

Table S1. NEON Data Products Used in Study.

Data Product	Used In	Instrument	NEON Product Code
Isotopic composition of ecosystem boundary layer (TL 1-4)	Keeling Plot & GMWL	PICARRO L2130-i	DP1.00037.001
Water vapor concentration of ecosystem boundary layer (TL 1-4)	Keeling Plot	LI-840A	DP1.00100.001
Isotopic composition of planetary boundary layer (Tower Top)	Keeling Plot, GMWL, & CGM	PICARRO L2130-i	DP1.00037.001
Water vapor concentration of planetary boundary layer (Tower Top)	Keeling Plot	LI-840A	DP1.00100.001
Relative humidity	CGM & VPD	HMP155A (Tower Top)	DP1.00098.001
Soil Moisture	Predictive Model	Sentek - EnviroSCAN TriSCAN	DP1.00094.001
Air Temperature	VPD	Thermometrics Climate RTD 100 Ω Probe	DP1.00002.001
Latent Heat Flux	Total Evapotranspiration	LI-7200/LI-840A/CSAT-3 3D Sonic Anemometer	DP4.00137.001
Shortwave and Longwave Radiation (Net Radiometer)	Penman-Monteith Model	Hukseflux NR01 Net Radiometer	DP1.00023.001
Soil Heat Flux	Penman-Monteith Model	Hukseflux HFP01SC: Self-Calibrating Heat Flux Sensor	DP1.00040.001
2D Wind Speed and Direction	Penman-Monteith & FFP	Gill - Wind Observer II; Extreme Weather Wind Observer	DP1.00001.001
Precipitation	Sap Flow Analysis	Belfort AEPG II 600M Weighing gauge (DFIR)	DP1.00006.001
Stable Isotope Concentrations in Precipitation	GMWL	N-Con Systems Company Wet Deposition Collector	DP1.00038.001
Woody Plant Vegetation Structure (DBH & Species)	Sap Flow Analysis	Field Crew	DP1.10098.001

Table S2. Sapwood Area to Basal Area.

Tree #	DBH (cm)	Sapwood Radius (cm)	Basal Area (m ²)	Sapwood Area (m ²)
1	23.5	6.400	0.043	0.032
2	25.5	7.600	0.051	0.040
3	30.5	4.200	0.073	0.033
4	36	10.600	0.102	0.077
5	40	6.600	0.126	0.064
6	54.5	12.100	0.233	0.149
7	36	5.100	0.102	0.046
8	29	7.500	0.066	0.047
9	31	--	0.075	
10	31	6.500	0.075	0.046
11	21.5	4.300	0.036	0.022

Tree #9 was rotten and not cored on this date.

Table S3. Daily Keeling Plots.

DOY	Keeling Plot				
		N	Slope	δ_{ET}	R ² P-Value
131	$\delta^{18}O$	32	-747.52	33.46	0.34 <0.001
	δ^2H	32	-7838.76	407.63	0.37 <0.001
132	$\delta^{18}O$	22	-50.06	-13.31	0.52 <0.001
	δ^2H	22	-609.83	-78.49	0.66 <0.001
133	$\delta^{18}O$	16	10.49	-14.61	0.10 0.24
	δ^2H	16	-552.25	-74.18	0.70 <0.001
134	$\delta^{18}O$	30	-35.49	-10.75	0.21 0.001
	δ^2H	30	-615.90	-62.52	0.89 <0.001
135	$\delta^{18}O$	30	-13.70	-11.88	0.04 0.3
	δ^2H	30	-776.71	-50.96	0.82 <0.001
136	$\delta^{18}O$	29	-69.80	-8.05	0.61 <0.001
	δ^2H	29	-629.38	-50.84	0.59 <0.001
137	$\delta^{18}O$	28	-19.93	-10.25	0.00 0.8
	δ^2H	28	-427.45	-62.31	0.27 0.005
138	$\delta^{18}O$	28	-176.00	-3.81	0.29 0.003
	δ^2H	28	-792.40	-46.30	0.44 0.001
139	$\delta^{18}O$				
	δ^2H				
140	$\delta^{18}O$				
	δ^2H				
141	$\delta^{18}O$				
	δ^2H				
142	$\delta^{18}O$				
	δ^2H				
143	$\delta^{18}O$	21	-236.37	-1.07	0.71 <0.001
	δ^2H	21	-1853.90	-3.37	0.77 <0.001
144	$\delta^{18}O$	30	-326.00	0.24	0.20 0.01
	δ^2H	30	-2277.56	-1.84	0.19 0.02
145	$\delta^{18}O$	6	-91.11	-6.56	0.08 0.58
	δ^2H	6	785.78	-103.37	0.15 0.46
146	$\delta^{18}O$				
	δ^2H				
147	$\delta^{18}O$				
	δ^2H				
148	$\delta^{18}O$				
	δ^2H				
149	$\delta^{18}O$				

	$\delta^2\text{H}$					
150	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
151	$\delta^{18}\text{O}$	25	-23.36	-10.21	0.03	0.41
	$\delta^2\text{H}$	25	-611.25	-58.20	0.73	<0.001
152	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
153	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
154	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
155	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
156	$\delta^{18}\text{O}$	25	62.47	-14.55	0.04	0.32
	$\delta^2\text{H}$	25	-907.04	-58.35	0.23	0.01
157	$\delta^{18}\text{O}$	22	67.22	-18.39	0.07	0.23
	$\delta^2\text{H}$	22	396.78	-125.99	0.03	0.47
158	$\delta^{18}\text{O}$	25	-336.03	-2.38	0.20	0.03
	$\delta^2\text{H}$	25	-2255.50	-25.01	0.25	0.01
159	$\delta^{18}\text{O}$	25	550.91	-36.69	0.62	<0.001
	$\delta^2\text{H}$	25	2917.59	-222.64	0.54	<0.001
160	$\delta^{18}\text{O}$	21	367.71	-29.36	0.68	<0.001
	$\delta^2\text{H}$	21	1396.28	-167.08	0.50	<0.001
161	$\delta^{18}\text{O}$	25	-117.65	-9.13	0.38	0.001
	$\delta^2\text{H}$	25	-927.70	-57.32	0.40	<0.001
162	$\delta^{18}\text{O}$	17	-122.39	-5.69	0.45	0.003
	$\delta^2\text{H}$	17	-876.52	-43.51	0.80	<0.001
163	$\delta^{18}\text{O}$	9	-403.20	9.02	0.60	0.01
	$\delta^2\text{H}$	9	-3645.57	98.49	0.60	0.01
164	$\delta^{18}\text{O}$	8	-30.42	-9.91	0.05	0.59
	$\delta^2\text{H}$	8	-305.24	-79.77	0.36	0.12
165	$\delta^{18}\text{O}$	21	-105.09	-5.85	0.17	0.06
	$\delta^2\text{H}$	21	-1077.59	-33.80	0.73	<0.001
166	$\delta^{18}\text{O}$	29	-68.88	-9.81	0.18	0.02
	$\delta^2\text{H}$	29	353.19	-98.74	0.13	0.05
167	$\delta^{18}\text{O}$	26	-9.95	-11.60	0.02	0.54
	$\delta^2\text{H}$	26	-494.01	-65.91	0.72	<0.001
168	$\delta^{18}\text{O}$	29	-134.38	-7.20	0.76	<0.001
	$\delta^2\text{H}$	29	-1052.28	-47.77	0.86	<0.001
169	$\delta^{18}\text{O}$	26	9.30	-12.29	0.01	0.68
	$\delta^2\text{H}$	26	-1100.90	-43.47	0.79	<0.001
170	$\delta^{18}\text{O}$	29	-97.11	-7.86	0.61	<0.001
	$\delta^2\text{H}$	29	-864.74	-47.32	0.86	<0.001
171	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
172	$\delta^{18}\text{O}$	14	-260.39	-1.77	0.49	0.005
	$\delta^2\text{H}$	14	-1726.72	-18.29	0.42	0.01
173	$\delta^{18}\text{O}$	28	83.43	-12.94	0.03	0.39
	$\delta^2\text{H}$	28	132.21	-79.87	0.00	0.86
174	$\delta^{18}\text{O}$	25	-156.48	-6.49	0.57	<0.001
	$\delta^2\text{H}$	25	-1261.48	-43.43	0.67	<0.001
175	$\delta^{18}\text{O}$	29	-12.93	-9.84	0.05	0.25
	$\delta^2\text{H}$	29	-287.15	-61.54	0.56	<0.001
176	$\delta^{18}\text{O}$	28	-5.95	-9.87	0.00	0.95
	$\delta^2\text{H}$	28	-254.83	-62.02	0.00	0.75
177	$\delta^{18}\text{O}$	19	-138.36	-7.47	0.20	0.05
	$\delta^2\text{H}$	19	-1290.47	-43.08	0.40	0.003

178	$\delta^{18}\text{O}$	26	-123.40	-6.23	0.83	<0.001
	$\delta^2\text{H}$	26	-1238.07	-31.40	0.90	<0.001
179	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
180	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
181	$\delta^{18}\text{O}$	28	53.82	-12.60	0.09	0.12
	$\delta^2\text{H}$	28	-488.25	-53.63	0.44	<0.001
182	$\delta^{18}\text{O}$	29	5.11	-10.78	0.00	0.76
	$\delta^2\text{H}$	29	-952.03	-40.64	0.84	<0.001
183	$\delta^{18}\text{O}$	28	93.35	-13.59	0.03	0.36
	$\delta^2\text{H}$	28	697.32	-95.62	0.02	0.44
184	$\delta^{18}\text{O}$	28	448.51	-28.90	0.64	<0.001
	$\delta^2\text{H}$	28	1963.94	-161.84	0.54	<0.001
185	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
186	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
187	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
188	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
189	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
190	$\delta^{18}\text{O}$	25	-110.15	-7.98	0.73	<0.001
	$\delta^2\text{H}$	25	-1486.18	-32.69	0.91	<0.001
191	$\delta^{18}\text{O}$	20	180.80	-14.95	0.63	<0.001
	$\delta^2\text{H}$	20	188.99	-73.51	0.01	0.64
192	$\delta^{18}\text{O}$	26	170.06	-16.84	0.43	<0.001
	$\delta^2\text{H}$	26	45.86	-78.27	0.00	0.92
193	$\delta^{18}\text{O}$	25	120.23	-19.27	0.05	0.27
	$\delta^2\text{H}$	25	377.29	-118.81	0.03	0.44
194	$\delta^{18}\text{O}$	25	166.49	-20.58	0.26	0.009
	$\delta^2\text{H}$	25	-6.28	-102.01	0.00	0.96
195	$\delta^{18}\text{O}$	27	223.42	-22.75	0.02	0.54
	$\delta^2\text{H}$	27	1490.86	-161.88	0.02	0.44
196	$\delta^{18}\text{O}$	25	173.20	-20.90	0.56	<0.001
	$\delta^2\text{H}$	25	129.14	-112.49	0.03	0.39
197	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
198	$\delta^{18}\text{O}$	29	392.56	-23.19	0.31	0.002
	$\delta^2\text{H}$	29	1649.41	-126.19	0.15	0.04
199	$\delta^{18}\text{O}$	28	-348.93	2.22	0.74	<0.001
	$\delta^2\text{H}$	28	-2164.17	3.31	0.77	<0.001
200	$\delta^{18}\text{O}$	28	-142.30	-5.27	0.29	0.003
	$\delta^2\text{H}$	28	-313.93	-64.31	0.05	0.27
201	$\delta^{18}\text{O}$	29	-33.64	-8.64	0.02	0.47
	$\delta^2\text{H}$	29	213.92	-77.79	0.05	0.24
202	$\delta^{18}\text{O}$	28	-118.81	-4.32	0.09	0.11
	$\delta^2\text{H}$	28	-310.36	-53.00	0.11	0.09
203	$\delta^{18}\text{O}$	27	167.67	-15.14	0.16	0.04
	$\delta^2\text{H}$	27	66.77	-69.03	0.00	0.91
204	$\delta^{18}\text{O}$	29	137.95	-20.98	0.13	0.05
	$\delta^2\text{H}$	29	449.88	-125.84	0.09	0.1
205	$\delta^{18}\text{O}$	29	-58.30	-10.41	0.04	0.3
	$\delta^2\text{H}$	29	-756.30	-63.23	0.51	<0.001
206	$\delta^{18}\text{O}$	26	76.09	-15.86	0.24	0.01

	$\delta^2\text{H}$	26	-371.49	-71.02	0.51	<0.001
207	$\delta^{18}\text{O}$	29	16.69	-12.80	0.01	0.57
	$\delta^2\text{H}$	29	-638.76	-61.87	0.72	<0.001
208	$\delta^{18}\text{O}$	29	17.79	-11.50	0.02	0.47
	$\delta^2\text{H}$	29	-527.42	-55.45	0.77	<0.001
209	$\delta^{18}\text{O}$	28	67.69	-12.84	0.20	0.02
	$\delta^2\text{H}$	28	-330.78	-64.86	0.39	<0.001
210	$\delta^{18}\text{O}$	26	-335.59	2.62	0.84	<0.001
	$\delta^2\text{H}$	26	-1179.73	-26.63	0.58	<0.001
211	$\delta^{18}\text{O}$	22	-25.78	-8.35	0.03	0.47
	$\delta^2\text{H}$	22	-793.47	-44.51	0.27	0.01
212	$\delta^{18}\text{O}$	9	180.33	-16.00	0.07	0.5
	$\delta^2\text{H}$	9	-586.41	-50.15	0.03	0.65
213	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
214	$\delta^{18}\text{O}$	19	21.94	-10.13	0.01	0.73
	$\delta^2\text{H}$	19	-946.20	-36.42	0.59	<0.001
215	$\delta^{18}\text{O}$	24	-932.58	20.06	0.58	<0.001
	$\delta^2\text{H}$	24	-3407.79	39.82	0.52	<0.001
216	$\delta^{18}\text{O}$	27	-123.32	-6.38	0.16	0.04
	$\delta^2\text{H}$	27	-1085.13	-38.14	0.30	0.003
217	$\delta^{18}\text{O}$	25	65.14	-12.12	0.05	0.26
	$\delta^2\text{H}$	25	-721.36	-48.46	0.42	<0.001
218	$\delta^{18}\text{O}$	24	83.10	-11.95	0.11	0.11
	$\delta^2\text{H}$	24	-1066.55	-35.26	0.68	<0.001
219	$\delta^{18}\text{O}$	27	147.41	-14.41	0.16	0.04
	$\delta^2\text{H}$	27	-233.93	-62.42	0.11	0.1
220	$\delta^{18}\text{O}$	28	-21.24	-8.64	0.02	0.51
	$\delta^2\text{H}$	28	-472.27	-54.14	0.61	<0.001
221	$\delta^{18}\text{O}$	25	96.01	-12.43	0.09	0.14
	$\delta^2\text{H}$	25	-754.63	-44.07	0.69	<0.001
222	$\delta^{18}\text{O}$	26	290.66	-20.15	0.32	0.003
	$\delta^2\text{H}$	26	352.81	-85.08	0.15	0.05
223	$\delta^{18}\text{O}$	26	149.94	-15.09	0.13	0.08
	$\delta^2\text{H}$	26	-545.97	-53.52	0.41	<0.001
224	$\delta^{18}\text{O}$	26	339.63	-22.65	0.78	<0.001
	$\delta^2\text{H}$	26	399.02	-93.38	0.47	<0.001
225	$\delta^{18}\text{O}$	28	160.30	-16.69	0.29	0.003
	$\delta^2\text{H}$	28	-428.07	-68.02	0.29	0.003
226	$\delta^{18}\text{O}$	22	-92.66	-9.17	0.05	0.3
	$\delta^2\text{H}$	22	-1130.41	-49.04	0.27	0.01
227	$\delta^{18}\text{O}$	18	61.00	-12.51	0.09	0.23
	$\delta^2\text{H}$	18	-546.36	-59.30	0.43	0.003
228	$\delta^{18}\text{O}$	28	104.87	-14.04	0.33	0.001
	$\delta^2\text{H}$	28	-644.52	-52.87	0.71	<0.001
229	$\delta^{18}\text{O}$	19	-112.47	-6.87	0.63	<0.001
	$\delta^2\text{H}$	19	-622.51	-53.78	0.77	<0.001
230	$\delta^{18}\text{O}$	21	-447.90	5.51	0.31	0.001
	$\delta^2\text{H}$	21	-3206.88	39.41	0.40	<0.001
231	$\delta^{18}\text{O}$	13	-274.97	-0.84	0.14	0.2
	$\delta^2\text{H}$	13	-1837.26	-10.95	0.16	0.18
232	$\delta^{18}\text{O}$	11	136.24	-16.37	0.20	0.17
	$\delta^2\text{H}$	11	134.67	-84.84	0.01	0.72
233	$\delta^{18}\text{O}$	16	76.63	-12.09	0.03	0.52
	$\delta^2\text{H}$	16	64.43	-74.23	0.00	0.88
234	$\delta^{18}\text{O}$	28	100.52	-13.82	0.15	0.04
	$\delta^2\text{H}$	28	-675.86	-45.09	0.66	<0.001

235	$\delta^{18}\text{O}$	27	72.44	-12.77	0.24	0.001
	$\delta^2\text{H}$	27	334.28	-83.55	0.22	0.01
236	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
237	$\delta^{18}\text{O}$	27	82.86	-16.82	0.23	0.01
	$\delta^2\text{H}$	27	29.96	-102.96	0.00	0.88
238	$\delta^{18}\text{O}$	28	-316.02	-1.46	0.40	<0.001
	$\delta^2\text{H}$	28	-2293.86	-10.92	0.44	<0.001
239	$\delta^{18}\text{O}$	28	146.58	-18.62	0.06	0.22
	$\delta^2\text{H}$	28	730.79	-123.11	0.04	0.29
240	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
241	$\delta^{18}\text{O}$	31	-72.80	-8.27	0.51	<0.001
	$\delta^2\text{H}$	31	-1320.62	-36.73	0.70	<0.001
242	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
243	$\delta^{18}\text{O}$	29	-118.52	-8.16	0.71	<0.001
	$\delta^2\text{H}$	29	-925.22	-56.16	0.27	0.004
244	$\delta^{18}\text{O}$	29	27.06	-14.16	0.01	0.59
	$\delta^2\text{H}$	29	-232.15	-87.63	0.04	0.29
245	$\delta^{18}\text{O}$	27	-43.47	-8.73	0.10	0.11
	$\delta^2\text{H}$	27	-1099.92	-40.36	0.71	<0.001
246	$\delta^{18}\text{O}$	28	14.42	-9.79	0.03	0.37
	$\delta^2\text{H}$	28	-989.84	-35.98	0.81	<0.001
247	$\delta^{18}\text{O}$	22	70.97	-12.70	0.09	0.17
	$\delta^2\text{H}$	22	-636.30	-52.50	0.61	<0.001
248	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
249	$\delta^{18}\text{O}$	28	36.16	-10.43	0.18	0.02
	$\delta^2\text{H}$	28	-692.49	-44.28	0.82	<0.001
250	$\delta^{18}\text{O}$	23	67.41	-11.73	0.33	0.004
	$\delta^2\text{H}$	23	-378.59	-57.25	0.20	0.03
251	$\delta^{18}\text{O}$	29	19.90	-11.03	0.01	0.53
	$\delta^2\text{H}$	29	-467.24	-55.62	0.46	<0.001
252	$\delta^{18}\text{O}$	27	58.38	-12.89	0.21	0.02
	$\delta^2\text{H}$	27	-414.68	-61.28	0.66	<0.001
253	$\delta^{18}\text{O}$	26	30.99	-11.82	0.04	0.35
	$\delta^2\text{H}$	26	-801.58	-47.67	0.55	<0.001
254	$\delta^{18}\text{O}$	16	14.35	-11.76	0.00	0.82
	$\delta^2\text{H}$	16	-800.81	-49.13	0.30	0.03
255	$\delta^{18}\text{O}$	9	7.84	-11.42	0.00	0.94
	$\delta^2\text{H}$	9	-874.09	-45.67	0.23	0.19
256	$\delta^{18}\text{O}$	6	-318.82	1.68	0.21	0.37
	$\delta^2\text{H}$	6	-731.75	-46.83	0.05	0.66
257	$\delta^{18}\text{O}$	24	24.43	-11.33	0.06	0.26
	$\delta^2\text{H}$	24	-959.28	-36.22	0.83	<0.001
258	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
259	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
260	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
261	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
262	$\delta^{18}\text{O}$	27	367.94	-29.64	0.80	<0.001
	$\delta^2\text{H}$	27	1713.00	-183.05	0.71	<0.001
263	$\delta^{18}\text{O}$	28	-648.44	9.15	0.84	<0.001

	$\delta^2\text{H}$	28	-5068.05	75.51	0.84	<0.001
264	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
265	$\delta^{18}\text{O}$					
	$\delta^2\text{H}$					
266	$\delta^{18}\text{O}$	17	-368.38	3.03	0.44	0.005
	$\delta^2\text{H}$	17	2256.54	-138.43	0.59	<0.001
267	$\delta^{18}\text{O}$	25	-70.53	-7.82	0.25	0.01
	$\delta^2\text{H}$	25	-693.16	-48.13	0.31	0.004
268	$\delta^{18}\text{O}$	29	-65.49	-8.03	0.40	<0.001
	$\delta^2\text{H}$	29	-598.62	-50.05	0.77	<0.001
269	$\delta^{18}\text{O}$	28	-53.79	-8.00	0.13	0.06
	$\delta^2\text{H}$	28	-711.34	-41.70	0.66	<0.001
270	$\delta^{18}\text{O}$	27	-9.84	-9.97	0.02	0.51
	$\delta^2\text{H}$	27	-56.08	-65.90	0.02	0.44
271	$\delta^{18}\text{O}$	29	-188.51	-3.74	0.37	<0.001
	$\delta^2\text{H}$	29	-854.94	-41.76	0.28	0.003
272	$\delta^{18}\text{O}$	28	-33.19	-8.92	0.14	0.05
	$\delta^2\text{H}$	28	-136.06	-65.48	0.12	0.08
273	$\delta^{18}\text{O}$	25	47.22	-11.75	0.08	0.16
	$\delta^2\text{H}$	25	441.76	-86.82	0.26	0.009
274	$\delta^{18}\text{O}$	22	187.55	-16.76	0.07	0.25
	$\delta^2\text{H}$	22	44.11	-74.40	0.00	0.97
275	$\delta^{18}\text{O}$	28	-175.58	-4.10	0.26	0.006
	$\delta^2\text{H}$	28	-938.74	-41.19	0.43	<0.001
276	$\delta^{18}\text{O}$	28	85.08	-14.03	0.14	0.05
	$\delta^2\text{H}$	28	-401.61	-59.48	0.23	0.01
277	$\delta^{18}\text{O}$	23	-129.06	-8.23	0.16	0.06
	$\delta^2\text{H}$	23	-1024.87	-52.79	0.21	0.03
278	$\delta^{18}\text{O}$	29	-87.82	-7.95	0.07	0.16
	$\delta^2\text{H}$	29	-867.54	-47.38	0.41	<0.001
279	$\delta^{18}\text{O}$	29	141.88	-16.15	0.05	0.26
	$\delta^2\text{H}$	29	888.00	-113.03	0.06	0.2
280	$\delta^{18}\text{O}$	22	31.20	-18.61	0.12	0.12
	$\delta^2\text{H}$	22	361.58	-140.60	0.39	0.002
281	$\delta^{18}\text{O}$	27	42.99	-16.74	0.39	<0.001
	$\delta^2\text{H}$	27	-172.68	-85.89	0.45	<0.001
282	$\delta^{18}\text{O}$	26	-13.44	-12.55	0.02	0.54
	$\delta^2\text{H}$	26	-424.84	-71.47	0.51	<0.001
283	$\delta^{18}\text{O}$	19	759.80	-37.76	0.06	0.33
	$\delta^2\text{H}$	19	5972.40	-287.30	0.06	0.3
284	$\delta^{18}\text{O}$	28	-87.38	-7.99	0.80	<0.001
	$\delta^2\text{H}$	28	-546.74	-65.51	0.73	<0.001
285	$\delta^{18}\text{O}$	18	-9.73	-13.81	0.11	0.18
	$\delta^2\text{H}$	18	-160.91	-96.03	0.33	0.01
286	$\delta^{18}\text{O}$	14	-49.90	-7.28	0.15	0.17
	$\delta^2\text{H}$	14	-231.48	-62.14	0.09	0.29
287	$\delta^{18}\text{O}$	12	85.17	-16.67	0.28	0.08
	$\delta^2\text{H}$	12	509.24	-113.94	0.32	0.05
288	$\delta^{18}\text{O}$	19	2532.48	-101.79	0.45	0.002
	$\delta^2\text{H}$	19	17017.94	-689.52	0.44	0.002
289	$\delta^{18}\text{O}$	28	-178.15	4.36	0.16	0.04
	$\delta^2\text{H}$	28	-602.80	-60.88	0.12	0.08
290	$\delta^{18}\text{O}$	29	39.82	-17.30	0.33	0.001
	$\delta^2\text{H}$	29	-114.91	-101.67	0.26	0.005
291	$\delta^{18}\text{O}$	28	38.02	-17.45	0.24	0.009
	$\delta^2\text{H}$	28	-209.97	-85.99	0.45	<0.001

292	$\delta^{18}\text{O}$	26	83.44	-18.54	0.23	0.01
	$\delta^2\text{H}$	26	409.49	-124.98	0.32	0.002
293	$\delta^{18}\text{O}$	28	9.79	-13.79	0.05	0.26
	$\delta^2\text{H}$	28	-286.65	-80.68	0.51	<0.001
294	$\delta^{18}\text{O}$	27	10.52	-13.87	0.06	0.23
	$\delta^2\text{H}$	27	-331.99	-76.86	0.72	<0.001

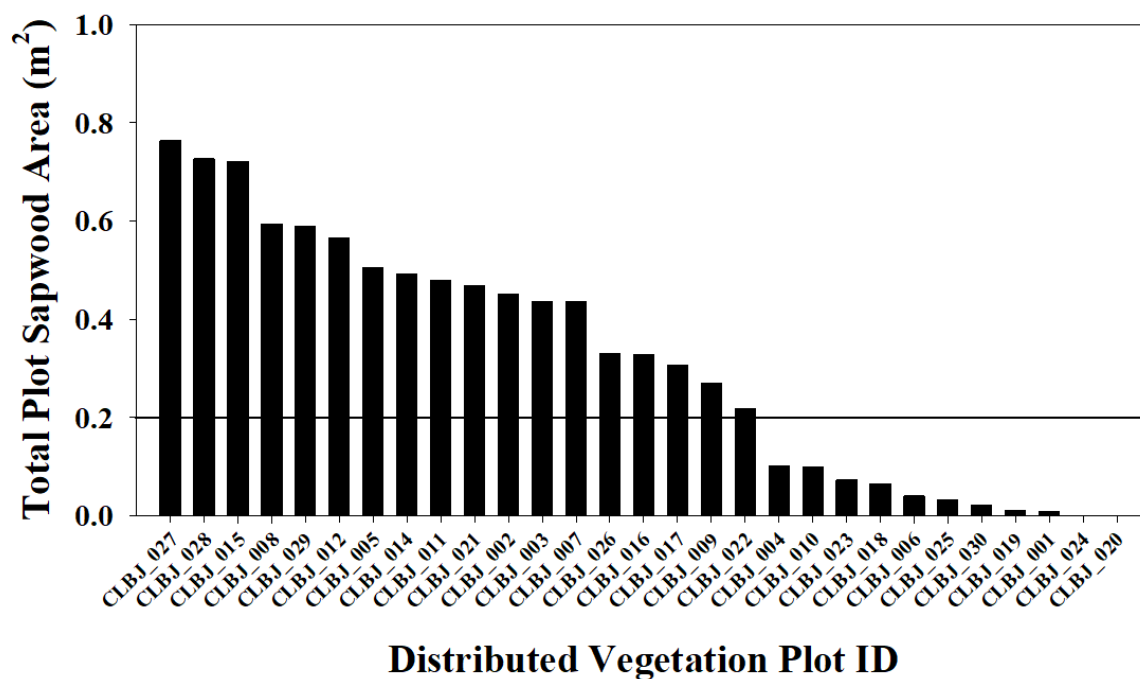


Figure S1. Distributed Plots Sapwood Area.