

Appendix to the Interim UKCIP98 Daily Weather Scenarios (prepared for MAFF under contract to DETR)

Ruth Doherty, Mike Hulme¹ and Xianfu Lu

Climatic Research Unit, School of Environmental Sciences
University of East Anglia, Norwich NR4 7TJ, UK.

¹ Also: Tyndall Centre for Climate Change Research, School of Environmental Sciences,
UEA, Norwich NR4 7TJ, UK

We present some results from our constructed weather scenarios for three selected 50km grid-boxes which represent a range of climate conditions across the UK:

- grid box 14 in the Scottish highlands (4.531°W, 56.797°N)
- grid box 67 in central Ireland (8.077°W, 53.604°N)
- grid box 90 in eastern England (0.897°E, 51.764°N)

The following diagnostics are presented for these three grid-boxes.

Figures:

- The 20-year daily-mean series for each of the seven variables for the eight scenarios (2020s shown in green, 2050s in red) are depicted, along with the 30-year daily-mean baseline series (shown in blue) for comparison. These illustrate the mean annual cycle for each of these variables.
- A random year is also plotted for each scenario to illustrate inter-daily variability in the weather series. The year “1973” is depicted for the baseline, the year 2027 for the four 2020s scenarios, and the year 2057 for the four 2050s scenario series.
- Cross-correlation plots between pairs of variables show their inter-relationships: mean temperature vs. precipitation, mean temperature vs. relative humidity, precipitation vs. relative humidity, and precipitation vs. downward surface shortwave radiation.

Tables:

- Monthly, seasonal and annual-mean values are given for the baseline and for the eight scenario series.
- For each month, probabilities of various temperature, precipitation and wind-speed thresholds being exceeded are reported.

Short descriptions of the Interim Weather Scenarios for the three selected grid boxes

A. Maximum temperature:

The plots in Figure A.1 show how the mean annual cycle of the scenarios resembles that of the baseline series. This is the expected result since examination of Eq. 1 shows that the last term - the daily anomaly series - tends to zero, and the dominant term for the annual cycle in the scenarios is the second term, i.e., daily-mean baseline climatology. The effect of scaling using the monthly anomaly series for the different scenarios can be clearly seen. The **Low**

and **Medium-low** scenarios for the 2050s overlap the **Medium-high** and **High** scenarios for the 2050s. The random one-year series shown in Figure A.2 shows the influence on an individual year of the anomaly series extracted from the pair of HadRM2 experiments - the last term in Eq. 1 - in the construction of the eight scenarios.

The largest annual cycle in maximum temperature is depicted in the eastern England grid box (grid-box 90, Figure A.1). This is the driest of the three grid boxes analysed and hence has the least amount of cloud cover and the highest diurnal temperature range. In this grid box, the maximum difference between mean maximum August and January temperatures is $\sim 13^{\circ}\text{C}$ in the baseline (Table A.3). In the central Ireland and Scottish Highland grid boxes the differences between mean maximum August and January temperatures are considerably lower at $\sim 7\text{-}8^{\circ}\text{C}$ (Table A.3). As in the UKCIP98 scenarios, there is greater warming in the southeast than in the northwest in all these interim MAFF2000 scenarios. In the 2050s **High** scenario, the average August daytime temperature rises by 2.6°C over eastern England, compared with 1.78°C relative to the baseline in central Ireland and 1.56°C for the Scottish highlands (Table A.3). Comparable warmings for the 2020s **Low** scenario for these three grid boxes are 0.61°C , 0.42°C and 0.36°C , respectively.

Probabilities of maximum temperatures exceeding 20°C and being less than 5°C are given in Tables A.4 and A.5 respectively. The northwest-southeast gradient in temperatures is evident. The probability of August daytime temperatures exceeding 20°C increases relative to the baseline series by 0.07 for the 2020s **Low** and by 0.26 for the 2050s **High** scenarios in eastern England, by 0.04 and by 0.12, respectively, in central Ireland, and by smaller amounts - 0.013 and 0.016, respectively - in the Scottish Highlands (Table A.4). The probability of January daytime temperatures being less than 5°C decreases by up to 0.21 in the Scottish Highlands, by up to 0.11 in central Ireland, and by up to 0.16 in eastern England in the 2050s **High** scenario series (relative to the baseline; Table A.5).

B. Minimum temperature

The mean annual cycle of minimum temperature in central Ireland and the Scottish Highlands in Figure B.1 shows similar differences between mean minimum August and January temperatures as for mean maximum temperature. For the eastern England grid box, however, the difference between the mean minimum August and January temperatures is less pronounced than for maximum temperature. The minimum temperature series for the individual years are plotted in Figure B.2. In the Scottish Highlands, the average December-March temperature increases by $0.56\text{-}0.71^{\circ}\text{C}$ in the 2020s **Low** scenario and by $2.4\text{-}3.0^{\circ}\text{C}$ in the 2050s **High** scenario (Table B.3). The probability of December-March minimum temperature being below 0°C decreases by between 0.04-0.08 in the 2020s **Low** scenario and by between 0.13-0.23 in the 2050s **High** scenario in all three grid boxes (Table B.4).

C. Mean temperature

The mean daily temperature series and the individual year series are plotted in Figures C.1 and C.2 respectively, and the mean monthly, seasonal and annual mean temperature values are given in Table C.4. The probability of mean temperature being less than 0°C is highest for central Ireland in winter in the baseline series, decreasing by $\sim 0.05\text{-}0.06$ in the 2050s **High** scenario (Table C.5). For the Scottish Highlands, the January-March probability of mean temperature being less than 0°C decreases by 0.02-0.06 in the 2020s **Low** scenario and by ~ 0.20 in the 2050s **High** scenario (Table C.5). The daily mean temperature plotted against the daily precipitation (Figure C.3) shows no obvious relationship for any of the three grid boxes in either baseline or scenario series.

D. Precipitation

The mean daily precipitation series in Figure D.1 shows the contrast between precipitation amounts in the Scottish Highlands and in the eastern England grid boxes. The individual year series are plotted in Figure D.2. As discussed above, these interim MAFF2000 weather scenarios are constrained to reproduce the mean seasonal changes in precipitation expressed in the UKCIP98 scenarios. Precipitation therefore increases by between 1% and 6% in the 2020 **Low** scenario and by between 10% and 17% in the 2050s **High** scenario in the autumn and winter months (Table D.3). An increase in summer precipitation is simulated in the Scottish Highlands grid box (except for the **Medium-high** and **High** scenarios for the 2050s), whereas decreases of 4% in the 2020s **Low** and 18% in the 2050s **High** scenarios are simulated for the eastern England grid box (Table D.3).

The probability of a dry day ($P(\text{prec})=0.0$) is given for each month (Table D.4), as well as the probabilities of extremely wet days in Tables D.5 and D.6 ($P(\text{prec})>10\text{mm/day}$ and $P(\text{prec})>15\text{mm/day}$, respectively). The probability of a dry day increases in all months in the eastern England and central Ireland scenarios, and increases in most months (except May, June, August and October) in the Scottish Highlands (Table D.4). The probability of precipitation greater than 10 mm/day and 15 mm/day tends to show an increase in the winter months in all three grid boxes, but shows a mixture of increases and decreases in the summer months (Tables D.5 and D.6). Overall, daily precipitation variability tends to increase in these three grid boxes.

E. Relative humidity

The mean annual cycle of relative humidity exhibits fairly similar trends in the Scottish Highlands and central Ireland grid boxes (Figure E.1), with a minimum in May and June. The individual yearly series are shown in Figure E.2. Mean winter relative humidity values are in the high 90s% in the Scottish Highlands and in the low 90s% in central Ireland. By May and June these humidities have fallen by about 6% under baseline climate (Table E.5). In contrast, in eastern England the mean annual cycle shows a minimum later in July and August (Figure E.1), representing a decrease of ~15% compared to mean winter values (Table E.5).

For Scotland and Ireland, the interim MAFF2000 scenarios show an increase in relative humidity in May and June, reaching between 0.7% to 1.4% higher than the baseline in the 2050s **High** scenario (Table E.5). For eastern England, the scenarios show a decrease in relative humidity in most months, with decreases reaching ~4% for July and August in the 2050s **High** scenario.

In eastern England a strong relationship between daily relative humidity and mean temperature can be seen (Figure E.3); when mean temperatures are highest in July and August the relative humidity is lowest. In central Ireland and the Scottish Highlands this relationship between relative humidity and mean temperature is weaker (Figure E.3), but the relationship between relative humidity and precipitation is stronger (Figure E.4). As precipitation increases the air contains more moisture and relative humidity increases. The increase in temperature and increases/decreases in summer precipitation thus have a contrasting effect on the changes in relative humidity in these two grid boxes.

F. Downward surface shortwave radiation

The annual cycle of shortwave radiation is most pronounced for the driest, and hence for the clearest sky conditions, in the eastern England grid-box (Figure F.1). The individual year series in Figure F.2 shows the influence of intense cloud-cover on the inter-daily variability of surface shortwave radiation. Since downward surface short wave radiation is inversely related to cloud-cover it will also be generally inversely related to precipitation. The relationship between shortwave radiation and precipitation is strongest in the wettest region -

the Scottish Highlands (Figure F.3). In the winter and summer months, shortwave radiation decreases by $\sim 1.5 \text{ Wm}^{-2}$ and $\sim 5-15 \text{ Wm}^{-2}$ respectively in the 2050s **High** scenario (Table F.4). In the spring and autumn months there is a general decrease in downward shortwave radiation the Scottish Highlands and central Ireland, whilst in eastern England several months simulate radiation increases (Table F.4).

G. Wind speed

The mean daily series of 10 metre wind speeds for the three grid boxes shows a weakish annual cycle with mean daily wind speeds highest in winter and autumn (Figure G.1). The individual year series is shown in Figure G.2. The interim MAFF2000 scenarios show increases in summer and autumn wind speeds of between $0.2-0.7 \text{ ms}^{-1}$ in the Scottish Highlands and central Ireland in the 2050s **High** scenario, with the highest increases in October (Table G.3). In eastern England, August and September show slight decreases in wind speed, with the strongest increases of $\sim 0.4 \text{ ms}^{-1}$ in the 2050s **High** scenario again occurring in October and November (Table G.3). The probability of daily mean wind speed exceeding 10 ms^{-1} is greatest for the Scottish Highlands. This probability of the strongest wind speeds shows both increases (with maximum increases of $0.02-0.08$ in October) and decreases in the three grid boxes (Table G.4).

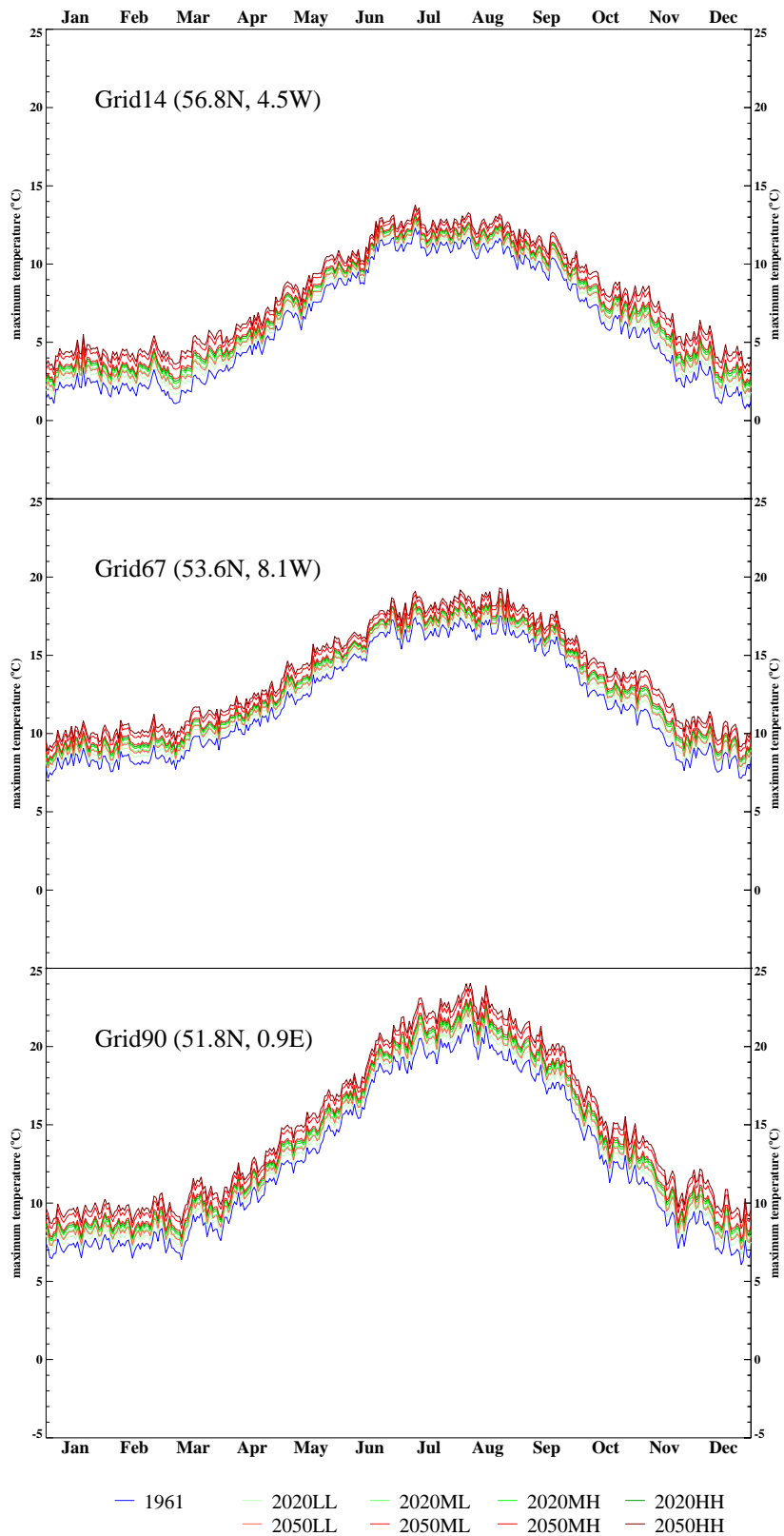


Figure A.1: Average daily maximum temperature series for the Scottish Highlands (grid box 14), central Ireland (grid box 67) and eastern England (grid box 90). The baseline series (in blue) is the average over the 30-year period, nominally “1961-1990”. The 2020s (in green) and 2050s scenario series (in red) are averaged over the 20-year periods “2015-2035” and “2045-2065” respectively.

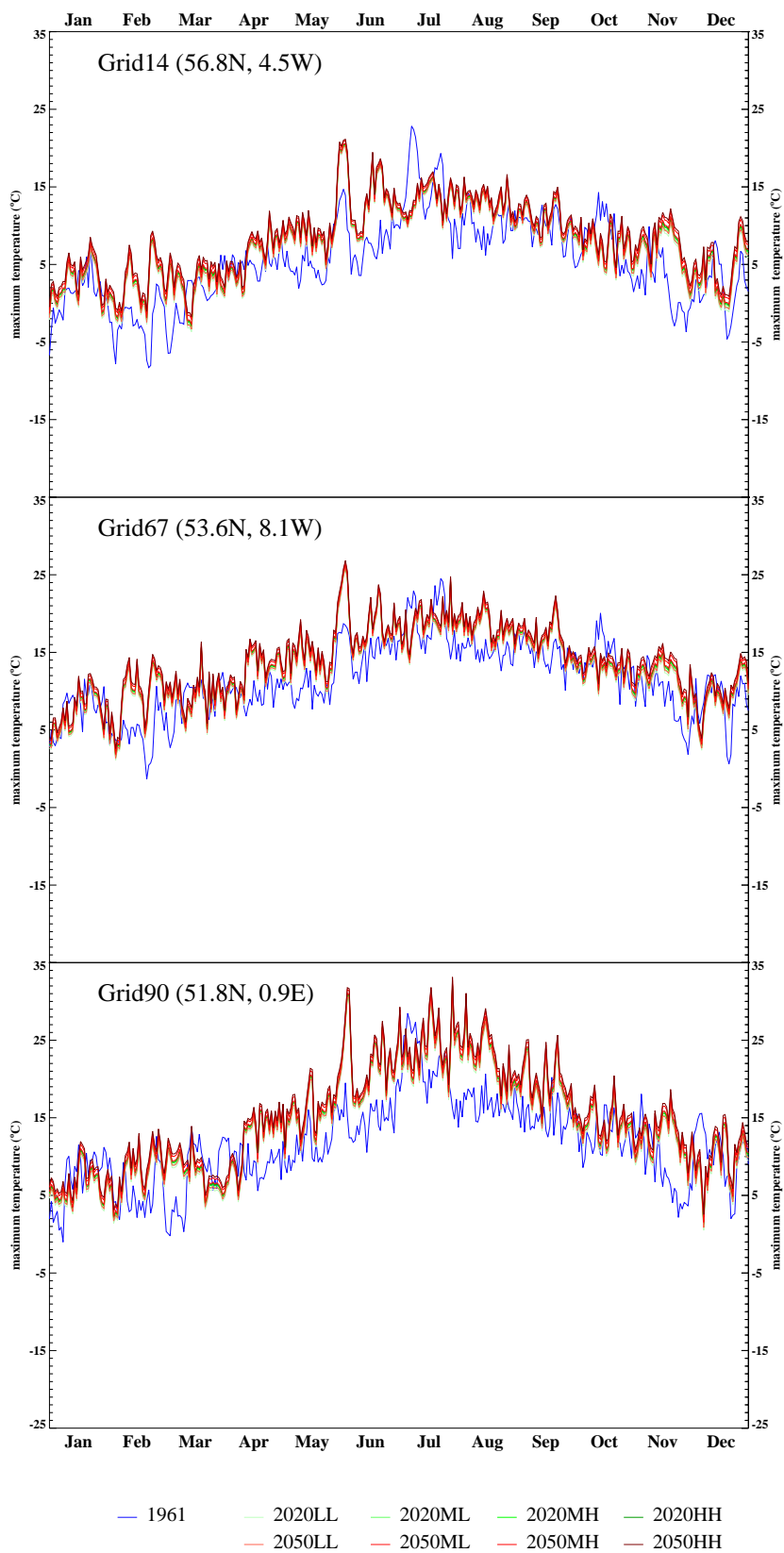


Figure A.2: Daily maximum temperature series for the year “1973” in the baseline series (in blue), and for the years “2027” (in green) and “2057” (in red) in the four 2020s and four 2050s scenario series for the three selected grid boxes.

Table A.3: Average monthly, seasonal and annual maximum temperature in °C for the 30-year baseline (1961BA) and the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Maximum temperature (oC)

Grid14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	2.18	2.17	2.20	4.49	7.42	10.08	11.21	11.03	9.66	6.69	4.12	2.03	2.13	4.70	10.77	6.82	6.11
2020LL	2.68	2.68	2.79	4.92	7.85	10.41	11.55	11.39	10.04	7.19	4.74	2.64	2.67	5.19	11.12	7.32	6.57
2020ML	3.04	3.04	3.22	5.23	8.15	10.65	11.80	11.66	10.31	7.55	5.19	3.07	3.05	5.53	11.37	7.68	6.91
2020MH	3.27	3.28	3.49	5.42	8.35	10.80	11.96	11.82	10.49	7.77	5.48	3.35	3.30	5.75	11.53	7.91	7.12
2020HH	3.39	3.40	3.63	5.53	8.45	10.89	12.04	11.91	10.58	7.90	5.63	3.50	3.43	5.87	11.61	8.04	7.24
2050LL	2.96	2.96	3.12	5.16	8.08	10.60	11.74	11.60	10.25	7.47	5.09	2.98	2.97	5.45	11.31	7.60	6.83
2050ML	3.51	3.52	3.78	5.63	8.55	10.97	12.12	12.00	10.67	8.02	5.78	3.65	3.56	5.99	11.70	8.16	7.35
2050MH	4.03	4.05	4.39	6.07	8.99	11.31	12.48	12.38	11.07	8.53	6.43	4.27	4.12	6.48	12.06	8.68	7.83
2050HH	4.32	4.35	4.73	6.32	9.24	11.50	12.68	12.59	11.29	8.82	6.79	4.63	4.43	6.76	12.26	8.97	8.11
Grid67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	8.12	8.30	8.98	10.56	12.91	15.55	16.52	16.76	15.50	12.30	9.74	8.27	8.23	10.82	16.28	12.51	11.96
2020LL	8.53	8.75	9.42	10.95	13.37	15.87	16.91	17.18	15.88	12.78	10.32	8.74	8.68	11.25	16.65	12.99	12.39
2020ML	8.82	9.09	9.73	11.23	13.69	16.11	17.20	17.47	16.16	13.13	10.74	9.07	9.00	11.55	16.93	13.34	12.70
2020MH	9.01	9.30	9.93	11.41	13.90	16.26	17.38	17.66	16.34	13.34	11.00	9.29	9.20	11.75	17.10	13.56	12.90
2020HH	9.11	9.41	10.04	11.50	14.01	16.33	17.47	17.77	16.43	13.46	11.15	9.40	9.31	11.85	17.19	13.68	13.01
2050LL	8.76	9.01	9.66	11.17	13.62	16.06	17.14	17.41	16.10	13.05	10.65	9.00	8.93	11.48	16.87	13.27	12.64
2050ML	9.21	9.53	10.14	11.60	14.13	16.41	17.57	17.87	16.53	13.58	11.29	9.52	9.42	11.96	17.28	13.80	13.12
2050MH	9.63	10.00	10.60	12.00	14.60	16.75	17.98	18.30	16.92	14.08	11.89	10.00	9.88	12.40	17.68	14.30	13.56
2050HH	9.87	10.27	10.85	12.23	14.86	16.94	18.21	18.54	17.15	14.35	12.23	10.27	10.14	12.65	17.90	14.58	13.82
Grid90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	7.19	7.44	7.92	10.32	13.38	17.17	19.58	20.06	17.72	13.19	9.67	7.64	7.42	10.54	18.94	13.53	12.61
2020LL	7.71	7.97	8.46	10.77	13.91	17.63	20.18	20.67	18.31	13.77	10.28	8.26	7.98	11.05	19.49	14.12	13.16
2020ML	8.09	8.35	8.85	11.09	14.29	17.95	20.62	21.10	18.72	14.19	10.72	8.71	8.38	11.41	19.89	14.54	13.56
2020MH	8.33	8.59	9.10	11.29	14.53	18.16	20.89	21.38	18.98	14.45	11.00	9.00	8.64	11.64	20.14	14.81	13.81
2020HH	8.45	8.72	9.23	11.40	14.66	18.27	21.04	21.53	19.13	14.59	11.16	9.15	8.77	11.76	20.28	14.96	13.94
2050LL	8.01	8.27	8.77	11.02	14.20	17.88	20.52	21.01	18.63	14.10	10.63	8.61	8.30	11.33	19.80	14.45	13.47
2050ML	8.58	8.85	9.36	11.51	14.79	18.39	21.19	21.68	19.27	14.74	11.31	9.30	8.91	11.89	20.42	15.10	14.08
2050MH	9.12	9.40	9.93	11.98	15.33	18.86	21.81	22.30	19.87	15.34	11.94	9.95	9.49	12.41	20.99	15.71	14.65
2050HH	9.43	9.71	10.24	12.24	15.64	19.12	22.16	22.66	20.20	15.67	12.30	10.31	9.82	12.71	21.31	16.05	14.97

Table A.4: Probability of maximum temperatures exceeding 20°C for each month of the 30 years of the baseline (1961BA) and the 20 years of the eight scenario series for the three grid boxes.

P (Tmax>20°C)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0	0	0	0	0	0.014	0.016	0.004	0.002	0	0	0
2020LL	0	0	0	0	0.008	0.007	0.020	0.017	0	0	0	0
2020ML	0	0	0	0	0.008	0.010	0.023	0.018	0	0	0	0
2020MH	0	0	0	0	0.013	0.012	0.025	0.018	0	0	0	0
2020HH	0	0	0	0	0.015	0.012	0.025	0.018	0	0	0	0
2050LL	0	0	0	0	0.008	0.010	0.022	0.017	0	0	0	0
2050ML	0	0	0	0	0.015	0.012	0.027	0.018	0	0	0	0
2050MH	0	0	0	0	0.015	0.013	0.030	0.020	0.002	0	0	0
2050HH	0	0	0	0	0.017	0.013	0.033	0.020	0.004	0	0	0

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0	0	0	0.004	0.012	0.073	0.078	0.093	0.047	0.006	0	0
2020LL	0	0	0	0	0.038	0.058	0.138	0.130	0.070	0.007	0	0
2020ML	0	0	0	0	0.040	0.072	0.153	0.142	0.074	0.007	0.002	0
2020MH	0	0	0	0.002	0.040	0.073	0.165	0.150	0.083	0.011	0.002	0
2020HH	0	0	0	0.002	0.040	0.078	0.168	0.158	0.088	0.011	0.002	0
2050LL	0	0	0	0	0.040	0.067	0.150	0.142	0.074	0.007	0.002	0
2050ML	0	0	0	0.002	0.042	0.080	0.175	0.165	0.088	0.011	0.004	0
2050MH	0	0	0.002	0.002	0.042	0.092	0.197	0.192	0.098	0.018	0.004	0
2050HH	0	0	0.002	0.002	0.048	0.103	0.215	0.213	0.112	0.019	0.007	0

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0	0	0	0.017	0.022	0.161	0.391	0.424	0.195	0.024	0	0
2020LL	0	0	0	0.003	0.053	0.203	0.452	0.498	0.249	0.040	0	0
2020ML	0	0	0	0.003	0.058	0.232	0.498	0.532	0.283	0.044	0	0
2020MH	0	0	0	0.003	0.063	0.250	0.528	0.563	0.297	0.053	0.002	0
2020HH	0	0	0	0.005	0.063	0.263	0.550	0.573	0.305	0.058	0.002	0
2050LL	0	0	0	0.003	0.057	0.223	0.487	0.527	0.274	0.044	0	0
2050ML	0	0	0	0.005	0.068	0.282	0.567	0.583	0.314	0.058	0.002	0
2050MH	0	0	0	0.005	0.075	0.325	0.635	0.647	0.374	0.070	0.005	0.002
2050HH	0	0	0	0.007	0.078	0.345	0.668	0.682	0.411	0.079	0.005	0.002

Table A.5: Probability of maximum temperatures below 5°C for each month of the 30 years of the baseline (1961BA) and the 20 years of the eight scenario series for the three grid boxes.

P(Tmax<5°C)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.758	0.767	0.803	0.570	0.208	0.030	0.003	0.003	0.016	0.255	0.585	0.740
2020LL	0.738	0.692	0.790	0.485	0.148	0.012	0	0.002	0.019	0.226	0.523	0.709
2020ML	0.705	0.653	0.747	0.440	0.123	0.010	0	0.002	0.012	0.188	0.465	0.684
2020MH	0.680	0.618	0.718	0.413	0.108	0.010	0	0	0.012	0.170	0.435	0.665
2020HH	0.665	0.613	0.703	0.400	0.093	0.010	0	0	0.011	0.156	0.428	0.653
2050LL	0.707	0.667	0.762	0.448	0.132	0.010	0	0.002	0.014	0.197	0.479	0.688
2050ML	0.650	0.602	0.677	0.390	0.087	0.010	0	0	0.009	0.147	0.411	0.633
2050MH	0.577	0.558	0.587	0.305	0.060	0.003	0	0	0.007	0.102	0.337	0.558
2050HH	0.552	0.522	0.533	0.277	0.047	0.003	0	0	0.004	0.077	0.295	0.512

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.157	0.120	0.058	0.008	0.002	0	0	0	0	0.003	0.063	0.171
2020LL	0.128	0.118	0.037	0.005	0	0	0	0	0	0	0.063	0.125
2020ML	0.102	0.102	0.028	0.003	0	0	0	0	0	0	0.044	0.104
2020MH	0.092	0.092	0.023	0.002	0	0	0	0	0	0	0.035	0.093
2020HH	0.090	0.092	0.023	0.002	0	0	0	0	0	0	0.026	0.088
2050LL	0.107	0.107	0.028	0.003	0	0	0	0	0	0	0.046	0.107
2050ML	0.082	0.092	0.017	0	0	0	0	0	0	0	0.026	0.077
2050MH	0.060	0.072	0.012	0	0	0	0	0	0	0	0.009	0.058
2050HH	0.050	0.058	0.008	0	0	0	0	0	0	0	0.007	0.046

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.283	0.251	0.214	0.057	0	0	0	0	0	0.003	0.094	0.262
2020LL	0.232	0.190	0.155	0.020	0.002	0	0	0	0	0	0.088	0.200
2020ML	0.212	0.168	0.130	0.015	0	0	0	0	0	0	0.074	0.172
2020MH	0.198	0.152	0.113	0.012	0	0	0	0	0	0	0.068	0.151
2020HH	0.180	0.148	0.108	0.010	0	0	0	0	0	0	0.061	0.142
2050LL	0.217	0.175	0.135	0.018	0	0	0	0	0	0	0.075	0.175
2050ML	0.172	0.147	0.100	0.010	0	0	0	0	0	0	0.060	0.132
2050MH	0.145	0.113	0.075	0.003	0	0	0	0	0	0	0.051	0.107
2050HH	0.125	0.097	0.067	0.002	0	0	0	0	0	0	0.039	0.091

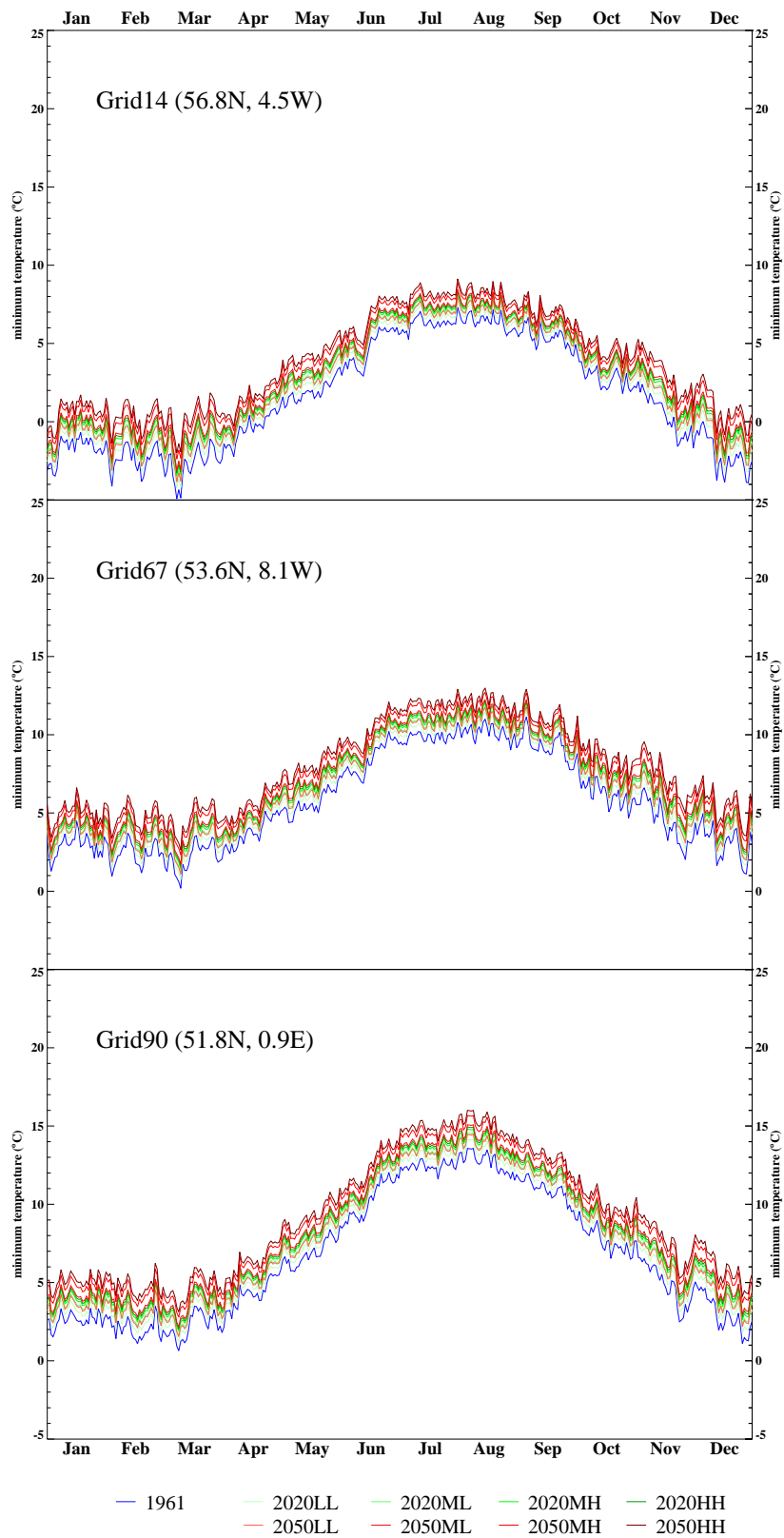


Figure B.1: As Figure A.1, but for mean daily minimum temperature.

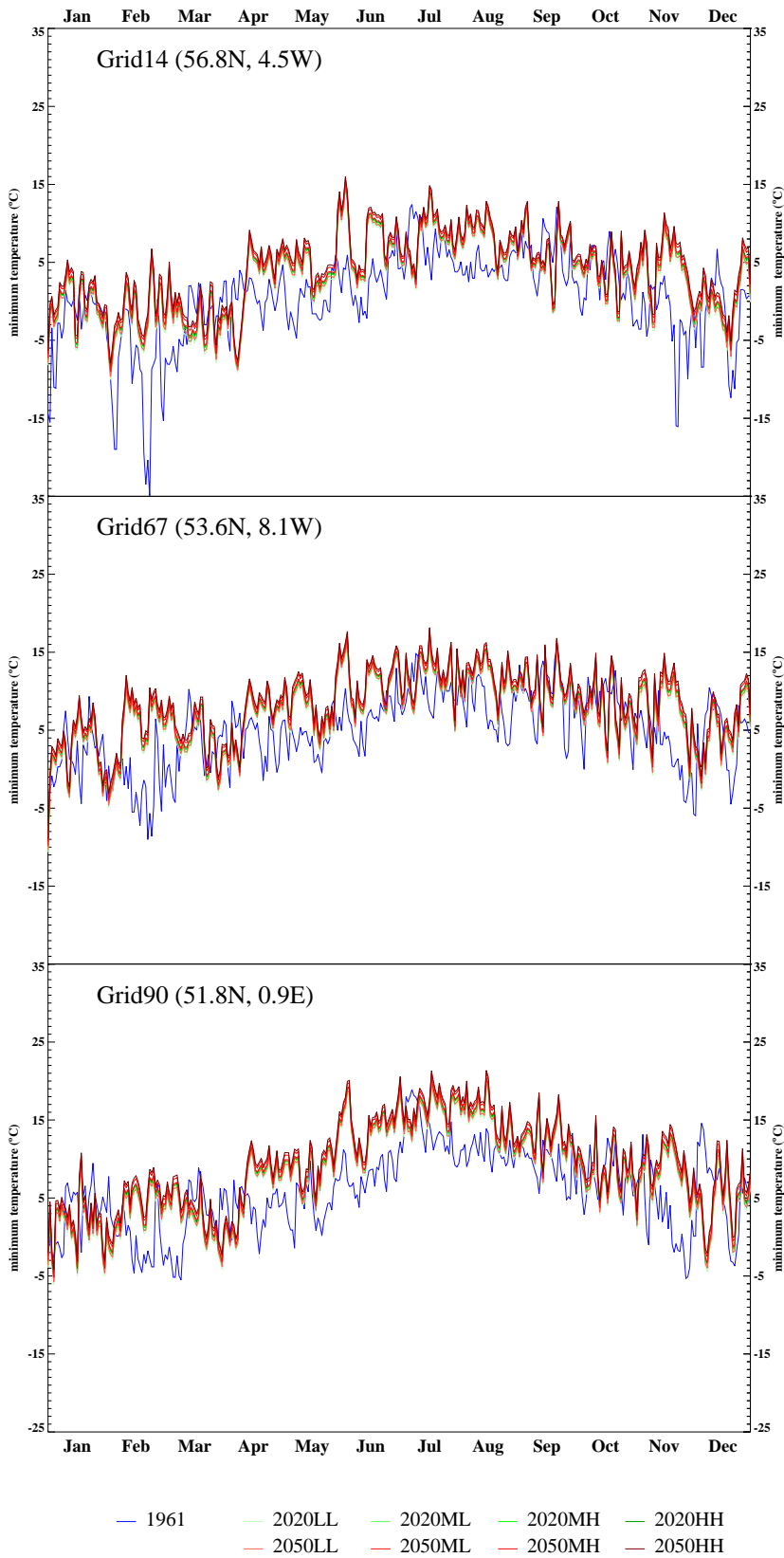


Figure B.2: As Figure A.2, but for daily minimum temperature.

Table B.3: Average monthly, seasonal and annual minimum temperature in °C for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Minimum temperature (oC)

Grid 14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	-1.75	-2.34	-2.72	-0.37	1.95	4.66	6.28	6.38	5.38	2.81	0.46	-2.13	-2.07	-0.38	5.77	2.88	1.55
2020LL	-1.19	-1.71	-2.03	0.08	2.50	5.12	6.71	6.80	5.76	3.26	1.09	-1.42	-1.44	0.19	6.21	3.37	2.08
2020ML	-0.79	-1.25	-1.54	0.41	2.90	5.46	7.02	7.10	6.04	3.58	1.55	-0.91	-0.98	0.59	6.53	3.73	2.47
2020MH	-0.53	-0.96	-1.22	0.61	3.16	5.67	7.21	7.30	6.21	3.78	1.83	-0.59	-0.69	0.85	6.73	3.94	2.71
2020HH	-0.40	-0.80	-1.05	0.72	3.29	5.78	7.32	7.40	6.31	3.89	1.99	-0.42	-0.54	0.99	6.83	4.07	2.84
2050LL	-0.88	-1.35	-1.64	0.34	2.82	5.39	6.95	7.04	5.98	3.51	1.45	-1.03	-1.08	0.51	6.46	3.65	2.38
2050ML	-0.26	-0.65	-0.88	0.84	3.43	5.90	7.43	7.50	6.40	4.00	2.14	-0.24	-0.38	1.13	6.94	4.18	2.97
2050MH	0.32	0.01	-0.17	1.30	4.00	6.38	7.87	7.94	6.80	4.46	2.80	0.49	0.28	1.71	7.40	4.69	3.52
2050HH	0.64	0.38	0.23	1.56	4.32	6.65	8.12	8.18	7.02	4.72	3.16	0.90	0.64	2.04	7.65	4.97	3.83
Grid 67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	2.90	2.41	2.16	3.79	5.67	8.46	9.85	10.12	9.22	6.30	4.41	3.12	2.81	3.87	9.48	6.64	5.70
2020LL	3.40	2.98	2.74	4.21	6.24	8.90	10.35	10.58	9.64	6.86	5.10	3.69	3.36	4.39	9.94	7.20	6.22
2020ML	3.76	3.38	3.15	4.52	6.65	9.22	10.71	10.92	9.93	7.27	5.59	4.10	3.75	4.77	10.28	7.60	6.60
2020MH	3.98	3.64	3.41	4.71	6.91	9.42	10.93	11.13	10.12	7.52	5.91	4.36	3.99	5.01	10.49	7.85	6.84
2020HH	4.11	3.78	3.55	4.81	7.05	9.53	11.06	11.24	10.23	7.66	6.08	4.50	4.13	5.13	10.61	7.99	6.97
2050LL	3.68	3.29	3.06	4.45	6.56	9.15	10.63	10.84	9.87	7.18	5.48	4.01	3.66	4.69	10.21	7.51	6.52
2050ML	4.23	3.92	3.69	4.92	7.19	9.64	11.18	11.36	10.33	7.80	6.24	4.64	4.26	5.26	10.73	8.12	7.09
2050MH	4.74	4.50	4.29	5.35	7.77	10.10	11.69	11.83	10.76	8.38	6.96	5.22	4.82	5.80	11.21	8.70	7.63
2050HH	5.03	4.83	4.62	5.60	8.10	10.35	11.98	12.10	11.00	8.70	7.35	5.55	5.14	6.10	11.48	9.02	7.93
Grid 90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	2.60	2.06	2.20	4.29	6.92	10.27	12.44	12.67	10.86	7.74	4.97	2.99	2.55	4.47	11.79	7.85	6.67
2020LL	3.18	2.70	2.78	4.78	7.48	10.77	13.01	13.24	11.37	8.29	5.62	3.70	3.19	5.01	12.34	8.42	7.24
2020ML	3.60	3.16	3.19	5.13	7.88	11.13	13.42	13.64	11.73	8.68	6.08	4.20	3.65	5.40	12.73	8.83	7.65
2020MH	3.86	3.45	3.46	5.35	8.14	11.36	13.69	13.90	11.96	8.93	6.38	4.52	3.94	5.65	12.98	9.09	7.92
2020HH	4.01	3.61	3.60	5.47	8.27	11.48	13.83	14.04	12.09	9.06	6.54	4.70	4.11	5.78	13.12	9.23	8.06
2050LL	3.51	3.06	3.10	5.05	7.79	11.05	13.33	13.56	11.65	8.59	5.98	4.09	3.55	5.31	12.65	8.74	7.56
2050ML	4.15	3.77	3.74	5.59	8.41	11.60	13.97	14.18	12.21	9.20	6.70	4.87	4.26	5.91	13.25	9.37	8.20
2050MH	4.75	4.43	4.34	6.10	8.99	12.12	14.56	14.77	12.74	9.76	7.37	5.59	4.92	6.48	13.82	9.95	8.79
2050HH	5.09	4.80	4.68	6.38	9.31	12.41	14.89	15.10	13.03	10.08	7.75	6.00	5.30	6.79	14.13	10.28	9.13

Table B.4: Probability of minimum temperatures below 0°C for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (Tmin<0°C)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.586	0.638	0.692	0.502	0.248	0.054	0.009	0.008	0.041	0.190	0.413	0.584
2020LL	0.593	0.633	0.717	0.488	0.178	0.025	0	0.002	0.012	0.125	0.363	0.623
2020ML	0.542	0.590	0.663	0.447	0.138	0.017	0	0.002	0.011	0.109	0.332	0.574
2020MH	0.515	0.563	0.625	0.422	0.118	0.012	0	0	0.007	0.096	0.300	0.544
2020HH	0.505	0.553	0.608	0.408	0.100	0.010	0	0	0.007	0.086	0.291	0.523
2050LL	0.548	0.598	0.675	0.452	0.148	0.017	0	0.002	0.011	0.114	0.337	0.581
2050ML	0.495	0.542	0.590	0.407	0.092	0.008	0	0	0.007	0.081	0.279	0.502
2050MH	0.428	0.490	0.510	0.357	0.063	0.005	0	0	0.007	0.067	0.240	0.426
2050HH	0.400	0.463	0.463	0.310	0.050	0.005	0	0	0.007	0.061	0.207	0.391

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.240	0.274	0.298	0.170	0.036	0	0	0.001	0.001	0.064	0.153	0.237
2020LL	0.180	0.238	0.235	0.095	0.018	0	0	0	0.002	0.011	0.105	0.184
2020ML	0.153	0.212	0.212	0.077	0.017	0	0	0	0.002	0.007	0.088	0.153
2020MH	0.147	0.192	0.190	0.072	0.013	0	0	0	0.002	0.007	0.074	0.142
2020HH	0.140	0.190	0.178	0.067	0.008	0	0	0	0.002	0.005	0.067	0.133
2050LL	0.162	0.215	0.218	0.080	0.017	0	0	0	0.002	0.007	0.088	0.156
2050ML	0.138	0.178	0.165	0.067	0.007	0	0	0	0.002	0.005	0.061	0.123
2050MH	0.120	0.143	0.135	0.045	0.002	0	0	0	0.002	0.005	0.042	0.105
2050HH	0.110	0.132	0.118	0.042	0.002	0	0	0	0.002	0.002	0.039	0.088

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.290	0.307	0.292	0.112	0.007	0	0	0	0	0.013	0.117	0.266
2020LL	0.213	0.243	0.228	0.043	0.005	0	0	0	0	0	0.086	0.193
2020ML	0.192	0.215	0.205	0.033	0.003	0	0	0	0	0	0.074	0.154
2020MH	0.180	0.195	0.180	0.025	0.003	0	0	0	0	0	0.065	0.133
2020HH	0.160	0.187	0.168	0.023	0.003	0	0	0	0	0	0.063	0.121
2050LL	0.197	0.218	0.212	0.035	0.003	0	0	0	0	0	0.074	0.161
2050ML	0.157	0.173	0.158	0.023	0.003	0	0	0	0	0	0.058	0.112
2050MH	0.138	0.153	0.122	0.015	0	0	0	0	0	0	0.040	0.068
2050HH	0.128	0.128	0.110	0.013	0	0	0	0	0	0	0.033	0.058

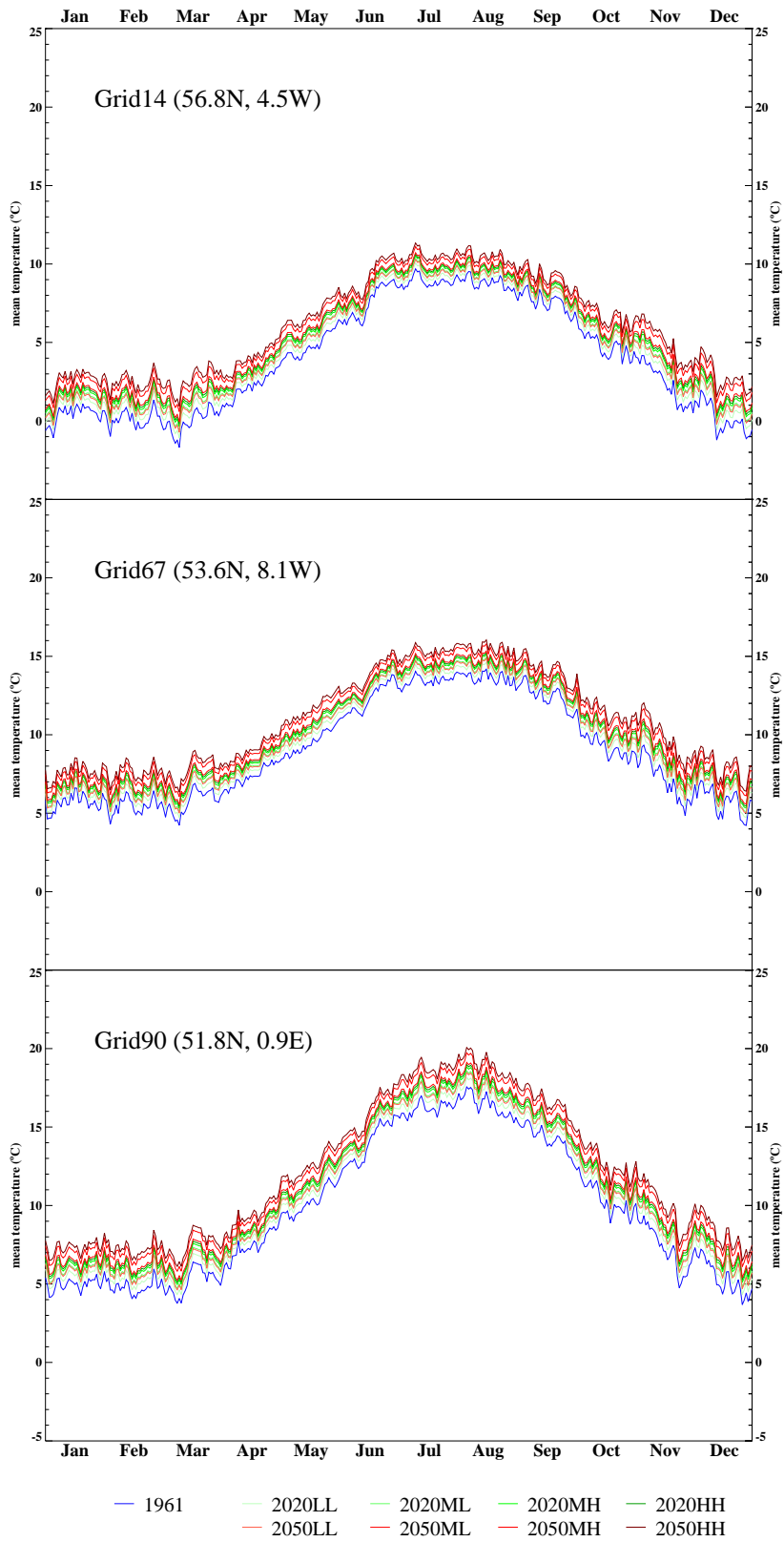


Figure C.1: As Figure A.1, but for mean daily mean temperature.

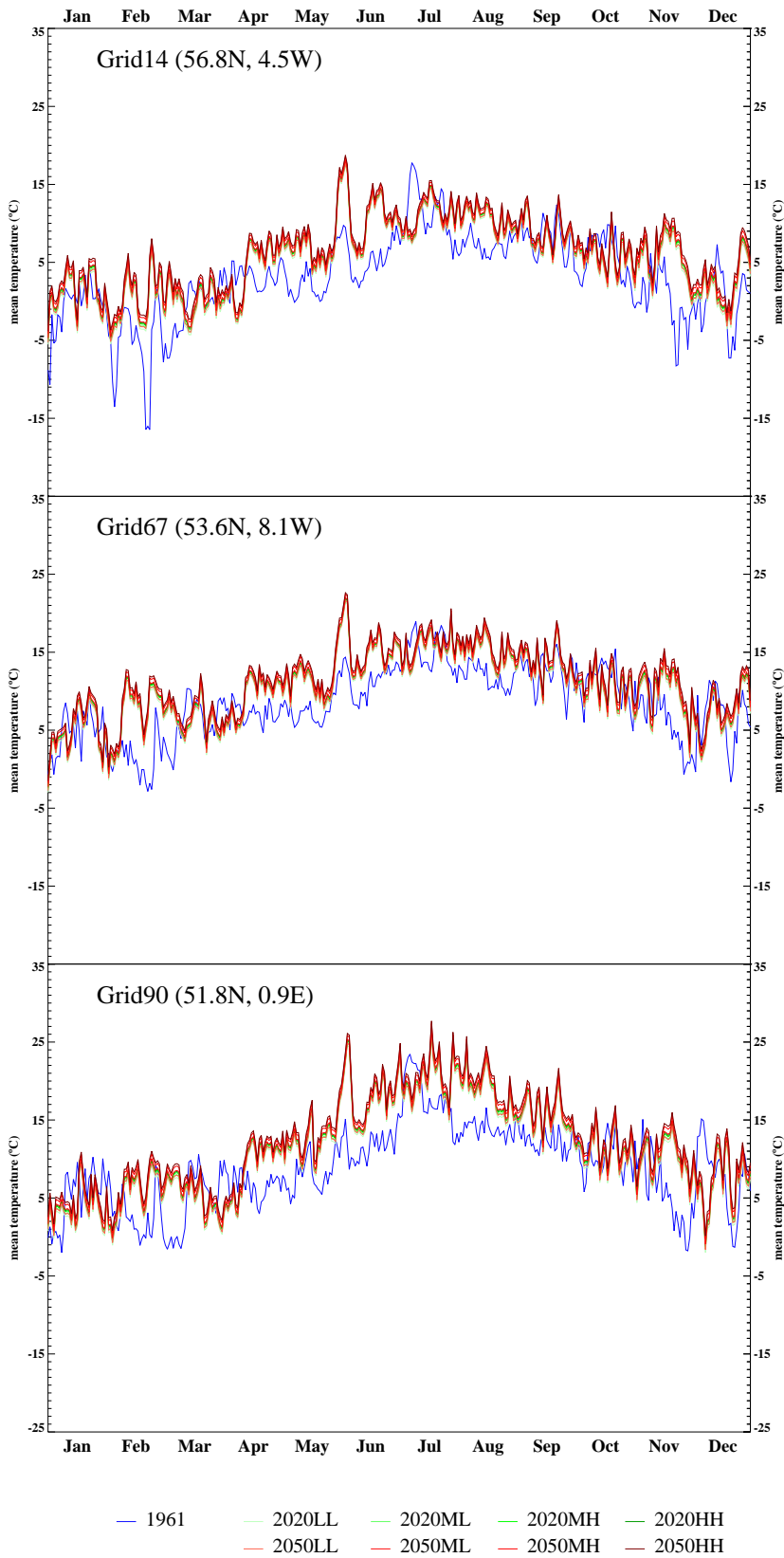


Figure C.2: As Figure A.2, but for daily mean temperature.

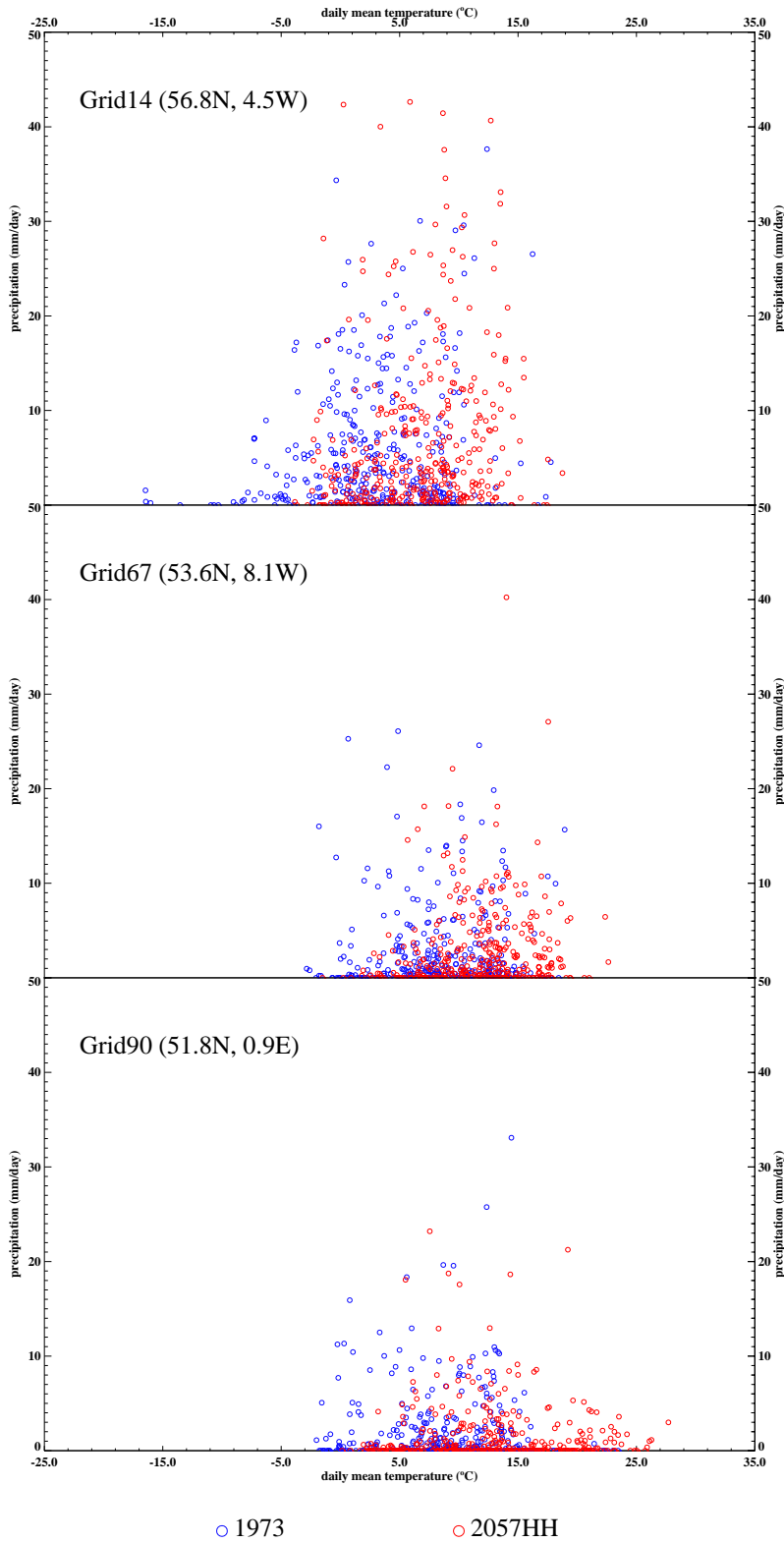


Figure C.3: Relationship between daily mean temperature ($^{\circ}\text{C}$) and precipitation (mm/day) for the year "1973" in the baseline series and the year 2057 for the **High** scenario.

Table C.4: Average monthly, seasonal and annual mean temperature in °C for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Mean temperature (oC)

Grid14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	0.39	0.13	-0.02	2.17	4.79	7.53	8.87	8.79	7.57	4.83	2.41	0.14	0.22	2.31	8.40	4.94	3.97
2020LL	0.91	0.68	0.59	2.59	5.27	7.92	9.25	9.17	7.95	5.30	3.03	0.78	0.79	2.82	8.78	5.43	4.45
2020ML	1.28	1.08	1.04	2.90	5.62	8.20	9.53	9.45	8.23	5.63	3.47	1.24	1.20	3.19	9.06	5.78	4.81
2020MH	1.51	1.33	1.32	3.09	5.84	8.38	9.71	9.63	8.40	5.85	3.76	1.54	1.46	3.42	9.24	6.00	5.03
2020HH	1.64	1.47	1.47	3.20	5.96	8.47	9.80	9.72	8.49	5.96	3.91	1.69	1.60	3.54	9.33	6.12	5.15
2050LL	1.19	0.99	0.94	2.83	5.55	8.14	9.47	9.39	8.17	5.56	3.38	1.14	1.11	3.11	9.00	5.70	4.73
2050ML	1.76	1.60	1.62	3.30	6.08	8.57	9.90	9.82	8.59	6.08	4.06	1.85	1.74	3.67	9.43	6.24	5.27
2050MH	2.30	2.17	2.26	3.74	6.58	8.97	10.29	10.21	8.98	6.56	4.70	2.51	2.33	4.19	9.82	6.75	5.77
2050HH	2.60	2.49	2.61	3.98	6.86	9.20	10.52	10.44	9.20	6.83	5.06	2.89	2.66	4.48	10.05	7.03	6.06

Grid67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	5.64	5.49	5.71	7.35	9.51	12.29	13.45	13.62	12.45	9.33	7.16	5.79	5.64	7.52	13.12	9.65	8.98
2020LL	6.09	5.99	6.20	7.74	10.01	12.66	13.88	14.06	12.85	9.86	7.79	6.30	6.13	7.98	13.53	10.17	9.45
2020ML	6.41	6.35	6.56	8.03	10.36	12.92	14.18	14.37	13.14	10.23	8.24	6.67	6.48	8.32	13.82	10.54	9.79
2020MH	6.62	6.58	6.78	8.20	10.59	13.09	14.38	14.57	13.32	10.48	8.52	6.90	6.70	8.52	14.01	10.78	10.00
2020HH	6.73	6.71	6.91	8.30	10.71	13.18	14.48	14.67	13.42	10.60	8.68	7.02	6.82	8.64	14.11	10.90	10.12
2050LL	6.34	6.27	6.48	7.96	10.29	12.87	14.12	14.30	13.07	10.15	8.14	6.59	6.40	8.24	13.76	10.46	9.72
2050ML	6.84	6.83	7.03	8.40	10.83	13.27	14.59	14.78	13.52	10.73	8.83	7.15	6.94	8.75	14.21	11.03	10.23
2050MH	7.30	7.35	7.54	8.80	11.35	13.66	15.03	15.23	13.93	11.28	9.48	7.68	7.44	9.23	14.64	11.57	10.72
2050HH	7.56	7.64	7.82	9.03	11.64	13.87	15.28	15.48	14.16	11.58	9.85	7.97	7.72	9.50	14.88	11.87	10.99

Grid90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	4.95	4.83	5.15	7.39	10.27	13.94	16.17	16.42	14.29	10.46	7.36	5.39	5.06	7.60	15.51	10.70	9.72
2020LL	5.50	5.40	5.70	7.85	10.81	14.40	16.75	17.01	14.83	11.02	7.99	6.04	5.65	8.12	16.05	11.28	10.27
2020ML	5.89	5.82	6.09	8.18	11.20	14.73	17.16	17.43	15.22	11.43	8.44	6.51	6.07	8.49	16.44	11.70	10.67
2020MH	6.14	6.08	6.34	8.39	11.44	14.94	17.42	17.69	15.47	11.68	8.72	6.81	6.34	8.72	16.68	11.96	10.93
2020HH	6.28	6.22	6.48	8.50	11.57	15.06	17.56	17.84	15.61	11.82	8.88	6.97	6.49	8.85	16.82	12.10	11.07
2050LL	5.81	5.73	6.00	8.10	11.11	14.66	17.07	17.33	15.14	11.34	8.34	6.41	5.98	8.40	16.35	11.61	10.59
2050ML	6.41	6.36	6.61	8.61	11.71	15.17	17.70	17.98	15.74	11.96	9.03	7.13	6.63	8.97	16.95	12.24	11.20
2050MH	6.98	6.96	7.18	9.08	12.27	15.65	18.30	18.59	16.30	12.54	9.68	7.81	7.25	9.51	17.51	12.84	11.78
2050HH	7.30	7.29	7.49	9.35	12.58	15.92	18.63	18.93	16.62	12.86	####	8.18	7.59	9.80	17.82	13.18	12.10

Table C.5: Probability of mean temperatures below 0°C for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (Tmean<0°C)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.409	0.453	0.466	0.253	0.008	0	0	0	0	0.040	0.233	0.454
2020LL	0.388	0.397	0.428	0.137	0.003	0	0	0	0	0.012	0.193	0.405
2020ML	0.347	0.372	0.367	0.112	0.002	0	0	0	0	0.011	0.165	0.367
2020MH	0.323	0.352	0.33	0.087	0.002	0	0	0	0	0.005	0.146	0.339
2020HH	0.312	0.343	0.315	0.077	0.002	0	0	0	0	0.004	0.135	0.323
2050LL	0.357	0.373	0.382	0.115	0.002	0	0	0	0	0.011	0.168	0.377
2050ML	0.298	0.335	0.295	0.072	0	0	0	0	0	0.002	0.125	0.311
2050MH	0.245	0.288	0.243	0.055	0	0	0	0	0	0	0.098	0.256
2050HH	0.218	0.263	0.203	0.047	0	0	0	0	0	0	0.091	0.221

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.069	0.071	0.038	0	0	0	0	0	0	0.001	0.033	0.076
2020LL	0.047	0.048	0.007	0	0	0	0	0	0	0	0.016	0.039
2020ML	0.037	0.043	0.002	0	0	0	0	0	0	0	0.011	0.032
2020MH	0.035	0.040	0	0	0	0	0	0	0	0	0.007	0.023
2020HH	0.032	0.038	0	0	0	0	0	0	0	0	0.007	0.021
2050LL	0.040	0.043	0.003	0	0	0	0	0	0	0	0.011	0.035
2050ML	0.032	0.038	0	0	0	0	0	0	0	0	0.005	0.019
2050MH	0.025	0.028	0	0	0	0	0	0	0	0	0.005	0.016
2050HH	0.023	0.023	0	0	0	0	0	0	0	0	0.004	0.012

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.116	0.094	0.070	0.006	0	0	0	0	0	0.001	0.023	0.099
2020LL	0.088	0.078	0.037	0	0	0	0	0	0	0	0.021	0.037
2020ML	0.070	0.063	0.027	0	0	0	0	0	0	0	0.019	0.028
2020MH	0.060	0.055	0.018	0	0	0	0	0	0	0	0.014	0.025
2020HH	0.058	0.055	0.015	0	0	0	0	0	0	0	0.012	0.025
2050LL	0.073	0.067	0.032	0	0	0	0	0	0	0	0.019	0.028
2050ML	0.055	0.050	0.015	0	0	0	0	0	0	0	0.012	0.023
2050MH	0.032	0.035	0.010	0	0	0	0	0	0	0	0.005	0.011
2050HH	0.025	0.032	0.008	0	0	0	0	0	0	0	0.005	0.007

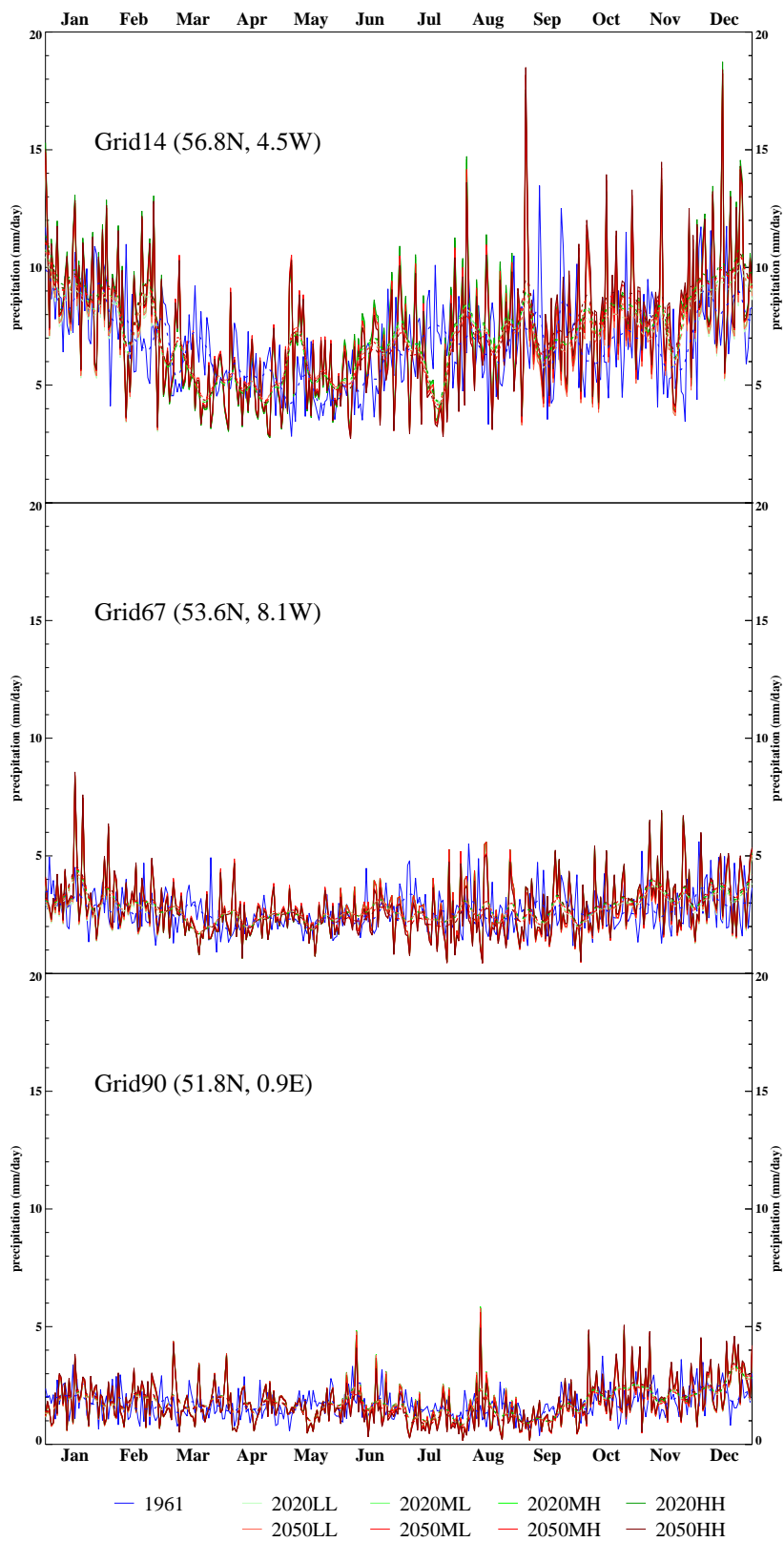


Figure D.1: As Figure A.1, but for mean daily precipitation. Smooth curves result from the application of a 30-day filter.

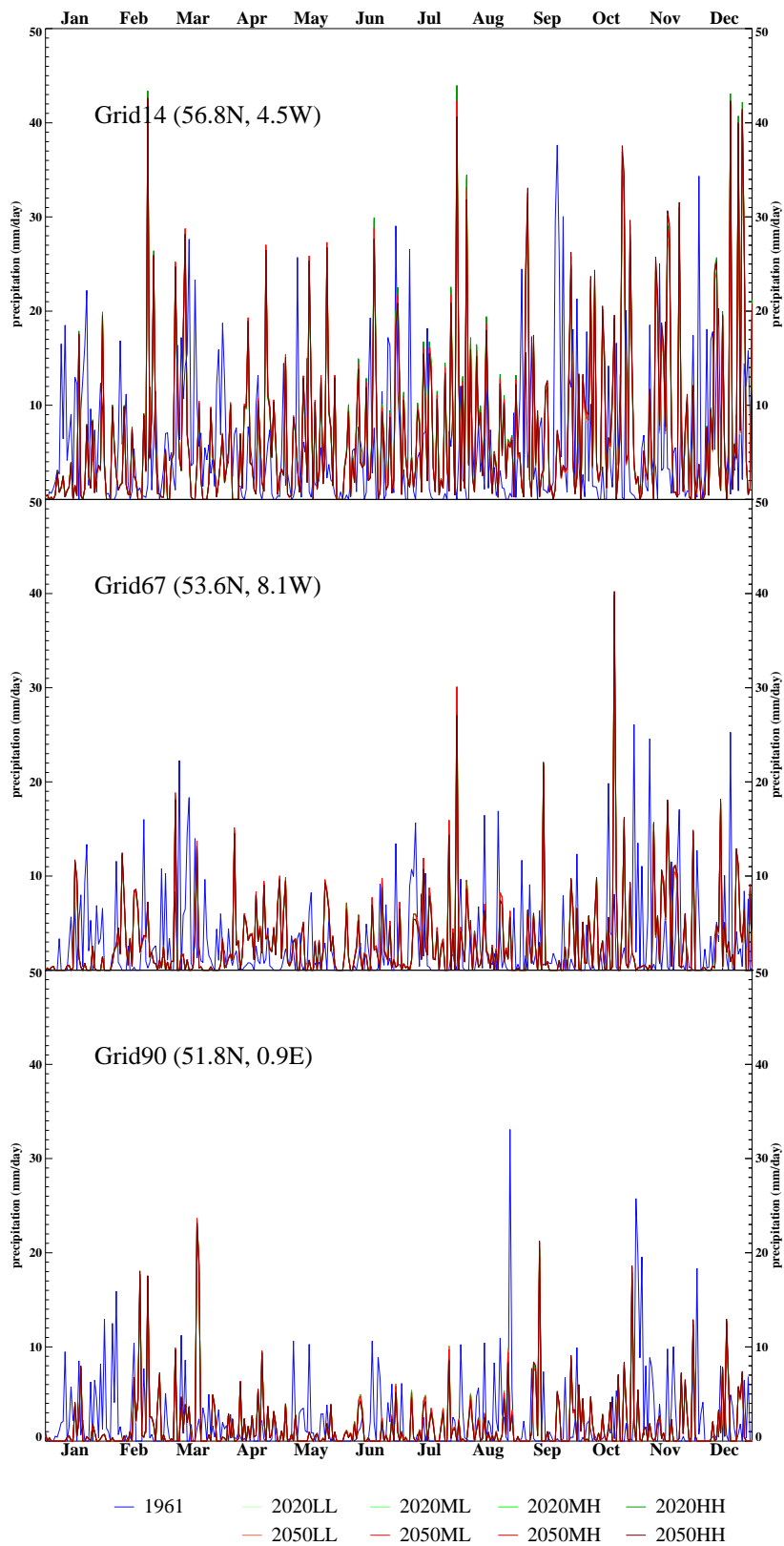


Figure D.2: As Figure A.2, but for daily precipitation.

Table D.3: Average monthly, seasonal and annual precipitation in mm/day for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Precipitation (mm/day)

Grid 14

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	8.91	7.42	6.37	5.52	4.57	5.54	6.89	6.70	7.47	6.67	6.55	8.48	8.27	5.49	6.38	6.90	6.76
2020LL	8.88	7.81	5.47	4.87	5.78	6.12	6.11	7.27	6.77	7.77	7.18	9.12	8.60	5.37	6.50	7.24	6.93
2020ML	9.13	8.04	5.42	4.82	5.72	6.24	6.23	7.42	7.03	8.06	7.45	9.38	8.85	5.32	6.63	7.52	7.08
2020MH	9.48	8.34	5.36	4.77	5.66	6.30	6.29	7.49	7.09	8.13	7.52	9.73	9.18	5.26	6.69	7.58	7.18
2020HH	9.65	8.49	5.36	4.77	5.66	6.36	6.35	7.56	7.16	8.21	7.59	9.90	9.35	5.26	6.76	7.65	7.25
2050LL	9.05	7.96	5.58	4.97	5.90	6.06	6.05	7.20	6.77	7.77	7.18	9.29	8.77	5.48	6.44	7.24	6.98
2050ML	9.39	8.26	5.58	4.97	5.90	6.12	6.11	7.27	7.03	8.06	7.45	9.64	9.10	5.48	6.50	7.52	7.15
2050MH	9.39	8.26	5.47	4.87	5.78	5.88	5.87	6.99	7.42	8.51	7.87	9.64	9.10	5.37	6.25	7.93	7.16
2050HH	9.48	8.34	5.47	4.87	5.78	5.88	5.87	6.99	7.55	8.65	8.00	9.73	9.18	5.37	6.25	8.07	7.22

Grid 67

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	3.11	2.64	2.59	2.17	2.17	2.50	2.81	2.53	2.72	2.61	2.69	3.20	2.98	2.31	2.61	2.68	2.65
2020LL	3.14	2.93	2.27	2.34	2.31	2.73	2.33	2.78	2.39	2.62	3.24	3.22	3.10	2.31	2.61	2.75	2.69
2020ML	3.23	3.02	2.29	2.37	2.34	2.73	2.33	2.78	2.44	2.67	3.31	3.31	3.19	2.33	2.61	2.81	2.73
2020MH	3.32	3.10	2.25	2.32	2.29	2.73	2.33	2.78	2.56	2.80	3.46	3.40	3.28	2.29	2.61	2.94	2.78
2020HH	3.35	3.13	2.22	2.30	2.27	2.73	2.33	2.78	2.58	2.82	3.50	3.44	3.31	2.26	2.61	2.97	2.79
2050LL	3.23	3.02	2.29	2.37	2.34	2.73	2.33	2.78	2.39	2.62	3.24	3.31	3.19	2.33	2.61	2.75	2.72
2050ML	3.38	3.16	2.34	2.41	2.38	2.73	2.33	2.78	2.44	2.67	3.31	3.47	3.34	2.38	2.61	2.81	2.78
2050MH	3.38	3.16	2.25	2.32	2.29	2.48	2.12	2.53	2.56	2.80	3.46	3.47	3.34	2.29	2.38	2.94	2.73
2050HH	3.44	3.22	2.25	2.32	2.29	2.46	2.10	2.50	2.60	2.85	3.53	3.53	3.40	2.29	2.35	2.99	2.76

Grid 90

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	1.93	1.71	1.60	1.50	1.67	1.76	1.51	1.47	1.42	1.79	2.01	2.25	1.96	1.59	1.58	1.74	1.72
2020LL	1.86	1.75	1.72	1.67	1.48	1.82	1.26	1.48	1.19	2.04	2.12	2.55	2.05	1.62	1.52	1.79	1.74
2020ML	1.91	1.80	1.74	1.69	1.49	1.78	1.24	1.45	1.22	2.08	2.17	2.63	2.11	1.64	1.49	1.82	1.76
2020MH	1.89	1.79	1.74	1.69	1.49	1.84	1.27	1.49	1.22	2.08	2.17	2.60	2.09	1.64	1.53	1.82	1.77
2020HH	1.91	1.80	1.75	1.70	1.51	1.82	1.26	1.48	1.23	2.10	2.19	2.63	2.11	1.65	1.52	1.84	1.78
2050LL	1.88	1.77	1.72	1.67	1.48	1.82	1.26	1.48	1.17	2.00	2.08	2.58	2.07	1.62	1.52	1.75	1.74
2050ML	1.95	1.84	1.75	1.70	1.51	1.76	1.22	1.43	1.18	2.02	2.10	2.68	2.15	1.65	1.47	1.77	1.76
2050MH	1.97	1.85	1.70	1.65	1.46	1.59	1.10	1.29	1.26	2.16	2.25	2.70	2.17	1.60	1.33	1.89	1.75
2050HH	2.00	1.89	1.72	1.67	1.48	1.55	1.08	1.26	1.27	2.18	2.27	2.75	2.21	1.62	1.30	1.91	1.76

Table D.4: Probability of a dry day ($P(\text{prec})= 0.0\text{mm/day}$) for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (prec=0.0)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.074	0.081	0.096	0.104	0.172	0.163	0.111	0.116	0.124	0.154	0.122	0.075
2020LL	0.138	0.128	0.178	0.220	0.145	0.160	0.125	0.112	0.146	0.156	0.140	0.163
2020ML	0.138	0.128	0.178	0.220	0.145	0.160	0.125	0.112	0.140	0.156	0.140	0.163
2020MH	0.138	0.128	0.178	0.220	0.145	0.160	0.125	0.112	0.140	0.156	0.140	0.163
2020HH	0.138	0.128	0.178	0.220	0.145	0.160	0.125	0.112	0.140	0.156	0.140	0.163
2050LL	0.138	0.128	0.178	0.220	0.145	0.160	0.130	0.113	0.146	0.156	0.140	0.163
2050ML	0.138	0.128	0.178	0.220	0.145	0.160	0.125	0.112	0.140	0.156	0.140	0.163
2050MH	0.138	0.128	0.178	0.220	0.145	0.160	0.130	0.113	0.140	0.154	0.135	0.163
2050HH	0.138	0.128	0.178	0.220	0.145	0.160	0.130	0.113	0.140	0.154	0.135	0.163

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.303	0.312	0.310	0.293	0.282	0.273	0.283	0.359	0.343	0.329	0.314	0.336
2020LL	0.357	0.318	0.330	0.345	0.340	0.345	0.438	0.417	0.423	0.358	0.340	0.360
2020ML	0.350	0.317	0.330	0.345	0.340	0.345	0.438	0.417	0.418	0.354	0.335	0.356
2020MH	0.350	0.317	0.330	0.345	0.340	0.345	0.438	0.417	0.416	0.347	0.332	0.356
2020HH	0.340	0.312	0.332	0.348	0.345	0.345	0.438	0.417	0.416	0.347	0.332	0.353
2050LL	0.350	0.317	0.330	0.345	0.340	0.345	0.438	0.417	0.423	0.358	0.340	0.356
2050ML	0.340	0.312	0.323	0.343	0.340	0.345	0.438	0.417	0.418	0.354	0.335	0.353
2050MH	0.340	0.312	0.330	0.345	0.340	0.353	0.447	0.432	0.416	0.347	0.332	0.353
2050HH	0.340	0.312	0.330	0.345	0.340	0.353	0.447	0.432	0.416	0.347	0.332	0.353

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.406	0.433	0.350	0.363	0.389	0.428	0.484	0.518	0.571	0.460	0.415	0.343
2020LL	0.433	0.493	0.463	0.440	0.443	0.475	0.638	0.663	0.646	0.514	0.463	0.432
2020ML	0.430	0.485	0.457	0.433	0.440	0.475	0.638	0.663	0.644	0.509	0.460	0.426
2020MH	0.430	0.485	0.457	0.433	0.440	0.475	0.638	0.663	0.644	0.509	0.460	0.426
2020HH	0.430	0.485	0.457	0.433	0.440	0.475	0.638	0.663	0.644	0.509	0.460	0.426
2050LL	0.433	0.493	0.463	0.440	0.443	0.475	0.638	0.663	0.646	0.514	0.463	0.432
2050ML	0.430	0.485	0.457	0.433	0.440	0.475	0.638	0.663	0.646	0.514	0.463	0.426
2050MH	0.430	0.485	0.463	0.440	0.443	0.475	0.638	0.663	0.644	0.505	0.453	0.426
2050HH	0.423	0.480	0.463	0.440	0.443	0.475	0.638	0.663	0.644	0.505	0.453	0.423

Table D.5: Probability of precipitation exceeding 10 mm/day for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (prec>10mm/day)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.352	0.282	0.231	0.183	0.136	0.176	0.246	0.233	0.266	0.236	0.259	0.330
2020LL	0.365	0.262	0.192	0.147	0.202	0.222	0.225	0.257	0.244	0.289	0.277	0.342
2020ML	0.373	0.267	0.190	0.143	0.202	0.227	0.227	0.258	0.247	0.302	0.277	0.346
2020MH	0.385	0.278	0.188	0.143	0.198	0.232	0.230	0.262	0.249	0.304	0.279	0.354
2020HH	0.393	0.283	0.188	0.143	0.198	0.237	0.232	0.263	0.253	0.305	0.281	0.354
2050LL	0.368	0.267	0.193	0.157	0.205	0.218	0.223	0.257	0.244	0.289	0.277	0.344
2050ML	0.382	0.275	0.193	0.157	0.205	0.222	0.225	0.257	0.247	0.302	0.277	0.354
2050MH	0.382	0.275	0.192	0.147	0.202	0.210	0.212	0.247	0.263	0.311	0.284	0.354
2050HH	0.385	0.278	0.192	0.147	0.202	0.210	0.212	0.247	0.267	0.314	0.293	0.354

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.087	0.064	0.068	0.032	0.024	0.031	0.067	0.067	0.087	0.076	0.079	0.095
2020LL	0.090	0.087	0.047	0.038	0.037	0.052	0.057	0.070	0.067	0.077	0.111	0.104
2020ML	0.095	0.092	0.048	0.040	0.038	0.052	0.057	0.070	0.067	0.081	0.114	0.111
2020MH	0.105	0.102	0.047	0.038	0.037	0.052	0.057	0.070	0.072	0.086	0.123	0.116
2020HH	0.110	0.103	0.047	0.038	0.037	0.052	0.057	0.070	0.075	0.086	0.125	0.116
2050LL	0.095	0.092	0.048	0.040	0.038	0.052	0.057	0.070	0.067	0.077	0.111	0.111
2050ML	0.112	0.103	0.048	0.048	0.042	0.052	0.057	0.070	0.067	0.081	0.114	0.116
2050MH	0.112	0.103	0.047	0.038	0.037	0.038	0.050	0.068	0.072	0.086	0.123	0.116
2050HH	0.115	0.108	0.047	0.038	0.037	0.038	0.050	0.067	0.079	0.086	0.126	0.118

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.038	0.034	0.023	0.017	0.023	0.029	0.022	0.031	0.034	0.043	0.043	0.052
2020LL	0.028	0.040	0.038	0.025	0.023	0.040	0.038	0.038	0.016	0.054	0.058	0.067
2020ML	0.033	0.045	0.038	0.025	0.023	0.038	0.035	0.038	0.019	0.056	0.060	0.068
2020MH	0.028	0.045	0.038	0.025	0.023	0.043	0.038	0.038	0.019	0.056	0.060	0.068
2020HH	0.033	0.045	0.038	0.025	0.025	0.040	0.038	0.038	0.021	0.056	0.061	0.068
2050LL	0.028	0.045	0.038	0.025	0.023	0.040	0.038	0.038	0.016	0.053	0.056	0.068
2050ML	0.037	0.045	0.038	0.025	0.025	0.038	0.033	0.033	0.016	0.054	0.058	0.072
2050MH	0.038	0.045	0.037	0.025	0.022	0.030	0.027	0.033	0.021	0.058	0.061	0.077
2050HH	0.042	0.047	0.038	0.025	0.023	0.023	0.025	0.032	0.021	0.058	0.061	0.081

Table D.6: Probability of precipitation exceeding 15 mm/day for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (prec>15mm/day)

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.204	0.142	0.120	0.074	0.064	0.090	0.127	0.134	0.156	0.144	0.137	0.192
2020LL	0.217	0.182	0.120	0.085	0.095	0.102	0.122	0.170	0.147	0.182	0.177	0.239
2020ML	0.223	0.185	0.117	0.085	0.092	0.105	0.125	0.177	0.153	0.193	0.184	0.240
2020MH	0.233	0.192	0.112	0.083	0.088	0.107	0.128	0.177	0.156	0.195	0.186	0.249
2020HH	0.243	0.193	0.112	0.083	0.088	0.112	0.128	0.180	0.158	0.195	0.186	0.254
2050LL	0.223	0.183	0.123	0.092	0.100	0.100	0.122	0.170	0.147	0.182	0.177	0.240
2050ML	0.232	0.188	0.123	0.092	0.100	0.102	0.122	0.170	0.153	0.193	0.184	0.242
2050MH	0.232	0.188	0.120	0.085	0.095	0.098	0.118	0.162	0.172	0.211	0.189	0.242
2050HH	0.233	0.192	0.120	0.085	0.095	0.098	0.118	0.162	0.177	0.212	0.196	0.249

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.027	0.026	0.026	0.007	0.009	0.013	0.031	0.023	0.033	0.031	0.032	0.039
2020LL	0.032	0.040	0.010	0.022	0.008	0.022	0.035	0.033	0.040	0.025	0.042	0.040
2020ML	0.032	0.040	0.012	0.022	0.008	0.022	0.035	0.033	0.044	0.026	0.046	0.044
2020MH	0.035	0.043	0.010	0.020	0.008	0.022	0.035	0.033	0.047	0.032	0.058	0.046
2020HH	0.035	0.043	0.008	0.020	0.007	0.022	0.035	0.033	0.047	0.033	0.058	0.046
2050LL	0.032	0.040	0.012	0.022	0.008	0.022	0.035	0.033	0.040	0.025	0.042	0.044
2050ML	0.037	0.043	0.013	0.023	0.008	0.022	0.035	0.033	0.044	0.026	0.046	0.049
2050MH	0.037	0.043	0.010	0.020	0.008	0.020	0.030	0.030	0.047	0.032	0.058	0.049
2050HH	0.038	0.045	0.010	0.020	0.008	0.020	0.030	0.030	0.051	0.033	0.063	0.049

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.014	0.006	0.006	0.006	0.008	0.008	0.008	0.008	0.010	0.014	0.018	0.015
2020LL	0.012	0.012	0.013	0.013	0.003	0.010	0.013	0.020	0.009	0.032	0.033	0.033
2020ML	0.012	0.015	0.013	0.013	0.003	0.008	0.012	0.020	0.009	0.033	0.033	0.035
2020MH	0.012	0.015	0.013	0.013	0.003	0.010	0.013	0.020	0.009	0.033	0.033	0.033
2020HH	0.012	0.015	0.013	0.013	0.005	0.010	0.013	0.020	0.009	0.035	0.033	0.035
2050LL	0.012	0.015	0.013	0.013	0.003	0.010	0.013	0.020	0.007	0.032	0.032	0.033
2050ML	0.013	0.015	0.013	0.013	0.005	0.008	0.010	0.020	0.009	0.032	0.032	0.035
2050MH	0.013	0.015	0.013	0.013	0.003	0.007	0.007	0.017	0.009	0.037	0.033	0.037
2050HH	0.015	0.017	0.013	0.013	0.003	0.005	0.007	0.017	0.009	0.037	0.033	0.039

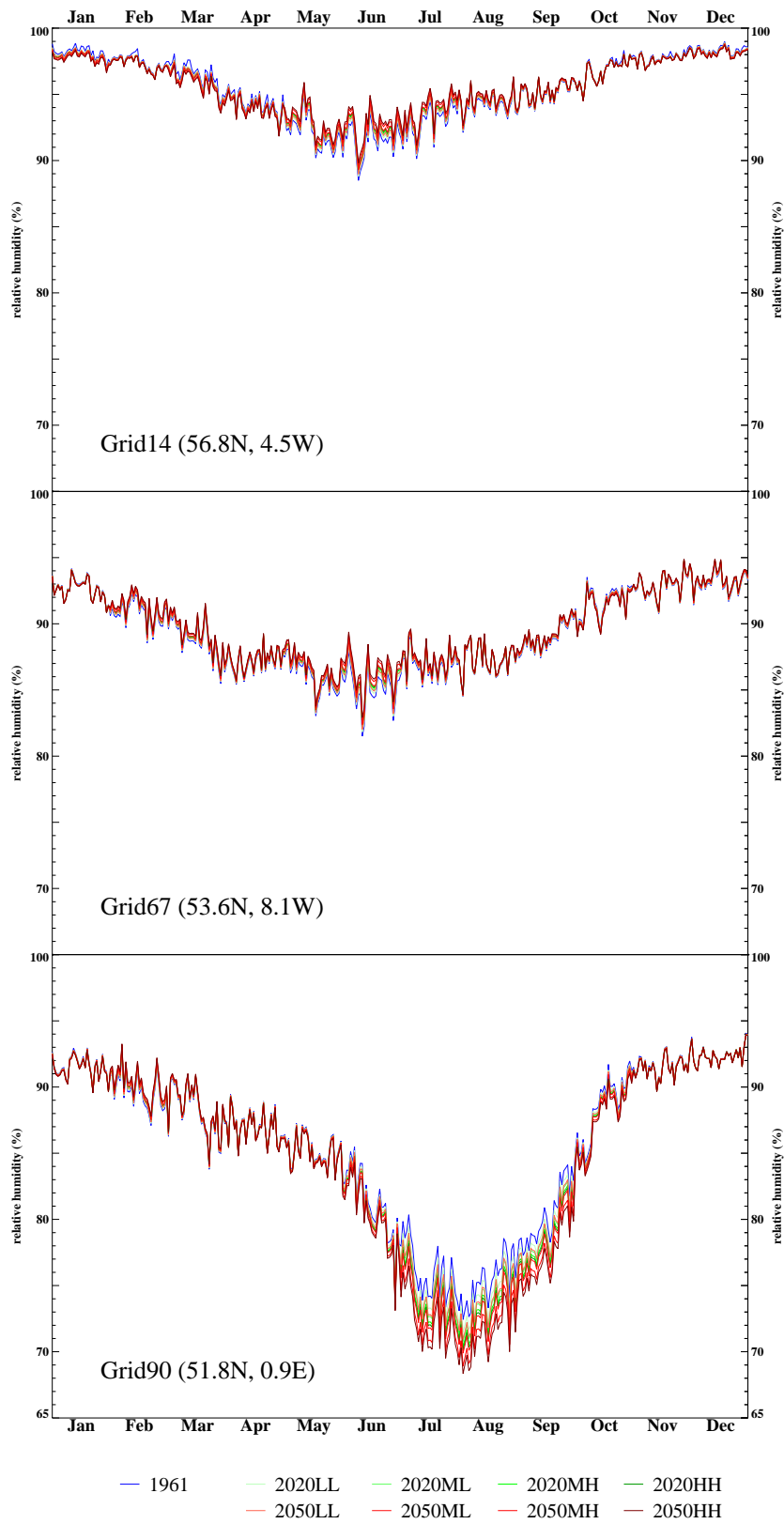


Figure E.1: As Figure A.1, but for mean daily relative humidity.

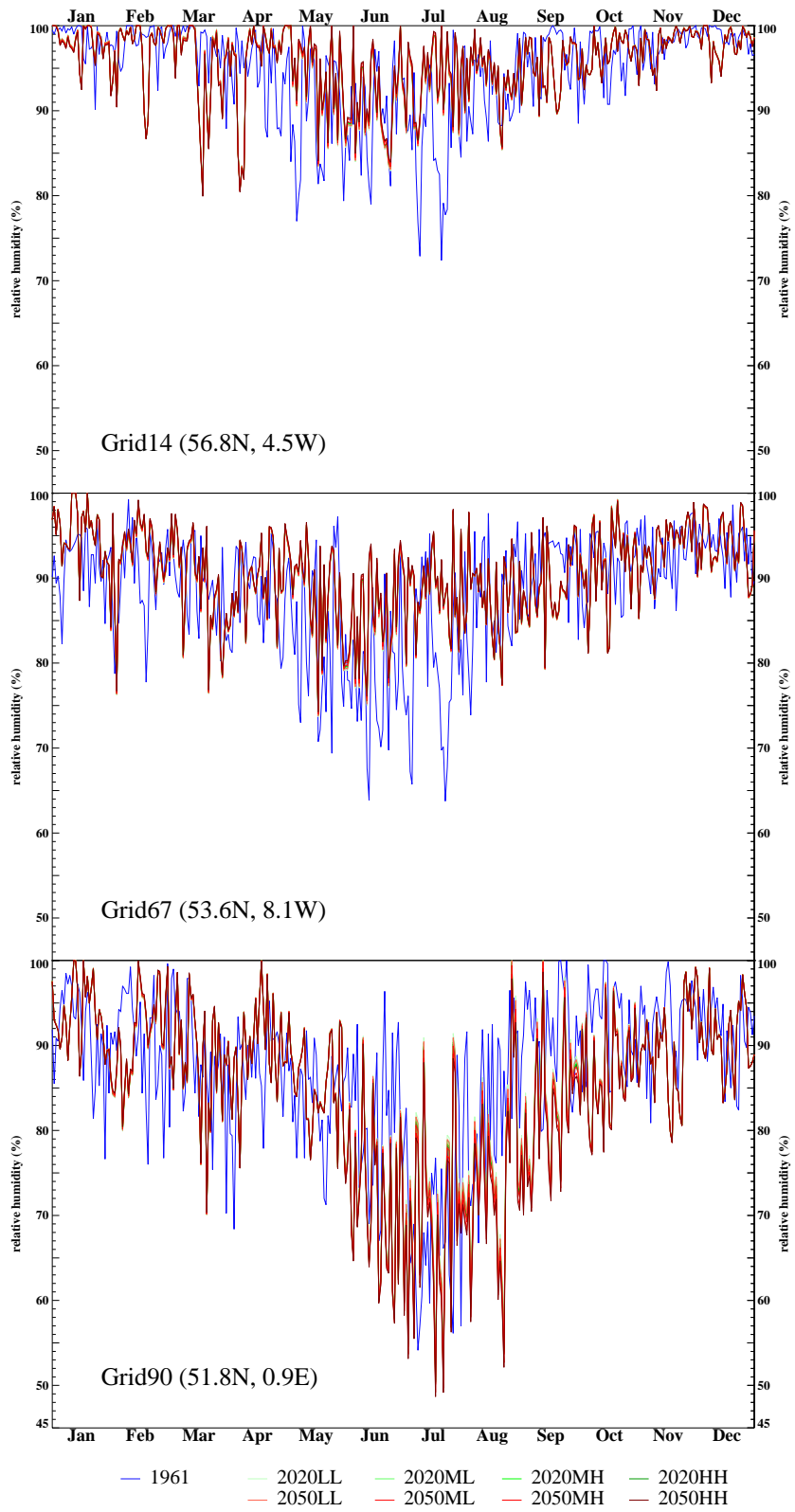


Figure E.2: As Figure A.2, but for daily relative humidity.

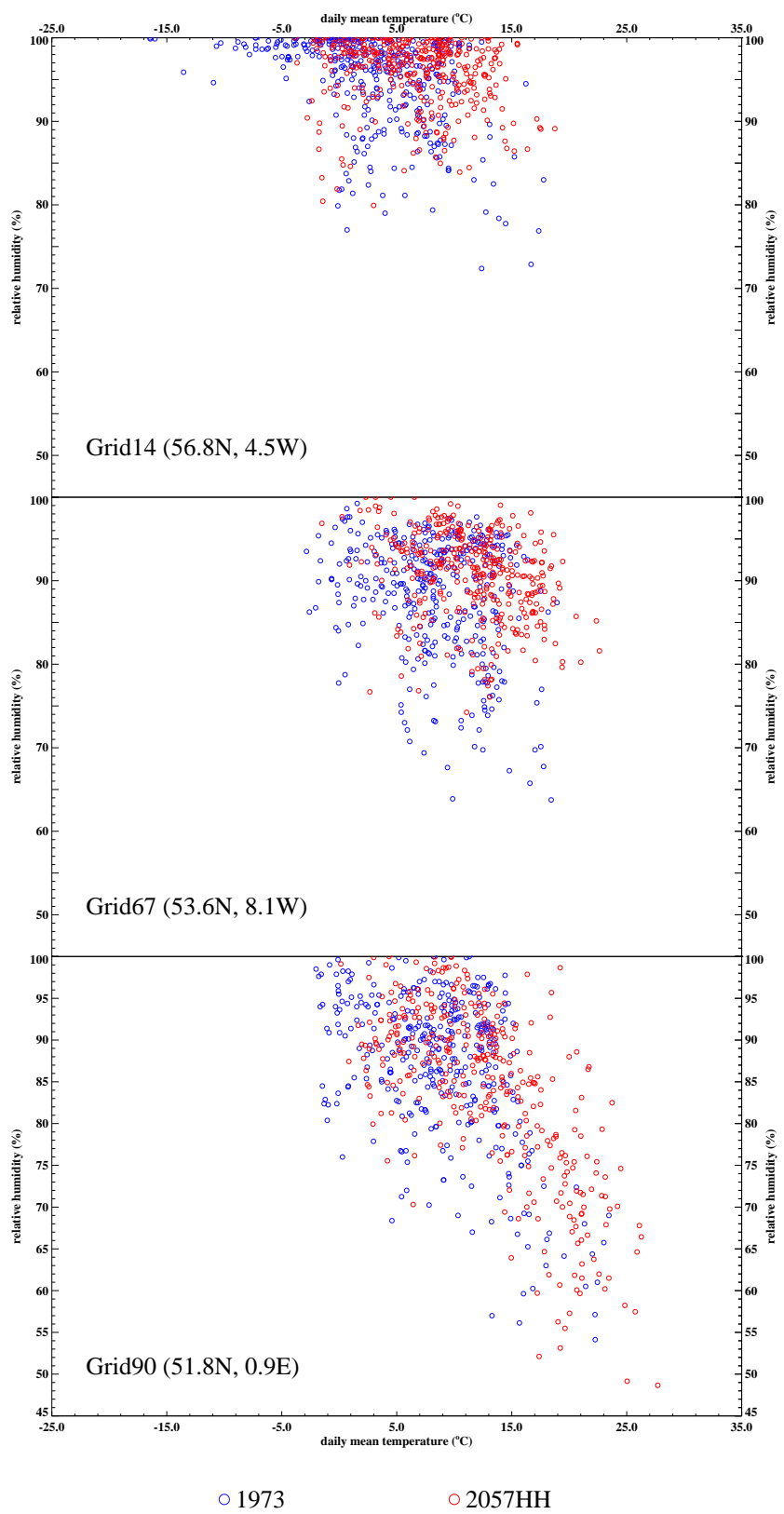


Figure E.3: As Figure C.3, but for daily mean relative humidity (%) and mean temperature (°C).

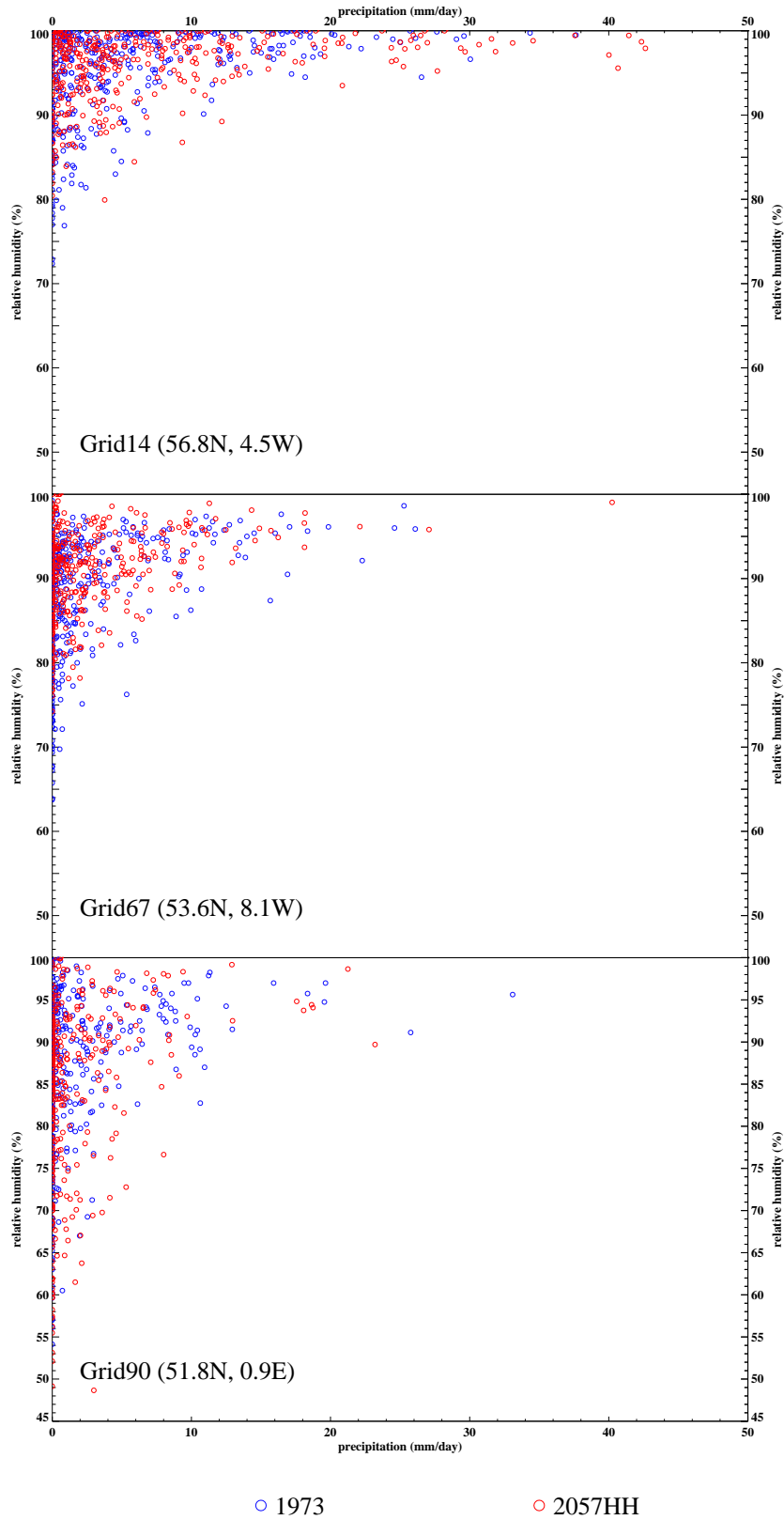


Figure E.4: As Figure C.3, but for daily relative humidity (%) and precipitation (mm/day).

Table E.5: Average monthly, seasonal and annual relative humidity in % for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Relative Humidity (%)

Grid14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	98.19	97.46	96.47	94.41	92.08	91.46	92.88	94.18	95.07	96.81	97.82	98.35	98.00	94.32	92.84	96.57	95.43
2020LL	98.01	97.35	96.19	94.23	92.30	91.76	93.12	94.28	95.11	96.74	97.73	98.27	97.88	94.24	93.05	96.53	95.42
2020M L	97.94	97.32	96.10	94.16	92.46	91.98	93.29	94.37	95.15	96.72	97.71	98.23	97.83	94.24	93.21	96.53	95.45
2020M H	97.91	97.31	96.04	94.11	92.55	92.11	93.39	94.42	95.17	96.72	97.70	98.20	97.81	94.24	93.31	96.53	95.47
2020HH	97.88	97.30	96.01	94.10	92.61	92.19	93.45	94.45	95.19	96.72	97.69	98.19	97.79	94.24	93.36	96.53	95.48
2050LL	97.96	97.33	96.11	94.18	92.42	91.93	93.25	94.35	95.14	96.72	97.72	98.23	97.84	94.24	93.17	96.53	95.45
2050M L	97.86	97.29	95.97	94.07	92.66	92.26	93.51	94.48	95.20	96.71	97.69	98.18	97.78	94.23	93.42	96.53	95.49
2050M H	97.77	97.25	95.84	93.97	92.89	92.57	93.74	94.60	95.26	96.69	97.67	98.13	97.72	94.23	93.64	96.54	95.53
2050HH	97.71	97.23	95.77	93.91	93.02	92.75	93.88	94.67	95.29	96.67	97.65	98.10	97.68	94.23	93.76	96.53	95.55
Grid67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	92.67	90.79	88.71	87.07	85.99	85.09	86.81	87.25	88.84	91.68	92.87	93.09	92.18	87.26	86.38	91.13	89.24
2020LL	92.63	90.94	88.84	87.15	86.16	85.42	86.94	87.29	88.92	91.58	92.90	93.15	92.24	87.39	86.55	91.13	89.33
2020M L	92.62	91.04	88.93	87.20	86.28	85.65	87.03	87.32	88.98	91.52	92.94	93.20	92.29	87.47	86.67	91.15	89.39
2020M H	92.61	91.11	89.00	87.24	86.35	85.80	87.09	87.33	89.02	91.48	92.96	93.24	92.32	87.53	86.74	91.15	89.44
2020HH	92.60	91.14	89.03	87.26	86.39	85.89	87.13	87.34	89.04	91.46	92.97	93.25	92.33	87.56	86.79	91.16	89.46
2050LL	92.62	91.02	88.91	87.19	86.25	85.60	87.01	87.31	88.97	91.53	92.93	93.19	92.28	87.45	86.64	91.14	89.38
2050M L	92.59	91.18	89.06	87.28	86.44	85.97	87.16	87.35	89.06	91.44	92.98	93.27	92.35	87.60	86.83	91.16	89.48
2050M H	92.57	91.33	89.20	87.36	86.61	86.31	87.29	87.39	89.15	91.35	93.03	93.34	92.41	87.72	87.00	91.18	89.58
2050HH	92.55	91.41	89.28	87.40	86.70	86.50	87.37	87.41	89.19	91.30	93.05	93.39	92.45	87.80	87.09	91.18	89.63
Grid90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	91.56	89.66	88.13	87.04	85.29	81.33	76.14	75.27	80.18	88.46	91.59	92.41	91.21	86.82	77.58	86.74	85.59
2020LL	91.51	89.81	88.21	87.00	85.22	81.05	75.28	74.30	79.44	88.21	91.54	92.40	91.24	86.81	76.88	86.40	85.33
2020M L	91.48	89.93	88.27	86.96	85.17	80.85	74.64	73.62	78.93	88.05	91.51	92.39	91.27	86.80	76.37	86.17	85.15
2020M H	91.46	90.01	88.31	86.94	85.14	80.73	74.24	73.19	78.61	87.95	91.50	92.39	91.29	86.80	76.05	86.02	85.04
2020HH	91.45	90.05	88.33	86.93	85.13	80.66	74.02	72.95	78.43	87.90	91.49	92.38	91.29	86.80	75.88	85.94	84.98
2050LL	91.49	89.91	88.26	86.97	85.18	80.89	74.78	73.77	79.05	88.08	91.52	92.39	91.26	86.81	76.48	86.22	85.19
2050M L	91.44	90.09	88.35	86.92	85.11	80.59	73.79	72.72	78.25	87.85	91.48	92.38	91.30	86.80	75.70	85.86	84.92
2050M H	91.40	90.26	88.43	86.87	85.04	80.31	72.86	71.74	77.52	87.62	91.46	92.37	91.34	86.78	74.97	85.53	84.66
2050HH	91.38	90.35	88.48	86.85	85.00	80.15	72.34	71.19	77.10	87.49	91.44	92.36	91.36	86.78	74.56	85.34	84.51

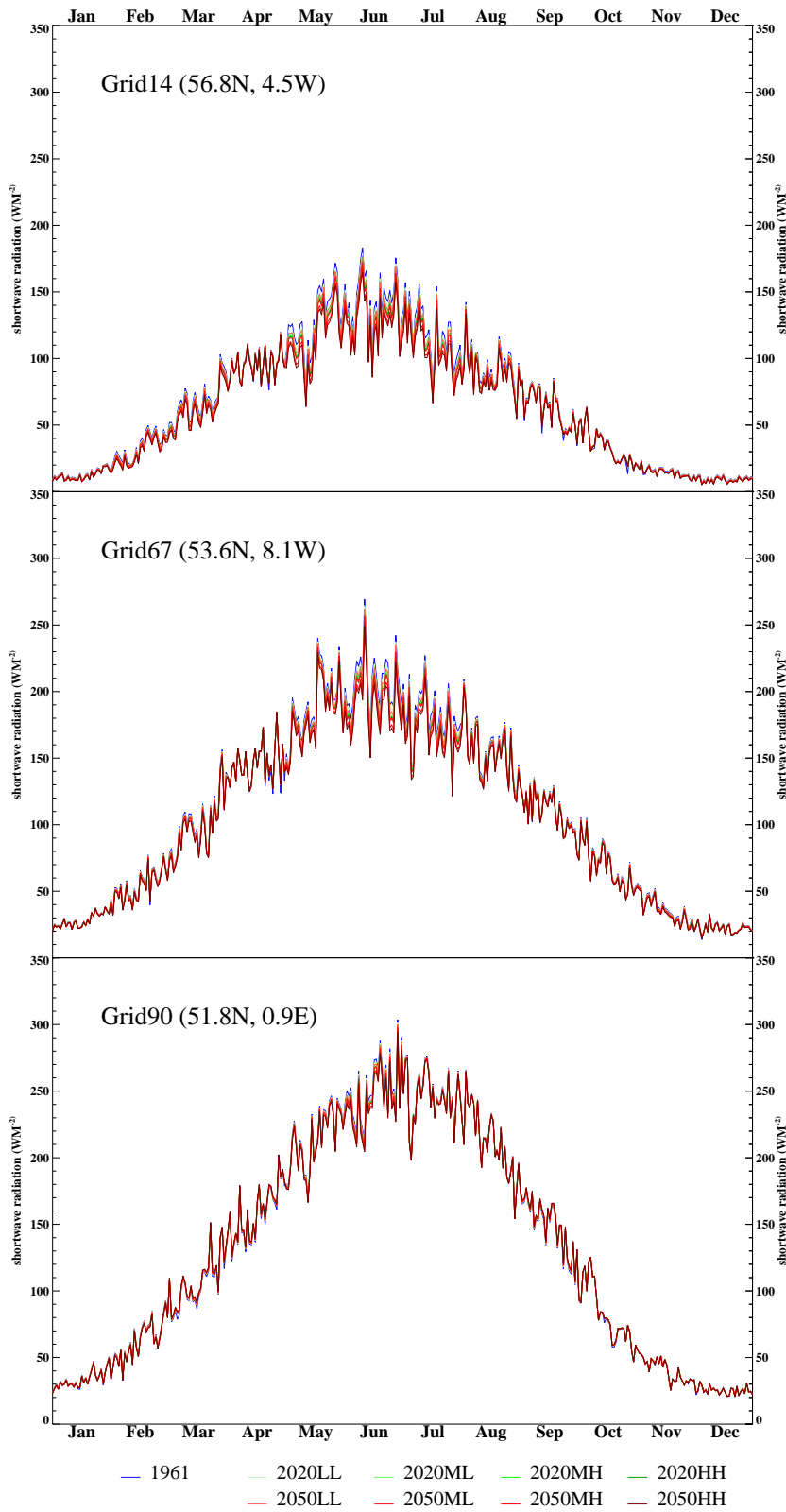


Figure F.1: As Figure A.1, but for mean daily total downward surface short wave radiation.

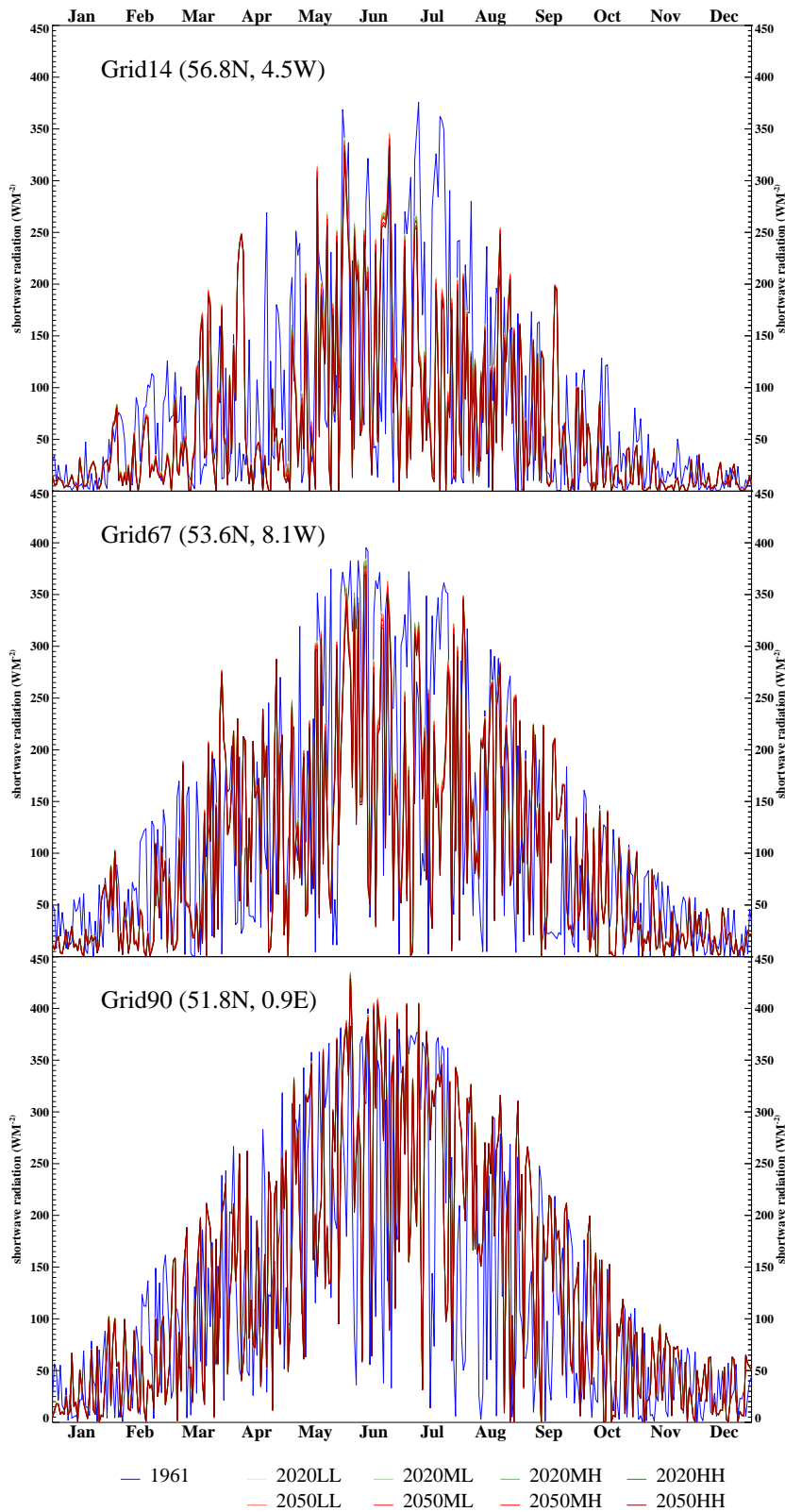


Figure F.2: As Figure A.2, but for daily total downward surface short wave radiation.

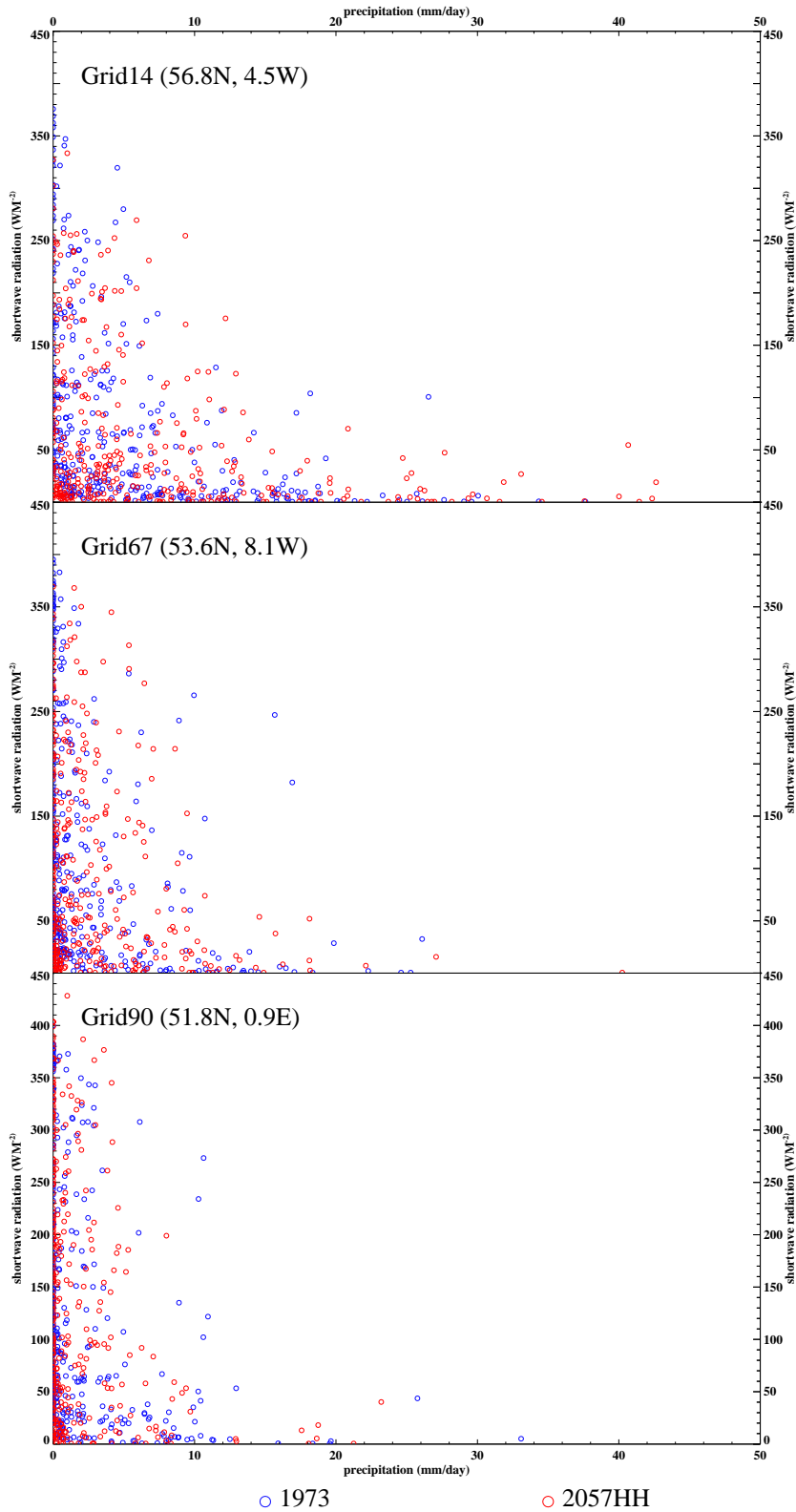


Figure F.3: As Figure C.3, but for daily mean total downward surface short wave radiation (Wm^{-2}) and precipitation (mm/day).

Table F.4: Average monthly, seasonal and annual total downward surface short wave radiation in Wm^{-2} for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

Total downward short wave radiation (WM^{-2})

Grid14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	13.09	33.34	68.04	95.35	129.47	143.41	120.92	94.29	63.47	34.20	15.20	9.88	18.77	97.62	119.54	37.62	68.39
2020LL	12.84	32.44	66.32	95.43	125.54	139.91	117.60	92.98	63.75	34.58	15.11	9.55	18.28	95.76	116.83	37.81	67.17
2020ML	12.59	31.60	65.00	95.13	122.68	136.93	114.94	91.58	63.28	34.38	14.87	9.31	17.83	94.27	114.48	37.51	66.02
2020MH	12.43	31.07	64.15	94.93	120.87	135.06	113.25	90.70	62.98	34.26	14.73	9.16	17.56	93.32	113.00	37.32	65.30
2020HH	12.35	30.80	63.70	94.83	119.90	134.05	112.35	90.23	62.82	34.19	14.66	9.08	17.41	92.81	112.21	37.22	64.91
2050LL	12.64	31.79	65.28	95.19	123.30	137.59	115.52	91.89	63.38	34.42	14.92	9.36	17.93	94.59	115.00	37.58	66.27
2050ML	12.26	30.52	63.25	94.72	118.93	133.04	111.45	89.77	62.67	34.12	14.58	9.01	17.26	92.30	111.42	37.12	64.53
2050MH	11.90	29.34	61.38	94.30	114.91	128.80	107.69	87.81	62.00	33.83	14.26	8.68	16.64	90.19	108.10	36.70	62.91
2050HH	11.70	28.70	60.34	94.05	112.68	126.45	105.63	86.74	61.62	33.68	14.08	8.50	16.30	89.02	106.27	36.46	62.01
Grid67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	28.29	54.61	101.59	144.36	190.30	208.47	182.98	157.16	111.58	70.33	36.95	22.59	35.16	145.42	182.87	72.96	109.10
2020LL	28.25	54.35	100.60	145.40	188.08	203.93	179.68	156.01	111.40	69.93	36.44	22.67	35.09	144.69	179.87	72.59	108.06
2020ML	28.10	53.88	99.70	145.43	186.33	200.60	177.05	155.01	110.97	69.44	35.96	22.51	34.83	143.82	177.55	72.12	107.08
2020MH	28.00	53.59	99.13	145.46	185.22	198.49	175.40	154.37	110.69	69.13	35.64	22.41	34.67	143.27	176.09	71.82	106.46
2020HH	27.95	53.42	98.82	145.48	184.62	197.36	174.51	154.04	110.54	68.96	35.48	22.35	34.57	142.98	175.30	71.66	106.13
2050LL	28.12	53.98	99.90	145.42	186.72	201.33	177.63	155.23	111.06	69.55	36.06	22.54	34.88	144.01	178.07	72.22	107.30
2050ML	27.90	53.26	98.52	145.49	184.03	196.22	173.62	153.69	110.40	68.80	35.31	22.30	34.49	142.68	174.51	71.50	105.79
2050MH	27.69	52.59	97.24	145.55	181.52	191.47	169.88	152.25	109.78	68.09	34.62	22.07	34.11	141.44	171.20	70.83	104.39
2050HH	27.57	52.21	96.52	145.59	180.13	188.82	167.79	151.45	109.43	67.70	34.24	21.94	33.91	140.74	169.35	70.46	103.62
Grid90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	33.76	62.39	105.03	157.43	214.85	252.44	247.49	212.81	147.81	81.93	40.97	25.31	40.49	159.10	237.58	90.24	131.85
2020LL	33.79	62.22	106.16	158.31	214.02	250.26	246.92	212.62	148.63	82.40	41.13	25.37	40.46	159.50	236.60	90.72	131.82
2020ML	33.62	61.90	106.53	158.65	213.34	248.64	246.44	212.43	149.09	82.45	41.09	25.28	40.27	159.51	235.84	90.88	131.62
2020MH	33.50	61.70	106.77	158.85	212.90	247.61	246.14	212.31	149.40	82.49	41.05	25.24	40.15	159.51	235.36	90.98	131.50
2020HH	33.44	61.59	106.90	158.97	212.66	247.06	245.98	212.24	149.56	82.50	41.04	25.20	40.08	159.51	235.09	91.03	131.43
2050LL	33.66	61.98	106.44	158.57	213.48	248.99	246.55	212.47	149.00	82.44	41.09	25.30	40.31	159.50	236.00	90.84	131.66
2050ML	33.38	61.48	107.02	159.09	212.44	246.51	245.82	212.18	149.71	82.52	41.02	25.17	40.01	159.52	234.84	91.08	131.36
2050MH	33.13	61.02	107.57	159.57	211.45	244.18	245.13	211.91	150.38	82.58	40.95	25.05	39.73	159.53	233.74	91.31	131.08
2050HH	32.98	60.76	107.86	159.83	210.90	242.88	244.75	211.75	150.76	82.63	40.91	24.98	39.58	159.53	233.13	91.43	130.92

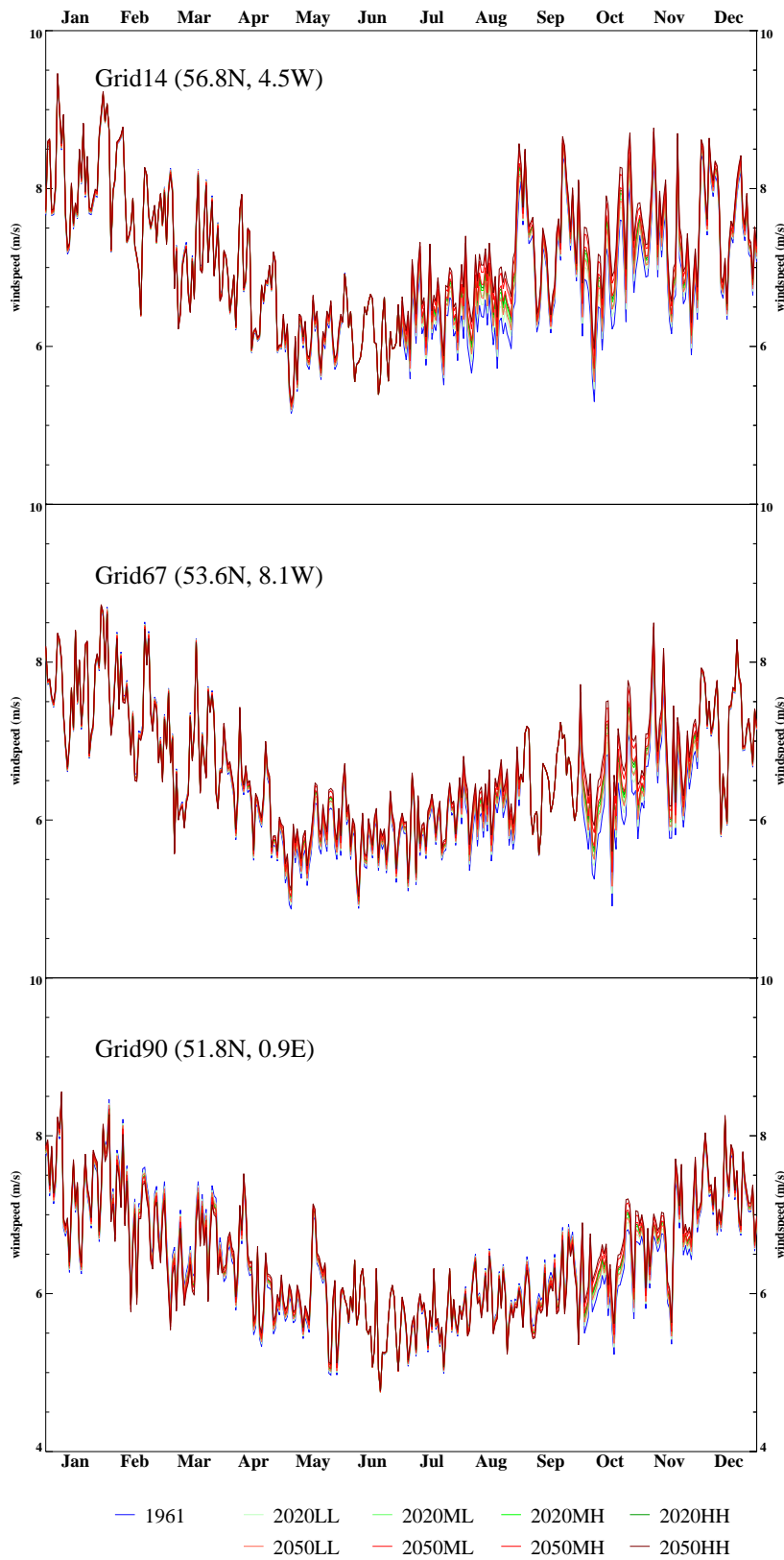


Figure G.1: As Figure A.1, but for mean daily 10 metre wind speed.

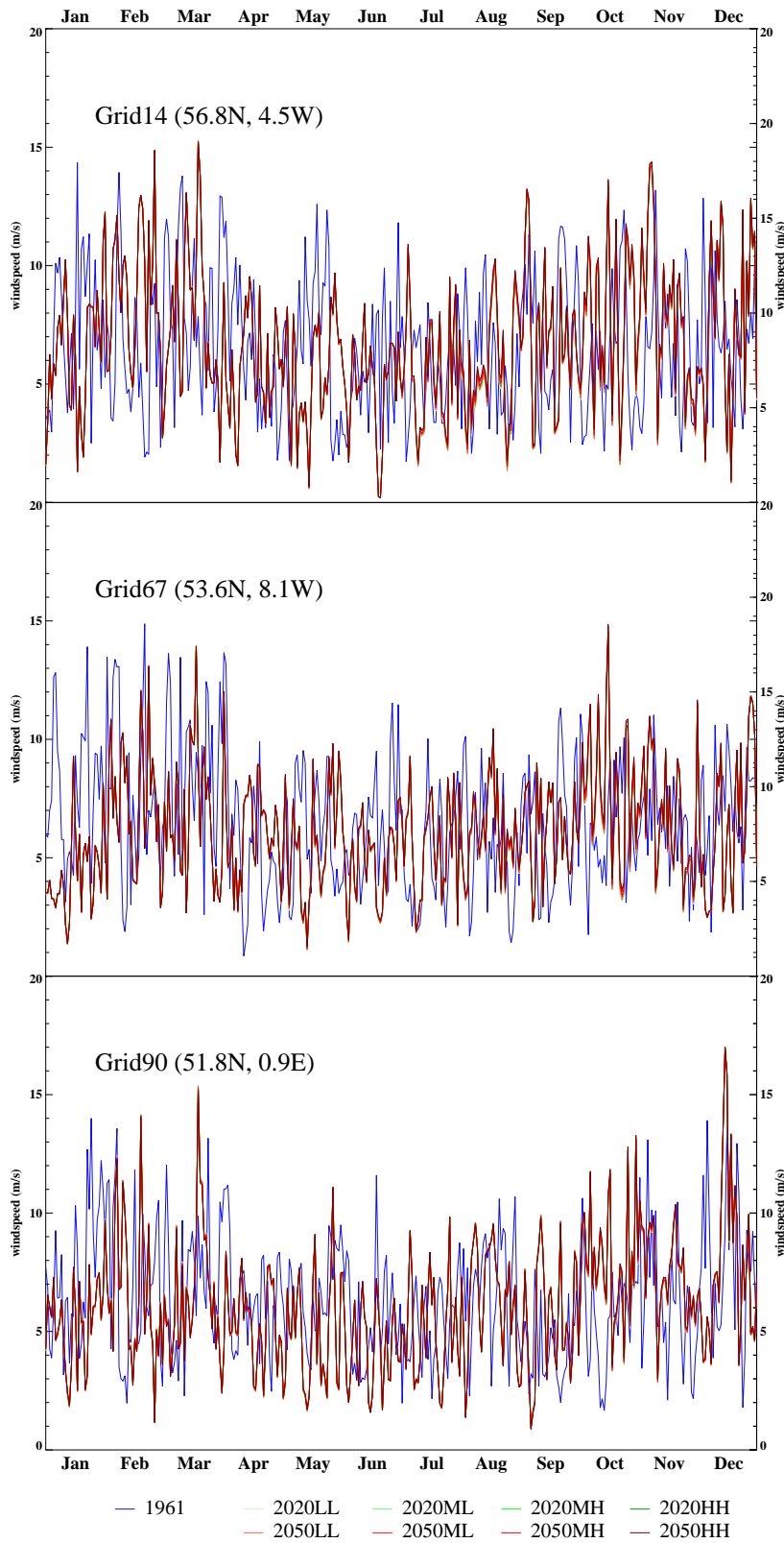


Figure G.2: As Figure A.2, but for daily 10 metre wind speed.

Table G.3: Average monthly, seasonal and annual 10 metre wind speed in ms^{-1} for the 30-year baseline (1961BA) and for the eight 20-year scenario series. LL=low, ML=medium-low, MH=medium-high and HH=high for the three grid boxes.

10 metre Wind Speed (m/s)

Grid14																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	8.12	7.83	7.28	6.70	5.96	6.16	6.23	6.34	7.25	6.72	7.01	7.53	7.83	6.65	6.24	6.99	6.93
2020LL	8.14	7.83	7.27	6.71	5.99	6.16	6.32	6.49	7.30	6.87	7.11	7.58	7.85	6.66	6.32	7.09	6.98
2020ML	8.15	7.84	7.25	6.72	6.02	6.16	6.38	6.60	7.34	6.98	7.18	7.61	7.87	6.66	6.38	7.17	7.02
2020MH	8.16	7.84	7.25	6.73	6.03	6.16	6.42	6.67	7.36	7.06	7.22	7.63	7.88	6.67	6.41	7.21	7.04
2020HH	8.17	7.85	7.24	6.73	6.04	6.16	6.44	6.71	7.38	7.09	7.25	7.64	7.89	6.67	6.43	7.24	7.06
2050LL	8.15	7.84	7.26	6.72	6.01	6.16	6.36	6.58	7.33	6.96	7.16	7.60	7.86	6.66	6.37	7.15	7.01
2050ML	8.17	7.85	7.24	6.73	6.05	6.16	6.46	6.75	7.39	7.13	7.27	7.65	7.89	6.67	6.45	7.26	7.07
2050MH	8.19	7.85	7.22	6.74	6.08	6.16	6.55	6.90	7.44	7.29	7.37	7.70	7.92	6.68	6.54	7.37	7.13
2050HH	8.20	7.86	7.21	6.75	6.10	6.16	6.60	6.99	7.47	7.38	7.42	7.73	7.93	6.69	6.58	7.43	7.16
Grid67																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	7.67	7.50	6.84	6.24	5.62	5.70	5.88	6.01	6.51	6.07	6.63	7.20	7.46	6.23	5.86	6.40	6.49
2020LL	7.68	7.48	6.82	6.27	5.68	5.74	5.91	6.08	6.51	6.23	6.72	7.22	7.46	6.26	5.91	6.49	6.53
2020ML	7.69	7.47	6.81	6.29	5.72	5.77	5.94	6.14	6.51	6.34	6.79	7.22	7.46	6.27	5.95	6.55	6.56
2020MH	7.70	7.46	6.81	6.30	5.75	5.78	5.95	6.17	6.51	6.42	6.83	7.23	7.46	6.29	5.97	6.59	6.58
2020HH	7.70	7.45	6.80	6.31	5.76	5.79	5.96	6.19	6.51	6.46	6.86	7.23	7.46	6.29	5.98	6.61	6.59
2050LL	7.69	7.47	6.81	6.28	5.71	5.76	5.93	6.13	6.51	6.32	6.77	7.22	7.46	6.27	5.94	6.53	6.55
2050ML	7.70	7.45	6.80	6.32	5.78	5.80	5.97	6.21	6.51	6.50	6.88	7.24	7.46	6.30	5.99	6.63	6.60
2050MH	7.72	7.43	6.79	6.35	5.84	5.84	6.00	6.29	6.51	6.66	6.98	7.25	7.47	6.32	6.04	6.72	6.64
2050HH	7.73	7.42	6.78	6.36	5.87	5.86	6.02	6.34	6.51	6.75	7.03	7.26	7.47	6.34	6.07	6.77	6.66
Grid90																	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	DJF	MAM	JJA	SON	ANN
1961BA	7.28	7.22	6.68	6.14	5.84	5.66	5.61	5.97	6.15	6.08	6.59	7.23	7.25	6.22	5.74	6.27	6.37
2020LL	7.31	7.18	6.62	6.17	5.87	5.66	5.62	5.94	6.11	6.17	6.65	7.26	7.25	6.22	5.74	6.31	6.38
2020ML	7.33	7.14	6.58	6.20	5.90	5.66	5.64	5.93	6.08	6.24	6.69	7.28	7.25	6.23	5.74	6.34	6.39
2020MH	7.35	7.12	6.56	6.22	5.91	5.67	5.65	5.92	6.06	6.28	6.72	7.30	7.25	6.23	5.74	6.36	6.40
2020HH	7.35	7.11	6.54	6.23	5.92	5.67	5.65	5.91	6.05	6.30	6.74	7.30	7.26	6.23	5.74	6.36	6.40
2050LL	7.33	7.15	6.59	6.20	5.89	5.66	5.63	5.93	6.09	6.22	6.68	7.28	7.25	6.23	5.74	6.33	6.39
2050ML	7.36	7.10	6.53	6.24	5.93	5.67	5.65	5.91	6.05	6.33	6.75	7.31	7.26	6.23	5.74	6.37	6.40
2050MH	7.39	7.05	6.47	6.28	5.96	5.67	5.67	5.89	6.01	6.42	6.82	7.34	7.26	6.24	5.74	6.42	6.42
2050HH	7.41	7.03	6.44	6.30	5.98	5.68	5.68	5.87	5.98	6.47	6.85	7.36	7.27	6.24	5.74	6.44	6.42

Table G.4: Probability of daily 10-metre wind speed exceeding 10 ms^{-1} for each month of the 30 years of the baseline (1961BA) and for the 20 years of the eight scenario series for the three grid boxes.

P (Wind Speed > 10 ms^{-1})

Grid 14												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.289	0.244	0.184	0.109	0.053	0.064	0.059	0.091	0.167	0.137	0.169	0.224
2020LL	0.263	0.248	0.197	0.113	0.063	0.065	0.075	0.103	0.167	0.163	0.161	0.221
2020ML	0.265	0.252	0.195	0.113	0.063	0.065	0.075	0.112	0.168	0.172	0.165	0.225
2020MH	0.265	0.252	0.193	0.113	0.063	0.065	0.075	0.115	0.172	0.177	0.167	0.228
2020HH	0.265	0.252	0.192	0.113	0.065	0.065	0.077	0.118	0.172	0.181	0.168	0.230
2050LL	0.265	0.248	0.195	0.113	0.063	0.065	0.075	0.108	0.168	0.170	0.163	0.225
2050ML	0.265	0.252	0.190	0.113	0.065	0.065	0.078	0.120	0.172	0.181	0.168	0.232
2050MH	0.267	0.252	0.188	0.113	0.067	0.065	0.085	0.132	0.177	0.202	0.177	0.237
2050HH	0.267	0.255	0.188	0.113	0.067	0.065	0.092	0.135	0.181	0.214	0.184	0.244

Grid 67												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.222	0.217	0.142	0.078	0.024	0.043	0.051	0.058	0.107	0.074	0.111	0.186
2020LL	0.227	0.205	0.137	0.090	0.032	0.038	0.025	0.057	0.077	0.102	0.133	0.172
2020ML	0.227	0.205	0.133	0.092	0.035	0.040	0.027	0.065	0.077	0.107	0.137	0.172
2020MH	0.227	0.205	0.133	0.097	0.037	0.040	0.027	0.065	0.077	0.109	0.139	0.172
2020HH	0.227	0.203	0.133	0.097	0.037	0.042	0.027	0.067	0.077	0.112	0.139	0.172
2050LL	0.227	0.205	0.135	0.092	0.033	0.040	0.025	0.065	0.077	0.107	0.137	0.172
2050ML	0.227	0.203	0.132	0.097	0.040	0.042	0.027	0.068	0.077	0.112	0.139	0.172
2050MH	0.227	0.202	0.132	0.105	0.040	0.045	0.027	0.072	0.077	0.119	0.144	0.174
2050HH	0.228	0.198	0.132	0.108	0.040	0.047	0.028	0.072	0.077	0.123	0.146	0.175

Grid 90												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1961BA	0.182	0.176	0.112	0.084	0.057	0.037	0.036	0.052	0.072	0.075	0.124	0.178
2020LL	0.158	0.155	0.117	0.083	0.047	0.033	0.037	0.057	0.06	0.081	0.118	0.189
2020ML	0.163	0.153	0.117	0.083	0.05	0.033	0.037	0.055	0.06	0.088	0.119	0.189
2020MH	0.163	0.15	0.115	0.083	0.05	0.033	0.037	0.055	0.058	0.091	0.121	0.189
2020HH	0.163	0.15	0.113	0.083	0.05	0.033	0.037	0.055	0.058	0.093	0.125	0.189
2050LL	0.163	0.153	0.117	0.083	0.05	0.033	0.037	0.055	0.06	0.088	0.118	0.189
2050ML	0.165	0.15	0.113	0.083	0.05	0.033	0.037	0.055	0.058	0.096	0.125	0.189
2050MH	0.168	0.15	0.113	0.085	0.05	0.033	0.037	0.055	0.058	0.102	0.126	0.195
2050HH	0.17	0.15	0.11	0.085	0.052	0.033	0.037	0.055	0.058	0.107	0.128	0.195