

1 Supplement: Tables

Table S1: **Estimates from ring-porous total concentration (mg/g) model.** Using a model testing the effects of increment depth on total concentration (mg/g) for ring-porous species, results in slightly muted variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	48.34	5.65	44.86	52.00	34.28	61.04
$\mu_{increment1-2}$	-21.86	6.65	-25.79	-17.96	-38.61	-6.08
$\mu_{increment2-3}$	-32.11	7.04	-36.09	-27.92	-48.83	-15.10
$\mu_{increment3-4}$	-32.11	7.26	-36.25	-27.80	-50.45	-14.96
$\mu_{increment4-8}$	-34.52	6.89	-38.46	-30.71	-51.66	-18.13
$\mu_{increment8-pith}$	-35.81	10.80	-41.13	-30.24	-64.40	-10.48

Table S2: **Estimates from diffuse-porous total concentration (mg/g) model.** Using a model testing the effects of increment depth on total concentration (mg/g) for diffuse-porous species, results in slightly in greater variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	31.88	6.84	27.68	36.35	15.77	47.07
$\mu_{increment1-2}$	-10.86	7.39	-15.15	-6.56	-27.79	6.65
$\mu_{increment2-3}$	-18.31	8.70	-23.44	-13.05	-40.65	2.40
$\mu_{increment3-4}$	-18.84	8.77	-24.04	-13.47	-41.03	0.86
$\mu_{increment4-8}$	-20.52	8.99	-25.64	-15.18	-41.75	0.15
$\mu_{increment8-pith}$	-17.25	11.39	-22.17	-12.49	-48.34	12.08

Table S3: **Estimates from ring-porous sugar concentration (mg/g) model.** Using a model testing the effects of increment depth on sugar concentration (mg/g) for ring-porous species, results in slightly muted variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	31.30	5.12	28.20	34.53	18.72	42.90
$\mu_{increment1-2}$	-11.77	5.48	-14.79	-8.57	-26.03	1.52
$\mu_{increment2-3}$	-14.80	5.69	-18.17	-11.42	-28.44	-1.18
$\mu_{increment3-4}$	-15.71	5.42	-18.82	-12.69	-29.07	-2.17
$\mu_{increment4-8}$	-17.03	5.88	-20.46	-13.70	-31.48	-2.99
$\mu_{increment8-pith}$	-18.41	12.91	-24.64	-12.92	-48.19	18.02

Table S4: **Estimates from diffuse-porous sugar concentration (mg/g) model.** Using a model testing the effects of increment depth on sugar concentration (mg/g) for diffuse-porous species, results in slightly in greater variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	14.54	3.69	12.37	16.72	5.55	23.51
$\mu_{increment1-2}$	-1.42	1.39	-2.10	-0.69	-5.05	1.96
$\mu_{increment2-3}$	-1.93	1.25	-2.60	-1.26	-5.32	1.12
$\mu_{increment3-4}$	-2.61	1.76	-3.34	-1.89	-6.67	1.24
$\mu_{increment4-8}$	-3.20	2.91	-4.62	-1.73	-11.33	4.19
$\mu_{increment8-pith}$	-6.28	9.48	-10.65	-1.56	-33.37	16.38

Table S5: **Estimates from ring-porous starch concentration (mg/g) model.** Using a model testing the effects of increment depth on starch concentration (mg/g) for ring-porous species, results in slightly muted variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	16.90	5.21	13.71	20.13	3.83	29.63
$\mu_{increment1-2}$	-10.41	5.04	-13.12	-7.57	-23.05	1.71
$\mu_{increment2-3}$	-17.19	5.96	-20.74	-13.81	-31.31	-2.13
$\mu_{increment3-4}$	-16.57	6.49	-20.26	-12.98	-32.11	-1.83
$\mu_{increment4-8}$	-17.58	5.79	-20.83	-14.15	-31.72	-4.00
$\mu_{increment8-pith}$	-14.52	9.01	-18.02	-10.59	-38.85	7.01

Table S6: **Estimates from diffuse-porous starch concentration (mg/g) model.** Using a model testing the effects of increment depth on starch concentration (mg/g) for diffuse-porous species, results in slightly in greater variation in concentration across increments. We present posterior means, as well as 50 percent and 97.5 percent uncertainty intervals from the model.

	mean	sd	25%	75%	2.5%	97.5%
μ_{α}	16.99	6.41	12.95	21.12	1.78	31.54
$\mu_{increment1-2}$	-9.31	7.16	-13.41	-5.00	-28.33	6.51
$\mu_{increment2-3}$	-16.07	7.97	-21.07	-11.26	-34.47	3.39
$\mu_{increment3-4}$	-15.88	8.10	-20.69	-10.98	-36.16	2.40
$\mu_{increment4-8}$	-17.27	8.15	-22.05	-12.37	-36.82	2.49
$\mu_{increment8-pith}$	-10.11	9.12	-13.74	-6.15	-35.11	12.48