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## Supplemental Material

*Journal of Climate*

Projected Seasonal Changes in Large-Scale Global Precipitation and Temperature Extremes Based on the CMIP5 Ensemble

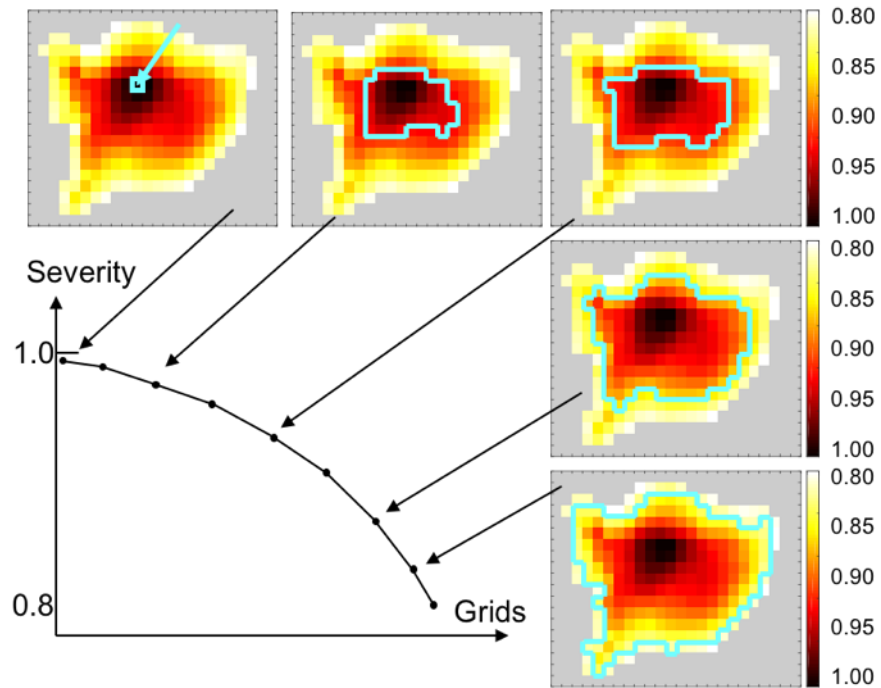
<https://doi.org/10.1175/JCLI-D-19-0311.1>

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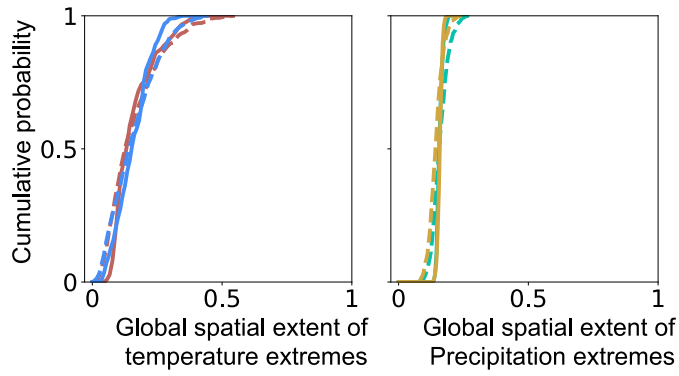
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## Supplementary Material

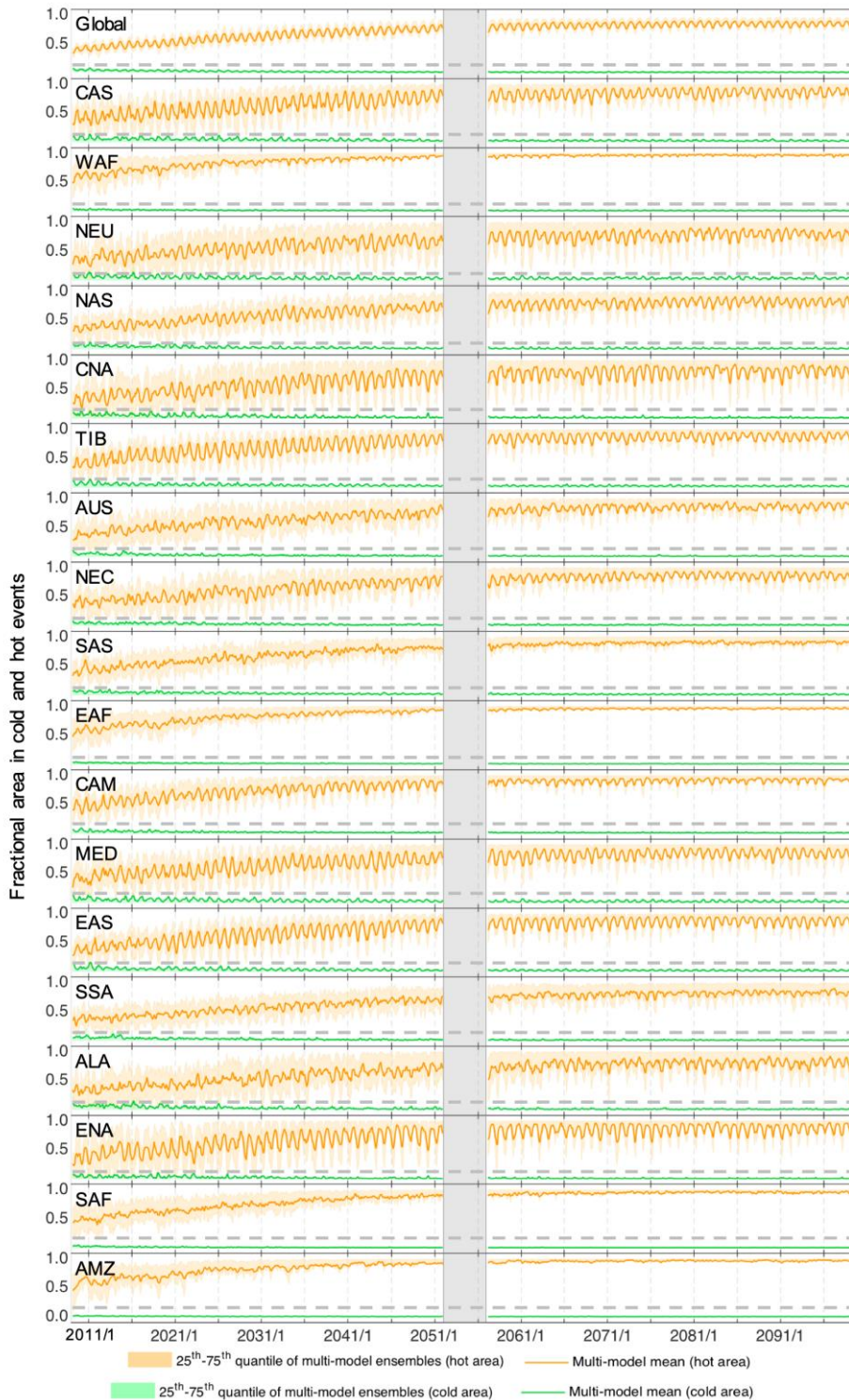
Supplementary Figure 1. Construction of SAD curves from a synthetic severity map. Grey shading represents areas, which are not identified as precipitation or temperature extreme events. Grid cells contributing to the SAD envelope curve are enclosed by the blue lines.



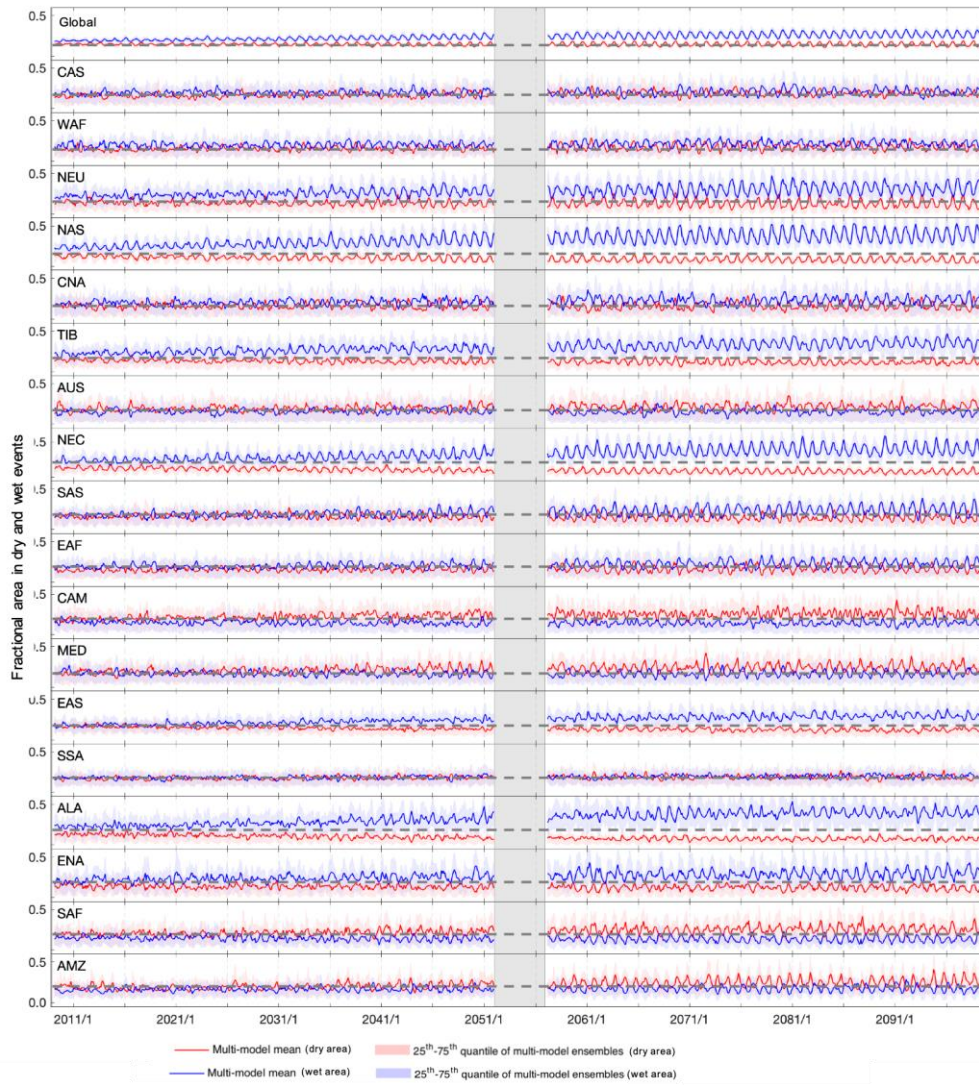
1 Supplementary Figure 2. distribution function of the spatial extent of hot (red), cold (blue), wet  
2 (green) and dry (yellow) extremes, defined by SPI3 above/below 1/-1, at global and continental scales  
3 in the 21<sup>st</sup> century under RCP4.5 emission scenarios. Dashed lines represent results from PGF. Solid  
4 lines represent results from CMIP5 multi-model ensemble mean.



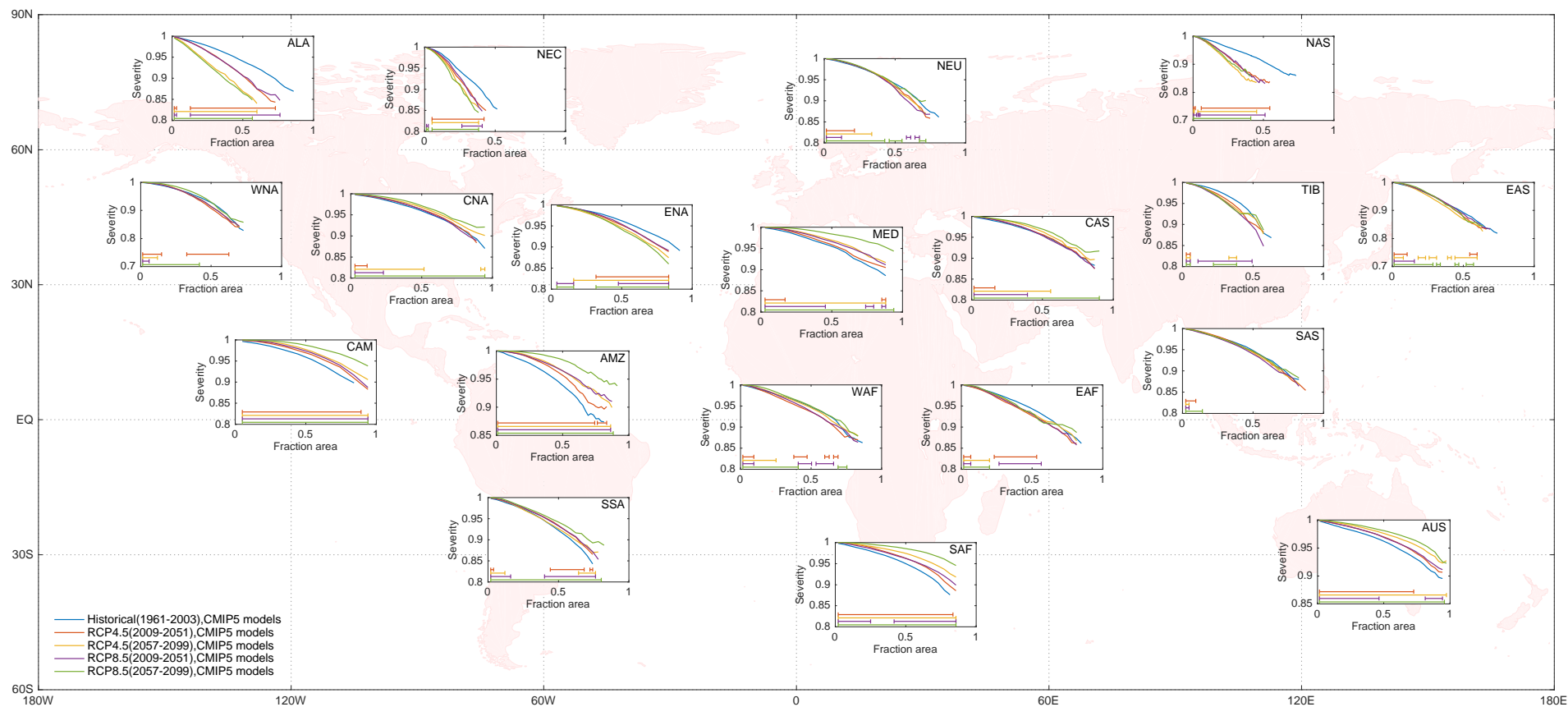
6 Supplementary Figure 3. Spatial extent of cold (green) and hot (orange) extremes, defined by SPI3  
 7 above/below 1/-1, at global and continental scales in the 21<sup>st</sup> century under RCP4.5 emission  
 8 scenarios. Shading areas represent the 25<sup>th</sup> quantile to 75<sup>th</sup> quantile of the CMIP5 multi-model  
 9 ensembles.



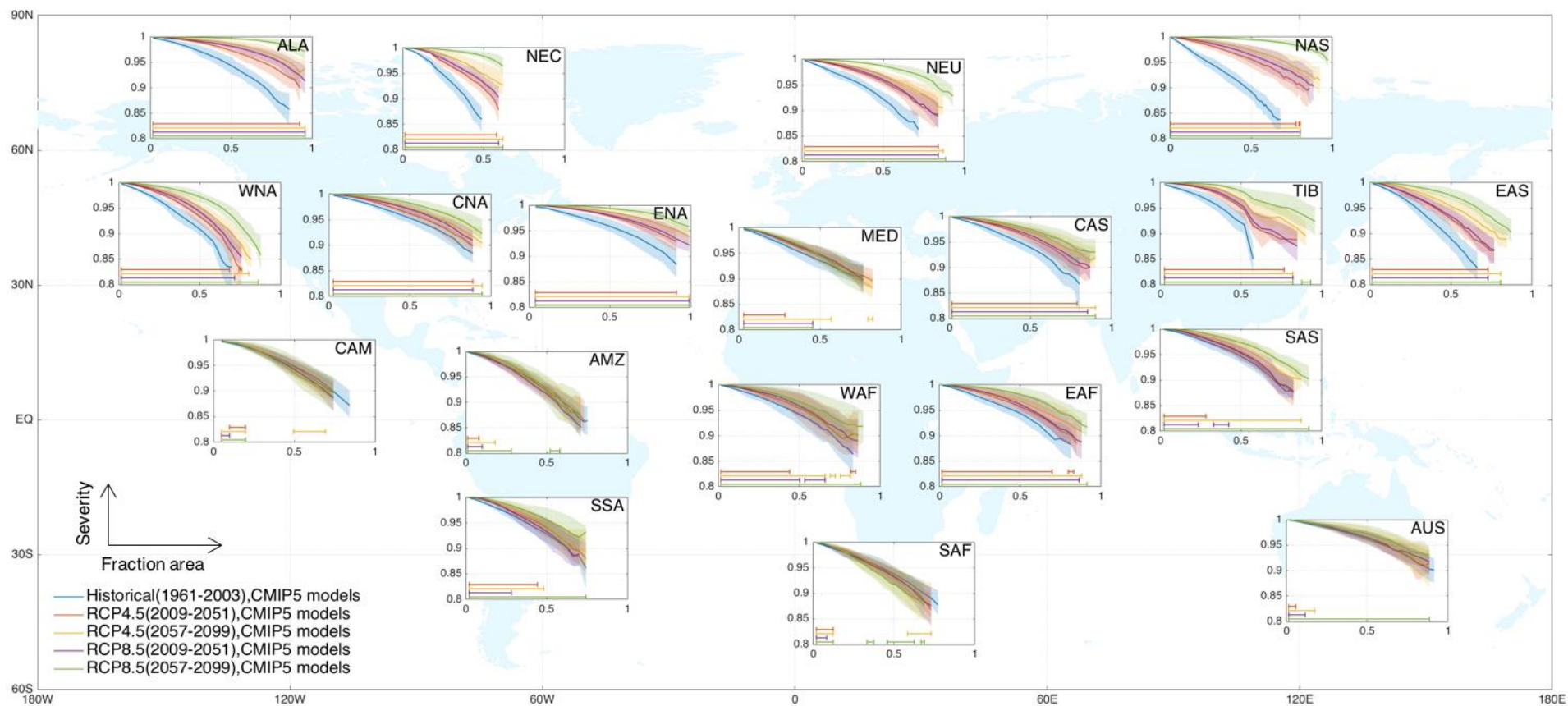
11 Supplementary Figure 4. Same as Supplementary Figure 3 but for dry (red) and wet (blue) extremes  
12 under RCP4.5 emission scenarios.



14 Supplementary Figure 5. Projected 3-month SAD curves of dry extremes in the near-term (2009-2051) and long-term (2057-2099) in CMIP5 models  
 15 under both RCP4.5 and RCP8.5 scenarios compared to the historical period (1961-2003).



17 Supplementary Figure 6. Same as Supplementary Figure 5 but for wet extremes.



19 Supplementary Table 1. Summary of CMIP5 climate models used in this study

	Model	Modeling Center	
1	ACCESS1.0	CSIRO- BOM	CSIRO (Commonwealth Scientific and Industrial Research Organization, Australia) and BOM (Bureau of Meteorology, Australia)
2	ACCESS1.3		
3	BCC-CSM1.1	BCC	Beijing Climate Center, China Meteorological Administration
4	BCC-CSM1.1(m)		
5	BNU-ESM	GCESS	College of Global Change and Earth System Science, Beijing Normal University
6	CanESM2	CCCma	Canadian Centre for Climate Modelling and Analysis
7	CCSM4	NCAR	National Center for Atmospheric Research
8	CESM1(BGC)	NSF-DOE- NCAR	National Science Foundation, Department of Energy, National Center for Atmospheric Research
9	CESM1(CAM5)		
10	CMCC-CM	CMCC	Centro Euro-Mediterraneo per I Cambiamenti Climatici
11	CMCC-CMS		
12	CNRM-CM5	CNRM- CERFACS	Centre National de Recherches Meteorologiques / Centre Europeen de Recherche et Formation Avancees en Calcul Scientifique
13	CSIRO-Mk3.6.0	CSIRO- QCCCE	Commonwealth Scientific and Industrial Research Organization in collaboration with the Queensland Climate Change Centre of Excellence
14	EC-EARTH	EC-EARTH	EC-EARTH consortium
15	FIO-ESM	FIO	The First Institute of Oceanography, SOA, China
16	GFDL-CM3	NOAA- GFDL	Geophysical Fluid Dynamics Laboratory
17	GFDL-ESM2G		
18	GFDL-ESM2M		
19	GISS-E2-H	NASA-GISS	NASA-Goddard Institute for Space Studies



20 GISS-E2-H-CC

21 GISS-E2-R

22 GISS-E2-R-CC

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23	HadGEM2-AO	NIMR/KMA	National Institute of Meteorological Research/Korea Administration
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24	HadGEM2-CC	MOHC (additional realizations by INPE)	Met Office Hadley Centre (additional HadGEM2-ES realizations contributed by Instituto Nacional de Pesquisas Espaciais)
25	HadGEM2-ES		

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26	INM-CM4	INM	Institute for Numerical Mathematics
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27 IPSL-CM5A-LR

28	IPSL-CM5A-MR	IPSL	Institute Pierre-Simon Laplace
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29 IPSL-CM5B-LR

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30	MIROC-ESM	MIROC	Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Atmosphere and Ocean Research Institute (AORI), and National Institute for Environmental Studies (NIES)
31	MIROC-ESM-CHEM		

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32	MIROC5	MIROC	Atmosphere and Ocean Research Institute (AORI), National Institute for Environmental Studies (NIES), and Japan Agency for Marine-Earth Science and Technology
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33	MPI-ESM-LR	MPI-M	Max Planck Institute for Meteorology (MPI-M)
34	MPI-ESM-MR		

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35	MRI-CGCM3	MRI	Meteorological Research Institute
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36 NorESM1-M

		NCC	Norwegian Climate Centre
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37 NorESM1-ME

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21 Supplementary Table 2. Number of projected short-term (1-6 month), mid-term (7-11 month) and long-term (12+ month) dry and wet events in the 21st  
 22 century as indicated by the 95% confidence interval of CMIP5 models under RCP4.5 and RCP8.5 emission scenarios.

	RCP4.5						RCP8.5						
	2009-2051			2057-2099			2009-2051			2057-2099			
	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	
Dry	CAS	31-35	8-11	1-2	28-33	9-11	2-4	31-34	8-10	1-2	26-31	10-13	3-5
	WAF	35-39	7-9	0-1	35-41	8-12	1-2	35-39	6-9	0-1	36-44	13-18	1-2
	NEU	32-37	5-7	0-1	31-35	3-6	0-0	34-38	4-6	0-1	31-37	4-6	0-0
	NAS	73-80	15-19	1-2	62-70	8-12	0-1	74-80	13-17	1-2	50-58	6-10	0-0
	CNA	25-28	4-6	0-1	24-27	5-7	0-1	25-28	4-6	0-1	25-28	5-7	0-1
	TIB	20-26	1-3	0-0	18-24	1-2	0-0	21-27	1-2	0-0	17-24	1-4	0-0
	AUS	27-32	9-11	3-4	24-29	11-13	3-5	24-28	10-12	3-4	23-29	11-13	4-6
	NEC	41-48	2-3	0-0	26-33	1-2	0-0	38-44	2-3	0-0	21-27	0-1	0-0
	SAS	28-32	4-6	0-1	25-29	3-5	0-0	28-31	4-5	0-1	26-31	4-6	0-0
	EAF	32-36	8-11	1-2	32-36	9-12	1-2	32-35	8-11	1-2	29-33	10-14	1-3
	CAM	21-25	3-5	0-0	24-28	4-7	0-2	24-27	3-5	0-1	26-32	8-11	1-4
	MED	30-33	5-7	0-1	35-39	6-9	1-2	30-35	5-7	0-1	33-39	11-15	3-5
	EAS	43-47	9-11	1-1	38-42	6-9	0-1	45-49	9-11	1-2	37-43	6-9	0-1
	SSA	38-41	7-11	1-2	35-40	9-13	1-3	39-42	8-11	1-2	31-39	11-14	4-7
	ALA	28-32	3-5	0-0	17-24	1-3	0-0	27-31	2-4	0-0	12-17	0-1	0-0
	ENA	18-21	1-2	0-0	15-18	1-2	0-0	17-21	1-2	0-0	16-20	1-2	0-0

	SAF	33-37	8-10	1-2	32-35	11-13	3-5	31-35	9-11	2-3	28-33	14-17	5-8
	AMZ	32-39	12-14	5-7	22-31	12-16	8-10	29-36	13-15	6-9	12-19	8-13	9-12
	WNA	39-42	10-12	1-2	36-40	9-12	1-2	39-43	10-13	1-2	33-37	11-13	2-3
	CAS	40-44	9-12	2-3	34-38	11-15	2-4	37-40	10-13	2-3	32-39	12-16	2-4
	WAF	39-45	11-14	1-2	36-42	13-16	2-3	38-43	12-15	1-3	26-35	15-19	5-8
	NEU	39-45	14-16	4-6	31-37	14-17	7-9	39-44	14-17	5-7	17-23	14-19	8-11
	NAS	33-41	9-13	13-15	14-22	1-4	6-10	29-37	7-10	12-15	4-7	0-1	2-4
	CNA	32-35	7-10	1-1	33-36	9-12	1-2	33-37	7-9	1-2	30-34	12-15	2-3
	TIB	45-51	9-13	1-2	42-51	15-19	3-6	47-51	10-14	1-2	31-42	14-19	6-9
	AUS	33-37	7-10	2-3	31-37	7-10	1-2	32-37	8-10	2-3	31-36	7-10	1-3
	NEC	102-110	20-24	3-5	90-103	32-39	10-15	103-111	22-27	4-7	59-76	37-45	20-24
We t	SAS	38-42	6-8	0-1	39-43	12-15	1-2	40-43	7-9	0-1	32-37	17-20	2-3
	EAF	32-37	10-13	2-4	27-35	11-14	3-5	34-39	10-13	2-4	18-26	12-17	5-8
	CAM	14-19	1-1	0-0	13-18	0-1	0-0	15-19	0-1	0-0	12-18	0-1	0-0
	MED	26-29	3-4	0-0	26-31	3-5	0-0	27-31	3-5	0-0	23-28	2-3	0-0
	EAS	48-53	15-17	3-5	32-41	14-19	8-11	45-51	15-17	4-6	20-28	11-15	11-13
	SSA	38-42	8-11	1-2	37-43	9-11	2-4	38-43	8-10	1-2	31-37	10-13	3-6
	ALA	33-39	15-17	5-7	14-22	10-13	11-13	30-36	14-16	6-8	5-10	5-9	9-11
	ENA	31-33	6-8	0-1	32-36	9-12	1-2	30-33	7-10	1-1	27-31	13-16	2-4
	SAF	30-34	4-6	0-0	28-32	3-5	0-0	32-36	4-5	0-1	27-32	2-4	0-0
	AMZ	39-45	12-15	3-5	34-42	14-18	3-5	38-44	12-16	3-5	29-39	14-19	4-6
	WNA	41-46	15-17	3-5	31-38	15-18	7-9	38-43	16-17	4-6	21-27	15-20	8-11

24 Supplementary Table 3. Projected changes of regional averaged SPI in 2057-2099 by 37 CMIP5 GCMs.

	AL	AM	AU	CA	CN			EN	ME	NA	NE	NE					WA	WN	
	A	Z	S	M	CAS	A	EAF	EAS	A	D	S	C	U	SAF	SAS	SSA	TIB	F	A
ACCESS1-0	1.09	-0.64	0.24	-0.18	0.04	0.00	0.14	0.57	0.27	-0.48	0.93	1.06	0.07	0.50	0.09	0.17	0.71	0.12	-0.03
ACCESS1-3	1.35	-0.69	0.76	-0.54	0.40	0.33	0.42	0.61	0.79	-0.08	1.04	1.02	0.48	0.38	0.34	0.26	0.51	0.35	0.33
bcc-csm1-1	1.31	-0.10	0.17	-0.30	0.22	0.15	0.37	0.40	0.38	-0.51	1.01	1.12	0.53	0.35	0.46	0.06	0.55	-0.04	0.39
bcc-csm1-1-m	1.00	-0.30	0.17	-0.35	0.03	0.17	0.37	0.35	0.32	-0.33	0.82	0.91	0.51	0.22	0.47	0.17	0.22	-0.23	0.35
BNU-ESM	1.19	-0.24	0.12	-0.65	0.16	0.03	1.21	0.35	0.39	-0.54	0.92	0.85	0.26	0.34	0.14	0.01	0.34	0.46	0.18
CanESM2	1.41	-1.16	0.16	-0.59	0.55	0.26	0.91	0.81	0.39	-0.30	1.22	1.13	0.57	0.45	0.35	0.22	1.00	-0.36	0.70
CCSM4	1.08	-0.29	0.11	-0.61	0.06	0.14	0.55	0.45	0.34	-0.47	0.75	0.68	0.28	0.14	0.18	0.12	0.47	0.38	0.15
CESM1-BGC	0.87	-0.27	0.08	-0.78	0.08	0.14	0.64	0.45	0.42	-0.36	0.70	0.73	0.24	0.09	0.22	0.13	0.43	0.41	0.25
CESM1-CAM5	1.04	-0.44	0.01	-0.24	0.27	0.40	0.74	0.60	0.51	-0.21	0.84	0.75	0.39	0.31	0.32	0.21	0.68	0.57	0.29
CMCC-CM	0.73	0.01	0.22	-0.42	0.12	0.20	0.20	0.35	0.49	-0.55	0.98	0.93	0.50	0.71	0.11	0.06	0.32	0.22	0.17
CMCC-CMS	1.08	-0.23	0.47	-0.50	0.14	0.46	0.21	0.40	0.65	-0.46	1.15	1.05	0.60	0.55	0.02	0.00	0.45	0.20	0.30

CNRM-CM5	0.80	-0.11	0.01	-0.18	0.20	0.23	0.37	0.38	0.52	0.13	0.88	0.86	0.72	0.08	0.39	0.13	0.88	0.28	0.35
			-				-							-		-			
CSIRO-Mk3-6-0	1.14	-0.41	0.90	-0.40	0.18	0.15	0.32	0.40	0.65	-0.68	0.84	0.92	0.31	0.74	0.36	0.09	0.64	-0.35	0.14
			-											-					
EC-EARTH	0.99	0.04	0.18	-0.33	0.16	0.30	0.04	0.48	0.48	-0.22	0.95	1.04	0.41	0.29	0.26	0.13	0.79	0.18	0.27
			-		-			-						-	-		-		
FIO-ESM	0.55	0.33	0.11	-1.06	0.51	0.12	0.18	0.02	0.25	-0.80	0.46	0.35	0.14	0.26	0.17	0.29	0.11	0.15	0.13
			-		-									-		-			
GFDL-CM3	2.03	-1.00	0.33	-0.24	0.11	0.60	0.48	0.55	0.79	-0.98	1.90	1.66	0.74	0.61	0.26	0.69	1.36	0.41	0.53
			-		-		-							-		-			
GFDL-ESM2G	0.73	-0.23	0.18	-0.21	0.31	0.14	0.21	0.26	0.39	-0.41	0.74	0.81	0.38	0.58	0.19	0.56	0.75	-0.10	0.28
			-		-									-		-			
GFDL-ESM2M	0.49	-0.17	0.51	-0.04	0.11	0.14	0.10	0.19	0.31	-0.48	0.69	0.70	0.49	0.49	0.00	0.48	0.65	-0.11	0.17
			-				-							-					
GISS-E2-H	0.67	-0.19	0.23	-0.45	0.28	0.51	0.26	0.47	0.71	-0.21	1.00	0.87	0.50	0.62	0.36	0.51	0.91	0.02	0.25
			-				-							-					
GISS-E2-H-CC	0.77	-0.42	0.24	-0.56	0.31	0.42	0.02	0.51	0.54	-0.26	1.00	0.93	0.46	0.66	0.32	0.38	0.88	0.02	0.30
							-							-					
GISS-E2-R	0.87	-0.37	0.13	-0.47	0.12	0.35	0.20	0.36	0.70	-0.43	0.79	0.73	0.41	0.41	0.35	0.41	0.77	-0.05	0.11
							-							-					
GISS-E2-R-CC	0.78	-0.39	0.05	-0.58	0.09	0.38	0.13	0.32	0.62	-0.35	0.86	0.67	0.32	0.43	0.30	0.43	0.75	-0.05	0.17
			-		-									-	-				
HadGEM2-AO	1.11	-0.63	0.52	-0.23	0.12	0.07	0.18	0.60	0.21	-0.38	0.78	0.98	0.20	0.61	0.43	0.07	0.78	0.09	0.05

HadGEM2-CC	1.46	-0.57	0.09	-0.24	0.15	0.15	0.13	0.70	0.36	-0.43	1.23	1.26	0.37	0.68	0.36	0.01	0.91	0.38	0.17
HadGEM2-ES	1.43	-0.63	0.45	-0.31	0.10	0.20	0.07	0.63	0.41	-0.44	1.16	1.31	0.18	0.67	0.23	0.13	0.71	0.19	0.13
inmcm4	0.89	-0.09	0.11	-0.85	0.10	0.03	0.12	0.29	0.25	-0.67	0.69	0.72	0.21	0.15	0.13	0.10	0.39	-0.41	0.11
IPSL-CM5A-LR	0.89	0.14	0.30	-1.09	0.58	0.29	0.95	0.20	0.17	-0.92	0.99	0.82	0.63	0.20	0.15	0.40	0.25	0.13	-0.11
IPSL-CM5A-MR	0.78	0.23	0.30	-1.28	0.51	0.44	0.60	0.16	0.01	-0.88	0.88	0.77	0.46	0.39	0.10	0.28	0.07	-0.03	-0.10
IPSL-CM5B-LR	0.44	-0.49	0.18	-0.35	0.13	0.30	0.08	0.22	0.41	-0.22	0.78	0.64	0.67	0.62	0.33	0.09	0.72	0.10	0.24
MIROC-ESM	1.58	-0.29	0.26	0.01	0.05	0.20	0.67	0.62	0.36	-0.41	1.50	1.39	1.19	0.82	0.22	0.41	1.12	0.66	0.42
MIROC-ESM-CHEM	1.74	-0.39	0.22	-0.14	0.02	0.18	0.56	0.66	0.57	-0.43	1.50	1.52	1.12	0.76	0.17	0.33	1.18	0.68	0.33
MIROC5	0.89	-0.08	0.17	-0.26	0.24	0.04	0.36	0.73	0.53	-0.17	0.91	1.13	0.52	0.42	0.45	0.08	1.03	0.30	0.14
MPI-ESM-LR	1.11	-0.48	0.31	-0.52	0.42	0.15	0.19	0.23	0.44	-0.73	0.77	0.92	0.23	0.71	0.14	0.13	0.09	-0.07	0.22
MPI-ESM-MR	1.07	-0.52	0.43	-0.29	0.12	0.42	0.19	0.33	0.58	-0.59	0.76	0.88	0.20	0.46	0.02	0.31	0.33	0.09	0.24
MRI-CGCM3	0.88	-0.24	0.02	-0.34	0.34	0.35	0.22	0.45	0.55	0.00	1.22	0.93	0.61	0.34	0.41	0.27	1.08	0.38	0.31

NorESM1-M	0.97	-0.30	0.39	-0.88	0.16	0.10	0.24	0.58	0.64	-0.27	0.78	0.95	0.37	0.35	0.30	0.05	0.42	0.31	0.26
NorESM1-ME	1.09	-0.25	0.32	-0.80	0.34	0.02	0.13	0.56	0.53	-0.43	0.83	0.94	0.42	0.49	0.29	0.01	0.51	0.28	0.35

26 Supplementary Table 4. Projected changes in regional averaged STI in 2057-2099 by 37 CMIP5 GCMs.

	ALA	AMZ	AUS	CAM	CAS	CNA	EMF	EAS	ENA	MED	NAS	NEC	NEU	SAF	SAS	SSA	TIB	WAF	WNA
ACCESS1-0	3.72	9.21	4.72	6.49	4.56	3.77	8.76	5.31	4.28	4.47	4.04	4.15	3.24	6.39	5.72	4.29	4.98	8.21	4.22
ACCESS1-3	4.52	6.09	4.52	5.43	4.49	3.25	6.22	5.35	4.06	4.65	4.28	4.45	3.91	5.41	4.92	3.95	5.34	6.18	4.19
bcc-csm1-1	2.61	5.30	3.69	4.44	3.96	2.92	5.57	4.16	3.53	3.68	3.24	3.64	2.64	4.75	4.46	3.74	4.38	5.89	3.12
bcc-csm1-1-m	2.69	4.56	3.80	4.27	3.73	2.55	5.45	3.54	2.94	3.13	2.86	3.18	2.43	4.54	3.69	3.12	4.09	5.65	2.79
BNU-ESM	3.88	5.83	3.61	5.13	3.92	3.68	4.93	4.28	4.10	3.94	4.07	4.71	3.45	5.33	4.71	4.09	4.52	5.85	3.71
CanESM2	3.95	5.80	4.65	5.56	4.88	3.96	6.11	4.67	4.57	4.68	4.14	4.51	3.54	5.81	4.95	4.83	4.94	6.71	3.92
CCSM4	2.61	5.56	3.83	4.75	3.59	3.00	5.29	4.18	3.72	4.04	3.40	3.09	2.91	5.20	4.61	4.30	4.15	5.57	2.99
CESM1-BGC	2.75	5.97	3.91	5.02	3.88	3.24	5.51	4.09	3.88	4.06	3.15	3.53	2.92	5.24	4.30	4.29	4.20	5.68	3.12
CESM1-CAM5	3.46	6.35	4.32	5.79	4.32	4.16	5.84	5.10	4.46	4.60	3.98	4.64	3.49	6.16	4.94	4.57	4.48	6.14	4.16
CMCC-CM	2.91	5.64	4.91	5.50	4.21	3.82	6.31	4.40	3.98	4.29	3.72	4.02	3.45	5.63	5.00	3.66	4.84	6.22	3.60
CMCC-CMS	3.36	5.22	4.55	5.30	4.39	3.49	6.01	4.57	4.11	4.26	3.66	3.87	3.59	5.67	4.95	3.68	4.72	5.93	3.53
CNRM-CM5	2.93	5.66	4.08	4.71	3.61	2.75	5.81	3.55	3.46	3.51	3.11	3.24	2.77	5.11	4.42	3.56	3.87	6.05	3.56
CSIRO-Mk3-6-0	3.07	5.40	4.93	4.97	4.48	3.62	6.74	4.91	3.99	3.85	3.08	3.73	2.84	6.11	5.34	4.43	5.05	6.47	4.41
EC-EARTH	2.98	6.23	3.83	5.16	3.44	3.23	5.54	3.86	3.85	3.71	2.91	3.69	2.79	5.00	4.82	3.80	3.72	6.04	3.39
FIO-ESM	2.36	5.72	4.83	4.53	2.94	3.17	5.90	3.30	3.30	2.85	2.41	2.86	1.15	5.30	4.25	4.42	3.49	5.91	2.58
GFDL-CM3	4.26	6.04	4.03	5.92	4.68	4.31	5.68	4.86	4.66	4.94	4.79	5.56	4.39	5.69	5.17	4.32	5.15	5.76	4.33
GFDL-ESM2G	2.50	4.25	2.44	3.71	3.04	2.51	4.80	2.78	3.03	2.41	2.47	3.06	2.12	4.38	3.46	2.82	3.68	4.73	2.55
GFDL-ESM2M	1.83	3.05	2.68	3.34	2.45	2.01	4.15	2.86	2.63	2.19	2.30	2.71	1.98	3.93	3.32	2.43	3.33	4.36	1.92



GISS-E2-H	3.09	5.78	3.23	4.45	3.77	3.05	5.74	3.88	4.16	3.78	2.90	3.69	3.34	4.70	4.60	2.07	4.76	5.81	2.91
GISS-E2-H-CC	2.57	5.76	2.52	4.32	3.43	3.03	5.57	3.93	3.95	3.51	2.69	3.81	3.07	4.56	4.38	2.15	4.25	5.80	2.72
GISS-E2-R	2.53	5.23	2.83	4.16	3.23	3.04	5.41	3.70	3.57	3.31	2.47	3.06	2.63	4.11	4.06	1.95	3.95	5.48	2.64
GISS-E2-R-CC	2.55	5.28	3.00	4.32	3.35	3.04	5.51	3.85	3.38	3.14	2.60	3.27	2.61	4.34	4.20	2.04	4.29	5.53	2.68
HadGEM2-AO	4.17	6.07	4.64	5.20	4.29	3.54	6.43	4.38	4.04	4.39	4.05	4.54	3.59	5.61	4.81	4.19	4.18	6.21	4.32
HadGEM2-CC	4.50	6.39	5.01	5.62	5.00	4.13	6.51	4.81	4.83	4.88	4.85	5.17	4.17	5.82	5.31	4.37	5.01	6.46	4.66
HadGEM2-ES	4.51	6.36	5.22	5.37	4.98	3.92	6.57	5.19	4.70	4.78	4.60	5.21	3.84	5.42	5.53	4.14	5.04	6.48	4.65
inmcm4	2.42	5.92	3.53	4.17	3.04	2.93	5.00	2.77	2.91	2.85	2.59	2.68	2.05	4.35	3.65	3.34	3.10	5.06	3.18
IPSL-CM5A-LR	3.36	6.41	5.20	5.74	4.73	4.05	6.64	5.10	4.30	4.61	4.29	4.14	4.13	5.90	5.75	4.58	4.94	6.63	4.38
IPSL-CM5A-MR	3.63	6.52	5.35	5.91	5.11	4.28	6.81	5.15	4.27	4.61	4.07	4.29	3.46	6.09	5.40	4.92	4.96	6.68	4.41
IPSL-CM5B-LR	2.86	5.66	4.05	5.00	3.87	3.60	5.84	4.26	4.07	3.88	3.70	3.58	3.21	5.17	4.36	3.23	3.52	5.81	3.48
MIROC-ESM	4.36	5.58	3.70	5.28	4.97	5.02	5.21	5.49	5.38	5.75	5.29	5.25	4.98	5.27	4.86	4.80	5.52	5.48	4.90
MIROC-ESM-CHEM	4.32	6.19	4.09	5.53	4.89	4.97	5.58	5.28	5.34	5.72	5.13	5.41	4.98	5.51	5.28	5.01	5.54	5.57	5.05
MIROC5	3.41	4.29	3.63	4.84	4.35	4.54	5.60	4.86	4.89	4.49	3.74	4.80	3.73	5.50	3.88	3.19	4.48	5.70	3.92
MPI-ESM-LR	3.63	5.30	3.85	4.88	3.95	3.24	5.79	4.59	3.72	3.83	3.40	3.96	2.66	5.47	4.82	4.03	4.56	5.88	3.75
MPI-ESM-MR	3.20	5.75	3.97	4.94	3.66	3.24	5.95	4.17	3.71	3.69	3.31	3.76	2.63	5.39	4.79	4.26	4.30	6.07	3.35
MRI-CGCM3	2.38	6.29	3.49	4.55	3.49	2.77	5.36	3.95	3.14	3.11	2.84	3.14	2.63	4.88	4.04	3.07	4.16	5.78	2.86
NorESM1-M	2.90	5.88	3.25	5.36	4.08	3.94	5.62	4.58	4.39	4.45	3.53	4.17	3.31	4.93	4.45	3.82	4.31	5.71	3.48
NorESM1-ME	3.01	5.93	3.16	5.30	4.17	4.09	5.88	4.55	4.31	4.33	3.56	4.09	3.20	5.48	4.54	3.76	4.49	6.19	3.58

