Annex A. Environmental indices

Tables in this Annex provide additional information about the environmental indices for the Crop Production System Zones (table A.1), Major Production Zones (A.2), and countries (tables A.3 through A.12). Figures A.1, A.2, and A.3 illustrate global distribution of environmental index values.

Table A.1. Current season environmental indices by Crop Production System Zones, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Equatorial central Africa	526	-5	-8	25.1	0.2	0.2	1205	6	7	1552.8	-2	-2
East African highlands	206	1	0	19.5	-0.2	0.2	1237	2	1	716.8	4	0
Gulf of Guinea	262	10	15	26.8	0	0	991	8	6	728.1	7	14
Horn of Africa	268	-20	-24	24.1	-0.1	-0.1	1319	4	6	622.7	-3	-6
Madagascar (main)	925	35	23	24.5	0	0	1329	-3	-1	1903.4	13	12
SW Madagascar	554	33	18	25.3	-0.5	-0.5	1449	0	2	1269.5	6	1
North Africa Mediterranean	88	-57	-54	13.7	0.5	0.6	663	3	3	303.8	-46	-43
Sahel	48	-3	2	27.5	0.1	0.2	1125	7	5	160.3	2	5
Southern Africa	167	19	20	9.2	0.4	0.3	695	2	4	1034	-3	-0.4
S. Africa Western Cape	273	163	123	17.7	0.5	0.2	1550	-1	-2	857.8	100	81
Boreal North America	443	77	61	-5.4	4.1	2.8	107	-6	-3	284.1	17	12
America northern great plains	188	29	31	-1.5	-1.2	-1.6	469	5	5	549.4	13	12
America corn belt	363	4	2	0.5	-1.4	-1.7	441	3	3	724.2	-4	-6
America cotton belt-Mexican coastal plain	307	-10	-15	10.8	-0.8	-1.1	660	0	1	914.5	1	-5
Sub-boreal North America	223	17	16	-6.5	-1	-1.4	344	7	7	404.3	-4	-4
America West Coast	93	-74	-74	6.6	-0.2	-0.3	549	14	15	396.1	-48	-49
Sierra Madre	169	66	36	14.8	0.1	0.1	971	-2	-1	565	61	32
SW Mexico and N. Mexico highlands	90	15	-3	6.5	-0.9	-1.5	745	3	4	339.9	4	-7
Northern South and Central America	450	-2	-2	25.4	0.1	0	965	-4	-3	1188.9	1	-1
Caribbean	232	-25	-33	25	0.7	0.5	921	-3	-2	787.3	-12	-18
Central-Northern Andes	605	5	2	16.8	0.2	0.3	1186	1	-2	1064.4	6	5
Brazil Nordeste	255	-2	-9	27	-0.1	0.6	1377	2	-1	854.1	-1	4
Central-Eastern Brazil	729	-5	-3	25.9	0	0.2	1273	4	-1	1877.7	-0.10	2
Amazon	867	4	6	27.4	-0.3	-0.2	1070	2	-2	2085.6	0.20	3
Central-North Argentina	459	19	6	26.2	0.5	0.8	1455	-1	-1	1351.7	12	4
SE Brazil-Concepcion-Bahia Blanca	628	8	3	23.5	0.8	1	1451	0	0	1623.8	10	4
SW Southern Cone	67	-57	-62	13.8	-0.2	0	1510	2	3	321.6	-44	-48
Semi-arid Southern Cone	109	-3	-11	19.4	0.5	0.9	1584	1	1	317.3	-15	-19
Caucasus	304	21	16	3.5	-1.2	-0.5	529	4	4	752.3	0.30	-1
Central Asia Pamir mountains	242	131	110	3.3	0.2	0.5	686	4	4	489	43	37
Western Asia	163	38	26	7.3	0.3	0.5	619	2	3	439.8	24	15
China Gansu-Xinjiang	109	125	155	-2.7	1.4	1.2	530	8	8	246.5	115	129
China Hainan	307	-47	-22	20.1	-0.6	-0.9	904	5	2	733.7	-9	10
China Huang Huaihai	61	-14	-25	6.7	1.1	0.9	605	10	13	291.9	-6	-15
China Inner Mongolia	58	17	38	-4.1	2.2	1.7	522	7	7	264.5	25	43
China Loess region	70	18	3	2.3	1.1	1	640	10	12	286.2	7	-0.40
China Lower Yangtze	281	16	16	11.8	0.6	0.4	737	12	14	686.6	-10	-13

	Rainfall total			Temperature average			PAR accumulation			Biomass		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
North East China	126	38	55	-6.5	1.8	1.3	426	6	6	378.8	23	29
China Qinghai-Tibet	147	68	59	0.6	-0.2	-0.3	836	2	2	282.1	42	49
Southern China	244	15	12	23	-0.3	-0.2	992	1	1	575.7	1	2
South-West China	373	-7	-12	9.1	0.1	0	591	4	4	526	9	5
Taiwan	62	-76	-73	17.5	-0.3	-0.5	831	-1	0	342.1	-59	-53
East Asia	166	-25	-24	-0.7	0.7	0.6	469	6	6	476.1	-4	-3
Southern Himalayas	213	17	26	15.3	-0.3	-0.5	857	6	5	513.9	43	35
Southern Asia	452	0	0	24.7	-0.1	0	1406	1	3	560	2	6
Southern Japan and Korea	209	71	60	16.9	-0.4	-0.4	873	1	1	1103.2	-6	-5
Mongolia region	52	173	185	-7.7	2	1.7	440	7	7	191.6	134	157
S. Asia Punjab to Gujarat	43	42	62	20.1	-0.5	-0.6	913	2	1	151.6	30	50
SE Asia islands	1124	-7	-1	25.2	0	-0.2	945	-2	-3	2196.9	-4	-2
SE Asia mainland	368	3	11	23.9	-0.8	-0.7	1018	4	3	816.6	-0.2	7
Eastern Siberia	189	8	15	-8.2	2.6	2.5	239	14	11	120.8	-10	-7
Eastern Central Asia	50	-9	-4	-12.7	3.5	3.1	313	8	7	187.4	14	20
North Australia	678	-5	9	26.7	0	-0.1	1281	3	1	1357.8	-2	6
Australia Queensland to Victoria	170	-41	-32	20.3	0.3	0.3	1558	4	3	650.8	-31	-24
Australia Nullarbor-Darling	56	-54	-44	19.6	0.3	0.7	1624	2	1	302.7	-40	-29
New Zealand	203	-37	-39	13.5	0.3	0.4	1374	0	0	963.4	-17	-19
Boreal Eurasia	288	19	14	-2.7	2.6	1.8	109	5	4	307.7	5	6
Ukraine to Kazakhstan	172	-6	-4	-1.6	1.8	1.5	206	2	3	573.9	11	12
Mediterranean Europe and Turkey	270	-26	-21	8.7	-0.2	0.1	508	5	4	825.2	-18	-14
W. Europe (non-Mediterranean)	284	-7	-2	6	1.4	1.1	279	0	-5	893	-1	-0.10

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.2. Current season environmental indices by Major Production Zone, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
West Africa	239	10	15	26.8	0.0	0.1	1007	9	5	639.2	4	12
South America	660	-5	-6	24.1	0.6	0.7	1385	3	1	1762.8	2	-0.2
North America	284	3	0	3.5	-1.2	-1.6	534	2	3	706.9	2	-2
South and Southeast Asia	250	26	27	21.4	-0.5	-0.4	953	2	2	572.5	19	22
Western Europe	283	-1	0	6.7	1.3	1.0	284	1	-0.4	946.8	3	3
Central Europe and Western Russia	181	-11	-8	0.8	1.0	0.9	226	1	2	658.6	2	2

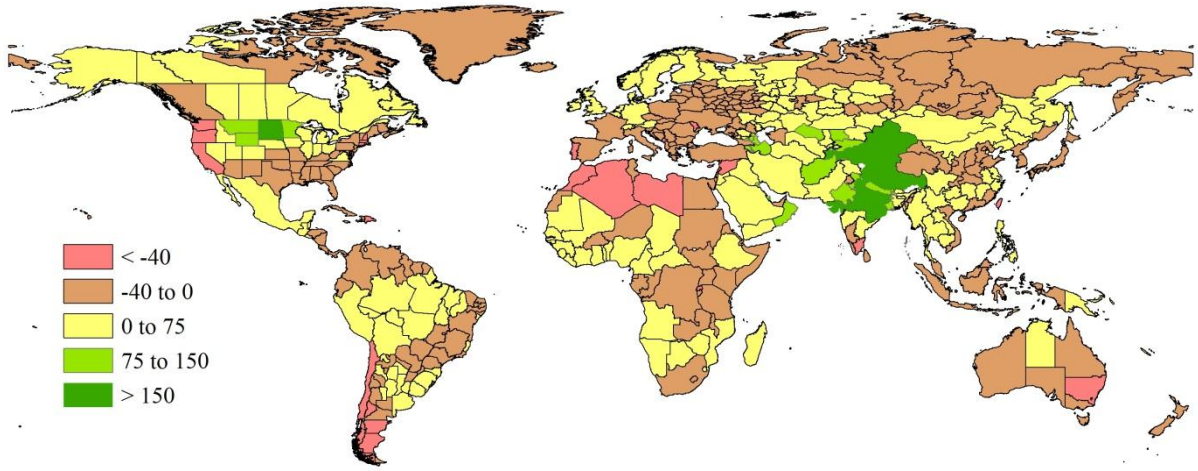
Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.3. Current season environmental indices by country, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Argentina	513	11	5	23.4	0.7	1	1491	0.40	0.10	921.9	5	-1
Australia	190	-37	-27	20.8	0.3	0.3	1550	3	3	773.5	-6	3
Bangladesh	253	46	11	21.2	-0.4	-0.5	881	-0.20	-0.50	665.7	55	33
Brazil	730	-3	-1	26	0	0.2	1237	3	-0.40	1891.7	-1	2
Cambodia	362	-1	5	25.6	-0.9	-0.8	1090	6	5	947.5	0	8
Canada	243	7	8	-6.4	-1	-1.3	288	5	6	292.9	-3	-2
China	177	16	19	7	0.7	0.5	680	6	8	355.7	20	21
Egypt	50	-16	-24	18	-0.1	0.2	770	2	3	71.6	26	26
Ethiopia	198	31	28	20.3	-0.1	0.3	1196	1	0.20	612.3	21	16
France	328	-3	-3	7.5	1.1	0.8	311	0.40	0.10	1051.8	3	4
Germany	262	3	5	5.6	1.7	1.2	218	1	-0.40	995.5	10	8
India	199	56	52	20.7	-0.3	-0.3	945	1	1	458.2	30	33
Indonesia	1140	-7	-2	25.5	0	-0.2	965	-1	-2	2217.1	-5	-2
Iran	264	68	42	7.4	-0.8	-0.4	703	1	2	565.0	33	19
Kazakhstan	141	32	25	-3.9	2.5	2	310	2	4	479.6	22	17
Mexico	274	81	48	18.6	0	-0.1	927	-4	-3	595.9	56	31
Myanmar	288	26	27	21.7	-0.5	-0.2	939	1	2	675.9	8	4
Nigeria	201	5	23	27	0	0.3	1014	9	6	442.6	-6	9
Pakistan	89	67	42	14	0	-0.1	825	2	3	189.0	19	14
Philippines	1032	2	11	24.9	-0.2	-0.3	910	-3	-4	1768.9	-5	-0.2
Poland	160	-18	-16	4.2	1.7	1.2	205	2	4	752.6	-5	-7
Romania	188	-20	-8	4.1	1.1	1.2	348	1	2	668.4	-15	-6
Russia	170	-2	-1	-3.5	2	1.7	211	3	4	268.4	4	6
South Africa	366	-6	-3	20.1	0.1	0	1497	2	3	932.2	-2	0.0
Thailand	328	1	13	23.7	-1	-1	1051	5	5	749.2	-6	6
Turkey	292	-14	-6	4.9	-1.1	-0.2	565	7	7	803.2	-17	-9
United Kingdom	495	43	42	6.9	1.4	0.7	172	1	1	1144.9	14	10
Ukraine	139	-30	-25	2.7	0.7	0.7	258	1	-1	639.7	-14	-11
United States	279	0	-4	4.1	-1	-1.4	551	2	3	567.5	3	-2
Uzbekistan	232	95	72	5.5	0.3	0.5	544	2	4	557.1	66	52
Vietnam	432	-7	-1	20.7	-0.6	-0.6	902	3	1	828.9	-10	-7

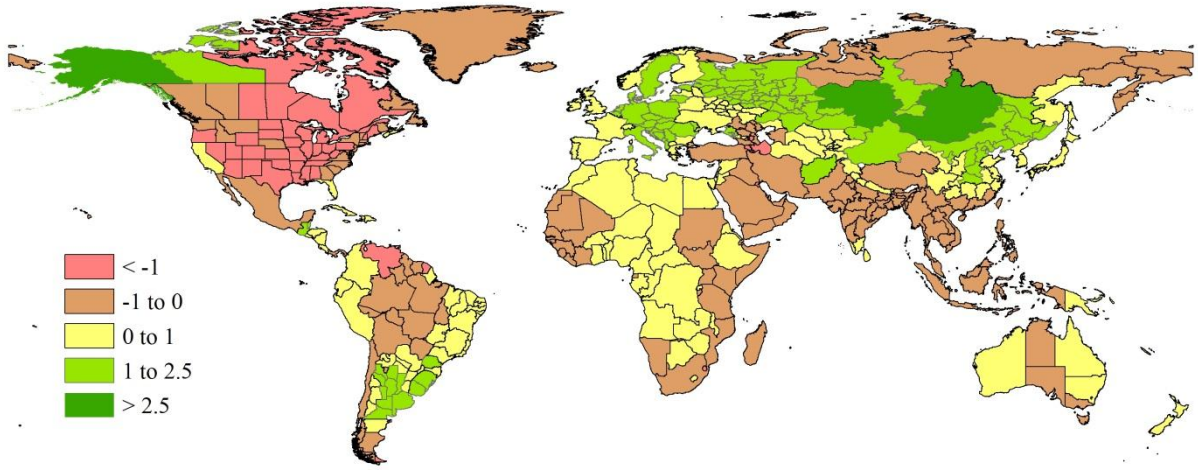
Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Figure A.1. Global map of rainfall by country and sub-national areas, departure from 12YA (2001-13) (percentage)



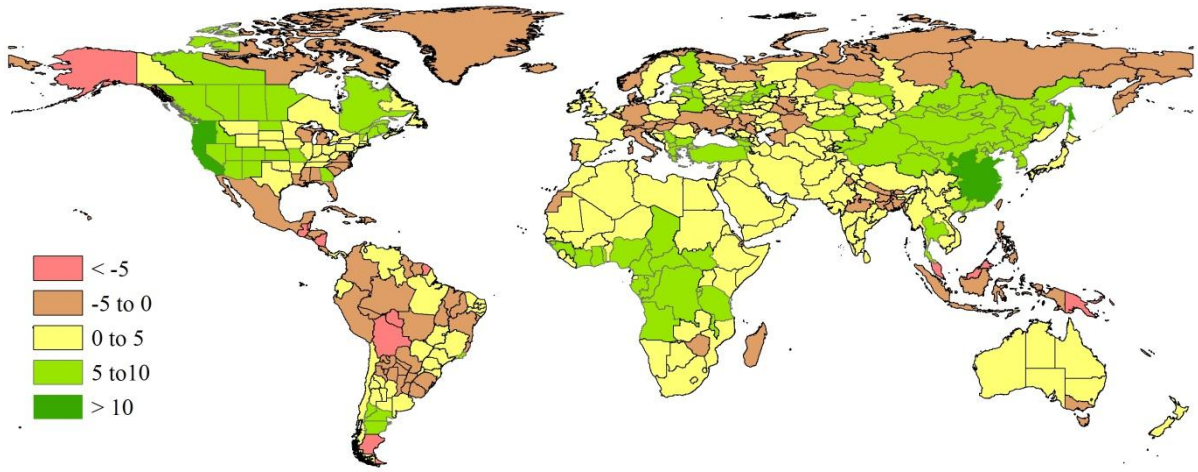
Note: 12YA=Twelve-year average; the average for October-January periods between October 2001 and January 2013.

Figure A.2. Global map of air temperature by country and sub-national areas, departure from 12YA (2001-13) (°C)



Note: 12YA=Twelve-year average; the average for October-January periods between October 2001 and January 2013.

Figure A.3. Global map of PAR by country and sub-national areas, departure from 12YA (2001-13) average (percentage)



Note: 12YA=Twelve-year average; the average for October-January periods between October 2001 and January 2013.

Table A.4. Current season environmental indices for China, by province, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure(°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Anhui	206	19	5	10.0	0.7	0.5	663	11	15	612.1	-5	-13
Chongqing	148	-17	-12	9.3	0.7	0.6	601	4	7	588.6	-3	-2
Fujian	231	-14	-6	12.4	-0.1	-0.5	807	14	13	643.9	-19	-16
Gansu	153	-23	-10	16.3	-0.1	-0.5	866	8	7	199.4	34	35
Guangdong	44	-12	-15	0.9	0.7	0.6	658	7	8	465.2	-24	-18
Guangxi	289	38	54	15.1	0.2	-0.1	805	8	8	727.7	21	21
Guizhou	231	36	44	10.2	0.6	0.4	678	2	3	598.3	9	6
Hebei	43	-12	-16	1.9	1.7	1.2	570	7	9	213.4	-7	-8
Heilongjiang	93	5	-13	8.1	1.2	1.2	635	11	15	361.9	21	27
Henan	128	47	66	-8.6	1.6	1.1	390	7	6	414.3	7	-7
Hubei	141	-20	-25	9.7	1.1	1.1	665	10	13	532.0	-16	-21
Hunan	256	1	3	11.8	1.1	1.0	721	13	15	722.0	-10	-12
Jiangsu	123	22	40	-5.0	1.8	1.2	461	6	6	528.1	6	-7
Jiangxi	193	52	27	9.6	0.7	0.3	649	10	13	751.1	-17	-17
Jilin	332	10	14	12.5	0.6	0.4	766	14	16	456.6	24	31
Liaoning	134	37	49	-0.7	1.8	1.4	508	5	6	518.1	32	38
Inner Mongolia	67	39	67	-6.3	2.5	2.0	473	6	6	248.7	46	67
Ningxia	56	62	63	0.6	1.2	1.2	639	9	10	218.0	33	47
Shaanxi	110	16	15	8.0	0.2	0.1	690	0	1	328.4	-11	-12
Shandong	70	0	-6	6.6	1.1	0.8	600	10	12	305.5	-3	-6
Shanxi	84	-11	-17	4.2	0.9	0.8	625	9	11	270.8	-0.3	-6
Sichuan	59	7	-5	0.4	1.4	1.1	625	10	12	405.6	24	19
Yunnan	223	68	54	11.2	-0.6	-0.6	856	0	1	557.0	24	14
Zhejiang	449	61	56	10.8	0.4	0.0	733	14	15	788.6	-13	-15

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.5. Current season environmental indices for Argentina, by province, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Buenos_Aires	489	18	13	21.1	0.7	1.1	1542	2	3	1438.1	16	8
Chaco	622	25	14	26.1	0.4	0.8	1434	-0.2	-2	1689.4	23	15
Cordoba	544	32	25	23.3	1.0	1.2	1521	1	2	1516.9	16	10
Corrientes	680	-4	-4	25.2	0.5	0.9	1441	-1	-2	1707.0	8	0
Entre_Rios	624	18	14	23.5	0.5	1.0	1472	-3	-3	1707.0	19	12
La_Pampa	330	-10	-12	22.4	1.2	1.6	1574	3	4	969.6	9	3
Misiones	734	-7	-15	24.6	0.9	0.9	1415	1	1	1777.3	-3	-8
Santiago_Del_Estero	442	11	0	26.3	0.8	1.1	1460	-0.5	-1	1406.3	12	5
San_Luis	390	5	1	22.6	1.1	1.3	1552	2	2	1134.8	-3	-6
Salta	421	5	-7	25.4	0.3	0.6	1458	-1	-3	1079.8	8	-3
Santa_Fe	559	5	4	24.3	0.9	1.2	1476	-1	-1	1645.7	11	6
Tucuman	-1	-1	-1	-1	-1	-1	-1	-1	-1	1210.8	3	-10

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.6. Current season environmental indices for Australia, by state, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current	Departure (%)		Current	Departure (°C)		Current	Departure (%)		Current	Departure (%)	
	(mm)	5YA	12YA	(°C)	5YA	12YA	(MJ/m^2)	5YA	12YA	(gDM/m^2)	5YA	12YA
New_South_Wales	140	-52	-44	20.9	0.4	0.3	1589	7	5	535.2	-42	-32
South_Australia	108	0	-2	18.3	-0.1	0.0	1567	0.2	0.0	428.8	-7	2
Victoria	151	-36	-27	16.8	-0.3	0.0	1510	-0.1	-0.3	680.0	-23	-17
Western_Australia	96	-33	-19	20.3	0.3	0.6	1607	2	1	748.2	16	30

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.7. Current season environmental indices for Brazil, by state, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current	Departure (%)		Current	Departure (°C)		Current	Departure (%)		Current	Departure (%)	
	(mm)	5YA	12YA	(°C)	5YA	12YA	(MJ/m^2)	5YA	12YA	(gDM/m^2)	5YA	12YA
Ceara	155	-6	-18	28.1	0.1	0.6	1360	3	1	615.7	19	20
Goias	769	-16	-11	25.3	0.0	0.1	1294	9	2	2094.8	-6	-1
Mato_Grosso_Do_Sul	589	-13	-14	26.4	0.0	-0.3	1325	5	0.2	1799.6	-3	-4
Mato_Grosso	1059	4	5	26.7	-0.3	-0.4	1169	4	-4	2401.4	4	4
Minas_Gerais	738	-16	-12	24.2	0.5	0.8	1318	7	2	1813.3	-8	-5
Parana	654	-12	-13	23.8	0.9	1.0	1386	4	3	1826.1	-4	-5
Rio_Grande_Do_Sul	798	17	14	23.3	1.0	1.2	1422	1	-0.2	1787.7	9	4
Santa_Catarina	807	6	3	21.3	0.8	0.9	1348	3	2	1892.2	-4	-5
Sao_Paulo	596	-29	-26	24.6	0.7	1.0	1336	7	4	1762.1	-12	-11

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.8. Current season environmental indices for Canada, by province, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current	Departure (%)		Current	Departure (°C)		Current	Departure (%)		Current	Departure (%)	
	(mm)	5YA	12YA	(°C)	5YA	12YA	(MJ/m^2)	5YA	12YA	(gDM/m^2)	5YA	12YA
Alberta	142	28	43	-6.3	0.1	-0.3	249	6	6	393.2	4	8
Manitoba	139	9	13	-9.8	-3.0	-3.1	298	7	7	298.4	-17	-20
Saskatchewan	104	-4	6	-9.1	-1.7	-2.0	284	9	7	328.8	-13	-9

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.9. Current season environmental indices for India, by state, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Arunachal_Pradesh	238	8	11	14.9	-0.1	-0.2	865	3	2	621.8	-5	-14
Andhra_Pradesh	286	49	37	24.5	-0.2	-0.1	1006	1	1	568.9	3	8
Assam	187	25	3	20.7	-0.3	-0.4	871	1	1	523.3	25	4
Bihar	242	359	224	20.6	-0.4	-0.7	857	-1	-1	585.5	204	141
Chandigarh	-1	-1	-1	-1	-1	-1	-1	-1	-1	504.4	66	63
Chhattisgarh	231	210	150	21.2	-0.3	-0.2	957	0.3	0.4	265.7	125	86
Daman_and_Diu	60	125	192	25.1	0.6	0.8	1045	2	1	278.3	-34	-9
Delhi	60	134	63	18.3	-0.5	-0.8	845	2	1	188.6	59	140
Dadra_and_Nagar_Haveli	68	-50	-24	24.0	-0.1	0.1	1047	3	2	472.3	-23	-12
Gujarat	49	60	152	23.3	-0.6	-0.5	1006	2	2	398.6	28	29
Goa	97	-60	-48	25.7	-0.2	-0.2	1097	3	3	240.8	81	62
Himachal_Pradesh	228	132	121	3.1	0.0	0.1	810	0.4	0.5	621.6	86	88
Haryana	66	101	79	17.6	-0.3	-0.5	827	1	0.2	969.0	-16	-16
Jharkhand	330	279	233	19.8	-0.4	-0.5	900	-1	-0.3	424.0	-29	-22
Kerala	352	-34	-35	25.5	0.2	0.3	1114	3	4	514.2	33	8
Karnataka	129	-38	-35	23.5	-0.1	0.0	1080	3	3	308.4	-15	6
Meghalaya	282	51	5	17.3	-0.3	-0.4	886	2	1	431.5	-13	-28
Maharashtra	109	-8	14	23.0	-0.4	-0.2	1017	2	1	402.0	68	126
Manipur	172	-5	-16	15.6	-0.4	-0.5	899	1	0.3	565.5	-6	-19
Madhya_Pradesh	136	104	179	20.3	-0.6	-0.6	930	-0.2	-1	457.3	-0.3	-22
Mizoram	213	-12	-20	18.2	-0.7	-0.8	908	1	1	733.1	85	69
Nagaland	164	12	-7	16.3	-0.2	-0.2	887	2	1	269.0	28	14
Orissa	449	244	186	22.0	-0.3	-0.2	956	0.0	1	131.7	45	96
Puducherry	233	-51	-46	25.6	0.1	0.2	1062	2	2	473.8	51	49
Punjab	55	13	-3	17.3	0.0	-0.1	781	-1	-1	849.8	-23	-23
Rajasthan	37	73	149	19.7	-0.8	-0.9	918	2	1	656.7	35	14
Sikkim	284	155	125	5.8	0.3	0.0	898	-5	-4	526.6	100	94
Tamil_Nadu	271	-49	-48	25.9	0.2	0.3	1046	1	2	562.1	215	210
Tripura	224	-5	-11	20.9	-0.3	-0.5	868	-2	-2	683.2	96	65
Uttarakhand	264	227	239	8.2	0.6	0.6	854	1	1	621.8	-5	-14
Uttar_Pradesh	195	303	316	19.4	-0.3	-0.6	862	1	0.4	568.9	3	8
West_Bengal	360	236	121	21.0	-0.4	-0.4	883	-1	-0.1	523.3	25	4

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.10. Current season environmental indices for Kazakhstan, by province, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Akmolinskaya	124	44	29	-5.8	2.7	2.1	269	0.4	3	465.4	21	20
Karagandinskaya	100	11	8	-5.9	2.3	1.9	328	4	5	410.4	9	8
Kustanayskaya	126	37	22	-5.0	2.5	1.9	243	-1	0.4	511.8	24	24
Pavlodarskaya	77	8	-4	-5.3	3.9	2.9	255	3	5	382.6	11	6
Severo_kazachstanskaya	113	29	11	-5.4	3.1	2.6	217	1	3	483.7	24	25
Vostochno_kazachstanskaya	157	3	9	-6.1	3.7	3.0	344	4	4	419.0	19	18
Zapadno_kazachstanskaya	151	43	20	-1.6	1.1	1.0	262	-2	1	653.5	36	23

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.11. Current season environmental indices for Russia, by oblast, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current (mm)	Departure (%)		Current (°C)	Departure (°C)		Current (MJ/m^2)	Departure (%)		Current (gDM/m^2)	Departure (%)	
		5YA	12YA		5YA	12YA		5YA	12YA		5YA	12YA
Bashkortostan_Rep.	210	31	18	-4.6	1.6	1.5	180	-6	-4	498.6	10	13
Chelyabinskaya_Oblast	109	1	-7	-4.9	2.4	2.0	200	-1	0.0	471.0	13	20
Gorodovikovsk	-1	-1	-1	-1	-1	-1	-1	-1	-1	836.7	11	6
Krasnodarskiy_Kray	196	-16	-18	-0.7	2.5	2.4	257	2	2	783.5	-14	-13
Kurganskaya_Oblast	105	1	-8	-5.3	2.7	2.1	184	2	3	479.9	15	21
Kirovskaya_Oblast	242	5	9	-3.3	2.0	1.8	120	6	5	528.2	12	14
Kurskaya_Oblast	162	-23	-14	0.3	0.5	0.5	210	-1	-1	742.2	6	8
Lipetskaya_Oblast	150	-22	-21	-0.4	0.7	0.7	209	4	6	708.5	7	9
Mordoviya_Rep.	178	-12	-12	-1.5	1.4	1.3	180	5	7	651.9	11	12
Novosibirskaya_Oblast	148	15	6	-5.8	4.8	3.8	182	4	4	447.7	20	21
Nizhegorodskaya_Oblast	187	-15	-12	-1.5	1.7	1.6	149	5	6	639.9	13	15
Orenburgskaya_Oblast	180	38	21	-3.6	1.5	1.3	225	-3	-1	559.9	14	15
Omskaya_Oblast	129	20	5	-6.0	3.9	3.3	175	3	4	445.4	15	20
Permskaya_Oblast	254	26	25	-5.3	1.7	1.5	125	1	0.3	427.7	5	9
Penzenskaya_Oblast	177	-9	-11	-1.6	1.2	1.1	198	2	5	642.2	11	11
Rostovskaya_Oblast	162	-18	-27	1.9	-0.6	-0.4	286	-3	-2	716.1	-3	-5
Ryazanskaya_Oblast	169	-17	-16	-0.8	1.2	1.0	185	8	9	686.2	9	10
Stavropolskiy_Kray	204	24	8	4.0	-1.2	-0.7	363	2	2	741.4	9	-1
Sverdlovskaya_Oblast	155	19	15	-5.6	2.1	1.9	147	3	3	424.7	6	11
Samarskaya_Oblast	168	11	3	-2.3	1.5	1.3	205	-0.3	3	612.2	13	14
Saratovskaya_Oblast	142	-4	-10	-1.2	0.9	0.9	235	-1	2	656.8	14	11
Tambovskaya_Oblast	156	-20	-22	-0.8	0.8	0.7	212	5	7	692.2	8	9
Tyumenskaya_Oblast	127	8	1	-5.9	3.2	2.6	160	4	5	434.0	11	16
Tatarstan_Rep.	192	3	3	-2.5	1.8	1.7	165	1	2	597.1	12	14
Ulyanovskaya_Oblast	157	-8	-10	-1.8	1.8	1.6	190	2	4	632.9	15	15
Udmurtiya_Rep.	245	22	22	-4.0	1.7	1.5	131	2	2	527.6	10	13
Volgogradskaya_Oblast	169	17	5	0.3	0.2	0.2	260	-3	-1	739.8	17	13
Voronezhskaya_Oblast	151	-15	-18	0.1	0.2	0.3	240	2	3	727.2	6	7

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.

Table A.12. Current season environmental indices for the United States, by state, current value and departure from 5YA and 12YA

	Rainfall total			Temperature average			PAR accumulation			Biomass accumulation		
	Current	Departure (%)		Current	Departure (°C)		Current	Departure (%)		Current	Departure (%)	
	(mm)	5YA	12YA	(°C)	5YA	12YA	(MJ/m^2)	5YA	12YA	(gDM/m^2)	5YA	12YA
Arkansas	435	-8	-11	8.1	-1.2	-1.6	624	3	4	1229.8	3	0.3
California	61	-75	-76	7.9	0.1	0.1	650	12	13	260.1	-55	-55
Idaho	196	13	5	-2.7	-0.9	-0.9	471	9	9	517.6	-1	-3
Indiana	427	23	12	2.7	-1.6	-2.1	497	3	3	893.9	-7	-11
Illinois	364	9	7	2.3	-1.8	-2.1	512	4	4	875.0	-5	-9
Iowa	263	25	32	-0.9	-2.0	-2.4	492	4	5	708.8	4	2
Kansas	122	-23	-28	3.8	-1.0	-1.3	618	5	5	462.1	-18	-24
Michigan	395	41	29	-0.9	-2.0	-2.3	380	-1	-0.5	702.7	-8	-10
Minnesota	296	80	83	-5.7	-2.7	-3.3	388	4	3	512.3	0.4	-5
Missouri	273	-12	-16	4.3	-1.4	-1.7	569	5	5	924.5	2	-5
Montana	183	86	94	-2.5	-0.3	-0.6	403	6	5	557.9	28	34
Nebraska	172	38	43	1.1	-0.4	-0.7	543	4	4	644.1	34	33
North Dakota	253	153	172	-6.1	-2.0	-2.5	386	7	6	472.9	14	17
Ohio	384	14	12	2.9	-1.0	-1.5	478	3	4	905.2	-4	-8
Oklahoma	185	-18	-30	7.3	-1.2	-1.6	662	2	4	704.0	-3	-15
Oregon	128	-63	-64	2.4	-1.0	-1.0	433	15	16	512.5	-30	-31
South Dakota	261	137	160	-1.6	-1.0	-1.4	454	3	2	654.0	51	57
Texas	227	9	-12	11.6	-1.2	-1.3	729	0.4	3	633.0	8	-10
Washington	169	-54	-53	1.6	-0.7	-0.8	345	15	13	583.8	-18	-18
Wisconsin	365	55	53	-3.5	-2.7	-3.2	393	-1	-1	598.0	-11	-14

Note: 5YA/12YA= five-year and twelve-year averages, respectively, for the October-January periods between October 2001 (12YA) or 2008 (5YA) and January 2013.