remote sensing

MDPI

Supplementary Materials

Table S1. Floristic survey and sampling strategies for the four (1–4) sampling campaigns used in this study.

	1[A]	2[A]	3	4
Forest type [A]	Eucalypt (*n* = 6), Ecotone (*n* = 6), Rainforest (*n* = 6)	Eucalypt (*n* = 23), Ecotone (*n* = 6), Rainforest (*n* = 11)	Eucalypt (*n* = 3)	Eucalypt (*n* = 3), Ecotone (*n* = 2), Rainforest (*n* = 5)
Site dimensions	30 m × 30 m (0.09 ha plot size adjusted for slope)	20 m × 20 m (~0.04 ha)	20 m × 20 m (~0.04 ha)	10 m × 40 m (~0.04 ha, shortest side parallel to slope)
Understorey vegetation survey	20 m × 20 m plot, point intercept every 1 m on transects located every 2 m (total 210 points)	20 m × 20 m plot, point intercept every 1 m on transects located every 2 m (total 210 points)	20 m × 20 m plot, point intercept every 1 m on transects located every 2 m (total 210 points)	10 m × 40 m plot, point intercept every 1 m on transects located every 2 m (total 205 points)
Vegetation Structure	All trees ≥ 10 cm measured for DBH and height, counts and also average height within 2 < 10 cm DBH class	Counts and representative trees measured for DBH and height for 2 < 10, 10 < 20 and 20 < 30 cm DBH classes. Larger trees were counted in DBH classes adapted to the size distribution of that plot.	Counts and representative trees measured for DBH and height for 2 < 10, 10 < 20 and 20 < 30 cm DBH classes. Larger trees were counted in DBH classes adapted to the size distribution of that plot.	All trees ≥ 20 cm measured, counts and also maximum and minimum height within 2 < 10 and 10 < 20 cm DBH classes
Date: Vegetation structure	October to December 2012	October to December 2012	September to December 2013	March to June 2014
Date: Understorey vegetation	September to December 2013	September to December 2013	September to December 2013	October 2014

A See Fedrigo et al. [66] for further details

DBH, Diameter at Breast Height (1.3 m) Over Bark

Modified from Kasel et al. [63] supplementary Appendix 2.

Table S2. SIMPER analysis on presence and absence records of tree, shrub, and tree fern species across 71 field plots in rainforest, ecotone and eucalypt stands (average similarity within stand types in brackets). Bold species occur in both the field floristics and ecological vegetation class species list for similar stand types.

Species by stand type	Av. Abund.	Av. Sim.	Sim/SD	Contrib. %	Cum.%
Rainforest (45.8)					
Nothofagus cunninghamii	1.00	13.11	3.49	28.6	28.6
Dicksonia antarctica	0.91	10.94	1.78	23.9	52.5
Atherosperma moschatum	0.82	8.49	1.25	18.5	71.0
Pittosporum bicolor	0.55	3.20	0.61	7.0	78.0
Eucalyptus regnans	0.45	2.09	0.47	4.6	82.6
Hedycarya angustifolia	0.41	1.56	0.43	3.4	86.0
Tasmannia lanceolata	0.32	1.14	0.31	2.5	88.5
Ecotone (46.3)					
Dicksonia antarctica	1.00	11.43	4.70	24.7	24.7
Nothofagus cunninghamii	0.93	10.04	2.13	21.7	46.3
Acacia dealbata	0.86	8.25	1.51	17.8	64.1
Eucalyptus regnans	0.79	6.98	1.16	15.1	79.2
Olearia phlogopappa	0.36	1.17	0.35	2.5	81.7
Lomatia fraseri	0.36	1.16	0.34	2.5	84.2
Tasmannia lanceolata	0.36	1.07	0.34	2.3	86.5
Correa lawrenceana	0.36	0.94	0.35	2.0	88.6
Eucalypt (37.7)					
Dicksonia antarctica	0.89	7.69	1.69	20.4	20.4
Eucalyptus regnans	0.89	7.57	1.70	20.1	40.4
Correa lawrenceana	0.60	3.03	0.72	8.0	48.5
Polyscias sambucifolia	0.54	2.74	0.60	7.3	55.7
Cyathea australis	0.54	2.35	0.62	6.2	61.9
Olearia phlogopappa	0.49	2.21	0.52	5.9	67.8
Acacia dealbata	0.43	1.60	0.44	4.3	72.0
Prostanthera lasianthos	0.34	1.06	0.34	2.8	74.9
Acacia frigescens[A]	0.31	0.98	0.32	2.6	77.4
Coprosma quadrifida	0.34	0.92	0.34	2.4	79.9
Tasmannia lanceolata	0.31	0.83	0.31	2.2	82.1
Cassinia aculeata	0.29	0.79	0.27	2.1	84.2
Pimelea axiflora	0.29	0.75	0.28	2.0	86.2
Pomaderris aspera	0.31	0.72	0.31	1.9	88.1
Hedycarya angustifolia	0.31	0.68	0.31	1.8	89.9

Av. Abund., average abundance; Av. Sim., average similarity; Sim/SD, average similarity/standard deviation; Contrib. %, percent contribution; Cum. %, cumulative percent. See Table S3 for SIMPER analysis.

[A] Absent from the ecological vegetation class (EVC) species list in similar stand types across the study area.

Table S3: SIMPER analysis among rainforest, ecotone, and eucalypt stands based on presence and absence records of tree, shrub, and tree fern species across 71 field plots. Bold species were used to separate stand types based on an abundance value < 0.2 in at least one stand type.

Species by stand type	Av. Abund.	Av. Abund.	Av. Diss.	Diss/ SD	Contrib. %	Cum. %
	Rainforest	Ecotone				
Acacia dealbata	0.09	0.86	4.92	1.72	7.87	7.87
Atherosperma moschatum	0.82	0.07	4.66	1.62	7.45	15.32
Eucalyptus regnans	0.45	0.79	3.37	0.99	5.40	20.72
Pittosporum bicolor	0.55	0.14	3.08	1.02	4.92	25.63
Tasmannia lanceolata	0.32	0.36	2.66	0.86	4.26	29.89
Lomatia fraseri	0.18	0.36	2.40	0.79	3.84	33.73
	Rainforest	Eucalypt				
Nothofagus cunninghamii	1.00	0.09	5.20	2.44	7.16	7.16
Atherosperma moschatum	0.82	0.03	4.57	1.74	6.29	13.45
Eucalyptus regnans	0.45	0.89	3.20	1.01	4.40	17.85
Correa lawrenceana	0.14	0.60	3.04	1.10	4.19	22.04
Polyscias sambucifolia	0.23	0.54	2.95	0.97	4.06	26.10
Pittosporum bicolor	0.55	0.23	2.87	1.00	3.95	30.04
	Ecotone	Eucalypt				
Nothofagus cunninghamii	0.93	0.09	4.63	2.08	7.28	7.28
Acacia dealbata	0.86	0.43	3.04	1.06	4.78	12.06
Correa lawrenceana	0.36	0.60	2.76	1.02	4.35	16.41
Polyscias sambucifolia	0.29	0.54	2.75	0.98	4.33	20.74
Olearia phlogopappa	0.36	0.49	2.64	0.94	4.16	24.90
Cyathea australis	0.21	0.54	2.61	1.02	4.10	29.00

Av. Abund., average abundance; Av. Diss., average dissimilarity; Diss/SD, average dissimilarity/standard deviation; Contrib. %, percent contribution; Cum. %, cumulative percent.

Table S4: Spatially and temporally pooled cross validated error statistics for mean monthly (1981-2010) precipitation and vapor pressure across Victoria interpolated using ordinary trivariate splines.

Mean Monthly (1981-2010)	r^2	MAE	RMSE	RSR	BIAS
Precipitation (mm)	0.92	4.65[A]	7.65[B]	0.28	-0.19[C]
Vapor Pressure (hPa)	0.97	0.29	0.38	0.17	0.00

r^2 = coefficient of determination, MAE = mean absolute error, RMSE = root mean square error, RSR = ratio of the RMSE to the standard deviation of the observations, BIAS = mean error.

[A] Precipitation MAE of 8.5% when expressed as a proportion of the mean.

[B] Precipitation RMSE of 14.0% when expressed as a proportion of the mean.

[C] Precipitation BIAS of -0.00% when expressed as a proportion of the mean.

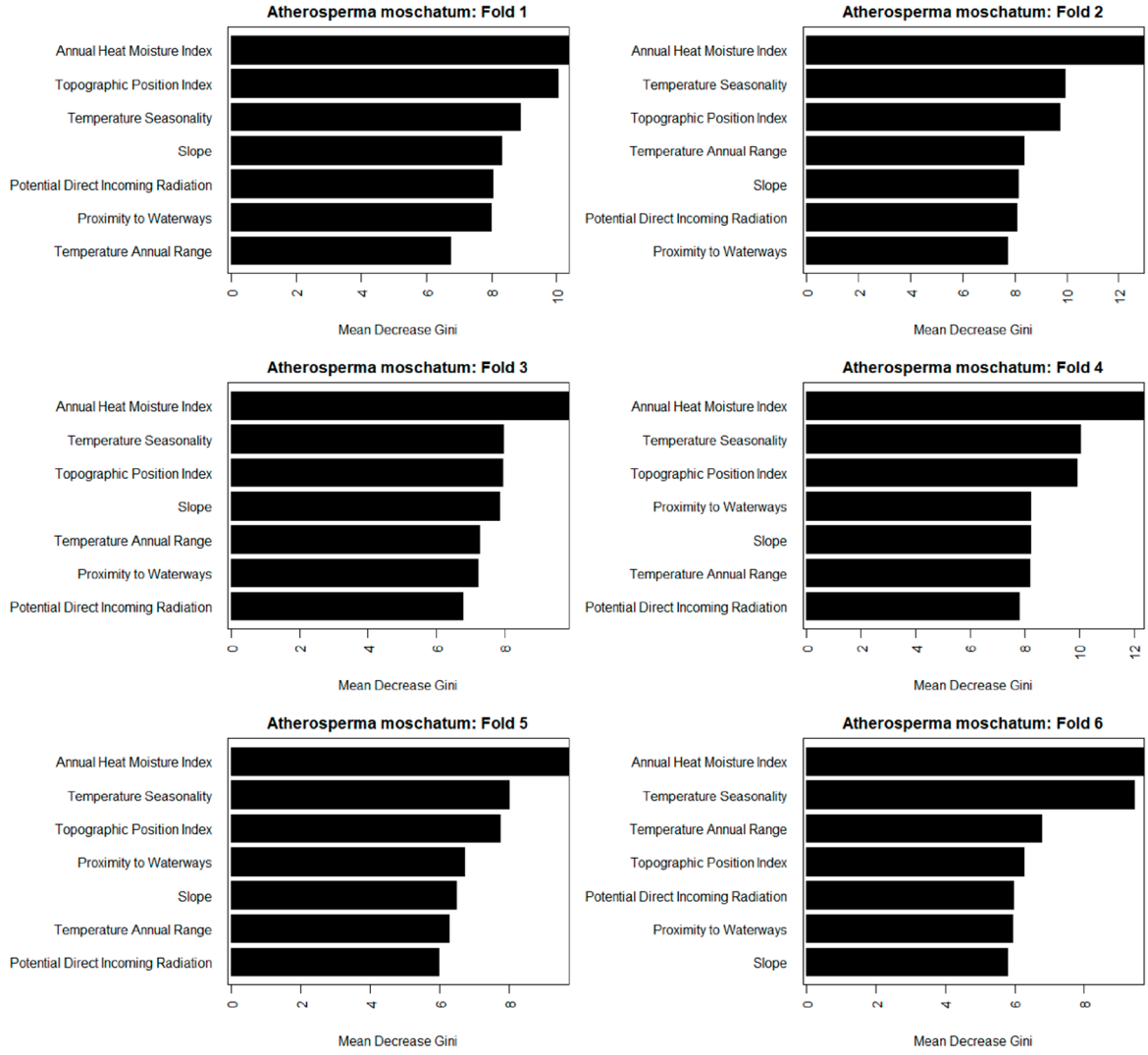
Table S5: Correlation matrix of variables considered for species distribution modelling across the study region.

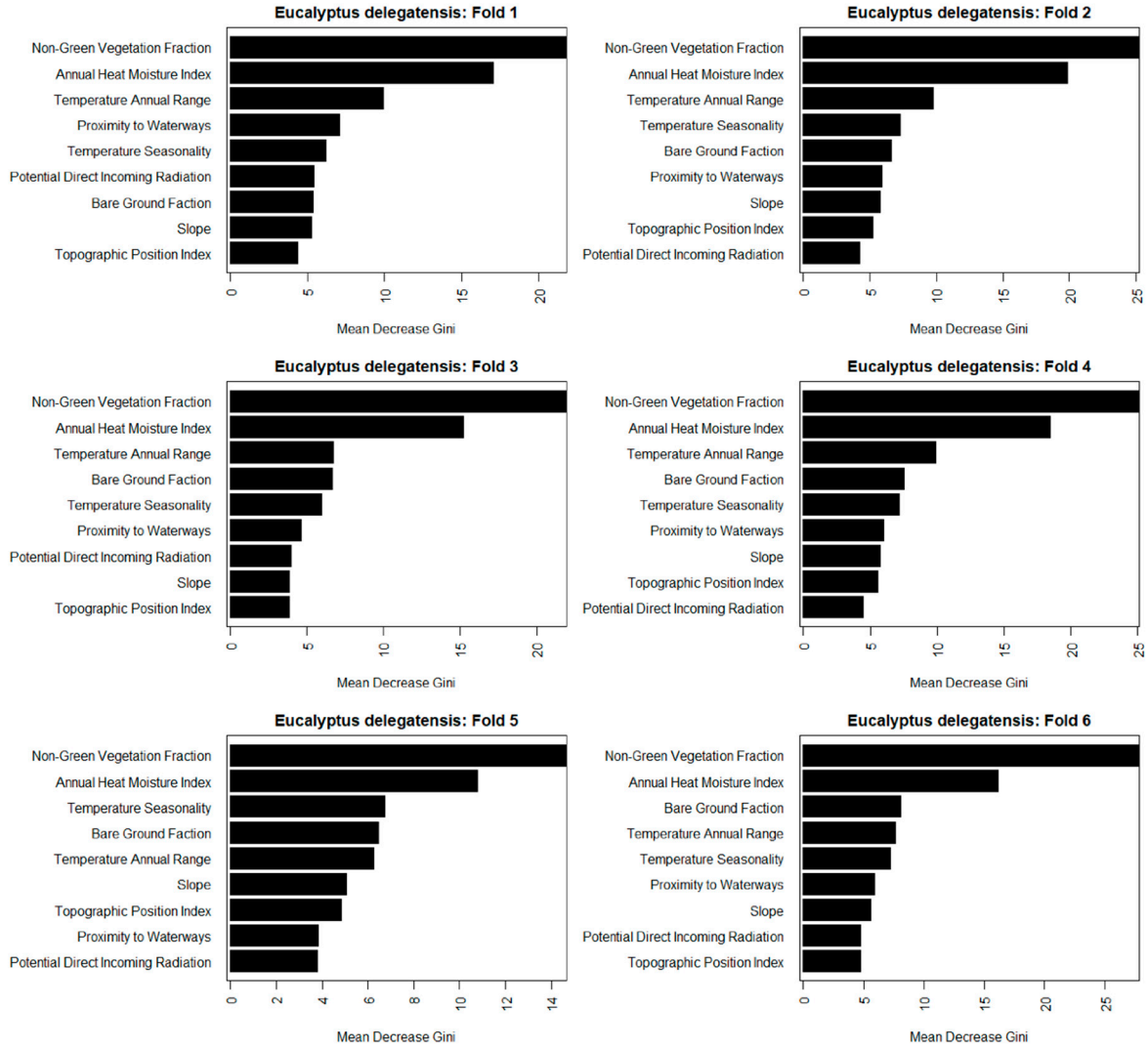
Correlation matrix of canditate predictor variables used for species distribution modelling and subseqent predictive ecosystem mapping

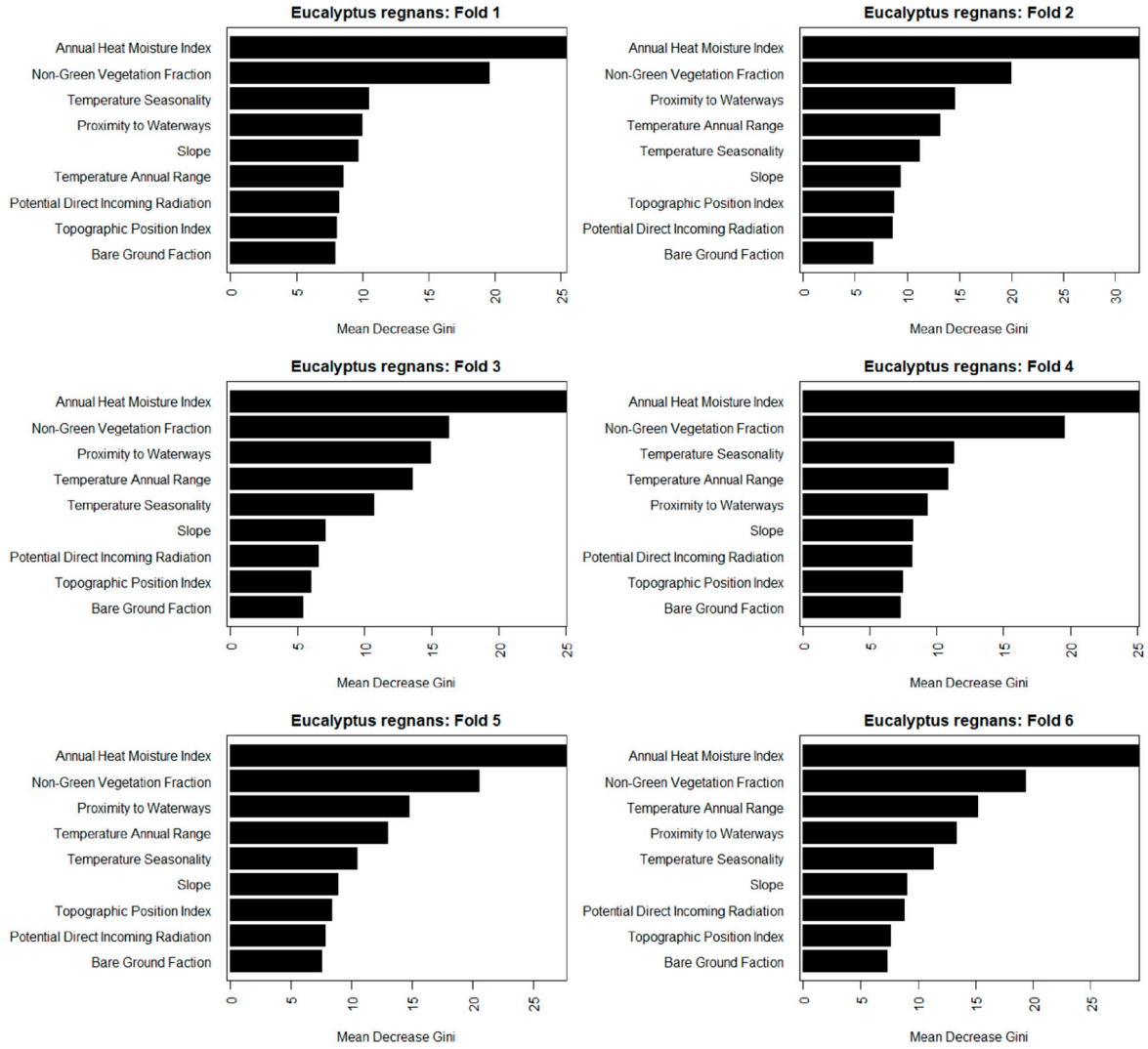
Bolded variables were used in the final analysis

	FracBare	FracGreen	**FracNonGreen**	Elevation	**Slope**	**TPI**	**PDIR**	HLI	**Waterdi**	BIO1	BIO2	BIO3	**BIO4**	BIO5	BIO6	**BIO7**	BIO8	BIO9	BIO10	BIO11	BIO12	BIO13	BIO14	BIO15	BIO16	BIO17	BIO18	BIO19	Ann_VPD	Sum_VPD	**AHMI**
FracBare	1.000	-0.712	0.560	-0.246	0.097	0.093	0.170	0.112	0.173	0.246	0.347	0.273	0.132	0.297	0.169	0.383	0.233	0.240	0.267	0.223	-0.280	-0.236	-0.254	-0.036	-0.242	-0.280	-0.256	-0.241	0.263	0.285	0.314
FracGreen	-0.712	1.000	-0.980	0.312	-0.068	-0.091	-0.276	-0.130	-0.261	-0.301	-0.428	-0.322	-0.228	-0.379	-0.219	-0.485	-0.249	-0.305	-0.336	-0.266	0.404	0.332	0.386	0.005	0.334	0.398	0.371	0.357	-0.371	-0.419	-0.465
FracNonGreen	0.560	-0.980	1.000	-0.301	0.054	0.083	0.275	0.119	0.259	0.289	0.406	0.303	0.228	0.365	0.215	0.462	0.230	0.295	0.324	0.255	-0.400	-0.328	-0.384	0.002	-0.328	-0.392	-0.367	-0.355	0.366	0.415	0.461
Elevation	-0.246	0.312	-0.301	1.000	-0.065	-0.057	-0.116	0.007	-0.130	-0.977	-0.880	-0.904	0.248	-0.957	-0.930	-0.733	-0.876	-0.961	-0.960	-0.979	0.913	0.901	0.861	0.452	0.899	0.896	0.885	0.832	-0.905	-0.829	-0.885
Slope	0.097	-0.068	0.054	-0.065	1.000	0.017	-0.309	-0.466	-0.002	0.131	0.063	0.072	-0.037	0.116	0.139	0.054	0.089	0.115	0.129	0.132	-0.091	-0.091	-0.081	0.017	-0.085	-0.098	-0.097	-0.065	0.146	0.111	0.062
TPI	0.099	-0.091	0.083	-0.057	0.017	1.000	0.142	0.085	0.132	0.148	0.000	-0.015	0.111	0.140	0.191	0.036	0.075	0.169	0.166	0.133	-0.147	-0.115	-0.131	0.046	-0.118	-0.187	-0.214	-0.075	0.193	0.208	0.137
PDIR	0.170	-0.276	0.275	-0.116	-0.309	0.142	1.000	0.733	0.116	0.115	0.136	0.100	0.112	0.143	0.094	0.167	0.082	0.138	0.131	0.098	-0.125	-0.093	-0.149	0.027	-0.097	-0.143	-0.140	-0.088	0.136	0.162	0.129
HLI	0.112	-0.130	0.119	0.007	-0.466	0.085	0.733	1.000	0.094	-0.034	0.016	-0.025	0.139	-0.002	-0.053	0.065	-0.014	-0.002	-0.018	-0.050	0.000	0.029	-0.021	0.044	0.020	-0.012	-0.015	0.017	-0.019	0.030	0.021
Waterdist	0.173	-0.261	0.259	-0.130	-0.002	0.132	0.116	0.094	1.000	0.194	0.016	-0.034	0.239	0.207	0.249	0.096	0.046	0.216	0.229	0.162	-0.335	-0.296	-0.345	-0.028	-0.300	-0.348	-0.364	-0.259	0.311	0.365	0.327
BIO1	0.246	-0.301	0.289	-0.977	0.131	0.148	0.115	-0.034	0.194	1.000	0.840	0.849	-0.177	0.979	0.970	0.726	0.853	0.989	0.993	0.993	-0.933	-0.910	-0.911	-0.389	-0.907	-0.940	-0.932	-0.820	0.960	0.892	0.896
BIO2	0.347	-0.428	0.406	-0.880	0.063	0.000	0.136	0.016	0.016	0.840	1.000	0.950	-0.064	0.897	0.694	0.918	0.723	0.831	0.843	0.823	-0.748	-0.708	-0.750	-0.231	-0.708	-0.769	-0.730	-0.643	0.749	0.728	0.741
BIO3	0.273	-0.322	0.303	-0.904	0.072	-0.015	0.100	-0.025	-0.034	0.849	0.950	1.000	-0.359	0.848	0.746	0.751	0.840	0.819	0.816	0.867	-0.767	-0.778	-0.663	-0.483	-0.778	-0.713	-0.690	-0.751	0.706	0.618	0.750
BIO4	0.132	-0.228	0.228	0.248	-0.037	0.111	0.112	0.139	0.239	-0.177	-0.064	-0.359	1.000	-0.008	-0.266	0.329	-0.537	-0.098	-0.057	-0.291	0.178	0.335	-0.168	0.827	0.333	-0.062	-0.038	0.455	0.013	0.248	-0.143
BIO5	0.297	-0.379	0.365	-0.957	0.116	0.140	0.143	-0.002	0.207	0.979	0.897	0.848	-0.008	1.000	0.911	0.845	0.776	0.980	0.992	0.952	-0.906	-0.853	-0.941	-0.242	-0.851	-0.953	-0.934	-0.748	0.958	0.933	0.878
BIO6	0.169	-0.219	0.215	-0.930	0.139	0.191	0.094	-0.053	0.249	0.970	0.694	0.746	-0.266	0.911	1.000	0.550	0.847	0.955	0.952	0.975	-0.932	-0.927	-0.875	-0.475	-0.924	-0.913	-0.920	-0.848	0.947	0.854	0.887
BIO7	0.383	-0.485	0.462	-0.733	0.054	0.036	0.167	0.065	0.096	0.726	0.918	0.751	0.329	0.845	0.550	1.000	0.474	0.748	0.775	0.665	-0.628	-0.527	-0.774	0.125	-0.527	-0.748	-0.701	-0.416	0.713	0.783	0.630
BIO8	0.233	-0.249	0.230	-0.876	0.089	0.075	0.082	-0.014	0.046	0.853	0.723	0.840	-0.537	0.776	0.847	0.474	1.000	0.805	0.800	0.893	-0.828	-0.860	-0.626	-0.676	-0.863	-0.711	-0.710	-0.879	0.744	0.597	0.817
BIO9	0.240	-0.305	0.295	-0.961	0.115	0.169	0.138	-0.002	0.216	0.989	0.831	0.819	-0.098	0.980	0.955	0.748	0.805	1.000	0.991	0.973	-0.918	-0.880	-0.933	-0.319	-0.878	-0.951	-0.946	-0.775	0.958	0.910	0.876
BIO10	0.267	-0.336	0.324	-0.960	0.129	0.166	0.131	-0.018	0.229	0.993	0.843	0.816	-0.057	0.992	0.952	0.775	0.800	0.991	1.000	0.972	-0.927	-0.884	-0.945	-0.296	-0.881	-0.962	-0.951	-0.779	0.976	0.936	0.894
BIO11	0.223	-0.266	0.255	-0.979	0.132	0.133	0.098	-0.050	0.162	0.993	0.823	0.867	-0.291	0.952	0.975	0.665	0.893	0.973	0.972	1.000	-0.930	-0.926	-0.866	-0.478	-0.923	-0.907	-0.903	-0.854	0.932	0.838	0.890
BIO12	-0.280	0.404	-0.400	0.913	-0.091	-0.147	-0.125	0.000	-0.335	-0.933	-0.748	-0.767	0.178	-0.906	-0.932	-0.628	-0.828	-0.918	-0.927	-0.930	1.000	0.982	0.907	0.504	0.983	0.955	0.951	0.935	-0.931	-0.866	-0.982
BIO13	-0.236	0.332	-0.328	0.901	-0.091	-0.115	-0.093	0.029	-0.296	-0.910	-0.708	-0.778	0.335	-0.853	-0.927	-0.527	-0.860	-0.880	-0.884	-0.926	0.982	1.000	0.829	0.639	0.938	0.894	0.894	0.972	-0.879	-0.779	-0.958
BIO14	-0.254	0.386	-0.384	0.861	-0.081	-0.191	-0.149	-0.021	-0.345	-0.911	-0.750	-0.663	-0.168	-0.941	-0.875	-0.774	-0.626	-0.933	-0.945	-0.866	0.907	0.829	1.000	0.129	0.828	0.988	0.978	0.704	-0.957	-0.971	-0.876
BIO15	-0.036	0.005	0.002	0.452	0.017	0.046	0.027	0.044	-0.028	-0.389	-0.231	-0.483	0.827	-0.242	-0.475	0.125	-0.676	-0.319	-0.296	-0.478	0.504	0.639	0.129	1.000	0.647	0.250	0.274	0.749	-0.253	-0.059	-0.506
BIO16	-0.242	0.334	-0.328	0.893	-0.085	-0.118	-0.097	0.020	-0.300	-0.907	-0.708	-0.778	0.333	-0.851	-0.924	-0.527	-0.863	-0.878	-0.881	-0.923	0.983	0.938	0.828	0.647	1.000	0.894	0.896	0.973	-0.874	-0.774	-0.960
BIO17	-0.280	0.398	-0.392	0.896	-0.098	-0.187	-0.143	-0.012	-0.348	-0.940	-0.769	-0.713	-0.062	-0.953	-0.913	-0.748	-0.711	-0.951	-0.962	-0.907	0.955	0.894	0.988	0.250	0.894	1.000	0.992	0.789	-0.968	-0.957	-0.926
BIO18	-0.256	0.371	-0.367	0.885	-0.097	-0.214	-0.140	-0.015	-0.364	-0.932	-0.730	-0.690	-0.038	-0.934	-0.920	-0.701	-0.710	-0.946	-0.951	-0.903	0.951	0.894	0.978	0.274	0.896	0.992	1.000	0.790	-0.959	-0.943	-0.919
BIO19	-0.241	0.357	-0.355	0.832	-0.065	-0.075	-0.088	0.017	-0.259	-0.820	-0.643	-0.751	0.455	-0.748	-0.848	-0.416	-0.879	-0.775	-0.779	-0.854	0.935	0.972	0.704	0.749	0.973	0.789	0.790	1.000	-0.778	-0.653	-0.932
Ann_VPD	0.263	-0.371	0.366	-0.905	0.146	0.193	0.136	-0.019	0.311	0.960	0.749	0.706	0.013	0.958	0.947	0.713	0.744	0.958	0.976	0.932	-0.931	-0.879	-0.957	-0.253	-0.874	-0.968	-0.959	-0.778	1.000	0.969	0.909
Sum_VPD	0.285	-0.419	0.415	-0.829	0.111	0.208	0.162	0.030	0.365	0.892	0.728	0.618	0.248	0.933	0.854	0.783	0.597	0.910	0.936	0.838	-0.866	-0.779	-0.971	-0.059	-0.774	-0.957	-0.943	-0.653	0.969	1.000	0.856
AHMI	0.314	-0.465	0.461	-0.885	0.062	0.137	0.129	0.021	0.327	0.896	0.741	0.750	-0.143	0.878	0.887	0.630	0.817	0.876	0.894	0.890	-0.982	-0.958	-0.876	-0.506	-0.960	-0.926	-0.919	-0.932	0.909	0.856	1.000

Figure S1: Random forest variable importance plots for distribution models of species which characterize rainforest, ecotone and eucalypt stand types.




Eucalyptus delegatensis: Fold 1
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Annual Range
Proximity to Waterways
Temperature Seasonality
Potential Direct Incoming Radiation
Bare Ground Faction
Slope
Topographic Position Index
0 5 10 15 20
Mean Decrease Gini
Eucalyptus delegatensis: Fold 2
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Annual Range
Temperature Seasonality
Bare Ground Faction
Proximity to Waterways
Slope
Topographic Position Index
Potential Direct Incoming Radiation
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus delegatensis: Fold 3
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Annual Range
Bare Ground Faction
Temperature Seasonality
Proximity to Waterways
Potential Direct Incoming Radiation
Slope
Topographic Position Index
0 5 10 15 20
Mean Decrease Gini
Eucalyptus delegatensis: Fold 4
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Annual Range
Bare Ground Faction
Temperature Seasonality
Proximity to Waterways
Slope
Topographic Position Index
Potential Direct Incoming Radiation
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus delegatensis: Fold 5
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Seasonality
Bare Ground Faction
Temperature Annual Range
Slope
Topographic Position Index
Proximity to Waterways
Potential Direct Incoming Radiation
0 2 4 6 8 10 12 14
Mean Decrease Gini
Eucalyptus delegatensis: Fold 6
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Bare Ground Faction
Temperature Annual Range
Temperature Seasonality
Proximity to Waterways
Slope
Potential Direct Incoming Radiation
Topographic Position Index
0 5 10 15 20 25
Mean Decrease Gini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Annual Heat Moisture Index
Non-Green Vegetation Fraction
Temperature Seasonality
Proximity to Waterways
Slope
Temperature Annual Range
Potential Direct Incoming Radiation
Topographic Position Index
Bare Ground Faction
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus regnans: Fold 2
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Proximity to Waterways
Temperature Annual Range
Temperature Seasonality
Slope
Topographic Position Index
Potential Direct Incoming Radiation
Bare Ground Faction
0 5 10 15 20 25 30
Mean Decrease Gini
Eucalyptus regnans: Fold 3
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Proximity to Waterways
Temperature Annual Range
Temperature Seasonality
Slope
Potential Direct Incoming Radiation
Topographic Position Index
Bare Ground Faction
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus regnans: Fold 4
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Temperature Seasonality
Temperature Annual Range
Proximity to Waterways
Slope
Potential Direct Incoming Radiation
Topographic Position Index
Bare Ground Faction
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus regnans: Fold 5
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Proximity to Waterways
Temperature Annual Range
Temperature Seasonality
Slope
Topographic Position Index
Potential Direct Incoming Radiation
Bare Ground Faction
0 5 10 15 20 25
Mean Decrease Gini
Eucalyptus regnans: Fold 6
Annual Heat Moisture Index
Non-Green Vegetation Fraction
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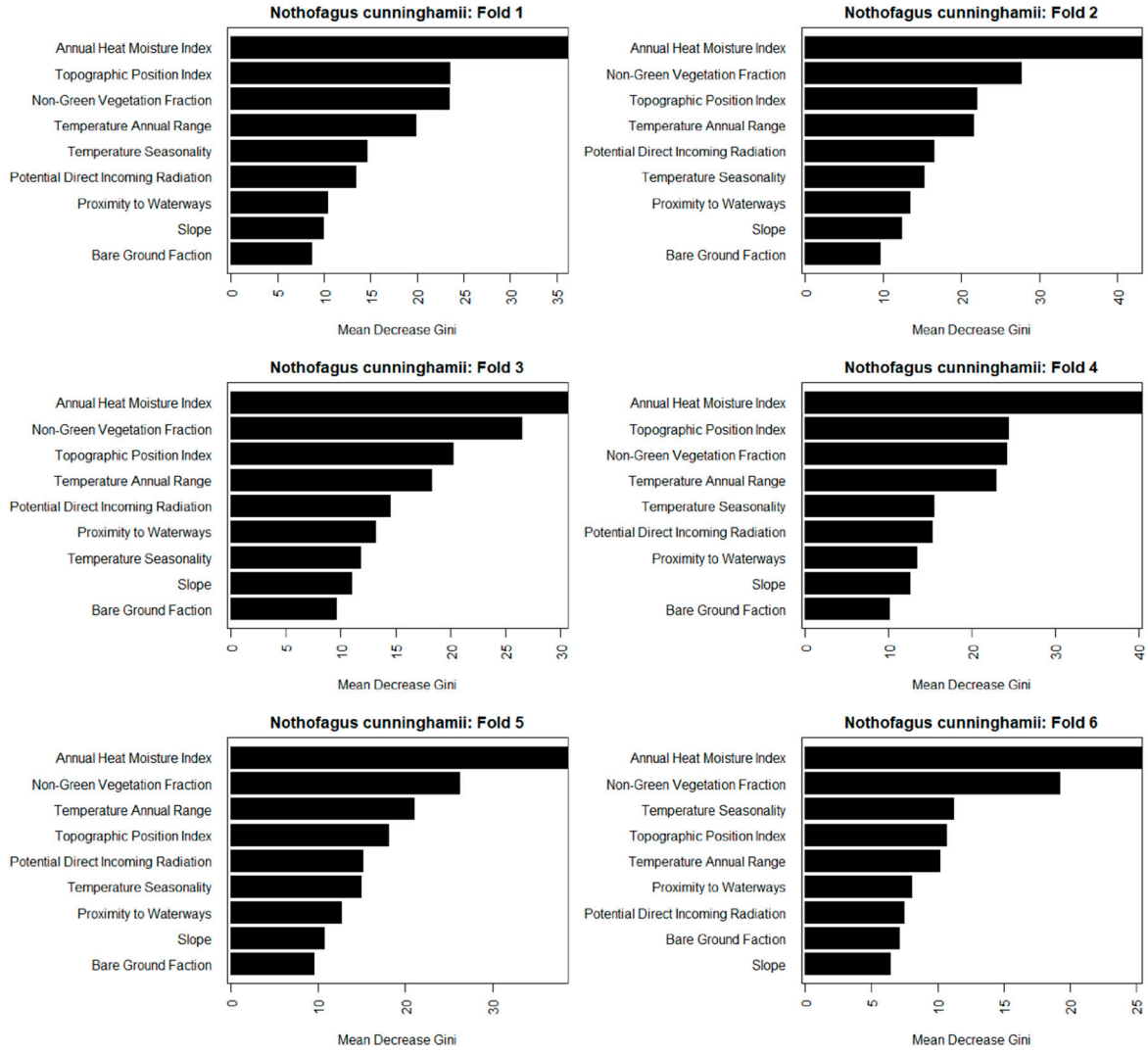
Temperature Seasonality
Slope
Potential Direct Incoming Radiation
Topographic Position Index
Bare Ground Faction
0 5 10 15 20 25
Mean Decrease Gini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Annual Heat Moisture Index
Topographic Position Index
Non-Green Vegetation Fraction
Temperature Annual Range
Temperature Seasonality
Potential Direct Incoming Radiation
Proximity to Waterways
Slope
Bare Ground Faction
0 5 10 15 20 25 30 35
Mean Decrease Gini
Nothofagus cunninghamii: Fold 2
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Topographic Position Index
Temperature Annual Range
Potential Direct Incoming Radiation
Temperature Seasonality
Proximity to Waterways
Slope
Bare Ground Faction
0 10 20 30 40
Mean Decrease Gini
Nothofagus cunninghamii: Fold 3
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Topographic Position Index
Temperature Annual Range
Potential Direct Incoming Radiation
Proximity to Waterways
Temperature Seasonality
Slope
Bare Ground Faction
0 5 10 15 20 25 30
Mean Decrease Gini
Nothofagus cunninghamii: Fold 4
Annual Heat Moisture Index
Topographic Position Index
Non-Green Vegetation Fraction
Temperature Annual Range
Temperature Seasonality
Potential Direct Incoming Radiation
Proximity to Waterways
Slope
Bare Ground Faction
0 10 20 30 40
Mean Decrease Gini
Nothofagus cunninghamii: Fold 5
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Temperature Annual Range
Topographic Position Index
Potential Direct Incoming Radiation
Temperature Seasonality
Proximity to Waterways
Slope
Bare Ground Faction
0 10 20 30
Mean Decrease Gini
Nothofagus cunninghamii: Fold 6
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Temperature Seasonality
Topographic Position Index
Temperature Annual Range
Proximity to Waterways
Potential Direct Incoming Radiation
Bare Ground Faction
Slope
0 5 10 15 20 25
Mean Decrease Gini

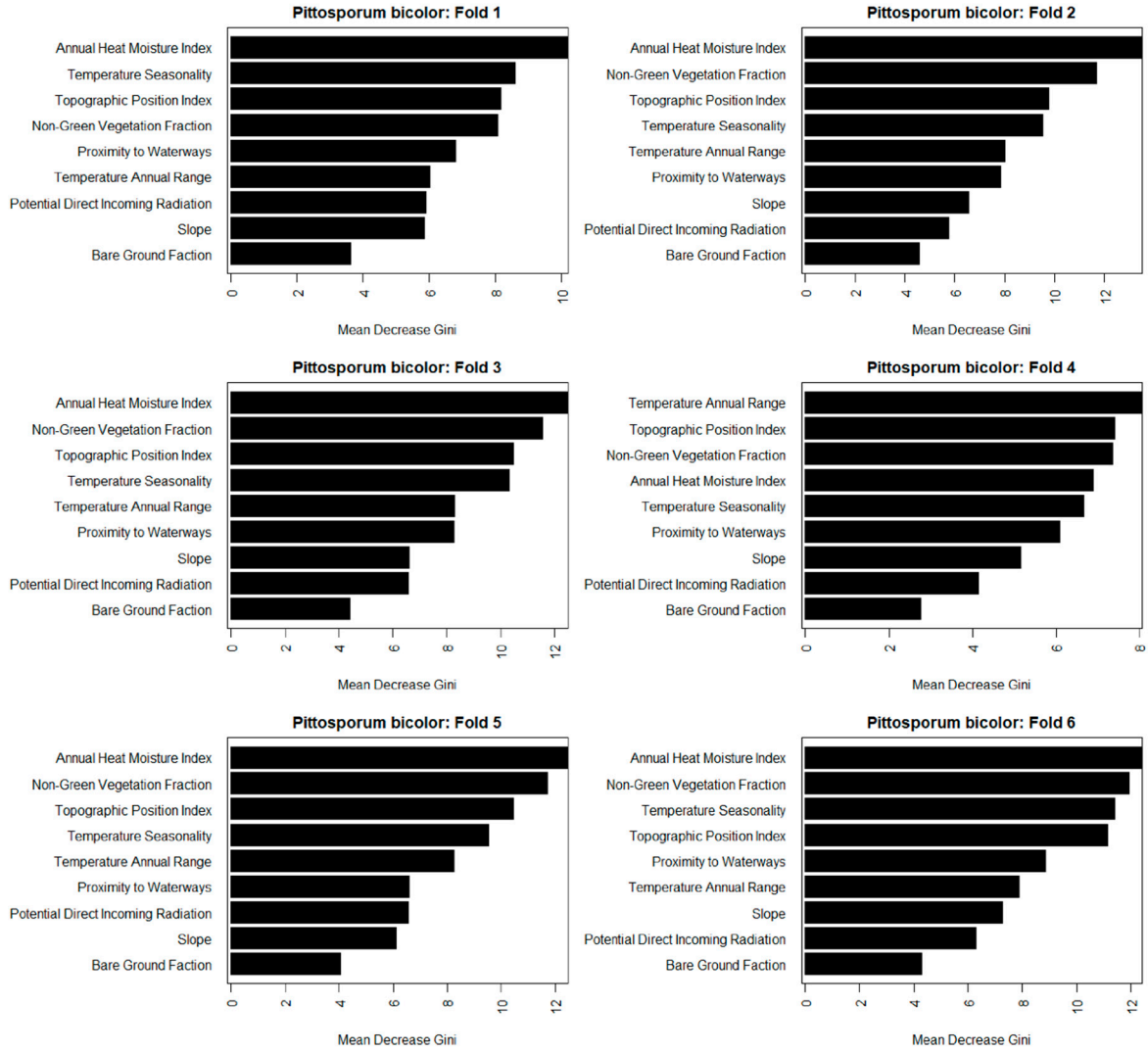
Pittosporum bicolor: Fold 1
Annual Heat Moisture Index
Temperature Seasonality
Topographic Position Index
Non-Green Vegetation Fraction
Proximity to Waterways
Temperature Annual Range
Potential Direct Incoming Radiation
Slope
Bare Ground Faction
0 2 4 6 8 10
Mean Decrease Gini
Pittosporum bicolor: Fold 2
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Topographic Position Index
Temperature Seasonality
Temperature Annual Range
Proximity to Waterways
Slope
Potential Direct Incoming Radiation
Bare Ground Faction
0 2 4 6 8 10 12
Mean Decrease Gini
Pittosporum bicolor: Fold 3
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Topographic Position Index
Temperature Seasonality
Temperature Annual Range
Proximity to Waterways
Slope
Potential Direct Incoming Radiation
Bare Ground Faction
0 2 4 6 8 10 12
Mean Decrease Gini
Pittosporum bicolor: Fold 4
Temperature Annual Range
Topographic Position Index
Non-Green Vegetation Fraction
Annual Heat Moisture Index
Temperature Seasonality
Proximity to Waterways
Slope
Potential Direct Incoming Radiation
Bare Ground Faction
0 2 4 6 8
Mean Decrease Gini
Pittosporum bicolor: Fold 5
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Topographic Position Index
Temperature Seasonality
Temperature Annual Range
Proximity to Waterways
Potential Direct Incoming Radiation
Slope
Bare Ground Faction
0 2 4 6 8 10 12
Mean Decrease Gini
Pittosporum bicolor: Fold 6
Annual Heat Moisture Index
Non-Green Vegetation Fraction
Temperature Seasonality
Topographic Position Index
Proximity to Waterways
Temperature Annual Range
Slope
Potential Direct Incoming Radiation
Bare Ground Faction
0 2 4 6 8 10 12
Mean Decrease Gini

Figure S2: Map of stand type distributions as predicted by the predictive ecosystem mapping model within the lidar footprint acquired across the Central Highlands region.

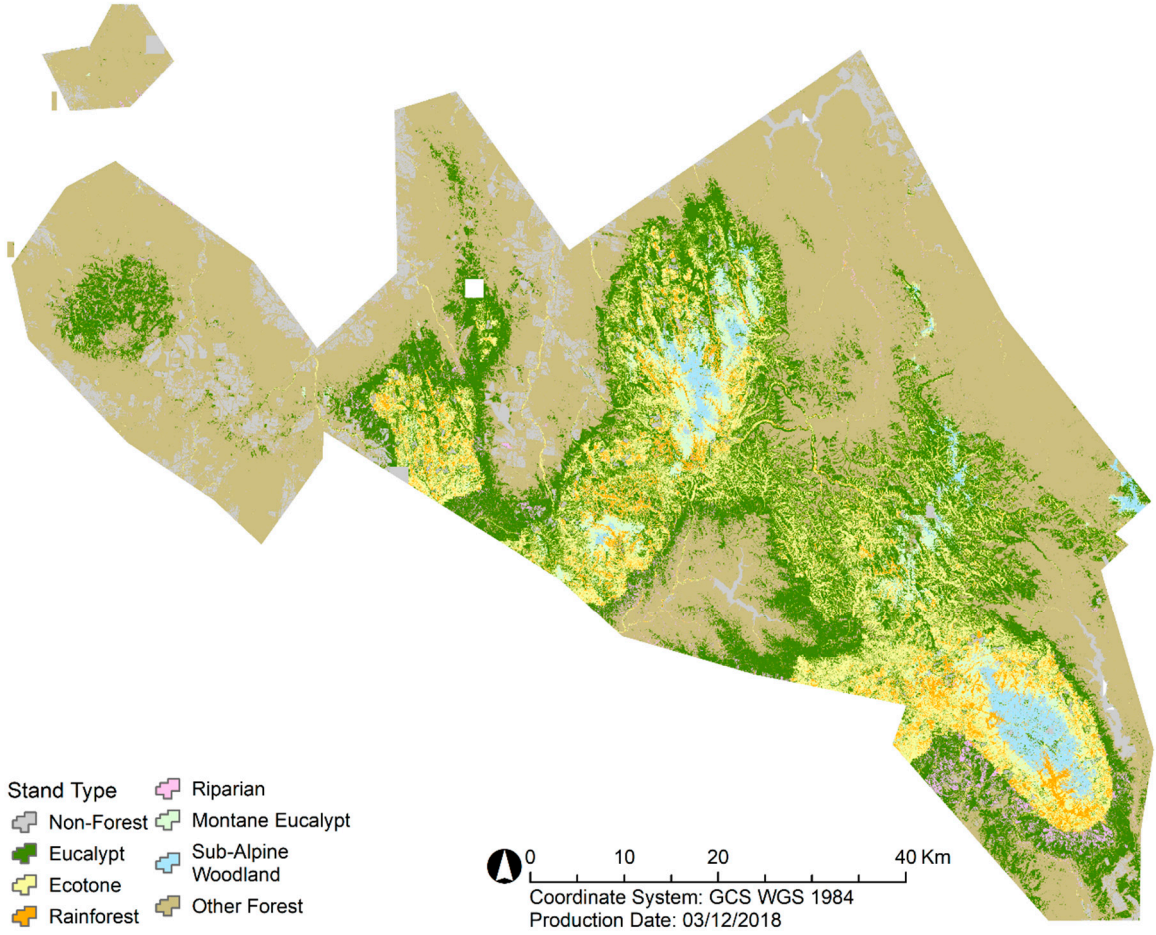

Figure S3: Map of stand type distributions as predicted by the ecological vegetation classes within the lidar footprint acquired across the Central Highlands region.