

Average elemental contents in tree rings of six Scots pines

Legend: ear = early-wood, lat = late-wood

Units: humidity (Hum) - %%, temperature (T) - grad C, precipitations (Prec) - mm, wind speed (Wind) - m/sec, other figures are dimensionless

North

Pine #1

Year	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	49.25	43.35	510.00	640.30	2.00	2.05	269.25	163.65	50.50	71.15	20.25	3.30	47058.25	46936.15	82.50	86.00	428.50	447.95	10.00	3.05	0.00	1.30	11.50	7.75	141.25	245.65	15.75	20.60	239.50	120.60	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	48.75	41.50	516.75	623.20	1.00	1.15	246.00	187.90	34.00	80.35	26.50	25.50	46874.50	47074.65	92.50	101.15	470.00	447.15	6.75	3.55	10.75	3.35	14.00	14.30	43.75	212.30	28.75	24.45	278.75	142.85	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	57.00	41.61	502.00	580.22	0.00	1.61	300.75	164.78	34.50	69.72	32.50	2.78	46755.75	46934.06	107.50	108.06	461.50	418.28	6.00	3.11	5.25	1.06	20.00	9.33	72.50	275.78	19.50	19.11	258.75	125.83	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	53.50	46.25	527.00	547.75	4.00	0.00	300.00	160.92	67.50	89.83	0.00	1.17	46981.00	46838.42	104.00	112.50	404.50	384.08	10.00	2.25	11.00	0.00	38.50	8.75	174.00	213.67	24.50	18.08	266.50	113.25	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	46.40	43.33	465.00	566.08	0.00	0.92	244.40	178.58	64.20	92.42	0.00	15.58	46826.20	46810.33	120.60	123.00	407.00	387.33	9.00	9.92	5.60	1.67	11.00	10.58	105.80	260.83	6.00	22.25	230.60	139.00	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	48.50	46.09	539.75	530.00	5.50	2.91	301.50	207.18	41.00	93.82	0.00	0.00	46876.50	46846.09	104.75	98.82	447.75	357.00	15.50	4.36	4.25	1.27	30.25	8.82	103.25	254.55	14.50	18.64	305.75	73.82	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	57.25	34.67	490.25	568.83	0.00	6.17	300.50	153.00	44.00	103.00	0.00	0.00	46857.50	46763.00	108.25	97.50	410.00	382.50	13.75	5.83	2.00	3.50	29.75	11.00	42.00	185.50	4.75	9.67	277.00	89.50	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	56.00	41.88	480.50	565.88	1.25	2.00	268.75	191.50	41.50	87.88	0.00	4.38	46729.75	46759.13	66.25	100.13	376.25	353.38	17.75	3.25	1.25	0.00	38.75	9.63	75.75	202.00	12.75	20.75	219.75	151.63	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	68.60	42.14	510.40	523.00	14.20	1.00	193.40	158.29	69.00	101.43	15.80	0.00	46633.20	46909.57	82.60	90.71	338.60	346.14	6.60	5.43	0.00	0.00	28.60	12.57	149.60	231.29	13.80	8.29	213.20	118.29	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	40.00	53.75	610.00	563.25	0.00	1.50	258.50	179.75	69.50	107.00	3.50	19.75	46738.50	46740.00	118.50	91.00	425.50	383.25	23.00	5.00	14.50	0.00	23.00	18.00	55.00	192.25	0.00	13.75	190.00	168.25	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	64.50	33.17	517.50	588.17	10.00	11.50	196.50	190.33	32.50	165.67	0.00	0.00	46784.50	46984.67	98.50	108.67	342.50	334.33	9.50	1.50	0.00	1.50	15.50	18.67	161.00	255.50	14.00	23.67	174.50	159.00	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #2

	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug	
1981	52.38	44.88	450.75	588.38	0.00	1.88	233.50	132.81	43.63	102.13	0.00	5.94	47353.75	47544.13	56.25	64.00	257.75	283.25	8.63	3.19	3.50	0.88	15.50	12.50	150.50	283.44	8.75	26.00	230.75	136.19	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1	
1982	54.73	46.42	416.82	500.83	1.36	0.00	197.27	142.33	36.64	72.50	2.91	2.00	47409.00	48025.83	60.91	50.33	250.36	271.58	7.82	2.75	0.36	0.00	20.18	11.67	138.55	231.33	9.45	10.67	242.18	128.08	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2	
1983	50.00	53.20	418.63	460.87	0.00	0.47	166.88	139.20	52.25	64.33	0.00	2.80	47512.25	47616.87	58.25	61.07	231.50	247.07	5.25	3.33	0.50	2.20	9.75	18.07	99.50	316.13	11.25	7.73	173.50	158.33	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5	
1984	55.33	46.93	426.00	459.93	0.00	0.64	172.33	157.86	92.33	65.43	2.67	0.64	47444.00	47341.43	75.00	62.36	246.67	230.71	3.00	4.07	0.00	1.86	20.67	13.86	221.67	283.00	30.67	15.93	204.33	185.43	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6	
1985	55.60	49.77	410.60	470.08	2.80	0.00	170.80	145.54	74.20	76.31	3.20	5.08	47681.40	47512.00	88.40	85.69	244.60	246.38	3.20	2.54	0.00	3.62	16.80	12.08	170.00	289.46	13.20	21.31	206.60	159.23	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7	
1986	34.40	46.73	399.40	454.73	0.00	0.00	194.60	196.36	50.60	66.45	0.00	0.00	47875.40	47865.55	101.60	105.36	238.00	240.64	11.60	7.09	0.00	1.09	13.00	18.00	242.00	231.18	16.00	27.36	177.60	127.09	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9	
1987	50.00	60.60	393.80	419.00	5.60	1.40	158.60	213.00	22.40	48.80	0.00	5.00	47631.80	47728.60	80.80	99.80	238.60	214.80	0.00	5.00	2.40	0.00	24.40	8.60	252.80	193.60	8.80	10.80	186.60	152.60	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7	
1988	39.25	52.33	400.50	407.67	0.00	0.00	193.00	191.33	71.75	91.17	0.00	0.00	47863.25	47874.50	101.25	96.67	232.00	200.50	1.75	1.50	0.00	0.00	10.50	19.50	161.00	228.00	22.25	21.50	160.50	151.33	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7	
1989	48.33	50.13	346.67	418.75	0.00	0.00	212.67	155.25	46.00	88.13	0.00	0.63	47805.67	47739.63	73.67	101.50	220.33	231.63	16.00	1.13	0.00	0.00	29.33	9.38	118.33	253.88	14.67	34.63	167.67	160.25	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2	
1990	53.00	52.67	439.33	412.00	0.00	3.00	214.67	216.67	43.33	37.33	0.00	0.00	47569.00	47675.67	93.00	87.33	214.33	250.67	3.00	8.67	0.00	0.00	10.67	15.00	171.33	179.33	20.33	15.67	156.00	230.67	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7	
1991	59.67	55.14	366.00	433.29	0.00	1.00	158.33	121.29	75.00	71.29	0.00	5.14	47673.00	48116.43	94.67	92.14	196.00	219.43	6.33	3.71	1.67	1.43	25.67	18.43	155.67	310.86	18.33	19.86	135.67	153.71	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9		77.2	2.7	2.1	1.7	1.8

1986	54.17	45.93	380.67	625.14	0.00	0.36	200.67	165.43	71.00	90.86	6.50	5.00	47361.00	46855.79	70.83	78.93	209.83	287.64	4.50	1.71	2.50	0.86	19.00	7.57	178.50	317.29	12.83	19.93	162.00	142.14	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	66.67	40.75	329.33	481.08	0.00	1.67	242.33	156.42	57.00	83.25	0.00	12.00	47206.00	47370.50	73.33	88.67	176.33	230.83	20.67	6.33	4.00	1.17	17.33	13.17	124.00	377.25	32.33	15.67	140.67	68.75	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	44.50	43.40	339.17	412.60	0.00	1.50	167.67	144.20	66.50	65.30	0.00	9.40	47877.00	47519.00	72.83	77.30	181.67	206.30	10.67	2.70	6.17	0.90	27.67	14.30	158.00	309.40	8.33	26.40	136.17	83.90	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	47.00	47.64	306.00	437.00	0.00	0.00	199.80	170.09	68.40	109.27	19.00	4.09	47668.60	47369.27	62.00	87.55	201.20	219.09	8.80	2.09	0.00	0.00	7.20	7.36	163.20	321.55	13.60	18.00	169.60	96.91	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	50.33	40.17	372.33	399.67	0.00	0.00	269.33	137.50	74.33	88.67	0.00	1.00	47800.67	47489.50	68.67	77.17	255.00	234.17	2.67	4.17	0.00	0.00	21.33	17.00	181.00	366.83	19.33	16.83	178.00	114.50	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	47.25	41.30	339.00	415.00	2.25	0.60	187.75	116.40	68.50	82.70	0.00	1.90	47783.25	47390.60	73.00	80.30	192.00	218.40	9.00	1.10	4.75	1.60	13.00	2.30	154.50	325.40	15.50	23.60	146.75	76.90	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #4

Year	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	48.33	41.90	383.33	610.24	9.17	2.05	294.17	162.05	29.50	44.00	4.00	1.10	47673.17	47577.52	62.67	71.71	181.50	248.67	17.00	7.90	0.00	0.95	19.17	14.00	3.50	146.86	11.17	15.57	311.17	153.57	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	53.50	45.83	423.25	557.28	2.13	2.22	241.63	182.56	31.00	38.89	2.75	3.22	47430.13	47645.94	66.75	74.06	193.63	226.33	13.25	4.56	4.25	3.28	24.63	15.78	18.00	160.00	21.00	11.11	295.25	166.89	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	58.00	48.74	382.25	543.81	7.00	0.48	225.00	162.85	67.25	53.33	0.00	3.22	47722.50	47580.04	77.75	96.70	187.25	211.07	13.25	8.33	10.00	1.96	22.75	13.74	0.00	171.59	30.25	19.63	246.75	147.48	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	69.50	45.94	331.50	505.47	0.00	2.35	199.50	164.65	16.00	60.24	0.00	2.76	47533.50	47531.00	68.00	96.82	170.50	206.35	14.00	5.35	13.00	2.29	20.00	11.59	0.00	148.35	0.00	16.35	307.00	153.65	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	45.60	49.53	414.00	517.93	13.80	0.73	249.40	150.40	30.60	50.47	10.40	0.40	47539.00	47161.13	111.80	112.87	191.80	213.00	7.20	6.60	0.80	3.27	22.00	13.40	68.80	167.40	3.20	16.53	276.80	175.20	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	60.00	47.00	336.00	475.77	9.00	4.62	233.25	146.92	35.50	62.77	0.00	0.00	47500.25	47363.15	68.25	92.62	171.75	190.77	16.75	11.46	6.00	3.23	29.00	16.69	32.25	175.92	9.50	15.15	248.75	156.54	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	73.20	46.11	394.80	464.78	3.40	1.67	188.40	158.22	25.40	36.33	0.00	0.00	47607.80	47439.56	83.40	94.44	189.00	206.67	22.80	5.67	12.80	2.89	32.60	6.11	47.00	127.89	10.60	8.00	243.60	161.56	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	57.60	58.50	360.20	439.13	1.80	5.38	237.60	160.13	24.00	35.38	2.00	21.13	47383.20	47751.63	77.60	73.75	179.20	206.75	7.40	6.75	2.00	5.50	20.80	18.50	36.60	139.25	3.60	9.88	276.60	143.13	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	54.60	52.00	309.60	438.43	8.80	2.00	186.80	203.29	18.40	58.71	0.00	7.43	47640.60	47724.43	75.60	84.71	147.20	205.57	11.60	8.86	2.00	3.57	16.40	11.86	36.60	101.86	11.40	21.71	205.20	126.86	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	61.00	49.20	413.67	423.80	2.33	5.80	174.67	216.60	37.00	41.60	0.00	0.00	47418.00	47324.20	88.00	97.20	204.33	204.40	8.67	15.00	0.00	3.20	18.00	25.40	31.33	173.80	15.00	2.80	247.67	212.20	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	57.50	49.44	325.83	456.67	6.33	1.33	246.17	130.56	42.00	114.22	3.50	0.00	47568.67	47718.33	87.83	74.11	223.33	224.11	9.50	7.22	6.33	7.11	17.00	14.11	44.50	124.89	9.33	18.67	237.67	151.67	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #5

	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	57.60	41.06	438.00	561.26	2.40	0.47	308.80	190.91	37.20	64.26	18.40	12.03	46794.20	46999.29	62.40	70.32	149.60	193.97	11.80	3.59	10.00	1.12	22.20	9.65	17.80	270.41	14.00	13.24	307.40	83.85	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	67.25	44.60	435.13	521.08	4.88	1.20	321.50	178.04	32.75	55.24	15.63	8.16	46795.50	47035.04	60.00	60.00	167.38	188.88	16.25	5.76	5.88	2.60	23.88	15.44	35.13	211.08	20.13	11.44	293.13	90.88	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	45.67	46.44	473.00	523.47	0.00	0.00	370.67	161.88	37.00	61.56	25.00	18.97	46791.67	46969.85	66.33	64.50	173.00	190.94	22.67	3.85	1.67	1.74	26.33	8.91	71.33	235.06	5.00	13.65	325.67	85.91	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	33.50	40.46	577.00	508.04	0.00	1.71	297.50	164.08	90.50	65.63	0.00	3.00	46449.00	46997.83	74.00	65.21	209.50	186.00	15.50	4.29	0.00	2.25	14.00	6.88	114.50	245.58	12.00	15.71	175.50	76.13	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	59.00	42.46	508.33	471.04	0.00	0.23	376.00	151.54	21.33	62.77	0.00	10.81	46528.33	46726.96	95.67	74.65	222.33	184.88	10.67	4.58	0.00	1.04	12.00	9.23	53.00	230.88	14.00	16.35	255.33	91.46	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	61.17	35.31	396.50	489.06	1.33	0.00	229.00	97.00	26.67	57.69	0.00	15.06	46898.33	46721.00	103.83	91.69	188.33	194.25	16.50	2.38	5.17	0.88	25.00	6.19	46.50	325.88	15.83	18.50	235.50	71.25	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	48.67	40.54	476.33	428.46	1.33	0.77	257.00	148.77	62.33	58.46	0.00	14.92	46433.33	46560.77	145.00	126.00	201.67	187.77	4.33	4.69	8.33	1.08	17.00	6.62	112.00	224.38	13.00	15.38	187.67	115.62	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	68.50	47.55	384.50	394.55	0.00	1.27	340.00	173.09	66.50	50.45	0.00	14.82	46758.00	46736.36	135.00	122.45	159.00	185.55	9.00	7.73	7.00	1.64	14.00	8.18	43.00	216.55	25.50	14.91	290.00	86.91	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	55.00	45.15	328.50	381.92	0.00	1.15	302.50	173.85	12.00	60.77	0.00	16.92	46725.00	46769.77	125.50	122.31	166.50	167.54	10.00	5.77	23.00	0.77	6.00	9.62	42.50	262.85	21.00	13.08	325.00	91.62	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	63.00	53.33	431.00	363.67	0.00	1.17	364.00	115.50	26.00	54.33	0.00	8.83	46638.50	47015.17	194.50	119.83	208.00	178.17	5.50	3.83	13.00	0.00	23.50	14.50	0.00	353.00	95.50	11.17	353.00	95.50	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	57	41.25	280.6	371.25	4.8	1.08	267.20	120.67	34.00	53.33	3.40	24.83	47248.60	46979.83	89.40	120.42	163.60	176.17	5.80	4.00	6.40	1.00	23.60	7.83	26.20	299.58	16.60	10.67	241.40	57.33	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

1985	50.40	43.14	419.60	575.90	3.60	0.48	191.80	139.24	108.40	104.52	8.80	15.93	47116.00	46569.41	91.00	97.03	205.00	246.28	10.40	4.10	2.20	3.03	22.60	12.17	114.20	289.90	12.00	16.69	198.00	123.59	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	41.67	44.58	372.33	528.75	8.50	0.46	220.83	156.46	66.00	92.54	0.00	24.46	47179.83	46503.71	80.17	86.63	221.00	240.42	6.17	3.46	4.33	0.88	25.83	8.21	106.67	291.92	7.50	17.50	250.33	120.17	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	38.33	37.00	403.33	551.41	0.00	0.68	170.33	136.41	37.67	97.91	0.00	6.77	47296.00	46637.82	72.00	89.32	235.67	234.73	3.33	5.86	7.67	1.18	22.33	13.32	171.67	272.95	14.33	14.82	187.00	106.50	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	52.17	42.09	348.50	500.27	2.67	0.68	181.50	147.45	65.33	102.27	2.17	15.95	47131.00	46718.59	77.83	89.73	201.50	232.23	8.50	5.91	1.67	3.14	21.50	12.27	183.50	230.95	9.17	28.77	190.00	152.23	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	58.17	42.60	347.50	495.40	1.67	0.55	248.83	133.20	54.33	103.20	11.17	8.95	46943.33	46702.45	61.67	71.50	188.33	225.20	9.50	4.70	7.50	3.10	15.83	13.00	122.00	282.45	16.00	13.75	205.50	124.10	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	56.33	45.85	360.67	501.85	4.67	0.00	200.00	166.31	78.00	78.92	26.67	18.69	46620.00	46749.38	46.33	78.31	240.67	220.38	17.00	6.31	0.00	2.31	27.67	12.00	140.33	214.00	20.67	19.54	261.67	136.46	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	58.29	49.05	314.00	476.89	3.57	1.21	223.57	150.84	72.14	76.53	26.86	14.21	46783.71	46533.11	58.57	57.89	185.14	222.84	11.57	6.05	7.29	1.89	19.71	12.47	78.14	226.32	19.00	24.11	266.14	147.79	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

South

Pine #1

Year	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	52.67	44.76	513.11	606.76	0.00	1.14	196.33	161.57	67.44	72.14	18.22	13.71	47089.22	46657.62	71.11	71.33	363.67	370.86	7.89	3.52	2.33	0.86	17.00	16.43	218.89	249.10	20.11	17.48	206.89	152.90	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	54.57	42.25	499.43	581.69	2.43	1.81	230.29	157.75	67.43	74.31	4.00	4.75	46831.43	46840.00	77.00	75.06	324.71	369.25	11.71	8.06	5.00	0.38	17.86	12.13	94.29	191.31	10.57	15.13	244.29	124.13	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	58.20	40.60	486.20	566.90	8.40	0.35	264.80	130.40	54.00	80.40	8.00	13.20	46644.40	46828.30	100.40	99.10	356.80	344.85	15.20	6.95	3.00	1.30	21.80	10.65	120.00	263.60	15.40	15.05	208.60	136.35	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	73.50	46.18	506.00	522.27	5.50	1.27	256.50	120.45	82.50	99.64	0.00	4.82	46383.00	46799.18	127.50	100.36	278.50	313.64	4.00	4.82	3.00	0.91	15.50	14.27	179.50	279.55	52.00	25.27	225.50	126.73	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	52.75	49.36	503.25	529.82	3.50	1.18	271.25	186.55	65.00	103.73	0.00	17.73	46670.25	46843.45	112.75	109.73	311.25	321.91	3.00	1.73	13.25	5.73	11.25	16.73	76.75	236.55	11.50	18.82	273.50	149.18	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	55.00	41.00	499.50	526.75	7.00	1.25	195.50	196.63	85.50	85.13	0.00	3.63	46651.00	46729.25	99.50	99.88	292.00	293.25	19.50	2.63	0.00	0.00	23.50	6.25	274.00	278.75	30.00	8.75	119.50	173.75	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	68.33	55.40	496.67	520.60	9.67	15.20	198.00	215.40	70.67	67.40	0.00	0.00	47026.67	46943.00	102.33	108.60	342.33	340.60	6.00	19.60	4.33	6.00	19.67	23.20	159.67	183.80	17.67	10.00	258.00	165.40	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	40.50	50.00	410.50	496.14	11.50	1.57	215.00	213.57	60.50	57.00	0.00	12.29	47580.50	47162.86	109.50	106.43	272.50	306.71	6.00	5.29	0.00	2.71	14.00	19.29	280.50	161.43	18.00	22.71	212.00	234.14	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	43.00	42.00	483.00	416.33	13.00	18.00	235.00	194.67	69.00	59.67	0.00	16.00	47131.00	46941.67	100.00	98.00	282.00	268.33	0.00	4.00	0.00	6.00	21.00	9.00	0.00	126.67	49.00	4.00	299.00	150.67	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	47.50	50.00	532.50	520.50	0.00	0.00	212.50	196.00	86.00	34.00	0.00	0.00	46277.50	46579.50	97.50	122.00	343.50	331.50	0.00	14.00	0.00	0.00	6.50	7.50	314.00	93.50	29.50	14.00	201.50	259.50	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	42.00	44.67	425.00	482.17	6.75	2.50	217.50	199.83	81.25	65.50	7.00	8.17	46849.25	46817.67	101.50	108.83	269.75	299.50	8.00	6.17	1.75	1.00	8.25	16.50	361.50	258.33	29.50	13.67	259.50	179.83	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #2

	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	lv_jn_ind	lv_jl_ind	lv_au_ind	lv-Vys_jn	lv-Vys_jl	lv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	58.71	55.33	428.29	484.53	1.57	0.00	208.00	136.80	42.14	59.47	4.14	15.67	47315.00	47544.87	48.14	53.67	223.00	248.67	16.00	4.60	2.00	0.67	13.86	5.67	155.71	298.73	15.43	17.87	310.43	195.33	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	51.89	44.91	395.00	451.18	0.00	2.00	241.33	178.55	53.44	50.73	4.67	8.09	46945.11	47832.09	39.89	46.09	222.67	239.18	13.67	2.73	3.22	0.91	20.89	10.27	68.78	186.64	6.89	15.45	312.22	237.36	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	47.00	50.00	405.25	436.40	0.00	0.00	267.50	144.90	50.25	49.95	13.25	10.55	47290.75	47398.70	51.50	55.65	224.75	225.80	0.00	7.85	0.00	1.70	20.00	12.00	89.25	223.40	13.00	16.60	351.75	199.35	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	59.00	55.77	408.00	419.31	0.00	0.00	196.00	142.62	27.50	56.62	0.00	8.08	46738.00	47377.08	65.50	48.23	223.50	207.54	9.00	9.23	3.50	1.00	24.00	12.77	47.00	260.08	10.50	11.15	273.00	209.08	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	47.00	54.21	378.67	408.00	0.00	0.36	228.33	172.64	48.00	67.00	0.00	0.71	47089.33	47394.43	53.67	51.07	214.67	206.07	5.67	3.50	13.33	3.43	24.33	17.86	141.67	244.21	13.33	18.79	326.00	209.57	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	48.33	52.67	385.67	388.50	0.00	0.58	215.33	139.42	49.33	45.17	0.00	5.58	46876.67	47532.75	46.00	56.83	174.00	205.25	6.67	3.08	4.33	2.17	25.67	6.83	24.00	260.75	0.00	17.00	375.33	200.83	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	58.00	46.60	328.00	374.40	8.00	0.00	268.00	140.30	31.67	61.70	0.00	4.40	46963.33	47441.70	72.33	52.60	207.67	198.40	12.33	2.70	13.33	0.60	28.67	11.00	31.00	293.10	17.00	18.50	391.33	277.30	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	67.40	55.50	383.40	373.50	0.00	0.00	290.40	151.40	44.40	52.40	3.00	1.70	47051.40	47440.50	63.40	65.70	200.60	200.80	13.20	7.50	1.00	0.00	12.00	12.40	106.00	246.60	21.60	14.30	343.20	230.00	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	58.00	52.00	377.50	353.33	0.00	0.00	236.50	193.00	31.00	49.67	16.00	14.22	46969.50	47372.44	78.75	78.56	195.75	182.00	4.50	7.89	0.00	3.89	28.00	15.89	20.00	155.78	13.75	10.89	343.25	280.44	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	58.67	53.60	472.67	443.60	6.33	0.00	180.67	161.80	65.67	50.40	5.67	44.60	47264.00	47266.80	113.33	102.20	253.67	212.00	11.67	8.40	8.00	6.80	23.00	18.60	183.33	161.80	9.33	10.80	303.00	262.40	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	57.00	55.09	418.00	362.18	0.00	0.00	202.67	168.82	62.00	68.73	0.00	6.18	47152.00	47299.09	109.00	77.73	189.67	193.18	11.00	9.45	2.67	2.64	29.00	17.45	98.67	196.64	17.00	29.18	260.33	221.00	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

1982	52.22	39.38	456.44	625.05	1.67	0.00	258.78	178.71	59.22	80.48	0.00	6.10	46895.11	46595.38	73.11	67.43	252.56	297.33	11.11	3.86	11.67	3.95	18.44	9.67	46.78	295.19	8.22	16.10	265.00	110.48	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	55.33	40.76	474.00	588.31	3.00	0.00	308.67	175.17	82.00	94.10	22.33	9.55	46838.33	46612.21	64.33	68.59	288.67	274.48	16.67	2.97	6.33	1.03	22.33	9.69	113.00	315.97	29.33	12.66	235.67	107.03	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	40.25	34.94	425.75	599.44	0.00	0.00	220.75	152.44	71.00	96.94	0.00	6.31	46566.50	46348.75	48.25	74.06	263.25	267.69	5.75	2.56	0.00	0.00	5.25	8.94	125.25	271.31	13.75	15.56	215.50	138.56	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	39.40	35.22	439.60	545.28	0.00	0.44	215.40	157.83	83.00	88.83	0.00	15.56	46800.00	46412.39	63.40	69.17	253.60	260.22	4.40	3.22	3.20	0.56	20.00	3.50	130.20	322.56	19.80	17.67	216.80	95.17	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	33.00	41.10	421.67	636.40	2.67	0.45	271.33	161.80	60.67	89.20	0.00	10.80	46848.67	46619.90	77.00	82.75	272.33	304.35	5.00	3.80	3.00	1.10	18.67	10.85	107.33	286.30	21.00	12.15	241.67	99.05	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	45.00	35.20	518.20	616.20	4.60	0.60	212.80	219.40	82.40	102.50	21.20	0.00	46809.40	46600.30	87.40	85.30	290.60	288.80	9.60	4.80	7.20	1.60	18.40	7.90	81.60	272.80	17.40	16.50	228.80	138.00	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	58.25	41.89	491.50	493.56	2.00	1.33	321.50	172.22	42.75	71.44	0.00	5.89	46788.75	46517.22	105.50	94.44	269.00	250.89	13.50	3.78	7.75	1.33	24.75	7.56	83.50	253.44	19.75	11.33	268.75	129.11	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	55.67	51.55	455.00	495.09	1.67	2.36	259.33	199.82	102.33	85.00	23.33	7.00	46677.67	46710.45	105.33	96.91	232.33	258.64	12.33	3.64	0.00	1.00	22.67	12.64	98.67	265.09	7.00	9.55	273.33	146.09	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	46.00	55.75	518.50	481.25	0.00	0.00	209.50	134.75	80.50	114.25	0.00	0.00	46983.50	46833.75	106.00	94.00	290.50	245.25	2.00	9.00	0.00	4.25	20.50	13.75	246.00	299.25	30.50	24.25	191.00	142.50	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	56.20	30.83	450.00	459.50	1.40	0.00	220.60	127.50	89.40	107.50	0.00	0.00	47122.60	46626.67	107.20	82.33	221.00	245.17	4.40	2.50	5.20	0.00	19.00	4.00	161.20	301.17	11.20	24.50	188.80	76.00	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #4

Year	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	Iv_jn_ind	Iv_jl_ind	Iv_au_ind	Iv-Vys_jn	Iv-Vys_jl	Iv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	65.33	53.12	404.33	614.62	14.33	3.27	293.33	236.62	18.33	46.96	1.19	8.67	47296.00	47622.96	75.67	81.38	217.33	251.96	23.33	7.38	11.67	3.42	22.67	15.85	0.00	192.54	20.33	14.85	336.00	225.77	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	62.89	52.13	434.33	573.38	3.33	2.31	262.78	215.75	17.00	42.81	0.00	1.63	47652.67	47519.44	79.44	91.06	221.78	257.06	20.22	8.06	6.44	3.00	23.44	15.25	41.22	166.94	13.78	11.31	309.67	215.81	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	57.80	45.29	376.80	543.67	12.40	4.19	210.60	208.29	50.00	71.29	0.00	1.38	48246.40	47640.86	99.40	116.90	209.60	244.86	19.40	12.05	16.60	7.05	38.20	15.38	21.40	200.62	11.40	20.81	268.60	202.24	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	48.50	49.00	394.50	502.75	1.75	1.19	286.00	229.38	55.00	58.38	2.75	1.13	47900.50	47669.13	114.00	127.81	179.00	230.13	21.75	5.13	1.50	1.44	22.00	13.06	80.00	197.69	3.25	17.00	306.75	244.50	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	40.00	43.43	396.75	515.50	0.00	3.00	245.50	193.64	67.25	49.29	0.00	1.50	47649.50	47844.29	114.75	144.21	203.75	227.86	5.25	4.43	6.00	2.86	17.75	15.93	27.75	149.14	15.50	20.86	383.50	209.14	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	64.00	44.92	360.50	480.69	1.75	2.08	284.75	217.69	50.25	38.69	0.00	0.00	47830.75	47615.08	115.50	121.77	206.75	223.38	17.25	10.46	6.25	1.62	14.50	12.46	77.00	174.62	15.00	11.62	267.50	216.69	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	48.50	50.70	345.50	455.50	0.00	2.30	310.50	226.40	26.00	44.60	0.00	0.70	47652.25	47691.70	113.00	120.10	229.25	216.70	15.50	9.80	3.00	4.80	21.50	18.90	6.75	141.00	18.50	21.90	311.50	226.80	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	66.50	50.11	338.50	438.89	0.00	1.67	207.50	200.89	11.00	38.67	0.00	0.00	47908.00	47721.67	97.00	104.00	166.50	232.11	5.50	11.56	0.00	5.89	20.50	15.78	0.00	140.33	20.00	12.44	324.50	242.67	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	57.00	43.25	325.50	434.92	0.00	2.83	325.50	259.17	14.50	42.75	0.00	5.75	48109.00	47685.83	116.00	116.17	220.00	227.50	0.00	7.25	3.00	4.25	16.50	17.83	37.00	103.50	11.50	13.33	396.00	263.83	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	72.00	51.00	434.00	411.43	2.50	3.14	284.50	231.71	36.00	36.86	0.00	0.00	48323.50	47919.71	118.00	124.00	190.00	205.43	9.00	6.86	0.00	0.86	21.50	23.43	54.50	133.29	54.50	12.29	317.00	258.14	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	54.25	46.90	352.00	409.00	1.75	4.00	277.75	181.10	27.75	44.10	0.00	4.90	47450.50	48186.70	80.50	99.80	214.25	200.90	19.75	10.70	8.25	3.20	23.75	13.40	0.00	149.40	18.75	11.40	273.25	212.30	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

Pine #5

	Al_lat	Al_ear	Ca_lat	Ca_ear	Cl_lat	Cl_ear	Cu_lat	Cu_ear	Fe_lat	Fe_ear	Hg_lat	Hg_ear	inc_lat	inc_ear	K_lat	K_ear	Mn_lat	Mn_ear	P_lat	P_ear	S_lat	S_ear	Si_lat	Si_ear	Sr_lat	Sr_ear	Ti_lat	Ti_ear	Zn_lat	Zn_ear	Iv_jn_ind	Iv_jl_ind	Iv_au_ind	Iv-Vys_jn	Iv-Vys_jl	Iv-Vys_aug	Hum_may	Hum_jn	Hum_jl	Hum_aug	T_may	T_jn	T_jl	T_aug	Prec_jn	Prec_jl	Prec_aug	Wind_my	Wind_jn	Wind_jl	Wind_aug
1981	62.11	51.24	433.89	553.59	2.33	0.76	267.33	181.55	49.11	64.03	3.00	5.66	47533.89	47361.59	54.67	58.17	135.00	182.97	11.44	3.59	10.78	3.59	26.11	15.31	9.56	148.93	8.67	13.97	338.89	237.03	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	58.69	47.03	523.77	484.77	6.38	2.35	244.54	184.61	62.62	59.71	2.85	7.00	47037.31	47526.87	61.23	57.68	168.23	163.42	13.62	9.06	7.92	4.84	24.15	17.84	90.77	122.74	10.38	18.45	268.08	242.29	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	54.00	47.95	526.00	450.27	8.67	1.55	321.00	158.50	31.67	73.36	6.00	2.41	46996.67	47667.05	42.67	55.68	123.33	166.27	24.00	7.59	18.33	1.27	39.67	17.73	0.00	126.73	0.00	18.14	373.67	190.82	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	81.00	45.36	358.00	531.52	3.50	1.12	293.00	154.12	34.50	62.00	0.00	2.44	46923.50	47225.44	62.00	70.92	137.50	180.68	14.00	7.44	7.50	2.72	27.00	17.56	0.00	178.56	3.00	14.56	378.00	200.96	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	52.67	42.65	381.00	531.26	1.33	0.78	236.33	141.39	43.67	68.00	3.33	5.48	47441.33	47184.39	87.67	91.65	179.33	178.91	11.67	5.00	6.67	2.78	21.00	20.13	86.00	176.35	10.67	17.43	312.00	196.83	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	53.20	43.69	329.20	515.94	1.40	0.94	187.40	161.69	27.00	67.19	36.60	6.44	47508.80	47173.38	85.80	128.06	147.60	190.44	0.00	3.88	8.20	3.75	28.00	12.63	41.60	201.50	8.40	18.06	268.00	173.94	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.83	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	54.80	43.73	391.20	541.09	4.60	0.45	211.60	132.82	54.60	67.82	0.00	12.18	47387.00	47210.45	103.40	133.00	170.80	169.91	13.20	12.00	5.20	2.73	30.60	14.18	45.40	212.64	6.60	18.00	221.40	173.00	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	60.67	42.67	380.00	420.67	0.00	0.58	270.33	116.58	15.33	61.42	0.00	3.25	47117.33	47416.75	116.00	98.33	158.67	158.33	24.33	5.83	6.67	0.67	15.33	12.83	70.00	186.42	10.00	16.33	338.00	154.33	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	49.00	47.33	372.00	419.33	16.67	1.08	231.67	122.00	35.00	71.33	0.00	0.00	46968.00	47101.83	125.33	120.17	157.00	171.25	15.33	7.92	4.33	1.00	13.67	19.58	35.33	166.17	18.33	22.92	318.00	181.25	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	58.00	41.00	458.00	453.20	8.00	4.40	224.50	149.20	61.00	86.40	0.00	8.60	47153.50	47198.60	160.50	117.60	173.50	157.20	3.00	6.80	6.00	3.40	23.50	10.40	54.50	184.40	23.50	21.60	319.00	223.20	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	45.40	46.86	315.60	463.86	2.60	1.14	185.60	146.57	60.60	69.14	0.00	0.00	47393.60	47063.43	89.80	122.43	150.40	179.71	9.80	4.29	3.00	1.29	27.80	14.29	38.60	130.29	3.80	24.00	299.80	156.43	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8

1981	55.00	45.11	583.38	703.55	3.13	2.53	315.25	257.05	104.75	88.63	11.63	1.13	46644.13	46784.21	56.63	71.05	230.38	278.39	8.75	7.58	3.00	4.79	25.25	16.68	116.13	208.26	26.50	18.53	225.00	161.74	0.267	1.200	1.422	0.011	0.102	0.130	47.7	56.4	68.8	76.4	12.15	17.13	16.67	14.94	15.3	99	88.2	3.2	1.7	2.1	1
1982	48.91	47.29	375.64	627.94	0.64	1.53	378.45	226.35	50.55	96.15	14.36	6.00	46654.09	46993.03	45.64	61.44	152.18	255.50	15.36	8.71	8.82	2.32	28.36	18.97	19.36	227.03	21.91	17.68	298.09	114.18	0.403	0.954	0.550	0.018	0.083	0.050	53.2	56.3	72.5	70.6	10.00	17.06	17.21	15.34	24.5	72.8	42.9	2.3	2.1	1.8	2
1983	57.00	45.09	529.88	595.98	0.75	1.37	307.38	230.07	84.50	91.17	9.63	5.83	46491.88	46801.09	60.38	58.98	236.13	234.52	13.50	4.72	5.25	2.24	26.75	13.11	87.50	226.30	8.88	16.28	243.00	119.74	0.947	1.212	0.681	0.044	0.107	0.061	50.7	54.3	68.8	75.7	7.59	16.11	16.45	15.26	61.2	102.8	43.5	2.4	1.9	1.7	1.5
1984	58.00	43.34	532.50	565.71	3.75	1.26	317.38	211.74	82.38	84.20	11.63	7.83	47016.25	46806.00	68.88	56.97	239.38	233.94	10.38	4.17	1.63	0.97	22.38	10.83	99.63	233.29	9.88	20.83	180.63	123.89	0.833	1.059	0.549	0.041	0.094	0.049	60.6	64	75.9	72.1	8.51	15.90	16.98	15.50	44.3	72	40.7	2.2	1.8	1.4	1.6
1985	47.75	41.78	513.38	587.44	0.00	0.59	286.00	212.69	85.38	87.56	13.25	4.50	47171.25	46638.00	49.00	66.03	207.38	248.25	3.88	3.81	5.88	3.66	20.75	16.66	151.88	277.59	23.25	17.03	193.88	122.38	1.778	1.286	0.865	0.091	0.115	0.078	53.9	66.7	75.2	76.6	8.28	14.28	18.04	15.25	84.5	95.1	53.2	2.9	1.7	1.2	1.7
1986	33.17	43.30	519.33	581.35	0.00	2.83	250.67	219.70	77.00	86.57	5.50	1.52	47194.50	46667.39	63.67	63.04	247.67	250.61	10.83	7.17	0.00	2.09	18.50	14.70	119.00	225.57	8.67	14.04	230.17	130.17	0.553	0.476	0.779	0.030	0.043	0.070	59.7	63	68.2	78.2	8.63	14.99	19.86	15.47	31.6	49.3	45.3	2.3	1.8	2	1.9
1987	52.89	43.44	581.89	598.20	2.78	0.40	366.78	249.48	74.44	88.20	0.00	0.24	47164.11	46776.20	114.78	83.56	273.67	268.04	14.89	6.80	6.67	3.20	27.11	14.44	85.67	214.36	26.00	15.48	261.56	154.92	1.477	0.862	0.784	0.082	0.078	0.071	51.7	58.8	69.8	77.6	9.86	12.32	17.98	16.69	84.8	77.9	50	2.2	2.9	2.1	1.7
1988	51.71	48.00	510.71	559.60	0.86	1.60	271.29	256.95	105.00	95.80	15.43	2.30	47427.14	46881.45	110.29	109.70	263.29	270.75	17.86	5.55	9.71	4.45	25.14	15.15	106.43	234.80	27.86	16.35	255.71	125.80	0.934	3.208	1.421	0.054	0.288	0.130	55.2	64.2	77.8	80.1	8.46	13.21	16.12	15.18	50.4	194.9	75.3	2.9	3.2	2.1	1.7
1989	48.00	47.61	475.91	601.39	2.18	0.83	254.45	211.50	108.55	107.06	4.82	2.17	47048.64	46784.61	114.91	123.94	255.91	305.06	1.91	7.61	1.91	3.11	19.82	22.06	218.64	228.61	20.36	18.33	176.45	130.78	0.695	0.516	0.432	0.041	0.046	0.040	48.8	64.3	64.8	69	11.59	13.41	18.43	15.04	38.8	55.4	35.7	2.9	2.1	1.9	2
1990	56.50	44.67	457.50	612.33	0.00	2.17	280.75	241.58	91.75	99.33	26.00	5.75	47249.50	46851.08	109.00	132.00	239.00	315.33	1.00	7.50	2.50	4.83	23.50	22.00	182.00	226.50	35.00	20.42	201.50	162.83	1.162	1.346	1.864	0.070	0.120	0.174	50.3	63.5	73.8	78.9	13.30	15.86	19.37	16.50	76.9	111.7	113.8	3.3	2	1.3	1.7
1991	48.78	49.55	418.56	545.90	2.89	0.60	308.11	230.15	80.11	86.55	0.00	0.00	47118.22	46903.95	126.44	124.80	239.00	282.95	10.22	3.40	4.22	2.85	26.56	14.60	105.33	170.45	15.33	18.75	262.78	192.30	0.712	1.589	1.252	0.044	0.141	0.118	54.4	59	79	77.7	8.87	16.46	19.51	15.36	55.6	105.9	77.2	2.7	2.1	1.7	1.8