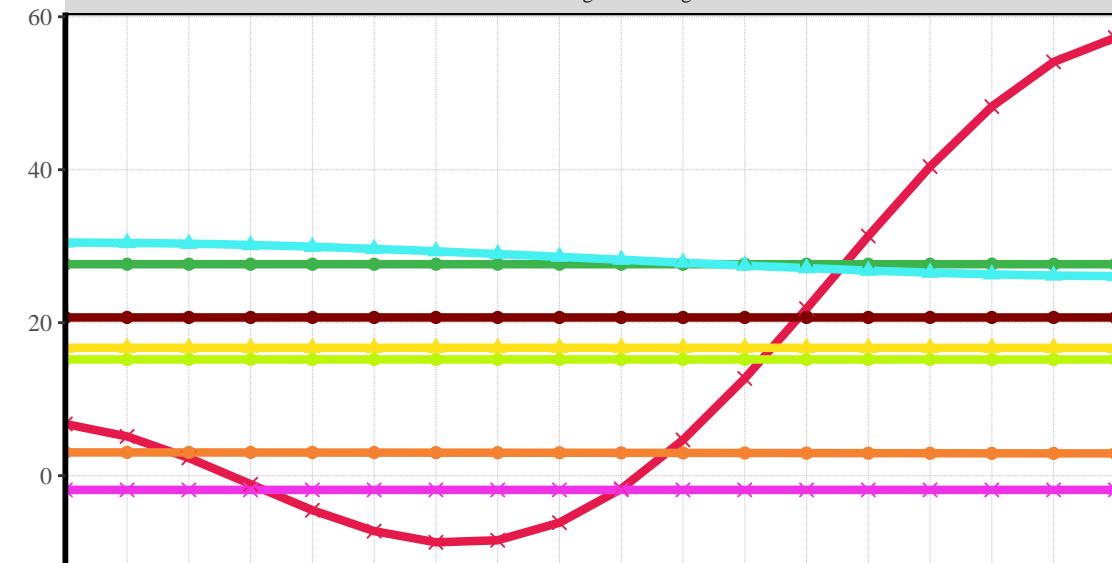
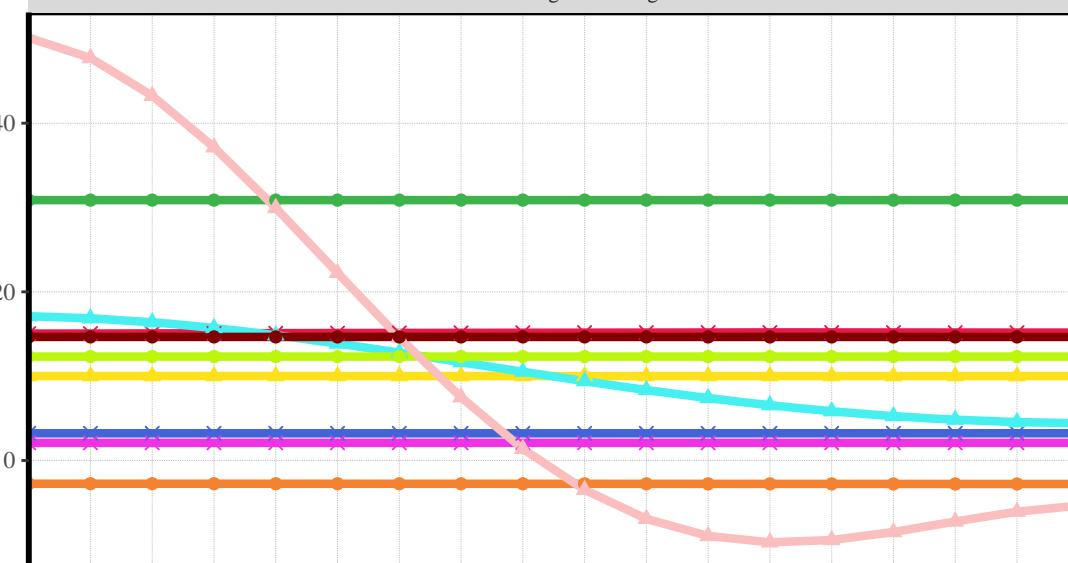


Supplementary Annexure 02: Historical Financial Performance Indicators: Growth in Fixed Assets

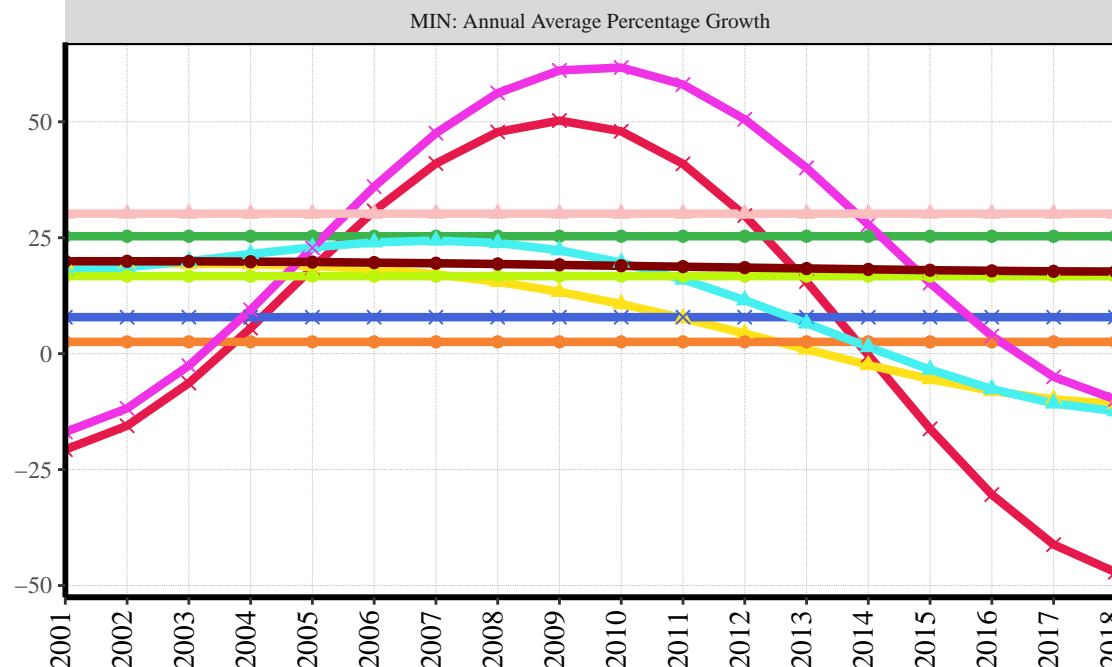
AGR: Annual Average Percentage Growth



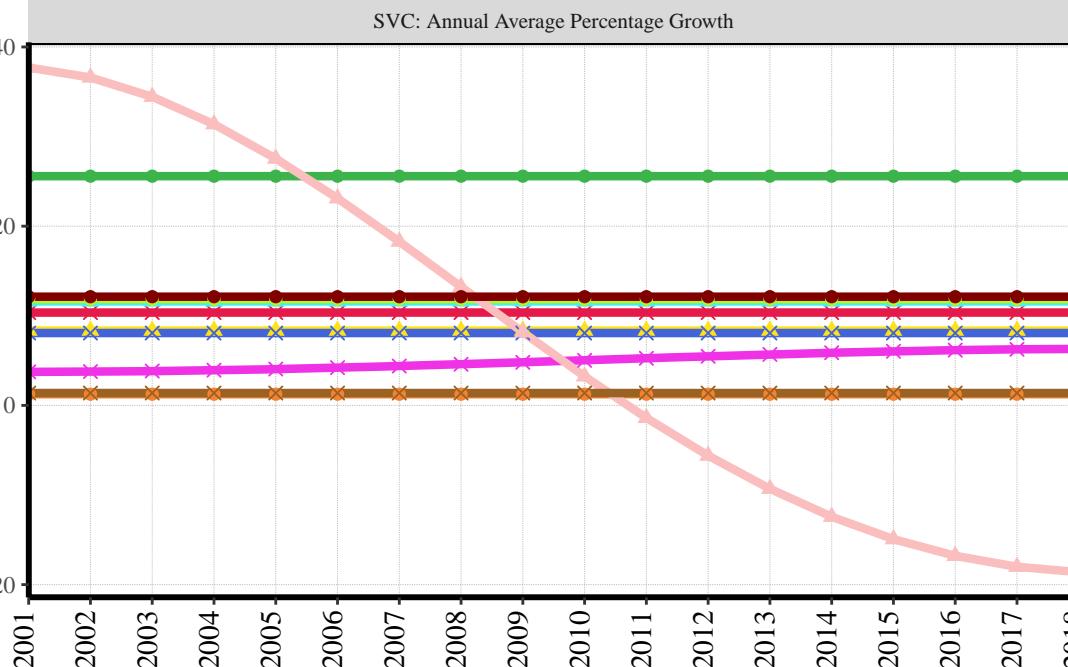
MAN: Annual Average Percentage Growth



MIN: Annual Average Percentage Growth



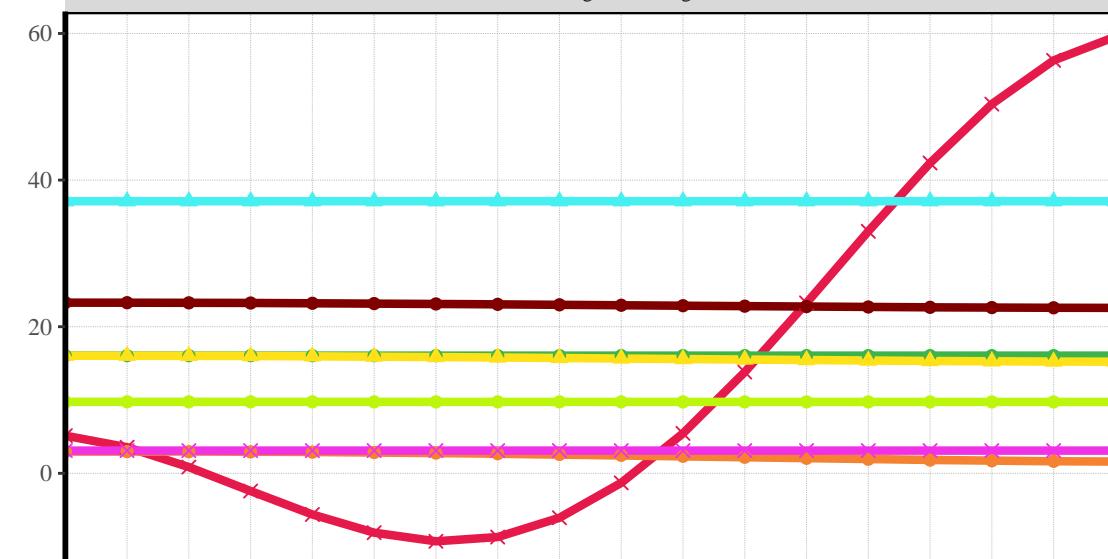
SVC: Annual Average Percentage Growth



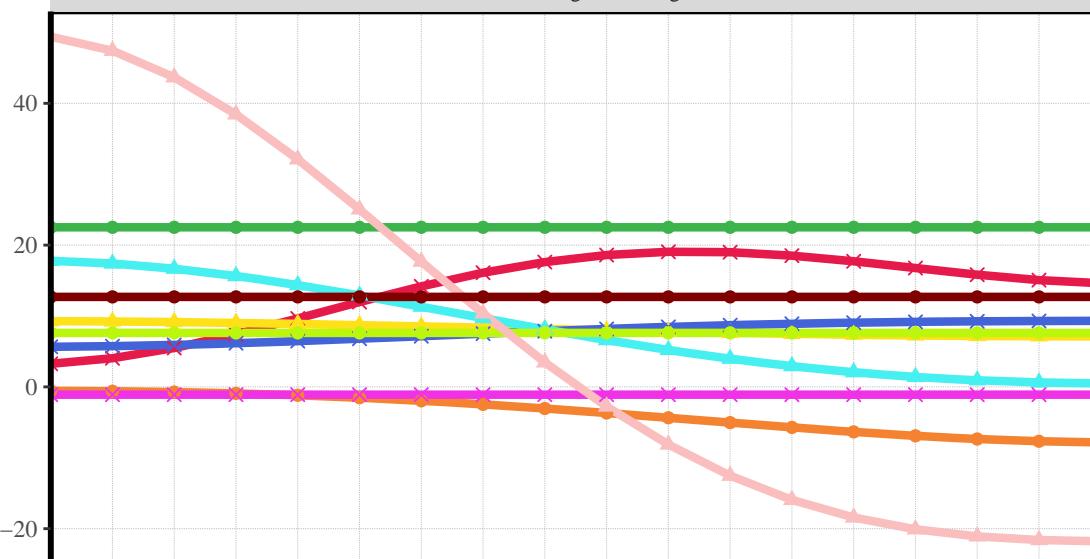
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■ EEU ■ NEU ■ SSA

Supplementary Annexure 02: Historical Financial Performance Indicators: Growth in Capital

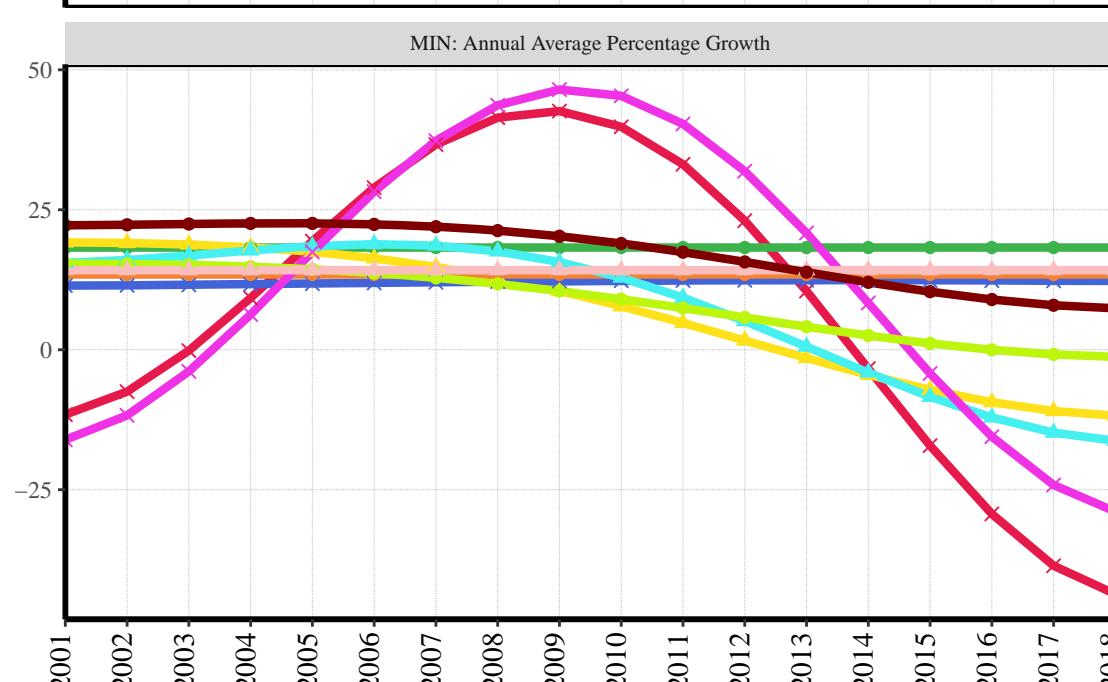
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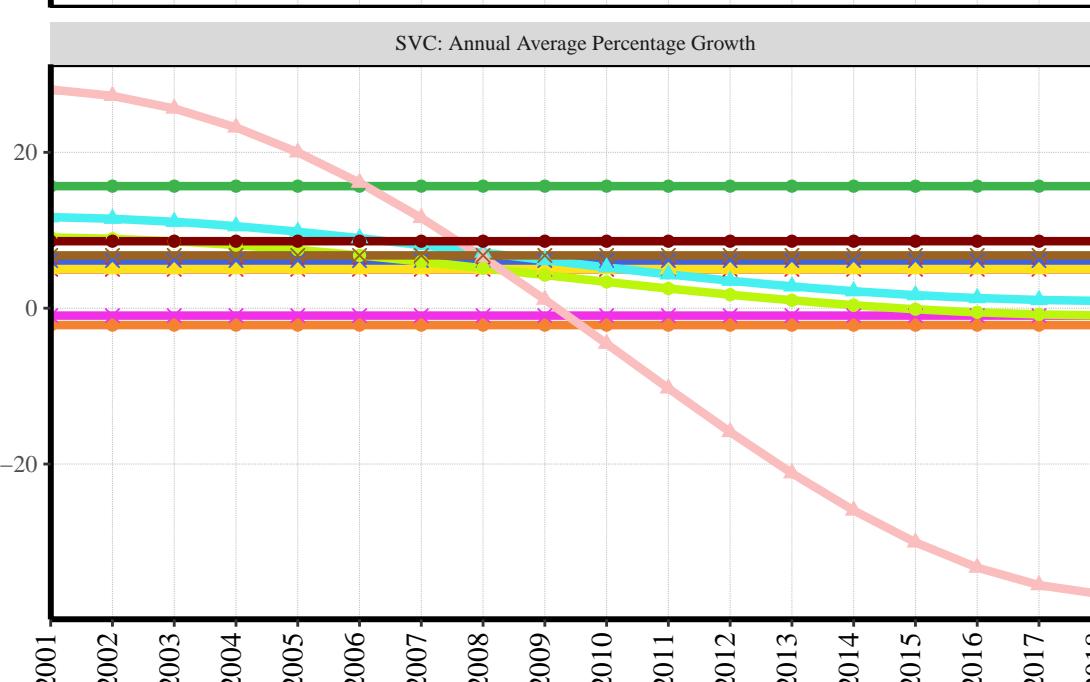
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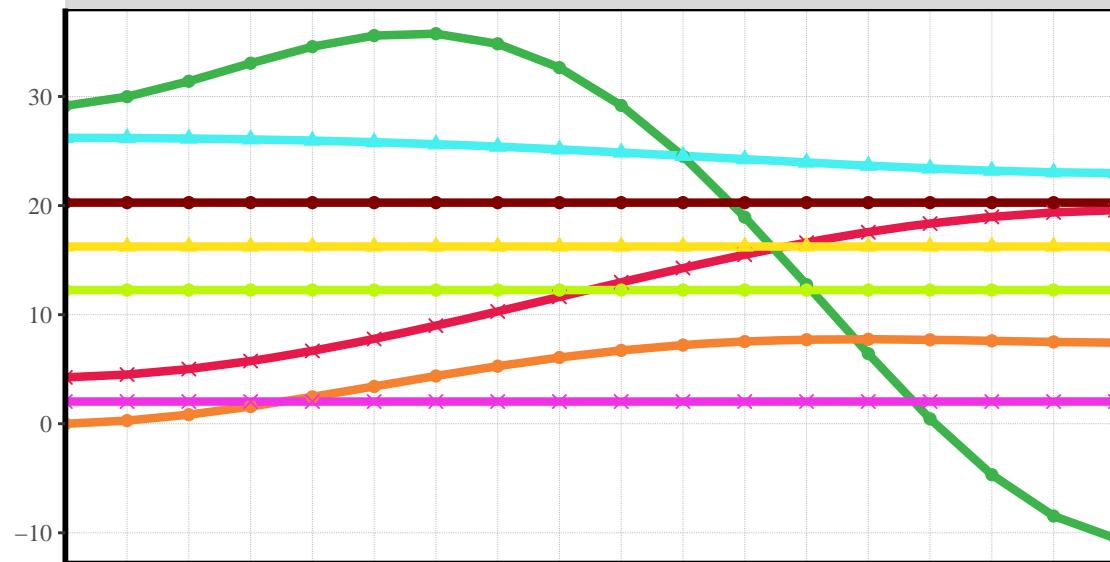


SVC: Annual Average Percentage Growth

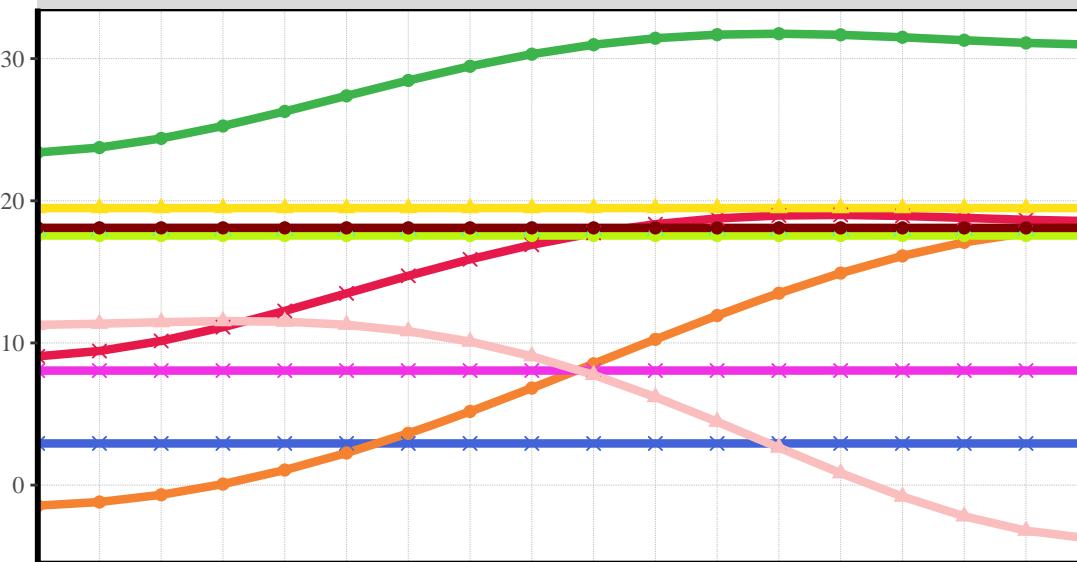


Supplementary Annexure 02: Historical Financial Performance Indicators: Growth in Labor

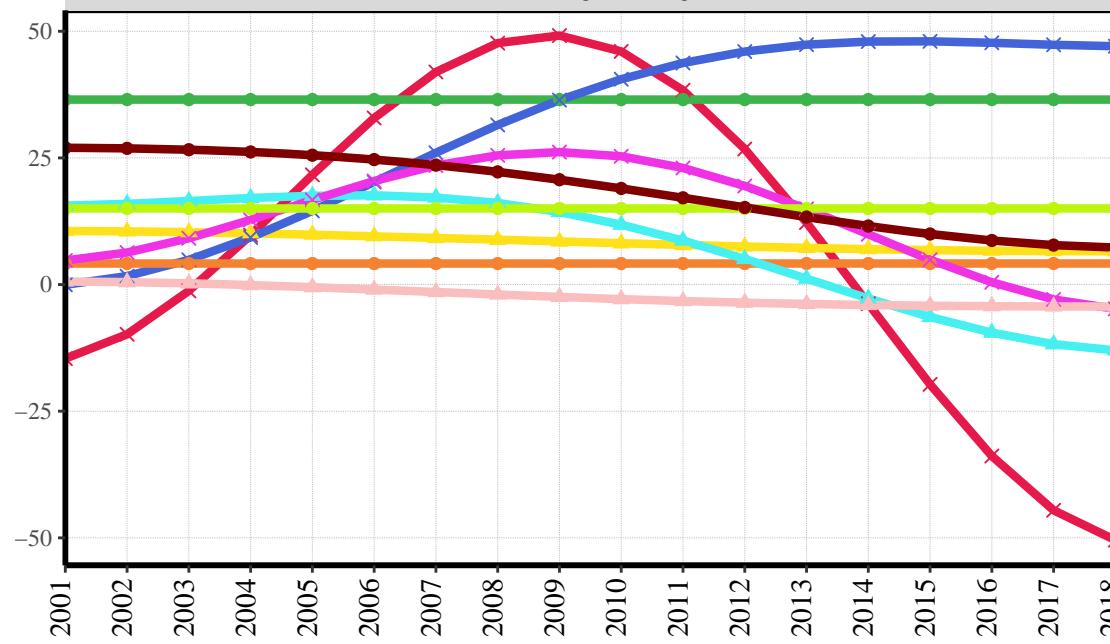
AGR: Annual Average Percentage Growth



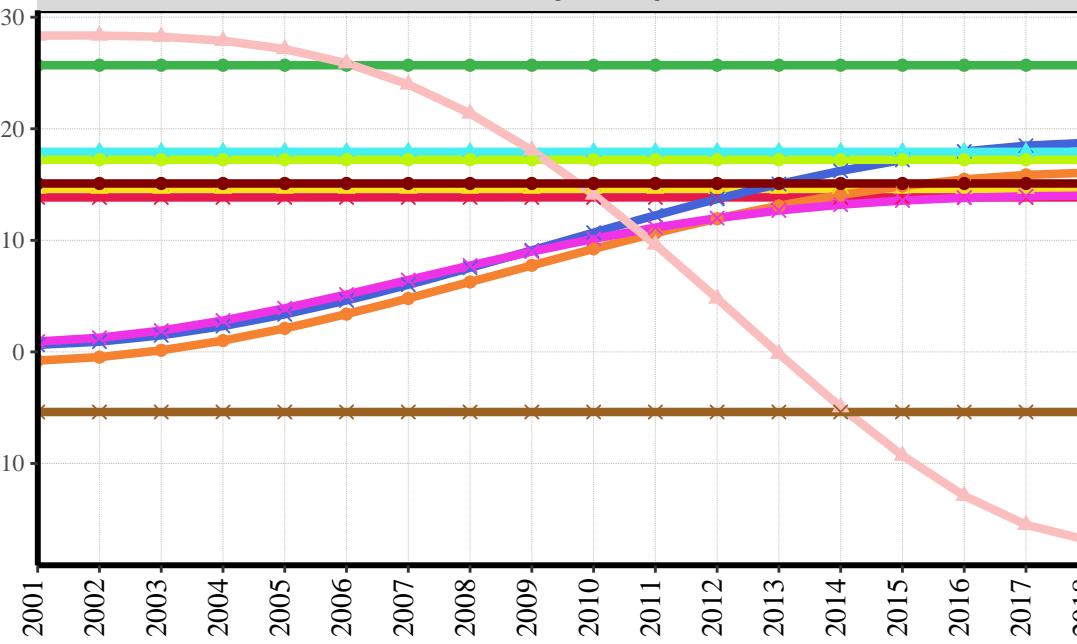
MAN: Annual Average Percentage Growth



MIN: Annual Average Percentage Growth

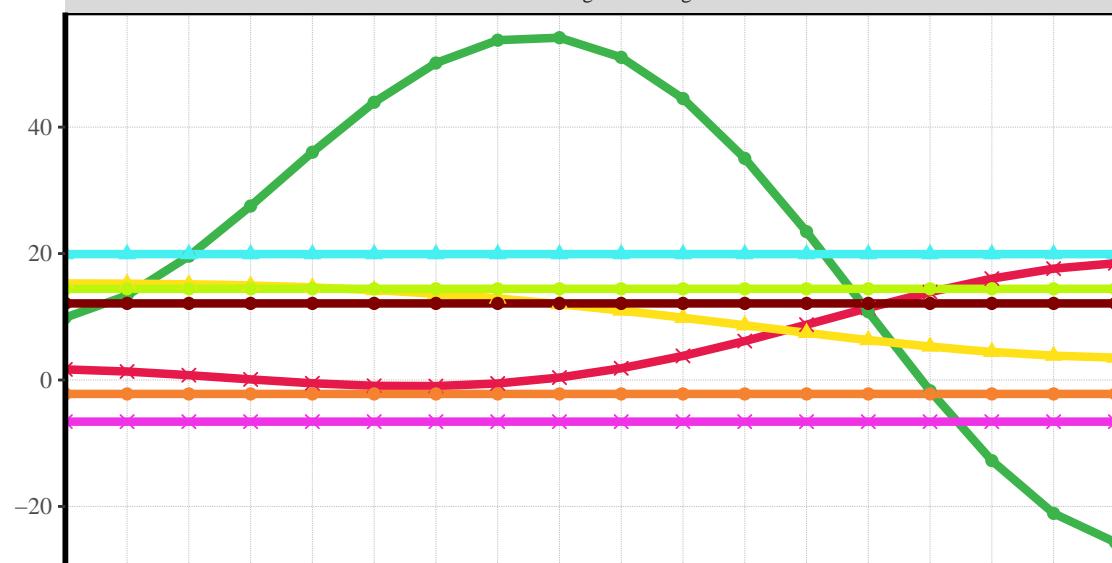


SVC: Annual Average Percentage Growth

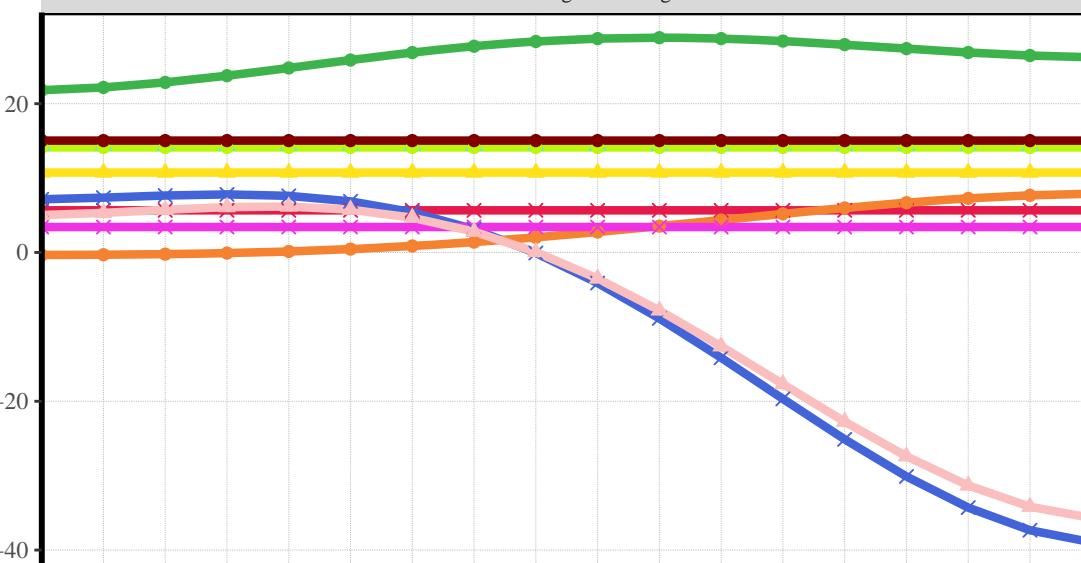


Supplementary Annexure 02: Historical Financial Performance Indicators: Growth in Material

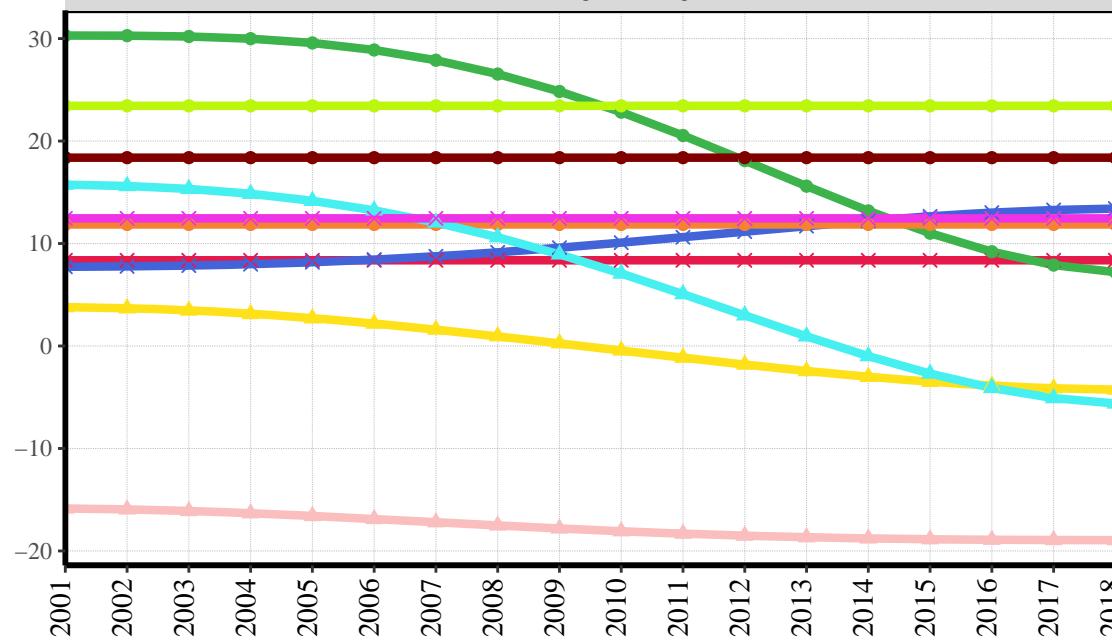
AGR: Annual Average Percentage Growth



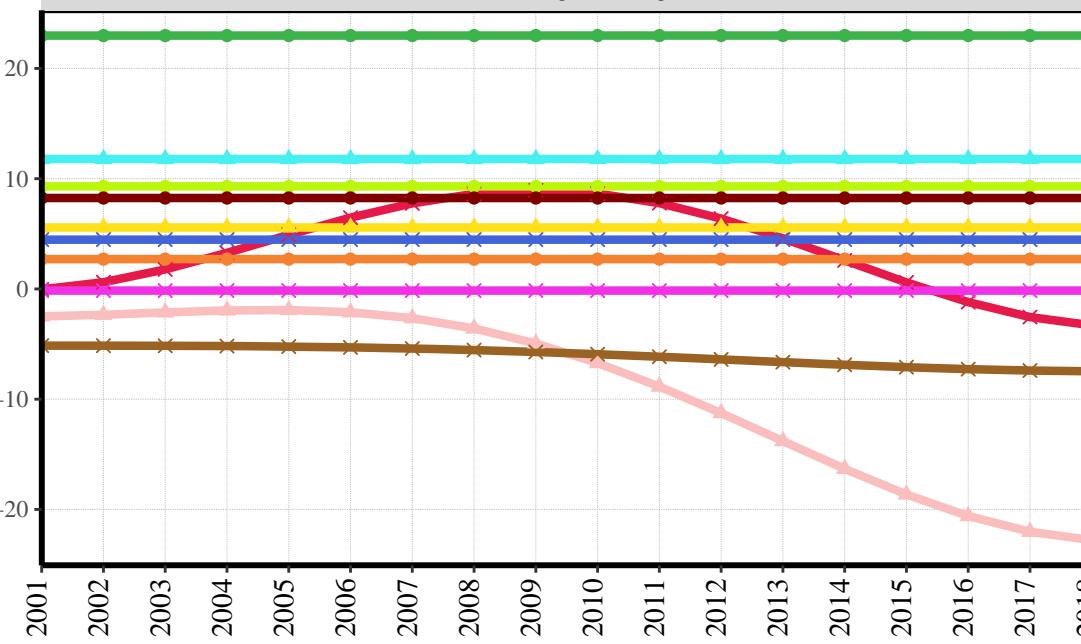
MAN: Annual Average Percentage Growth



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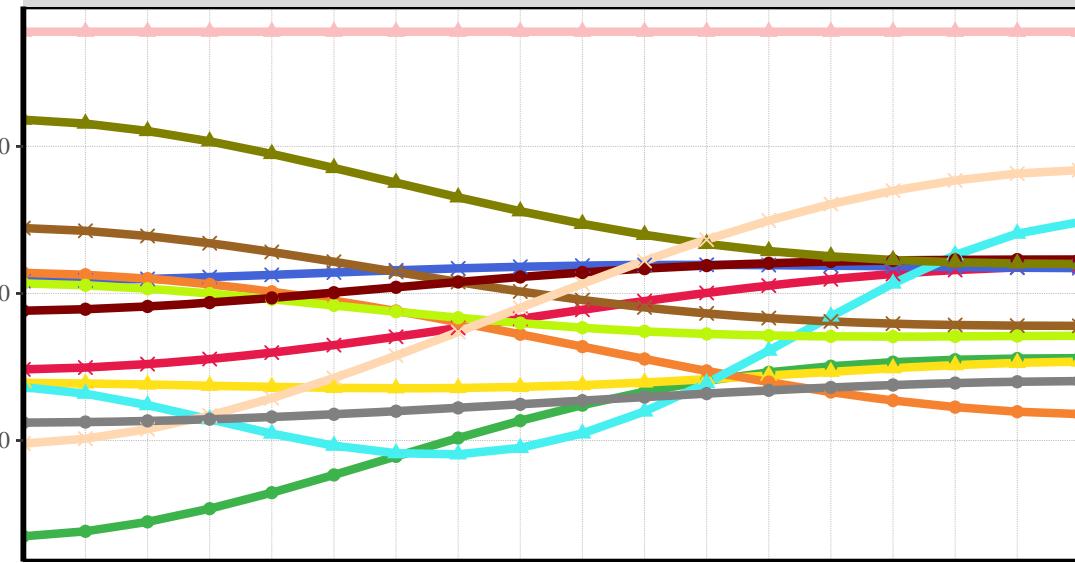


SVC: Annual Average Percentage Growth

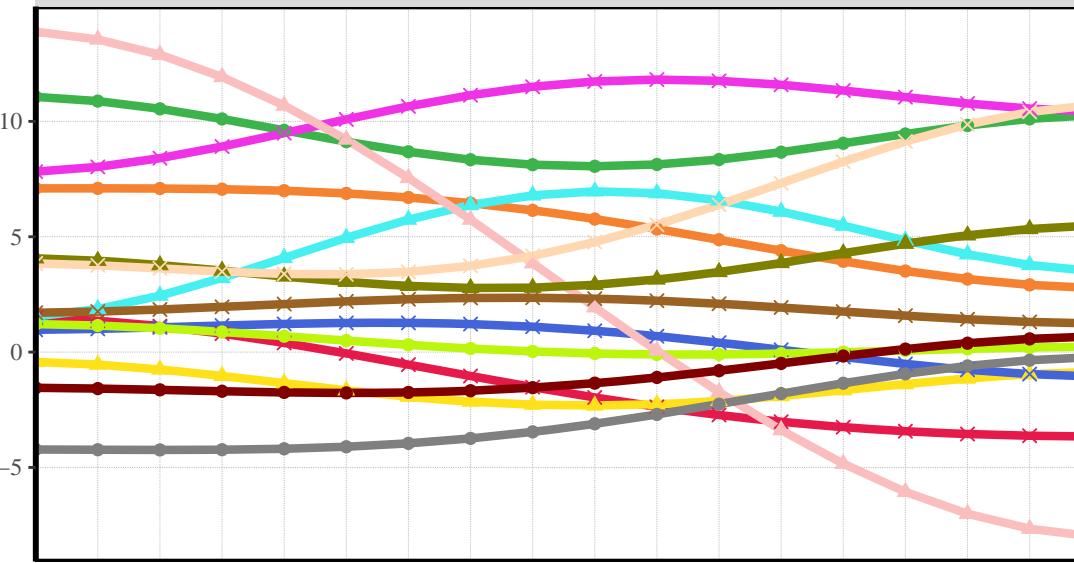


Supplementary Annexure 02: Historical Financial Performance Indicators: Growth in Total Factor Productivity

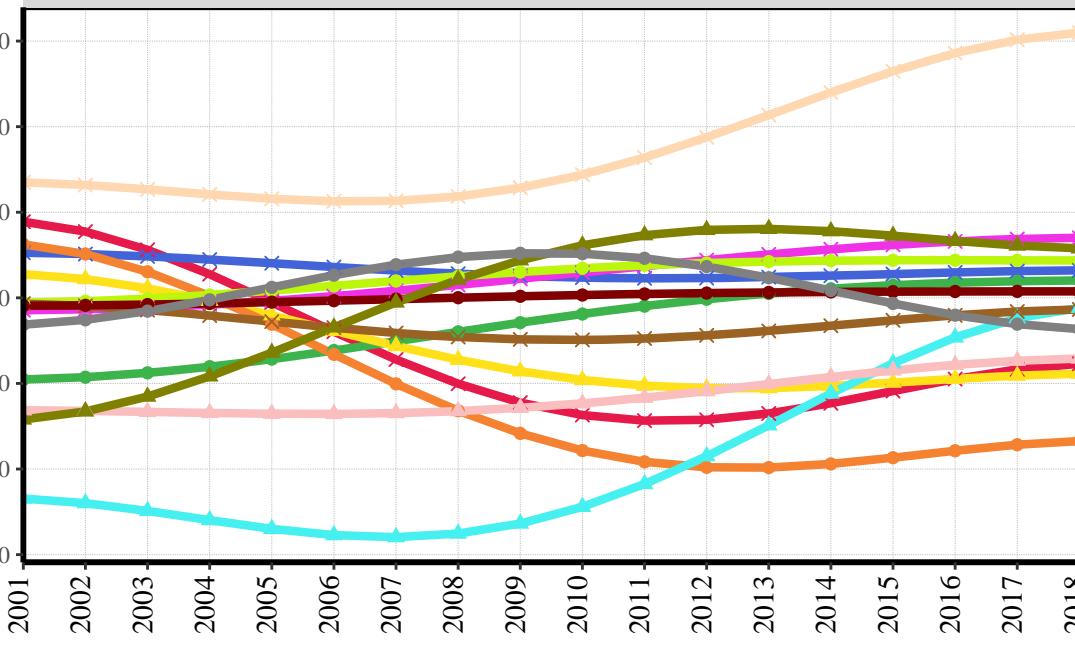
AGR: Annual Average Percentage Growth



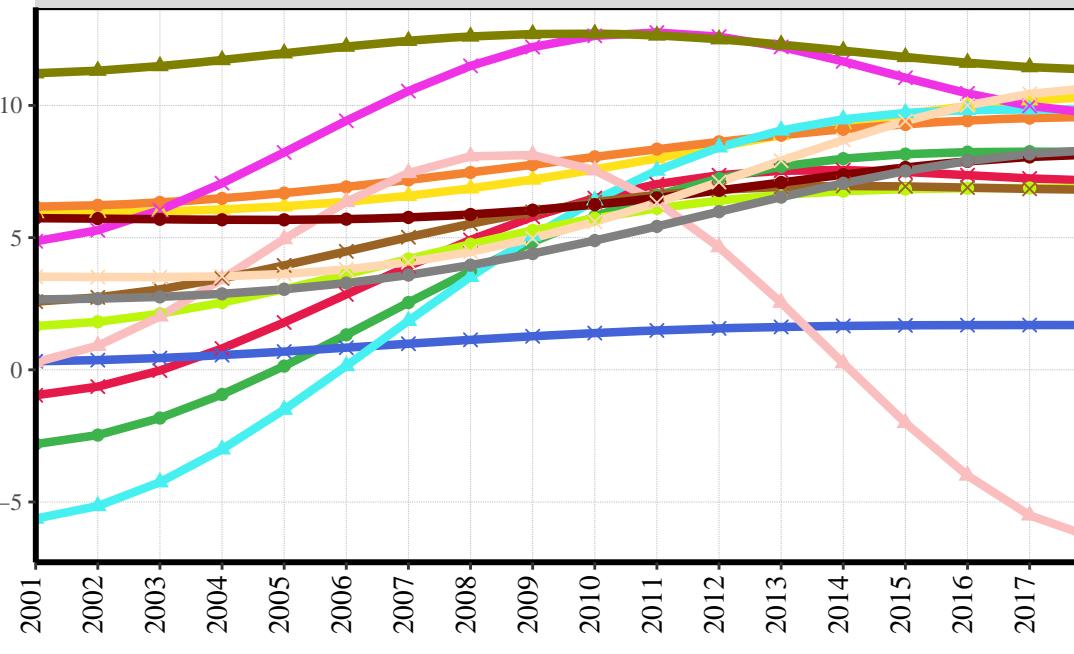
MAN: Annual Average Percentage Growth



MIN: Annual Average Percentage Growth



SVC: Annual Average Percentage Growth



★ ANZ ■ EEU ▲ NAM ▲ SEA ▲ WAS
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SUPPLEMENTARY ANNEXURE 03:

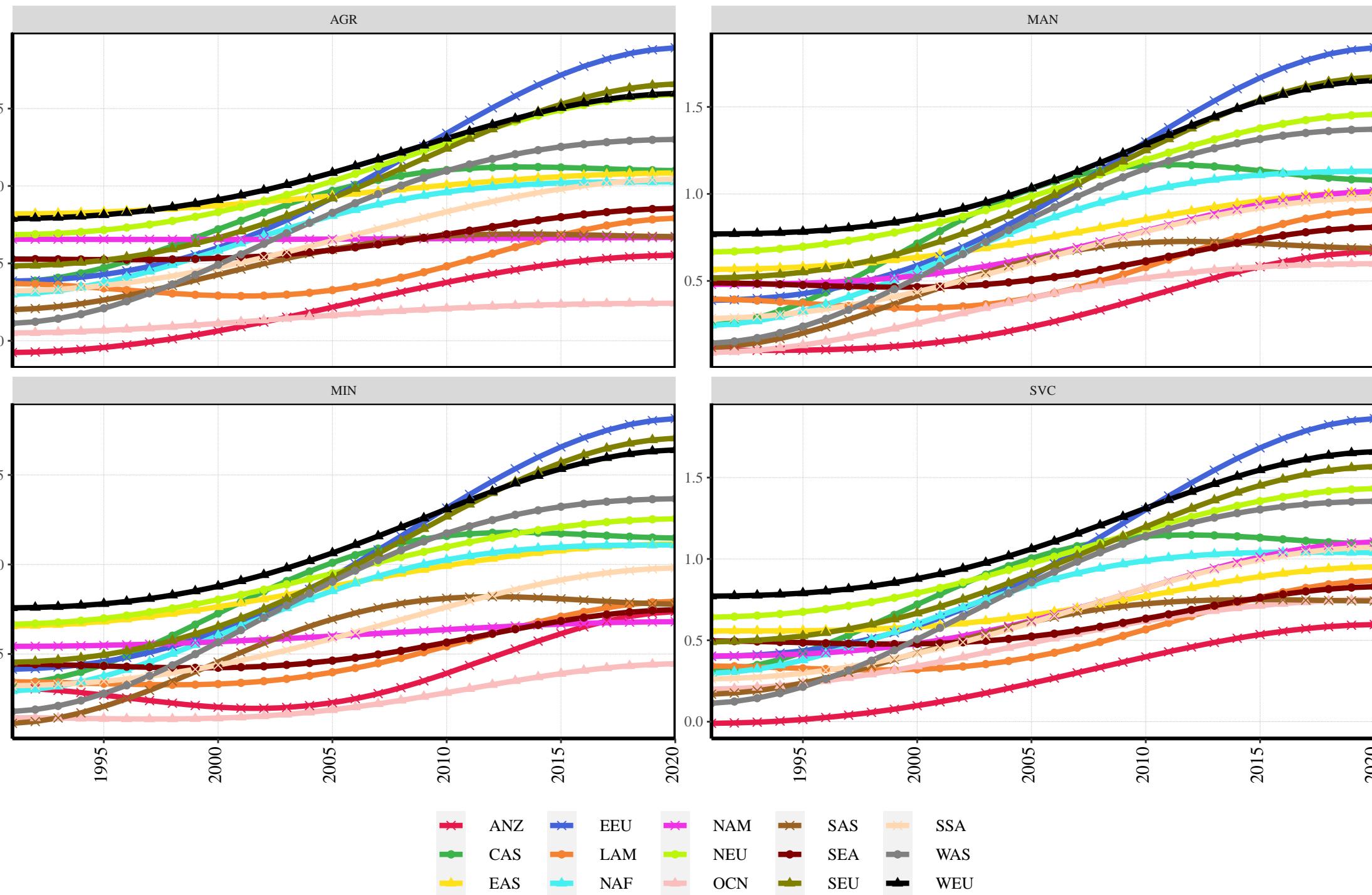
NARRATIVES OF THE SHARED SOCIOECONOMIC PATHWAYS

SSP	Narrative
SSP1	<p>Sustainability – Taking the Green Road (Low challenges to mitigation and adaptation) The world shifts gradually, but pervasively, toward a more sustainable path, emphasizing more inclusive development that respects perceived environmental boundaries. Management of the global commons slowly improves; educational and health investments accelerate the demographic transition and the emphasis on economic growth shifts toward a broader emphasis on human well-being. Driven by an increasing commitment to achieving development goals, inequality is reduced both across and within countries. Consumption is oriented toward low material growth and lower resource and energy intensity.</p>
SSP2	<p>Middle of the Road (Medium challenges to mitigation and adaptation) The world follows a path in which social, economic, and technological trends do not shift markedly from historical patterns. Development and income growth proceed unevenly, with some countries making relatively good progress while others fall short of expectations. Global and national institutions work toward but make slow progress in achieving sustainable development goals. Environmental systems experience degradation, although there are some improvements, and overall, the intensity of resource and energy use declines. Global population growth is moderate and levels off in the second half of the century. Income inequality persists or improves only slowly and challenges to reducing vulnerability to societal and environmental changes remain.</p>
SSP3	<p>Regional Rivalry – A Rocky Road (High challenges to mitigation and adaptation) A resurgent nationalism, concerns about competitiveness and security, and regional conflicts push countries to increasingly focus on domestic or, at most, regional issues. Policies shift over time to become increasingly oriented toward national and regional security issues. Countries focus on achieving energy and food security goals within their own regions at the expense of broader-based development. Investments in education and technological development decline. Economic development is slow, consumption is material-intensive, and inequalities persist or worsen over time. Population growth is low in industrialized and high in developing countries. A low international priority for addressing environmental concerns leads to strong environmental degradation in some regions.</p>
SSP4	<p>Inequality – A Road Divided (Low challenges to mitigation, high challenges to adaptation) Highly unequal investments in human capital, combined with increasing disparities in economic opportunity and political power, lead to increasing inequalities and stratification both across and within countries. Over time, a gap widens between an internationally connected society that contributes to knowledge- and capital-intensive sectors of the global economy, and a fragmented collection of lower-income, poorly educated societies that work in a labor-intensive, low-tech economy. Social cohesion degrades and conflict and unrest become increasingly common. Technology development is high in the high-tech economy and sectors. The globally connected energy sector diversifies, with investments in both carbon-intensive fuels like coal and unconventional oil, but also low-carbon energy sources. Environmental policies focus on local issues around middle and high-income areas.</p>
SSP5	<p>Fossil-fueled Development – Taking the Highway (High challenges to mitigation, low challenges to adaptation) This world places increasing faith in competitive markets, innovation, and participatory societies to produce rapid technological progress and development of human capital as the path to sustainable development. Global markets are increasingly integrated. There are also strong investments in health, education, and institutions to enhance human and social capital. At the same time, the push for economic and social development is coupled with the exploitation of abundant fossil fuel resources and the adoption of resource and energy-intensive lifestyles around the world. All these factors lead to the rapid growth of the global economy, while the global population peaks and declines in the 21st century. Local environmental problems like air pollution are successfully managed. There is faith in the ability to effectively manage social and ecological systems, including by geo-engineering if necessary.</p>

Source: Riahi et al (2017).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Temperature

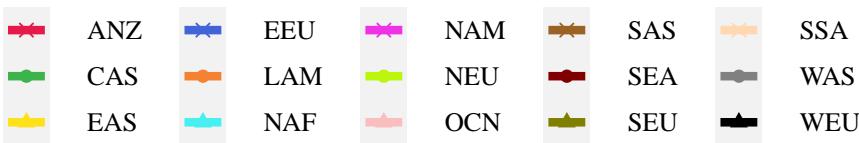
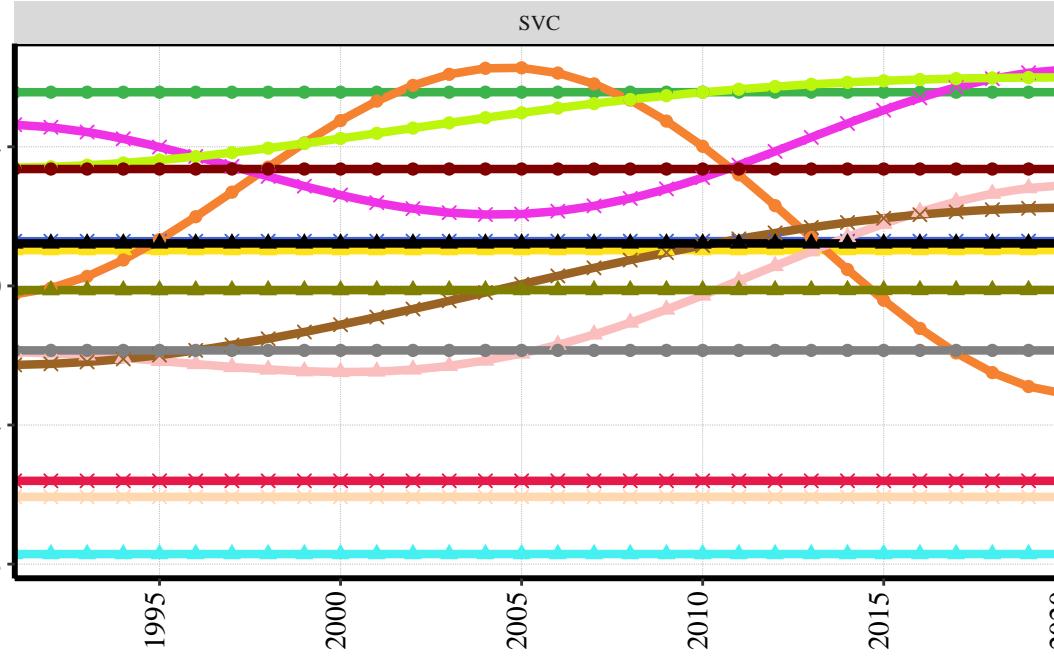
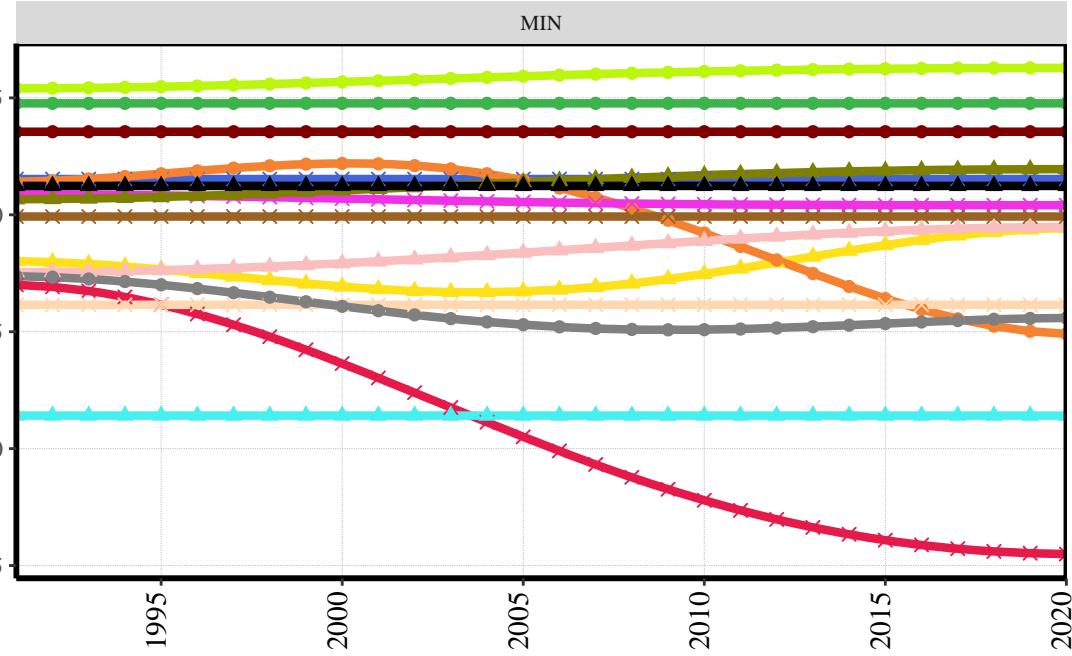
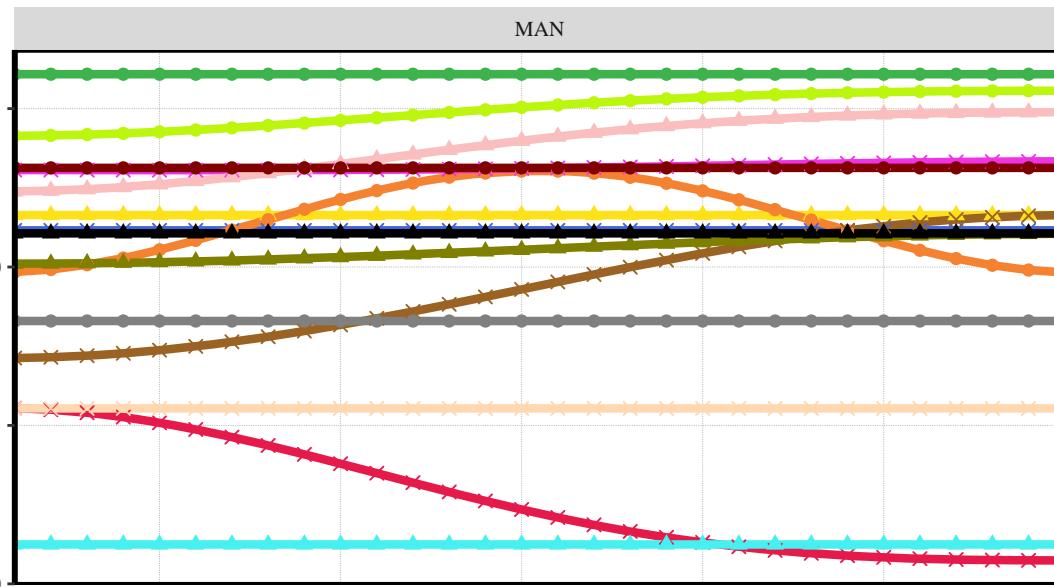
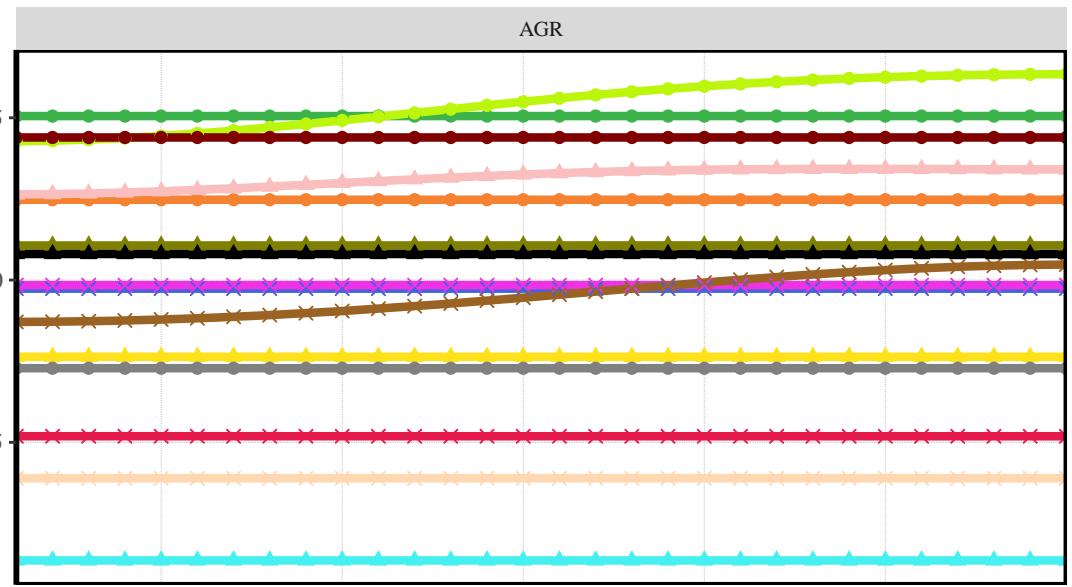
Average Annual Deviation from the 1961–90 Baseline (Degrees Centigrade)



Source: Constructed by the Authors using Orbis Data (2022).

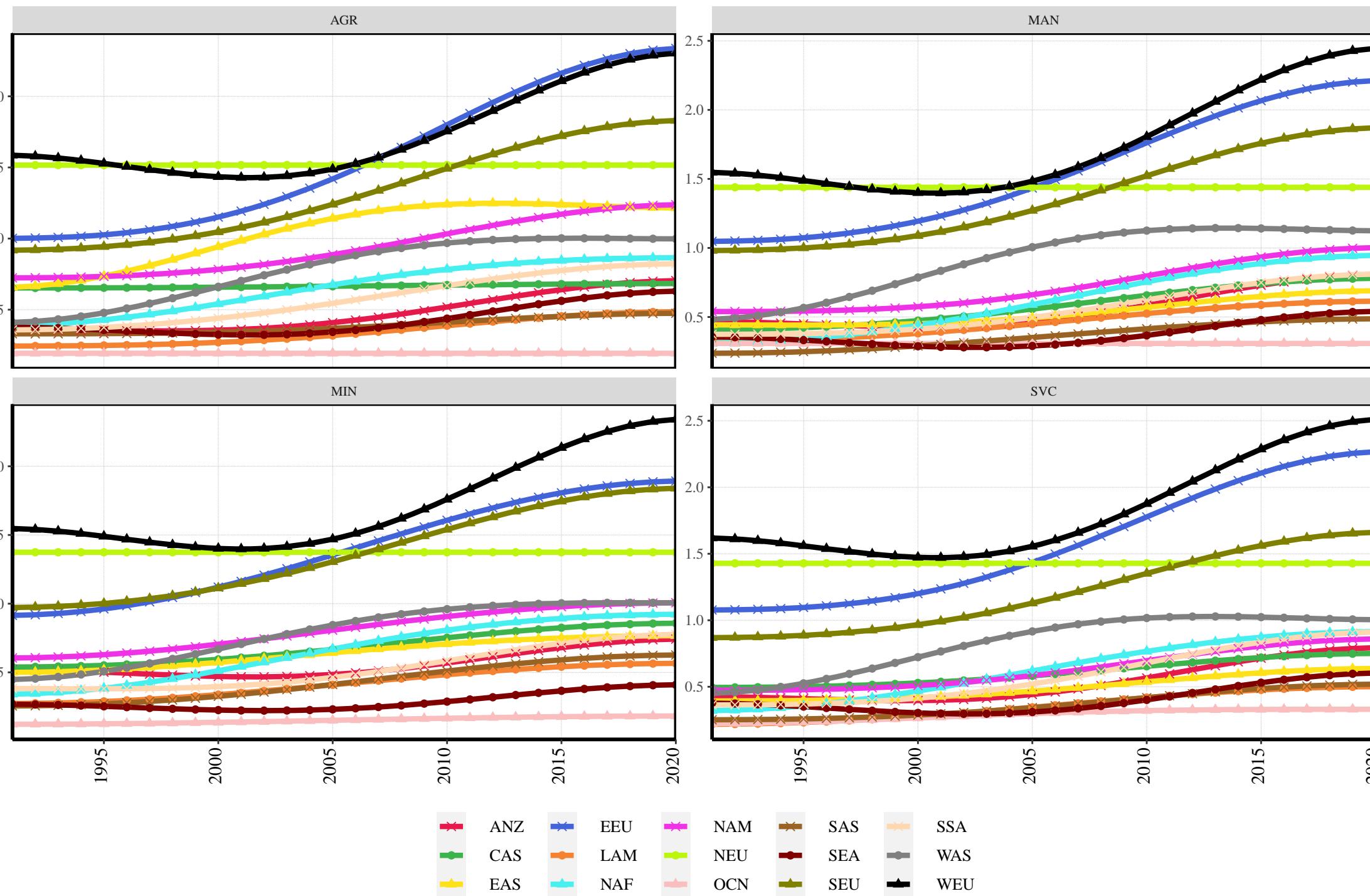
Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Precipitation

Average Annual Percentage Deviation from the 1961–90 Baseline



Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Warm Conditions during the Day

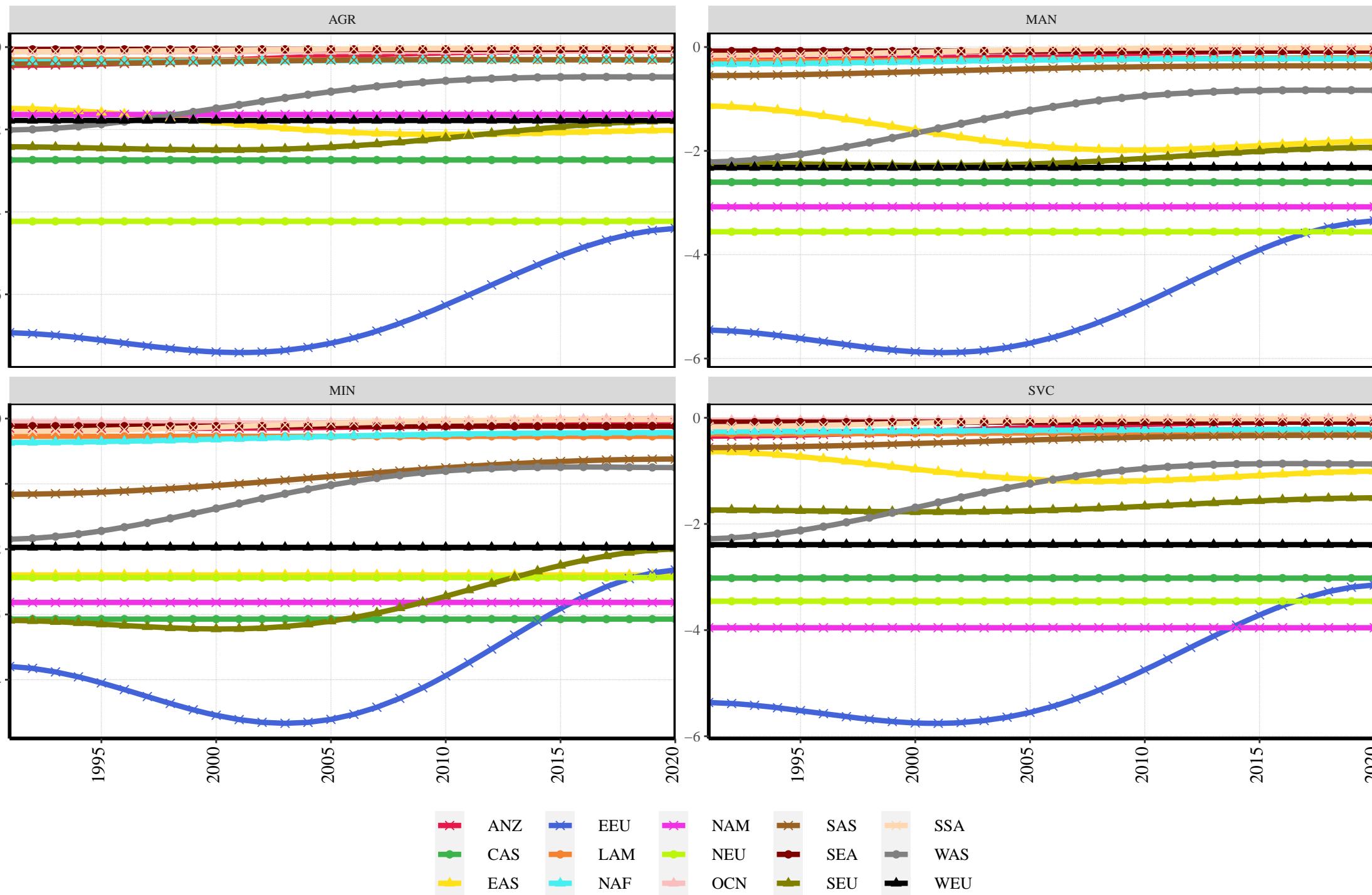
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Cold Conditions during the Day

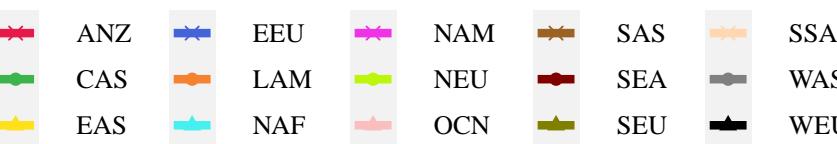
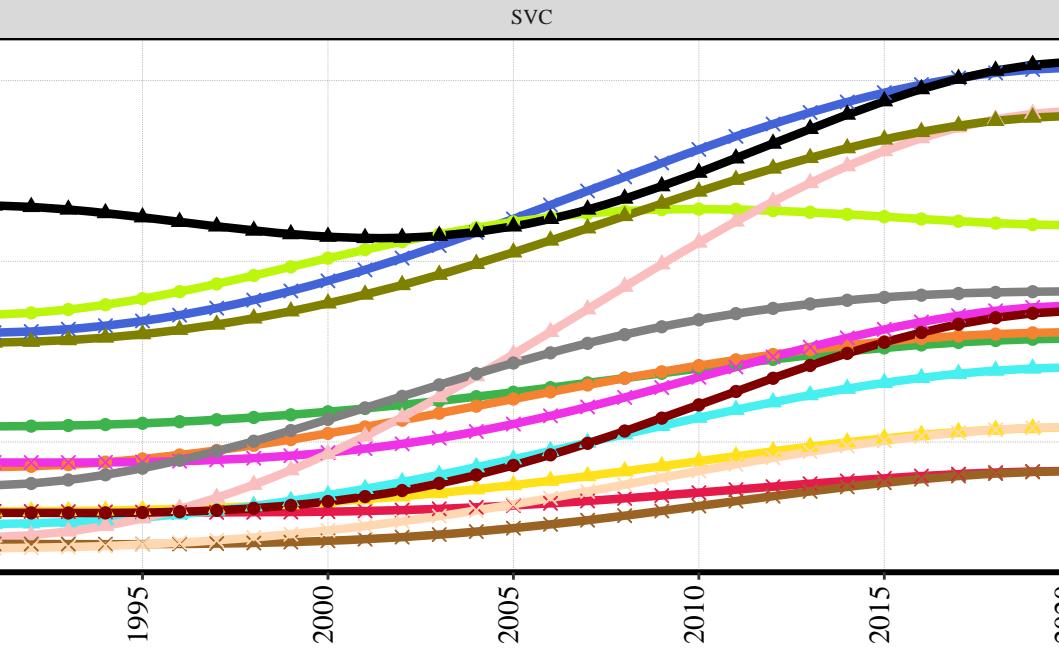
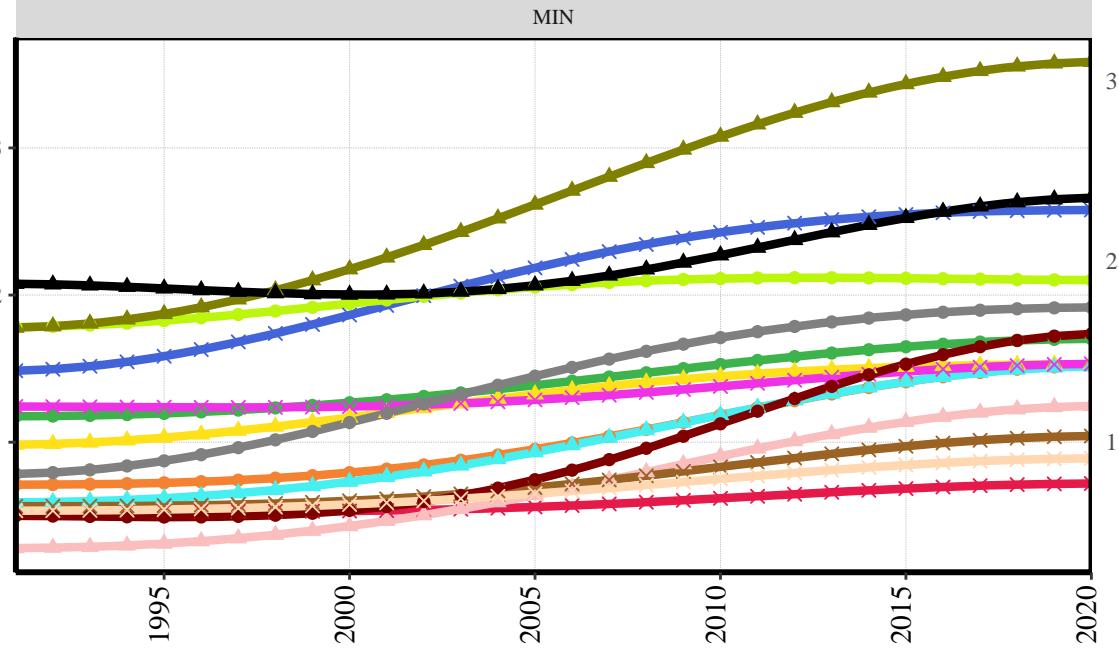
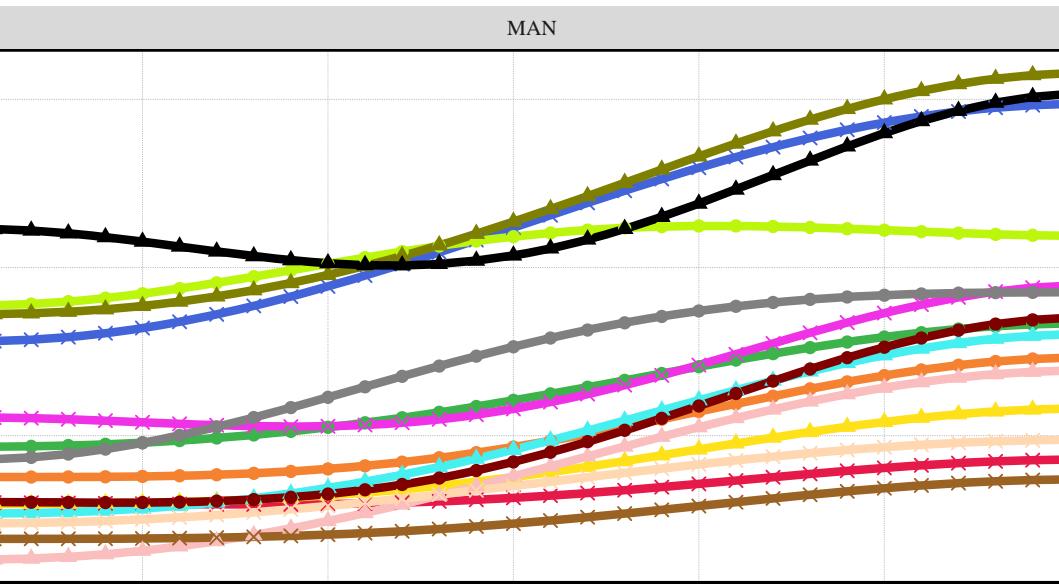
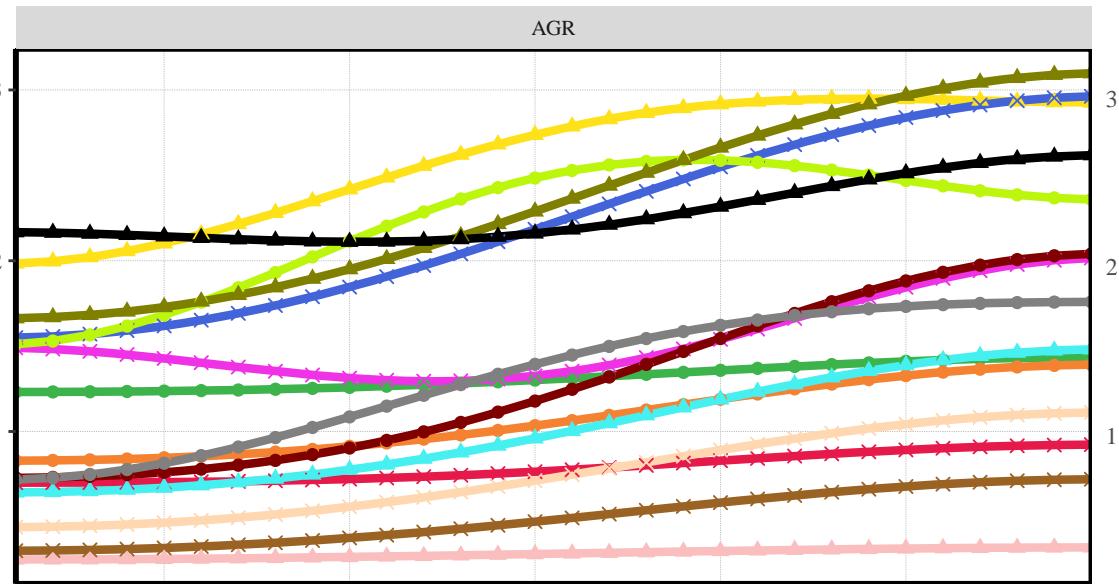
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Warm Conditions during the Night

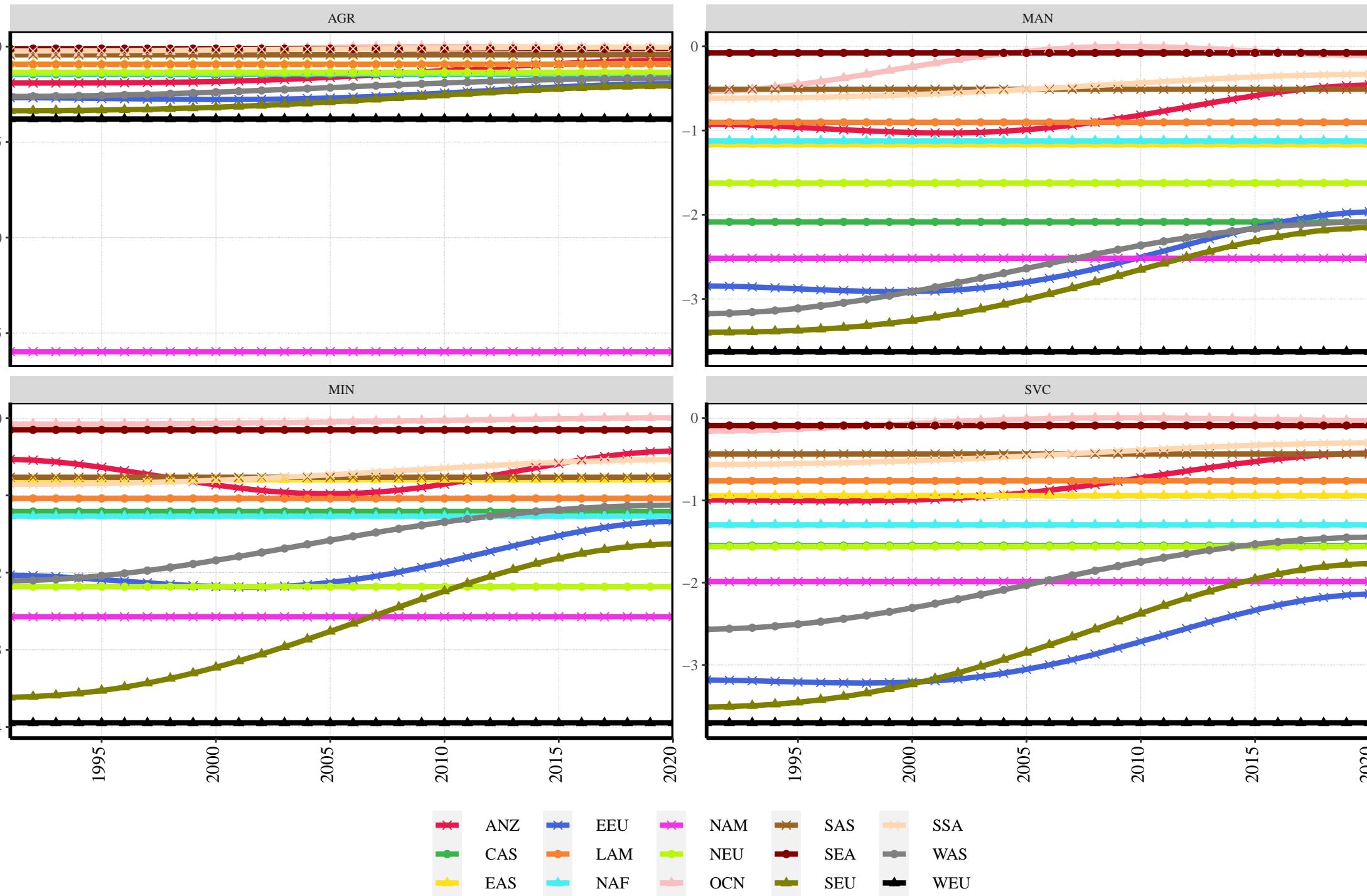
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Cold Conditions during the Night

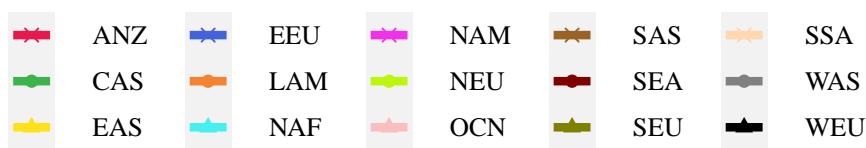
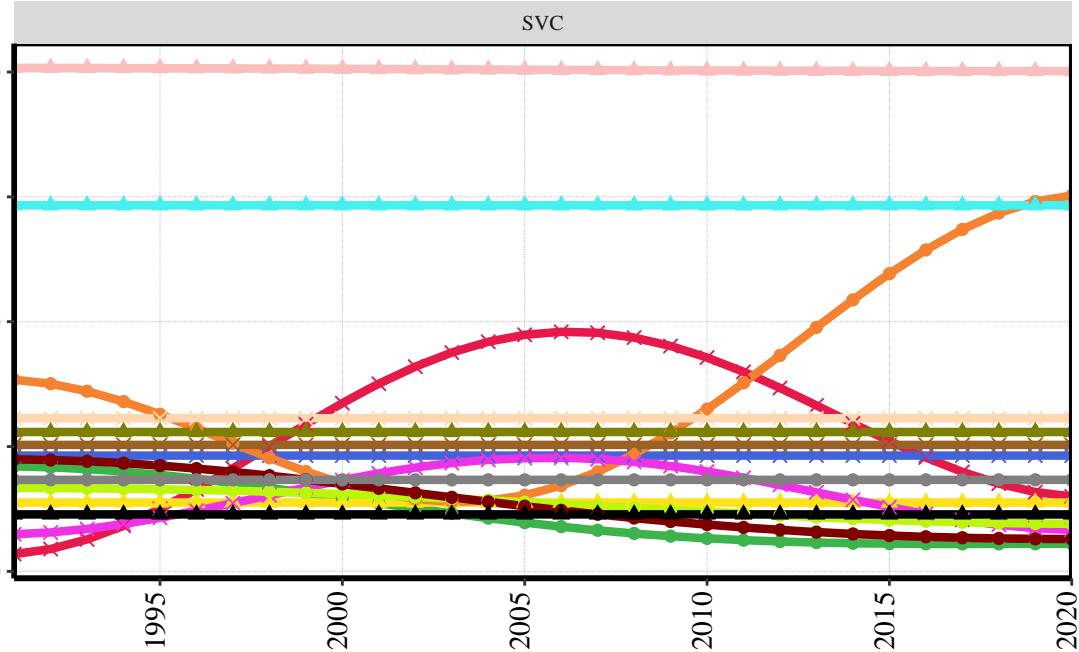
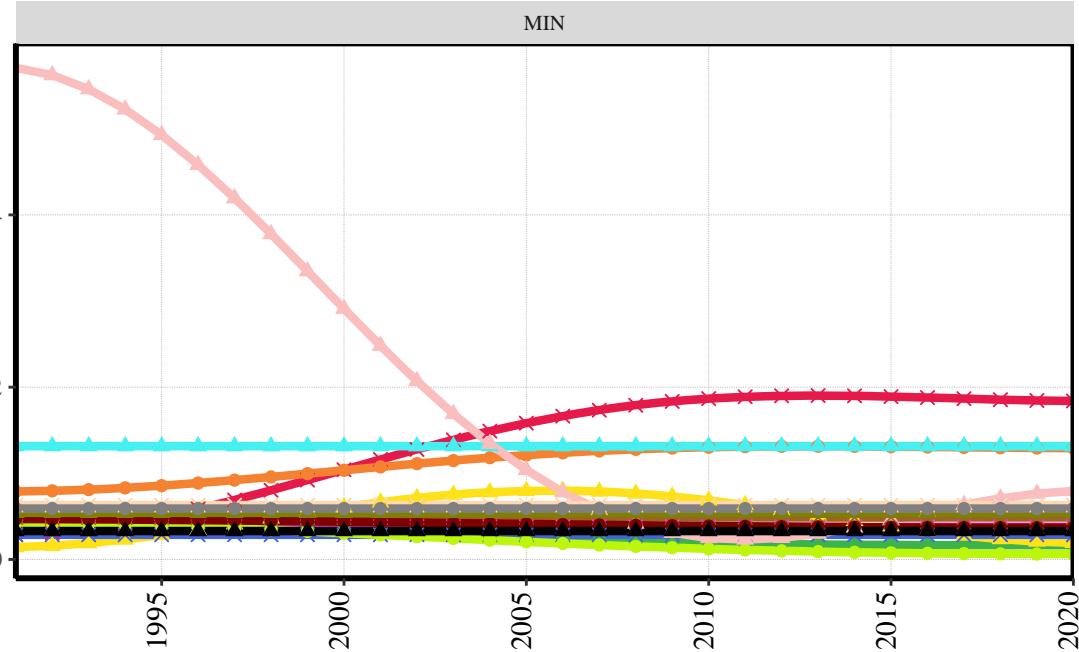
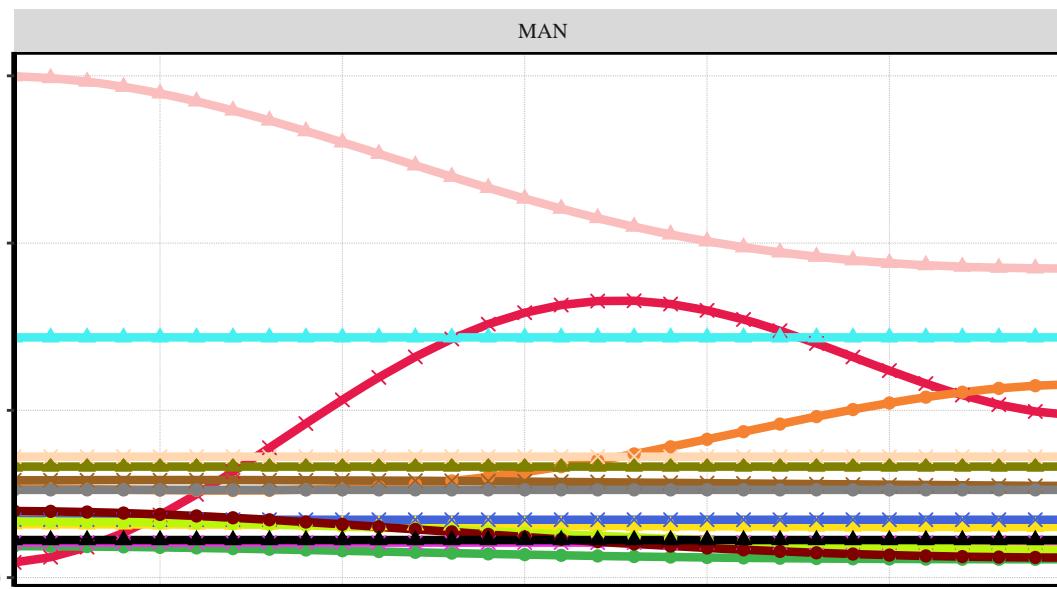
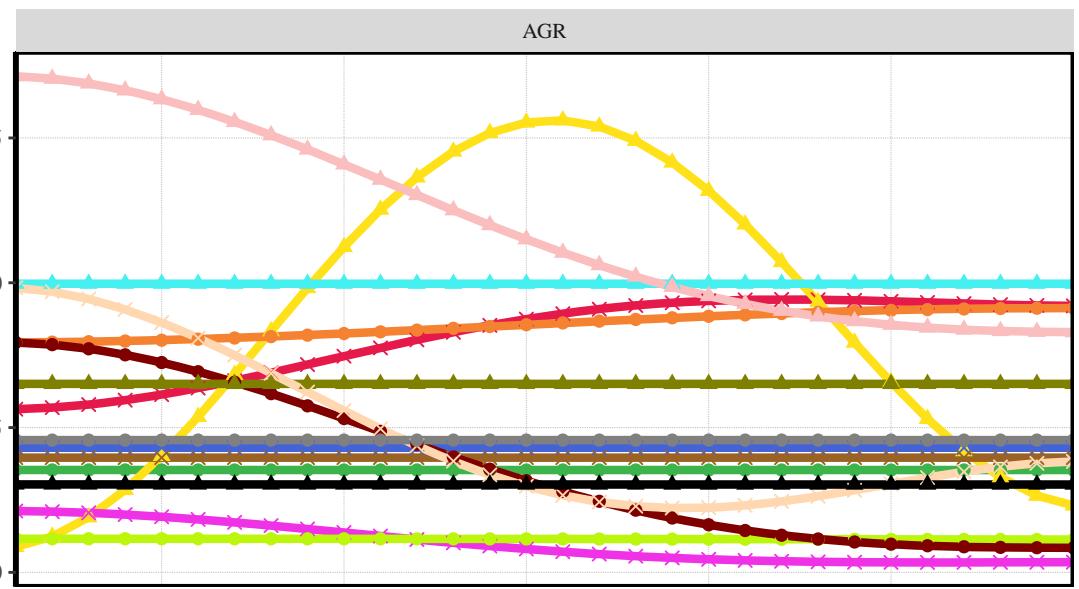
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Dry Conditions

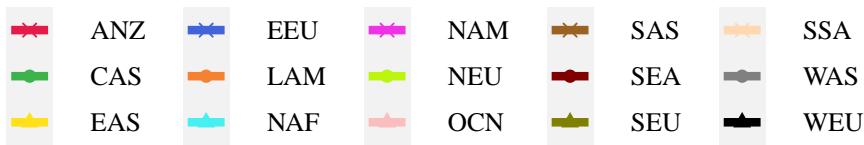
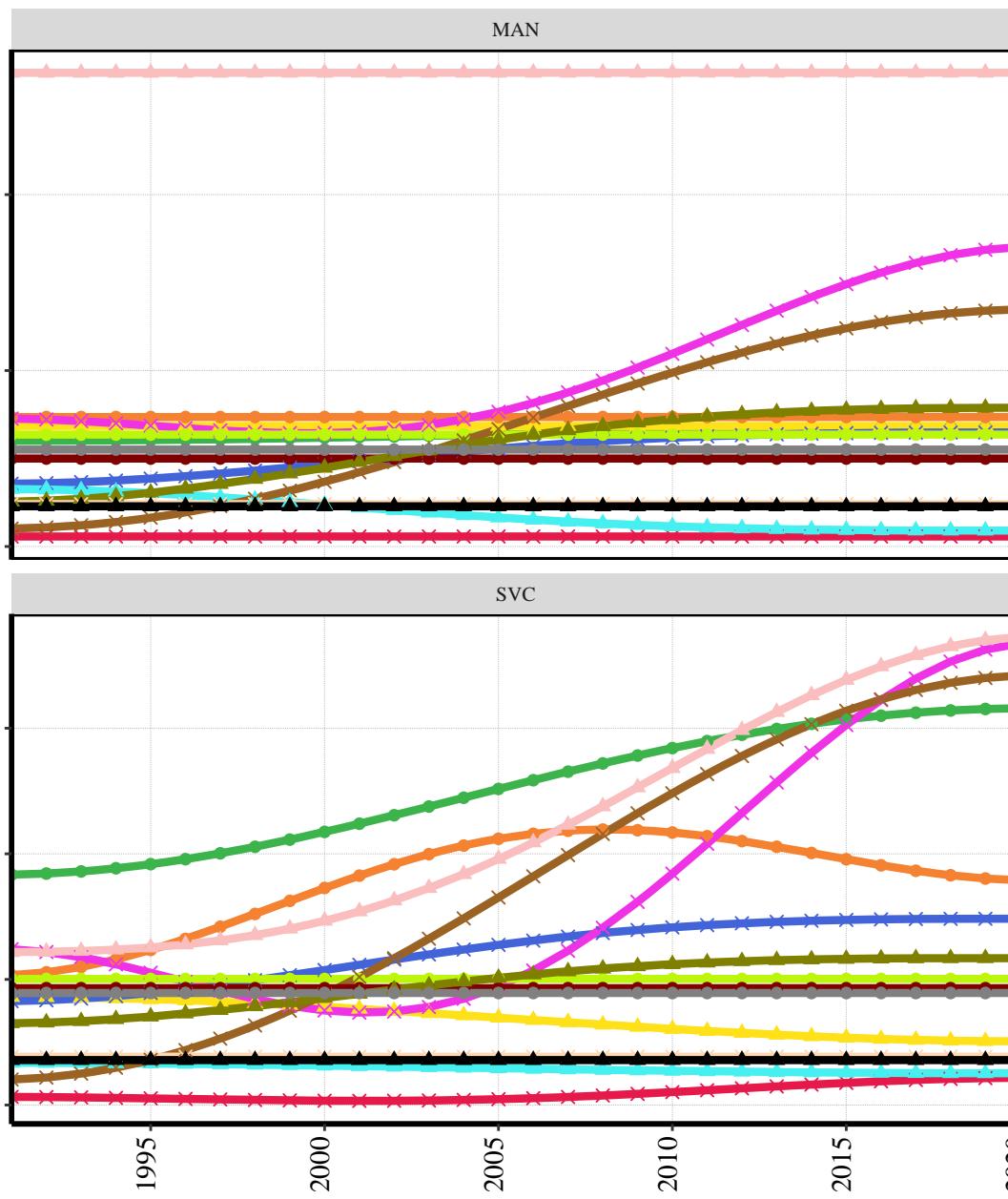
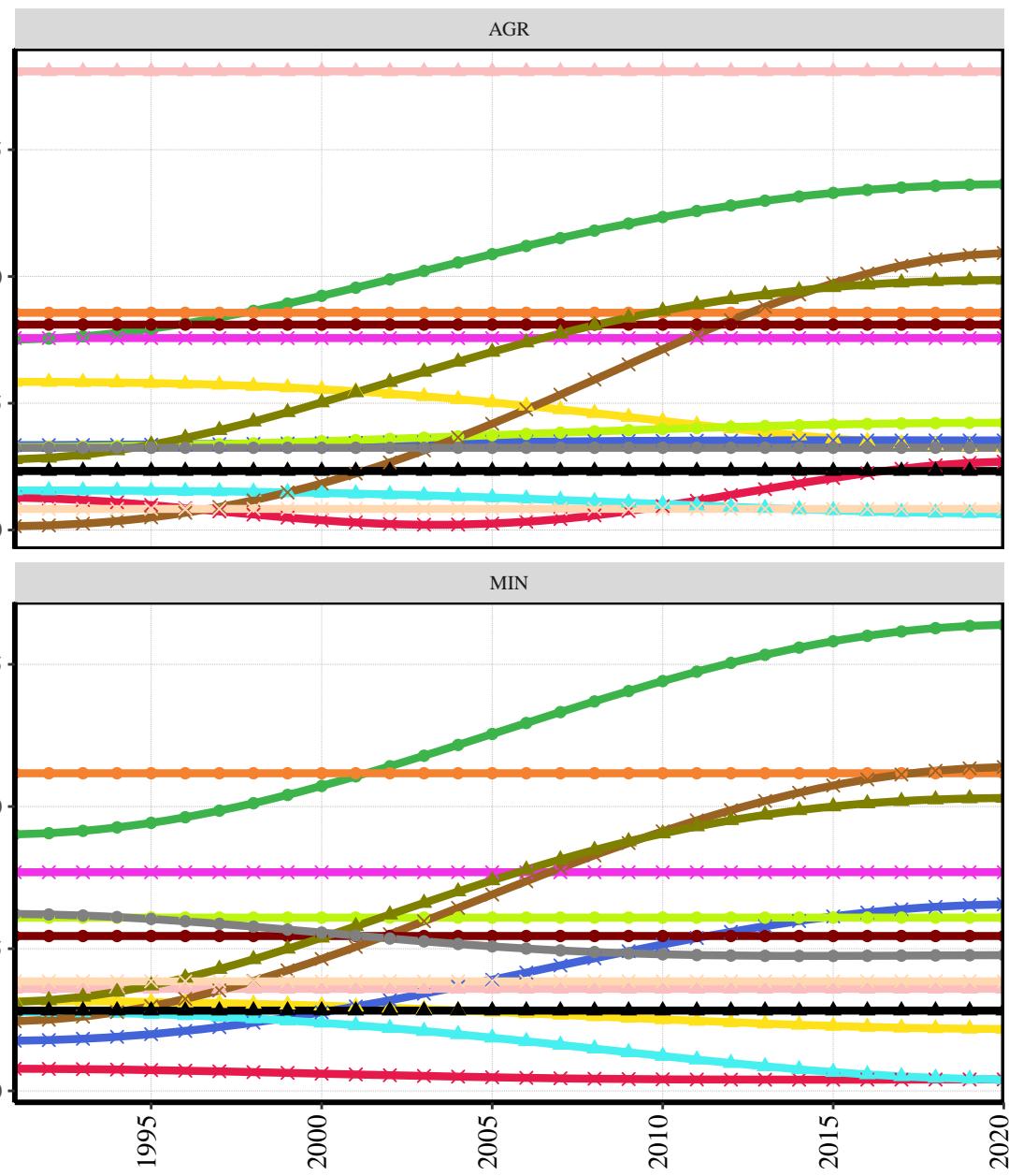
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 04: Historical Average Variation in Climate Indicators at Firm Locations: Extremely Wet Conditions

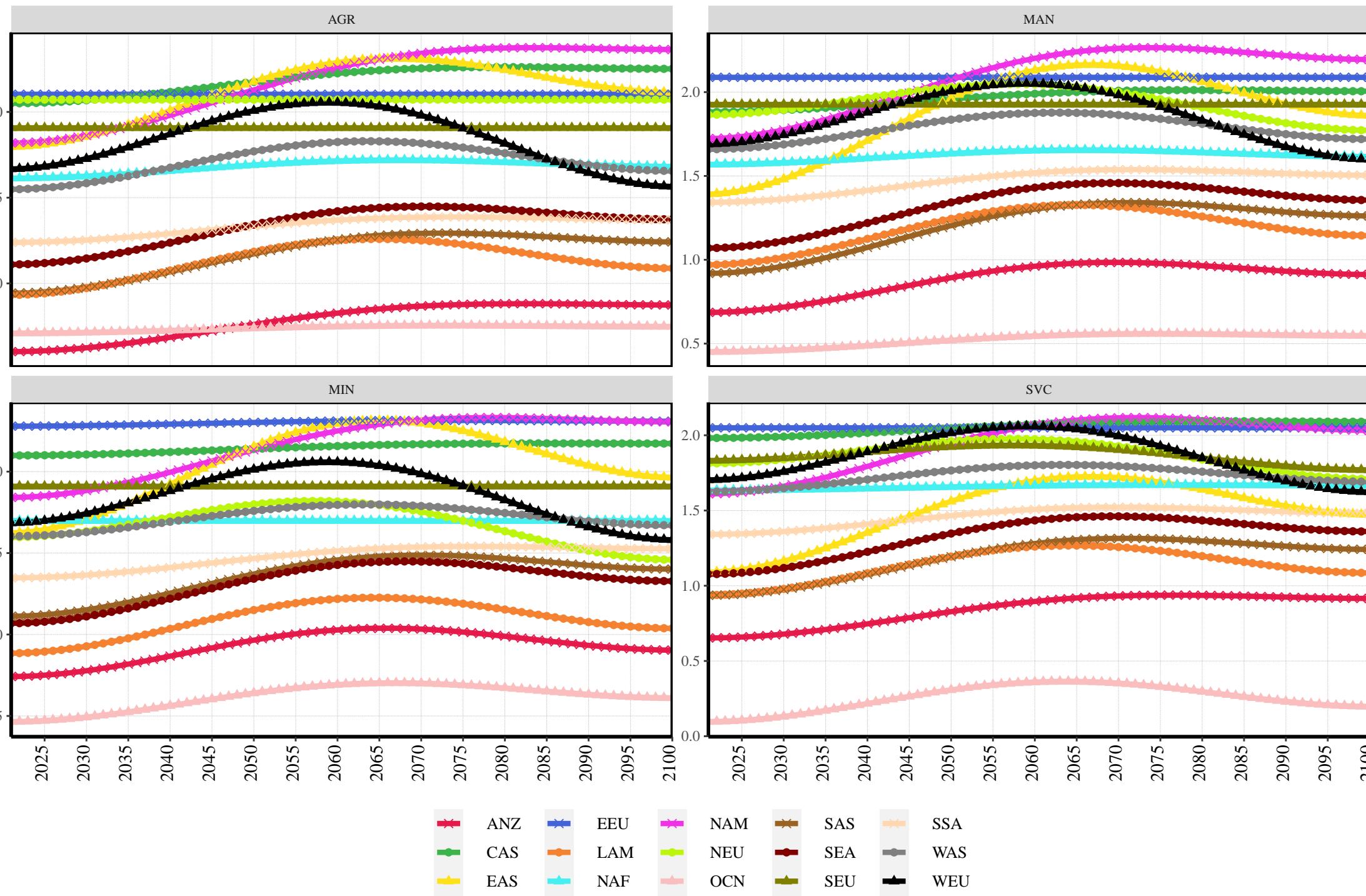
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Orbis Data (2022).

Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Temperature

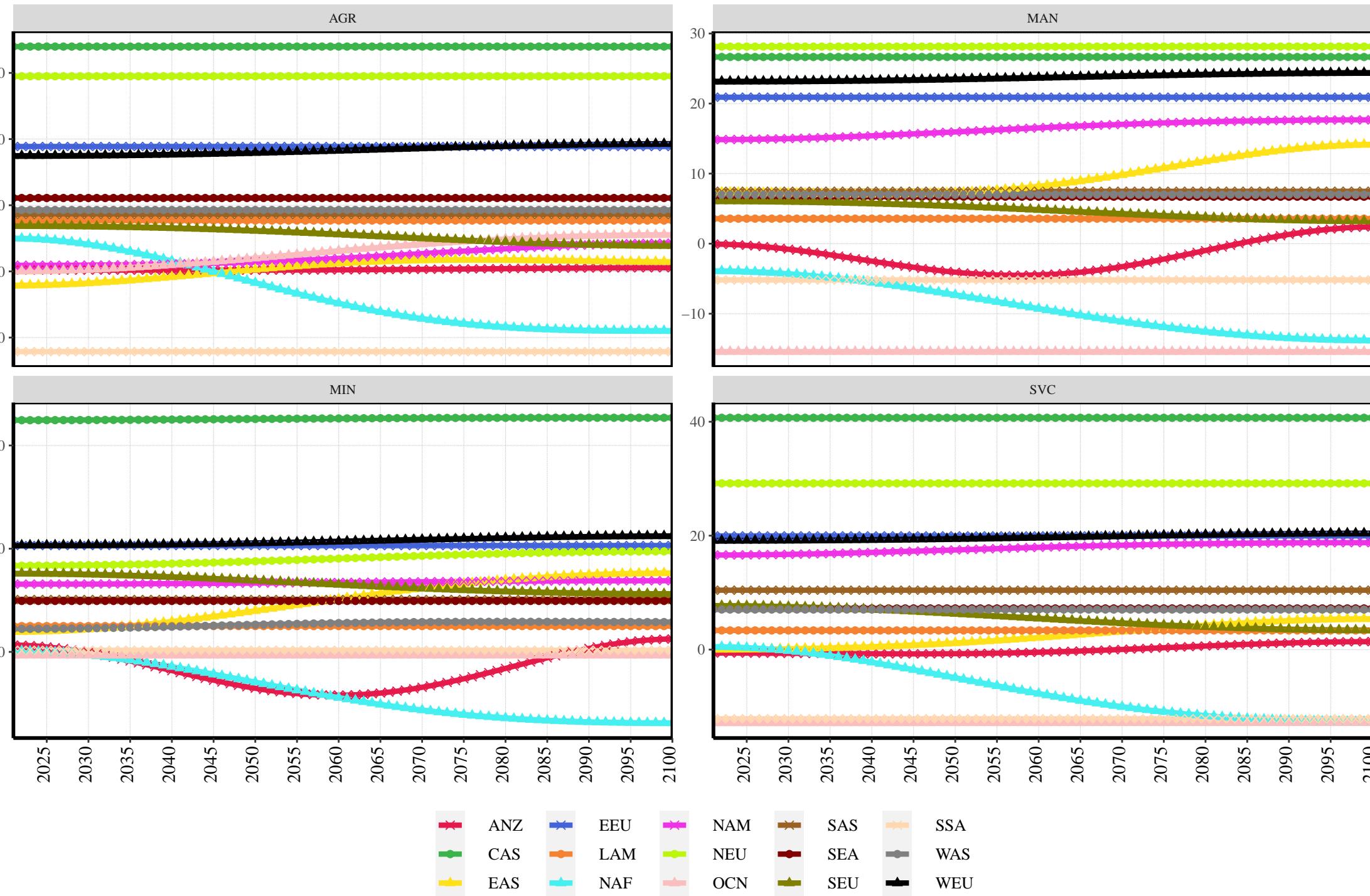
Average Annual Deviation from the 1961–90 Baseline (Degrees Centigrade)



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Precipitation

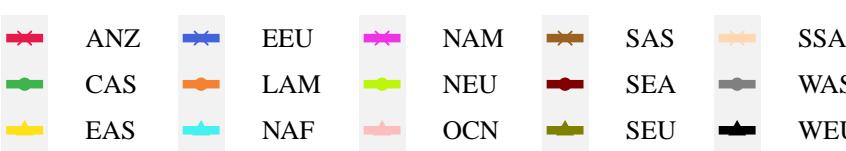
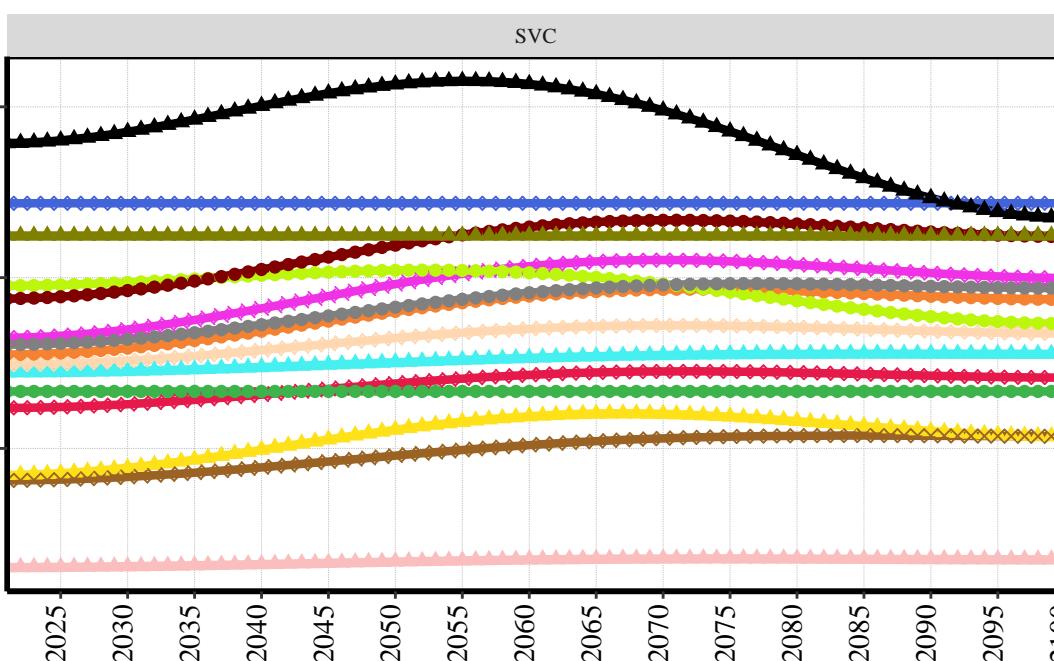
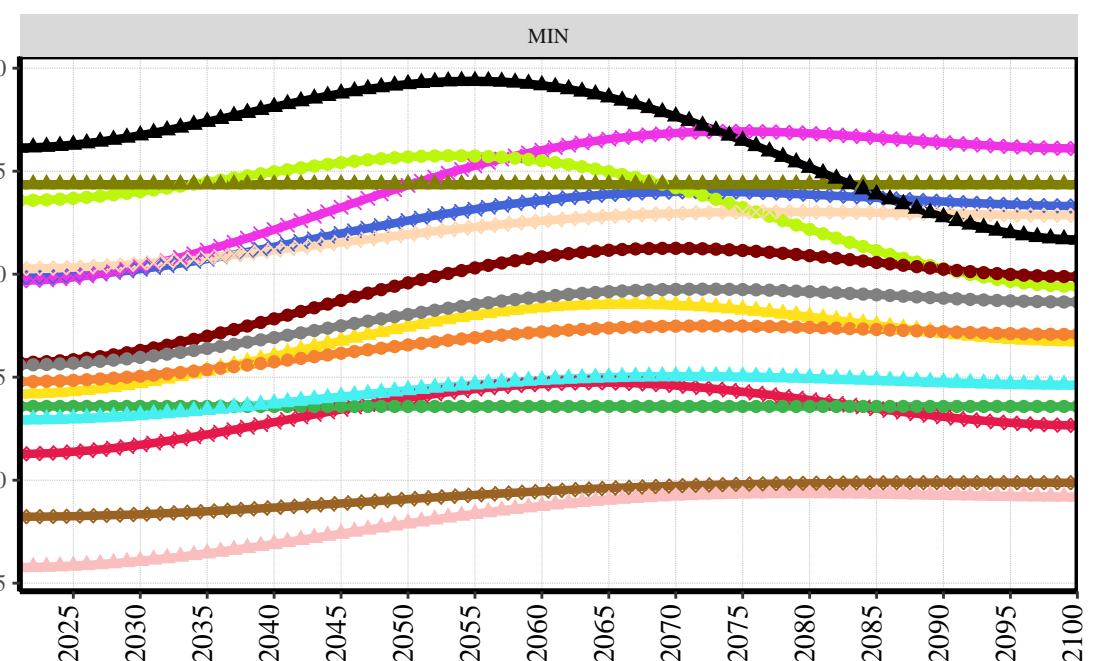
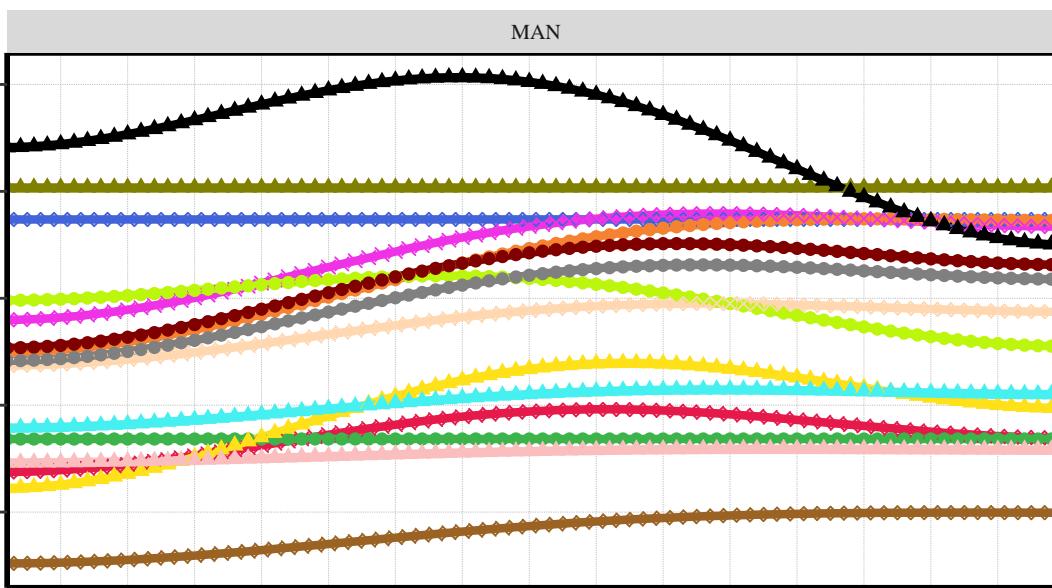
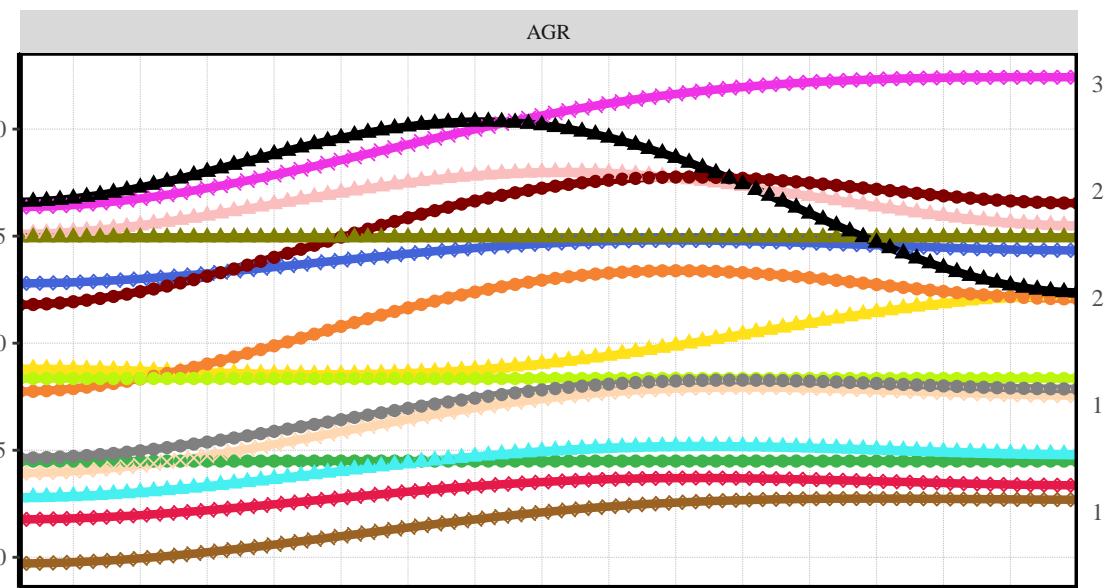
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

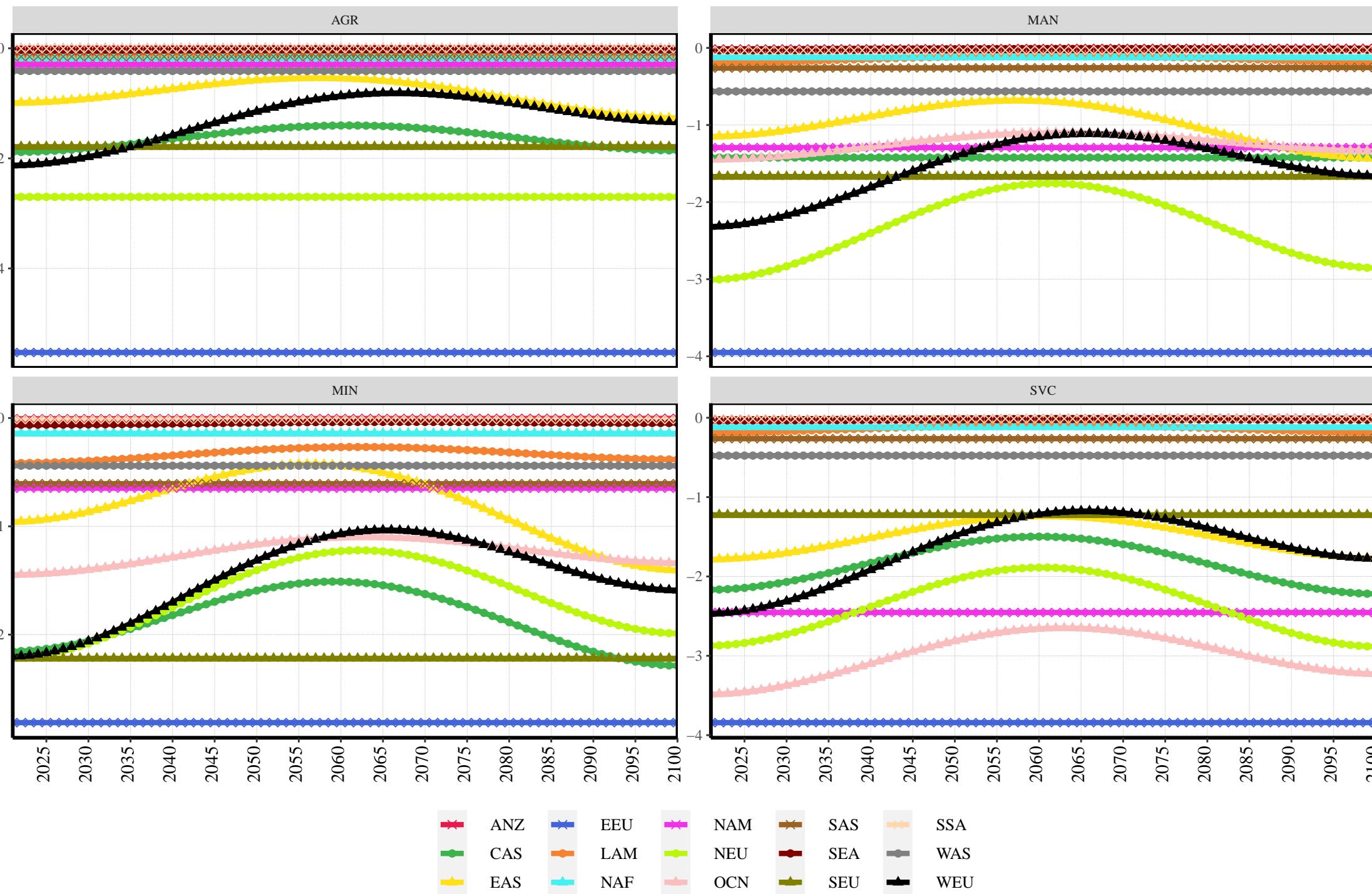
Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Warm Conditions during the Day

Average Annual Percentage Deviation from the 1961–90 Baseline



Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Cold Conditions during the Day

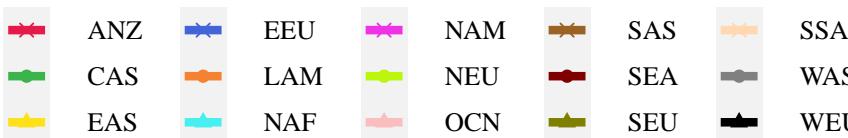
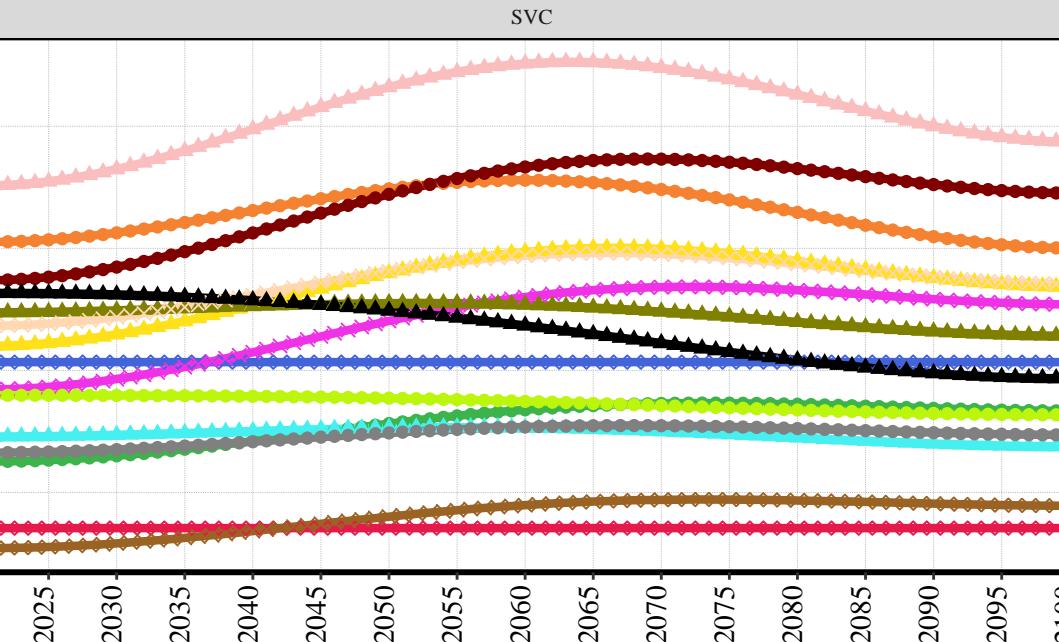
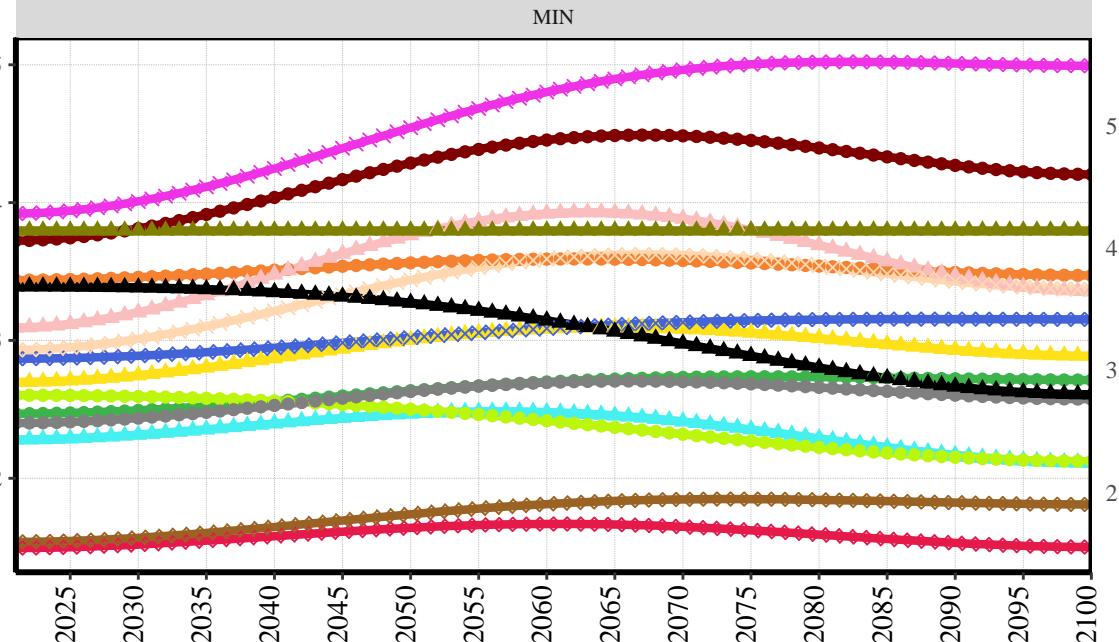
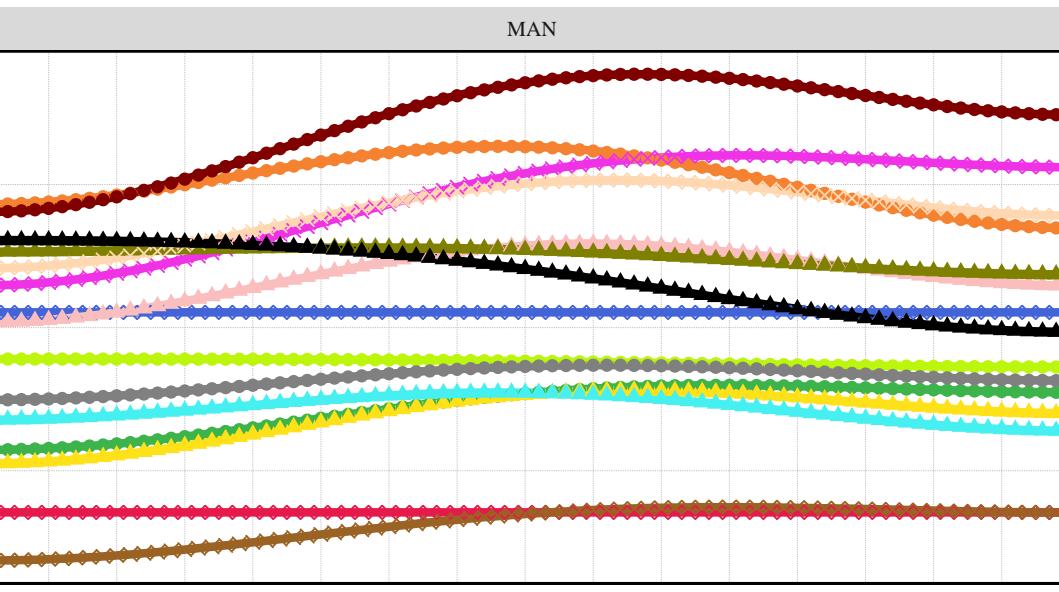
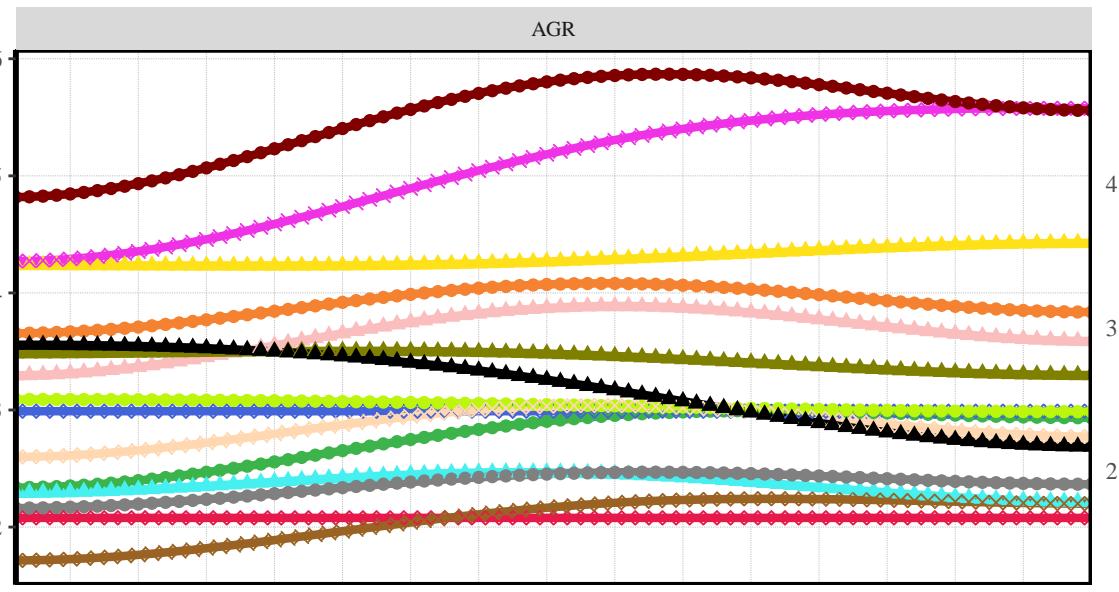
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Warm Conditions during the Night

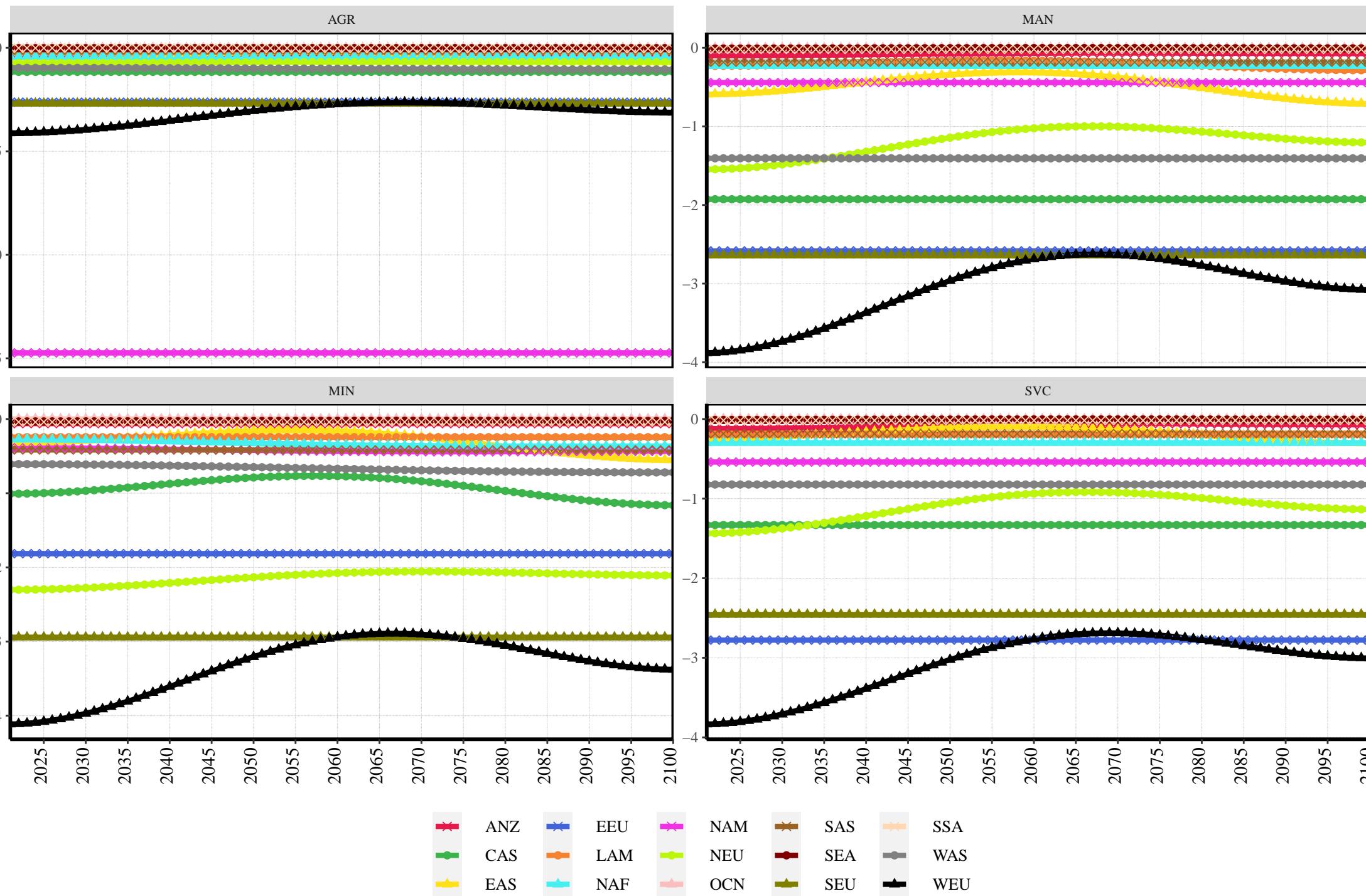
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Cold Conditions during the Night

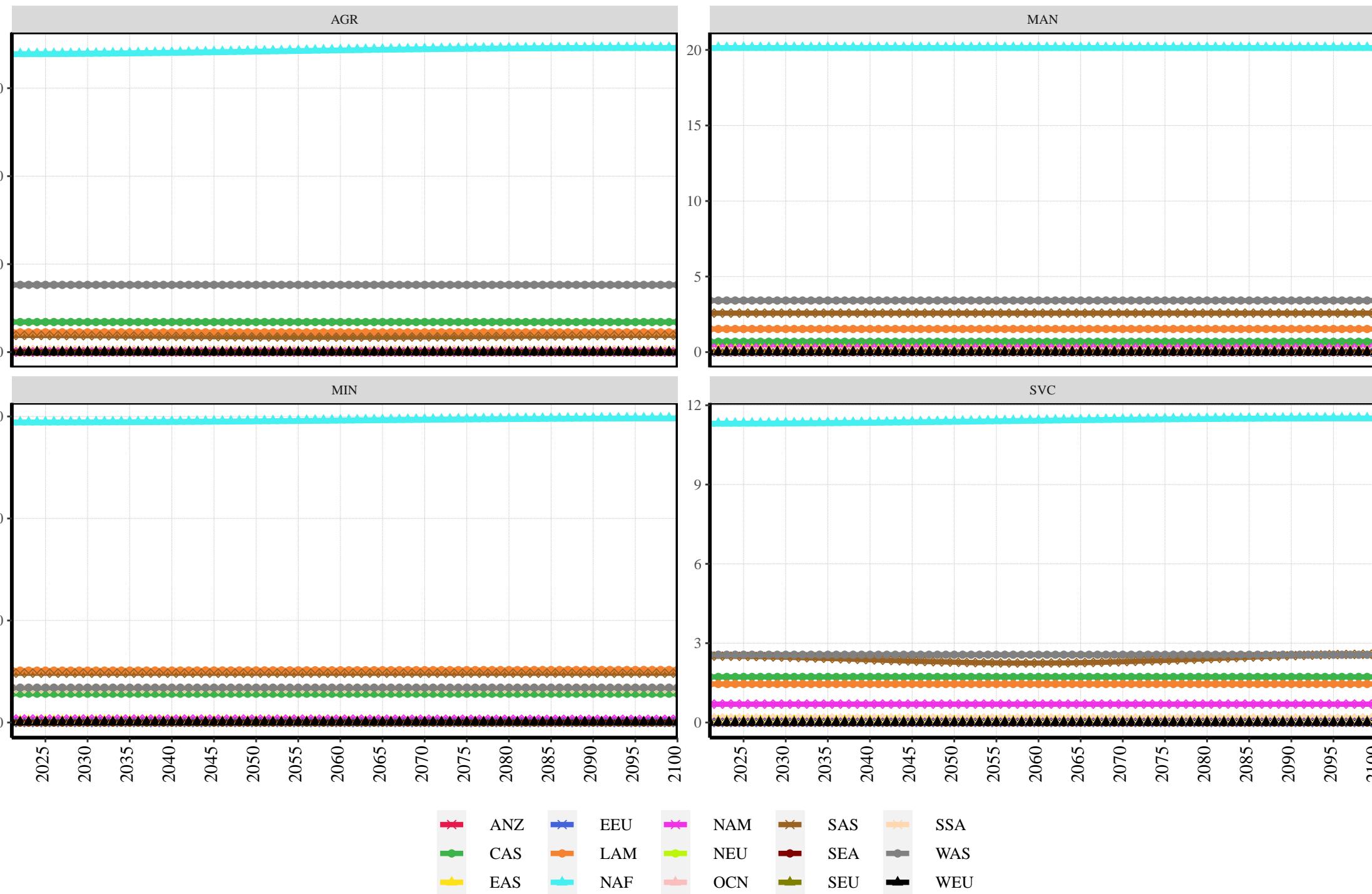
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Dry Conditions

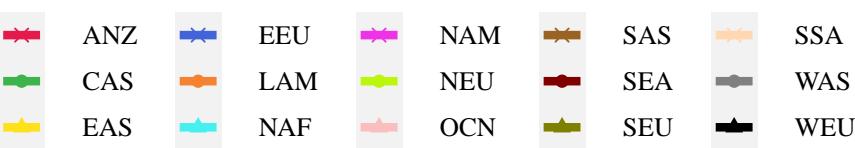
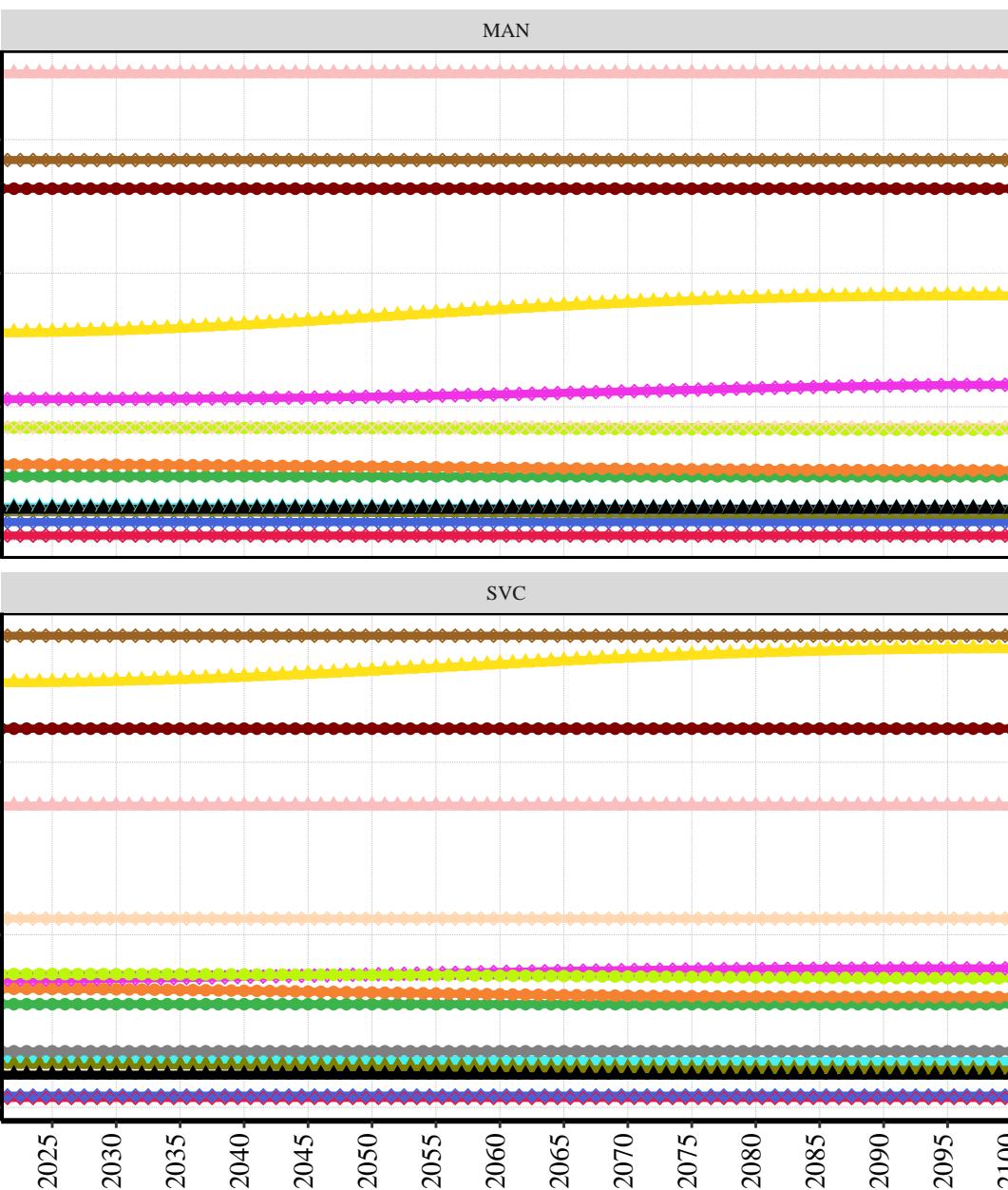
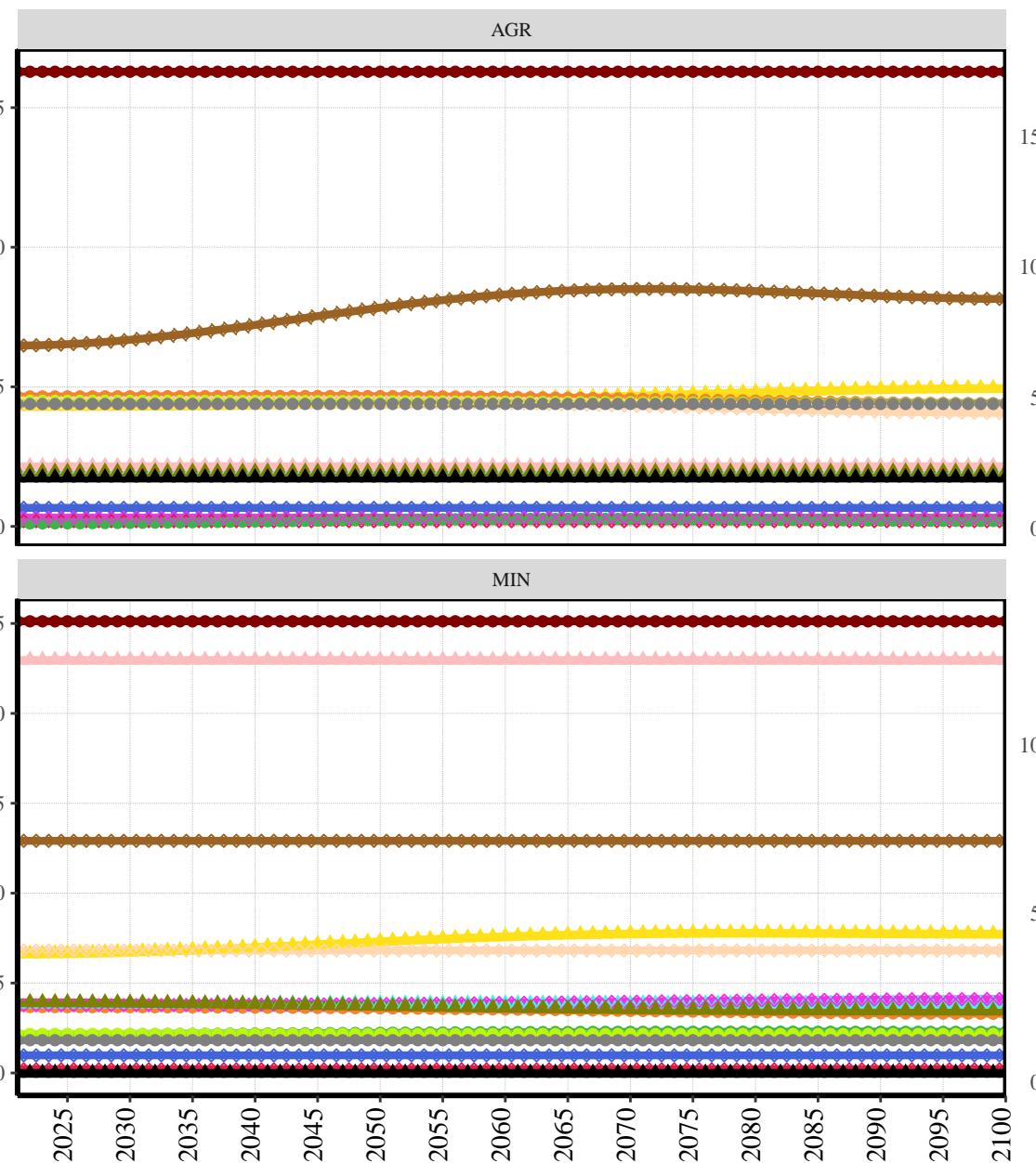
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

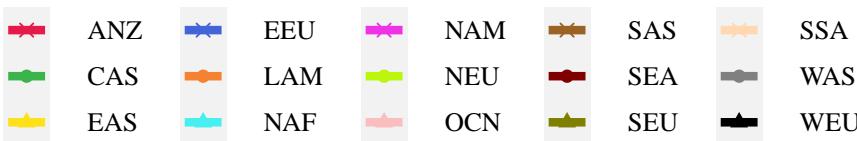
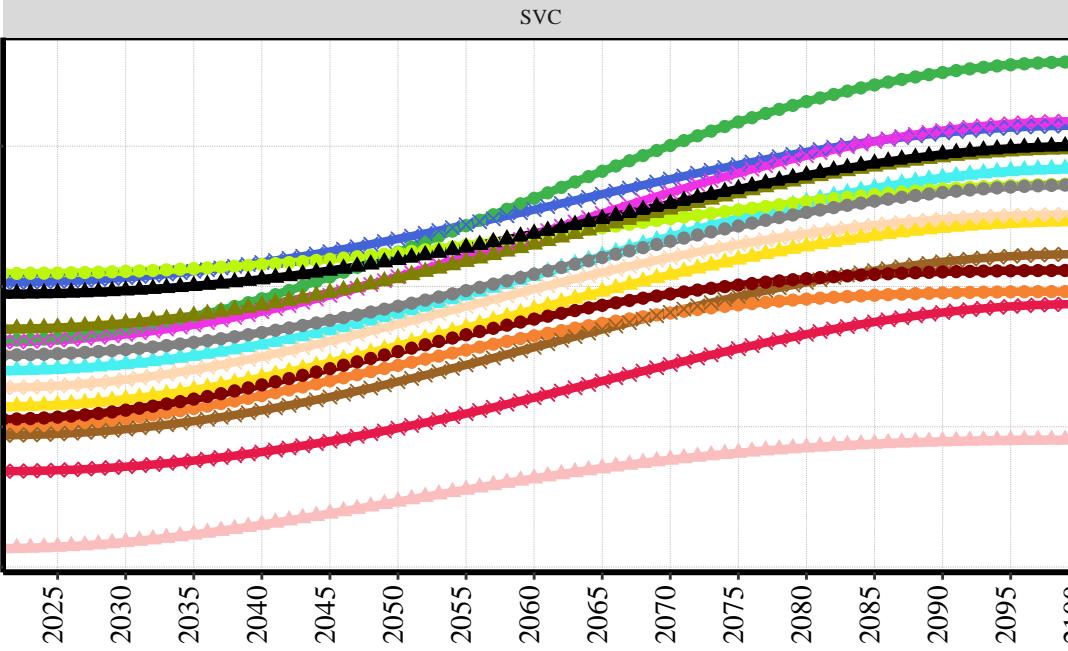
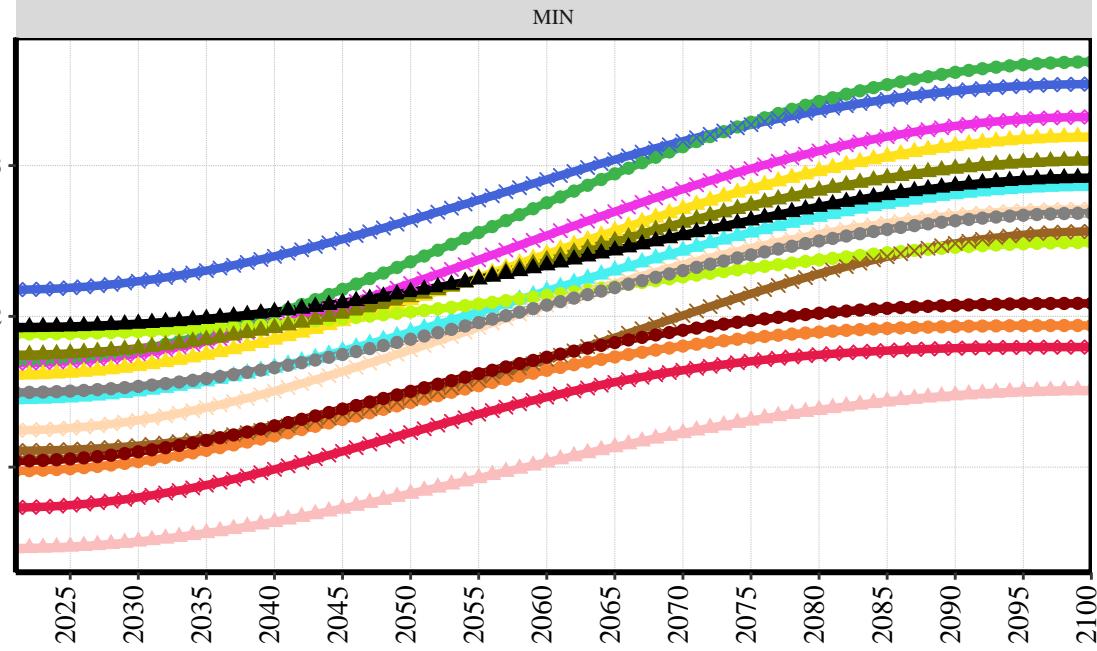
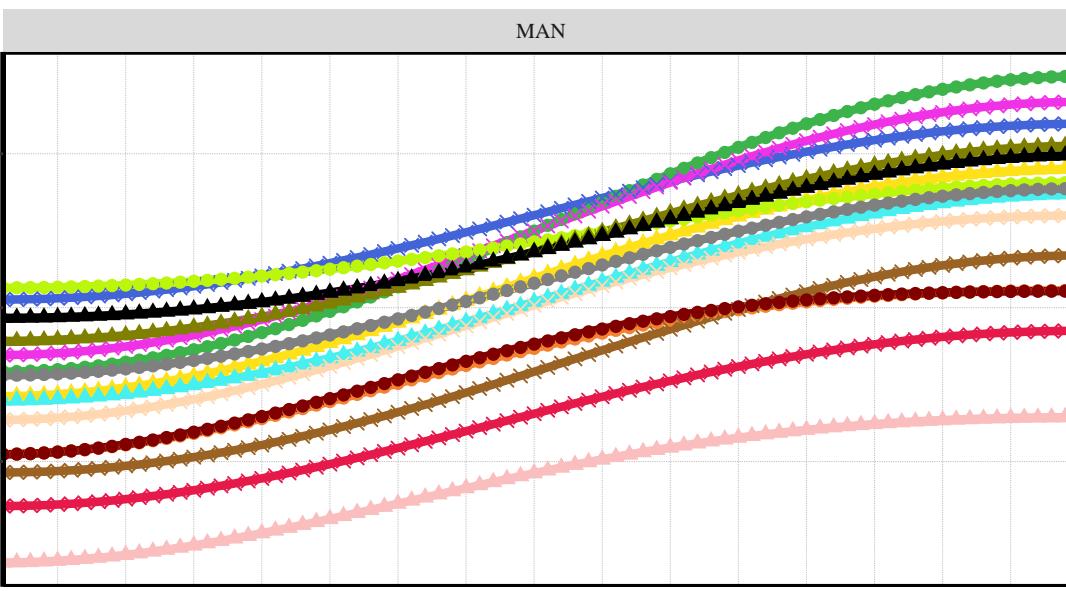
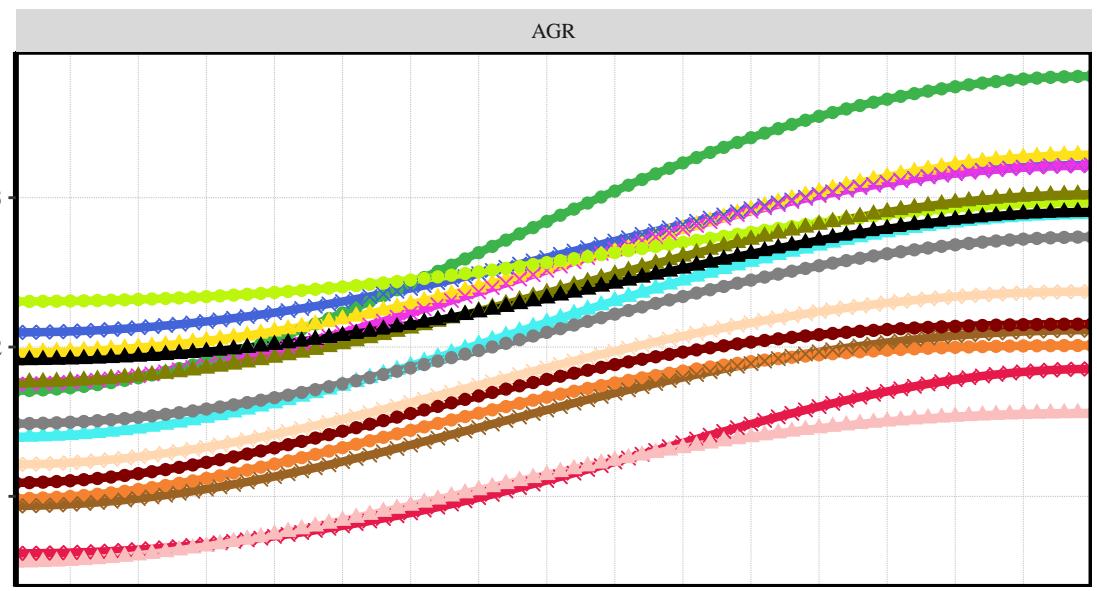
Supplementary Annexure 05: Projected Average Variation in Climate Indicators at Firm Locations under SSP 1–2.6: Extremely Wet Conditions

Average Annual Percentage Deviation from the 1961–90 Baseline



Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Temperature

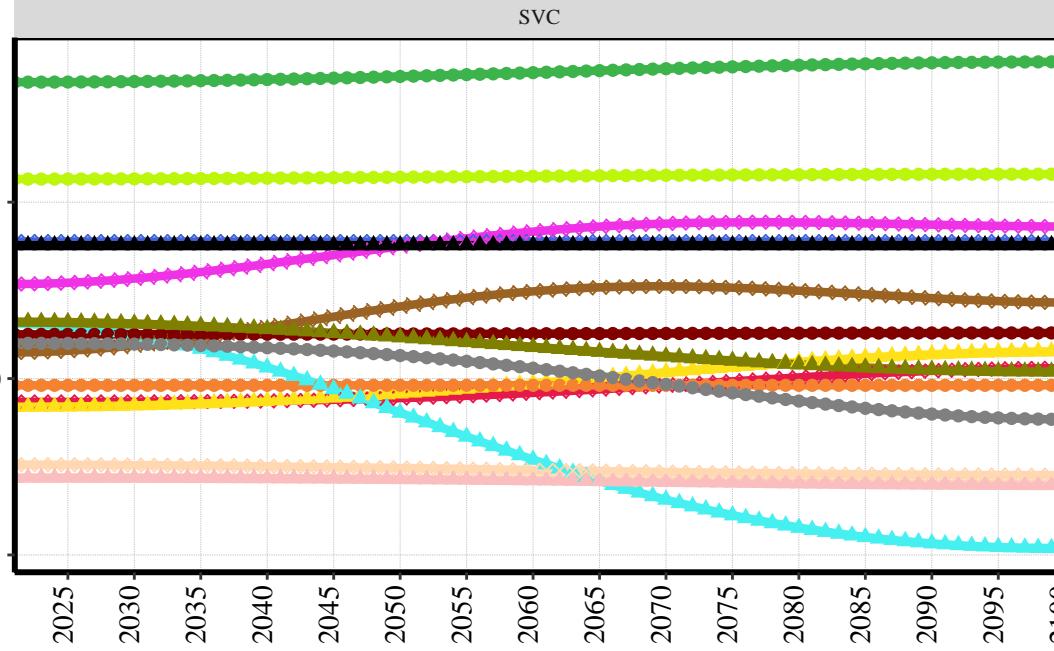
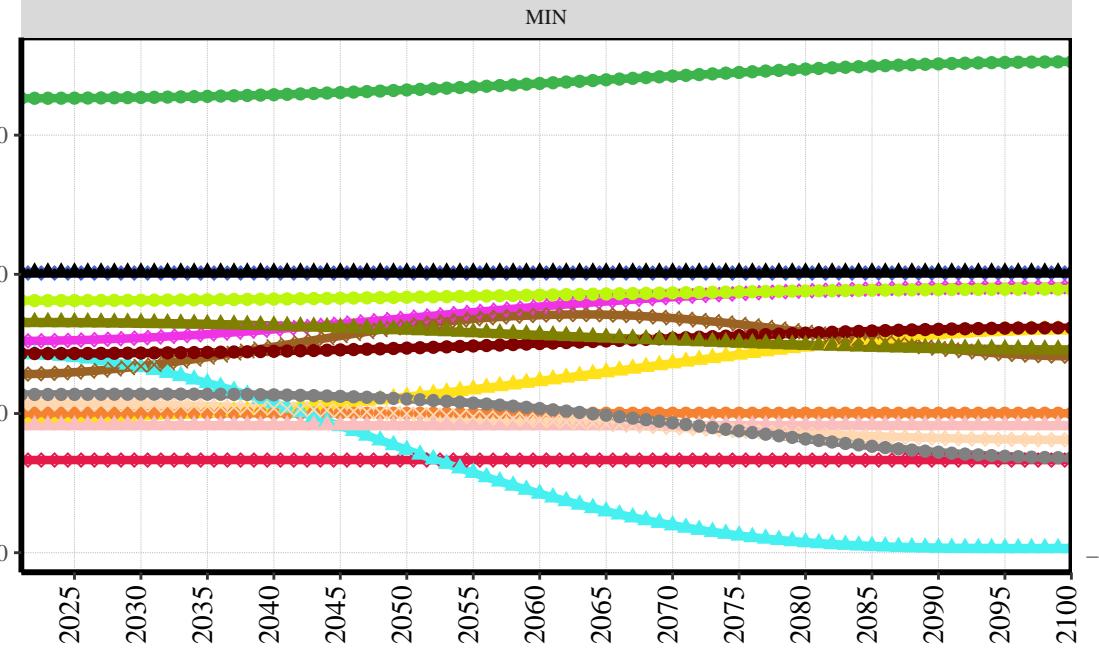
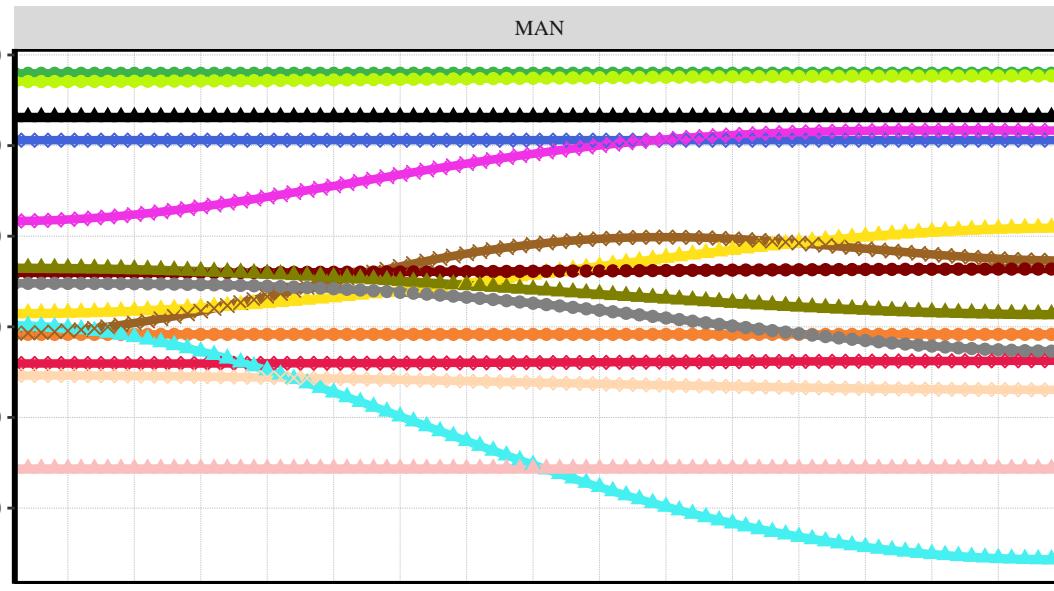
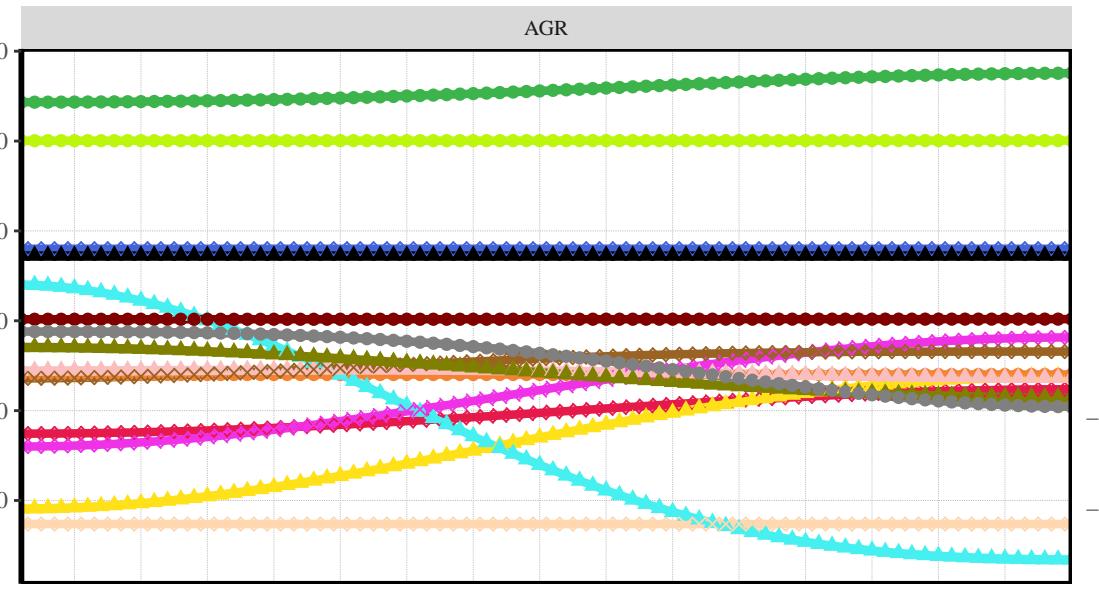
Average Annual Deviation from the 1961–90 Baseline (Degrees Centigrade)



Source: Constructed by the Authors using Data from ISIMIP (2022).

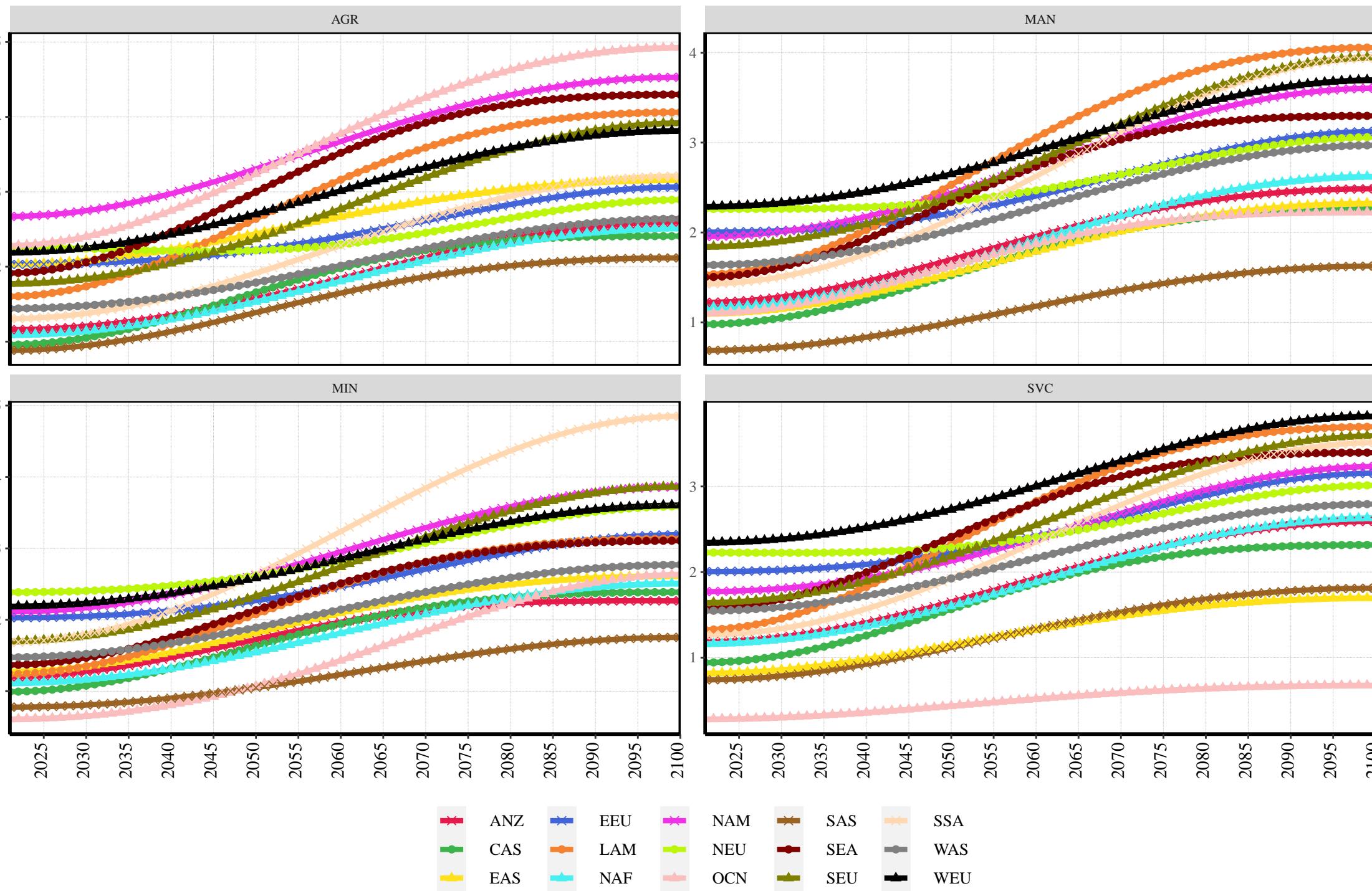
Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Precipitation

Average Annual Percentage Deviation from the 1961–90 Baseline



Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Extremely Warm Conditions during the Day

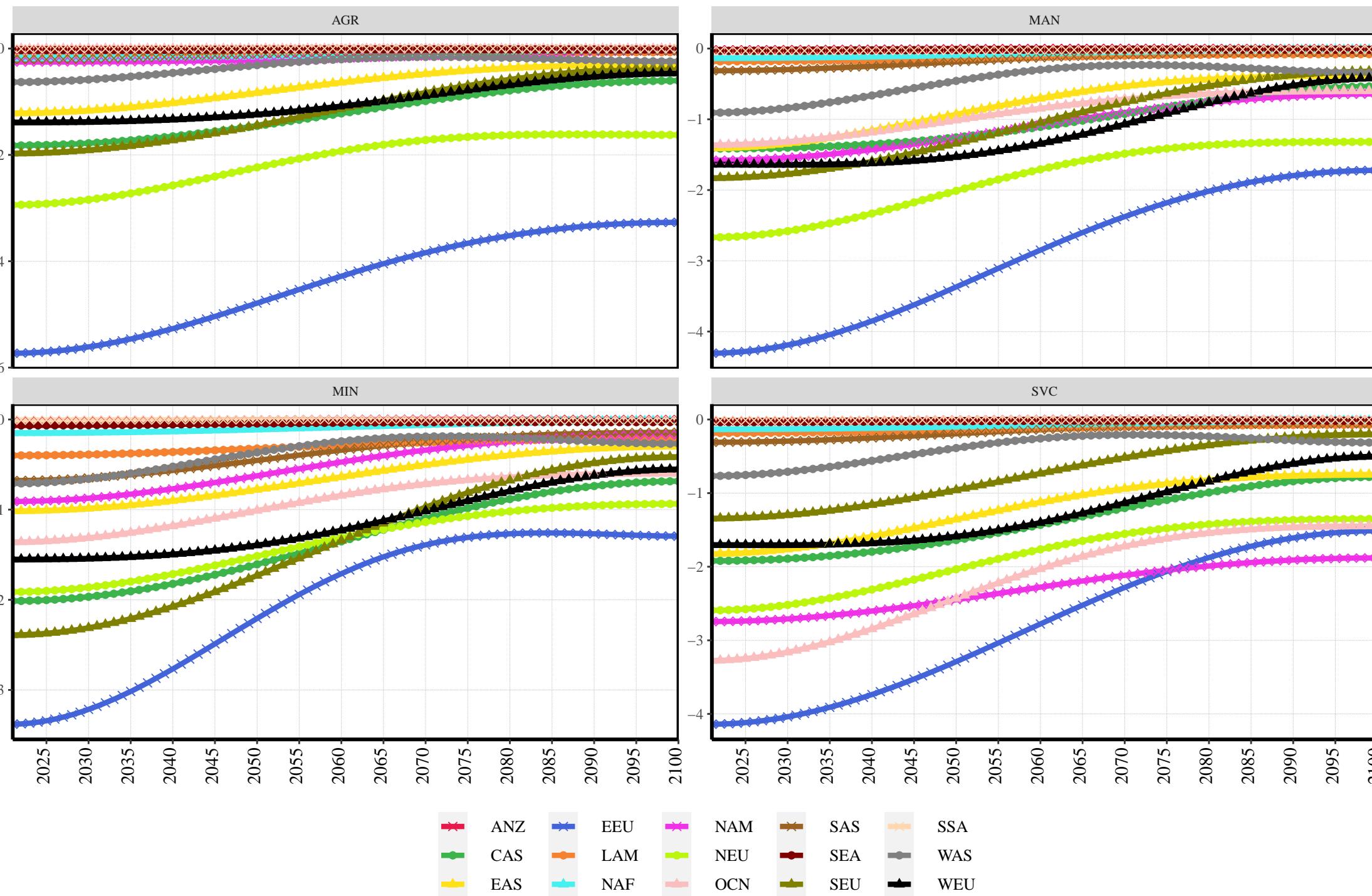
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

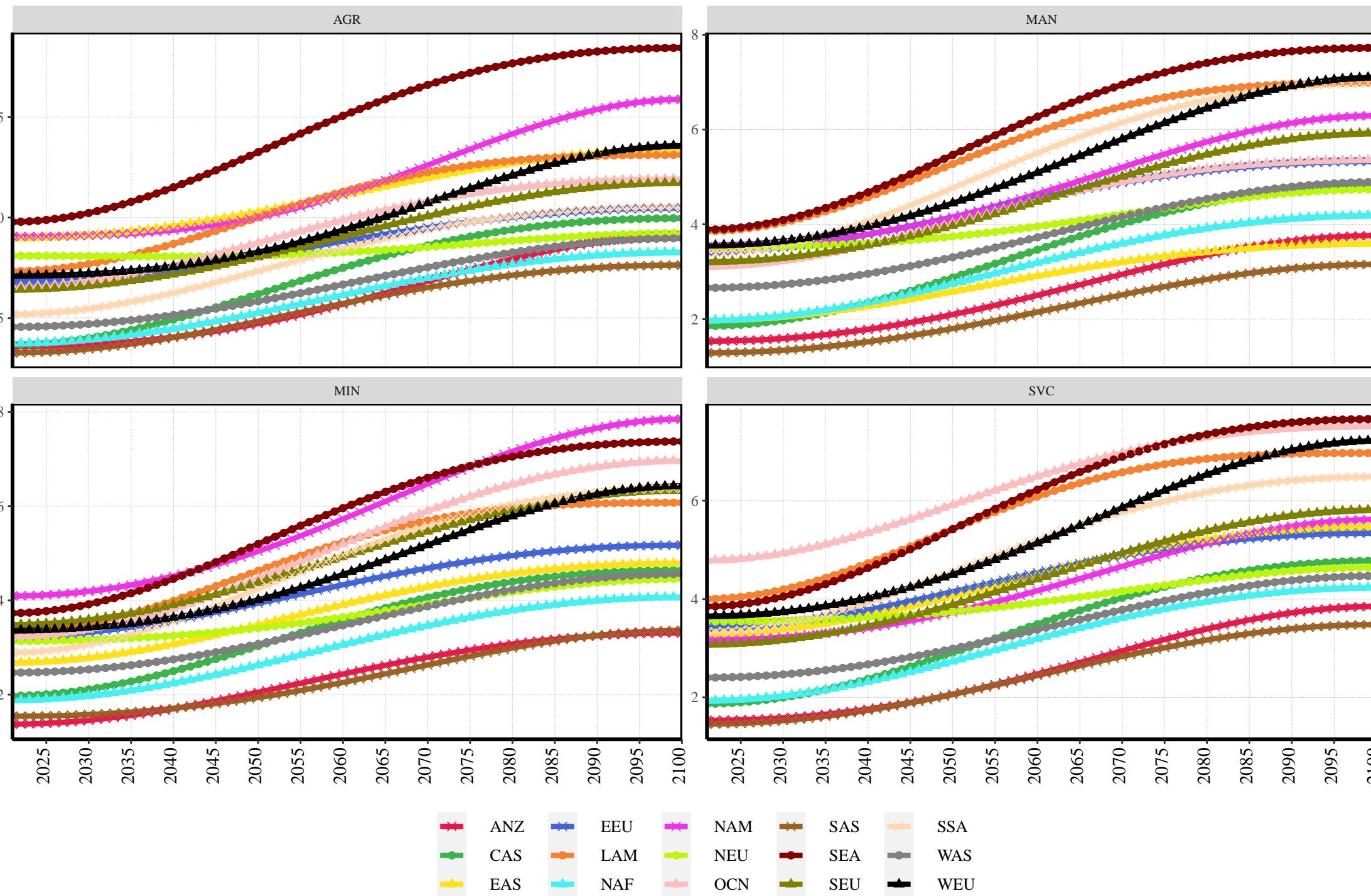
Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Extremely Cold Conditions during the Day

Average Annual Percentage Deviation from the 1961–90 Baseline



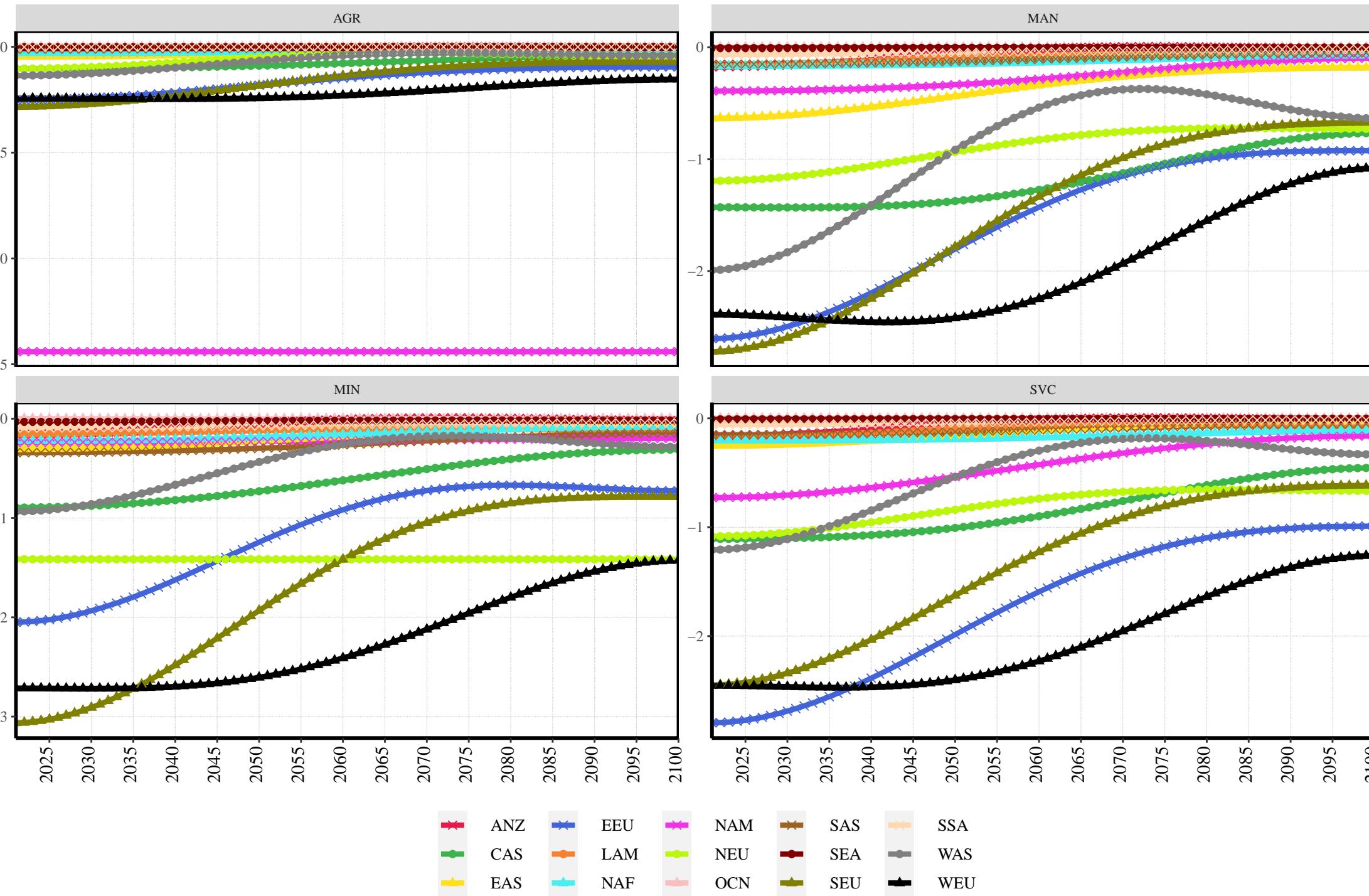
Source: Constructed by the Authors using Data from ISIMIP (2022).

Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

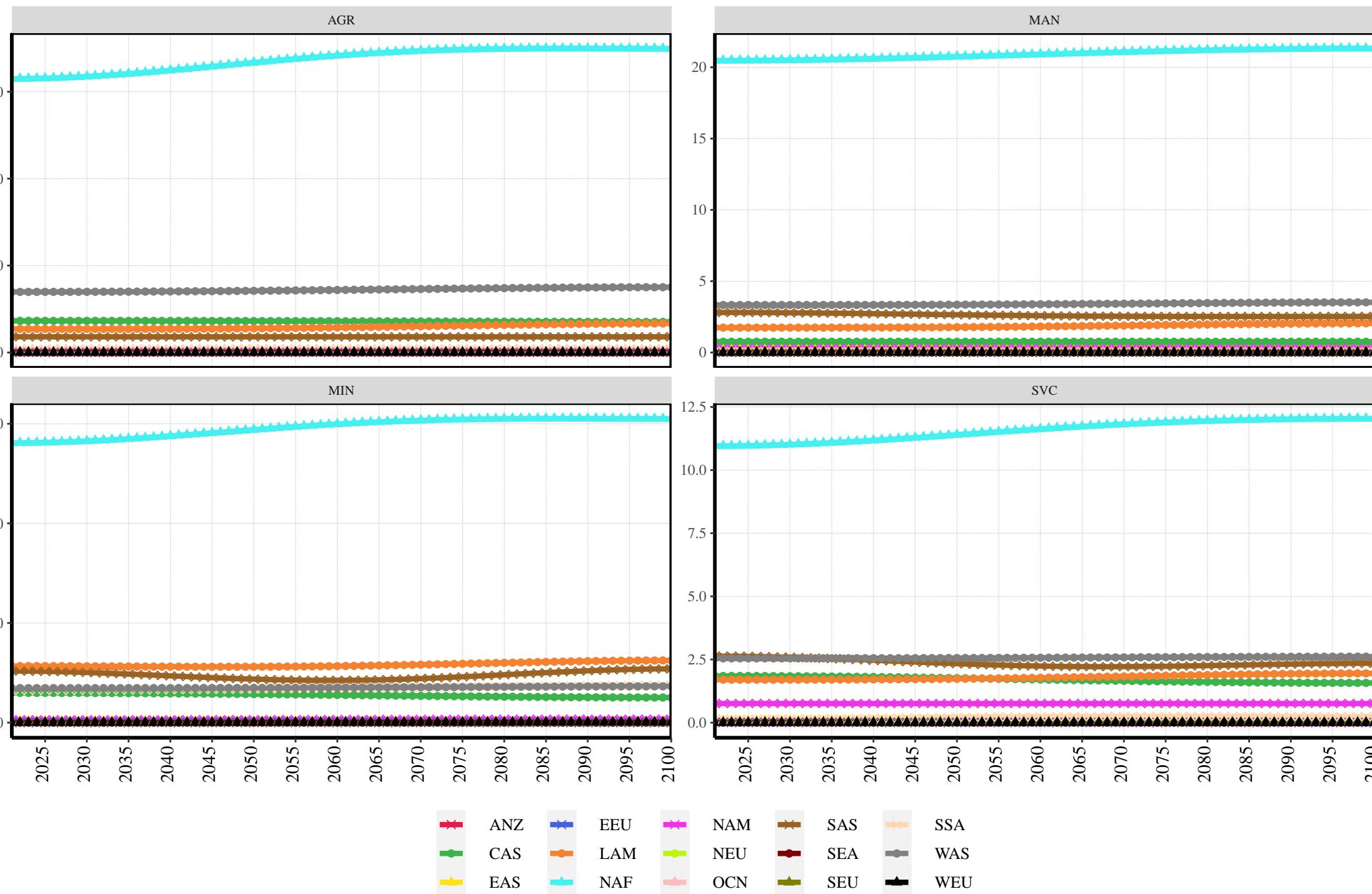
Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Extremely Cold Conditions during the Night
 Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Extremely Dry Conditions

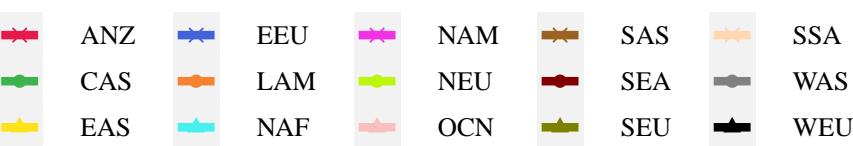
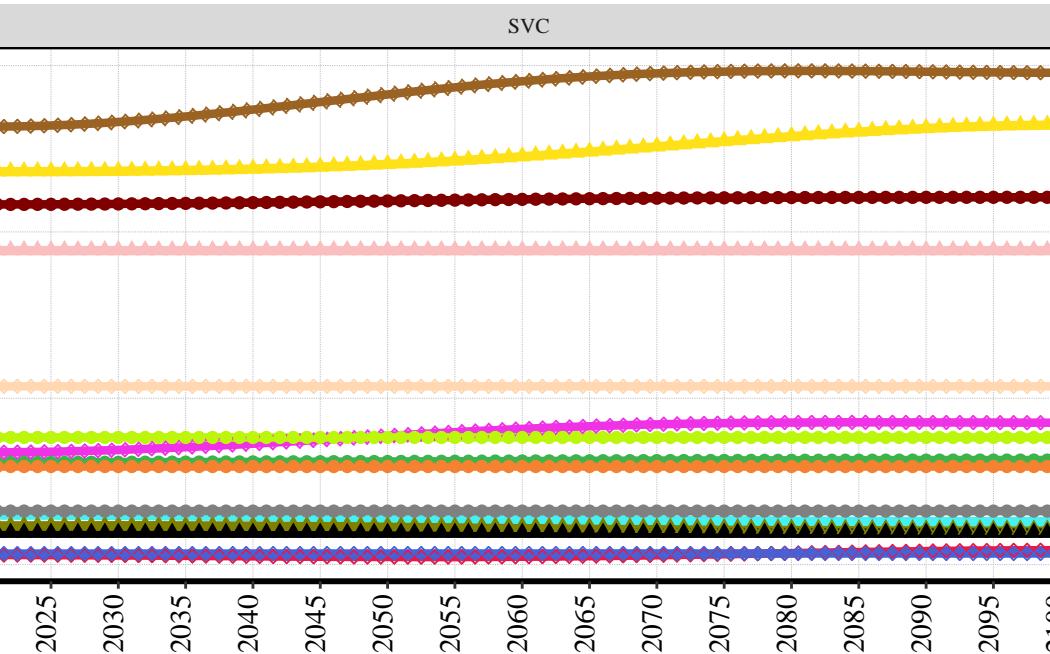
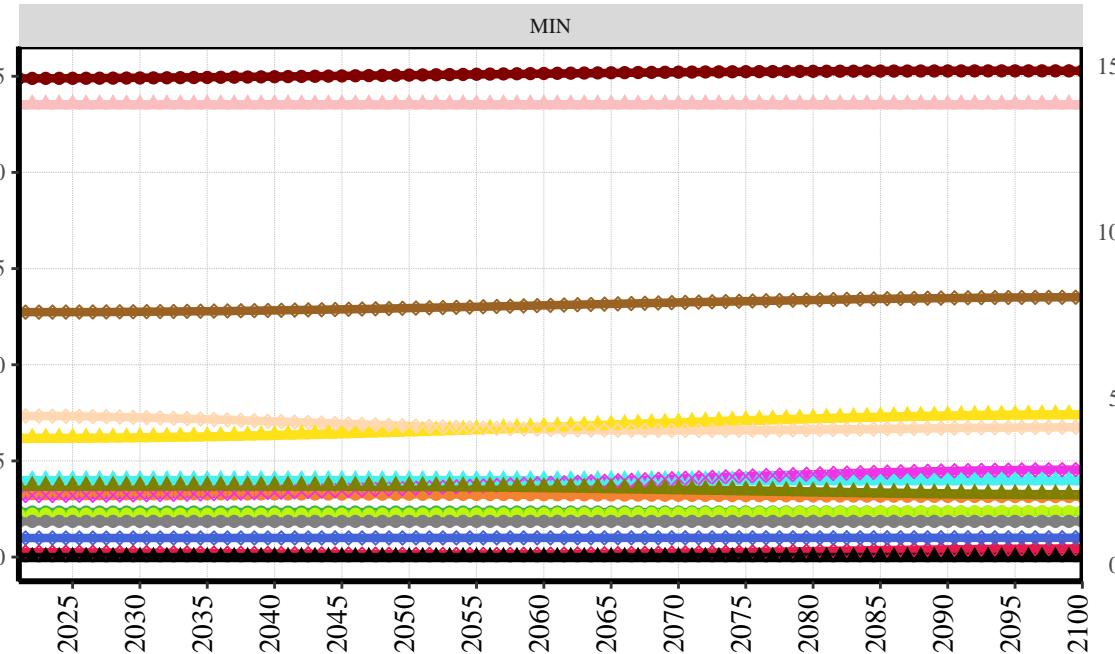
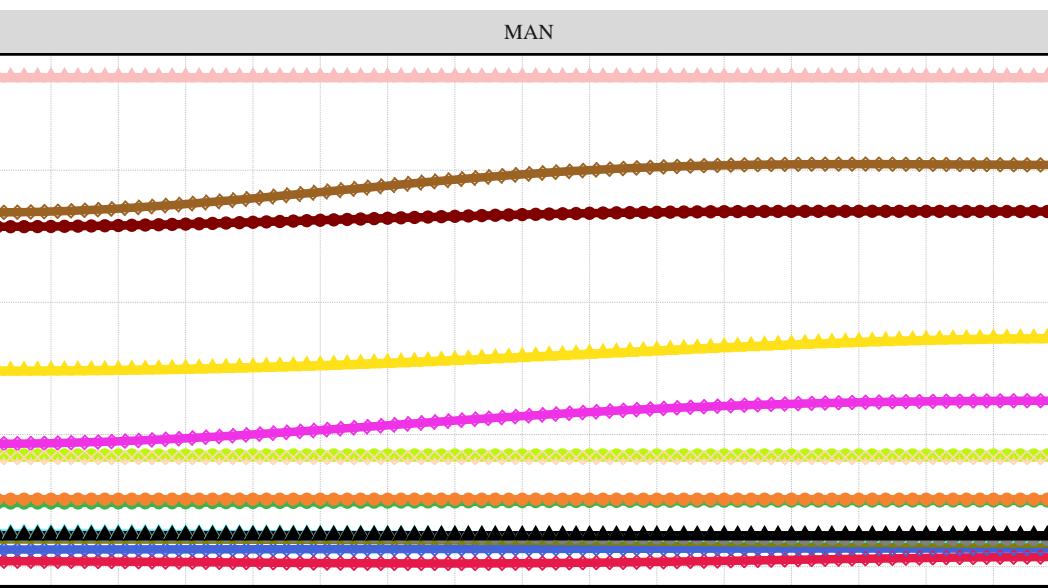
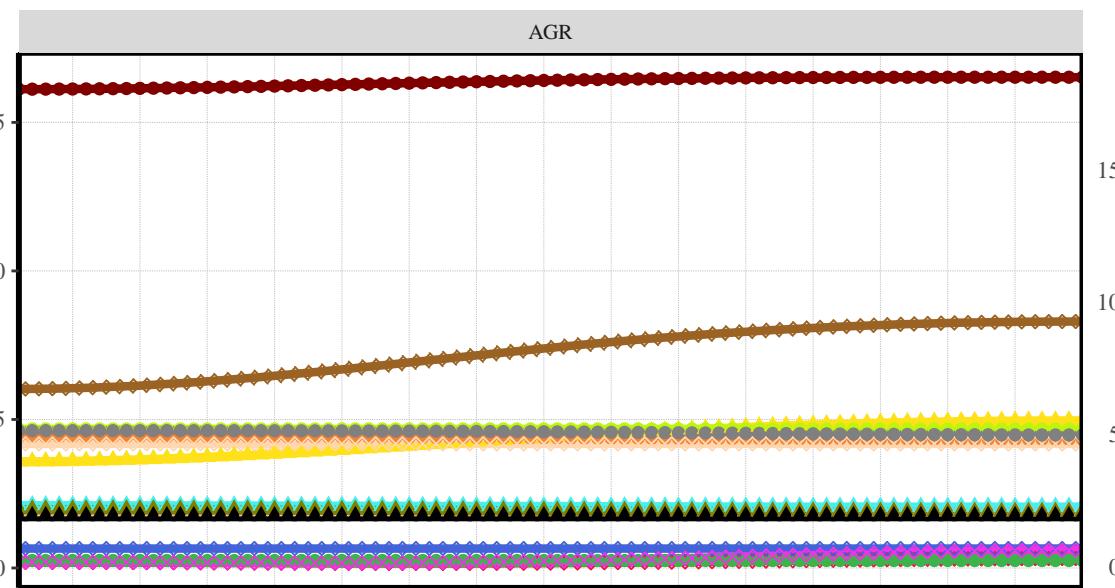
Average Annual Percentage Deviation from the 1961–90 Baseline



Source: Constructed by the Authors using Data from ISIMIP (2022).

Supplementary Annexure 06: Projected Average Variation in Climate Indicators at Firm Locations under SSP 2–4.5: Extremely Wet Conditions

Average Annual Percentage Deviation from the 1961–90 Baseline



SUPPLEMENTARY ANNEXURE 07: MAPPING OF NACE SECTORS FOR FLOOD RISKS

NACE Sector	Corresponding Sector in Huizinga et al. (2017)
A - Agriculture, forestry, and fishing	Agriculture
B - Mining and quarrying	Industrial
C - Manufacturing	Industrial
D - Electricity, gas, steam, and air conditioning supply	Infrastructure
E - Water supply; sewerage, waste management, and remediation activities	Infrastructure
F - Construction	Infrastructure
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	Industrial
H - Transportation and storage	Transport
I - Accommodation and food service activities	Commercial
J - Information and communication	Commercial
K - Financial and insurance activities	Commercial
L - Real estate activities	Commercial
M - Professional, scientific, and technical activities	Commercial
N - Administrative and support service activities	Commercial
O - Public administration and defense; compulsory social security	Commercial
P - Education	Commercial
Q - Human health and social work activities	Commercial
R - Arts, entertainment, and recreation	Commercial
S - Other service activities	Commercial
T - Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	Residential
U - Activities of extraterritorial organizations and bodies	Commercial

**SUPPLEMENTARY ANNEXURE 08: MAPPING UNITED NATIONS COUNTRIES
TO UNITED NATIONS REGIONS AND G-CUBED REGIONS**

ISO	Long Name	GTAP10	UN	GGG20C
ABW	Aruba	XCB	LAM	ROW
AFG	Afghanistan	XSA	SAS	ROW
AGO	Angola	XAC	SAF	OPC
AIA	Anguilla	XCB	LAM	ROW
ALB	Albania	ALB	SEU	ROW
AND	Andorra	XER	SEU	ROW
ANT	Netherland Antilles	XCB	LAM	ROW
ARE	United Arab Emirates	ARE	WAS	OPC
ARG	Argentina	ARG	LAM	ROW
ARM	Armenia	ARM	WAS	ROW
ASM	American Samoa	XOC	ANZ	ROW
ATG	Antigua & Barbuda	XCB	LAM	ROW
AUS	Australia	AUS	ANZ	AUS
AUT	Austria	AUT	WEU	EUR
AZE	Azerbaijan	AZE	WAS	ROW
BDI	Burundi	XEC	SAF	ROW
BEL	Belgium	BEL	WEU	EUR
BEN	Benin	BEN	SAF	ROW
BFA	Burkina Faso	BFA	SAF	ROW
BGD	Bangladesh	BGD	SAS	ROW
BGR	Bulgaria	BGR	EEU	ROW
BHR	Bahrain	BHR	WAS	OPC
BHS	Bahamas	XCB	LAM	ROW
BIH	Bosnia & Herzegovina	XER	SEU	ROW
BLR	Belarus	BLR	EEU	ROW
BLZ	Belize	XCA	LAM	ROW
BMU	Bermuda	XNA	NAM	ROW
BOL	Bolivia	BOL	LAM	ROW
BRA	Brazil	BRA	LAM	ROW
BRB	Barbados	XCB	LAM	ROW
BRN	Brunei	BRN	SEA	ROW
BTN	Bhutan	XSA	SAS	ROW
BWA	Botswana	BWA	SAF	ROW
CAF	Central African Republic	XCF	SAF	ROW
CAN	Canada	CAN	NAM	CAN
CHE	Switzerland	CHE	WEU	OEC
CHL	Chile	CHL	LAM	ROW
CHN	China	CHN	EAS	CHN
CIV	Cote D Ivoire	CIV	SAF	ROW
CMR	Cameroon	CMR	SAF	ROW
COD	Congo Kinshsa	XAC	SAF	OPC
COG	Congo Brzvle	XCF	SAF	ROW
COK	Cook Islands	XOC	ANZ	ROW
COL	Colombia	COL	LAM	ROW
COM	Comoros	XEC	SAF	ROW
CPV	Cape Verde	XWF	SAF	ROW
CRI	Costa Rica	CRI	LAM	ROW
CUB	Cuba	XCB	LAM	ROW
CYM	Cayman Islands	XCB	LAM	ROW
CYP	Cyprus	CYP	WAS	EUR
CZE	Czech Republic	CZE	EEU	ROW
DEU	Germany	DEU	WEU	EUR
DJI	Djibouti	XEC	SAF	ROW
DMA	Dominica	XCB	LAM	ROW
DNK	Denmark	DNK	NEU	OEC
DOM	Dominican Republic	DOM	LAM	ROW

ISO	Long Name	GTAP10	UN	GGG20C
DZA	Algeria	XNF	NAF	OPC
ECU	Ecuador	ECU	LAM	OPC
EGY	Egypt	EGY	NAF	ROW
ERI	Eritrea	XEC	SAF	ROW
ESP	Spain	ESP	SEU	EUR
EST	Estonia	EST	NEU	EUR
ETH	Ethiopia	ETH	SAF	ROW
FIN	Finland	FIN	NEU	EUR
FJI	Fiji	XOC	ANZ	ROW
FLK	Falklands	XSM	LAM	ROW
FRA	France	FRA	WEU	EUR
FRO	Faroes	XER	NEU	ROW
FSM	Micronesia FS	XOC	ANZ	ROW
GAB	Gabon	XCF	SAF	ROW
GBR	United Kingdom	GBR	NEU	OEC
GEO	Georgia	GEO	WAS	ROW
GHA	Ghana	GHA	SAF	ROW
GIB	Gibraltar	XER	SEU	ROW
GIN	Guinea	GIN	SAF	ROW
GLP	Guadeloupe	FRA	LAM	EUR
GMB	Gambia	XWF	SAF	ROW
GNB	Guinea-Bissau	XWF	SAF	ROW
GNQ	Equatorial Guinea	XCF	SAF	ROW
GRC	Greece	GRC	SEU	EUR
GRD	Grenada	XCB	LAM	ROW
GRL	Greenland	XNA	NAM	ROW
GTM	Guatemala	GTM	LAM	ROW
GUF	French Guiana	XSM	LAM	ROW
GUM	Guam	XOC	ANZ	ROW
GUY	Guyana	XSM	LAM	ROW
HKG	Hong Kong	HKG	EAS	ROW
HND	Honduras	HND	LAM	ROW
HRV	Croatia	HRV	SEU	ROW
HTI	Haiti	XCB	LAM	ROW
HUN	Hungary	HUN	EEU	ROW
IDN	Indonesia	IDN	SEA	ROW
IND	India	IND	SAS	IND
IRL	Ireland	IRL	NEU	EUR
IRN	Iran	IRN	SAS	OPC
IRQ	Iraq	XWS	WAS	OPC
ISL	Iceland	XEF	NEU	OEC
ISR	Israel	ISR	WAS	OPC
ITA	Italy	ITA	SEU	EUR
JAM	Jamaica	JAM	LAM	ROW
JOR	Jordan	JOR	WAS	OPC
JPN	Japan	JPN	EAS	JPN
KAZ	Kazakhstan	KAZ	CAS	ROW
KEN	Kenya	KEN	SAF	ROW
KGZ	Kyrgyzstan	KGZ	CAS	ROW
KHM	Cambodia	KHM	SEA	ROW
KIR	Kiribati	XOC	ANZ	ROW
TKN	St Kitts & Nevis	XCB	LAM	ROW
KOR	South Korea	KOR	EAS	ROW
KWT	Kuwait	KWT	WAS	OPC
LAO	Laos	LAO	SEA	ROW
LBN	Lebanon	XWS	WAS	OPC
LBR	Liberia	XWF	SAF	ROW
LBY	Libya	XNF	NAF	OPC
LCA	Saint Lucia	XCB	LAM	ROW

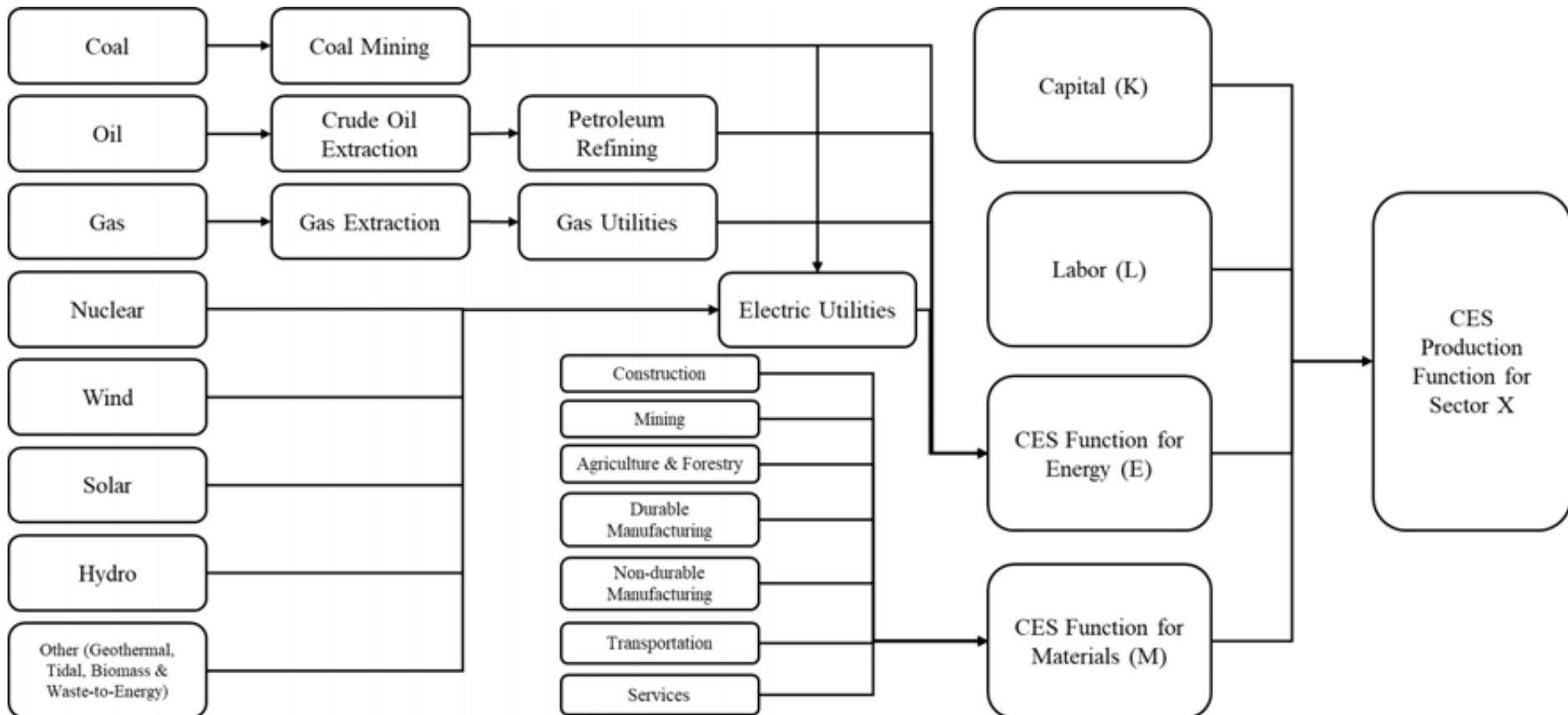
ISO	Long Name	GTAP10	UN	GGG20C
LIE	Liechtenstein	XEF	WEU	OEC
LKA	Sri Lanka	LKA	SAS	ROW
LSO	Lesotho	XSC	SAF	ROW
LTU	Lithuania	LTU	NEU	EUR
LUX	Luxembourg	LUX	WEU	EUR
LVA	Latvia	LVA	NEU	EUR
MAC	Macau	XEA	EAS	ROW
MAR	Morocco	MAR	NAF	ROW
MCO	Monaco	XER	WEU	ROW
MDA	Moldova	XEE	EEU	ROW
MDG	Madagascar	MDG	SAF	ROW
MDV	Maldives	XSA	SAS	ROW
MEX	Mexico	MEX	LAM	ROW
MHL	Marshalls	XOC	ANZ	ROW
MKD	Macedonia	XER	SEU	ROW
MLI	Mali	XWF	SAF	ROW
MLT	Malta	MLT	SEU	ROW
MMR	Burma	XSE	SEA	ROW
MNG	Mongolia	MNG	EAS	ROW
MNP	North Marianas	XOC	ANZ	ROW
MOZ	Mozambique	MOZ	SAF	ROW
MRT	Mauritania	XWF	SAF	ROW
MSR	Montserrat	XCB	LAM	ROW
MTQ	Martinique	FRA	LAM	EUR
MUS	Mauritius	MUS	SAF	ROW
MWI	Malawi	MWI	SAF	ROW
MYS	Malaysia	MYS	SEA	ROW
MYT	Mayotte	XEC	SAF	ROW
NAM	Namibia	NAM	SAF	ROW
NCL	New Caledonia	XOC	ANZ	ROW
NER	Niger	XWF	SAF	ROW
NFK	Norfolk Island	AUS	ANZ	AUS
NGA	Nigeria	NGA	SAF	OPC
NIC	Nicaragua	NIC	LAM	ROW
NIU	Niue	XOC	ANZ	ROW
NLD	Netherlands	NLD	WEU	EUR
NOR	Norway	NOR	NEU	OEC
NPL	Nepal	NPL	SAS	ROW
NRU	Nauru	XOC	ANZ	ROW
NZL	New Zealand	NZL	ANZ	OEC
OMN	Oman	OMN	WAS	OPC
PAK	Pakistan	PAK	SAS	ROW
PAN	Panama	PAN	LAM	ROW
PER	Peru	PER	LAM	ROW
PHL	Philippines	PHL	SEA	ROW
PLW	Palau	XOC	ANZ	ROW
PNG	Papua New Guinea	XOC	ANZ	ROW
POL	Poland	POL	EEU	ROW
PRI	Puerto Rico	PRI	LAM	ROW
PRK	North Korea	XEA	EAS	ROW
PRT	Portugal	PRT	SEU	EUR
PRY	Paraguay	PRY	LAM	ROW
PSE	Occ Palestine	XWS	WAS	OPC
PYF	French Polynesia	XOC	ANZ	ROW
QAT	Qatar	QAT	WAS	OPC
REU	Reunion	FRA	SAF	EUR
ROM	Romania	ROU	EEU	ROW
RUS	Russian Federation	RUS	EEU	RUS
RWA	Rwanda	RWA	SAF	ROW

ISO	Long Name	GTAP10	UN	GGG20C
SAU	Saudi Arabia	SAU	WAS	OPC
SCG	Serbia and Montenegro	XER	EEU	ROW
SDN	Sudan	XEC	NAF	ROW
SEN	Senegal	SEN	SAF	ROW
SGP	Singapore	SGP	SEA	ROW
SHN	Saint Helena	XWF	SAF	ROW
SLB	Solomons	XOC	ANZ	ROW
SLE	Sierra Leone	XWF	SAF	ROW
SLV	El Salvador	SLV	LAM	ROW
SMR	San Marino	XER	SEU	ROW
SOM	Somalia	XEC	SAF	ROW
SPM	St Pier Miq	XNA	NAM	ROW
STP	Sao Tome & Principe	XCF	SAF	ROW
SUR	Suriname	XSM	LAM	ROW
SVK	Slovakia	SVK	EEU	ROW
SVN	Slovenia	SVN	SEU	ROW
SWE	Sweden	SWE	NEU	OEC
SWZ	Swaziland	XSC	SAF	ROW
SYC	Seychelles	XEC	SAF	ROW
SYR	Syria	XWS	WAS	OPC
TCA	Turks Caicos	XCB	LAM	ROW
TCD	Chad	XCF	SAF	ROW
TGO	Togo	TGO	SAF	ROW
THA	Thailand	THA	SEA	ROW
TJK	Tajikistan	TJK	CAS	ROW
TKL	Tokelau	XOC	ANZ	ROW
TKM	Turkmenistan	XSU	CAS	ROW
TLS	Timor Leste	XSE	SEA	ROW
TON	Tonga	XOC	ANZ	ROW
TTO	Trinidad & Tobago	TTO	LAM	ROW
TUN	Tunisia	TUN	NAF	ROW
TUR	Turkey	TUR	WAS	ROW
TUV	Tuvalu	XOC	ANZ	ROW
TWN	Taiwan	TWN	EAS	ROW
TZA	Tanzania	TZA	SAF	ROW
UGA	Uganda	UGA	SAF	ROW
UKR	Ukraine	UKR	EEU	ROW
URY	Uruguay	URY	LAM	ROW
USA	United States	USA	NAM	USA
UZB	Uzbekistan	XSU	CAS	ROW
VCT	St Vincent Grenadines	XCB	LAM	ROW
VEN	Venezuela	VEN	LAM	OPC
VGB	UK Virgin Islands	XCB	LAM	ROW
VIR	USA Virgin Islands	XCB	LAM	ROW
VNM	Vietnam	VNM	SEA	ROW
VUT	Vanuatu	XOC	ANZ	ROW
WLF	Wallis & Futuna	XOC	ANZ	ROW
WSM	Samoa	XOC	ANZ	ROW
YEM	Yemen	XWS	WAS	OPC
ZAF	South Africa	ZAF	SAF	ROW
ZMB	Zambia	ZMB	SAF	ROW
ZWE	Zimbabwe	ZWE	SAF	ROW
ATA	Antarctica	XTW	ANT	ROW

SUPPLEMENTARY ANNEXURE 09: MAPPING GTAP SECTORS TO G-CUBED SECTORS

Number	Code	Description	G-Cubed Sector
1	PDR	Paddy rice	Agriculture
2	WHT	Wheat	Agriculture
3	GRO	Cereal grains nec	Agriculture
4	V_F	Vegetables, fruit, nuts	Agriculture
5	OSD	Oil seeds	Agriculture
6	C_B	Sugar cane, sugar beet	Agriculture
7	PFB	Plant-based fibers	Agriculture
8	OCR	Crops nec	Agriculture
9	CTL	Bovine cattle, sheep and goats, horses	Agriculture
10	OAP	Animal products nec	Agriculture
11	RMK	Raw milk	Agriculture
12	WOL	Wool, silk-worm cocoons	Agriculture
13	FRS	Forestry	Agriculture
14	FSH	Fishing	Agriculture
15	COA	Coal	Coal Mining
16	OIL	Oil	Crude Oil Extraction
17	GAS	Gas	Gas Utilities
18	OXT	Other Extraction (formerly omn Minerals nec)	Mining
19	CMT	Bovine meat products	Non-durable Manufacturing
20	OMT	Meat products nec	Non-durable Manufacturing
21	VOL	Vegetable oils and fats	Non-durable Manufacturing
22	MIL	Dairy products	Non-durable Manufacturing
23	PCR	Processed rice	Non-durable Manufacturing
24	SGR	Sugar	Non-durable Manufacturing
25	OFD	Food products nec	Non-durable Manufacturing
26	B_T	Beverages and tobacco products	Non-durable Manufacturing
27	TEX	Textiles	Non-durable Manufacturing
28	WAP	Wearing apparel	Non-durable Manufacturing
29	LEA	Leather products	Non-durable Manufacturing
30	LUM	Wood products	Agriculture
31	PPP	Paper products, publishing	Non-durable Manufacturing
32	P_C	Petroleum, coal products	Petroleum Refining
33	CHM	Chemical products	Non-durable Manufacturing
34	BPH	Basic pharmaceutical products	Non-durable Manufacturing
35	RPP	Rubber and plastic products	Non-durable Manufacturing
36	NMM	Mineral products nec	Durable Manufacturing
37	I_S	Ferrous metals	Durable Manufacturing
38	NFM	Metals nec	Durable Manufacturing
39	FMP	Metal products	Durable Manufacturing
40	ELE	Computer, electronic and optical products	Durable Manufacturing
41	EEQ	Electrical equipment	Durable Manufacturing
42	OME	Machinery and equipment nec	Durable Manufacturing
43	MVH	Motor vehicles and parts	Durable Manufacturing
44	OTN	Transport equipment nec	Durable Manufacturing
45	OMF	Manufactures nec	Durable Manufacturing
46	ELY	Electricity	Electric Utilities
47	GDT	Gas manufacture, distribution	Gas Utilities
48	WTR	Water	Services
49	CNS	Construction	Construction
50	TRD	Trade	Services
51	AFS	Accommodation, Food and service activities	Services
52	OTP	Transport nec	Transport
53	WTP	Water transport	Transport
54	ATP	Air transport	Transport
55	WHS	Warehousing and support activities	Transport
56	CMN	Communication	Services
57	OFI	Financial services nec	Services
58	INS	Insurance (formerly isr)	Services
59	RSA	Real estate activities	Services
60	OBS	Business services nec	Services
61	ROS	Recreational and other services	Services
62	OSG	Public Administration and defense	Services
63	EDU	Education	Services
64	HHT	Human health and social work activities	Services
65	DWE	Dwellings	Services

SUPPLEMENTARY ANNEXURE 10: PRODUCTION STRUCTURE OF THE G-CUBED MODEL



Source: G-Cubed Model (version GGG20C_v169).

Supplementary Annexure 11 – Descriptive Statistics for Shocks

SSP 1-2.6

Sector	Region	Mean	Median	SD	Min	Max
Agriculture	AUS	-0.68	-0.66	0.42	-1.47	0.00
Agriculture	CAN	-3.84	-3.84	2.26	-7.69	0.00
Agriculture	CHN	-1.91	-1.90	1.14	-3.86	0.00
Agriculture	EUR	-0.33	-0.27	0.27	-0.91	0.00
Agriculture	IND	-1.08	-1.05	0.66	-2.26	0.00
Agriculture	JPN	-1.73	-1.72	1.02	-3.46	0.00
Agriculture	OEC	-0.13	-0.04	0.32	-1.95	0.00
Agriculture	OPC	-1.30	-1.18	0.91	-3.06	0.00
Agriculture	ROW	-0.70	-0.70	0.41	-1.40	0.00
Agriculture	RUS	-0.51	-0.47	0.34	-1.17	0.00
Agriculture	USA	-3.84	-3.84	2.26	-7.69	0.00
Coal Mining	AUS	-1.36	-1.34	0.84	-2.87	0.00
Coal Mining	CAN	-2.77	-2.77	1.63	-5.55	0.00
Coal Mining	CHN	-1.54	-1.44	1.03	-3.50	0.00
Coal Mining	IND	-1.88	-1.88	1.12	-3.79	0.00
Coal Mining	ROW	-0.46	-0.44	0.30	-1.01	0.00
Coal Mining	RUS	-0.76	-0.76	0.45	-1.53	0.00
Coal Mining	USA	-2.83	-2.83	1.67	-5.67	0.00
Construction	AUS	-1.36	-1.34	0.84	-2.87	0.00
Construction	CAN	-2.77	-2.77	1.63	-5.55	0.00
Construction	CHN	-1.54	-1.44	1.03	-3.49	0.00
Construction	EUR	-0.17	-0.11	0.19	-1.02	0.00
Construction	IND	-1.84	-1.84	1.10	-3.69	0.00
Construction	JPN	-1.30	-1.24	0.84	-2.86	0.00
Construction	OEC	-1.30	-1.28	0.80	-3.06	0.00
Construction	OPC	-0.73	-0.67	0.49	-1.65	0.00
Construction	ROW	-0.46	-0.44	0.29	-1.00	0.00
Construction	RUS	-0.76	-0.76	0.45	-1.53	0.00
Construction	USA	-2.83	-2.83	1.67	-5.67	0.00
Crude Oil Extraction	AUS	-1.36	-1.34	0.84	-2.87	0.00
Crude Oil Extraction	CAN	-2.77	-2.77	1.63	-5.55	0.00
Crude Oil Extraction	CHN	-1.55	-1.44	1.04	-3.51	0.00
Crude Oil Extraction	IND	-1.88	-1.88	1.12	-3.78	0.00
Crude Oil Extraction	OEC	-1.30	-1.28	0.80	-3.06	0.00
Crude Oil Extraction	OPC	-0.73	-0.67	0.49	-1.65	0.00
Crude Oil Extraction	ROW	-0.46	-0.44	0.30	-1.01	0.00
Crude Oil Extraction	RUS	-0.76	-0.76	0.45	-1.53	0.00
Crude Oil Extraction	USA	-2.83	-2.83	1.67	-5.67	0.00
Durable Manufacturing	AUS	-0.21	-0.21	0.13	-0.43	0.00
Durable Manufacturing	CAN	-0.91	-0.91	0.54	-1.83	0.00
Durable Manufacturing	CHN	-0.71	-0.68	0.45	-1.53	0.00
Durable Manufacturing	EUR	-0.02	-0.01	0.01	-0.04	0.00
Durable Manufacturing	IND	-0.84	-0.84	0.51	-1.72	0.00
Durable Manufacturing	JPN	-0.45	-0.45	0.27	-0.91	0.00
Durable Manufacturing	OEC	-0.18	-0.14	0.16	-0.52	0.00
Durable Manufacturing	OPC	-0.19	-0.19	0.12	-0.41	0.00
Durable Manufacturing	ROW	-0.10	-0.10	0.06	-0.21	0.00
Durable Manufacturing	RUS	-0.34	-0.34	0.21	-0.72	0.00
Durable Manufacturing	USA	-0.70	-0.70	0.42	-1.43	0.00
Electric Utilities	AUS	-0.21	-0.21	0.13	-0.43	0.00
Electric Utilities	CAN	-0.91	-0.91	0.54	-1.83	0.00
Electric Utilities	CHN	-0.71	-0.68	0.45	-1.54	0.00
Electric Utilities	EUR	-0.02	-0.01	0.01	-0.04	0.00
Electric Utilities	IND	-0.84	-0.83	0.50	-1.70	0.00
Electric Utilities	JPN	-0.45	-0.45	0.27	-0.91	0.00
Electric Utilities	OEC	-0.18	-0.14	0.16	-0.52	0.00
Electric Utilities	OPC	-0.19	-0.19	0.12	-0.41	0.00
Electric Utilities	ROW	-0.11	-0.11	0.07	-0.22	0.00
Electric Utilities	RUS	-0.34	-0.34	0.21	-0.72	0.00
Electric Utilities	USA	-0.70	-0.70	0.42	-1.43	0.00
Electricity Generation from Coal	AUS	-0.21	-0.21	0.13	-0.43	0.00
Electricity Generation from Coal	CHN	-0.71	-0.68	0.45	-1.53	0.00
Electricity Generation from Coal	EUR	-0.02	-0.01	0.01	-0.04	0.00
Electricity Generation from Coal	IND	-0.84	-0.83	0.50	-1.71	0.00
Electricity Generation from Coal	JPN	-0.45	-0.45	0.27	-0.91	0.00
Electricity Generation from Coal	ROW	-0.11	-0.11	0.06	-0.22	0.00
Electricity Generation from Coal	RUS	-0.34	-0.34	0.21	-0.72	0.00
Electricity Generation from Coal	USA	-0.71	-0.70	0.42	-1.43	0.00
Electricity Generation from Gas	AUS	-0.21	-0.21	0.13	-0.43	0.00
Electricity Generation from Gas	CAN	-0.91	-0.91	0.54	-1.83	0.00

Electricity Generation from Gas	EUR	-0.02	-0.01	0.01	-0.04	0.00
Electricity Generation from Gas	IND	-0.83	-0.83	0.50	-1.69	0.00
Electricity Generation from Gas	JPN	-0.45	-0.45	0.27	-0.91	0.00
Electricity Generation from Gas	OPC	-0.19	-0.19	0.12	-0.40	0.00
Electricity Generation from Gas	ROW	-0.10	-0.10	0.06	-0.21	0.00
Electricity Generation from Gas	RUS	-0.34	-0.34	0.21	-0.72	0.00
Electricity Generation from Gas	USA	-0.70	-0.70	0.42	-1.43	0.00
Electricity Generation from Oil	IND	-0.83	-0.83	0.50	-1.69	0.00
Electricity Generation from Oil	JPN	-0.45	-0.45	0.27	-0.91	0.00
Electricity Generation from Oil	OPC	-0.19	-0.19	0.12	-0.40	0.00
Electricity Generation from Oil	ROW	-0.10	-0.10	0.06	-0.20	0.00
Electricity Generation from Oil	RUS	-0.34	-0.34	0.21	-0.72	0.00
Gas Utilities	AUS	-0.21	-0.21	0.13	-0.43	0.00
Gas Utilities	CAN	-0.91	-0.91	0.54	-1.83	0.00
Gas Utilities	IND	-0.91	-0.90	0.55	-1.85	0.00
Gas Utilities	OEC	-0.18	-0.14	0.16	-0.52	0.00
Gas Utilities	OPC	-0.19	-0.19	0.12	-0.41	0.00
Gas Utilities	ROW	-0.11	-0.11	0.07	-0.23	0.00
Gas Utilities	RUS	-0.34	-0.34	0.21	-0.72	0.00
Gas Utilities	USA	-0.71	-0.70	0.42	-1.43	0.00
Non-durable Manufacturing	AUS	-0.21	-0.21	0.13	-0.43	0.00
Non-durable Manufacturing	CAN	-0.91	-0.91	0.54	-1.83	0.00
Non-durable Manufacturing	CHN	-0.71	-0.68	0.45	-1.53	0.00
Non-durable Manufacturing	EUR	-0.02	-0.01	0.01	-0.04	0.00
Non-durable Manufacturing	IND	-0.85	-0.84	0.51	-1.72	0.00
Non-durable Manufacturing	JPN	-0.45	-0.45	0.27	-0.91	0.00
Non-durable Manufacturing	OEC	-0.18	-0.14	0.16	-0.52	0.00
Non-durable Manufacturing	OPC	-0.19	-0.19	0.12	-0.41	0.00
Non-durable Manufacturing	ROW	-0.11	-0.11	0.06	-0.21	0.00
Non-durable Manufacturing	RUS	-0.34	-0.34	0.21	-0.72	0.00
Non-durable Manufacturing	USA	-0.70	-0.70	0.42	-1.43	0.00
Other Mining	AUS	-1.36	-1.34	0.84	-2.87	0.00
Other Mining	CAN	-2.77	-2.77	1.63	-5.55	0.00
Other Mining	CHN	-1.55	-1.44	1.03	-3.50	0.00
Other Mining	EUR	-0.17	-0.11	0.19	-1.02	0.00
Other Mining	IND	-1.87	-1.86	1.11	-3.75	0.00
Other Mining	OEC	-1.30	-1.28	0.80	-3.06	0.00
Other Mining	OPC	-0.73	-0.67	0.49	-1.65	0.00
Other Mining	ROW	-0.46	-0.44	0.30	-1.00	0.00
Other Mining	RUS	-0.76	-0.76	0.45	-1.53	0.00
Other Mining	USA	-2.83	-2.83	1.67	-5.67	0.00
Petroleum Refining	AUS	-0.21	-0.21	0.13	-0.43	0.00
Petroleum Refining	CAN	-0.91	-0.91	0.54	-1.83	0.00
Petroleum Refining	CHN	-0.70	-0.67	0.45	-1.52	0.00
Petroleum Refining	EUR	-0.02	-0.01	0.01	-0.04	0.00
Petroleum Refining	IND	-0.84	-0.83	0.50	-1.71	0.00
Petroleum Refining	JPN	-0.45	-0.45	0.27	-0.91	0.00
Petroleum Refining	OEC	-0.18	-0.14	0.16	-0.52	0.00
Petroleum Refining	OPC	-0.19	-0.19	0.12	-0.40	0.00
Petroleum Refining	ROW	-0.10	-0.10	0.06	-0.20	0.00
Petroleum Refining	RUS	-0.34	-0.34	0.21	-0.72	0.00
Petroleum Refining	USA	-0.70	-0.70	0.42	-1.43	0.00
Services	AUS	-0.27	-0.27	0.16	-0.55	0.00
Services	CAN	-0.36	-0.36	0.21	-0.72	0.00
Services	CHN	-0.33	-0.32	0.21	-0.71	0.00
Services	EUR	-0.03	-0.02	0.02	-0.08	0.00
Services	IND	-0.33	-0.33	0.20	-0.67	0.00
Services	JPN	-0.29	-0.29	0.17	-0.58	0.00
Services	OEC	-0.17	-0.16	0.11	-0.37	0.00
Services	OPC	-0.32	-0.29	0.22	-0.74	0.00
Services	ROW	-0.33	-0.32	0.21	-0.70	0.00
Services	RUS	-0.38	-0.38	0.24	-0.79	0.00
Services	USA	-0.41	-0.41	0.25	-0.84	0.00
Transportation	AUS	-0.27	-0.27	0.16	-0.55	0.00
Transportation	CAN	-0.36	-0.36	0.21	-0.72	0.00
Transportation	CHN	-0.33	-0.31	0.21	-0.70	0.00
Transportation	EUR	-0.03	-0.02	0.02	-0.08	0.00
Transportation	IND	-0.31	-0.30	0.18	-0.61	0.00
Transportation	JPN	-0.29	-0.29	0.17	-0.58	0.00
Transportation	OEC	-0.17	-0.16	0.11	-0.37	0.00
Transportation	OPC	-0.32	-0.29	0.22	-0.74	0.00
Transportation	ROW	-0.33	-0.32	0.20	-0.69	0.00
Transportation	RUS	-0.38	-0.38	0.24	-0.79	0.00
Transportation	USA	-0.41	-0.41	0.25	-0.84	0.00

SSP 2-4.5

Sector	Region	Mean	Median	SD	Min	Max
Agriculture	AUS	-5.06	-5.06	2.97	-10.11	0.00
Agriculture	CAN	-8.58	-8.58	5.04	-17.16	0.00
Agriculture	CHN	-3.15	-2.76	2.33	-7.82	0.00
Agriculture	EUR	-4.17	-4.06	2.58	-8.77	0.00
Agriculture	IND	-5.17	-5.16	3.06	-10.40	0.00
Agriculture	JPN	-1.13	-0.73	1.09	-3.46	0.00
Agriculture	OEC	-0.64	-0.46	0.57	-1.95	0.00
Agriculture	OPC	-7.05	-6.92	4.29	-15.30	0.00
Agriculture	ROW	-5.70	-5.70	3.35	-11.40	0.00
Agriculture	RUS	-7.61	-7.61	4.48	-15.22	0.00
Agriculture	USA	-8.58	-8.58	5.04	-17.16	0.00
Coal Mining	AUS	-3.87	-3.87	2.28	-7.74	0.00
Coal Mining	CAN	-4.69	-4.69	2.76	-9.39	0.00
Coal Mining	CHN	-1.68	-1.33	1.42	-4.70	0.00
Coal Mining	IND	-3.05	-3.04	1.80	-6.11	0.00
Coal Mining	ROW	-2.49	-2.49	1.46	-4.98	0.00
Coal Mining	RUS	-3.84	-3.79	2.32	-7.90	0.00
Coal Mining	USA	-4.48	-4.48	2.63	-8.96	0.00
Construction	AUS	-3.87	-3.87	2.28	-7.74	0.00
Construction	CAN	-4.69	-4.69	2.76	-9.39	0.00
Construction	CHN	-1.68	-1.33	1.42	-4.70	0.00
Construction	EUR	-1.33	-1.22	0.90	-3.05	0.00
Construction	IND	-2.99	-2.99	1.76	-5.98	0.00
Construction	JPN	-1.03	-0.82	0.87	-2.90	0.00
Construction	OEC	-0.24	-0.01	0.35	-1.09	0.00
Construction	OPC	-2.15	-2.06	1.36	-4.61	0.00
Construction	ROW	-2.48	-2.48	1.46	-4.96	0.00
Construction	RUS	-3.84	-3.79	2.32	-7.90	0.00
Construction	USA	-4.48	-4.48	2.63	-8.96	0.00
Crude Oil Extraction	AUS	-3.87	-3.87	2.28	-7.74	0.00
Crude Oil Extraction	CAN	-4.69	-4.69	2.76	-9.39	0.00
Crude Oil Extraction	CHN	-1.68	-1.33	1.42	-4.72	0.00
Crude Oil Extraction	IND	-3.04	-3.04	1.79	-6.10	0.00
Crude Oil Extraction	OEC	-0.24	-0.01	0.35	-1.09	0.00
Crude Oil Extraction	OPC	-2.15	-2.06	1.36	-4.61	0.00
Crude Oil Extraction	ROW	-2.49	-2.49	1.46	-4.98	0.00
Crude Oil Extraction	RUS	-3.84	-3.79	2.32	-7.90	0.00
Crude Oil Extraction	USA	-4.48	-4.48	2.63	-8.96	0.00
Durable Manufacturing	AUS	-0.91	-0.91	0.53	-1.81	0.00
Durable Manufacturing	CAN	-1.07	-1.05	0.65	-2.22	0.00
Durable Manufacturing	CHN	-0.55	-0.45	0.44	-1.48	0.00
Durable Manufacturing	EUR	-0.53	-0.51	0.34	-1.14	0.00
Durable Manufacturing	IND	-0.84	-0.83	0.49	-1.68	0.00
Durable Manufacturing	JPN	-0.32	-0.25	0.27	-0.90	0.00
Durable Manufacturing	OEC	-0.24	-0.20	0.19	-0.63	0.00
Durable Manufacturing	OPC	-0.55	-0.51	0.37	-1.24	0.00
Durable Manufacturing	ROW	-0.68	-0.68	0.40	-1.37	0.00
Durable Manufacturing	RUS	-1.15	-1.15	0.68	-2.30	0.00
Durable Manufacturing	USA	-0.96	-0.96	0.56	-1.92	0.00
Electric Utilities	AUS	-0.91	-0.91	0.53	-1.81	0.00
Electric Utilities	CAN	-1.07	-1.05	0.65	-2.22	0.00
Electric Utilities	CHN	-0.56	-0.46	0.45	-1.50	0.00
Electric Utilities	EUR	-0.53	-0.51	0.34	-1.14	0.00
Electric Utilities	IND	-0.82	-0.82	0.49	-1.66	0.00
Electric Utilities	JPN	-0.32	-0.25	0.27	-0.90	0.00
Electric Utilities	OEC	-0.24	-0.20	0.19	-0.63	0.00
Electric Utilities	OPC	-0.55	-0.51	0.37	-1.24	0.00
Electric Utilities	ROW	-0.69	-0.69	0.41	-1.39	0.00
Electric Utilities	RUS	-1.15	-1.15	0.68	-2.30	0.00
Electric Utilities	USA	-0.96	-0.96	0.56	-1.92	0.00
Electricity Generation from Coal	AUS	-0.91	-0.91	0.53	-1.81	0.00
Electricity Generation from Coal	CHN	-0.55	-0.45	0.45	-1.49	0.00
Electricity Generation from Coal	EUR	-0.53	-0.51	0.34	-1.14	0.00
Electricity Generation from Coal	IND	-0.83	-0.83	0.49	-1.67	0.00
Electricity Generation from Coal	JPN	-0.32	-0.25	0.27	-0.90	0.00
Electricity Generation from Coal	ROW	-0.69	-0.69	0.41	-1.38	0.00
Electricity Generation from Coal	RUS	-1.15	-1.15	0.68	-2.30	0.00
Electricity Generation from Coal	USA	-0.96	-0.96	0.56	-1.92	0.00
Electricity Generation from Gas	AUS	-0.91	-0.91	0.53	-1.81	0.00
Electricity Generation from Gas	CAN	-1.07	-1.05	0.65	-2.22	0.00
Electricity Generation from Gas	EUR	-0.53	-0.51	0.34	-1.14	0.00
Electricity Generation from Gas	IND	-0.82	-0.82	0.49	-1.65	0.00

Electricity Generation from Gas	JPN	-0.32	-0.25	0.27	-0.90	0.00
Electricity Generation from Gas	OPC	-0.55	-0.51	0.37	-1.24	0.00
Electricity Generation from Gas	ROW	-0.68	-0.68	0.40	-1.37	0.00
Electricity Generation from Gas	RUS	-1.15	-1.15	0.68	-2.30	0.00
Electricity Generation from Gas	USA	-0.96	-0.96	0.56	-1.92	0.00
Electricity Generation from Oil	IND	-0.82	-0.82	0.49	-1.65	0.00
Electricity Generation from Oil	JPN	-0.32	-0.25	0.27	-0.90	0.00
Electricity Generation from Oil	OPC	-0.55	-0.51	0.37	-1.24	0.00
Electricity Generation from Oil	ROW	-0.68	-0.68	0.40	-1.36	0.00
Electricity Generation from Oil	RUS	-1.15	-1.15	0.68	-2.30	0.00
Gas Utilities	AUS	-0.91	-0.91	0.53	-1.81	0.00
Gas Utilities	CAN	-1.07	-1.05	0.65	-2.22	0.00
Gas Utilities	IND	-0.92	-0.91	0.55	-1.86	0.00
Gas Utilities	OEC	-0.24	-0.20	0.19	-0.63	0.00
Gas Utilities	OPC	-0.55	-0.51	0.37	-1.24	0.00
Gas Utilities	ROW	-0.69	-0.69	0.41	-1.39	0.00
Gas Utilities	RUS	-1.15	-1.15	0.68	-2.30	0.00
Gas Utilities	USA	-0.96	-0.96	0.56	-1.92	0.00
Non-durable Manufacturing	AUS	-0.91	-0.91	0.53	-1.81	0.00
Non-durable Manufacturing	CAN	-1.07	-1.05	0.65	-2.22	0.00
Non-durable Manufacturing	CHN	-0.55	-0.45	0.45	-1.48	0.00
Non-durable Manufacturing	EUR	-0.53	-0.51	0.34	-1.14	0.00
Non-durable Manufacturing	IND	-0.84	-0.83	0.49	-1.68	0.00
Non-durable Manufacturing	JPN	-0.32	-0.25	0.27	-0.90	0.00
Non-durable Manufacturing	OEC	-0.24	-0.20	0.19	-0.63	0.00
Non-durable Manufacturing	OPC	-0.55	-0.51	0.37	-1.24	0.00
Non-durable Manufacturing	ROW	-0.68	-0.68	0.40	-1.37	0.00
Non-durable Manufacturing	RUS	-1.15	-1.15	0.68	-2.30	0.00
Non-durable Manufacturing	USA	-0.96	-0.96	0.56	-1.92	0.00
Other Mining	AUS	-3.87	-3.87	2.28	-7.74	0.00
Other Mining	CAN	-4.69	-4.69	2.76	-9.39	0.00
Other Mining	CHN	-1.68	-1.33	1.42	-4.71	0.00
Other Mining	EUR	-1.33	-1.22	0.90	-3.05	0.00
Other Mining	IND	-3.03	-3.02	1.78	-6.06	0.00
Other Mining	OEC	-0.24	-0.01	0.35	-1.09	0.00
Other Mining	OPC	-2.15	-2.06	1.36	-4.61	0.00
Other Mining	ROW	-2.48	-2.48	1.46	-4.97	0.00
Other Mining	RUS	-3.84	-3.79	2.32	-7.90	0.00
Other Mining	USA	-4.48	-4.48	2.63	-8.96	0.00
Petroleum Refining	AUS	-0.91	-0.91	0.53	-1.81	0.00
Petroleum Refining	CAN	-1.07	-1.05	0.65	-2.22	0.00
Petroleum Refining	CHN	-0.54	-0.44	0.44	-1.46	0.00
Petroleum Refining	EUR	-0.53	-0.51	0.34	-1.14	0.00
Petroleum Refining	IND	-0.83	-0.83	0.49	-1.67	0.00
Petroleum Refining	JPN	-0.32	-0.25	0.27	-0.90	0.00
Petroleum Refining	OEC	-0.24	-0.20	0.19	-0.63	0.00
Petroleum Refining	OPC	-0.55	-0.51	0.37	-1.24	0.00
Petroleum Refining	ROW	-0.68	-0.68	0.40	-1.36	0.00
Petroleum Refining	RUS	-1.15	-1.15	0.68	-2.30	0.00
Petroleum Refining	USA	-0.96	-0.96	0.56	-1.92	0.00
Services	AUS	-0.69	-0.69	0.41	-1.38	0.00
Services	CAN	-1.32	-1.32	0.78	-2.64	0.00
Services	CHN	-0.49	-0.46	0.31	-1.06	0.00
Services	EUR	-1.12	-1.12	0.66	-2.24	0.00
Services	IND	-0.73	-0.73	0.43	-1.47	0.00
Services	JPN	-0.25	-0.20	0.21	-0.70	0.00
Services	OEC	-0.43	-0.34	0.37	-1.22	0.00
Services	OPC	-0.93	-0.89	0.59	-1.99	0.00
Services	ROW	-0.95	-0.95	0.56	-1.91	0.00
Services	RUS	-0.99	-0.99	0.58	-1.99	0.00
Services	USA	-0.81	-0.81	0.48	-1.62	0.00
Transportation	AUS	-0.69	-0.69	0.41	-1.38	0.00
Transportation	CAN	-1.32	-1.32	0.78	-2.64	0.00
Transportation	CHN	-0.48	-0.45	0.31	-1.04	0.00
Transportation	EUR	-1.12	-1.12	0.66	-2.24	0.00
Transportation	IND	-0.69	-0.69	0.41	-1.39	0.00
Transportation	JPN	-0.25	-0.20	0.21	-0.70	0.00
Transportation	OEC	-0.43	-0.34	0.37	-1.22	0.00
Transportation	OPC	-0.93	-0.89	0.59	-1.99	0.00
Transportation	ROW	-0.95	-0.95	0.56	-1.90	0.00
Transportation	RUS	-0.99	-0.99	0.58	-1.99	0.00
Transportation	USA	-0.81	-0.81	0.48	-1.62	0.00