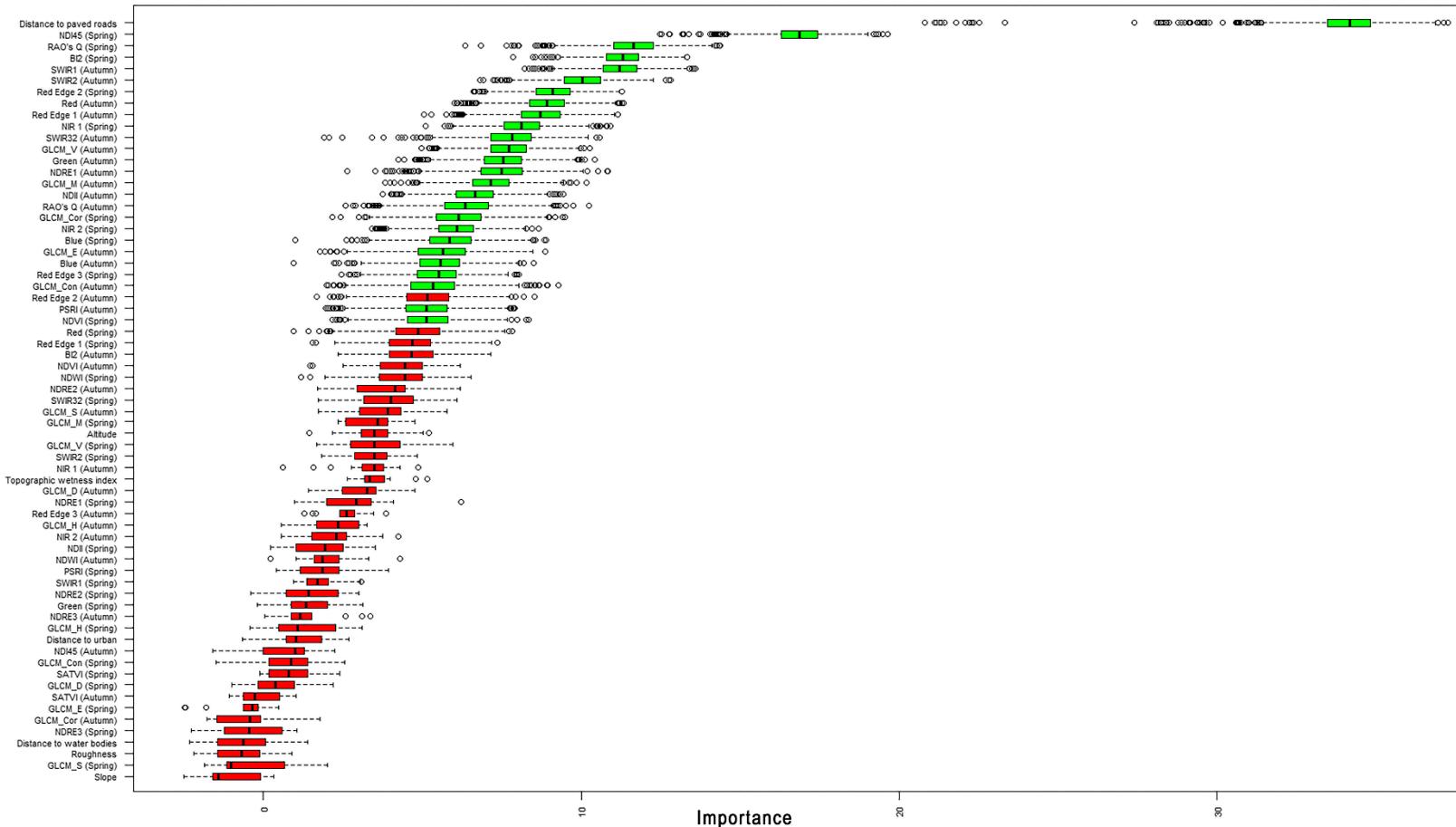
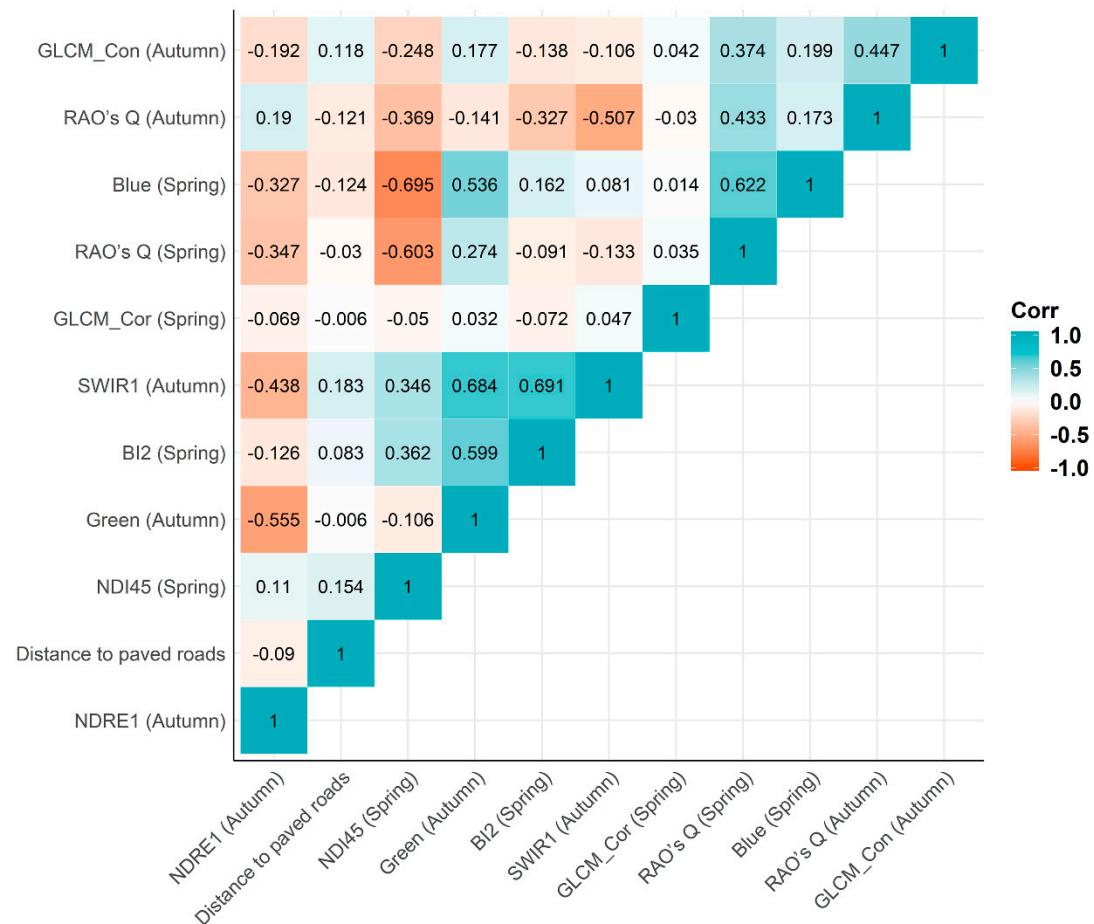




## Supplementary material



**Figure S1.** Variable explanation power as calculated by the Boruta feature selection algorithm. *Rejected* and *confirmed* features are evidenced by red and green boxplots, respectively. No *tentative* features were achieved.



**Figure S2.** List of retained *confirmed* variables after the Boruta screening procedure, with pairwise correlation coefficients  $<|0.7|$ .

**Table S1.** Pairwise correlation scores between all *Confirmed* features. Correlations scores greater than 0.7 are signaled in bold.

	Blue (Spring)	Blue (Autumn)	Green (Autumn)	Red (Autumn)	NIR 1 (Spring)	BI2 (Spring)	NDI45 (Spring)	NDII (Autumn)	NDRE1 (Autumn)	NDVI (Spring)	PSRI (Autumn)	SWIR1 (Autumn)	Red Edge 1 (Autumn)	Red Edge 2 (Spring)	Red Edge 3 (Spring)	NIR 2 (Spring)	SWIR2 (Autumn)	GLCM_Con (Autumn)	GLCM_E (Autumn)	GLCM_M (Autumn)	GLCM_V (Autumn)	RAO's Q (Spring)	RAO's Q (Autumn)	Distance to paved roads	GLCM_Cor (Spring)	SWIR32 (Autumn)	
Blue (Spring)	1.000	0.590	0.536	0.376	0.001	0.162	<b>-0.695</b>	-0.087	-0.327	-0.698	0.048	0.081	0.303	0.081	-0.004	-0.022	0.266	0.199	0.164	-0.191	-0.204	0.622	0.173	-0.124	0.014	0.565	
Blue (Autumn)	0.590	1.000	<b>0.985</b>	<b>0.926</b>	0.485	0.552	-0.153	-0.395	-0.563	-0.123	0.515	0.643	<b>0.850</b>	0.516	0.472	0.449	<b>0.764</b>	0.152	0.036	<b>-0.728</b>	<b>-0.738</b>	0.292	-0.132	-0.024	0.030	0.693	
Green (Autumn)	0.536	<b>0.985</b>	1.000	<b>0.945</b>	0.540	0.599	-0.106	-0.389	-0.555	-0.072	0.516	0.684	<b>0.887</b>	0.565	0.527	0.503	<b>0.793</b>	0.177	0.039	<b>-0.774</b>	<b>-0.786</b>	0.274	-0.141	-0.006	0.032	0.672	
Red (Autumn)	0.376	<b>0.926</b>	<b>0.945</b>	1.000	0.596	<b>0.623</b>	0.014	-0.526	-0.572	0.076	<b>0.736</b>	0.801	<b>0.920</b>	0.605	0.575	0.563	<b>0.846</b>	0.051	0.003	<b>-0.843</b>	<b>-0.848</b>	0.134	-0.296	0.047	0.029	<b>0.710</b>	
NIR 1 (Spring)	0.001	0.485	0.540	0.596	1.000	<b>0.946</b>	0.483	-0.192	-0.057	0.619	0.504	0.651	0.628	<b>0.953</b>	<b>0.963</b>	<b>0.962</b>	0.599	-0.194	-0.220	<b>-0.728</b>	<b>-0.727</b>	-0.182	-0.368	0.098	-0.064	0.168	
BI2 (Spring)	0.162	0.552	0.599	0.623	<b>0.946</b>	1.000	0.362	-0.234	-0.126	0.502	0.458	0.691	0.689	<b>0.982</b>	<b>0.975</b>	<b>0.974</b>	0.669	-0.138	-0.178	<b>-0.769</b>	<b>-0.773</b>	-0.091	-0.327	0.083	-0.072	0.262	
NDI45 (Spring)	<b>-0.695</b>	-0.153	-0.106	0.014	0.483	0.362	1.000	-0.183	0.110	<b>0.883</b>	0.181	0.346	0.127	0.432	0.469	0.485	0.193	-0.248	-0.273	-0.248	-0.242	-0.603	-0.369	0.154	-0.050	-0.261	
NDII (Autumn)	-0.087	-0.395	-0.389	-0.526	-0.192	-0.234	-0.183	1.000	<b>0.741</b>	-0.064	-0.562	<b>-0.721</b>	-0.507	-0.253	-0.210	-0.219	-0.720	0.073	0.158	0.515	0.506	0.005	0.502	-0.218	-0.071	-0.435	
NDRE1 (Autumn)	-0.327	-0.563	-0.555	-0.572	-0.057	-0.126	0.110	<b>0.741</b>	1.000	0.291	-0.276	-0.438	-0.572	-0.126	-0.084	-0.054	-0.568	-0.192	0.001	0.350	0.351	-0.347	0.190	-0.090	-0.069	-0.692	
NDVI (Spring)	-0.698	-0.123	-0.072	0.076	0.619	0.502	<b>0.883</b>	-0.064	0.291	1.000	0.308	0.381	0.162	0.565	0.624	0.649	0.194	-0.334	-0.280	-0.331	-0.325	-0.653	-0.401	0.094	-0.073	-0.357	
PSRI (Autumn)	0.048	0.515	0.516	<b>0.736</b>	0.504	0.458	0.181	-0.562	-0.276	0.308	1.000	<b>0.716</b>	0.618	0.473	0.449	0.471	0.641	-0.233	-0.102	-0.669	-0.672	-0.188	-0.555	0.140	0.013	0.199	
SWIR1 (Autumn)	0.081	0.643	0.684	<b>0.801</b>	0.651	0.691	0.346	<b>-0.721</b>	-0.438	0.381	<b>0.716</b>	1.000	<b>0.860</b>	<b>0.703</b>	0.681	0.690	<b>0.945</b>	-0.106	-0.158	<b>-0.934</b>	<b>-0.937</b>	-0.133	-0.507	0.183	0.047	0.356	
Red Edge 1 (Autumn)	0.303	<b>0.850</b>	<b>0.887</b>	<b>0.920</b>	0.628	0.689	0.127	-0.507	-0.572	0.162	0.618	<b>0.860</b>	1.000	0.681	0.658	0.639	<b>0.898</b>	0.083	-0.006	<b>-0.903</b>	<b>-0.923</b>	0.108	-0.303	0.080	0.038	0.562	
Red Edge 2 (Spring)	0.081	0.516	0.565	0.605	<b>0.953</b>	<b>0.982</b>	0.432	-0.253	-0.126	0.565	0.473	<b>0.703</b>	0.681	1.000	<b>0.989</b>	<b>0.986</b>	0.666	-0.164	-0.212	<b>-0.761</b>	<b>-0.766</b>	-0.155	-0.364	0.101	-0.067	0.240	
Red Edge 3 (Spring)	-0.004	0.472	0.527	0.575	<b>0.963</b>	<b>0.975</b>	0.469	-0.210	-0.084	0.624	0.449	0.681	0.658	<b>0.989</b>	1.000	<b>0.995</b>	0.628	-0.179	-0.217	<b>-0.745</b>	<b>-0.747</b>	-0.194	-0.359	0.090	-0.068	0.178	
NIR 2 (Spring)	-0.022	0.449	0.503	0.563	<b>0.962</b>	<b>0.974</b>	0.485	-0.219	-0.054	0.649	0.471	0.690	0.639	<b>0.986</b>	<b>0.995</b>	1.000	0.627	-0.203	-0.226	<b>-0.749</b>	<b>-0.748</b>	-0.224	-0.376	0.097	-0.073	0.149	
SWIR2 (Autumn)	0.266	<b>0.764</b>	<b>0.793</b>	<b>0.846</b>	0.599	0.669	0.193	<b>-0.720</b>	-0.568	0.194	0.641	<b>0.945</b>	<b>0.898</b>	0.666	0.628	0.627	1.000	-0.226	-0.103	<b>-0.910</b>	<b>-0.920</b>	0.060	-0.398	0.162	0.027	0.612	
GLCM_Con (Autumn)	0.199	0.152	0.177	0.051	-0.194	-0.138	-0.248	0.073	-0.192	-0.334	-0.233	-0.106	0.083	-0.164	-0.179	-0.203	0.006	1.000	<b>-0.727</b>	0.109	0.061	0.374	0.447	0.118	0.042	0.255	
GLCM_E (Autumn)	0.164	0.036	0.039	0.003	-0.220	-0.178	-0.273	0.158	0.001	-0.280	-0.102	-0.158	-0.006	-0.212	-0.217	-0.226	-0.103	<b>-0.727</b>	1.000	0.132	0.110	0.309	0.540	-0.089	-0.075	0.065	
GLCM_M (Autumn)	-0.191	<b>-0.728</b>	<b>-0.774</b>	<b>-0.843</b>	<b>-0.728</b>	<b>-0.769</b>	-0.248	0.515	0.350	-0.331	-0.669	<b>-0.934</b>	<b>-0.903</b>	<b>-0.761</b>	<b>-0.745</b>	<b>-0.749</b>	<b>-0.910</b>	0.109	0.132	1.000	<b>0.992</b>	0.050	0.411	-0.100	-0.029	-0.393	
GLCM_V (Autumn)	-0.204	-0.738	<b>-0.786</b>	<b>-0.848</b>	<b>-0.727</b>	<b>-0.773</b>	-0.242	0.506	0.351	-0.325	-0.672	<b>-0.937</b>	<b>-0.923</b>	<b>-0.766</b>	<b>-0.747</b>	<b>-0.748</b>	<b>-0.920</b>	0.061	0.110	<b>0.992</b>	1.000	0.037	0.398	-0.099	-0.025	-0.415	
RAO's Q (Spring)	0.622	0.292	0.274	0.134	-0.182	-0.091	-0.603	0.005	-0.347	-0.653	-0.188	-0.133	0.108	-0.155	-0.194	-0.224	0.060	0.374	0.309	0.050	0.037	1.000	0.433	-0.030	0.035	0.469	
RAO's Q (Autumn)	0.173	-0.132	-0.141	-0.296	-0.368	-0.327	-0.369	0.502	0.190	-0.401	-0.555	-0.507	-0.303	-0.364	-0.359	-0.376	-0.398	0.447	0.540	0.411	0.398	0.433	1.000	-0.121	-0.030	0.010	
Distance to paved roads	-0.124	-0.024	-0.006	0.047	0.098	0.083	0.154	-0.218	-0.090	0.094	0.140	0.183	0.080	0.101	0.090	0.097	0.162	0.118	-0.089	-0.100	-0.099	-0.030	-0.121	1.000	-0.006	0.015	
GLCM_Cor (Spring)	0.014	0.030	0.032	0.029	-0.064	-0.072	-0.050	-0.071	-0.069	-0.073	0.013	0.047	0.038	-0.067	-0.068	-0.073	0.027	0.042	-0.075	-0.029	-0.025	0.035	-0.030	-0.006	1.000	-0.025	
SWIR32 (Autumn)	0.565	0.693	0.672	<b>0.710</b>	0.168	0.262	-0.261	-0.435	-0.692	-0.357	0.199	0.356	0.562	0.240	0.178	0.149	0.612	0.255	0.065	-0.393	-0.415	0.469	0.010	0.015	-0.025	1.000	