

Increased Extreme Precipitation in Western North America from Cut-Off Lows Under a Warming Climate

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Table S1. Percentage change in the number of identified 250-hPa COL tracks for each CMIP6 model across the seasons (Spring, Summer, Autumn, Winter) within the region of 20°–50° N and 140°–60° W. The percentage change is calculated as the difference between the future period (2070–2099) and the historical period (1980–2009).

Model	Spring	Summer	Autumn	Winter
ACCESS-CM2	1.9	38.6	9.4	–16.6
BCC-CSM2-MR	–1.7	29.6	10.5	11.7
CNRM-CM6-1-HR	–11.7	17.6	–2.9	–44.0
MIROC-ES2L	1.2	28.1	–4.4	–15.5
MPI-ESM1-2-HR	–2.4	69.9	21.8	–24.1
MRI-ESM2-0	–7.4	38.2	21.1	–22.3
NESM3	–2.1	5.5	14.7	14.7
NorESM2-LM	20.6	30.5	30.5	3.8
Average	–0.2	32.2	12.6	–11.5

Table S2. Same as Table S1 but for the change in the 250-hPa COL track density.

Model	Spring	Summer	Autumn	Winter
ACCESS-CM2	–12.1	15.9	–7.2	–29.7
BCC-CSM2-MR	–10.5	8.3	–2.9	–6.2
CNRM-CM6-1-HR	1.2	30.7	14.6	10.9
MIROC-ES2L	–21.1	12.1	–12.6	–27.2
MPI-ESM1-2-HR	–19.3	44.5	4.2	–36.2
MRI-ESM2-0	–25.0	18.9	4.4	–30.3
NESM3	–18.9	–3.8	1.2	–2.4
NorESM2-LM	7.8	20.3	14.8	–9.4
Average	–12.2	18.4	2.1	–16.3