

# Supplementary Materials: Interactions between Climate, Land Use and Vegetation Fire Occurrences in El Salvador. *Atmosphere*, 2016, 7, Article No. 26

Dolors Armenteras, Cerian Gibbes, Carla A. Vivacqua, Juan Sebastián Espinosa, Wania Duleba, Fabio Goncalves and Christopher Castro

**Table S1.** Area (in hectares) of each land use land cover category per year.

Land Use Land Cover Type/Year (ha)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
Cropland/Natural vegetation mosaic	897,725	796,100	1,089,675	1,089,275	1,336,150	1,245,525	1,264,000	1,139,325	1,271,775	1,343,800	1,340,775	1,156,275	1,164,200.0	175,681.45
Woody savannas	717,000	947,650	845,750	922,500	706,475	772,450	697,900	849,300	752,600	707,100	649,425	654,975	768,593.8	100,406.30
Croplands	405,800	389,875	230,350	179,575	116,025	155,675	167,950	150,175	139,500	129,700	136,675	195,275	199,714.6	97,656.37
Savannas	167,975	9,7025	55,425	31,475	29,400	31,300	49,000	69,950	35,425	37,525	62,550	146,750	67,816.7	46,468.00
Deciduous Broadleaf forest	43,850	20,025	16,850	22,075	41,525	38,100	45,500	22,950	27,350	29,600	37,075	63,950	34,070.8	13,572.77
Evergreen Broadleaf forest	143,250	135,475	146,425	140,100	148,000	130,200	147,025	135,425	139,200	125,250	138,575	145,950	139,572.9	7110.15
Grasslands	3750	2025	1075	2050	2925	2450	4025	6700	8325	4025	1825	11,025	4183.3	3008.38
Mixed forest	22,675	12,250	7900	12,875	13,400	12,225	11,675	11,150	10,325	8250	15,425	15,700	12,820.8	3915.42
Other	52,500	54,100	61,075	54,525	60,600	66,600	67,450	69,550	71,350	68,925	72,200	64,625	63,625.0	6966.40

**Table S2.** Percentage of landscape in each land use land cover category per year.

Land Use Land Cover Type/Year (%)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
Cropland/Natural vegetation mosaic	36.6%	32.4%	44.4%	44.4%	54.4%	50.7%	51.5%	46.4%	51.8%	54.8%	54.6%	47.1%	47.4%	0.072
Woody savannas	29.2%	38.6%	34.5%	37.6%	28.8%	31.5%	28.4%	34.6%	30.6%	28.8%	26.5%	26.7%	31.3%	0.041
Croplands	16.5%	15.9%	9.4%	7.3%	4.7%	6.3%	6.8%	6.1%	5.7%	5.3%	5.6%	8.0%	8.1%	0.040
Savannas	6.8%	4.0%	2.3%	1.3%	1.2%	1.3%	2.0%	2.8%	1.4%	1.5%	2.5%	6.0%	2.8%	0.019
Deciduous Broadleaf forest	1.8%	0.8%	0.7%	0.9%	1.7%	1.6%	1.9%	0.9%	1.1%	1.2%	1.5%	2.6%	1.4%	0.006
Evergreen Broadleaf forest	5.8%	5.5%	6.0%	5.7%	6.0%	5.3%	6.0%	5.5%	5.7%	5.1%	5.6%	5.9%	5.7%	0.003
Grasslands	0.2%	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%	0.3%	0.3%	0.2%	0.1%	0.4%	0.2%	0.001
Mixed forest	0.9%	0.5%	0.3%	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%	0.3%	0.6%	0.6%	0.5%	0.002
Other	2.1%	2.2%	2.5%	2.2%	2.5%	2.7%	2.7%	2.8%	2.9%	2.8%	2.9%	2.6%	2.6%	0.003

**Table S3.** Number of satellite detected active fires per land use land cover category.

Fires per Land Use Land Cover Type/Year (Number)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean	SD
Cropland/Natural vegetation mosaic	345	314	640	760	596	488	430	298	420	342	313	343	660	556	<b>464.6</b>	<b>152.69</b>
Woody savannas	134	127	209	326	237	216	172	113	190	125	144	136	306	223	<b>189.9</b>	<b>67.31</b>
Croplands	80	83	175	190	169	130	114	67	102	82	102	112	132	172	<b>122.1</b>	<b>40.36</b>
Savannas	40	38	82	110	80	63	69	36	46	53	48	60	96	78	<b>64.2</b>	<b>22.69</b>
Deciduous																
Broadleaf forest	11	11	26	51	35	22	12	12	21	15	14	23	63	33	<b>24.9</b>	<b>15.85</b>
Evergreen																
Broadleaf forest	4	6	17	19	16	20	13	12	13	6	8	8	17	11	<b>12.1</b>	<b>5.19</b>
Grasslands	2	7	18	22	22	7	6	6	10	6	6	7	17	25	<b>11.5</b>	<b>7.59</b>
Mixed forest	4	5	8	10	6	5	8	3	6	5	9	3	6	3	<b>5.8</b>	<b>2.26</b>
Other	3	4	13	12	9	14	6	8	23	9	10	32	22	32	<b>14.1</b>	<b>9.55</b>

**Table S4.** Percentage of fire occurrence per land use land cover category.

Fires per Land Use per Year (%)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean	SD
Croplands/Natural Vegetation Mosaic	55.4%	52.8%	53.9%	50.7%	50.9%	50.6%	51.8%	53.7%	50.5%	53.2%	47.9%	47.4%	50.0%	49.1%	<b>51.3%</b>	0.023
Woody Savanna	21.5%	21.3%	17.6%	21.7%	20.3%	22.4%	20.7%	20.4%	22.9%	19.4%	22.0%	18.8%	23.2%	19.7%	<b>20.8%</b>	0.016
Croplands	12.8%	13.9%	14.7%	12.7%	14.4%	13.5%	13.7%	12.1%	12.3%	12.8%	15.6%	15.5%	10.0%	15.2%	<b>13.5%</b>	0.015
Savanna	6.4%	6.4%	6.9%	7.3%	6.8%	6.5%	8.3%	6.5%	5.5%	8.2%	7.3%	8.3%	7.3%	6.9%	<b>7.1%</b>	0.008
Deciduous Broadleaf forest	1.8%	1.8%	2.2%	3.4%	3.0%	2.3%	1.4%	2.2%	2.5%	2.3%	2.1%	3.2%	4.8%	2.9%	<b>2.6%</b>	0.008
Evergreen Broadleaf forest	0.6%	1.0%	1.4%	1.3%	1.4%	2.1%	1.6%	2.2%	1.6%	0.9%	1.2%	1.1%	1.3%	1.0%	<b>1.3%</b>	0.004
Graslands	0.3%	1.2%	1.5%	1.5%	1.9%	0.7%	0.7%	1.1%	1.2%	0.9%	0.9%	1.0%	1.3%	2.2%	<b>1.2%</b>	0.005
Mixed Forest	0.6%	0.8%	0.7%	0.7%	0.5%	0.5%	1.0%	0.5%	0.7%	0.8%	1.4%	0.4%	0.5%	0.3%	<b>0.7%</b>	0.003
Others	0.5%	0.7%	1.1%	0.8%	0.8%	1.5%	0.7%	1.4%	2.8%	1.4%	1.5%	4.4%	1.7%	2.8%	<b>1.6%</b>	0.011



© 2016 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons by Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).