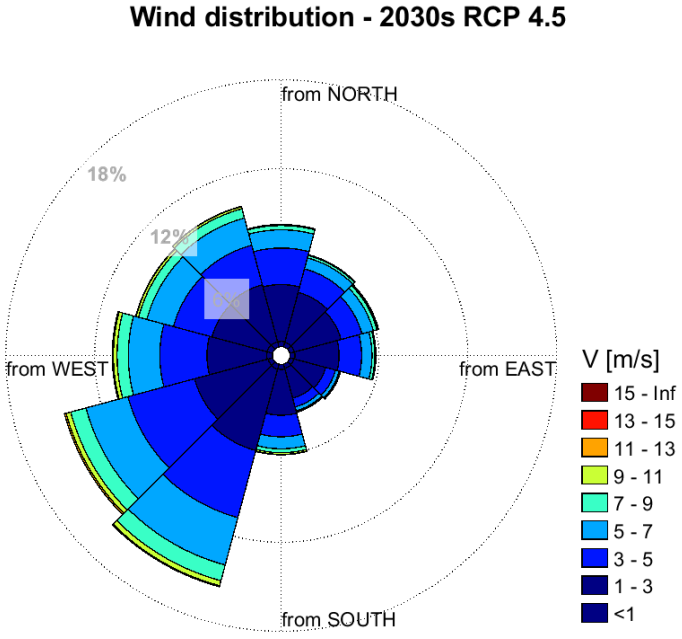


Figure F3.36: Wind Distribution - 2030s RCP 4.5. The direction indicates where the wind comes from.

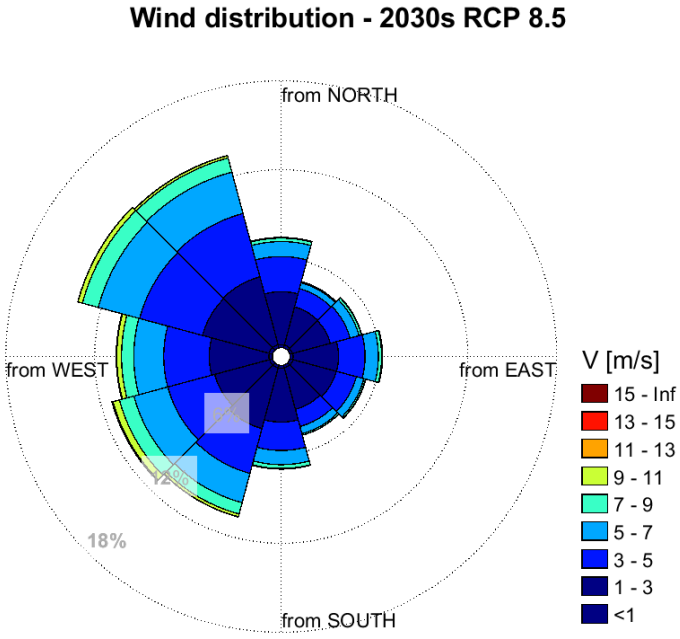


Figure F3.37: Wind Distribution - 2030s RCP 8.5. The direction indicates where the wind comes from.

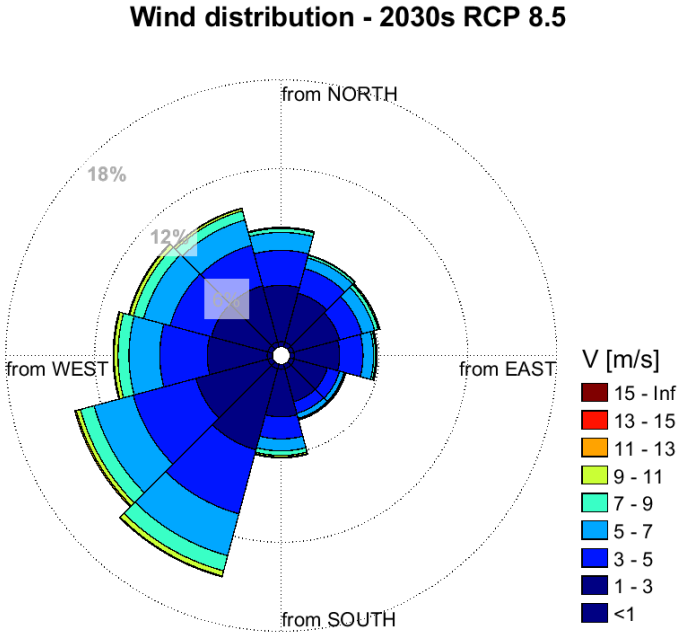


Figure F3.38: Wind Distribution - 2030s RCP 8.5. The direction indicates where the wind comes from.

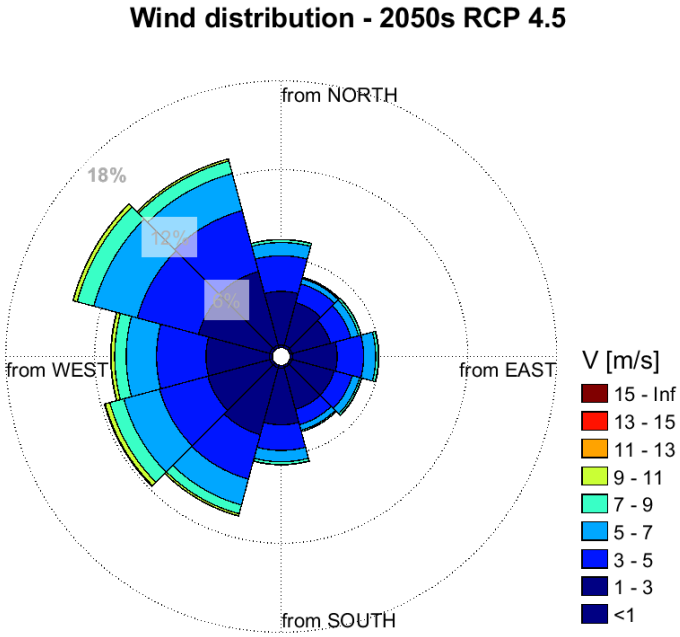


Figure F3.39: Wind Distribution - 2050s RCP 4.5. The direction indicates where the wind comes from.

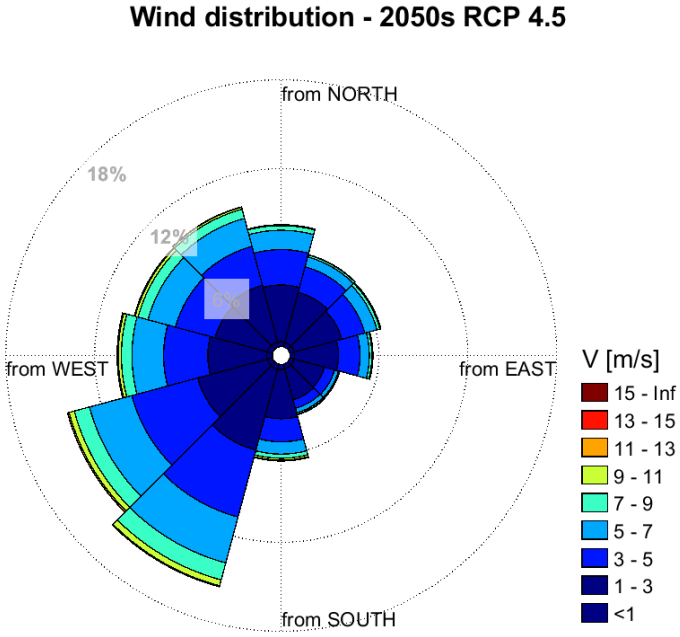


Figure F3.40: Wind Distribution - 2050s RCP 4.5. The direction indicates where the wind comes from.

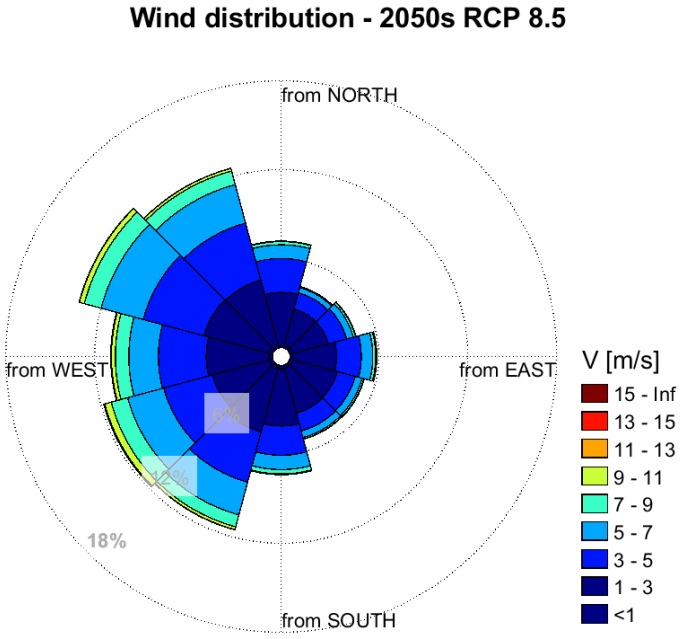


Figure F3.41: Wind Distribution - 2050s RCP 8.5. The direction indicates where the wind comes from.

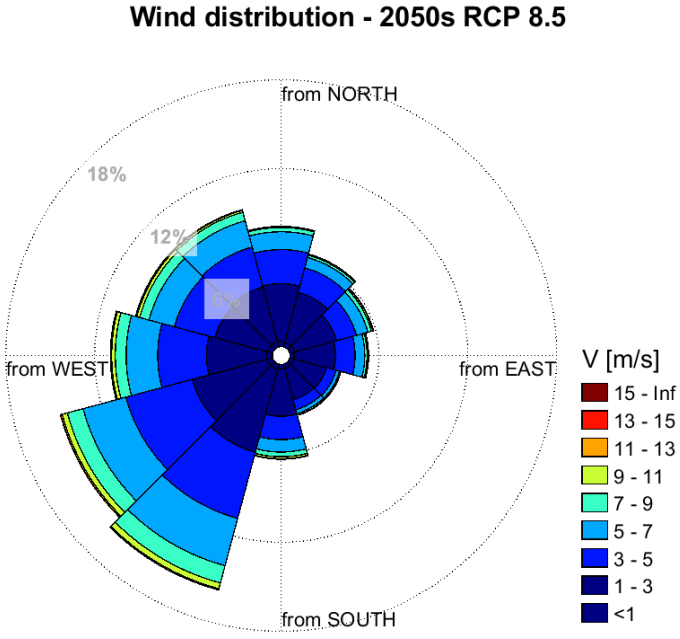


Figure F3.42: Wind Distribution - 2050s RCP 8.5. The direction indicates where the wind comes from.

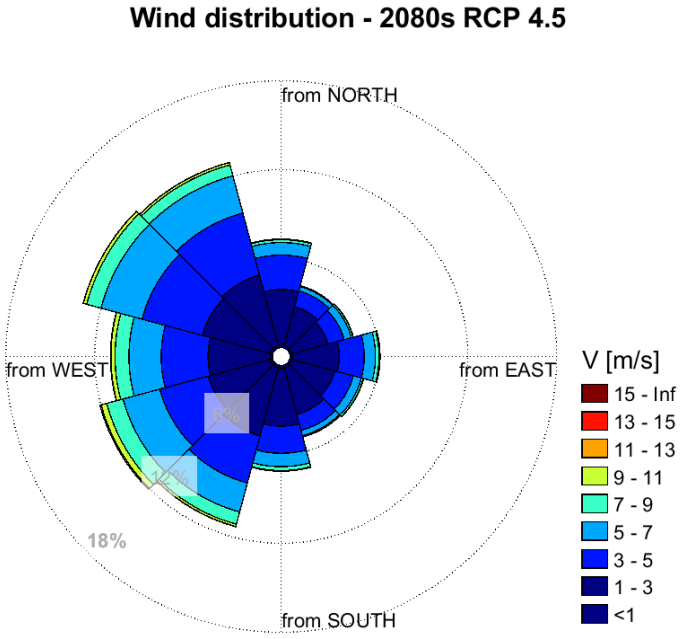


Figure F3.43: Wind Distribution - 2080s RCP 4.5. The direction indicates where the wind comes from.

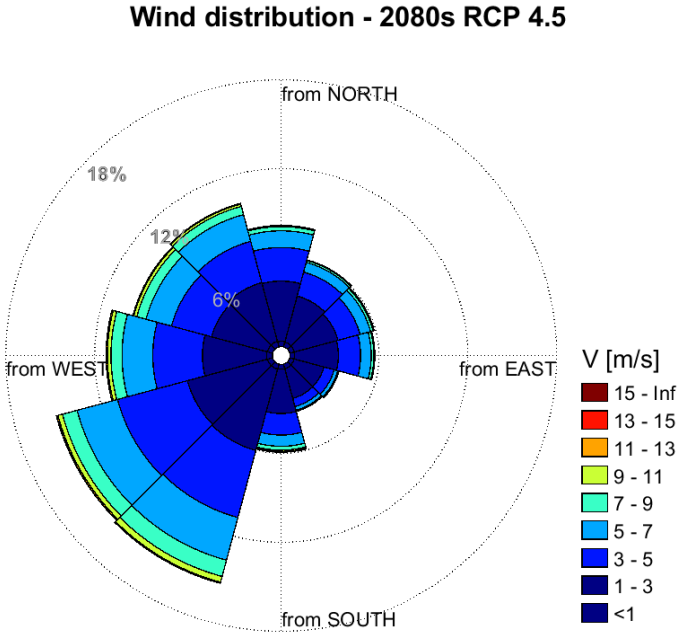


Figure F3.44: Wind Distribution - 2080s RCP 4.5. The direction indicates where the wind comes from.

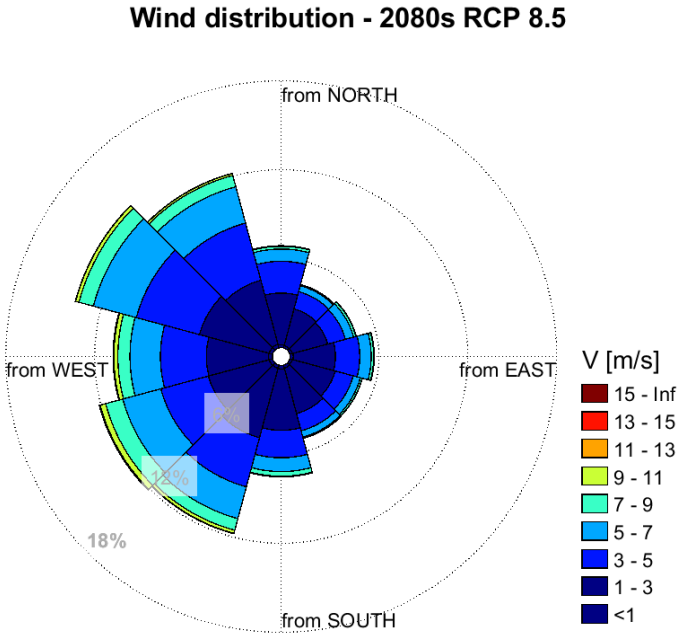


Figure F3.45: Wind Distribution - 2080s RCP 8.5. The direction indicates where the wind comes from.

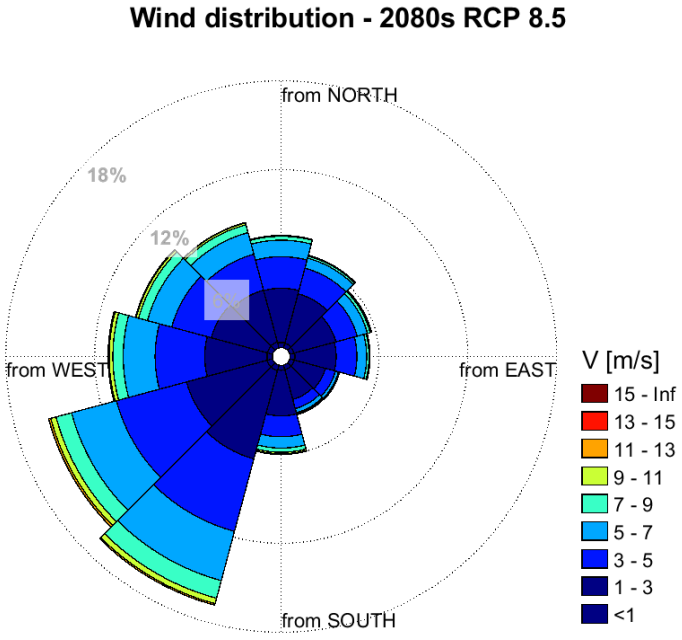


Figure F3.46: Wind Distribution - 2080s RCP 8.5. The direction indicates where the wind comes from.

F4 Humidity

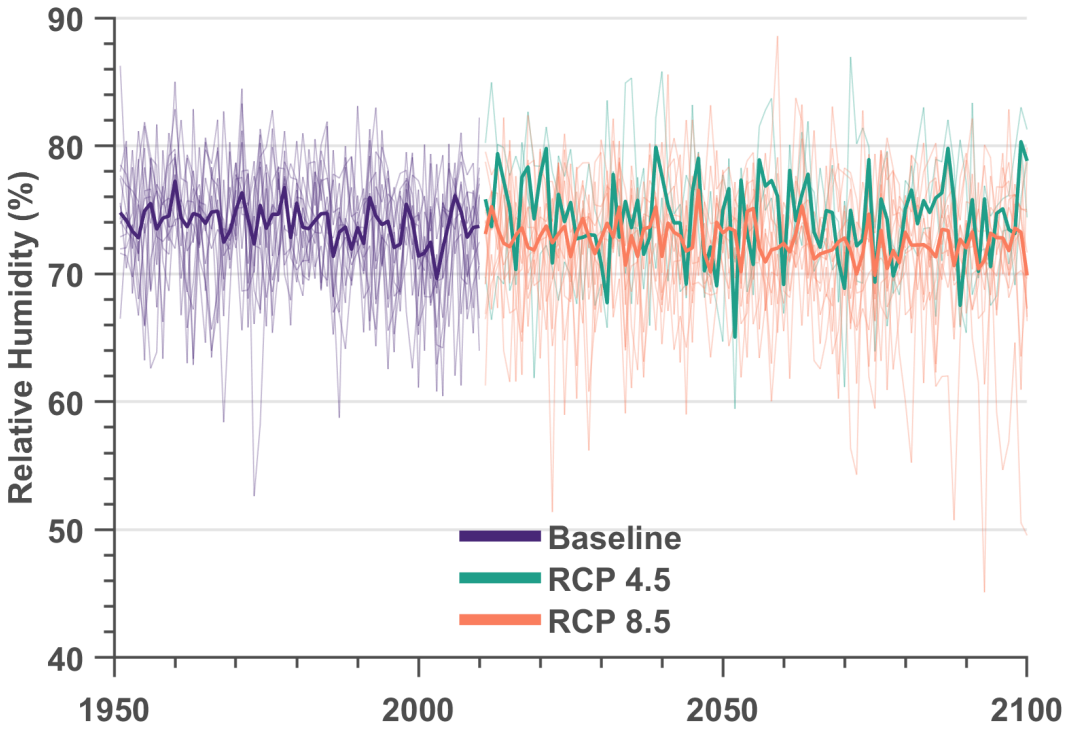


Figure F4.1: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - January.

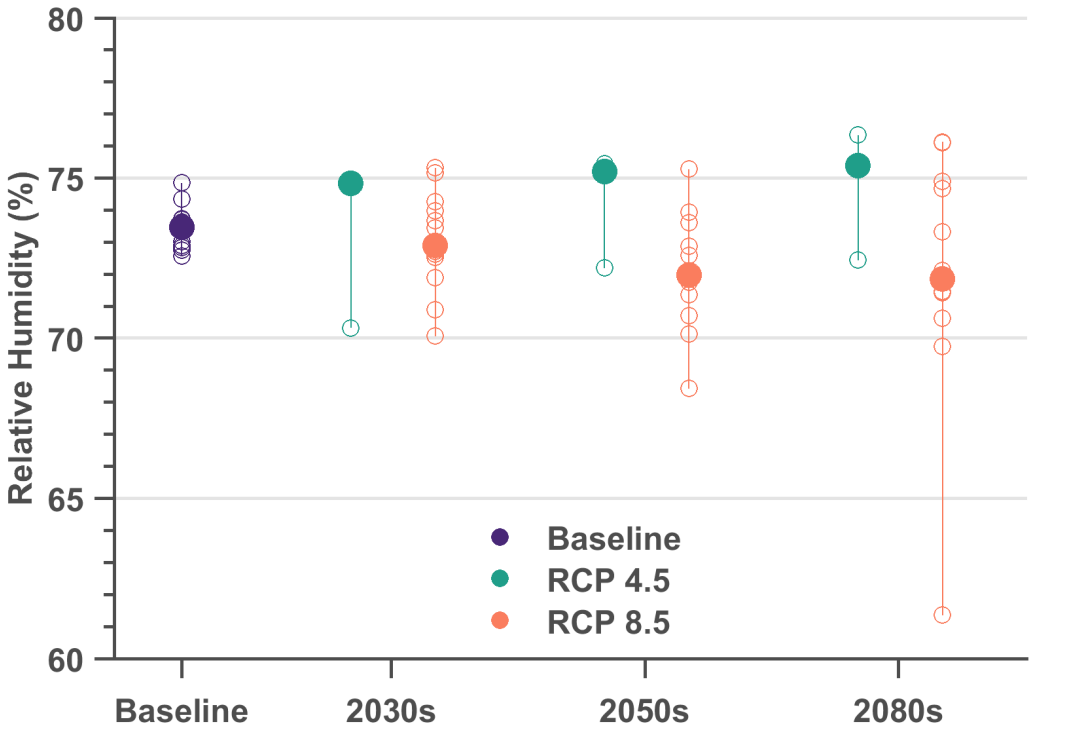


Figure F4.2: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - January.

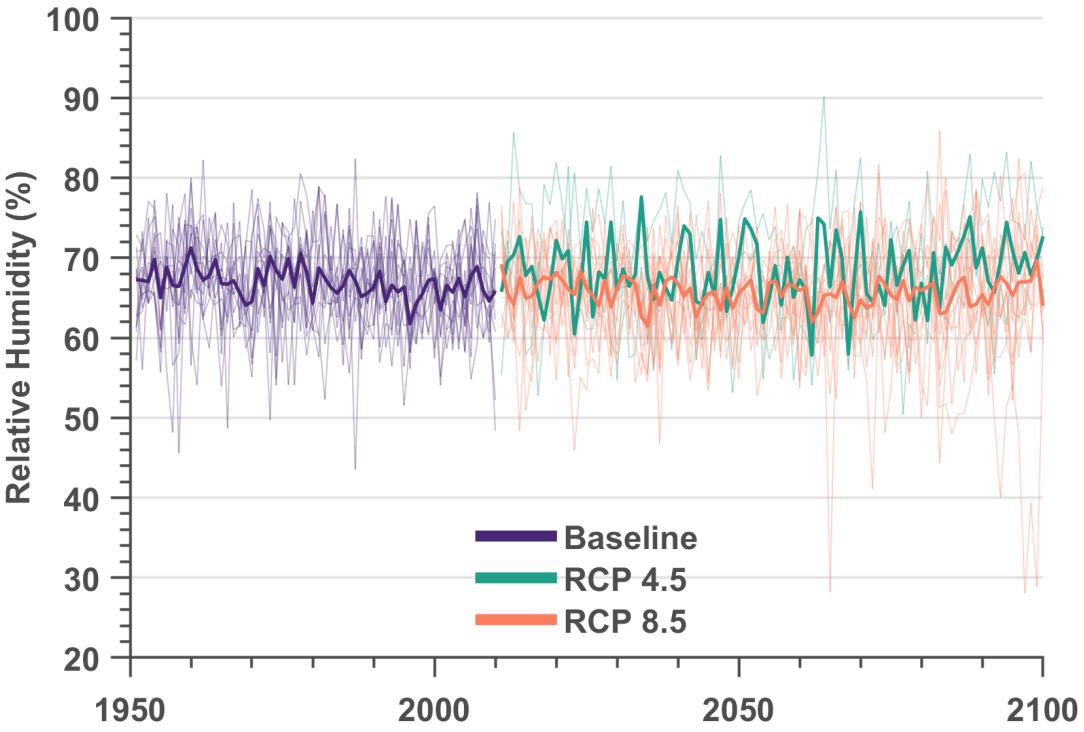


Figure F4.3: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - February.

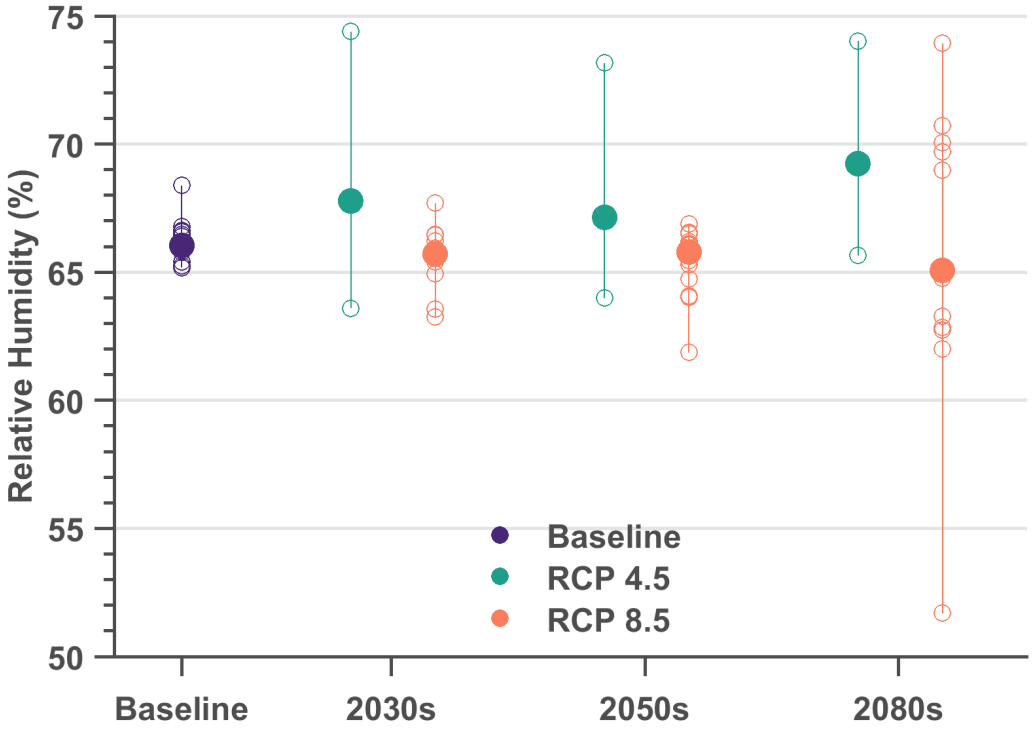


Figure F4.4: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - February.

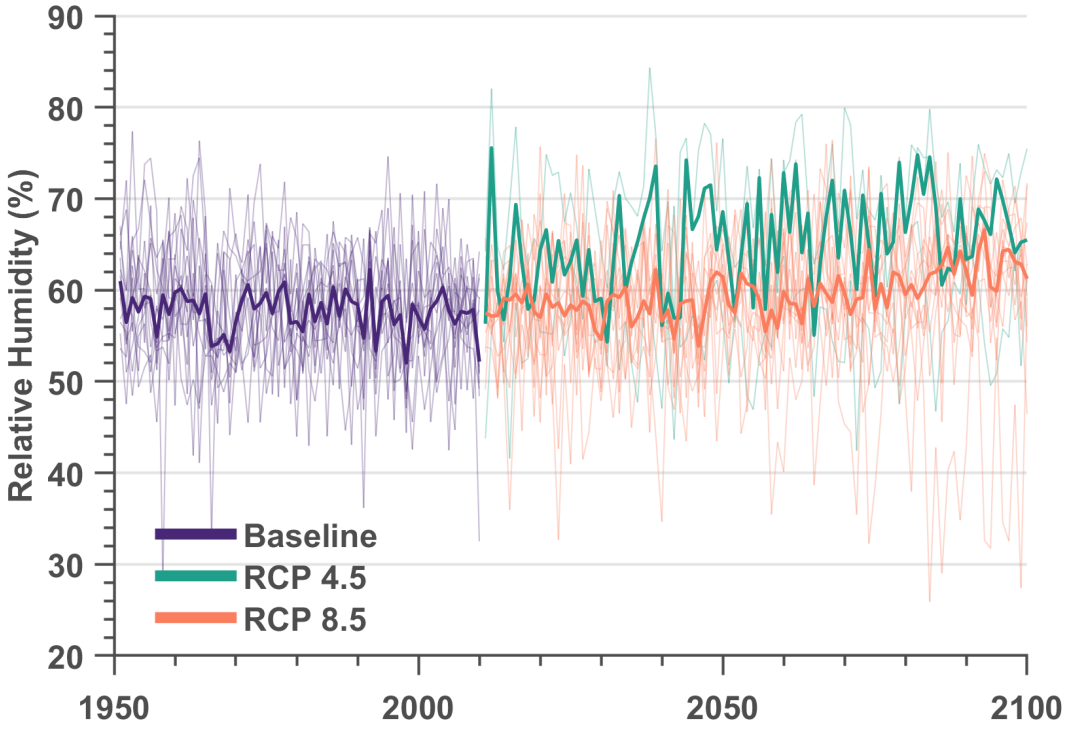


Figure F4.5: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - March.

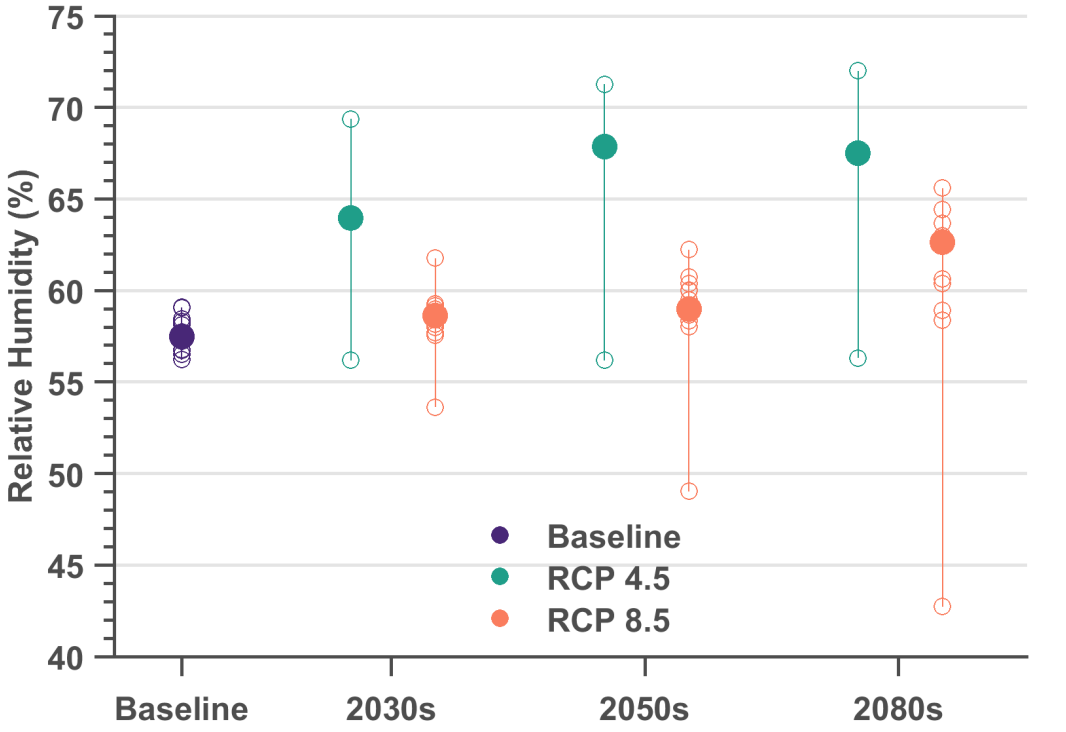


Figure F4.6: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - March.

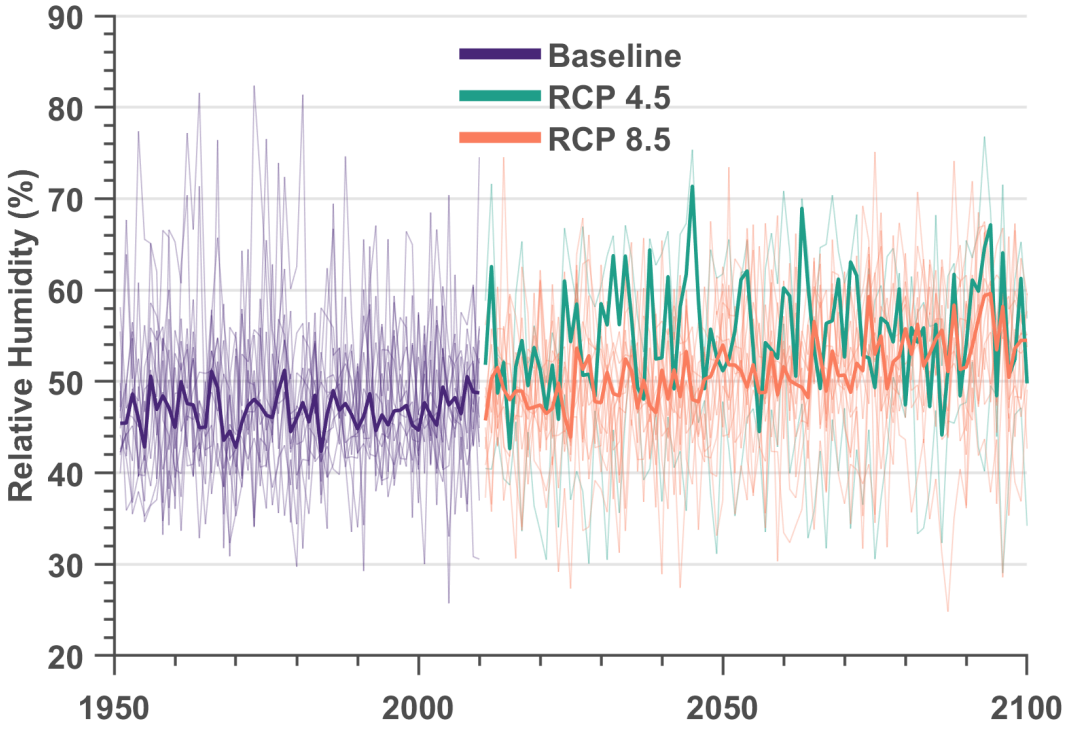


Figure F4.7: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - April.

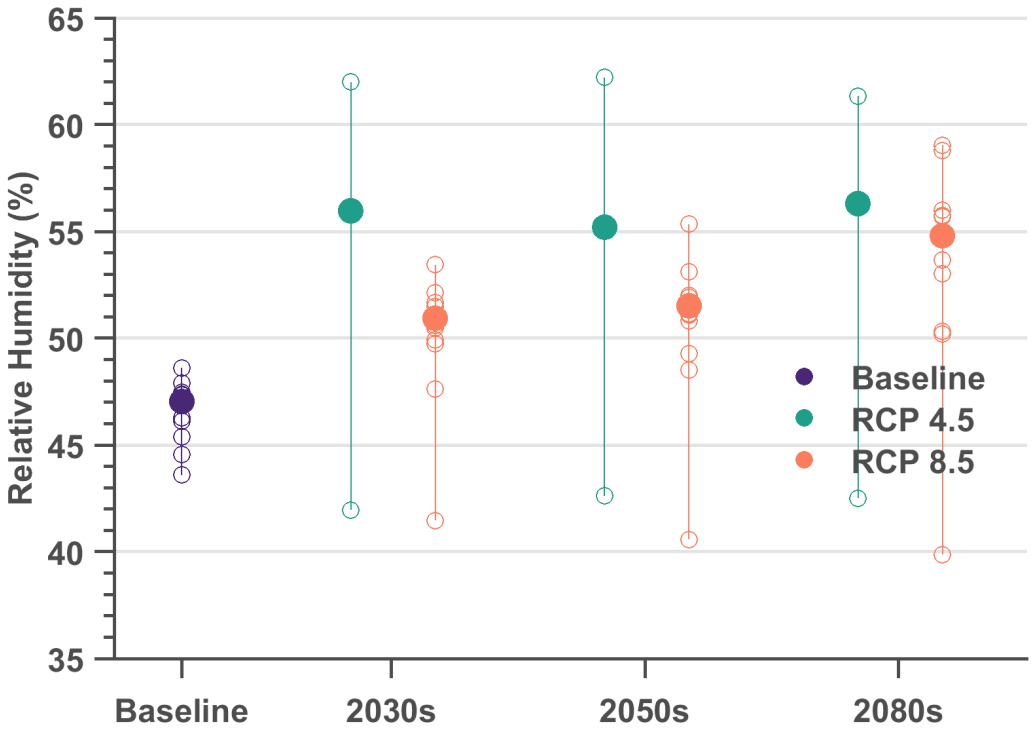


Figure F4.8: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - April.

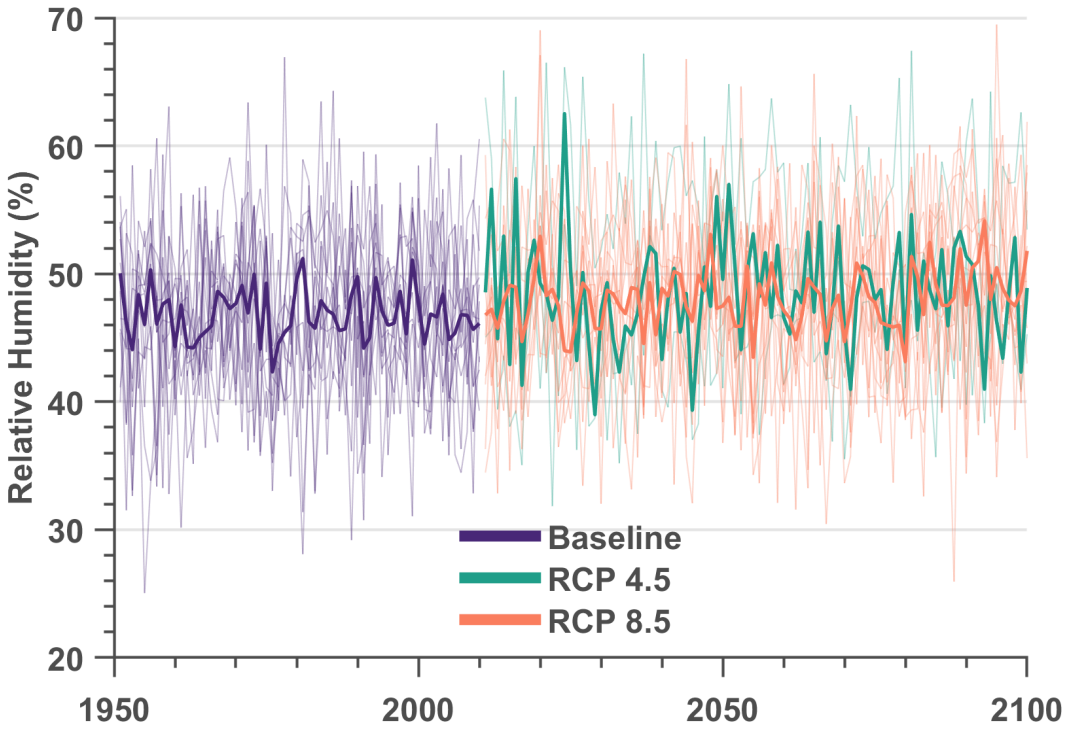


Figure F4.9: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - May.

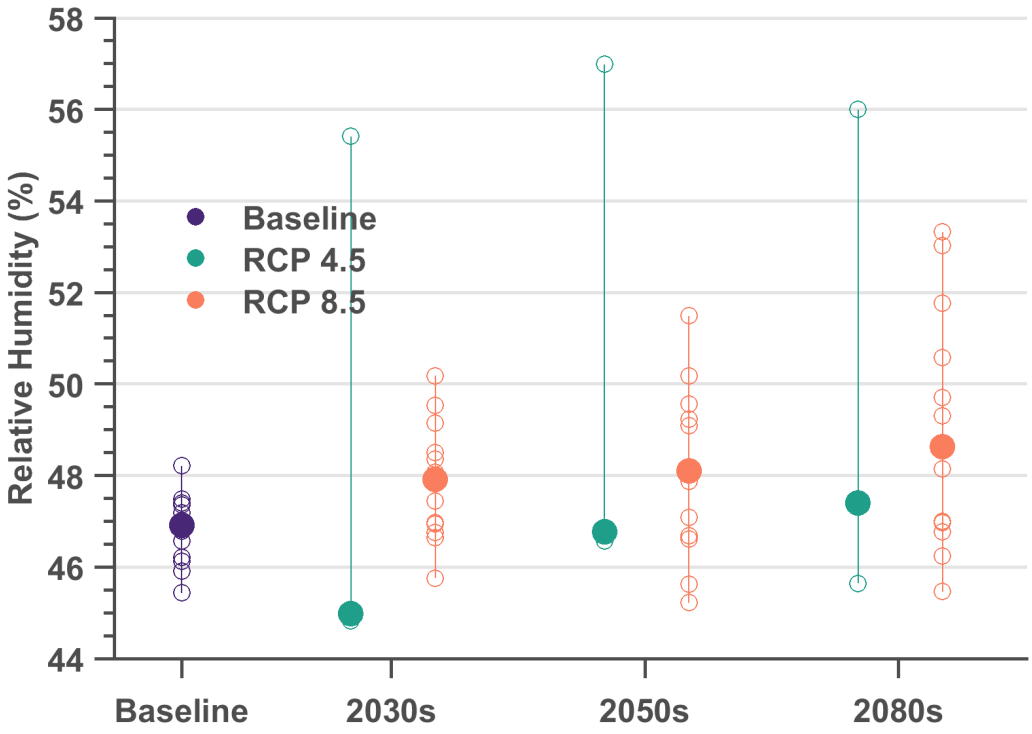


Figure F4.10: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - May.

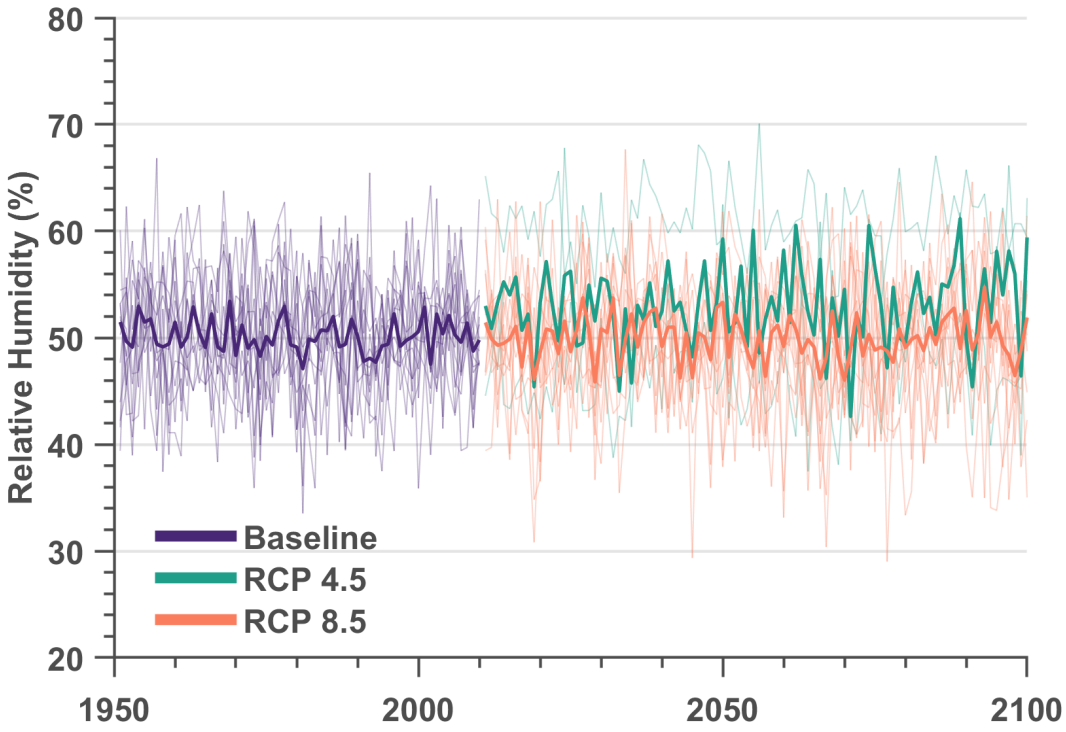


Figure F4.11: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - June.

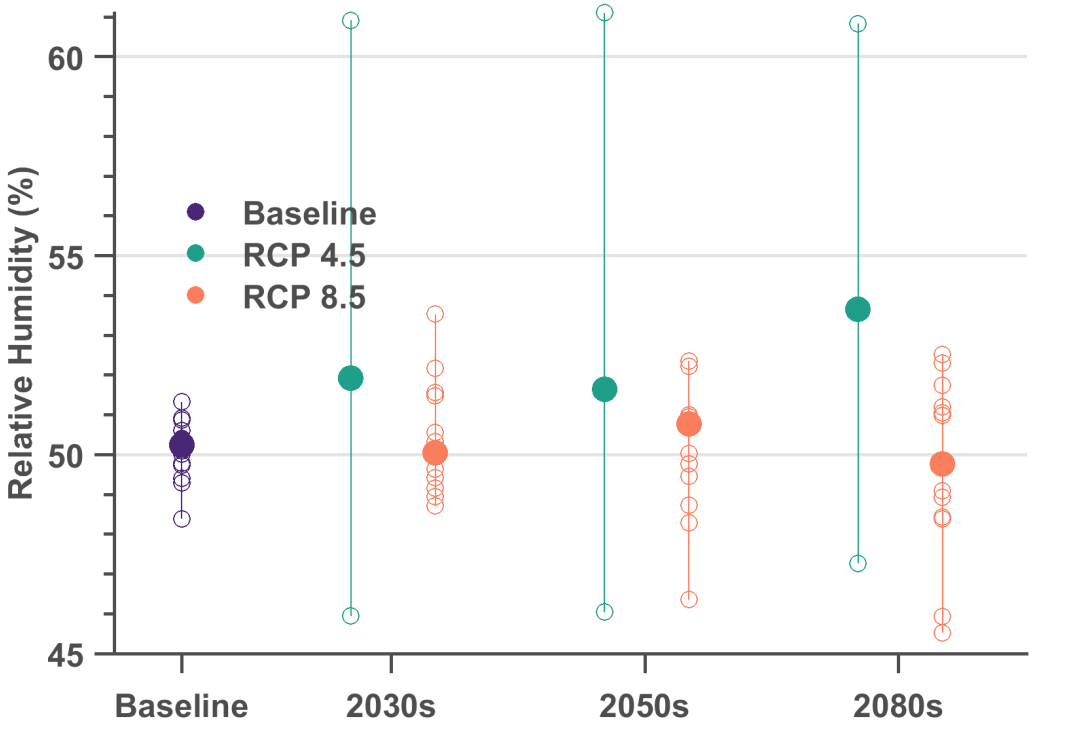


Figure F4.12: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - June.

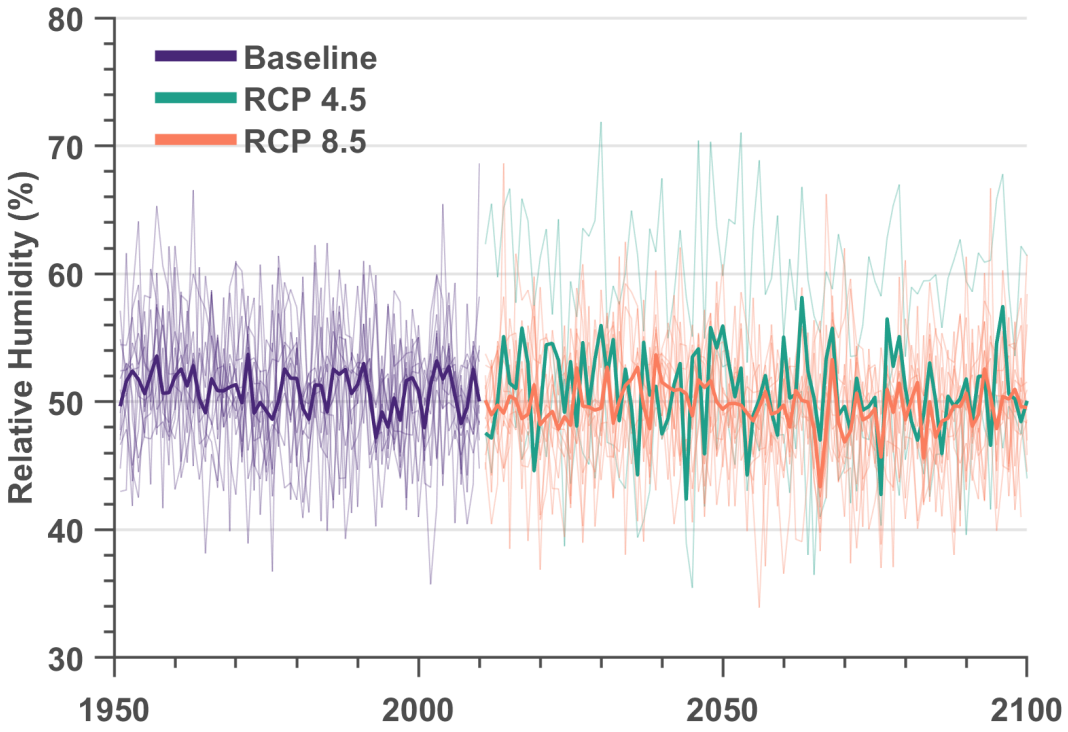


Figure F4.13: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - July.

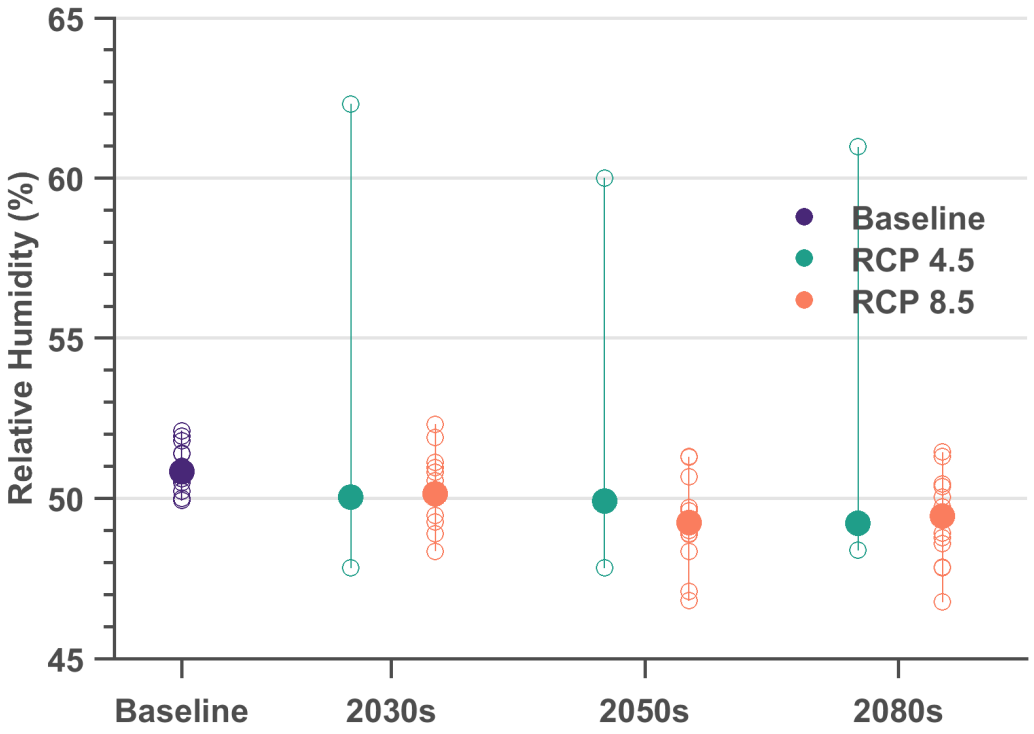


Figure F4.14: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - July.

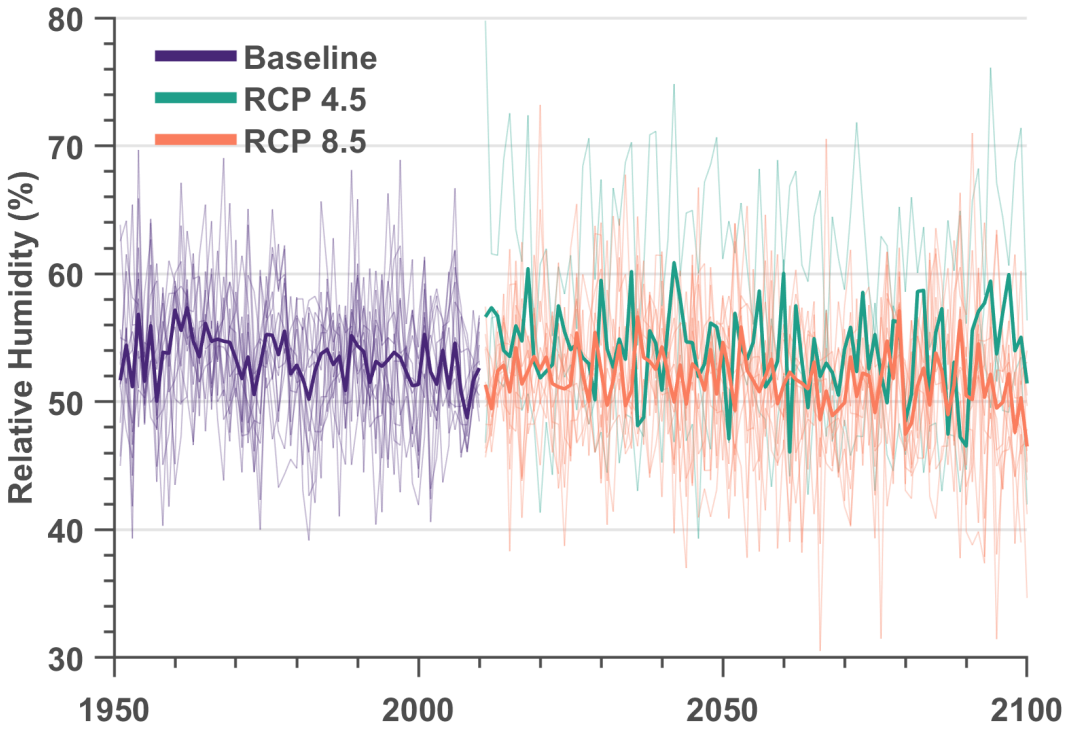


Figure F4.15: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - August.

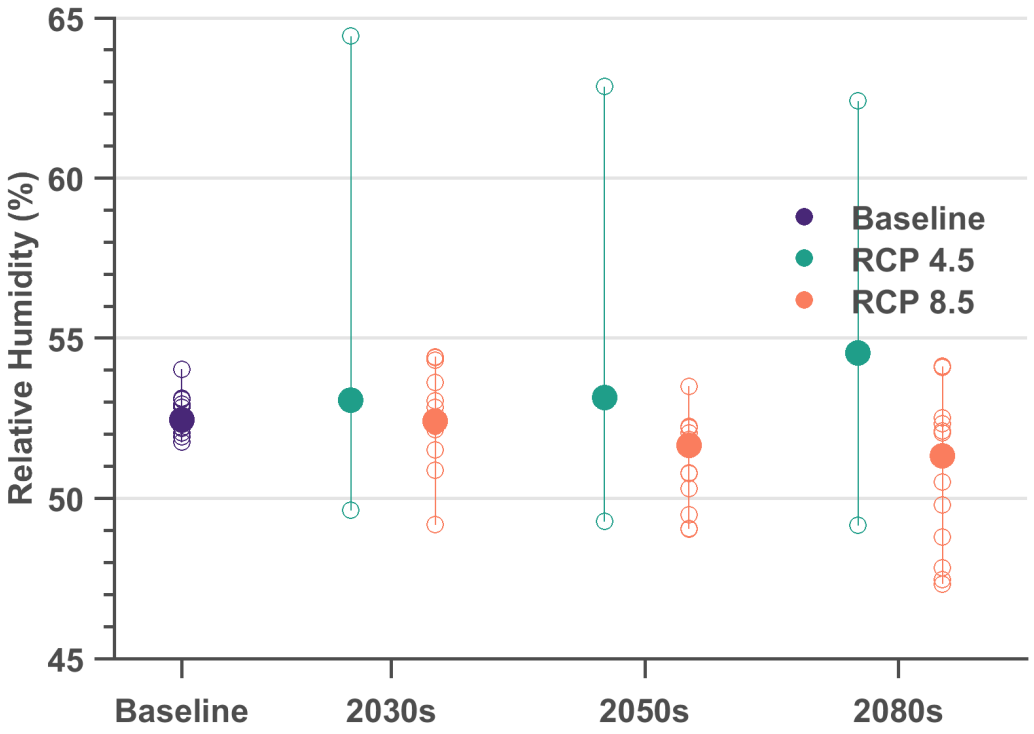


Figure F4.16: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - August.

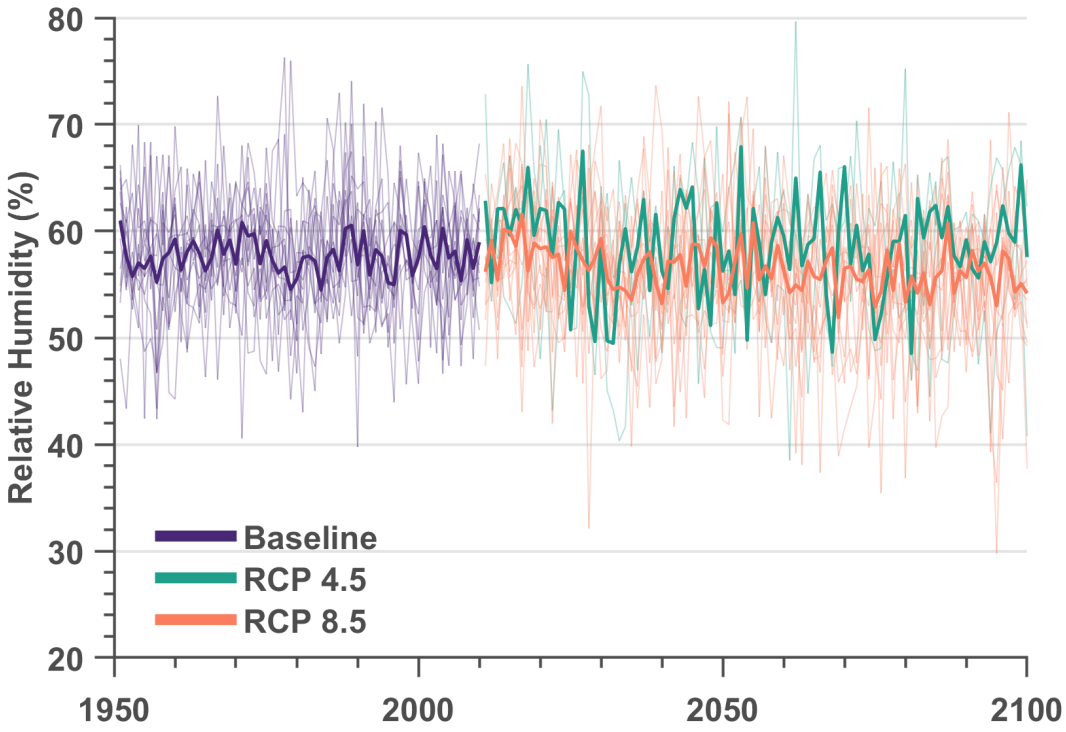


Figure F4.17: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - September.

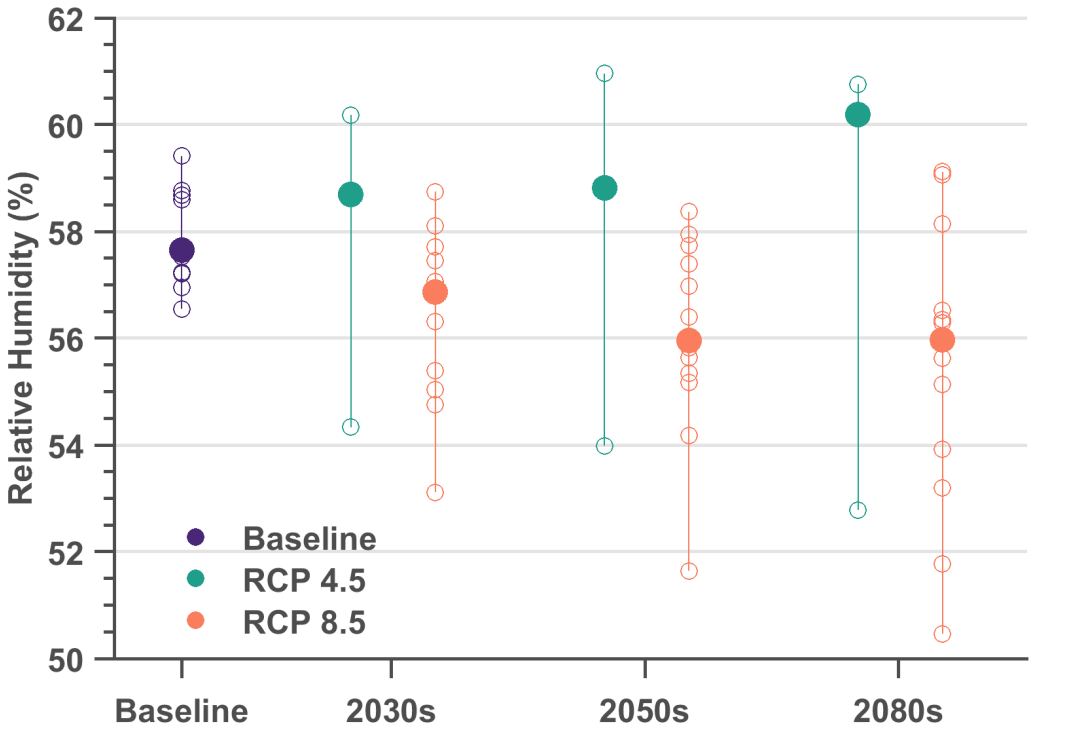


Figure F4.18: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - September.

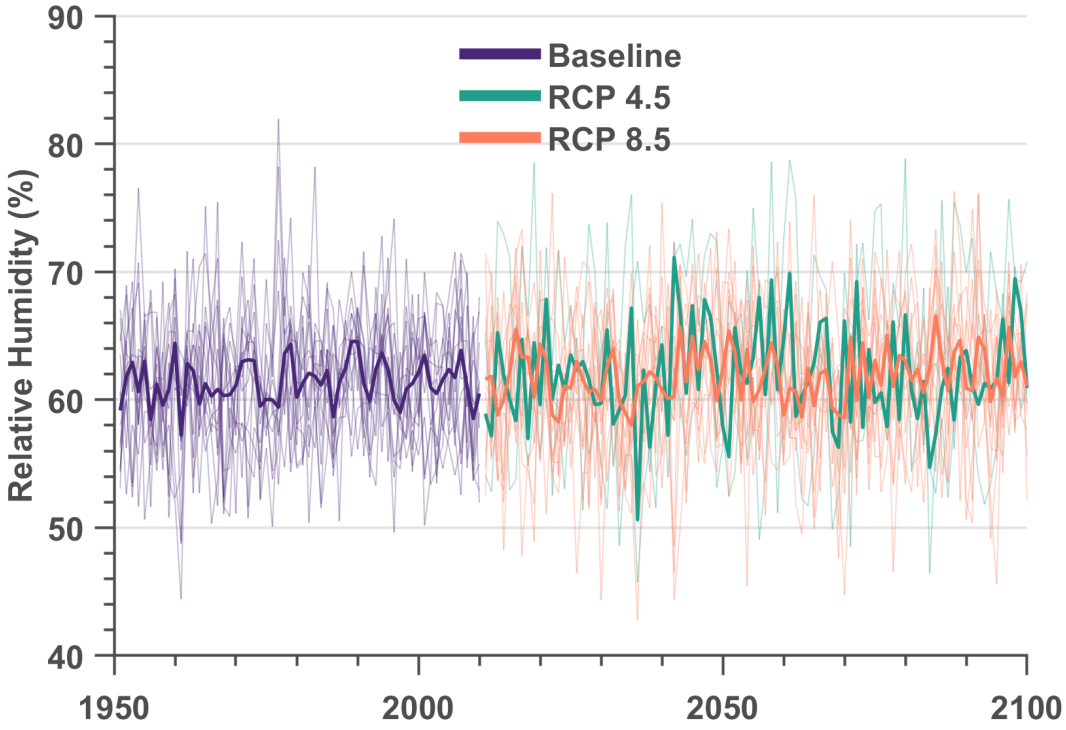


Figure F4.19: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - October.

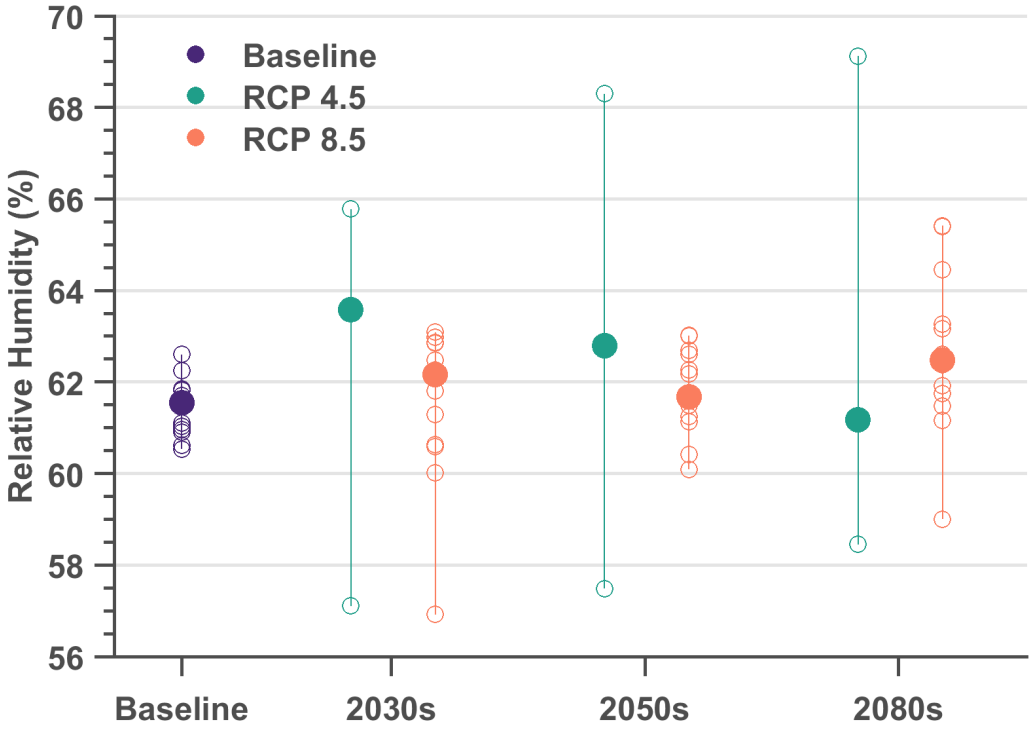


Figure F4.20: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - October.

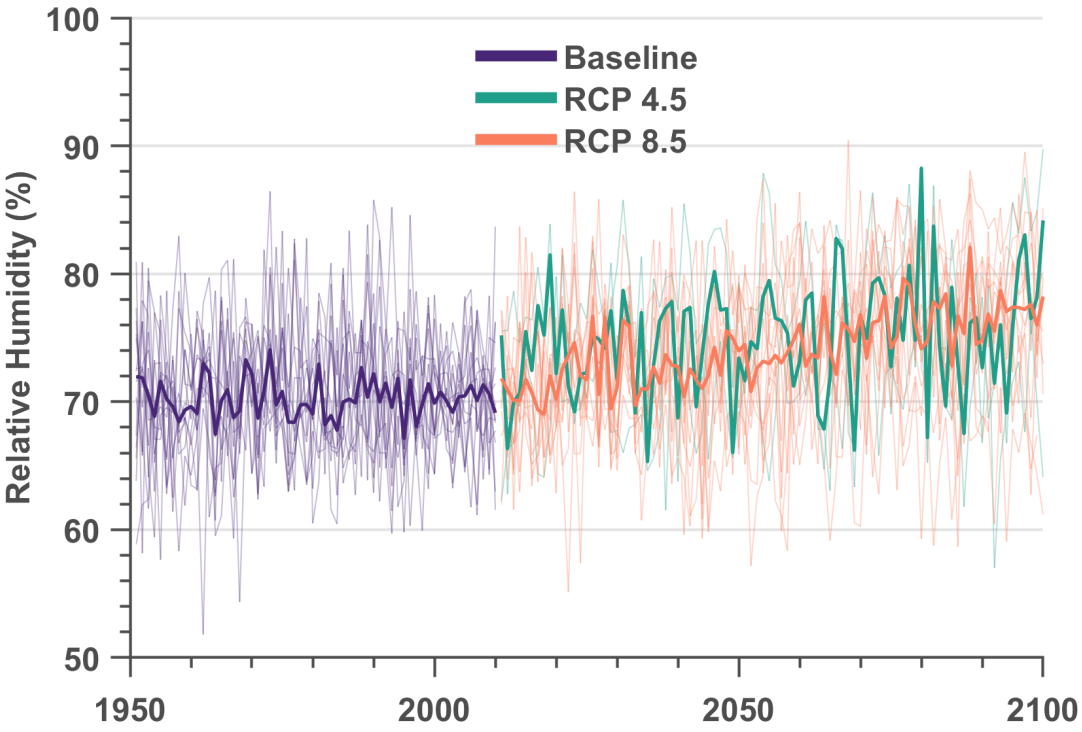


Figure F4.21: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - November.

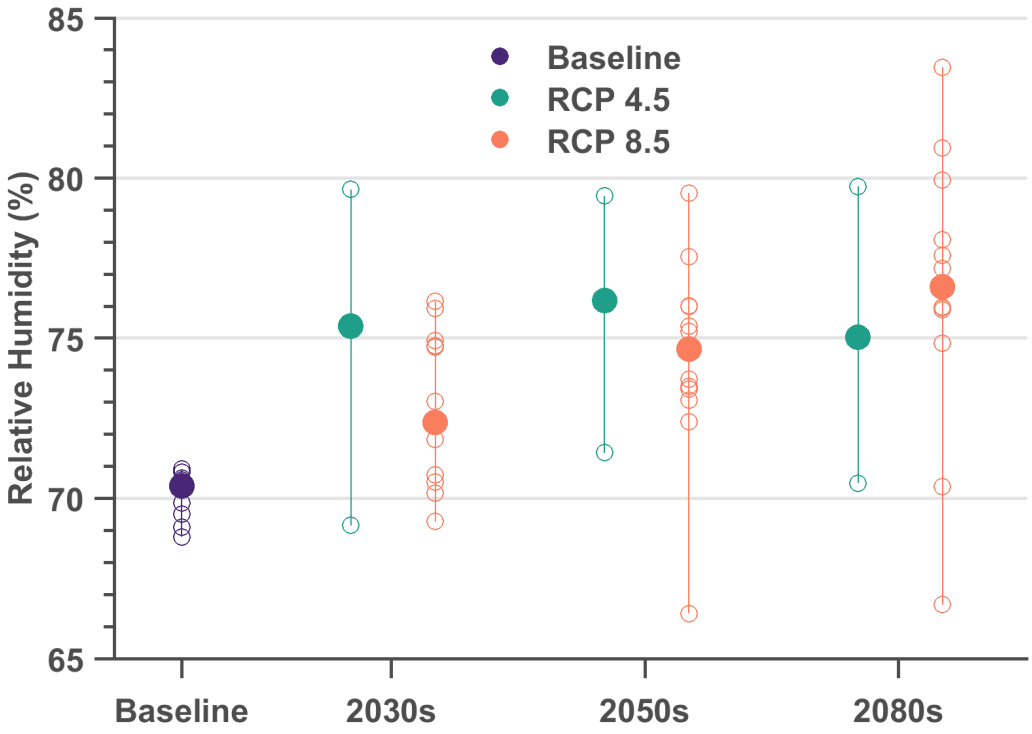


Figure F4.22: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - November.

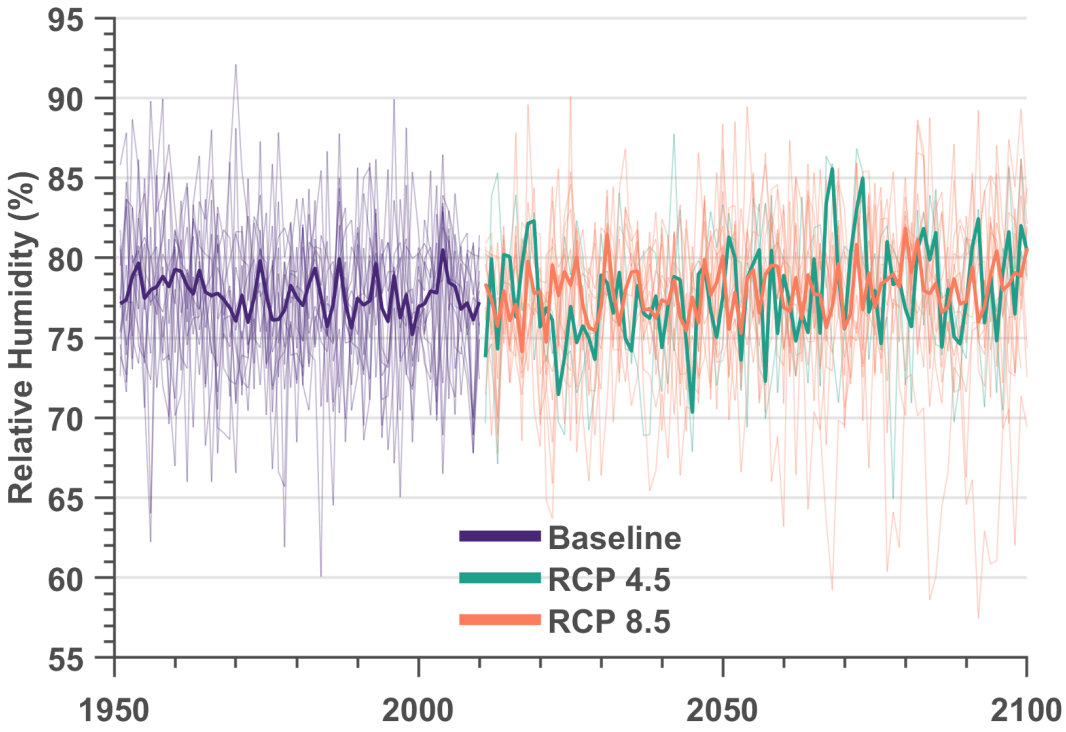


Figure F4.23: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - December.

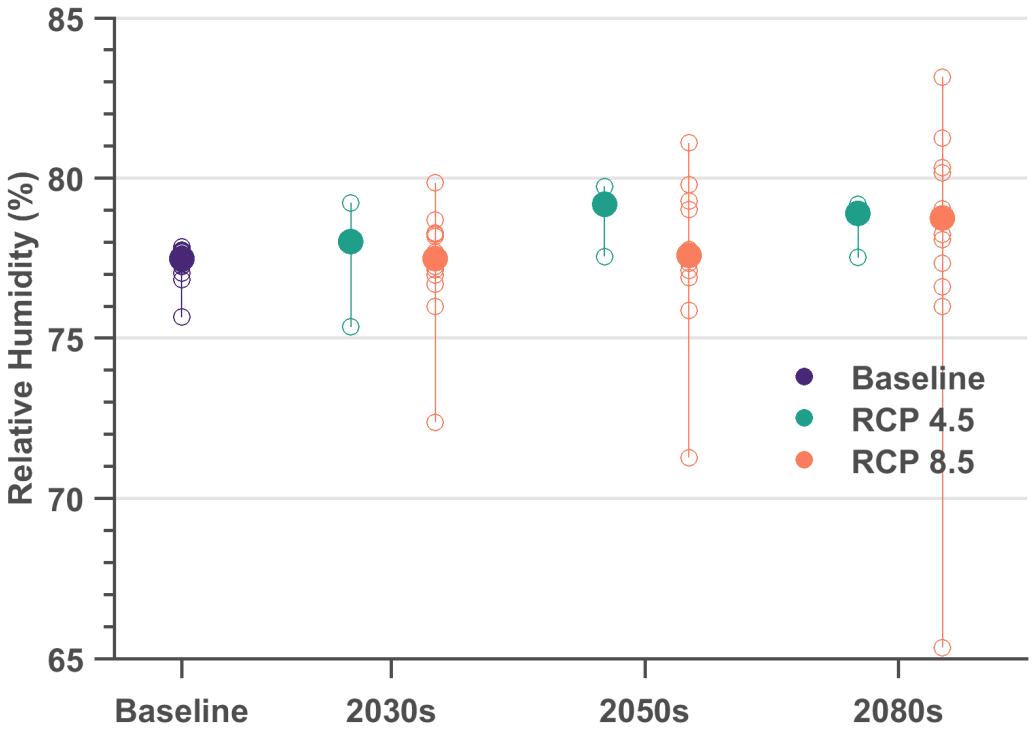


Figure F4.24: Monthly Average Relative Humidity at the Time of Max. Daily Temperature - December.

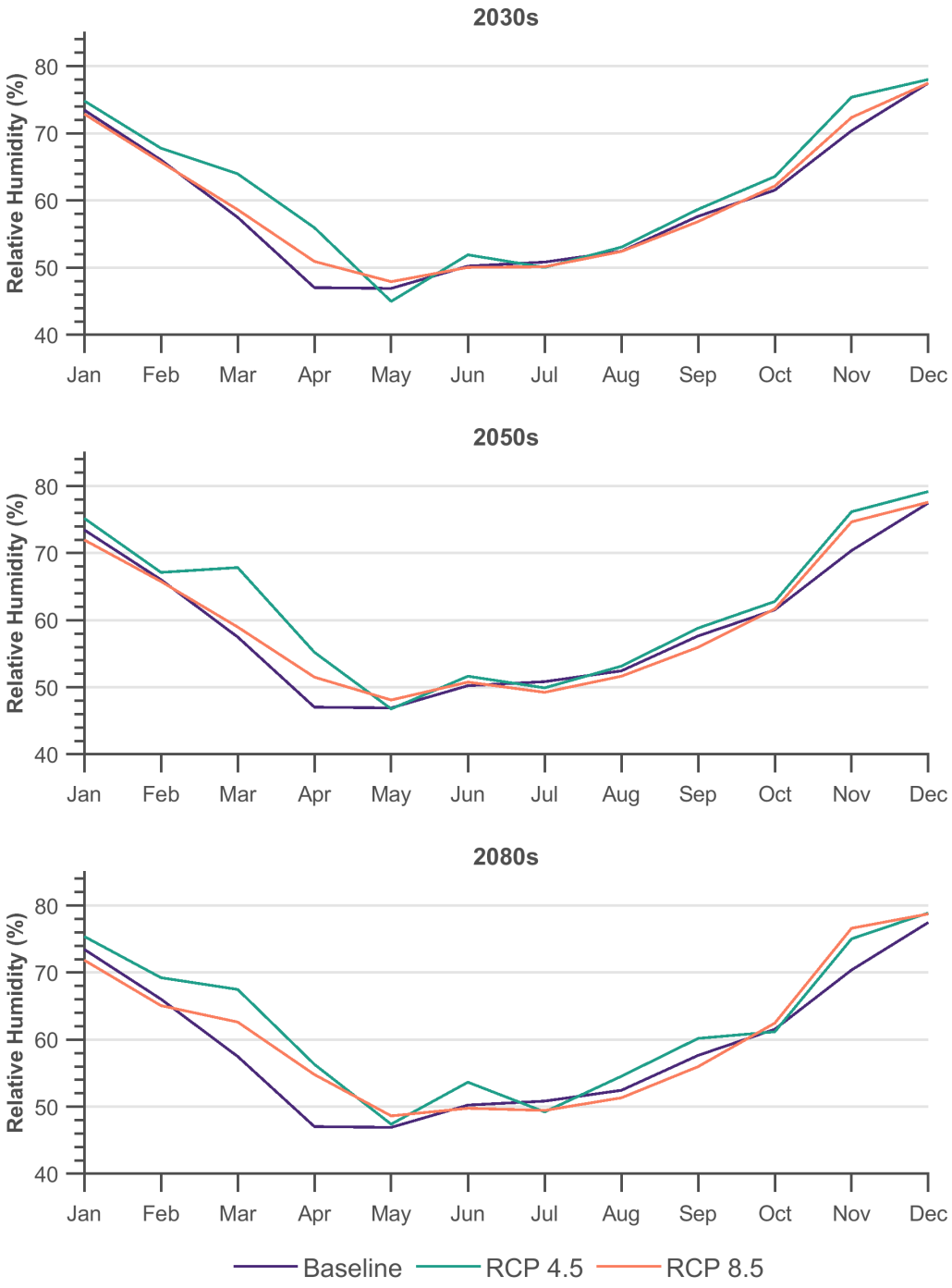


Figure F4.25: Monthly Average Relative Humidity at the Time of Max. Daily Temperature.

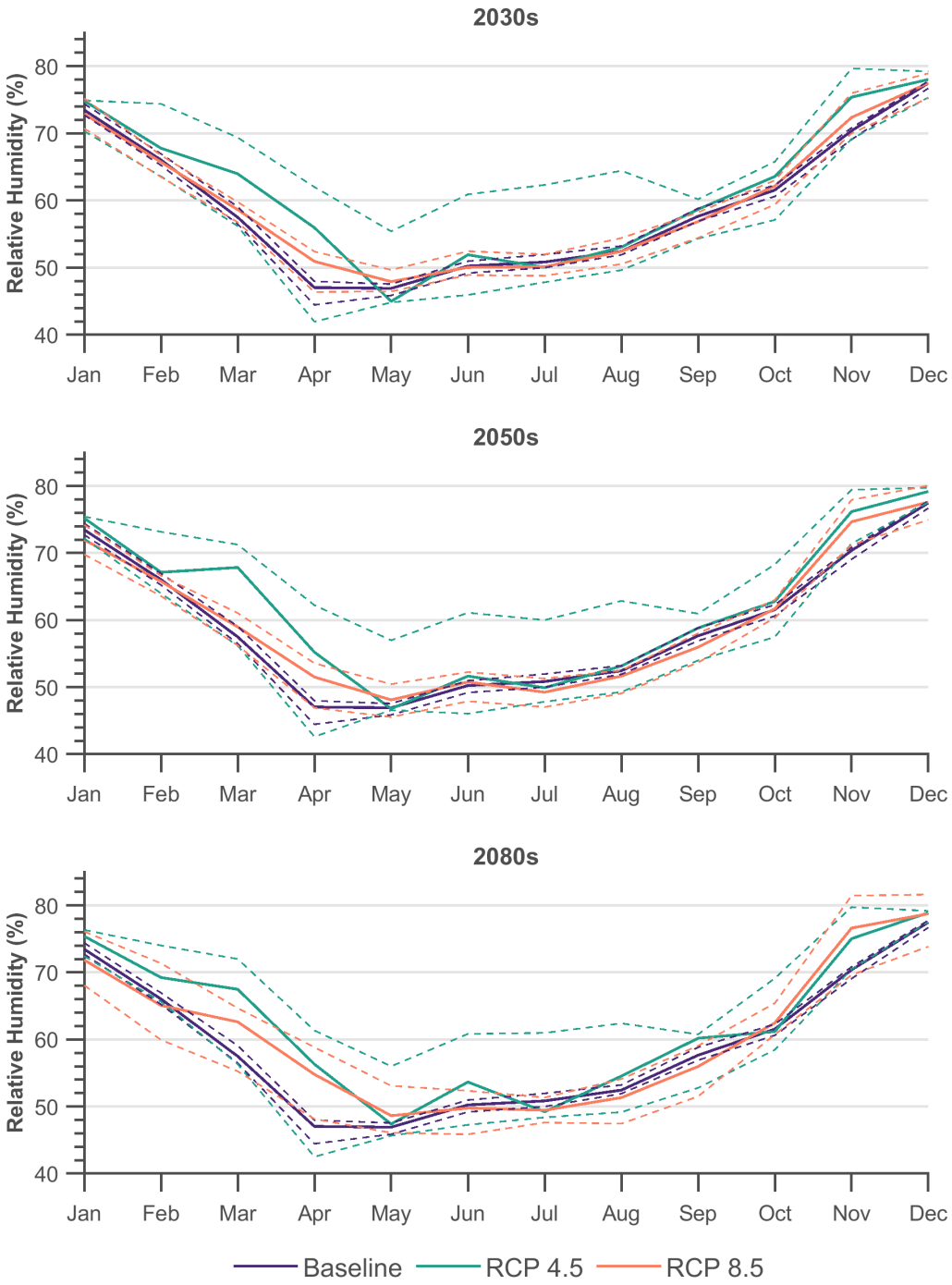


Figure F4.26: Monthly Average Relative Humidity at the Time of Max. Daily Temperature. Dashed lines indicate the 10% and 90% percentile.

F5 Combined

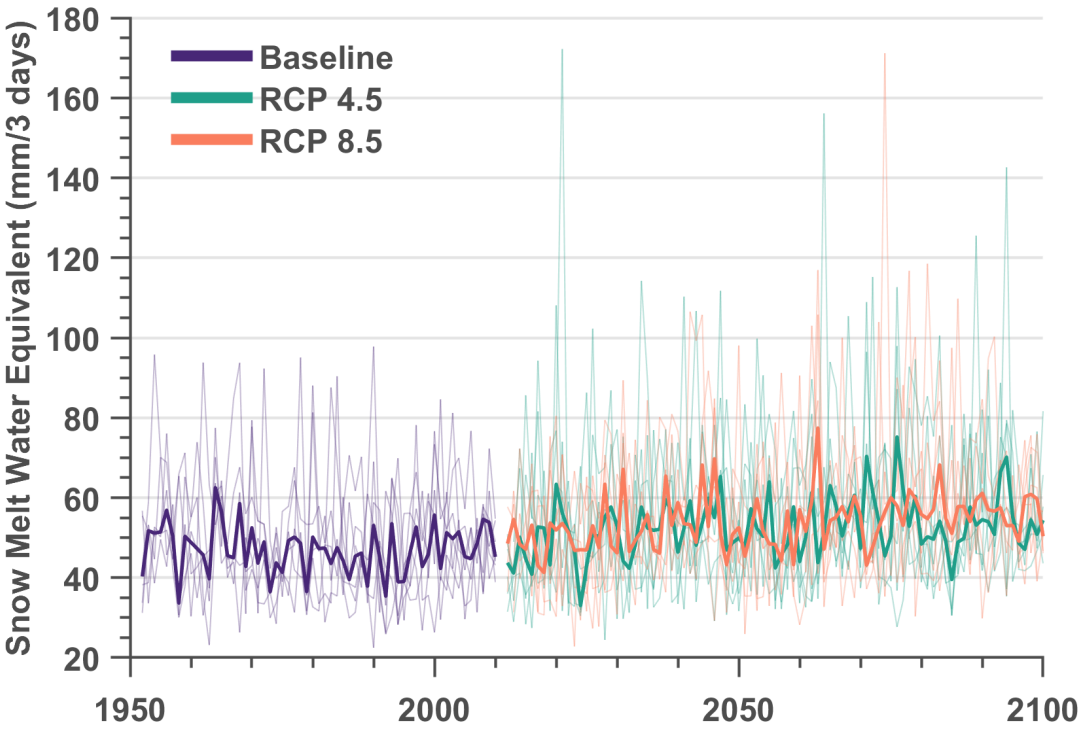


Figure F5.1: Max. 3-Day Sum of Snow Melt and Precipitation.

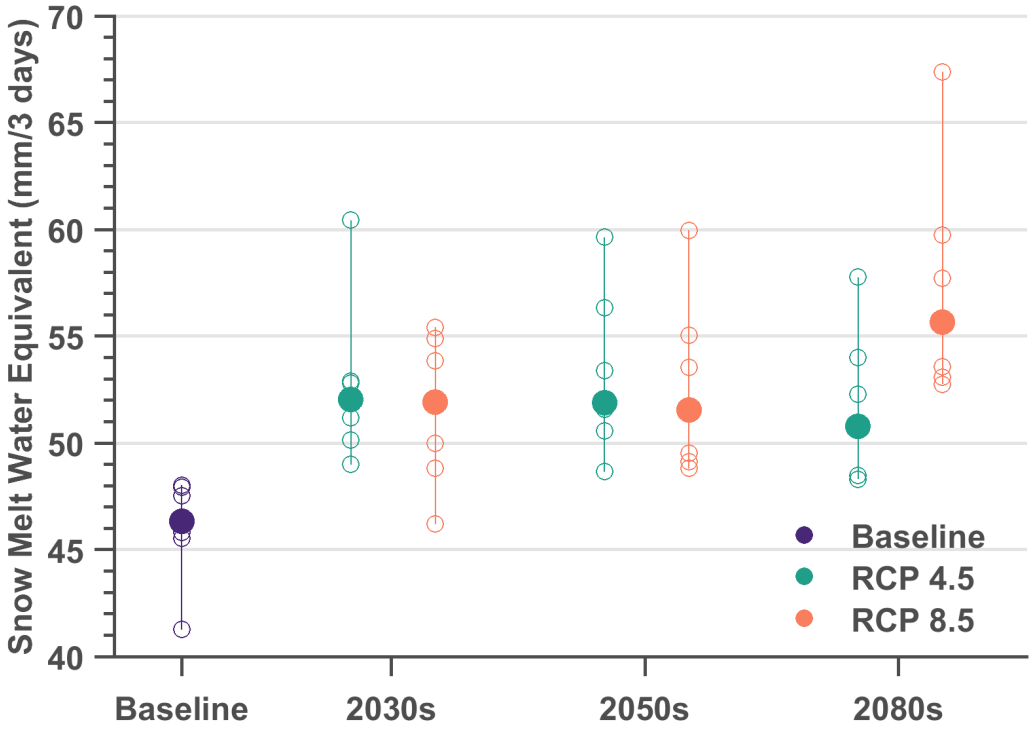


Figure F5.2: Max. 3-Day Sum of Snow Melt and Precipitation.

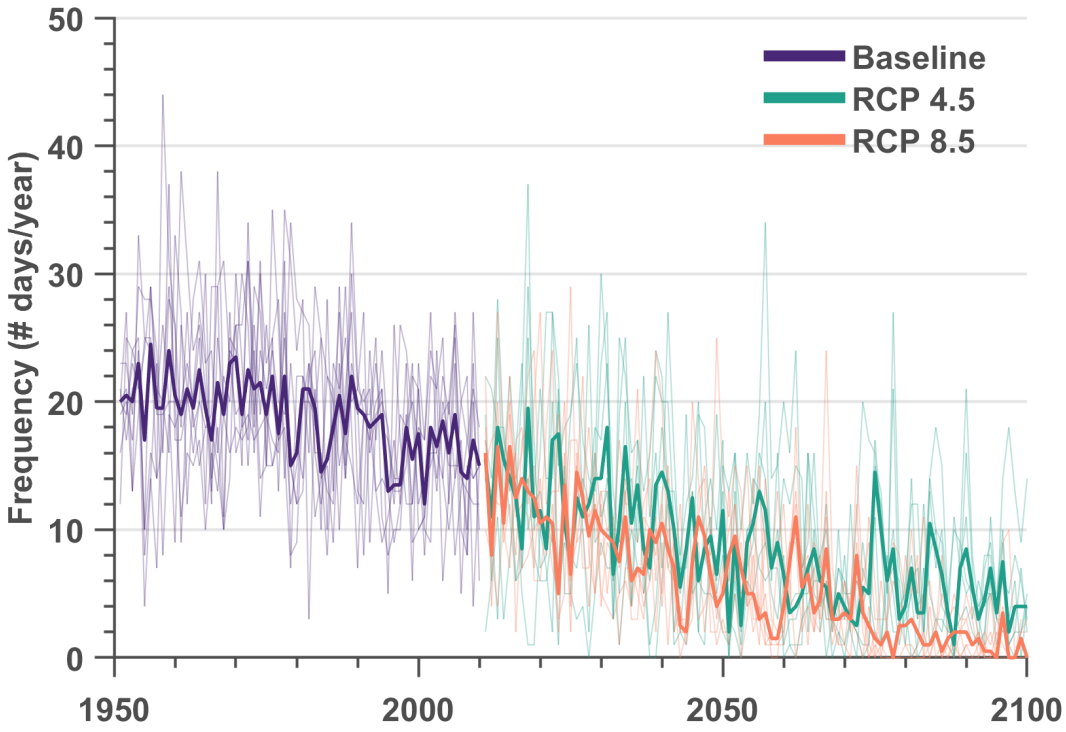


Figure F5.3: Number of Days Wind Chill is between -35°C and -25°C.

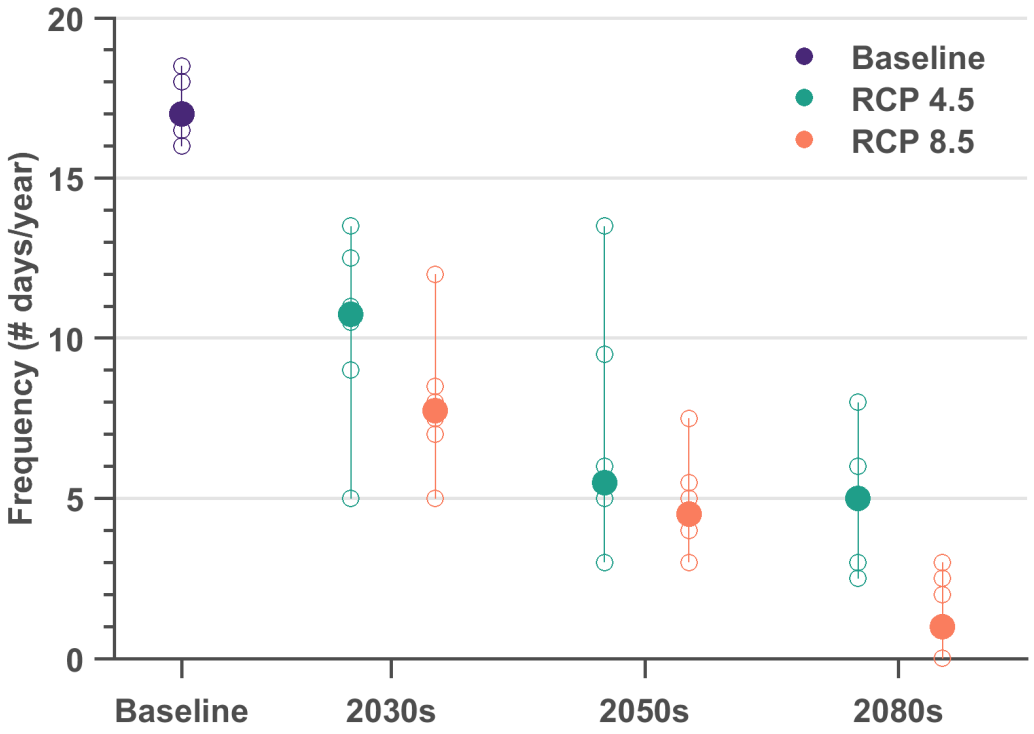


Figure F5.4: Number of Days Wind Chill is between -35°C and -25°C.

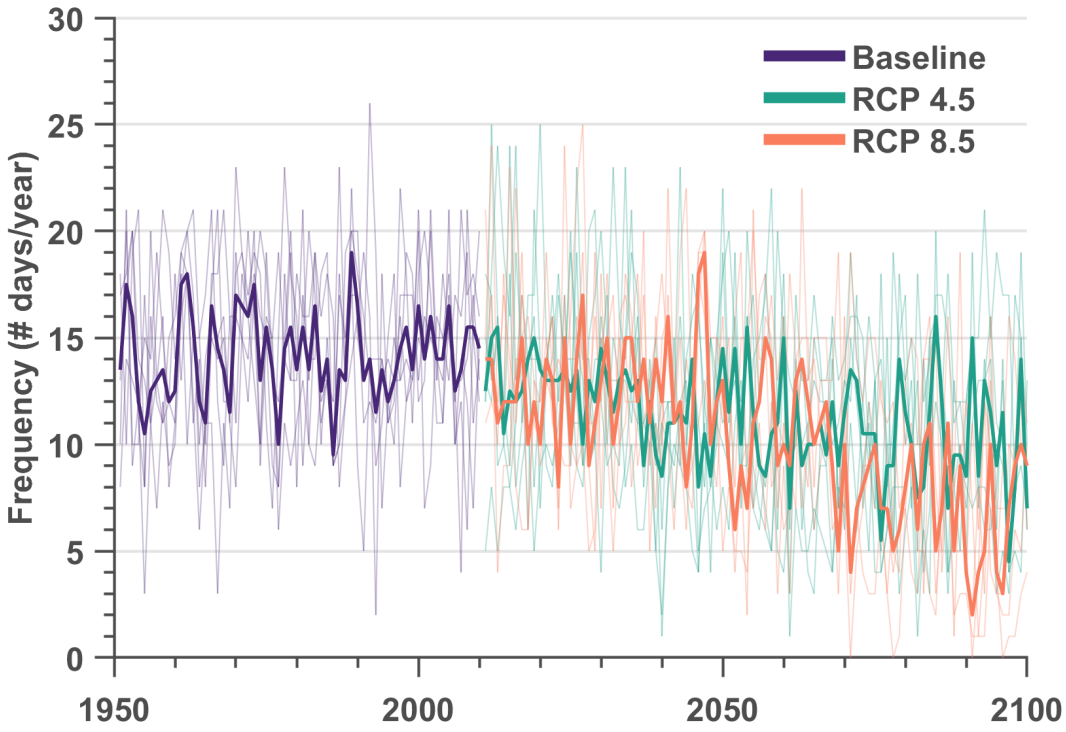


Figure F5.5: Number of Days Wind > 10 km/hr and Snow > 1 cm.

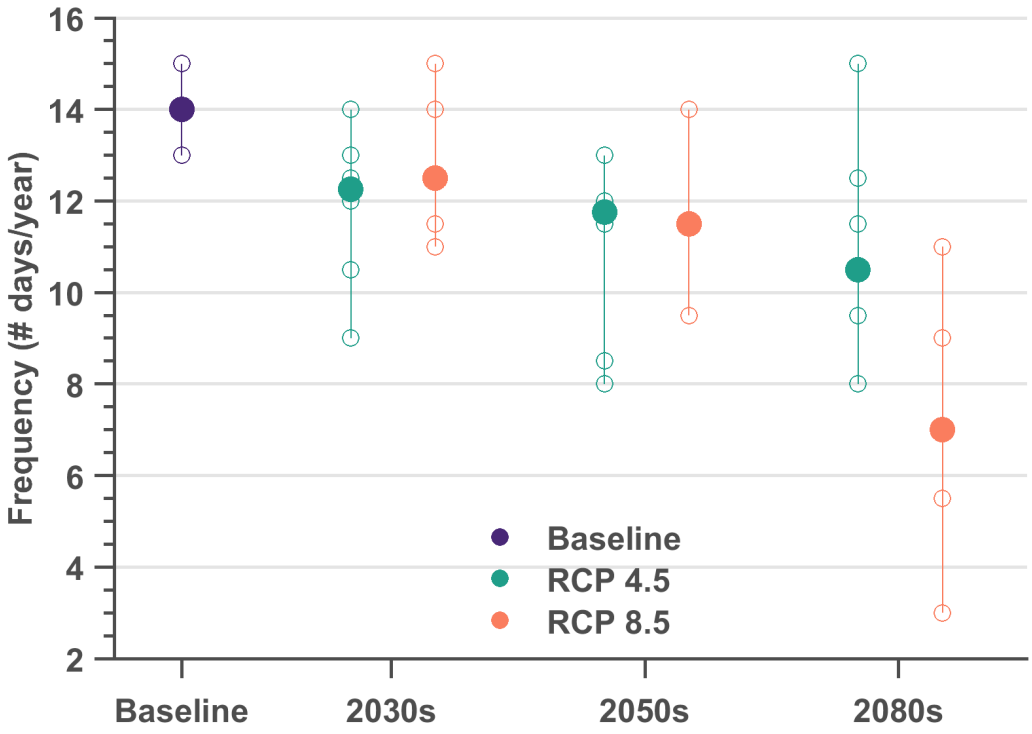


Figure F5.6: Number of Days Wind > 10 km/hr and Snow > 1 cm.

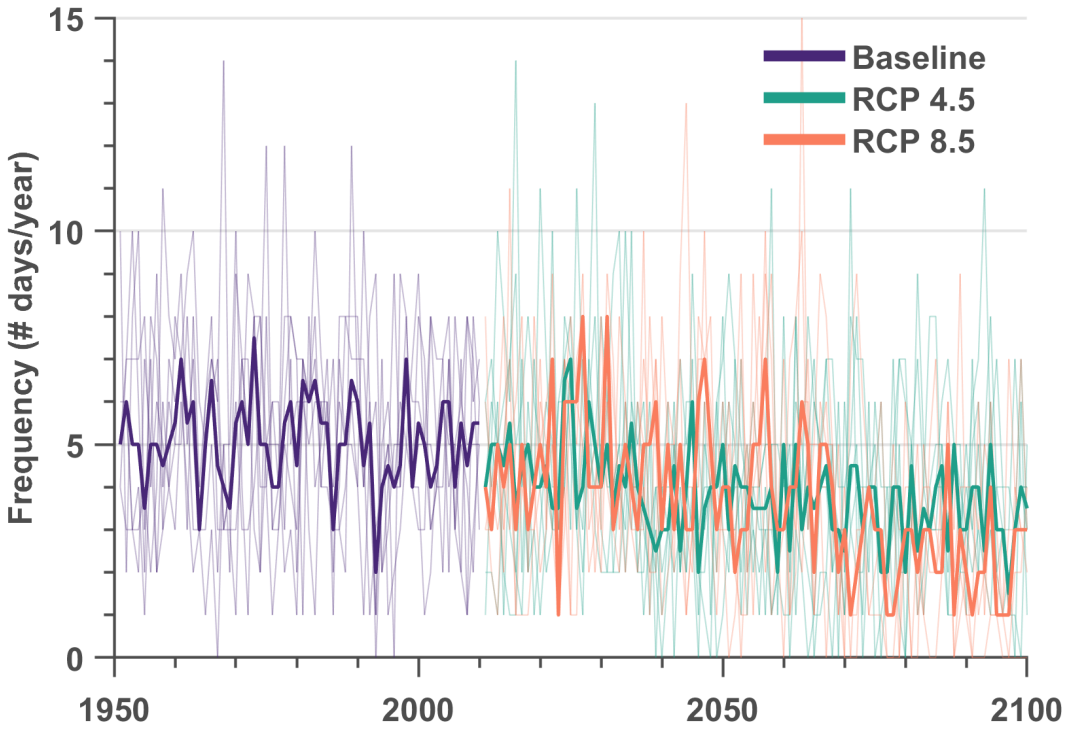


Figure F5.7: Number of Days Wind > 10 km/hr and Snow > 5 cm.

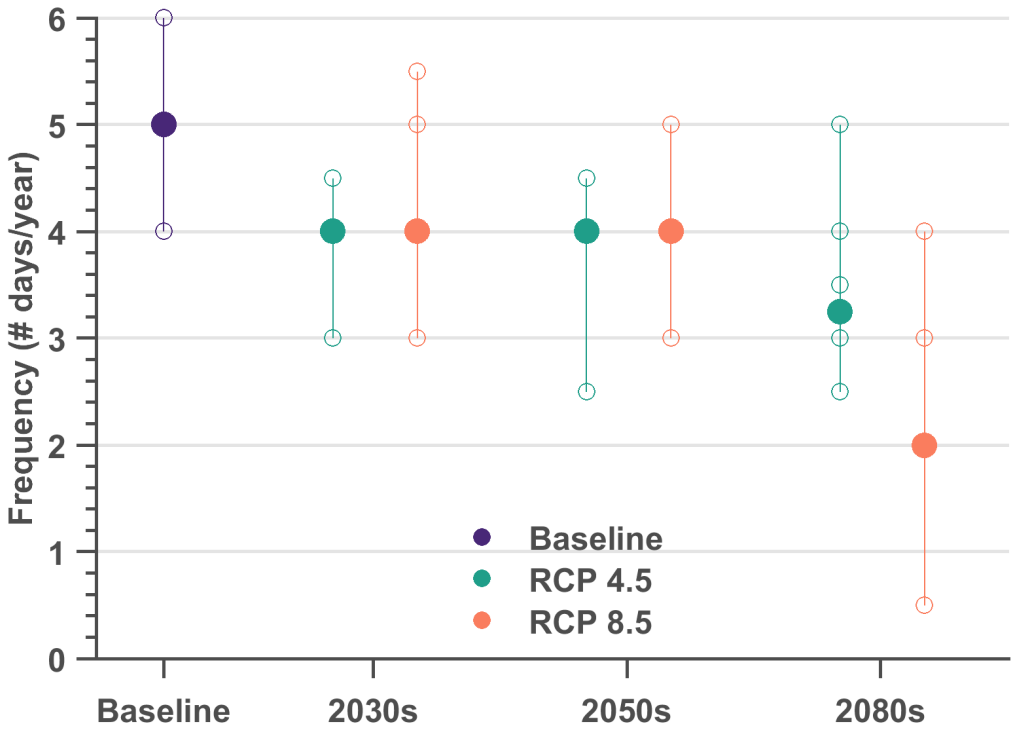


Figure F5.8: Number of Days Wind > 10 km/hr and Snow > 5 cm.

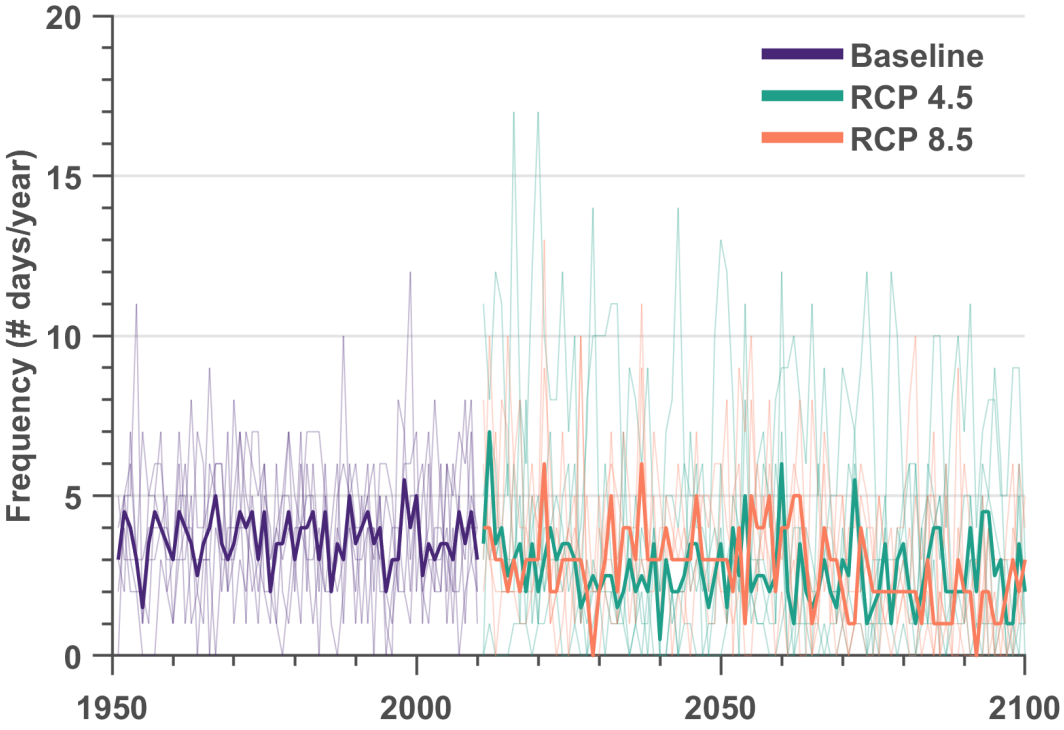


Figure F5.9: Number of Days Wind > 20 km/hr and Snow > 1 cm.

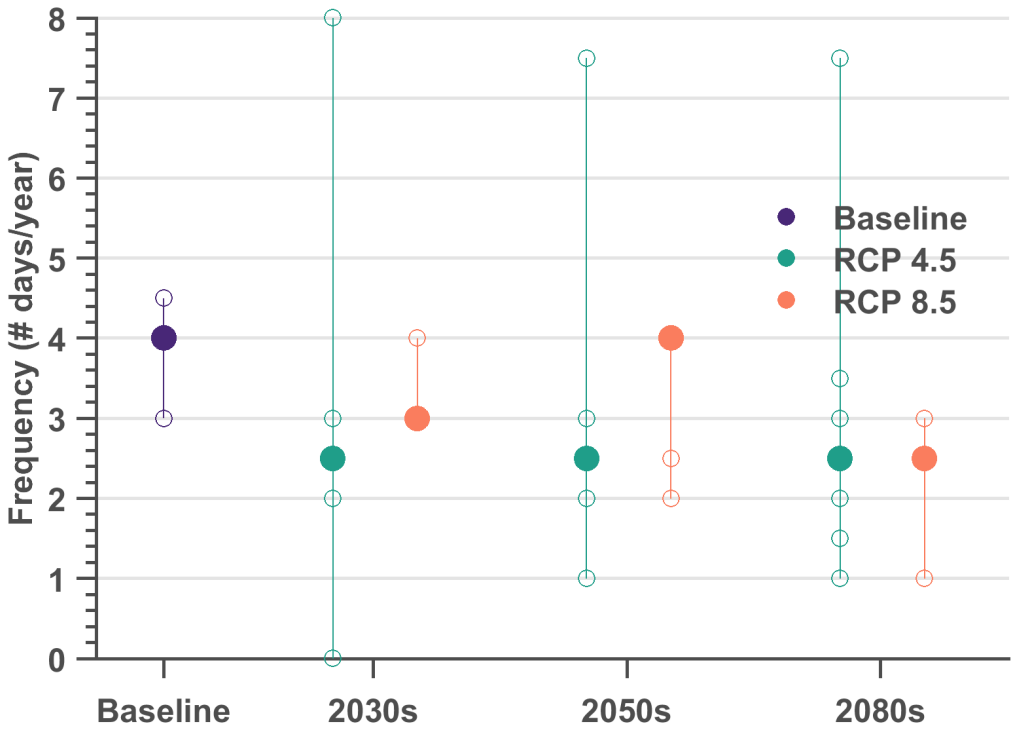


Figure F5.10: Number of Days Wind > 20 km/hr and Snow > 1 cm.

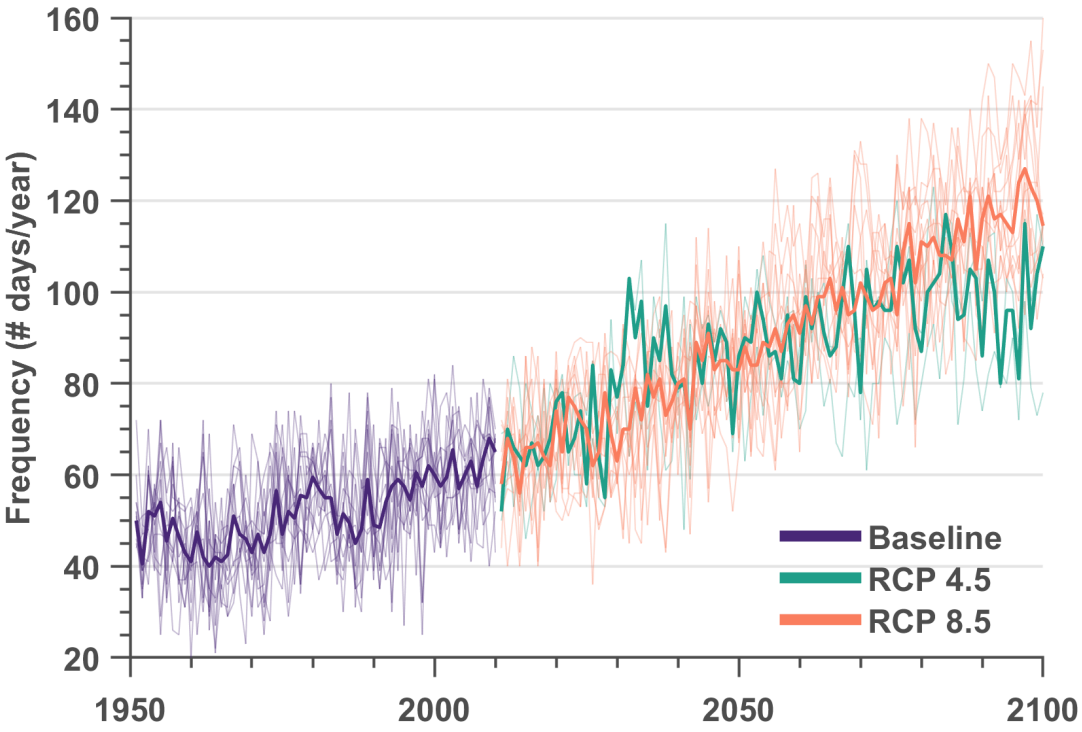


Figure F5.11: Number of Days Humidex > 30.

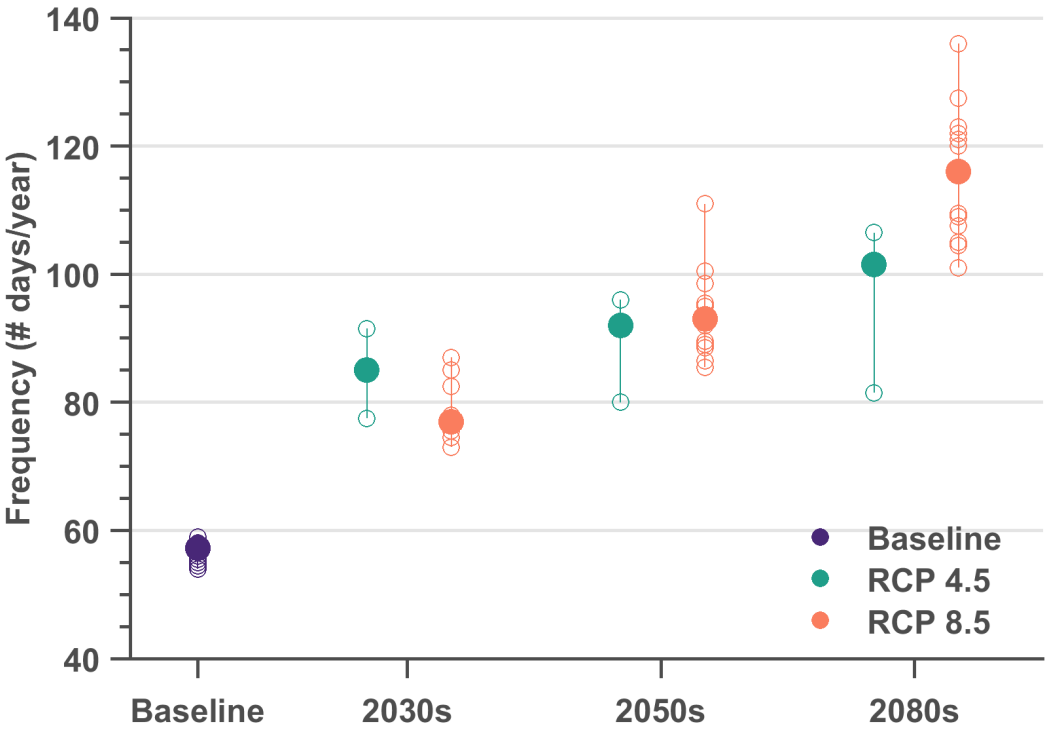


Figure F5.12: Number of Days Humidex > 30.

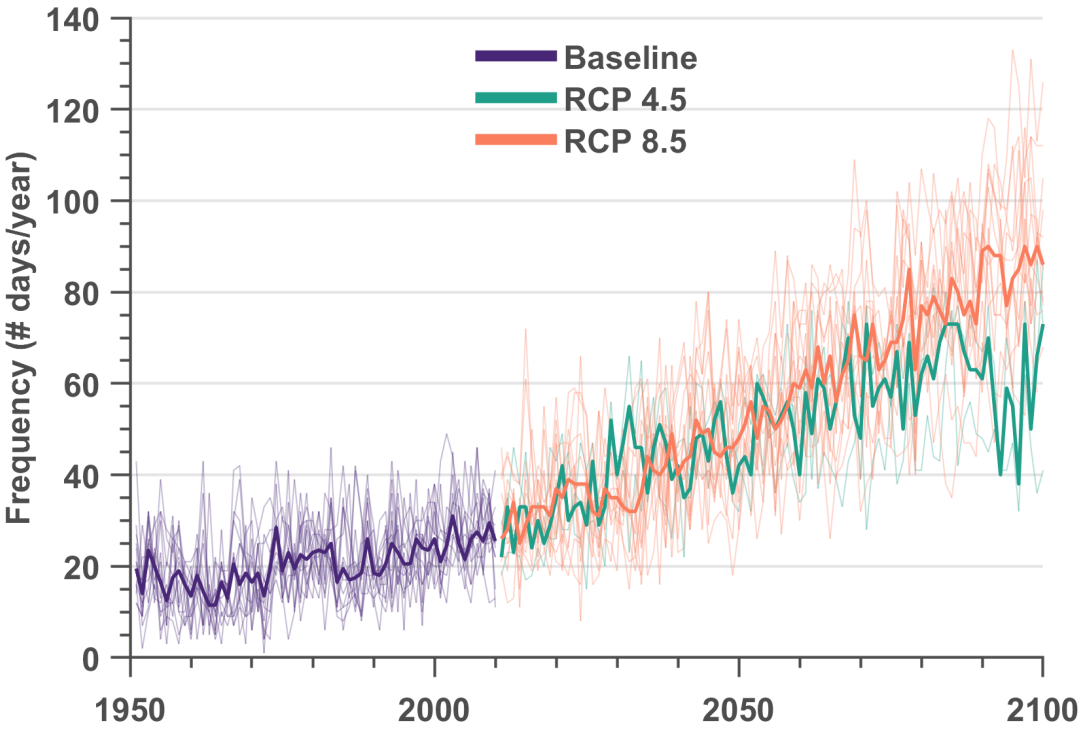


Figure F5.13: Number of Days Humidex > 35.

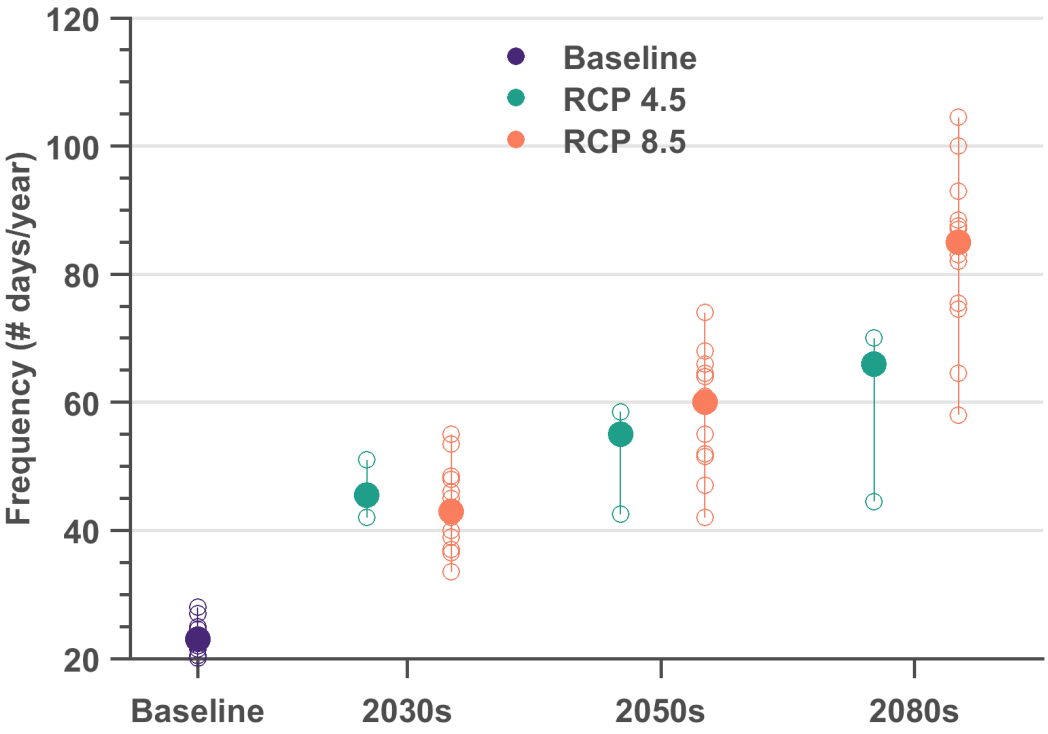


Figure F5.14: Number of Days Humidex > 35.

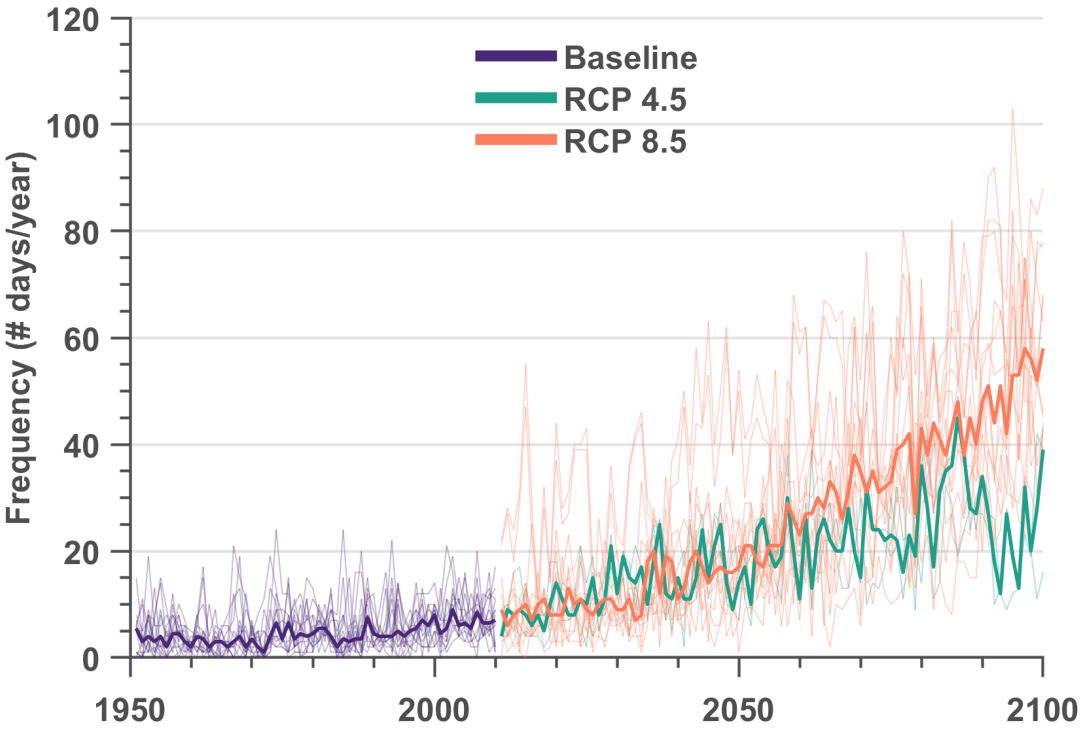


Figure F5.15: Number of Days Humidex > 40.

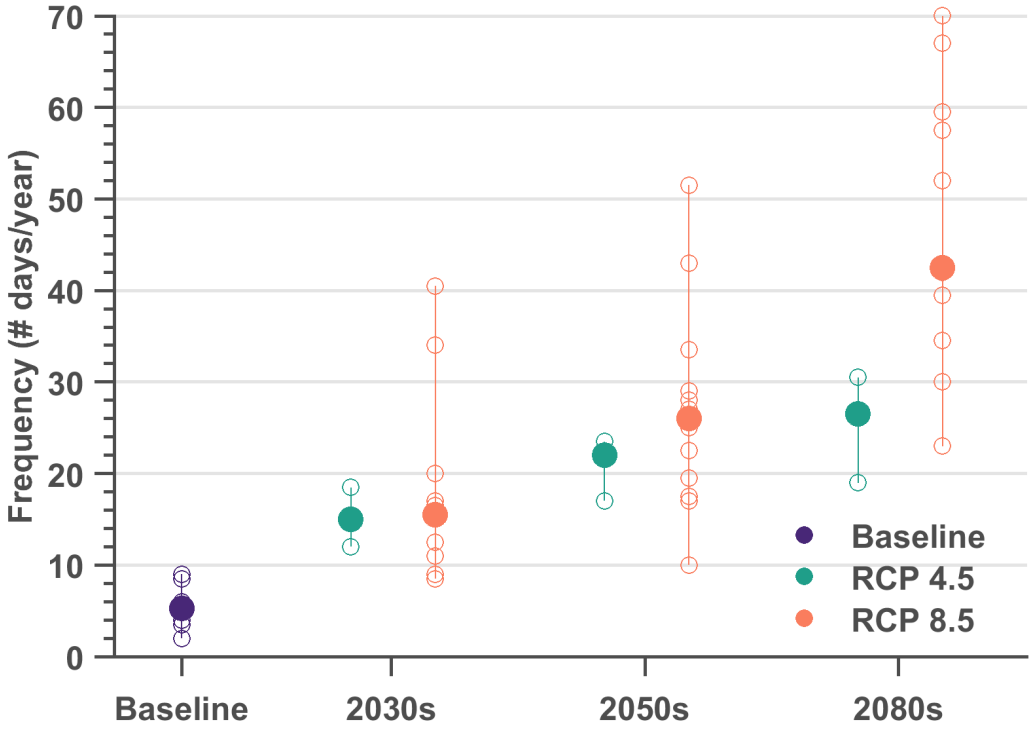


Figure F5.16: Number of Days Humidex > 40.

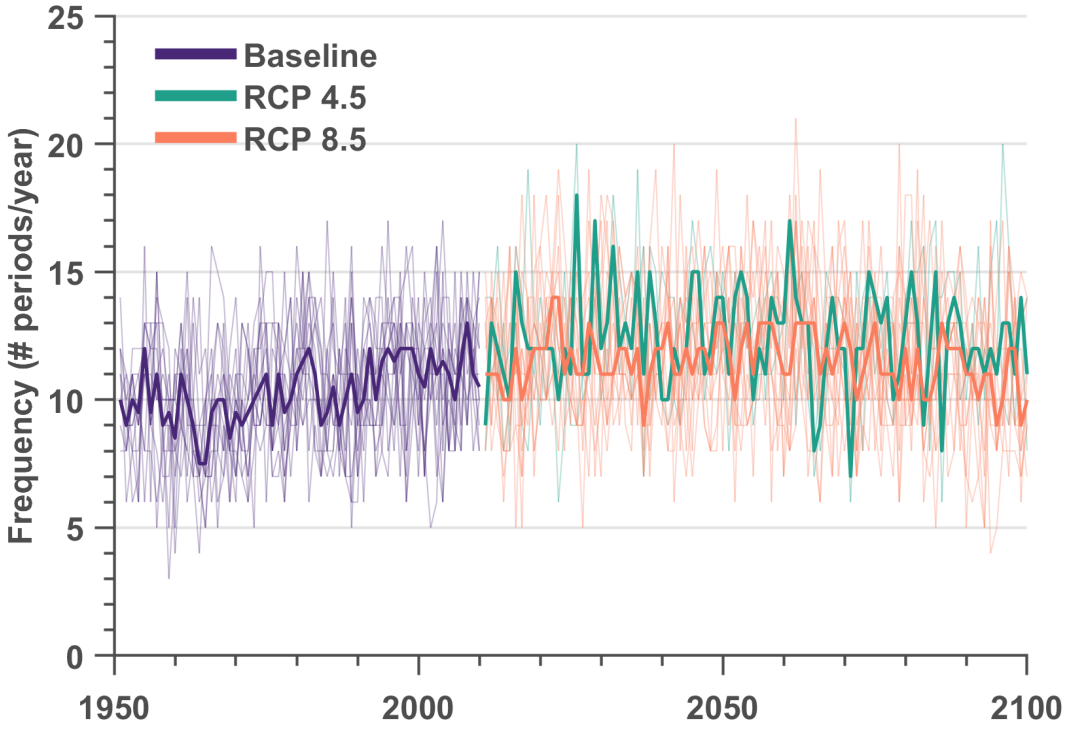


Figure F5.17: Number of Periods Humidex > 30 for 2 Days.

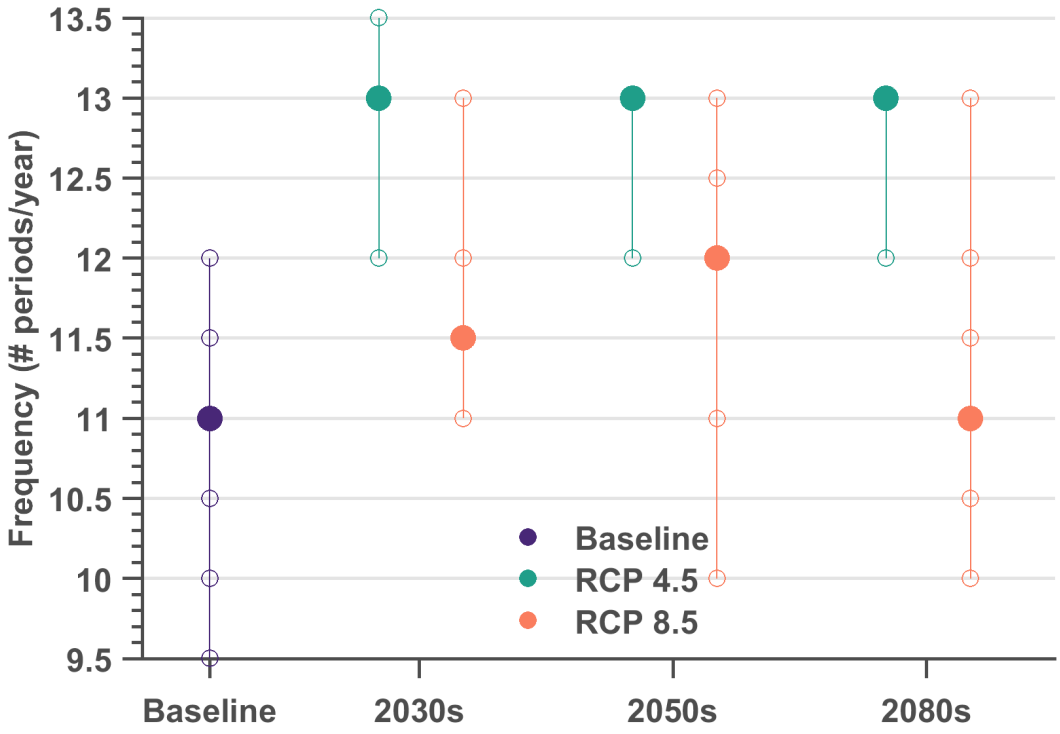


Figure F5.18: Number of Periods Humidex > 30 for 2 Days.

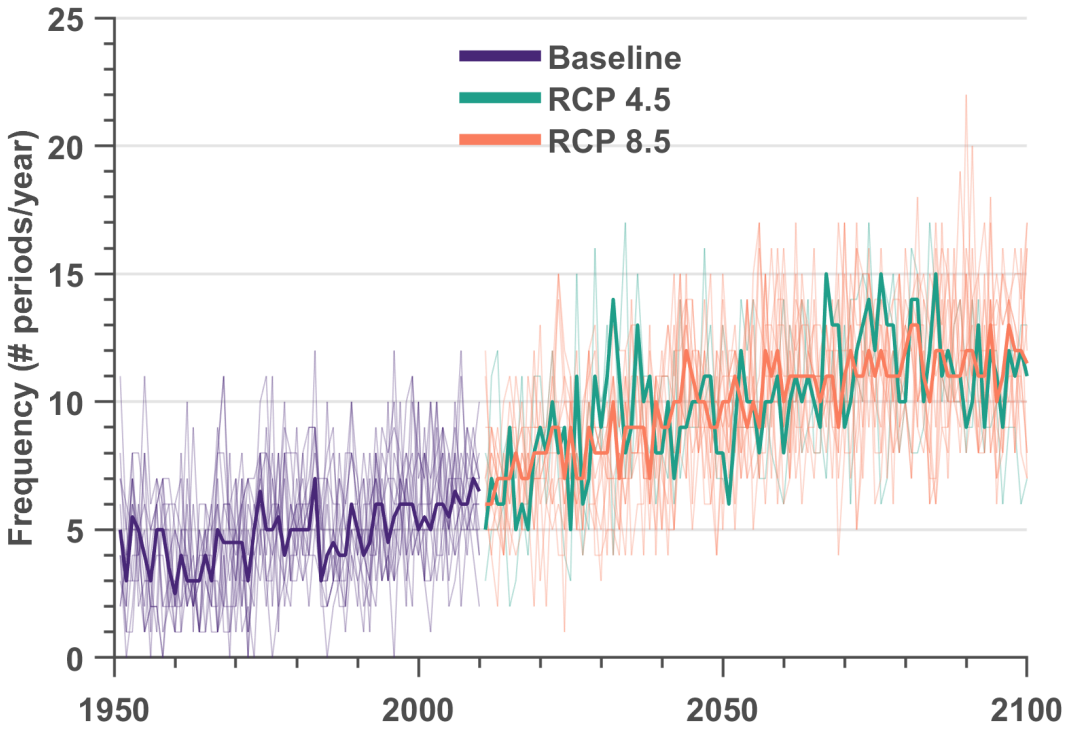


Figure F5.19: Number of Periods Humidex > 35 for 2 Days.

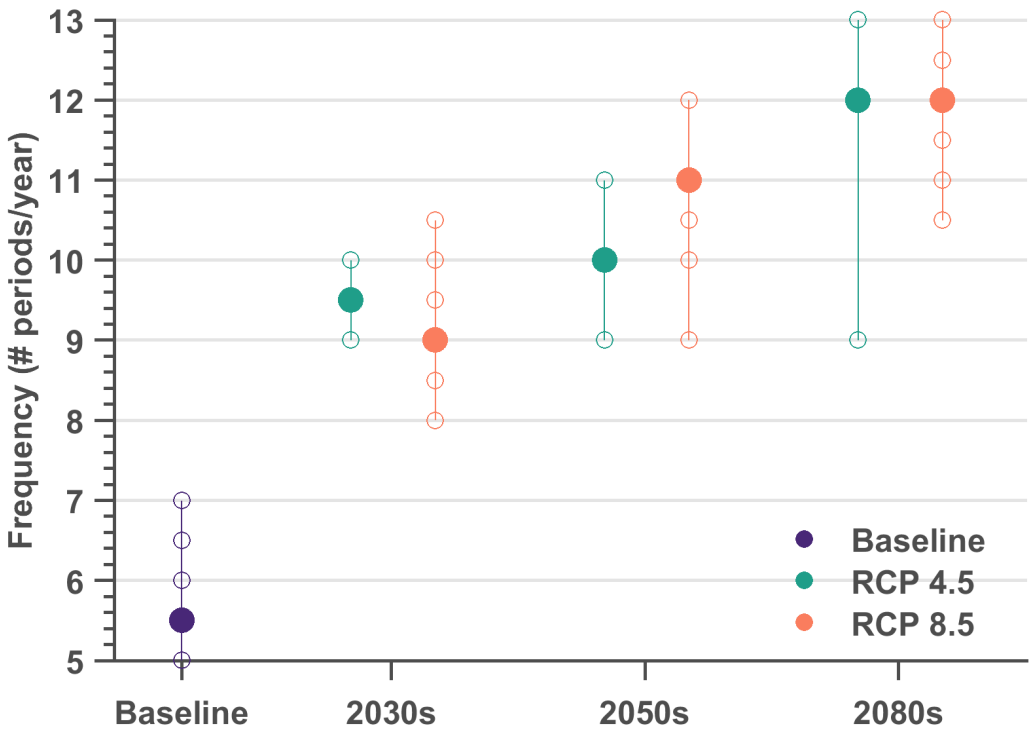


Figure F5.20: Number of Periods Humidex > 35 for 2 Days.

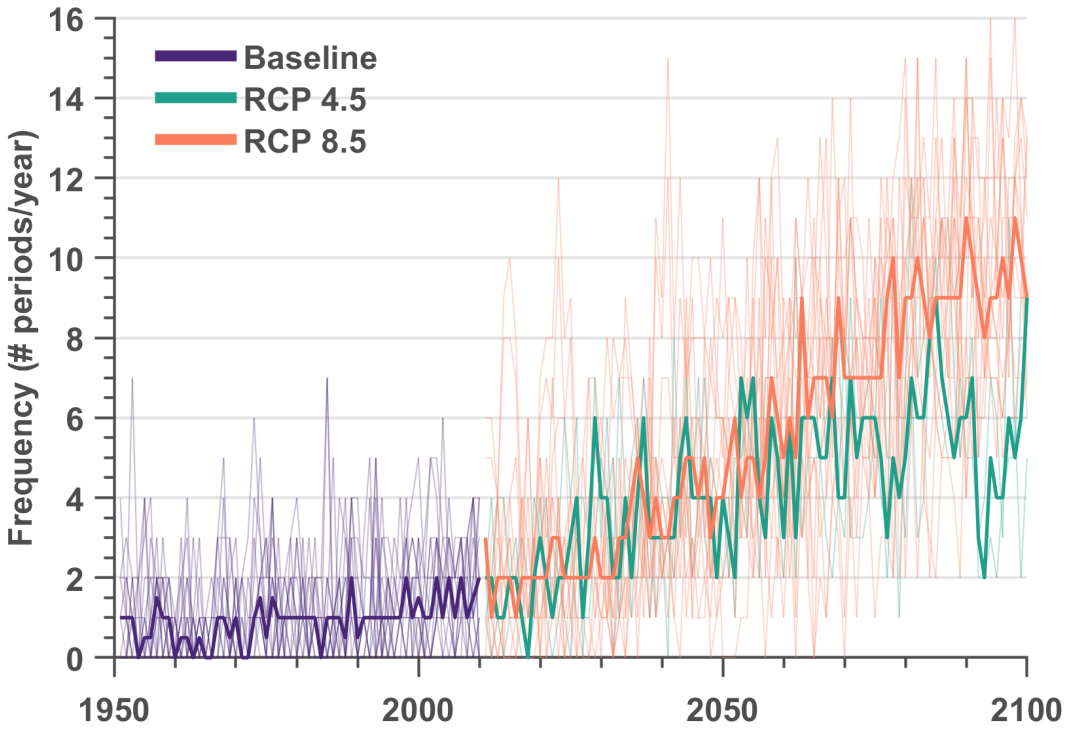


Figure F5.21: Number of Periods Humidex > 40 for 2 Days.

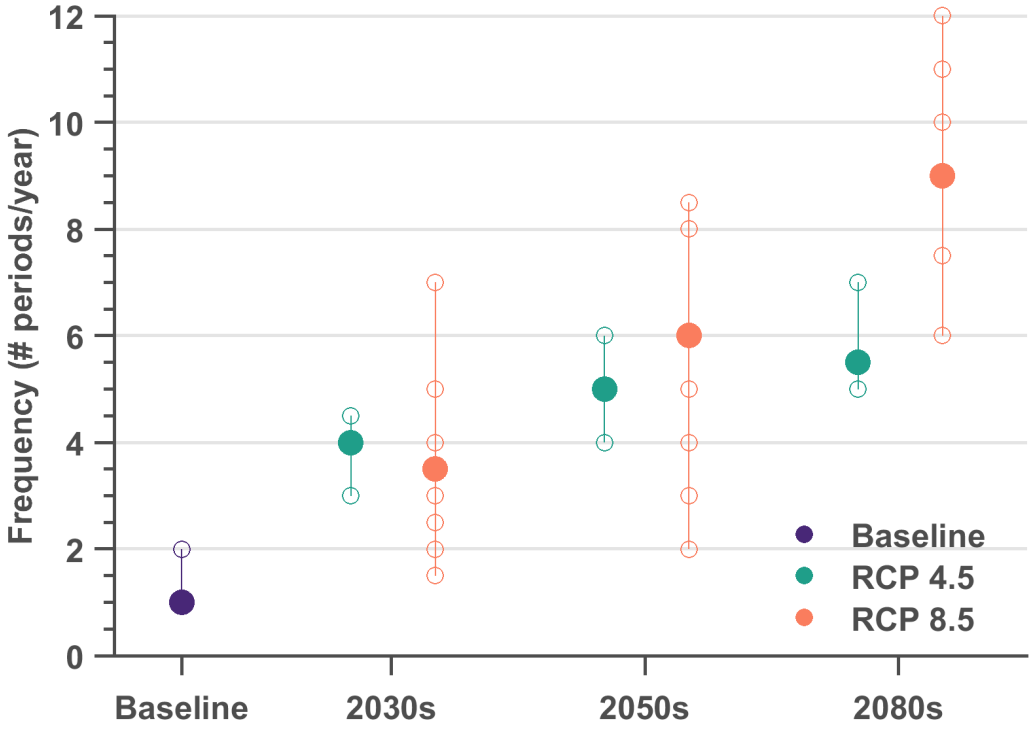


Figure F5.22: Number of Periods Humidex > 40 for 2 Days.

Appendix G - Table of Climate Indices

G1 Temperature

Table G.1: Median projections for temperature-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Warmest Temperature of the Year [°C]	33.5 (32.9-34.3)	35.3 (34.0-36.6)	35.6 (34.1-36.7)	36.2 (34.3-37.4)	37.1 (35.3-38.8)	36.7 (35.2-38.8)	39.7 (37.7-41.9)
Coldest Temperature of the Year [°C]	-31.4 (-32.4–29.8)	-28.5 (-30.7–25.6)	-28.3 (-30.1–25.6)	-26.9 (-29.0–22.6)	-25.5 (-27.4–21.9)	-25.4 (-28.0–21.4)	-20.3 (-24.5–16.5)
Warmest Monthly Temperature (January) [°C]	4.4 (3.3-5.2)	5.5 (4.0-7.2)	5.3 (4.4-6.9)	6.3 (4.4-8.5)	6.7 (4.8-8.5)	6.2 (4.6-8.3)	8.8 (6.1-11.9)
Warmest Monthly Temperature (February) [°C]	5.4 (4.8-6.0)	6.2 (5.0-8.0)	7.1 (5.3-8.6)	7.0 (5.5-10.6)	8.3 (5.6-10.7)	7.5 (6.1-9.2)	10.4 (7.2-15.6)
Warmest Monthly Temperature (March) [°C]	11.9 (10.4-13.6)	13.6 (12.0-16.4)	14.2 (11.4-16.8)	14.4 (12.0-18.8)	15.7 (13.1-20.3)	15.4 (13.3-18.9)	17.2 (14.7-23.9)
Warmest Monthly Temperature (April) [°C]	22.3 (21.2-23.8)	23.9 (22.5-26.3)	24.0 (21.8-25.7)	24.9 (22.4-27.1)	25.5 (24.4-27.7)	25.4 (23.5-26.8)	27.7 (25.8-30.0)
Warmest Monthly Temperature (May) [°C]	28.3 (27.5-29.1)	29.9 (28.4-31.1)	29.8 (28.8-31.2)	29.9 (28.9-32.1)	31.5 (29.3-32.3)	31.2 (28.8-32.6)	33.2 (31.5-34.6)
Warmest Monthly Temperature (June) [°C]	31.4 (30.6-31.9)	32.7 (31.7-33.9)	33.0 (31.6-34.1)	33.3 (31.8-35.3)	34.5 (32.6-35.3)	33.7 (32.0-35.6)	36.8 (34.2-38.5)
Warmest Monthly Temperature (July) [°C]	32.7 (31.7-33.4)	34.4 (32.9-35.6)	34.7 (32.4-35.7)	35.2 (33.2-36.5)	36.4 (33.7-37.9)	35.7 (33.7-37.6)	38.7 (35.8-40.6)
Warmest Monthly Temperature (August) [°C]	31.5 (30.8-32.2)	33.4 (32.1-34.8)	33.7 (32.7-35.0)	34.2 (32.5-36.3)	35.5 (33.6-37.4)	34.9 (32.9-37.8)	37.8 (36.0-41.0)
Warmest Monthly Temperature (September) [°C]	28.5 (27.2-29.2)	30.6 (29.2-32.4)	30.9 (29.2-32.4)	31.2 (29.6-32.9)	32.3 (31.3-34.0)	31.9 (29.8-34.8)	34.9 (33.3-38.8)
Warmest Monthly Temperature (October) [°C]	23.2 (22.4-23.8)	25.2 (23.8-26.0)	25.4 (23.7-26.6)	25.8 (24.1-27.1)	26.8 (25.3-27.7)	25.9 (24.8-27.6)	28.7 (27.5-32.4)
Warmest Monthly Temperature (November) [°C]	15.4 (14.5-15.8)	17.4 (15.2-18.2)	17.2 (15.9-18.3)	17.6 (16.7-18.7)	18.0 (16.8-20.1)	18.1 (16.9-19.3)	20.0 (18.8-21.0)
Warmest Monthly Temperature (December) [°C]	7.8 (6.3-8.5)	9.0 (7.0-11.5)	9.3 (7.4-11.0)	10.0 (7.8-11.5)	10.4 (8.2-13.1)	10.3 (8.3-12.6)	13.3 (11.0-16.1)
Monthly Min. of Daily Max. Temperature (January) [°C]	-18.3 (-19.0–17.0)	-15.4 (-17.5–12.5)	-15.0 (-17.7–12.8)	-14.0 (-16.2–10.7)	-12.4 (-15.6–8.8)	-12.7 (-16.7–9.4)	-8.2 (-11.5–5.0)
Monthly Min. of Daily Max. Temperature (February) [°C]	-15.5 (-17.0–13.7)	-13.5 (-14.3–10.6)	-12.7 (-14.3–10.0)	-12.6 (-13.7–8.4)	-10.9 (-12.7–7.3)	-11.3 (-12.5–6.2)	-7.6 (-9.4–2.9)
Monthly Min. of Daily Max. Temperature (March) [°C]	-8.3 (-9.2–7.1)	-6.4 (-8.3–4.2)	-5.9 (-7.3–3.5)	-5.4 (-7.1–2.3)	-4.3 (-6.3–2.0)	-5.0 (-6.7–2.2)	-2.3 (-4.5-2.6)
Monthly Min. of Daily Max. Temperature (April) [°C]	1.7 (0.5-2.3)	3.3 (1.4-5.0)	3.0 (1.4-5.6)	3.9 (1.8-5.7)	4.3 (2.7-8.5)	4.4 (2.4-7.8)	6.4 (4.6-11.2)
Monthly Min. of Daily Max. Temperature (May) [°C]	9.6 (8.1-10.5)	11.0 (9.5-13.2)	10.9 (9.8-13.6)	11.3 (10.1-13.8)	12.1 (11.0-15.6)	11.8 (10.4-14.5)	14.3 (12.4-17.4)
Monthly Min. of Daily Max. Temperature (June) [°C]	15.7 (15.1-16.4)	17.2 (16.3-17.9)	17.3 (16.5-18.4)	18.1 (16.8-19.2)	18.6 (17.3-20.3)	18.3 (16.9-19.7)	20.7 (18.4-22.8)
Monthly Min. of Daily Max. Temperature (July) [°C]	20.3 (19.2-20.9)	21.7 (20.8-22.5)	22.1 (20.9-23.1)	22.5 (21.0-23.6)	23.9 (22.1-25.2)	23.4 (21.2-24.8)	26.2 (24.1-28.2)
Monthly Min. of Daily Max. Temperature (August) [°C]	18.3 (17.5-19.2)	19.9 (18.4-21.4)	20.1 (18.7-21.5)	20.7 (19.5-22.1)	22.0 (20.8-23.4)	21.7 (19.9-23.3)	24.5 (22.5-27.0)
Monthly Min. of Daily Max. Temperature (September) [°C]	11.7 (11.2-12.5)	13.9 (12.3-14.9)	14.0 (13.0-14.9)	14.7 (13.2-15.2)	15.2 (13.8-17.3)	15.5 (13.3-16.5)	17.6 (15.2-21.2)
Monthly Min. of Daily Max. Temperature (October) [°C]	4.5 (4.1-5.7)	6.2 (5.3-7.0)	6.4 (5.1-7.1)	6.5 (5.7-7.6)	7.6 (6.3-8.6)	7.4 (6.2-8.6)	9.2 (8.0-11.6)
Monthly Min. of Daily Max. Temperature (November) [°C]	-3.0 (-3.9–2.4)	-0.9 (-2.3-0.5)	-0.6 (-2.1-0.7)	-0.1 (-1.5-1.0)	1.0 (-0.6-2.0)	0.1 (-0.8-2.0)	3.0 (0.2-4.1)
Monthly Min. of Daily Max. Temperature (December) [°C]	-14.2 (-15.3–13.1)	-11.3 (-13.3–8.6)	-11.1 (-12.8–8.7)	-9.6 (-12.7–8.1)	-8.2 (-10.5–6.2)	-8.9 (-11.4–6.8)	-6.0 (-8.3–3.5)
Monthly Max. of Daily Min. Temperature (January) [°C]	-1.7 (-2.7–0.8)	-0.5 (-1.4-1.3)	-0.5 (-1.4-0.9)	-0.0 (-1.0-2.1)	0.3 (-1.0-2.0)	0.2 (-0.8-2.2)	2.1 (0.8-5.6)
Monthly Max. of Daily Min. Temperature (February) [°C]	-0.9 (-1.7–0.2)	-0.5 (-1.2-1.2)	0.3 (-0.6-1.2)	0.5 (-0.4-2.1)	1.0 (-0.1-3.4)	0.4 (-0.6-2.8)	2.8 (0.9-5.9)
Monthly Max. of Daily Min. Temperature (March) [°C]	1.7 (1.3-2.7)	3.3 (1.9-5.6)	3.5 (1.9-4.8)	3.5 (2.6-6.7)	5.1 (2.8-7.4)	4.3 (2.6-7.7)	6.3 (4.3-11.0)
Monthly Max. of Daily Min. Temperature (April) [°C]	8.3 (7.2-9.0)	9.8 (9.1-11.1)	10.3 (8.8-11.9)	11.0 (9.4-12.2)	11.6 (10.5-13.0)	11.4 (9.4-12.4)	13.6 (11.5-15.2)
Monthly Max. of Daily Min. Temperature (May) [°C]	14.9 (14.1-15.5)	16.3 (15.4-17.1)	16.6 (15.7-17.0)	16.6 (15.9-17.7)	17.5 (16.2-18.7)	17.3 (15.8-18.3)	19.6 (17.7-20.5)
Monthly Max. of Daily Min. Temperature (June) [°C]	18.7 (18.4-19.2)	20.0 (19.1-20.5)	20.3 (19.4-21.3)	20.5 (19.3-22.0)	21.4 (20.5-22.5)	21.2 (19.6-22.7)	23.1 (21.9-25.0)
Monthly Max. of Daily Min. Temperature (July) [°C]	20.6 (20.0-20.9)	21.8 (20.9-22.5)	22.1 (21.5-22.8)	22.4 (21.4-23.5)	23.4 (22.4-24.9)	22.8 (21.9-24.6)	25.1 (23.8-27.9)
Monthly Max. of Daily Min. Temperature (August) [°C]	20.0 (19.6-20.3)	21.2 (20.6-22.3)	21.6 (20.9-22.7)	22.0 (21.0-23.5)	23.0 (22.2-24.5)	22.3 (21.2-24.6)	24.9 (23.4-27.3)
Monthly Max. of Daily Min. Temperature (September) [°C]	17.5 (16.8-18.1)	19.2 (17.8-20.3)	19.3 (18.4-20.7)	19.5 (18.8-21.0)	20.8 (19.6-22.0)	20.4 (18.6-21.9)	22.9 (21.4-24.4)
Monthly Max. of Daily Min. Temperature (October) [°C]	11.6 (11.2-12.3)	13.3 (12.5-14.2)	13.6 (12.9-14.4)	13.7 (12.8-14.9)	14.8 (13.6-15.8)	14.3 (13.4-16.0)	16.9 (15.5-19.0)
Monthly Max. of Daily Min. Temperature (November) [°C]	6.6 (5.6-7.3)	8.2 (5.7-9.5)	8.3 (7.1-9.2)	8.7 (6.8-9.8)	9.4 (8.4-10.9)	9.1 (7.9-10.3)	11.5 (9.6-12.5)
Monthly Max. of Daily Min. Temperature (December) [°C]	0.9 (0.3-1.5)	2.1 (0.7-4.1)	2.6 (1.6-3.6)	3.0 (1.3-4.4)	3.4 (2.4-5.3)	3.7 (1.6-4.7)	5.9 (4.0-7.7)
Coldest Monthly Temperature (January) [°C]	-30.0 (-31.0–28.2)	-26.9 (-29.0–24.0)	-26.2 (-29.2–23.9)	-25.2 (-28.3–21.4)	-22.9 (-26.2–19.0)	-23.4 (-27.8–19.7)	-18.2 (-22.5–14.0)
Coldest Monthly Temperature (February) [°C]	-28.6 (-29.7–26.6)	-26.1 (-27.1–22.5)	-25.0 (-27.4–21.6)	-24.8 (-26.5–19.8)	-23.2 (-25.2–18.3)	-23.3 (-25.6–17.1)	-17.9 (-21.2–12.7)
Coldest Monthly Temperature (March) [°C]	-21.1 (-23.0–19.5)	-19.0 (-22.0–16.7)	-18.5 (-19.8–15.0)	-17.6 (-20.3–13.3)	-16.0 (-17.8–11.8)	-17.4 (-19.7–11.0)	-13.1 (-14.4–6.3)
Coldest Monthly Temperature (April) [°C]	-8.3 (-8.9–6.5)	-6.0 (-8.2–3.0)	-6.2 (-7.2–3.0)	-5.6 (-7.3–2.5)	-5.0 (-6.1–0.9)	-4.8 (-6.2–0.7)	-2.9 (-4.9-2.6)
Coldest Monthly Temperature (May) [°C]	-1.3 (-1.8–0.7)	0.0 (-1.1-1.7)	0.1 (-0.9-2.3)	0.2 (-0.9-3.1)	1.0 (-0.5-4.0)	0.4 (-0.6-4.2)	2.9 (1.2-6.4)
Coldest Monthly Temperature (June) [°C]	4.0 (3.5-4.6)	5.4 (4.6-6.5)	5.6 (4.7-6.6)	5.8 (4.7-7.1)	7.1 (5.6-8.1)	6.4 (5.4-8.1)	8.8 (6.8-11.2)
Coldest Monthly Temperature (July) [°C]	7.8 (7.3-8.5)	9.2 (8.2-10.4)	9.6 (8.0-10.9)	10.0 (8.6-11.2)	11.0 (9.6-13.0)	10.5 (8.5-12.3)	13.9 (10.9-15.3)
Coldest Monthly Temperature (August) [°C]	6.1 (5.6-6.7)	7.6 (6.6-9.0)	8.0 (7.1-9.0)	8.6 (7.3-10.0)	9.7 (8.3-11.0)	9.0 (7.5-11.1)	11.9 (9.9-14.4)
Coldest Monthly Temperature (September) [°C]	-0.1 (-0.8-1.0)	1.9 (0.7-2.8)	1.8 (1.1-3.1)	2.0 (1.1-3.1)	2.9 (2.1-4.6)	2.6 (1.5-4.8)	5.5 (3.6-8.1)
Coldest Monthly Temperature (October) [°C]	-4.8 (-5.6–3.6)	-3.6 (-4.5–2.3)	-3.2 (-4.4–1.6)	-2.7 (-4.0–1.3)	-2.1 (-3.4–0.5)	-2.2 (-3.7–0.6)	-0.0 (-2.2-1.4)
Coldest Monthly Temperature (November) [°C]	-11.6 (-12.8–10.2)	-8.8 (-10.3–7.0)	-8.7 (-10.7–6.6)	-8.1 (-10.6–7.0)	-7.2 (-9.0–5.1)	-7.4 (-10.4–6.1)	-4.8 (-9.3–1.8)
Coldest Monthly Temperature (December) [°C]	-25.5 (-26.4–24.0)	-21.0 (-24.3–18.8)	-21.2 (-23.5–18.8)	-19.8 (-23.4–17.7)	-17.7 (-20.7–15.7)	-18.9 (-22.1–15.3)	-14.7 (-17.0–11.0)
Number of Hot Days (Daily Max. Temp. >30 °C) [# Days]	11 (9-13)	25 (15-32)	28 (19-32)	32 (18-41)	43 (31-52)	36 (23-52)	72 (48-88)
Number of Tropical Nights (Daily. Min Temp. >20 °C) [# Days]	3 (2-3)	8 (4-12)	9 (7-13)	10 (6-20)	18 (13-26)	15 (9-26)	39 (26-60)
Number of Deep Freeze Events (Daily Min. Temp. < -10 °C) [# Days]	71 (69-75)	59 (50-65)	57 (50-66)	53 (43-63)	46 (35-53)	48 (35-59)	28 (15-39)
Number of Days Daily Max. Temperature >0 °C (Fall) [# Days]	87 (86-88)	90 (89-91)	89 (88-91)	90 (89-91)	91 (90-91)	90 (90-91)	91 (90-91)
Number of Days Daily Max. Temperature >0 °C (Winter) [# Days]	27 (24-30)	32 (28-42)	34 (29-40)	36 (30-46)	40 (36-50)	40 (32-53)	55 (44-69)
Number of Days Daily Max. Temperature >0 °C (Spring) [# Days]	82 (80-84)	84 (82-87)	84 (82-88)	85 (83-90)	86 (84-90)	86 (84-90)	89 (87-92)
Number of Days Daily Max. Temperature >0 °C (Summer) [# Days]	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)
Number of Days Daily Max. Temperature >5 °C (Fall) [# Days]	74 (73-76)	79 (76-81)	80 (76-83)	80 (78-84)	82 (79-87)	82 (80-86)	87 (84-89)
Number of Days Daily Max. Temperature >5 °C (Winter) [# Days]	5 (4-7)	7 (5-13)	8 (6-13)	10 (7-16)	11 (8-18)	11 (7-18)	21 (12-29)
Number of Days Daily Max. Temperature >5 °C (Spring) [# Days]	65 (63-66)	70 (65-74)	70 (65-78)	70 (67-77)	73 (68-81)	73 (69-81)	79 (74-87)
Number of Days Daily Max. Temperature >5 °C (Summer) [# Days]	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)
Number of Days Daily Max. Temperature >10 °C (Fall) [# Days]	58 (55-60)	64 (60-67)	65 (61-68)	65 (61-70)	68 (65-72)	68 (64-72)	74 (71-79)
Number of Days Daily Max. Temperature >10 °C (Winter) [# Days]	0 (0-0)	1 (0-3)	1 (0-2)	2 (1-3)	2 (1-4)	2 (1-4)	6 (3-9)
Number of Days Daily Max. Temperature >10 °C (Spring) [# Days]	48 (46-51)	53 (50-59)	53 (49-62)	55 (51-64)	57 (53-67)	58 (52-65)	64 (59-75)

Table G.1: Median projections for temperature-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Number of Days Daily Max. Temperature >10 °C (Summer) [# Days]	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)
Number of Days Daily Max. Temperature >15 °C (Fall) [# Days]	39 (36-40)	46 (42-49)	47 (43-50)	48 (44-52)	51 (46-56)	51 (45-55)	59 (54-63)
Number of Days Daily Max. Temperature >15 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	1 (0-3)
Number of Days Daily Max. Temperature >15 °C (Spring) [# Days]	31 (28-33)	36 (34-42)	36 (32-45)	38 (35-48)	41 (37-55)	41 (36-51)	47 (42-65)
Number of Days Daily Max. Temperature >15 °C (Summer) [# Days]	92 (91-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)	92 (92-92)
Number of Days Daily Max. Temperature >20 °C (Fall) [# Days]	19 (18-21)	26 (23-30)	28 (25-31)	29 (24-33)	32 (28-37)	32 (25-37)	40 (36-47)
Number of Days Daily Max. Temperature >20 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature >20 °C (Spring) [# Days]	15 (13-17)	20 (18-23)	20 (17-23)	21 (19-28)	24 (21-30)	23 (20-28)	31 (25-45)
Number of Days Daily Max. Temperature >20 °C (Summer) [# Days]	83 (81-84)	87 (85-89)	88 (86-90)	89 (86-91)	90 (88-92)	89 (87-91)	92 (90-92)
Number of Days Daily Max. Temperature >25 °C (Fall) [# Days]	5 (3-6)	10 (7-13)	12 (8-14)	12 (8-14)	15 (11-19)	15 (10-19)	23 (19-31)
Number of Days Daily Max. Temperature >25 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature >25 °C (Spring) [# Days]	4 (3-5)	7 (5-10)	7 (5-9)	8 (6-12)	10 (7-14)	9 (6-13)	15 (10-21)
Number of Days Daily Max. Temperature >25 °C (Summer) [# Days]	50 (47-52)	65 (58-69)	67 (57-72)	71 (59-75)	76 (68-80)	74 (63-79)	85 (77-90)
Number of Days Daily Max. Temperature >35 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-1)	1 (0-6)
Number of Days Daily Max. Temperature >35 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature >35 °C (Spring) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature >35 °C (Summer) [# Days]	0 (0-0)	1 (0-3)	1 (0-3)	2 (0-5)	4 (1-10)	3 (1-11)	16 (6-35)
Number of Days Daily Max. Temperature < -34 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < -34 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < -34 °C (Spring) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < -34 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < -5 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < -5 °C (Winter) [# Days]	37 (34-39)	29 (20-34)	28 (22-34)	23 (16-31)	21 (13-27)	21 (10-30)	9 (2-17)
Number of Days Daily Max. Temperature < -5 °C (Spring) [# Days]	3 (2-3)	1 (0-2)	1 (0-2)	1 (0-2)	0 (0-1)	1 (0-2)	0 (0-0)
Number of Days Daily Max. Temperature < -5 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temperature < 0 °C (Fall) [# Days]	4 (3-5)	1 (0-2)	1 (0-3)	1 (0-2)	0 (0-1)	1 (0-1)	0 (0-1)
Number of Days Daily Max. Temperature < 0 °C (Winter) [# Days]	63 (60-66)	58 (46-62)	56 (49-61)	54 (44-60)	50 (40-54)	50 (37-59)	35 (21-46)
Number of Days Daily Max. Temperature < 0 °C (Spring) [# Days]	10 (8-12)	8 (5-10)	8 (4-10)	7 (2-9)	5 (2-8)	6 (2-8)	2 (0-5)
Number of Days Daily Max. Temperature < 0 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -34 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -34 °C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -34 °C (Spring) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -34 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -28 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -28 °C (Winter) [# Days]	4 (2-5)	1 (0-3)	1 (0-2)	1 (0-2)	0 (0-1)	0 (0-1)	0 (0-0)
Number of Days Daily Min. Temperature < -28 °C (Spring) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -28 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -20 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -20 °C (Winter) [# Days]	22 (20-24)	13 (7-19)	12 (8-17)	10 (3-15)	6 (2-12)	7 (2-13)	1 (0-5)
Number of Days Daily Min. Temperature < -20 °C (Spring) [# Days]	1 (1-2)	0 (0-2)	0 (0-1)	0 (0-1)	0 (0-0)	0 (0-1)	0 (0-0)
Number of Days Daily Min. Temperature < -20 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -15 °C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -15 °C (Winter) [# Days]	39 (36-41)	30 (22-36)	27 (23-33)	24 (16-31)	20 (11-26)	21 (12-30)	8 (2-15)
Number of Days Daily Min. Temperature < -15 °C (Spring) [# Days]	5 (3-6)	3 (2-5)	3 (1-4)	2 (0-4)	1 (0-2)	2 (0-3)	0 (0-1)
Number of Days Daily Min. Temperature < -15 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < -5 °C (Fall) [# Days]	8 (7-10)	5 (4-7)	5 (3-7)	4 (3-6)	3 (1-5)	3 (1-5)	1 (0-3)
Number of Days Daily Min. Temperature < -5 °C (Winter) [# Days]	75 (73-77)	70 (65-74)	69 (64-72)	66 (61-71)	63 (54-68)	63 (54-69)	50 (38-60)
Number of Days Daily Min. Temperature < -5 °C (Spring) [# Days]	23 (20-24)	19 (15-21)	18 (13-21)	18 (10-20)	15 (7-18)	16 (9-19)	9 (2-14)
Number of Days Daily Min. Temperature < -5 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Min. Temperature < 0 °C (Fall) [# Days]	29 (27-31)	21 (18-26)	19 (16-25)	18 (15-23)	15 (10-20)	17 (12-22)	8 (4-14)
Number of Days Daily Min. Temperature < 0 °C (Winter) [# Days]	87 (86-88)	85 (82-87)	84 (82-86)	83 (80-86)	82 (77-84)	82 (76-85)	74 (67-80)
Number of Days Daily Min. Temperature < 0 °C (Spring) [# Days]	45 (42-48)	39 (31-44)	39 (29-43)	38 (28-43)	33 (22-40)	33 (24-40)	26 (13-33)
Number of Days Daily Min. Temperature < 0 °C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between -20 and -10°C (Fall) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between -20 and -10°C (Winter) [# Days]	16 (14-18)	10 (5-14)	9 (6-13)	6 (2-11)	5 (1-9)	6 (1-10)	1 (0-3)
Number of Days Daily Max. Temp. is between -20 and -10°C (Spring) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between -20 and -10°C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between -10 and 0°C (Fall) [# Days]	4 (3-5)	1 (0-2)	1 (0-3)	1 (0-2)	0 (0-1)	1 (0-1)	0 (0-1)
Number of Days Daily Max. Temp. is between -10 and 0°C (Winter) [# Days]	45 (44-47)	46 (40-50)	45 (41-49)	44 (39-49)	43 (36-48)	44 (35-49)	33 (21-44)
Number of Days Daily Max. Temp. is between -10 and 0°C (Spring) [# Days]	10 (8-12)	8 (5-9)	8 (4-10)	7 (2-9)	5 (2-8)	6 (2-8)	2 (0-5)
Number of Days Daily Max. Temp. is between -10 and 0°C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 0 and 5°C (Fall) [# Days]	12 (10-13)	10 (8-12)	10 (7-11)	9 (6-12)	8 (4-10)	8 (5-10)	4 (2-6)
Number of Days Daily Max. Temp. is between 0 and 5°C (Winter) [# Days]	21 (19-24)	24 (21-32)	24 (22-31)	26 (22-33)	28 (23-37)	28 (22-35)	31 (26-40)
Number of Days Daily Max. Temp. is between 0 and 5°C (Spring) [# Days]	16 (14-17)	14 (10-17)	14 (9-17)	13 (9-17)	12 (8-16)	12 (8-15)	9 (5-13)
Number of Days Daily Max. Temp. is between 0 and 5°C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)

Table G.1: Median projections for temperature-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Number of Days Daily Max. Temp. is between 4 and 10°C (Fall) [# Days]	19 (17-21)	17 (15-20)	17 (16-18)	17 (14-19)	16 (13-19)	16 (13-19)	12 (10-16)
Number of Days Daily Max. Temp. is between 4 and 10°C (Winter) [# Days]	7 (5-8)	9 (8-14)	10 (8-14)	11 (9-18)	14 (9-19)	13 (9-20)	21 (13-31)
Number of Days Daily Max. Temp. is between 4 and 10°C (Spring) [# Days]	20 (18-21)	19 (16-21)	19 (16-21)	18 (15-21)	18 (12-20)	18 (13-20)	17 (11-20)
Number of Days Daily Max. Temp. is between 4 and 10°C (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 10 and 15°C (Fall) [# Days]	19 (18-20)	18 (15-19)	17 (15-20)	18 (15-20)	17 (14-19)	18 (15-20)	16 (12-18)
Number of Days Daily Max. Temp. is between 10 and 15°C (Winter) [# Days]	0 (0-0)	1 (0-2)	1 (0-2)	2 (1-3)	2 (1-4)	2 (1-4)	4 (2-8)
Number of Days Daily Max. Temp. is between 10 and 15°C (Spring) [# Days]	17 (16-18)	16 (14-18)	16 (15-19)	16 (13-19)	17 (13-19)	16 (13-19)	15 (12-20)
Number of Days Daily Max. Temp. is between 10 and 15°C (Summer) [# Days]	0 (0-1)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 15 and 20°C (Fall) [# Days]	19 (17-20)	19 (17-21)	18 (16-20)	19 (17-20)	18 (17-20)	18 (16-20)	17 (14-20)
Number of Days Daily Max. Temp. is between 15 and 20°C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-3)
Number of Days Daily Max. Temp. is between 15 and 20°C (Spring) [# Days]	16 (14-17)	16 (15-21)	16 (14-21)	16 (15-21)	16 (15-23)	17 (15-23)	17 (15-20)
Number of Days Daily Max. Temp. is between 15 and 20°C (Summer) [# Days]	8 (7-10)	4 (3-6)	4 (2-6)	3 (1-5)	2 (0-3)	2 (1-4)	0 (0-2)
Number of Days Daily Max. Temp. is between 18 and 34°C (Fall) [# Days]	26 (25-28)	34 (31-37)	35 (32-37)	36 (33-40)	40 (36-43)	39 (33-43)	45 (41-52)
Number of Days Daily Max. Temp. is between 18 and 34°C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 18 and 34°C (Spring) [# Days]	21 (18-22)	26 (24-32)	26 (23-31)	28 (24-36)	30 (26-42)	30 (26-39)	36 (31-51)
Number of Days Daily Max. Temp. is between 18 and 34°C (Summer) [# Days]	87 (86-88)	87 (84-89)	87 (83-88)	86 (81-88)	83 (76-87)	85 (74-87)	69 (49-79)
Number of Days Daily Max. Temp. is between 20 and 25°C (Fall) [# Days]	13 (12-15)	16 (14-17)	16 (14-18)	16 (15-18)	17 (15-19)	16 (15-19)	16 (15-19)
Number of Days Daily Max. Temp. is between 20 and 25°C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 20 and 25°C (Spring) [# Days]	10 (9-11)	13 (11-15)	12 (11-16)	13 (12-17)	13 (12-18)	13 (11-18)	14 (13-24)
Number of Days Daily Max. Temp. is between 20 and 25°C (Summer) [# Days]	32 (30-34)	22 (19-29)	21 (17-27)	17 (14-26)	13 (10-21)	16 (11-25)	6 (2-13)
Number of Days Daily Max. Temp. is between 22 and 30°C (Fall) [# Days]	12 (11-13)	17 (15-20)	18 (16-21)	19 (16-21)	22 (18-25)	21 (16-24)	24 (20-28)
Number of Days Daily Max. Temp. is between 22 and 30°C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 22 and 30°C (Spring) [# Days]	9 (8-10)	13 (11-15)	13 (11-15)	14 (11-17)	16 (13-19)	15 (13-18)	19 (16-27)
Number of Days Daily Max. Temp. is between 22 and 30°C (Summer) [# Days]	62 (59-64)	58 (55-64)	58 (53-63)	56 (49-62)	49 (43-57)	53 (42-59)	32 (19-46)
Number of Days Daily Max. Temp. is between 26 and 29°C (Fall) [# Days]	2 (2-3)	5 (3-6)	5 (4-7)	6 (3-7)	7 (5-9)	6 (4-9)	9 (8-11)
Number of Days Daily Max. Temp. is between 26 and 29°C (Winter) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of Days Daily Max. Temp. is between 26 and 29°C (Spring) [# Days]	2 (2-3)	3 (3-4)	3 (3-5)	4 (3-5)	4 (3-6)	4 (3-6)	6 (5-8)
Number of Days Daily Max. Temp. is between 26 and 29°C (Summer) [# Days]	24 (22-25)	26 (23-27)	26 (23-28)	26 (23-28)	24 (20-26)	25 (21-27)	16 (9-21)
Seasonal Temp. Range (Fall) [°C]	40.2 (39.1-41.3)	40.2 (38.3-41.4)	40.2 (37.9-41.5)	40.4 (38.0-41.8)	40.1 (37.0-43.2)	40.2 (37.9-43.0)	39.8 (37.6-45.1)
Seasonal Temp. Range (Winter) [°C]	40.6 (39.0-41.9)	38.4 (36.2-41.1)	38.6 (36.0-40.3)	38.4 (35.2-39.3)	36.8 (33.9-39.2)	37.2 (33.8-39.4)	34.4 (32.3-36.4)
Seasonal Temp. Range (Spring) [°C]	49.6 (48.0-50.8)	48.9 (46.1-51.1)	48.3 (45.9-50.9)	48.1 (44.1-49.9)	47.2 (43.8-49.5)	48.2 (43.7-50.4)	45.7 (39.6-47.8)
Seasonal Temp. Range (Summer) [°C]	29.7 (28.8-30.7)	29.8 (28.9-31.6)	30.0 (28.8-31.7)	30.1 (29.0-32.2)	30.1 (28.7-33.1)	30.5 (29.4-32.3)	30.9 (28.5-33.4)
Annual Average Temperature [°C]	6.1 (5.7-6.3)	7.5 (7.1-8.6)	7.9 (7.2-9.0)	8.2 (7.5-9.6)	9.3 (8.5-11.0)	8.8 (7.6-10.7)	11.4 (10.3-13.7)
Seasonal Average Temperature (Fall) [°C]	8.2 (7.8-8.4)	9.9 (9.2-10.6)	10.2 (9.3-10.9)	10.5 (9.7-11.2)	11.5 (10.5-12.4)	11.0 (9.9-12.3)	13.6 (12.3-15.5)
Seasonal Average Temperature (Winter) [°C]	-8.9 (-9.5–8.2)	-6.8 (-8.2–5.5)	-6.6 (-7.8–5.5)	-5.8 (-7.4–4.2)	-4.7 (-6.2–3.5)	-5.2 (-6.9–3.1)	-2.4 (-4.3–0.1)
Seasonal Average Temperature (Spring) [°C]	5.2 (4.6-5.6)	6.4 (5.9-8.2)	6.7 (5.7-8.1)	6.8 (6.4-9.2)	7.9 (7.0-10.5)	7.5 (6.5-10.0)	9.6 (8.8-13.2)
Seasonal Average Temperature (Summer) [°C]	19.2 (19.0-19.4)	20.7 (19.8-21.4)	21.1 (20.1-21.7)	21.6 (20.4-22.5)	22.5 (21.4-23.5)	22.1 (20.6-23.4)	24.8 (22.9-26.7)
Monthly Average Temperature (January) [°C]	-10.8 (-11.6–10.4)	-8.3 (-10.6–6.4)	-8.3 (-10.2–7.0)	-7.6 (-9.3–5.4)	-6.7 (-8.6–4.6)	-6.9 (-9.5–4.5)	-3.7 (-6.0–1.6)
Monthly Average Temperature (February) [°C]	-9.3 (-9.9–8.6)	-7.6 (-9.0–6.1)	-7.0 (-8.5–5.8)	-7.1 (-7.9–4.3)	-5.5 (-7.1–3.7)	-6.1 (-7.4–3.9)	-3.1 (-5.2–0.7)
Monthly Average Temperature (March) [°C]	-2.9 (-3.7–2.2)	-1.5 (-2.5-0.1)	-1.0 (-2.9-0.8)	-0.8 (-1.8-1.7)	0.0 (-1.0-2.6)	-0.3 (-1.5-2.6)	1.8 (0.9-6.1)
Monthly Average Temperature (April) [°C]	5.5 (4.9-6.2)	7.1 (5.9-8.7)	6.8 (5.8-9.2)	7.5 (6.3-10.4)	8.4 (6.7-11.7)	8.1 (6.9-10.5)	9.9 (8.6-13.7)
Monthly Average Temperature (May) [°C]	12.3 (12.0-13.1)	13.9 (13.4-14.8)	14.0 (13.1-15.4)	14.3 (13.5-15.7)	15.2 (14.5-16.8)	15.0 (13.7-16.3)	17.4 (16.1-19.0)
Monthly Average Temperature (June) [°C]	17.6 (17.2-18.3)	19.0 (18.3-19.8)	19.4 (18.7-20.3)	19.9 (18.9-21.0)	20.8 (19.9-21.9)	20.4 (19.1-21.3)	22.7 (20.8-24.1)
Monthly Average Temperature (July) [°C]	20.5 (20.1-20.9)	22.0 (21.1-22.8)	22.5 (21.4-23.1)	22.9 (21.3-23.8)	23.8 (22.5-25.0)	23.4 (21.8-25.1)	26.1 (24.0-28.9)
Monthly Average Temperature (August) [°C]	19.3 (18.9-19.6)	21.1 (20.3-22.0)	21.2 (20.6-22.0)	21.9 (20.9-22.9)	23.1 (21.6-24.0)	22.5 (21.0-24.2)	25.5 (23.6-28.9)
Monthly Average Temperature (September) [°C]	14.6 (14.2-15.0)	16.4 (15.5-17.5)	16.8 (16.0-17.6)	17.0 (16.1-18.1)	18.0 (16.9-19.1)	17.9 (16.1-19.1)	20.5 (19.3-22.5)
Monthly Average Temperature (October) [°C]	8.3 (7.7-8.8)	9.9 (9.0-10.6)	10.2 (9.3-11.3)	10.2 (9.4-11.4)	11.7 (10.3-12.6)	11.0 (9.6-12.3)	13.4 (12.2-15.8)
Monthly Average Temperature (November) [°C]	1.6 (1.2-1.9)	3.5 (2.2-4.2)	3.7 (2.6-4.2)	4.0 (3.1-4.8)	4.7 (3.7-6.0)	4.6 (3.3-5.2)	6.9 (5.3-8.1)
Monthly Average Temperature (December) [°C]	-6.4 (-6.9–5.5)	-4.3 (-5.8–3.1)	-4.7 (-5.4–3.0)	-3.4 (-4.9–2.8)	-2.5 (-3.7–1.2)	-2.9 (-4.9–1.0)	-0.3 (-2.7-1.7)
Growing Season Length [# Days]	200 (195-205)	212 (205-221)	214 (204-224)	218 (208-229)	223 (216-240)	224 (214-239)	242 (228-259)
Frost Season Length [# Days]	124 (121-127)	113 (102-120)	111 (98-118)	106 (89-114)	98 (85-106)	101 (80-110)	78 (48-92)
Potato Growing Season Length [# Days]	116 (113-119)	120 (113-125)	117 (110-129)	120 (110-124)	115 (104-127)	117 (106-129)	109 (92-131)
Corn Heat Units [Units]	3110 (3020-3170)	3540 (3330-3840)	3595 (3430-3920)	3705 (3440-4120)	3955 (3735-4450)	3825 (3470-4340)	4510 (4270-5280)
Timing of Tulip Emergence [Day]	108 (104-111)	102 (92-106)	99 (92-108)	99 (85-104)	93 (84-101)	95 (82-102)	83 (63-93)
Timing of Tulip Blooming [Day]	130 (128-132)	124 (118-128)	124 (116-129)	122 (113-127)	118 (106-124)	119 (111-125)	112 (94-118)
Timing of First Fall Frost [Day]	273 (269-279)	285 (277-291)	287 (279-296)	288 (280-296)	293 (288-303)	290 (283-302)	306 (294-320)
Timing of Last Spring Frost [Day]	126 (122-130)	118 (106-125)	118 (106-124)	117 (101-126)	111 (94-120)	115 (94-123)	101 (84-113)
Timing of Warmest Month [Month]	July	July	July	July	July	July	July
Timing of Coldest Month [Month]	January	January	January	January	January	January	January
Winter Melting Episode [# Days]	1 (1-1)	2 (1-2)	2 (2-2)	2 (1-3)	3 (2-3)	3 (2-4)	4 (3-5)
Annual Freeze-Thaw Cycles [# Days]	82 (78-86)	79 (68-83)	78 (66-83)	77 (66-84)	75 (62-82)	75 (64-82)	68 (55-76)
Seasonal Freeze-Thaw Cycles (Fall) [# Days]	24 (22-27)	19 (15-23)	18 (15-22)	17 (13-21)	14 (10-19)	16 (11-20)	8 (4-12)
Seasonal Freeze-Thaw Cycles (Winter) [# Days]	24 (21-26)	28 (24-35)	27 (24-33)	30 (25-38)	32 (27-40)	32 (26-40)	37 (30-44)
Seasonal Freeze-Thaw Cycles (Spring) [# Days]	34 (32-36)	30 (24-34)	30 (24-33)	30 (22-33)	27 (19-32)	27 (20-33)	23 (13-28)
Seasonal Freeze-Thaw Cycles (Summer) [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)

Table G.1: Median projections for temperature-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Frequency of Warm Spells (3-day max T >32°C) [# Periods]	0 (0-0)	1 (0-2)	2 (1-2)	2 (1-3)	3 (2-5)	2 (1-4)	6 (3-6)
Frequency of Warm Spells (2-day max T >31 and min T >20°C) [# Periods]	0 (0-0)	1 (0-2)	1 (1-2)	1 (1-4)	3 (2-5)	2 (1-5)	6 (4-8)
Frequency of Warm Spells (1-day max T >31 and min T >20°C) [# Periods]	1 (0-2)	2 (1-4)	3 (2-5)	3 (3-7)	6 (4-8)	5 (3-8)	10 (8-12)
Frequency of Cold Spells [# Periods]	4 (4-5)	3 (1-4)	2 (1-3)	2 (0-3)	1 (0-2)	1 (0-2)	0 (0-1)
Heating Degree Days (17 °C) [°C Days]	4320 (4265-4440)	3905 (3585-4035)	3830 (3560-4045)	3720 (3295-3920)	3460 (3080-3685)	3570 (3115-3870)	2985 (2470-3270)
Heating Degree Days (18 °C) [°C Days]	4610 (4560-4735)	4170 (3835-4310)	4100 (3810-4315)	3990 (3540-4190)	3710 (3310-3940)	3825 (3350-4140)	3215 (2690-3500)
Freezing Degree Days [°C Days]	995 (955-1050)	785 (650-885)	725 (635-865)	675 (535-805)	580 (455-710)	620 (440-780)	355 (215-505)
Above Freezing Degree Days [°C Days]	3180 (3090-3250)	3565 (3440-3770)	3640 (3465-3905)	3740 (3500-4055)	3995 (3740-4405)	3920 (3545-4300)	4530 (4285-5190)
Cooling Degree Days (18 °C) [°C Days]	230 (205-245)	360 (280-440)	385 (320-455)	425 (320-525)	525 (450-645)	500 (335-650)	815 (615-1040)
Winter Melting Days [°C Days]	20 (15-25)	35 (25-50)	35 (25-55)	45 (30-70)	60 (40-80)	55 (35-95)	105 (65-160)
January 2.5% Design Temp. Approximation [°C]	-23.3 (-24.5–21.8)	-21.0 (-22.8–17.6)	-20.0 (-22.6–18.2)	-18.9 (-21.3–14.8)	-17.1 (-20.1–13.0)	-17.4 (-21.5–14.6)	-12.5 (-16.5–9.4)
July 2.5% Design Temp. Approximation [°C]	25.6 (25.2-26.6)	27.1 (26.5-28.0)	27.3 (26.8-28.9)	27.9 (26.8-29.2)	28.8 (27.7-30.6)	28.2 (27.2-30.4)	30.9 (29.4-33.8)

G2 Precipitation

Table G.2: Median projections for precipitation-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Annual Total Precip. [mm]	921 (901-945)	949 (905-1000)	968 (925-1005)	979 (932-1039)	993 (943-1028)	983 (914-1056)	1028 (945-1072)
Monthly Total Precip (January) [mm]	67 (60-74)	73 (65-85)	71 (64-80)	77 (64-83)	76 (68-83)	73 (63-87)	80 (71-94)
Monthly Total Precip (February) [mm]	58 (51-61)	62 (50-68)	64 (58-77)	64 (59-70)	68 (57-77)	69 (59-79)	72 (58-83)
Monthly Total Precip (March) [mm]	61 (56-69)	65 (59-73)	63 (55-80)	68 (53-83)	73 (62-84)	68 (59-83)	79 (60-96)
Monthly Total Precip (April) [mm]	67 (61-77)	75 (61-83)	73 (66-85)	76 (63-94)	81 (73-99)	78 (63-92)	88 (74-101)
Monthly Total Precip (May) [mm]	77 (67-84)	77 (67-87)	81 (71-90)	81 (64-92)	78 (69-89)	81 (67-91)	85 (69-95)
Monthly Total Precip (June) [mm]	79 (74-89)	84 (70-99)	77 (69-100)	77 (66-102)	80 (65-98)	80 (66-94)	79 (69-104)
Monthly Total Precip (July) [mm]	78 (69-84)	81 (69-87)	76 (66-88)	79 (68-90)	72 (61-83)	78 (69-87)	77 (59-90)
Monthly Total Precip (August) [mm]	76 (69-83)	73 (65-87)	77 (66-87)	75 (59-84)	76 (57-93)	77 (56-86)	75 (54-84)
Monthly Total Precip (September) [mm]	84 (77-93)	86 (72-99)	82 (68-96)	87 (74-102)	87 (71-100)	83 (68-94)	82 (57-96)
Monthly Total Precip (October) [mm]	77 (68-85)	74 (66-85)	78 (67-91)	80 (68-94)	78 (67-93)	75 (64-90)	82 (64-98)
Monthly Total Precip (November) [mm]	82 (72-88)	84 (73-99)	84 (72-102)	86 (77-101)	88 (73-102)	90 (75-102)	96 (78-109)
Monthly Total Precip (December) [mm]	73 (69-82)	80 (68-95)	80 (71-91)	81 (73-100)	86 (77-99)	82 (74-99)	93 (83-112)
1 in 2 Year 1-day Precip. [mm]	37 (35-39)	39 (35-40)	39 (37-44)	40 (36-42)	41 (38-46)	41 (37-43)	44 (39-46)
1 in 5 Year 1-day Precip. [mm]	47 (44-51)	49 (45-53)	50 (47-57)	52 (45-55)	53 (50-61)	52 (48-59)	55 (50-62)
1 in 20 Year 1-day Precip. [mm]	66 (58-73)	69 (59-80)	69 (63-94)	70 (61-79)	75 (70-93)	72 (64-85)	78 (68-95)
1 in 50 Year 1-day Precip. [mm]	79 (68-95)	85 (69-108)	83 (73-130)	84 (71-102)	95 (83-120)	91 (76-120)	97 (77-136)
1 in 100 Year 1-day Precip. [mm]	92 (77-116)	102 (77-137)	99 (81-169)	97 (80-126)	113 (93-145)	109 (87-159)	118 (85-185)
1 in 350 Year 1-day Precip. [mm]	122 (98-172)	150 (91-216)	128 (99-286)	123 (95-184)	159 (114-225)	153 (111-283)	154 (102-318)
1 in 2 Year 2-day Precip. [mm]	49 (47-52)	52 (48-55)	52 (48-58)	53 (50-56)	54 (52-62)	53 (50-58)	58 (53-62)
1 in 5 Year 2-day Precip. [mm]	63 (58-67)	65 (61-71)	65 (61-72)	67 (62-73)	69 (64-80)	68 (64-73)	72 (67-82)
1 in 20 Year 2-day Precip. [mm]	84 (73-94)	89 (78-105)	86 (79-97)	89 (80-99)	97 (83-111)	93 (85-106)	95 (84-117)
1 in 50 Year 2-day Precip. [mm]	99 (84-122)	105 (92-138)	101 (91-120)	104 (92-131)	117 (97-136)	115 (96-135)	115 (95-148)
1 in 100 Year 2-day Precip. [mm]	112 (93-149)	121 (101-173)	116 (98-143)	113 (100-158)	136 (109-166)	135 (106-161)	132 (102-176)
1 in 350 Year 2-day Precip. [mm]	140 (110-219)	164 (116-259)	152 (110-202)	141 (117-231)	178 (134-247)	183 (128-221)	170 (116-259)
1 in 2 Year 5-day Precip. [mm]	63 (61-67)	66 (62-72)	68 (62-75)	69 (64-73)	71 (65-80)	70 (65-78)	75 (68-82)
1 in 5 Year 5-day Precip. [mm]	80 (73-85)	81 (78-95)	83 (77-94)	86 (80-89)	89 (81-101)	87 (82-97)	93 (83-102)
1 in 20 Year 5-day Precip. [mm]	100 (89-117)	110 (94-140)	108 (97-120)	109 (99-120)	115 (105-139)	111 (102-128)	121 (105-147)
1 in 50 Year 5-day Precip. [mm]	117 (100-144)	128 (103-178)	127 (108-142)	127 (108-149)	138 (121-175)	128 (114-164)	138 (113-180)
1 in 100 Year 5-day Precip. [mm]	129 (109-168)	145 (109-222)	141 (114-174)	141 (115-178)	159 (132-208)	142 (123-197)	152 (125-222)
1 in 350 Year 5-day Precip. [mm]	158 (123-224)	182 (119-339)	172 (124-259)	165 (131-249)	203 (161-287)	172 (137-279)	184 (139-326)
1 in 2 Year 1-Hour Precip. [mm]	19 (21-18)*	19 (19-18)*	23 (25-17)*	20 (20-16)*	23 (28-19)*	20 (26-16)*	27 (29-17)*
1 in 5 Year 1-Hour Precip. [mm]	26 (27-25)*	26 (30-25)*	28 (32-25)*	25 (28-25)*	29 (35-27)*	27 (33-22)*	33 (39-23)*
1 in 10 Year 1-Hour Precip. [mm]	31 (32-29)*	31 (40-30)*	36 (38-28)*	32 (33-29)*	34 (41-31)*	32 (37-26)*	38 (45-28)*
1 in 20 Year 1-Hour Precip. [mm]	35 (37-33)*	36 (53-36)*	41 (49-31)*	37 (44-32)*	39 (48-33)*	39 (41-30)*	40 (51-31)*
1 in 50 Year 1-Hour Precip. [mm]	40 (44-38)*	45 (74-42)*	46 (75-34)*	44 (67-35)*	44 (59-36)*	45 (51-36)*	43 (60-37)*
1 in 100 Year 1-Hour Precip. [mm]	44 (50-42)*	53 (95-46)*	50 (103-37)*	49 (93-38)*	47 (68-37)*	48 (64-41)*	44 (74-41)*
1 in 2 Year 3-Hour Precip. [mm]	37 (43-33)*	44 (45-42)*	40 (51-38)*	45 (46-37)*	45 (52-38)*	45 (62-35)*	49 (61-38)*
1 in 5 Year 3-Hour Precip. [mm]	49 (61-47)*	63 (70-62)*	58 (68-50)*	61 (67-58)*	64 (69-50)*	65 (85-47)*	68 (77-51)*
1 in 10 Year 3-Hour Precip. [mm]	58 (70-53)*	77 (99-75)*	71 (84-58)*	79 (84-75)*	78 (87-58)*	83 (99-56)*	82 (88-60)*
1 in 20 Year 3-Hour Precip. [mm]	71 (81-60)*	93 (139-89)*	83 (112-67)*	104 (107-91)*	88 (108-67)*	106 (113-64)*	96 (115-69)*
1 in 50 Year 3-Hour Precip. [mm]	88 (96-69)*	118 (218-108)*	100 (165-80)*	137 (162-117)*	102 (144-81)*	131 (146-77)*	110 (166-80)*
1 in 100 Year 3-Hour Precip. [mm]	94 (111-76)*	140 (308-124)*	115 (222-91)*	170 (223-144)*	114 (179-94)*	144 (190-87)*	118 (226-90)*
1 in 2 Year 6-Hour Precip. [mm]	49 (57-41)*	61 (61-59)*	54 (65-46)*	60 (62-53)*	56 (69-47)*	58 (84-50)*	61 (82-55)*
1 in 5 Year 6-Hour Precip. [mm]	65 (78-56)*	89 (94-85)*	75 (88-59)*	88 (89-84)*	82 (98-60)*	87 (116-66)*	85 (109-72)*
1 in 10 Year 6-Hour Precip. [mm]	76 (98-64)*	112 (127-101)*	90 (110-68)*	112 (115-110)*	100 (120-68)*	116 (138-79)*	108 (129-83)*
1 in 20 Year 6-Hour Precip. [mm]	86 (120-72)*	138 (171-116)*	109 (147-77)*	141 (158-134)*	117 (160-77)*	154 (162-94)*	142 (175-94)*
1 in 50 Year 6-Hour Precip. [mm]	108 (157-83)*	181 (250-137)*	147 (221-91)*	191 (244-172)*	143 (236-90)*	195 (227-121)*	179 (318-109)*
1 in 100 Year 6-Hour Precip. [mm]	115 (191-91)*	220 (335-153)*	172 (305-101)*	239 (341-205)*	164 (324-100)*	222 (310-149)*	203 (544-122)*
1 in 2 Year 12-Hour Precip. [mm]	59 (66-48)*	76 (77-75)*	64 (76-51)*	74 (76-74)*	71 (80-52)*	70 (97-70)*	75 (94-66)*
1 in 5 Year 12-Hour Precip. [mm]	79 (93-64)*	111 (115-102)*	87 (108-64)*	114 (115-102)*	96 (119-66)*	105 (133-94)*	104 (128-83)*
1 in 10 Year 12-Hour Precip. [mm]	91 (119-75)*	141 (142-117)*	102 (128-75)*	143 (149-125)*	114 (151-78)*	140 (158-105)*	122 (158-94)*
1 in 20 Year 12-Hour Precip. [mm]	103 (149-86)*	166 (177-130)*	125 (150-85)*	172 (191-151)*	133 (186-90)*	182 (186-114)*	141 (203-105)*
1 in 50 Year 12-Hour Precip. [mm]	119 (200-102)*	198 (234-147)*	166 (195-101)*	210 (265-191)*	160 (239-112)*	214 (274-122)*	171 (328-120)*
1 in 100 Year 12-Hour Precip. [mm]	131 (248-116)*	222 (286-159)*	180 (240-114)*	240 (340-226)*	182 (300-132)*	240 (372-127)*	197 (487-130)*
Annual Max. 1-day Precip. [mm]	37 (34-39)	39 (36-41)	39 (37-44)	41 (36-43)	42 (39-45)	41 (38-44)	44 (39-47)
Annual Max. 2-day Precip. [mm]	49 (47-53)	52 (48-56)	52 (49-58)	53 (49-58)	55 (52-63)	54 (50-59)	58 (52-61)
Annual Max. 5-day Precip. [mm]	65 (59-67)	66 (62-74)	68 (62-77)	70 (63-73)	69 (65-77)	71 (66-78)	75 (68-82)
Monthly Max. 1-day Precip. (January) [mm]	14 (13-16)	16 (13-19)	16 (13-18)	16 (14-19)	17 (14-20)	16 (14-19)	17 (16-20)
Monthly Max. 1-day Precip. (February) [mm]	13 (12-15)	14 (13-16)	15 (13-18)	15 (13-17)	16 (14-18)	16 (13-19)	17 (15-19)
Monthly Max. 1-day Precip. (March) [mm]	16 (14-18)	17 (14-19)	17 (14-20)	17 (14-21)	19 (16-22)	18 (14-21)	20 (17-24)
Monthly Max. 1-day Precip. (April) [mm]	17 (15-19)	18 (16-21)	19 (17-22)	19 (16-23)	20 (18-24)	19 (17-22)	22 (17-27)
Monthly Max. 1-day Precip. (May) [mm]	18 (15-20)	18 (16-21)	19 (16-22)	19 (16-23)	19 (17-23)	19 (16-22)	21 (18-26)
Monthly Max. 1-day Precip. (June) [mm]	21 (18-24)	21 (19-28)	21 (17-26)	20 (18-26)	21 (18-26)	21 (19-26)	21 (17-28)
Monthly Max. 1-day Precip. (July) [mm]	18 (16-22)	19 (15-21)	19 (16-20)	19 (15-22)	19 (16-20)	19 (16-23)	19 (15-22)
Monthly Max. 1-day Precip. (August) [mm]	21 (19-24)	21 (16-23)	20 (17-23)	21 (16-25)	20 (17-25)	20 (16-23)	20 (15-23)
Monthly Max. 1-day Precip. (September) [mm]	21 (19-25)	23 (17-26)	21 (17-25)	22 (17-27)	22 (18-29)	21 (17-26)	21 (14-28)
Monthly Max. 1-day Precip. (October) [mm]	19 (17-23)	21 (17-23)	21 (17-24)	21 (17-25)	22 (17-26)	20 (17-26)	21 (18-27)
Monthly Max. 1-day Precip. (November) [mm]	21 (17-25)	22 (17-28)	21 (19-28)	23 (20-28)	24 (19-28)	23 (19-27)	26 (18-31)
Monthly Max. 1-day Precip. (December) [mm]	16 (15-18)	17 (15-21)	17 (16-20)	18 (15-22)	19 (17-21)	19 (16-22)	21 (17-26)
Monthly Max. 2-day Precip. (January) [mm]	20 (19-22)	22 (18-27)	22 (19-26)	23 (20-28)	23 (19-27)	22 (20-28)	24 (22-28)
Monthly Max. 2-day Precip. (February) [mm]	19 (16-21)	19 (18-23)	21 (19-25)	21 (17-25)	23 (19-26)	22 (19-26)	24 (22-28)
Monthly Max. 2-day Precip. (March) [mm]	21 (19-25)	22 (19-26)	23 (21-27)	23 (19-30)	26 (22-29)	24 (20-30)	27 (23-31)
Monthly Max. 2-day Precip. (April) [mm]	24 (21-25)	24 (21-29)	25 (23-28)	26 (22-34)	27 (24-33)	27 (23-30)	30 (25-36)
Monthly Max. 2-day Precip. (May) [mm]	24 (21-27)	25 (23-29)	26 (22-30)	26 (21-31)	26 (23-30)	26 (22-30)	28 (24-35)
Monthly Max. 2-day Precip. (June) [mm]	27 (24-33)	29 (25-36)	29 (23-34)	28 (24-34)	28 (23-35)	28 (23-33)	29 (22-38)

Table G.2: Median projections for precipitation-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Monthly Max. 2-day Precip. (July) [mm]	26 (23-28)	26 (22-28)	25 (22-28)	25 (21-29)	25 (21-28)	25 (22-30)	25 (20-29)
Monthly Max. 2-day Precip. (August) [mm]	28 (23-31)	27 (24-30)	26 (22-31)	28 (22-32)	27 (22-34)	27 (22-31)	26 (19-31)
Monthly Max. 2-day Precip. (September) [mm]	29 (25-35)	30 (24-35)	29 (23-34)	30 (24-34)	30 (24-34)	29 (24-37)	30 (19-37)
Monthly Max. 2-day Precip. (October) [mm]	26 (23-31)	27 (23-31)	29 (26-33)	28 (23-34)	29 (24-35)	27 (24-34)	30 (25-36)
Monthly Max. 2-day Precip. (November) [mm]	28 (23-33)	29 (23-35)	29 (25-34)	31 (25-37)	32 (26-34)	32 (26-35)	34 (26-40)
Monthly Max. 2-day Precip. (December) [mm]	22 (20-25)	24 (21-29)	24 (21-30)	25 (22-29)	26 (23-30)	27 (23-30)	29 (25-34)
Monthly Max. 5-day Precip. (January) [mm]	28 (26-31)	29 (26-36)	30 (26-35)	31 (27-37)	33 (27-37)	31 (27-35)	33 (29-37)
Monthly Max. 5-day Precip. (February) [mm]	26 (23-28)	27 (24-31)	29 (25-34)	28 (25-33)	32 (27-35)	31 (25-36)	33 (29-37)
Monthly Max. 5-day Precip. (March) [mm]	28 (25-33)	30 (27-34)	31 (25-34)	31 (26-38)	33 (29-39)	32 (26-37)	36 (29-41)
Monthly Max. 5-day Precip. (April) [mm]	31 (29-35)	32 (28-37)	35 (29-39)	34 (29-41)	38 (32-43)	34 (31-41)	40 (33-46)
Monthly Max. 5-day Precip. (May) [mm]	33 (28-37)	34 (30-38)	35 (29-40)	36 (27-41)	35 (30-40)	33 (29-39)	38 (33-43)
Monthly Max. 5-day Precip. (June) [mm]	35 (33-42)	38 (32-47)	36 (29-44)	34 (31-45)	37 (29-46)	36 (30-41)	35 (31-49)
Monthly Max. 5-day Precip. (July) [mm]	33 (30-38)	34 (30-38)	33 (29-35)	34 (29-39)	32 (28-34)	34 (29-37)	33 (28-40)
Monthly Max. 5-day Precip. (August) [mm]	35 (29-39)	34 (30-39)	36 (28-41)	35 (28-43)	37 (30-43)	35 (28-39)	32 (26-37)
Monthly Max. 5-day Precip. (September) [mm]	38 (34-44)	40 (34-44)	37 (34-44)	39 (31-44)	39 (33-47)	38 (32-43)	38 (29-45)
Monthly Max. 5-day Precip. (October) [mm]	34 (30-39)	35 (31-40)	37 (31-42)	38 (31-44)	36 (32-43)	35 (31-44)	39 (31-45)
Monthly Max. 5-day Precip. (November) [mm]	36 (31-39)	39 (31-47)	38 (33-44)	40 (34-46)	40 (33-47)	40 (34-45)	42 (35-49)
Monthly Max. 5-day Precip. (December) [mm]	31 (29-34)	33 (29-38)	34 (29-39)	35 (30-41)	36 (31-40)	35 (32-40)	41 (34-46)
Number of Days Precip >20 mm [# Days]	6 (6-7)	7 (6-8)	7 (6-8)	8 (6-8)	8 (7-9)	8 (7-9)	9 (7-10)
Number of Days Precip >1 mm [# Days]	139 (137-141)	140 (136-143)	140 (138-143)	141 (137-143)	141 (136-144)	140 (135-144)	140 (134-144)
Number of Days Precip >10 mm [# Days]	27 (25-29)	29 (26-30)	29 (27-31)	29 (27-32)	30 (28-32)	30 (26-32)	32 (28-34)
Number of Days Precip >25 mm [# Days]	3 (3-4)	4 (3-4)	4 (3-5)	4 (4-5)	4 (4-5)	4 (4-5)	5 (4-6)
Number of Days Precip >50 mm [# Days]	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)	0 (0-0)
Number of 2-day Precip. >50 mm [# Days]	0 (0-1)	1 (0-1)	1 (0-1)	1 (1-1)	1 (1-1)	1 (1-1)	1 (1-2)
Number of Hours Precip. >15 mm [# Hours]	2 (2-1)*	2 (2-1)*	2 (3-1)*	2 (3-1)*	3 (5-1)*	1 (4-1)*	4 (7-1)*
Number of Hours Precip. >25 mm [# Hours]	0 (1-0)*	0 (0-0)*	1 (1-0)*	0 (1-0)*	1 (1-0)*	0 (2-0)*	1 (2-0)*
Number of Hours Precip. >50 mm [# Hours]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Max. Length of Dry Spell [# Days]	13 (13-15)	14 (13-15)	14 (13-15)	13 (13-15)	14 (12-15)	14 (13-14)	14 (13-15)
Max. Length of Wet Spell [# Days]	7 (6-7)	7 (6-7)	7 (6-7)	7 (7-7)	7 (6-7)	7 (7-7)	7 (7-7)
Timing of Wettest Month [Month]	September	June	June	June	November	November	April
Timing of Dryest Month [Month]	March	March	March	March	March	March	March
Annual Total Snowfall [cm]	223 (232-219)*	193 (215-171)*	201 (209-156)*	184 (216-122)*	179 (193-133)*	154 (210-103)*	124 (169-55)*
Monthly Total Snowfall (August) [cm]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Monthly Total Snowfall (September) [cm]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Monthly Total Snowfall (October) [cm]	1 (2-0)*	0 (2-0)*	0 (2-0)*	0 (2-0)*	0 (2-0)*	0 (2-0)*	0 (2-0)*
Monthly Total Snowfall (November) [cm]	17 (19-6)*	9 (19-2)*	9 (21-3)*	9 (15-2)*	7 (13-2)*	6 (12-1)*	2 (8-0)*
Monthly Total Snowfall (December) [cm]	47 (49-23)*	44 (65-23)*	40 (52-19)*	38 (55-19)*	35 (43-19)*	32 (58-14)*	19 (39-8)*
Monthly Total Snowfall (January) [cm]	51 (56-28)*	48 (58-28)*	49 (59-29)*	39 (55-22)*	46 (55-28)*	42 (55-23)*	26 (44-8)*
Monthly Total Snowfall (February) [cm]	39 (47-30)*	34 (46-24)*	36 (58-22)*	34 (45-17)*	31 (47-15)*	25 (47-16)*	12 (40-5)*
Monthly Total Snowfall (March) [cm]	34 (39-19)*	27 (42-11)*	24 (37-10)*	21 (34-8)*	20 (41-8)*	19 (38-6)*	11 (27-4)*
Monthly Total Snowfall (April) [cm]	8 (9-3)*	4 (9-2)*	5 (8-2)*	3 (8-0)*	3 (4-1)*	2 (5-0)*	0 (2-0)*
Monthly Total Snowfall (May) [cm]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Monthly Total Snowfall (June) [cm]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Monthly Total Snowfall (July) [cm]	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Annual Max. 1-day Snowfall [cm/day]	19.9 (21.0-18.5)*	20.6 (23.4-17.7)*	20.1 (23.8-17.6)*	21.9 (23.6-16.2)*	19.7 (22.5-16.9)*	20.2 (23.9-16.3)*	16.4 (20.5-10.1)*
Number of Days with Snowfall [# Days]	41 (43-39)*	37 (38-32)*	37 (39-30)*	33 (39-25)*	32 (35-24)*	31 (38-22)*	22 (30-11)*
Number of Days with Snowfall >= 10 cm/day [# Days]	5 (6-5)*	4 (6-4)*	4 (5-3)*	3 (5-2)*	4 (4-3)*	3 (6-2)*	2 (4-1)*
Annual Max. Snow Depth [cm]	58 (67-55)*	48 (65-38)*	50 (64-48)*	45 (58-26)*	40 (65-31)*	42 (58-34)*	29 (57-18)*
Number of Days with Snow Depth >8 cm [# Days]	92 (95-87)*	79 (86-61)*	75 (81-57)*	67 (84-44)*	53 (66-39)*	61 (73-36)*	30 (42-12)*
Number of Days with Snow Depth >21 cm [# Days]	42 (47-37)*	28 (43-11)*	26 (32-9)*	19 (41-2)*	13 (24-2)*	15 (22-1)*	5 (13-0)*
Annual Max. 3-day Snow Melt Water Equivalent [mm SWE]	71 (119-65)*	62 (117-48)*	63 (124-46)*	69 (111-36)*	57 (123-35)*	69 (113-34)*	40 (124-22)*
Annual Max. 7-day Snow Melt Water Equivalent [mm SWE]	99 (165-92)*	88 (158-73)*	84 (168-75)*	94 (158-45)*	76 (169-46)*	87 (161-50)*	56 (160-31)*
Number of days with Snow Cover [# Days]	115 (117-107)*	95 (113-80)*	94 (110-81)*	90 (103-60)*	72 (93-59)*	78 (103-55)*	43 (68-20)*
Duration of From First to Last Day of Snow [# Days]	160 (174-150)*	151 (165-130)*	150 (160-135)*	150 (164-122)*	133 (153-123)*	141 (150-105)*	109 (142-97)*
Timing of Month with Max. Snowfall [Month]	December	December	January	January	January	January	January
Timing of Month with Max. Snow Depth [Month]	March	January	January	March	January	January	January
Timing of First Snowfall [Day]	309 (313-305)*	312 (328-308)*	316 (326-298)*	320 (330-309)*	325 (330-308)*	322 (336-312)*	334 (339-315)*
Timing of Last Snowfall [Day]	105 (110-97)*	101 (108-94)*	99 (105-93)*	101 (110-89)*	92 (103-88)*	95 (102-73)*	82 (91-74)*
Timing of Max. 3-day Melt [Day]	56 (64–7)*	35 (72–12)*	32 (70–14)*	44 (71–7)*	36 (64–11)*	32 (64–13)*	25 (57–7)*
Timing of Max. 7-day Melt [Day]	61 (66-0)*	36 (71–8)*	37 (72–13)*	42 (71–7)*	34 (66–9)*	30 (65–10)*	31 (50–7)*

G3 Wind

Table G.3: Median projections for wind-related indices (with 10th and 90th percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Monthly Avg. Wind Speed (January) [m/s]	4.1 (4.1-4.0)*	4.2 (4.3-4.1)*	4.2 (4.3-4.1)*	4.2 (4.3-4.2)*	4.2 (4.4-4.1)*	4.1 (4.2-4.0)*	4.2 (4.3-4.1)*
Monthly Avg. Wind Speed (February) [m/s]	4.1 (4.1-4.1)*	4.3 (4.6-4.0)*	4.2 (4.2-4.1)*	4.2 (4.5-3.9)*	4.2 (4.2-4.2)*	4.2 (4.4-4.0)*	4.3 (4.4-4.2)*
Monthly Avg. Wind Speed (March) [m/s]	4.2 (4.2-4.1)*	4.1 (4.2-4.0)*	4.2 (4.2-4.1)*	4.2 (4.2-4.1)*	4.2 (4.4-4.0)*	4.1 (4.2-4.0)*	4.1 (4.2-4.1)*
Monthly Avg. Wind Speed (April) [m/s]	4.1 (4.2-4.0)*	4.0 (4.2-3.9)*	3.9 (4.1-3.7)*	3.9 (4.1-3.8)*	4.1 (4.3-4.0)*	4.1 (4.2-4.0)*	4.0 (4.2-3.8)*
Monthly Avg. Wind Speed (May) [m/s]	3.9 (4.1-3.7)*	3.9 (3.9-3.8)*	3.8 (4.0-3.7)*	3.8 (3.9-3.7)*	3.8 (4.0-3.6)*	3.8 (3.8-3.7)*	3.8 (3.9-3.6)*
Monthly Avg. Wind Speed (June) [m/s]	3.5 (3.6-3.3)*	3.5 (3.7-3.3)*	3.5 (3.7-3.2)*	3.5 (3.7-3.4)*	3.5 (3.8-3.2)*	3.5 (3.7-3.3)*	3.3 (3.6-3.1)*
Monthly Avg. Wind Speed (July) [m/s]	3.1 (3.2-3.1)*	3.2 (3.3-3.1)*	3.1 (3.2-2.9)*	3.1 (3.2-3.0)*	3.1 (3.2-2.9)*	3.0 (3.2-2.8)*	3.1 (3.2-3.1)*
Monthly Avg. Wind Speed (August) [m/s]	3.0 (3.0-2.9)*	2.9 (2.9-2.9)*	2.9 (2.9-2.8)*	2.9 (3.1-2.8)*	2.9 (3.0-2.9)*	2.9 (2.9-2.9)*	3.0 (3.1-2.8)*
Monthly Avg. Wind Speed (September) [m/s]	3.1 (3.3-2.9)*	2.9 (3.1-2.8)*	3.1 (3.2-3.0)*	2.9 (3.0-2.8)*	3.0 (3.0-3.0)*	3.0 (3.0-3.0)*	3.0 (3.1-3.0)*
Monthly Avg. Wind Speed (October) [m/s]	3.3 (3.6-3.1)*	3.3 (3.7-3.0)*	3.4 (3.7-3.1)*	3.3 (3.6-3.0)*	3.4 (3.7-3.0)*	3.3 (3.6-3.0)*	3.4 (3.9-2.9)*
Monthly Avg. Wind Speed (November) [m/s]	3.8 (4.0-3.7)*	3.6 (3.7-3.5)*	3.7 (3.9-3.5)*	3.7 (3.9-3.5)*	3.7 (4.0-3.4)*	3.7 (3.9-3.6)*	3.5 (3.8-3.2)*
Monthly Avg. Wind Speed (December) [m/s]	3.9 (4.0-3.8)*	4.0 (4.0-3.9)*	4.0 (4.1-3.9)*	3.9 (3.9-3.9)*	4.1 (4.1-4.1)*	4.1 (4.2-4.0)*	4.1 (4.3-4.0)*
1 in 2 Year 3-Hourly Winds [m/s]	13.6 (13.8-13.4)*	14.2 (15.1-13.3)*	14.1 (14.8-13.5)*	14.3 (15.3-13.3)*	14.5 (15.6-13.4)*	14.7 (16.1-13.3)*	14.0 (14.5-13.5)*
1 in 5 Year 3-Hourly Winds [m/s]	14.7 (15.1-14.2)*	15.2 (16.4-14.0)*	15.3 (16.3-14.3)*	15.3 (16.6-14.0)*	15.7 (17.2-14.1)*	15.6 (17.1-14.0)*	15.2 (16.1-14.3)*
1 in 10 Year 3-Hourly Winds [m/s]	15.3 (15.9-14.7)*	15.6 (16.9-14.3)*	16.0 (16.9-15.0)*	15.7 (17.0-14.4)*	16.2 (17.9-14.6)*	15.9 (17.4-14.5)*	16.0 (16.9-15.1)*
1 in 20 Year 3-Hourly Winds [m/s]	15.8 (16.5-15.1)*	15.9 (17.3-14.6)*	16.5 (17.4-15.6)*	16.0 (17.3-14.7)*	16.7 (18.4-15.0)*	16.2 (17.6-14.9)*	16.9 (17.7-16.1)*
1 in 50 Year 3-Hourly Winds [m/s]	16.4 (17.2-15.6)*	16.2 (17.6-14.9)*	17.2 (17.8-16.5)*	16.3 (17.5-15.0)*	17.2 (18.9-15.6)*	16.6 (17.7-15.4)*	18.3 (18.6-18.0)*
1 in 100 Year 3-Hourly Winds [m/s]	16.8 (17.7-15.9)*	16.4 (17.7-15.0)*	17.7 (18.1-17.3)*	16.4 (17.6-15.2)*	17.6 (19.2-16.0)*	16.8 (17.7-15.8)*	19.6 (20.2-19.1)*
Number of Hours Wind Speed >10 km/hr [# hours]	4993 (5141-4845)*	4981 (5095-4868)*	5049 (5227-4870)*	4934 (4981-4887)*	5040 (5164-4917)*	4981 (5053-4909)*	4974 (5013-4934)*
Number of Hours Wind Speed >20 km/hr [# hours]	1493 (1559-1427)*	1500 (1548-1452)*	1481 (1534-1428)*	1477 (1477-1476)*	1533 (1581-1486)*	1465 (1534-1397)*	1497 (1564-1430)*
Number of Hours Wind Speed >40 km/hr [# hours]	28 (34-22)*	28 (31-25)*	30 (36-25)*	25 (26-25)*	36 (37-35)*	34 (34-34)*	36 (40-32)*

G4 Humidity

Table G.4: Median projections for humidity-related indices (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (January) [%]	73.5 (74.9-72.6)*	74.8 (74.9-70.3)*	72.9 (75.3-70.1)*	75.2 (75.4-72.2)*	72.0 (75.3-68.4)*	75.4 (76.3-72.4)*	71.9 (76.1-61.4)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (February) [%]	66.0 (68.4-65.2)*	67.8 (74.4-63.6)*	65.7 (67.7-63.2)*	67.1 (73.2-64.0)*	65.8 (66.9-61.9)*	69.2 (74.0-65.7)*	65.1 (73.9-51.7)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (March) [%]	57.5 (59.1-56.2)*	64.0 (69.4-56.2)*	58.6 (61.8-53.6)*	67.9 (71.3-56.2)*	59.0 (62.2-49.0)*	67.5 (72.0-56.3)*	62.6 (65.6-42.7)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (April) [%]	47.0 (48.6-43.6)*	56.0 (62.0-42.0)*	50.9 (53.4-41.5)*	55.2 (62.2-42.6)*	51.5 (55.4-40.6)*	56.3 (61.3-42.5)*	54.8 (59.0-39.9)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (May) [%]	46.9 (48.2-45.4)*	45.0 (55.4-44.8)*	47.9 (50.2-45.8)*	46.8 (57.0-46.6)*	48.1 (51.5-45.2)*	47.4 (56.0-45.6)*	48.6 (53.3-45.5)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (June) [%]	50.2 (51.3-48.4)*	51.9 (60.9-45.9)*	50.0 (53.5-48.7)*	51.6 (61.1-46.0)*	50.8 (52.4-46.4)*	53.7 (60.8-47.3)*	49.8 (52.5-45.5)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (July) [%]	50.8 (52.1-49.9)*	50.0 (62.3-47.8)*	50.1 (52.3-48.4)*	49.9 (60.0-47.8)*	49.2 (51.3-46.8)*	49.2 (61.0-48.4)*	49.4 (51.4-46.8)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (August) [%]	52.4 (54.0-51.8)*	53.1 (64.4-49.6)*	52.4 (54.4-49.2)*	53.1 (62.9-49.3)*	51.6 (53.5-49.0)*	54.5 (62.4-49.2)*	51.3 (54.1-47.3)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (September) [%]	57.7 (59.4-56.5)*	58.7 (60.2-54.3)*	56.9 (58.7-53.1)*	58.8 (61.0-54.0)*	56.0 (58.4-51.6)*	60.2 (60.8-52.8)*	56.0 (59.1-50.5)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (October) [%]	61.6 (62.6-60.5)*	63.6 (65.8-57.1)*	62.2 (63.1-56.9)*	62.8 (68.3-57.5)*	61.7 (63.0-60.1)*	61.2 (69.1-58.5)*	62.5 (65.4-59.0)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (November) [%]	70.4 (70.9-68.8)*	75.4 (79.7-69.2)*	72.4 (76.2-69.3)*	76.2 (79.4-71.4)*	74.7 (79.5-66.4)*	75.0 (79.7-70.5)*	76.6 (83.5-66.7)*
Monthly Avg. Relative Humidity at the Time of Max. Daily Temp. (December) [%]	77.5 (77.9-75.7)*	78.0 (79.2-75.3)*	77.5 (79.8-72.4)*	79.2 (79.7-77.6)*	77.6 (81.1-71.3)*	78.9 (79.2-77.5)*	78.8 (83.2-65.3)*

G5 Combined

Table G.5: Median projections for indices that combine different parameters (10^{th} and 90^{th} percentiles shown as ranges, or maxima-minima for the indices with *).

Index	Baseline	2030s RCP 4.5	2030s RCP 8.5	2050s RCP 4.5	2050s RCP 8.5	2080s RCP 4.5	2080s RCP 8.5
Snow Approximation (Based on Precip. and Temp.) [mm]	148 (133-168)	128 (108-146)	132 (113-150)	120 (99-140)	113 (89-134)	116 (79-140)	79 (45-102)
Winter Rain Approximation (Based on Dec-Feb Precip. & Temp.) [mm]	99 (90-117)	121 (106-157)	130 (109-156)	137 (117-165)	156 (127-186)	150 (122-171)	187 (153-230)
Max. 3-day Sum of Snow Melt and Precip. [mm]	46 (48-41)*	52 (60-49)*	52 (55-46)*	52 (60-49)*	52 (60-49)*	51 (58-48)*	56 (67-53)*
Winter Rain >10 mm and Freezing [# Days]	6 (5-7)	6 (4-7)	6 (5-7)	5 (4-7)	6 (4-6)	5 (4-7)	5 (3-7)
Snow Melt Water Equivalent >10 mm and Freezing [# Days]	9 (11-8)*	7 (29-6)*	6 (6-6)*	7 (26-3)*	6 (6-5)*	8 (24-3)*	3 (3-2)*
Winds >20 km/hr and Winter Precip. >1 mm [# Days]	5 (6-3)*	4 (10-1)*	4 (6-4)*	4 (10-1)*	5 (6-4)*	4 (11-1)*	5 (7-3)*
Number of Days Wind Chill is between -35 and -25 [# Days]	17 (19-16)*	11 (14-5)*	8 (12-5)*	6 (14-3)*	5 (8-3)*	5 (8-3)*	1 (3-0)*
Number of Days Wind Chill < -35 [# Days]	1 (2-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*	0 (0-0)*
Number of Days Wind >10 km/hr and Snow >1 cm [# Days]	14 (15-13)*	12 (14-9)*	13 (15-11)*	12 (13-8)*	12 (14-10)*	11 (15-8)*	7 (11-3)*
Number of Days Wind >10 km/hr and Snow >5 cm [# Days]	5 (6-4)*	4 (5-3)*	4 (6-3)*	4 (5-3)*	4 (5-3)*	3 (5-3)*	2 (4-1)*
Number of Days Wind >20 km/hr and Snow >1 cm [# Days]	4 (5-3)*	3 (8-0)*	3 (4-3)*	3 (8-1)*	4 (4-2)*	3 (8-1)*	3 (3-1)*
Number of Days Wind >20 km/hr and Snow >5 cm [# Days]	1 (2-1)*	1 (3-0)*	2 (2-1)*	1 (3-0)*	1 (2-0)*	1 (2-0)*	1 (1-0)*
Number of Days Humidex >30 [# Days]	57 (59-54)*	85 (92-78)*	77 (87-73)*	92 (96-80)*	93 (111-86)*	102 (107-82)*	116 (136-101)*
Number of Days Humidex >35 [# Days]	23 (28-20)*	46 (51-42)*	43 (55-34)*	55 (59-43)*	60 (74-42)*	66 (70-45)*	85 (105-58)*
Number of Days Humidex >40 [# Days]	5 (9-2)*	15 (19-12)*	16 (41-9)*	22 (24-17)*	26 (52-10)*	27 (31-19)*	43 (70-23)*
Number of Days Humidex >30 for Two Days [# Days]	11 (12-10)*	13 (14-12)*	12 (13-11)*	13 (13-12)*	12 (13-10)*	13 (13-12)*	11 (13-10)*
Number of Days Humidex >35 for Two Days [# Days]	6 (7-5)*	10 (10-9)*	9 (11-8)*	10 (11-9)*	11 (12-9)*	12 (13-9)*	12 (13-11)*
Number of Days Humidex >40 for Two Days [# Days]	1 (2-1)*	4 (5-3)*	4 (7-2)*	5 (6-4)*	6 (9-2)*	6 (7-5)*	9 (12-6)*
Number of Days Chandler Burning Index (Fire Index) >75 [# Days]	6 (7-5)*	5 (9-0)*	5 (6-4)*	4 (8-0)*	5 (8-4)*	5 (10-0)*	5 (10-2)*
Number of Days Chandler Burning Index (Fire Index) >90 [# Days]	2 (2-1)*	1 (3-0)*	1 (3-1)*	1 (2-0)*	1 (4-1)*	1 (2-0)*	1 (3-0)*
Water Scarcity Approximation (Based on Precip. and Temp.) [# Days]	26 (23-29)	39 (33-46)	42 (33-46)	45 (35-52)	54 (44-60)	48 (37-58)	69 (58-81)

