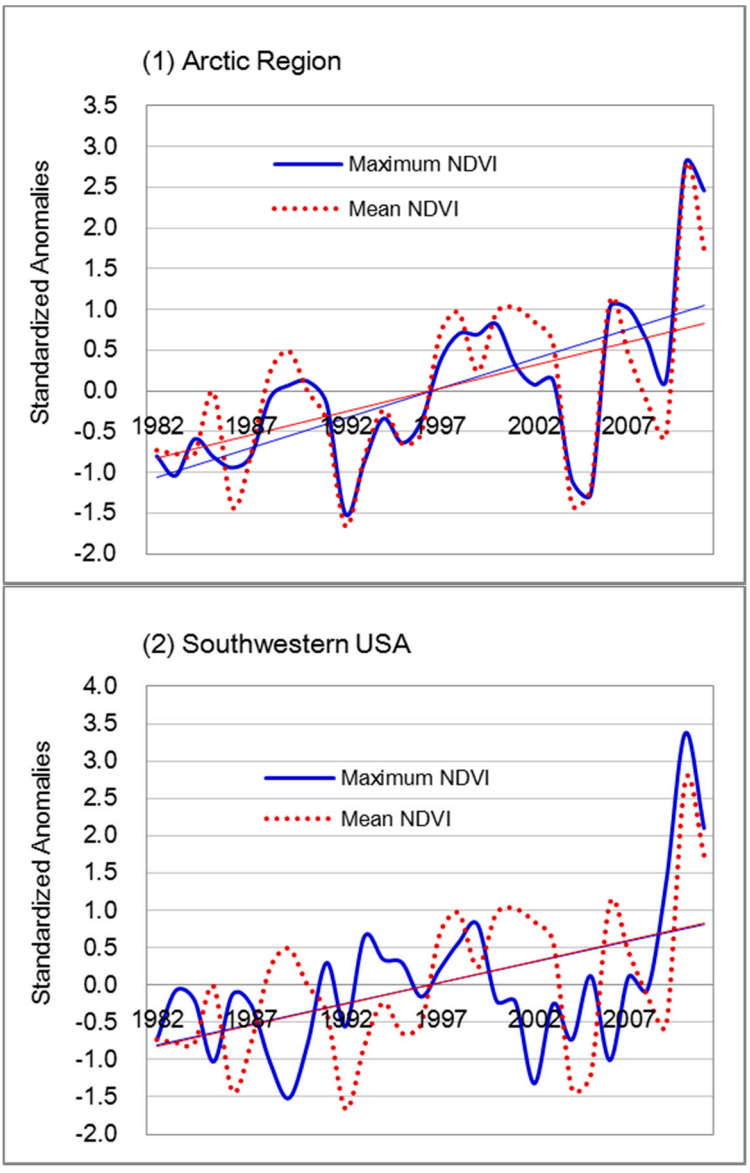
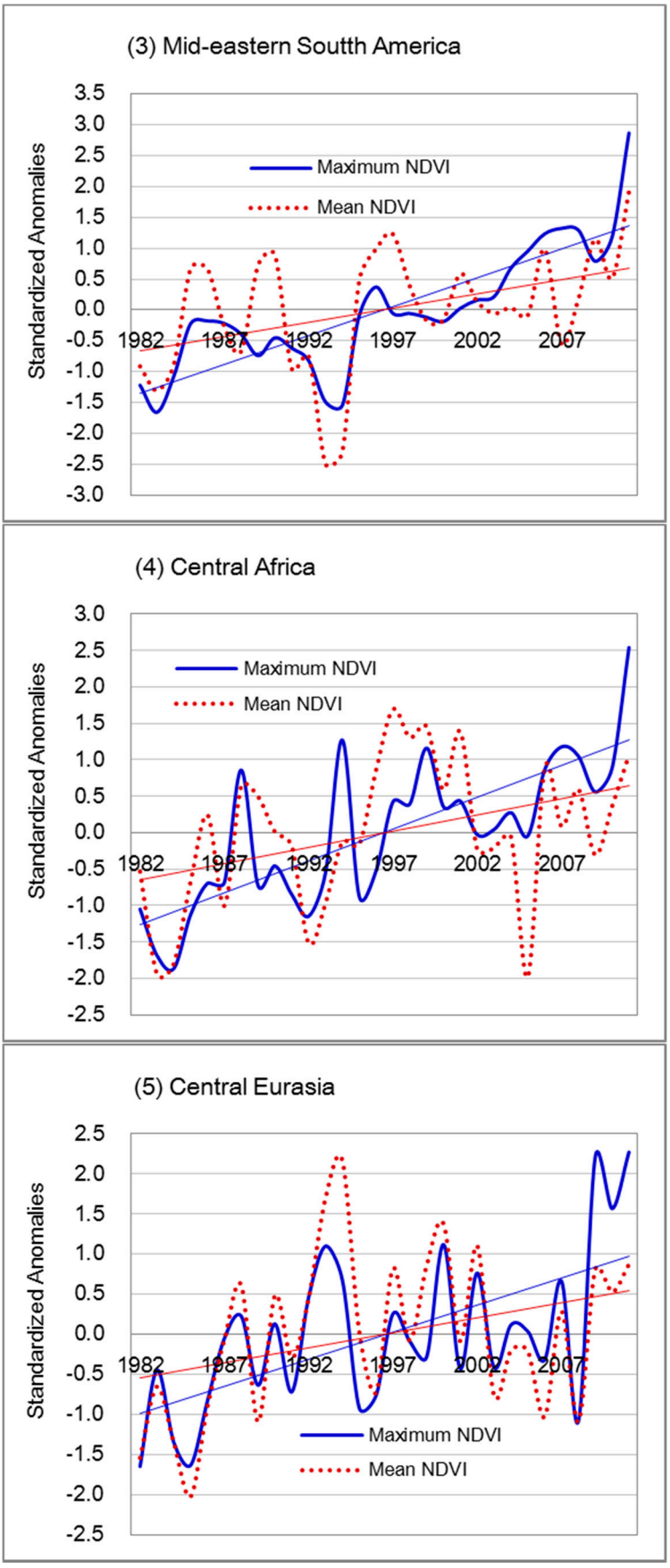
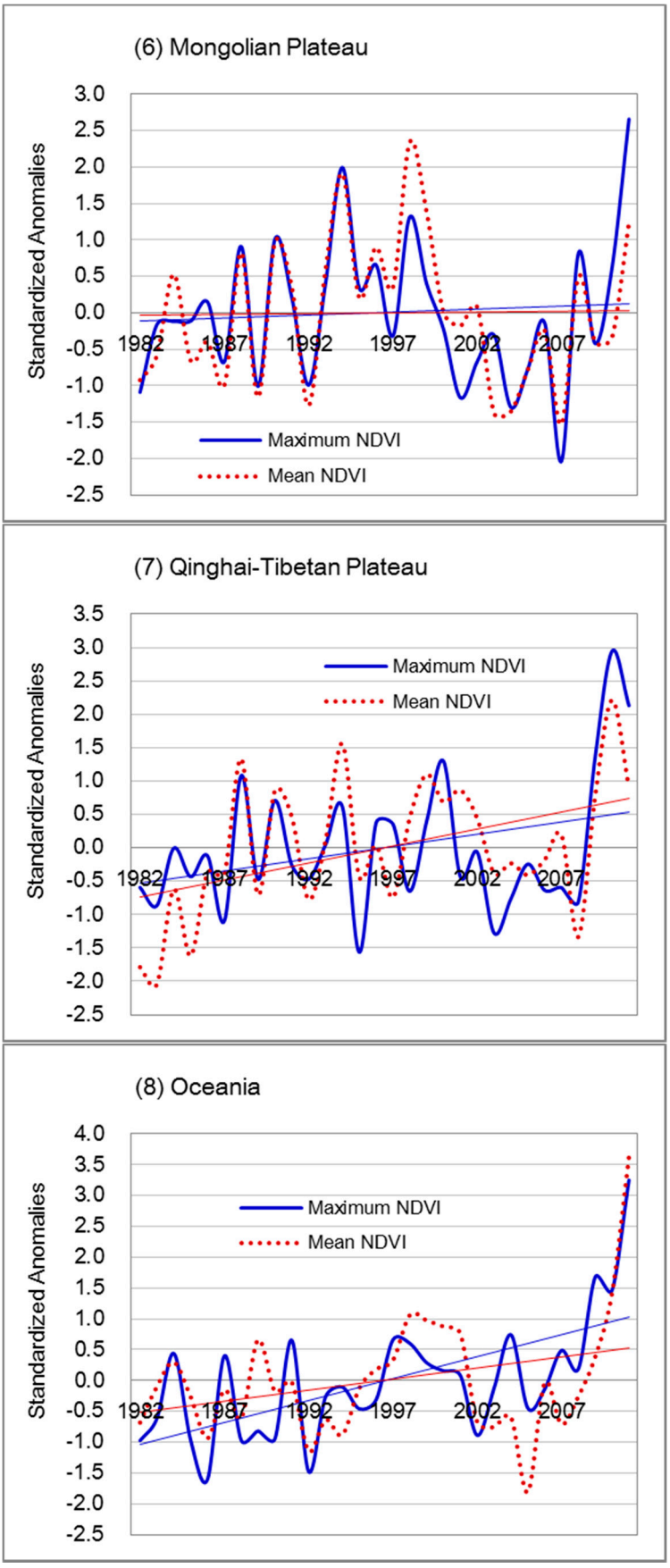
Supplementary Materials: Changes in Global Grassland Productivity during 1982 to 2011 Attributable to Climatic Factors. *Remote Sensing* 2016, *8*, 384

Qingzhu Gao, Mark W. Schwartz, Wenquan Zhu, Yunfan Wan, Xiaobo Qin, Xin Ma, Shuo Liu, Matthew A. Williamson, Casey B. Peters and Yue Li




(3) Mid-eastern Soutth America
Standardized Anomalies
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI
(4) Central Africa
Standardized Anomalies
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI
(5) Central Eurasia
Standardized Anomalies
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI


(6) Mongolian Plateau
Standardized Anomalies
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI
(7) Qinghai-Tibetan Plateau
Standardized Anomalies
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI
(8) Oceania
Standardized Anomalies
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
1982
1987
1992
1997
2002
2007
Maximum NDVI
Mean NDVI

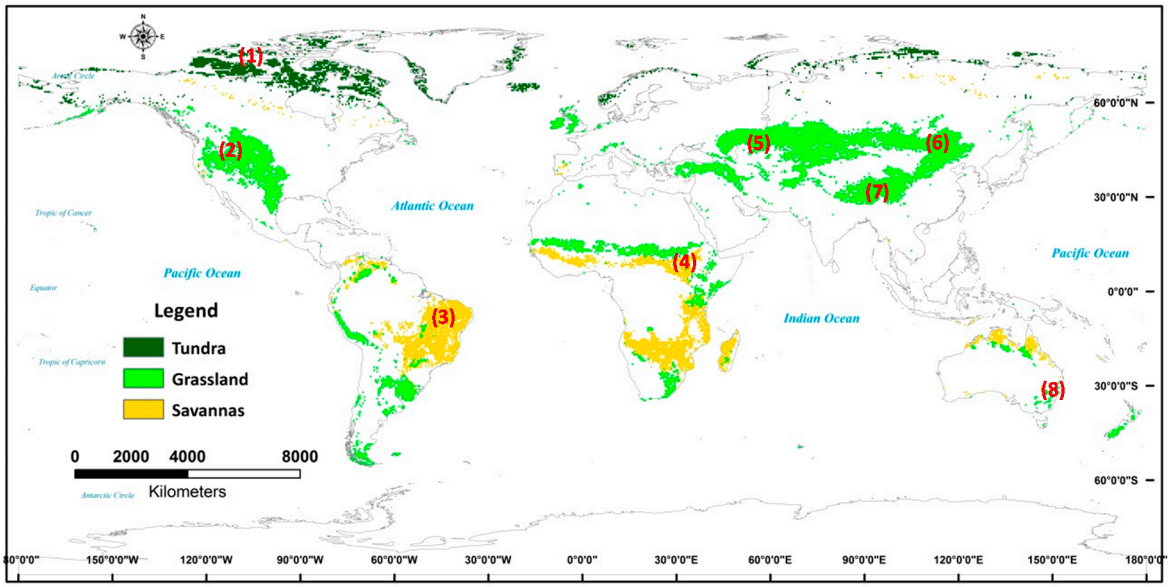


Figure S1. Trends of standardized anomalies of annual maximum and mean NDVI in the main distribution regions of global OGFD ecosystem. (**1**) is the Arctic Region; (**2**) is southwest USA; (**3**) is mid-eastern South America; (**4**) is central Africa; (**5**) is central Eurasia; (**6**) is the Mongolian Plateau; (**7**) is the Qinghai-Tibetan Plateau; and (**8**) is Oceania.

Table S1. Significant correlation between NDVI and bioclimatic factors in different OGFD ecosystem types and different regions from 1982 to 2011. P_{at} is annual total precipitation (mm); P_{wm} is the precipitation of the wettest month (mm); P_{dm} is the precipitation of the driest month (mm); T_{am} is annual mean temperature (°C); T_{hm} is the mean temperature of the hottest month (°C); T_{cm} is the mean temperature of the coldest month (°C); and I_o is the ombrothermic index.

NDVI	Bioclimatic Factors	Arctic	Southwestern USA	Mid-Eastern South America	Central Africa	Central Eurasia	Mongolian Plateau	Qinghai-Tibetan Plateau	Oceania	Tundra	Grassland	Savannas
Annual maximum NDVI	P_{at}	−	+		+	+					+	+
	P_{wm}				+	+	+		+			
	P_{dm}	−		−	−		−				+	
	T_{am}	+		+						+		−
	T_{hm}	+			+		+	+	−			+
	T_{cm}	+					−					
	I_o		−	+		−			+		−	−
Annual mean NDVI	P_{at}		+	+	+	+		−				+
	P_{wm}		+	−	+	+	+				+	−
	P_{dm}				−		−				+	−
	T_{am}	+	+	+				+	−	+	+	
	T_{hm}		+	+	−		+	+		+		
	T_{cm}		−				−	−	+			+
	I_o								+			

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