Annex A. Agroclimatic indicators and BIOMSS

Table A.1. October 2015-January 2016 agroclimatic indicators and biomass by global Monitoring and Reporting Unit

	65 Global MRUs	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	14YA dep. (%)	Current (°C)	14YA dep. (°C)	Current (MJ/m^2)	14YA dep. (%)	Current (gDM/m^2)	5YA dep. (%)
1	Equatorial central Africa	443	-8	25.3	0	964	3	1512	-4
2	East African highlands	174	-3	19.8	0.2	987	-3	723	6
3	Gulf of Guinea	249	9	26.4	-0.9	946	1	807	0
4	Horn of Africa	312	13	24.6	-0.3	1024	-4	1107	16
5	Madagascar (main)	476	-10	24.4	-0.5	1104	1	1426	-3
6	Southwest Madagascar	219	-29	24.3	-1.5	1250	3	833	-13
7	North Africa-Mediterranean	74	-53	14.6	0.4	603	2	340	-37
8	Sahel	72	55	27.1	-1	1036	-1	281	38
9	Southern Africa	252	-23	26.3	0.9	1205	7	929	-21
10	Western Cape (South Africa)	36	-68	18.7	0.7	1314	3	196	-60
11	British Columbia to Colorado	264	28	-2.3	0.5	379	-3	582	19
12	Northern Great Plains	200	56	3.2	2	391	-6	755	46
13	Corn Belt	344	14	5.8	2.3	361	-5	998	19
14	Cotton Belt to Mexican Nordeste	484	61	14.5	1.5	521	-9	1241	38
15	Sub-boreal America	128	-2	-3.5	2.9	209	-6	511	15
16	West Coast (North America)	224	-25	8	0.2	448	-3	655	-3
17	Sierra Madre	147	30	15.8	0.3	812	-5	607	55
18	SW U.S. and N. Mexican highlands	128	71	9.2	0.1	624	-5	529	58
19	Northern South and Central America	403	-7	26.5	0.5	789	2	1196	-1
20	Caribbean	371	15	25.6	0.2	774	1	1321	35
21	Central-northern Andes	389	-21	17.9	0.8	973	4	1136	-11
22	Nordeste (Brazil)	172	-9	29	1.2	1188	3	575	-21
23	Central eastern Brazil	598	3	27.2	0.4	1059	4	1703	-4
24	Amazon	426	-32	28.5	0.2	994	8	1424	-26
25	Central-north Argentina	465	38	24.1	-2	946	-11	1431	17
26	Pampas	833	62	21.7	-1.3	971	-14	1899	21
27	Western Patagonia	64	-56	11.9	-0.9	1162	-1	334	-27
28	Semi-arid Southern Cone	135	50	16.4	-2.2	1165	-6	567	49
29	Caucasus	306	36	4.6	-0.2	433	-5	856	17
30	Pamir area	219	102	4.1	0.3	577	-5	591	35
31	Western Asia	148	42	8.6	0.3	527	-5	550	35
32	Gansu-Xinjiang (China)	102	139	-1.1	1.4	464	-5	360	61
33	Hainan (China)	251	-27	23.1	0.8	654	-2	727	-7

	65 Global MRUs	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	14YA dep. (%)	Current (°C)	14YA dep. (°C)	Current (MJ/m^2)	14YA dep. (%)	Current (gDM/ m^2)	5YA dep. (%)
34	Huanghuaihai (China)	114	63	7.2	0	494	-9	514	43
35	Inner Mongolia (China)	94	122	-3.8	0.7	460	-4	421	41
36	Loess region (China)	119	88	3.3	0.8	527	-6	541	58
37	Lower Yangtze (China)	400	110	13	0.4	473	-22	1222	58
38	Northeast China	127	59	-5.4	0.8	395	-3	445	9
39	Qinghai-Tibet (China)	119	31	2.4	0.4	704	0	430	24
40	Southern China	280	93	17	0.2	579	-14	943	51
41	Southwest China	228	69	10.7	0.6	450	-10	789	33
42	Taiwan (China)	109	-34	19.7	0.4	646	-2	538	-26
43	East Asia	133	-29	1.2	1.1	407	-6	545	-10
44	Southern Himalayas	128	3	18.7	0.3	722	-2	457	7
45	Southern Asia	218	0	24.8	0.6	828	-2	572	-15
46	Southern Japan and Korea	309	-13	11.2	1.2	495	0	1084	-9
47	Southern Mongolia	82	272	-6.2	1.8	386	-5	386	105
48	Punjab to Gujarat	15	-37	22.4	0.2	808	0	74	-39
49	Maritime Southeast Asia	725	-24	25.9	-0.1	859	5	1804	-20
50	Mainland Southeast Asia	325	0	25.8	0.3	819	1	903	-2
51	Eastern Siberia	164	10	-8.6	0.2	238	2	365	-6
52	Eastern Central Asia	55	14	-13.4	0.7	303	1	241	8
53	Northern Australia	249	-43	26.9	-0.6	1141	4	840	-42
54	Queensland to Victoria	184	-8	21.3	1.1	1238	1	808	-9
55	Nullarbor to Darling	79	-9	20.1	1.1	1295	0	424	-13
56	New Zealand	92	-65	12.8	-0.3	1083	2	471	-47
57	Boreal Eurasia	219	0	-2.3	0.1	115	1	548	-4
58	Ukraine to Ural mountains	176	4	0.2	0.2	169	-2	667	-1
59	Mediterranean Europe and Turkey	193	-31	10.2	0	449	-1	720	-24
60	W. Europe (non Mediterranean)	234	-4	6.9	0.3	256	-4	893	-7
61	Boreal America	387	60	-4.9	2.9	106	-13	459	24
62	Ural to Altai mountains	161	41	-5.3	0.6	205	-7	459	3
63	Australian desert	108	42	22.3	0.8	1319	0	546	13
64	Sahara to Afghan deserts	71	50	18.4	-0.2	770	-4	269	52
65	Sub-arctic America	96	113	-12.6	4.6	26	10	162	126

Note: Departures are expressed in relative terms (percentage) for all variables, except for temperature, for which absolute departure in degrees Celsius is given. Zero means no change from the average value; relative departures are calculated as (C-R)/R*100, with C=current value and R=reference value, which is the five-year (5YA) or fourteen-year average (14YA) for the same period between April and July.

Table A.2. October 2015-January 2016 agroclimatic indicators and biomass by country

	31 Countries	RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)

31 Countries		RAIN		TEMP		RADPAR		BIOMSS	
		Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
[ARG]	Argentina	500	24	21.0	-1.7	1042	-10	1492	13
[AUS]	Australia	176	-11	21.6	0.9	1235	0	741	-11
[BGD]	Bangladesh	137	-38	23.0	-0.2	749	-1	380	-33
[BRA]	Brazil	562	-1	27.1	0.4	1043	3	1535	-9
[CAN]	Canada	165	-15	-1.8	2.4	248	-5	551	13
[CHN]	China	238	85	8.4	0.5	487	-12	683	41
[DEU]	Germany	219	3	7.0	1.7	200	-7	1028	4
[EGY]	Egypt	56	32	19.1	0.3	621	-5	160	15
[ETH]	Ethiopia	142	2	20.6	0.3	986	-3	610	6
[FRA]	France	204	-27	8.9	-0.9	299	0	901	-18
[GBR]	UK	446	48	8.5	-0.7	153	-13	1189	-2
[IDN]	Indonesia	729	-24	26.1	-0.1	876	6	1811	-21
[IND]	India	129	-3	22.7	0.6	811	-1	357	-18
[IRN]	Iran	218	50	8.7	-0.3	598	-5	711	47
[KAZ]	Kazakhstan	153	52	-3.2	1.1	246	-9	518	12
[KHM]	Cambodia	408	23	27.9	0.5	876	3	1036	-3
[MEX]	Mexico	215	21	20.0	0.5	756	-6	682	49
[MMR]	Myanmar	240	6	22.5	-0.4	757	-1	829	12
[NGA]	Nigeria	158	-4	26.6	-0.7	1012	1	456	-13
[PAK]	Pakistan	51	3	15.3	-0.1	714	-2	168	18
[PHL]	Philippines	661	-18	25.8	-0.1	827	10	1313	-32
[POL]	Poland	154	-1	4.5	0.7	193	-4	812	5
[ROU]	Romania	163	-9	4.9	0.9	293	-7	699	-10
[RUS]	Russia	174	16	-3.6	0.3	186	-3	507	0
[THA]	Thailand	284	0	25.9	0.4	827	1	831	-3
[TUR]	Turkey	256	-1	6.6	0.5	490	0	798	-12
[UKR]	Ukraine	149	1	3.0	0.2	234	0	747	4
[USA]	USA	362	47	8.1	1.6	448	-7	927	35
[UZB]	Uzbekistan	189	59	6.7	0.7	439	-9	701	51
[VNM]	Vietnam	380	-8	23.0	0.9	661	-1	1127	13
[ZAF]	South Africa	221	-26	22.1	1.4	1265	9	828	-27

See note table A.1.

Table A.3. Argentina, October 2015-January 2016 agroclimatic indicators and biomass (by province)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Buenos Aires	400	9	18.2	-1.7	1165	-5	1539	14
Chaco	466	7	24.7	-1.3	907	-19	1446	0
Cordoba	396	11	20.4	-2.1	1067	-9	1474	7
Corrientes	989	59	23.1	-1.6	922	-18	2258	32
Entre Rios	559	17	21.1	-1.7	1092	-7	1733	12
La Pampa	482	57	18.9	-2.1	1169	-7	1762	40
Misiones	1291	81	23.4	-0.9	818	-24	2426	27
Santiago Del Estero	383	14	23.9	-1.9	970	-11	1292	5
San Luis	441	40	18.8	-3.1	1057	-12	1494	16
Salta	345	0	23.4	-1.7	943	-7	1096	-6
Santa Fe	478	6	22.1	-1.4	1053	-9	1610	5

See note table A.1.

Table A.4. Australia, October 2015-January 2016 agroclimatic indicators and biomass (by state)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
New South Wales	193	-3	21.8	1.1	1240	0	894	-1
South Australia	68	-29	20.2	1.8	1294	4	411	-21
Victoria	94	-45	18.9	2.1	1237	3	530	-37
W. Australia	85	-12	20.8	1.1	1292	0	432	-14

See note table A.1.

Table A.5. Brazil, October 2015-January 2016 agroclimatic indicators and biomass (by state)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Ceara	80	7	28.9	0.3	1186	0	328	-19
Goias	588	-13	27.0	0.6	1093	7	1863	-10
MatoGrosso Do Sul	815	55	26.9	-0.9	1017	-5	2198	26
MatoGrosso	639	-19	28.4	0.6	1066	11	2004	-10

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Minas Gerais	583	-12	26.1	1.5	1125	10	1612	-13
Parana	1072	81	23.3	-0.4	857	-17	2378	29
Rio Grande Do Sul	1257	103	21.3	-1.3	867	-21	2245	33
Santa Catarina	1195	84	20.4	-0.5	750	-25	2198	16
Sao Paulo	820	40	25.0	0.3	995	-4	2213	22

See note table A.1.

Table A.6. Canada, October 2015-January 2016 agroclimatic indicators and biomass (by province)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Alberta	73	-17	-3.5	2.1	240	0	420	-5
Manitoba	116	13	-2.1	3.5	241	-10	602	32
Saskatchewan	86	3	-3.0	3.2	247	-6	498	16

See note table A.1.

Table A.7. India, October 2015-January 2016 agroclimatic indicators and biomass (by state)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Arunachal Pradesh	166	-13	16.0	0.1	664	-1	743	11
Andhra Pradesh	277	29	26.0	0.6	853	0	668	-3
Assam	141	-16	22.1	-0.1	696	1	599	26
Bihar	31	-60	22.6	0.1	783	1	143	-54
Chandigarh	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Chhattisgarh	40	-59	23.3	0.8	846	0	193	-57
Daman and Diu	n.a.	n.a.	28.0	2.0	900	1	n.a.	n.a.
Delhi	18	-35	20.5	0.4	757	-1	114	-33
Dadra and Nagar Haveli	75	-20	25.2	0.2	872	0	341	-27
Gujarat	10	-56	25.7	0.5	886	1	65	-64
Goa	173	-11	26.8	0.1	895	-2	570	-19
Himachal Pradesh	55	-34	5.2	1.2	716	-3	257	-27

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Haryana	32	25	19.5	0.2	748	-1	155	7
Jharkhand	23	-80	22.1	0.7	809	0	140	-72
Kerala	588	7	26.5	0.2	814	-8	1664	18
Karnataka	223	14	25.1	0.7	878	-2	666	-2
Meghalaya	48	-81	19.3	0.4	741	2	270	-44
Maharashtra	78	-21	25.1	1.0	874	-1	252	-41
Manipur	187	0	16.5	-0.6	727	0	656	13
Madhya Pradesh	32	-39	22.9	0.9	830	-1	155	-42
Mizoram	419	70	19.0	-0.9	747	-2	778	6
Nagaland	189	18	17.1	-0.3	695	0	784	46
Orissa	75	-57	24.1	0.7	816	-1	330	-48
Puducherry	535	21	26.7	0.5	796	-7	1603	28
Punjab	34	2	18.6	0.2	715	-1	156	1
Rajasthan	8	-42	22.3	0.1	818	1	38	-58
Sikkim	69	-50	7.7	0.4	683	-3	333	-28
Tamil Nadu	803	57	26.5	-0.1	759	-6	1646	21
Tripura	260	8	22.2	-0.4	738	-3	632	-8
Uttarakhand	94	37	10.7	1.7	749	0	369	12
Uttar Pradesh	62	33	21.6	0.6	784	0	254	5
West Bengal	46	-73	23.5	0.5	764	-1	223	-58

See note table A.1.

Table A.8. Kazakhstan, October 2015-January 2016 agroclimatic indicators and biomass (by oblast)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Akmolinskaya	136	54	-5.2	0.8	205	-8	459	4
Karagandinskaya	134	61	-4.3	1.5	244	-12	484	13
Kustanayskaya	150	61	-4.9	0.1	204	-4	476	-3
Pavlodarskaya	99	38	-5.2	0.7	199	-9	484	21
Severo	150	63	-6.4	-0.3	172	-5	429	-4
Vostochno	192	50	-4.3	2.7	273	-11	483	18
Zapadno	166	59	-0.3	0.9	211	-11	663	18

See note table A.1.

Table A.9. Russia, October 2015-January 2016 agroclimatic indicators and biomass (by oblast, kray and republic)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Bashkortostan	247	58	-4.5	0.2	149	-11	462	-9
Chelyabinskaya	142	39	-6.0	-0.8	166	-8	425	-10
Gorodovikovsk	-999	-999	-999.0	-999.0	-999	-999	-999	-999
Krasnodarskiy	141	-31	-1.4	0.4	234	-2	512	-1
Kurganskaya	146	43	-6.6	-0.8	157	-4	411	-10
Kirovskaya	214	7	-3.7	0.2	105	-5	485	-7
Kurskaya	165	8	0.7	0.0	194	3	723	-1
Lipetskaya	189	22	0.2	0.1	180	-1	689	-3
Mordoviya	232	35	-1.3	0.3	144	-6	602	-6
Novosibirskaya	173	37	-6.8	0.9	152	-7	423	1
Nizhegorodskaya	187	1	-1.7	0.2	127	-2	586	-6
Orenburgskaya	216	70	-3.2	0.4	184	-10	524	-7
Omskaya	152	35	-7.6	-0.3	149	-2	394	-7
Permskaya	250	38	-5.9	-0.2	106	-10	403	-13
Penzenskaya	246	49	-1.2	0.3	158	-8	609	-6
Rostovskaya	155	-14	3.1	0.1	261	2	736	8
Ryazanskaya	178	5	-0.5	0.3	152	0	654	-5
Stavropolskiy	214	32	5.0	0.0	303	1	803	24
Sverdlovskaya	151	25	-7.4	-1.3	126	-7	363	-18
Samarskaya	269	99	-2.0	0.5	157	-13	577	-6
Saratovskaya	217	70	-0.2	0.6	186	-10	669	4
Tambovskaya	203	22	-0.2	0.3	174	-3	663	-5
Tyumenskaya	140	22	-7.7	-0.8	141	-2	376	-12
Tatarstan	245	52	-2.5	0.3	130	-14	543	-6
Ulyanovskaya	258	79	-1.6	0.5	147	-12	590	-4
Udmurtiya	225	25	-4.1	0.2	109	-12	469	-9
Volgogradskaya	196	46	1.5	0.4	220	-5	768	16
Voronezhskaya	188	25	1.0	0.4	205	0	735	2

See note table A.1.

Table A.10. United States, October 2015-January 2016 agroclimatic indicators and biomass (by state)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Arkansas	785	88	12.4	1.6	488	-7	1601	27
California	132	-37	8.9	0.1	531	-3	530	-7
Idaho	253	57	-0.6	0.3	393	-5	661	20
Indiana	360	10	8.2	2.4	407	-5	1245	24

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Illinois	372	27	8.0	2.4	417	-5	1217	29
Iowa	292	62	5.0	2.2	402	-7	1005	41
Kansas	201	35	7.7	1.5	493	-6	847	53
Michigan	282	9	5.2	2.6	310	-8	980	22
Minnesota	260	76	1.7	3.0	323	-7	810	51
Missouri	532	86	9.0	1.8	449	-6	1307	37
Montana	176	95	-0.3	0.7	362	-4	672	35
Nebraska	196	75	4.5	1.7	443	-8	881	72
North Dakota	159	83	0.0	2.4	327	-7	706	63
Ohio	284	-3	8.3	2.7	392	-4	1176	17
Oklahoma	432	99	10.6	0.6	530	-5	1182	50
Oregon	290	-3	4.4	0.4	358	-4	864	18
South Dakota	192	93	2.7	1.9	394	-6	838	79
Texas	379	78	14.5	0.5	575	-8	1051	69
Washington	340	10	3.6	0.6	293	-5	807	8
Wisconsin	337	59	3.7	2.8	324	-9	924	31

See note table A.1.

Table A.11. China, October 2015-January 2016 agroclimatic indicators and biomass (by province)

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current (MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Anhui	281	77	10.8	0.0	490	-15	1035	50
Chongqing	181	10	11.0	0.9	375	-12	767	5
Fujian	386	114	15.2	1.2	496	-24	1091	45
Gansu	325	155	18.5	0.5	575	-19	921	62
Guangdong	104	102	2.5	1.2	552	-4	449	66
Guangxi	368	130	16.6	0.1	486	-23	1146	64
Guizhou	379	140	11.8	0.9	379	-18	1134	62
Hebei	70	53	2.2	0.2	476	-8	374	47
Heilongjiang	105	11	8.2	-0.1	503	-11	539	12
Henan	147	91	-7.3	0.9	369	-2	441	14
Hubei	203	25	10.3	0.1	465	-15	815	12
Hunan	416	103	12.2	-0.1	430	-23	1225	45
Jiangsu	128	51	-4.3	0.5	424	-3	498	9
Jiangxi	248	96	10.7	0.3	500	-12	1013	74
Jilin	510	133	13.8	0.5	474	-24	1457	73
Liaoning	85	-3	0.0	0.5	448	-6	457	-6

	RAIN		TEMP		RADPAR		BIOMSS	
	Current (mm)	14YA Departure (%)	Current (°C)	14YA Departure (°C)	Current MJ/m^2)	14YA Departure (%)	Current (gDM/m^2)	5YA Departure (%)
Inner Mongolia	98	139	-6.0	0.8	429	-2	396	36
Ningxia	116	215	1.6	1.1	555	-3	438	74
Shaanxi	122	26	9.7	0.8	466	-6	494	10
Shandong	119	86	7.3	0.2	494	-9	499	35
Shanxi	153	59	5.2	0.8	476	-10	644	44
Sichuan	102	81	1.6	1.2	516	-6	506	61
Yunnan	232	64	12.5	-0.1	619	-3	910	64
Zhejiang	472	112	13.0	1.0	440	-25	1405	59

See note table A.1.