Supporting information for:

Stability in numbers: a positive link between honeybee colony size and thermoregulatory efficiency around the brood

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Table of contents

Appendix S1. Method for detection of multicollinearity

15   To reveal multicollinearity effects, one possible method is to compare regression models. Comparing several versions of the same model, with and without multicollinearity, would highlight its occurrence. Multicollinearity effects include: *(i)* high variance of coefficients, *(ii)* large changes in predictor coefficients and variance based on which other predictors are in the model, *(iii)* significant model with no significant predictor coefficients, *(iv)* implausible

20   coefficient or coefficient with wrong signs. Effects *(ii)* and *(iv)* of multicollinearity can lead to a change of sign of the coefficients based on which other predictors are included in the model (Mela & Kopalle, 2002). We focused on changes in the signs and magnitudes of the predictor coefficients because of their ease of identification, and their importance in the calculation of the average model (a variable with a coefficient changing in sign will have an average coefficient

25   biased towards zero). From the comparison of all the models produced to study MeanT (Appendix S3 Table S10), we were able to note that: *(i)* the sign of NBeeS coefficient was linked to the presence of NBroodS and random effects, *(ii)* the sign of RRS coefficient was linked to the presence of GRS, and *(iii)* the sign of TMS coefficient was linked to the presence of GRS only with a coefficient > 0.2. From the comparison of all the models produced to study CV (Appendix

30   S3 Table S11): *(i)* the sign of GDDcumS coefficient was linked to the presence of MeanTS, *(ii)* the sign of GRS coefficient was linked to the presence of TMS, and *(iii)* the sign of NBroodS coefficient seemed to be linked to the presence of NBeeS. In conclusion, the following pairs of variables seemed to be the cause of multicollinearity in the models: NBeeS and NBroodS, GRS and RRS, GRS and TMS, and GDDcumS and MeanTS. Therefore, models containing these pairs

35   of variables were not taken into account in the procedure to produce an average model. The

study of models excluding these pairs seemed to confirm that all multicollinearities had been detected and corrected given that sign fluctuations disappeared.

Appendix S2. Additional Figures
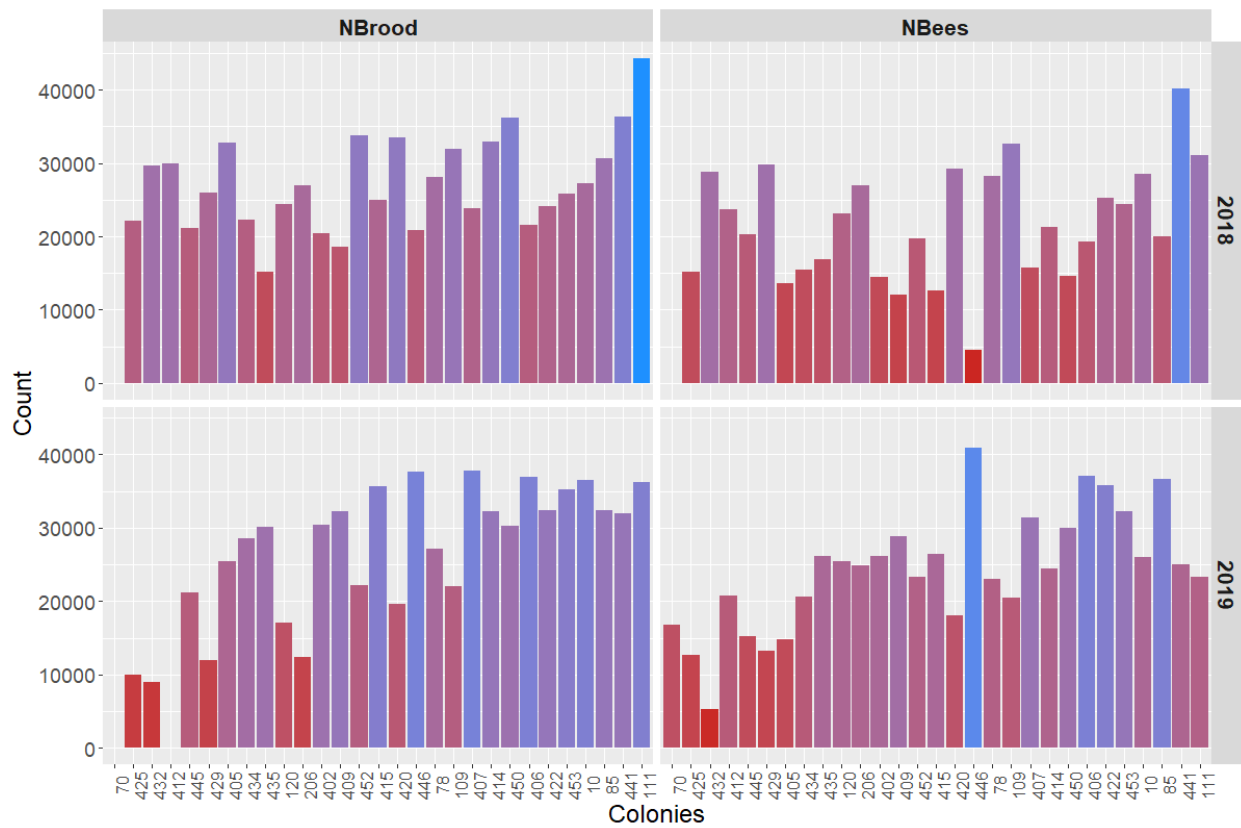
40

Figure S1: Size of colonies (number of adult bees Nbees and number of brood cells Nbrood) at the beginning of the experimental monitoring (n=28 colonies in July 2018, n=29 colonies in April 2019, the new colony is colony #70).
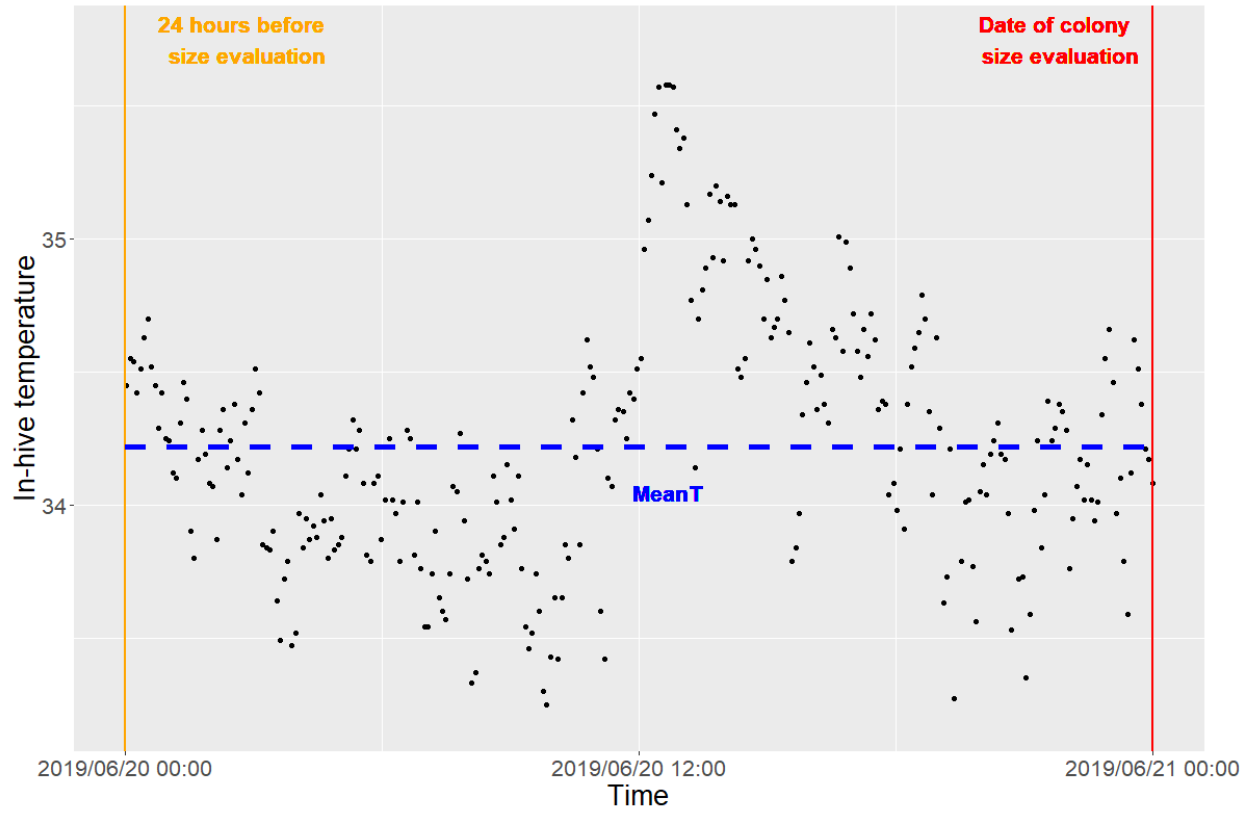
Figure S2: Example of in-hive temperature evolution between colony-size evaluation (red segment) and 24 hours before this colony inspection (orange segment) for one colony. The mean in-hive temperature MeanT (dashed blue line) and its coefficient of variation (CV) were calculated over the 24 hours preceding the day of colony size evaluation.
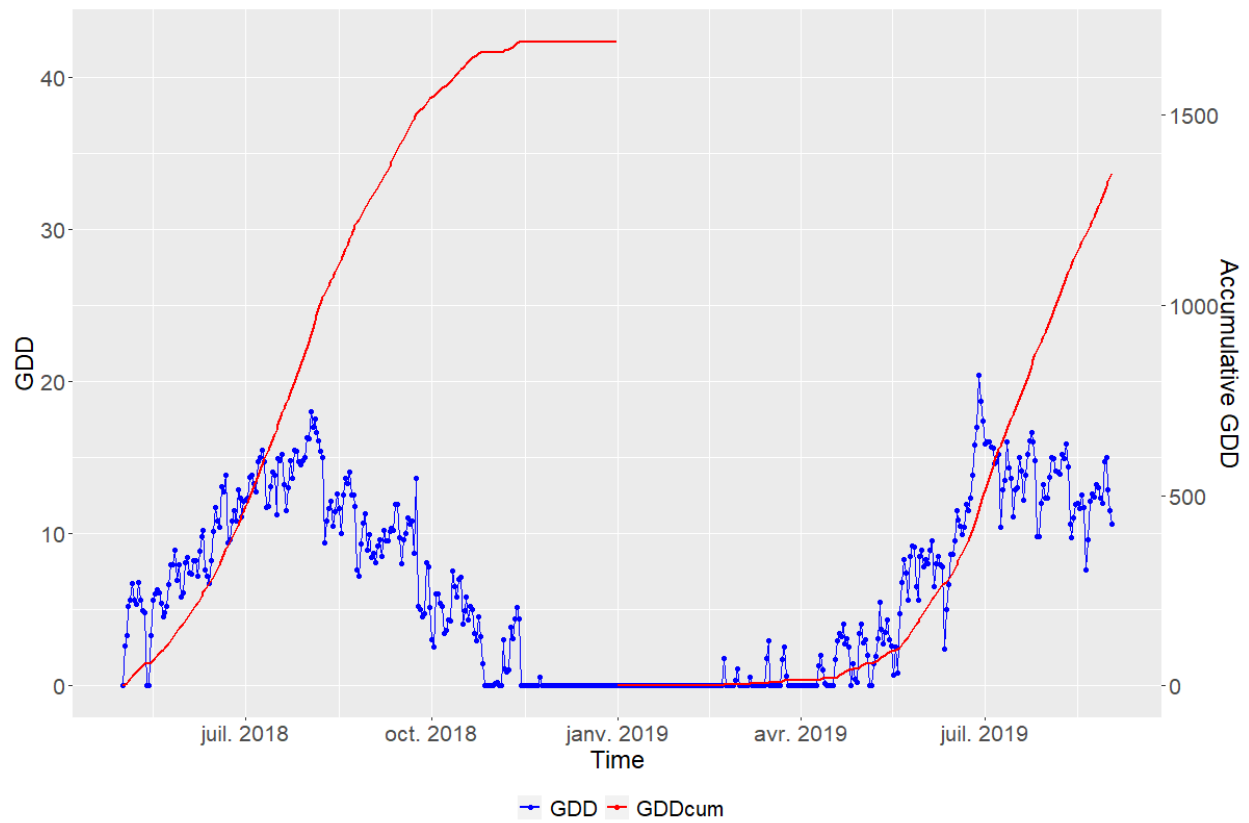
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Figure S3: Growing degree-day (GDD, blue line) and cumulative growing degree-day (GDDcum, red line) estimated for honeybee flight activity (with a threshold value of 12.5°C) in 2018 and 2019.
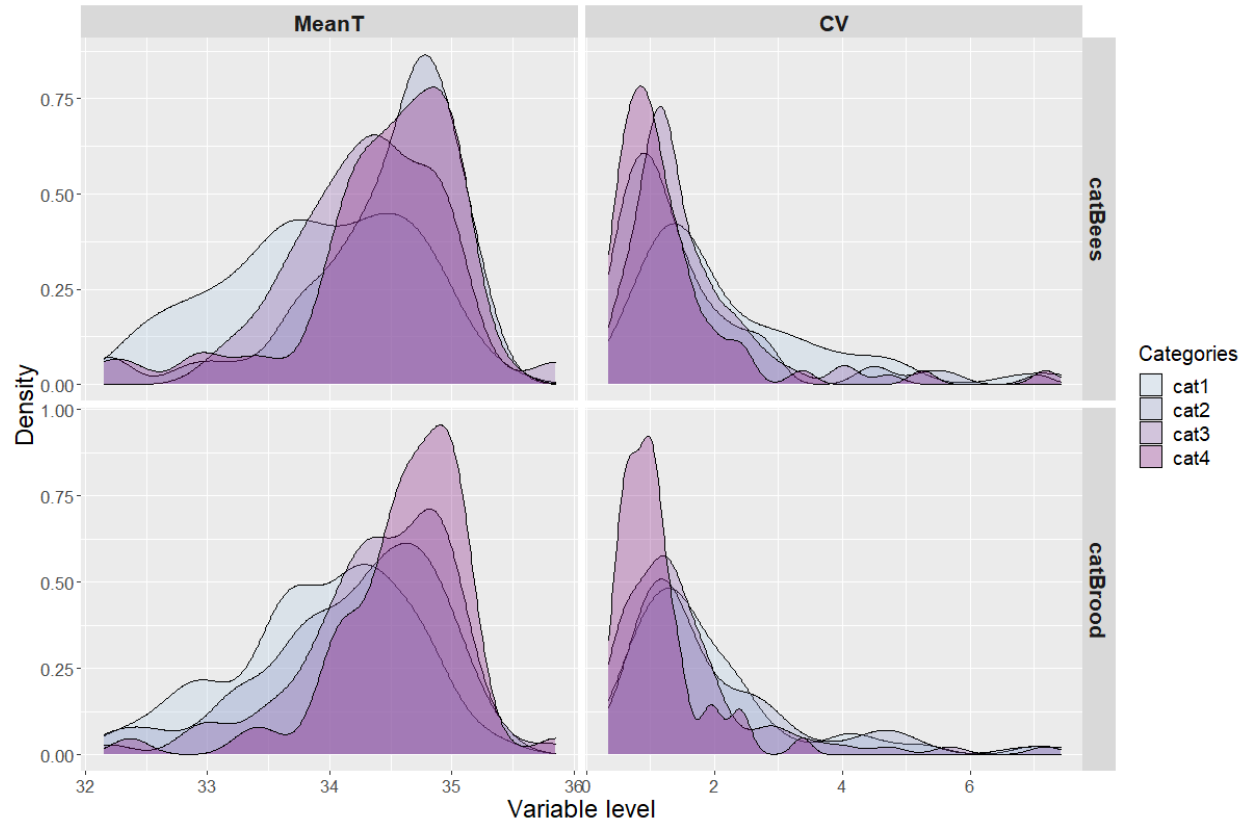
Figure S4: Density plots of the mean (MeanT) and coefficient of variation (CV) of the in-hive temperature for each category of number of adult bees (catBees) and brood cells (catBrood).

Appendix S3. Additional Tables

Table S1: Number of adult bees and brood cells grouped into four categories based on their quartiles (respectively, catBees and catBrood).

		Quartile range	Category range	Number of data
catBees	**cat1**	[Min ; Q1]	[1512 ; 13419]	86
	cat2	]Q1 ; Q2]	[13420 ; 19152]	85
	cat3	]Q2 ; Q3]	[19153 ; 25326]	85
	cat4	]Q3 ; Max]	[25327 ; 47880]	85
catBrood	**cat1**	[Min ; Q1]	[0 ; 13800]	88
	cat2	]Q1 ; Q2]	[13801 ; 20400]	84
	cat3	]Q2 ; Q3]	[20401 ; 25326]	84
	cat4	]Q3 ; Max]	[27226 ; 46250]	85

65 *Table S2: Models composing the average model explaining the mean in-hive temperature (MeanT, 16 models). Intercept of the model, estimates of the predictors included in the model, precision of integration of a colony random effect (+ if yes), number of degrees of freedom (df), log-likelihood (logLik), AICc score, the difference in AICc score between the best model and the model (ΔAICc) and weight of the model are shown.*

Intercept	GDDcumS	GRS	NBeeS	NBroodS	RRS	TMS	Colony random effect	df	logLik	AICc	ΔAICc	Weight
34.3033	-0.2035	0.1520		0.0950				5	-210.28	430.82	0.00	0.32
34.3033	-0.2975			0.1126		0.1325		5	-210.89	432.03	1.21	0.17
34.2962	-0.2576	0.1532					+	5	-211.36	432.98	2.15	0.11
34.3033	-0.2473	0.1558						4	-212.60	433.37	2.54	0.09
34.3033	-0.2900			0.1099	-0.0283	0.1238		6	-210.66	433.68	2.86	0.08
34.3033	-0.2312	0.1487	0.0515					5	-211.86	433.97	3.15	0.07
34.2959	-0.3606					0.1317	+	5	-212.28	434.83	4.01	0.04
34.3033	-0.3244		0.0653			0.1221		5	-212.90	436.06	5.24	0.02
34.2972	-0.2191	0.1497		0.0808			+	6	-211.94	436.24	5.42	0.02
34.2971	-0.3120			0.1016		0.1381	+	6	-211.94	436.26	5.43	0.02

34.3033	-0.3496			0.1246	4	-214.10	436.38	5.55	0.02
34.3033	-0.3158	0.0621	-0.0314	0.1128	6	-212.62	437.61	6.79	0.01
34.3033	-0.3379		-0.0377	0.1133	5	-213.70	437.66	6.84	0.01

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Table S3: Averaged coefficient estimates, standard errors (SE), adjusted standard errors (Adj. SE), z-values, and P-values (Pr(>|z|)) of each predictor variable of the average model explaining the mean in-hive temperature (MeanT). *** P-value < 0.005, ** P-value < 0.01, * P-value < 0.05.

	Estimate	SE	Adj. SE	z-value	Pr(>|z|)	
(Intercept)	34.3019	0.0437	0.0439	780.9399	0.0000	***
GDDcumS	-0.2567	0.0661	0.0663	3.8739	0.0001	***
GRS	0.1523	0.0432	0.0435	3.5039	0.0005	***
NBroodS	0.1016	0.0454	0.0456	2.2285	0.0258	*
TMS	0.1288	0.0408	0.0410	3.1421	0.0017	**
RRS	-0.0296	0.0424	0.0426	0.6952	0.4869	
NBeeS	0.0558	0.0430	0.0432	1.2922	0.1963	

75

Table S4: Models composing the average model that explains coefficient of variation of the in-hive temperature (CV, 3 models). Intercept of the model, estimates of the predictors included in the model, precision of integration of a colony random effect (+ if yes), number of degrees of freedom (df), log-likelihood (logLik), AICc score, the difference in AICc score between the best model and the model (ΔAICc) and weight of the model are shown.

Intercept	GDD cumS	GRS	meanS	NBeeS	NBroodS	RRS	TMS	Colony random effect	df	logLik	AICc	ΔAICc	Weight
0.3633			-0.3838	-0.0646		-0.1159	0.1040	+	7	-175.20	364.90	0.00	0.63
0.3661			-0.4007			-0.1139	0.1116	+	6	-177.22	366.82	1.92	0.24
0.3642			-0.3922		-0.0270	-0.1196	0.1044	+	7	-176.85	368.20	3.30	0.12

Table S5: Model-averaged coefficient estimates, standard errors (SE), adjusted standard errors (Adj. SE), z-values, and P-values (Pr(>|z|)) of each predictor variable of the average model explaining the coefficient of variation of the in-hive temperature (CV). *** P-value < 0.005, **

P-value < 0.01, * P-value < 0.05.

	Estimate	SE	Adj. SE	z-value	Pr(>|z|)	
(Intercept)	0.3641	0.0690	0.0694	5.2499	0.0000	***
meanS	-0.3889	0.0340	0.0342	11.3650	0.0000	***
NBeeS	-0.0646	0.0318	0.0319	2.0241	0.0430	*
RRS	-0.1158	0.0240	0.0242	4.7926	0.0000	***
TMS	0.1059	0.0236	0.0237	4.4656	0.0000	***
NBroodS	-0.0270	0.0314	0.0316	0.8555	0.3923	

Table S6: Summary statistics for the mean (MeanT) and coefficient of variation (CV) of the in-hive temperature, in relation to the category of number of adult bees (catBees). n: number of individuals, min: minimum, max: maximum, iqr: interquartile range, sd: standard deviation, se: standard error, 95%CI: 95 percent confidence interval. Highlighted values are values of particular interest.

Variable	catBees	n	min	max	median	iqr	mean	sd	se	95%CI
MeanT	cat1	47	32.334	35.326	33.840	1.110	33.896	0.763	0.111	0.224
	cat2	61	32.185	35.336	34.663	0.714	34.443	0.673	0.086	0.172
	cat3	73	33.005	35.851	34.360	0.787	34.354	0.576	0.067	0.134
	cat4	55	32.151	35.417	34.585	0.676	34.429	0.671	0.090	0.181
CV	cat1	47	0.423	7.415	1.666	1.624	2.241	1.540	0.225	0.452
	cat2	61	0.345	5.682	1.109	1.031	1.503	1.146	0.147	0.294
	cat3	73	0.422	7.061	1.262	0.886	1.591	1.064	0.125	0.248
	cat4	55	0.380	7.182	1.017	0.742	1.305	1.148	0.155	0.310

Table S7 Summary statistics for the mean (MeanT) and coefficient of variation (CV) of the in-hive temperature, in relation to the category of number of brood cells (catBrood). n: the number of individuals, min: minimum, max: maximum, iqr: interquartile range, sd: standard deviation, se: standard error, 95%CI: 95 percent confidence interval. Highlighted values are values of particular interest.

Variable	catBrood	n	min	max	median	iqr	mean	sd	se	95% CI
MeanT	cat1	45	32.207	35.326	34.079	0.848	33.939	0.712	0.106	0.214
	cat2	64	32.151	35.336	34.349	0.896	34.185	0.723	0.090	0.181

	cat3	72	32.185	35.844	34.472	0.773	34.403	0.631	0.074	0.148
	cat4	55	32.366	35.851	34.728	0.579	34.607	0.544	0.073	0.147
	cat1	45	0.417	7.061	1.539	1.282	1.882	1.331	0.198	0.400
CV	cat2	64	0.440	7.415	1.434	1.461	2.011	1.470	0.184	0.367
	cat3	72	0.345	7.182	1.255	1.004	1.560	1.204	0.142	0.283
	cat4	55	0.391	3.371	0.962	0.562	1.077	0.589	0.079	0.159

Table S8: Models generated with all combinations of predictors to explain the mean in-hive temperature (MeanT). Intercept of the model, estimates of the predictors included in the model, precision of integration of a colony random effect (+ if yes), number of degrees of freedom (df), log-likelihood (logLik), AICc score, the difference in AICc score between the best model and the model (ΔAICc) and weight of the model are shown. Green and orange highlights denote positive and negative coefficients, respectively.

(Intercept)	GDDcumS	GRS	NBeeS	NBroodS	RRS	TMS	Colony random effect	df	logLik	AICc	delta	weight
34.3033	-0.2035	0.1520		0.0950				5	-210.28	430.82	0.00	0.17
34.3033	-0.2391	0.1002		0.1025		0.0626		6	-209.76	431.88	1.06	0.10
34.3033	-0.2975			0.1126		0.1325		5	-210.89	432.03	1.21	0.09
34.3033	-0.2013	0.1691		0.0961	0.0263			6	-210.14	432.65	1.82	0.07
34.3033	-0.2035	0.1532	-0.0105	0.1020				6	-210.26	432.89	2.07	0.06
34.2962	-0.2576	0.1532					+	5	-211.36	432.98	2.15	0.06
34.3033	-0.2473	0.1558						4	-212.60	433.37	2.54	0.05
34.3033	-0.2900			0.1099	-0.0283	0.1238		6	-210.66	433.68	2.86	0.04
34.3033	-0.2354	0.1125		0.1025	0.0131	0.0580		7	-209.72	433.94	3.12	0.04
34.3033	-0.2393	0.1013	-0.0114	0.1101		0.0628		7	-209.73	433.96	3.14	0.03
34.3033	-0.2312	0.1487	0.0515					5	-211.86	433.97	3.15	0.03

34.3033	-0.2978		-0.0050	0.1160		0.1329		6	-210.88	434.13	3.31	0.03
34.3033	-0.2014	0.1702	-0.0103	0.1029	0.0262			7	-210.12	434.73	3.91	0.02
34.2959	-0.3606					0.1317	+	5	-212.28	434.83	4.01	0.02
34.3033	-0.2719	0.1235				0.0394		5	-212.39	435.04	4.21	0.02
34.3033	-0.2460	0.1696			0.0211			5	-212.51	435.28	4.45	0.02
34.3033	-0.2593	0.1099	0.0545			0.0466		6	-211.56	435.49	4.67	0.02
34.3033	-0.2904		-0.0071	0.1147	-0.0286	0.1243		7	-210.65	435.79	4.97	0.01
34.3033	-0.2294	0.1639	0.0522		0.0234			6	-211.75	435.86	5.03	0.01
34.3033	-0.2356	0.1135	-0.0113	0.1100	0.0130	0.0583		8	-209.70	436.04	5.22	0.01
34.3033	-0.3244		0.0653			0.1221		5	-212.90	436.06	5.24	0.01
34.2972	-0.2191	0.1497		0.0808			+	6	-211.94	436.24	5.42	0.01
34.2971	-0.3120			0.1016		0.1381	+	6	-211.94	436.26	5.43	0.01
34.3033	-0.3496					0.1246		4	-214.10	436.38	5.55	0.01
34.3033	-0.2683	0.1356			0.0129	0.0349		6	-212.36	437.08	6.26	0.01
34.3033	-0.2554	0.1228	0.0546		0.0137	0.0419		7	-211.53	437.55	6.72	0.01
34.3033	-0.3158		0.0621		-0.0314	0.1128		6	-212.62	437.61	6.79	0.01
34.3033	-0.3379				-0.0377	0.1133		5	-213.70	437.66	6.84	0.01
34.2959	-0.2955	0.1037				0.0600	+	6	-212.75	437.87	7.04	0.00

34.2964	-0.2413	0.1465	0.0504				+	6	-212.92	438.20	7.38	0.00
34.2964	-0.2559	0.1754			0.0342		+	6	-213.23	438.83	8.01	0.00
34.2961	-0.3344		0.0670			0.1290	+	6	-213.38	439.12	8.30	0.00
34.2970	-0.3256						+	4	-215.98	440.13	9.30	0.00
34.3033	-0.2569			0.0966	-0.0661			5	-214.95	440.15	9.33	0.00
34.2971	-0.2644	0.0833		0.0917		0.0799	+	7	-212.91	440.31	9.49	0.00
34.3033	-0.2703			0.1013				4	-216.27	440.71	9.89	0.00
34.2957	-0.3525				-0.0249	0.1241	+	6	-214.40	441.16	10.34	0.00
34.2975	-0.2166	0.1741		0.0823	0.0377		+	7	-213.76	442.00	11.18	0.00
34.3033	-0.2565		0.0078	0.0914	-0.0655			6	-214.94	442.24	11.42	0.00
34.2972	-0.2191	0.1495	0.0014	0.0799			+	7	-213.88	442.25	11.42	0.00
34.2971	-0.3112		0.0075	0.0971		0.1375	+	7	-213.88	442.25	11.43	0.00
34.3033	-0.2798		0.0630		-0.0650			5	-216.17	442.61	11.78	0.00
34.3033	-0.3020				-0.0716			4	-217.25	442.67	11.84	0.00
34.3033	-0.2694		0.0158	0.0907				5	-216.23	442.72	11.90	0.00
34.2981	-0.2815			0.0892			+	5	-216.28	442.82	11.99	0.00
34.2970	-0.3073			0.0999	-0.0171	0.1328	+	7	-214.16	442.82	12.00	0.00
34.2961	-0.2818	0.0909	0.0556			0.0666	+	7	-214.18	442.85	12.03	0.00

34.3033	-0.2923		0.0704					4	-217.43	443.04	12.22	0.00
34.3033	-0.3189							3	-218.78	443.66	12.83	0.00
34.2972	-0.2973		0.0744				+	5	-216.85	443.96	13.13	0.00
34.2961	-0.2897	0.1241			0.0219	0.0525	+	7	-214.75	443.98	13.16	0.00
34.2966	-0.2398	0.1686	0.0503		0.0340		+	7	-214.79	444.08	13.26	0.00
34.2965	-0.3103				-0.0635		+	5	-216.96	444.19	13.36	0.00
34.2959	-0.3284		0.0652		-0.0207	0.1228	+	7	-215.55	445.59	14.77	0.00
34.3033		0.2770		0.1458		-0.0829		5	-217.69	445.64	14.82	0.00
34.3033		0.2255		0.1741				4	-219.00	446.17	15.35	0.00
34.2970	-0.2644	0.0832	0.0006	0.0913		0.0799	+	8	-214.85	446.34	15.52	0.00
34.3033		0.3213		0.1428	0.0605	-0.0937		6	-217.00	446.37	15.54	0.00
34.2972	-0.2589	0.1031		0.0916	0.0212	0.0726	+	8	-214.92	446.47	15.65	0.00
34.2975	-0.2695			0.0847	-0.0591		+	6	-217.44	447.25	16.42	0.00
34.3033		0.2529		0.1746	0.0441			5	-218.63	447.52	16.69	0.00
34.3033		0.2779	-0.0081	0.1513		-0.0829		6	-217.68	447.72	16.90	0.00
34.2975	-0.2166	0.1741	-0.0003	0.0824	0.0377		+	8	-215.69	448.02	17.20	0.00
34.3033		0.2265	-0.0089	0.1801				5	-218.99	448.24	17.41	0.00
34.2966	-0.2855		0.0683		-0.0586		+	6	-218.03	448.44	17.61	0.00

34.3033		0.3221	-0.0075	0.1478	0.0605	-0.0936		7	-216.99	448.47	17.65	0.00
34.2979	-0.2789		0.0319	0.0699			+	6	-218.05	448.47	17.65	0.00
34.2970	-0.3067		0.0068	0.0957	-0.0170	0.1323	+	8	-216.10	448.83	18.01	0.00
34.2963	-0.2766	0.1097	0.0550		0.0200	0.0597	+	8	-216.20	449.02	18.20	0.00
34.3033		0.2538	-0.0085	0.1803	0.0441			6	-218.62	449.60	18.78	0.00
34.2988		0.2214		0.1790			+	5	-220.53	451.32	20.50	0.00
34.3033		0.3111	0.0858			-0.1231		5	-220.99	452.24	21.41	0.00
34.2972	-0.2589	0.1031	-0.0002	0.0917	0.0212	0.0726	+	9	-216.86	452.51	21.69	0.00
34.3033		0.3593	0.0841		0.0671	-0.1340		6	-220.16	452.69	21.87	0.00
34.2974	-0.2676		0.0265	0.0687	-0.0580		+	7	-219.26	453.02	22.19	0.00
34.3033		0.3488				-0.1482		4	-222.92	454.02	23.19	0.00
34.3033		0.3984			0.0701	-0.1591		5	-222.03	454.33	23.51	0.00
34.2987		0.2707		0.1493		-0.0763	+	6	-221.42	455.22	24.39	0.00
34.3033		0.2373	0.1137					4	-224.06	456.30	25.48	0.00
34.2991		0.2543		0.1796	0.0525		+	6	-222.06	456.48	25.65	0.00
34.2987		0.2199	0.0124	0.1715			+	6	-222.41	457.19	26.37	0.00
34.3033		0.2643	0.1142		0.0434			5	-223.72	457.70	26.87	0.00
34.2976		0.3450				-0.1434	+	5	-224.49	459.24	28.42	0.00

34.2991	0.3222		0.1451	0.0691	-0.0892	+	7	-222.54	459.58	28.76	0.00
34.2973	0.2296	0.1343				+	5	-225.10	460.47	29.64	0.00
34.2975	0.3011	0.1012			-0.1141	+	6	-224.34	461.05	30.23	0.00
34.2986	0.2692	0.0106	0.1429		-0.0761	+	7	-223.31	461.12	30.30	0.00
34.3033	0.2695						3	-227.58	461.27	30.45	0.00
34.2990	0.2528	0.0102	0.1733	0.0523		+	7	-223.94	462.37	31.55	0.00
34.2974	0.2666					+	4	-227.17	462.52	31.70	0.00
34.3033	0.2953			0.0413			4	-227.28	462.73	31.91	0.00
34.2980	0.4020			0.0798	-0.1561	+	6	-225.32	463.00	32.18	0.00
34.2980	0.3550	0.0963		0.0724	-0.1271	+	7	-225.38	465.25	34.43	0.00
34.2990	0.3210	0.0076	0.1404	0.0689	-0.0890	+	8	-224.44	465.52	34.69	0.00
34.2976	0.2595	0.1335		0.0472		+	6	-226.73	465.83	35.01	0.00
34.2976	0.2979			0.0498		+	5	-228.75	467.77	36.95	0.00
34.3033			0.2131	-0.1073			4	-229.90	467.97	37.15	0.00
34.3033			0.2267	-0.0917	0.0597		5	-228.98	468.22	37.39	0.00
34.3033		0.0235	0.1970	-0.1056			5	-229.82	469.90	39.07	0.00
34.3033		0.0174	0.2146	-0.0907	0.0587		6	-228.93	470.23	39.41	0.00
34.3033			0.2466		0.0839		4	-231.15	470.47	39.65	0.00

34.3033		0.2311				3	-233.06	472.22	41.39	0.00
34.3033	0.0267	0.2276		0.0819		5	-231.05	472.36	41.53	0.00
34.3033	0.0380	0.2046				4	-232.85	473.87	43.05	0.00
34.3006		0.2404			+	4	-232.93	474.04	43.22	0.00
34.2995		0.2218	-0.1006		+	5	-232.21	474.69	43.87	0.00
34.3002		0.2591		0.0881	+	5	-232.88	476.02	45.20	0.00
34.3002	0.0694	0.1957			+	5	-234.18	478.63	47.80	0.00
34.2994		0.2391	-0.0825	0.0661	+	6	-233.23	478.83	48.00	0.00
34.3033	0.1596		-0.1131			4	-235.37	478.91	48.09	0.00
34.2992	0.0573	0.1855	-0.0973		+	6	-233.66	479.69	48.87	0.00
34.3033	0.1620		-0.1073	0.0237		5	-235.22	480.71	49.88	0.00
34.3000	0.0577	0.2214		0.0846	+	6	-234.32	481.00	50.18	0.00
34.3033	0.1808					3	-238.69	483.49	52.66	0.00
34.2987	0.2128				+	4	-237.69	483.55	52.73	0.00
34.2976	0.1916		-0.1068		+	5	-236.68	483.62	52.80	0.00
34.2992	0.0505	0.2066	-0.0804	0.0636	+	7	-234.77	484.03	53.21	0.00
34.3033	0.1836			0.0490		4	-238.05	484.28	53.46	0.00
34.2984	0.2172			0.0532	+	5	-239.12	488.50	57.68	0.00

(Intercept)	GDDcumS	GRS	meanS	NBeeS	NBroodS	RRS	TMS	Colony random effect	df	logLik	AICc	delta	weight
34.2975			0.1954		-0.0994	0.0298		+	6	-238.68	489.74	58.91	0.00
34.3033					-0.1431				3	-241.89	489.89	59.06	0.00
34.3033					-0.1415	0.0068			4	-241.88	491.93	61.11	0.00
34.2980					-0.1379			+	4	-242.64	493.45	62.62	0.00
34.2992								+	3	-245.55	497.21	66.38	0.00
34.3033									2	-247.06	498.18	67.36	0.00
34.3033						0.0385			3	-246.70	499.50	68.68	0.00
34.2980					-0.1356	0.0101		+	5	-244.83	499.92	69.10	0.00
34.2990						0.0402		+	4	-247.34	502.86	72.04	0.00

105 *Table S9: Models generated with all combinations of predictors explaining coefficient of variation of the in-hive temperature (CV), with intercept of the model, estimates of the predictors included in the model, precision of integration of a colony random effect (+ if yes), number of degrees of freedom (df), log-likelihood (logLik), AICc score, the difference in AICc score between the best model and the model (ΔAICc) and weight of the model. Green and orange highlights denote positive and negative coefficients, respectively.*

0.3624	-0.1256	-0.1675	-0.3993	-0.0636		-0.1713	0.2218	+	9	-168.49	355.77	0.00	0.42
0.3668	-0.1117	-0.1897	-0.4042			-0.1836	0.2333	+	8	-170.20	357.03	1.26	0.23
0.3637	-0.1266	-0.1852	-0.4002		-0.0418	-0.1871	0.2256	+	9	-169.46	357.71	1.95	0.16
0.3624	-0.1264	-0.1671	-0.3992	-0.0596	-0.0067	-0.1723	0.2205	+	10	-168.47	357.92	2.16	0.14
0.3699		-0.1072	-0.3716			-0.1680	0.1573	+	7	-174.31	363.11	7.35	0.01
0.3601	-0.0651		-0.4110	-0.0880		-0.1032	0.1259	+	8	-173.43	363.49	7.72	0.01
0.3671		-0.0867	-0.3663	-0.0425		-0.1590	0.1435	+	8	-173.53	363.69	7.92	0.01
0.3633			-0.3838	-0.0646		-0.1159	0.1040	+	7	-175.20	364.90	9.13	0.00
0.3695		-0.1042	-0.3699		-0.0087	-0.1685	0.1537	+	8	-174.27	365.18	9.41	0.00
0.3685		-0.0872	-0.3692	-0.0578	0.0241	-0.1542	0.1487	+	9	-173.35	365.49	9.72	0.00
0.3605	-0.0643		-0.4112	-0.0901	0.0036	-0.1026	0.1264	+	9	-173.42	365.64	9.88	0.00
0.3646			-0.3868	-0.0788	0.0217	-0.1114	0.1084	+	8	-175.06	366.75	10.98	0.00
0.3661			-0.4007			-0.1139	0.1116	+	6	-177.22	366.82	11.05	0.00
0.3648	-0.0331		-0.4187			-0.1072	0.1242	+	7	-176.69	367.87	12.11	0.00
0.3607	-0.0540		-0.4137		-0.0493	-0.1132	0.1189	+	8	-175.69	368.01	12.24	0.00
0.3642			-0.3922		-0.0270	-0.1196	0.1044	+	7	-176.85	368.20	12.43	0.00
0.3682	-0.0802		-0.4042	-0.0889			0.1503	+	7	-179.46	373.41	17.64	0.00
0.3699	-0.0746		-0.4059	-0.1072	0.0299		0.1538	+	8	-179.22	375.08	19.32	0.00

0.3694	-0.0897	-0.0245	-0.4020	-0.0854			0.1662	+	8	-179.32	375.28	19.52	0.00
0.3740			-0.3694	-0.0573			0.1274	+	6	-182.24	376.84	21.07	0.00
0.3712	-0.0844	-0.0251	-0.4035	-0.1040	0.0306		0.1703	+	9	-179.08	376.96	21.19	0.00
0.3763			-0.3757	-0.0918	0.0506		0.1357	+	7	-181.51	377.51	21.74	0.00
0.3728	-0.0472		-0.4127				0.1487	+	6	-182.66	377.68	21.91	0.00
0.3761			-0.3858				0.1331	+	5	-183.78	377.82	22.05	0.00
0.3715		0.0274	-0.3762	-0.0653			0.1123	+	7	-182.02	378.53	22.76	0.00
0.3701	-0.0619		-0.4092		-0.0351		0.1457	+	7	-182.17	378.82	23.06	0.00
0.3750	-0.0675	-0.0466	-0.4083				0.1788	+	7	-182.18	378.84	23.07	0.00
0.3743		0.0218	-0.3811	-0.0965	0.0480		0.1233	+	8	-181.37	379.37	23.60	0.00
0.3756			-0.3832		-0.0082		0.1313	+	6	-183.75	379.86	24.09	0.00
0.3758		0.0000	-0.3858				0.1331	+	6	-183.78	379.93	24.16	0.00
0.3724	-0.0784	-0.0417	-0.4056		-0.0316		0.1728	+	8	-181.79	380.21	24.44	0.00
0.3651		0.0656	-0.4106	-0.0973		-0.1089		+	7	-183.02	380.53	24.77	0.00
0.3693			-0.4047	-0.0888		-0.1498		+	6	-184.46	381.28	25.51	0.00
0.3753		0.0035	-0.3841		-0.0091		0.1293	+	7	-183.74	381.98	26.21	0.00
0.3640		0.0608	-0.4058	-0.0805	-0.0235	-0.1153		+	8	-182.85	382.33	26.56	0.00
0.3678			-0.3984	-0.0648	-0.0356	-0.1554		+	7	-184.04	382.56	26.80	0.00

0.3653	0.0081	0.0651	-0.4070	-0.0939		-0.1101	+	8	-182.99	382.62	26.85	0.00
0.3671			-0.4024		-0.0718	-0.1603	+	6	-185.19	382.74	26.98	0.00
0.3697	0.0109		-0.4003	-0.0846		-0.1514	+	7	-184.41	383.31	27.54	0.00
0.3654		0.0452	-0.4077		-0.0695	-0.1313	+	7	-184.53	383.55	27.78	0.00
0.3642	0.0005	0.0609	-0.4056	-0.0805	-0.0232	-0.1153	+	9	-182.85	384.49	28.72	0.00
0.3676	-0.0017		-0.3990	-0.0649	-0.0364	-0.1553	+	8	-184.03	384.70	28.94	0.00
0.3673	0.0032		-0.4013		-0.0703	-0.1605	+	7	-185.18	384.86	29.09	0.00
0.3644	0.0055	0.0449	-0.4063		-0.0671	-0.1318	+	8	-184.52	385.67	29.90	0.00
0.3721			-0.4255			-0.1485	+	5	-187.80	385.87	30.10	0.00
0.3693		0.0487	-0.4328			-0.1187	+	6	-187.04	386.44	30.67	0.00
0.3739	0.0400		-0.4050			-0.1547	+	6	-187.07	386.52	30.75	0.00
0.3699	0.0401	0.0500	-0.4111			-0.1230	+	7	-186.25	386.99	31.22	0.00
0.3679		0.1324	-0.4080	-0.1050			+	6	-187.39	387.14	31.37	0.00
0.3681		0.1327	-0.4089	-0.1081	0.0043		+	7	-187.38	389.26	33.49	0.00
0.3679	0.0004	0.1324	-0.4079	-0.1048			+	7	-187.39	389.27	33.50	0.00
0.3684	0.0020	0.1328	-0.4081	-0.1079	0.0052		+	8	-187.38	391.39	35.63	0.00
0.3674		0.1202	-0.4128		-0.0591		+	6	-190.26	392.88	37.12	0.00
0.3721		0.1187	-0.4333				+	5	-191.97	394.21	38.44	0.00

25

0.3681	0.0093	0.1208	-0.4093		-0.0542			+	7	-190.23	394.94	39.17	0.00
0.3726	0.0360	0.1213	-0.4131					+	6	-191.32	395.02	39.25	0.00
0.3833			-0.3851	-0.0811				+	5	-195.64	401.54	45.77	0.00
0.3827			-0.3835	-0.0727	-0.0123			+	6	-195.60	403.56	47.79	0.00
0.3829	-0.0084		-0.3884	-0.0844				+	6	-195.62	403.60	47.83	0.00
0.3816			-0.3891		-0.0543			+	5	-196.87	404.00	48.23	0.00
0.3849			-0.4045					+	4	-198.20	404.58	48.81	0.00
0.3818	-0.0138		-0.3882	-0.0745	-0.0177			+	7	-195.54	405.57	49.80	0.00
0.3811	-0.0068		-0.3915		-0.0575			+	6	-196.86	406.08	50.31	0.00
0.3860	0.0220		-0.3936					+	5	-198.00	406.26	50.50	0.00
0.3556	-0.2147	-0.1762	-0.4138	-0.1510		-0.2063	0.2638		8	-197.33	411.30	55.53	0.00
0.3542	-0.2225	-0.1767	-0.4056	-0.1199	-0.0528	-0.2083	0.2537		9	-196.72	412.23	56.46	0.00
0.3531	-0.1437		-0.4211	-0.1613		-0.1396	0.1576		7	-200.56	415.61	59.84	0.00
0.3515	-0.1515		-0.4124	-0.1312	-0.0514	-0.1413	0.1476		8	-199.97	416.58	60.81	0.00
0.3558	-0.2273	-0.2028	-0.3956		-0.1447	-0.2127	0.2567		8	-200.80	418.24	62.47	0.00
0.3512	-0.1419		-0.4010		-0.1452	-0.1353	0.1355		7	-204.63	423.75	67.98	0.00
0.3595			-0.3772	-0.1344		-0.1759	0.0949		6	-206.60	425.57	69.80	0.00
0.3593	-0.1604		-0.4143	-0.1557			0.1893		6	-207.45	427.26	71.50	0.00

0.3590			-0.3725	-0.1210	-0.0215	-0.1770	0.0897	7	-206.49	427.48	71.71	0.00
0.3604		-0.0167	-0.3749	-0.1333		-0.1845	0.1022	7	-206.57	427.62	71.86	0.00
0.3577	-0.1662		-0.4057	-0.1270	-0.0471		0.1805	7	-206.98	428.46	72.69	0.00
0.3590	-0.1576	0.0067	-0.4147	-0.1561			0.1848	7	-207.44	429.38	73.61	0.00
0.3598		-0.0149	-0.3706	-0.1204	-0.0208	-0.1846	0.0964	8	-206.47	429.57	73.80	0.00
0.3575	-0.1631	0.0073	-0.4062	-0.1274	-0.0471		0.1757	8	-206.98	430.59	74.82	0.00
0.3590	-0.0740	0.0880	-0.4061	-0.1186	-0.0863	-0.1426		8	-207.42	431.48	75.72	0.00
0.3625	-0.1910	-0.2126	-0.4251			-0.2054	0.2955	7	-208.60	431.69	75.92	0.00
0.3620		0.0988	-0.4023	-0.1545		-0.1452		6	-209.73	431.83	76.06	0.00
0.3601		0.0856	-0.3865	-0.1182	-0.0545	-0.1522		7	-209.00	432.49	76.72	0.00
0.3617	-0.0468	0.1059	-0.4206	-0.1679		-0.1356		7	-209.00	432.49	76.73	0.00
0.3656	-0.0765		-0.3975	-0.1076	-0.1046	-0.1975		7	-209.08	432.65	76.89	0.00
0.3581			-0.3624		-0.1096	-0.1675	0.0836	6	-210.44	433.25	77.48	0.00
0.3684			-0.3791	-0.1101	-0.0719	-0.2082		6	-210.53	433.43	77.66	0.00
0.3717			-0.3988	-0.1575		-0.2095		5	-211.85	433.96	78.19	0.00
0.3573	-0.1556		-0.3932		-0.1392		0.1677	6	-211.00	434.37	78.60	0.00
0.3705	-0.0384		-0.4122	-0.1663		-0.2037		6	-211.43	435.22	79.45	0.00
0.3592		-0.0199	-0.3599		-0.1086	-0.1777	0.0925	7	-210.39	435.28	79.51	0.00

0.3575	-0.1579	-0.0053	-0.3930		-0.1391		0.1712	7	-211.00	436.48	80.72	0.00
0.3583	-0.0739	0.0743	-0.3950		-0.1671	-0.1400		7	-211.04	436.58	80.81	0.00
0.3589	-0.0995		-0.4316			-0.1266	0.1681	6	-212.11	436.59	80.83	0.00
0.3638	-0.0791		-0.3888		-0.1779	-0.1860		6	-212.17	436.71	80.95	0.00
0.3592		0.0763	-0.3751		-0.1359	-0.1467		6	-212.61	437.58	81.81	0.00
0.3664			-0.3685		-0.1472	-0.1964		5	-213.76	437.79	82.02	0.00
0.3598		0.1219	-0.3839	-0.1351			0.0647	6	-212.95	438.27	82.50	0.00
0.3613		0.1843	-0.4009	-0.1486				5	-214.16	438.59	82.82	0.00
0.3594	-0.0718	0.1738	-0.4079	-0.1212	-0.0737			7	-212.08	438.65	82.88	0.00
0.3621	-0.0518	0.1862	-0.4218	-0.1651				6	-213.21	438.79	83.02	0.00
0.3594		0.1765	-0.3879	-0.1182	-0.0440			6	-213.70	439.77	84.01	0.00
0.3589		0.1238	-0.3785	-0.1194	-0.0246		0.0582	7	-212.82	440.12	84.36	0.00
0.3623			-0.3956			-0.1530	0.1216	5	-215.19	440.65	84.88	0.00
0.3690			-0.3606	-0.1230			0.1287	5	-215.59	441.43	85.66	0.00
0.3636		-0.0338	-0.3903			-0.1701	0.1359	6	-215.06	442.49	86.72	0.00
0.3686			-0.3567	-0.1115	-0.0177		0.1250	6	-215.52	443.40	87.63	0.00
0.3586	-0.0687	0.1609	-0.3951		-0.1545			6	-215.53	443.43	87.66	0.00
0.3588		0.1667	-0.3760		-0.1248			5	-217.02	444.29	88.52	0.00

0.3584		0.1177	-0.3673		-0.1089		0.0548	6	-216.27	444.91	89.14	0.00
0.3636	-0.1178		-0.4232				0.1963	5	-217.78	445.82	90.05	0.00
0.3676			-0.3468		-0.0999		0.1186	5	-218.61	447.48	91.71	0.00
0.3637	-0.1200	-0.0049	-0.4229				0.1996	6	-217.78	447.92	92.16	0.00
0.3664		0.1180	-0.4275			-0.1161		5	-220.16	450.59	94.82	0.00
0.3639		0.1017	-0.3986				0.0971	5	-220.77	451.80	96.03	0.00
0.3664	0.0011	0.1180	-0.4270			-0.1162		6	-220.16	452.69	96.92	0.00
0.3696			-0.3766				0.1484	4	-222.49	453.16	97.39	0.00
0.3735			-0.4176			-0.1869		4	-222.69	453.56	97.79	0.00
0.3778	-0.0947		-0.3840	-0.0898	-0.1174			6	-221.03	454.43	98.66	0.00
0.3671		0.1917	-0.4252					4	-223.33	454.83	99.06	0.00
0.3736	0.0036		-0.4164			-0.1876		5	-222.69	455.64	99.87	0.00
0.3758	-0.0957		-0.3757		-0.1780			5	-222.96	456.17	100.40	0.00
0.3830			-0.3602	-0.0923	-0.0821			5	-223.12	456.49	100.73	0.00
0.3672	-0.0039	0.1914	-0.4269					5	-223.32	456.91	101.14	0.00
0.3861			-0.3816	-0.1460				4	-224.62	457.40	101.64	0.00
0.3831	-0.0588		-0.4019	-0.1575				5	-223.74	457.74	101.97	0.00
0.3807			-0.3504		-0.1454			4	-225.15	458.48	102.71	0.00

0.4248		-0.2627		-0.1075		-0.1932	0.2296	+	7	-227.75	469.99	114.22	0.00
0.4258	0.0300	-0.2395		-0.1007		-0.1904	0.2104	+	8	-227.58	471.79	116.02	0.00
0.3845			-0.3938					+	3	-232.90	471.90	116.14	0.00
0.4236		-0.2604		-0.0956	-0.0182	-0.1969	0.2256	+	8	-227.68	472.00	116.24	0.00
0.4214		-0.2899			-0.0742	-0.2225	0.2347	+	7	-229.37	473.23	117.46	0.00
0.3833	-0.0256		-0.4031					+	4	-232.73	473.64	117.87	0.00
0.4244	0.0270	-0.2407		-0.0945	-0.0105	-0.1928	0.2101	+	9	-227.55	473.90	118.14	0.00
0.4304		-0.3275				-0.2218	0.2640	+	6	-231.12	474.60	118.83	0.00
0.4222	0.0303	-0.2672			-0.0645	-0.2178	0.2173	+	8	-229.21	475.05	119.28	0.00
0.4317	0.0614	-0.2702				-0.2117	0.2209	+	7	-230.36	475.22	119.45	0.00
0.4230	0.1264			-0.1282		-0.0968	0.0746	+	7	-233.57	481.64	125.87	0.00
0.4230	0.1269			-0.1291	0.0016	-0.0964	0.0748	+	8	-233.57	483.78	128.01	0.00
0.4223	0.1714			-0.1204		-0.1275		+	6	-235.94	484.24	128.47	0.00
0.4231	0.1716	-0.0235		-0.1167		-0.1426		+	7	-235.82	486.14	130.37	0.00
0.4205	0.1672			-0.1141	-0.0115	-0.1292		+	7	-235.91	486.31	130.54	0.00
0.4340	0.0994			-0.1364			0.1040	+	6	-237.40	487.16	131.39	0.00
0.4390		-0.1245		-0.1468			0.1955	+	6	-237.47	487.31	131.55	0.00
0.4180	0.1441				-0.0682	-0.1154	0.0656	+	7	-236.56	487.61	131.84	0.00

0.4378	0.0648	-0.0770	-0.1279			0.1542	+	7	-236.62	487.73	131.97	0.00
0.4291	0.1813				-0.1076	0.0669	+	6	-237.79	487.96	132.19	0.00
0.4207	0.1662	-0.0252	-0.1084	-0.0149	-0.1457		+	8	-235.78	488.20	132.43	0.00
0.4387	0.1100		-0.1584	0.0366		0.1055	+	7	-237.15	488.79	133.02	0.00
0.4245			-0.1985		-0.0654	0.1153	+	6	-238.24	488.84	133.07	0.00
0.4157	0.1776			-0.0704	-0.1419		+	6	-238.32	489.01	133.24	0.00
0.4419		-0.1298	-0.1629	0.0240		0.2012	+	7	-237.37	489.23	133.47	0.00
0.4400	0.0747	-0.0807	-0.1531	0.0425		0.1586	+	8	-236.31	489.26	133.49	0.00
0.4274	0.2166				-0.1343		+	5	-239.62	489.50	133.73	0.00
0.4189			-0.1570	-0.0550	-0.0795	0.1057	+	7	-237.65	489.80	134.03	0.00
0.4167	0.1752	-0.0457		-0.0710	-0.1704		+	7	-237.90	490.30	134.53	0.00
0.4283	0.2142	-0.0443			-0.1618		+	6	-239.22	490.81	135.05	0.00
0.4336			-0.1950			0.1302	+	5	-240.46	491.17	135.40	0.00
0.4323			-0.1844	-0.0136		0.1286	+	6	-240.42	493.21	137.44	0.00
0.4445	0.1086	-0.1053				0.1639	+	6	-240.68	493.73	137.96	0.00
0.4304	0.1575	0.0698	-0.1371				+	6	-240.88	494.12	138.35	0.00
0.4400	0.1586					0.0962	+	5	-242.02	494.31	138.54	0.00
0.4370	0.0882	-0.0998		-0.0448		0.1610	+	7	-240.16	494.82	139.05	0.00

0.4346	0.1498		-0.1255				+	5	-242.34	494.95	139.18	0.00
0.4313	0.1312			-0.0510		0.0970	+	6	-241.35	495.07	139.30	0.00
0.4345		-0.1651		-0.0752		0.2132	+	6	-241.61	495.58	139.82	0.00
0.4336	0.1664	0.0696	-0.1517	0.0254			+	7	-240.75	496.00	140.23	0.00
0.4121				-0.1563	-0.0975	0.0997	+	6	-241.87	496.10	140.33	0.00
0.4454		-0.2079				0.2418	+	5	-243.21	496.68	140.91	0.00
0.4376	0.1577		-0.1389	0.0236			+	6	-242.24	496.85	141.08	0.00
0.4135			-0.1419	-0.0964	-0.1148		+	6	-242.52	497.40	141.63	0.00
0.4130		-0.0525	-0.1293	-0.0974	-0.1449		+	7	-242.01	498.51	142.74	0.00
0.4232			-0.2114		-0.0920		+	5	-244.42	499.10	143.33	0.00
0.4230		-0.0500	-0.1978		-0.1198		+	6	-243.96	500.28	144.51	0.00
0.4387	0.1993						+	4	-246.05	500.28	144.51	0.00
0.4363	0.2081	0.0529					+	5	-245.27	500.81	145.04	0.00
0.4299	0.1732			-0.0495			+	5	-245.45	501.16	145.39	0.00
0.4265	0.1799	0.0566		-0.0534			+	6	-244.56	501.49	145.72	0.00
0.4067		-0.0806		-0.1684	-0.1709		+	6	-244.82	502.00	146.23	0.00
0.4229				-0.1339		0.1244	+	5	-245.91	502.08	146.31	0.00
0.4064				-0.1796	-0.1266		+	5	-245.98	502.22	146.45	0.00

0.4349			-0.2068				+	4	-248.40	504.98	149.21	0.00
0.4289			-0.1695	-0.0505			+	5	-247.90	506.07	150.30	0.00
0.4329		0.0373	-0.2191				+	5	-248.02	506.30	150.53	0.00
0.4271		0.0447	-0.1783	-0.0568			+	6	-247.38	507.13	151.36	0.00
0.4311					-0.0587	0.1232	+	5	-250.39	511.04	155.27	0.00
0.4367						0.1372	+	4	-252.17	512.51	156.74	0.00
0.4171				-0.1521			+	4	-252.30	512.77	157.00	0.00
0.4163		0.0251		-0.1587			+	5	-252.16	514.58	158.81	0.00
0.4279		-0.1276			-0.1550		+	5	-252.89	516.03	160.27	0.00
0.4296					-0.0840		+	4	-255.93	520.02	164.26	0.00
0.4350							+	3	-259.07	524.23	168.47	0.00
0.4357		-0.0333					+	4	-258.79	525.76	169.99	0.00
0.4558		-0.1934	-0.1003	-0.1647	-0.2240	0.1488		7	-263.63	541.75	185.98	0.00
0.4589		-0.2063		-0.2449	-0.2205	0.1386		6	-265.31	542.98	187.21	0.00
0.4564	-0.0549	-0.2400	-0.0997	-0.1758	-0.2311	0.1877		8	-263.31	543.24	187.48	0.00
0.4601	-0.0596	-0.2618		-0.2573	-0.2309	0.1817		7	-264.94	544.37	188.61	0.00
0.4560			-0.0925	-0.2312	-0.1507			5	-267.28	544.81	189.05	0.00
0.4529			-0.1084	-0.1942	-0.1358	0.0601		6	-266.28	544.93	189.17	0.00

0.4541	0.0619		-0.0938	-0.1963	-0.1601		6	-266.59	545.55	189.79	0.00
0.4572				-0.2952	-0.1371		4	-268.76	545.68	189.92	0.00
0.4630		-0.2288	-0.2007		-0.2312	0.2122	6	-266.90	546.16	190.39	0.00
0.4552	0.0587			-0.2632	-0.1460		5	-268.11	546.48	190.71	0.00
0.4572		-0.0434	-0.0856	-0.2365	-0.1749		6	-267.06	546.49	190.72	0.00
0.4519	0.0371		-0.1055	-0.1800	-0.1439	0.0481	7	-266.05	546.60	190.83	0.00
0.4552				-0.2784	-0.1249	0.0449	5	-268.19	546.64	190.87	0.00
0.4588		-0.0626		-0.2954	-0.1732		5	-268.31	546.88	191.11	0.00
0.4559	0.0605	-0.0364	-0.0887	-0.2026	-0.1810		7	-266.44	547.37	191.60	0.00
0.4577	0.0550	-0.0537		-0.2676	-0.1773		6	-267.78	547.94	192.17	0.00
0.4539	0.0432			-0.2588	-0.1346	0.0318	6	-267.87	548.10	192.33	0.00
0.4635	-0.0279	-0.2538	-0.2035		-0.2349	0.2347	7	-266.82	548.12	192.35	0.00
0.4587	0.0772		-0.2086		-0.1441	0.0828	6	-269.85	552.07	196.31	0.00
0.4620			-0.2324		-0.1247	0.1188	5	-270.94	552.14	196.37	0.00
0.4602			-0.0936	-0.1832		0.0884	5	-271.00	552.27	196.50	0.00
0.4622				-0.2563		0.0738	4	-272.35	552.88	197.11	0.00
0.4633	0.1372		-0.2005		-0.1752		5	-271.42	553.10	197.33	0.00
0.4666				-0.2805			3	-273.86	553.82	198.05	0.00

0.4607		-0.0146	-0.0928	-0.1803		0.0962	6	-270.99	554.34	198.57	0.00
0.4600	0.0096		-0.0927	-0.1794		0.0857	6	-270.99	554.34	198.57	0.00
0.4659			-0.0674	-0.2345			4	-273.10	554.37	198.61	0.00
0.4618		0.0739	-0.0827	-0.2268			5	-272.25	554.77	199.00	0.00
0.4634		0.0580		-0.2833			4	-273.33	554.83	199.07	0.00
0.4618	0.0156			-0.2487		0.0698	5	-272.31	554.88	199.11	0.00
0.4629		-0.0228		-0.2514		0.0860	5	-272.31	554.88	199.12	0.00
0.4633	0.1371	0.0007	-0.2005		-0.1747		6	-271.42	555.21	199.44	0.00
0.4657	0.0420			-0.2586			4	-273.54	555.24	199.48	0.00
0.4587	0.0555	0.0835	-0.0839	-0.1937			6	-271.68	555.72	199.95	0.00
0.4652	0.0438		-0.0681	-0.2111			5	-272.76	555.78	200.02	0.00
0.4606	0.0532	0.0694		-0.2530			5	-272.79	555.84	200.07	0.00
0.4604	0.0056	-0.0096	-0.0926	-0.1791		0.0919	7	-270.98	556.45	200.69	0.00
0.4624	0.0103	-0.0128		-0.2486		0.0780	6	-272.30	556.97	201.20	0.00
0.4678			-0.2132			0.1406	4	-275.08	558.34	202.57	0.00
0.4666			-0.2361		-0.1503		4	-275.40	558.96	203.20	0.00
0.4661	0.0464		-0.1975			0.1209	5	-274.65	559.55	203.78	0.00
0.4692		-0.0607	-0.2024			0.1690	5	-274.73	559.73	203.96	0.00

0.4666		-0.0043	-0.2355	-0.1525		5	-275.39	561.05	205.28	0.00
0.4672	0.0338	-0.0278	-0.1970		0.1394	6	-274.60	561.57	205.81	0.00
0.4650	0.1228	0.1131	-0.1918			5	-276.14	562.55	206.78	0.00
0.4736	0.1187		-0.1811			4	-278.18	564.53	208.76	0.00
0.4761		-0.3129		-0.2224	0.2496	5	-278.42	567.09	211.32	0.00
0.4727		0.0950	-0.2301			4	-279.69	567.55	211.78	0.00
0.4746			-0.2091			3	-281.03	568.16	212.39	0.00
0.4753	0.0175	-0.2913		-0.2176	0.2337	6	-278.39	569.14	213.38	0.00
0.4731	0.1726			-0.1351		4	-281.66	571.49	215.73	0.00
0.4709	0.1407			-0.1151	0.0585	5	-281.00	572.25	216.49	0.00
0.4736	0.1717	-0.0180		-0.1453		5	-281.63	573.52	217.75	0.00
0.4765	0.1078				0.0933	4	-284.07	576.32	220.55	0.00
0.4770	0.1621	0.0865				4	-284.82	577.82	222.05	0.00
0.4809	0.1471					3	-285.89	577.88	222.11	0.00
0.4829		-0.1436			0.2038	4	-285.00	578.17	222.40	0.00
0.4770	0.0960	-0.0253			0.1106	5	-284.05	578.36	222.59	0.00
0.4804				-0.0717	0.1171	4	-285.31	578.79	223.02	0.00
0.4834					0.1323	3	-286.93	579.97	224.20	0.00

0.4845		-0.0925	3	-288.11	582.33	226.56	0.00
0.4830	-0.0883	-0.1405	4	-287.35	582.87	227.10	0.00
0.4892			2	-290.56	585.17	229.40	0.00
0.4892	0.0121		3	-290.54	587.18	231.41	0.00

110