

Supplementary Information

Table S1. Results of parameter estimates in the GPR and GWPR per Month.

Variable	GPR					GWPR		
	Estimate	Std. Error	z value	P-value	VIF	Minimum	Median	Maximum
January								
Intercept	4.035	1.388	2.906	0.003*	-	-29.306	-4.546	13.577
LST_1	-0.091	0.047	-1.903	0.056	3.315	-0.480	0.135	0.700
NDVI_1	-1.852	0.692	-2.676	0.007*	1.746	-10.206	1.820	13.798
NDWI_1	-11.095	2.630	-4.217	<0.0001*	3.054	-43.066	-2.329	30.076
RAIN_1	-0.178	0.031	-5.746	<0.0001*	1.143	-0.876	0.077	6.524
February								
Intercept	-0.300	1.999	-0.150	0.880	-	-30.095	-2.289	23.633
LST_2	-0.018	0.061	-0.295	0.767	3.496	-0.692	0.046	0.686
NDVI_2	-1.322	0.987	-1.339	0.180	1.758	-15.031	-0.055	19.014
NDWI_2	-3.014	3.775	-0.798	0.424	4.292	-24.921	1.340	25.184
RAIN_2	0.212	0.032	6.479	<0.0001*	1.250	-0.197	0.160	0.833
March								
Intercept	6.135	1.974	3.107	0.001*	-	-14.387	2.804	34.225
LST_3	-0.157	0.060	-2.603	0.009*	3.804	-0.685	-0.082	0.308
NDVI_3	-1.265	1.122	-1.127	0.259	2.191	-19.936	-0.193	10.151
NDWI_3	-12.481	4.072	-3.064	0.002*	4.340	-19.037	-6.077	9.244
RAIN_3	-0.023	0.014	-1.626	0.103	1.033	-0.162	-0.025	0.058
April								
Intercept	-2.185	2.127	-1.027	0.304	-	-15.795	1.762	29.470
LST_4	0.110	0.061	1.784	0.074	3.822	-0.527	-0.054	0.541
NDVI_4	-1.615	1.244	-1.298	0.194	2.342	-14.398	-3.555	8.367
NDWI_4	4.658	6.133	0.759	0.447	5.096	-44.996	-6.519	53.702
RAIN_4	-0.010	0.011	-0.900	0.367	1.113	-0.160	0.005	0.078
May								
Intercept	1.929	2.270	0.850	0.395	-	-5.640	-0.546	5.502
LST_5	0.003	0.054	0.069	0.944	2.459	-0.201	0.004	0.236
NDVI_5	-1.831	0.982	-1.863	0.062	2.420	-3.813	-1.581	4.092
NDWI_5	-4.794	5.942	-0.806	0.419	3.757	-43.837	-10.219	20.632
RAIN_5	-0.003	0.003	-1.136	0.255	1.242	-0.011	-0.003	0.020
June								
Intercept	1.294	1.620	0.798	0.424	-	-28.823	-2.625	24.282
LST_6	0.019	0.043	0.449	0.653	1.607	-0.466	0.073	0.539
NDVI_6	-1.499	0.745	-2.011	0.044*	1.088	-11.629	3.209	22.125
NDWI_6	12.079	5.352	2.256	0.024*	1.573	-72.993	4.1483	80.041
RAIN_6	-0.001	0.001	-1.403	0.160	1.326	-0.035	-0.001	0.018
July								
Intercept	5.593	1.882	2.971	0.002*	-	0.368	5.140	9.802
LST_7	-0.143	0.059	-2.412	0.015*	1.330	-0.211	-0.110	-0.040
NDVI_7	-4.842	0.605	-7.994	<0.0001*	1.187	-8.973	-3.195	-0.241
NDWI_7	64.235	8.055	7.974	<0.0001*	1.134	1.447	31.425	74.617
RAIN_7	-0.001	0.0007	-1.950	0.051	1.322	-0.005	0.0008	0.002
August								
Intercept	-8.249	1.928	-4.277	<0.0001*	-	-27.725	-2.808	4.620
LST_8	0.237	0.056	4.207	<0.0001*	1.240	-0.206	0.045	0.687
NDVI_8	-2.874	0.625	-4.595	<0.0001*	1.167	-8.081	0.720	7.744
NDWI_8	72.880	9.152	7.963	<0.0001*	1.238	-25.417	34.014	192.858
RAIN_8	0.002	0.0006	4.110	<0.0001*	1.248	-0.006	0.003	0.014

Table S1. Results of parameter estimates in the GPR and GWPR in Month. (Con.)

Variable	GPR					GWPR		
	Estimate	Std. Error	z value	P-value	VIF	Minimum	Median	Maximum
September								
Intercept	1.372	2.643	0.519	0.603	-	-22.759	2.068	45.772
LST_9	0.000	0.079	0.001	0.998	1.258	-0.992	0.033	0.817
NDVI_9	3.673	0.910	4.034	<0.0001*	1.313	-37.523	0.705	11.266
NDWI_9	-1.215	8.055	-0.150	0.880	1.450	-127.278	-8.659	128.350
RAIN_9	-0.007	0.001	-5.269	<0.0001*	1.137	-0.059	-0.003	0.028
October								
Intercept	6.709	3.362	1.995	0.046*	-	-62.382	-2.948	32.500
LST_10	-0.178	0.100	-1.774	0.075	1.688	-1.013	0.056	2.198
NDVI_10	1.474	0.968	1.522	0.127	1.331	-22.095	6.686	15.871
NDWI_10	2.153	4.884	0.440	0.659	1.578	-89.435	1.9126	48.391
RAIN_10	-0.019	0.002	-7.456	<0.0001*	1.251	-0.144	-0.006	0.054
November								
Intercept	6.705	2.725	2.460	0.013*	-	-44.975	1.991	43.933
LST_11	-0.167	0.084	-1.991	0.046*	2.354	-1.218	-0.018	1.389
NDVI_11	-1.119	0.830	-1.347	0.177	2.036	-14.731	-0.823	8.788
NDWI_11	-1.603	4.932	-0.324	0.745	2.564	-70.773	4.952	89.168
RAIN_11	-0.035	0.012	-2.949	0.003*	1.189	-0.110	-0.023	0.082
December								
Intercept	1.181	2.567	0.459	0.645	-	-37.627	6.755	105.256
LST_12	-0.134	0.085	-1.571	0.115	2.803	-4.539	-0.208	0.775
NDVI_12	2.214	1.253	1.767	0.077	2.043	-23.980	0.088	37.968
NDWI_12	-12.617	5.445	-2.317	0.020*	3.885	-203.774	-10.567	64.757
RAIN_12	0.193	0.025	7.728	<0.0001*	1.157	-2.620	0.130	1.087