Electronic Supplementary Information

for

Revisiting Sesquiterpene Biosynthetic Pathways Leading to Santalene and its Analogues: A Comprehensive Mechanistic Stud

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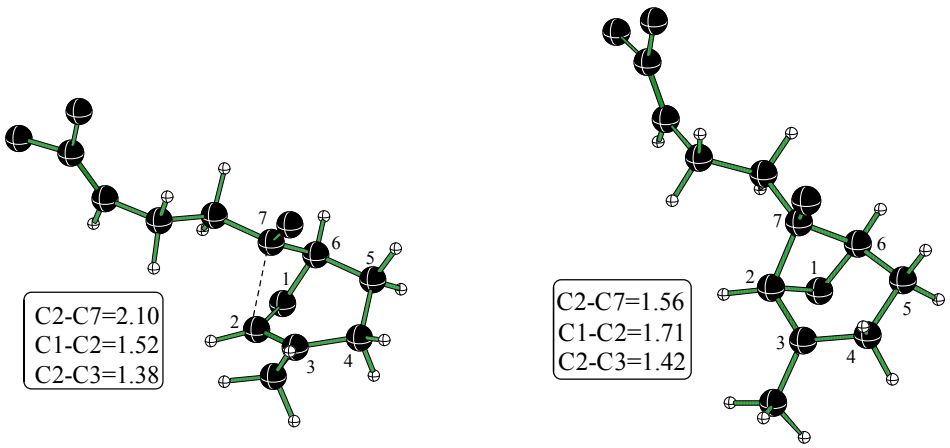


Figure S1. Optimized geometries of intermediates **b** and **b'** at the B3LYP/6-31+G** level of theory. Second-order perturbative stabilization energy ($E^{(2)}$) computed by using the NBO method for π_{C2-C3} to $AO_{(C7)}$ delocalization in intermediate **b** is found to be 134.3 kcal/mol at the B3LYP/6-31+G**. This clearly indicates toward strong cation-π interaction. On the other hand, in intermediate **b'**, an effective π_{C1-C2} to $AO_{(C3)}$ delocalization ($E^{(2)}$ = 70.6kcal/mol), facilitated by the conducive alignment of the interacting orbital is observed. The reason for such an interaction can be traced to strong hyperconjugation interaction between the newly formed bond and the empty *p*-orbital of the carbocationic center C3.

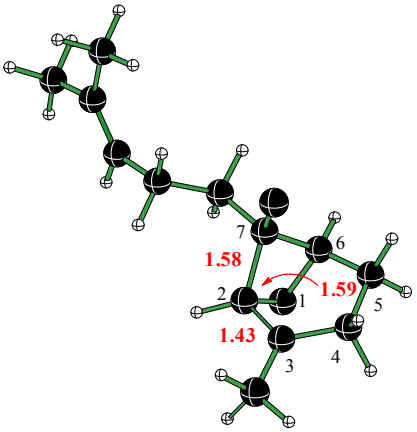
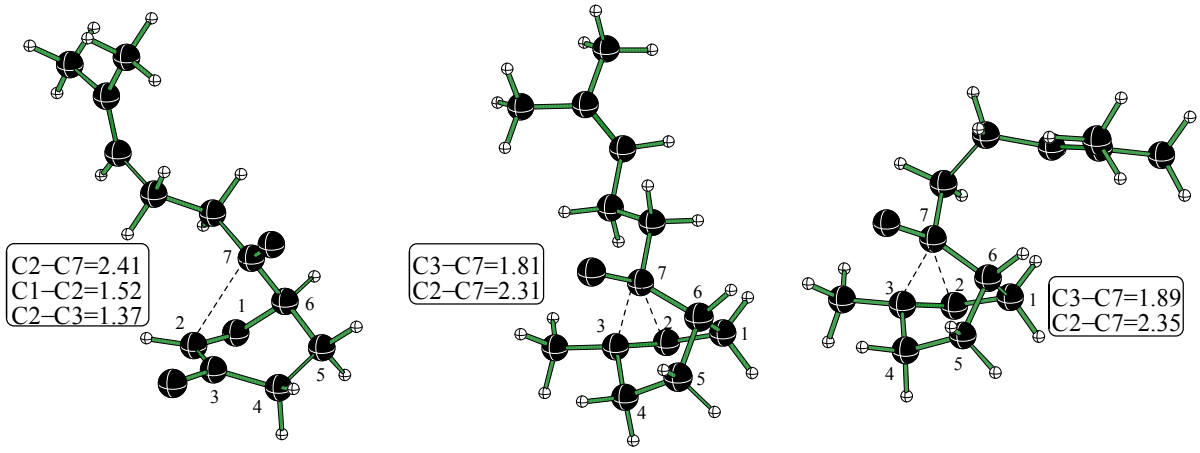
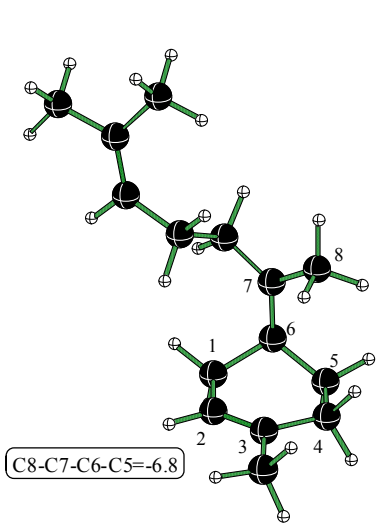


Figure S2. Optimized geometry of **TS(b-b')** at the mPW1K/6-31+G** level of theory. The C1–C2 and C2–C7 bond distances are almost similar in the transition state which elongate in the intermediates **b** and **b'** respectively. Distances are in Å.

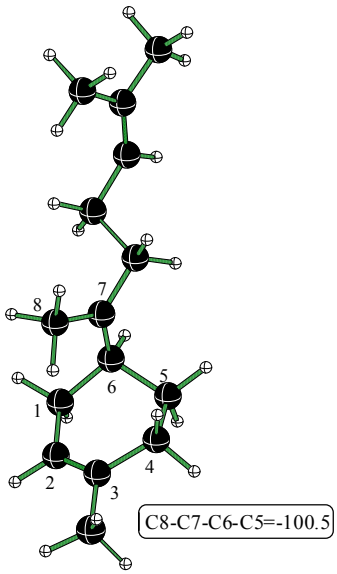


TS(a-b) **TS(b-c)** **TS(a-c)**

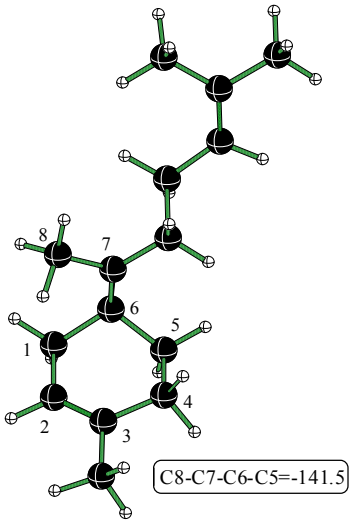
Figure S3. Optimized geometries of **TS(a-b)** , **TS(b-c)** and **TS(a-c)** at the B3LYP/6-31+G** level of theory. The conformation of the alkyl chain, R is different in **TS(a-c)**. Various attempts to locate **TS(a-b)** at this particular conformation failed. The C3–C7 and C2–C7 are slightly elongated in **TS(a-c)** in comparison to **TS(a-b)**. Selected hydrogens are removed for clarity. Distances are in Å.



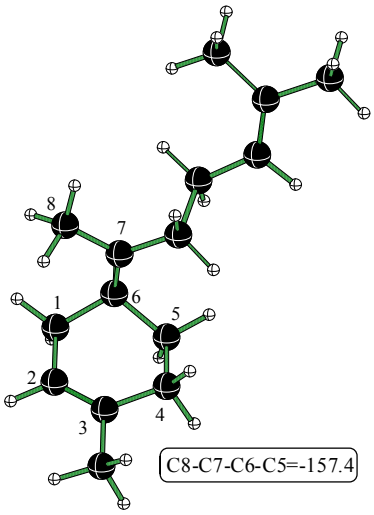
TS(a-a')



a'



TS(a'-a1)



a1

Figure S4. Optimized geometries of **TS(a-a')**, **TS(a'-a1)** and intermediates **a'** and **a1** at the mPW1K/6-31+G** level of theory. Distances are in Å.

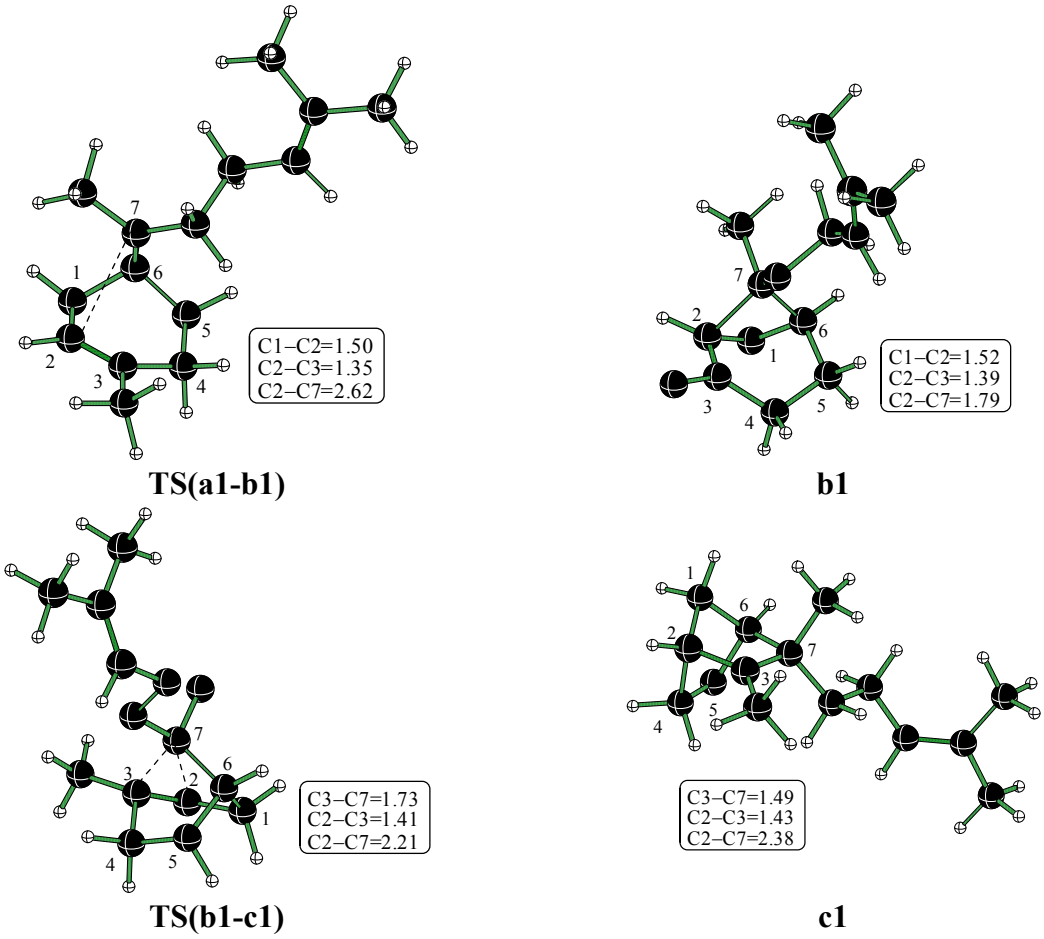


Figure S5. Optimized geometries for the conversion of **a1** to **c1** at the mPW1K/6-31+G** level of theory. Select hydrogens are removed for clarity. Distances are in Å.

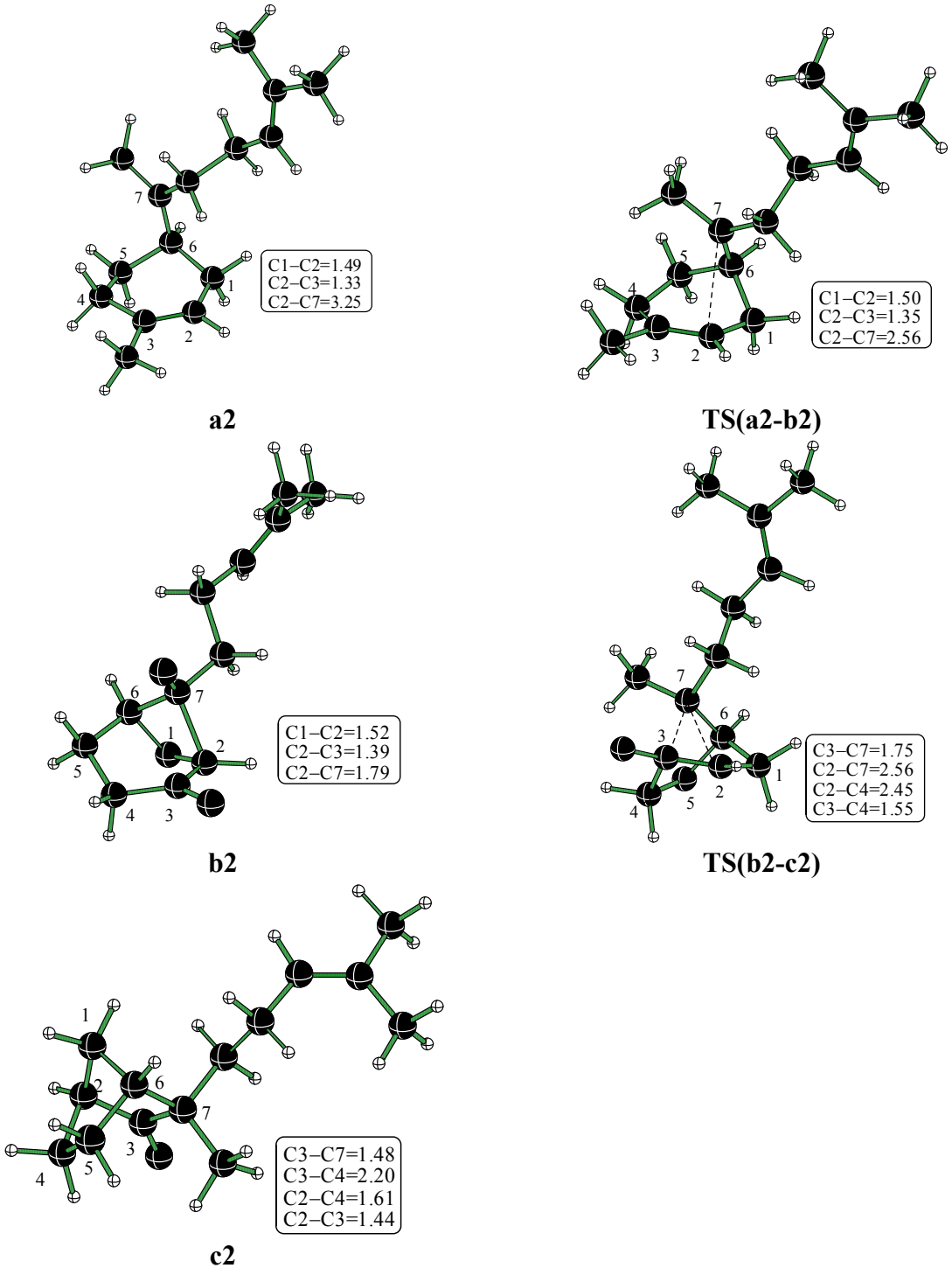


Figure S6. Optimized geometries of transition states and intermediates for the conversion of **a2** to **c2** at the mPW1K/6-31+G** level of theory. Distances are in Å.

Conformational Analyses of Key Intermediates

The conformations of all intermediates involved in the conversion of bisabolyl cation to sanatalene and bergamotene are sampled. The sampling was done by first changing the key dihedral angles of the side chain and then of the ring. The structural parameters and energetics are given in Tables S1-S14 and Figures S7-S16. Once all the intermediates were sampled, the transition states were optimized. A particular transition state, for e.g. (X-Y) was optimized in the most stable conformations of intermediates X and Y. For each of the intermediates, all conformers are superimposed (with the ring skeleton held fixed) to examine the structural variations. The energy dispersion of different conformers are provided in the highlighted area in Figures S7-S16. A comparison of the IRC-driven free energy profile (in blue) and the profile obtained using the lowest energy stationary points (in red) is also provided. No appreciable changes in the free energy profile obtained through both these approaches are visible. The energy of $\mathbf{a_9}$ (the lowest energy conformer of **a**) is set as 0.0 kcal/mol and all energies at the mPW1K/6-31+G** level of theory are reported with respect to this intermediate.

Conformational Analysis of Intermediate 'a'

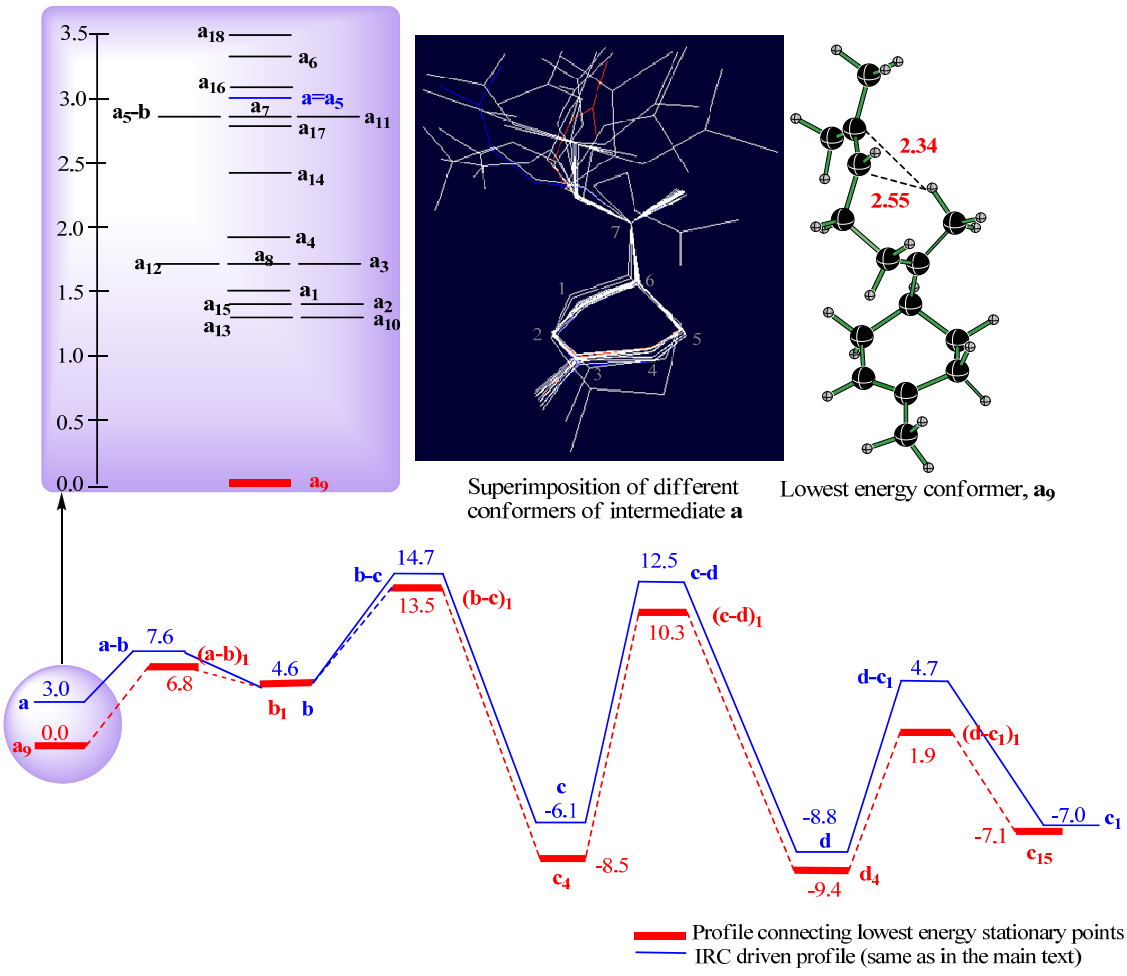
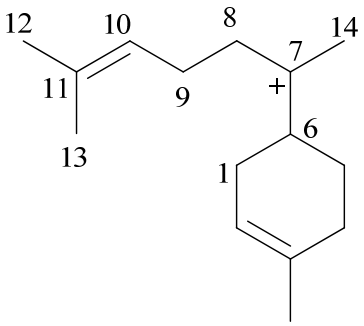


Figure S7. Relative energies (in kcal/mol) of different conformers of intermediate **a** at the mPW1K/6-31+G** level of theory. The optimized geometry of $\mathbf{a_9}$ shows the C-H of methyl is involved in C-H···π interaction with the double bond of the side chain ($-CH_2-CH_2-CH=C(CH_3)_2$ group). All distances are given in Å.

Table S1. Relative free energies (kcal/mol) of conformers of **a** and dihedrals (in °) A, B, C and D at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 14-7-6-1= **D**

Stationary point	A	B	C	D	ΔG
$\mathbf{a_1}$	167	-179	-117	-162	1.5
$\mathbf{a_2}$	166	175	116	-161	1.4
$\mathbf{a_3}$	-94	174	-115	-175	1.7
$\mathbf{a_4}$	-90	174	103	-176	1.9
$\mathbf{a_5}$	97	-177	-104	156	3.0
$\mathbf{a_6}$	100	180	110	157	3.3
$\mathbf{a_7}$	162	-73	-114	-157	2.8
$\mathbf{a_8}$	165	-68	133	-165	1.7
$\mathbf{a_9}$	-97	-79	125	-162	0.0
$\mathbf{a_{10}}$	-92	-67	-83	-169	1.3
$\mathbf{a_{11}}$	142	-62	-100	-156	2.8
$\mathbf{a_{12}}$	152	-63	130	-155	1.7
$\mathbf{a_{13}}$	-81	72	-122	146	1.3
$\mathbf{a_{14}}$	-122	66	104	-151	2.4
$\mathbf{a_{15}}$	-155	63	-133	-155	1.4
$\mathbf{a_{16}}$	172	66	78	-162	3.1
$\mathbf{a_{17}}$	110	77	-132	-167	2.7
$\mathbf{a_{18}}$	100	60	88	-165	3.5
$\mathbf{a_9}$**-b**[a]	-101	-77	128	-156	2.8

[a] $\mathbf{a_9}$**-b** refers to the boat form of the most stable intermediate $\mathbf{a_9}$.

Conformation Analysis of Intermediate b and b'

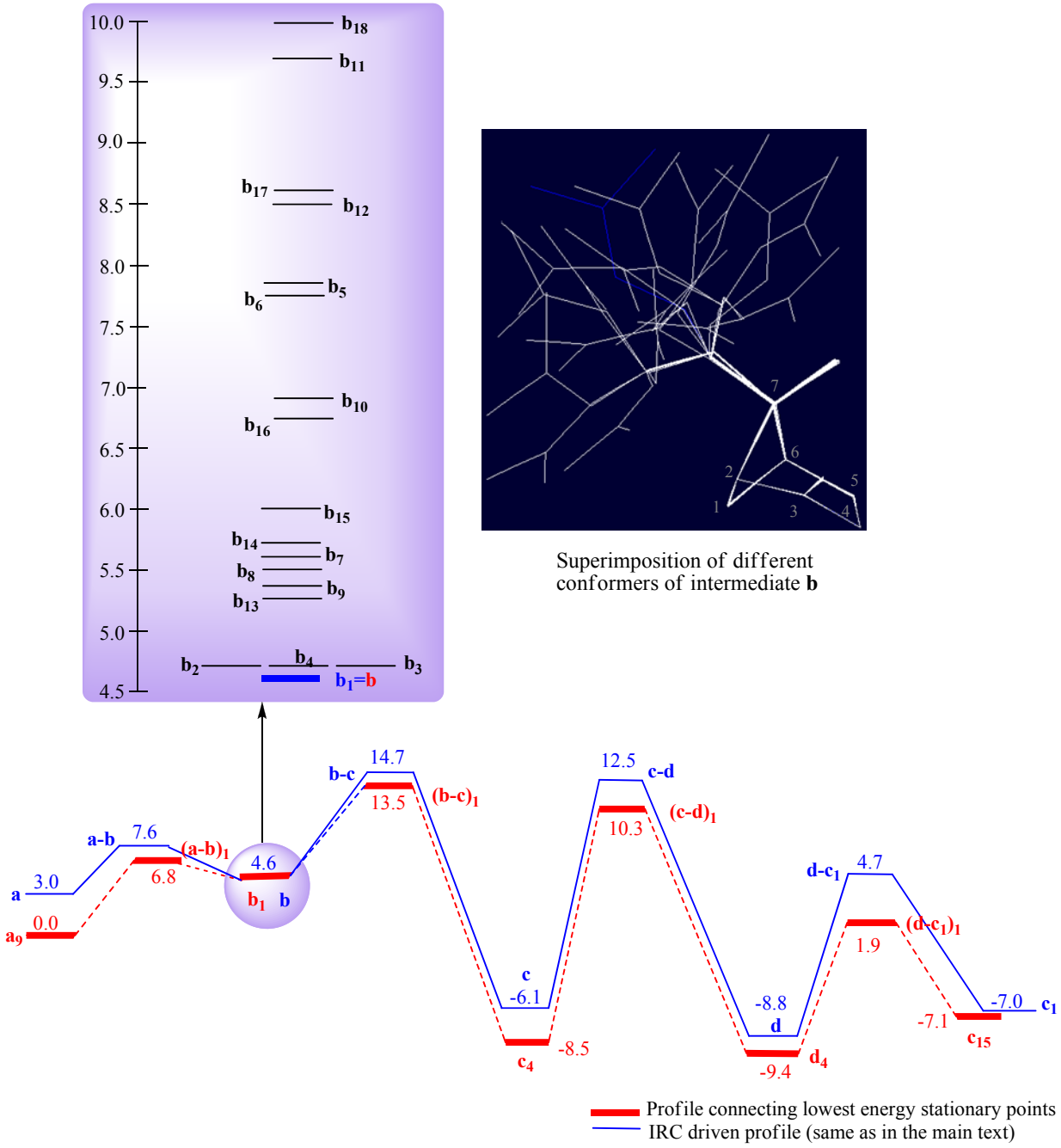
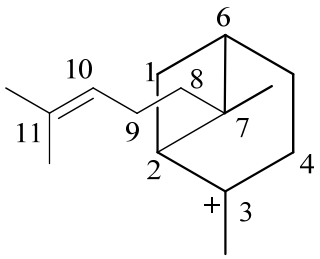


Figure S8. Relative energies (in kcal/mol) of different conformers of intermediate **b** at the mPW1K/6-31+G** level of theory.

Table S2. Relative energies (kcal/mol) of conformers of **b** and dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 1-2-3-4 ~ **10°**

Stationary point	A	B	C	C2-C7/Å	ΔG
b_1	167	-170	-114	1.78	4.6
b_2	166	180	117	1.79	4.7
b_3	-78	177	-112	1.80	4.7
b_4	-78	169	111	1.79	4.7
b_5	35	-171	-115	1.77	7.8
b_6	37	-178	113	1.77	7.7
b_7	174	-63	-92	1.78	5.6
b_8	174	-68	132	1.77	5.5
b_9	-72	-78	137	1.84	5.4
b_{10}	-57	-59	-92	1.81	6.9
b_{11}	31	-67	-84	1.79	9.7
b_{12}	35	-68	146	1.78	8.5
b_{13}	-86	62	-130	1.82	5.3
b_{14}	-85	59	94	1.81	5.7
b_{15}	160	76	-141	1.79	6.0
b_{16}	144	54	95	1.77	6.7
b_{17}	38	80	-145	1.76	8.6
b_{18}	42	77	80	1.76	10.0

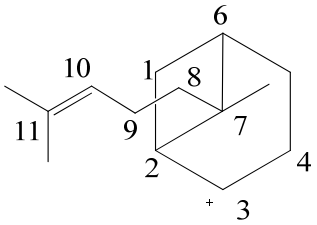
Table S3. Relative energies (kcal/mol) of conformers of **b** at the B3LYP/6-31+G** level of theory

Stationary point	**C2-C7/Å**	**ΔG**
b_1	2.10	0.0
b_2	2.09	0.3
b_3	-	-
b_4 [a]	-	-
b_5 [a]	1.98	3.6
b_6	1.98	3.7
b_7	2.04	1.6
b_8	1.96	2.0
b_9 [a]	-	-
b_{10} [a]	-	-

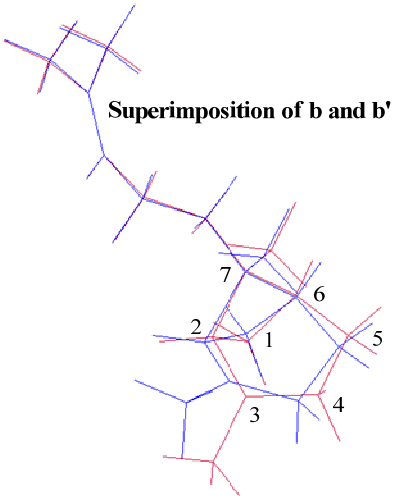
b_{11}	2.04	5.7
b_{12}	2.00	4.8
b_{13} [a]	-	-
b_{14} [a]	-	-
b_{15} [a]	-	-
b_{16} [a]	-	-
b_{17}	1.91	5.4
b_{18}	1.92	6.1

[a] Could not be located as a minimum. During optimization the geometry reverted to intermediate **a**.

Table S4. Relative energies (kcal/mol) of conformers of **b'** dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 1-2-3-4 ~ **76°**



Stationary point	A	B	C	C2-C7/Å	C1-C2/Å	ΔG
b'$_1$	169	-171	-115	1.54	1.69	6.6
b'$_2$	169	-177	122	1.54	1.69	6.5
b'$_3$	-76	178	-119	1.54	1.69	6.5
b'$_4$	-77	171	114	1.54	1.69	6.6
b'$_5$	23	-175	-120	1.53	1.70	9.0
b'$_6$	48	179	117	1.53	1.70	9.0
b'$_7$	176	-59	-95	1.54	1.69	7.3
b'$_8$	172	-70	129	1.53	1.69	6.8
b'$_9$	-70	-80	139	1.54	1.69	8.0
b'$_{10}$	-75	-84	-83	1.54	1.69	9.0
b'$_{11}$	45	-71	-83	1.53	1.70	11.1
b'$_{12}$	53	-73	147	1.53	1.70	9.1
b'$_{13}$	-83	66	-130	1.54	1.69	7.3
b'$_{14}$	-84	58	99	1.54	1.69	8.0
b'$_{15}$	159	74	-139	1.53	1.69	8.1
b'$_{16}$	-	-	-	-	-	-
b'$_{17}$	43	76	-146	1.53	1.70	8.4
b'$_{18}$	50	73	77	1.53	1.70	10.4

Table S5. Relative energies (kcal/mol) of conformers of **b'** dihedrals (in °) A, B and C at the B3LYP/6-31+G** level of theory

Stationary point	A	B	C	C2-C7/Å	ΔG
b'$_1$	169	-171	-115	1.71	0.3
b'$_2$	168	-180	122	1.71	0.3
b'$_3$	-73	-179	-118	1.71	0.0
b'$_4$	-76	172	115	1.71	0.0
b'$_5$	46	-175	-117	1.72	2.6
b'$_6$	47	178	114	1.72	2.6
b'$_7$	176	-60	-99	1.71	1.2
b'$_8$	171	-71	131	1.71	0.6
b'$_9$	-63	-74	138	1.7	1.6
b'$_{10}$	-51	-57	-100	1.7	2.4
b'$_{11}$	44	-72	-87	1.72	4.8
b'$_{12}$	56	-74	152	1.72	3.2
b'$_{13}$	-79	70	-133	1.71	0.9
b'$_{14}$	-83	59	101	1.71	1.8
b'$_{15}$	159	76	-139	1.71	1.7
b'$_{16}$	167	99	115	1.71	3.8
b'$_{17}$	41	76	-149	1.73	2.6
b'$_{18}$	51	73	82	1.72	4.7

Conformation Analysis of Intermediate c

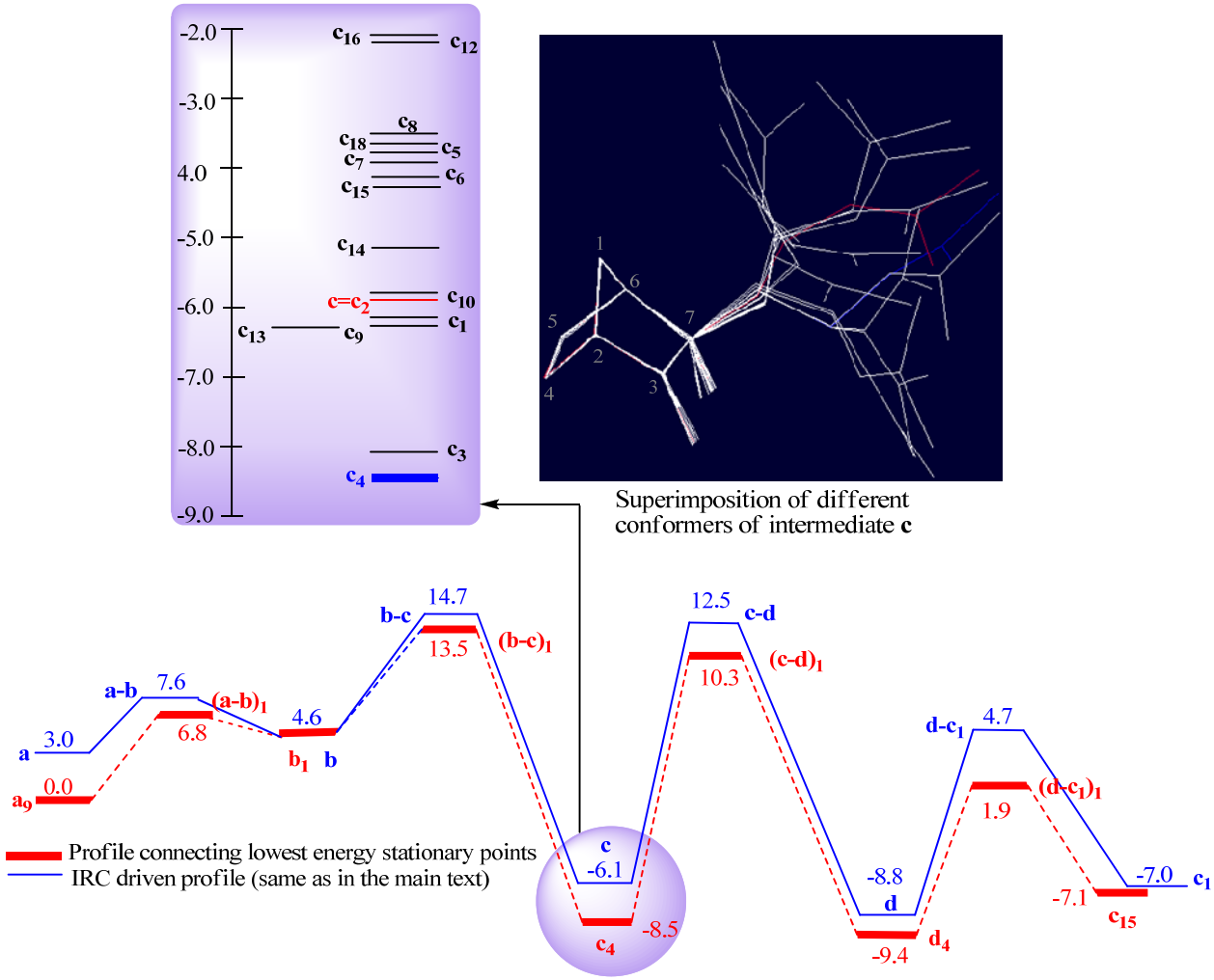
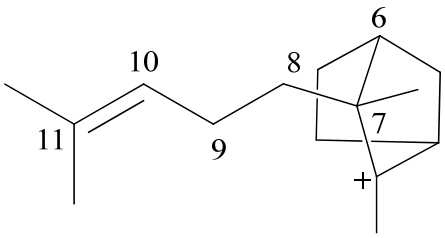


Figure S9. Relative energies (in kcal/mol) of different conformers of intermediate **c** at the mPW1K/6-31+G** level of theory.

Table S6. Relative energies (kcal/mol) of conformers of **c** dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**

Stationary point	A	B	C	ΔG
$\mathbf{c_1}$	-166	-174	-112	-6.1
$\mathbf{c_2}$	-164	-179	119	-6.0
$\mathbf{c_3}$	-55	-168	-108	-8.1
$\mathbf{c_4}$	-58	-178	107	-8.5
$\mathbf{c_5}$	48	-179	-113	-3.8
$\mathbf{c_6}$	52	173	113	-4.2
$\mathbf{c_7}$	-154	-70	-91	-4.1
$\mathbf{c_8}$	-157	-77	135	-4.5
$\mathbf{c_9}$	-47	-63	133	-6.3
$\mathbf{c_{10}}$	-46	-60	-94	-5.8
$\mathbf{c_{11}}$	-	-	-	-
$\mathbf{c_{12}}$	48	-78	151	-2.2
$\mathbf{c_{13}}$	-74	71	-135	-6.3
$\mathbf{c_{14}}$	-75	66	87	-5.2
$\mathbf{c_{15}}$	-166	83	-139	-4.3
$\mathbf{c_{16}}$	-165	83	86	-2.1
$\mathbf{c_{17}}$	-	-	-	-
$\mathbf{c_{18}}$	56	64	84	-3.7

Conformation Analysis of Intermediate d

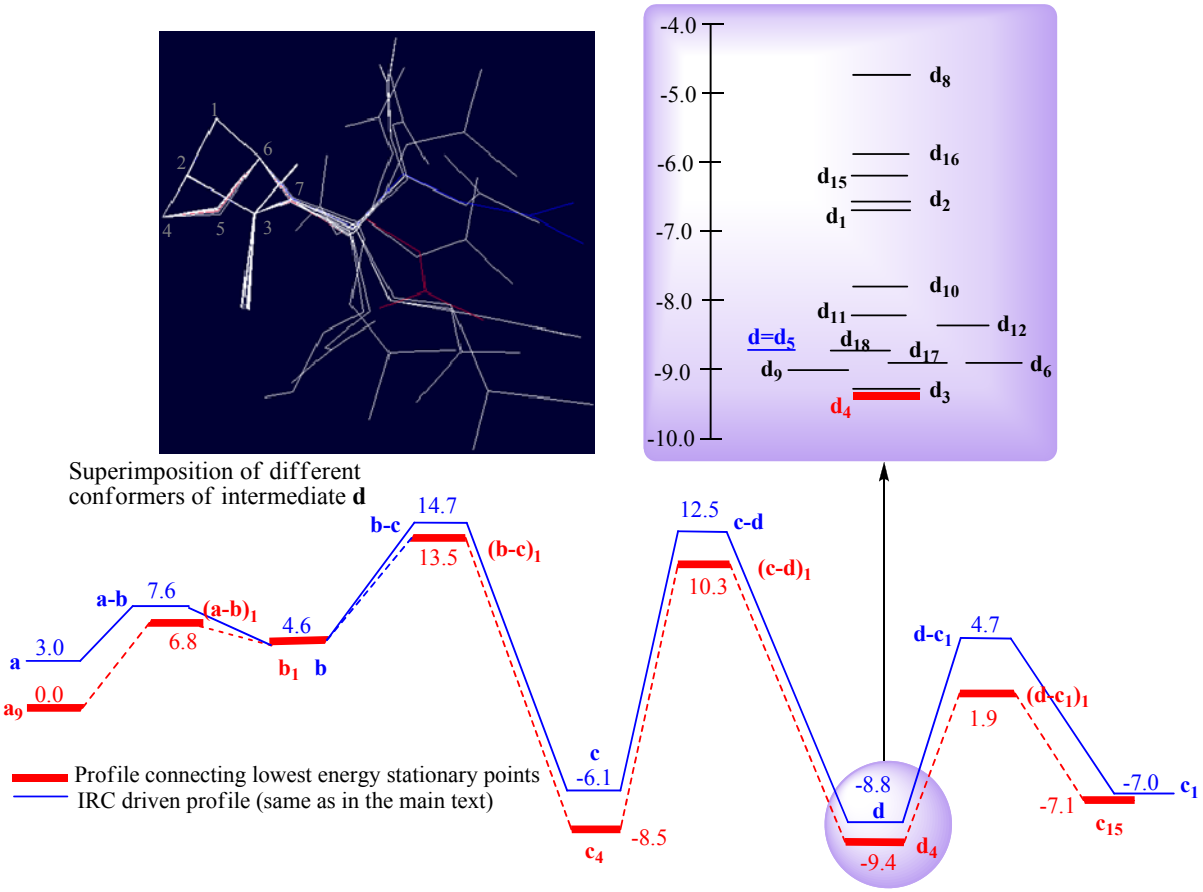
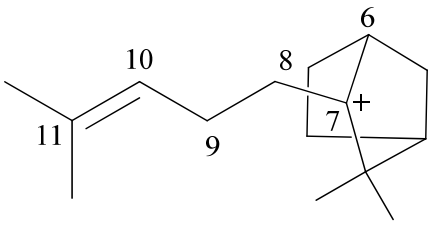


Figure S10. Relative energies (in kcal/mol) of different conformers of intermediate **d** Relative energies (in kcal/mol) of different conformers of intermediate **c** at the mPW1K/6-31+G** level of theory.

Table S7. Relative energies (kcal/mol) of conformers of **d** dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Stationary point	A	B	C	ΔG
$\mathbf{d_1}$	-154	-179	-116	-6.7
$\mathbf{d_2}$	-154	176	117	-6.6
$\mathbf{d_3}$	-49	-176	-116	-9.3
$\mathbf{d_4}$	-1	177	116	-9.4
$\mathbf{d_5}$	75	-178	-112	-8.8
$\mathbf{d_6}$	79	178	108	-8.9
$\mathbf{d_7}$	-	-	-	-
$\mathbf{d_8}$	-157	-80	148	-4.7
$\mathbf{d_9}$	4	-72	133	-9.0
$\mathbf{d_{10}}$	-40	-87	-109	-7.8
$\mathbf{d_{11}}$	82	-62	-92	-8.2
$\mathbf{d_{12}}$	75	-76	129	-8.4
$\mathbf{d_{13}}$	-	-	-	-
$\mathbf{d_{14}}$	-	-	-	-
$\mathbf{d_{15}}$	-127	72	-139	-6.2
$\mathbf{d_{16}}$	-136	66	88	-5.9
$\mathbf{d_{17}}$	11	67	-135	-8.9
$\mathbf{d_{18}}$	26	67	114	-8.8

Conformation Analysis of Intermediate c1

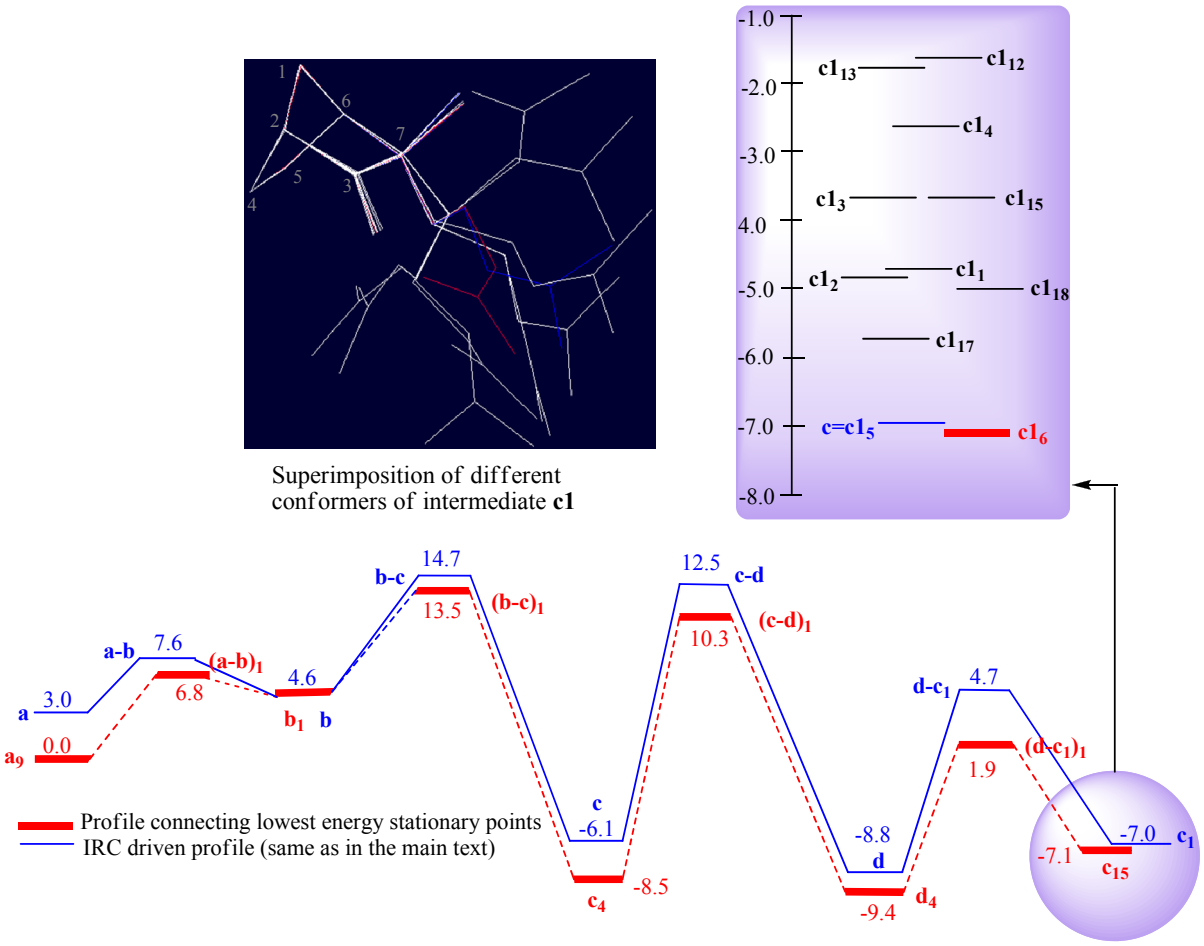
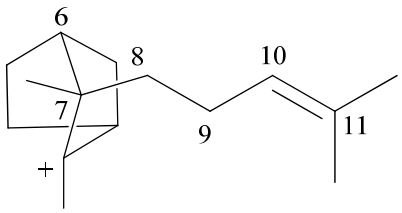


Figure S11. Relative energies (in kcal/mol) of different conformers of intermediate **c1** at the mPW1K/6-31+G** level of theory.

Table S8. Relative energies (kcal/mol) of conformers of **c1** dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**

Stationary point	A	B	C	ΔG
c1$_1$	160	177	-123	-4.7
c1$_2$	160	172	116	-4.8
c1$_3$	-66	-161	-116	-3.6
c1$_4$	-61	-167	121	-2.6
c1$_5$	56	-177	-115	-7.0
c1$_6$	55	175	116	-7.1
c1$_7$	-	-	-	-
c1$_8$	-	-	-	-
c1$_9$	-	-	-	-
c1$_{10}$	-	-	-	-
c1$_{11}$	-	-	-	-
c1$_{12}$	-58	89	-174	-1.6
c1$_{13}$	-58	92	-158	-1.8
c1$_{14}$	-	-	-	-
c1$_{15}$	148	73	-131	-3.6
c1$_{16}$	-	-	-	-
c1$_{17}$	48	68	-134	-5.7
c1$_{18}$	48	64	90	-5.0

Conformation Analysis of Intermediate a1' and b1

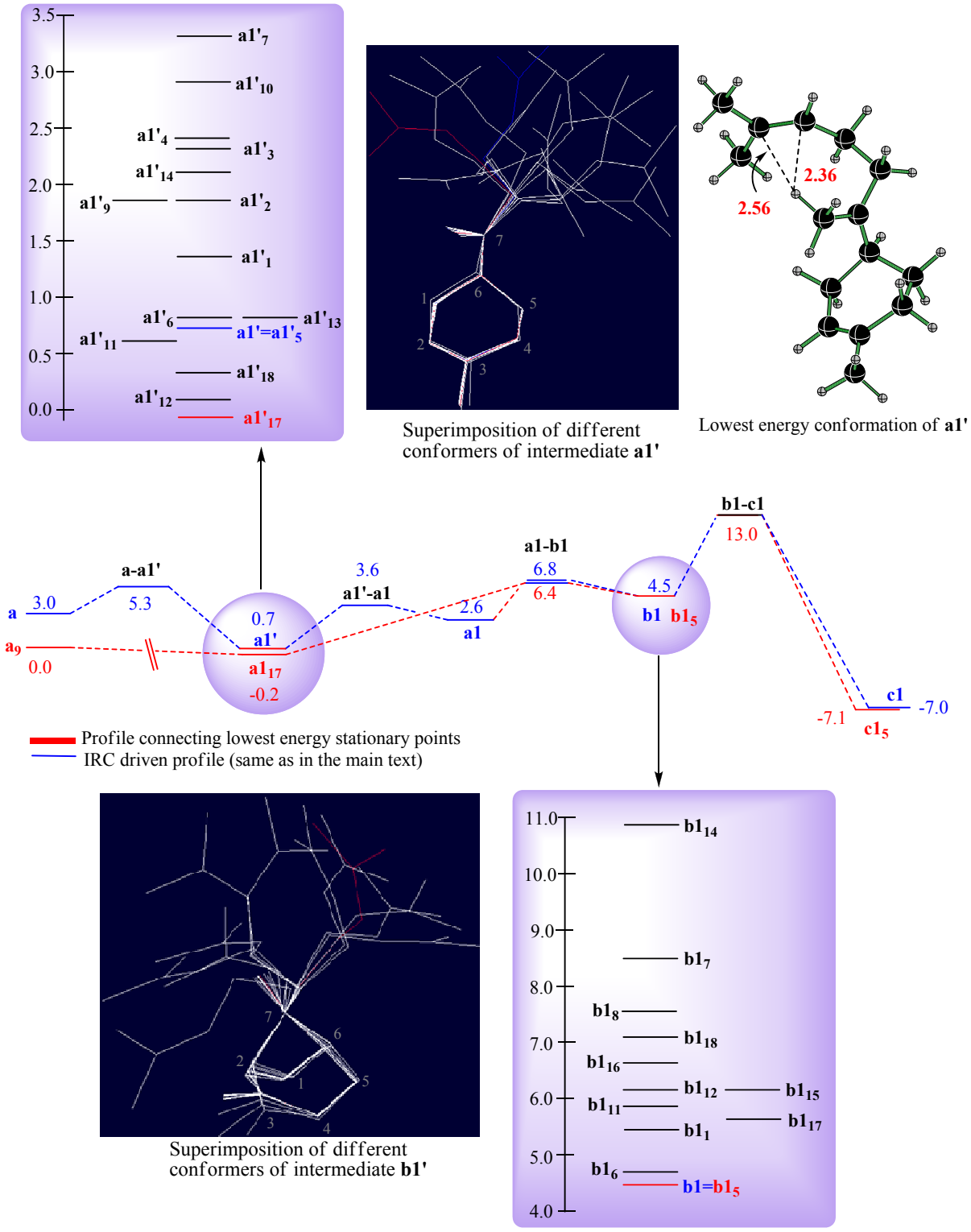
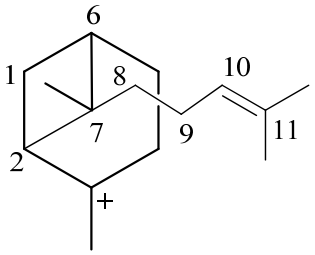


Figure S12. Relative energies (in kcal/mol) of different conformers of intermediate **a1'** and **b1** at the mPW1K/6-31+G** level of theory.

Table S9. Relative energies (kcal/mol) of conformers of **a1'** dihedrals (in °) A, B, C and D at the mPW1K/6-31+G** level of theory

Stationary point	A	B	C	D	ΔG
a1'$_1$	-150	-178	-115	-148	1.3
a1'$_2$	-149	174	113	-151	1.8
a1'$_3$	-114	-178	-112	-166	2.3
a1'$_4$	-113	176	106	-165	2.4
a1'$_5$	97	-174	-103	-154	0.7
a1'$_6$	102	-178	110	-156	0.8
a1'$_7$	-164	-68	-77	-143	3.3
a1'$_8$	-	-	-	-	-
a1'$_9$	-112	-76	134	-160	1.8
a1'$_{10}$	-107	-65	-87	-166	2.9
a1'$_{11}$	97	-66	-92	-159	0.6
a1'$_{12}$	86	-84	122	-158	0.1
a1'$_{13}$	-151	64	-133	-148	0.8
a1'$_{14}$	-143	65	108	-152	2.1
a1'$_{15}$	-	-	-	-	-
a1'$_{16}$	-	-	-	-	-
a1'$_{17}$	94	76	-124	-149	-0.2
a1'$_{18}$	89	66	85	-145	0.3

Table S10. Relative energies (kcal/mol) of conformers of **b1** dihedrals (in °) A, B and C at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**

Stationary point	1	2	3	C2-C7	C1-C2	ΔG
b1$_1$	-175	167	-139	1.76	1.52	5.5
b1$_2$	-	-	-	-	-	-
b1$_3$	-	-	-	-	-	-
b1$_4$	-	-	-	-	-	-
b1$_5$	75	-168	-111	1.79	1.57	4.5
b1$_6$	75	-175	121	1.79	1.52	4.7
b1$_7$	-175	-84	-80	1.81	1.52	8.3
b1$_8$	-174	-88	136	1.79	1.52	7.4
b1$_9$	-	-	-	-	-	-
b1$_{10}$	-	-	-	-	-	-

$b1_{11}$	83	-59	-103	1.79	1.52	5.9
$b1_{12}$	87	-58	131	1.8	1.52	6.1
$b1_{13}$	-	-	-	-	-	-
$b1_{14}$	-74	-172	105	1.62	1.57	10.9
$b1_{15}$	-177	84	-116	1.54	1.65	6.1
$b1_{16}$	174	62	117	1.66	1.54	6.6
$b1_{17}$	70	80	-137	1.89	1.51	5.7
$b1_{18}$	66	71	82	1.92	1.51	7.1

Conformation Analysis of Intermediates h, h' and $a2_{exo}$

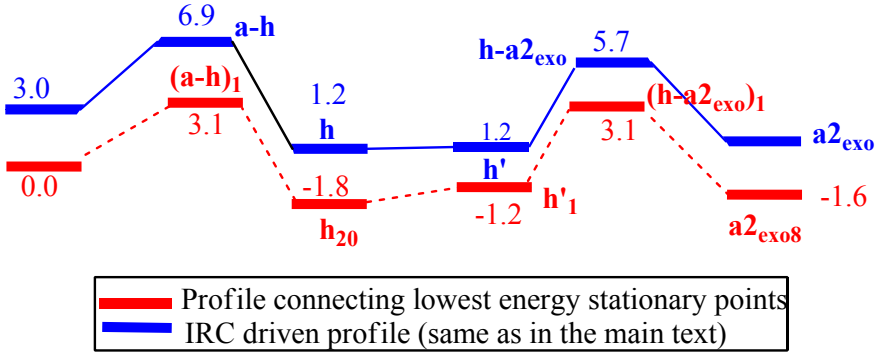
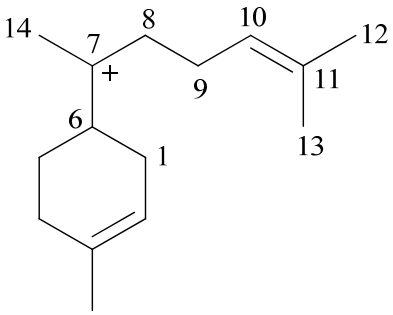


Figure S13. Free energy profile for the epimerization process that interconverts (*S*)-bisabolyl and (*R*)-bisabolyl cation at the mPW1K/6-31+G** level of theory.

Table S11. Relative energies (kcal/mol) of conformers of $\mathbf{a_{2exo}}$ (6*R*) and dihedrals (in °) A, B, C and D at the mPW1K/6-31+G** level of theory

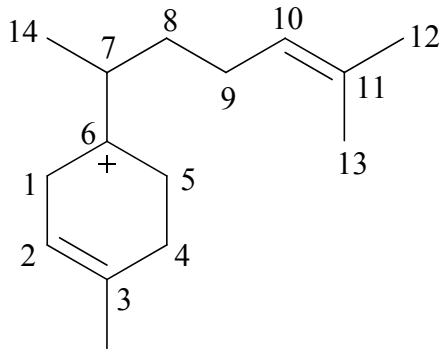
Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 8-7-6-1= **D**



Stationary point	A	B	C	D	ΔG
a_{2exo1}	159	178	115	-41	0.4
a_{2exo2}	-100	178	-110	-31	-0.4
a_{2exo3}	-94	176	105	-32	-0.2
a_{2exo4}	96	-174	-103	-92	-0.2
a_{2exo5}	-	-	-	-	-
a_{2exo6}	143	-64	-109	-30	0.4

$\mathbf{a}_{2exo7}$	155	-66	133	-43	-0.2
$\mathbf{a}_{2exo8}$	-93	-75	124	-37	-1.6
$\mathbf{a}_{2exo9}$	-87	-65	-85	-41	-0.6
$\mathbf{a}_{2exo10}$	-	-	-	-	-
$\mathbf{a}_{2exo11}$	-	-	-	-	-
$\mathbf{a}_{2exo12}$	-108	60	-129	-29	0.3
$\mathbf{a}_{2exo13}$	-97	67	95	-27	-0.1
$\mathbf{a}_{2exo14}$	-156	65	-134	-80	-0.2
$\mathbf{a}_{2exo15}$	-	-	-	-	-
$\mathbf{a}_{2exo16}$	99	76	-124	6	1.8
$\mathbf{a}_{2exo17}$	99	68	85	10	2.4
$\mathbf{a}_{2exo18}$	-	-	-	-	-

Table S12. Relative energies (kcal/mol) of conformers of **h** dihedrals (in °) A, B, C and D at the mPW1K/6-31+G** level of theory



Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 8-7-6-1= **D**
Dihedral 4-5-6-1= **-39**

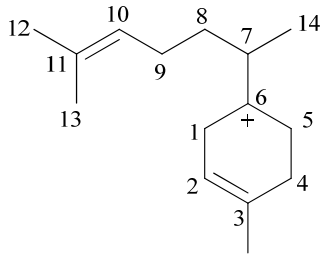
Stationary point	A	B	C	D	ΔG
$\mathbf{h}_1$	-72	-175	-117	-32	0.7
$\mathbf{h}_2$	-72	177	115	-32	0.4
$\mathbf{h}_3$	-172	-179	-113	-29	0.5
$\mathbf{h}_4$	-175	171	114	-29	3.8
$\mathbf{h}_5$	81	-177	-115	-31	3.9
$\mathbf{h}_6$	80	-175	120	-31	3.9
$\mathbf{h}_7$	52	55	-143	-36	6.1
$\mathbf{h}_8$	82	75	82	-31	6.2
$\mathbf{h}_9$	-175	57	-129	-27	0.1
$\mathbf{h}_{10}$	-175	54	90	-27	0.8
$\mathbf{h}_{11}$	-	-	-	-	-
$\mathbf{h}_{12}$	-	-	-	-	-
$\mathbf{h}_{13}$	-72	-55	-89	-31	1.0
$\mathbf{h}_{14}$	-71	-69	129	-32	0.1
$\mathbf{h}_{15}$	94	-65	-96	-17	5.2

h$_{16}$	93	-75	130	-27	4.8
h$_{17}$	-155	-58	-95	-25	2.6
h$_{18}$	-158	-66	125	-27	1.7
h$_{19}$	-16	62	-126	-97	-1.6
h$_{20}$ [a]	-166	60	-127	-110	-1.8

[a] The 4-5-6-1 dihedral is 39°.

Table S13. Relative energies (kcal/mol) of conformers of **h** dihedrals (in °) A, B, C, D and E at the mPW1K/6-31+G** level of theory

Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 8-7-6-1= **D**
Dihedral 4-5-6-1= **E**



Stationary point	A	B	C	D	E	ΔG
h'$_{1}$	-163	62	-125	82	9	-1.2
h'$_{2}$	-167	56	89	82	8	-0.9
h'$_{3}$	56	63	87	71	5	4.2
h'$_{4}$	47	62	-147	73	5	3.2
h'$_{5}$	-156	-171	-104	87	10	-0.1
h'$_{6}$	-162	178	106	88	13	0.0
h'$_{7}$	62	167	106	73	-2	1.9
h'$_{8}$	-132	-69	122	84	3	0.9
h'$_{9}$	-135	-57	-98	85	2	1.5
h'$_{10}$	-66	-56	-90	140	41	0.6
h'$_{11}$	-58	-51	133	138	42	-0.1
h'$_{12}$	66	-55	123	54	-2	1.2
h'$_{13}$	-	-	-	-	-	-
h'$_{14}$	-	-	-	-	-	-
h'$_{15}$	-	-	-	-	-	-
h'$_{16}$	-	-	-	-	-	-
h'$_{17}$	-	-	-	-	-	-
h'$_{18}$	-	-	-	-	-	-
h'$_{19}$	-166	63	-126	141	40	0.0
h'$_{20}$	-166	63	-127	93	-43	-0.8

1,2 versus 1,3-hydride transfer in the formation of allylic cation

Homobisabolyl cation, **h**, like bisabolyl cation can branch into an array of products. It is important to note that the majority of sesquiterpenes are derived from either bisabolyl or homobisabolyl cation. A recent study by Jones and coworkers, (ref. 13 in the main text) wherein the genes from different species of Sandalwood were isolated show that products isolated only include santalene and bergamotene. Therefore, other pathways emanating from both bisabolyl and homobisabolyl cation are not favored in the particular enzyme. There can be multitude of reasons for this, which is beyond the scope of the present study. There are other minor products like curcumene and bisabolene, which are formed from different enzymes that are isolated from the Sandalwood species. We considered a plausible biosynthetic route towards curcumene, which would form via deprotonation of cation **i**. Cation **i** can form via two pathways, as shown in Figure S14. The first pathway (a) involves two consecutive 1,2-hydride transfers whereas the other pathway (b) involves a direct 1,3-hydride transfer. It should be noted that both 1,2 and 1,3-hydride shifts are common in terepene biosynthesis. (See (a) S.-H. Kim, K. Heo, Y.-J. Chang, S.-H. Park, S.-K. Rhee and S.-U. KimCitron, *J. Nat. Prod.*, 2006, **69**, 758. (b) R. E. LaFever and R. Croteau, *Arch. Biochem. Biophys*., 1993, **301**, 361. (c) Y. J. Hong, and D. J. Tantillo, *Chem. Sci.*, 2010, **1**, 609. (d) C. A. Citron, R. Riclea, N. L. Brock and J. S. Dickschat *RSC Advances*, 2011, **1**, 290.) Previous computational studies have shown that both pathways exhibit similar barriers and therefore conformational preorganization would likely be the guiding factor in the biosynthesis of a particular product. In the formation of amorphadiene, it was earlier established that cation **i** is generated via a 1,3-hydride transfer rather than two consecutive 1,2-hydride transfers. Cation **i** can exist as four diastereomers, namely (6*R*,7*R*), (6*R*,7*S*), (6*S*,7*S*) and (6*S*,7*R*). In the present case we studied the formation of (6*R*,7*R*). Cationic

intermediate **i** can present several conformers, whose energies and structural parameters are provided in Table S14.

The details of **TS(a-h)** are already provided in the main text. The optimized geometries of **TS(a1'-i)** and **TS(h-i)** are given in Figure S15. From the free energy profile in Figure S14(b), it can be seen that the barriers for both 1,2 and 1,3-hydride transfers with repsect to the respective preceding intermediates are quite close (4.9 and 5.9 kcal/mol respectively). Hence, it is difficult to predict which one of these pathways would be operating under the enzymatic conditions. In Figure S16, the free energy profile connecting the most stable stationary points is provided. In **TS(h-i)**, the conformation of the side chain can play a major role. This is the only case where a large deviation from IRC-driven profile is noticed. As shown in Figure S15, in **TS(h-i)$_1$**, the migrating hydride strongly interacts with the double bond on the isoprenyl side chain rendering improved stabilization. In this case, one can say that 1,2-hydride transfer is more favourable. However, in the enzyme active site, the pre-organization of the substrate plays an important role and might be the guiding factor to adopt a particular pathway.

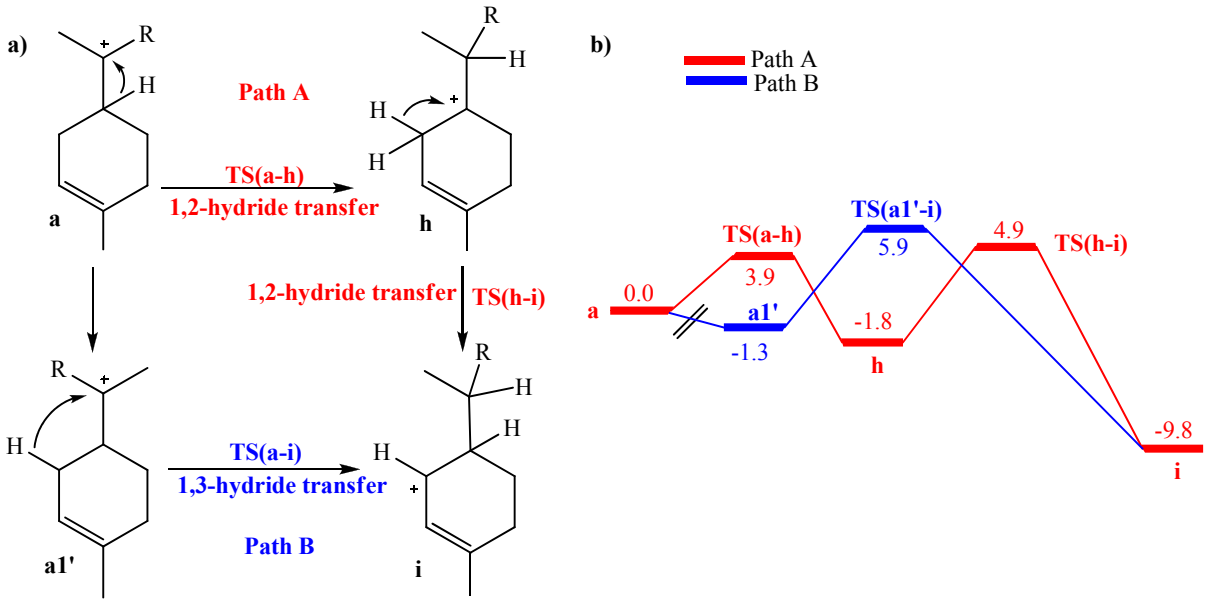
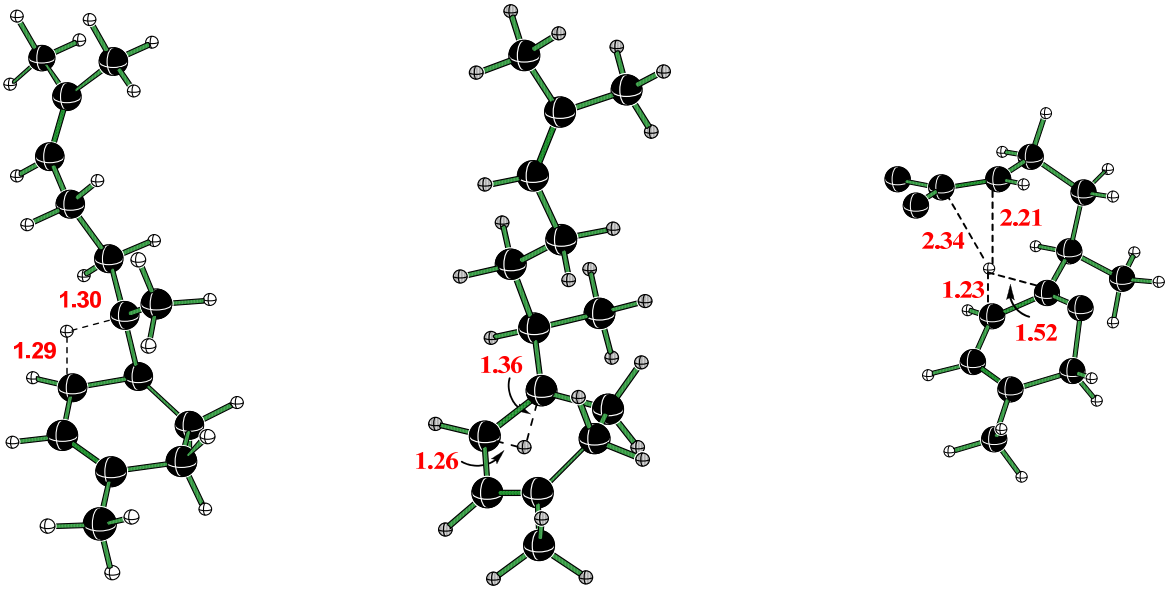


Figure S14. (a) 1,2 (Path A) and 1,3 (Path b) hydride transfers involved the formation of cation **i**. (b) Free energy profile for Path A and B at the mPW1K/6-31+G** level of theory. All energy values are in kcal/mol.



TS(a1'-i) **TS(h-i)** **TS(h-i)$_1$**

Figure S15. Optimized geometries of transition states **TS(a-i)** and **TS(h-i)** at the mPW1K/6-31+G** level of theory. All distances are in Å.

Conformational analysis of intermediate i

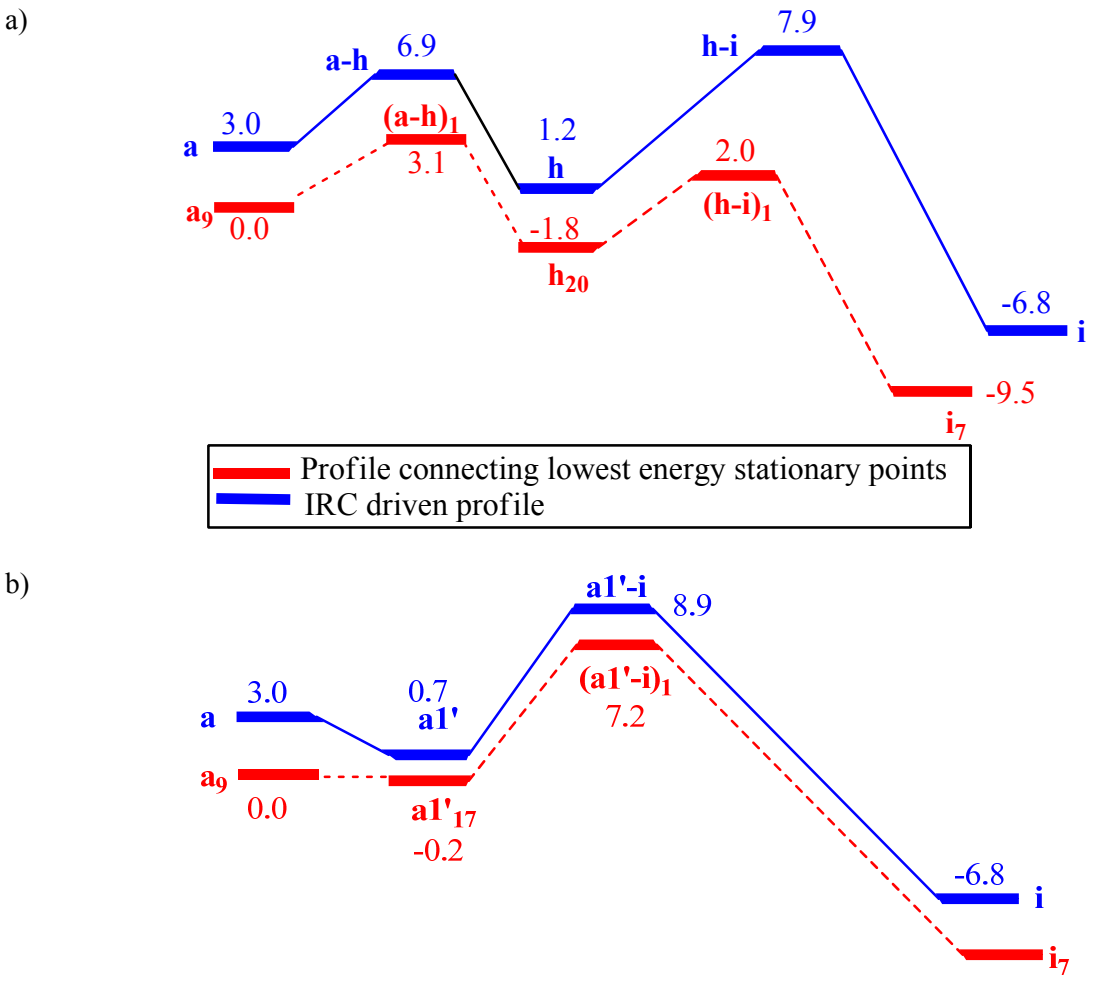
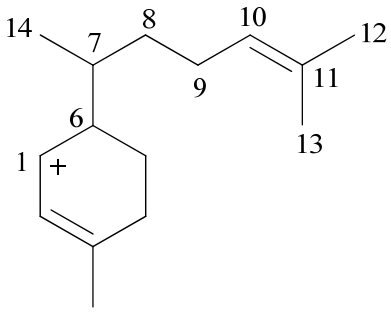


Figure S16. (a) Free energy profile for 1,2-hydride transfer leading to the formation of cation **I** at the mPW1K/6-31+G** level of theory. (b) Free energy profile for 1,3-hydride transfer leading to the formation of cation **i** at the mPW1K/6-31+G** level of theory.

Table S14. Relative energies (kcal/mol) of conformers of **i** (6*R*,7*R*) dihedrals (in °) A, B, C and D at the mPW1K/6-31+G** level of theory

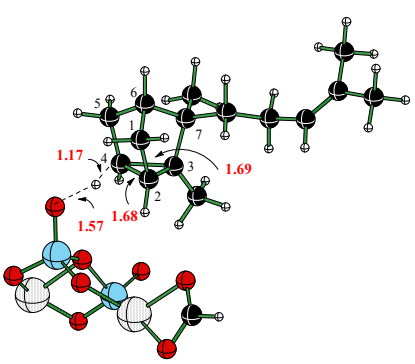
Dihedral 9-8-7-6= **A**
Dihedral 10-9-8-7= **B**
Dihedral 11-10- 9-8= **C**
Dihedral 8-7-6-1= **D**



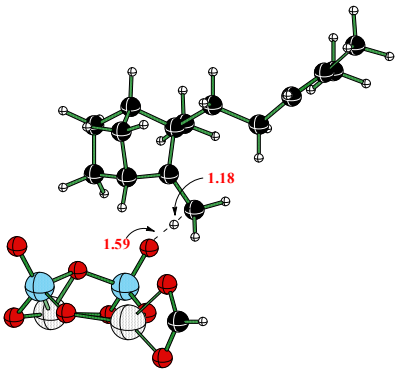
Stationary point	A	B	C	D	ΔG
i_1	-173	59	-130	-72	-8.4

$\mathbf{i_2}$	-156	69	-119	64	-8.9
$\mathbf{i_3}$	-179	59	-131	168	-7.4
$\mathbf{i_4}$	-172	56	97	72	-7.9
$\mathbf{i_5}$	-168	57	97	62	-8.4
$\mathbf{i_6}$	-178	56	98	168	-6.7
$\mathbf{i_7}$	-71	72	-130	-73	-9.5
$\mathbf{i_8}$	-	-	-	-	-
$\mathbf{i_9}$	-158	67	-23	-164	-7.9
$\mathbf{i_{10}}$	-79	58	90	-74	-8.0
$\mathbf{i_{11}}$	-76	62	73	72	-6.4
$\mathbf{i_{12}}$	-179	56	98	168	-6.7
$\mathbf{i_{13}}$	53	64	-147	-85	-5.4
$\mathbf{i_{14}}$	54	65	-147	47	-3.3
$\mathbf{i_{15}}$	50	60	-134	-174	-5.6
$\mathbf{i_{16}}$	58	67	84	-88	-3.7
$\mathbf{i_{17}}$	90	81	86	64	-2.9
$\mathbf{i_{18}}$	56	66	89	55	-4.9
$\mathbf{i_{19}}$	-171	178	-116	-72	-8.9
$\mathbf{i_{20}}$	-168	179	-117	62	-9.0
$\mathbf{i_{21}}$	-180	176	-116	168	-7.3
$\mathbf{i_{22}}$	-171	171	118	-71	-8.4
$\mathbf{i_{23}}$	-170	172	116	62	-8.7
$\mathbf{i_{24}}$	179	169	114	168	-7.5
$\mathbf{i_{25}}$	-62	-170	-117	-70	-8.7
$\mathbf{i_{26}}$	-60	-175	-114	72	-8.3
$\mathbf{i_{27}}$	-95	-176	-121	175	-5.6
$\mathbf{i_{28}}$	-67	179	116	-72	-8.7
$\mathbf{i_{29}}$	-60	173	127	69	-9.0
$\mathbf{i_{30}}$	-	-	-	-	-
$\mathbf{i_{31}}$	62	178	-117	-87	-6.0
$\mathbf{i_{32}}$	89	-175	-115	62	-5.4
$\mathbf{i_{33}}$	62	-176	-118	176	-7.7
$\mathbf{i_{34}}$	61	171	114	-86	-5.9
$\mathbf{i_{35}}$	89	179	125	61	-5.3
$\mathbf{i_{36}}$	62	177	120	179	-7.1
$\mathbf{i_{37}}$	-	-	-	-	-
$\mathbf{i_{38}}$	-174	-95	-117	60	-6.1
$\mathbf{i_{39}}$	180	-85	-81	167	-4.5
$\mathbf{i_{40}}$	-148	-68	127	-62	-7.1
$\mathbf{i_{41}}$	-156	-72	-132	63	-7.2
$\mathbf{i_{42}}$	-177	-85	139	42	-6.2
$\mathbf{i_{43}}$	-60	-53	-94	-70	-8.4
$\mathbf{i_{44}}$	-62	-61	152	70	-9.0
$\mathbf{i_{45}}$	-91	-57	-91	173	-4.6
$\mathbf{i_{46}}$	-47	-50	137	-61	-8.8
$\mathbf{i_{47}}$	-62	-61	152	70	-9.0

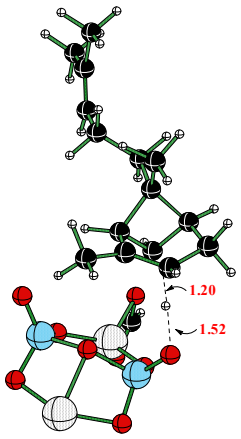
i_{48}	-95	-63	128	175	-5.8
i_{49}	60	-79	-78	-92	-4.2
i_{50}	66	-92	149	51	-4.7
i_{51}	76	-60	-85	-159	-6.3
i_{52}	-	-	-	-	-
i_{53}	66	-92	149	51	-4.7
i_{54}	70	-70	130	-165	-7.5



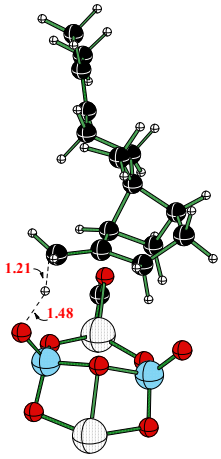
TS(c-F1)



TS(c-F2)



TS(b-G1)



TS(b-G2)

Figure S17. Optimized geometries of the transition state structures involving proton abstraction for the formation of sesquiterpenes, **F1**, **F2** , **G1** and **G2** at the mPW1K/6-31+G** level of theory. Distances are in Å [atom colors: black = C, red = O, blue = P, ivory = Mg]

Table S15. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points at the B3LYP/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H_{298K}	G_{298K}	NImag
a	-586.408725	-586.026853	-586.092659	0
TS(a-b)	-586.399316	-586.018185	-586.081380	1 (-74.1126)
b	-586.399698	-586.017074	-586.080937	0
TS(b-b')	-586.3920907	-586.011119	-586.073138	1 (-63.8791)
b'	-586.3934326	-586.010726	-586.073077	0
TS(b-c)	-586.382007	-586.000802	-586.061900	1 (-291.8926)
c	-586.4130939	-586.029770	-586.092050	0
TS(a-c)[a]	-586.3834804	-586.002242	-586.063072	1 (-304.0299)
TS(c-d)	-586.382035	-585.999637	-586.060024	1 (-346.9619)
d	-586.4138179	-586.030681	-586.093021	0
TS(d-c1)	-586.394520	-586.01193	-586.07256	1 (-325.6154)
c1	-586.4141824	-586.030797	-586.093152	0
TS(a- a')	-586.407430	-586.026460	-586.089340	1 (-30.0053)
a'	-586.4135382	-586.031392	-586.096645	0
TS(a'-a1)	-586.4094904	-586.028702	-586.091823	1 (-33.7991)
a1	-586.409673	-586.027813	-586.093394	0
TS(a1-b1)[b]				
b1[b]				
TS(b1-c1)[b]				
TS(a1-c1)	-586.046630	-586.004080	-586.065900	1 (-287.8419)
a_{exo}	-586.4138171	-586.031633	-586.097955	0
TS(a_{exo}-a)	-586.400900	-586.020190	-586.083600	1 (-43.6821)

TS(a-h)	-586.396887	-586.017452	-586.082715	1 (-515.28)
h	-586.4098307	- 586.028645	-586.095492	0
h'	-586.4103305	-586.029456	-586.095397	0
TS(h'-a2$_{exo}$)	-586.398233	-586.019277	-586.085131	1 (-513.5946)
a2$_{exo}$	586.4124337	-586.096272	-586.049405	0
a2	-586.4111268	-586.029049	-586.095251	0
TS(a2-b2)[b]				
b2[b]				
TS(b2-c2)				
TS(a2-c2)	-586.3839309	-586.002710	-586.064674	1(-311.4432)
c2	-586.4162861	-586.032849	-586.095600	0

[a] The conformation of R group is different than in other transition states.
[b] Transition states and intermediates could not be located with this particular conformation of **a**. Direct conversion of **a** to **c** was observed instead.

Table S16. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points at the B3LYP/6-31G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H_{298K}	G_{298K}	Nimag
a	-586.399256	-586.016536	-586.082210	0
TS(a-b)	-586.389989	-586.008047	-586.071249	1 (-82.4372)
b	-586.390609	-586.007131	-586.070940	0
TS(b-b')	-586.382628	-586.000845	-586.062924	1 (-67.9918)
b'	-586.384133	-586.000597	-586.062967	0
TS(b-c)	-586.373046	-585.991033	-586.051808	1 (-288.7371)
c	-586.404281	-586.020226	-586.082829	0
TS(a-c)[a]	-586.375370	-585.993294	-586.053838	1 (-303.4909)
TS(c-d)	-586.373102	-585.989960	-586.050785	1 (-348.4336)
d	-586.409049	-586.024479	-586.086571	0
TS(d-c1)	-586.385746	-586.002371	-586.062823	1 (-325.993)
c1	-586.405185	-586.021004	-586.083278	0
TS(a- a')	-586.397429	-586.015616	-586.078196	1 (-34.5461)

a'	-586.402939	-586.020039	-586.085753	0
TS(a'-a1)	-586.399533	-586.017834	-586.080627	1 (-27.6154)
a1	-586.399565	-586.016867	-586.082773	0
TS(a1-b1)[b]				
b1[b]				
TS(b1-c1)[b]				
TS(a1-c1)	-586.376619	-585.994433	-586.056293	1 (-283.3038)
a_{exo}	-586.402705	-586.019843	-586.085527	0
TS(a_{exo}-a)	-586.390688	-586.009155	-586.072494	1 (-43.4012)
TS(a-h)	-586.386478	-586.006218	-586.071215	1 (-534.7471)
h	-586.3993683	-586.017343	-586.084703	0
h'	-586.399775	-586.018121	-586.084022	0
TS(h'-$a2_{exo}$)	-586.387794	-586.008022	-586.073780	1(-514.7172)
$a2_{exo}$	-586.402407	-586.019569	-586.085349	0
a2	-586.4014806	-586.018523	-586.084333	0
TS(a2-b2)[b]				
b2[b]				
TS(b2-c2)				
TS(a2-c2)	-586.3748101	-585.992815	-586.054825	1 (-311.6434)
c2	-586.4074913	-586.02326	-586.086135	0

[a] The conformation of R group is different than in other transition states.
[b] Transition states and intermediates could not be located with this particular conformation of **a**. Direct conversion of **a** to **c** was observed instead.

Table S17. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points at the BB1K/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H_{298K}	G_{298K}	Nimag
a	-586.063418	-585.673324	-585.738941	0
TS(a-b)	-586.0586259	-585.669287	-585.73287	1 (-87.9149)
b	-586.06905	-585.677272	-585.737933	0
TS(b-c)	-586.052694	-585.662779	-585.723109	1 (-310.8142)
TS(b-b')	-586.0612664	-585.671747	-585.733094	1 (-88.0119)

b'	-586.0648749	-585.673643	-585.735280	0
c	-586.0857296	-585.693975	-585.755204	0
TS(c-d)	-586.057634	-585.666505	-585.726191	1 (-306.8699)
d	-586.0893687	-585.696876	-585.758287	0
TS(d-c1)	-586.0709452	-585.679999	-585.740288	1 (-301.5594)
c1	-586.0874964	-585.695325	-585.756167	0
TS(a- a')	-586.0629774	-585.673948	-585.736279	1 (-30.392)
a'	-586.067357	-585.676514	-585.740628	0
TS(a'-a1)	-586.0639144	-585.675186	-585.738349	1 (-39.245)
a1	-585.694779	-585.674142	-585.738521	0
TS(a1-b1)	-586.0607868	-585.671152	-585.734072	1 (-48.7811)
b1	-586.068805	-585.677109	-585.739265	0
TS(b1-c1)	-586.055241	-585.665038	-585.725728	1 (-302.6997)
a_{exo}	-586.059839	-585.669355	-585.733922	0
TS(a_{exo}-a)	-586.0548765	-585.66597	-585.729589	1 (-43.2166)
TS(a-h)	-586.055406	-585.667159	-585.731912	1 (-300.7821)
h[a]				
h'	-586.064864	-585.675421	-585.740113	0
TS(h'-$a2_{exo}$)	-586.056545	-585.668755	-585.733425	1 (-210.7511)
$a2_{exo}$	-586.063965	-585.674124	-585.692791	0
a2	-586.0659144	-585.675365	-585.740232	0
TS(a2-b2)[a]				
b2	-586.0690664	-585.677226	-585.738929	0
TS(b2-c2)	-586.0542589	-585.664207	-585.724318	1 (-301.9744)
c2	-586.088242	-585.696649	-585.760808	0

[a] Stationary point not located.

Table S18. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points at the PCM/mPW1K/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H	G	NImag
a	-586.3324535	-585.94015	-586.00337	0
TS(a-b)	-586.3246849	-585.933671	-585.994724	1 (-105.282)
b	-586.3342196	-585.941355	-586.002215	0
TS(b-b')	-586.330621	-585.939695	-585.999375	1 (-57.0442)
b'	-586.3329382	-585.939778	-586.000982	0
TS(b-c)	-586.319471	-585.927763	-585.987923	1 (-283.6468)
c	-586.351988	-585.95828	-586.018756	0
TS(c-d)	-586.322153	-585.929138	-585.987900	1 (-332.489)
d	-586.3545082	-585.960080	-586.020157	0
TS(d-c1)	-586.3358571	-585.942355	-586.000709	0
c1	-586.3545749	-585.960776	-586.020971	0
TS(a- a')[a]	-586.3307923			
a'	-586.3348975	-585.94271	-586.006775	0
TS(a'-a1)[a]	-586.3320127			
a1	-586.3331331	-585.941129	-586.004403	0
TS(a1-b1)	-586.3256625	-585.933745	-585.993821	1 (-67.0617)
b1	-586.3337096	-585.940446	-586.000780	0
TS(b1-c1)	-586.321711	-585.929352	-585.988576	1 (-271.7482)
a_{exo}	-586.2697625	-585.876575	-585.938186	0
TS(a_{exo}-a)	-586.3247455	-585.934164	-585.996895	1 (-46.2031)
TS(a-h)	-586.3252486	-585.935307	-585.99842	1 (-286.1131)
h	-586.3344300	-585.942929	-586.005249	0
h'	-586.3352506	-585.942929	-586.005249	0
TS(h'-$a2_{exo}$)	-586.3269291	-585.937679	-586.002162	1 (-284.9044)
$a2_{exo}$	-586.3341764	-585.942179	-586.006327	0
a2	-586.3342417	-585.941435	-586.004746	0
TS(a2-b2)	-586.3257603	-585.934124	-585.995142	1 (-81.87)
b2	-586.3341013	-585.940693	-586.000859	0
TS(b2-c2)	-586.321351	-585.928984	-585.98787	1 (-274.5728)
c2	-586.3544477	-585.960754	-586.021426	0

[a] Single point calculation at PCM/ mPW1K/6-31+G**//mPW1K/6-31+G**.

Table S19. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points at the mPW1K/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H	G	NImag
a	-586.2709057	-585.878811	-585.943976	0
TS(a-b)	-586.2646729	-585.873548	-585.936628	1 (-94.0763)
b	-586.2730677	-585.879806	-585.941508	0
TS(b-b')	-586.266983	-585.875631	-585.936769	1 (-77.4099)
b'	-586.269763	-585.876575	-585.938184	0
TS(b-c)	-586.2566924	-585.864946	-585.925365	1 (-301.5702)
c	-586.290734	-585.897073	-585.958555	0
TS(c-d)	-586.2612677	-585.868451	-585.928894	1 (-331.3435)
d	-586.295229	-585.901000	-585.962818	0
TS(d-c1)	-586.2748944	-585.881788	-585.94131	1 (-315.8403)
c1	-586.2924344	-585.898600	-585.959971	0
TS(a- a')	-586.269778	-585.878561	-585.940359	1 (-26.0707)
a'	-586.274585	-585.882305	-585.947598	0
TS(a'-a1)	-586.271500	-585.880554	-585.942983	1 (-32.1397)
a1	-586.271876	-585.879783	-585.944674	0
TS(a1-b1)	-586.2670439	-585.875418	-585.937937	1 (-53.2613)
b1	-586.2728932	-585.879500	-585.941611	0
TS(b1-c1)	-586.259405	-585.867422	-585.928089	1 (-287.731)
a_{exo}	-586.266717	-585.874300	-585.93990	0
TS(a_{exo}-a)	-586.2625518	-585.871641	-585.934575	1 (-40.5949)
TS(a-h)	-586.0553623	-585.872704	-585.937729	1 (-267.7973)
h	-586.27184	-585.880364	-585.946714	0
h'	-586.272603	-585.881318	-585.946802	0
TS(h'-a2$_{exo}$)	-586.263961	-585.874545	-585.939605	1 (-289.212)

$a2_{exo}$	-586.273005	-585.880857	-585.946924	0
a2	-586.2731822	-585.880825	-585.945790	0
TS(a2-b2)	-586.267029	-585.875414	-585.937911	1 (-77.0083)
b2	-586.273316	-585.879754	-585.941364	0
TS(b2-c2)	-586.2587246	-585.866814	-585.927288	1 (-293.3752)
c2	-586.2935331	-585.899730	-585.962293	0
TS(h-i)	-586.260856	-585.871576	-585.936192	-545.1171
TS(a1'-i)	-586.262204	-585.871679	-585.934501	-347.1171
i	-586.287623	-585.894633	-585.959632	-586.287623

Table S20. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points in the presence of pyrophosphate (OPP^-) at the mPW1K/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (NImag) and value in cm^{-1} is provided

Stationary point	E	H	G	Nimag
a_{pp}	-2385.303541	-2384.833631	-2384.935348	0
TS(a-b) $_{pp}$	-2385.287627	-2384.819372	-2384.852437	1 (-45.0075)
b_{pp}	-2385.318287	-2384.849176	-2384.94947	0
$TS(b\text{-}c)_{pp}$ [a]	-2385.298487	-2384.827769	-2384.925953	1 (-233.4548)
c_{pp}	-2385.330304	-2384.859313	-2384.95818	0
TS(b-G1)	-2385.317859	-2384.851362	-2384.949287	1 (-148.8964)
G1	-2385.345109	-2384.874283	-2384.977712	0
TS(b-G2)	-2385.317258	-2384.850779	-2384.948678	1 (-148.8964)
G2	-2385.343938	-2384.872677	-2384.974196	0
TS(c-F1)	-2385.3230798	-2384.855045	-2384.953554	1 (-196.7191)
F1	-2385.3641762	-2384.892414	-2384.99499	0
TS(c-F2)	-2385.3296146	-2384.861285	-2384.958939	1 (-85.4454)
F2	-2385.361674	-2384.889747	-2384.991846	0
$b1_{pp}$	-2385.318328	-2384.849127	-2384.948909	0

TS(b1-G3)	-2385.317875	-2384.851258	-2384.949031	1 (-156.5518)
G3	-2385.345128	-2384.874243	-2384.976655	0
TS(b1-G4)	-2385.317229	-2384.850719	-2384.948178	1 (-256.92940)
G4	-2385.343732	-2384.872382	-2384.973894	0
$c1_{pp}$	-2385.332423	-2384.862032	-2384.962123	0
TS(c1-F3)	-2385.332343	-2384.864067	-2384.961722	1 (-105.9697)
F3[b]	-2385.4027025	-2384.930218	-2385.028083	0
$c2_{pp}$	-2385.332753	-2384.861838	-2384.961292	0
TS(c2-F4)	-2385.332103	-2384.863785	-2384.961803	1 (-111.957)
F4	-2385.363777	-2384.891914	-2384.993856	0

[a] The geometry could not be optimized using 6-31+G** basis set. The energy is therefore reported at the mPW1K/6-31+G**//mPW1K/6-31G** level of theory.
[b] When Mg^{2+} is not bound to the formate, large changes during geometry optimization results in its interaction with the double bond of the side chain.

Table S21. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different stationary points in the presence of pyrophosphate (OPP^-) at the PCM/mPW1K/6-31+G** level of theory. All energy values given are in a.u. Number of imaginary frequencies (Nimag) and value in cm^{-1} is provided

Stationary point	E	H	G	Nimag
a_{pp} [a]	-2385.3815893			
TS(a-b) $_{pp}$	-2385.372365	-2384.90483	-2385.008447	1 (-84.5067)
b_{pp}	-2385.3910961	-2384.922432	-2385.025713	0
$TS(b\text{-}c)_{pp}$	-2385.3746636	-2384.906097	-2385.008358	1 (-259.9540)
c_{pp}	-2385.405936	-2384.936052	-2384.96989	0
TS(b-G1)	-2385.389217	-2384.925116	-2385.025261	1 (-558.9009)
G1[a]	-2385.4171734			
TS(b-G2)	-2385.3882521	-2384.923384	-2385.023204	1 (-441.3631)
G2	-2385.415691	-2384.945741	-2385.048925	0
TS(c-F1)	-2385.398462	-2384.932342	-2385.032974	1 (-265.4158)
F1	-2385.438174	-2384.96767	-2385.070588	0
TS(c-F2) [c]	-2385.4034445	-2384.938624	-2385.037166	2 (-308.9971, -4.7867)

F2	-2385.434401	-2384.963941	-2385.06683	0
$b1_{pp}$	-2385.392284	-2384.923838	-2385.026799	0
TS(b1-G3)	-2385.389297	-2384.925227	-2385.025880	1 (-528.4177)
G3[a]	-2385.4171486			0
TS(b1-G4)	-2385.388007	-2384.923466	-2385.024876	1 (-585.4346)
G4[b]				
$c1_{pp}$[a]	-2385.4080466			
TS(c1-F3)	-2385.406494	-2384.940368	-2385.042084	1 (-292.6439)
F3	-2385.4373014	-2384.96674	-2385.068395	0
$c2_{pp}$	-2385.4082556	-2384.938158	-2385.040796	0
TS(c2-F4)	-2385.406698	-2384.940452	-2385.042667	1 (-282.6198)
F4[a]	-2385.4359837			

[a] Single point energy calculation at PCM/mPW1K/6-31G**//PCM/mPW1K/6-31+G**.
[b] Stationary point could not be located. [c] Intruder frequency could not be eliminated.

Table S22. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of the lowest transition states for the conversion of bisabolyl cation to santalene and bergamotene precursors at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G	NImag
$TS(a\text{-}b)_1$	-586.269116	-585.877493	-585.937996	-62.7511
$TS(b\text{-}c)_1$	-586.258724	-585.866812	-585.927287	-293.4452
$TS(c\text{-}d)_1$	-586.265501	-585.872582	-585.932430	-335.3316
$TS(d\text{-}c1)_1$	-586.278863	-585.885845	-585.945780	-324.9903
$TS(a1\text{-}b1)_1$	-586.269879	-585.878249	-585.938594	-56.2036
$TS(b1\text{-}c1)_1$	-586.259406	-585.867420	-585.928074	-287.7456
$TS(a\text{-}h)_1$	-586.270271	-585.881010	-585.943784	-168.7660
$TS(h'\text{-}a2_{exo})_1$	-586.270019	-585.880827	-585.943895	-151.7217
$TS(h\text{-}i)_1$	-586.272160	-585.883056	-585.945637	-334.3185
$TS(a1'\text{-}i)_1$	-586.267120	-585.876419	-585.937328	-252.4157

Table S23. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **a** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
a_1	-586.272530	-585.881331	-585.946312
a_2	-586.272392	-585.881244	-585.946560
a_3	-586.273288	-585.880960	-585.946012

a_4	-586.273182	-585.880825	-585.945794
a_5	-586.270906	-585.878811	-585.943976
a_6	-586.271081	-585.879055	-585.943582
a_7	-586.271926	-585.880355	-585.944368
a_8	-586.274371	-585.883055	-585.946059
a_9	-586.277235	-585.885177	-585.948779
a_{10}	-586.274919	-585.882716	-585.946628
a_{11}	-586.271926	-585.880357	-585.944374
a_{12}	-586.274371	-585.883055	-585.946059
a_{13}	-586.274065	-585.882543	-585.946768
a_{14}	-586.272262	-585.880117	-585.945002
a_{15}	-586.274038	-585.882669	-585.946607
a_{16}	-586.271709	-585.880465	-585.943886
a_{17}	-586.273124	-585.881107	-585.944421
a_{18}	-586.272520	-585.880250	-585.943271
a_5-b	-586.272105	-585.879877	-585.94432

Table S24. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **a_{2exo}** (6*R*) at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
a_{2exo1}	-	-	-
a_{2exo2}	-586.273884	-585.882200	-585.948219
a_{2exo3}	-586.276549	-585.883952	-585.949416
a_{2exo4}	-586.276316	-585.883745	-585.949160
a_{2exo5}	-586.276173	-585.883718	-585.949156
a_{2exo6}	-	-	-
a_{2exo7}	-586.274133	-585.882354	-585.948063
a_{2exo8}	-586.275808	-585.884170	-585.949108
a_{2exo9}	-586.278967	-585.886905	-585.951281
a_{2exo10}	-586.277200	-585.884851	-585.949790
a_{2exo11}	-	-	-
a_{2exo12}	-	-	-
a_{2exo13}	-586.276107	-585.883623	-585.948225
a_{2exo14}	-586.276394	-585.883979	-585.948964
a_{2exo15}	-586.275702	-585.884189	-585.949085
a_{2exo16}	-	-	-
a_{2exo17}	-586.274272	-585.882590	-585.945980
a_{2exo18}	-586.272034	-585.880136	-585.944894

Table S25. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
$\mathbf{b_1}$	-586.273068	-585.879806	-585.941508
$\mathbf{b_2}$	-586.272586	-585.879373	-585.941309
$\mathbf{b_3}$	-586.273185	-585.879561	-585.941338
$\mathbf{b_4}$	-586.273316	-585.879754	-585.941364
$\mathbf{b_5}$	-586.268759	-585.875326	-585.936286
$\mathbf{b_6}$	-586.268822	-585.875416	-585.936541
$\mathbf{b_7}$	-586.259108	-585.865345	-585.926044
$\mathbf{b_8}$	-586.272679	-585.879227	-585.939825
$\mathbf{b_9}$	-586.273886	-585.880392	-585.940022
$\mathbf{b_{10}}$	-586.271906	-585.878622	-585.940192
$\mathbf{b_{11}}$	-586.270340	-585.876803	-585.937772
$\mathbf{b_{12}}$	-586.266391	-585.872868	-585.933371
$\mathbf{b_{13}}$	-586.268280	-585.875067	-585.935252
$\mathbf{b_{14}}$	-586.273273	-585.879745	-585.940359
$\mathbf{b_{15}}$	-586.272156	-585.878582	-585.939630
$\mathbf{b_{16}}$	-586.270949	-585.877801	-585.939274
$\mathbf{b_{17}}$	-586.269396	-585.876202	-585.938162
$\mathbf{b_{18}}$	586.268289	-585.875135	-585.935053

Table S26. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b** at the B3LYP/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
$\mathbf{b_1}$	-586.399698	-586.017076	-586.080949
$\mathbf{b_2}$	-586.399370	-586.016703	-586.080540
$\mathbf{b_3}$	-	-	-
$\mathbf{b_4}$	-	-	-
$\mathbf{b_5}$	-586.394871	-586.012058	-586.075205
$\mathbf{b_6}$	-586.394996	-586.012159	-586.075024
$\mathbf{b_7}$	-586.398498	-586.015692	-586.078452
$\mathbf{b_8}$	-586.398964	-586.016002	-586.077812
$\mathbf{b_9}$	-	-	-
$\mathbf{b_{10}}$	-	-	-
$\mathbf{b_{11}}$	-586.392468	-586.009489	-586.071803
$\mathbf{b_{12}}$	-586.393620	-586.011036	-586.073260
$\mathbf{b_{13}}$	-	-	-
$\mathbf{b_{14}}$	-	-	-

b_{15}	-	-	-
b_{16}	-	-	-
b_{17}	-586.393354	-586.010680	-586.072327
b_{18}	-586.391922	-586.009086	-586.071238

Table S27. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b_9** at different levels of theory using 6-31+G** as the basis set. All energy values are in a.u.

Level of Theory	**E**	**H**	**G**
B3LYP	-	-	-
mPW1K	-586.273886	-585.880392	-585.940022
BB1K	-586.067999	-585.675936	-585.736376
mPW1PW91	-	-	-
MP2	-582.326448	-584.150532	-584.212541
MPWB1K	-586.063555	-585.670897	-585.730821
M06-2X	-586.096855	-585.711149	-585.772807

Table S28. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b'$_9$** at different levels of theory using 6-31+G** as the basis set. All energy values are in a.u.

Level of Theory	E	H	G
B3LYP	-586.390906	-586.008362	-586.070994
mPW1K	-586.267447	-585.874388	-585.935979
BB1K	-586.063212	-585.672107	-585.733477
mPW1PW91	-586.262856	-585.877442	-585.939979
MP2	-582.323298	-584.143837	-584.205829
MPWB1K	-586.058803	-585.666908	-585.726924
M06-2X	-586.0913452	-585.705762	-585.766030

Table S29. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b'** at the mPW1K/6-31+G** level of theory. All energy values are in a.u

Stationary point	E	H	G
b'$_1$	-586.269762	-585.876576	-585.938185
b'$_2$	-586.269417	-585.876272	-585.938354
b'$_3$	-586.269509	-585.876406	-585.938365
b'$_4$	-586.269803	-585.876643	-585.938242
b'$_5$	-586.266536	-585.873237	-585.934397
b'$_6$	-586.266585	-585.873291	-585.934469
b'$_7$	-586.269973	-585.876545	-585.937218
b'$_8$	-586.270786	-585.877507	-585.937985

b'$_9$	-586.267447	-585.874388	-585.935979
b'$_{10}$	-586.265950	-585.872776	-585.934382
b'$_{11}$	-586.264133	-585.870723	-585.931093
b'$_{12}$	-586.266841	-585.873845	-585.934294
b'$_{13}$	-586.269462	-585.876326	-585.937104
b'$_{14}$	-586.268627	-585.875338	-585.936006
b'$_{15}$	-586.267495	-585.874387	-585.935810
b'$_{16}$	-	-	-
b'$_{17}$	-586.268976	-585.875734	-585.935402
b'$_{18}$	-586.265147	-585.871918	-585.932245

Table S30. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b'** at the B3LYP/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
b'$_1$	-586.393433	-586.010728	-586.073070
b'$_2$	-586.393244	-586.010390	-586.073112
b'$_3$	-586.393223	-586.010592	-586.073537
b'$_4$	-586.393427	-586.010830	-586.073507
b'$_5$	-586.389645	-586.006987	-586.069376
b'$_6$	-586.069376	-586.007013	-586.069381
b'$_7$	-586.392801	-586.009962	-586.071692
b'$_8$	-586.393569	-586.010850	-586.072657
b'$_9$	-586.390906	-586.008362	-586.070994
b'$_{10}$	-586.389664	-586.007080	-586.069681
b'$_{11}$	-586.386770	-586.004007	-586.065851
b'$_{12}$	-586.389264	-586.006741	-586.068383
b'$_{13}$	-586.392411	-586.009901	-586.072060
b'$_{14}$	-586.391703	-586.008938	-586.070725
b'$_{15}$	-586.390747	-586.008279	-586.070884
b'$_{16}$	-586.389284	-586.007703	-586.067526
b'$_{17}$	-586.390528	-586.007894	-586.069376
b'$_{18}$	-586.387498	-586.004723	-586.066016

Table S31. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **c** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
$\mathbf{c_1}$	-586.290734	-585.897073	-585.958555
$\mathbf{c_2}$	-586.290096	-585.896456	-585.958375
$\mathbf{c_3}$	-586.293624	-585.899810	-585.961723
$\mathbf{c_4}$	-586.293533	-585.899730	-585.962296
$\mathbf{c_5}$	-586.287027	-585.893259	-585.954878
$\mathbf{c_6}$	-586.287586	-585.893921	-585.955408
$\mathbf{c_7}$	-586.288966	-585.895288	-585.955284
$\mathbf{c_8}$	-586.289897	-585.896266	-585.956013
$\mathbf{c_9}$	-586.291906	-585.898206	-585.958748
$\mathbf{c_{10}}$	-586.290443	-585.896738	-585.958021
$\mathbf{c_{11}}$	-	-	-
$\mathbf{c_{12}}$	-586.285225	-585.891684	-585.952280
$\mathbf{c_{13}}$	-586.291670	-585.897905	-585.958893
$\mathbf{c_{14}}$	-586.290096	-585.896136	-585.957103
$\mathbf{c_{15}}$	-586.287700	-585.894248	-585.955646
$\mathbf{c_{16}}$	-586.286637	-585.893928	-585.952172
$\mathbf{c_{17}}$	-	-	-
$\mathbf{c_{18}}$	-586.288719	-585.894761	-585.954704

Table S32. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **d** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
$\mathbf{d_1}$	-586.291544	-585.897970	-585.959500
$\mathbf{d_2}$	-586.291362	-585.897716	-585.959315
$\mathbf{d_3}$	-586.295460	-585.901902	-585.963641
$\mathbf{d_4}$	-586.295443	-585.901822	-585.963826
$\mathbf{d_5}$	-586.295229	-585.901000	-585.962818
$\mathbf{d_6}$	-586.294743	-585.900605	-585.962996
$\mathbf{d_7}$	-	-	-
$\mathbf{d_8}$	-586.290278	-585.896603	-585.956243
$\mathbf{d_9}$	-586.295997	-585.902467	-585.963095
$\mathbf{d_{10}}$	-586.292607	-585.898727	-585.961282
$\mathbf{d_{11}}$	-586.294885	-585.900605	-585.961780
$\mathbf{d_{12}}$	-586.295533	-585.901268	-585.962093
$\mathbf{d_{13}}$	-	-	-
$\mathbf{d_{14}}$	-	-	-
$\mathbf{d_{15}}$	-586.292404	-585.898594	-585.958670
$\mathbf{d_{16}}$	-586.291704	-585.897794	-585.958225
$\mathbf{d_{17}}$	-586.296293	-585.902569	-585.963006

d_{18}	-586.294590	-585.900896	-585.962807

Table S33. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **a1'** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
a1'$_1$	-586.272670	-585.881061	-585.946688
a1'$_2$	-586.272519	-585.880879	-585.945959
a1'$_3$	-586.272791	-585.880793	-585.945131
a1'$_4$	-586.272208	-585.880270	-585.945229
a1'$_5$	-586.274585	-585.882305	-585.947598
a1'$_6$	-586.274908	-585.882633	-585.947481
a1'$_7$	-586.271036	-585.879503	-585.943468
a1'$_8$			
a1'$_9$	-586.273604	-585.881693	-585.945863
a1'$_{10}$	-586.272319	-585.880243	-585.944223
a1'$_{11}$	-586.275359	-585.883231	-585.947826
a1'$_{12}$	-586.275954	-585.883819	-585.948548
a1'$_{13}$	-586.274812	-585.883357	-585.947428
a1'$_{14}$	-586.272392	-585.880692	-585.945438
a1'$_{15}$			
a1'$_{16}$			
a1'$_{17}$	-586.277948	-585.885863	-585.949063
a1'$_{18}$	-586.275994	-585.883807	-585.948228

Table S34. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **b1** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
b1$_1$	-586.272031	-585.878863	-585.940062
b1$_2$			
b1$_3$			
b1$_4$			
b1$_5$	-586.272893	-585.879500	-585.941614
b1$_6$	-586.272805	-585.879373	-585.941270
b1$_7$	-586.268151	-585.874821	-585.935529
b1$_8$	-586.269243	-585.876071	-585.937025
b1$_9$			
b1$_{10}$			
b1$_{11}$	-586.271769	-585.878250	-585.939428
b1$_{12}$	-586.272410	-585.878862	-585.939052
b1$_{13}$			
b1$_{14}$	-586.261192	-585.868624	-585.931445

b1$_{15}$	-586.271803	-585.878767	-585.939101
b1$_{16}$	-586.270764	-585.878292	-585.938300
b1$_{17}$	-586.271451	-585.878097	-585.939678
b1$_{18}$	-586.269265	-585.875762	-585.937522

Table S35. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **c1** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
c1$_1$	-586.288968	-585.895147	-585.956252
c1$_2$	-586.289278	-585.895505	-585.956501
c1$_3$	-586.285929	-585.892181	-585.954558
c1$_4$	-586.285278	-585.891425	-585.952907
c1$_5$	-586.292435	-585.898600	-585.959972
c1$_6$	-586.292379	-585.898642	-585.960104
c1$_7$	-	-	-
c1$_8$	-	-	-
c1$_9$	-	-	-
c1$_{10}$	-	-	-
c1$_{11}$	-	-	-
c1$_{12}$	-586.283230	-585.889691	-585.951274
c1$_{13}$	-586.283242	-585.889637	-585.951679
c1$_{14}$	-	-	-
c1$_{15}$	-586.288144	-585.894421	-585.954442
c1$_{16}$	-	-	-
c1$_{17}$	-586.291285	-585.897519	-585.957915
c1$_{18}$	-586.289539	-585.895741	-585.956704

Table S36. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **i** (6*R*, 7*R*) at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
i$_1$	-586.290196	-585.897640	-585.962229
i$_2$	-586.290955	-585.898363	-585.962955
i$_3$	-586.288979	-586.288979	-585.960515
i$_4$	-586.289042	-585.896437	-585.961422
i$_5$	-586.289834	-585.897220	-585.962185
i$_6$	-586.287832	-585.894961	-585.959508
i$_7$	-	-	-
i$_8$	-586.310048	-585.916289	-585.975199
i$_9$	-586.288429	-585.895850	-585.961438
i$_{10}$	-586.289856	-585.897455	-585.961530
i$_{11}$	-586.291134	-585.897722	-585.958966

i_{12}	-586.287832	-585.894961	-585.959504
i_{13}	586.287474	-585.894668	-585.957435
i_{14}	-586.283473	-585.890787	-585.954026
i_{15}	-586.286644	-585.893938	-585.957761
i_{16}	-586.283179	-585.890508	-585.954712
i_{17}	-586.281487	-585.888782	-585.953387
i_{18}	-585.953387	-585.892069	-585.956523
i_{19}	-586.289187	-585.896689	-585.962956
i_{20}	-586.289816	-585.897371	-585.963064
i_{21}	-586.288156	-585.895480	-585.960466
i_{22}	-586.289470	-585.896922	-585.962228
i_{23}	-585.960466	-585.897409	-585.962620
i_{24}	-586.288345	-585.895685	-585.960805
i_{25}	-586.289297	-585.896867	-585.962657
i_{26}	-586.290097	-585.897627	-585.962001
i_{27}	-586.285042	-585.892398	-585.957756
i_{28}	-586.289414	-585.897004	-585.962677
i_{29}	-586.291166	-585.898975	-585.963134
i_{30}	-	-	-
i_{31}	-586.286125	-585.893454	-585.958363
i_{32}	-586.285049	-585.892395	-585.957420
i_{33}	-586.288103	-585.895526	-585.961104
i_{34}	-586.286113	-585.893408	-585.958198
i_{35}	-586.284715	-585.892063	-585.957272
i_{36}	-586.287903	-585.895176	-585.960083
i_{37}	-	-	-
i_{38}	-586.285804	-585.893090	-585.958471
i_{39}	-586.284232	-585.891516	-585.955995
i_{40}	-586.287618	-585.895109	-585.960169
i_{41}	-586.287803	-585.895389	-585.960286
i_{42}	-586.285755	-585.893269	-585.958691
i_{43}	-586.289120	-585.896632	-585.962205
i_{44}	-586.292033	-585.899731	-585.963186
i_{45}	-586.284240	-585.891522	-585.956131
i_{46}	-586.291051	-585.898643	-585.962875
i_{47}	-586.292033	-585.899731	-585.963186
i_{48}	-586.285595	-585.892985	-585.957954
i_{49}	-586.284318	-585.891612	-585.955486
i_{50}	-586.284690	-585.892151	-585.956194
i_{51}	-586.287577	-585.895023	-585.958831
i_{52}	-	-	-
i_{53}	-586.284690	-585.892151	-585.956204
i_{54}	-586.289852	-585.897408	-585.960742

Table S37. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **h** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
h_1	-586.273117	-585.881776	-585.947599
h_2	-586.273582	-585.882220	-585.948073
h_3	-586.272954	-585.881602	-585.947956
h_4	-586.268445	-585.877066	-585.942731
h_5	586.268175	-585.876854	-585.942525
h_6	-586.268175	-585.876854	-585.942525
h_7	-586.267489	-585.875734	-585.939042
h_8	-586.265372	-585.873997	-585.938852
h_9	-586.274855	-585.883448	-585.948569
h_{10}	-586.273176	-585.881749	-585.947469
h_{11}	-	-	-
h_{12}	-	-	-
h_{13}	-586.273045	-585.881625	-585.947217
h_{14}	-586.274567	-585.883178	-585.948550
h_{15}	-586.267919	-585.876597	-585.940489
h_{16}	-586.269420	-585.877986	-585.941147
h_{17}	-586.271324	-585.879693	-585.944578
h_{18}	-586.272767	-585.881220	-585.946103
h_{19}	-586.276100	-585.884705	-585.949267
h_{20}	-586.277949	-585.886500	-585.951593

Table S38. The total electronic Energy (E), Enthalpy (H_{298K}) and Gibbs Free Energy (G_{298K}) of different conformers of cation **h'** at the mPW1K/6-31+G** level of theory. All energy values are in a.u.

Stationary point	E	H	G
h'_1	-586.276125	-585.884927	-585.950763
h'_2	-586.274427	-585.883164	-585.950245
h'_3	-586.267799	-585.876621	-585.942030
h'_4	-586.271249	-585.880271	-585.943737
h'_5	-586.274160	-585.882736	-585.948896
h'_6	-586.274400	-585.882913	-585.948817
h'_7	-586.271285	-585.879999	-585.945827
h'_8	-586.273637	-585.882166	-585.947365
h'_9	-586.272035	-585.880545	-585.946354
h'_{10}	586.275218	-585.883719	-585.948994
h'_{11}	-586.276460	-585.884753	-585.946945
h'_{12}	-586.273190	-585.881679	-585.947783
h'_{13}	-	-	-
h'_{14}	-	-	-

h'$_{15}$	-	-	-
h'$_{16}$	-	-	-
h'$_{17}$	-	-	-
h'$_{18}$	-	-	-
h'$_{19}$	-586.274178	-585.882686	-585.948702
h'$_{20}$	-586.276832	-585.885070	-585.950133

Table S39. Relative energies (in kcal/mol) of key stationary points at different levels of theory

Stationary point	L1		L2		L3		L4		L5	
	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG
a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TS(a-b)	5.33	6.88	5.44	7.08	2.53	3.81	4.07	5.43	3.30	4.61
b	5.90	7.07	6.14	7.36	-2.48	0.63	-0.76	0.72	-0.62	1.55
TS(b-b')	.85	12.10	9.87	12.25	0.99	3.67	0.29	2.51	2.00	4.52
b'	10.00	12.07	10.12	12.29	-0.20	2.30	0.23	1.50	1.40	3.63
TS(b-c)	16.00	19.08	16.35	19.30	6.62	9.93	7.77	9.69	8.70	11.68
c	-2.32	-0.39	-1.83	0.38	-12.04	-9.53	-11.38	-9.65	-11.46	-9.15
TS(a-c)[a]	14.58	17.80	15.44	18.57						
TS(c-d)	16.68	19.72	17.08	20.48	4.28	8.00	6.91	9.71	6.50	9.46
d	-4.98	-2.74	-2.40	-0.23	-14.78	-12.14	-12.51	-10.53	-13.92	-11.82
TS(d-c1)	8.89	12.17	9.36	12.61	-4.19	-0.85	-1.38	1.67	-1.87	1.67
c1	-2.80	-0.67	-2.47	-0.31	-13.81	-10.81	-12.94	-11.04	-12.42	-10.04
TS(a- a')	0.58	2.52	0.24	2.08	-0.39	1.67	0.36[c]	1.25[c]	0.16	2.27
a'	-2.20	-2.22	-2.30	-2.40	-2.00	-1.06	-1.61	-21.4	-2.19	-2.27
TS(a'-a1)	-0.81	0.99	-1.16	0.52	-1.17	0.37	-0.53[c]	-0.03[c]	-1.09	0.62
a1	-0.21	-0.36	-0.60	-0.46	-0.51	0.26	-0.61	-0.65	-0.61	-0.44
TS(a1-1)	-	-	-	-	1.36	3.06	4.02	5.99	2.13	3.79
1	-	-	-	-	-2.38	-0.20	-0.19	1.63	-0.43	1.48
TS(b1-	-	-	-	-	5.20	8.29	6.78	9.28	7.15	9.97

c1)										
TS(a1-c1)[a]	13.87	16.26	14.29	16.79						
a_{exo}	-2.08	-2.08	-3.00	-3.32	2.49	3.15	3.84	2.48	2.83	2.56
TS(a_{exo}-a)	4.63	6.10	4.18	5.68	4.61	5.87	3.76	4.06	4.50	5.90
TS(a-h)	6.47	6.90	5.90	6.24	3.87	4.41	3.04	3.11	3.83	3.92
h	-0.51	-1.56	-1.12	-1.78	-[d]	-[d]	-1.51	-1.55	-0.97	-1.72
h'	-0.99	-1.14	-1.63	-1.72	-1.32	-0.74	-1.74	-1.18	-1.57	-1.77
TS(h'-$a2_{exo}$)	5.34	5.29	4.75	4.72	2.87	3.46	1.55	0.76	2.68	2.74
$a2_{exo}$	-1.90	-1.97	-2.24	-2.27	-0.50	-0.63	-1.27	-1.86	-1.28	-1.85
a2	-1.25	-1.33	-1.38	-1.63	-1.28	-0.81	-0.81	-0.86	-1.26	-1.14
TS(a2-2)	-	-	-	-	-[d]	-[d]	3.78	5.16	2.13	3.81
b2	-	-	-	-	-2.45	0.01	-0.34	1.58	-0.59	1.64
TS(b2-c2)	-	-	-	-	5.72	9.18	7.01	9.73	7.53	10.47
TS(a2-c2)[a]	14.88	17.18	15.15	17.56						
c2	-4.22	-2.46	-3.76	-1.85	-14.64	-13.72	-12.93	-11.33	-13.13	-11.49

L1=B3LYP/6-31G** , L2=B3LYP/6-31+G**, L3= BB1K/6-31+G**, L4=PCM/mPW1K/6-31+G**, L5=mPW1K/6-31+G**.

[a] Conformation of the side chain is different and this particular transition state is otained only at 3LYP functional.

Direct conversion of **a** to **c** is oserved and hence these stationary points do not exist on PES.

[c] Single point calculation at PCM/ mPW1K/6-31+G**//mPW1K/6-31+G**.

[d] Stationary point could not e located.

Table S40. Relative energies (in kcal/mol) in the presence of OPP^- at the mPW1K/6-31+G** and PCM $_{Ether}$/mPW1K/6-31+G** level of theory

	mPW1K/6-31+G**		PCM_{Ether}/mPW1K/6-31+G**	
Stationary Point	ΔH	ΔG	ΔH	ΔG
a_{pp}	0.00	0.00	0.00[a]	0.00[a]
TS(a-b)$_{pp}$	8.95	10.07	4.32	5.53
$_{pp}$	-9.75	-8.86	-6.72	-5.30
TS(b-c)$_{pp}$	3.68	5.89	3.53	5.59
c_{pp}	-16.11	-14.33	-15.27	-14.74
TS(b-G1)	-11.13	-8.75	-8.41	-5.02
G1	-25.50	-26.58	-21.79[a]	-20.42[a]
TS(b-G2)	-10.76	-8.36	-7.32	-3.73
G2	-24.50	-24.38	-21.35	-19.87
TS(c-F1)	-13.44	-11.42	-12.94	-9.86
F1	-36.89	-37.42	-35.11	-33.46
TS(c-F2)	-17.35	-14.80	-16.88 [c]	-12.49
F2	-35.45	-35.45	-32.77	-31.10
1_{pp}	-9.72	-8.51	-7.60	-5.98
TS(b1-G3)	-11.06	-8.59	-8.48	-5.41
G3	-25.48	25.92	-21.76[a]	-20.26[a]
TS(b1-G4)	-10.72	-8.05	-7.37	-4.78
G4	-24.32	-24.19	-[d]	-[d]
$c1_{pp}$	-17.82	-16.80	-15.88[a]	-15.38[a]
TS(c1-F3)	-19.09	-16.55	-17.98	-15.58
F3	-60.6[e]	-58.2[e]	-34.52	-32.09
$c2_{pp}$	-17.69	-16.28	-16.59	-14.77
TS(c2-F4)	-18.92	-16.60	-18.03	-15.94
F4	-36.57	-36.71	-33.65[a]	-29.9[a]

[a] Single point calculation at PCM/mPW1K/6-31+G**// PCM/mPW1K/6-31G**.
Single point calculation mPW1K/6-31+G**// mPW1K/6-31G**.
[c] Intruder NImag of -4.7867 could not e eliminated.
[d] Stationary point not located.
[e] When Mg^{2+} is not ound to the formate, large changes during geometry optimization results in its interaction with the doule ond of the side chain.

Table S41. Activation barriers for the important transition states at different levels of theory. All values are in kcal/mol

	L1		L2		L3		L4		L5	
	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG	ΔH	ΔG
TS(a-b)	5.33	6.88	5.44	7.08	2.53	3.81	4.07	5.43	3.30	4.61
TS(b-c)	10.10	12.01	10.21	11.95	9.09	9.30	8.53	8.97	9.33	10.13
TS(a1-b1)	-[a]	-[a]	-[a]	-[a]	1.36	3.06	4.63	6.64	2.74	4.23
TS(b1-c1)	-[a]	-[a]	-[a]	-[a]	7.57	8.49	6.96	9.28	7.58	8.49
TS(c-d)	18.99	20.11	18.91	20.10	17.24	18.21	18.29	19.37	17.96	18.61
TS(d-c1)	13.87	14.90	11.76	12.84	10.59	11.29	11.12	12.20	12.06	13.50
TS(a- a')	0.58	2.52	0.24	2.08	-0.39	1.67	-[c]	-[c]	0.16	2.27
TS(a'-a1)	1.38	3.22	1.14	2.93	0.83	1.43	-[c]	-[c]	1.10	2.90
TS(a_{exo}-a)[b]	6.71	8.18	7.18	9.01	2.12	2.72	0.09	1.58	1.67	3.34
TS(a-h)	6.47	6.90	5.90	6.24	3.87	4.41	4.55	4.66	3.83	3.92
TS(h-$a2_{exo}$)	6.34	6.43	6.39	6.44	4.18	4.20	3.29	1.94	3.96	4.59

[a] Transition state not located.
The activation arrier for the *exo* to *endo* conversion is found to e higher than the hydride shift at 3LYP level of theory. This is due to the greater staility of the *exo* intermediate otained through optimization after IRC calculations. The *exo* form is in the half chair form rather than the oat form found at other level of theories.
[c] Single point energy calculation at PCM/mPW1K/6-31+G**//mpW1K/6-31+G**.

Optimized Cartesian coordinates of stationary points at mPW1K/6-31+G** level of theory

a

6	0.483006	-1.525454	0.217913	6	-0.755166	-0.955012	0.371279
6	2.622451	1.327658	-0.306730	6	-2.494353	1.192095	-0.171320
6	3.042943	0.037217	-0.948795	6	-3.508760	0.301135	0.480259
6	3.000894	-1.148065	0.005959	6	-3.261605	-1.205802	0.269945
6	1.740174	-1.126000	0.867033	6	-1.928102	-1.448744	-0.420727
6	1.722683	0.143460	1.717424	6	-1.904805	-0.652947	-1.722236
6	2.044630	1.354465	0.893435	6	-1.790097	0.765522	-1.239357
1	1.802000	2.308904	1.342355	1	-1.163277	1.462856	-1.779047
6	2.907162	2.569295	-1.086119	6	-2.388325	2.583250	0.351053
1	2.534947	3.456446	-0.582212	1	-1.674903	3.178687	-0.210608
1	3.979405	2.690019	-1.239982	1	-3.358359	3.078498	0.303831
1	2.451016	2.522469	-2.075461	1	-2.092859	2.584085	1.400884
1	4.058400	0.143563	-1.331742	1	-4.483614	0.570518	0.069340
1	2.428467	-0.135396	-1.837723	1	-3.582475	0.550889	1.539593
1	3.117391	-2.087443	-0.530112	1	-3.321995	-1.736613	1.217898
1	3.846136	-1.082769	0.688674	1	-4.035754	-1.634976	-0.360749
1	1.782916	-1.991614	1.564703	1	-1.771712	-2.524488	-0.573570
1	0.770559	0.281026	2.224455	1	-1.070759	-0.920525	-2.362329
1	2.457990	0.028562	2.515682	1	-2.809325	-0.828494	-2.304767
6	0.522372	-2.369556	-0.981848	6	-0.854739	-0.820942	1.829213
1	1.088484	-3.275755	-0.749364	1	-1.041086	-1.837518	2.199903
1	-0.462900	-2.648278	-1.336318	1	0.048721	-0.446350	2.293470
1	1.088641	-1.879363	-1.774459	1	-1.716518	-0.241892	2.146296
6	-0.811192	-1.162407	0.747823	6	0.593810	-0.931385	-0.210201
1	-0.796626	-0.900859	1.799886	1	0.589975	-1.189609	-1.263119
1	-1.554176	-1.930669	0.554564	1	1.108590	-1.746896	0.317236
6	-1.261370	0.130333	-0.072059	6	1.435273	0.346036	0.023139
1	-0.496883	0.895402	0.044617	1	0.881141	1.184063	-0.399567
1	-1.320502	-0.122711	-1.126527	1	1.541219	0.540790	1.086037
6	-2.565336	0.604750	0.467231	6	2.765100	0.231581	-0.645080
1	-2.507145	1.131478	1.411815	1	2.732846	0.219131	-1.728630
6	-3.766983	0.453672	-0.099208	6	3.963932	0.165013	-0.060773
6	-4.983443	1.034051	0.548353	6	5.206932	0.085868	-0.890101
1	-4.749760	1.546222	1.477029	1	4.989676	0.080925	-1.954397
1	-5.713491	0.252733	0.760253	1	5.773083	-0.814313	-0.650689
1	-5.469816	1.743364	-0.120941	1	5.861008	0.931894	-0.679234
6	-4.026516	-0.259416	-1.386734	6	4.205833	0.177290	1.415160
1	-4.752303	-1.057460	-1.231316	1	4.773462	-0.705345	1.709269
1	-4.470276	0.423658	-2.110670	1	4.813200	1.039994	1.688445
1	-3.141329	-0.695532	-1.839280	1	3.300150	0.206950	2.012982

b

6	-0.891909	-0.246538	0.494001	6	-1.862108	-0.024460	-1.691121
6	-2.548845	0.727401	-0.725997	6	-1.547109	0.796507	-0.362526
6	-3.680924	0.220353	0.085777	6	-2.856203	0.895683	0.206349
6	-3.243217	-0.909763	1.050863	6	-3.673016	-0.317326	0.345215
6	-1.878362	-1.416658	0.634222	6	-3.046422	-1.603934	-0.205427
6	-1.902645	-1.655461	-0.880858	6	-1.709059	-1.295693	-0.858502
6	-1.590744	-0.195229	-1.147598	6	-3.412871	2.192280	0.596088
1	-0.881079	0.122802	-1.900691	6	-0.778671	-0.509189	0.098114
6	-2.456997	2.158383	-1.054990	6	0.660985	-0.485772	-0.419134
1	-1.547508	2.417084	-1.586347	6	1.614709	0.474614	0.289261
1	-3.310941	2.397298	-1.695325	6	2.919339	0.576026	-0.435517
1	-2.569886	2.776462	-0.165485	6	4.123487	0.183105	-0.016048

1	-4.386677	-0.185482	-0.646892	6	5.330023	0.368010	-0.883238
1	-4.198929	1.029859	0.593146	6	-0.797303	-0.827814	1.579916
1	-3.226289	-0.533066	2.070679	6	4.408890	-0.451577	1.308671
1	-3.965055	-1.721627	1.024415	1	-1.013587	1.738372	-0.434450
1	-1.531615	-2.230626	1.267400	1	-3.290659	2.905202	-0.221671
1	-1.109177	-2.302159	-1.233849	1	-4.449567	2.150580	0.910722
1	-2.845157	-2.010048	-1.292479	1	-2.793898	2.587798	1.407300
6	-0.952870	0.907625	1.465144	1	-4.645231	-0.086850	-0.103322
1	-0.433713	0.592447	2.370751	1	-3.920346	-0.382158	1.412548
1	-0.432095	1.783209	1.088060	1	-2.926870	-2.339170	0.586423
1	-1.955461	1.201854	1.757798	1	-3.718046	-2.044368	-0.939441
6	0.552653	-0.656962	0.236132	1	-1.287854	-2.170809	-1.346865
1	0.600380	-1.488687	-0.462155	1	-1.052326	0.167643	-2.384692
1	0.905142	-1.055183	1.192340	1	-2.808176	0.161242	-2.194425
6	1.509576	0.441842	-0.221566	1	-1.795401	-0.958222	1.989538
1	1.065503	0.985556	-1.061311	1	-0.254291	-1.753789	1.761851
1	1.656953	1.170569	0.570717	1	-0.306002	-0.044624	2.152358
6	2.818512	-0.134712	-0.660432	1	1.044344	-1.503225	-0.319102
1	2.767369	-0.756956	-1.547687	1	0.685499	-0.275442	-1.487773
6	4.015411	0.029168	-0.093794	1	1.164107	1.470795	0.339928
6	5.229424	-0.621393	-0.680323	1	1.770664	0.159847	1.317618
1	4.993528	-1.204145	-1.566448	1	2.858219	1.022463	-1.422702
1	5.704112	-1.280241	0.046948	1	5.083217	0.834737	-1.833005
1	5.971752	0.128829	-0.953529	1	5.809981	-0.589527	-1.086843
6	4.285128	0.848430	1.128676	1	6.072478	0.989156	-0.381550
1	4.765911	0.236553	1.891869	1	4.898196	-1.415103	1.165890
1	4.980901	1.654500	0.895386	1	5.102017	0.165576	1.880733
1	3.396888	1.292282	1.567144	1	3.525512	-0.612890	1.918337

b'

6	1.984834	0.774251	1.292253	6	-1.049089	-0.069195	0.606335
6	1.496370	0.738464	-0.321794	6	-1.878594	0.579406	-0.759662
6	2.885940	0.707931	-0.525550	6	-3.282779	0.772087	-0.096053
6	3.641709	-0.554125	-0.294752	6	-3.435701	-0.281852	1.004176
6	3.018730	-1.382562	0.849986	6	-2.168516	-1.107250	0.853214
6	1.716087	-0.724702	1.258169	6	-2.208464	-1.787065	-0.516959
6	3.607818	1.910605	-0.992855	6	-1.816057	-0.674966	-1.394439
6	0.747875	-0.548433	0.055822	1	-1.398443	-0.829434	-2.385714
6	-0.664871	-0.223348	0.549916	6	-1.360495	1.804994	-1.461512
6	-1.654368	0.230791	-0.521858	1	-0.461533	1.614993	-2.038552
6	-2.923922	0.738080	0.084850	1	-2.122167	2.193610	-2.135254
6	-4.149400	0.222584	-0.028346	1	-1.142873	2.588887	-0.740620
6	-5.315190	0.874104	0.648743	1	-4.046752	0.701245	-0.866356
6	0.701549	-1.635145	-1.002268	1	-3.315227	1.790826	0.280471
6	-4.500071	-1.001882	-0.813775	1	-3.494301	0.173455	1.988758
1	0.971924	1.622701	-0.664401	1	-4.330689	-0.885495	0.879918
1	2.994578	2.805584	-0.981005	1	-1.972636	-1.790501	1.674931
1	4.530420	2.071535	-0.441008	1	-1.519169	-2.622289	-0.635846
1	3.896235	1.713733	-2.028756	1	-3.185883	-2.182559	-0.817645
1	4.693091	-0.336229	-0.126870	6	-0.920712	1.058821	1.610257
1	3.592339	-1.096300	-1.242174	1	-0.707553	0.603946	2.578656
1	2.867246	-2.416012	0.552854	1	-0.084117	1.707650	1.368058
1	3.703237	-1.389435	1.695983	1	-1.807278	1.671347	1.723228
1	1.289636	-1.157815	2.159502	6	0.330289	-0.705417	0.401338
1	1.229094	1.424517	1.720158	1	0.248030	-1.723287	0.022697
1	2.961441	1.127712	1.620637	1	0.755653	-0.808866	1.400106
1	1.681363	-1.976809	-1.320302	6	1.334088	0.044333	-0.473876
1	0.162479	-2.499612	-0.619274	1	0.978002	0.031629	-1.509724
1	0.176497	-1.286595	-1.888021	1	1.395228	1.090541	-0.184229
1	-1.054899	-1.119062	1.034871	6	2.679590	-0.604732	-0.427615

TS(b-c)

1	-0.627975	0.535939	1.333399	1	2.699571	-1.634986	-0.767354
1	-1.208997	1.030818	-1.122302	6	3.833935	-0.070854	-0.022697
1	-1.858106	-0.584094	-1.211146	6	5.093624	-0.879324	-0.045822
1	-2.815785	1.634649	0.686704	1	4.925678	-1.887977	-0.413004
1	-5.021831	1.759669	1.205887	1	5.526922	-0.946067	0.952261
1	-5.799451	0.181110	1.337103	1	5.842666	-0.405501	-0.680487
1	-6.069385	1.165997	-0.082480	6	4.010512	1.329981	0.471738
1	-4.993195	-1.731809	-0.171727	1	4.439189	1.323631	1.473883
1	-5.211340	-0.752701	-1.601483	1	4.716668	1.865373	-0.162957
1	-3.647155	-1.487173	-1.277406	1	3.091224	1.906019	0.504239

c **TS(c-d)**

6	-1.008081	-0.431601	0.265649	6	-0.906361	-0.273318	-0.028550
6	-1.678057	0.882620	0.364690	6	-1.621582	0.897377	-0.326888
6	-3.717754	0.140425	0.023754	6	-3.761622	-0.025023	0.732586
6	-3.287735	-1.301539	-0.258920	6	-2.985387	-1.316598	1.071109
6	-1.881020	-1.106569	-0.828558	6	-1.948186	-1.402594	-0.058369
6	-2.137033	0.041255	-1.800903	6	-2.781172	-0.884276	-1.242129
6	-2.596956	1.025631	-0.731985	6	-3.072309	0.458842	-0.551856
1	-2.944334	2.019882	-0.985158	1	-3.636721	1.199988	-1.109243
6	-1.493713	1.881584	1.415644	6	-1.166297	2.207347	-0.876313
1	-0.617218	2.466077	1.111425	1	-1.302607	2.169459	-1.956783
1	-2.325242	2.577772	1.471821	1	-1.792790	3.013004	-0.500974
1	-1.270725	1.452267	2.387012	1	-0.128015	2.434014	-0.671314
1	-4.652299	0.440134	-0.445792	1	-4.803554	-0.237514	0.509132
1	-3.823712	0.363767	1.084934	1	-3.766585	0.710362	1.533356
1	-3.326305	-1.931027	0.623722	1	-2.555926	-1.326569	2.069794
1	-3.929228	-1.757219	-1.008682	1	-3.630465	-2.189258	1.012194
1	-1.423940	-2.000254	-1.241737	1	-1.484125	-2.378474	-0.159607
1	-1.267189	0.388465	-2.348894	1	-2.213082	-0.784915	-2.166122
1	-2.926688	-0.178560	-2.514156	1	-3.672960	-1.474723	-1.438796
6	-0.877333	-1.210286	1.565293	6	-1.051292	0.829947	1.372680
1	-0.398320	-2.166187	1.365753	1	-1.077608	-0.017333	2.049207
1	-0.271290	-0.685935	2.297069	1	-0.121554	1.374203	1.431190
1	-1.843525	-1.412149	2.019099	1	-1.892242	1.455065	1.658466
6	0.413742	-0.097995	-0.337596	6	0.537090	-0.654481	-0.189029
1	0.342777	0.700550	-1.076005	1	0.518942	-1.386809	-1.000338
1	0.703705	-0.988311	-0.895685	1	0.835473	-1.226995	0.690881
6	1.521211	0.255383	0.650205	6	1.596051	0.395602	-0.510694
1	1.207293	1.067135	1.311232	1	1.316871	0.924048	-1.423267
1	1.735669	-0.593760	1.291995	1	1.666717	1.138420	0.281048
6	2.748152	0.683561	-0.092264	6	2.923621	-0.262022	-0.726171
1	2.656088	1.623080	-0.626934	1	2.974877	-0.902296	-1.599923
6	3.918766	0.046299	-0.168293	6	4.025775	-0.142815	0.016450
6	5.050059	0.628608	-0.956700	6	5.277638	-0.870921	-0.362344
1	4.781439	1.572622	-1.422604	1	5.147610	-1.466894	-1.261268
1	5.370428	-0.060766	-1.738048	1	5.599233	-1.530820	0.443450
1	5.915542	0.798472	-0.316091	1	6.092381	-0.167573	-0.534957
6	4.237256	-1.254196	0.498900	6	4.150826	0.697409	1.248071
1	4.562546	-1.985522	-0.240934	1	4.473469	0.084579	2.089650
1	5.068389	-1.126027	1.192372	1	4.918639	1.458199	1.107662
1	3.407121	-1.683589	1.050789	1	3.233278	1.201974	1.535225

d **TS(d-c1)**

6	-0.867402	-0.311778	0.052732	6	1.003417	-0.240685	-0.521747
6	-1.623010	0.960172	0.194878	6	1.706232	-0.669453	0.616723
6	-3.611199	-0.467858	0.657194	6	2.709970	1.482434	0.906538
6	-2.608021	-1.624366	0.584712	6	1.945400	1.956515	-0.349668
6	-1.682484	-1.253196	-0.675124	6	1.949662	0.697697	-1.252826
6	-2.654146	-0.398319	-1.488291	6	3.330190	0.137254	-0.931814

6	-3.015778	0.533464	-0.334558
1	-3.655010	1.377169	-0.575655
6	-0.950620	1.970809	-0.769252
1	-0.856296	1.612936	-1.789735
1	-1.569643	2.865022	-0.781846
1	0.035272	2.247970	-0.406702
1	-4.594144	-0.784854	0.318904
1	-3.727065	-0.074428	1.661673
1	-2.051339	-1.780556	1.507177
1	-3.050456	-2.583206	0.323447
1	-1.196305	-2.118083	-1.109997
1	-2.185695	0.080392	-2.342684
1	-3.500396	-0.979976	-1.843951
6	-1.599580	1.550587	1.601887
1	-1.893176	0.835106	2.364863
1	-0.613439	1.929156	1.857600
1	-2.291862	2.388716	1.644780
6	0.462767	-0.590921	0.574888
1	0.480114	-1.590061	1.011713
1	0.771774	0.129560	1.325204
6	1.499782	-0.602065	-0.601309
1	1.191510	-1.356462	-1.324727
1	1.488889	0.357224	-1.109149
6	2.853478	-0.925391	-0.067184
1	2.967585	-1.937554	0.303760
6	3.913975	-0.115194	-0.009739
6	5.216044	-0.614596	0.532103
1	5.156641	-1.650628	0.852700
1	5.535892	-0.009574	1.380580
1	5.999025	-0.534724	-0.221833
6	3.939702	1.307809	-0.468250
1	4.255320	1.957812	0.347569
1	4.674943	1.431316	-1.263168
1	2.986813	1.672781	-0.838650

6	3.058575	0.012298	0.562760
1	3.822732	-0.438825	1.187499
6	1.529993	-1.955355	-0.647961
1	2.438575	-2.419975	-0.275075
1	0.661248	-2.540288	-0.385337
1	1.650792	-1.865478	-1.722299
1	3.631084	2.039782	1.053764
1	2.129470	1.581139	1.820386
1	0.944785	2.317718	-0.125508
1	2.467517	2.762044	-0.858872
1	1.698124	0.876673	-2.293336
1	3.580427	-0.793645	-1.431820
1	4.120194	0.852385	-1.143780
6	1.211323	-1.241836	1.900579
1	1.149130	-0.429722	2.623446
1	0.235871	-1.704069	1.827660
1	1.924586	-1.963718	2.290900
6	-0.460951	-0.163464	-0.841917
1	-0.596201	-0.558184	-1.850949
1	-0.666082	0.904085	-0.939028
6	-1.500905	-0.766776	0.097325
1	-1.324368	-1.837014	0.227753
1	-1.422694	-0.309052	1.080141
6	-2.874484	-0.584294	-0.468704
1	-3.067796	-1.138732	-1.380536
6	-3.864052	0.166188	0.019263
6	-5.187784	0.223911	-0.677174
1	-5.205181	-0.387173	-1.575229
1	-5.433088	1.248997	-0.955125
1	-5.983264	-0.119559	-0.015716
6	-3.787050	0.991041	1.265258
1	-4.028918	2.030277	1.043018
1	-4.528113	0.649387	1.987879
1	-2.816050	0.970105	1.750344

c1

6	-0.990550	0.462757	-0.269719
6	-1.650634	-0.633869	-1.146215
6	-1.824261	-1.872796	-0.266254
6	-2.743864	-1.347002	0.836871
6	-3.277509	0.072155	0.250760
6	-2.083871	0.717869	0.704229
6	-3.097582	-0.156853	-1.244002
6	-1.959736	1.480232	1.945352
6	-0.852621	1.796244	-1.052507
6	0.350302	0.101675	0.383665
6	1.428811	-0.349218	-0.599641
6	2.674703	-0.756586	0.120974
6	3.874830	-0.174805	0.075010
6	4.214308	1.036874	-0.734749
6	5.022274	-0.734303	0.857190
1	-0.892427	-2.269508	0.123283
1	-3.659775	-1.914396	0.987593
1	-1.016919	1.306194	2.456102
1	-2.803334	1.337381	2.612599
1	-1.958898	2.533668	1.641766
1	-4.226781	0.371575	0.676756
1	-0.337022	2.536675	-0.446824
1	-0.259341	1.606722	-1.942437
1	-1.800040	2.219488	-1.374158

Ts(a-a')

6	-1.551298	-1.043014	-1.018440
6	-1.539514	0.392873	-1.608966
6	-2.155731	1.363735	-0.650185
6	-3.045642	1.033779	0.285520
6	-3.523697	-0.377499	0.466689
6	-2.961022	-1.372137	-0.545819
6	-3.651161	2.046249	1.202056
6	-0.436865	-1.223759	-0.077684
6	-0.656300	-1.565237	1.321916
6	0.929036	-1.008597	-0.527390
6	1.519755	0.285484	0.161428
6	2.840139	0.615321	-0.443418
6	4.043822	0.373710	0.085791
6	4.282480	-0.305191	1.395894
6	5.284819	0.801260	-0.630265
1	-1.872839	2.401529	-0.770348
1	-3.234304	3.036230	1.041918
1	-4.728965	2.103543	1.050385
1	-3.496630	1.774853	2.246672
1	-4.612227	-0.385994	0.396263
1	-3.318288	-0.689890	1.493182
1	-3.020598	-2.389904	-0.161234
1	-3.584085	-1.360503	-1.438554
1	-1.269710	-1.708146	-1.847830

1	-3.248840	0.747399	-1.825795	1	-0.533737	0.703660	-1.882037
1	-3.769652	-0.922499	-1.621860	1	-2.101302	0.354239	-2.543026
1	0.723433	0.966835	0.931743	1	-1.482800	-2.260928	1.446097
1	0.201606	-0.683981	1.126285	1	0.235726	-1.911340	1.831578
1	1.060857	-1.200086	-1.177366	1	-0.990473	-0.630099	1.793914
1	1.637079	0.442249	-1.315468	1	1.000334	-0.909217	-1.606309
1	-1.139319	-0.802570	-2.087666	1	1.554501	-1.837419	-0.195422
1	2.571691	-1.637498	0.745876	1	0.824775	1.109634	0.010224
1	5.417330	0.008964	1.550077	1	1.589077	0.113611	1.231268
1	5.841892	-1.008003	0.192503	1	2.796460	1.107591	-1.407171
1	4.738441	-1.615369	1.426141	1	5.066124	1.289655	-1.575324
1	4.629888	1.814039	-0.093286	1	5.928457	-0.056284	-0.826510
1	4.985430	0.795546	-1.466531	1	5.861884	1.490713	-0.014293
1	3.369984	1.460296	-1.269582	1	4.919461	-1.177952	1.253147
1	-2.308612	-2.666519	-0.828845	1	4.819343	0.360441	2.071467
1	-2.264274	-1.280847	1.813303	1	3.376886	-0.629881	1.899178

a' **Ts(a'-a1)**

6	1.977347	-1.452825	-0.700914	6	-1.803758	-1.152258	-1.133173
6	1.218469	-0.896451	0.557272	6	-1.324866	0.307211	-1.082277
6	2.235632	-0.465845	1.610015	6	-2.544549	1.217913	-1.130623
6	3.459690	0.195984	1.054782	6	-3.552973	0.809665	-0.096613
6	3.814037	0.207823	-0.229415	6	-3.594243	-0.393842	0.476732
6	2.976288	-0.469305	-1.275024	6	-2.624680	-1.480888	0.103702
6	0.295274	0.116819	0.049687	6	-0.352808	0.584849	-0.006888
6	-0.988662	-0.304345	-0.474949	6	0.749892	-0.316372	0.254494
6	-2.029830	-0.111576	0.709723	6	1.927986	0.149275	-0.713899
6	-3.352380	-0.654737	0.294177	6	3.142854	-0.658185	-0.430847
6	-4.419937	0.053238	-0.088829	6	4.272905	-0.230126	0.143261
6	-5.699704	-0.639196	-0.432830	6	5.429775	-1.162217	0.311144
6	5.052766	0.884952	-0.716789	6	-4.611311	-0.753700	1.509425
6	0.602883	1.539884	0.136994	6	-0.401488	1.841256	0.737395
6	-4.468244	1.543086	-0.197518	6	4.514770	1.156697	0.644508
1	4.102718	0.674982	1.781442	1	-4.297576	1.547766	0.170672
1	5.572628	1.400284	0.085499	1	-5.242362	0.092069	1.766404
1	5.738962	0.161554	-1.157052	1	-5.252403	-1.559959	1.153056
1	4.821100	1.612027	-1.495821	1	-4.133121	-1.112771	2.421193
1	3.629892	-1.011096	-1.959877	1	-3.175590	-2.406302	-0.067075
1	2.482846	0.284369	-1.897597	1	-1.974545	-1.692863	0.959303
1	1.275790	-1.796269	-1.457757	1	-0.982990	-1.853038	-1.262763
1	2.499085	-2.331482	-0.324702	1	-2.425378	-1.241938	-2.021838
1	0.611610	-1.729943	0.916698	1	-0.695219	0.486342	-1.973567
1	1.763886	0.183456	2.349565	1	-2.279007	2.266045	-1.007925
1	2.528262	-1.358034	2.167121	1	-2.978150	1.151531	-2.129966
1	1.662197	1.724821	-0.039290	1	-1.333336	1.813714	1.316640
1	-0.035708	2.163146	-0.478475	1	0.439196	1.979158	1.406895
1	0.457662	1.818172	1.189614	1	-0.514688	2.698361	0.073740
1	-0.999051	-1.354087	-0.755478	1	0.534378	-1.354852	0.033716
1	-1.325178	0.319239	-1.298289	1	1.117669	-0.207788	1.270318
1	-1.665667	-0.650458	1.583422	1	1.593147	-0.014763	-1.737257
1	-2.080479	0.942324	0.966417	1	2.107060	1.213165	-0.586961
1	-3.436334	-1.734010	0.322444	1	3.088303	-1.694237	-0.741963
1	-5.621161	-1.718222	-0.338575	1	5.214438	-2.157380	-0.066322
1	-6.000188	-0.402895	-1.453648	1	5.704912	-1.243940	1.362729
1	-6.504364	-0.296452	0.217365	1	6.305715	-0.779398	-0.212107
1	-4.766583	1.833457	-1.204643	1	4.787623	1.128535	1.699259
1	-5.225978	1.943685	0.475574	1	5.360125	1.601382	0.119952
1	-3.527728	2.036386	0.027757	1	3.666770	1.825494	0.535808

a1

6	1.649122	-0.840000	1.319887
6	1.333187	0.613235	0.969949
6	2.642581	1.390054	0.842951
6	3.581949	0.677823	-0.085088
6	3.497425	-0.617010	-0.391917
6	2.443535	-1.506811	0.204559
6	0.371379	0.812231	-0.128528
6	-0.671785	-0.151909	-0.400313
6	-1.825303	0.166194	0.655119
6	-2.990202	-0.714650	0.382903
6	-4.184094	-0.341153	-0.091372
6	-5.273533	-1.351058	-0.260700
6	4.452491	-1.279471	-1.329845
6	0.352599	2.068687	-0.877428
6	-4.564668	1.052827	-0.472157
1	4.387972	1.268058	-0.500515
1	5.155707	-0.570672	-1.757136
1	5.020864	-2.054594	-0.815866
1	3.922031	-1.768612	-2.147264
1	2.919286	-2.406770	0.595567
1	1.787345	-1.862160	-0.595612
1	0.754399	-1.410058	1.562295
1	2.247926	-0.820060	2.228510
1	0.745430	1.060662	1.796863
1	2.482720	2.411899	0.507296
1	3.082641	1.481157	1.837295
1	1.181810	1.984542	-1.593366
1	-0.563029	2.212351	-1.440451
1	0.580828	2.936683	-0.264063
1	-0.367573	-1.180431	-0.245659
1	-1.096795	-0.018985	-1.390202
1	-1.422173	-0.028876	1.647827
1	-2.088825	1.218767	0.601894
1	-2.836521	-1.762014	0.612602
1	-4.957893	-2.349168	0.028043
1	-5.608267	-1.381325	-1.297634
1	-6.141196	-1.078856	0.339884
1	-4.897517	1.077236	-1.509608
1	-5.409577	1.386297	0.129860
1	-3.767690	1.780986	-0.358687

Ts(a1-b1)

6	-1.578586	0.875563	-1.090785
6	-2.970147	1.262751	-0.598920
6	-3.192200	0.353358	0.576492
6	-2.792557	-0.931807	0.548426
6	-2.224314	-1.537323	-0.700294
6	-1.665249	-0.514937	-1.707266
6	-2.978131	-1.848969	1.708810
6	-0.678511	0.937974	0.104024
6	-0.665687	2.119988	0.980684
6	0.432656	0.010088	0.265024
6	1.593902	0.496210	-0.694571
6	2.730324	-0.463297	-0.619452
6	3.884849	-0.286136	0.030845
6	4.241799	0.922752	0.834320
6	4.950074	-1.334380	-0.022924
1	-3.703292	0.733585	1.450925
1	-3.435744	-1.347348	2.556189
1	-3.611468	-2.690983	1.428975
1	-2.024690	-2.271243	2.027593
1	-3.019111	-2.116529	-1.173655
1	-1.473074	-2.278753	-0.424913
1	-0.702694	-0.846301	-2.091245
1	-2.318369	-0.438358	-2.572909
1	-1.178072	1.589024	-1.823398
1	-3.036839	2.307045	-0.311391
1	-3.710300	1.118461	-1.386043
1	-1.529782	2.763862	0.899361
1	-0.491831	1.838178	2.016275
1	0.214555	2.701200	0.679751
1	0.819792	0.010866	1.279094
1	0.179045	-1.001306	-0.032645
1	1.213707	0.545138	-1.713602
1	1.894531	1.500087	-0.408531
1	2.586743	-1.390817	-1.160354
1	4.652629	-2.191924	-0.619288
1	5.197194	-1.681225	0.980520
1	5.866748	-0.924541	-0.446548
1	4.500583	0.631177	1.851999
1	5.126727	1.402584	0.416766
1	3.453680	1.667110	0.890601

b1

6	-1.873792	0.781295	-1.172481
6	-3.190697	0.968312	-0.409742
6	-2.609084	0.312895	0.829817
6	-2.249182	-1.029205	0.708378
6	-2.289106	-1.628192	-0.645787
6	-1.851085	-0.622995	-1.740110
6	-1.831494	-1.836511	1.864427
6	-1.047618	0.848270	0.120348
6	-0.883481	2.228148	0.719010
6	0.232965	0.046751	0.247469
6	1.385280	0.663590	-0.562160
6	2.535232	-0.287793	-0.656496
6	3.737798	-0.171999	-0.089233
6	4.175173	0.968410	0.774862
6	4.784512	-1.220303	-0.304667
1	-2.772680	0.702464	1.826684
1	-1.766627	-1.263992	2.783407

Ts(b1-c1)

6	-2.167929	-1.591327	0.553727
6	-1.763984	-1.682766	-0.923685
6	-1.706870	-0.225873	-1.359527
6	-3.116767	0.355556	-1.250717
6	-3.194182	0.591836	0.200502
6	-2.206302	-0.085093	0.938688
6	-1.020923	0.498455	-0.177549
6	-0.928459	2.014398	-0.287592
6	-2.035383	0.237394	2.396736
6	0.321231	-0.046220	0.295772
6	1.395704	-0.028301	-0.808683
6	2.643874	-0.689162	-0.318675
6	3.800425	-0.104939	0.004534
6	4.963547	-0.925549	0.466636
6	4.068600	1.364885	-0.066632
1	-0.798398	-2.166807	-1.041265
1	-3.141231	-2.031895	0.755311

1	-2.581258	-2.621537	1.998808
1	-0.892086	-2.350967	1.667034
1	-3.341503	-1.890493	-0.800202
1	-1.731790	-2.560313	-0.684774
1	-0.856540	-0.883167	-2.094613
1	-2.521112	-0.689546	-2.593099
1	-1.616151	1.528449	-1.919947
1	-3.442883	2.005785	-0.228199
1	-4.061324	0.470331	-0.830976
1	-1.796269	2.812248	0.743178
1	-0.477833	2.171039	1.725985
1	-0.167626	2.772535	0.104132
1	0.531585	-0.009873	1.294419
1	0.107284	-0.977494	-0.097284
1	1.033480	0.900386	-1.569747
1	1.695876	1.603105	-0.115246
1	2.353727	-1.166396	-1.266719
1	4.429593	-2.028928	-0.937734
1	5.108395	-1.644641	0.645854
1	5.669661	-0.787249	-0.770815
1	4.518182	0.597869	1.740839
1	5.024476	1.479102	0.320882
1	3.400886	1.707236	0.956320
1	-1.079746	-0.131754	2.758947
1	-2.812473	-0.246561	2.985424
1	-2.082901	1.306711	2.588231
1	-3.845627	1.345973	0.633435
1	-0.698095	2.452272	0.681080
1	-0.112461	2.271793	-0.957614
1	-1.817778	2.505960	-0.672689
1	-3.265006	1.288629	-1.792940
1	-3.923266	-0.306921	-1.583809
1	0.675906	0.553766	1.132109
1	0.238896	-1.066689	0.658724
1	1.028593	-0.567516	-1.683389
1	1.596237	0.989431	-1.130969
1	-1.242349	-0.064358	-2.327506
1	2.581906	-1.767179	-0.218503
1	5.286628	-0.612168	1.459648
1	5.817251	-0.788266	-0.197239
1	4.727935	-1.985542	0.502083
1	4.401779	1.733050	0.903729
1	4.878539	1.566352	-0.767878
1	3.209608	1.954861	-0.370784
1	-2.477496	-2.251600	-1.513842
1	-1.461930	-2.081308	1.218490

TS(a-h)

6	1.658166	-0.300576	-1.559585
6	2.349991	-1.397730	-0.785770
6	3.074478	-1.212085	0.314958
6	3.291337	0.158895	0.883333
6	2.917335	1.269415	-0.105846
6	1.586938	0.906571	-0.678945
6	3.712832	-2.340549	1.054517
6	0.378865	1.542827	-0.340555
6	-0.951026	1.014197	-0.810270
6	-1.458321	-0.095973	0.128515
6	-2.735358	-0.678606	-0.382881
6	-3.949263	-0.586700	0.164818
6	-5.125203	-1.248481	-0.482548
6	0.305666	2.642050	0.676210
6	-4.270298	0.139094	1.432675
1	2.212055	-2.392896	-1.184130
1	3.472185	-3.301210	0.609875
1	4.796868	-2.229881	1.064122
1	3.386368	-2.355018	2.094324
1	4.338787	0.287479	1.154533
1	2.726545	0.267785	1.811622
1	2.934724	2.237446	0.380414
1	3.649897	1.279928	-0.911211
1	1.049978	1.951148	-1.345922
1	0.678106	-0.641356	-1.875421
1	2.227119	-0.064586	-2.462310
1	1.257717	3.091509	0.927055
1	-0.377449	3.418364	0.344551
1	-0.112486	2.212047	1.585618
1	-0.894696	0.631993	-1.826209
1	-1.670534	1.829094	-0.822637
1	-0.698735	-0.878400	0.196035
1	-1.583618	0.302182	1.132627
1	-2.643069	-1.239896	-1.306275
1	-4.850974	-1.768947	-1.395785

h'

6	2.299703	0.685275	-1.296234
6	3.258741	-0.427082	-1.031023
6	3.288822	-1.120019	0.103343
6	2.350728	-0.795763	1.226989
6	1.750326	0.605149	1.137350
6	1.407991	1.063437	-0.201532
6	4.216168	-2.265870	0.327894
6	0.271092	1.931618	-0.477463
6	-0.897188	0.968343	-0.935045
6	-1.364271	-0.077365	0.067681
6	-2.533813	-0.828015	-0.483117
6	-3.783679	-0.852509	-0.012147
6	-4.834839	-1.668805	-0.696163
6	-0.160693	2.860248	0.647326
6	-4.264514	-0.116379	1.197728
1	3.933964	-0.669775	-1.838488
1	4.814289	-2.477578	-0.552924
1	4.889487	-2.059910	1.159513
1	3.658705	-3.166163	0.586576
1	2.869015	-0.879222	2.180521
1	1.550430	-1.537879	1.262384
1	0.951055	0.774750	1.851604
1	2.539250	1.338265	1.394349
1	0.500271	2.511577	-1.373165
1	1.711046	0.538730	-2.207311
1	2.834843	1.626524	-1.512800
1	0.654015	3.506164	0.966782
1	-0.960681	3.498946	0.282784
1	-0.539010	2.330778	1.516538
1	-0.611660	0.486720	-1.868954
1	-1.717401	1.645375	-1.171552
1	-0.555977	-0.786788	0.270801
1	-1.617086	0.389329	1.016606
1	-2.322093	-1.413429	-1.371018
1	-4.446653	-2.190283	-1.566496

1	-5.894775	-0.514953	-0.723310
1	-5.581291	-1.968524	0.196911
1	-5.043870	0.885238	1.252055
1	-4.675825	-0.554465	2.169221
1	-3.419860	0.641823	1.882490

1	-5.664572	-1.038341	-1.016023
1	-5.250595	-2.408479	-0.011784
1	-5.095223	0.537571	0.932741
1	-4.649050	-0.819996	1.936062
1	-3.503813	0.489540	1.679734

TS(a-i)

6	-1.423494	0.137443	1.282091
6	-1.590886	-1.106418	0.476045
6	-2.790170	-1.287856	-0.333990
6	-3.771927	-0.373585	-0.382852
6	-3.678671	0.943436	0.319455
6	-2.645151	1.018026	1.438758
6	-5.010710	-0.611850	-1.172413
6	-0.409486	0.289612	0.184968
6	-0.700014	1.217040	-0.961746
6	1.027982	0.056792	0.596406
6	1.992079	-0.339133	-0.517691
6	3.321694	-0.740091	0.037493
6	4.493774	-0.123991	-0.128816
6	4.706000	1.124796	-0.924637
6	5.737371	-0.678712	0.492533
1	-2.871511	-2.211800	-0.886801
1	-4.967300	-1.536164	-1.739458
1	-5.871800	-0.654696	-0.505473
1	-5.191043	0.213583	-1.860700
1	-4.659647	1.194489	0.721727
1	-3.491323	1.705451	-0.440132
1	-2.336119	2.048970	1.599787
1	-3.118720	0.701440	2.366222
1	-1.089858	-1.989736	0.858688
1	-0.726093	2.235560	-0.577283
1	0.068689	1.152614	-1.723542
1	-1.658469	1.003876	-1.424940
1	1.052088	-0.690917	1.390348
1	1.354912	0.990021	1.061574
1	1.569764	-1.183361	-1.073845
1	2.101236	0.474483	-1.229648
1	3.311357	-1.643453	0.637778
1	5.542768	-1.585003	1.059201
1	6.194821	0.051937	1.159656
1	6.477708	-0.908798	-0.273877
1	5.170865	1.890509	-0.303801
1	5.395219	0.933377	-1.747133
1	3.795893	1.542142	-1.343857
1	-0.942036	-0.040793	2.236039
1	-0.661750	-0.846779	-0.394161

i

6	1.433924	-0.915756	-0.559500
6	2.604194	-1.513968	0.088944
6	3.818937	-0.901537	0.263442
6	3.981834	0.431450	-0.101582
6	2.872654	1.186279	-0.716430
6	1.803851	0.324567	-1.368430
6	5.248075	1.132259	0.153808
6	0.290440	-0.765117	0.500461
6	0.549958	0.348305	1.504637
6	-1.051224	-0.606909	-0.214022
6	-2.257351	-0.626169	0.723788
6	-3.539650	-0.683276	-0.042588
6	-4.502849	0.238482	-0.103318
6	-4.483496	1.551980	0.613697
6	-5.734330	0.001437	-0.921635
1	4.627118	-1.425375	0.751304
1	5.867164	0.640586	0.896539
1	5.801795	1.143390	-0.791899
1	5.083599	2.175173	0.416933
1	3.280277	1.912637	-1.420564
1	2.470062	1.796598	0.101511
1	0.921913	0.926159	-1.568448
1	2.177018	-0.000238	-2.339095
1	2.479124	-2.512065	0.493642
1	0.426216	1.330230	1.048868
1	-0.160681	0.287258	2.323958
1	1.543196	0.290108	1.949127
1	-1.163085	-1.414944	-0.939700
1	-1.069033	0.323911	-0.783809
1	-2.188218	-1.506005	1.369983
1	-2.238101	0.240467	1.379811
1	-3.687457	-1.594686	-0.612373
1	-5.711198	-0.962232	-1.423195
1	-5.853178	0.778296	-1.677640
1	-6.625747	0.037030	-0.294654
1	-4.604970	2.370735	-0.096000
1	-5.323222	1.615987	1.306192
1	-3.573286	1.729690	1.177700
1	1.059149	-1.683379	-1.243694
1	0.251742	-1.711497	1.047863

TS(h'-a2$_{exo}$)

6	-1.354877	0.516967	-0.063601
6	-2.508205	1.346304	-0.547373
6	-3.830220	0.649037	-0.431788
6	-3.998390	-0.612974	-0.047196
6	-2.821926	-1.491498	0.257835
6	-1.518561	-0.949612	-0.314296
6	-5.346196	-1.234580	0.106912
6	-0.177840	1.075635	0.465664
6	0.039218	2.551572	0.570439
6	1.018216	0.231921	0.809752
6	1.883967	-0.019396	-0.440247
6	3.060334	-0.876560	-0.104842

a2$_{exo}$

6	1.437342	0.447046	-0.399870
6	2.628648	1.383202	-0.524197
6	3.909069	0.607568	-0.524688
6	4.035220	-0.638026	-0.072118
6	2.876306	-1.380896	0.523337
6	1.672397	-0.506074	0.831529
6	5.324766	-1.388419	-0.130935
6	0.129788	1.023187	-0.145471
6	0.001952	2.315992	0.526889
6	-1.073103	0.289718	-0.530224
6	-2.065416	-0.004658	0.635979
6	-3.167564	-0.889748	0.157029

6	4.350407	-0.534542	-0.131982	6	-4.436018	-0.541071	-0.075186
6	4.879429	0.812477	-0.510056	6	-4.993847	0.835829	0.093944
6	5.406280	-1.534816	0.220519	6	-5.430199	-1.562492	-0.528746
1	-4.691582	1.259487	-0.663740	1	4.772273	1.111526	-0.936937
1	-6.142685	-0.521299	-0.082002	1	6.103286	-0.809341	-0.618517
1	-5.465819	-2.071887	-0.580333	1	5.669134	-1.648616	0.869895
1	-5.475665	-1.630700	1.114182	1	5.204879	-2.323888	-0.677902
1	-2.990631	-2.485210	-0.155508	1	3.188773	-1.851071	1.457758
1	-2.735802	-1.635256	1.338094	1	2.589152	-2.201109	-0.138639
1	-0.666211	-1.530855	0.018228	1	0.803911	-1.127694	1.038213
1	-1.552571	-1.030388	-1.404069	1	1.863885	0.112821	1.706875
1	-2.556246	2.301705	-0.031328	1	2.545316	1.950109	-1.452674
1	-2.287000	1.589243	-1.592885	1	2.636036	2.115733	0.285669
1	-0.819888	3.159271	0.320184	1	0.594289	2.328505	1.444131
1	0.396226	2.815456	1.562379	1	0.470466	3.069239	-0.114483
1	0.838798	2.798412	-0.127838	1	-1.020523	2.601941	0.737495
1	0.728118	-0.721131	1.244734	1	-0.823696	-0.627454	-1.057491
1	1.613157	0.751280	1.556863	1	-1.604925	0.944258	-1.231861
1	1.275399	-0.514728	-1.200078	1	-1.520871	-0.505166	1.436303
1	2.199670	0.930134	-0.865908	1	-2.446735	0.926181	1.043952
1	2.816439	-1.892720	0.184891	1	-2.888375	-1.924134	-0.004286
1	4.984119	-2.499147	0.488681	1	-4.985666	-2.547538	-0.637367
1	6.009692	-1.179771	1.055975	1	-5.867052	-1.274594	-1.484978
1	6.087963	-1.682037	-0.617174	1	-6.253382	-1.635492	0.181819
1	5.481442	1.219805	0.302080	1	-5.445468	1.173684	-0.838584
1	5.541221	0.726197	-1.371695	1	-5.790471	0.828945	0.837626
1	4.111123	1.539485	-0.753971	1	-4.261816	1.577456	0.398789
1	-1.189081	0.725047	1.221806	1	1.371532	-0.211249	-1.268436

a2 **TS(a2-b2)**

6	1.565433	1.040980	0.916225	6	1.493106	-1.300265	0.402541
6	1.616163	-0.299233	1.633793	6	1.806594	-1.457686	-1.081938
6	2.204788	-1.386384	0.786636	6	2.235625	-0.071533	-1.474841
6	2.917349	-1.185818	-0.321555	6	3.038164	0.655881	-0.672763
6	3.224483	0.198080	-0.817793	6	3.618958	0.056389	0.572372
6	2.929515	1.280985	0.203508	6	2.805374	-1.118062	1.152268
6	3.469951	-2.309787	-1.134680	6	3.466402	2.040912	-1.016101
6	0.475279	1.240466	-0.048208	6	0.592523	-0.104159	0.494221
6	-0.515081	0.233982	-0.340400	6	-0.627414	-0.012732	-0.305983
6	-1.705070	0.505422	0.693170	6	-1.793911	-0.657431	0.539112
6	-2.713845	-0.579366	0.553372	6	-3.038686	-0.683133	-0.279903
6	-3.897119	-0.492836	-0.063621	6	-4.105200	0.110618	-0.143545
6	-4.416106	0.721647	-0.762746	6	-4.239445	1.203834	0.867189
6	0.353133	2.544684	-0.707940	6	0.702981	0.822546	1.627852
6	-4.826353	-1.664134	-0.075591	6	-5.296657	-0.066422	-1.030220
1	-0.941131	0.349082	-1.333241	1	-0.896767	1.024208	-0.486393
1	-0.149226	-0.774846	-0.182790	1	-0.569049	-0.542182	-1.248638
1	0.628166	-0.593425	1.987446	1	0.947698	-1.786795	-1.658079
1	2.211058	-0.168931	2.540197	1	2.587152	-2.201454	-1.242127
1	2.038125	-2.399786	1.127521	1	1.916330	0.338025	-2.423928
1	1.458707	1.865508	1.632284	1	0.940897	-2.150919	0.821009
1	4.559272	-2.275070	-1.150555	1	4.552262	2.091024	-1.099337
1	3.138199	-2.242521	-2.171279	1	3.185139	2.742491	-0.229820
1	3.167617	-3.276714	-0.743320	1	3.037259	2.380811	-1.953742
1	-0.678434	2.780805	-0.956255	1	0.024130	1.664471	1.554626
1	0.825772	3.358543	-0.167841	1	0.452990	0.243393	2.525927
1	3.674125	1.253767	0.996585	1	3.360559	-2.047883	1.060211
1	2.976991	2.271941	-0.241093	1	2.638654	-0.975518	2.218141
1	0.872122	2.438783	-1.669407	1	1.720550	1.166574	1.788139
1	4.280084	0.254409	-1.086773	1	4.627028	-0.284194	0.328493

1	2.686650	0.375692	-1.755198
1	-2.442839	-1.521445	1.013257
1	-5.773782	-1.403291	0.395495
1	-5.056564	-1.958522	-1.099597
1	-4.411768	-2.522851	0.443993
1	-4.653136	0.481994	-1.799156
1	-5.347408	1.049831	-0.301826
1	-3.729823	1.562847	-0.762629
1	-2.124442	1.487030	0.495080
1	-1.303455	0.515035	1.704077

1	3.769895	0.841636	1.314486
1	-3.060818	-1.436601	-1.057901
1	-6.184918	-0.282948	-0.437007
1	-5.504300	0.851348	-1.580627
1	-5.159877	-0.872034	-1.745636
1	-4.446602	2.150439	0.368380
1	-5.088873	1.007491	1.521109
1	-3.362337	1.339898	1.492167
1	-1.926750	-0.099013	1.461141
1	-1.510742	-1.674819	0.807838

b2

6	1.518061	-1.319110	0.546689
6	1.811361	-1.620240	-0.927600
6	1.857867	-0.139603	-1.256302
6	2.867776	0.599373	-0.642158
6	3.680892	-0.079040	0.395498
6	2.834842	-1.057560	1.248168
6	3.127308	2.006341	-0.986109
6	0.828248	0.009212	0.203712
6	-0.568156	-0.089131	-0.398370
6	-1.656467	-0.363367	0.653902
6	-2.949845	-0.699429	-0.016618
6	-4.063522	0.035778	-0.051775
6	-4.231074	1.375304	0.593155
6	0.910202	1.166238	1.169340
6	-5.282650	-0.464442	-0.761715
1	-0.804862	0.844197	-0.908427
1	-0.616060	-0.875865	-1.146537
1	0.996737	-2.115961	-1.440682
1	2.729996	-2.167001	-1.129112
1	1.391225	0.276630	-2.140123
1	0.900924	-2.028881	1.092860
1	4.119839	2.050423	-1.443488
1	3.181583	2.629254	-0.094445
1	2.409271	2.411958	-1.690956
1	0.529293	2.082172	0.723158
1	0.267790	0.926615	2.015618
1	3.374481	-1.990318	1.388053
1	2.671067	-0.632987	2.235740
1	1.897347	1.359898	1.575292
1	4.430302	-0.647498	-0.165475
1	4.230583	0.637344	1.000425
1	-2.964809	-1.656546	-0.526412
1	-6.122920	-0.542581	-0.071591
1	-5.585492	0.230548	-1.545204
1	-5.122426	-1.439736	-1.212803
1	-4.547064	2.111112	-0.146327
1	-5.019481	1.334696	1.344888
1	-3.332197	1.748985	1.073456
1	-1.772677	0.494151	1.310074
1	-1.351495	-1.202556	1.283117

TS(b2-c2)

6	-0.995658	0.187223	-0.325432
6	-1.724219	-1.037858	-0.926480
6	-3.090130	-0.506511	-1.335117
6	-3.478073	0.408828	-0.165885
6	-2.285521	0.446842	0.825006
6	-2.003772	-0.826218	1.347846
6	-1.906754	-1.888772	0.331418
6	-2.201832	1.646322	1.725729
6	0.376158	-0.070657	0.300998
6	1.500844	-0.268463	-0.720165
6	2.759058	-0.719945	-0.049054
6	3.918136	-0.064469	0.040523
6	5.088411	-0.681479	0.741223
6	-0.932428	1.428934	-1.187160
6	4.187473	1.291302	-0.532162
1	0.631180	0.776320	0.938706
1	0.370502	-0.942040	0.957047
1	-1.075639	-2.554562	0.557046
1	-2.802817	-2.518622	0.337315
1	-1.715158	-0.985983	2.383021
1	-1.187574	-1.540382	-1.725663
1	-2.111513	2.556512	1.138600
1	-1.355035	1.592903	2.405412
1	-3.109233	1.736540	2.320074
1	-0.363933	2.216834	-0.700422
1	-0.406229	1.162094	-2.104246
1	-3.804194	-1.311993	-1.484353
1	-3.035132	0.043262	-2.270368
1	-1.897412	1.826674	-1.477636
1	-4.363159	0.065608	0.364192
1	-3.680128	1.430442	-0.475823
1	1.197296	-1.022512	-1.451165
1	1.669364	0.649625	-1.275349
1	2.706989	-1.703731	0.405855
1	5.424598	-0.048917	1.562989
1	4.854766	-1.664944	1.139764
1	5.933115	-0.782887	0.059570
1	4.983832	1.233811	-1.274345
1	3.325035	1.749573	-1.005799
1	4.540323	1.965908	0.247843

c2

6	0.957051	0.295409	0.363558
6	1.619068	-1.060260	0.717441
6	3.019292	-0.758124	1.259337
6	3.697001	-0.097875	0.054827
6	1.824373	0.738204	-0.744434
6	2.660204	-0.358295	-1.154297

a_{exo}

6	3.228331	-0.610564	-1.116056
6	3.590687	-0.883928	0.135759
6	2.533546	-0.746716	1.193741
6	1.740001	0.562342	1.100179
6	1.509596	0.985659	-0.406824
6	1.831095	-0.144005	-1.383382

6	1.966170	-1.622029	-0.657365
6	1.859721	2.080976	-1.321409
6	-0.421137	0.115915	-0.380593
6	-1.447947	-0.694395	0.414741
6	-2.732478	-0.775636	-0.345965
6	-3.877305	-0.142030	-0.077871
6	-5.082575	-0.351881	-0.939709
6	0.799329	1.280579	1.514035
6	-4.091349	0.793369	1.069600
1	-0.821125	1.111570	-0.566703
1	-0.294668	-0.349964	-1.358196
1	1.113912	-1.902664	-1.268940
1	2.649036	-2.465976	-0.610158
1	3.127112	-0.313303	-2.130586
1	1.012964	-1.687534	1.361026
1	1.701436	2.863833	-0.585412
1	1.016268	2.125931	-2.020143
1	2.759482	2.260371	-1.901457
1	0.227144	2.155006	1.214470
1	0.268716	0.806016	2.334872
1	3.520425	-1.685171	1.525080
1	3.020799	-0.125005	2.140573
1	1.757214	1.621211	1.898729
1	4.612746	-0.585556	-0.272734
1	3.947318	0.950933	0.209644
1	-1.068700	-1.702645	0.580553
1	-1.595822	-0.246964	1.394135
1	-2.712254	-1.429645	-1.210683
1	-5.427330	0.593700	-1.358776
1	-4.885706	-1.037836	-1.758876
1	-5.908540	-0.752158	-0.351531
1	-4.869048	0.408110	1.729199
1	-3.202408	0.965969	1.668096
1	-4.445464	1.758204	0.706449

6	0.163591	1.542146	-0.423194
6	-0.045922	2.883708	0.124999
6	-0.989175	0.815054	-0.927737
6	-1.508621	-0.189207	0.178865
6	-2.721133	-0.891686	-0.320726
6	-3.976287	-0.735138	0.112275
6	-4.407632	0.211853	1.185302
6	4.943639	-1.360451	0.537552
6	-5.081629	-1.555361	-0.472474
1	3.919236	-0.709430	-1.940479
1	5.607591	-1.446023	-0.317718
1	5.397999	-0.681026	1.259016
1	4.881541	-2.336627	1.018894
1	2.964102	-0.802907	2.192285
1	1.842431	-1.588955	1.112451
1	0.803554	0.442457	1.644396
1	2.279296	1.370598	1.586083
1	2.209589	1.805793	-0.581010
1	1.123951	-0.968336	-1.258554
1	1.727033	0.213816	-2.406034
1	0.754323	3.224360	0.773604
1	-0.061425	3.544806	-0.752520
1	-1.021116	2.993565	0.593992
1	-0.732210	0.223488	-1.803104
1	-1.806282	1.493471	-1.157337
1	-0.714969	-0.905541	0.383136
1	-1.705757	0.358541	1.096409
1	-2.541065	-1.608174	-1.113267
1	-4.728014	-2.228794	-1.247624
1	-5.850879	-0.911951	-0.899658
1	-5.565953	-2.149534	0.302218
1	-5.172464	0.886723	0.801563
1	-4.866291	-0.338004	2.006802
1	-3.604737	0.815444	1.596795

TS(a_{exo}-a)

6	-2.847129	-1.336104	0.728973
6	-3.585753	-0.928244	-0.298168
6	-3.137155	0.287207	-1.056904
6	-2.604500	1.339694	-0.093432
6	-1.451296	0.800080	0.768454
6	-1.531431	-0.711061	1.080414
6	-0.114706	1.340305	0.541384
6	0.063246	2.667105	-0.065694
6	1.078733	0.606188	0.915907
6	1.648523	0.000898	-0.438660
6	2.766950	-0.931896	-0.123706
6	4.073362	-0.678474	-0.248657
6	4.656405	0.618250	-0.709800
6	-4.845578	-1.598541	-0.728309
6	5.080286	-1.737795	0.067296
1	-3.140447	-2.199608	1.309271
1	-5.064872	-2.472206	-0.121461
1	-5.691907	-0.914266	-0.664225
1	-4.775117	-1.915842	-1.769081
1	-3.967791	0.716231	-1.614779
1	-2.380480	0.017701	-1.799212
1	-2.312071	2.235914	-0.633031
1	-3.420426	1.626611	0.565608
1	-1.536118	1.326562	1.751667

h'

6	-1.310680	0.692138	0.372888
6	-1.905625	0.840497	-0.948462
6	-3.036540	-0.069963	-1.289824
6	-3.724110	-0.740108	-0.369023
6	-3.315292	-0.646582	1.072751
6	-1.820275	-0.377979	1.225530
6	-4.919243	-1.572109	-0.683516
6	-0.198057	1.528869	0.816237
6	0.127528	2.741393	-0.035527
6	1.051586	0.602758	1.049637
6	1.599738	-0.069854	-0.202578
6	2.774299	-0.927133	0.142953
6	4.047499	-0.752392	-0.221706
6	4.552598	0.363009	-1.080441
6	5.101996	-1.717258	0.221195
1	-3.319538	-0.112620	-2.331226
1	-5.170414	-1.532812	-1.738944
1	-4.750689	-2.612612	-0.407248
1	-5.783260	-1.229424	-0.113858
1	-3.543569	-1.574495	1.592732
1	-3.893205	0.130504	1.577786
1	-1.503571	-0.271504	2.259666
1	-1.286661	-1.255922	0.818585
1	-2.191392	1.901203	-1.030929

1	-0.753482	-1.235313	0.521926
1	-1.310586	-0.884986	2.131757
1	-0.678452	3.377048	0.294597
1	1.062844	3.061013	0.078205
1	-0.124399	2.568371	-1.140470
1	0.886287	-0.211099	1.601162
1	1.848747	1.261665	1.312705
1	0.854391	-0.535758	-0.955636
1	1.963335	0.817591	-1.081170
1	2.465417	-1.908765	0.233264
1	4.614741	-2.661105	0.399142
1	5.763339	-1.396911	0.845345
1	5.689217	-1.957462	-0.809437
1	5.341609	1.007282	0.043107
1	5.246551	0.464035	-1.612878
1	3.919931	1.387625	-0.920953
1	-1.076590	0.789015	-1.668483
1	-0.709173	3.434921	-0.087650
1	0.961580	3.275760	0.410640
1	0.416209	2.478612	-1.049844
1	0.813228	-0.146091	1.802920
1	1.812057	1.247801	1.485787
1	0.826388	-0.697648	-0.659368
1	1.870404	0.676696	-0.944888
1	2.546808	-1.782305	0.769935
1	4.696289	-2.512541	0.840185
1	5.879188	-1.204296	0.787838
1	5.591816	-2.171116	-0.640413
1	5.333403	0.914861	-0.557190
1	5.011342	-0.038422	-1.984013
1	3.787662	1.071753	-1.381374
1	-0.470845	1.848971	1.828664

TS(h-i)

6	1.380915	0.847995	-0.195930
6	2.379192	0.739550	-1.174565
6	3.609890	-0.006569	-0.968259
6	3.708354	-0.888875	0.036994
6	2.509986	-1.119432	0.909652
6	1.642356	0.118986	1.078699
6	4.916108	-1.716195	0.276813
6	0.191427	1.747702	-0.385827
6	-0.051938	2.569501	0.879046
6	-1.066215	0.988861	-0.856523
6	-1.587614	-0.137085	0.030085
6	-2.822670	-0.746784	-0.554508
6	-4.054447	-0.754732	-0.041564
6	-4.448869	-0.144158	1.266168
6	-5.178932	-1.414967	-0.777196
1	4.406643	0.145403	-1.678817
1	5.691640	-1.532485	-0.459543
1	5.319544	-1.512791	1.268719
1	4.658354	-2.775613	0.256895
1	2.814543	-1.480301	1.889160
1	1.922641	-1.931612	0.465671
1	0.720290	-0.117319	1.599284
1	2.165466	0.861364	1.693876
1	0.445626	2.442646	-1.187118
1	1.382719	-0.031229	-1.265189
1	0.824539	3.148446	1.162051
1	-0.858488	3.271373	0.684400
1	-0.347369	1.957606	1.726827
1	-0.879012	0.595873	-1.859042
1	-1.850775	1.735403	-0.976286
1	-0.829134	-0.921480	0.121254
1	-1.778093	0.231092	1.036044
1	-2.679465	-1.229925	-1.515193
1	-4.852803	-1.848181	-1.718721
1	-5.974341	-0.699569	-0.986883
1	-5.621725	-2.206561	-0.172417
1	-5.246471	0.583278	1.115547
1	-4.849642	-0.908540	1.932107
1	-3.636030	0.355467	1.783738
1	2.286096	1.364869	-2.054876

TS(a1'-i)

6	2.647716	-0.140308	-1.403731
6	2.358302	-1.123564	-0.288242
6	2.162850	-0.554363	1.077537
6	1.987836	0.884492	1.241652
6	2.003667	1.736753	0.204609
6	2.116704	1.276919	-1.213329
6	0.982517	-1.593278	0.090959
6	-0.222382	-0.909417	-0.508082
6	-1.573879	-1.308788	0.077567
6	-2.684237	-0.571290	-0.601411
6	-3.534934	0.305586	-0.064587
6	-4.606686	0.933385	-0.900432
6	1.878939	3.205207	0.411405
6	0.888868	-3.045856	0.476719
6	-3.540984	0.735015	1.368767
1	1.862886	1.248849	2.250332
1	1.702415	3.461939	1.450999
1	2.789615	3.704634	0.080995
1	1.065920	3.607748	-0.192347
1	2.756381	1.973259	-1.754986
1	1.133256	1.393989	-1.673256
1	2.302188	-0.548860	-2.351293
1	3.732561	-0.093645	-1.477665
1	2.610102	-1.113120	1.893194
1	1.790000	-3.388062	0.978830
1	0.028945	-3.259506	1.102177
1	0.790036	-3.616881	-0.446434
1	-0.191545	-1.134398	-1.577250
1	-0.106328	0.168461	-0.420771
1	-1.730766	-2.380387	-0.055143
1	-1.578257	-1.122490	1.151344
1	-2.804049	-0.803871	-1.654085
1	-4.573669	0.592550	-1.931474
1	-4.515649	2.019783	-0.894560
1	-5.592296	0.700752	-0.496982
1	-3.465842	1.820303	1.437591
1	-4.485901	0.461091	1.838058
1	-2.740245	0.304644	1.961994
1	3.061273	-1.947656	-0.303386
1	0.973201	-1.032083	1.267707

i

6	-2.664729	0.704933	-0.899690
6	-2.061921	1.201537	0.412551
6	-2.129803	0.182416	1.464536
6	-2.397608	-1.147854	1.270851
6	-2.498023	-1.651652	-0.023298
6	-2.376516	-0.758278	-1.190857
6	-0.615989	1.798641	0.352981
6	0.395602	0.826557	-0.250100
6	1.853628	1.221339	-0.019512
6	2.794276	0.247318	-0.653649
6	3.669018	-0.562871	-0.053988
6	4.553509	-1.462560	-0.861178
6	-2.681811	-3.090335	-0.258703
6	-0.645996	3.137935	-0.368733
6	3.884454	-0.652641	1.424469
1	-2.443219	-1.822236	2.112616
1	-2.418352	-3.701653	0.597715
1	-3.746624	-3.244063	-0.467782
1	-2.150616	-3.421981	-1.148535
1	-3.006893	-1.133848	-1.997746
1	-1.351198	-0.914875	-1.549258
1	-2.325455	1.315638	-1.731585
1	-3.745528	0.832720	-0.849747
1	-1.921415	0.513453	2.475815
1	-1.358055	3.822961	0.087156
1	0.329843	3.613313	-0.328227
1	-0.907207	3.024866	-1.419722
1	0.220956	0.743723	-1.325864
1	0.258807	-0.172083	0.172160
1	2.035578	2.209474	-0.444769
1	2.036829	1.309475	1.050165
1	2.754576	0.219126	-1.737791
1	4.371901	-1.363297	-1.928022
1	4.405336	-2.506634	-0.583103
1	5.603793	-1.237193	-0.674297
1	3.762592	-1.681995	1.762946
1	4.906123	-0.365361	1.674179
1	3.213517	-0.025882	2.003310
1	-2.673258	2.029246	0.787477
1	-0.320584	1.990195	1.388834

Optimized Cartesian coordinates of stationary points in the presence of pyrophosphate (OPP^-) at the mPW1K/6-31+G** level of theory

a_{pp}				$TS(a\text{-}b)_{pp}$			
6	1.219943	1.818666	-1.118588	6	0.962948	-0.416787	-1.468615
6	0.202984	2.513828	-0.262718	6	0.963123	0.193148	-0.097604
6	0.116382	2.240589	1.035754	6	0.750113	-0.525494	1.024970
6	1.035142	1.201833	1.615331	6	0.353603	-1.966268	0.982572
6	1.148812	-0.045117	0.752560	6	0.461085	-2.589586	-0.405634
6	1.267961	0.331239	-0.835603	6	1.481587	-1.825263	-1.264065
6	-0.822870	2.917152	1.974159	6	0.774979	0.099705	2.379177
6	2.462871	-0.418006	-0.715376	6	2.834031	-1.794032	-0.666779

6	2.415415	-1.867712	-1.017622	6	3.288864	-2.955834	0.100576
6	3.770489	0.233330	-0.426650	6	3.826885	-0.739214	-0.922003
6	4.835910	-0.617363	0.258700	6	4.506567	-0.164370	0.340726
6	6.058329	0.190878	0.553553	6	5.495418	0.891025	-0.028638
6	7.284466	0.035127	0.052050	6	6.820762	0.857423	0.120948
6	8.399655	0.944111	0.468196	6	7.662722	2.025664	-0.289647
6	7.684762	-1.018218	-0.933074	6	7.593289	-0.285820	0.700467
8	-0.599542	-1.983243	-1.786677	8	-1.963148	-1.525422	-2.226462
15	-1.942878	-1.664076	-1.242046	15	-2.860645	-0.568845	-1.539303
8	-2.983227	-2.831284	-1.236737	8	-4.394525	-0.739081	-1.801524
12	-3.249371	-2.971191	0.617492	12	-4.942524	-1.079371	-0.040403
8	-1.745128	-1.565413	0.445667	8	-2.890431	-1.017891	0.104342
15	-2.504463	-0.724444	1.745387	15	-3.098792	-0.227461	1.614533
8	-3.531051	-1.852856	2.093069	8	-4.657739	-0.370234	1.669081
8	-1.435719	-0.455440	2.727736	8	-2.325404	-1.009061	2.600694
8	-3.199773	0.463122	1.096336	8	-2.687766	1.219798	1.373757
12	-3.323807	1.121810	-0.693195	12	-2.104369	2.165344	-0.173350
8	-2.561380	-0.342868	-1.668111	8	-2.448719	0.898797	-1.559877
8	-4.958177	2.160540	-1.375902	8	-2.290989	4.194015	-0.412162
6	-4.201825	3.149287	-1.511139	6	-1.042908	4.267852	-0.348141
8	-2.981271	3.085960	-1.220125	8	-0.330660	3.244868	-0.193554
1	-0.445768	3.246080	-0.721234	1	1.100013	1.264275	-0.014441
1	-1.444207	3.641785	1.454927	1	1.018333	1.157796	2.331473
1	-1.460549	2.180042	2.459957	1	-0.204789	-0.023145	2.843931
1	-0.268923	3.435983	2.758791	1	1.500853	-0.400225	3.023965
1	0.642671	0.850468	2.568662	1	-0.677193	-2.019659	1.342960
1	2.020777	1.636827	1.803642	1	0.929756	-2.515531	1.735380
1	1.953993	-0.668173	1.166307	1	0.687962	-3.652737	-0.338806
1	0.270357	-0.683980	0.796155	1	-0.484180	-2.497804	-0.939356
1	0.477946	-0.223497	-1.334339	1	1.610449	-2.377031	-2.210735
1	2.198596	2.284756	-0.988532	1	1.579483	0.162002	-2.152420
1	0.966955	1.927514	-2.171546	1	-0.034568	-0.457984	-1.909966
1	2.893214	-1.974271	-1.996226	1	4.367427	-3.021970	0.192000
1	2.988620	-2.464342	-0.313883	1	2.861093	-2.847265	1.104610
1	1.390189	-2.220136	-1.120011	1	2.864759	-3.877725	-0.290963
1	4.135917	0.550245	-1.410299	1	4.606393	-1.236110	-1.514422
1	3.609862	1.157963	0.123386	1	3.418810	0.066705	-1.518439
1	4.431192	-1.005076	1.197675	1	3.717430	0.268759	0.955548
1	5.077217	-1.481793	-0.353686	1	4.968442	-0.958260	0.920907
1	5.909361	0.998433	1.262592	1	5.062246	1.786358	-0.460134
1	8.070516	1.690140	1.186585	1	7.064180	2.833324	-0.701967
1	8.819176	1.462131	-0.394974	1	8.398530	1.728311	-1.037724
1	9.213787	0.374314	0.917654	1	8.221160	2.416074	0.561782
1	8.110854	-0.557560	-1.824822	1	8.348755	-0.627935	-0.007567
1	8.462994	-1.654204	-0.510007	1	8.128588	0.035033	1.594599
1	6.866825	-1.658594	-1.246975	1	6.977961	-1.138108	0.970830
1	-4.611733	4.089439	-1.890705	1	-0.560991	5.246570	-0.428695

b_{pp}

6	0.628622	-0.368520	-1.358602
6	1.024573	-1.014479	-0.017072
6	0.309628	-2.261446	0.188738
6	-0.142658	-2.959251	-0.985935
6	0.668170	-2.659426	-2.257714
6	1.511265	-1.411146	-2.056834
6	0.077987	-2.747453	1.536566
6	2.366700	-1.493905	-0.769448
6	2.997855	-2.820580	-0.387814
6	3.415468	-0.383720	-0.716020
6	4.105189	-0.182402	0.631615

$TS(b\text{-}c)_{pp}$

6	1.442780	-2.001736	-1.601543
6	0.729221	-0.649835	-1.733546
6	0.870687	-0.201280	-0.341076
6	1.005400	-1.228764	0.606958
6	0.120314	-2.453701	0.346040
6	0.440410	-3.000810	-1.051326
6	1.237674	-0.892628	2.049110
6	2.386027	-1.666304	-0.420116
6	3.478175	-0.652362	-0.784240
6	4.097905	0.160023	0.352334
6	5.238875	0.988539	-0.142386

6	4.958353	1.045161	0.627469	6	6.522788	0.912996	0.203084
6	6.283659	1.130066	0.750063	6	7.091694	-0.050926	1.196364
6	6.970890	2.461161	0.724125	6	3.027503	-2.828164	0.310485
6	7.206994	-0.035178	0.927748	6	7.531306	1.838839	-0.403938
8	-2.696188	-1.738513	-1.609541	8	-2.203816	-1.238805	-2.226919
15	-3.206753	-0.546720	-0.883371	15	-3.042581	-0.314088	-1.430985
8	-4.719260	-0.569439	-0.499850	8	-2.709875	1.171551	-1.515743
12	-4.550129	-0.460793	1.365140	12	-2.037928	2.329002	-0.160568
8	-2.587157	-0.677667	0.698072	8	0.008518	2.721560	-0.305015
15	-2.140992	0.425752	1.937960	6	-0.325077	3.928076	-0.406940
8	-3.549201	0.514725	2.610225	8	-1.525195	4.282219	-0.390599
8	-1.083900	-0.265302	2.710743	8	-4.584364	-0.565771	-1.465205
8	-1.778491	1.716702	1.225753	12	-4.853823	-0.920561	0.354390
12	-1.822615	2.282815	-0.598945	8	-4.363928	-0.238815	2.023722
8	-2.770237	0.817096	-1.390905	15	-2.847487	0.027471	1.744767
8	-1.913480	4.219791	-1.230841	8	-2.599902	1.504154	1.455450
6	-0.729730	4.090547	-1.625148	8	-2.796566	-0.737527	0.202111
8	-0.108253	3.008711	-1.486834	8	-1.875788	-0.693750	2.585714
1	1.113913	-0.416885	0.884806	1	1.028325	0.842921	-0.085366
1	1.016539	-2.711356	2.093532	1	1.809019	0.021640	2.180261
1	-0.539135	-1.983545	2.050033	1	0.259498	-0.770202	2.518465
1	-0.363884	-3.736189	1.578367	1	1.756235	-1.705721	2.552159
1	-1.173546	-2.498860	-1.117751	1	-0.910672	-2.125104	0.441528
1	-0.331126	-4.013942	-0.801901	1	0.295234	-3.178338	1.137046
1	1.295018	-3.518741	-2.495934	1	0.866890	-4.000700	-1.003080
1	-0.012933	-2.513010	-3.092904	1	-0.448110	-3.037352	-1.675029
1	2.033589	-1.125153	-2.968183	1	1.952199	-2.332042	-2.503798
1	1.002464	0.645846	-1.426588	1	1.186210	0.055290	-2.421757
1	-0.426598	-0.376241	-1.615690	1	-0.336165	-0.749087	-2.017251
1	3.869909	-2.999238	-1.016468	1	3.633554	-2.493296	1.146600
1	3.336768	-2.817589	0.646273	1	2.319266	-3.562321	0.673784
1	2.331668	-3.671316	-0.511951	1	3.690539	-3.323240	-0.400866
1	4.171485	-0.625081	-1.467546	1	4.269460	-1.237607	-1.256792
1	2.978683	0.562556	-1.028894	1	3.133681	0.038888	-1.551164
1	3.347440	-0.075438	1.412162	1	3.340898	0.827445	0.769527
1	4.693386	-1.058919	0.891828	1	4.410627	-0.489836	1.165476
1	4.411576	1.973862	0.501308	1	4.966286	1.737886	-0.877971
1	6.265828	3.278497	0.597048	1	7.077957	2.522859	-1.116126
1	7.697905	2.507933	-0.088070	1	8.313440	1.279188	-0.918624
1	7.523760	2.630069	1.649467	1	8.027532	2.430385	0.366549
1	7.966170	-0.038874	0.144550	1	7.880603	-0.646725	0.736078
1	7.739515	0.042894	1.876687	1	7.553038	0.486290	2.025695
1	6.701740	-0.995486	0.907014	1	6.357176	-0.733485	1.610959
1	-0.229486	4.939052	-2.099374	1	0.452559	4.689917	-0.512613

c_{pp} **TS(c-F1)**

6	1.260383	-1.589622	-2.084125	6	1.361675	-1.024858	-2.121698
6	1.981902	-2.555370	-1.145156	6	2.059703	-2.223950	-1.464936
6	0.794796	-3.358701	-0.615132	6	0.863173	-3.054123	-1.010615
6	-0.234835	-2.261162	-0.334964	6	0.112318	-1.969632	-0.258682
6	0.410456	-0.941675	-0.998315	6	0.635504	-0.512400	-0.907518
6	1.302202	-0.687517	0.099356	6	1.318851	-0.906257	0.264010
6	2.470335	-1.611797	-0.012521	6	2.612018	-1.621417	-0.151724
6	2.813113	-2.302459	1.303749	6	3.074616	-2.661515	0.857853
6	3.714463	-0.825466	-0.527603	6	3.744666	-0.615160	-0.441800
6	4.216758	0.360317	0.291847	6	4.536397	-0.088793	0.755734
6	5.456533	0.926327	-0.324950	6	5.432221	1.037717	0.351014
6	6.696130	0.927742	0.167672	6	6.765352	1.079381	0.361812
6	7.822843	1.547125	-0.601133	6	7.496566	2.308159	-0.085957

6	1.042426	0.216495	1.193913	6	1.096664	-0.285245	1.606404
6	7.097180	0.347051	1.487670	6	7.656476	-0.038098	0.807499
8	-2.695120	-1.334174	-2.206318	8	-2.073979	-1.531227	-1.849578
15	-3.362315	-0.355439	-1.325112	15	-3.079782	-0.612548	-1.228440
8	-2.887609	-0.780729	0.270173	8	-2.862477	-0.803661	0.427370
15	-2.646475	-0.000859	1.755969	15	-3.037830	0.178945	1.846999
8	-1.525806	-0.714876	2.420817	8	-2.025621	-0.322503	2.791842
8	-2.980680	1.113269	-1.470228	8	-2.907685	0.866331	-1.524875
12	-2.141956	2.326112	-0.264987	12	-2.386185	2.300799	-0.358597
8	-2.416750	1.467243	1.418615	8	-2.916858	1.607314	1.333782
8	-4.899370	-0.528183	-1.092951	8	-4.565135	-1.072525	-1.298094
12	-4.885955	-0.890744	0.749285	12	-4.894498	-1.177989	0.558606
8	-4.079904	-0.243356	2.323999	8	-4.531383	-0.198406	2.113220
8	-1.754363	4.299690	-0.555384	8	-2.084899	4.223122	-0.924942
6	-0.541257	4.006470	-0.677524	6	-0.855508	3.970866	-0.976855
8	-0.141103	2.819418	-0.591258	8	-0.406897	2.834052	-0.695426
1	1.895750	-0.879947	-2.605821	1	2.042638	-0.267609	-2.500189
1	-0.338331	-0.205351	-1.254360	1	-0.103178	0.272199	-0.946293
1	0.761933	1.199054	0.807578	1	1.611985	0.672314	1.646389
1	0.123306	-0.138592	1.720897	1	0.043829	-0.109975	1.820536
1	1.851291	0.275878	1.911432	1	1.487026	-0.918731	2.398633
1	-1.162962	-2.346027	-0.901841	1	-0.811134	-1.666961	-0.918711
1	-0.508964	-2.136069	0.710419	1	-0.421507	-2.121736	0.672184
1	1.940292	-2.737311	1.782298	1	2.288422	-3.355912	1.137575
1	3.262212	-1.615095	2.014624	1	3.418130	-2.191084	1.774885
1	3.530128	-3.099025	1.112510	1	3.906013	-3.236854	0.452002
1	1.028424	-3.953735	0.262908	1	1.128197	-3.896605	-0.381733
1	0.436643	-4.040447	-1.383354	1	0.278166	-3.426112	-1.848751
1	4.507587	-1.572003	-0.589571	1	4.449455	-1.092890	-1.125513
1	2.787090	-3.144239	-1.577331	1	2.791550	-2.735967	-2.082507
1	0.634500	-2.093546	-2.815661	1	0.673453	-1.302921	-2.915806
1	3.540912	-0.486120	-1.545772	1	3.343245	0.243867	-0.978094
1	4.397547	0.070317	1.323864	1	5.109891	-0.892660	1.209416
1	3.456416	1.142208	0.315494	1	3.850510	0.270265	1.525279
1	5.309805	1.382658	-1.298431	1	4.913219	1.923902	-0.000553
1	8.604787	0.813623	-0.802545	1	8.161574	2.082296	-0.920870
1	7.488680	1.957844	-1.550327	1	6.814322	3.094797	-0.397831
1	8.287256	2.350432	-0.027586	1	8.123590	2.700416	0.716120
1	7.879087	-0.400663	1.349547	1	8.352809	-0.306888	0.012162
1	7.517671	1.121266	2.130632	1	8.262804	0.276039	1.658273
1	6.278280	-0.122396	2.023038	1	7.116512	-0.934137	1.095861
1	0.182524	4.804403	-0.863513	1	-0.163829	4.763257	-1.274608

F1

6	1.055669	-0.461766	-1.301977
6	2.142034	-1.424584	-1.795720
6	1.365460	-2.745617	-1.799329
6	0.929312	-2.695084	-0.350192
6	0.725696	-1.212655	-0.027074
6	1.966108	-1.928549	0.424712
6	3.076583	-1.556671	-0.565344
6	4.111437	-2.662634	-0.726377
6	3.759942	-0.217247	-0.241320
6	4.948024	-0.258341	0.721200
6	5.374017	1.120171	1.111512
6	6.528324	1.736528	0.852818
6	6.771510	3.138578	1.322686
6	2.212080	-2.208186	1.875467
6	7.672836	1.133863	0.098510

TS(c-F2)

6	1.428739	-0.361230	-0.275303
6	0.595087	-0.572289	-1.452922
6	1.566137	-1.139127	-2.488849
6	2.151646	-2.199036	-1.555364
6	2.554589	-1.349721	-0.317972
6	0.892298	-3.001019	-1.233179
6	-0.151315	-1.898344	-1.004771
6	2.683479	-2.125315	0.990297
6	3.903321	-0.641320	-0.638968
6	4.404035	0.448247	0.305189
6	5.757913	0.922233	-0.120233
6	6.919998	0.779195	0.518749
6	8.186684	1.324572	-0.066376
6	1.116059	0.501785	0.796412
6	7.095360	0.096853	1.839493

8	-2.116673	-2.324577	-0.778982	8	-0.966834	-0.698367	2.151895
15	-3.006642	-1.043478	-0.627243	15	-2.293294	-0.100773	1.792283
8	-3.063031	-0.729227	0.953580	8	-2.269034	1.378009	1.441840
15	-3.459156	0.795332	1.864319	12	-2.535298	2.229945	-0.255886
8	-2.702057	0.700664	3.109965	8	-0.716536	2.862814	-1.044281
8	-2.465585	0.122019	-1.398773	6	-1.209629	4.017187	-1.022093
12	-2.364042	2.014115	-0.901225	8	-2.375501	4.223952	-0.607628
8	-3.145571	1.859264	0.832433	8	-2.820244	-0.913917	0.425014
8	-4.461827	-1.466857	-0.885730	12	-4.596625	-1.258273	1.410131
12	-5.141564	-1.023554	0.843591	8	-5.140477	-0.921523	-0.350295
8	-4.988203	0.493366	1.910014	15	-3.761396	-0.551636	-0.989599
8	-2.735330	3.474030	-2.268334	8	-3.247282	-1.434334	-2.049509
6	-1.506642	3.730220	-2.228801	8	-3.480953	-0.482504	2.723577
8	-0.730462	3.079313	-1.486816	8	-3.620066	0.955550	-1.158221
1	1.404219	0.551949	-1.127869	1	-0.074189	0.235029	-1.724718
1	0.011306	-0.865348	0.706761	1	-1.036356	-1.972874	-1.636375
1	2.575725	-1.323643	2.395491	1	-0.510902	-1.847790	0.019082
1	1.292850	-2.518067	2.369947	1	1.004423	-3.659503	-0.376537
1	2.943081	-3.005173	2.007322	1	0.624471	-3.623901	-2.084152
1	-1.164640	-2.180198	-0.649015	1	2.981454	-2.783157	-1.946257
1	0.365202	-3.483785	0.127849	1	2.274240	-0.406625	-2.865986
1	3.656672	-3.622901	-0.951478	1	1.033419	-1.568716	-3.333695
1	4.692047	-2.794618	0.183990	1	3.037284	-1.491165	1.798170
1	4.809741	-2.423644	-1.528967	1	1.736842	-2.551304	1.309602
1	1.967475	-3.617774	-2.038269	1	3.400485	-2.934159	0.859256
1	0.527966	-2.718449	-2.497637	1	3.873791	-0.230967	-1.646214
1	4.103929	0.234639	-1.174976	1	4.640445	-1.445295	-0.665274
1	2.634506	-1.154392	-2.725994	1	4.426397	0.091469	1.332040
1	0.215347	-0.408982	-1.993837	1	3.720755	1.298201	0.284289
1	3.021726	0.470445	0.169493	1	5.777807	1.437899	-1.074888
1	5.774790	-0.805328	0.275119	1	8.014675	1.815458	-1.020799
1	4.672273	-0.807212	1.624246	1	8.918151	0.529667	-0.218428
1	4.628825	1.683653	1.664511	1	8.645768	2.047119	0.609789
1	6.977992	3.801190	0.480603	1	7.824153	-0.710003	1.753735
1	5.918248	3.536891	1.865798	1	7.490318	0.795459	2.578186
1	7.643221	3.184086	1.977646	1	6.177181	-0.324234	2.235863
1	7.923861	1.750483	-0.765834	1	-0.611458	4.863210	-1.370644
1	8.565668	1.098536	0.724788	1	1.893992	0.639527	1.536672
1	7.473722	0.127761	-0.256044	1	0.614089	1.417404	0.491311
1	-1.105940	4.533210	-2.851669	1	0.255229	-0.068138	1.360996

F2 **$c1_{pp}$**

6	-1.717413	0.590637	0.197906	6	-0.399772	0.058810	1.678745
6	-0.918406	1.484436	1.105744	6	-0.279986	1.570218	1.166585
6	-1.975598	1.871586	2.141289	6	-1.155381	1.417202	0.028224
6	-2.348750	0.423166	2.472617	6	-2.568338	1.394168	0.518416
6	-2.734848	-0.138664	1.075748	6	-2.348848	1.378059	2.052528
6	-0.988099	-0.108369	2.928949	6	-1.733032	0.032455	2.434730
6	-0.004055	0.574320	1.952740	6	-1.131471	2.287362	2.212746
6	-2.607014	-1.654059	0.959215	6	-0.744033	1.216391	-1.325759
6	-4.199284	0.267288	0.798050	6	-3.182226	2.734307	0.060800
6	-4.758045	0.041020	-0.603581	6	-3.367309	0.222166	-0.067842
6	-6.194667	0.447501	-0.679984	6	-4.760082	0.051678	0.533463
6	-7.259266	-0.308156	-0.953281	6	-5.440788	-1.158250	-0.021147
6	-8.634365	0.286743	-0.984556	6	-6.570682	-1.221370	-0.727009
6	-1.535015	0.459883	-1.117857	6	-7.413422	-0.044524	-1.109271
6	-7.216516	-1.773975	-1.255796	6	-7.100536	-2.538763	-1.204920
8	0.530940	-1.710707	-1.193340	8	0.248704	-1.493295	-1.361161
15	2.006947	-1.193850	-1.246461	15	1.734660	-1.509202	-1.242593
8	2.074958	0.257923	-1.618071	8	2.437734	-2.873401	-1.518918

12	3.103867	1.708799	-0.803831
8	2.084450	3.447301	-0.482145
6	2.852314	3.969964	-1.327086
8	3.750606	3.298486	-1.892072
8	2.629155	-1.457224	0.219860
12	4.055582	-2.689213	-0.697475
8	5.075012	-1.690565	0.497576
15	4.030520	-0.697991	1.093243
8	3.704808	-0.816759	2.512619
8	2.830692	-2.193808	-2.075519
8	4.118571	0.657182	0.420645
1	-0.396498	2.289212	0.595464
1	0.732339	1.173694	2.484220
1	0.548583	-0.144376	1.353175
1	-0.915413	-1.192057	2.919216
1	-0.797815	0.207614	3.953102
1	-3.142252	0.286155	3.205184
1	-2.785434	2.469491	1.730746
1	-1.550376	2.401435	2.992462
1	-2.920012	-1.999875	-0.023700
1	-1.584792	-1.993486	1.105226
1	-3.236505	-2.147261	1.700173
1	-4.338313	1.318827	1.047430
1	-4.814554	-0.290806	1.507594
1	-4.634821	-0.997127	-0.904024
1	-4.190320	0.643162	-1.313889
1	-6.376613	1.498487	-0.477153
1	-8.619669	1.350985	-0.763063
1	-9.287567	-0.202822	-0.260383
1	-9.095767	0.150168	-1.964040
1	-7.859844	-2.322518	-0.566345
1	-7.599588	-1.967338	-2.259063
1	-6.219949	-2.198343	-1.191424
1	2.736938	5.027342	-1.576001
1	-2.144637	-0.198749	-1.720902
1	-0.806771	1.067969	-1.638291
1	-0.135119	-1.021755	-0.998891

12	3.285937	-3.076158	0.153267
8	4.224521	-2.040985	1.403472
15	3.309353	-0.772152	1.423892
8	3.919534	0.359606	0.605957
12	3.405287	1.111714	-1.063510
8	4.266167	2.679260	-2.029544
6	3.246922	3.357655	-1.758846
8	2.284857	2.869349	-1.116180
8	2.470223	-0.341672	-1.886016
8	2.077533	-1.429517	0.406934
8	2.642477	-0.438136	2.695672
1	0.737918	1.886150	0.977972
1	0.488679	-0.093421	2.294543
1	-0.338263	-0.668089	0.871319
1	-2.349014	-0.821320	2.166269
1	-1.571683	-0.009148	3.509729
1	-3.233789	1.661284	2.615577
1	-1.303220	3.335445	1.982839
1	-0.681640	2.219702	3.199991
1	-2.565171	3.594254	0.306026
1	-3.340758	2.733038	-1.014784
1	-4.143141	2.868001	0.551077
1	-3.464103	0.360915	-1.144452
1	-2.805404	-0.702643	0.058881
1	-5.356328	0.945067	0.363478
1	-4.671549	-0.059230	1.616749
1	-4.929119	-2.094205	0.178557
1	-6.460541	-3.365377	-0.907580
1	-7.188126	-2.550223	-2.292260
1	-8.100180	-2.721498	-0.807967
1	-7.533763	-0.001913	-2.192489
1	-8.415199	-0.142531	-0.688867
1	-7.006363	0.906406	-0.780840
1	3.196813	4.397911	-2.091412
1	-1.542880	1.321388	-2.051979
1	0.148106	1.786982	-1.575931
1	-0.406257	0.131630	-1.371407

TS(c1-F3)

6	-0.398385	0.075567	1.776162
6	-0.273315	1.542350	1.191604
6	-1.140380	1.408565	0.028238
6	-2.561480	1.399748	0.506318
6	-2.359137	1.415534	2.043094
6	-1.763744	0.076383	2.479504
6	-1.134003	2.317379	2.191684
6	-0.715379	1.205685	-1.299645
6	-3.176926	2.727075	0.018951
6	-3.354464	0.215439	-0.063509
6	-4.755592	0.064392	0.523315
6	-5.442738	-1.146153	-0.021193
6	-6.568791	-1.207522	-0.733353
6	-7.398688	-0.027881	-1.134660
6	-7.107862	-2.525448	-1.199223
8	0.201447	-1.392028	-1.342072
15	1.694684	-1.461886	-1.237463
8	2.329448	-2.847831	-1.552796
12	3.201909	-3.112820	0.101801
8	4.205584	-2.123266	1.334795
15	3.334187	-0.826102	1.409613

F3

6	3.132000	-2.905032	-0.192179
6	4.478914	-2.592617	0.469072
6	4.033638	-1.225356	1.002046
6	3.573631	-0.518106	-0.301563
6	2.837255	-1.653406	1.858759
6	2.164102	-2.745783	0.998704
6	4.768806	0.065374	-1.056704
6	2.512399	0.569260	-0.099407
6	2.954051	1.822757	0.660492
6	1.798188	2.758293	0.888310
6	1.311399	3.670284	0.018923
6	1.893275	3.920800	-1.337641
6	2.514928	-1.672079	-2.320077
6	0.165234	4.562895	0.402058
8	-0.632942	-1.487252	-2.201252
15	-1.309626	-0.349723	-1.345896
8	-2.793717	-0.503914	-1.454279
12	-4.139087	-0.587532	-0.040221
8	-2.989742	-0.385062	1.469389
15	-1.516545	-0.122159	1.708681
8	-1.172503	1.386702	1.599468

8	3.956487	0.302278	0.597633
12	3.439031	1.108526	-1.044966
8	4.319420	2.661770	-2.013165
6	3.311513	3.354813	-1.734316
8	2.348116	2.879440	-1.084676
8	2.449207	-0.308283	-1.877792
8	2.054214	-1.425515	0.399593
8	2.706530	-0.506355	2.702289
1	0.746195	1.856629	1.005252
1	0.456268	-0.058371	2.438646
1	-0.308687	-0.684777	1.004859
1	-2.375513	-0.780143	2.209373
1	-1.647261	0.060061	3.561135
1	-3.247853	1.723992	2.587070
1	-1.289718	3.357544	1.918656
1	-0.702728	2.283046	3.189185
1	-2.562754	3.592724	0.251094
1	-3.325874	2.704257	-1.057946
1	-4.142032	2.870612	0.498463
1	-3.435910	0.330336	-1.144363
1	-2.797223	-0.707869	0.092324
1	-5.341769	0.960389	0.334092
1	-4.679607	-0.031173	1.609013
1	-4.941083	-2.084332	0.192906
1	-6.477440	-3.354287	-0.888027
1	-7.188708	-2.549014	-2.286873
1	-8.111676	-2.694527	-0.806675
1	-7.512736	0.002526	-2.218949
1	-8.403628	-0.111643	-0.718683
1	-6.984774	0.923251	-0.815739
1	3.273627	4.395699	-2.066168
1	-1.485668	1.279663	-2.058766
1	0.213219	1.714708	-1.547430
1	-0.378439	0.074809	-1.295008

12	-0.080817	1.547248	0.066609
8	-0.713888	1.023763	-1.683392
8	-0.770610	-0.573534	0.150426
8	-0.766248	-0.905538	2.697279
8	-5.752541	-1.822613	-0.207299
6	-6.449808	-0.787115	-0.337109
8	-5.931794	0.355797	-0.310070
1	3.043707	-3.850958	-0.718841
1	2.085368	-3.684739	1.542603
1	1.158922	-2.470535	0.690263
1	2.149074	-0.858982	2.135156
1	3.203557	-2.069353	2.795455
1	4.789563	-0.660919	1.544940
1	5.310447	-2.558899	-0.231179
1	4.725124	-3.289136	1.268840
1	5.482874	-0.707645	-1.324838
1	4.449645	0.542504	-1.982692
1	5.295521	0.803094	-0.453144
1	2.155002	0.865883	-1.091763
1	1.678054	0.091583	0.428938
1	3.748733	2.327984	0.116099
1	3.361900	1.538150	1.628671
1	1.319917	2.702390	1.863737
1	-0.291921	4.272677	1.345067
1	-0.602760	4.585961	-0.371698
1	0.526523	5.586787	0.501889
1	1.139321	3.792983	-2.114055
1	2.228998	4.956159	-1.397161
1	2.734812	3.276308	-1.568166
1	-7.529521	-0.883014	-0.476462
1	2.498353	-0.763130	-2.907541
1	2.199252	-2.579611	-2.817695
1	0.329046	-1.518086	-2.117643

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6	0.077406	-2.033755	-0.455079
6	-0.482600	-0.601963	-0.930823
6	-1.257372	-0.392889	0.261157
6	-2.514683	-1.189488	0.155334
6	-2.215366	-2.039787	-1.103291
6	-1.074271	-2.997252	-0.752805
6	-1.477447	-1.046694	-1.997499
6	-0.862959	0.396178	1.401427
6	-2.848037	-1.978430	1.417869
6	-3.606352	-0.108095	-0.098620
6	-4.983224	-0.679313	-0.436102
6	-5.971114	0.420412	-0.656912
6	-7.030850	0.736143	0.089587
6	-7.451989	0.016263	1.332579
6	-7.915205	1.884809	-0.287602
8	1.650470	-0.870622	2.387680
15	2.801074	-0.215776	1.712653
8	4.229058	-0.608454	2.205465
12	4.912990	-1.240242	0.567689
8	4.892992	-0.771749	-1.250535
15	3.370403	-0.450537	-1.408952
8	3.118827	1.052164	-1.454539
12	2.438376	2.264086	-0.154235
8	2.229717	4.278765	-0.318542

TS(c2-F4)

6	0.019446	-1.587799	-1.144032
6	-0.633033	-0.158068	-1.339268
6	-1.364869	-0.062855	-0.082274
6	-2.572877	-0.945487	-0.176747
6	-2.336524	-1.621347	-1.551538
6	-1.132879	-2.557998	-1.441854
6	-1.722031	-0.482508	-2.364442
6	-0.945875	0.634828	1.067338
6	-2.691051	-1.895688	1.013548
6	-3.786736	0.022984	-0.200132
6	-5.138790	-0.664405	-0.384592
6	-6.241056	0.343161	-0.456523
6	-7.219870	0.556899	0.424313
6	-7.410741	-0.206684	1.697491
6	-8.245174	1.622617	0.185324
8	1.091031	-0.886661	2.112004
15	2.443275	-0.353752	1.743599
8	3.637296	-0.924040	2.563236
12	4.622933	-1.637496	1.117405
8	5.115297	-1.146834	-0.621587
15	3.745545	-0.600913	-1.143940
8	3.722521	0.921985	-1.137028
12	2.784162	2.167663	-0.050354
8	2.779902	4.195286	-0.177335

6	0.990728	4.105946	-0.407142
8	0.483678	2.957920	-0.369520
8	2.682466	1.283204	1.465517
8	2.918278	-0.927528	0.179067
8	2.587236	-1.310734	-2.317794
1	0.305765	0.095937	-1.175454
1	0.954213	-2.150110	-1.094837
1	0.433203	-2.042344	0.573494
1	-1.301732	-3.654760	0.081285
1	-0.842521	-3.626194	-1.609500
1	-3.094008	-2.516823	-1.526350
1	-2.083278	-0.229825	-2.380152
1	-0.966683	-1.520853	-2.831267
1	-3.624217	-2.709454	1.204053
1	-3.213281	-1.324601	2.206530
1	-1.985026	-2.512052	1.806040
1	-3.303582	0.572282	-0.893771
1	-3.690903	0.501496	0.800600
1	-4.915447	-1.279077	-1.344743
1	-5.312694	-1.347984	0.354835
1	-5.780524	1.033150	-1.531874
1	-7.576992	2.375069	-1.196687
1	-8.941414	1.549124	-0.442825
1	-7.945964	2.628164	0.510073
1	-8.454097	-0.396696	1.210421
1	-7.502722	0.710974	2.171760
1	-6.788388	-0.795752	1.611844
1	0.339264	4.976656	-0.519598
1	-1.632445	0.472285	2.161488
1	-0.503931	1.374414	1.077639
1	0.037088	-0.090678	1.853165

6	1.584433	4.128807	-0.551907
8	0.994814	3.026785	-0.670832
8	2.518188	1.152583	1.555804
8	2.838553	-1.047740	0.270854
8	3.115429	-1.314393	-2.266433
1	0.080779	0.630297	-1.545341
1	0.852454	-1.645450	-1.844084
1	0.447743	-1.715742	-0.153701
1	-1.247479	-3.323718	-0.679539
1	-0.978134	-3.069516	-2.389599
1	-3.228336	-2.083386	-1.964206
1	-2.388450	0.350951	-2.569587
1	-1.289716	-0.819102	-3.303633
1	-3.417377	-2.675730	0.796911
1	-3.021956	-1.366014	1.904423
1	-1.744328	-2.372948	1.250323
1	-3.664898	0.773971	-0.980156
1	-3.801671	0.570623	0.742165
1	-5.132723	-1.243053	-1.309531
1	-5.308441	-1.372466	0.422479
1	-6.219689	0.977304	-1.336895
1	-8.074437	2.148401	-0.750516
1	-9.248523	1.195377	0.157535
1	-8.239033	2.354816	0.993907
1	-8.376659	-0.713425	1.695378
1	-7.419587	0.475257	2.548537
1	-6.642885	-0.952353	1.875732
1	1.046010	5.052791	-0.778547
1	-1.683478	0.728703	1.856271
1	-0.390972	1.545407	0.855655
1	-0.104136	-0.067530	1.508823

F4

6	0.099518	0.677736	1.690117
6	0.861756	1.557131	0.676480
6	1.592988	0.645649	-0.264615
6	2.706833	-0.026390	0.540752
6	2.493513	0.643903	1.925162
6	1.220742	0.116281	2.592358
6	2.030506	2.050749	1.536013
6	1.356311	0.494742	-1.568377
6	2.553673	-1.545939	0.547775
6	4.072573	0.351688	-0.061226
6	5.289421	-0.272561	0.619224
6	6.564949	0.286585	0.076877
6	7.540561	-0.349639	-0.573169
6	7.547838	-1.812570	-0.892128
6	8.755528	0.389032	-1.046422
8	-0.706568	-1.674312	-1.449169
15	-2.181464	-1.178880	-1.288679
8	-3.096284	-2.151946	-2.052285
12	-4.127518	-2.731550	-0.554555
8	-4.993139	-1.812444	0.812950
15	-3.893352	-0.825916	1.311319
8	-4.088445	0.554283	0.716427
12	-3.272625	1.675330	-0.591685
8	-4.117781	3.261123	-1.542640
6	-3.183256	3.957529	-1.075668
8	-2.293612	3.448744	-0.349793

TS(b-G1)

6	0.653788	-0.182291	-1.273693
6	1.098910	-0.981110	-0.030560
6	0.341357	-2.233998	0.047021
6	-0.077611	-2.813189	-1.167637
6	0.666512	-2.360514	-2.423907
6	1.513683	-1.135126	-2.113470
6	2.408293	-1.348377	-0.864144
6	3.458143	-0.244773	-0.735491
6	4.181347	-0.171004	0.607843
6	5.047962	1.043768	0.695053
6	6.375301	1.106178	0.809495
6	7.076060	2.428338	0.885233
6	3.058144	-2.703978	-0.651656
6	0.051154	-2.819858	1.355450
6	7.288246	-0.078442	0.881219
8	-2.589353	-1.854264	-1.516854
15	-3.157257	-0.679713	-0.781225
8	-2.476532	-0.752622	0.756045
15	-2.065972	0.403338	1.980809
8	-0.924641	-0.194228	2.701711
8	-2.836219	0.691335	-1.342050
12	-2.015309	2.260925	-0.588549
8	-1.860522	1.708783	1.234625
8	-4.648835	-0.821463	-0.357178
12	-4.424371	-0.685400	1.506584
8	-3.451662	0.371514	2.703551

8	-2.311652	0.287233	-1.579206
8	-2.608483	-1.519925	0.230893
8	-3.383594	-0.997208	2.669852
1	0.250055	2.310194	0.187897
1	-0.603224	1.283574	2.258441
1	-0.477833	-0.110569	1.212901
1	1.191284	-0.965549	2.685257
1	1.142784	0.519012	3.600706
1	3.370554	0.589968	2.565660
1	2.761056	2.631560	0.977503
1	1.699826	2.637248	2.392043
1	3.193742	-2.004185	1.300236
1	2.829821	-1.959273	-0.421933
1	1.531177	-1.852550	0.753221
1	4.182990	1.436370	-0.056170
1	4.079410	0.061419	-1.112858
1	5.250929	-0.071256	1.692253
1	5.264203	-1.354054	0.511438
1	6.693171	1.352958	0.235137
1	8.712650	1.444865	-0.790996
1	9.661800	-0.030414	-0.606481
1	8.865624	0.304914	-2.128785
1	8.399086	-2.301770	-0.416085
1	7.662171	-1.965673	-1.966164
1	6.646992	-2.327760	-0.575110
1	-3.143214	5.024726	-1.305494
1	1.971952	-0.144040	-2.188418
1	0.589168	1.072294	-2.066554
1	-0.026464	-0.983374	-1.317519

8	-2.371996	4.164631	-1.223153
6	-1.202549	4.171165	-1.678262
8	-0.451794	3.171662	-1.565665
1	1.192823	-0.484891	0.930222
1	1.010835	-3.031862	1.835642
1	-0.422793	-2.059258	1.988075
1	-0.533773	-3.731437	1.293303
1	-1.178246	-2.329200	-1.204169
1	-0.325019	-3.869883	-1.105024
1	1.286301	-3.180799	-2.787971
1	-0.046484	-2.125491	-3.212253
1	2.003022	-0.746643	-3.005113
1	1.025168	0.834575	-1.240147
1	-0.408597	-0.162230	-1.497632
1	3.907458	-2.811959	-1.326056
1	3.433789	-2.809428	0.364472
1	2.387307	-3.538476	-0.841054
1	4.195778	-0.407069	-1.525279
1	3.013564	0.726781	-0.943053
1	3.442339	-0.129281	1.412098
1	4.765684	-1.072619	0.773724
1	4.510126	1.985383	0.652454
1	6.378305	3.259994	0.831428
1	7.796600	2.534350	0.072784
1	7.638531	2.516596	1.816041
1	8.037259	-0.027740	0.089814
1	7.833765	-0.081462	1.826034
1	6.771829	-1.028755	0.791447
1	-0.830973	5.066588	-2.183191

G1

6	1.134654	-0.541837	-1.376990
6	1.442415	-1.040110	0.049940
6	0.555667	-2.227724	0.329650
6	0.433234	-3.126085	-0.657471
6	1.232254	-2.959655	-1.922025
6	2.053441	-1.675026	-1.860601
6	2.816117	-1.546003	-0.508689
6	3.863250	-0.431825	-0.585868
6	4.450489	0.009936	0.753826
6	5.285278	1.241155	0.610714
6	6.593638	1.387359	0.825027
6	7.260241	2.714323	0.623305
6	3.445163	-2.788088	0.094193
6	-0.057163	-2.368078	1.680825
6	7.515934	0.298293	1.278087
8	-2.446135	-2.207334	-1.041460
15	-3.066345	-0.800757	-0.755863
8	-3.015808	-0.615320	0.847161
15	-3.062068	0.859362	1.894106
8	-2.288944	0.498395	3.081496
8	-2.338933	0.308876	-1.453765
12	-1.856041	2.095534	-0.814374
8	-2.578212	1.936761	0.945178
8	-4.584677	-0.908715	-0.977391
12	-5.109906	-0.481258	0.809191
8	-4.617646	0.863761	2.000652
8	-2.018273	3.720957	-2.027847
6	-0.763581	3.758434	-2.035409
8	-0.084129	2.916452	-1.397437

TS(b-G2)

6	2.421461	-1.609121	-0.510111
6	1.119982	-0.869654	0.067501
6	0.321926	-1.979767	0.578289
6	-0.235782	-2.880501	-0.441516
6	0.650217	-2.981655	-1.701841
6	1.577186	-1.781136	-1.797026
6	0.771298	-0.537788	-1.393672
6	0.102090	-2.147995	1.957744
6	3.554065	-0.602660	-0.708151
6	4.254020	-0.130780	0.564328
6	5.200963	0.991268	0.284523
6	6.525049	1.014768	0.443073
6	7.349830	-0.124411	0.956700
6	2.944254	-2.844794	0.200624
6	7.314464	2.243673	0.108795
8	-1.996088	-0.660304	2.711799
15	-2.733076	0.246713	1.774224
8	-2.029991	1.528663	1.377679
12	-1.594918	2.293184	-0.329556
8	0.362764	2.829355	-0.701330
6	-0.062263	4.005852	-0.806617
8	-1.279027	4.276632	-0.665051
8	-4.237692	0.454196	2.116411
12	-4.988661	-0.322289	0.573792
8	-2.940743	-0.654667	0.369674
15	-3.145707	-0.290286	-1.306721
8	-2.527457	-1.425024	-2.022126
8	-4.704788	-0.224828	-1.275140
8	-2.534010	1.090121	-1.481895

1	1.444482	-0.325160	0.870466
1	0.731658	-2.442635	2.431190
1	-0.658103	-1.500510	1.952609
1	-0.676842	-3.259343	1.751999
1	-1.482768	-2.289931	-0.888947
1	-0.138845	-4.036149	-0.513585
1	1.882550	-3.828565	-2.054357
1	0.580230	-2.938907	-2.799061
1	2.630114	-1.524585	-2.773502
1	1.524990	0.450006	-1.573807
1	0.096443	-0.573429	-1.700229
1	4.346884	-3.055850	-0.457665
1	3.733694	-2.617372	1.130294
1	2.778687	-3.644879	0.083219
1	4.677271	-0.777292	-1.228120
1	3.449425	0.444875	-1.081422
1	3.633395	0.223021	1.448117
1	5.025700	-0.797690	1.199444
1	4.739370	2.119064	0.279354
1	6.555175	3.475975	0.299838
1	8.052052	2.643621	-0.124329
1	7.731081	3.057549	1.546043
1	8.336489	0.176805	0.569382
1	7.968637	0.556247	2.236829
1	7.025154	-0.663179	1.388500
1	-0.253483	4.536826	-2.607498

1	1.274578	-0.077976	0.795566
1	0.822963	-1.652223	2.601165
1	-0.869276	-1.463515	2.176714
1	-0.181030	-3.143310	2.280370
1	-1.180200	-2.399488	-0.752420
1	-0.500157	-3.847423	-0.021015
1	1.220303	-3.909975	-1.682652
1	0.003187	-3.011782	-2.575232
1	2.121949	-1.767141	-2.739930
1	1.224286	0.400275	-1.689427
1	-0.278766	-0.530457	-1.671824
1	3.812061	-3.231911	-0.333215
1	3.257461	-2.615653	1.217305
1	2.216779	-3.650905	0.262360
1	4.291182	-1.074411	-1.362768
1	3.190303	0.269215	-1.248211
1	4.768723	-0.959952	1.043099
1	3.503235	0.219566	1.277691
1	4.731652	1.891113	-0.099732
1	6.678901	3.046638	-0.255622
1	8.064238	2.028854	-0.654182
1	7.854306	2.608126	0.984174
1	8.130636	-0.380005	0.239236
1	7.856811	0.159084	1.880218
1	6.772586	-1.021655	1.155256
1	0.641660	4.812829	-1.026332

G2

6	-2.378344	-1.801866	0.430353
6	-1.091824	-1.253761	-0.278937
6	-0.355759	-2.423702	-0.845990
6	0.162076	-3.381428	0.197066
6	-0.683582	-3.379170	1.485100
6	-1.438406	-2.065592	1.638630
6	-0.546336	-0.922243	1.126075
6	-0.196243	-2.614011	-2.160124
6	-3.378038	-0.689963	0.755198
6	-4.122782	-0.100612	-0.441411
6	-4.919288	1.101490	-0.050059
6	-6.241266	1.272809	-0.095497
6	-7.223724	0.251335	-0.579199
6	-3.099790	-2.974933	-0.204400
6	-6.864124	2.560200	0.352738
8	2.517806	-1.374412	-2.206697
15	2.854928	-0.050261	-1.449439
8	1.723020	0.932600	-1.481482
12	1.063236	2.114953	-0.070947
8	-0.939361	2.479537	0.062035
6	-0.676660	3.662452	-0.271815
8	0.502308	4.026535	-0.497012
8	4.237091	0.422644	-1.932375
12	5.135222	0.292051	-0.254119
8	3.210961	-0.485467	0.066551
15	3.229601	0.454165	1.614089
8	2.899788	-0.521188	2.652282
8	4.718385	0.889116	1.459527
8	2.291933	1.601837	1.296715
1	-1.215265	-0.454117	-1.006895
1	-0.589150	-1.906192	-2.877964
1	1.602492	-1.702532	-2.082602

TS(b1-G3)

6	2.429539	0.941510	0.210167
6	1.030275	0.301768	0.618800
6	1.043248	-1.063520	0.081657
6	1.186623	-1.204482	-1.312580
6	1.763822	-0.002168	-2.058470
6	1.756989	1.225687	-1.158414
6	0.408792	1.256008	-0.426610
6	0.897010	-2.198201	0.991877
6	3.669506	0.056774	0.264405
6	4.921228	0.699150	-0.334588
6	6.036466	-0.286317	-0.470518
6	7.225131	-0.280152	0.134721
6	7.691548	0.764068	1.100690
6	2.657851	2.208295	1.021229
6	8.224580	-1.364925	-0.128652
8	-1.351922	-1.349382	-2.239220
15	-2.577006	-0.988202	-1.456016
8	-3.805201	-1.917980	-1.682899
12	-4.008586	-2.545957	0.079612
8	-3.976904	-1.835186	1.808404
15	-2.726287	-0.903501	1.700520
8	-3.131770	0.546248	1.508147
12	-3.241735	1.728947	0.011265
8	-2.270113	3.541049	-0.003987
6	-3.407351	4.065829	-0.086795
8	-4.448852	3.366794	-0.119518
8	-2.236891	-1.442317	0.126775
8	-2.952135	0.480190	-1.424924
8	-1.584345	-1.215448	2.582064
1	0.712944	0.348930	1.656390
1	1.716986	-2.144411	1.713513
1	-0.014946	-2.062634	1.588527

1	0.254310	-3.517991	-2.549036
1	1.172453	-3.057102	0.453334
1	0.260993	-4.382570	-0.218715
1	-1.384194	-4.213660	1.488044
1	-0.026276	-3.519265	2.341943
1	-1.877966	-1.972216	2.631600
1	-0.876662	0.053043	1.466490
1	0.522370	-1.011936	1.307656
1	-3.910910	-3.312833	0.441602
1	-3.532823	-2.693238	-1.162675
1	-2.448758	-3.823902	-0.393397
1	-4.108596	-1.093433	1.460980
1	-2.878968	0.125117	1.276837
1	-4.756757	-0.853398	-0.903565
1	-3.394486	0.198981	-1.199083
1	-4.324347	1.926415	0.328512
1	-6.117267	3.274408	0.690546
1	-7.565834	2.389884	1.171030
1	-7.433770	3.020726	-0.456360
1	-7.959289	0.034404	0.196914
1	-7.780104	0.633385	-1.436709
1	-6.761516	-0.685749	-0.872136
1	-1.490011	4.385494	-0.368034

1	0.917488	-3.156901	0.484590
1	0.016114	-1.270791	-1.590730
1	1.525271	-2.184685	-1.638192
1	2.776909	-0.239204	-2.386213
1	1.176159	0.193246	-2.953800
1	2.077491	2.118519	-1.691823
1	0.168941	2.216734	0.012012
1	-0.453851	0.895020	-0.978225
1	3.422742	2.824082	0.551801
1	1.765570	2.819579	1.114792
1	2.995673	1.959436	2.026479
1	3.494534	-0.885069	-0.257830
1	3.872125	-0.209131	1.304479
1	4.675559	1.094507	-1.324391
1	5.228644	1.551806	0.264629
1	5.832976	-1.110296	-1.147627
1	7.849497	-2.099640	-0.836673
1	8.487657	-1.883747	0.794321
1	9.150870	-0.949841	-0.528662
1	7.976047	0.303584	2.047596
1	8.582385	1.264026	0.718013
1	6.946253	1.524261	1.310320
1	-3.493268	5.154605	-0.131624

G3

6	2.744094	0.927336	0.204792
6	1.316377	0.359264	0.513132
6	1.184130	-1.026945	-0.064018
6	1.549702	-1.174812	-1.344665
6	2.144451	-0.010540	-2.089482
6	2.161080	1.235018	-1.206272
6	0.785152	1.361892	-0.534042
6	0.734126	-2.135652	0.824278
6	3.941908	-0.005429	0.322100
6	5.242006	0.565040	-0.246194
6	6.311461	-0.474578	-0.336485
6	7.484347	-0.518957	0.297198
6	7.979928	0.516983	1.257774
6	3.007352	2.197280	1.004447
6	8.431574	-1.659814	0.079940
8	-1.408765	-1.624028	-1.978536
15	-2.653215	-0.964384	-1.299370
8	-3.907984	-1.658849	-1.855583
12	-4.531835	-2.374868	-0.197818
8	-4.766288	-1.650596	1.502028
15	-3.433663	-0.872770	1.727414
8	-3.600197	0.597125	1.400708
12	-3.107923	1.838308	0.036512
8	-2.044352	3.566341	0.218663
6	-3.079250	4.163603	-0.168507
8	-4.127349	3.532217	-0.448454
8	-2.663593	-1.509904	0.220042
8	-2.613651	0.533738	-1.337954
8	-2.552819	-1.311129	2.809031
1	0.952213	0.419970	1.537241
1	1.456338	-2.268532	1.631490
1	-0.221253	-1.912541	1.298627
1	0.651990	-3.077156	0.285279
1	-0.534647	-1.322038	-1.658184
1	1.538357	-2.150025	-1.819209

TS(b1-G4)

6	-0.511921	1.207020	0.965471
6	-1.065399	0.668886	-0.369354
6	-1.032900	-0.791350	-0.405460
6	-1.059863	-1.458655	0.903544
6	-1.789450	-0.640821	1.988054
6	-1.858476	0.827605	1.598061
6	-2.516630	1.014995	0.209114
6	-3.685106	0.123115	-0.192751
6	-4.984639	0.428833	0.553001
6	-6.021703	-0.618978	0.307884
6	-7.200802	-0.489786	-0.302314
6	-8.115735	-1.666054	-0.457701
6	-2.835604	2.469080	-0.102089
6	-0.944501	-1.489056	-1.623464
6	-7.736175	0.785602	-0.874952
8	1.618645	-1.578653	-2.402794
15	2.760097	-1.034516	-1.599222
8	2.416887	-1.463016	-0.009733
15	2.817447	-0.832395	1.548488
8	3.137834	0.632750	1.303696
12	3.090334	1.779636	-0.226539
8	4.048836	3.568241	-0.403756
6	2.920137	4.115268	-0.374293
8	1.868090	3.438868	-0.267191
8	2.952768	0.467790	-1.622671
8	4.095332	-1.822503	-1.745951
12	4.268682	-2.420819	0.030647
8	4.115593	-1.676973	1.742620
8	1.658345	-1.162414	2.402424
1	-0.785044	1.129971	-1.312971
1	-1.287462	-0.936540	-2.493396
1	0.241328	-1.497488	-1.854558
1	-1.241563	-2.531083	-1.604045
1	0.000739	-1.519612	1.207803
1	-1.415642	-2.482784	0.821997

1	3.156070	-0.271613	-2.412274
1	1.584188	0.195922	-3.005041
1	2.558402	2.098233	-1.739641
1	0.594232	2.347772	-0.125946
1	-0.079575	1.056545	-1.119311
1	3.818877	2.774260	0.563528
1	2.142408	2.851496	1.063265
1	3.294994	1.944208	2.024999
1	3.731565	-0.949344	-0.178267
1	4.095678	-0.252356	1.375474
1	5.045826	0.954829	-1.249597
1	5.574717	1.413432	0.346484
1	6.080713	-1.302330	-1.000357
1	8.036310	-2.385909	-0.626239
1	8.640750	-2.176465	1.018081
1	9.390069	-1.302946	-0.300691
1	8.214317	0.059994	2.220230
1	8.905463	0.964566	0.892167
1	7.268062	1.316813	1.433048
1	-3.066435	5.251794	-0.263690
1	-2.788419	-1.045532	2.148362
1	-1.240288	-0.743462	2.920991
1	-2.241527	1.441784	2.411104
1	-0.335835	2.274008	0.905538
1	0.369364	0.723255	1.376556
1	-3.635039	2.824989	0.545323
1	-1.984777	3.127758	0.041446
1	-3.166697	2.573458	-1.134669
1	-3.445337	-0.928812	-0.029957
1	-3.858490	0.222683	-1.266488
1	-5.354133	1.411813	0.274242
1	-4.773800	0.474379	1.625200
1	-5.762112	-1.607719	0.673614
1	-7.692402	-2.569136	-0.025361
1	-8.326489	-1.858417	-1.510727
1	-9.076182	-1.476511	0.023843
1	-7.968983	0.656920	-1.932720
1	-8.669827	1.060403	-0.382251
1	-7.051654	1.622473	-0.783442
1	2.852866	5.204126	-0.443372

G4

6	-0.481078	0.530332	0.950964
6	-1.175499	0.335219	-0.415107
6	-1.172043	-1.113083	-0.778605
6	-1.200137	-2.037759	0.411978
6	-1.878834	-1.408409	1.643132
6	-1.818332	0.113436	1.585897
6	-2.523921	0.660126	0.314838
6	-3.785681	-0.027930	-0.186566
6	-5.009140	0.174742	0.706838
6	-6.152934	-0.692199	0.291549
6	-7.357732	-0.324613	-0.147343
6	-8.383252	-1.350175	-0.524602
6	-2.742696	2.166363	0.379401
6	-1.164014	-1.545193	-2.044116
6	-7.817067	1.091507	-0.306800
8	1.799038	-1.901891	-2.097316
15	2.815053	-0.938419	-1.405018
8	2.865755	-1.389637	0.146880
15	3.408584	-0.514965	1.636439
8	3.297246	0.934423	1.207103
12	2.567271	1.952491	-0.233958
8	3.210862	3.800540	-0.805271
6	2.043780	4.203961	-0.585360
8	1.150111	3.418622	-0.180311
8	2.424393	0.502930	-1.538952
8	4.226743	-1.350196	-1.857908
12	4.894490	-1.846889	-0.140728
8	4.880085	-1.017006	1.526428
8	2.573801	-1.046924	2.712551
1	-0.898135	0.974305	-1.252148
1	-1.151899	-0.848199	-2.871504
1	0.853523	-1.673572	-1.976419
1	-1.254291	-2.597129	-2.281880
1	-0.162916	-2.257894	0.671475
1	-1.655199	-2.990085	0.145651
1	-2.914821	-1.737245	1.719733
1	-1.372316	-1.755368	2.542421

$b1_{pp}$

6	-2.415185	0.928567	-0.047099
6	-0.983700	0.335008	-0.475197
6	-1.048814	-1.061100	-0.078259
6	-1.173707	-1.333889	1.329164
6	-1.803302	-0.195616	2.147774
6	-1.779222	1.101026	1.353079
6	-0.409288	1.197047	0.670187
6	-0.970403	-2.104509	-1.082396
6	-3.646016	0.044414	-0.209833
6	-4.920088	0.642986	0.388085
6	-6.034683	-0.352039	0.422434
6	-7.196602	-0.313427	-0.231677
6	-7.625493	0.782620	-1.156792
6	-2.622115	2.250986	-0.768878
6	-8.202210	-1.412405	-0.071727
8	1.552889	-1.325104	2.314162
15	2.716620	-0.954319	1.467408
8	3.988460	-1.846586	1.614796
12	4.110449	-2.474411	-0.148632
8	3.963081	-1.781146	-1.881231
15	2.680435	-0.906140	-1.701540
8	3.022632	0.567083	-1.568689
12	3.171131	1.761835	-0.084297
8	2.048487	3.492738	-0.035481
6	3.141387	4.110265	-0.042768
8	4.237085	3.500294	-0.069512
8	2.303454	-1.437835	-0.112017
8	3.066634	0.521243	1.373563
8	1.506902	-1.279712	-2.523357
1	-0.654282	0.478892	-1.500034
1	-1.664044	-1.872066	-1.893116
1	0.019436	-2.004850	-1.574041
1	-1.139515	-3.102522	-0.695111
1	-0.078243	-1.407044	1.624139
1	-1.580086	-2.321699	1.531506
1	-2.823896	-0.468580	2.416671
1	-1.246622	-0.069385	3.073594

1	-2.095022	0.559866	2.540309	1	-2.122495	1.945226	1.947837
1	-0.238612	1.571194	1.134961	1	-0.159538	2.190699	0.319077
1	0.385414	-0.083634	1.187320	1	0.435912	0.789860	1.217134
1	-3.446023	2.424144	1.169937	1	-3.397920	2.830059	-0.271377
1	-1.825744	2.718491	0.565038	1	-1.727618	2.865287	-0.795507
1	-3.153473	2.526694	-0.564017	1	-2.937455	2.077224	-1.796696
1	-3.616101	-1.097806	-0.305037	1	-3.488554	-0.932466	0.250457
1	-4.011021	0.340024	-1.190401	1	-3.811080	-0.148867	-1.272085
1	-5.299527	1.222118	0.714192	1	-4.709004	0.974639	1.408637
1	-4.737145	-0.070649	1.737667	1	-5.211379	1.530897	-0.165870
1	-5.956414	-1.758516	0.351210	1	-5.856529	-1.211950	1.060806
1	-8.011424	-2.362940	-0.390180	1	-7.854382	-2.184859	0.609417
1	-8.685680	-1.234057	-1.566677	1	-8.424101	-1.879046	-1.032514
1	-9.286510	-1.237189	0.077301	1	-9.145890	-1.021274	0.311206
1	-8.138769	1.272401	-1.333448	1	-7.869563	0.374852	-2.138441
1	-8.682238	1.285610	0.329124	1	-8.532797	1.259924	-0.784089
1	-7.052862	1.822151	-0.063077	1	-6.874792	1.554125	-1.293675
1	1.798732	5.255963	-0.748835	1	3.139309	5.203327	-0.025251

Coordinates of Optimized Geometries of different Conformers of Intermediates and Transition states at the mPW1K/6-31+G** level of theory

a_1

6	0.650269	-1.509503	0.078096
6	2.542872	1.447491	-0.090845
6	2.717846	0.354206	-1.105161
6	2.944415	-1.009413	-0.484460
6	1.955845	-1.304902	0.701433
6	2.087898	-0.205706	1.748912
6	2.261055	1.170696	1.181572
1	2.167522	1.984351	1.888664
6	2.704786	2.843687	-0.595328
1	2.507797	3.577818	0.180343
1	3.717048	3.004277	-0.966197
1	2.030294	3.039339	-1.429639
1	3.575221	0.586947	-1.737700
1	1.860592	0.345236	-1.787116
1	2.910861	-1.799752	-1.230722
1	3.929037	-1.047819	-0.021420
1	2.269049	-2.271542	1.102382
1	1.234917	-0.224259	2.429435
1	2.948950	-0.451040	2.373398
6	0.395229	-2.770391	-0.615967
1	1.243656	-3.444213	-0.631143
1	-0.444028	-3.256423	-0.106636
1	0.025534	-2.580057	-1.624913
6	-0.390872	-0.498713	0.149793
1	0.083071	0.488790	0.112547
1	-0.681507	-0.548473	1.216151
6	-1.625644	-0.609673	-0.734734
1	-1.310505	-0.614720	-1.781365
1	-2.134962	-1.553926	-0.557431
6	-2.546933	0.546714	-0.506355
1	-2.142515	1.513057	-0.786289
6	-3.790460	0.511531	-0.023130
6	-4.582773	1.773151	0.119752

a_2

6	0.976900	-1.633422	0.079674
6	1.897348	1.765393	-0.046497
6	2.080993	0.861002	-1.230933
6	2.818627	-0.419612	-0.898733
6	2.291837	-1.096033	0.419529
6	2.388572	-0.098860	1.568400
6	2.041503	1.310928	1.197410
1	1.925937	1.997822	2.025411
6	1.548977	3.185139	-0.350456
1	1.377376	3.760010	0.554785
1	2.349061	3.666443	-0.912817
1	0.651418	3.244508	-0.967054
1	2.646318	1.388765	-1.999974
1	1.108000	0.654648	-1.689706
1	2.804250	-1.118342	-1.732061
1	3.862838	-0.200779	-0.681829
1	2.949404	-1.952277	0.584948
1	1.772408	-0.425721	2.407788
1	3.413033	-0.132701	1.943924
6	0.908874	-2.861999	-0.710847
1	0.399857	-3.614152	-0.098130
1	0.254988	-2.726148	-1.573451
1	1.877668	-3.243596	-1.011136
6	-0.246203	-0.982757	0.518432
1	-0.083862	0.100068	0.543670
1	-0.246234	-1.223453	1.598794
6	-1.580065	-1.370400	-0.108395
1	-1.553753	-1.147906	-1.173473
1	-1.734354	-2.447100	-0.015809
6	-2.708242	-0.652823	0.562127
1	-2.858422	-0.913644	1.604119
6	-3.542055	0.237889	0.021279
6	-4.638488	0.843034	0.840663

1	-4.022326	2.647551	-0.198636
1	-4.890424	1.919951	1.155011
1	-5.495991	1.719263	-0.472855
6	-4.519498	-0.724980	0.398233
1	-4.856652	-0.628618	1.430066
1	-5.415506	-0.855347	-0.208340
1	-3.933345	-1.635566	0.321539

a_3

6	-0.677199	1.477035	-0.137695
6	-2.522897	-1.451981	-0.256323
6	-3.227782	-0.141426	-0.459821
6	-2.936302	0.870320	0.632133
6	-1.419938	0.907272	0.993944
6	-0.993192	-0.470426	1.476439
6	-1.531536	-1.579664	0.625059
1	-1.073939	-2.550484	0.763197
6	-3.009074	-2.592724	-1.088254
1	-2.421448	-3.491034	-0.923085
1	-4.050189	-2.820538	-0.859652
1	-2.966771	-2.348047	-2.150080
1	-4.304046	-0.315891	-0.491250
1	-2.978485	0.255398	-1.449668
1	-3.304599	1.859178	0.370125
1	-3.439392	0.577007	1.551468
1	-1.329744	1.649067	1.796241
1	0.092843	-0.541881	1.539402
1	-1.343651	-0.586046	2.504257
6	-0.984531	2.848573	-0.556486
1	-1.464991	3.446862	0.210540
1	-0.112768	3.355092	-0.964003
1	-1.686393	2.752478	-1.394690
6	0.371686	0.770233	-0.831233
1	0.447915	1.070125	-1.874237
1	0.288988	-0.305899	-0.737710
6	1.726365	1.242856	-0.129076
1	1.851910	2.304213	-0.336173
1	1.653392	1.122468	0.947665
6	2.853117	0.459823	-0.700086
1	3.048185	0.639948	-1.750442
6	3.638053	-0.408961	-0.053536
6	4.765821	-1.078107	-0.772347
1	4.821469	-0.783035	-1.815928
1	4.657895	-2.161842	-0.725667
1	5.716638	-0.837895	-0.297138
6	3.512522	-0.784434	1.387409
1	3.379663	-1.862054	1.481842
1	4.433158	-0.540284	1.916871
1	2.693693	-0.297250	1.907357

a_5

6	0.483006	-1.525454	0.217913
6	2.622451	1.327658	-0.306730
6	3.042943	0.037217	-0.948795
6	3.000894	-1.148065	0.005959
6	1.740174	-1.126000	0.867033
6	1.722683	0.143460	1.717424
6	2.044630	1.354465	0.893435
1	1.802000	2.308904	1.342355

1	-4.640125	0.471845	1.861544
1	-5.610358	0.625874	0.397637
1	-4.543457	1.928485	0.869533
6	-3.502083	0.707496	-1.398384
1	-4.431431	0.446693	-1.904484
1	-3.426880	1.794188	-1.432033
1	-2.682652	0.296615	-1.979814

a_4

6	-0.475106	1.240178	-0.048177
6	-2.917557	-1.185588	-0.321705
6	-3.224562	0.198478	-0.817557
6	-2.929318	1.281095	0.203995
6	-1.565207	1.040722	0.916395
6	-1.616069	-0.299631	1.633708
6	-2.204873	-1.386523	0.786341
1	-2.038287	-2.400030	1.126949
6	-3.470390	-2.309282	-1.135051
1	-3.168240	-3.276347	-0.743889
1	-4.559703	-2.274345	-1.150903
1	-3.138641	-2.241875	-2.171643
1	-4.280169	0.255027	-1.086453
1	-2.686766	0.376261	-1.754956
1	-2.976766	2.272160	-0.240372
1	-3.673854	1.253773	0.997139
1	-1.458074	1.865034	1.632647
1	-0.628112	-0.594013	1.987310
1	-2.210946	-0.169419	2.540138
6	-0.353044	2.544402	-0.707892
1	-0.825363	3.358290	-0.167552
1	0.678430	2.780403	-0.956688
1	-0.872527	2.438621	-1.669111
6	0.515229	0.233721	-0.340391
1	0.941380	0.348852	-1.333182
1	0.149469	-0.775134	-0.182764
6	1.705085	0.505319	0.693359
1	2.124325	1.487004	0.495368
1	1.303308	0.514821	1.704201
6	2.714019	-0.579324	0.553652
1	2.443288	-1.521319	1.013868
6	3.897130	-0.492757	-0.063660
6	4.826593	-1.663865	-0.075497
1	4.412319	-2.522496	0.444477
1	5.774094	-1.402675	0.395254
1	5.056598	-1.958539	-1.099467
6	4.415664	0.721623	-0.763298
1	5.347043	1.050135	-0.302771
1	4.652421	0.481714	-1.799714
1	3.729204	1.562678	-0.763219

a_6

6	0.730992	-1.738883	0.129373
6	2.122555	1.558061	-0.259859
6	2.999006	0.401289	-0.644108
6	3.043052	-0.692861	0.413669
6	1.655081	-0.976404	0.982840
6	1.109796	0.284236	1.654494
6	1.293846	1.489479	0.781268
1	0.721387	2.365274	1.058655

6	2.907162	2.569295	-1.086119
1	2.534947	3.456446	-0.582212
1	3.979405	2.690019	-1.239982
1	2.451016	2.522469	-2.075461
1	4.058400	0.143563	-1.331742
1	2.428467	-0.135396	-1.837723
1	3.117391	-2.087443	-0.530112
1	3.846136	-1.082769	0.688674
1	1.782916	-1.991614	1.564703
1	0.770559	0.281026	2.224455
1	2.457990	0.028562	2.515682
6	0.522372	-2.369556	-0.981848
1	1.088484	-3.275755	-0.749364
1	-0.462900	-2.648278	-1.336318
1	1.088641	-1.879363	-1.774459
6	-0.811192	-1.162407	0.747823
1	-0.796626	-0.900859	1.799886
1	-1.554176	-1.930669	0.554564
6	-1.261370	0.130333	-0.072059
1	-0.496883	0.895402	0.044617
1	-1.320502	-0.122711	-1.126527
6	-2.565336	0.604750	0.467231
1	-2.507145	1.131478	1.411815
6	-3.766983	0.453672	-0.099208
6	-4.983443	1.034051	0.548353
1	-4.749760	1.546222	1.477029
1	-5.713491	0.252733	0.760253
1	-5.469816	1.743364	-0.120941
6	-4.026516	-0.259416	-1.386734
1	-4.752303	-1.057460	-1.231316
1	-4.470276	0.423658	-2.110670
1	-3.141329	-0.695532	-1.839280

6	2.253568	2.785564	-1.100141
1	1.557919	3.561151	-0.793338
1	3.263640	3.190027	-1.036058
1	2.071738	2.560022	-2.151331
1	4.012702	0.764505	-0.816065
1	2.674415	0.015940	-1.615373
1	3.521400	-1.591106	0.029275
1	3.658609	-0.355244	1.245461
1	1.754797	-1.753940	1.771328
1	0.062285	0.179808	1.927410
1	1.639205	0.423144	2.598714
6	1.260417	-2.585060	-0.946015
1	1.939131	-3.316697	-0.496921
1	0.485714	-3.114544	-1.488298
1	1.880156	-2.005448	-1.629422
6	-0.697750	-1.735793	0.341336
1	-0.998662	-1.402126	1.326476
1	-1.136072	-2.704819	0.113641
6	-1.276920	-0.706888	-0.730392
1	-0.803778	0.260247	-0.590372
1	-1.012577	-1.067992	-1.722870
6	-2.756260	-0.648516	-0.578141
1	-3.286229	-1.536087	-0.902141
6	-3.471651	0.376033	-0.102656
6	-4.964274	0.295014	-0.058543
1	-5.335912	-0.654654	-0.431756
1	-5.406905	1.093577	-0.653545
1	-5.323877	0.429104	0.961779
6	-2.902808	1.664001	0.398389
1	-3.291713	2.496620	-0.187443
1	-3.220380	1.836616	1.426699
1	-1.818890	1.710995	0.366408

a_7

6	-0.892504	-1.668633	-0.066426
6	-1.677919	1.785278	-0.019890
6	-1.309322	1.041293	1.230144
6	-2.103487	-0.234778	1.426907
6	-2.221371	-1.095016	0.112684
6	-2.799284	-0.236662	-1.008036
6	-2.342276	1.189490	-1.008694
1	-2.608881	1.764482	-1.885727
6	-1.252076	3.215015	-0.083530
1	-1.502687	3.667879	-1.038306
1	-1.731724	3.795458	0.704547
1	-0.176125	3.308253	0.067275
1	-1.486553	1.683551	2.093801
1	-0.231911	0.847598	1.233671
1	-1.710717	-0.827591	2.250151
1	-3.137713	0.003435	1.670766
1	-2.897519	-1.913662	0.364088
1	-2.592996	-0.695060	-1.976987
1	-3.886111	-0.267630	-0.910335
6	-0.544648	-2.859848	0.711892
1	-0.457580	-3.683017	-0.007359
1	0.439271	-2.775391	1.167644
1	-1.296127	-3.127298	1.446056
6	0.045555	-1.117270	-1.031209
1	-0.154271	-0.052523	-1.169312
1	-0.377165	-1.564205	-1.954612

a_8

6	-0.241111	-1.453742	0.045094
6	-2.553185	1.189876	-0.073481
6	-1.700588	0.964993	1.141975
6	-1.756382	-0.458821	1.658350
6	-1.628105	-1.515661	0.506086
6	-2.734017	-1.278335	-0.514836
6	-3.005497	0.168052	-0.799474
1	-3.640159	0.368290	-1.652715
6	-2.860887	2.612399	-0.407537
1	-3.430254	2.696058	-1.328583
1	-3.436502	3.079477	0.391545
1	-1.946370	3.196199	-0.517871
1	-2.031923	1.631272	1.939363
1	-0.669855	1.267720	0.929425
1	-1.013838	-0.631481	2.433691
1	-2.732501	-0.657543	2.097435
1	-1.744624	-2.487290	0.992755
1	-2.517303	-1.807727	-1.444197
1	-3.640603	-1.749525	-0.130353
6	0.808596	-1.993381	0.899336
1	1.412337	-2.695917	0.319102
1	1.500899	-1.173085	1.124870
1	0.447126	-2.465945	1.804603
6	0.107347	-0.867936	-1.241663
1	-0.588473	-0.048074	-1.446671
1	-0.251134	-1.650567	-1.935956

6	1.534013	-1.435339	-0.926308
1	1.681499	-2.511837	-0.825197
1	1.985067	-1.167630	-1.876696
6	2.198535	-0.705448	0.199446
1	1.905602	-1.006928	1.200319
6	3.129301	0.248518	0.109000
6	3.716854	0.853542	1.345514
1	3.288733	0.435641	2.252671
1	3.565307	1.932904	1.357111
1	4.794167	0.690988	1.373129
6	3.689027	0.789474	-1.167800
1	3.567453	1.871898	-1.201163
1	4.760866	0.598002	-1.214664
1	3.237723	0.374992	-2.063040

6	1.559019	-0.512062	-1.542507
1	2.194967	-1.390182	-1.457158
1	1.592986	-0.226261	-2.594711
6	2.058982	0.623074	-0.703308
1	1.426224	1.504679	-0.710347
6	3.206865	0.696734	-0.022519
6	3.576207	1.948389	0.710789
1	2.807789	2.712378	0.631862
1	4.504335	2.360080	0.314555
1	3.753557	1.743687	1.766666
6	4.233430	-0.389494	0.050715
1	5.155714	-0.057986	-0.426313
1	4.488009	-0.607169	1.088070
1	3.935560	-1.315598	-0.431196

a_9

6	-0.033235	0.640556	-0.240505
6	-3.355687	-0.453857	-0.121342
6	-3.008702	0.904154	-0.659027
6	-2.137042	1.713438	0.280707
6	-0.956003	0.873662	0.875035
6	-1.524637	-0.342947	1.597111
6	-2.679499	-0.988718	0.894050
1	-2.978276	-1.957715	1.272183
6	-4.495885	-1.152857	-0.785641
1	-4.652271	-2.147185	-0.377526
1	-5.419174	-0.586469	-0.663835
1	-4.324898	-1.247456	-1.858524
1	-3.928160	1.462300	-0.839961
1	-2.543995	0.799625	-1.644979
1	-1.770101	2.618926	-0.197253
1	-2.717373	2.021915	1.148925
1	-0.447665	1.541949	1.574422
1	-0.743897	-1.082073	1.780959
1	-1.839042	-0.016608	2.590647
6	0.819686	1.728699	-0.689573
1	0.674319	2.664443	-0.162492
1	1.852069	1.355613	-0.538213
1	0.757346	1.866717	-1.768847
6	0.126059	-0.652911	-0.871946
1	0.337698	-0.571076	-1.935065
1	-0.730313	-1.294932	-0.695691
6	1.407524	-1.323230	-0.197077
1	1.339926	-1.262990	0.884898
1	1.284836	-2.374241	-0.456576
6	2.699101	-0.822042	-0.719960
1	2.844914	-0.954510	-1.786160
6	3.718267	-0.303757	-0.015581
6	4.999647	0.056524	-0.695864
1	4.962618	-0.121860	-1.766387
1	5.821765	-0.527004	-0.281568
1	5.247774	1.104051	-0.525181
6	3.712466	-0.081173	1.462650
1	4.426801	-0.753267	1.938619
1	4.044373	0.930314	1.694310
1	2.748367	-0.241705	1.935084

a_{10}

6	-0.107080	0.777166	-0.121475
6	-3.256058	-0.707164	-0.200878
6	-2.954586	0.466406	-1.087969
6	-2.373472	1.648970	-0.337360
6	-1.261347	1.214214	0.671161
6	-1.854234	0.224532	1.664507
6	-2.758185	-0.789774	1.032260
1	-3.025040	-1.636622	1.650989
6	-4.146617	-1.756844	-0.779710
1	-4.277511	-2.593819	-0.099965
1	-5.130480	-1.345966	-1.006113
1	-3.742630	-2.139306	-1.717716
1	-3.873717	0.787963	-1.579440
1	-2.295774	0.148180	-1.902950
1	-2.008971	2.413296	-1.019525
1	-3.143568	2.110150	0.278563
1	-0.949143	2.135944	1.172841
1	-1.068927	-0.278578	2.228527
1	-2.409135	0.797776	2.410136
6	0.628725	1.764299	-0.905422
1	0.329985	2.791496	-0.731060
1	1.698620	1.618388	-0.701742
1	0.526498	1.519559	-1.966086
6	0.379076	-0.583082	-0.134036
1	0.851319	-0.835623	-1.079431
1	-0.401478	-1.293434	0.120426
6	1.521267	-0.698382	0.983807
1	1.098605	-0.424168	1.945950
1	1.703212	-1.769739	1.018209
6	2.772955	0.061599	0.730144
1	2.883050	0.999915	1.260350
6	3.801797	-0.344187	-0.029256
6	5.040518	0.483084	-0.141533
1	4.971731	1.407568	0.424474
1	5.250534	0.727038	-1.182966
1	5.901178	-0.076742	0.224230
6	3.824289	-1.624526	-0.797760
1	3.978486	-1.425398	-1.858450
1	4.667831	-2.235519	-0.476998
1	2.923042	-2.220222	-0.691140

a_{11}

a_{12}

6	-2.342466	1.188931	-1.009202
6	-1.678865	1.784927	-0.020010
6	-1.310880	1.041081	1.230294
6	-2.104759	-0.235271	1.426554
6	-2.221339	-1.095463	0.112285
6	-2.799238	-0.237305	-1.008591
6	-1.253316	3.214757	-0.083436
6	-0.892075	-1.668440	-0.066308
6	0.045983	-1.116932	-1.030963
6	1.534460	-1.434780	-0.926077
6	2.198853	-0.704672	0.199621
6	3.130005	0.248904	0.109114
6	3.690511	0.789016	-1.167706
6	-0.543916	-2.859325	0.712395
6	3.717357	0.854209	1.345588
1	-2.608613	1.763791	-1.886460
1	-1.503142	3.667440	-1.038504
1	-1.733884	3.795169	0.704106
1	-0.177537	3.308308	0.068394
1	-1.488795	1.683314	2.093825
1	-0.233407	0.847693	1.234456
1	-1.712283	-0.827901	2.250070
1	-3.139217	0.002594	1.669759
1	-2.897140	-1.914584	0.363148
1	-2.592796	-0.695740	-1.977487
1	-3.886073	-0.268446	-0.910978
1	-1.295434	-3.126878	1.446483
1	-0.456451	-3.682659	-0.006623
1	0.439888	-2.774368	1.168286
1	-0.154046	-0.052202	-1.169031
1	-0.376775	-1.563765	-1.954420
1	1.682117	-2.511251	-0.824890
1	1.985471	-1.167052	-1.876479
1	1.905476	-1.005739	1.200512
1	3.289092	0.436506	2.252768
1	3.565755	1.933564	1.356900
1	4.794672	0.691703	1.373417
1	3.570815	1.871642	-1.200991
1	4.762014	0.595668	-1.214687
1	3.238408	0.375372	-2.062932

6	-3.005450	0.168258	-0.799586
6	-2.553065	1.190045	-0.073590
6	-1.700450	0.965089	1.141841
6	-1.756472	-0.458657	1.658361
6	-1.628420	-1.515648	0.506129
6	-2.734435	-1.278165	-0.514647
6	-2.860579	2.612593	-0.407691
6	-0.241443	-1.453780	0.045088
6	0.107215	-0.867760	-1.241504
6	1.558976	-0.512139	-1.542201
6	2.058996	0.622900	-0.702867
6	3.207117	0.696670	-0.022490
6	4.233927	-0.389367	0.050134
6	0.808265	-1.993955	0.899046
6	3.576393	1.948171	0.711109
1	-3.639913	0.368561	-1.652959
1	-3.429890	2.696306	-1.328766
1	-3.436199	3.079726	0.391356
1	-1.946001	3.196310	-0.517957
1	-2.031440	1.631564	1.939202
1	-0.669664	1.267521	0.929069
1	-1.013950	-0.631408	2.433697
1	-2.732633	-0.657181	2.097437
1	-1.745029	-2.487241	0.992838
1	-2.518210	-1.807935	-1.443893
1	-3.641115	-1.748856	-0.129751
1	1.411796	-2.696380	0.318481
1	1.500689	-1.173831	1.124813
1	0.446763	-2.466828	1.804135
1	-0.588502	-0.047976	-1.446914
1	-0.251154	-1.650757	-1.935543
1	2.194738	-1.390379	-1.456791
1	1.593081	-0.226270	-2.594384
1	1.426030	1.504360	-0.709526
1	2.807989	2.712181	0.632256
1	4.504576	2.359929	0.315091
1	3.753601	1.743239	1.766971
1	5.156197	-0.057290	-0.426525
1	4.488449	-0.607707	1.087370
1	3.936346	-1.315186	-0.432488

a_{13}

6	-0.121686	1.212955	-0.109860
6	-3.202661	-0.527504	-0.102116
6	-2.684801	-0.142518	1.254648
6	-1.214257	-0.485183	1.454479
6	-0.404334	-0.175056	0.203980
6	-0.899815	-1.063535	-0.940655
6	-2.390277	-0.954914	-1.068197
1	-2.811831	-1.271685	-2.013079
6	-4.680958	-0.424608	-0.288854
1	-4.978239	-0.679315	-1.301866
1	-5.203764	-1.090837	0.397321
1	-5.032071	0.585350	-0.075124
1	-3.274522	-0.653316	2.016780
1	-2.873992	0.921132	1.423808
1	-0.816382	0.000757	2.342946
1	-1.119402	-1.555290	1.630449
1	0.683696	-0.446140	0.351095

a_{14}

6	-0.451090	1.569334	-0.124300
6	-2.447248	-1.389991	-0.082727
6	-3.042950	-0.058970	-0.435249
6	-2.710321	1.031509	0.560274
6	-1.200294	1.036700	1.005424
6	-0.796914	-0.349412	1.506303
6	-1.448104	-1.490451	0.792292
1	-1.058582	-2.471164	1.032568
6	-3.040477	-2.576861	-0.767552
1	-2.519818	-3.493789	-0.507352
1	-4.090041	-2.693957	-0.497700
1	-3.005930	-2.460684	-1.851365
1	-4.129341	-0.153287	-0.473864
1	-2.750398	0.217551	-1.452565
1	-3.011991	2.011530	0.196516
1	-3.249363	0.857615	1.490128
1	-1.146141	1.772494	1.809803

1	-0.420351	-0.817420	-1.883736
1	-0.606197	-2.092626	-0.726860
6	-0.366014	2.291375	0.852992
1	-0.391583	1.965091	1.886541
1	0.305359	3.134336	0.718477
1	-1.375436	2.652699	0.615214
6	0.598139	1.568690	-1.324086
1	0.451471	2.618685	-1.562602
1	0.339015	0.956538	-2.179772
6	2.145214	1.369760	-1.028601
1	2.620782	1.837851	-1.889682
1	2.428245	1.955453	-0.158463
6	2.570577	-0.046557	-0.933416
1	2.437756	-0.629927	-1.837506
6	3.162657	-0.651393	0.110118
6	3.622863	-2.069538	-0.000663
1	3.375764	-2.508805	-0.962558
1	3.185654	-2.683040	0.786857
1	4.703623	-2.123782	0.130479
6	3.472790	0.005250	1.417164
1	3.132082	-0.615781	2.244919
1	4.552636	0.101213	1.532487
1	3.043046	0.995518	1.532281

1	0.288539	-0.457200	1.462172
1	-1.046059	-0.391455	2.568634
6	-0.316021	3.024048	-0.232190
1	-1.133297	3.553866	0.250038
1	0.585511	3.273781	0.343149
1	-0.155690	3.374817	-1.246647
6	0.166244	0.727228	-1.138718
1	-0.269611	1.035819	-2.095612
1	-0.039360	-0.323826	-0.970141
6	1.710372	0.965020	-1.268716
1	2.013394	0.399728	-2.144212
1	1.888387	2.014254	-1.500906
6	2.477160	0.556725	-0.057541
1	2.433403	1.241688	0.783981
6	3.235189	-0.534998	0.085020
6	3.983458	-0.779047	1.357195
1	3.815780	0.003848	2.091658
1	5.054114	-0.837746	1.162307
1	3.695455	-1.734080	1.796746
6	3.433976	-1.583398	-0.962114
1	4.487342	-1.641735	-1.235477
1	3.163791	-2.562234	-0.566642
1	2.862035	-1.420449	-1.869622

a_{15}

6	-0.064297	0.758896	0.021124
6	-3.308151	-0.602121	-0.138270
6	-3.044030	0.738676	-0.757777
6	-2.306964	1.699878	0.151565
6	-1.149460	1.018457	0.965604
6	-1.704549	-0.166942	1.744900
6	-2.698756	-0.984301	0.983391
1	-2.939825	-1.950216	1.407555
6	-4.293097	-1.468680	-0.851792
1	-4.393813	-2.439553	-0.375768
1	-5.275909	-0.998014	-0.874516
1	-3.997024	-1.626949	-1.889484
1	-3.996326	1.198554	-1.027714
1	-2.527291	0.607293	-1.714057
1	-1.943520	2.567627	-0.394867
1	-2.981888	2.069452	0.921500
1	-0.787051	1.792733	1.645111
1	-0.887974	-0.797754	2.100759
1	-2.168039	0.229546	2.650717
6	0.840456	1.851957	-0.300813
1	0.513634	2.819985	0.060901
1	1.775971	1.567791	0.209627
1	1.104843	1.879452	-1.356156
6	0.133890	-0.535069	-0.623818
1	-0.542308	-0.453494	-1.493637
1	-0.311053	-1.328388	-0.026844
6	1.542943	-0.887137	-1.115227
1	1.454889	-1.861405	-1.597598
1	1.864077	-0.200307	-1.893960
6	2.533702	-0.965297	0.003349
1	2.227476	-1.583861	0.840834
6	3.753172	-0.419789	0.055459
6	4.640493	-0.655765	1.237772
1	4.158738	-1.264197	1.997908

a_{16}

6	-0.120750	1.015136	0.132976
6	-3.102379	-0.823192	-0.182925
6	-2.931962	0.499499	-0.873141
6	-2.468399	1.605071	0.054524
6	-1.297516	1.148630	0.993951
6	-1.748525	-0.065650	1.795689
6	-2.561360	-1.052390	1.013245
1	-2.728386	-2.008311	1.492028
6	-3.907950	-1.847362	-0.912351
1	-3.937298	-2.792278	-0.377835
1	-4.932811	-1.503357	-1.051146
1	-3.501031	-2.030708	-1.907358
1	-3.884016	0.799153	-1.312642
1	-2.253781	0.384341	-1.725804
1	-2.204109	2.503859	-0.497499
1	-3.270631	1.873724	0.739654
1	-1.104218	2.001361	1.649503
1	-0.890148	-0.563631	2.249632
1	-2.336877	0.299531	2.639556
6	0.538280	2.230482	-0.329500
1	0.036479	3.145180	-0.036981
1	1.546771	2.204175	0.101591
1	0.709054	2.195203	-1.406064
6	0.391417	-0.292944	-0.241123
1	-0.478785	-0.930314	-0.444552
1	0.723538	-0.697661	0.731324
6	1.499882	-0.429604	-1.278991
1	1.590851	-1.493079	-1.493658
1	1.174555	0.022939	-2.215909
6	2.834810	0.135139	-0.874857
1	3.127266	1.068214	-1.340460
6	3.711397	-0.440645	-0.047096
6	5.028905	0.202743	0.248514
1	5.140160	1.158701	-0.255561

1	4.944275	0.287833	1.691167
1	5.555963	-1.160525	0.929505
6	4.370051	0.411243	-1.025490
1	4.740559	1.352893	-0.620395
1	5.236789	-0.105129	-1.438008
1	3.702385	0.632591	-1.852433

a_{17}

6	-0.251883	-1.576991	-0.038674
6	-2.356833	1.228588	-0.078781
6	-1.650235	0.962113	1.218309
6	-1.718231	-0.481323	1.682535
6	-1.617431	-1.492397	0.504167
6	-2.732322	-1.212535	-0.489953
6	-2.840635	0.240180	-0.831923
1	-3.373675	0.485462	-1.741166
6	-2.500643	2.666831	-0.456240
1	-2.972301	2.783400	-1.427537
1	-3.103832	3.199283	0.279211
1	-1.531238	3.165918	-0.485224
1	-2.090396	1.590747	1.994426
1	-0.613669	1.301792	1.144353
1	-0.968113	-0.683061	2.443631
1	-2.687247	-0.677794	2.136663
1	-1.758216	-2.477044	0.968009
1	-2.608350	-1.812680	-1.391611
1	-3.666446	-1.563453	-0.045700
6	0.796944	-2.127896	0.808988
1	0.476403	-2.380524	1.812641
1	1.228749	-3.006165	0.323521
1	1.634611	-1.410438	0.816104
6	0.118691	-1.145162	-1.378823
1	-0.751108	-0.925418	-1.984510
1	0.723996	-1.913539	-1.860670
6	1.022153	0.152427	-1.324825
1	0.976754	0.511959	-2.352858
1	0.539511	0.910083	-0.716503
6	2.433394	-0.097484	-0.943891
1	2.937726	-0.856129	-1.533063
6	3.167646	0.555979	-0.030211
6	4.615580	0.228869	0.148834
1	4.938633	-0.582472	-0.496755
1	4.825432	-0.044553	1.183013
1	5.229583	1.102392	-0.070219
6	2.668247	1.662944	0.840179
1	2.889663	1.454449	1.886605
1	3.191936	2.587035	0.594901
1	1.604950	1.855887	0.744580

a_5-b

6	-1.509478	-0.714864	1.222351
1	-1.834381	-0.604036	2.258963
1	-0.690147	-1.429720	1.258228
6	-2.648003	-1.246064	0.407561
1	-2.696391	-2.310968	0.225866
6	-3.621215	-0.437313	-0.005368
6	-4.833608	-0.890705	-0.743277
1	-4.827192	-1.964767	-0.905047

1	5.846586	-0.444626	-0.068040
1	5.153962	0.360656	1.319828
6	3.487363	-1.756761	0.628270
1	4.309541	-2.435758	0.404087
1	3.478286	-1.636630	1.712192
1	2.565768	-2.249604	0.331002

a_{18}

6	-0.224914	-1.472102	-0.226153
6	-2.504359	1.196116	0.088730
6	-2.006083	0.587714	1.367538
6	-2.059454	-0.928399	1.394256
6	-1.670584	-1.564749	0.026956
6	-2.596140	-1.031638	-1.054006
6	-2.761673	0.454060	-0.989065
1	-3.147898	0.935874	-1.877714
6	-2.703063	2.676648	0.107781
1	-3.000958	3.056236	-0.865221
1	-3.472653	2.951681	0.829086
1	-1.792008	3.193510	0.412516
1	-2.608315	0.964771	2.195872
1	-0.994396	0.950393	1.572351
1	-1.452077	-1.327065	2.203270
1	-3.080135	-1.259031	1.575215
1	-1.829240	-2.641477	0.168040
1	-2.255001	-1.338520	-2.042925
1	-3.565324	-1.519427	-0.928315
6	0.676799	-2.252362	0.616921
1	0.202524	-2.717060	1.473431
1	1.124467	-3.029706	-0.009980
1	1.526770	-1.622448	0.908457
6	0.379567	-0.676607	-1.276016
1	-0.329227	-0.424138	-2.056516
1	1.238834	-1.202717	-1.687856
6	0.952720	0.707662	-0.724961
1	1.327942	1.179289	-1.629244
1	0.103618	1.296417	-0.394581
6	2.000862	0.633106	0.324426
1	1.664293	0.728788	1.350320
6	3.322922	0.534129	0.118078
6	4.279474	0.554284	1.265450
1	3.773693	0.637228	2.223168
1	4.965006	1.396154	1.169025
1	4.895122	-0.345269	1.273077
6	3.956549	0.413371	-1.228963
1	4.639007	1.246657	-1.395779
1	4.562104	-0.491594	-1.280328
1	3.248120	0.394065	-2.051199

1	-4.911561	-0.395976	-1.711811
1	-5.736501	-0.636837	-0.187535
6	-3.478934	1.023512	0.309066
1	-3.699607	1.211212	1.362351
1	-4.182094	1.619607	-0.270360
6	-2.069341	1.511542	-0.012954
1	-1.932353	2.560615	0.234950
1	-1.934006	1.416994	-1.092398
6	-0.992634	0.663703	0.781602
1	-0.705657	1.260399	1.645875
6	0.065129	0.707059	-0.217314
6	0.308569	-0.398615	-1.134571
1	0.566122	-0.047568	-2.131188
1	-0.545706	-1.065819	-1.183399
6	0.930071	1.875439	-0.298421
1	0.690941	2.659052	0.410979
1	0.993866	2.263103	-1.314204
1	1.945761	1.481173	-0.105477
6	1.553983	-1.205322	-0.584242
1	1.490129	-2.151105	-1.122337
1	1.415204	-1.442986	0.466482
6	2.867769	-0.568631	-0.851892
6	3.835221	-0.291963	0.034988
1	3.077359	-0.372195	-1.897629
6	5.146984	0.259194	-0.425275
1	5.365112	1.205986	0.068799
1	5.955484	-0.421617	-0.159141
1	5.174575	0.414240	-1.499817
6	3.742594	-0.531183	1.508070
1	2.755637	-0.825508	1.851215
1	4.438727	-1.318503	1.797935
1	4.044028	0.360476	2.056760

a_{2exo1}

6	1.706902	-0.484231	0.918592
6	1.417303	0.451763	-0.311923
6	2.647978	1.313263	-0.577404
6	3.878780	0.464137	-0.642069
6	3.969871	-0.777330	-0.171208
6	2.816878	-1.442823	0.519729
6	0.187402	1.111699	0.081611
6	-1.073397	0.616244	-0.468898
6	-2.387586	0.927678	0.240839
6	-3.546217	0.386707	-0.534223
6	-4.397158	-0.571463	-0.160546
6	-5.523562	-0.975536	-1.059113
6	5.210231	-1.598144	-0.301748
6	0.184336	2.234148	1.016839
6	-4.349597	-1.310256	1.139247
1	4.736255	0.911908	-1.125474
1	5.982328	-1.072220	-0.855363
1	5.609719	-1.857309	0.678666
1	5.002194	-2.536032	-0.817222
1	3.171629	-1.931336	1.429141
1	2.421843	-2.242201	-0.111214
1	0.822247	-1.041760	1.222703
1	2.021896	0.134631	1.756960
1	2.513881	1.833062	-1.526577
1	2.765003	2.088809	0.181143

a_{2exo2}

6	1.140208	0.413401	-0.057154
6	2.046122	0.536515	-1.273765
6	3.216154	-0.390042	-1.156975
6	3.634731	-0.935963	-0.017230
6	2.966707	-0.635549	1.292031
6	2.016390	0.549038	1.239677
6	4.784622	-1.886573	0.043633
6	0.101628	1.413536	0.129278
6	0.286481	2.789794	-0.335466
6	-1.152281	1.034319	0.745669
6	-2.170948	0.839565	-0.457713
6	-3.483665	0.397221	0.086054
6	-4.043696	-0.809091	-0.051601
6	-3.430641	-1.969199	-0.767147
6	-5.399443	-1.076879	0.519863
1	3.732796	-0.623711	-2.077734
1	5.185663	-2.094458	-0.943917
1	5.588344	-1.484985	0.660640
1	4.482793	-2.832670	0.493637
1	3.726564	-0.417638	2.044848
1	2.444789	-1.526382	1.649192
1	1.405655	0.581997	2.140092
1	2.576182	1.481144	1.177518
1	1.476511	0.293883	-2.172045
1	2.393799	1.564016	-1.399999

1	-0.585051	2.104987	1.776958
1	1.147203	2.441182	1.465571
1	-0.129912	3.116289	0.445216
1	-0.975993	-0.446662	-0.702211
1	-1.069678	1.083249	-1.471105
1	-2.359395	0.509746	1.245339
1	-2.499822	2.007794	0.348992
1	-3.703676	0.849939	-1.502128
1	-5.526039	-0.417014	-1.990788
1	-6.481660	-0.816811	-0.564284
1	-5.465807	-2.038054	-1.295025
1	-5.263612	-1.129203	1.704659
1	-4.305889	-2.384117	0.959102
1	-3.509922	-1.042728	1.773195
1	1.229268	-0.201291	-1.164594

1	-0.452452	3.478730	0.057559
1	1.294176	3.143920	-0.120904
1	0.217700	2.778019	-1.429453
1	-1.555661	1.817977	1.382624
1	-1.085525	0.093130	1.282586
1	-2.276064	1.793965	-0.971113
1	-1.762587	0.123530	-1.165537
1	-4.027636	1.154017	0.638278
1	-5.809333	-0.209666	1.028987
1	-5.359182	-1.905030	1.227521
1	-6.093275	-1.371469	-0.267197
1	-3.366335	-2.827313	-0.098465
1	-4.066351	-2.273607	-1.598325
1	-2.437545	-1.776789	-1.160867
1	0.692767	-0.581168	-0.012840

a_{2exo3}

6	1.285825	0.206950	-0.011771
6	2.149531	0.894830	-1.059766
6	3.487882	0.231816	-1.159048
6	4.008190	-0.560865	-0.224712
6	3.288184	-0.840329	1.061016
6	2.110907	0.085278	1.319230
6	5.331495	-1.233320	-0.387334
6	0.058723	0.867019	0.403763
6	-0.041021	2.328068	0.427541
6	-1.096482	0.066934	0.750111
6	-1.957197	-0.020594	-0.584789
6	-3.123178	-0.917449	-0.353021
6	-4.395190	-0.543754	-0.180904
6	-4.881471	0.869378	-0.161700
6	-5.464822	-1.573733	-0.004794
1	4.044604	0.415912	-2.067609
1	5.769402	-1.026781	-1.359341
1	6.031898	-0.903115	0.379714
1	5.233227	-2.314047	-0.281978
1	3.982984	-0.733369	1.896158
1	2.963926	-1.883453	1.079363
1	1.504550	-0.295564	2.139095
1	2.463952	1.078242	1.594038
1	1.646778	0.847840	-2.026799
1	2.272614	1.954977	-0.828847
1	0.864325	2.775911	0.836194
1	-0.080390	2.672102	-0.612376
1	-0.916924	2.689244	0.954002
1	-1.720244	0.530022	1.508425
1	-0.828362	-0.948350	1.030603
1	-2.262266	0.979455	-0.878221
1	-1.327652	-0.424217	-1.376441
1	-2.892492	-1.975428	-0.336053
1	-5.069255	-2.584822	-0.028667
1	-6.215517	-1.481172	-0.789368
1	-5.983078	-1.428219	0.943052
1	-5.599649	1.029250	-0.965653
1	-5.412149	1.067960	0.769174
1	-4.096155	1.612014	-0.263813
1	1.057633	-0.815760	-0.317584

a_{2exo4}

6	-2.205166	0.840600	-1.020151
6	-1.285593	0.185341	0.001756
6	-2.043699	0.069894	1.370247
6	-3.399774	-0.525359	1.136670
6	-4.014324	-0.609164	-0.039857
6	-3.390396	-0.067802	-1.292657
6	-0.054736	0.879276	0.350310
6	1.112950	0.114620	0.730784
6	1.973149	-0.031984	-0.600057
6	3.133241	-0.926655	-0.333063
6	4.402062	-0.551099	-0.142125
6	5.467677	-1.578380	0.069635
6	-5.353737	-1.249517	-0.195693
6	0.027729	2.337833	0.262795
6	4.886907	0.862545	-0.133422
1	-3.880510	-0.915784	2.024349
1	-5.715787	-1.664200	0.740424
1	-6.086258	-0.527522	-0.556179
1	-5.313084	-2.052921	-0.931329
1	-4.141913	0.483511	-1.858135
1	-3.094195	-0.900788	-1.935526
1	-1.667390	1.042813	-1.946109
1	-2.564158	1.795700	-0.636078
1	-1.477091	-0.558716	2.055616
1	-2.133629	1.052025	1.839694
1	0.909295	2.750746	0.739175
1	0.036927	2.599037	-0.802001
1	-0.876344	2.804506	0.652688
1	1.733621	0.627324	1.459510
1	0.860555	-0.887082	1.068107
1	1.342448	-0.463358	-1.375918
1	2.282707	0.954614	-0.931899
1	2.900937	-1.983907	-0.303418
1	5.072105	-2.589613	0.053320
1	5.968093	-1.419002	1.024811
1	6.232995	-1.497561	-0.701996
1	5.395835	1.075763	0.806360
1	5.623233	1.011435	-0.922907
1	4.103095	1.602324	-0.264460
1	-1.049224	-0.840235	-0.289126

a_{2exo6}

6	1.249815	0.803581	-0.362180
6	2.583301	1.390819	0.070899
6	3.666246	0.361807	-0.030718
6	3.456375	-0.950764	-0.103011
6	2.074430	-1.532380	-0.050721
6	1.011672	-0.549979	0.413051
6	4.569150	-1.935913	-0.248214
6	0.029514	1.523616	-0.064586
6	-0.062745	2.373157	1.122704
6	-1.097360	1.405328	-0.990860
6	-2.523990	1.367666	-0.430590
6	-2.763186	0.165747	0.426073
6	-3.526844	-0.893593	0.144169
6	-4.296337	-1.085182	-1.123677
6	-3.687381	-2.000326	1.138653
1	4.679340	0.738503	-0.059647
1	5.533410	-1.442664	-0.326505
1	4.601059	-2.614572	0.604041
1	4.429535	-2.550627	-1.137780
1	2.062502	-2.377322	0.640557
1	1.811034	-1.945068	-1.027201
1	0.015760	-0.953984	0.238656
1	1.116352	-0.352819	1.478644
1	2.823796	2.237878	-0.573261
1	2.533048	1.784186	1.088039
1	0.482102	1.950497	1.964067
1	0.472805	3.297749	0.871783
1	-1.075861	2.627984	1.405203
1	-0.922121	0.587522	-1.687561
1	-0.965709	2.329169	-1.585015
1	-2.731735	2.281367	0.126413
1	-3.195263	1.386943	-1.283797
1	-2.275917	0.180239	1.396717
1	-3.118356	-1.823695	2.047405
1	-3.372814	-2.952643	0.711710
1	-4.735971	-2.114646	1.412849
1	-4.023923	-2.032500	-1.588290
1	-5.362637	-1.144069	-0.906240
1	-4.149028	-0.298627	-1.856382
1	1.272637	0.539699	-1.420364

a_{2exo7}

6	1.280627	-0.729966	0.280952
6	2.325367	-1.408968	-0.598447
6	3.631485	-0.683721	-0.506568
6	3.775669	0.564250	-0.066383
6	2.597460	1.390847	0.356368
6	1.257981	0.806272	-0.058590
6	5.108744	1.226810	0.049076
6	-0.111256	-1.101027	0.119154
6	-0.720431	-1.281684	-1.191529
6	-0.943246	-1.235699	1.317396
6	-2.454273	-1.052813	1.199960
6	-2.826492	0.349809	0.831638
6	-3.689739	0.749004	-0.107631
6	-4.460779	-0.163033	-1.009361
6	-3.988340	2.203709	-0.295465
1	4.505891	-1.242630	-0.810619
1	5.915383	0.554575	-0.227887
1	5.162727	2.106722	-0.591855
1	5.285968	1.566886	1.069690
1	2.673864	2.384989	-0.088278
1	2.627864	1.547509	1.437078
1	0.444908	1.323721	0.448158
1	1.109026	0.915151	-1.131397
1	2.455412	-2.438105	-0.262722
1	1.996327	-1.464125	-1.637078
1	-1.489731	-0.504216	-1.283357
1	-0.030621	-1.240447	-2.023357
1	-1.282228	-2.218191	-1.206823
1	-0.516283	-0.632854	2.120790
1	-0.708099	-2.272019	1.620772
1	-2.874651	-1.779852	0.509457
1	-2.871161	-1.298955	2.177433
1	-2.371048	1.117969	1.448486
1	-3.411186	2.831537	0.377613
1	-5.045655	2.399362	-0.117477
1	-3.783605	2.514414	-1.320047
1	-5.526634	-0.073780	-0.799521
1	-4.330268	0.127875	-2.051744
1	-4.199143	-1.212101	-0.910509
1	1.566289	-0.816177	1.329781

a_{2exo8}

6	1.012138	-0.358085	-0.094269
6	1.273175	1.065731	0.383636
6	2.697178	1.454612	0.134612
6	3.686544	0.595494	-0.098937
6	3.456564	-0.886781	-0.102230
6	2.119989	-1.299670	0.491176
6	5.084826	1.037398	-0.380007
6	-0.225253	-1.007299	0.318519
6	-0.813644	-0.810835	1.629313
6	-0.942246	-1.838012	-0.634018
6	-2.016988	-0.895246	-1.325664
6	-3.195918	-0.590274	-0.479077
6	-3.661696	0.619850	-0.133955
6	-3.028747	1.920283	-0.512361
6	-4.930781	0.747385	0.646516
1	2.907215	2.515550	0.139802

a_{2exo9}

6	1.161356	-0.178526	-0.036245
6	1.656221	1.258253	0.111699
6	3.114746	1.347397	-0.212301
6	3.949528	0.311066	-0.237093
6	3.490426	-1.076477	0.100036
6	2.123121	-1.125330	0.760731
6	5.389648	0.447815	-0.606880
6	-0.154287	-0.500186	0.495039
6	-0.636858	0.010822	1.769827
6	-1.048622	-1.340983	-0.277640
6	-1.860109	-0.385915	-1.257525
6	-2.778136	0.589793	-0.608273
6	-4.039099	0.349315	-0.222089
6	-4.715596	-0.977472	-0.340347
6	-4.884414	1.439279	0.352375
1	3.487446	2.333948	-0.452113

1	5.164974	2.120032	-0.411163
1	5.769906	0.666555	0.382357
1	5.432009	0.643857	-1.335720
1	4.243388	-1.376756	0.474072
1	3.555172	-1.269296	-1.120848
1	1.919314	-2.346708	0.269365
1	2.131814	-1.183028	1.573926
1	0.610788	1.747889	-0.150385
1	1.034803	1.177876	1.442618
1	-1.175151	-1.743051	2.058547
1	-0.209909	-0.251685	2.332069
1	-1.743190	-0.246897	1.402599
1	-1.474076	-2.660911	-0.164388
1	-0.282116	-2.206885	-1.414241
1	-1.530042	-0.005463	-1.715328
1	-2.329502	-1.480649	-2.190091
1	-3.769748	-1.455094	-0.165288
1	-5.355747	-0.218522	0.903083
1	-5.671497	1.302398	0.070888
1	-4.767204	1.311214	1.564770
1	-3.683288	2.463767	-1.193994
1	-2.909126	2.553829	0.366046
1	-2.063040	1.820721	-0.997892
1	1.103411	-0.406053	-1.180327
1	5.636664	1.467497	-0.887336
1	6.033113	0.156946	0.223410
1	5.639077	-0.204458	-1.444164
1	4.206366	-1.539397	0.781633
1	3.500038	-1.693542	-0.801528
1	1.754110	-2.149613	0.782904
1	2.183144	-0.767868	1.787637
1	1.092368	1.900689	-0.565341
1	1.470498	1.637033	1.117928
1	-0.984551	-0.810900	2.396970
1	0.054238	0.645495	2.308593
1	-1.559424	0.564724	1.527785
1	-1.765411	-1.871503	0.341648
1	-0.492892	-2.031645	-0.908103
1	-1.150434	0.126052	-1.903477
1	-2.404380	-1.085030	-1.887826
1	-2.404374	1.600614	-0.494070
1	-4.350053	2.382380	0.422289
1	-5.244696	1.168638	1.344829
1	-5.768531	1.594333	-0.265796
1	-5.063312	-1.312265	0.636975
1	-5.603496	-0.887368	-0.965836
1	-4.089030	-1.757333	-0.761941
1	1.215972	-0.480534	-1.082965

a_{2exo12}

6	0.758064	-0.443716	-0.008807
6	1.074471	0.610990	1.038037
6	2.393297	1.258552	0.752260
6	3.330805	0.744703	-0.040693
6	3.153920	-0.585812	-0.710331
6	2.001183	-1.406791	-0.155476
6	4.615275	1.449398	-0.329617
6	-0.310641	-1.383868	0.242604
6	-0.668261	-1.778420	1.603648
6	-1.061481	-1.949098	-0.876024
6	-2.484746	-1.297923	-0.868739
6	-2.452846	0.187657	-1.017905
6	-3.052610	1.096031	-0.242329
6	-3.878119	0.789090	0.967689
6	-2.970459	2.551977	-0.579821
1	2.566637	2.215432	1.225133
1	4.653959	2.423553	0.148662
1	5.466571	0.864406	0.018312
1	4.746882	1.592773	-1.402402
1	4.063919	-1.176640	-0.589414
1	3.034436	-0.442791	-1.786645
1	1.792794	-2.251214	-0.809771
1	2.250429	-1.794995	0.830700
1	0.284148	1.362066	1.024361
1	1.076638	0.183858	2.042778
1	0.204107	-1.862695	2.248354
1	-1.247697	-0.938962	2.009783
1	-1.275837	-2.675168	1.649132
1	-1.187640	-3.023563	-0.747457
1	-0.576863	-1.739934	-1.826256
1	-2.997327	-1.755295	-1.715545
1	-3.017932	-1.611574	0.024024
1	-1.923510	0.548603	-1.893436

a_{2exo13}

6	0.748161	0.632763	-0.040634
6	1.542650	0.451404	-1.324134
6	2.620148	-0.571601	-1.140200
6	3.089042	-0.968125	0.040976
6	2.581801	-0.383585	1.326075
6	1.751969	0.875528	1.143306
6	4.139689	-2.020574	0.176503
6	-0.173488	1.752196	0.040625
6	0.046280	2.976306	-0.732832
6	-1.345700	1.643363	0.882647
6	-2.552969	1.214555	-0.062756
6	-2.439155	-0.150980	-0.640593
6	-2.982349	-1.268907	-0.143599
6	-3.772909	-1.339928	1.122776
6	-2.842299	-2.569155	-0.867726
1	3.021892	-1.009774	-2.043514
1	4.423557	-2.430647	-0.788174
1	5.033776	-1.617935	0.652395
1	3.789302	-2.840439	0.804089
1	3.427867	-0.133831	1.969084
1	2.010344	-1.139194	1.870292
1	1.235925	1.124970	2.068286
1	2.392352	1.715858	0.877986
1	0.870410	0.133393	-2.122468
1	1.979149	1.398256	-1.649504
1	1.069713	3.327745	-0.585534
1	-0.013503	2.734411	-1.798044
1	-0.655151	3.767472	-0.495186
1	-1.611749	2.601566	1.322846
1	-1.241032	0.875111	1.643064
1	-3.422995	1.310387	0.580518
1	-2.661140	1.962377	-0.846181
1	-1.895966	-0.233472	-1.575200

1	-2.362423	2.736132	-1.460992
1	-2.557064	3.121893	0.252438
1	-3.966246	2.954341	-0.765434
1	-3.526926	1.363383	1.824920
1	-4.909762	1.096903	0.797528
1	-3.895841	-0.261205	1.242359
1	0.617432	0.014064	-0.988106
1	-2.264982	-2.470704	-1.782554
1	-3.824267	-2.965325	-1.125951
1	-2.363686	-3.315320	-0.233584
1	-4.790472	-1.666871	0.909231
1	-3.344487	-2.086864	1.790619
1	-3.831190	-0.400758	1.663824
1	0.201114	-0.279962	0.211057

a_{2exo14}

6	0.747945	0.632939	-0.040700
6	1.542509	0.451657	-1.324147
6	2.619912	-0.571461	-1.140245
6	3.088789	-0.968039	0.040917
6	2.581583	-0.383498	1.326029
6	1.751801	0.875642	1.143322
6	4.139331	-2.020594	0.176409
6	-0.173647	1.752354	0.040727
6	0.046057	2.976559	-0.732591
6	-1.345928	1.643285	0.882672
6	-2.553245	1.214475	-0.062711
6	-2.439336	-0.150923	-0.640815
6	-2.981853	-1.269112	-0.143663
6	-3.771461	-1.340631	1.123264
6	-2.841803	-2.569196	-0.868087
1	3.021604	-1.009660	-2.043570
1	4.423420	-2.430391	-0.788320
1	5.033321	-1.618163	0.652656
1	3.788728	-2.840631	0.803652
1	3.427667	-0.133801	1.969042
1	2.010125	-1.139120	1.870229
1	1.235736	1.125099	2.068285
1	2.392161	1.715984	0.877987
1	0.870312	0.133802	-2.122579
1	1.979127	1.398495	-1.649390
1	1.069792	3.327529	-0.586508
1	-0.015041	2.734710	-1.797776
1	-0.654843	3.767979	-0.494249
1	-1.612118	2.601373	1.323018
1	-1.241198	0.874930	1.642977
1	-3.423222	1.310076	0.580670
1	-2.661541	1.962458	-0.845956
1	-1.896659	-0.233111	-1.575745
1	-2.264506	-2.470527	-1.782905
1	-3.823781	-2.965288	-1.126392
1	-2.363186	-3.315531	-0.234149
1	-4.788228	-1.670717	0.910832
1	-3.340516	-2.085498	1.791822
1	-3.832029	-0.400912	1.663109
1	0.200953	-0.279830	0.210967

a_{2exo16}

6	1.115802	0.635927	0.465818
6	1.693565	-0.428765	1.386569
6	3.099031	-0.780679	1.008014
6	3.684221	-0.453912	-0.142029
6	2.942360	0.284095	-1.216438
6	1.439587	0.304889	-1.001370
6	5.107314	-0.791962	-0.441799
6	-0.267058	1.058292	0.737883
6	-1.017459	0.591723	1.885043
6	-0.963236	1.946260	-0.183165
6	-1.899469	1.056834	-1.106028
6	-3.132819	0.574038	-0.441115
6	-3.546564	-0.697840	-0.316347
6	-2.785859	-1.894072	-0.790291
6	-4.877899	-1.003251	0.290874
1	3.661512	-1.331165	1.749849
1	5.590856	-1.280600	0.398953
1	5.175413	-1.452218	-1.306452
1	5.675577	0.106214	-0.684993
1	3.151262	-0.178374	-2.181845
1	3.331074	1.303342	-1.291152
1	0.980775	1.007586	-1.692153
1	1.026719	-0.681955	-1.214524
1	1.689445	-0.076745	2.418664
1	1.064774	-1.323979	1.363337
1	-0.483898	-0.053366	2.568045
1	-1.511378	1.412025	2.404440
1	-1.872820	0.047048	1.424364
1	-0.275992	2.491309	-0.821680
1	-1.605924	2.645423	0.346212
1	-2.164315	1.739777	-1.912928
1	-1.323638	0.254850	-1.556903
1	-3.794121	1.352280	-0.076799
1	-5.398048	-0.107477	0.616812
1	-4.771059	-1.674815	1.142618
1	-5.509883	-1.519353	-0.431852
1	-2.748347	-2.653126	-0.009877
1	-3.303614	-2.349244	-1.634971
1	-1.770174	-1.678979	-1.107748
1	1.636712	1.592082	0.676876

a_{2exo17}

6	-1.277230	0.238648	0.486103
6	-2.054156	1.452735	0.001744
6	-3.506203	1.134209	-0.178823
6	-4.015317	-0.094854	-0.228965
6	-3.141395	-1.311329	-0.147636
6	-1.664710	-1.007122	-0.330074
6	-5.479883	-0.350552	-0.366891

6	0.157376	0.430521	0.730369
6	0.777196	1.750292	0.727704
6	1.017185	-0.694783	1.050880
6	1.790056	-1.152519	-0.263418
6	2.797204	-0.196705	-0.799218
6	4.072212	-0.090292	-0.399316
6	4.676307	-0.891874	0.707258
6	5.007405	0.861255	-1.071967
1	-4.168452	1.985102	-0.262207
1	-6.051313	0.572921	-0.372158
1	-5.693742	-0.890158	-1.289512
1	-5.843688	-0.970455	0.452961
1	-3.447671	-2.026423	-0.911996
1	-3.311180	-1.815167	0.807881
1	-1.074587	-1.877485	-0.055068
1	-1.461112	-0.789738	-1.378941
1	-1.960178	2.271196	0.716109
1	-1.631139	1.814640	-0.940297
1	0.229081	2.510769	0.186778
1	0.848526	2.056797	1.779341
1	1.814747	1.667449	0.391713
1	0.455022	-1.547524	1.418800
1	1.780053	-0.405355	1.769916
1	2.253473	-2.087701	0.041389
1	1.060572	-1.404978	-1.027825
1	2.477835	0.427132	-1.625228
1	4.522820	1.425061	-1.863916
1	5.848009	0.319532	-1.505294
1	5.429844	1.563432	-0.353130
1	5.517863	-1.472502	0.329860
1	5.081352	-0.231095	1.473885
1	3.985508	-1.580299	1.184559
1	-1.597924	0.019065	1.525871

b_1

6	-0.891909	-0.246538	0.494001
6	-2.548845	0.727401	-0.725997
6	-3.680924	0.220353	0.085777
6	-3.243217	-0.909763	1.050863
6	-1.878362	-1.416658	0.634222
6	-1.902645	-1.655461	-0.880858
6	-1.590744	-0.195229	-1.147598
1	-0.881079	0.122802	-1.900691
6	-2.456997	2.158383	-1.054990
1	-1.547508	2.417084	-1.586347
1	-3.310941	2.397298	-1.695325
1	-2.569886	2.776462	-0.165485
1	-4.386677	-0.185482	-0.646892
1	-4.198929	1.029859	0.593146
1	-3.226289	-0.533066	2.070679
1	-3.965055	-1.721627	1.024415
1	-1.531615	-2.230626	1.267400
1	-1.109177	-2.302159	-1.233849
1	-2.845157	-2.010048	-1.292479
6	-0.952870	0.907625	1.465144
1	-0.433713	0.592447	2.370751
1	-0.432095	1.783209	1.088060
1	-1.955461	1.201854	1.757798
6	0.552653	-0.656962	0.236132

b_2

6	-0.971912	-0.633257	0.393739
6	-2.301753	1.114302	-0.204036
6	-3.579701	0.362306	-0.211148
6	-3.352260	-1.169892	-0.179519
6	-1.902942	-1.462832	-0.504583
6	-1.522918	-0.653543	-1.751010
6	-1.226611	0.570523	-0.906265
1	-0.362601	1.200492	-1.074409
6	-2.194397	2.384128	0.531463
1	-1.189622	2.792746	0.532313
1	-2.857386	3.100021	0.037228
1	-2.567988	2.284978	1.549408
1	-4.057080	0.635834	-1.158132
1	-4.245426	0.704942	0.576545
1	-3.621090	-1.559330	0.799395
1	-4.000319	-1.657238	-0.902980
1	-1.692230	-2.530229	-0.513823
1	-0.633350	-1.014965	-2.251352
1	-2.308268	-0.524992	-2.492797
6	-1.338783	-0.392558	1.838319
1	-1.049960	-1.283510	2.396521
1	-0.788453	0.441191	2.264407
1	-2.397184	-0.233204	2.016851
6	0.506256	-0.976467	0.258048

1	0.600380	-1.488687	-0.462155
1	0.905142	-1.055183	1.192340
6	1.509576	0.441842	-0.221566
1	1.065503	0.985556	-1.061311
1	1.656953	1.170569	0.570717
6	2.818512	-0.134712	-0.660432
1	2.767369	-0.756956	-1.547687
6	4.015411	0.029168	-0.093794
6	5.229424	-0.621393	-0.680323
1	4.993528	-1.204145	-1.566448
1	5.704112	-1.280241	0.046948
1	5.971752	0.128829	-0.953529
6	4.285128	0.848430	1.128676
1	4.765911	0.236553	1.891869
1	4.980901	1.654500	0.895386
1	3.396888	1.292282	1.567144

1	0.770446	-1.167164	-0.778317
1	0.606822	-1.938426	0.771112
6	1.511246	0.008104	0.851948
1	1.372558	0.994908	0.411811
1	1.336006	0.117770	1.922964
6	2.912154	-0.474235	0.643465
1	3.147559	-1.406892	1.144425
6	3.883282	0.103328	-0.065951
6	5.238374	-0.527122	-0.154669
1	5.291129	-1.460989	0.397911
1	6.001168	0.144848	0.239110
1	5.504037	-0.727906	-1.192791
6	3.756634	1.393622	-0.813488
1	4.475677	2.119669	-0.434046
1	3.994989	1.244677	-1.866813
1	2.770554	1.844323	-0.752413

b_3

6	0.848022	-0.204141	0.300758
6	2.953304	-0.440044	-0.557201
6	3.557978	0.698169	0.175900
6	2.483467	1.619499	0.806511
6	1.132979	1.301088	0.197683
6	1.297654	1.233829	-1.324597
6	1.766171	-0.206821	-1.247328
1	1.420821	-0.969200	-1.933997
6	3.597342	-1.763107	-0.532326
1	3.015596	-2.529593	-1.033174
1	4.556751	-1.667561	-1.048459
1	3.835194	-2.068492	0.485570
1	4.111500	1.258567	-0.584949
1	4.294250	0.357630	0.899363
1	2.467765	1.476888	1.884432
1	2.735417	2.661284	0.627455
1	0.349152	1.943781	0.591842
1	0.363979	1.318643	-1.866750
1	2.013578	1.929273	-1.757358
6	1.279424	-0.962125	1.532064
1	0.613262	-0.668837	2.342349
1	1.169607	-2.035677	1.396589
1	2.287950	-0.753133	1.872195
6	-0.523580	-0.670212	-0.171052
1	-0.481940	-1.741769	-0.368227
1	-0.804352	-0.189456	-1.103319
6	-1.640457	-0.396203	0.850955
1	-1.450452	-0.953511	1.768019
1	-1.648907	0.658577	1.117837
6	-2.960333	-0.823615	0.293597
1	-3.073614	-1.894513	0.165923
6	-3.991075	-0.048969	-0.052089
6	-5.251900	-0.654864	-0.585142
1	-5.190565	-1.737756	-0.647497
1	-5.476692	-0.266064	-1.578606
1	-6.099690	-0.397883	0.050161
6	-4.022834	1.442747	0.058647
1	-4.245091	1.887521	-0.911498
1	-4.823246	1.752632	0.730616
1	-3.097250	1.877257	0.423194

b_4

6	-0.828452	0.009489	0.203305
6	-2.868254	0.598981	-0.642068
6	-3.681078	-0.079452	0.395712
6	-2.834614	-1.057427	1.248620
6	-1.517863	-1.318893	0.547058
6	-1.811311	-1.620453	-0.927145
6	-1.857885	-0.139808	-1.255915
1	-1.391718	0.276310	-2.140052
6	-3.128201	2.005752	-0.986377
1	-2.410569	2.411297	-1.691667
1	-4.120991	2.049517	-1.443224
1	-3.182190	2.628903	-0.094851
1	-4.430113	-0.648456	-0.165227
1	-4.231181	0.636787	1.000426
1	-2.670847	-0.632435	2.236014
1	-3.374042	-1.990246	1.388928
1	-0.900502	-2.028347	1.093376
1	-0.996643	-2.116116	-1.440208
1	-2.729891	-2.167351	-1.128519
6	-0.910285	1.166783	1.168700
1	-0.267813	0.927364	2.014977
1	-0.529417	2.082617	0.722268
1	-1.897380	1.360608	1.574718
6	0.568066	-0.088925	-0.398709
1	0.804488	0.844157	-0.909362
1	0.616063	-0.876073	-1.146435
6	1.656437	-0.362300	0.653619
1	1.772725	0.495711	1.309140
1	1.351494	-1.201000	1.283529
6	2.949818	-0.698941	-0.016601
1	2.964444	-1.656207	-0.526138
6	4.063856	0.035693	-0.051726
6	5.282821	-0.465260	-0.761445
1	5.122467	-1.440994	-1.211535
1	6.123246	-0.542729	-0.071441
1	5.585494	0.228944	-1.545700
6	4.232051	1.375272	0.592932
1	5.019662	1.334133	1.345477
1	4.549516	2.110524	-0.146466
1	3.333070	1.750004	1.072214

b_5

6	-0.965783	-0.420638	0.565387
6	-2.533701	1.037991	-0.173646
6	-3.615842	0.042146	-0.362975
6	-3.083400	-1.413958	-0.308064
6	-1.574941	-1.393547	-0.455663
6	-1.240292	-0.473554	-1.635429
6	-1.287960	0.744617	-0.732460
1	-0.553795	1.539490	-0.779134
6	-2.782892	2.277208	0.578502
1	-1.882504	2.856824	0.752741
1	-3.464944	2.882861	-0.025905
1	-3.302803	2.081890	1.514357
1	-4.004502	0.243680	-1.367003
1	-4.439413	0.214356	0.324828
1	-3.382523	-1.877495	0.628807
1	-3.526406	-1.999327	-1.109334
1	-1.146543	-2.393744	-0.451899
1	-0.254299	-0.628936	-2.047296
1	-1.962112	-0.468963	-2.449644
6	-1.589929	-0.325517	1.944879
1	-1.311561	-1.230610	2.484158
1	-1.188716	0.516035	2.504623
1	-2.672905	-0.270308	1.966335
6	0.550400	-0.393204	0.759218
1	0.725509	-1.176257	1.503366
1	0.805539	0.537838	1.266228
6	1.536542	-0.612517	-0.383012
1	1.300418	-1.539724	-0.909324
1	1.478408	0.195523	-1.108936
6	2.926449	-0.718304	0.164529
1	3.098644	-1.580758	0.799239
6	3.954092	0.106866	-0.043384
6	5.286675	-0.166285	0.582011
1	5.275554	-1.065836	1.191017
1	5.597256	0.668890	1.210138
1	6.053252	-0.283287	-0.184218
6	3.915440	1.337621	-0.893891
1	4.212265	2.208599	-0.309475
1	4.634222	1.253096	-1.708983
1	2.942810	1.542614	-1.330703

b_6

6	0.898706	-0.093573	0.552184
6	2.827957	-0.590674	-0.513095
6	3.594385	0.585498	-0.033751
6	2.674547	1.660832	0.601392
6	1.237593	1.367040	0.219241
6	1.208767	1.103131	-1.290343
6	1.570020	-0.353612	-1.069812
1	1.089893	-1.164896	-1.603016
6	3.390868	-1.944920	-0.397021
1	2.685478	-2.723308	-0.668271
1	4.236313	-1.996939	-1.089654
1	3.802025	-2.126003	0.594126
1	4.060559	0.998235	-0.934820
1	4.407633	0.287876	0.622799
1	2.804599	1.662580	1.680787
1	2.958301	2.647381	0.244769
1	0.545292	2.103756	0.621479
1	0.231662	1.210010	-1.737553
1	1.926470	1.668532	-1.881510
6	1.483226	-0.709709	1.809731
1	0.933294	-0.293848	2.653525
1	1.332971	-1.786435	1.830749
1	2.533025	-0.503466	1.989298
6	-0.555795	-0.556823	0.464659
1	-0.978269	-0.268674	1.431640
1	-0.553401	-1.647830	0.471954
6	-1.520101	-0.074943	-0.614187
1	-1.591638	1.010172	-0.606363
1	-1.166355	-0.369352	-1.604719
6	-2.867293	-0.692742	-0.398053
1	-2.903135	-1.766977	-0.543777
6	-4.002619	-0.079621	-0.058122
6	-5.269069	-0.861526	0.103177
1	-5.120159	-1.922580	-0.076633
1	-6.031614	-0.502694	-0.588379
1	-5.674539	-0.737640	1.107504
6	-4.151450	1.389934	0.180818
1	-4.871961	1.813530	-0.518896
1	-4.548837	1.569595	1.179808
1	-3.226060	1.949213	0.084240

b_7

6	-0.935539	-0.823985	0.391813
6	-1.552401	1.297113	-0.184482
6	-3.007560	1.034562	-0.284663
6	-3.322806	-0.481331	-0.303669
6	-2.048653	-1.250560	-0.580216
6	-1.341382	-0.587718	-1.768744
6	-0.686729	0.428088	-0.851727
1	0.354267	0.713038	-0.937871
6	-1.063430	2.437411	0.605154
1	0.018335	2.486674	0.654626
1	-1.429858	3.345888	0.118530
1	-1.496682	2.440794	1.604517
1	-3.302947	1.475718	-1.242722
1	-3.561520	1.570342	0.481718
1	-3.759699	-0.776286	0.647318

b_8

6	-0.951016	-0.828731	0.319188
6	-1.249014	1.356046	-0.233163
6	-2.662546	1.461498	0.196649
6	-3.290552	0.069050	0.456790
6	-2.405910	-0.997547	-0.153388
6	-2.048130	-0.559868	-1.579280
6	-0.899539	0.282819	-1.057819
1	0.072681	0.316365	-1.529997
6	-0.255637	2.346103	0.207322
1	0.759622	2.055504	-0.042579
1	-0.486988	3.279204	-0.316148
1	-0.349636	2.564068	1.269300
1	-3.174235	1.933464	-0.649120
1	-2.773993	2.138023	1.039667
1	-3.407382	-0.084149	1.526918

1	-4.060309	-0.698107	-1.071853
1	-2.222569	-2.323458	-0.631175
1	-0.605426	-1.222334	-2.246472
1	-1.988487	-0.170914	-2.537666
6	-1.273808	-0.513850	1.829635
1	-1.349014	-1.463877	2.359420
1	-0.489415	0.060085	2.315087
1	-2.216469	0.005189	1.969586
6	0.318560	-1.688132	0.304389
1	0.612941	-1.837804	-0.730671
1	-0.019635	-2.665031	0.665523
6	1.546089	-1.280815	1.120889
1	1.303579	-1.295770	2.182813
1	2.278053	-2.074916	0.987510
6	2.155302	0.045938	0.776101
1	1.784321	0.898194	1.336464
6	3.144840	0.277325	-0.091806
6	3.695928	1.655799	-0.284518
1	3.196623	2.389879	0.343121
1	3.609886	1.971489	-1.324868
1	4.758653	1.677875	-0.043092
6	3.804682	-0.779226	-0.920364
1	3.729271	-0.534256	-1.980222
1	4.869506	-0.825384	-0.691949
1	3.388025	-1.770741	-0.774419

1	-4.284182	0.022254	0.019163
1	-2.818206	-1.995470	-0.020018
1	-1.693856	-1.368386	-2.206754
1	-2.818560	-0.015056	-2.120724
6	-0.668061	-0.400152	1.739388
1	-0.734969	-1.286710	2.370390
1	0.338049	-0.004173	1.843545
1	-1.365895	0.328973	2.138357
6	-0.036001	-1.982830	-0.085415
1	-0.174439	-2.238196	-1.133251
1	-0.427729	-2.833533	0.480625
6	1.456593	-1.859300	0.214278
1	1.619568	-1.728281	1.280303
1	1.890036	-2.833040	-0.024798
6	2.174840	-0.818325	-0.584103
1	2.056450	-0.909510	-1.660410
6	3.009997	0.128916	-0.146618
6	3.716674	1.030183	-1.112630
1	3.429048	0.835444	-2.142550
1	4.796156	0.899046	-1.035762
1	3.520824	2.080282	-0.890256
6	3.369087	0.361477	1.287949
1	4.431152	0.168052	1.439857
1	3.208647	1.404684	1.562989
1	2.823131	-0.264896	1.986353

b_9

6	0.614361	-0.028271	0.322915
6	2.792908	0.652768	-0.006728
6	2.956247	0.012967	-1.335658
6	1.835235	-1.015035	-1.627712
6	1.091484	-1.325164	-0.344973
6	2.125877	-1.607089	0.749255
6	2.305239	-0.128972	1.032201
1	2.351628	0.271409	2.036763
6	3.130284	2.074910	0.171378
1	2.915894	2.441642	1.169506
1	4.200758	2.188747	-0.017572
1	2.628527	2.690720	-0.574366
1	3.918114	-0.506990	-1.283114
1	3.055276	0.757025	-2.121787
1	1.160696	-0.618889	-2.382830
1	2.263840	-1.927556	-2.033399
1	0.313199	-2.068529	-0.501813
1	1.720585	-2.131265	1.606218
1	3.026615	-2.124027	0.425122
6	0.143629	1.127815	-0.513038
1	-0.888105	0.912587	-0.795241
1	0.115906	2.048251	0.065697
1	0.709902	1.297352	-1.422841
6	-0.231226	-0.182995	1.579907
1	-0.284556	0.780043	2.087895
1	0.233532	-0.877920	2.272278
6	-1.661718	-0.692442	1.309061
1	-1.628452	-1.575395	0.674282
1	-2.021273	-1.044920	2.278650
6	-2.629333	0.323055	0.794275
1	-2.628070	1.265111	1.333450
6	-3.532820	0.176465	-0.178689

b_{10}

6	-0.595509	-0.093549	-0.181253
6	-2.785179	0.634446	-0.377014
6	-3.164706	0.386306	1.033689
6	-2.126586	-0.497240	1.767454
6	-1.206683	-1.145101	0.754436
6	-2.062053	-1.735573	-0.371027
6	-2.147479	-0.391233	-1.069529
1	-2.042656	-0.283280	-2.141482
6	-3.062689	1.941168	-0.993294
1	-2.693365	2.021573	-2.010000
1	-4.147247	2.078267	-1.005021
1	-2.668164	2.751212	-0.380330
1	-4.117941	-0.149979	0.976646
1	-3.369742	1.316238	1.557713
1	-1.562812	0.109796	2.471587
1	-2.634313	-1.264150	2.346299
1	-0.487340	-1.802958	1.235425
1	-1.529189	-2.459473	-0.976924
1	-3.016175	-2.165631	-0.073995
6	-0.215868	1.269076	0.333235
1	0.778250	1.178776	0.770707
1	-0.129138	1.983320	-0.482727
1	-0.880167	1.675225	1.089505
6	0.446282	-0.601407	-1.176858
1	0.799646	0.248341	-1.758906
1	0.016347	-1.308046	-1.881508
6	1.652062	-1.310404	-0.523939
1	1.301959	-2.228189	-0.051116
1	2.276451	-1.635419	-1.354401
6	2.468797	-0.532702	0.460998
1	2.162741	-0.606779	1.499117
6	3.565410	0.185080	0.200748

6	-4.485893	1.283645	-0.506078
1	-4.324075	2.160302	0.115201
1	-5.515967	0.955448	-0.366016
1	-4.394167	1.579945	-1.551523
6	-3.715531	-1.060080	-1.001381
1	-4.698973	-1.491211	-0.812743
1	-3.684954	-0.818738	-2.064071
1	-2.978341	-1.832615	-0.806159

b_{11}

6	0.727281	-0.426793	0.408090
6	2.816318	-0.132713	-0.413238
6	3.101452	1.135211	0.302216
6	1.818240	1.758947	0.912734
6	0.603366	1.099221	0.290907
6	0.823110	1.075598	-1.225531
6	1.619291	-0.209455	-1.123971
1	1.483672	-1.038027	-1.808100
6	3.772730	-1.250145	-0.363622
1	3.392388	-2.155315	-0.825271
1	4.661337	-0.933957	-0.917779
1	4.106638	-1.448546	0.653024
1	3.493637	1.807034	-0.468520
1	3.895915	1.009734	1.033138
1	1.827802	1.632423	1.992475
1	1.798404	2.827792	0.717433
1	-0.333241	1.508964	0.661108
1	-0.081452	0.941082	-1.799281
1	1.370574	1.922223	-1.635214
6	1.348439	-1.006468	1.665147
1	0.615289	-0.885222	2.462487
1	1.536869	-2.072465	1.561932
1	2.259420	-0.525128	2.002849
6	-0.449768	-1.330572	0.039195
1	-0.995013	-1.438348	0.980539
1	-0.032436	-2.317634	-0.166882
6	-1.479827	-0.992076	-1.038479
1	-1.004375	-0.869258	-2.011701
1	-2.084391	-1.891625	-1.145867
6	-2.376139	0.175335	-0.739860
1	-2.099450	1.131899	-1.167369
6	-3.505478	0.140553	-0.027568
6	-4.328109	1.375049	0.169672
1	-3.884028	2.243793	-0.309007
1	-4.455269	1.593210	1.230271
1	-5.328266	1.236675	-0.241282
6	-4.065003	-1.089642	0.614546
1	-4.149838	-0.950257	1.692665
1	-5.074593	-1.277585	0.249354
1	-3.475021	-1.983760	0.437568

b_{12}

6	0.929721	0.621905	-0.580557
6	2.512982	-0.234665	0.790822
6	2.773774	-1.462564	0.001148
6	1.683999	-1.704751	-1.076124
6	0.482017	-0.835812	-0.765228
6	0.164138	-0.996132	0.723538
6	1.182604	0.066672	1.087080
1	0.990044	0.838113	1.822734
6	3.627598	0.617547	1.233968
1	3.298198	1.541007	1.698541
1	4.189790	0.045000	1.977652
1	4.324003	0.822202	0.422991
1	2.737987	-2.275440	0.734324
1	3.779902	-1.464410	-0.409816
1	2.088598	-1.485644	-2.061276
1	1.392299	-2.751595	-1.077145
1	-0.335244	-0.981184	-1.467331
1	-0.844423	-0.697985	0.969127
1	0.356909	-1.980045	1.146820
6	2.042304	1.155079	-1.464342
1	1.616760	1.300563	-2.457075
1	2.394772	2.125198	-1.121972
1	2.897946	0.500051	-1.585297
6	-0.110033	1.739839	-0.462555
1	-0.304957	2.019467	-1.502336
1	0.405167	2.598712	-0.031576
6	-1.459499	1.583805	0.230749
1	-1.340026	1.321120	1.280759
1	-1.881026	2.592338	0.245374
6	-2.424148	0.681194	-0.475311
1	-2.400382	0.749699	-1.558441
6	-3.347707	-0.116831	0.065228
6	-4.282490	-0.902538	-0.800909
1	-4.095495	-0.738147	-1.858679
1	-5.317349	-0.629387	-0.594266
1	-4.196834	-1.970500	-0.597674
6	-3.572648	-0.288444	1.535264
1	-4.563975	0.077550	1.803441
1	-3.551975	-1.343982	1.807995
1	-2.856347	0.241477	2.156504

b_{13}

6	-0.604710	-0.431374	0.138450
6	-2.832399	-0.064344	-0.170178
6	-2.692662	1.270403	-0.801694
6	-1.271588	1.857094	-0.604264
6	-0.550058	1.066192	0.466866
6	-1.492819	0.918338	1.666734

b_{14}

6	-0.688880	-0.434261	-0.198119
6	-2.877882	-0.067612	0.345182
6	-2.969882	1.283900	-0.258366
6	-1.571978	1.870926	-0.582811
6	-0.511100	1.055612	0.126297
6	-0.949334	0.868595	1.583045

6	-2.177753	-0.277849	1.037401
1	-2.420724	-1.170918	1.598605
6	-3.641494	-1.111081	-0.817543
1	-3.588061	-2.066393	-0.306104
1	-4.681486	-0.774012	-0.805421
1	-3.375176	-1.225975	-1.867089
1	-3.418697	1.904863	-0.283293
1	-2.995955	1.247955	-1.845211
1	-0.727841	1.822638	-1.545199
1	-1.337403	2.902003	-0.313293
1	0.452576	1.443392	0.648925
1	-0.989792	0.650015	2.587611
1	-2.142914	1.767824	1.865343
6	-0.483755	-0.880368	-1.294699
1	0.551698	-0.705185	-1.585678
1	-0.680082	-1.944921	-1.399968
1	-1.100451	-0.338129	-2.002936
6	0.147032	-1.380910	1.065539
1	-0.337946	-2.356342	1.025206
1	0.086518	-1.038890	2.095514
6	1.628753	-1.574851	0.703419
1	2.007450	-2.294541	1.432925
1	1.721250	-2.063825	-0.262229
6	2.451969	-0.330384	0.776034
1	2.383517	0.206004	1.717782
6	3.297171	0.151553	-0.139163
6	4.089566	1.392760	0.133013
1	3.863254	1.818092	1.107141
1	3.900389	2.150802	-0.627826
1	5.158077	1.179737	0.098395
6	3.575265	-0.476148	-1.469288
1	3.405468	0.239552	-2.274279
1	4.625216	-0.762477	-1.531703
1	2.986006	-1.365464	-1.670980

6	-1.820511	-0.315211	1.214630
1	-1.846503	-1.224363	1.801544
6	-3.880353	-1.095666	0.018745
1	-3.652471	-2.064325	0.450977
1	-4.838043	-0.757107	0.423463
1	-4.023588	-1.182889	-1.057152
1	-3.448937	1.901686	0.508211
1	-3.637163	1.290204	-1.116426
1	-1.414579	1.865065	-1.658801
1	-1.520371	2.907372	-0.260363
1	0.493321	1.432134	-0.049226
1	-0.142856	0.580206	2.245659
1	-1.479601	1.707284	2.029202
6	-1.117411	-0.852171	-1.582320
1	-0.265723	-0.694354	-2.243052
1	-1.364458	-1.910677	-1.620964
1	-1.941322	-0.284157	-2.000424
6	0.352016	-1.396297	0.360282
1	-0.109577	-2.379196	0.461712
1	0.668929	-1.084277	1.351358
6	1.609603	-1.551991	-0.516235
1	2.233205	-2.281489	-0.003261
1	1.340715	-2.019008	-1.462853
6	2.379934	-0.295542	-0.778489
1	2.069064	0.282478	-1.642429
6	3.433646	0.158199	-0.093853
6	4.138185	1.411600	-0.509598
1	3.681906	1.869057	-1.383616
1	5.181493	1.201311	-0.745547
1	4.145083	2.142494	0.299530
6	4.021493	-0.516819	1.104894
1	5.061574	-0.781867	0.914817
1	4.029054	0.163756	1.956622
1	3.495571	-1.418913	1.401314

b_{15}

6	-0.842794	-0.721859	0.265699
6	-1.764581	1.258387	-0.377801
6	-2.937212	1.204702	0.528082
6	-3.133034	-0.206315	1.138278
6	-2.300174	-1.202772	0.359697
6	-2.549094	-0.962689	-1.134436
6	-1.506126	0.137009	-1.164605
1	-0.789688	0.238983	-1.969289
6	-0.915505	2.459394	-0.420340
1	-0.044425	2.343103	-1.055841
1	-1.527503	3.274789	-0.815996
1	-0.617830	2.766280	0.581068
1	-3.793725	1.441648	-0.111970
1	-2.892294	1.985876	1.282204
1	-2.847878	-0.193173	2.187370
1	-4.182153	-0.486511	1.097170
1	-2.419296	-2.217480	0.734395
1	-2.267905	-1.795450	-1.766868
1	-3.556334	-0.652087	-1.403736
6	-0.214691	-0.024287	1.446110
1	0.027470	-0.797437	2.175958
1	0.723800	0.452122	1.178219
1	-0.856998	0.693955	1.945342

b_{16}

6	-0.738198	-0.613833	0.353805
6	-1.991069	1.117458	-0.492428
6	-3.158042	0.944687	0.400515
6	-3.101468	-0.396764	1.172148
6	-2.097856	-1.314937	0.507413
6	-2.337758	-1.278119	-1.007211
6	-1.493190	-0.022624	-1.132265
1	-0.795859	0.132556	-1.944642
6	-1.387208	2.444742	-0.676063
1	-0.496484	2.426975	-1.294055
1	-2.136625	3.073105	-1.166533
1	-1.180870	2.920999	0.281369
1	-4.019386	0.930375	-0.277020
1	-3.294466	1.802905	1.053053
1	-2.829376	-0.208222	2.207995
1	-4.084377	-0.860195	1.179510
1	-2.054541	-2.289060	0.990543
1	-1.887810	-2.106791	-1.539855
1	-3.372412	-1.180655	-1.329365
6	-0.255632	0.298812	1.457594
1	0.001879	-0.340580	2.302224
1	0.650067	0.824896	1.171351
1	-0.989367	1.013945	1.816581

6	0.111667	-1.734349	-0.357519
1	-0.405678	-2.298198	-1.128462
1	0.309395	-2.449314	0.447290
6	1.446591	-1.240984	-0.921423
1	1.817980	-2.048753	-1.556002
1	1.282364	-0.401911	-1.596757
6	2.499959	-0.924196	0.094474
1	2.586599	-1.648801	0.897768
6	3.379083	0.079957	0.081983
6	4.422626	0.195492	1.149557
1	4.343163	-0.598210	1.887376
1	4.348505	1.153312	1.665694
1	5.421507	0.153536	0.714923
6	3.448062	1.145858	-0.966472
1	3.425390	2.135432	-0.508844
1	4.393853	1.079623	-1.504672
1	2.653022	1.088574	-1.704033

6	0.380297	-1.544592	-0.116821
1	-0.054616	-2.431095	-0.573347
1	0.851145	-1.881513	0.809528
6	1.476025	-1.024898	-1.054675
1	2.165023	-1.855160	-1.195767
1	1.047371	-0.853361	-2.043517
6	2.227558	0.199885	-0.631421
1	1.791798	1.151030	-0.919936
6	3.398449	0.243702	0.009971
6	4.057917	1.551089	0.318675
1	3.475207	2.398436	-0.033582
1	5.042016	1.601560	-0.147284
1	4.216782	1.663363	1.391527
6	4.157750	-0.960595	0.468065
1	5.147045	-0.979021	0.010994
1	4.317244	-0.918045	1.545771
1	3.665159	-1.900522	0.240649

b_{17}

6	1.070288	-0.833149	-0.480703
6	1.924746	1.227147	-0.050471
6	2.840540	0.807912	1.036482
6	2.537071	-0.630533	1.531778
6	1.166413	-1.047448	1.037126
6	0.201179	0.108026	1.319192
6	0.598808	0.789433	0.024375
1	-0.133346	1.245350	-0.629966
6	2.412641	2.065097	-1.155622
1	1.680512	2.194702	-1.945608
1	2.631916	3.049701	-0.731134
1	3.353850	1.694934	-1.557403
1	2.641943	1.514982	1.849448
1	3.881820	0.946034	0.757587
1	3.309079	-1.308605	1.175984
1	2.563429	-0.659192	2.617831
1	0.890253	-2.041784	1.382466
1	-0.843421	-0.165281	1.297908
1	0.397125	0.681016	2.223580
6	2.296225	-1.102100	-1.335621
1	2.412084	-2.183020	-1.407857
1	2.163329	-0.725999	-2.347387
1	3.231490	-0.714773	-0.945901
6	-0.123343	-1.429269	-1.230661
1	0.194052	-2.463223	-1.391393
1	-0.142953	-0.980478	-2.224933
6	-1.549140	-1.471129	-0.686061
1	-2.051910	-2.233426	-1.286865
1	-1.569360	-1.860891	0.329607
6	-2.321983	-0.195820	-0.829373
1	-2.172506	0.318539	-1.774548
6	-3.229239	0.317933	0.004799
6	-3.969678	1.571051	-0.346378
1	-3.657360	1.976463	-1.305221
1	-3.824870	2.336866	0.416338
1	-5.041918	1.380767	-0.394336
6	-3.627819	-0.290681	1.312942
1	-3.539196	0.436686	2.120423
1	-4.677449	-0.583550	1.279107
1	-3.056845	-1.174643	1.581444

b_{18}

6	-0.931707	-0.719463	0.541547
6	-1.850017	1.278348	-0.019380
6	-3.161827	0.749204	-0.461691
6	-3.138739	-0.792350	-0.631552
6	-1.698938	-1.264577	-0.673248
6	-0.941812	-0.346520	-1.638057
6	-0.703478	0.663293	-0.530364
1	0.253736	1.149097	-0.383982
6	-1.779563	2.402436	0.926037
1	-0.769857	2.609832	1.264065
1	-2.148293	3.285139	0.394554
1	-2.449416	2.259571	1.771725
1	-3.331572	1.214274	-1.438871
1	-3.967432	1.088934	0.183795
1	-3.684247	-1.257945	0.185559
1	-3.645731	-1.069263	-1.552063
1	-1.621893	-2.339306	-0.824833
1	-0.014780	-0.763659	-2.001701
1	-1.512708	0.024656	-2.486901
6	-1.653068	-0.618331	1.873451
1	-1.729024	-1.626566	2.279421
1	-1.084447	-0.028113	2.588194
1	-2.662349	-0.223378	1.827479
6	0.462837	-1.271378	0.840226
1	0.236580	-2.218786	1.339133
1	0.904227	-0.635197	1.607136
6	1.532415	-1.555946	-0.217216
1	2.244620	-2.217585	0.274791
1	1.121780	-2.155196	-1.028754
6	2.274091	-0.367825	-0.764386
1	1.991162	-0.021052	-1.751785
6	3.293945	0.264211	-0.176300
6	3.983155	1.408773	-0.850856
1	3.536512	1.646566	-1.812755
1	5.035229	1.175913	-1.015727
1	3.958596	2.303093	-0.227420
6	3.857080	-0.104126	1.160125
1	4.922858	-0.314417	1.071828
1	3.766923	0.730045	1.856871
1	3.383292	-0.971150	1.610222

b'$_1$

6	0.747804	-0.548413	0.055634
6	1.496367	0.738466	-0.321875
6	2.885939	0.707957	-0.525385
6	3.641652	-0.554154	-0.294643
6	3.018605	-1.382578	0.850064
6	1.715873	-0.724766	1.258103
6	1.984637	0.774140	1.292329
6	3.607976	1.910622	-0.992511
6	-0.664988	-0.223305	0.549571
6	-1.654368	0.230934	-0.522317
6	-2.923897	0.738396	0.084337
6	-4.149308	0.222620	-0.028322
6	-4.499955	-1.002341	-0.812996
6	0.701652	-1.635168	-1.002401
6	-5.315057	0.874328	0.648655
1	0.971979	1.622738	-0.664477
1	2.994447	2.805413	-0.981885
1	4.529790	2.072126	-0.439480
1	3.897969	1.713274	-2.027874
1	4.693032	-0.336270	-0.126688
1	3.592327	-1.096321	-1.242077
1	2.867150	-2.416025	0.552922
1	3.703031	-1.389414	1.696135
1	1.289322	-1.157952	2.159357
1	1.228925	1.424431	1.720253
1	2.961219	1.127518	1.620884
1	1.681537	-1.976354	-1.320746
1	0.163101	-2.499850	-0.619149
1	0.176139	-1.286930	-1.888004
1	-0.628165	0.535896	1.333137
1	-1.055109	-1.119081	1.034331
1	-1.858155	-0.583954	-1.211586
1	-1.208849	1.030899	-1.122716
1	-2.815773	1.635327	0.685651
1	-5.021734	1.760376	1.205056
1	-5.798891	0.181696	1.337688
1	-6.069578	1.165481	-0.082531
1	-4.992769	-1.732020	-0.170422
1	-5.211483	-0.753715	-1.600652
1	-3.647063	-1.487712	-1.276592

b'$_2$

6	0.837532	-0.795411	-0.182852
6	1.229357	0.689121	-0.148835
6	2.581662	1.060168	-0.230889
6	3.637099	0.010402	-0.272465
6	3.235289	-1.225825	0.560669
6	1.799491	-1.048385	1.010435
6	1.666504	0.402118	1.456226
6	2.972326	2.484372	-0.303675
6	-0.616745	-0.977750	0.262396
6	-1.683610	-0.508058	-0.725095
6	-3.056774	-0.690147	-0.160663
6	-3.998304	0.234237	0.036218
6	-3.860266	1.689283	-0.286508
6	1.091101	-1.529233	-1.486662
6	-5.330993	-0.144950	0.604206
1	0.496787	1.474440	-0.293110
1	2.145496	3.161876	-0.117926
1	3.807217	2.710501	0.354761
1	3.326455	2.656074	-1.323488
1	4.592723	0.427190	0.034344
1	3.744154	-0.248024	-1.328774
1	3.366528	-2.143600	-0.004803
1	3.883246	-1.291908	1.432529
1	1.486941	-1.802762	1.728129
1	0.759606	0.703298	1.970029
1	2.511104	0.882575	1.948463
1	2.131410	-1.523801	-1.796148
1	0.785302	-2.569262	-1.390162
1	0.510850	-1.090881	-2.294579
1	-0.792174	-0.480641	1.217672
1	-0.757059	-2.041941	0.459911
1	-1.605234	-1.085732	-1.647581
1	-1.515839	0.532720	-1.001357
1	-3.300731	-1.712872	0.106711
1	-5.392165	-1.206766	0.826085
1	-6.131180	0.102952	-0.093672
1	-5.533817	0.408458	1.521559
1	-4.607425	1.983056	-1.024034
1	-4.048427	2.293926	0.601086
1	-2.885775	1.961471	-0.680691

b'$_3$

6	0.779207	-0.033233	0.611742
6	1.831278	-1.008202	0.063381
6	3.145261	-0.570889	-0.169404
6	3.500309	0.859819	0.042013
6	2.309995	1.790345	-0.274347
6	1.097027	0.928551	-0.564733
6	1.586428	-0.234963	-1.417855
6	4.192887	-1.522461	-0.598539
6	-0.607734	-0.669346	0.473189
6	-1.777154	0.245332	0.832031
6	-3.085747	-0.447137	0.618841
6	-4.083021	-0.092862	-0.193555
6	-4.087172	1.113350	-1.079626
6	1.002984	0.456392	2.031203

b'$_4$

6	-0.727991	0.289409	-0.187372
6	-1.775777	-0.715467	-0.686791
6	-3.144559	-0.435089	-0.544717
6	-3.579769	0.800682	0.163574
6	-2.592604	1.185188	1.287051
6	-1.399693	0.253084	1.211946
6	-1.953969	-1.138605	0.937829
6	-4.164723	-1.342853	-1.112215
6	0.648919	-0.382059	-0.180959
6	1.765579	0.455096	0.440091
6	3.016259	-0.347347	0.610713
6	4.188597	-0.177095	-0.003375
6	4.486109	0.887849	-1.011731
6	-0.668743	1.611793	-0.930768

6	-5.335745	-0.910630	-0.262328
1	1.660102	-2.079022	0.061002
1	3.797191	-2.496052	-0.868234
1	4.801146	-1.120434	-1.404739
1	4.859642	-1.655444	0.257353
1	4.389544	1.111313	-0.530275
1	3.788469	0.935241	1.093178
1	2.118990	2.478843	0.543453
1	2.551249	2.390271	-1.149548
1	0.264786	1.499975	-0.965914
1	0.848525	-0.889875	-1.869033
1	2.375648	-0.059628	-2.147782
1	2.027743	0.752999	2.233497
1	0.369507	1.314242	2.241424
1	0.742856	-0.325025	2.742805
1	-0.640911	-1.554271	1.112789
1	-0.766043	-1.029632	-0.544351
1	-1.725508	1.165728	0.252593
1	-1.703242	0.536395	1.881089
1	-3.225640	-1.341753	1.216556
1	-5.295672	-1.773805	0.396373
1	-5.513382	-1.263275	-1.278713
1	-6.202567	-0.310700	0.016001
1	-4.266628	0.821921	-2.114767
1	-4.902748	1.781074	-0.801190
1	-3.165866	1.686510	-1.045656

6	5.345247	-1.078388	0.299707
1	-1.505092	-1.528941	-1.350844
1	-3.748406	-2.278598	-1.470346
1	-4.976491	-1.528339	-0.413434
1	-4.603523	-0.820353	-1.966162
1	-4.597890	0.683595	0.525663
1	-3.620761	1.576754	-0.604391
1	-2.288935	2.224753	1.206870
1	-3.087771	1.068609	2.248989
1	-0.741691	0.346454	2.071458
1	-1.278086	-1.984875	1.002284
1	-2.902921	-1.428230	1.387316
1	-1.643181	2.057169	-1.107450
1	-0.078233	2.334113	-0.372860
1	-0.191107	1.475355	-1.899259
1	0.923006	-0.624264	-1.209406
1	0.604800	-1.336170	0.347998
1	1.444815	0.822851	1.418905
1	1.954058	1.335030	-0.168750
1	2.942382	-1.160972	1.324981
1	5.091369	-1.834039	1.038109
1	6.191176	-0.503881	0.677991
1	5.689400	-1.583181	-0.603336
1	5.285385	1.535519	-0.650731
1	4.846337	0.439292	-1.937671
1	3.634067	1.515157	-1.253816

b'$_5$

6	-0.855610	-0.792698	0.446016
6	-1.325475	0.663996	0.498003
6	-2.675271	0.969979	0.273401
6	-3.648376	-0.118018	-0.044209
6	-2.980508	-1.238789	-0.870214
6	-1.498294	-0.929952	-0.960014
6	-1.403941	0.572253	-1.197561
6	-3.165349	2.362302	0.401641
6	0.675330	-0.914182	0.448204
6	1.527150	-0.155920	-0.569589
6	2.966526	-0.545531	-0.437591
6	3.995455	0.218894	-0.068362
6	3.908678	1.668340	0.293956
6	-1.378168	-1.685871	1.560436
6	5.378102	-0.351113	0.004392
1	-0.695518	1.455052	0.888598
1	-2.362501	3.088213	0.479069
1	-3.842145	2.630504	-0.405394
1	-3.746857	2.404422	1.325460
1	-4.518140	0.300877	-0.543649
1	-4.003708	-0.491351	0.918232
1	-3.160674	-2.216556	-0.433781
1	-3.410708	-1.249513	-1.869823
1	-0.977687	-1.563247	-1.673478
1	-0.442000	1.000641	-1.452593
1	-2.163586	1.055840	-1.811011
1	-2.453798	-1.641851	1.697378
1	-1.114340	-2.722057	1.358804
1	-0.916129	-1.411786	2.506700
1	0.891527	-1.978228	0.339823
1	1.026736	-0.645339	1.445670

b'$_6$

6	0.829947	-0.650009	-0.577545
6	1.586991	0.680444	-0.630407
6	2.909990	0.748786	-0.171255
6	3.571458	-0.465654	0.393427
6	2.556783	-1.351469	1.148923
6	1.175288	-0.764792	0.931016
6	1.347009	0.744726	1.051095
6	3.686447	2.004878	-0.290739
6	-0.670527	-0.485247	-0.860672
6	-1.506220	0.543853	-0.099884
6	-2.922877	0.528272	-0.583198
6	-4.020510	0.209889	0.104898
6	-4.049191	-0.201864	1.543366
6	1.347131	-1.732048	-1.512751
6	-5.366773	0.253740	-0.548923
1	1.208887	1.533441	-1.182384
1	3.074436	2.855811	-0.571623
1	4.246981	2.223597	0.614440
1	4.421407	1.842898	-1.082553
1	4.409309	-0.171090	1.020051
1	4.002665	-0.993911	-0.459077
1	2.610939	-2.385874	0.822967
1	2.793142	-1.337361	2.211164
1	0.419640	-1.215260	1.569217
1	0.462652	1.369524	1.088364
1	2.069571	1.135773	1.766829
1	2.412796	-1.919600	-1.429336
1	0.831745	-2.669672	-1.314816
1	1.142309	-1.461839	-2.546722
1	-1.122381	-1.464362	-0.698475
1	-0.778750	-0.286552	-1.928803

1	1.421815	0.921469	-0.440771
1	1.204510	-0.394851	-1.586668
1	3.174531	-1.583204	-0.674616
1	5.400046	-1.403161	-0.265778
1	5.786457	-0.247769	1.009948
1	6.051454	0.186242	-0.663805
1	4.300369	1.829269	1.298456
1	4.527822	2.262619	-0.378266
1	2.901028	2.071628	0.260446

1	-1.109983	1.551495	-0.263411
1	-1.472894	0.354098	0.971782
1	-3.048803	0.811167	-1.622641
1	-5.305569	0.559525	-1.589681
1	-6.024994	0.949113	-0.027541
1	-5.847972	-0.723620	-0.506984
1	-4.645123	0.501982	2.124723
1	-4.531493	-1.173870	1.646394
1	-3.068196	-0.266445	2.004007

b'$_7$

6	0.758082	-1.000837	-0.141538
6	0.687497	0.525057	0.018217
6	1.840419	1.302001	-0.169177
6	3.141944	0.644116	-0.477723
6	3.260980	-0.717352	0.241382
6	1.924976	-1.028304	0.884585
6	1.443944	0.272796	1.512267
6	1.772840	2.779063	-0.103448
6	-0.478274	-1.680218	0.458920
6	-1.762146	-1.661300	-0.374708
6	-2.286089	-0.303588	-0.737933
6	-3.223020	0.399469	-0.094245
6	-3.908039	-0.051713	1.157392
6	1.021455	-1.522093	-1.542101
6	-3.692901	1.720656	-0.619735
1	-0.265329	1.037910	0.069664
1	0.820715	3.142197	0.269073
1	2.593358	3.197951	0.473650
1	1.895262	3.141686	-1.126946
1	3.965288	1.312449	-0.239937
1	3.156341	0.517980	-1.562559
1	3.568907	-1.502112	-0.443242
1	4.026359	-0.646900	1.011872
1	1.965457	-1.892897	1.542566
1	0.575866	0.244044	2.162513
1	2.175641	0.947992	1.953837
1	1.947303	-1.158839	-1.976576
1	1.072605	-2.609381	-1.528639
1	0.215601	-1.240997	-2.215385
1	-0.699950	-1.257981	1.440250
1	-0.201628	-2.720858	0.637610
1	-2.511602	-2.216295	0.185681
1	-1.607245	-2.234730	-1.288372
1	-1.894074	0.128449	-1.653824
1	-3.174002	2.007908	-1.531015
1	-3.559106	2.509759	0.121414
1	-4.760043	1.684787	-0.839910
1	-3.805291	0.699495	1.941083
1	-4.977923	-0.164309	0.980363
1	-3.532527	-0.993824	1.543896

b'$_8$

6	-0.701344	-1.010984	0.047069
6	-0.652908	0.487599	-0.277798
6	-1.683298	1.331644	0.162922
6	-2.844972	0.769733	0.909770
6	-3.199829	-0.644610	0.402125
6	-2.124940	-1.075645	-0.574342
6	-1.830885	0.138550	-1.445330
6	-1.609968	2.791868	-0.068445
6	0.275659	-1.812928	-0.821802
6	1.763074	-1.714189	-0.481630
6	2.381408	-0.383344	-0.774928
6	3.110739	0.391694	0.032994
6	3.433766	0.078527	1.460408
6	-0.532094	-1.377548	1.509490
6	3.716373	1.666030	-0.470874
1	0.252036	0.951502	-0.649796
1	-0.807625	3.072975	-0.742540
1	-2.557897	3.196328	-0.414218
1	-1.411007	3.250811	0.902948
1	-3.688701	1.452881	0.858600
1	-2.536220	0.746092	1.957235
1	-3.301896	-1.347862	1.223415
1	-4.160045	-0.608719	-0.108882
1	-2.376856	-1.993592	-1.099587
1	-1.199391	0.007145	-2.318111
1	-2.648359	0.804809	-1.717380
1	-1.286404	-0.941405	2.156315
1	-0.581383	-2.457878	1.632055
1	0.436707	-1.046798	1.874789
1	0.142987	-1.557999	-1.875213
1	-0.029874	-2.856678	-0.734768
1	2.269069	-2.465943	-1.091284
1	1.934768	-2.015833	0.548246
1	2.267996	-0.050625	-1.803837
1	3.458921	1.860567	-1.509046
1	4.803406	1.626972	-0.398153
1	3.399174	2.518019	0.132165
1	4.511636	-0.029010	1.583265
1	3.132218	0.899533	2.111881
1	2.972054	-0.833678	1.824137

b'$_9$

6	0.535292	-0.384560	0.119295
6	1.965702	-0.916258	0.303163
6	3.032222	-0.021541	0.490050
6	2.792446	1.446417	0.418455
6	1.659877	1.786919	-0.573895

b'$_{10}$

6	0.541993	-0.063919	0.037758
6	1.654129	0.917063	-0.364548
6	2.943851	0.441328	-0.652412
6	3.258268	-1.004865	-0.485246
6	2.441044	-1.631856	0.664940

6	1.045542	0.488525	-1.059617
6	2.203290	-0.469901	-1.305818
6	4.393585	-0.520494	0.780761
6	-0.358307	-1.535106	-0.362531
6	-1.734850	-1.146341	-0.909497
6	-2.776033	-0.863829	0.128513
6	-3.685521	0.112543	0.138972
6	-3.810191	1.180039	-0.902826
6	-0.064742	0.302947	1.330942
6	-4.703388	0.197722	1.234175
1	2.154877	-1.960157	0.528571
1	4.488054	-1.593933	0.654247
1	5.150614	0.000835	0.200519
1	4.590821	-0.286986	1.830309
1	3.719800	1.963708	0.186268
1	2.527221	1.746239	1.435173
1	0.914299	2.430828	-0.116990
1	2.080224	2.330055	-1.417991
1	0.362558	0.638057	-1.890888
1	1.999183	-1.407358	-1.812149
1	3.142518	-0.075633	-1.691773
1	0.572839	1.075222	1.750786
1	-1.020273	0.751852	1.075855
1	-0.256967	-0.427609	2.114561
1	-0.486625	-2.232872	0.467635
1	0.159714	-2.096458	-1.141286
1	-2.077506	-1.992451	-1.509750
1	-1.640964	-0.317913	-1.610180
1	-2.816891	-1.588237	0.935864
1	-4.584095	-0.596371	1.966365
1	-5.712566	0.132894	0.826629
1	-4.638646	1.155169	1.752554
1	-4.769650	1.095010	-1.413680
1	-3.794559	2.167808	-0.441009
1	-3.033520	1.145815	-1.660491

6	1.460662	-0.593509	1.172636
6	2.216111	0.728209	1.216901
6	3.994055	1.358155	-1.145910
6	-0.644382	0.731459	0.592510
6	-1.767843	-0.101393	1.228113
6	-2.795391	-0.650790	0.279356
6	-3.852962	0.007001	-0.200745
6	-4.175975	1.431966	0.122775
6	0.096429	-1.033751	-1.040260
6	-4.828119	-0.663392	-1.116928
1	1.428714	1.936248	-0.658745
1	3.709343	2.403165	-1.082420
1	4.946206	1.190734	-0.648986
1	4.146627	1.114295	-2.200475
1	4.329185	-1.140066	-0.357386
1	3.008725	-1.469641	-1.442042
1	1.930986	-2.534010	0.340529
1	3.119274	-1.916940	1.466708
1	0.971404	-0.897208	2.094082
1	1.746156	1.576720	1.702712
1	3.270947	0.725064	1.488556
1	0.922043	-1.493140	-1.575755
1	-0.496885	-1.832956	-0.605214
1	-0.532342	-0.526707	-1.768488
1	-1.064250	1.330788	-0.216530
1	-0.285703	1.439918	1.341170
1	-2.260534	0.530799	1.964898
1	-1.336214	-0.922542	1.803071
1	-2.682777	-1.686305	-0.016753
1	-4.548130	-1.691904	-1.328521
1	-4.906478	-0.127415	-2.063319
1	-5.826008	-0.667149	-0.677628
1	-4.190472	2.035236	-0.785743
1	-5.173995	1.504244	0.555387
1	-3.477050	1.888536	0.817256

b'$_{11}$

6	-0.670330	0.960735	0.195112
6	-1.651204	0.418192	-0.847893
6	-2.800835	-0.269715	-0.437017
6	-3.061987	-0.493111	1.016761
6	-1.742386	-0.696586	1.792728
6	-0.592740	-0.451457	0.834059
6	-1.004346	-1.110786	-0.475799
6	-3.798667	-0.733605	-1.429513
6	0.636119	1.457724	-0.443113
6	1.503483	0.574595	-1.349259
6	2.250368	-0.546158	-0.681949
6	3.423713	-0.447734	-0.051615
6	4.188532	0.827534	0.111144
6	-1.200096	2.098851	1.054880
6	4.082683	-1.652294	0.543783
1	-1.588465	0.700757	-1.892803
1	-3.446494	-0.654174	-2.452851
1	-4.135641	-1.746063	-1.222747
1	-4.671040	-0.085124	-1.322081
1	-3.749195	-1.325665	1.143675
1	-3.594750	0.394152	1.364349
1	-1.686865	-0.047497	2.661488

b'$_{12}$

6	-0.960368	1.170545	-0.215990
6	-1.292076	-0.140056	-0.935018
6	-2.234113	-1.018977	-0.383557
6	-2.893979	-0.693643	0.916040
6	-1.930846	0.064119	1.854760
6	-0.663580	0.364847	1.077537
6	-0.359419	-0.888825	0.272002
6	-2.628610	-2.251912	-1.104329
6	0.258122	1.877529	-0.834048
6	1.556600	1.138229	-1.161064
6	2.396581	0.755799	0.019638
6	3.174960	-0.320724	0.161154
6	3.327380	-1.402777	-0.863284
6	-2.084557	2.194591	-0.169435
6	4.015563	-0.504966	1.386402
1	-0.972606	-0.331855	-1.952839
1	-1.989136	-2.467943	-1.953948
1	-2.678931	-3.111020	-0.440376
1	-3.641341	-2.085558	-1.478419
1	-3.283251	-1.601777	1.369076
1	-3.765017	-0.085266	0.663887
1	-2.386330	0.967522	2.249171

1	-1.697475	-1.721510	2.155976
1	0.372665	-0.745711	1.233900
1	-0.272611	-1.194426	-1.269717
1	-1.576444	-2.037530	-0.444466
1	-2.165438	1.898990	1.508065
1	-0.497693	2.312753	1.857848
1	-1.299941	3.004758	0.460353
1	1.263953	1.795610	0.381476
1	0.375485	2.355566	-1.007438
1	2.219905	1.249586	-1.815373
1	0.922835	0.189443	-2.190958
1	1.820087	-1.539688	-0.747418
1	3.491072	-2.553682	0.405736
1	4.255777	-1.514050	1.611352
1	5.059958	-1.816711	0.089641
1	4.319767	1.059816	1.168404
1	5.189551	0.720891	-0.306710
1	3.717157	1.682400	-0.363551

1	-1.689892	-0.570467	2.705475
1	0.143742	0.730581	1.704306
1	0.603657	-0.944203	-0.224158
1	-0.577709	-1.864117	0.706018
1	-3.018511	1.809615	0.226163
1	-1.789917	3.039427	0.450140
1	-2.285933	2.578494	-1.167530
1	0.497217	2.709215	-0.169123
1	-0.094516	2.336094	-1.758825
1	2.135774	1.831556	-1.775835
1	1.369356	0.287912	-1.818492
1	2.418261	1.490799	0.817986
1	3.878658	0.302009	2.101070
1	5.072479	-0.545529	1.122188
1	3.784447	-1.448082	1.882971
1	4.350232	-1.414260	-1.240588
1	3.156400	-2.384504	-0.419778
1	2.672913	-1.291321	-1.723384

b'$_{13}$

6	-0.541685	0.666513	0.258926
6	-2.013507	0.897022	-0.113499
6	-2.970127	-0.101952	0.123346
6	-2.548546	-1.416799	0.682040
6	-1.134705	-1.803340	0.197630
6	-0.560870	-0.638317	-0.583845
6	-1.695468	-0.098989	-1.444639
6	-4.403672	0.145907	-0.145860
6	0.299747	1.778679	-0.382111
6	1.805793	1.722327	-0.125543
6	2.495622	0.540690	-0.729168
6	3.341070	-0.312341	-0.145494
6	3.758454	-0.261319	1.290976
6	-0.242777	0.563161	1.742656
6	3.989465	-1.407028	-0.936179
1	-2.385224	1.886517	-0.356486
1	-4.580013	1.068542	-0.688885
1	-4.871359	-0.692164	-0.656266
1	-4.892329	0.229136	0.828109
1	-3.291430	-2.175741	0.450509
1	-2.571010	-1.293780	1.767364
1	-0.492089	-2.076980	1.029138
1	-1.208346	-2.674522	-0.450373
1	0.361571	-0.891959	-1.095131
1	-1.463654	0.646671	-2.197970
1	-2.416847	-0.796013	-1.869197
1	-0.940790	-0.069671	2.282314
1	0.752960	0.155101	1.895376
1	-0.272508	1.548700	2.204267
1	-0.072513	2.732568	-0.002386
1	0.137473	1.800025	-1.461691
1	2.005260	1.798368	0.940149
1	2.224917	2.630620	-0.564548
1	2.321230	0.409428	-1.793671
1	3.663411	-1.411793	-1.973154
1	3.774159	-2.384009	-0.501634
1	5.074007	-1.296511	-0.925451
1	3.567288	-1.216614	1.781068
1	4.833271	-0.092073	1.359910

b'$_{14}$

6	0.624512	-0.652840	0.433330
6	1.893067	-0.889806	-0.398461
6	2.983527	-0.012842	-0.291262
6	2.886339	1.192139	0.578815
6	1.445577	1.746375	0.612250
6	0.548098	0.788623	-0.145054
6	1.323488	0.360637	-1.383790
6	4.245766	-0.285388	-1.013242
6	-0.491192	-1.558402	-0.104145
6	-1.838189	-1.474671	0.619111
6	-2.477391	-0.119453	0.649014
6	-3.443434	0.338340	-0.151878
6	-4.053346	-0.437548	-1.276588
6	0.781963	-0.832540	1.931936
6	-4.019422	1.706601	0.043659
1	2.067635	-1.833206	-0.904180
1	4.159880	-1.097766	-1.727291
1	4.637543	0.606378	-1.495915
1	4.979120	-0.577217	-0.257321
1	3.613121	1.937207	0.265672
1	3.202564	0.861435	1.570967
1	1.101646	1.890388	1.632334
1	1.429791	2.720981	0.128439
1	-0.449152	1.181800	-0.315273
1	0.803237	-0.208974	-2.146720
1	1.968555	1.083323	-1.881856
1	1.660464	-0.340518	2.337665
1	-0.083596	-0.436267	2.456504
1	0.857118	-1.890554	2.177231
1	-0.138810	-2.590771	-0.043456
1	-0.663691	-1.352739	-1.161678
1	-1.719722	-1.832854	1.641957
1	-2.498497	-2.194120	0.139951
1	-2.141652	0.545248	1.438645
1	-3.552159	2.232960	0.872171
1	-5.089169	1.645548	0.244893
1	-3.908459	2.311162	-0.857234
1	-5.120024	-0.579586	-1.101847
1	-3.966648	0.117643	-2.211049

1	3.269811	0.520880	1.863213
1	-3.605275	-1.414862	-1.424782

b'$_{15}$

6	-0.585046	-0.790370	-0.039416
6	-1.109442	0.587446	-0.464568
6	-2.234435	1.138810	0.168766
6	-2.960776	0.361407	1.211803
6	-2.918158	-1.152611	0.915055
6	-2.006386	-1.374274	-0.274471
6	-2.324285	-0.269581	-1.273736
6	-2.693419	2.505355	-0.164327
6	0.382342	-1.355788	-1.088891
6	1.672650	-0.582453	-1.371438
6	2.721657	-0.670591	-0.307582
6	3.508032	0.301546	0.158832
6	3.457659	1.731893	-0.279525
6	0.001584	-0.883650	1.356459
6	4.559958	0.007431	1.183458
1	-0.525726	1.255432	-1.086163
1	-2.193004	2.921128	-1.032613
1	-3.772439	2.552359	-0.287200
1	-2.450829	3.132633	0.697111
1	-3.975363	0.736834	1.316959
1	-2.454429	0.592042	2.151915
1	-2.585026	-1.716762	1.781068
1	-3.922138	-1.496554	0.674435
1	-2.048395	-2.392532	-0.653011
1	-1.891187	-0.331184	-2.266873
1	-3.352268	0.076001	-1.374290
1	-0.654791	-0.494705	2.129290
1	0.210983	-1.924506	1.596370
1	0.943181	-0.344396	1.407779
1	-0.144446	-1.481149	-2.036040
1	0.633677	-2.367862	-0.767195
1	1.450762	0.455652	-1.617775
1	2.084703	-1.007549	-2.289981
1	2.887856	-1.670819	0.079685
1	4.568771	-1.040689	1.470104
1	4.409012	0.607875	2.081396
1	5.549305	0.261726	0.802420
1	3.339422	2.391589	0.580795
1	4.398632	2.011648	-0.753864
1	2.662146	1.946382	-0.986842

b'$_{17}$

6	1.073317	-1.117674	-0.359844
6	0.820090	0.331059	-0.782284
6	1.718068	1.332395	-0.398005
6	2.942191	0.990300	0.392317
6	2.649850	-0.155041	1.384232
6	1.242527	-0.648216	1.109409
6	0.408306	0.600202	0.852560
6	1.518315	2.734075	-0.843859
6	-0.141985	-2.032837	-0.580054
6	-1.499905	-1.743072	0.061554
6	-2.284832	-0.636170	-0.575707
6	-3.096383	0.246835	0.015849
6	-3.351668	0.315633	1.490159
6	2.261199	-1.783773	-1.037910
6	-3.877198	1.234713	-0.794931
1	0.039445	0.594616	-1.485768
1	0.539239	2.901105	-1.281226
1	1.696700	3.443437	-0.039920
1	2.268918	2.932216	-1.611401
1	3.315690	1.880632	0.891596
1	3.706318	0.706575	-0.332805
1	3.380341	-0.954240	1.300390
1	2.708501	0.227333	2.401450
1	0.874880	-1.323466	1.877530
1	-0.668924	0.503798	0.731373
1	0.611952	1.505151	1.423788
1	3.169378	-1.190075	-1.019836
1	2.479036	-2.735666	-0.557872
1	2.028155	-1.991512	-2.080452
1	0.177328	-3.017254	-0.237128
1	-0.285444	-2.132121	-1.658117
1	-1.400785	-1.603880	1.137668
1	-2.076924	-2.664497	-0.046249
1	-2.240234	-0.614852	-1.660787
1	-3.677046	1.141078	-1.859023
1	-3.655610	2.257801	-0.488617
1	-4.946901	1.092577	-0.640654
1	-3.226372	1.334067	1.859351
1	-4.386632	0.042506	1.697524
1	-2.722375	-0.345904	2.078269

b'$_{18}$

6	-0.778975	-1.027676	0.323820
6	-0.740009	0.498814	0.420193
6	-1.935592	1.226706	0.383374
6	-3.248026	0.519000	0.261475
6	-3.116858	-0.737680	-0.626305
6	-1.647233	-0.914651	-0.956658
6	-1.123691	0.485732	-1.245028
6	-1.924326	2.701701	0.539550
6	0.602587	-1.655695	0.085393
6	1.536767	-1.182635	-1.034514
6	2.212319	0.147886	-0.833729
6	3.258822	0.392413	-0.039474
6	3.927424	-0.643476	0.807844

6	-1.380928	-1.733747	1.529996
6	3.872950	1.755212	0.034834
1	0.173977	1.027277	0.665201
1	-0.926857	3.124375	0.476483
1	-2.586839	3.189893	-0.170478
1	-2.318553	2.915217	1.535209
1	-4.002843	1.207626	-0.109449
1	-3.548416	0.260114	1.278109
1	-3.528304	-1.616375	-0.138827
1	-3.680156	-0.587370	-1.545236
1	-1.472286	-1.660763	-1.727513
1	-0.122549	0.599208	-1.642044
1	-1.771859	1.198847	-1.753012
1	-2.353971	-1.354826	1.824256
1	-1.490630	-2.796358	1.322992
1	-0.719343	-1.636599	2.388461
1	0.408557	-2.717776	-0.072672
1	1.149977	-1.588912	1.025933
1	1.023552	-1.198611	-1.997050
1	2.301465	-1.953504	-1.126914
1	1.865222	0.981112	-1.437410
1	3.352028	2.475411	-0.591176
1	4.914074	1.721581	-0.286230
1	3.877716	2.126910	1.059945
1	4.990756	-0.687237	0.572848
1	3.857345	-0.380691	1.863980
1	3.516548	-1.639975	0.679963

c_1

6	-1.008226	-0.431946	0.265116
6	-1.678105	0.882225	0.365628
6	-3.717652	0.140479	0.024339
6	-3.287907	-1.301194	-0.260155
6	-1.881248	-1.105676	-0.829748
6	-2.137255	0.043218	-1.800832
6	-2.596999	1.026494	-0.730834
1	-2.944445	2.020988	-0.982925
6	-1.493385	1.880116	1.417563
1	-0.616933	2.464855	1.113731
1	-2.324844	2.576311	1.474697
1	-1.270199	1.449738	2.388416
1	-4.652359	0.440949	-0.444392
1	-3.823118	0.362584	1.085836
1	-3.326459	-1.931768	0.621714
1	-3.929580	-1.755840	-1.010391
1	-1.424274	-1.998937	-1.243958
1	-1.267432	0.390946	-2.348523
1	-2.926990	-0.175777	-2.514250
6	-0.877316	-1.212056	1.563867
1	-0.398320	-2.167734	1.363221
1	-0.271195	-0.688507	2.296158
1	-1.843456	-1.414414	2.017570
6	0.413532	-0.097591	-0.337924
1	0.342468	0.702013	-1.075189
1	0.703360	-0.987127	-0.897328
6	1.521168	0.254350	0.650176
1	1.207430	1.065269	1.312312
1	1.735638	-0.595649	1.290820
6	2.748064	0.683343	-0.091900

c_2

6	-1.114956	-0.426871	0.513348
6	-1.348763	0.913601	-0.067676
6	-3.522547	0.701949	-0.304961
6	-3.560104	-0.762014	0.142242
6	-2.171037	-1.255170	-0.269275
6	-2.076298	-0.666014	-1.673982
6	-2.195030	0.784696	-1.222362
1	-2.223108	1.601654	-1.933033
6	-0.845560	2.184649	0.448382
1	0.166584	2.282216	0.037732
1	-1.412795	3.034341	0.080471
1	-0.756361	2.205778	1.529689
1	-4.325885	0.995626	-0.977318
1	-3.540766	1.412355	0.521053
1	-3.774210	-0.871881	1.199992
1	-4.323236	-1.313398	-0.400758
1	-2.017971	-2.326148	-0.180232
1	-1.150147	-0.868878	-2.202170
1	-2.905936	-0.959523	-2.311407
6	-1.210503	-0.518752	2.028070
1	-1.053392	-1.548947	2.339662
1	-0.462421	0.090804	2.524760
1	-2.185612	-0.207816	2.392157
6	0.330271	-0.810685	0.004322
1	0.506159	-0.427479	-1.000257
1	0.314912	-1.896583	-0.094122
6	1.508125	-0.397794	0.882438
1	1.506863	0.675221	1.065320
1	1.423019	-0.877892	1.857391
6	2.792330	-0.824714	0.243295

1	2.655817	1.623210	-0.625925
6	3.918868	0.046464	-0.168231
6	5.050064	0.629633	-0.956149
1	4.781261	1.573962	-1.421310
1	5.370580	-0.059056	-1.738041
1	5.915505	0.799162	-0.315396
6	4.237706	-1.254391	0.498092
1	4.563215	-1.985120	-0.242237
1	5.068789	-1.126456	1.191665
1	3.407694	-1.684404	1.049679

1	2.898721	-1.896439	0.115845
6	3.802398	-0.054723	-0.166653
6	5.025389	-0.665733	-0.776767
1	4.951788	-1.747581	-0.842330
1	5.910749	-0.419957	-0.190153
1	5.195200	-0.272220	-1.779211
6	3.851615	1.436883	-0.056040
1	4.701625	1.739738	0.555357
1	4.003209	1.884879	-1.038323
1	2.961025	1.876284	0.383603

c_3

6	-1.077169	0.492136	0.449946
6	-1.841365	0.646175	-0.801375
6	-3.517611	-0.659922	-0.232309
6	-2.889692	-1.076164	1.101806
6	-1.391813	-0.984724	0.796374
6	-1.344760	-1.655560	-0.573050
6	-2.268550	-0.650802	-1.253485
1	-2.565613	-0.763312	-2.288950
6	-2.149160	1.911423	-1.466006
1	-1.236907	2.195692	-2.003003
1	-2.936821	1.813278	-2.206085
1	-2.362671	2.714662	-0.766416
1	-4.202410	-1.390424	-0.657961
1	-4.064220	0.281368	-0.186916
1	-3.208835	-0.450099	1.928589
1	-3.153679	-2.100702	1.350504
1	-0.747648	-1.397687	1.564388
1	-0.361053	-1.698506	-1.031258
1	-1.768172	-2.656333	-0.569964
6	-1.377378	1.511383	1.540357
1	-0.861872	1.234756	2.455842
1	-1.038594	2.505991	1.261655
1	-2.438479	1.569680	1.768474
6	0.399686	0.681104	-0.068184
1	0.547590	1.750396	-0.216267
1	0.558060	0.215819	-1.041021
6	1.460701	0.146049	0.896644
1	1.253573	0.508581	1.904008
1	1.413951	-0.938942	0.936120
6	2.816209	0.613753	0.474120
1	3.006361	1.668419	0.638696
6	3.795893	-0.112944	-0.069941
6	5.106433	0.519194	-0.420240
1	5.123080	1.580625	-0.189609
1	5.324060	0.394567	-1.481253
1	5.920294	0.039647	0.123840
6	3.717933	-1.577477	-0.364928
1	3.917992	-1.759570	-1.420952
1	4.486584	-2.114216	0.191141
1	2.759297	-2.025440	-0.121977

c_4

6	-0.957054	0.295365	0.363621
6	-1.824400	0.738444	-0.744222
6	-3.697041	-0.097991	0.054865
6	-3.019227	-0.758518	1.259180
6	-1.619011	-1.060439	0.717135
6	-1.966161	-1.621809	-0.657817
6	-2.660283	-0.357950	-1.154320
1	-3.127193	-0.312695	-2.130599
6	-1.859766	2.081383	-1.320782
1	-1.016494	2.126455	-2.019731
1	-2.759640	2.261030	-1.900580
1	-1.701221	2.864004	-0.584594
1	-4.612743	-0.585719	-0.272749
1	-3.947473	0.950745	0.209968
1	-3.020737	-0.125637	2.140588
1	-3.520303	-1.685658	1.524711
1	-1.012840	-1.687867	1.360510
1	-1.113939	-1.902244	-1.269533
1	-2.649004	-2.465785	-0.610819
6	-0.799337	1.280164	1.514402
1	-0.268917	0.805276	2.335176
1	-0.226984	2.154608	1.215204
1	-1.757235	1.620824	1.899039
6	0.421095	0.116104	-0.380679
1	0.821066	1.111820	-0.566496
1	0.294580	-0.349467	-1.358425
6	1.447918	-0.694496	0.414352
1	1.595749	-0.247474	1.393941
1	1.068653	-1.702815	0.579741
6	2.732441	-0.775363	-0.346375
1	2.712167	-1.428801	-1.211524
6	3.877340	-0.142058	-0.077872
6	5.082521	-0.351321	-0.939980
1	4.885652	-1.036914	-1.759451
1	5.908654	-0.751712	-0.352124
1	5.427034	0.594523	-1.358664
6	4.091548	0.792537	1.070217
1	4.870039	0.407290	1.728880
1	4.444681	1.757947	0.707617
1	3.202958	0.963965	1.669565

c_5

6	-1.129365	-0.502693	0.595329
6	-1.400889	0.931375	0.338523
6	-3.473693	0.583789	-0.369293
6	-3.363351	-0.944213	-0.388412
6	-1.860863	-1.149505	-0.609586

c_6

6	-1.090550	0.260721	0.682242
6	-1.725793	0.850753	-0.518159
6	-3.544210	-0.416490	-0.385261
6	-3.010048	-1.311822	0.737476
6	-1.495969	-1.227619	0.515863

6	-1.626423	-0.149449	-1.741495
6	-2.041336	1.076746	-0.937074
1	-2.081457	2.063041	-1.383160
6	-1.114888	2.026238	1.259846
1	-0.075090	2.306541	1.046952
1	-1.719718	2.906772	1.065368
1	-1.157257	1.736542	2.304894
1	-4.189056	0.998098	-1.076388
1	-3.732116	0.995914	0.605612
1	-3.746585	-1.404177	0.516013
1	-3.920334	-1.359759	-1.223906
1	-1.560428	-2.175402	-0.798506
1	-0.608900	-0.080177	-2.104299
1	-2.285327	-0.315507	-2.589707
6	-1.643896	-0.946752	1.972365
1	-1.653706	-2.033828	2.006420
1	-0.988682	-0.600503	2.767110
1	-2.649536	-0.596540	2.188344
6	0.420475	-0.744866	0.638308
1	0.516621	-1.784898	0.951947
1	0.814231	-0.150248	1.462613
6	1.303714	-0.519458	-0.584996
1	0.987859	-1.172978	-1.398563
1	1.223539	0.505192	-0.946908
6	2.723527	-0.846943	-0.241136
1	2.908377	-1.895917	-0.037818
6	3.761992	-0.012464	-0.162252
6	5.123739	-0.523993	0.191274
1	5.122714	-1.594973	0.373030
1	5.504656	-0.025569	1.082892
1	5.832085	-0.315223	-0.610662
6	3.706215	1.460748	-0.419080
1	4.058541	2.009466	0.454682
1	4.374320	1.725338	-1.238628
1	2.715500	1.827433	-0.671267

6	-1.443262	-1.437873	-0.996752
6	-2.259950	-0.197246	-1.341199
1	-2.529404	0.039451	-2.363369
6	-1.843864	2.276968	-0.803085
1	-0.917381	2.533438	-1.333097
1	-2.659439	2.501029	-1.484261
1	-1.885998	2.897125	0.086363
1	-4.277076	-0.889625	-1.035160
1	-3.998901	0.508548	-0.031783
1	-3.333404	-0.990059	1.721434
1	-3.345985	-2.336865	0.605232
1	-0.904156	-1.906391	1.121994
1	-0.455996	-1.418277	-1.439922
1	-1.945536	-2.349373	-1.310180
6	-1.581813	0.915404	1.980861
1	-1.274321	0.296799	2.820949
1	-1.140118	1.898270	2.120225
1	-2.662098	1.023031	2.023286
6	0.455054	0.534493	0.639504
1	0.832128	0.128803	1.578310
1	0.580151	1.615472	0.713053
6	1.327761	0.021447	-0.501265
1	1.354255	-1.064286	-0.503059
1	0.921423	0.332144	-1.469272
6	2.709865	0.577735	-0.363537
1	2.786013	1.651258	-0.499728
6	3.835186	-0.088859	-0.094969
6	5.141707	0.635027	-0.000067
1	5.031674	1.702567	-0.168965
1	5.849290	0.245073	-0.731957
1	5.593922	0.487814	0.980819
6	3.931484	-1.565605	0.122989
1	4.589078	-2.012793	-0.622507
1	4.380202	-1.772622	1.094460
1	2.978090	-2.082735	0.079281

c_7

6	0.990542	-0.588949	-0.388508
6	0.921907	0.832251	0.034944
6	3.074325	1.242897	-0.041191
6	3.462627	-0.195721	-0.394631
6	2.341359	-0.997630	0.265561
6	2.264737	-0.305924	1.624323
6	1.902980	1.062036	1.059623
1	1.789053	1.931876	1.694616
6	0.063623	1.865568	-0.529808
1	-0.950286	1.612919	-0.192909
1	0.315158	2.862076	-0.183394
1	0.023915	1.819079	-1.615807
1	3.841137	1.804101	0.488650
1	2.792848	1.847644	-0.901973
1	3.550143	-0.355495	-1.464123
1	4.418148	-0.459933	0.050925
1	2.491143	-2.072906	0.276157
1	1.510567	-0.696431	2.300180
1	3.218315	-0.290083	2.145123
6	0.902662	-0.828103	-1.886617
1	1.038156	-1.886332	-2.097602
1	-0.060376	-0.531780	-2.290008

c_8

6	-0.886700	-0.602112	0.164731
6	-0.984213	0.849805	-0.123887
6	-3.026393	1.158566	0.646129
6	-3.235658	-0.319321	0.989386
6	-2.370069	-1.016815	-0.059831
6	-2.740751	-0.218737	-1.307994
6	-2.241421	1.116260	-0.767596
1	-2.347089	2.037010	-1.327848
6	-0.026258	1.868418	0.287779
1	0.940797	1.592395	-0.146139
1	-0.308744	2.871154	-0.011752
1	0.142339	1.818439	1.364054
1	-3.940461	1.699667	0.410837
1	-2.521498	1.728850	1.423088
1	-2.961957	-0.554159	2.012717
1	-4.276557	-0.604132	0.859800
1	-2.497777	-2.093510	-0.116527
1	-2.236641	-0.523293	-2.219223
1	-3.810862	-0.202824	-1.496642
6	-0.305178	-0.944297	1.525678
1	-0.309687	-2.022483	1.668446
1	0.720235	-0.598106	1.618570

1	1.670445	-0.283018	-2.428995
6	-0.177057	-1.314221	0.395309
1	-0.410506	-0.783377	1.318529
1	0.246875	-2.270861	0.699270
6	-1.488857	-1.587684	-0.341109
1	-1.287989	-2.159397	-1.245687
1	-2.043456	-2.266605	0.305354
6	-2.345565	-0.404554	-0.682448
1	-2.202628	0.023146	-1.669100
6	-3.316006	0.125735	0.069052
6	-4.142271	1.267652	-0.435924
1	-3.839999	1.586690	-1.430236
1	-4.084431	2.123876	0.237239
1	-5.193679	0.983681	-0.481337
6	-3.689652	-0.359730	1.433914
1	-3.624359	0.451834	2.159143
1	-4.727375	-0.693368	1.441550
1	-3.072944	-1.179072	1.789495
1	-0.880712	-0.502434	2.334833
6	-0.027272	-1.234175	-1.006021
1	-0.151232	-0.666548	-1.928459
1	-0.494741	-2.200578	-1.189414
6	1.465628	-1.459565	-0.778947
1	1.634060	-2.004817	0.144874
1	1.767756	-2.145091	-1.575337
6	2.325878	-0.240149	-0.873978
1	2.174510	0.349039	-1.775054
6	3.312656	0.142850	-0.057751
6	4.131922	1.356923	-0.370519
1	3.804314	1.849839	-1.282284
1	5.180612	1.086787	-0.494349
1	4.094680	2.077191	0.447699
6	3.724903	-0.577739	1.187035
1	4.747051	-0.941761	1.081627
1	3.729089	0.100942	2.040352
1	3.100069	-1.431041	1.430847

c_9

6	0.721431	-0.467469	0.191387
6	2.151466	-0.690112	-0.113509
6	2.889682	1.179710	0.756150
6	1.494770	1.716263	1.089745
6	0.631037	1.067352	0.005280
6	1.507331	1.295671	-1.223272
6	2.698096	0.501589	-0.699013
1	3.623798	0.427180	-1.256078
6	2.900824	-1.912434	0.173988
1	2.565529	-2.652628	-0.560894
1	3.971667	-1.789735	0.051364
1	2.660114	-2.323793	1.151170
1	3.644599	1.945111	0.588829
1	3.297348	0.510097	1.512773
1	1.183887	1.475694	2.101040
1	1.463192	2.798028	0.988904
1	-0.387978	1.433425	-0.041063
1	1.113829	0.890941	-2.151430
1	1.755278	2.341919	-1.380703
6	0.255289	-1.006460	1.537041
1	-0.766738	-0.689925	1.719560
1	0.270740	-2.093388	1.555163
1	0.874361	-0.649138	2.356503
6	0.038156	-1.246455	-0.997336
1	-0.016585	-2.290929	-0.691543
1	0.664430	-1.229933	-1.891671
6	-1.351042	-0.747546	-1.400692
1	-1.285446	0.265325	-1.789424
1	-1.640462	-1.369894	-2.251853
6	-2.394970	-0.865010	-0.339440
1	-2.465461	-1.844360	0.122775
6	-3.279453	0.057533	0.048079
6	-4.302606	-0.261254	1.093921
1	-4.202609	-1.276167	1.469106
1	-5.309486	-0.147285	0.692093
1	-4.224999	0.426925	1.936318
6	-3.377361	1.444307	-0.505770
1	-4.349965	1.588228	-0.976552
1	-3.313538	2.181511	0.295287

c_{10}

6	-0.707175	0.141460	0.269645
6	-1.922460	0.972474	0.125836
6	-3.366657	-0.626566	0.513155
6	-2.309156	-1.730585	0.597764
6	-1.212056	-1.196398	-0.326414
6	-2.049572	-0.726567	-1.512453
6	-2.862029	0.290093	-0.719011
1	-3.659624	0.863500	-1.174890
6	-2.153412	2.262767	0.774903
1	-1.518378	2.985096	0.250726
1	-3.180219	2.600783	0.684776
1	-1.827147	2.267857	1.811976
1	-4.353642	-0.962482	0.202247
1	-3.510070	-0.083069	1.446541
1	-1.976296	-1.914649	1.613932
1	-2.697243	-2.668024	0.207965
1	-0.418558	-1.902836	-0.541602
1	-1.486486	-0.268635	-2.320683
1	-2.675355	-1.511435	-1.928364
6	-0.133377	0.080492	1.678989
1	0.693509	-0.620620	1.713147
1	0.255727	1.047283	1.987988
1	-0.875965	-0.232608	2.409091
6	0.276308	0.890099	-0.709136
1	0.727207	1.698119	-0.134968
1	-0.271070	1.365828	-1.526588
6	1.375684	0.025780	-1.338160
1	0.919819	-0.724794	-1.983531
1	1.921339	0.687975	-2.008596
6	2.317690	-0.642406	-0.386550
1	2.017786	-1.619798	-0.025370
6	3.504372	-0.183352	0.019971
6	4.363240	-0.992087	0.940591
1	3.896534	-1.934799	1.213618
1	4.583186	-0.438575	1.853821
1	5.322654	-1.212717	0.472404
6	4.094760	1.128458	-0.390271
1	4.302002	1.739776	0.488347
1	5.051628	0.971269	-0.887980

1	-2.621406	1.678679	-1.249026

1	3.461711	1.705587	-1.057160

c_{12}

6	-1.205031	-0.574676	-0.592288
6	-1.724860	-0.378733	0.784413
6	-2.556388	1.619525	0.371152
6	-1.942486	1.752051	-1.025287
6	-0.703910	0.857902	-0.910593
6	-0.153883	1.337636	0.429657
6	-1.374906	0.930599	1.244732
1	-1.456825	1.146078	2.303064
6	-2.512493	-1.347656	1.541583
1	-1.771513	-1.969617	2.059618
1	-3.115818	-0.881138	2.314712
1	-3.107000	-2.007734	0.918467
1	-2.733521	2.561442	0.885841
1	-3.502208	1.078650	0.389465
1	-2.629735	1.464957	-1.813862
1	-1.640193	2.778160	-1.216731
1	-0.020516	0.901874	-1.751613
1	0.754593	0.842734	0.747020
1	0.009683	2.411877	0.455724
6	-2.288106	-1.097669	-1.546276
1	-1.936049	-0.983381	-2.569045
1	-2.481977	-2.154466	-1.382950
1	-3.231507	-0.566017	-1.457384
6	-0.104480	-1.693996	-0.573209
1	0.105050	-1.873709	-1.628322
1	-0.602775	-2.595284	-0.216609
6	1.225463	-1.550314	0.163594
1	1.082099	-1.241622	1.199361
1	1.619798	-2.568060	0.228486
6	2.242652	-0.704120	-0.540501
1	2.214533	-0.769443	-1.623410
6	3.212116	0.034400	0.003138
6	4.195823	0.762278	-0.858967
1	4.001630	0.611249	-1.917332
1	5.211395	0.425850	-0.649962
1	4.175047	1.833242	-0.654576
6	3.438217	0.191894	1.474371
1	4.400607	-0.239512	1.750717
1	3.486236	1.246842	1.746049
1	2.682599	-0.287692	2.090160

c_{13}

6	0.806339	-0.512028	0.193089
6	2.213961	-0.525773	-0.275255
6	2.790508	1.349354	0.666619
6	1.384147	1.698200	1.155754
6	0.502181	1.008121	0.111389
6	1.217928	1.422027	-1.171205
6	2.542607	0.754922	-0.824223
1	3.414483	0.842301	-1.460473
6	3.140234	-1.653179	-0.169767
1	2.951701	-2.272382	-1.054264
1	4.179260	-1.342878	-0.226490
1	2.960611	-2.274091	0.702340
1	3.440995	2.203253	0.488956
1	3.338799	0.683151	1.332010
1	1.201687	1.367725	2.172945
1	1.220471	2.772233	1.128385
1	-0.554732	1.236403	0.171482
1	0.784598	1.036607	-2.088991
1	1.320109	2.499478	-1.269181
6	0.594845	-1.151847	1.561068
1	-0.389096	-0.884473	1.936636
1	0.645090	-2.236979	1.506124
1	1.326492	-0.819603	2.293264
6	0.056815	-1.353061	-0.899868
1	0.508344	-2.345165	-0.911261
1	0.212106	-0.929188	-1.890544
6	-1.445772	-1.532268	-0.662155
1	-1.754957	-2.284915	-1.392531
1	-1.616589	-1.985190	0.310552
6	-2.281531	-0.310661	-0.859711
1	-2.105272	0.217782	-1.791740
6	-3.258619	0.148804	-0.073424
6	-4.053096	1.354447	-0.469764
1	-3.721618	1.771024	-1.417223
1	-3.987120	2.132158	0.291977
1	-5.109513	1.102278	-0.563246
6	-3.680564	-0.468725	1.222591
1	-3.673885	0.275468	2.019345
1	-4.707075	-0.828174	1.147465
1	-3.064781	-1.306824	1.533638

c_{14}

6	0.913398	-0.498939	0.403669
6	2.039527	-0.536967	-0.563054
6	2.926077	1.354229	0.043470
6	1.807667	1.731477	1.015429
6	0.599211	1.021731	0.399441
6	0.776529	1.395978	-1.068670
6	2.135159	0.726168	-1.229241
1	2.703410	0.790434	-2.148809
6	2.938920	-1.669187	-0.785842
1	2.437748	-2.302662	-1.526509
1	3.882880	-1.366178	-1.228919
1	3.095451	-2.272965	0.102429
1	3.464160	2.195382	-0.388628

c_{15}

6	0.762004	-0.308794	-0.019631
6	1.527041	0.951169	0.134675
6	3.287048	0.303783	-0.995402
6	2.802903	-1.135205	-1.190153
6	1.922017	-1.341109	0.043413
6	2.828692	-0.761061	1.125939
6	2.871493	0.642052	0.532393
1	3.475423	1.428504	0.968094
6	1.028814	2.301679	-0.117463
1	0.488018	2.585887	0.793152
1	1.829197	3.023811	-0.245993
1	0.317236	2.347860	-0.936047
1	4.367497	0.431202	-1.004622

1	3.682468	0.698004	0.472819
1	2.021929	1.431711	2.036002
1	1.644828	2.805972	1.019212
1	-0.358160	1.269288	0.838819
1	0.027096	0.990485	-1.740988
1	0.832770	2.469670	-1.226253
6	1.243154	-1.102534	1.765223
1	0.475306	-0.826474	2.482830
1	1.276352	-2.188781	1.721245
1	2.196335	-0.754794	2.155819
6	-0.191644	-1.361395	-0.299826
1	0.232716	-2.349477	-0.482888
1	-0.448011	-0.941938	-1.270149
6	-1.480085	-1.561565	0.510889
1	-2.055886	-2.299983	-0.046270
1	-1.237464	-2.042241	1.457109
6	-2.317859	-0.346942	0.769236
1	-2.167890	0.143605	1.724221
6	-3.269537	0.147679	-0.027116
6	-4.073495	1.341124	0.383277
1	-3.769645	1.725967	1.353158
1	-5.132274	1.087245	0.437564
1	-3.984421	2.143279	-0.350034
6	-3.639112	-0.426760	-1.358311
1	-4.692393	-0.707279	-1.367330
1	-3.515440	0.320118	-2.143318
1	-3.059324	-1.302970	-1.632572

1	2.892039	1.001752	-1.733172
1	2.285702	-1.279212	-2.132679
1	3.637769	-1.830799	-1.168997
1	1.573474	-2.357903	0.194670
1	2.425173	-0.781064	2.133124
1	3.812579	-1.221895	1.142966
6	-0.106776	-0.386010	-1.265522
1	-0.543480	-1.377822	-1.345389
1	-0.930073	0.319158	-1.231154
1	0.467089	-0.195777	-2.168928
6	-0.090937	-0.407311	1.303332
1	0.494224	-0.042750	2.146349
1	-0.219719	-1.475923	1.477274
6	-1.458805	0.276979	1.329637
1	-1.693354	0.437945	2.384731
1	-1.413643	1.273833	0.893429
6	-2.563152	-0.533214	0.723876
1	-2.569549	-1.576283	1.023087
6	-3.555738	-0.116597	-0.063774
6	-4.616470	-1.067851	-0.523342
1	-4.452567	-2.074449	-0.148686
1	-4.655739	-1.108665	-1.612353
1	-5.599932	-0.737774	-0.188375
6	-3.733620	1.287818	-0.549159
1	-3.817603	1.308133	-1.636165
1	-4.663916	1.703549	-0.161652
1	-2.932939	1.960715	-0.255576

c_{16}

6	-0.785308	-0.082639	0.261747
6	-1.781076	0.906512	-0.212836
6	-3.552127	-0.173473	0.484580
6	-2.781404	-1.411561	0.950532
6	-1.570940	-1.401052	0.015348
6	-2.261070	-1.132953	-1.319699
6	-2.831781	0.219153	-0.910335
1	-3.473811	0.790667	-1.569307
6	-1.746784	2.349374	0.019017
1	-1.036305	2.747897	-0.714505
1	-2.703169	2.825672	-0.172232
1	-1.363503	2.612476	1.000366
1	-4.586816	-0.355357	0.201822
1	-3.573900	0.630152	1.220138
1	-2.527778	-1.375477	2.004522
1	-3.364754	-2.314184	0.788531
1	-0.940472	-2.283092	0.068277
1	-1.602618	-1.070027	-2.180028
1	-3.044849	-1.852312	-1.540914
6	-0.292314	0.118231	1.685572
1	0.389051	-0.685287	1.951703
1	0.245255	1.053691	1.800109
1	-1.110857	0.118049	2.400456
6	0.383651	0.030584	-0.791130
1	-0.029618	0.222922	-1.781470
1	0.821512	-0.965731	-0.838408
6	1.494233	1.054260	-0.520631
1	1.922066	1.310015	-1.488604
1	1.079481	1.989474	-0.141899
6	2.586167	0.588193	0.399104

c_{18}

6	1.058616	0.858568	0.227544
6	0.721086	-0.512183	0.689111
6	2.768910	-1.318005	0.328616
6	3.293406	-0.056056	-0.365143
6	2.009214	0.534898	-0.955994
6	1.399656	-0.727201	-1.562740
6	1.264435	-1.468822	-0.238189
1	0.899491	-2.487481	-0.191311
6	0.084901	-0.851223	1.960519
1	-0.988894	-0.746633	1.774166
1	0.265478	-1.880060	2.255578
1	0.340209	-0.160713	2.758845
1	3.259585	-2.238880	0.021422
1	2.832766	-1.282411	1.415330
1	3.819293	0.609156	0.311232
1	3.982611	-0.314083	-1.164918
1	2.157447	1.374286	-1.628444
1	0.452196	-0.594027	-2.067652
1	2.081201	-1.234872	-2.240437
6	1.704245	1.693051	1.343542
1	2.159464	2.576566	0.901628
1	0.962487	2.030751	2.061986
1	2.477523	1.157072	1.887032
6	-0.228863	1.654673	-0.178538
1	0.151113	2.632560	-0.476182
1	-0.793945	1.808961	0.740387
6	-1.193361	1.145503	-1.244302
1	-1.923864	1.942298	-1.381730
1	-0.693937	1.060610	-2.207395
6	-1.898877	-0.134821	-0.905960

1	2.496937	0.860973	1.442658
6	3.670199	-0.104504	0.040791
6	4.706011	-0.484572	1.051608
1	4.446174	-0.145335	2.050626
1	5.672770	-0.055245	0.787959
1	4.842674	-1.565792	1.080412
6	3.968549	-0.551186	-1.355667
1	4.927452	-0.148957	-1.682625
1	4.061904	-1.636807	-1.394319
1	3.217150	-0.254573	-2.081265

1	-1.498941	-1.045755	-1.337675
6	-3.017121	-0.258585	-0.180811
6	-3.644154	-1.598396	0.044329
1	-3.077928	-2.401620	-0.420029
1	-4.653812	-1.618249	-0.366038
1	-3.744218	-1.812671	1.109414
6	-3.750596	0.887698	0.439671
1	-4.773047	0.923416	0.063701
1	-3.829422	0.754077	1.519435
1	-3.291842	1.853103	0.251714

d_1

6	-0.935192	0.040693	-0.557892
6	-1.776161	0.820063	0.395703
6	-2.898468	-1.339574	0.895391
6	-1.822896	-1.916566	-0.030053
6	-1.788294	-0.883540	-1.262576
6	-3.193852	-0.298376	-1.189487
6	-3.118726	0.049282	0.292471
1	-3.955839	0.603375	0.705838
6	-1.891423	2.229837	-0.239540
1	-2.233470	2.222971	-1.269799
1	-2.611703	2.792850	0.349686
1	-0.938084	2.749612	-0.196533
1	-3.814685	-1.920867	0.834475
1	-2.593058	-1.323754	1.936289
1	-0.857425	-2.056437	0.456668
1	-2.075733	-2.873036	-0.482411
1	-1.409000	-1.323974	-2.176921
1	-3.334465	0.545149	-1.858446
1	-3.953868	-1.042070	-1.413374
6	-1.256296	0.964606	1.823904
1	-0.903132	0.027104	2.243548
1	-0.452985	1.689323	1.894930
1	-2.073803	1.319680	2.448238
6	0.495785	0.139467	-0.844205
1	0.488622	0.842457	-1.695546
1	0.830743	-0.794415	-1.298487
6	1.496224	0.627714	0.203426
1	1.232434	1.636144	0.520720
1	1.440050	-0.006296	1.084000
6	2.876783	0.637161	-0.370666
1	3.028711	1.341084	-1.181900
6	3.921559	-0.101771	0.009066
6	5.246268	0.054910	-0.669584
1	5.215426	0.797634	-1.461669
1	5.574249	-0.891962	-1.098459
1	6.009825	0.353977	0.048505
6	3.909685	-1.112798	1.111581
1	4.234500	-2.082493	0.734776
1	4.621501	-0.828734	1.886497
1	2.941213	-1.243972	1.584131

d_2

6	-0.938452	-0.325680	-0.382599
6	-1.597017	0.917795	0.111691
6	-3.348612	-0.586747	1.025792
6	-2.400486	-1.688504	0.543835
6	-1.955071	-1.191825	-0.922082
6	-3.126773	-0.291580	-1.293281
6	-3.091154	0.517593	-0.001752
1	-3.762271	1.368807	0.058781
6	-1.227582	2.001639	-0.933465
1	-1.461207	1.726670	-1.957417
1	-1.795925	2.895931	-0.688049
1	-0.170266	2.245487	-0.875901
1	-4.383510	-0.913692	0.969491
1	-3.158034	-0.288269	2.051243
1	-1.567023	-1.872754	1.222568
1	-2.869445	-2.654959	0.372183
1	-1.639713	-2.001749	-1.568825
1	-2.950281	0.274981	-2.202514
1	-4.047859	-0.854880	-1.415474
6	-1.193044	1.414343	1.497428
1	-1.185843	0.626750	2.245261
1	-0.215142	1.882781	1.493750
1	-1.915004	2.164762	1.813305
6	0.479962	-0.686131	-0.415064
1	0.761390	-0.343869	-1.425820
1	0.560399	-1.771639	-0.493384
6	1.479582	-0.129251	0.596900
1	1.531276	0.952234	0.519614
1	1.132091	-0.359669	1.605029
6	2.825371	-0.746971	0.384027
1	2.868843	-1.815847	0.563200
6	3.955238	-0.135119	0.023234
6	5.224788	-0.914153	-0.123576
1	5.081896	-1.972045	0.077654
1	5.985441	-0.537062	0.560056
1	5.628574	-0.807438	-1.130372
6	4.095849	1.329250	-0.248422
1	4.812195	1.770814	0.444199
1	4.495464	1.489324	-1.249617
1	3.168361	1.887368	-0.164950

d_3

6	0.863476	0.040628	0.136052
6	2.030429	0.969354	0.089677
6	3.195059	-0.913716	-1.034398

d_4

6	-0.910064	0.221912	-0.321531
6	-2.083290	0.871212	0.334355
6	-2.736215	-1.444207	0.949968

6	1.815188	-1.569648	-0.956152
6	1.319566	-1.248116	0.560442
6	2.661184	-1.033469	1.249128
6	3.198266	-0.041261	0.221524
1	4.147285	0.431527	0.453925
6	1.913889	1.845216	1.362563
1	1.752734	1.281716	2.276568
1	2.843725	2.398735	1.469579
1	1.104273	2.562427	1.257919
1	3.982758	-1.659893	-0.972945
1	3.342314	-0.360232	-1.955871
1	1.128432	-1.241907	-1.735877
1	1.816099	-2.656852	-0.990553
1	0.600821	-1.969198	0.924841
1	2.554926	-0.645926	2.257657
1	3.243718	-1.949549	1.296771
6	2.081400	1.882964	-1.127902
1	2.013458	1.338319	-2.066053
1	1.279108	2.616388	-1.105795
1	3.021695	2.429557	-1.127284
6	-0.501891	0.400589	-0.251656
1	-0.468652	0.893188	-1.227296
1	-0.768875	1.221251	0.428598
6	-1.571381	-0.685212	-0.204379
1	-1.254272	-1.527092	-0.825196
1	-1.665938	-1.063269	0.810826
6	-2.879320	-0.168089	-0.713241
1	-2.880462	0.112790	-1.760891
6	-4.021745	-0.032930	-0.036823
6	-5.247882	0.489062	-0.718282
1	-5.065354	0.730548	-1.761613
1	-5.615749	1.384516	-0.217459
1	-6.051303	-0.246259	-0.674167
6	-4.218348	-0.381279	1.404614
1	-4.589353	0.484582	1.952692
1	-4.978178	-1.156632	1.501598
1	-3.320551	-0.733291	1.903022

6	-1.388978	-1.793432	0.315127
6	-1.369527	-0.917830	-1.056285
6	-2.863158	-0.721267	-1.280610
6	-3.160764	-0.224661	0.130843
1	-4.169677	0.129315	0.317981
6	-2.398634	2.120496	-0.526492
1	-2.460217	1.921976	-1.592223
1	-3.359939	2.511741	-0.202155
1	-1.649080	2.890717	-0.366385
1	-3.449937	-2.252334	0.813543
1	-2.659382	-1.254635	2.015512
1	-0.537318	-1.622133	0.972764
1	-1.296041	-2.816671	-0.041986
1	-0.731987	-1.348882	-1.815878
1	-3.075810	-0.014220	-2.076520
1	-3.363864	-1.656954	-1.514069
6	-1.855309	1.314755	1.773315
1	-1.483187	0.513493	2.406291
1	-1.149105	2.139682	1.825724
1	-2.795134	1.663883	2.194957
6	0.477308	0.664518	-0.170852
1	0.688808	0.819656	0.890150
1	0.470849	1.687382	-0.574014
6	1.572149	-0.157188	-0.843263
1	1.559124	-1.173271	-0.453752
1	1.363396	-0.226196	-1.912756
6	2.911325	0.477557	-0.642363
1	3.028802	1.448437	-1.111412
6	3.956840	-0.016742	0.023725
6	5.235464	0.756646	0.108896
1	5.172940	1.710195	-0.407769
1	6.056366	0.186731	-0.326302
1	5.503014	0.946214	1.148428
6	3.990313	-1.340975	0.718980
1	4.767050	-1.971085	0.285984
1	4.250484	-1.207673	1.768933
1	3.055071	-1.890132	0.672070

d_5

6	-0.867402	-0.311778	0.052732
6	-1.623010	0.960172	0.194878
6	-3.611199	-0.467858	0.657194
6	-2.608021	-1.624366	0.584712
6	-1.682484	-1.253196	-0.675124
6	-2.654146	-0.398319	-1.488291
6	-3.015778	0.533464	-0.334558
1	-3.655010	1.377169	-0.575655
6	-0.950620	1.970809	-0.769252
1	-0.856296	1.612936	-1.789735
1	-1.569643	2.865022	-0.781846
1	0.035272	2.247970	-0.406702
1	-4.594144	-0.784854	0.318904
1	-3.727065	-0.074428	1.661673
1	-2.051339	-1.780556	1.507177
1	-3.050456	-2.583206	0.323447
1	-1.196305	-2.118083	-1.109997
1	-2.185695	0.080392	-2.342684
1	-3.500396	-0.979976	-1.843951
6	-1.599580	1.550587	1.601887

d_6

6	0.811338	-0.031891	-0.093549
6	1.941486	0.921703	0.067301
6	3.378514	-0.894220	-0.854023
6	2.052577	-1.639711	-1.037717
6	1.250116	-1.339955	0.323509
6	2.414011	-1.090084	1.280999
6	3.101161	-0.055214	0.394142
1	3.968772	0.443627	0.815033
6	1.605696	1.805145	1.295879
1	1.357806	1.243381	2.191129
1	2.486273	2.406779	1.509086
1	0.783862	2.478849	1.071211
1	4.191137	-1.589517	-0.660610
1	3.655271	-0.308296	-1.724230
1	1.510756	-1.356211	-1.938537
1	2.148046	-2.723112	-1.061724
1	0.494729	-2.086067	0.538640
1	2.093174	-0.727928	2.252870
1	3.012615	-1.984783	1.429410
6	2.162971	1.835372	-1.134771

1	-1.893176	0.835106	2.364863
1	-0.613439	1.929156	1.857600
1	-2.291862	2.388716	1.644780
6	0.462767	-0.590921	0.574888
1	0.480114	-1.590061	1.011713
1	0.771774	0.129560	1.325204
6	1.499782	-0.602065	-0.601309
1	1.191510	-1.356462	-1.324727
1	1.488889	0.357224	-1.109149
6	2.853478	-0.925391	-0.067184
1	2.967585	-1.937554	0.303760
6	3.913975	-0.115194	-0.009739
6	5.216044	-0.614596	0.532103
1	5.156641	-1.650628	0.852700
1	5.535892	-0.009574	1.380580
1	5.999025	-0.534724	-0.221833
6	3.939702	1.307809	-0.468250
1	4.255320	1.957812	0.347569
1	4.674943	1.431316	-1.263168
1	2.986813	1.672781	-0.838650

d_8

6	1.016339	0.624213	-0.440356
6	0.915100	-0.800930	-0.029080
6	2.961257	-0.378414	1.324027
6	2.776742	1.068795	0.855721
6	2.406949	0.919567	-0.699830
6	3.065606	-0.417260	-1.022544
6	2.413118	-1.166847	0.132916
1	2.580428	-2.238689	0.174709
6	0.302592	-1.522393	-1.261623
1	0.796033	-1.294650	-2.201652
1	0.397237	-2.591321	-1.083647
1	-0.750654	-1.274493	-1.349415
1	4.013658	-0.607848	1.468941
1	2.453406	-0.585610	2.260070
1	2.038313	1.624346	1.433323
1	3.685922	1.666032	0.866647
1	2.632292	1.808698	-1.277214
1	2.817685	-0.783873	-2.013816
1	4.147655	-0.363336	-0.937962
6	0.052247	-1.108414	1.188961
1	0.304555	-0.494889	2.049274
1	-1.001240	-0.978043	0.966354
1	0.210939	-2.148873	1.465636
6	-0.011363	1.656413	-0.614563
1	-0.160598	1.631412	-1.707282
1	0.478906	2.620032	-0.463870
6	-1.368900	1.612714	0.086430
1	-1.238835	1.388688	1.142220
1	-1.744340	2.637430	0.049037
6	-2.370253	0.710119	-0.565422
1	-2.339028	0.699263	-1.650643
6	-3.344447	0.012376	0.024636
6	-4.317593	-0.779009	-0.791680
1	-4.110987	-0.712024	-1.856348
1	-5.334271	-0.424843	-0.621780
1	-4.302846	-1.830005	-0.502093
6	-3.587501	-0.030892	1.499941
1	-4.553943	0.419603	1.727042

1	2.233191	1.290606	-2.072198
1	1.364342	2.566317	-1.229537
1	3.092203	2.383660	-0.995592
6	-0.516531	0.266415	-0.613436
1	-0.863301	-0.557956	-1.234819
1	-0.534922	1.184621	-1.193125
6	-1.530782	0.378264	0.578852
1	-1.542861	-0.560306	1.125773
1	-1.188252	1.148842	1.266638
6	-2.882638	0.737709	0.059270
1	-2.987402	1.762688	-0.275804
6	-3.951685	-0.059346	-0.016936
6	-5.252934	0.468859	-0.532652
1	-5.186216	1.514346	-0.819324
1	-6.031068	0.371403	0.224267
1	-5.584455	-0.105006	-1.398067
6	-3.985591	-1.496129	0.396205
1	-4.713255	-1.639742	1.194747
1	-4.315280	-2.116879	-0.436678
1	-3.031416	-1.880824	0.743001

d_9

6	0.803131	0.536264	0.166019
6	2.260219	0.368654	-0.127244
6	1.626750	-1.918365	-0.847306
6	0.217225	-1.387001	-0.596048
6	0.337260	-0.628609	0.846088
6	1.563611	-1.323288	1.422523
6	2.438674	-1.138359	0.186095
1	3.478757	-1.434632	0.278787
6	2.999460	1.237091	0.919684
1	2.659483	1.086812	1.940063
1	4.055771	0.982589	0.878205
1	2.898246	2.292216	0.680042
1	1.684313	-2.984068	-0.641770
1	1.953297	-1.765582	-1.870647
1	-0.177119	-0.768812	-1.400570
1	-0.547661	-2.135530	-0.403259
1	-0.606570	-0.595933	1.371151
1	1.928023	-0.841190	2.324603
1	1.368921	-2.367874	1.649745
6	2.691539	0.808339	-1.520071
1	2.109218	0.339230	-2.308858
1	2.610124	1.886239	-1.637734
1	3.735223	0.543482	-1.673549
6	0.020470	1.718543	-0.215472
1	0.140824	1.881437	-1.290214
1	0.583254	2.550175	0.228290
6	-1.443788	1.786758	0.204272
1	-1.525674	1.634144	1.278151
1	-1.769147	2.813221	0.026321
6	-2.325867	0.854177	-0.564673
1	-2.232766	0.929491	-1.643978
6	-3.249462	0.015238	-0.088451
6	-4.094603	-0.796122	-1.020827
1	-3.834358	-0.627861	-2.062268
1	-5.148226	-0.548397	-0.892217
1	-4.000250	-1.861462	-0.807945
6	-3.566899	-0.180019	1.361064
1	-4.594104	0.125814	1.559652

1	-3.640013	-1.061559	1.851209
1	-2.839626	0.494330	2.086062
1	-3.507758	-1.235649	1.628555
1	-2.928144	0.382338	2.035519

d_{10}

6	-0.900277	0.396399	-0.520621
6	-1.794457	0.769790	0.606988
6	-2.324940	-1.659433	0.810333
6	-1.263298	-1.841723	-0.281935
6	-1.543812	-0.638573	-1.297525
6	-3.040228	-0.418712	-1.052134
6	-2.913205	-0.291299	0.463074
1	-3.817277	-0.029637	1.004277
6	-2.331439	2.187659	0.284774
1	-2.823696	2.260779	-0.679840
1	-3.057667	2.441001	1.053631
1	-1.530900	2.921561	0.320696
1	-3.094135	-2.423532	0.734869
1	-1.911789	-1.717246	1.812038
1	-0.244880	-1.860538	0.098051
1	-1.390572	-2.743835	-0.876094
1	-1.173428	-0.825071	-2.298001
1	-3.432044	0.456445	-1.561471
1	-3.623439	-1.282755	-1.359617
6	-1.090742	0.817624	1.961866
1	-0.519806	-0.081873	2.173716
1	-0.416128	1.666538	2.030534
1	-1.840981	0.931263	2.741436
6	0.385990	1.012350	-0.812451
1	0.724625	1.644078	0.003827
1	0.095216	1.683109	-1.638576
6	1.536392	0.115748	-1.327837
1	1.132450	-0.654366	-1.985019
1	2.172887	0.736866	-1.949145
6	2.321948	-0.497061	-0.215713
1	1.828618	-1.286304	0.340587
6	3.570683	-0.191442	0.149400
6	4.233403	-0.927419	1.271005
1	3.584019	-1.679221	1.711036
1	4.542698	-0.236688	2.055294
1	5.137549	-1.423384	0.918293
6	4.426373	0.854058	-0.491578
1	4.769097	1.566688	0.258211
1	5.320982	0.396222	-0.913300
1	3.934265	1.412128	-1.281314

d_{11}

6	0.659892	0.257608	-0.259641
6	1.980741	0.701961	0.263573
6	2.882587	-1.386234	-0.753039
6	1.456079	-1.560267	-1.284782
6	0.525480	-1.157822	-0.033367
6	1.469522	-1.476186	1.123896
6	2.640931	-0.666595	0.574865
1	3.512665	-0.579141	1.216153
6	1.701400	1.484610	1.571476
1	1.072282	0.953671	2.279073
1	2.661152	1.670262	2.048247
1	1.243150	2.445093	1.354481
1	3.349921	-2.350779	-0.572846
1	3.522894	-0.840033	-1.437811
1	1.252339	-0.989794	-2.189347
1	1.180630	-2.590479	-1.499431
1	-0.469896	-1.580532	-0.091182
1	1.087507	-1.144747	2.084703
1	1.683758	-2.539563	1.189853
6	2.758760	1.609990	-0.683903
1	2.845388	1.198573	-1.685756
1	2.297424	2.591012	-0.761621
1	3.763754	1.752835	-0.292735
6	-0.329997	1.082978	-0.937813
1	-0.806899	0.505531	-1.728172
1	0.116265	1.979828	-1.357969
6	-1.475297	1.500913	0.057232
1	-1.045415	2.103281	0.853592
1	-2.101341	2.171005	-0.526108
6	-2.268786	0.376665	0.633596
1	-1.906631	-0.033607	1.569324
6	-3.402568	-0.129947	0.137336
6	-4.132391	-1.219024	0.856928
1	-3.626219	-1.518674	1.770484
1	-4.248432	-2.096075	0.220034
1	-5.138394	-0.891623	1.119072
6	-4.051757	0.328238	-1.129219
1	-4.187441	-0.513317	-1.808469
1	-5.048233	0.717026	-0.919917
1	-3.497807	1.098917	-1.656482

d_{12}

6	-0.678882	-0.252083	-0.470003
6	-1.843150	-0.701769	0.340472
6	-2.856128	1.502660	-0.218944
6	-1.608250	1.680208	-1.090043
6	-0.408614	1.128135	-0.166378
6	-1.004055	1.361861	1.221301
6	-2.321613	0.648530	0.932074
1	-3.001549	0.527837	1.769829
6	-1.271836	-1.621260	1.449071
1	-0.484142	-1.162213	2.037952
1	-2.092080	-1.869163	2.119010
1	-0.893490	-2.547020	1.024033

d_{15}

6	1.008129	-0.266323	-0.796437
6	1.585727	-0.685814	0.526868
6	1.256448	1.687561	1.125591
6	0.569990	1.676081	-0.236357
6	1.660147	0.935201	-1.204096
6	2.934770	1.079674	-0.395541
6	2.328284	0.616362	0.923698
1	3.014449	0.481449	1.753769
6	2.582782	-1.818173	0.193064
1	3.278210	-1.575040	-0.604853
1	3.162049	-2.030420	1.088777
1	2.051898	-2.725295	-0.083949

1	-3.204372	2.459881	0.160024
1	-3.682271	1.048082	-0.755822
1	-1.679232	1.193907	-2.061255
1	-1.338668	2.716514	-1.281297
1	0.560900	1.523163	-0.441903
1	-0.405849	0.926596	2.015799
1	-1.133267	2.420320	1.431155
6	-2.890610	-1.487579	-0.442585
1	-3.201963	-0.985006	-1.354123
1	-2.528189	-2.476552	-0.710307
1	-3.770669	-1.622076	0.182632
6	0.048405	-1.056683	-1.445221
1	0.221448	-0.468778	-2.347022
1	-0.506583	-1.950872	-1.711688
6	1.458108	-1.450444	-0.886911
1	1.360113	-1.892857	0.100100
1	1.785237	-2.254109	-1.547681
6	2.452367	-0.342444	-0.919493
1	2.603915	0.101652	-1.897987
6	3.217957	0.100690	0.082809
6	4.233856	1.173295	-0.156099
1	4.228515	1.522796	-1.184697
1	5.234516	0.805757	0.071100
1	4.060764	2.025878	0.501048
6	3.183955	-0.417970	1.485233
1	4.135116	-0.891285	1.729254
1	3.061630	0.403809	2.190748
1	2.401109	-1.147146	1.669389
1	1.718183	2.651521	1.322864
1	0.568204	1.478190	1.937708
1	-0.424950	1.213807	-0.208837
1	0.420071	2.635026	-0.727580
1	1.592933	1.250054	-2.236817
1	3.736348	0.456535	-0.780670
1	3.287540	2.106685	-0.362192
6	0.610701	-1.186274	1.584482
1	-0.254916	-0.540742	1.700332
1	0.259125	-2.189438	1.360628
1	1.126475	-1.232488	2.541576
6	0.031975	-0.986023	-1.637371
1	0.565043	-1.916381	-1.870466
1	-0.077604	-0.457631	-2.582730
6	-1.358058	-1.349473	-1.087580
1	-1.789702	-2.028551	-1.824639
1	-1.274608	-1.915860	-0.167047
6	-2.248619	-0.158146	-0.936457
1	-2.261478	0.511881	-1.791137
6	-3.081766	0.122539	0.070707
6	-3.956901	1.335864	0.016943
1	-3.794717	1.920408	-0.884529
1	-3.785252	1.977109	0.881878
1	-5.007819	1.048761	0.048802
6	-3.269351	-0.722056	1.290864
1	-3.135438	-0.127430	2.194719
1	-4.292225	-1.097681	1.322256
1	-2.607376	-1.580468	1.341865

d_{16}

6	0.846741	-0.375987	-0.638298
6	1.823311	-0.609663	0.475028
6	1.685790	1.842460	0.779591
6	0.608350	1.701625	-0.295588
6	1.306882	0.742525	-1.406060
6	2.779055	0.943027	-1.092947
6	2.639667	0.706807	0.405636
1	3.560267	0.666470	0.979480
6	2.668446	-1.819087	0.005936
1	3.057925	-1.725144	-1.003302
1	3.513567	-1.915968	0.683621
1	2.084695	-2.734181	0.062513
1	2.193083	2.800257	0.698848
1	1.283288	1.768993	1.784484
1	-0.348407	1.332585	0.085627
1	0.368978	2.603405	-0.855188
1	0.908078	0.888962	-2.401456
1	3.415011	0.235763	-1.616572
1	3.115600	1.947631	-1.334000
6	1.270305	-0.913996	1.861756
1	0.487205	-0.227305	2.166906
1	0.882512	-1.925260	1.930721
1	2.082314	-0.831328	2.581427
6	-0.341803	-1.155014	-1.013194
1	0.120903	-2.063677	-1.428150
1	-0.832255	-0.665001	-1.852121
6	-1.388481	-1.572285	0.032955
1	-2.071000	-2.243239	-0.483312
1	-0.924827	-2.167861	0.814007

d_{17}

6	-0.688560	-0.361421	-0.234721
6	-2.050841	-0.672352	0.279929
6	-2.612111	1.646487	-0.419087
6	-1.181016	1.648167	-0.963885
6	-0.314289	0.947073	0.215209
6	-1.200289	1.256106	1.417462
6	-2.486568	0.722995	0.793633
1	-3.359591	0.685266	1.437726
6	-1.819819	-1.645773	1.465746
1	-1.052180	-1.324829	2.163271
1	-2.756998	-1.728104	2.011011
1	-1.553142	-2.633012	1.098860
1	-2.906245	2.642762	-0.099680
1	-3.339106	1.313736	-1.152605
1	-1.079621	1.176722	-1.939905
1	-0.729058	2.633828	-1.050936
1	0.731810	1.218142	0.197832
1	-0.874651	0.746196	2.318558
1	-1.241148	2.322201	1.624125
6	-2.986794	-1.336997	-0.720413
1	-3.092692	-0.766315	-1.639287
1	-2.643549	-2.334947	-0.982084
1	-3.974048	-1.439018	-0.275723
6	0.072711	-1.233784	-1.133944
1	-0.530154	-1.364144	-2.039149
1	0.039164	-2.228042	-0.672858
6	1.508357	-0.837562	-1.455393
1	1.858291	-1.521274	-2.230625
1	1.527748	0.152940	-1.906095

6	-2.136187	-0.424009	0.638620
1	-1.742572	-0.037189	1.571736
6	-3.259530	0.130580	0.171876
6	-3.926861	1.248207	0.909061
1	-3.384093	1.531027	1.807027
1	-4.936431	0.959693	1.201434
1	-4.028322	2.128078	0.273429
6	-3.960473	-0.300405	-1.076904
1	-4.979580	-0.609692	-0.845693
1	-4.044278	0.535192	-1.772059
1	-3.472946	-1.120913	-1.594212
6	2.408027	-0.929911	-0.262616
1	2.338054	-1.863835	0.286154
6	3.312682	-0.041024	0.155760
6	4.171746	-0.331337	1.346683
1	3.937821	-1.292656	1.795447
1	4.057729	0.441791	2.106837
1	5.224648	-0.336606	1.064692
6	3.591032	1.273527	-0.503213
1	3.537968	2.085244	0.222950
1	4.607896	1.283230	-0.895907
1	2.925442	1.505559	-1.329505

d_{18}

6	0.723595	-0.007131	-0.278245
6	1.736909	1.005401	0.108386
6	3.414396	-0.790278	-0.293310
6	2.208753	-1.629005	-0.733204
6	1.065916	-1.261144	0.342478
6	1.946585	-0.899964	1.539507
6	2.805070	0.109710	0.783592
1	3.522183	0.673669	1.371963
6	1.014882	1.893345	1.160003
1	0.510212	1.337930	1.943971
1	1.770993	2.521897	1.624554
1	0.283891	2.534901	0.676879
1	4.186412	-1.419561	0.141288
1	3.867641	-0.244476	-1.114100
1	1.910084	-1.472936	-1.767076
1	2.346130	-2.700628	-0.606828
1	0.302371	-2.023065	0.422935
1	1.382982	-0.498997	2.375912
1	2.512745	-1.759028	1.889473
6	2.225705	1.898498	-1.024852
1	2.633310	1.332626	-1.858232
1	1.427380	2.530263	-1.406059
1	3.008791	2.554182	-0.651080
6	-0.357576	0.236421	-1.234127
1	0.138131	0.205560	-2.215466
1	-0.666420	1.279046	-1.136077
6	-1.560734	-0.702765	-1.198654
1	-2.174930	-0.476734	-2.064952
1	-1.223972	-1.732274	-1.336206
6	-2.346918	-0.572384	0.067711
1	-1.843272	-0.905532	0.970094
6	-3.592393	-0.111132	0.207881
6	-4.236909	-0.062405	1.557851
1	-3.578707	-0.427669	2.341547
1	-5.145110	-0.664826	1.568977
1	-4.536035	0.956014	1.805727
6	-4.462653	0.373488	-0.907758
1	-5.360946	-0.240174	-0.972783
1	-4.797924	1.390776	-0.706797
1	-3.983714	0.365091	-1.881209

$a1'_1$

6	0.410755	-0.923144	0.168169
6	3.591958	0.659902	0.100452
6	2.375245	1.402217	-0.367185

$a1'_2$

6	0.362699	0.375208	0.473608
6	3.740138	-0.060377	-0.487253
6	2.735872	-1.133658	-0.787607

6	1.520194	0.621305	-1.342351
6	1.339133	-0.891574	-0.955739
6	2.705495	-1.538370	-0.736369
6	3.715519	-0.654861	-0.078031
1	4.618442	-1.147205	0.258666
6	4.643020	1.481564	0.770951
1	5.461156	0.868180	1.136690
1	5.053630	2.219749	0.082081
1	4.228600	2.035065	1.614265
1	2.689727	2.321438	-0.864334
1	1.799521	1.742755	0.498597
1	0.555492	1.098957	-1.502114
1	2.014613	0.578070	-2.311413
1	0.829628	-1.344777	-1.807290
1	2.594170	-2.465894	-0.170974
1	3.072470	-1.850119	-1.716478
6	0.857995	-0.860197	1.554155
1	1.920400	-1.025566	1.682116
1	0.621331	0.154894	1.901004
1	0.258158	-1.510776	2.189526
6	-1.019448	-0.997398	-0.124262
1	-1.183536	-2.090361	-0.138316
1	-1.214766	-0.687886	-1.151412
6	-2.009929	-0.360825	0.857565
1	-1.878345	-0.792670	1.849994
1	-1.788189	0.700965	0.943201
6	-3.415277	-0.584040	0.401801
1	-3.739716	-1.618754	0.412776
6	-4.296717	0.338548	0.008812
6	-5.681836	-0.061048	-0.392334
1	-5.833740	-1.134706	-0.328693
1	-5.893628	0.256589	-1.413193
1	-6.418991	0.426103	0.245847
6	-4.035051	1.809719	-0.059138
1	-4.246442	2.181801	-1.061326
1	-4.707394	2.339875	0.615233
1	-3.018941	2.093486	0.196565

6	1.878995	-1.518053	0.399779
6	1.398865	-0.288862	1.255240
6	2.602110	0.553774	1.668088
6	3.659872	0.678116	0.619161
1	4.418276	1.427194	0.805370
6	4.825507	0.121641	-1.496416
1	5.476521	0.952741	-1.241777
1	5.436675	-0.777653	-1.572048
1	4.411396	0.304482	-2.488552
1	3.263133	-2.029459	-1.120265
1	2.129703	-0.838194	-1.649250
1	1.036030	-2.138212	0.101887
1	2.468306	-2.102175	1.104553
1	0.911080	-0.725121	2.128603
1	2.273074	1.544373	1.988437
1	3.023836	0.094917	2.564815
6	0.649577	1.470285	-0.443221
1	1.620966	1.926444	-0.299292
1	0.628686	1.026136	-1.448534
1	-0.157625	2.201010	-0.450616
6	-1.012764	-0.104740	0.603098
1	-1.400794	0.540988	1.410697
1	-1.024112	-1.105546	1.035683
6	-1.950420	0.009052	-0.605569
1	-2.093962	1.050675	-0.878585
1	-1.473809	-0.477698	-1.459571
6	-3.256830	-0.661699	-0.326400
1	-3.204367	-1.740326	-0.231201
6	-4.454791	-0.085100	-0.205268
6	-5.672336	-0.916730	0.049626
1	-5.438649	-1.975219	0.119632
1	-6.401177	-0.780577	-0.749267
1	-6.161086	-0.610349	0.974372
6	-4.721259	1.382275	-0.318166
1	-5.400292	1.576714	-1.148180
1	-5.221636	1.742271	0.580526
1	-3.831580	1.985780	-0.469640

a1'$_3$

6	-0.508603	-1.355077	0.002139
6	-3.134715	0.952836	-0.263020
6	-1.750631	1.419580	0.087066
6	-1.134364	0.655651	1.242564
6	-1.346593	-0.889233	1.109272
6	-2.840317	-1.179939	1.032736
6	-3.602282	-0.215454	0.175273
1	-4.615165	-0.503438	-0.073732
6	-3.942226	1.874355	-1.116743
1	-4.906576	1.445083	-1.372085
1	-4.116453	2.820569	-0.604508
1	-3.418079	2.110775	-2.043377
1	-1.787923	2.476440	0.354276
1	-1.115207	1.375388	-0.804224
1	-0.081574	0.895848	1.370860
1	-1.636779	0.920176	2.171314
1	-0.909212	-1.319017	2.014828
1	-3.016327	-2.201974	0.693861
1	-3.233530	-1.152618	2.050888
6	-1.095496	-1.787560	-1.258104

a1'$_4$

6	0.405471	-1.070629	0.177121
6	3.348006	0.838691	0.156180
6	2.160492	1.270530	-0.655763
6	1.609152	0.172974	-1.544668
6	1.494134	-1.196674	-0.792859
6	2.868069	-1.591546	-0.265741
6	3.646241	-0.450166	0.315225
1	4.526409	-0.719909	0.883918
6	4.163083	1.934509	0.760407
1	4.967677	1.544897	1.377092
1	4.602774	2.560409	-0.016058
1	3.545543	2.587600	1.377951
1	2.447505	2.111931	-1.287797
1	1.388791	1.669393	0.011703
1	0.659483	0.454591	-1.993123
1	2.300629	-0.024617	-2.361824
1	1.143111	-1.907846	-1.545617
1	2.782020	-2.396789	0.465473
1	3.425826	-2.028134	-1.096571
6	0.673712	-0.997469	1.606301

1	-1.919667	-1.137026	-1.554986
1	-0.377226	-1.942765	-2.054074
1	-1.579856	-2.748516	-1.036111
6	0.939468	-1.388610	0.163509
1	1.282892	-2.382299	-0.139282
1	1.240502	-1.209021	1.191374
6	1.668260	-0.370706	-0.783062
1	1.398665	-0.595179	-1.813920
1	1.317311	0.633924	-0.567704
6	3.141257	-0.489169	-0.599283
1	3.572104	-1.419890	-0.950174
6	3.964255	0.420092	-0.068242
6	5.433969	0.152638	0.007838
1	5.695174	-0.822447	-0.392706
1	5.779702	0.204994	1.040223
1	5.988455	0.909652	-0.546484
6	3.548991	1.751564	0.470208
1	3.871637	1.852631	1.506201
1	4.041819	2.549066	-0.085496
1	2.479479	1.933832	0.432128
1	1.543664	-0.372193	1.812572
1	-0.186745	-0.728771	2.206982
1	0.996728	-2.007632	1.893133
6	-0.974556	-1.016275	-0.292041
1	-1.553954	-1.735553	0.291976
1	-1.053349	-1.269912	-1.345604
6	-1.640873	0.382238	-0.034939
1	-1.659570	0.584956	1.031400
1	-1.026471	1.151122	-0.500328
6	-3.006650	0.407359	-0.632689
1	-3.033987	0.489847	-1.712472
6	-4.170556	0.350623	0.021192
6	-5.462433	0.421003	-0.729228
1	-5.310195	0.507662	-1.801076
1	-6.050328	1.276468	-0.397069
1	-6.065628	-0.466470	-0.537675
6	-4.319147	0.231105	1.504006
1	-4.868359	1.086958	1.895796
1	-4.908323	-0.652003	1.750527
1	-3.378124	0.166347	2.041662

a1'$_5$

6	0.295169	0.116917	0.049611
6	3.814010	0.207843	-0.229274
6	2.976248	-0.468727	-1.275242
6	1.977253	-1.452443	-0.701573
6	1.218310	-0.896608	0.556789
6	2.235418	-0.466505	1.609787
6	3.459609	0.195391	1.054908
1	4.102678	0.673927	1.781837
6	5.052835	0.885081	-0.716246
1	5.572655	1.400049	0.086304
1	5.739024	0.161822	-1.156750
1	4.821294	1.612500	-1.494996
1	3.629836	-1.010247	-1.960324
1	2.482864	0.285270	-1.897467
1	1.275710	-1.795554	-1.458579
1	2.498966	-2.331261	-0.325703
1	0.611439	-1.730281	0.915759
1	1.763695	0.182635	2.349498
1	2.527881	-1.358901	2.166644
6	0.602791	1.539937	0.137502
1	1.662116	1.724943	-0.038679
1	-0.035785	2.163471	-0.477705
1	0.457578	1.817785	1.190241
6	-0.988772	-0.303998	-0.475166
1	-0.999180	-1.353564	-0.756342
1	-1.325497	0.320107	-1.298019
6	-2.029751	-0.112052	0.709877
1	-1.665385	-0.651533	1.583119
1	-2.080314	0.941676	0.967299
6	-3.352354	-0.654945	0.294193
1	-3.436465	-1.734210	0.322247
6	-4.419783	0.053257	-0.088772
6	-5.699646	-0.638911	-0.432925
1	-5.621086	-1.718006	-0.339476
1	-6.000459	-0.401855	-1.453468
1	-6.504095	-0.296640	0.217783
6	-4.467800	1.543126	-0.197263

a1'$_6$

6	0.338431	-0.496456	-0.227617
6	3.796306	0.050995	0.170484
6	2.911618	-0.171047	1.363209
6	1.687005	0.720666	1.375951
6	0.976814	0.802997	-0.021272
6	1.980340	1.273747	-1.068954
6	3.355629	0.700777	-0.906001
1	4.031507	0.862092	-1.735535
6	5.182614	-0.495439	0.269667
1	5.739929	-0.350249	-0.651132
1	5.730129	-0.011622	1.078467
1	5.167953	-1.562303	0.494941
1	3.482429	0.022253	2.272287
1	2.636291	-1.229179	1.425325
1	0.985521	0.423311	2.152026
1	1.980719	1.748174	1.584890
1	0.173417	1.531411	0.109972
1	1.607017	1.065819	-2.073105
1	2.032306	2.362652	-1.009211
6	0.917559	-1.498174	-1.114850
1	2.005192	-1.501141	-1.044935
1	0.491000	-2.487657	-0.995685
1	0.717115	-1.151400	-2.137796
6	-0.938018	-0.761535	0.406960
1	-1.163457	-0.058453	1.202727
1	-1.005003	-1.785775	0.768159
6	-2.042351	-0.597877	-0.720125
1	-1.955978	0.388371	-1.168193
1	-1.846500	-1.335316	-1.496835
6	-3.385688	-0.821376	-0.121471
1	-3.595610	-1.846633	0.158853
6	-4.336356	0.095769	0.086167
6	-5.657441	-0.308290	0.658632
1	-5.705532	-1.372308	0.870408
1	-6.463369	-0.059874	-0.031620
1	-5.857345	0.236312	1.581520
6	-4.214110	1.552182	-0.226182

1	-4.765245	1.833700	-1.204598
1	-5.226048	1.943731	0.475242
1	-3.527408	2.036253	0.028900
1	-4.975883	1.844451	-0.948562
1	-4.398221	2.142355	0.671314
1	-3.247737	1.843090	-0.625865

a1'$_7$

6	0.096063	-0.408985	0.062180
6	3.550823	0.549270	-0.063437
6	3.007590	-0.484344	-1.004418
6	2.199682	-1.564764	-0.316637
6	1.209334	-1.027303	0.775912
6	1.958021	-0.125614	1.762731
6	3.061629	0.689197	1.167555
1	3.489401	1.438178	1.821110
6	4.656568	1.402303	-0.591830
1	4.952093	2.166237	0.121197
1	5.532755	0.797035	-0.824206
1	4.361026	1.895950	-1.518203
1	3.837973	-0.968455	-1.520642
1	2.436455	0.007025	-1.797595
1	1.676623	-2.191403	-1.036788
1	2.866393	-2.219215	0.242860
1	0.826862	-1.911977	1.285248
1	1.253036	0.526800	2.282312
1	2.363247	-0.775954	2.540494
6	0.131067	0.978615	-0.370137
1	1.025354	1.512600	-0.075676
1	-0.000440	1.004687	-1.456630
1	-0.776232	1.464628	0.003564
6	-1.081156	-1.237310	-0.201203
1	-1.547071	-1.267715	0.800075
1	-0.747776	-2.268803	-0.345842
6	-2.120520	-0.809432	-1.235317
1	-1.627993	-0.659758	-2.196179
1	-2.776277	-1.666322	-1.381843
6	-2.930140	0.407843	-0.879237
1	-2.699278	1.317469	-1.419621
6	-3.943332	0.448034	-0.009292
6	-4.701320	1.714410	0.232579
1	-4.306826	2.545009	-0.346063
1	-4.678094	1.986647	1.287861
1	-5.750614	1.584852	-0.032150
6	-4.425723	-0.733724	0.771410
1	-4.303037	-0.564204	1.841804
1	-5.492950	-0.879014	0.606785
1	-3.926144	-1.663472	0.512982

a1'$_9$

6	0.264320	-1.444446	0.388160
6	2.529081	1.247919	0.026826
6	1.646058	0.858346	-1.123597
6	1.695723	-0.622052	-1.443761
6	1.622044	-1.513118	-0.161501
6	2.756635	-1.134950	0.784962
6	3.019417	0.335597	0.864782
1	3.672252	0.655979	1.666218
6	2.821873	2.705701	0.164136
1	3.417506	2.915415	1.047744
1	3.364250	3.074421	-0.706538
1	1.900364	3.285455	0.229093
1	1.954887	1.409943	-2.012827
1	0.623225	1.192052	-0.922880
1	0.929008	-0.906796	-2.160973
1	2.655673	-0.869350	-1.893579
1	1.747495	-2.539046	-0.516188
1	2.567838	-1.537460	1.781738
1	3.654557	-1.651394	0.438882
6	-0.078343	-0.639242	1.545915
1	0.726487	-0.015995	1.912926
1	-0.978972	-0.053940	1.296241
1	-0.441013	-1.306005	2.334889
6	-0.804035	-2.192878	-0.276216
1	-1.341952	-2.787055	0.464761
1	-0.396634	-2.863487	-1.026887
6	-1.863763	-1.247322	-0.949581
1	-1.362612	-0.522958	-1.585666
1	-2.406107	-1.916937	-1.618039
6	-2.815525	-0.611078	-0.003944
1	-3.311349	-1.295698	0.676200
6	-3.188877	0.676462	0.041070
6	-4.241123	1.123581	1.004712
1	-4.595921	0.312348	1.633636
1	-5.095102	1.535057	0.466759
1	-3.865582	1.921598	1.645332
6	-2.661025	1.755542	-0.847779
1	-3.464979	2.137251	-1.477325
1	-2.310768	2.599559	-0.254016
1	-1.857318	1.438676	-1.504604

a1'$_{10}$

6	0.202321	-1.113523	0.498666
6	2.912158	1.027892	-0.120802
6	2.051844	0.574711	-1.265758
6	1.868308	-0.929724	-1.316129
6	1.550742	-1.526294	0.090293
6	2.689875	-1.186224	1.043280
6	3.191153	0.218329	0.899994
1	3.840736	0.572703	1.689611
6	3.435122	2.424050	-0.206249
1	4.003249	2.696232	0.678450

a1'$_{11}$

6	-0.220733	0.950480	-0.225081
6	-3.436381	-0.403765	0.126251
6	-2.696499	0.098319	1.332787
6	-1.293387	-0.461584	1.453993
6	-0.524579	-0.443432	0.089842
6	-1.318720	-1.240737	-0.937148
6	-2.797320	-1.002144	-0.878358
1	-3.369637	-1.374054	-1.718063
6	-4.915284	-0.195435	0.128832
1	-5.371195	-0.531005	-0.798064

1	4.082642	2.540925	-1.075240
1	2.621180	3.140546	-0.322405
1	2.506545	0.898480	-2.202937
1	1.088109	1.093521	-1.224031
1	1.117278	-1.221614	-2.046212
1	2.800274	-1.405621	-1.615617
1	1.485412	-2.607986	-0.062134
1	2.396738	-1.376631	2.076747
1	3.502825	-1.888732	0.848223
6	-0.019588	-0.194326	1.603673
1	-0.072210	-0.844116	2.490516
1	0.809379	0.489271	1.762789
1	-0.986131	0.301473	1.535837
6	-0.958511	-1.662038	-0.189987
1	-1.710606	-1.935477	0.550824
1	-0.692343	-2.533198	-0.782023
6	-1.660080	-0.611377	-1.144569
1	-0.938511	-0.293131	-1.891997
1	-2.399782	-1.210459	-1.669733
6	-2.288576	0.573343	-0.497449
1	-1.694534	1.478785	-0.468468
6	-3.536508	0.636901	-0.014223
6	-4.074786	1.912096	0.549015
1	-3.344151	2.715423	0.520560
1	-4.399353	1.773649	1.580416
1	-4.953343	2.231093	-0.011556
6	-4.491579	-0.512066	0.002113
1	-4.819171	-0.715691	1.021729
1	-5.389185	-0.259739	-0.562169
1	-4.086425	-1.430201	-0.412382

1	-5.379121	-0.738894	0.951966
1	-5.162985	0.857286	0.269219
1	-3.253242	-0.172632	2.230799
1	-2.687470	1.193695	1.328789
1	-0.728078	0.049801	2.229181
1	-1.336892	-1.514204	1.728257
1	0.447190	-0.908644	0.294483
1	-0.948687	-1.044691	-1.944732
1	-1.113145	-2.299042	-0.764234
6	-0.938447	1.677099	-1.266729
1	-2.011417	1.498583	-1.169426
1	-0.705533	2.734681	-1.305150
1	-0.686854	1.212518	-2.227161
6	0.878619	1.593309	0.464064
1	1.137955	1.097115	1.394072
1	0.681984	2.650973	0.623761
6	2.150660	1.501841	-0.491115
1	1.911795	1.995218	-1.430936
1	2.886181	2.124091	0.011026
6	2.660930	0.125191	-0.725669
1	2.247990	-0.402927	-1.577622
6	3.613609	-0.496662	-0.018691
6	4.081022	-1.862128	-0.407457
1	3.554076	-2.245616	-1.276525
1	3.952576	-2.564793	0.415830
1	5.146539	-1.844888	-0.636023
6	4.303012	0.087095	1.171723
1	4.202465	-0.579212	2.028199
1	5.371594	0.175969	0.976485
1	3.934891	1.065992	1.462405

a1'$_{12}$

6	-0.163912	1.100288	-0.263860
6	-3.214992	-0.556177	0.019757
6	-2.740914	0.268473	1.181524
6	-1.313716	-0.028273	1.597304
6	-0.361535	-0.200017	0.369168
6	-0.886953	-1.325176	-0.510914
6	-2.367698	-1.269062	-0.721970
1	-2.758325	-1.871691	-1.531548
6	-4.685353	-0.532648	-0.241050
1	-4.946718	-1.105027	-1.126272
1	-5.233968	-0.946337	0.605083
1	-5.043552	0.488450	-0.377326
1	-3.391465	0.081943	2.037572
1	-2.879179	1.331517	0.957641
1	-0.937705	0.724193	2.286062
1	-1.269320	-0.985124	2.114164
1	0.621672	-0.452664	0.790795
1	-0.367291	-1.333844	-1.470361
1	-0.614665	-2.269938	-0.035244
6	-0.816658	1.491766	-1.510180
1	-1.775500	1.926523	-1.193492
1	-0.278981	2.277379	-2.034180
1	-1.068280	0.659892	-2.158251
6	0.749807	2.040760	0.356248
1	0.790060	1.943529	1.437372
1	0.524860	3.064547	0.071275
6	2.196895	1.677700	-0.200555

a1'$_{13}$

6	0.215481	-1.400272	0.247785
6	2.685674	1.145787	0.092405
6	1.609802	1.077917	-0.950493
6	1.424268	-0.300605	-1.547504
6	1.473706	-1.459104	-0.486561
6	2.754667	-1.354669	0.338362
6	3.181640	0.043055	0.652446
1	3.969746	0.136843	1.388089
6	3.159431	2.513956	0.457452
1	3.893419	2.486021	1.257382
1	3.612834	3.007249	-0.402258
1	2.328658	3.143173	0.778815
1	1.860980	1.760792	-1.764006
1	0.674136	1.469300	-0.541013
1	0.514597	-0.357997	-2.141548
1	2.254645	-0.529784	-2.213263
1	1.464149	-2.381333	-1.069672
1	2.653551	-1.930883	1.260406
1	3.540797	-1.861759	-0.224871
6	0.044901	-0.607055	1.450606
1	0.968666	-0.255769	1.892030
1	-0.551950	0.257413	1.116178
1	-0.600863	-1.110776	2.169108
6	-0.926771	-2.151709	-0.280275
1	-0.792448	-3.130426	0.213000
1	-0.771045	-2.361106	-1.339181
6	-2.335708	-1.625295	-0.000003

1	2.159398	1.509490	-1.273503
1	2.752511	2.603407	-0.055161
6	2.855953	0.574433	0.539965
1	3.042727	0.778265	1.588321
6	3.303580	-0.587885	0.044617
6	4.036336	-1.551835	0.921590
1	4.120379	-1.196079	1.944235
1	5.041786	-1.722869	0.537186
1	3.539550	-2.522130	0.930423
6	3.164197	-1.021511	-1.378782
1	4.147798	-1.085557	-1.844564
1	2.737165	-2.022851	-1.428464
1	2.556814	-0.360046	-1.988926
1	-3.024424	-2.358592	-0.421508
1	-2.534983	-1.613149	1.068286
6	-2.572600	-0.287701	-0.627365
1	-2.325000	-0.229427	-1.682542
6	-3.107578	0.798989	-0.061508
6	-3.331808	2.041558	-0.865784
1	-2.983401	1.936994	-1.889550
1	-2.827826	2.895664	-0.413130
1	-4.393144	2.288002	-0.893459
6	-3.573143	0.888309	1.357864
1	-3.133789	1.754766	1.852154
1	-4.652456	1.038705	1.382252
1	-3.356618	0.007103	1.953733

a1'$_{14}$

6	0.345296	-1.425077	0.176773
6	2.894034	1.055527	0.078353
6	1.489643	1.353658	-0.357774
6	0.923052	0.339050	-1.328939
6	1.242648	-1.155590	-0.936905
6	2.742327	-1.327712	-0.713419
6	3.428552	-0.152916	-0.088249
1	4.451099	-0.322793	0.222234
6	3.641018	2.185932	0.706560
1	4.622603	1.876502	1.053312
1	3.773259	3.001967	-0.003841
1	3.092566	2.594406	1.555987
1	1.466489	2.329621	-0.844670
1	0.848102	1.465408	0.521799
1	-0.145624	0.484253	-1.473575
1	1.399242	0.449288	-2.302070
1	0.902433	-1.749520	-1.786070
1	2.931935	-2.226534	-0.123747
1	3.193225	-1.531976	-1.686335
6	0.810943	-1.331269	1.554455
1	1.620152	-0.612760	1.663354
1	0.022794	-1.192219	2.283976
1	1.275950	-2.308988	1.750182
6	-1.020165	-1.859606	-0.126297
1	-0.917173	-2.953594	-0.006349
1	-1.237992	-1.703169	-1.181220
6	-2.172311	-1.368234	0.759199
1	-3.061534	-1.903473	0.440303
1	-2.003013	-1.669010	1.792987
6	-2.364773	0.111770	0.668462
1	-1.618468	0.711522	1.181022
6	-3.359059	0.764809	0.060473
6	-3.420621	2.259632	0.096576
1	-2.585967	2.693413	0.640665
1	-4.343412	2.589810	0.573288
1	-3.428278	2.671438	-0.912605
6	-4.489643	0.116775	-0.673209
1	-5.436383	0.368935	-0.195902
1	-4.545827	0.501695	-1.691160
1	-4.421820	-0.964729	-0.727919

a1'$_{17}$

6	-0.057755	0.807115	-0.243545
6	-3.250167	-0.727535	-0.173113
6	-3.084957	0.703692	-0.592588
6	-2.276940	1.526550	0.389941
6	-0.983085	0.797463	0.890420
6	-1.352843	-0.567691	1.469377
6	-2.463686	-1.271080	0.754053
1	-2.628534	-2.300318	1.045142
6	-4.338202	-1.491145	-0.853482
1	-4.360805	-2.529836	-0.536816
1	-5.311422	-1.049267	-0.639874
1	-4.213482	-1.467539	-1.936624
1	-4.069481	1.163250	-0.689355
1	-2.656341	0.743306	-1.598687
1	-2.036989	2.507721	-0.015109
1	-2.857537	1.690296	1.296737
1	-0.563348	1.442637	1.663691
1	-0.470729	-1.210175	1.506800
1	-1.633313	-0.412720	2.513263
6	0.079807	-0.304574	-1.158832
1	-0.635835	-1.104345	-1.016463
1	0.133707	0.025107	-2.195366
1	1.114383	-0.661613	-0.956992
6	0.836157	1.942798	-0.403322
1	0.449923	2.826831	0.096829
1	1.054748	2.161920	-1.445082
6	2.203855	1.555116	0.304739
1	2.716147	2.513728	0.382267
1	2.010030	1.225020	1.321662
6	3.043185	0.605550	-0.464074
1	3.358205	0.958827	-1.439558
6	3.508925	-0.586069	-0.057186
6	4.435350	-1.373012	-0.927598
1	4.619389	-0.885559	-1.880401
1	4.037631	-2.369924	-1.116869
1	5.393268	-1.512448	-0.426536
6	3.213238	-1.212214	1.267637
1	2.891534	-2.244816	1.135808
1	4.122070	-1.250209	1.868571
1	2.459482	-0.689660	1.848393

a1'$_{18}$

6	0.094198	-0.516706	-0.143144

6	3.470129	0.615233	-0.176328
6	3.053781	-0.573371	-0.991117
6	2.266128	-1.599990	-0.203943
6	1.173214	-0.973293	0.729312
6	1.808025	0.084872	1.633950
6	2.897447	0.886116	0.995352
1	3.238175	1.743671	1.560833
6	4.552522	1.463344	-0.758243
1	4.756355	2.334985	-0.143337
1	5.476665	0.894084	-0.858343
1	4.285106	1.806315	-1.758348
1	3.944471	-1.065037	-1.385300
1	2.507415	-0.236285	-1.876884
1	1.830181	-2.354195	-0.856467
1	2.929686	-2.122382	0.483665
1	0.786515	-1.801656	1.324239
1	1.038374	0.752484	2.026980
1	2.202126	-0.435294	2.509468
6	0.041718	0.819185	-0.715120
1	0.822850	1.488341	-0.377574
1	0.056379	0.733703	-1.805451
1	-0.964228	1.213140	-0.503260
6	-1.010189	-1.415839	-0.420494
1	-0.700833	-2.456419	-0.351633
1	-1.478931	-1.213265	-1.379238
6	-2.111755	-1.192004	0.706446
1	-2.828337	-1.986137	0.511937
1	-1.662083	-1.409149	1.672748
6	-2.768890	0.142816	0.721390
1	-2.379917	0.863424	1.431024
6	-3.832303	0.506601	-0.009796
6	-4.443132	1.860619	0.150857
1	-3.917329	2.465578	0.883961
1	-5.482278	1.769672	0.466821
1	-4.454299	2.395650	-0.798704
6	-4.506191	-0.375407	-1.009487
1	-5.547808	-0.528453	-0.727528
1	-4.522097	0.105773	-1.987370
1	-4.044378	-1.351602	-1.120039

$b1_1$

6	1.380056	0.957550	0.027264
6	1.263181	-1.297440	-0.544071
6	1.824283	-1.805820	0.725594
6	2.465080	-0.689171	1.583895
6	2.681040	0.544202	0.731005
6	3.301450	0.101329	-0.599532
6	1.923741	-0.224831	-1.160670
1	1.642223	0.011680	-2.179236
6	0.040684	-1.900240	-1.090387
1	-0.231693	-1.512680	-2.065299
1	0.198017	-2.979111	-1.160319
1	-0.787109	-1.768903	-0.389359
1	2.604280	-2.507774	0.405846
1	1.093858	-2.396000	1.273347
1	1.820480	-0.470614	2.432022
1	3.414552	-1.032120	1.986325
1	3.176489	1.339934	1.283312
1	3.770770	0.905546	-1.151948

$b1_5$

6	-1.047412	0.848196	0.120362
6	-2.249322	-1.029233	0.708330
6	-2.289669	-1.627945	-0.645932
6	-1.851736	-0.622637	-1.740143
6	-1.873912	0.781582	-1.172264
6	-3.190585	0.968747	-0.409200
6	-2.608810	0.312936	0.830089
1	-2.772101	0.702338	1.827071
6	-1.831636	-1.836910	1.864119
1	-1.767183	-1.264792	2.783371
1	-2.580915	-2.622479	1.997932
1	-0.891888	-2.350756	1.666650
1	-3.342169	-1.890008	-0.800113
1	-1.732595	-2.560199	-0.685241
1	-0.857392	-0.883014	-2.095056
1	-2.522061	-0.688829	-2.592926
1	-1.616235	1.528736	-1.919716
1	-3.442512	2.006234	-0.227369

1	3.994519	-0.735812	-0.552877
6	1.460635	2.277300	-0.709557
1	2.424707	2.457352	-1.171360
1	0.690982	2.365803	-1.470168
1	1.291171	3.068417	0.022275
6	0.061416	0.824686	0.763109
1	0.130938	1.526783	1.599433
1	-0.048957	-0.152752	1.229650
6	-1.195634	1.136639	-0.050767
1	-1.256920	2.213313	-0.217836
1	-1.124807	0.684839	-1.039930
6	-2.425490	0.665440	0.660576
1	-2.445941	0.875291	1.724883
6	-3.492928	0.060055	0.134959
6	-4.656017	-0.321948	0.996849
1	-4.490743	-0.070618	2.040798
1	-4.855910	-1.391590	0.928738
1	-5.561692	0.185807	0.664689
6	-3.668867	-0.258495	-1.316972
1	-3.900434	-1.315100	-1.454095
1	-4.518298	0.295056	-1.717621
1	-2.806254	-0.012283	-1.929044
1	-4.061432	0.471053	-0.830321
6	-0.882960	2.227988	0.719142
1	-1.795685	2.812167	0.743642
1	-0.477015	2.170749	1.725985
1	-0.167266	2.772389	0.104087
6	0.233021	0.046447	0.247103
1	0.107182	-0.977620	-0.098133
1	0.531710	-0.010680	1.294004
6	1.385397	0.663521	-0.562304
1	1.033690	0.900501	-1.569873
1	1.695934	1.602946	-0.115159
6	2.535376	-0.287821	-0.656660
1	2.353973	-1.166333	-1.267040
6	3.737872	-0.172059	-0.089237
6	4.784668	-1.220265	-0.304761
1	4.429897	-2.028731	-0.938113
1	5.108379	-1.644841	0.645712
1	5.669893	-0.787056	-0.770620
6	4.175123	0.968230	0.775082
1	4.518389	0.597510	1.740898
1	5.024224	1.479245	0.321086
1	3.400693	1.706821	0.956893

b1$_6$

6	-1.165027	-0.832708	-0.388921
6	-2.192033	1.230420	-0.257134
6	-1.737502	1.552957	1.114768
6	-1.143325	0.317282	1.836176
6	-1.544793	-0.941030	1.094775
6	-3.042203	-0.851635	0.775214
6	-2.762227	-0.025902	-0.468101
1	-3.272313	-0.195083	-1.408068
6	-2.026612	2.208231	-1.342506
1	-2.309547	1.818715	-2.314514
1	-2.674345	3.059007	-1.110961
1	-1.012060	2.603076	-1.367231
1	-2.645853	1.871050	1.638173
1	-1.064254	2.405894	1.121076
1	-0.061178	0.413066	1.883847
1	-1.506506	0.277273	2.859645
1	-1.190625	-1.840328	1.593970
1	-3.489779	-1.805657	0.525054
1	-3.663209	-0.365369	1.524410
6	-1.395737	-2.081658	-1.212108
1	-2.352952	-2.558067	-1.033414
1	-1.302587	-1.871852	-2.274684
1	-0.622749	-2.802498	-0.948571
6	0.119988	-0.139810	-0.799111
1	0.260579	0.806533	-0.281480
1	0.083558	0.087830	-1.865464
6	1.364727	-0.994833	-0.514680
1	1.352494	-1.334354	0.519728
1	1.345734	-1.889578	-1.137293
6	2.608419	-0.221261	-0.815447
1	2.698521	0.106138	-1.845831
6	3.605546	0.087611	0.016175
6	4.792311	0.857797	-0.474081
1	4.704490	1.118752	-1.525095

b1$_7$

6	-0.722266	-0.740794	-0.012683
6	-2.299765	0.885350	-0.540692
6	-2.825992	1.037138	0.836044
6	-2.368496	-0.105815	1.774051
6	-1.809890	-1.243867	0.945014
6	-2.786072	-1.514118	-0.205940
6	-2.169602	-0.407924	-1.044289
1	-1.972019	-0.521599	-2.102491
6	-1.941268	2.080804	-1.319584
1	-1.544203	1.850079	-2.301733
1	-2.852300	2.673234	-1.441441
1	-1.248002	2.714706	-0.767681
1	-3.914480	0.991198	0.717305
1	-2.606831	2.023655	1.236363
1	-1.627262	0.270558	2.474853
1	-3.209816	-0.459763	2.363938
1	-1.510352	-2.088809	1.562171
1	-2.659024	-2.483257	-0.671353
1	-3.840619	-1.380388	0.025711
6	-0.017505	-1.822345	-0.797055
1	-0.655128	-2.663705	-1.042686
1	0.420450	-1.437463	-1.712404
1	0.803817	-2.185511	-0.178754
6	0.240234	0.328310	0.461732
1	0.793471	-0.152316	1.274062
1	-0.289758	1.154369	0.931205
6	1.247145	0.883313	-0.559893
1	0.758276	1.009899	-1.526904
1	1.510715	1.889709	-0.237190
6	2.503991	0.079694	-0.748217
1	2.553958	-0.549872	-1.627427
6	3.574973	0.104016	0.048212
6	4.785395	-0.718344	-0.263359
1	4.656686	-1.307394	-1.167314

1	5.706151	0.277969	-0.343338
1	4.921236	1.776661	0.098387
6	3.675271	-0.296536	1.460679
1	4.545854	-0.928126	1.637989
1	3.806441	0.589449	2.082232
1	2.802079	-0.834048	1.817235
1	5.017958	-1.396123	0.558309
1	5.658113	-0.078720	-0.396369
6	3.682271	0.935087	1.287809
1	3.835020	0.299597	2.160800
1	4.552141	1.589258	1.229045
1	2.810267	1.555634	1.473084

b1$_8$

6	0.709641	-0.749374	0.028056
6	2.090182	1.102849	0.338851
6	3.098021	0.713106	-0.674148
6	2.935694	-0.754785	-1.137028
6	2.039132	-1.492170	-0.164272
6	2.498477	-1.151795	1.258576
6	1.684717	0.131441	1.255236
1	1.104375	0.455346	2.109817
6	1.558502	2.474001	0.346370
1	0.823512	2.646066	1.124509
1	2.403347	3.149451	0.506571
1	1.150221	2.739309	-0.628571
1	4.057600	0.821792	-0.155588
1	3.120440	1.416699	-1.502507
1	2.523439	-0.776467	-2.142931
1	3.908127	-1.237814	-1.181968
1	1.934423	-2.543980	-0.423038
1	2.144252	-1.845188	2.010562
1	3.569516	-1.016558	1.393362
6	-0.302939	-1.482717	0.875595
1	0.138503	-2.030091	1.700556
1	-1.070795	-0.818482	1.257704
1	-0.805474	-2.199976	0.225797
6	0.059891	-0.069343	-1.161053
1	-0.204060	-0.892304	-1.833042
1	0.783010	0.521398	-1.718549
6	-1.192716	0.775467	-0.888642
1	-1.085236	1.315551	0.051164
1	-1.236163	1.541896	-1.665615
6	-2.477020	0.005561	-0.925625
1	-2.584070	-0.645670	-1.787117
6	-3.506831	0.075791	-0.080570
6	-4.744923	-0.731689	-0.318280
1	-4.669918	-1.339770	-1.215514
1	-5.613668	-0.081286	-0.421520
1	-4.947314	-1.390141	0.527017
6	-3.558511	0.938985	1.141049
1	-4.355946	1.676185	1.045556
1	-3.797786	0.340671	2.020697
1	-2.638238	1.481401	1.337953

b1$_{11}$

6	0.914883	0.834000	-0.355866
6	2.358489	-0.946054	-0.060068
6	1.602633	-1.589957	1.038003
6	0.513583	-0.655307	1.621912
6	0.776723	0.765969	1.173178
6	2.266538	1.065072	1.377135
6	2.611181	0.423228	0.045380
1	3.324449	0.856644	-0.644654
6	2.809582	-1.736987	-1.214653
1	3.254977	-1.132866	-1.997905
1	3.568751	-2.434626	-0.848073
1	2.004997	-2.352369	-1.613406
1	2.355677	-1.789774	1.808650
1	1.209896	-2.557226	0.736004
1	-0.469607	-0.980985	1.291504
1	0.525672	-0.709155	2.707327
1	0.060459	1.463881	1.598825
1	2.501922	2.122168	1.380544
1	2.731981	0.605521	2.246437
6	1.050531	2.227992	-0.930189
1	1.746545	2.860952	-0.392026
1	1.345814	2.194765	-1.976022
1	0.073529	2.706926	-0.877848
6	0.085335	-0.049984	-1.273206
1	-0.024121	-1.054105	-0.867770
1	0.613487	-0.142687	-2.223868
6	-1.326582	0.484087	-1.564205
1	-1.255778	1.420575	-2.116903
1	-1.784751	-0.221914	-2.252575
6	-2.189553	0.679319	-0.356771
1	-2.006498	1.583565	0.214174
6	-3.184872	-0.106561	0.063118
6	-3.991311	0.259073	1.270338
1	-3.653155	1.187178	1.723570
1	-3.948313	-0.529148	2.022571
1	-5.042171	0.376542	1.005337
6	-3.612824	-1.375484	-0.604862
1	-3.592220	-2.202785	0.105034
1	-4.644885	-1.290287	-0.945268
1	-3.002673	-1.651216	-1.459120

b1$_{12}$

6	-0.574221	-0.447366	0.479300
6	-2.727735	-0.090883	-0.268981
6	-2.464399	1.215542	-0.915715
6	-1.098264	1.808845	-0.490992
6	-0.580386	1.068312	0.724236
6	-1.729518	0.964424	1.734728
6	-2.283504	-0.265331	1.039808
1	-2.637764	-1.132906	1.582074

b1$_{13}$

6	-3.434388	-1.150923	-1.005215
1	-3.486597	-2.087300	-0.459925
1	-4.455086	-0.798210	-1.179084
1	-2.999203	-1.305443	-1.991286
1	-3.267418	1.869328	-0.558772
1	-2.577865	1.153526	-1.994772
1	-0.398311	1.738308	-1.318924
1	-1.209074	2.864436	-0.257574
1	0.368466	1.468850	1.071542
1	-1.403944	0.738228	2.742677
1	-2.407480	1.814405	1.774524
6	0.025297	-1.278579	1.590966
1	-0.307066	-0.996833	2.583116
1	-0.173174	-2.337183	1.442200
1	1.103811	-1.128746	1.554658
6	-0.231887	-1.035008	-0.879015
1	-0.604554	-0.408105	-1.687486
1	-0.726048	-2.002868	-0.974531
6	1.273360	-1.254216	-1.097364
1	1.631138	-2.044242	-0.443315
1	1.374085	-1.645675	-2.111936
6	2.099254	-0.014822	-0.963190
1	1.771456	0.823620	-1.569550
6	3.213784	0.156769	-0.247325
6	3.943910	1.464015	-0.274494
1	3.442984	2.200929	-0.896758
1	4.955039	1.329300	-0.658881
1	4.047093	1.873598	0.730827
6	3.864594	-0.892739	0.598441
1	4.862020	-1.109825	0.215858
1	4.000419	-0.533253	1.618823
1	3.321677	-1.832174	0.635369

$b1_{14}$

6	-1.257062	-1.111265	-0.341534
6	-1.343752	1.393378	-0.234492
6	-1.690660	1.404484	1.196100
6	-2.094275	0.043246	1.774403
6	-2.425342	-0.926590	0.651471
6	-3.160932	-0.152528	-0.446778
6	-1.761115	0.266620	-1.020201
1	-1.618475	0.388201	-2.089376
6	-0.795366	2.599791	-0.863260
1	-0.176500	2.364484	-1.725205
1	-1.661793	3.145161	-1.258772
1	-0.279633	3.255391	-0.169632
1	-2.544743	2.099582	1.218260
1	-0.926762	1.925894	1.769511
1	-1.296451	-0.351227	2.399493
1	-2.960623	0.167920	2.420173
1	-2.882446	-1.837305	1.030031
1	-3.665184	-0.778579	-1.170951
1	-3.831017	0.651610	-0.153114
6	-1.531767	-2.258216	-1.307687
1	-2.568154	-2.351203	-1.614301
1	-0.917206	-2.169173	-2.200758
1	-1.259406	-3.190191	-0.814585
6	0.197776	-1.257123	0.107084
1	0.759984	-1.658637	-0.735517

$b1_{15}$

6	1.275560	-1.026601	0.132754
6	0.511375	1.399714	0.219037
6	1.164917	1.590929	-1.095749
6	2.468635	0.772520	-1.220960
6	2.568357	-0.182732	-0.048738
6	2.220213	0.617042	1.202270
6	0.660864	0.165910	0.891049
1	0.024029	0.014942	1.754833
6	-0.237328	2.509040	0.830155
1	-1.151727	2.611194	0.238349
1	-0.523123	2.314378	1.858106
1	0.293675	3.454055	0.744721
1	1.307151	2.647620	-1.305737
1	0.420220	1.233579	-1.813015
1	2.508236	0.249195	-2.171965
1	3.315882	1.455581	-1.199728
1	3.512060	-0.722623	-0.035962
1	2.432176	0.164131	2.164655
1	2.513220	1.665380	1.246805
6	1.517159	-2.179939	1.099137
1	2.011468	-1.877229	2.019194
1	0.584152	-2.664970	1.376417
1	2.149360	-2.925974	0.622857
6	0.542323	-1.541753	-1.104063
1	1.033495	-2.467721	-1.402482

1	0.204624	-2.049070	0.860390
6	0.987688	-0.064543	0.630111
1	0.906376	0.765975	-0.078033
1	0.594382	0.283098	1.583442
6	2.434153	-0.401597	0.831434
1	2.634153	-1.023794	1.696143
6	3.471721	-0.038373	0.076167
6	4.860226	-0.473981	0.426868
1	4.881149	-1.084390	1.325127
1	5.505596	0.390058	0.586577
1	5.301607	-1.048628	-0.387534
6	3.383964	0.810629	-1.153108
1	3.968506	1.722264	-1.028112
1	3.811428	0.283395	-2.005879
1	2.369050	1.095570	-1.416848

1	0.661583	-0.867575	-1.950751
6	-0.952603	-1.805237	-0.903711
1	-1.276152	-2.476798	-1.700971
1	-1.123279	-2.351714	0.020924
6	-1.801961	-0.573823	-0.978030
1	-1.725958	-0.034495	-1.918781
6	-2.711679	-0.132206	-0.102989
6	-3.570830	1.052932	-0.422873
1	-3.303296	1.511720	-1.371819
1	-3.521039	1.808927	0.362939
1	-4.617880	0.755063	-0.484606
6	-3.015739	-0.778699	1.212141
1	-2.987902	-0.045206	2.019176
1	-4.028751	-1.181907	1.205489
1	-2.343175	-1.592131	1.464762

b1$_{16}$

6	-1.235443	-0.959346	-0.106787
6	-0.979274	1.436373	-0.249869
6	-1.864054	1.700478	0.892502
6	-2.717856	0.499203	1.332070
6	-2.684678	-0.582186	0.266402
6	-2.841558	0.086364	-1.103119
6	-1.324348	0.356120	-1.118780
1	-0.754384	0.304496	-2.039712
6	0.230201	2.218899	-0.443635
1	1.051983	1.535340	-0.156518
1	0.405805	2.446463	-1.492630
1	0.279401	3.106558	0.177793
1	-2.507167	2.502982	0.496891
1	-1.314996	2.173072	1.705465
1	-2.342378	0.119922	2.279899
1	-3.743128	0.816886	1.504759
1	-3.343710	-1.411025	0.514404
1	-3.111294	-0.599705	-1.895711
1	-3.486302	0.959961	-1.165804
6	-1.162586	-2.198163	-0.979837
1	-1.960106	-2.255410	-1.712460
1	-0.215034	-2.269067	-1.506139
1	-1.249512	-3.073097	-0.335466
6	-0.214013	-1.039212	1.025194
1	-0.653607	-1.735713	1.744816
1	-0.130159	-0.092876	1.560189
6	1.194331	-1.540210	0.696111
1	1.733138	-1.616732	1.636871
1	1.132156	-2.561360	0.317420
6	1.965882	-0.711133	-0.281866
1	1.588167	-0.714849	-1.300498
6	3.107273	-0.043881	-0.071762
6	3.795239	0.665539	-1.197413
1	3.252757	0.575234	-2.135322
1	4.793720	0.255531	-1.349308
1	3.931181	1.724267	-0.972257
6	3.821812	0.042121	1.239939
1	4.790177	-0.453566	1.168716
1	4.028166	1.081953	1.493627
1	3.279559	-0.405064	2.066074

b1$_{17}$

6	-0.570051	-0.037887	0.474861
6	-2.778019	-0.560595	-0.018509
6	-2.905587	0.408864	-1.137879
6	-1.763860	1.455615	-1.135962
6	-1.028398	1.394801	0.188072
6	-2.070484	1.401779	1.310862
6	-2.317388	-0.085839	1.195040
1	-2.373123	-0.733444	2.059724
6	-3.153360	-1.972696	-0.221193
1	-2.962070	-2.590932	0.649699
1	-4.223401	-2.006743	-0.439363
1	-2.655185	-2.390824	-1.094977
1	-3.861772	0.914562	-0.972471
1	-2.994929	-0.103803	-2.092343
1	-1.089779	1.262366	-1.966837
1	-2.170284	2.452513	-1.284081
1	-0.232364	2.134748	0.248088
1	-1.664138	1.664537	2.279986
1	-2.946085	2.021260	1.127747
6	0.228777	-0.256148	1.729595
1	-0.064411	0.374908	2.560500
1	0.197507	-1.297174	2.040952
1	1.268851	-0.037558	1.477348
6	-0.093154	-0.918872	-0.656102
1	-0.797785	-0.927193	-1.482573
1	0.002372	-1.947041	-0.307278
6	1.262857	-0.445529	-1.228210
1	1.333114	-0.901598	-2.218021
1	1.236585	0.628633	-1.403090
6	2.469911	-0.843941	-0.442060
1	2.498232	-1.889661	-0.153315
6	3.530873	-0.093950	-0.131202
6	4.694635	-0.688610	0.598914
1	4.540209	-1.739093	0.829339
1	4.882622	-0.155129	1.531142
1	5.603629	-0.602549	0.003417
6	3.691860	1.352958	-0.476704
1	3.921518	1.933985	0.416666
1	4.537048	1.482648	-1.152899
1	2.821956	1.792894	-0.954511

b1$_{18}$

6	-0.615537	-0.468032	-0.319436
6	-2.522313	0.853987	-0.406150
6	-2.883519	0.666258	1.024684
6	-2.137653	-0.531913	1.660650
6	-1.488451	-1.358006	0.567368
6	-2.540162	-1.618558	-0.515134
6	-2.321987	-0.275299	-1.172535
1	-2.217174	-0.166581	-2.243508
6	-2.417852	2.215901	-0.966106
1	-2.095367	2.223152	-2.002058
1	-3.404760	2.680600	-0.909399
1	-1.756684	2.838339	-0.364432
1	-3.959652	0.470114	1.028541
1	-2.741726	1.585812	1.587056
1	-1.397279	-0.167567	2.368014
1	-2.831708	-1.151455	2.222292
1	-0.966551	-2.225729	0.967609
1	-2.287049	-2.434655	-1.181014
1	-3.550824	-1.780762	-0.146100
6	0.125076	-1.127507	-1.449917
1	-0.388620	-1.975456	-1.887556
1	0.366656	-0.410524	-2.230182
1	1.078091	-1.470859	-1.045970
6	0.179089	0.660509	0.290552
1	-0.447009	1.318861	0.886708
1	0.625112	1.262764	-0.499331
6	1.298030	0.154014	1.236951
1	1.625528	1.034483	1.788085
1	0.860616	-0.507037	1.984729
6	2.484139	-0.524757	0.619738
1	2.499880	-1.607315	0.671687
6	3.548110	0.077151	0.080907
6	4.694721	-0.720182	-0.454652
1	4.529680	-1.789846	-0.358758
1	5.613730	-0.469926	0.075509
1	4.870180	-0.491428	-1.506148
6	3.708046	1.560055	-0.029927
1	4.630377	1.876093	0.457126
1	3.796707	1.856044	-1.075805
1	2.889430	2.121149	0.410936

c1$_1$

6	1.132661	-0.269920	0.641282
6	1.578435	1.002632	0.009720
6	2.409744	0.098470	-1.771292
6	2.220999	-1.347973	-1.314134
6	2.296576	-1.205242	0.207301
6	3.524230	-0.308911	0.341094
6	2.931684	0.861914	-0.429034
1	3.503688	1.753285	-0.653604
6	0.761657	2.200422	-0.186863
1	0.634718	2.645467	0.805693
1	1.241069	2.936723	-0.823194
1	-0.237562	1.963614	-0.543664
1	3.222797	0.263026	-2.475217
1	1.521413	0.534693	-2.227071
1	1.290945	-1.778122	-1.670158
1	3.032189	-1.976763	-1.671398

c1$_2$

6	-1.027683	0.558618	-0.092344
6	-1.883612	-0.042993	0.966555
6	-2.760641	-1.574994	-0.290451
6	-2.133869	-1.081164	-1.594758
6	-1.974951	0.414783	-1.316521
6	-3.345999	0.734489	-0.728081
6	-3.212500	-0.203273	0.462856
1	-4.021113	-0.361086	1.165318
6	-1.450128	-0.455899	2.301320
1	-1.294027	0.470307	2.865052
1	-2.200775	-1.038973	2.824424
1	-0.491629	-0.967803	2.289219
1	-3.699580	-2.113602	-0.399879
1	-2.107342	-2.221073	0.295216
1	-1.202610	-1.586716	-1.826921
1	-2.809132	-1.235879	-2.432092

1	2.315583	-2.139778	0.759038
1	3.799710	-0.042887	1.356671
1	4.401450	-0.717942	-0.152834
6	1.189726	-0.017006	2.167699
1	2.151608	0.353390	2.507839
1	0.426884	0.689263	2.479141
1	1.001196	-0.964147	2.667710
6	-0.258280	-0.768189	0.206936
1	-0.246000	-1.853474	0.321244
1	-0.392901	-0.588723	-0.860346
6	-1.483315	-0.227489	0.944194
1	-1.435836	-0.526473	1.992503
1	-1.499587	0.860883	0.938797
6	-2.737836	-0.776987	0.342070
1	-2.799231	-1.860089	0.338723
6	-3.771633	-0.104176	-0.166584
6	-4.957525	-0.833902	-0.717312
1	-4.837118	-1.911929	-0.656945
1	-5.127336	-0.566115	-1.760469
1	-5.862501	-0.562082	-0.173572
6	-3.885063	1.386835	-0.230929
1	-4.037813	1.711815	-1.260384
1	-4.757850	1.720936	0.330113
1	-3.021877	1.912579	0.166503

c1$_3$

6	-1.159277	-0.410862	0.716880
6	-1.855647	-0.834086	-0.513423
6	-2.053302	1.191541	-1.407265
6	-1.455655	1.912363	-0.195397
6	-1.824938	0.972777	0.957217
6	-3.284284	0.694649	0.596977
6	-2.971594	0.044577	-0.749040
1	-3.759469	-0.298339	-1.408728
6	-1.490710	-1.963085	-1.365431
1	-1.992159	-2.832509	-0.922542
1	-1.884915	-1.864589	-2.372626
1	-0.426402	-2.172959	-1.373863
1	-2.752683	1.787602	-1.989678
1	-1.307186	0.819169	-2.107383
1	-0.395212	2.092701	-0.303009
1	-1.936996	2.875346	-0.044602
1	-1.637436	1.366907	1.951069
1	-3.822832	0.040211	1.273673
1	-3.864350	1.605086	0.473089
6	-1.693587	-1.439663	1.770008
1	-2.768572	-1.585706	1.760311
1	-1.216753	-2.404648	1.626763
1	-1.415840	-1.061125	2.750767
6	0.372451	-0.545056	0.744044
1	0.597840	-1.611824	0.714128
1	0.704035	-0.217707	1.729404
6	1.233330	0.137956	-0.322092
1	0.766082	0.042916	-1.307424
1	1.323258	1.200528	-0.124239
6	2.591443	-0.487609	-0.374611
1	2.604261	-1.527549	-0.685335
6	3.764999	0.078165	-0.084509
6	5.035328	-0.705139	-0.200577

1	-1.660309	1.011986	-2.166534
1	-3.497052	1.767313	-0.430297
1	-4.164073	0.446200	-1.382618
6	-0.876824	2.049989	0.297288
1	-1.824580	2.550938	0.466990
1	-0.270213	2.163443	1.190040
1	-0.374080	2.556113	-0.523522
6	0.348690	-0.103807	-0.291546
1	0.639952	0.082379	-1.326053
1	0.243145	-1.186810	-0.209921
6	1.500965	0.342715	0.607748
1	1.748236	1.381137	0.405991
1	1.206846	0.301693	1.659963
6	2.696559	-0.534092	0.407389
1	2.557533	-1.570183	0.698902
6	3.890955	-0.191078	-0.079084
6	4.981938	-1.208725	-0.203717
1	4.666144	-2.191230	0.136244
1	5.853280	-0.910298	0.379481
1	5.313356	-1.294367	-1.238722
6	4.276906	1.183091	-0.527770
1	5.110503	1.552263	0.069808
1	4.624518	1.157601	-1.560505
1	3.474158	1.910682	-0.462897

c1$_4$

6	-1.195256	0.868899	0.112729
6	-1.496456	-0.274878	0.997083
6	-1.902465	-1.749793	-0.595299
6	-1.752614	-0.741851	-1.738018
6	-2.162805	0.573736	-1.067030
6	-3.420282	0.099338	-0.337417
6	-2.696438	-0.920839	0.536773
1	-3.232826	-1.557550	1.229645
6	-0.708462	-0.695344	2.153486
1	-0.993421	-0.012857	2.963304
1	-0.955028	-1.699015	2.484702
1	0.360730	-0.574785	2.005851
1	-2.557455	-2.591086	-0.811751
1	-0.957918	-2.175579	-0.259316
1	-0.757398	-0.740642	-2.159596
1	-2.447952	-0.967409	-2.542558
1	-2.282071	1.417158	-1.739745
1	-3.948426	0.853995	0.234941
1	-4.132135	-0.381105	-1.003054
6	-1.743294	2.075269	0.949648
1	-2.708606	1.908755	1.416977
1	-1.031871	2.339999	1.725912
1	-1.842312	2.917809	0.269599
6	0.284481	1.188425	-0.149000
1	0.734158	1.424484	0.815897
1	0.308504	2.124414	-0.707999
6	1.195461	0.172028	-0.842193
1	1.038715	-0.830556	-0.445076
1	0.964859	0.128539	-1.906068
6	2.627921	0.579258	-0.692786
1	2.865492	1.549325	-1.115842
6	3.624033	-0.101052	-0.122511
6	5.007731	0.469407	-0.079161

1	4.859042	-1.724291	-0.533309
1	5.554001	-0.742468	0.757447
1	5.716302	-0.229058	-0.906282
6	3.953258	1.493873	0.361080
1	4.489896	1.520222	1.309283
1	4.568667	2.035151	-0.357679
1	3.026523	2.044530	0.487590

1	5.056280	1.455050	-0.533252
1	5.707905	-0.181238	-0.603541
1	5.363037	0.547661	0.948588
6	3.500321	-1.458049	0.497048
1	4.151404	-2.166040	-0.015754
1	3.831886	-1.432245	1.535441
1	2.493179	-1.864398	0.472590

$c1_5$

6	-0.990450	0.462447	-0.269831
6	-2.083743	0.718075	0.704012
6	-2.743912	-1.346443	0.837443
6	-1.824582	-1.872918	-0.265549
6	-1.650689	-0.634358	-1.145969
6	-3.097540	-0.157096	-1.244004
6	-3.277499	0.072592	0.250635
1	-4.226751	0.372211	0.676522
6	-1.959425	1.480865	1.944885
1	-1.959917	2.534215	1.641005
1	-2.802519	1.337445	2.612662
1	-1.016176	1.307758	2.455118
1	-3.659944	-1.913521	0.988628
1	-2.264170	-1.279898	1.813777
1	-0.892835	-2.269761	0.124067
1	-2.309209	-2.666713	-0.827800
1	-1.139342	-0.803513	-2.087324
1	-3.248516	0.746987	-1.826142
1	-3.769777	-0.922712	-1.621614
6	-0.852501	1.795792	-1.052918
1	-1.799994	2.219538	-1.373756
1	-0.336066	2.535994	-0.447676
1	-0.260162	1.605976	-1.943401
6	0.350344	0.101338	0.383598
1	0.201557	-0.684424	1.126077
1	0.723415	0.966431	0.931830
6	1.428840	-0.349515	-0.599748
1	1.060875	-1.200457	-1.177361
1	1.636978	0.441902	-1.315670
6	2.674806	-0.756823	0.120765
1	2.571947	-1.637927	0.745418
6	3.874795	-0.174753	0.075012
6	5.022331	-0.734133	0.857134
1	4.738765	-1.615583	1.425625
1	5.416932	0.008979	1.550448
1	5.842196	-1.007172	0.192482
6	4.213995	1.037156	-0.734522
1	4.629793	1.814149	-0.092996
1	4.984852	0.796029	-1.466652
1	3.369460	1.460710	-1.268923

$c1_6$

6	1.105009	-0.524617	-0.442569
6	2.192955	-0.699494	0.553752
6	2.175000	1.353815	1.268020
6	1.162647	1.858978	0.238116
6	1.411654	0.912551	-0.938028
6	2.937007	0.929145	-0.991142
6	3.137679	0.366260	0.409816
1	4.121111	0.253475	0.848553
6	2.273742	-1.769832	1.545956
1	2.597016	-2.658815	0.991885
1	3.016547	-1.578550	2.313326
1	1.308473	-2.013075	1.981293
1	2.863598	2.105353	1.648302
1	1.717392	0.891270	2.142215
1	0.144479	1.835592	0.612675
1	1.382759	2.883029	-0.051676
1	0.898462	1.171922	-1.857750
1	3.380872	0.304154	-1.760135
1	3.345242	1.931465	-1.088598
6	1.423197	-1.575393	-1.540872
1	2.467171	-1.598125	-1.840569
1	1.145181	-2.569790	-1.202109
1	0.834932	-1.335959	-2.422021
6	-0.301825	-0.764108	0.121082
1	-0.433730	-0.212129	1.052273
1	-0.400524	-1.819156	0.379305
6	-1.434201	-0.384449	-0.831281
1	-1.388319	0.678391	-1.058659
1	-1.305533	-0.909449	-1.779887
6	-2.763574	-0.752029	-0.252661
1	-2.917088	-1.816505	-0.110609
6	-3.762238	0.063119	0.092265
6	-5.037655	-0.489242	0.649016
1	-5.013339	-1.572528	0.728845
1	-5.883001	-0.213736	0.018140
1	-5.238484	-0.076737	1.638037
6	-3.744625	1.553432	-0.042635
1	-4.538839	1.878833	-0.714687
1	-3.944878	2.021968	0.921105
1	-2.808143	1.950288	-0.422266

$c1_{12}$

6	1.296317	-0.553077	-0.634251
6	2.022826	-0.375439	0.642809
6	1.045282	1.479675	1.267220
6	0.220216	1.627869	-0.011859
6	1.105272	0.932115	-1.050309
6	2.458238	1.542766	-0.684564
6	2.488156	0.979303	0.731988

$c1_{13}$

6	1.291142	-0.683561	-0.493236
6	2.009349	-0.168959	0.693288
6	0.939879	1.734285	0.862020
6	0.108581	1.525831	-0.404747
6	1.028381	0.644515	-1.254557
6	2.348890	1.390869	-1.062032
6	2.405217	1.188895	0.448560

1	3.294137	1.203087	1.419776
6	2.233799	-1.404723	1.660467
1	3.001720	-2.072682	1.253981
1	2.614259	-1.001481	2.592980
1	1.351288	-2.016426	1.826104
1	1.275274	2.411784	1.779398
1	0.590373	0.827975	2.012437
1	-0.774565	1.207637	0.072736
1	0.110895	2.676514	-0.277634
1	0.784720	1.047218	-2.080884
1	3.301071	1.221952	-1.287407
1	2.436810	2.629084	-0.681780
6	2.395743	-1.213447	-1.533583
1	3.389318	-0.788625	-1.430605
1	2.460514	-2.275744	-1.317661
1	2.085218	-1.089580	-2.568118
6	0.114156	-1.535580	-0.646486
1	0.520493	-2.498984	-0.339129
1	-0.164544	-1.672995	-1.691790
6	-1.153073	-1.270831	0.168432
1	-1.567398	-2.249486	0.418143
1	-0.908137	-0.816518	1.131436
6	-2.203498	-0.475843	-0.559088
1	-2.027158	-0.316066	-1.617357
6	-3.343204	-0.011520	-0.044237
6	-4.332803	0.724137	-0.891086
1	-3.993570	0.828513	-1.918170
1	-4.524070	1.719635	-0.489368
1	-5.290528	0.203626	-0.901494
6	-3.740969	-0.191809	1.386374
1	-3.928092	0.773363	1.858169
1	-4.675634	-0.749704	1.447971
1	-3.001137	-0.723670	1.977309

1	3.199040	1.610660	1.052454
6	2.274556	-0.912365	1.924677
1	3.078721	-1.615389	1.679268
1	2.632208	-0.278898	2.729538
1	1.427298	-1.513785	2.242434
1	1.122650	2.773230	1.128752
1	0.517925	1.262618	1.748789
1	-0.861612	1.085453	-0.212203
1	-0.055763	2.471818	-0.915044
1	0.702519	0.490768	-2.278291
1	3.207979	0.976257	-1.578682
1	2.272902	2.443201	-1.321904
6	2.420590	-1.490205	-1.220188
1	3.389854	-1.002371	-1.244885
1	2.544852	-2.460740	-0.749130
1	2.098020	-1.643271	-2.247096
6	0.158292	-1.694723	-0.253729
1	0.615558	-2.541433	0.257782
1	-0.121201	-2.081657	-1.234195
6	-1.116799	-1.312994	0.506115
1	-1.453911	-2.222412	1.008722
1	-0.901890	-0.609911	1.312025
6	-2.236053	-0.820654	-0.365748
1	-2.222509	-1.193827	-1.384233
6	-3.266788	-0.052793	-0.006897
6	-4.343237	0.295521	-0.986594
1	-4.158315	-0.135712	-1.966595
1	-4.433060	1.376552	-1.098141
1	-5.311288	-0.062441	-0.635858
6	-3.465593	0.506052	1.366870
1	-3.596745	1.587857	1.327061
1	-4.378959	0.102660	1.804807
1	-2.652724	0.282487	2.051814

$c1_{15}$

6	0.844364	-0.561841	0.144444
6	1.068907	0.900661	0.308507
6	2.904584	0.995711	-0.858704
6	3.006869	-0.515367	-1.076805
6	2.317203	-1.060661	0.176214
6	2.956622	-0.186756	1.249181
6	2.432391	1.127064	0.688667
1	2.694408	2.082158	1.126315
6	0.094601	1.964390	0.089734
1	-0.647176	1.862447	0.888963
1	0.532974	2.954941	0.145690
1	-0.468923	1.822453	-0.827730
1	3.852491	1.529296	-0.877184
1	2.256338	1.501577	-1.573143
1	2.543841	-0.831682	-2.005673
1	4.045288	-0.834712	-1.102292
1	2.394177	-2.134608	0.315173
1	2.620731	-0.374034	2.264052
1	4.042455	-0.228358	1.236344
6	0.104400	-0.978738	1.440421
1	0.586029	-0.626574	2.347564
1	-0.915700	-0.608952	1.430592
1	0.083080	-2.065367	1.477570
6	0.083077	-1.028632	-1.118347

$c1_{17}$

6	-0.713425	-0.453027	0.099195
6	-2.160476	-0.768456	0.180439
6	-2.857067	1.092830	-0.705871
6	-1.470492	1.735348	-0.785337
6	-0.744393	1.069511	0.387089
6	-1.811676	1.182974	1.472520
6	-2.856397	0.353313	0.737342
1	-3.852610	0.203173	1.134342
6	-2.788623	-2.014464	-0.255311
1	-2.590676	-2.735258	0.546508
1	-3.866384	-1.930185	-0.350094
1	-2.341939	-2.422306	-1.157587
1	-3.686254	1.793081	-0.630533
1	-3.086964	0.439635	-1.547330
1	-0.995073	1.572674	-1.747142
1	-1.531559	2.808893	-0.627195
1	0.230075	1.481079	0.626783
1	-1.541056	0.758568	2.434228
1	-2.144755	2.205080	1.631293
6	-0.118762	-1.241763	1.301216
1	-0.674732	-1.120171	2.226980
1	-0.073346	-2.302008	1.067866
1	0.894243	-0.883190	1.457449
6	-0.047626	-0.881211	-1.218038

1	0.561925	-1.961879	-1.415862
1	0.271290	-0.332154	-1.937589
6	-1.420313	-1.304489	-1.039550
1	-1.669319	-1.820143	-1.970038
1	-1.627796	-2.024132	-0.251978
6	-2.300563	-0.101471	-0.930718
1	-2.150553	0.639696	-1.711071
6	-3.299016	0.122645	-0.071555
6	-4.129049	1.365560	-0.171162
1	-3.793959	2.021616	-0.970504
1	-4.112922	1.924007	0.765638
1	-5.172627	1.113798	-0.360451
6	-3.722184	-0.813889	1.016810
1	-3.728272	-0.306973	1.982440
1	-4.745493	-1.145708	0.840702
1	-3.103646	-1.701841	1.099646
1	-0.705951	-0.629460	-2.050913
1	0.045489	-1.967795	-1.226168
6	1.322376	-0.261274	-1.497996
1	1.582173	-0.551385	-2.519026
1	1.241519	0.823250	-1.515628
6	2.419395	-0.706782	-0.584056
1	2.500862	-1.782435	-0.461667
6	3.337119	0.046661	0.026850
6	4.413712	-0.584473	0.854842
1	4.319138	-1.666370	0.893701
1	4.397569	-0.199915	1.875248
1	5.397379	-0.346230	0.449703
6	3.422089	1.538510	-0.060305
1	3.443666	1.979614	0.936680
1	4.354342	1.830779	-0.544166
1	2.610329	1.994706	-0.618807

c1$_{18}$

6	0.695887	0.163578	0.235184
6	1.931392	0.984716	0.271246
6	3.124326	-0.320709	-0.998503
6	2.059887	-1.415686	-1.102842
6	1.310904	-1.258731	0.223401
6	2.484084	-1.124928	1.190039
6	3.051974	0.138325	0.555392
1	3.971610	0.591843	0.903544
6	2.003548	2.425492	0.034469
1	1.665292	2.891395	0.967232
1	3.015965	2.771172	-0.147322
1	1.323908	2.759814	-0.744099
1	4.150526	-0.663576	-1.112163
1	2.993533	0.489453	-1.715425
1	1.431688	-1.297512	-1.979463
1	2.519642	-2.398844	-1.159002
1	0.594578	-2.042218	0.446161
1	2.212293	-0.984788	2.231645
1	3.180074	-1.957056	1.126772
6	0.038553	0.489914	1.607737
1	0.736166	0.485228	2.441392
1	-0.440703	1.463772	1.567425
1	-0.728064	-0.252569	1.801521
6	-0.250476	0.504390	-0.925790
1	0.338482	0.651132	-1.833360
1	-0.731131	1.459373	-0.714274
6	-1.334622	-0.533565	-1.235826
1	-1.834029	-0.194694	-2.142157
1	-0.862345	-1.478491	-1.505377
6	-2.345558	-0.787971	-0.157019
1	-2.128247	-1.608857	0.517718
6	-3.503131	-0.146755	0.020138
6	-4.442057	-0.541909	1.116433
1	-4.056376	-1.368941	1.706651
1	-5.406033	-0.841364	0.704711
1	-4.637167	0.297329	1.784763
6	-3.979778	0.985170	-0.834220
1	-4.935755	0.734183	-1.293881
1	-4.155605	1.872548	-0.225357
1	-3.287899	1.253684	-1.626685

i_1

6	2.096350	-1.120547	-0.170915
6	3.426556	-1.013277	0.149894
6	4.056022	0.225235	0.071495
6	3.282570	1.428910	-0.298734
6	1.803742	1.322004	0.025508
6	1.211725	0.013297	-0.475625
6	5.500172	0.359043	0.303018
6	-0.250230	-0.230057	-0.034853
6	-0.944148	-1.240158	-0.944821
6	-2.441239	-1.399414	-0.678525
6	-3.191872	-0.115706	-0.832817
6	-4.058668	0.445000	0.013610
6	-4.744270	1.730755	-0.333323
6	-0.349050	-0.608139	1.436545
6	-4.462241	-0.128877	1.335916
1	4.005976	-1.896528	0.372554
1	6.028951	-0.587491	0.284084
1	5.948374	1.064403	-0.394982
1	5.626783	0.803620	1.296422
1	-0.755026	0.728407	-0.171885
1	1.673927	-2.116049	-0.241473
1	0.202202	0.074736	2.080200
1	-1.383846	-0.579334	1.764545
1	0.020645	-1.618504	1.620578
1	-0.472911	-2.222940	-0.854567
1	-0.809883	-0.928083	-1.983631
1	-2.822872	-2.128177	-1.396865
1	-2.601973	-1.840456	0.302414
1	-3.018281	0.398707	-1.773684
1	-4.425405	2.116418	-1.298150
1	-4.549685	2.492368	0.422697
1	-5.825511	1.593531	-0.364499
1	-4.289281	0.592765	2.135029
1	-5.531717	-0.341132	1.339746
1	-3.946952	-1.049817	1.589978
1	3.740830	2.313445	0.142047
1	3.436804	1.539201	-1.382359
1	1.669676	1.389604	1.105002
1	1.268648	2.161127	-0.411336
1	1.198005	0.031774	-1.580104

i_2

6	1.291355	-0.887551	-0.496902
6	2.462481	-1.517347	-0.158290
6	3.630940	-0.771908	-0.034808
6	3.596950	0.695435	-0.208701
6	2.241044	1.312161	0.085439
6	1.124903	0.568303	-0.632399
6	4.923084	-1.421654	0.220982
6	-0.310618	0.996631	-0.266459
6	-0.633561	0.716149	1.202561
6	-2.132066	0.576227	1.474839
6	-2.709565	-0.664020	0.870860
6	-3.663415	-0.772826	-0.057687
6	-4.143681	-2.118338	-0.508198
6	-0.563638	2.446508	-0.647604
6	-4.362731	0.379978	-0.707186
1	2.499433	-2.593030	-0.075156
1	4.906641	-2.493090	0.054776
1	5.720579	-0.955078	-0.355195
1	5.171783	-1.240316	1.272513
1	-0.974169	0.370404	-0.869089
1	0.425706	-1.502720	-0.720147
1	-0.347430	2.630010	-1.699026
1	-1.605953	2.706443	-0.484848
1	0.033602	3.134213	-0.050800
1	-0.223268	1.507814	1.831628
1	-0.146231	-0.211017	1.525169
1	-2.274807	0.540727	2.556171
1	-2.656066	1.467598	1.136894
1	-2.308577	-1.589276	1.275577
1	-3.614670	-2.928262	-0.012391
1	-4.024853	-2.235981	-1.585980
1	-5.207642	-2.234362	-0.300128
1	-4.279594	0.314187	-1.792500
1	-5.428194	0.350036	-0.477860
1	-3.985563	1.349040	-0.397290
1	4.395169	1.154880	0.373104
1	3.879847	0.860821	-1.258862
1	2.059172	1.279837	1.159895
1	2.248825	2.358673	-0.204561
1	1.227370	0.731965	-1.720592

i_3

6	1.923240	0.521658	1.164101
6	3.121230	1.109355	0.843775
6	3.926355	0.539362	-0.136640
6	3.448884	-0.643676	-0.880273
6	1.935886	-0.754659	-0.935944
6	1.307745	-0.604292	0.443550
6	5.266917	1.065196	-0.423899
6	-0.241712	-0.486169	0.465757
6	-0.875205	-1.471675	-0.515510
6	-2.401936	-1.407981	-0.566347
6	-2.909800	-0.055729	-0.952608
6	-3.858964	0.673634	-0.361682
6	-4.263073	2.003017	-0.921348
6	-0.779272	-0.692878	1.873915
6	-4.627977	0.258844	0.853764

i_4

6	2.060880	-1.005027	-0.488959
6	3.430323	-0.912853	-0.483633
6	4.036857	0.322818	-0.279092
6	3.212147	1.518165	-0.004477
6	1.862464	1.194476	0.609500
6	1.144921	0.097712	-0.162849
6	5.493898	0.479019	-0.377677
6	-0.171345	-0.382863	0.490640
6	-1.070740	-1.082156	-0.525702
6	-2.470619	-1.424885	-0.009293
6	-3.225752	-0.244234	0.519690
6	-4.129463	0.493050	-0.130415
6	-4.823444	1.633666	0.547099
6	0.084874	-1.233562	1.727187
6	-4.552352	0.262660	-1.547373

1	3.482202	1.952719	1.412794
1	5.639191	1.736681	0.341875
1	5.975940	0.259424	-0.607539
1	5.199431	1.621090	-1.365682
1	-0.505466	0.521783	0.133424
1	1.394904	0.908317	2.026506
1	-0.290701	-0.070815	2.622311
1	-1.835168	-0.443934	1.915825
1	-0.665206	-1.731557	2.184616
1	-0.566629	-2.488196	-0.257082
1	-0.504508	-1.276682	-1.522043
1	-2.727452	-2.139050	-1.309881
1	-2.826028	-1.740365	0.377831
1	-2.458398	0.357437	-1.850277
1	-3.685001	2.268258	-1.802800
1	-4.139956	2.792298	-0.178760
1	-5.317836	1.999201	-1.197785
1	-4.554029	1.019024	1.632143
1	-5.687385	0.168668	0.612161
1	-4.307578	-0.690343	1.271465
1	3.898947	-0.664264	-1.872143
1	3.883538	-1.505922	-0.353545
1	1.542717	0.022794	-1.593365
1	1.664369	-1.708811	-1.375574
1	1.556191	-1.491800	1.051872

1	4.034790	-1.773301	-0.728038
1	5.985888	-0.362011	-0.853558
1	5.758349	1.411167	-0.874470
1	5.877865	0.568650	0.644604
1	-0.681930	0.531605	0.798672
1	1.620711	-1.947502	-0.793032
1	0.758262	-0.751397	2.432990
1	-0.841756	-1.425062	2.260529
1	0.508278	-2.205133	1.466346
1	-0.599475	-2.005540	-0.876041
1	-1.181843	-0.434635	-1.398065
1	-3.016136	-1.898646	-0.822619
1	-2.397071	-2.183231	0.770905
1	-3.022459	0.025425	1.550693
1	-4.489074	1.763244	1.573114
1	-5.901793	1.472609	0.560494
1	-4.655568	2.567697	0.009753
1	-5.620979	0.051343	-1.593583
1	-4.390426	1.162406	-2.141785
1	-4.027728	-0.555997	-2.029657
1	3.780430	2.230159	0.592912
1	3.087700	2.004399	-0.983464
1	2.008028	0.875636	1.641435
1	1.246606	2.089572	0.639413
1	0.863429	0.492629	-1.155434

i_5

6	1.272264	-0.726599	-0.770404
6	2.313613	-1.548598	-0.419565
6	3.518641	-0.988903	-0.006760
6	3.652774	0.477988	0.113576
6	2.335198	1.191727	0.358281
6	1.270619	0.738058	-0.629451
6	4.691476	-1.829314	0.268511
6	-0.156270	1.271493	-0.381045
6	-0.743620	0.719182	0.916995
6	-2.244797	0.961407	1.086259
6	-3.078273	0.417137	-0.033413
6	-3.727923	-0.749507	-0.063880
6	-4.554424	-1.139090	-1.250259
6	-0.192181	2.790037	-0.443290
6	-3.730893	-1.748795	1.050706
1	2.233664	-2.617091	-0.550924
1	4.595390	-2.840174	-0.112071
1	5.605309	-1.365231	-0.099123
1	4.802014	-1.880973	1.357351
1	-0.761577	0.887178	-1.205732
1	0.396510	-1.177453	-1.225611
1	0.277654	3.166274	-1.350935
1	-1.218142	3.147597	-0.441783
1	0.306939	3.243284	0.412075
1	-0.220802	1.149401	1.773698
1	-0.575184	-0.362489	0.960147
1	-2.547266	0.529905	2.038059
1	-2.429285	2.031895	1.181870
1	-3.179978	1.056818	-0.903468
1	-4.524898	-0.385414	-2.032764
1	-5.595498	-1.284461	-0.960451
1	-4.214997	-2.086276	-1.671178

i_6

6	-2.169073	0.895717	0.913834
6	-3.266320	0.115864	1.179823
6	-3.758632	-0.736782	0.197133
6	-3.049614	-0.853727	-1.092559
6	-1.571733	-0.518221	-1.005597
6	-1.335276	0.808730	-0.295953
6	-4.998227	-1.497596	0.398073
6	0.147997	1.134754	0.035402
6	1.056411	0.769818	-1.137948
6	2.545057	1.030371	-0.892339
6	3.088284	0.339433	0.320403
6	3.756936	-0.815638	0.361971
6	4.262015	-1.366061	1.659671
6	0.303941	2.599728	0.417793
6	4.087365	-1.649804	-0.835918
1	-3.801935	0.230909	2.110038
1	-5.591590	-1.141294	1.232882
1	-5.594334	-1.529617	-0.512564
1	-4.709303	-2.535080	0.600164
1	0.440245	0.509124	0.883426
1	-1.904553	1.646798	1.647552
1	-0.378028	2.920398	1.203648
1	1.305522	2.797492	0.787788
1	0.138273	3.244588	-0.445274
1	0.735962	1.325275	-2.024254
1	0.949585	-0.289833	-1.366525
1	3.082727	0.719280	-1.785372
1	2.721990	2.102540	-0.805972
1	2.931414	0.848128	1.265816
1	4.002325	-0.729562	2.501605
1	5.347273	-1.469266	1.636062
1	3.859364	-2.362664	1.844401

1	-4.744868	-1.894914	1.424049
1	-3.394238	-2.721580	0.690447
1	-3.103741	-1.465416	1.890203
1	4.400957	0.720159	0.867373
1	4.096492	0.798738	-0.840631
1	1.999505	0.981801	1.373561
1	2.484980	2.265111	0.287867
1	1.553847	1.085977	-1.639604
1	5.168140	-1.746360	-0.942888
1	3.698828	-2.661212	-0.712371
1	3.693618	-1.250678	-1.765246
1	-3.222155	-1.839823	-1.522260
1	-3.568209	-0.155963	-1.766445
1	-1.053630	-1.310065	-0.461802
1	-1.152455	-0.494312	-2.006084
1	-1.693856	1.631680	-0.939068

i_7

6	-1.344969	0.673860	-0.995987
6	-2.546151	0.011904	-1.125502
6	-2.955766	-0.870350	-0.137520
6	-2.117952	-1.076122	1.065761
6	-1.238723	0.115504	1.400714
6	-0.484626	0.615299	0.178501
6	-4.186639	-1.661845	-0.281179
6	0.326467	1.910692	0.417140
6	1.470820	2.089758	-0.578454
6	2.651338	1.132002	-0.412547
6	2.384480	-0.284874	-0.814845
6	2.618112	-1.407419	-0.123110
6	2.377781	-2.749858	-0.741731
6	-0.571615	3.141213	0.451076
6	3.164125	-1.454685	1.268976
1	-3.127766	0.115790	-2.028961
1	-4.606850	-1.624853	-1.280038
1	-4.021794	-2.695067	0.022861
1	-4.923320	-1.261036	0.422193
1	0.772701	1.786909	1.406662
1	-0.993864	1.245216	-1.847661
1	-1.413673	3.024226	1.130533
1	-0.010944	4.011874	0.782093
1	-0.967163	3.374354	-0.538505
1	1.845268	3.106644	-0.464099
1	1.095587	2.039075	-1.605456
1	3.463855	1.506789	-1.038718
1	3.016792	1.190561	0.611148
1	2.028174	-0.404360	-1.835083
1	1.983502	-2.672512	-1.751899
1	1.686484	-3.343126	-0.140775
1	3.306134	-3.319793	-0.788322
1	2.548134	-2.094019	1.902195
1	4.159707	-1.899499	1.263549
1	3.241362	-0.480553	1.739987
1	-2.742202	-1.376553	1.906090
1	-1.501295	-1.956440	0.834596
1	-1.859154	0.919367	1.798441
1	-0.535314	-0.156578	2.183524
1	0.275549	-0.146896	-0.112119

i_9

6	-2.103464	-1.048852	-0.801804
6	-3.233179	-0.330565	-1.107617
6	-3.699533	0.634276	-0.221584
6	-2.942549	0.923824	1.012610
6	-1.463437	0.605254	0.903668
6	-1.213238	-0.786852	0.337536
6	-4.966489	1.338584	-0.457894
6	0.284096	-1.071554	0.040735
6	1.073638	-1.159203	1.348539
6	2.570670	-0.899613	1.177091
6	2.864851	0.513234	0.785672
6	3.532325	0.959529	-0.281032
6	3.764006	2.426255	-0.479585
6	0.495513	-2.328380	-0.792297
6	4.135862	0.092679	-1.341688
1	-3.817401	-0.586036	-1.978767
1	-5.582250	0.873428	-1.219641
1	-5.527483	1.463036	0.467068
1	-4.714373	2.351591	-0.790465
1	0.659541	-0.211572	-0.519668
1	-1.875756	-1.904111	-1.424766
1	0.188523	-2.212425	-1.830216
1	1.550371	-2.585496	-0.815563
1	-0.029251	-3.185964	-0.367658
1	0.917851	-2.147027	1.788597
1	0.696782	-0.439128	2.075035
1	3.052737	-1.109770	2.133772
1	3.001060	-1.605188	0.470172
1	2.504873	1.259057	1.488625
1	3.311602	3.021296	0.309553
1	3.362250	2.759931	-1.437158
1	4.831672	2.646963	-0.497943
1	3.775856	0.389290	-2.327422
1	5.218609	0.220010	-1.358697
1	3.931531	-0.964967	-1.210628
1	-3.118521	1.952928	1.323519
1	-3.419766	0.307646	1.788700
1	-0.985302	1.334924	0.248334
1	-1.003192	0.714462	1.879972
1	-1.524407	-1.554570	1.071151

i_{10}

6	1.157950	0.396399	1.071099
6	2.343481	-0.271893	1.281387
6	2.988740	-0.882334	0.216150
6	2.419779	-0.790981	-1.147189
6	1.555061	0.438576	-1.360961
6	0.551310	0.625838	-0.235179

i_{11}

6	-0.308444	-0.404091	-1.215313
6	-1.681634	-0.199099	-1.064963
6	-2.383609	-0.874908	-0.101546
6	-1.684930	-1.764642	0.863188
6	-0.197338	-1.487791	0.988229
6	0.440910	-1.368462	-0.386519

6	4.209124	-1.677483	0.416555
6	-0.250370	1.947875	-0.317219
6	-1.592818	1.856497	0.407185
6	-2.704764	1.136591	-0.359746
6	-2.425854	-0.283349	-0.763512
6	-2.690068	-1.388215	-0.055336
6	-2.424134	-2.749794	-0.616895
6	0.568878	3.136405	0.170995
6	-3.288377	-1.378843	1.315338
1	2.728306	-0.391450	2.282846
1	4.416333	-1.891057	1.459209
1	4.171636	-2.600986	-0.160282
1	5.047328	-1.106097	0.005104
1	-0.454743	2.091857	-1.380929
1	0.613792	0.739223	1.943721
1	1.552873	3.184050	-0.292355
1	0.059191	4.068150	-0.061279
1	0.706437	3.110739	1.252793
1	-1.935162	2.869793	0.616827
1	-1.460357	1.385935	1.386059
1	-3.610504	1.182184	0.242621
1	-2.922594	1.711723	-1.260493
1	-2.027964	-0.425227	-1.763582
1	-1.988984	-2.704674	-1.612309
1	-3.349878	-3.321908	-0.683315
1	-1.757838	-3.321331	0.031274
1	-4.236646	-1.916946	1.316118
1	-2.641060	-1.902089	2.020674
1	-3.469220	-0.380156	1.699343
1	3.215188	-0.868269	-1.887228
1	1.825085	-1.707740	-1.268273
1	2.193887	1.320235	-1.423318
1	1.034527	0.360003	-2.312146
1	-0.217255	-0.177698	-0.287100

6	-3.859295	-0.811736	-0.034780
6	1.972769	-1.226353	-0.431978
6	2.519049	0.003176	0.284989
6	2.347557	1.334903	-0.441378
6	0.946114	1.801075	-0.727724
6	0.059381	2.280395	0.173872
6	-1.238480	2.865485	-0.260488
6	2.630352	-2.488541	0.111223
6	0.311808	2.327274	1.642757
1	-2.206351	0.415812	-1.780016
1	-4.293773	-0.235245	-0.844328
1	-4.279824	-1.817845	-0.044487
1	-4.161300	-0.371482	0.917319
1	2.241849	-1.147643	-1.489870
1	0.146522	-0.093663	-2.145356
1	2.218213	-3.388264	-0.343811
1	3.697251	-2.475989	-0.096960
1	2.516025	-2.572968	1.190778
1	3.590017	-0.146801	0.419708
1	2.106477	0.051759	1.292817
1	2.860009	2.106201	0.135860
1	2.884748	1.277911	-1.387504
1	0.701994	1.977563	-1.768615
1	-1.344726	2.892011	-1.341270
1	-1.339238	3.883042	0.116809
1	-2.074128	2.300412	0.160761
1	0.250507	3.360890	1.984853
1	-0.461877	1.786281	2.190079
1	1.281248	1.936942	1.929397
1	-2.185392	-1.717863	1.830102
1	-1.854064	-2.788827	0.505905
1	-0.045686	-0.560742	1.539258
1	0.273315	-2.282188	1.560500
1	0.232918	-2.309428	-0.929339

i_{12}

6	-2.168954	0.895589	0.913968
6	-3.266260	0.115815	1.179935
6	-3.758705	-0.736662	0.197163
6	-3.049641	-0.853734	-1.092480
6	-1.571773	-0.518219	-1.005605
6	-1.335225	0.808668	-0.295875
6	-4.998477	-1.497218	0.398006
6	0.148067	1.134653	0.035367
6	1.056418	0.769583	-1.138004
6	2.545054	1.030299	-0.892528
6	3.088361	0.339539	0.320272
6	3.756949	-0.815563	0.361984
6	4.262083	-1.365805	1.659744
6	0.304142	2.599657	0.417587
6	4.087161	-1.650013	-0.835768
1	-3.801860	0.230882	2.110157
1	-5.592311	-1.140124	1.232149
1	-5.594040	-1.530182	-0.512935
1	-4.709618	-2.534474	0.601410
1	0.440364	0.509103	0.883432
1	-1.904317	1.646551	1.647766
1	-0.378041	2.920592	1.203150
1	1.305632	2.797297	0.787901

i_{13}

6	-0.671120	0.369008	-0.002583
6	-1.600311	1.353361	0.234231
6	-2.950116	1.099132	0.024146
6	-3.396034	-0.247157	-0.393773
6	-2.441741	-1.352761	0.018452
6	-1.001620	-1.023682	-0.348952
6	-3.956277	2.160742	0.165407
6	0.017221	-2.040922	0.216345
6	1.245077	-2.236252	-0.682007
6	2.046887	-1.015735	-1.136950
6	2.721938	-0.243207	-0.046060
6	2.953783	1.072589	0.006417
6	3.718444	1.673578	1.145362
6	0.353188	-1.764807	1.678075
6	2.544133	2.051667	-1.051089
1	-1.277645	2.349147	0.498413
1	-3.528293	3.156302	0.203927
1	-4.708541	2.096801	-0.619365
1	-4.490520	1.978338	1.104063
1	-0.512217	-2.995873	0.190876
1	0.380997	0.634544	0.049597
1	-0.542724	-1.705292	2.294915
1	0.960700	-2.572382	2.079507

1	0.138870	3.244406	-0.445639
1	0.735832	1.324872	-2.024367
1	0.949665	-0.290119	-1.366383
1	3.082696	0.719150	-1.785557
1	2.721901	2.102491	-0.806280
1	2.931611	0.848408	1.265613
1	4.002720	-0.729005	2.501552
1	5.347302	-1.469352	1.635984
1	3.859143	-2.362231	1.844802
1	5.167909	-1.746821	-0.942762
1	3.698410	-2.661318	-0.712029
1	3.693440	-1.250986	-1.765154
1	-3.222173	-1.839908	-1.522026
1	-3.568311	-0.156127	-1.766476
1	-1.053627	-1.310103	-0.461912
1	-1.152559	-0.494225	-2.006118
1	-1.693855	1.631696	-0.938868
1	0.918056	-0.844185	1.808564
1	0.917884	-2.760588	-1.581510
1	1.917185	-2.925126	-0.168758
1	2.814850	-1.393196	-1.816828
1	1.430345	-0.365686	-1.760338
1	3.123319	-0.846625	0.760949
1	4.003542	0.928247	1.882743
1	3.136355	2.447827	1.646936
1	4.627188	2.155384	0.783794
1	2.028013	2.907435	-0.613028
1	3.429149	2.454410	-1.544838
1	1.915629	1.624594	-1.827891
1	-4.412112	-0.425225	-0.043774
1	-3.477078	-0.192912	-1.489089
1	-2.511086	-1.502564	1.096463
1	-2.738803	-2.287949	-0.449158
1	-0.904907	-1.048764	-1.448294

i_{14}

6	1.961043	1.223240	-0.641306
6	2.732746	0.121830	-0.915488
6	2.805450	-0.910082	0.014105
6	2.027082	-0.833860	1.267909
6	0.769586	0.011435	1.163689
6	1.053793	1.354557	0.504984
6	3.698672	-2.057884	-0.192125
6	-0.178522	2.236042	0.167193
6	-0.873017	1.905841	-1.163186
6	-1.352909	0.484568	-1.457202
6	-2.442570	-0.018886	-0.562927
6	-2.653287	-1.269076	-0.145614
6	-3.839902	-1.606898	0.703100
6	-1.124793	2.301264	1.356480
6	-1.788722	-2.441415	-0.494176
1	3.357288	0.098594	-1.795723
1	4.420248	-1.905564	-0.986974
1	4.200434	-2.336459	0.733525
1	3.068715	-2.914330	-0.456006
1	0.223596	3.243358	0.031246
1	2.054472	2.082304	-1.296688
1	-0.605975	2.625282	2.258184
1	-1.913433	3.023789	1.159050
1	-1.601906	1.345988	1.557369
1	-0.208012	2.198585	-1.979456
1	-1.725477	2.581915	-1.243443
1	-1.728035	0.500876	-2.484144
1	-0.508189	-0.205160	-1.481923
1	-3.175223	0.727470	-0.275464
1	-4.441712	-0.730392	0.926878
1	-3.531396	-2.060065	1.646153
1	-4.477800	-2.335406	0.201920
1	-1.463522	-2.964550	0.406719
1	-2.359685	-3.165167	-1.076595
1	-0.913134	-2.178144	-1.081862
1	1.817033	-1.837366	1.635468
1	2.726254	-0.404435	2.001001
1	0.009187	-0.523905	0.599262
1	0.359883	0.166021	2.157371
1	1.648488	1.962714	1.211512

i_{15}

6	-1.502869	-0.330619	1.285504
6	-2.788718	0.154482	1.294815
6	-3.354438	0.631103	0.119011
6	-2.593216	0.560611	-1.145424
6	-1.558628	-0.549028	-1.167816
6	-0.694285	-0.560212	0.084865
6	-4.679893	1.264897	0.112379
6	0.216623	-1.811664	0.187896
6	1.143880	-1.900948	-1.033163
6	1.931207	-0.649001	-1.422380
6	2.863104	-0.132999	-0.372800
6	3.029056	1.125640	0.041282
6	4.059363	1.461554	1.075454
6	0.969999	-1.888504	1.511064
6	2.268703	2.308849	-0.474124
1	-3.317843	0.266958	2.229015
1	-5.043063	1.513288	1.103416
1	-4.693227	2.143059	-0.531718
1	-5.377238	0.553270	-0.342623
1	-0.445555	-2.679833	0.136453
1	-1.034494	-0.519615	2.242950
1	0.317300	-2.138121	2.346246
1	1.714637	-2.678802	1.462502
1	1.496346	-0.963825	1.739029
1	0.564233	-2.218645	-1.900425
1	1.843114	-2.716021	-0.844313
1	2.514772	-0.912709	-2.307854
1	1.253825	0.136881	-1.757145
1	3.510435	-0.884943	0.066149
1	4.593408	0.579974	1.419510
1	3.604045	1.945890	1.940521
1	4.791161	2.164481	0.676359
1	1.802139	2.854727	0.347574
1	2.949864	3.010177	-0.956784
1	1.502752	2.055095	-1.201748
1	-3.279613	0.497471	-1.988972
1	-2.113998	1.545420	-1.242476
1	-2.068526	-1.511033	-1.245099
1	-0.943348	-0.449856	-2.056578
1	-0.000449	0.301751	0.086634

i_{16}

6	-1.232954	0.627759	-0.224484
6	-2.372455	1.388493	-0.136083
6	-3.618627	0.770657	-0.130742
6	-3.714217	-0.703562	-0.160514
6	-2.486892	-1.400441	0.397303
6	-1.199863	-0.842987	-0.194325
6	-4.858167	1.558466	-0.142316
6	0.073407	-1.418976	0.473007
6	1.240396	-1.596180	-0.503632
6	1.772013	-0.384794	-1.279032
6	2.442274	0.691513	-0.474917
6	3.714641	0.706892	-0.071943
6	4.264758	1.855990	0.712884
6	0.435869	-0.690334	1.761845
6	4.697090	-0.385283	-0.354375
1	-2.308173	2.465919	-0.158606
1	-4.703360	2.600858	-0.397776
1	-5.604529	1.109193	-0.795723
1	-5.280725	1.510192	0.867328
1	-0.214492	-2.433646	0.757650
1	-0.292695	1.146750	-0.359379
1	-0.408380	-0.642478	2.449160
1	1.236128	-1.218839	2.273609
1	0.796302	0.320416	1.586396
1	0.940088	-2.348177	-1.237121
1	2.067016	-2.035137	0.055013
1	2.474805	-0.774208	-2.014681
1	0.973737	0.054064	-1.882882
1	1.846164	1.561031	-0.213649
1	3.517658	2.625024	0.892645
1	5.103165	2.314037	0.187785
1	4.647748	1.519251	1.676697
1	5.571929	0.016892	-0.865272
1	5.057530	-0.821012	0.578064
1	4.291890	-1.187467	-0.963135
1	-4.632785	-1.025232	0.328851
1	-3.853850	-0.955837	-1.222023
1	-2.463784	-1.277458	1.480850
1	-2.551045	-2.467852	0.202788
1	-1.153974	-1.119566	-1.262642

i_{17}

6	-2.159733	-0.092875	1.386794
6	-3.271842	-0.783688	0.975750
6	-3.839482	-0.494304	-0.261820
6	-3.198199	0.491577	-1.157063
6	-1.707746	0.645412	-0.912108
6	-1.417857	0.876049	0.563160
6	-5.099166	-1.119259	-0.685332
6	0.065699	0.961179	0.985640
6	0.831830	-0.355322	0.769702
6	1.532766	-0.589305	-0.579613
6	2.875973	0.068886	-0.716567
6	4.045860	-0.432903	-0.314661
6	5.321346	0.320629	-0.528304
6	0.737845	2.183395	0.383606
6	4.209534	-1.756422	0.364333
1	-3.761753	-1.476053	1.643587
1	-5.634671	-1.601382	0.124986
1	-5.740723	-0.405125	-1.199322
1	-4.845772	-1.880343	-1.431701
1	0.032327	1.123532	2.066393
1	-1.825890	-0.231828	2.409737
1	0.198281	3.093988	0.640943
1	1.751248	2.278933	0.763609
1	0.805586	2.127061	-0.700668
1	0.146654	-1.189532	0.958196
1	1.595044	-0.426048	1.543456
1	1.643638	-1.665608	-0.705152
1	0.902132	-0.265367	-1.407122
1	2.894165	1.037399	-1.200080
1	5.153029	1.275211	-1.019659
1	6.012803	-0.259338	-1.140234
1	5.825986	0.507732	0.420116
1	4.893643	-2.389927	-0.200784
1	4.655920	-1.624231	1.350540
1	3.277193	-2.298511	0.490812
1	-3.424658	0.249812	-2.194892
1	-3.725945	1.437438	-0.963456
1	-1.201904	-0.262272	-1.238822
1	-1.320090	1.463930	-1.511553
1	-1.867217	1.842235	0.859982

i_{18}

6	-2.020037	1.297106	0.074071
6	-3.379159	1.189898	-0.091204
6	-3.942374	-0.047248	-0.381766
6	-3.084859	-1.247877	-0.451070
6	-1.820360	-1.141414	0.381357
6	-1.083495	0.170176	0.150916
6	-5.373839	-0.181048	-0.682711
6	0.066814	0.421815	1.163014
6	1.049326	-0.755486	1.170875
6	1.697150	-1.166385	-0.154467
6	2.627818	-0.169185	-0.780046
6	3.938335	-0.053711	-0.555666
6	4.755436	0.975808	-1.271711
6	0.746169	1.771006	0.955803

i_{19}

6	-1.937310	0.891615	0.459385
6	-3.270801	1.212224	0.505379
6	-4.174096	0.518813	-0.294543
6	-3.707560	-0.595520	-1.145641
6	-2.444886	-1.262951	-0.631466
6	-1.371230	-0.241230	-0.287900
6	-5.589918	0.904923	-0.350977
6	-0.114399	-0.837328	0.389805
6	1.080266	0.104947	0.258780
6	2.410260	-0.493616	0.712534
6	3.540702	0.464718	0.514095
6	4.592281	0.341124	-0.297656
6	5.641164	1.408648	-0.355927
6	-0.388961	-1.244927	1.831538

6	4.709693	-0.910844	0.397818
1	-3.994837	2.076530	-0.104800
1	-5.861525	0.766243	-0.884316
1	-5.541870	-0.881406	-1.499420
1	-5.847314	-0.631319	0.196682
1	-0.394542	0.434465	2.154229
1	-1.599678	2.293873	0.117483
1	0.135643	2.600568	1.309232
1	1.674030	1.806360	1.519410
1	1.005563	1.952818	-0.085074
1	0.546358	-1.628088	1.590533
1	1.837217	-0.506108	1.881561
1	2.228324	-2.099071	0.030618
1	0.925028	-1.429519	-0.882866
1	2.192639	0.509159	-1.505497
1	4.154409	1.572908	-1.952687
1	5.551228	0.502681	-1.847626
1	5.241278	1.648255	-0.563918
1	5.522876	-1.418179	-0.121592
1	5.173191	-0.295714	1.169804
1	4.104415	-1.664637	0.891640
1	-3.666269	-2.134208	-0.199856
1	-2.843613	-1.361014	-1.517910
1	-2.080659	-1.212505	1.438943
1	-1.174272	-1.985131	0.160365
1	-0.607331	0.167377	-0.846210

6	4.853491	-0.827331	-1.195628
1	-3.607870	2.056713	1.087348
1	-5.785812	1.885708	0.068058
1	-5.978768	0.835207	-1.365637
1	-6.148429	0.164302	0.232287
1	0.113470	-1.738626	-0.184451
1	-1.244807	1.542339	0.980324
1	-1.271773	-1.874117	1.926013
1	0.443194	-1.812181	2.237213
1	-0.525268	-0.373414	2.474378
1	0.904371	1.022963	0.827795
1	1.185811	0.408160	-0.784876
1	2.353476	-0.750686	1.771735
1	2.584871	-1.426424	0.178418
1	3.483454	1.364679	1.117878
1	5.418185	2.236881	0.311413
1	5.739156	1.801393	-1.368530
1	6.616529	1.005274	-0.082081
1	4.966006	-0.493014	-2.227321
1	5.792482	-1.309727	-0.922917
1	4.073292	-1.581268	-1.170683
1	-4.517785	-1.306714	-1.301914
1	-3.534159	-0.141263	-2.132483
1	-2.687822	-1.847040	0.255969
1	-2.068235	-1.960769	-1.374900
1	-1.017585	0.226963	-1.223703

i_{20}

6	-1.690935	-0.321496	1.211540
6	-2.550664	-1.348901	0.915928
6	-3.543257	-1.157560	-0.040707
6	-3.630433	0.123711	-0.771506
6	-2.308180	0.864104	-0.861154
6	-1.637437	0.966139	0.500986
6	-4.549595	-2.192898	-0.309186
6	-0.207477	1.550243	0.506414
6	0.776167	0.629637	-0.215310
6	2.242741	0.999881	-0.010246
6	3.157651	0.048531	-0.712556
6	4.070701	-0.763871	-0.177211
6	4.916049	-1.641385	-1.048274
6	-0.199901	2.970854	-0.036307
6	4.366962	-0.880931	1.285325
1	-2.519626	-2.266881	1.483033
1	-4.588109	-2.963992	0.452223
1	-5.534610	-1.755786	-0.465028
1	-4.279815	-2.663297	-1.261365
1	0.090531	1.595407	1.558434
1	-1.025833	-0.444337	2.059807
1	-0.957498	3.588246	0.444514
1	0.760221	3.445255	0.144227
1	-0.373144	2.993622	-1.111208
1	0.562251	0.619821	-1.286187
1	0.639596	-0.401295	0.128893
1	2.418170	2.004528	-0.399381
1	2.458843	1.042690	1.056280
1	3.058377	0.039320	-1.793134
1	4.677145	-1.521900	-2.101660
1	4.787021	-2.691680	-0.784502

i_{21}

6	-2.649048	1.151290	0.376014
6	-3.794797	0.466813	0.695342
6	-4.020760	-0.790848	0.145519
6	-2.989095	-1.412134	-0.708508
6	-1.583962	-0.915794	-0.419929
6	-1.519610	0.605978	-0.393991
6	-5.286803	-1.502183	0.362229
6	-0.174130	1.212605	0.096647
6	1.008750	0.433473	-0.477302
6	2.375949	0.957908	-0.040425
6	3.480858	0.097859	-0.563975
6	4.358222	-0.630050	0.129676
6	5.414928	-1.425009	-0.573499
6	-0.093191	2.690451	-0.259157
6	4.408045	-0.725340	1.622546
1	-4.561106	0.938947	1.291381
1	-6.074946	-0.868905	0.754228
1	-5.614609	-2.008648	-0.544292
1	-5.089467	-2.296667	1.090555
1	-0.143613	1.106023	1.185523
1	-2.577543	2.180594	0.705206
1	-0.969052	3.260143	0.047523
1	0.758444	3.159051	0.224287
1	0.023254	2.820766	-1.335076
1	0.950452	0.443875	-1.569805
1	0.951300	-0.610271	-0.171780
1	2.517896	1.972437	-0.415718
1	2.407734	1.023014	1.046434
1	3.568086	0.081620	-1.645478
1	5.348016	-1.326334	-1.653644
1	5.337582	-2.483032	-0.320686

1	5.973731	-1.413728	-0.912511
1	4.264592	-1.916725	1.610414
1	5.400408	-0.595980	1.484209
1	3.728154	-0.266408	1.911692
1	-4.080112	-0.038341	-1.750309
1	-4.370660	0.715708	-0.212987
1	-1.650183	0.333672	-1.548973
1	-2.473614	1.853478	-1.277453
1	-2.240186	1.632264	1.144555

1	6.409498	-1.102343	-0.264048
1	4.340443	-1.767193	1.937120
1	5.363724	-0.352682	1.992248
1	3.620182	-0.171559	2.123221
1	-3.061959	-2.497356	-0.647819
1	-3.285017	-1.164879	-1.738707
1	-1.257388	-1.303585	0.546609
1	-0.904678	-1.313925	-1.166536
1	-1.669380	0.990787	-1.417857

i_{22}

6	1.792573	-0.866755	0.320046
6	3.064716	-1.308634	0.584433
6	4.152842	-0.667066	-0.000060
6	3.943281	0.523966	-0.849820
6	2.664861	1.277268	-0.532352
6	1.468683	0.340452	-0.454325
6	5.518387	-1.179815	0.170657
6	0.157105	1.018876	0.005764
6	-1.064051	0.192439	-0.389940
6	-2.399398	0.896292	-0.156319
6	-3.536527	0.134097	-0.756965
6	-4.585989	-0.406236	-0.134851
6	-5.644363	-1.127797	-0.910889
6	0.181488	1.350813	1.492183
6	-4.836669	-0.348561	1.339578
1	3.219524	-2.204165	1.167111
1	5.552879	-2.194662	0.551182
1	6.090681	-1.094177	-0.751599
1	6.019181	-0.525248	0.892768
1	0.113801	1.956088	-0.554443
1	0.965109	-1.471652	0.672010
1	1.076431	1.896679	1.783809
1	-0.665923	1.974497	1.760710
1	0.121456	0.448682	2.103572
1	-1.081020	-0.757164	0.151952
1	-0.991325	-0.062326	-1.450050
1	-2.559041	1.054658	0.907083
1	-2.353905	1.889115	-0.613334
1	-3.488238	0.023386	-1.835475
1	-5.429866	-1.143337	-1.976112
1	-6.616423	-0.655072	-0.767170
1	-5.744269	-2.157608	-0.566376
1	-5.768009	0.180822	1.542620
1	-4.959244	-1.354545	1.741745
1	-4.047244	0.142787	1.899267
1	4.823036	1.165406	-0.811675
1	3.920878	0.134239	-1.878419
1	2.783628	1.794656	0.419457
1	2.489831	2.040132	-1.286592
1	1.266434	-0.057224	-1.464890

i_{23}

6	2.046598	-0.065263	-1.295500
6	2.959224	-1.045730	-0.999772
6	3.694003	-0.964961	0.179545
6	3.447174	0.137678	1.132044
6	2.046321	0.716258	1.043925
6	1.666232	1.034034	-0.394883
6	4.756926	-1.932660	0.479973
6	0.200513	1.467260	-0.621082
6	-0.774102	0.327458	-0.328585
6	-2.209319	0.605827	-0.768218
6	-3.073996	-0.606887	-0.638809
6	-4.127041	-0.784618	0.161285
6	-4.887731	-2.074592	0.146999
6	-0.117142	2.731820	0.161581
6	-4.665071	0.235936	1.114566
1	3.176523	-1.823109	-1.716569
1	5.061162	-2.519018	-0.379980
1	5.616657	-1.446314	0.938147
1	4.362889	-2.616612	1.240008
1	0.121381	1.706661	-1.685953
1	1.598492	-0.069808	-2.283613
1	0.628744	3.507346	-0.007097
1	-1.076475	3.138731	-0.144622
1	-0.174470	2.540459	1.232171
1	-0.778876	0.094415	0.737501
1	-0.432873	-0.583187	-0.834369
1	-2.616837	1.434254	-0.194514
1	-2.200886	0.930245	-1.812840
1	-2.799106	-1.432870	-1.287173
1	-4.469612	-2.787486	-0.558725
1	-5.930548	-1.903097	-0.121471
1	-4.892020	-2.533484	1.136203
1	-5.691845	0.491957	0.851991
1	-4.696990	-0.171562	2.125328
1	-4.090028	1.155875	1.142353
1	3.698472	-0.183163	2.142287
1	4.199909	0.899675	0.880655
1	1.338393	-0.003732	1.453572
1	1.983580	1.609415	1.658508
1	2.288833	1.875052	-0.750206

i_{24}

6	2.661224	1.236992	-0.119164
6	3.916290	0.718211	-0.316035
6	4.181699	-0.598325	0.046488
6	3.090991	-1.449461	0.561793

i_{25}

6	-1.465800	-0.233082	-0.902661
6	-2.646977	-0.890923	-1.139282
6	-3.584104	-1.011907	-0.117984
6	-3.336023	-0.381246	1.195733

6	1.713454	-1.020946	0.089813
6	1.481232	0.468535	0.308855
6	5.538990	-1.152670	-0.033052
6	0.184871	1.044322	-0.326966
6	-0.987331	0.084432	-0.125956
6	-2.308478	0.581965	-0.711300
6	-3.345166	-0.495217	-0.711619
6	-4.477506	-0.545319	-0.007211
6	-5.410175	-1.709079	-0.142789
6	-0.124549	2.422525	0.240322
6	-4.942617	0.507915	0.948904
1	4.718612	1.353449	-0.659783
1	6.307506	-0.395531	-0.143000
1	5.752479	-1.797839	0.817703
1	5.569613	-1.803607	-0.914001
1	0.357527	1.134046	-1.404118
1	2.533571	2.300794	-0.276686
1	0.714906	3.114035	0.187894
1	-0.937480	2.890025	-0.306692
1	-0.426077	2.349600	1.285347
1	-1.123388	-0.111051	0.941158
1	-0.761049	-0.874879	-0.591072
1	-2.657530	1.453117	-0.163670
1	-2.136148	0.911868	-1.739962
1	-3.134217	-1.329974	-1.372246
1	-5.040078	-2.448742	-0.847749
1	-6.392013	-1.377863	-0.482350
1	-5.561765	-2.198658	0.819772
1	-5.893266	0.925969	0.616649
1	-5.123230	0.071677	1.931639
1	-4.242653	1.328345	1.070898
1	3.296729	-2.494447	0.332820
1	3.167106	-1.378752	1.656869
1	1.612692	-1.245499	-0.973604
1	0.960490	-1.604543	0.609433
1	1.400086	0.665188	1.392250

6	-2.399245	0.811330	1.128149
6	-1.142001	0.490217	0.333623
6	-4.808659	-1.802100	-0.300584
6	-0.218340	1.706874	0.087817
6	1.200284	1.308928	-0.311397
6	1.974378	0.492129	0.720619
6	3.419033	0.367694	0.354788
6	4.106969	-0.738908	0.068996
6	5.562191	-0.664320	-0.276330
6	-0.815255	2.675735	-0.924662
6	3.546402	-2.126909	0.068599
1	-2.811779	-1.392141	-2.081126
1	-4.775241	-2.453820	-1.166639
1	-5.052142	-2.367556	0.597507
1	-5.632066	-1.092129	-0.436710
1	-0.155967	2.213727	1.053798
1	-0.699223	-0.281135	-1.667538
1	-1.818519	3.001577	-0.658644
1	-0.199287	3.568532	-0.996939
1	-0.856722	2.237293	-1.923146
1	1.749352	2.231829	-0.501889
1	1.203410	0.780936	-1.269107
1	1.895142	0.990768	1.691141
1	1.533952	-0.496513	0.847227
1	3.956199	1.309471	0.321359
1	5.931279	0.357432	-0.263218
1	5.747967	-1.081880	-1.266406
1	6.155950	-1.249426	0.426569
1	3.704523	-2.598306	-0.901820
1	4.066991	-2.744734	0.800762
1	2.485002	-2.170488	0.294381
1	-4.284149	-0.136813	1.673292
1	-2.904862	-1.181884	1.814890
1	-2.920666	1.646526	0.661227
1	-2.132316	1.127751	2.133190
1	-0.543941	-0.240083	0.905294

i_{26}

6	-1.437347	0.151318	1.302446
6	-1.882179	-1.148105	1.200712
6	-2.572762	-1.550711	0.067485
6	-2.764795	-0.611101	-1.059244
6	-1.719753	0.487873	-1.119566
6	-1.542876	1.155706	0.235466
6	-3.175247	-2.888923	-0.023608
6	-0.459409	2.257216	0.309560
6	0.933244	1.765440	-0.071960
6	1.479155	0.632048	0.787288
6	2.887692	0.271525	0.435249
6	3.339460	-0.863837	-0.098859
6	4.797220	-1.046229	-0.388107
6	-0.861328	3.459941	-0.531358
6	2.490878	-2.045341	-0.453273
1	-1.780542	-1.821620	2.038097
1	-3.212904	-3.408198	0.927519
1	-4.167059	-2.842121	-0.471359
1	-2.564776	-3.477736	-0.716029
1	-0.427239	2.579764	1.354569
1	-1.054847	0.482516	2.261300

i_{27}

6	2.711810	1.096688	-0.175137
6	3.688070	0.156607	-0.389865
6	3.476752	-1.160326	0.007371
6	2.169197	-1.554727	0.568532
6	1.028179	-0.660275	0.120444
6	1.359095	0.810439	0.333930
6	4.543402	-2.164997	-0.084313
6	0.305665	1.820793	-0.187736
6	-1.114265	1.435605	0.258551
6	-1.921912	0.616761	-0.747212
6	-3.317276	0.379850	-0.267272
6	-3.933928	-0.783855	-0.054847
6	-5.351918	-0.820980	0.425634
6	0.625718	3.235901	0.277741
6	-3.325416	-2.134028	-0.273973
1	4.651699	0.453519	-0.775502
1	5.528645	-1.735122	-0.227285
1	4.534213	-2.831250	0.776772
1	4.315451	-2.796280	-0.950575
1	0.337995	1.795098	-1.280736
1	2.968763	2.130597	-0.367580

1	-1.850651	3.829627	-0.265866
1	-0.156813	4.273542	-0.377907
1	-0.857184	3.231036	-1.595736
1	1.610010	2.617400	0.004495
1	0.958203	1.472526	-1.122806
1	1.448104	0.937012	1.837825
1	0.840950	-0.252227	0.699074
1	3.613612	1.049224	0.644884
1	5.378457	-0.170287	-0.114457
1	4.960346	-1.246600	-1.447389
1	5.194746	-1.902176	0.158021
1	2.604794	-2.288155	-1.510126
1	2.814706	-2.925136	0.103423
1	1.432746	-1.896240	-0.255203
1	-2.831303	-1.165844	-1.994492
1	-3.768264	-0.186640	-0.909572
1	-0.767974	0.059909	-1.434692
1	-2.003595	1.219294	-1.870373
1	-2.485245	1.670213	0.503406
1	1.612953	3.590708	-0.013266
1	-0.088657	3.933996	-0.150843
1	0.548374	3.314342	1.362134
1	-1.665976	2.356061	0.449501
1	-1.083552	0.920513	1.221501
1	-1.957453	1.175924	-1.686600
1	-1.425792	-0.323006	-0.977774
1	-3.885654	1.283594	-0.074005
1	-5.757149	0.176127	0.574038
1	-5.428817	-1.364729	1.367795
1	-5.988250	-1.343098	-0.289629
1	-3.365237	-2.721275	0.644110
1	-3.895638	-2.688302	-1.019902
1	-2.293025	-2.097939	-0.609301
1	1.977811	-2.606266	0.357453
1	2.299453	-1.503111	1.659875
1	0.834787	-0.831855	-0.939382
1	0.124571	-0.929350	0.658211
1	1.441448	1.000369	1.419899

i_{28}

6	-1.822036	-0.334972	-0.973151
6	-3.123348	-0.761458	-1.070185
6	-3.939726	-0.743258	0.056094
6	-3.426079	-0.212908	1.336747
6	-2.300375	0.791124	1.169006
6	-1.226893	0.275439	0.222161
6	-5.302164	-1.290618	0.015841
6	-0.131273	1.313197	-0.119625
6	1.152988	0.668365	-0.634788
6	1.918179	-0.170535	0.385350
6	3.144553	-0.787069	-0.207587
6	4.418189	-0.565305	0.122337
6	5.525088	-1.277038	-0.592254
6	-0.640807	2.372654	-1.088730
6	4.879571	0.368967	1.196261
1	-3.487427	-1.193530	-1.990059
1	-5.493260	-1.905894	-0.856403
1	-5.536168	-1.834978	0.929385
1	-5.991048	-0.438921	-0.006741
1	0.102871	1.801478	0.829299
1	-1.174308	-0.495409	-1.827239
1	-1.559117	2.847932	-0.749607
1	0.100105	3.158863	-1.209281
1	-0.823349	1.955111	-2.080224
1	1.811320	1.465369	-0.980162
1	0.949100	0.067164	-1.526480
1	2.165848	0.451612	1.243677
1	1.283053	-0.976182	0.769018
1	2.955376	-1.495092	-1.008036
1	5.150087	-1.949821	-1.358855
1	6.124874	-1.858867	0.108202
1	6.201056	-0.563853	-1.064814
1	5.440057	-0.177336	1.955256
1	5.562278	1.111060	0.781863
1	4.073340	0.898006	1.694065
1	-4.249218	0.183044	1.930304
1	-3.078328	-1.098955	1.888281
1	-2.709176	1.723708	0.780178

1	-1.862262	1.018225	2.137466
1	-0.710920	-0.572245	0.706036

i_{29}

6	-1.353220	-0.141431	1.231573
6	-1.960052	-1.361889	1.011167
6	-2.919890	-1.483483	0.022362
6	-3.244179	-0.329049	-0.846962
6	-2.117175	0.681580	-0.959369
6	-1.577947	1.059440	0.411893
6	-3.680163	-2.730679	-0.157317
6	-0.383382	2.041451	0.422084
6	0.840993	1.502684	-0.309759
6	1.396886	0.205674	0.255733
6	2.491531	-0.378708	-0.571396
6	3.711400	-0.752094	-0.173988
6	4.692696	-1.306311	-1.158854
6	-0.796467	3.398591	-0.127020
6	4.226515	-0.664876	1.227254
1	-1.756924	-2.191431	1.671361
1	-3.554694	-3.430467	0.661393
1	-4.737408	-2.523144	-0.318111
1	-3.327005	-3.205971	-1.077731
1	-0.114318	2.177966	1.473774
1	-0.758678	-0.025701	2.130417
1	-1.678653	3.789489	0.377746
1	0.006311	4.117952	0.013896
1	-1.004852	3.358236	-1.194806
1	1.620842	2.262971	-0.263652
1	0.617803	1.380927	-1.371606
1	1.716893	0.361140	1.284902
1	0.581327	-0.540674	0.300271
1	2.250264	-0.501547	-1.621894
1	4.279112	-1.362106	-2.161979
1	5.011449	-2.306328	-0.863443
1	5.591448	-0.690283	-1.193713
1	4.493315	-1.657441	1.591171
1	5.139769	-0.070600	1.255347
1	3.523301	-0.230068	1.930065
1	-3.572061	-0.684309	-1.823184
1	-4.135421	0.131263	-0.397417
1	-1.312036	0.252891	-1.556274
1	-2.469184	1.563857	-1.486007
1	-2.375866	1.577987	0.975079

i_{31}

6	1.476939	-0.670300	0.333824
6	2.669774	-1.315598	0.545826
6	3.831796	-0.838742	-0.052476
6	3.793018	0.392102	-0.868602
6	2.658275	1.328325	-0.496354
6	1.325436	0.599190	-0.396193
6	5.102776	-1.564318	0.070213
6	0.189547	1.500618	0.150187
6	-1.184073	1.192654	-0.449497
6	-1.770004	-0.197614	-0.204205
6	-3.136896	-0.324686	-0.798847
6	-4.291970	-0.539085	-0.166926
6	-5.574020	-0.631094	-0.935302
6	0.176246	1.559483	1.673178
6	-4.447853	-0.710132	1.311660
1	2.694231	-2.241009	1.101248
1	4.986560	-2.577340	0.439111
1	5.652827	-1.557868	-0.869585
1	5.724173	-1.008104	0.780806
1	0.448838	2.500174	-0.205198
1	0.576788	-1.148127	0.698848
1	1.151661	1.820092	2.082077
1	-0.524369	2.319476	2.010047
1	-0.135338	0.619460	2.126870
1	-1.140722	1.366613	-1.527056
1	-1.885194	1.930736	-0.059746
1	-1.133529	-0.956932	-0.670829
1	-1.796118	-0.416530	0.862428
1	-3.171778	-0.216490	-1.877686
1	-5.419122	-0.506716	-2.003561
1	-6.279811	0.130077	-0.601732
1	-6.054139	-1.596162	-0.770626
1	-5.150759	0.025450	1.703006
1	-4.869418	-1.690351	1.535969
1	-3.520026	-0.610933	1.866358
1	4.763884	0.885408	-0.841613
1	3.681485	0.039883	-1.904646
1	2.879481	1.798043	0.463038
1	2.587002	2.128078	-1.228901
1	1.019446	0.278255	-1.407547

i_{32}

6	-2.109912	0.236048	1.352890
6	-2.993258	-0.794940	1.153398
6	-3.555231	-0.980604	-0.106490
6	-3.136839	-0.123653	-1.235571
6	-1.743802	0.455675	-1.066631
6	-1.596049	1.120243	0.293813
6	-4.598100	-1.989365	-0.333238
6	-0.213719	1.702699	0.660925
6	0.886789	0.643559	0.833960
6	1.686298	0.233624	-0.403443
6	2.628118	-0.885185	-0.090128
6	3.962161	-0.868217	-0.111171
6	4.746563	-2.094795	0.239512
6	0.177871	2.832970	-0.276922

i_{33}

6	-2.545058	1.244222	-0.228072
6	-3.803634	0.696180	-0.205573
6	-3.953053	-0.686285	-0.194086
6	-2.758602	-1.552857	-0.140978
6	-1.555119	-0.889695	0.502856
6	-1.290852	0.497217	-0.066699
6	-5.278761	-1.310833	-0.288590
6	-0.227892	1.312170	0.719728
6	1.039942	0.487491	0.957382
6	1.793456	0.043085	-0.293099
6	2.955095	-0.835138	0.048983
6	4.250436	-0.612914	-0.180106
6	5.281282	-1.614674	0.239937
6	0.092197	2.641411	0.046840

6	4.802488	0.315337	-0.475101
1	-3.326064	-1.396937	1.985390
1	-5.040249	-2.365428	0.582703
1	-5.367358	-1.617086	-1.007917
1	-4.125345	-2.828105	-0.856405
1	-0.363365	2.151110	1.646910
1	-1.801281	0.449691	2.370837
1	-0.581118	3.613699	-0.294470
1	1.106939	3.289753	0.056536
1	0.335292	2.492422	-1.298021
1	0.461838	-0.254548	1.295696
1	1.601643	1.024738	1.563189
1	1.021483	-0.082072	-1.210175
1	2.226166	1.096282	-0.785589
1	2.150435	-1.817564	0.194699
1	4.102882	-2.931649	0.497409
1	5.409830	-1.901252	1.082981
1	5.381487	-2.397370	-0.593655
1	5.482732	0.558947	0.341213
1	5.426305	0.083066	-1.338558
1	4.228563	1.206119	-0.709065
1	-3.249857	-0.666688	-2.173139
1	-3.889424	0.678188	-1.277828
1	-1.014759	-0.347955	-1.158218
1	-1.542176	1.164959	-1.863897
1	-2.294874	1.977302	0.334550

6	4.810267	0.599397	-0.855518
1	-4.672528	1.329563	-0.301665
1	-6.057020	-0.623968	-0.602211
1	-5.256730	-2.187975	-0.933518
1	-5.530859	-1.683702	0.710351
1	-0.655451	1.520681	1.704127
1	-2.469459	2.309324	-0.407153
1	-0.728986	3.354083	0.090754
1	0.931601	3.114485	0.550812
1	0.370536	2.513965	-0.998381
1	0.808065	-0.384196	1.570487
1	1.708858	1.092790	1.569406
1	1.122982	-0.516267	-0.955492
1	2.119811	0.911276	-0.860655
1	2.692481	-1.760735	0.551338
1	4.836551	-2.480099	0.723919
1	5.996191	-1.166947	0.930769
1	5.854006	-1.962129	-0.620441
1	5.534254	1.091296	-0.205727
1	5.349518	0.312544	-1.758614
1	4.060155	1.332394	-1.134608
1	-3.007929	-2.500196	0.335465
1	-2.548622	-1.809490	-1.189544
1	-1.725120	-0.801922	1.577467
1	-0.685459	-1.526063	0.372882
1	-0.905074	0.408632	-1.097797

i_{34}

6	-1.383701	-0.276901	-0.735341
6	-2.552923	-0.911738	-1.072919
6	-3.600695	-0.965904	-0.159156
6	-3.475545	-0.294613	1.151121
6	-2.499349	0.867335	1.143280
6	-1.170902	0.493368	0.500983
6	-4.825009	-1.722896	-0.449985
6	-0.229882	1.711263	0.315836
6	1.253816	1.365557	0.460334
6	1.844026	0.352543	-0.521027
6	3.333889	0.284233	-0.404423
6	4.081552	-0.734961	0.021525
6	5.573478	-0.617307	0.072767
6	-0.539055	2.496065	-0.953624
6	3.554227	-2.060430	0.475133
1	-2.629518	-1.445228	-2.008342
1	-4.722091	-2.403459	-1.287854
1	-5.182541	-2.250191	0.433074
1	-5.603919	-0.991985	-0.694318
1	-0.466914	2.361681	1.160336
1	-0.544464	-0.377278	-1.411815
1	-1.593514	2.759139	-1.027107
1	0.022868	3.426735	-0.961592
1	-0.266197	1.954970	-1.858813
1	1.437730	1.005578	1.474292
1	1.812984	2.298018	0.373529
1	1.414149	-0.635177	-0.352666
1	1.594403	0.639722	-1.546694
1	3.848900	1.191744	-0.700014
1	5.917178	0.354144	-0.271486
1	6.042439	-1.383009	-0.545895

i_{35}

6	-1.944843	0.451060	1.318891
6	-2.569256	-0.770751	1.314867
6	-3.013055	-1.308299	0.110156
6	-2.737887	-0.603955	-1.159769
6	-1.517152	0.296335	-1.096454
6	-1.583732	1.215428	0.113458
6	-3.796412	-2.550002	0.074129
6	-0.375573	2.142055	0.372990
6	0.907920	1.395036	0.772008
6	1.843592	0.925418	-0.342219
6	3.049943	0.248564	0.226092
6	3.514657	-0.974365	-0.034305
6	4.759201	-1.476314	0.630991
6	-0.175894	3.125308	-0.768363
6	2.897421	-1.945652	-0.991929
1	-2.802757	-1.267205	2.244554
1	-4.192213	-2.837762	1.041818
1	-4.592472	-2.493508	-0.666478
1	-3.124486	-3.343377	-0.271935
1	-0.669593	2.730365	1.246512
1	-1.742363	0.914158	2.278868
1	-1.076752	3.710329	-0.947587
1	0.622749	3.822785	-0.526115
1	0.098174	2.634148	-1.699398
1	0.656656	0.536437	1.403425
1	1.482741	2.062151	1.415653
1	1.332983	0.273944	-1.047073
1	2.168351	1.794961	-0.917294
1	3.611221	0.850509	0.933246
1	5.176061	-0.745376	1.318351
1	5.521739	-1.718940	-0.109745

1	5.938867	-0.768572	1.088910
1	3.943015	-2.859321	-0.156905
1	3.894544	-2.274044	1.488529
1	2.470268	-2.126739	0.467251
1	-4.460712	-0.006269	1.515758
1	-3.136122	-1.081882	1.840141
1	-2.938188	1.701090	0.593672
1	-2.333498	1.213884	2.160003
1	-0.643227	-0.217234	1.160992

1	4.560678	-2.393353	1.186893
1	3.602371	-2.190370	-1.786820
1	2.665776	-2.883427	-0.485514
1	1.989575	-1.578604	-1.461545
1	-2.681745	-1.323089	-1.976134
1	-3.645723	-0.015334	-1.360411
1	-0.624938	-0.323812	-1.028780
1	-1.439493	0.873721	-2.012921
1	-2.450121	1.891442	-0.014830

i_{36}

6	-2.553149	1.100911	-0.409812
6	-3.686294	0.339540	-0.264968
6	-3.572925	-1.021541	-0.003457
6	-2.237775	-1.625805	0.177881
6	-1.187881	-0.645905	0.668082
6	-1.183710	0.645263	-0.138303
6	-4.756244	-1.890123	0.041903
6	-0.307800	1.768322	0.480722
6	1.102615	1.258538	0.789496
6	1.921261	0.789114	-0.409924
6	3.304744	0.393787	-0.001353
6	3.897396	-0.794806	-0.125011
6	5.303496	-0.999788	0.348073
6	-0.272943	3.020201	-0.388034
6	3.272155	-2.011612	-0.733290
1	-4.657237	0.770304	-0.457574
1	-5.644714	-1.429604	-0.375731
1	-4.560260	-2.849851	-0.433684
1	-4.949328	-2.115554	1.096618
1	-0.763832	2.029902	1.439203
1	-2.675955	2.109937	-0.782740
1	-1.212988	3.568264	-0.384174
1	0.480719	3.707740	-0.011783
1	-0.018263	2.795853	-1.422939
1	1.063687	0.460689	1.530945
1	1.633257	2.075363	1.280526
1	1.423789	-0.039638	-0.914940
1	1.988178	1.596682	-1.142379
1	3.882513	1.191373	0.453291
1	5.722269	-0.095915	0.781698
1	5.946749	-1.311340	-0.475410
1	5.349237	-1.790638	1.097528
1	3.851001	-2.341675	-1.596239
1	3.280356	-2.837795	-0.021508
1	2.248714	-1.858800	-1.063393
1	-2.311366	-2.502161	0.820719
1	-1.970798	-2.022646	-0.812363
1	-1.382706	-0.404711	1.714602
1	-0.212018	-1.119967	0.632178
1	-0.768677	0.457608	-1.144483

i_{38}

6	2.217421	-0.006404	-1.305945
6	3.234082	-0.856022	-0.949234
6	3.831979	-0.721404	0.300032
6	3.332637	0.288617	1.256217
6	1.875029	0.657297	1.046707
6	1.589186	0.979399	-0.412796
6	4.996569	-1.533517	0.676207
6	0.102237	1.197186	-0.774422
6	-0.694570	-0.103198	-0.664105
6	-2.148301	-0.013835	-1.156339
6	-3.145505	0.260698	-0.074910
6	-4.143130	-0.528741	0.330677
6	-5.064188	-0.087993	1.426500
6	-0.484963	2.345893	0.029338
6	-4.465275	-1.876684	-0.234124
1	3.634866	-1.558268	-1.664473
1	5.465485	-2.030318	-0.165912
1	5.725864	-0.945286	1.230908
1	4.641489	-2.300310	1.373701
1	0.093986	1.494962	-1.827469
1	1.876939	-0.025337	-2.335880
1	0.148036	3.231024	-0.020313
1	-1.457612	2.625624	-0.364980
1	-0.623543	2.081425	1.076235
1	-0.698380	-0.461650	0.365969
1	-0.177248	-0.870862	-1.249940
1	-2.216242	0.761876	-1.924422
1	-2.399205	-0.943149	-1.660243
1	-3.045908	1.215061	0.428481
1	-4.802441	0.894944	1.809321
1	-5.046298	-0.795212	2.256403
1	-6.094517	-0.050298	1.071621
1	-4.473146	-2.625026	0.558741
1	-5.466380	-1.873742	-0.666005
1	-3.773842	-2.209968	-1.001144
1	3.533871	-0.036359	2.276277
1	3.981538	1.163905	1.104014
1	1.248678	-0.175784	1.364173
1	1.620457	1.503985	1.677309
1	2.104305	1.921006	-0.675188

i_{39}

6	-2.338177	1.292904	-0.136856
6	-3.684302	1.037626	-0.054929
6	-4.147758	-0.265092	-0.204166
6	-3.182333	-1.370856	-0.363040
6	-1.821732	-1.078163	0.243538

i_{40}

6	2.023599	-1.099580	0.033695
6	3.343485	-1.071969	0.409359
6	4.107827	0.061895	0.151603
6	3.483369	1.255788	-0.456320
6	1.991073	1.354206	-0.197986

6	-1.282178	0.270985	-0.213442
6	-5.584719	-0.563821	-0.248901
6	0.010676	0.761742	0.500666
6	0.980428	-0.400601	0.712712
6	2.303083	-0.028620	1.401207
6	3.391238	0.482342	0.500467
6	4.212365	-0.264920	-0.240753
6	5.282754	0.360846	-1.079073
6	0.643567	1.904036	-0.279053
6	4.162519	-1.759580	-0.302154
1	-4.387351	1.852688	0.027613
1	-6.202175	0.314039	-0.403831
1	-5.805721	-1.326128	-0.994469
1	-5.852511	-1.007103	0.716608
1	-0.280598	1.127396	1.490553
1	-2.030571	2.331041	-0.161764
1	-0.058638	2.700656	-0.521672
1	1.441228	2.363733	0.294917
1	1.076342	1.544133	-1.211424
1	1.201199	-0.868996	-0.249450
1	0.491230	-1.154970	1.328345
1	2.105724	0.704214	2.185416
1	2.658511	-0.916436	1.922332
1	3.540713	1.554411	0.471365
1	5.278420	1.444860	-1.001808
1	5.164011	0.091568	-2.129289
1	6.267178	0.003397	-0.775479
1	3.975170	-2.093806	-1.323550
1	5.124792	-2.182586	-0.012477
1	3.400368	-2.193438	0.338329
1	-3.612182	-2.296034	0.019063
1	-3.098931	-1.523496	-1.449137
1	-1.906037	-1.080093	1.331712
1	-1.133981	-1.874040	-0.022812
1	-1.028784	0.212034	-1.286426

6	1.286073	0.045811	-0.520403
6	5.550214	0.084413	0.428045
6	-0.219900	0.012038	-0.171117
6	-0.903113	-1.226458	-0.762868
6	-2.365813	-1.018867	-1.164347
6	-3.307547	-0.805347	-0.023441
6	-4.174096	0.193358	0.160059
6	-5.083196	0.204840	1.350589
6	-0.451287	0.136594	1.329191
6	-4.353041	1.358965	-0.761734
1	3.813606	-1.955883	0.813231
1	5.971946	-0.900512	0.595249
1	6.094592	0.607998	-0.356227
1	5.694239	0.678805	1.337128
1	-0.645354	0.891691	-0.659280
1	1.495421	-2.043186	0.108920
1	-0.054980	1.062409	1.740541
1	-1.516307	0.120665	1.539375
1	0.001896	-0.696249	1.871109
1	-0.846622	-2.057082	-0.054221
1	-0.365992	-1.548685	-1.658659
1	-2.422367	-0.202456	-1.882317
1	-2.679403	-1.914565	-1.705593
1	-3.303047	-1.597531	0.719371
1	-4.927247	-0.659270	1.991046
1	-6.127575	0.209413	1.037336
1	-4.933694	1.106283	1.946244
1	-5.364101	1.363132	-1.169962
1	-4.237634	2.296000	-0.215925
1	-3.660743	1.367004	-1.597541
1	4.018545	2.151889	-0.144185
1	3.688550	1.163406	-1.533285
1	1.829669	1.605633	0.849558
1	1.565360	2.162155	-0.787650
1	1.345359	-0.125173	-1.610205

i_{41}

6	-1.957062	-0.993291	0.747218
6	-3.224618	-1.278122	0.306467
6	-4.058494	-0.240148	-0.099329
6	-3.558922	1.150535	-0.110556
6	-2.051646	1.255575	-0.258232
6	-1.331305	0.337802	0.718244
6	-5.455932	-0.491090	-0.474606
6	0.200194	0.242267	0.534044
6	0.560168	-0.396227	-0.812004
6	1.938401	-1.056813	-0.874315
6	3.094906	-0.108725	-0.884828
6	4.202457	-0.147181	-0.141170
6	5.288642	0.865090	-0.338745
6	0.848066	1.600438	0.752827
6	4.493602	-1.163707	0.918036
1	-3.607500	-2.286104	0.359403
1	-5.814426	-1.468892	-0.172455
1	-6.112471	0.292394	-0.099369
1	-5.511939	-0.426760	-1.566988
1	0.555047	-0.426666	1.323912
1	-1.381134	-1.798552	1.191137
1	0.553664	2.033374	1.708329

i_{42}

6	-2.147070	1.269878	-0.031507
6	-3.490975	1.291883	0.247082
6	-4.253929	0.146279	0.048990
6	-3.597100	-1.103964	-0.382103
6	-2.133814	-1.187369	0.012805
6	-1.369585	0.070766	-0.379505
6	-5.712475	0.161308	0.217958
6	0.084386	0.176784	0.168906
6	0.801800	-1.168937	0.054706
6	2.219837	-1.201324	0.635450
6	3.296960	-0.732311	-0.292164
6	4.353455	0.033024	-0.011664
6	5.372419	0.345522	-1.063654
6	0.841654	1.289964	-0.538542
6	4.645488	0.630668	1.329195
1	-3.972394	2.217446	0.524556
1	-6.130760	1.160940	0.258836
1	-6.204612	-0.430746	-0.552145
1	-5.932757	-0.342813	1.165478
1	0.013897	0.416734	1.234667
1	-1.619916	2.215384	-0.008810
1	0.354199	2.260928	-0.462875

1	1.929073	1.503633	0.746600
1	0.584892	2.303606	-0.035941
1	0.483808	0.348140	-1.607499
1	-0.179338	-1.167610	-1.054033
1	2.026883	-1.778844	-0.063579
1	1.968663	-1.640957	-1.797703
1	3.027606	0.676295	-1.631817
1	5.041009	1.582186	-1.116916
1	6.224246	0.377187	-0.613575
1	5.483242	1.412757	0.584226
1	5.379987	-1.740211	0.651751
1	4.718873	-0.672075	1.864986
1	3.683340	-1.865955	1.086413
1	-4.089586	1.727521	-0.867026
1	-3.886290	1.574259	0.850502
1	-1.772846	0.984692	-1.276722
1	-1.744137	2.286021	-0.107588
1	-1.491404	0.712142	1.745645

1	1.835139	1.401590	-0.117425
1	0.968607	1.060618	-1.596323
1	0.830687	-1.476339	-0.994756
1	0.220327	-1.923122	0.582229
1	2.238245	-0.655604	1.578533
1	2.430358	-2.241448	0.895236
1	3.220997	-1.119396	-1.303576
1	5.126160	-0.111876	-2.018277
1	6.358658	-0.009198	-0.762794
1	5.461206	1.422510	-1.212020
1	5.578409	0.227726	1.724717
1	4.788037	1.708571	1.243783
1	3.871367	0.447661	2.067851
1	-4.166653	-1.962960	-0.029380
1	-3.706068	-1.120760	-1.476426
1	-2.060895	-1.327008	1.092910
1	-1.691150	-2.062890	-0.450726
1	-1.277388	0.111025	-1.478983

i_{43}

6	-1.900613	0.968184	-0.613121
6	-3.247962	0.730235	-0.729132
6	-3.771800	-0.482991	-0.294697
6	-2.892431	-1.485031	0.343955
6	-1.666316	-0.880882	1.002927
6	-0.948812	0.084452	0.071049
6	-5.186595	-0.818153	-0.503686
6	0.216137	0.856284	0.733655
6	1.179509	1.468989	-0.279128
6	1.874537	0.488367	-1.226258
6	2.576984	-0.637784	-0.530405
6	3.862784	-0.686201	-0.174029
6	4.428366	-1.891392	0.510076
6	-0.282671	1.911898	1.711544
6	4.849724	0.411678	-0.416661
1	-3.884118	1.437744	-1.239163
1	-5.682771	-0.167592	-1.215334
1	-5.306934	-1.862247	-0.788495
1	-5.688622	-0.715190	0.464671
1	0.772992	0.103451	1.294643
1	-1.502051	1.854190	-1.093978
1	-0.948719	1.505045	2.469527
1	0.557192	2.361675	2.235162
1	-0.808076	2.720755	1.200718
1	1.947399	1.989610	0.293318
1	0.677100	2.246822	-0.862206
1	1.156927	0.073470	-1.939179
1	2.572538	1.057080	-1.837336
1	1.972931	-1.509567	-0.299337
1	3.678935	-2.663378	0.665020
1	4.851938	-1.625157	1.478848
1	5.240516	-2.319927	-0.077609
1	5.278255	0.748591	0.527618
1	5.680924	0.046301	-1.019967
1	4.424955	1.276000	-0.917071
1	-3.471115	-2.100387	1.031838
1	-2.603159	-2.165156	-0.470860
1	-1.972155	-0.353555	1.906230
1	-0.986836	-1.670384	1.313378

i_{44}

6	0.540967	-0.422777	-0.717122
6	1.284696	-1.544180	-0.420066
6	2.619327	-1.412677	-0.069820
6	3.225333	-0.068947	0.059804
6	2.217735	1.025362	0.359531
6	1.034708	0.955553	-0.594508
6	3.476074	-2.591101	0.131287
6	-0.086356	1.994725	-0.371870
6	-0.748355	1.896188	0.999642
6	-1.450360	0.579069	1.304828
6	-2.565544	0.271430	0.350239
6	-3.025313	-0.926887	-0.019454
6	-4.196623	-1.052610	-0.943693
6	0.431428	3.403346	-0.622814
6	-2.478276	-2.230705	0.474705
1	0.855719	-2.526141	-0.549589
1	3.029973	-3.511797	-0.227992
1	4.456765	-2.443075	-0.318920
1	3.655050	-2.689088	1.206865
1	-0.846666	1.779469	-1.126976
1	-0.455607	-0.558311	-1.126179
1	0.916538	3.491203	-1.593868
1	-0.392388	4.112495	-0.605103
1	1.140392	3.719116	0.140991
1	-1.484128	2.699706	1.058550
1	-0.019893	2.115056	1.781719
1	-0.725336	-0.241024	1.344131
1	-1.846104	0.640512	2.321645
1	-3.086006	1.141022	-0.037943
1	-4.560833	-0.083516	-1.273180
1	-5.018638	-1.573066	-0.451706
1	-3.940682	-1.640795	-1.825792
1	-3.231792	-2.746220	1.070937
1	-2.245287	-2.896813	-0.357708
1	-1.595666	-2.124089	1.099639
1	4.031746	-0.097175	0.791689
1	3.722413	0.114827	-0.903924
1	1.861408	0.913430	1.383808
1	2.702895	1.994837	0.295085

1	-0.503087	-0.494111	-0.756978

i_{45}

6	-2.143529	1.062903	0.824793
6	-3.292416	0.380748	1.138278
6	-3.788953	-0.574177	0.256494
6	-3.025353	-0.914029	-0.960668
6	-1.538849	-0.635817	-0.835001
6	-1.278691	0.777803	-0.333214
6	-5.081851	-1.229458	0.490701
6	0.201316	1.143196	-0.049380
6	1.139196	0.681830	-1.175432
6	1.756707	-0.713445	-1.034479
6	2.535821	-0.903912	0.233216
6	3.839881	-0.680994	0.413362
6	4.489445	-0.931322	1.738469
6	0.352686	2.646336	0.149395
6	4.767198	-0.185898	-0.651479
1	-3.860545	0.649180	2.016139
1	-5.693380	-0.723404	1.229535
1	-5.631866	-1.362352	-0.439513
1	-4.868121	-2.240188	0.856117
1	0.501968	0.638795	0.871641
1	-1.867479	1.890434	1.466336
1	-0.299675	3.063702	0.914901
1	1.370907	2.875885	0.451862
1	0.156961	3.181165	-0.780175
1	1.966354	1.389689	-1.214045
1	0.631137	0.774944	-2.139339
1	0.992400	-1.487622	-1.093762
1	2.396661	-0.875621	-1.900231
1	1.979541	-1.272906	1.088107
1	3.779514	-1.287912	2.480271
1	4.957451	-0.023382	2.119992
1	5.282395	-1.673622	1.643260
1	5.238763	0.746196	-0.338875
1	5.574343	-0.900843	-0.812710
1	4.279099	-0.009898	-1.604911
1	-3.229658	-1.944360	-1.249773
1	-3.471381	-0.301287	-1.758291
1	-1.099581	-1.349769	-0.137236
1	-1.060059	-0.792459	-1.796281
1	-1.621388	1.493051	-1.103347

i_{47}

6	0.540966	-0.423016	-0.716575
6	1.285034	-1.544211	-0.419596
6	2.619738	-1.412357	-0.069743
6	3.225443	-0.068495	0.059810
6	2.217666	1.025685	0.359372
6	1.034523	0.955432	-0.594481
6	3.476849	-2.590573	0.131057
6	-0.086637	1.994514	-0.371978
6	-0.748609	1.896101	0.999561
6	-1.450489	0.578961	1.304911
6	-2.565780	0.271249	0.350486
6	-3.025378	-0.927054	-0.019461
6	-4.196840	-1.052707	-0.943524

1	1.399487	1.154703	-1.620307

i_{46}

6	-1.383919	0.647939	-0.956681
6	-2.598080	0.021589	-1.111067
6	-3.024972	-0.893642	-0.156531
6	-2.203524	-1.145125	1.047827
6	-1.315606	0.026639	1.424896
6	-0.526601	0.524998	0.223812
6	-4.261984	-1.665237	-0.340153
6	0.337943	1.773607	0.492746
6	1.300994	2.093263	-0.651158
6	2.113510	0.916899	-1.194369
6	2.790883	0.132451	-0.116471
6	2.883413	-1.195688	0.006838
6	3.648211	-1.808440	1.139172
6	-0.493249	2.999365	0.845220
6	2.310021	-2.186909	-0.958544
1	-3.175799	0.168219	-2.011165
1	-4.656502	-1.612081	-1.348752
1	-4.125318	-2.702516	-0.037267
1	-5.009055	-1.252786	0.346253
1	0.941958	1.502313	1.360431
1	-1.016130	1.244173	-1.783926
1	-1.098699	2.857211	1.737173
1	0.158708	3.848535	1.036817
1	-1.157050	3.284114	0.027183
1	1.988374	2.853241	-0.278349
1	0.767809	2.576122	-1.474006
1	1.491428	0.269974	-1.813681
1	2.864134	1.323272	-1.875389
1	3.295317	0.732916	0.633893
1	4.052169	-1.056905	1.811753
1	4.478567	-2.405923	0.761782
1	3.018334	-2.484928	1.718319
1	3.114676	-2.727478	-1.457914
1	1.718871	-2.939729	-0.435096
1	1.695504	-1.740125	-1.735097
1	-2.840884	-1.464941	1.871153
1	-1.595149	-2.026384	0.796069
1	-1.937671	0.831353	1.815650
1	-0.634290	-0.265169	2.220073
1	0.198456	-0.262736	-0.059135

i_{48}

6	1.889324	0.804418	-1.121379
6	2.917869	-0.093592	-1.262185
6	3.385967	-0.785570	-0.149861
6	2.708364	-0.623817	1.152220
6	1.259282	-0.192093	1.026046
6	1.117042	1.019036	0.114387
6	4.570027	-1.650180	-0.232007
6	-0.334119	1.481966	-0.172683
6	-1.163766	1.575893	1.117583
6	-2.007022	0.343936	1.452641
6	-3.044761	0.072057	0.410695
6	-3.294694	-1.067114	-0.238656
6	-4.411440	-1.152727	-1.233300

6	0.430994	3.403171	-0.623066
6	-2.478025	-2.230942	0.474167
1	0.856271	-2.526294	-0.548907
1	3.031254	-3.511221	-0.228981
1	4.457750	-2.441941	-0.318459
1	3.655174	-2.689172	1.206698
1	-0.846927	1.779108	-1.127060
1	-0.455747	-0.558809	-1.125219
1	0.916263	3.490930	-1.594048
1	-0.392935	4.112197	-0.605621
1	1.139772	3.719181	0.140814
1	-1.484454	2.699563	1.058348
1	-0.020152	2.115168	1.781589
1	-0.725419	-0.241108	1.344118
1	-1.846076	0.640397	2.321788
1	-3.086447	1.140853	-0.037397
1	-4.560815	-0.083604	-1.273243
1	-5.018941	-1.572778	-0.451268
1	-3.941186	-1.641221	-1.825482
1	-3.231732	-2.747258	1.069462
1	-2.244087	-2.896351	-0.358542
1	-1.595948	-2.124329	1.099850
1	4.031780	-0.096545	0.791797
1	3.722672	0.115240	-0.903850
1	1.861479	0.913908	1.383716
1	2.702618	1.995244	0.294657
1	1.399101	1.154300	-1.620404

6	-0.347114	2.824338	-0.892916
6	-2.550626	-2.351120	-0.039274
1	3.426140	-0.192020	-2.209497
1	5.159291	-1.488713	-1.127879
1	5.189430	-1.556879	0.658602
1	4.212665	-2.685965	-0.237730
1	-0.804581	0.733340	-0.815789
1	1.649560	1.421916	-1.977551
1	0.216451	2.838275	-1.824465
1	-1.368729	3.091548	-1.149978
1	0.046845	3.614318	-0.253243
1	-1.847248	2.418503	1.012310
1	-0.520696	1.835236	1.961759
1	-1.381310	-0.530083	1.616078
1	-2.503707	0.537103	2.406130
1	-3.684837	0.918807	0.183147
1	-4.924608	-0.202336	-1.351702
1	-5.145593	-1.897438	-0.924407
1	-4.041640	-1.466484	-2.210223
1	-3.225858	-3.122189	0.332663
1	-2.159193	-2.718131	-0.989045
1	-1.727706	-2.272832	0.665011
1	2.819206	-1.533199	1.741881
1	3.296797	0.135702	1.688415
1	0.674379	-1.016149	0.615339
1	0.859871	0.023390	2.011862
1	1.619076	1.881700	0.590439

i_{49}

6	-1.078162	0.131360	-0.887415
6	-2.237087	-0.554172	-1.161605
6	-3.075232	-0.939156	-0.122197
6	-2.747447	-0.566213	1.269960
6	-1.886386	0.679078	1.372573
6	-0.684624	0.619243	0.440505
6	-4.270322	-1.756778	-0.370851
6	0.105321	1.953857	0.398674
6	1.623482	1.782922	0.333436
6	2.227274	1.020723	-0.854139
6	2.149929	-0.480202	-0.777344
6	2.931382	-1.277941	-0.043799
6	2.783292	-2.766683	-0.090040
6	-0.427893	2.916333	-0.656551
6	4.023554	-0.783900	0.851595
1	-2.455556	-0.867936	-2.171202
1	-4.290098	-2.200282	-1.360131
1	-4.388429	-2.522477	0.394649
1	-5.140754	-1.099813	-0.269038
1	-0.093723	2.410338	1.370704
1	-0.390900	0.296652	-1.706721
1	-1.511026	3.024303	-0.601298
1	-0.000669	3.905246	-0.510247
1	-0.173054	2.611273	-1.670721
1	1.958450	1.301697	1.253148
1	2.047355	2.787723	0.346649
1	1.779998	1.364051	-1.788519
1	3.273061	1.316368	-0.928322
1	1.428021	-0.975488	-1.419691
1	1.974547	-3.078045	-0.746869

i_{50}

6	-0.466075	-1.659831	-1.155158
6	-1.753971	-1.189227	-1.187722
6	-2.407787	-0.903709	0.005835
6	-1.706492	-1.073510	1.295635
6	-0.197071	-0.938977	1.194288
6	0.353283	-1.786911	0.057534
6	-3.816744	-0.488407	0.019022
6	1.866169	-1.664361	-0.246895
6	2.305506	-0.443951	-1.068349
6	2.168626	0.961866	-0.475768
6	0.873120	1.648020	-0.787870
6	0.212587	2.540891	-0.045675
6	-1.018238	3.215657	-0.569442
6	2.684401	-1.832720	1.023649
6	0.640781	2.993834	1.315260
1	-2.287602	-1.122592	-2.123687
1	-4.326316	-0.663413	-0.922064
1	-4.357952	-0.953472	0.841502
1	-3.831291	0.587627	0.223407
1	2.090923	-2.525183	-0.882558
1	-0.031761	-2.013452	-2.084118
1	2.416818	-2.745580	1.554121
1	3.741943	-1.895903	0.778077
1	2.562997	-0.999434	1.712443
1	1.806454	-0.459769	-2.041409
1	3.357729	-0.617801	-1.291968
1	2.369214	0.949125	0.594234
1	2.969738	1.566916	-0.906118
1	0.483660	1.450265	-1.782849
1	-1.299021	2.848158	-1.553593

1	2.597529	-3.173239	0.904749
1	3.702898	-3.231142	-0.446424
1	3.830204	-1.067457	1.886868
1	4.970519	-1.249032	0.577538
1	4.157401	0.292572	0.817049
1	-3.660962	-0.488232	1.858203
1	-2.216852	-1.438046	1.679528
1	-2.487181	1.555098	1.121824
1	-1.551977	0.810466	2.398397
1	0.018721	-0.155429	0.793069
1	-0.861129	4.291716	-0.648611
1	-1.862472	3.082949	0.109767
1	0.944755	4.040613	1.281758
1	-0.187055	2.939533	2.023422
1	1.474448	2.427557	1.718517
1	-2.130160	-0.398329	2.037944
1	-1.989000	-2.081714	1.634563
1	0.054198	0.104726	1.015730
1	0.253843	-1.234635	2.136944
1	0.208459	-2.849905	0.328490

i_{51}

6	-1.613745	1.047500	-0.866891
6	-2.846763	0.430531	-0.873012
6	-3.102207	-0.615042	-0.001122
6	-2.059057	-1.044402	0.956219
6	-1.082932	0.059068	1.320243
6	-0.548496	0.778873	0.089828
6	-4.370231	-1.358634	-0.045565
6	0.362723	1.987761	0.431709
6	1.704796	1.527579	1.007954
6	2.729493	0.969457	0.015228
6	2.307269	-0.240132	-0.771181
6	2.391296	-1.519663	-0.384888
6	1.998024	-2.633182	-1.303910
6	0.560581	2.956629	-0.724588
6	2.906294	-1.955600	0.949907
1	-3.579339	0.699548	-1.618878
1	-4.969710	-1.132169	-0.920270
1	-4.194584	-2.431589	0.025473
1	-4.943348	-1.092931	0.848204
1	-0.153989	2.527123	1.229686
1	-1.405203	1.743067	-1.669952
1	-0.343768	3.515056	-0.959824
1	1.318949	3.690323	-0.461811
1	0.899825	2.457094	-1.632303
1	1.538267	0.796681	1.799508
1	2.154476	2.391430	1.498345
1	3.013500	1.754224	-0.684720
1	3.635121	0.745916	0.577451
1	1.964488	-0.057656	-1.785223
1	1.625881	-2.266489	-2.257329
1	1.234190	-3.268120	-0.851402
1	2.851339	-3.281479	-1.504675
1	2.162074	-2.556756	1.474470
1	3.779247	-2.596694	0.823757
1	3.188562	-1.128631	1.593356
1	-2.521553	-1.487426	1.837156
1	-1.536864	-1.872881	0.456980
1	-1.584713	0.787161	1.960317
1	-0.267251	-0.361469	1.899810
1	0.112134	0.082206	-0.477711

i_{52}

6	-0.058958	0.060430	0.258459
6	-1.253185	0.962404	0.267695
6	-2.505994	0.552569	0.049010
6	-2.826168	-0.884369	-0.228510
6	-1.685987	-1.807916	0.155725
6	-0.366656	-1.289307	-0.397896
6	-3.662875	1.493157	0.098336
6	0.787571	-2.289006	-0.301214
6	2.027783	-1.683830	-0.950745
6	2.386707	-0.327866	-0.368259
6	1.220798	0.654040	-0.524352
6	1.439188	1.971114	0.019121
6	0.951552	3.141637	-0.704258
6	1.060139	-2.801070	1.107243
6	2.182761	2.160966	1.264567
1	-1.110124	2.002807	0.534342
1	-3.353076	2.522345	0.258187
1	-4.231731	1.445922	-0.830335
1	-4.348114	1.212737	0.897960
1	0.497017	-3.152035	-0.903391
1	0.293009	-0.097275	1.281923
1	0.194262	-3.311860	1.520754
1	1.878689	-3.517918	1.093164
1	1.335999	-2.011916	1.806028
1	1.861204	-1.576587	-2.024417
1	2.879346	-2.353469	-0.837852
1	2.651340	-0.431136	0.683495
1	3.262060	0.074310	-0.878690
1	0.909917	0.736314	-1.566346
1	0.143685	2.903542	-1.390066
1	1.804953	3.454477	-1.324892
1	0.711234	3.982217	-0.060013
1	3.245876	2.100240	0.996209
1	2.009119	3.126383	1.726257
1	2.018679	1.349637	1.970485
1	-3.734554	-1.154265	0.310702
1	-3.071521	-0.994525	-1.288445
1	-1.633644	-1.885242	1.242380
1	-1.865412	-2.813435	-0.224335
1	-0.528275	-1.088981	-1.462626

i_{53}

6	-0.467896	-1.660700	-1.154617
6	-1.755249	-1.188659	-1.187359
6	-2.408659	-0.901691	0.006088
6	-1.707493	-1.071859	1.295924

i_{54}

6	-1.362444	-0.720587	1.162827
6	-2.628583	-0.175555	1.202864
6	-3.127437	0.496761	0.099593
6	-2.309046	0.599965	-1.128418

6	-0.197958	-0.938649	1.194316
6	0.351540	-1.787681	0.058011
6	-3.817082	-0.484629	0.019104
6	1.864465	-1.666375	-0.246938
6	2.304433	-0.446250	-1.068564
6	2.169088	0.959682	-0.475846
6	0.874281	1.647247	-0.787991
6	0.215185	2.541273	-0.045903
6	-1.015017	3.217365	-0.569428
6	2.682859	-1.835353	1.023398
6	0.644745	2.994537	1.314480
1	-2.288930	-1.122030	-2.123298
1	-4.327046	-0.659908	-0.921720
1	-4.358774	-0.948044	0.842188
1	-3.830110	0.591655	0.222320
1	2.088311	-2.527423	-0.882633
1	-0.034078	-2.015508	-2.083360
1	2.415001	-2.748283	1.553621
1	3.740332	-1.898865	0.777588
1	2.561935	-1.002279	1.712513
1	1.804540	-0.461647	-2.041192
1	3.356288	-0.621160	-1.292993
1	2.369293	0.946666	0.594214
1	2.970958	1.563986	-0.905827
1	0.484155	1.449504	-1.782695
1	-1.296869	2.849582	-1.553170
1	-0.856498	4.293156	-0.649433
1	-1.859033	3.086301	0.110370
1	0.950928	4.040647	1.279786
1	-0.182909	2.942719	2.023025
1	1.477452	2.427000	1.717971
1	-2.130455	-0.396114	2.038117
1	-1.990895	-2.079739	1.635051
1	0.054036	0.104734	1.014951
1	0.252841	-1.234019	2.137105
1	0.206081	-2.850474	0.329457

6	-1.310857	-0.531814	-1.287406
6	-0.508706	-0.770860	-0.016062
6	-4.433371	1.171961	0.136217
6	0.430149	-2.003425	-0.092261
6	1.534306	-1.809733	-1.135446
6	2.619608	-0.783007	-0.807070
6	2.161128	0.642157	-0.829696
6	2.341850	1.593170	0.095956
6	1.882198	2.996957	-0.150650
6	1.012885	-2.395525	1.259143
6	3.026126	1.387744	1.410135
1	-3.192844	-0.192446	2.122993
1	-4.851083	1.245066	1.134132
1	-4.373763	2.158300	-0.322880
1	-5.122895	0.596127	-0.488966
1	-0.188999	-2.833327	-0.442629
1	-0.953551	-1.090750	2.094291
1	0.274568	-2.851489	1.916122
1	1.800199	-3.133010	1.121840
1	1.454288	-1.546519	1.781226
1	1.097912	-1.576466	-2.107402
1	2.015050	-2.779455	-1.263772
1	3.093825	-1.030729	0.139651
1	3.400895	-0.894030	-1.562044
1	1.685967	0.948990	-1.757787
1	1.395456	3.105578	-1.116807
1	2.726846	3.685786	-0.124189
1	1.193629	3.328781	0.628346
1	3.932743	1.991666	1.456369
1	2.392508	1.726281	2.231076
1	3.309404	0.357541	1.598204
1	-2.955196	0.698386	-1.999639
1	-1.789012	1.564681	-1.044955
1	-1.843210	-1.450120	-1.542718
1	-0.651093	-0.309181	-2.119743
1	0.181515	0.091081	0.150938

h_1

6	-1.149649	-0.468875	-0.729623
6	-2.338307	-1.372259	-0.728284
6	-3.478098	-1.093945	-0.102426
6	-3.619295	0.167508	0.698017
6	-2.277840	0.736984	1.145239
6	-1.208457	0.688450	0.157805
6	-4.678336	-1.975229	-0.172423
6	-0.231598	1.769141	0.079928
6	1.186588	1.409277	-0.343906
6	1.964774	0.644683	0.726341
6	3.384817	0.422637	0.316844
6	4.007208	-0.737355	0.099199
6	5.449233	-0.763301	-0.302165
6	-0.916732	2.726127	-0.949501
6	3.383523	-2.090776	0.236761
1	-2.241305	-2.276702	-1.310832
1	-4.512840	-2.829497	-0.821490
1	-4.946732	-2.342052	0.817913
1	-5.538519	-1.421847	-0.549403
1	-4.222611	-0.016912	1.584729
1	-4.165315	0.914478	0.117918

h_2

6	-1.515675	-0.703232	-0.729128
6	-2.849952	-1.354069	-0.567817
6	-3.858864	-0.814901	0.110072
6	-3.689007	0.501469	0.809887
6	-2.230082	0.825350	1.113129
6	-1.280932	0.505980	0.055063
6	-5.206355	-1.446366	0.198496
6	-0.137922	1.377178	-0.193797
6	1.147903	0.727191	-0.687707
6	1.866678	-0.077262	0.394369
6	3.076423	-0.768296	-0.144782
6	4.353354	-0.554870	0.180949
6	5.445158	-1.345471	-0.469683
6	-0.730499	2.365493	-1.250754
6	4.830854	0.442130	1.188700
1	-2.975928	-2.298562	-1.076585
1	-5.261942	-2.359433	-0.386026
1	-5.454713	-1.683905	1.232545
1	-5.974303	-0.762318	-0.162889
1	-4.238377	0.500089	1.749299
1	-4.130106	1.299747	0.209220

1	-2.351881	1.712633	1.619963
1	-1.851716	0.060649	1.911654
1	-0.222611	2.298903	1.034227
1	-0.881413	-0.125066	-1.734840
1	-0.233736	-0.997946	-0.421264
1	-1.939705	2.982693	-0.685871
1	-0.333091	3.642906	-0.948775
1	-0.898957	2.305422	-1.950814
1	1.703899	2.343752	-0.559706
1	1.184263	0.851949	-1.280827
1	1.945198	1.226261	1.651925
1	1.475271	-0.302613	0.954522
1	3.963043	1.331235	0.189910
1	5.865760	0.235973	-0.392205
1	5.576038	-1.274289	-1.256807
1	6.041442	-1.314200	0.428767
1	3.469966	-2.643223	-0.699065
1	3.913388	-2.674175	0.989754
1	2.335180	-2.066729	0.519770

1	-2.077386	1.826260	1.509977
1	-1.877351	0.130702	1.899567
1	0.052219	1.966305	0.705174
1	-1.270560	-0.496966	-1.776708
1	-0.696668	-1.377621	-0.431678
1	-1.660234	2.830018	-0.932062
1	0.007855	3.152332	-1.380259
1	-0.884277	1.874088	-2.207155
1	1.808096	1.520766	-1.034484
1	0.952517	0.104403	-1.561566
1	2.125328	0.585170	1.218370
1	1.186082	-0.826533	0.814430
1	2.872912	-1.526615	-0.893519
1	5.058947	-2.061810	-1.189469
1	6.022560	-1.890049	0.277575
1	6.143819	-0.685441	-0.984207
1	5.369870	-0.063503	1.989949
1	5.537842	1.132114	0.728187
1	4.037302	1.028815	1.640329

h_3

6	-1.704599	-0.981713	-0.416003
6	-3.124767	-1.433953	-0.331347
6	-4.119010	-0.661819	0.097816
6	-3.846517	0.731980	0.582979
6	-2.401448	0.927707	1.031314
6	-1.396557	0.316515	0.170289
6	-5.543603	-1.100805	0.101874
6	-0.120637	0.979608	-0.065222
6	1.082686	0.078802	-0.333137
6	2.405456	0.842327	-0.365840
6	3.551248	-0.074219	-0.656061
6	4.549352	-0.419098	0.159917
6	5.629305	-1.344124	-0.308507
6	-0.472380	1.888096	-1.288455
6	4.717310	0.062913	1.566440
1	-3.322373	-2.435186	-0.685065
1	-5.660098	-2.093194	-0.322376
1	-5.942340	-1.110682	1.115911
1	-6.158856	-0.409161	-0.473820
1	-4.496226	0.969501	1.423039
1	-4.096539	1.452357	-0.198766
1	-2.155405	1.957431	1.279694
1	-2.248149	0.344534	1.958617
1	0.078371	1.655114	0.769685
1	-1.304689	-1.020682	-1.434788
1	-1.022602	-1.667314	0.116862
1	-1.332505	2.527924	-1.109827
1	0.386087	2.530496	-1.459658
1	-0.644551	1.294838	-2.182355
1	0.952003	-0.455023	-1.275558
1	1.149331	-0.677569	0.450450
1	2.369726	1.610982	-1.140089
1	2.545962	1.361387	0.580776
1	3.556255	-0.492361	-1.656881
1	5.471794	-1.670830	-1.332681
1	5.686263	-2.226900	0.328721
1	6.602451	-0.855806	-0.253191
1	4.780915	-0.784224	2.249525

h_4

6	1.662678	-1.012629	0.153349
6	3.077033	-1.467031	0.299348
6	4.126618	-0.661254	0.165260
6	3.936233	0.781692	-0.201594
6	2.608737	1.038221	-0.907803
6	1.459735	0.343143	-0.341623
6	5.529768	-1.110932	0.390924
6	0.151506	0.985155	-0.304892
6	-1.066073	0.069285	-0.392424
6	-2.387334	0.832602	-0.465970
6	-3.524806	-0.087503	-0.776457
6	-4.555307	-0.408417	0.008403
6	-5.618598	-1.343689	-0.477492
6	0.223419	1.756659	1.052516
6	-4.777381	0.110118	1.394316
1	3.213504	-2.503942	0.569178
1	5.573592	-2.146246	0.714260
1	6.119085	-1.008970	-0.519917
1	6.011397	-0.495152	1.150616
1	4.738350	1.109951	-0.859643
1	4.010942	1.404718	0.692204
1	2.402930	2.090862	-1.087038
1	2.653753	0.561633	-1.905255
1	0.118396	1.746750	-1.087230
1	1.073911	-1.150589	1.066763
1	1.102788	-1.634030	-0.567107
1	1.103473	2.388742	1.138297
1	-0.649476	2.401278	1.093242
1	0.189710	1.071319	1.895017
1	-1.098272	-0.611080	0.458767
1	-0.975237	-0.549927	-1.287152
1	-2.566201	1.365408	0.464725
1	-2.316117	1.590002	-1.251465
1	-3.492392	-0.531708	-1.765528
1	-5.422564	-1.696636	-1.486180
1	-6.592087	-0.852996	-0.471988
1	-5.701760	-2.209857	0.179345
1	-5.716929	0.660700	1.443327

1	5.654250	0.611056	1.666533
1	3.915902	0.710015	1.908899

1	-4.868541	-0.718860	2.096284
1	-3.989628	0.766110	1.751312

h_5

6	-1.430798	-0.805917	-0.162040
6	-2.764781	-1.470485	-0.258127
6	-3.916641	-0.808418	-0.202070
6	-3.912833	0.676310	0.023052
6	-2.678477	1.135702	0.784101
6	-1.411691	0.550361	0.373173
6	-5.244300	-1.461099	-0.378769
6	-0.180091	1.325343	0.541560
6	1.122034	0.572720	0.842215
6	1.877714	-0.068378	-0.321889
6	3.076616	-0.812132	0.176468
6	4.362307	-0.544303	-0.060513
6	5.438248	-1.405180	0.524643
6	-0.103872	2.196081	-0.747464
6	4.867451	0.584171	-0.903134
1	-2.750301	-2.536552	-0.430874
1	-5.146684	-2.521283	-0.590831
1	-5.855380	-1.343109	0.515671
1	-5.791468	-0.997453	-1.199774
1	-4.793564	0.975267	0.587459
1	-3.977468	1.200064	-0.933112
1	-2.611413	2.213215	0.919037
1	-2.727273	0.713787	1.809524
1	-0.373708	2.032246	1.352353
1	-0.940061	-0.739897	-1.145136
1	-0.701338	-1.389689	0.412385
1	-0.983148	2.820989	-0.876765
1	0.758740	2.848137	-0.636606
1	0.036468	1.591120	-1.638131
1	0.929652	-0.174098	1.615206
1	1.789434	1.297146	1.307892
1	1.238959	-0.766235	-0.867783
1	2.170381	0.696533	-1.036618
1	2.854055	-1.667179	0.806086
1	5.033350	-2.215045	1.125228
1	6.105833	-0.814346	1.152005
1	6.053224	-1.839817	-0.263538
1	5.547590	1.209340	-0.324725
1	5.443409	0.196287	-1.743399
1	4.085394	1.221917	-1.302783

h_6

6	1.096363	-0.629836	0.117565
6	2.276661	-1.544158	0.090297
6	3.533869	-1.115841	0.025995
6	3.818351	0.354774	-0.078953
6	2.668726	1.116846	-0.720524
6	1.329260	0.752217	-0.286029
6	4.711200	-2.027588	0.078467
6	0.272078	1.765245	-0.305100
6	-1.163502	1.315840	-0.604148
6	-1.990368	0.695292	0.521776
6	-3.390770	0.443708	0.058206
6	-4.037522	-0.720855	-0.014031
6	-5.452694	-0.775698	-0.499901
6	0.423707	2.489514	1.065677
6	-3.470333	-2.050301	0.374147
1	2.059317	-2.598625	0.176766
1	4.413205	-3.062880	0.212071
1	5.298821	-1.953144	-0.836168
1	5.370631	-1.752904	0.901907
1	4.714237	0.524330	-0.672536
1	4.032295	0.766022	0.909863
1	2.812439	2.194639	-0.757484
1	2.588361	0.795116	-1.779728
1	0.570583	2.504495	-1.052562
1	0.645678	-0.576378	1.119598
1	0.257336	-0.997885	-0.486758
1	1.411066	2.923849	1.195180
1	-0.303388	3.297570	1.077263
1	0.213953	1.829415	1.901714
1	-1.157600	0.645066	-1.464922
1	-1.684719	2.210797	-0.944881
1	-1.542783	-0.225314	0.888310
1	-2.020996	1.382226	1.369675
1	-3.930722	1.333498	-0.247170
1	-5.828435	0.206223	-0.773382
1	-6.107071	-1.188647	0.268046
1	-5.538383	-1.429052	-1.368464
1	-4.067142	-2.495267	1.170347
1	-3.514907	-2.741079	-0.468112
1	-2.441933	-2.007024	0.720767

h_7

6	-0.688765	0.279095	-0.716659
6	-1.791269	1.282165	-0.626881
6	-2.949831	1.055520	-0.014885
6	-3.237367	-0.285706	0.592637
6	-2.392093	-1.400680	-0.015323
6	-0.988360	-1.063807	-0.241898
6	-4.006997	2.095845	0.135729
6	0.042221	-2.057046	0.028328
6	1.310486	-2.157918	-0.831917
6	2.210745	-0.955760	-1.121668
6	2.722813	-0.221041	0.075756
6	2.900044	1.097404	0.213585

h_8

6	-1.581707	-0.977260	-0.055707
6	-3.023773	-1.299237	-0.273334
6	-3.980764	-0.377032	-0.316767
6	-3.637812	1.066044	-0.082286
6	-2.398762	1.225182	0.785750
6	-1.280261	0.345811	0.481335
6	-5.406125	-0.691905	-0.615574
6	0.083661	0.804017	0.749405
6	1.130094	-0.236767	1.162683
6	1.826701	-1.086154	0.089409
6	2.883198	-0.378974	-0.712779
6	4.149607	-0.177992	-0.340289

6	3.495429	1.661356	1.466276
6	0.306326	-1.757266	1.544462
6	2.589631	2.119026	-0.836357
1	-1.582057	2.249604	-1.059561
1	-3.694494	3.049770	-0.277695
1	-4.925621	1.788891	-0.363541
1	-4.252264	2.243660	1.187584
1	-4.285698	-0.543047	0.454012
1	-3.081705	-0.244566	1.672830
1	-2.506865	-2.355661	0.491433
1	-2.732198	-1.560435	-1.054764
1	-0.432289	-3.039552	0.015782
1	0.246189	0.616643	-0.252727
1	-0.379573	0.113445	-1.762964
1	-0.589516	-1.876795	2.148246
1	1.030744	-2.498491	1.873736
1	0.727067	-0.770439	1.702696
1	1.011890	-2.591996	-1.786786
1	1.909762	-2.926406	-0.342310
1	3.062301	-1.367228	-1.669737
1	1.736484	-0.278002	-1.827323
1	3.052111	-0.850448	0.895687
1	3.717560	0.889552	2.198239
1	2.825674	2.389664	1.924562
1	4.422107	2.190426	1.243346
1	1.966363	2.915949	-0.429492
1	3.512250	2.594911	-1.169468
1	2.103686	1.713434	-1.718897

6	5.118888	0.512709	-1.247207
6	0.444004	1.611126	-0.534539
6	4.721716	-0.617018	0.970625
1	-3.253976	-2.339616	-0.450073
1	-5.550076	-1.747439	-0.824486
1	-6.047148	-0.415561	0.221182
1	-5.749868	-0.122786	-1.479485
1	-4.465412	1.576005	0.406286
1	-3.492566	1.576515	-1.036738
1	-2.086026	2.256560	0.933964
1	-2.636096	0.840760	1.799322
1	0.006105	1.553280	1.541203
1	-1.005774	-1.055261	-0.989585
1	-1.072378	-1.708088	0.584410
1	-0.243750	2.434481	-0.706772
1	1.440122	2.015925	-0.379335
1	0.472349	0.978765	-1.416440
1	0.674076	-0.892511	1.907416
1	1.903112	0.313794	1.696472
1	2.273768	-1.931056	0.611641
1	1.103924	-1.532499	-0.592971
1	2.597141	-0.031390	-1.697738
1	4.657905	0.816281	-2.183325
1	5.958320	-0.142799	-1.479641
1	5.538556	1.397323	-0.767579
1	5.577862	-1.271385	0.806672
1	5.094550	0.241434	1.530200
1	4.013283	-1.146037	1.601040

h_9

6	-2.039795	1.238206	-0.272999
6	-3.501519	0.939917	-0.326196
6	-4.017037	-0.260616	-0.077219
6	-3.120021	-1.424213	0.230145
6	-1.708543	-1.235577	-0.313526
6	-1.143174	0.096202	-0.137331
6	-5.483549	-0.526734	-0.057723
6	0.276767	0.262315	0.135952
6	0.930007	1.555664	-0.337042
6	2.441527	1.571113	-0.106018
6	3.134313	0.421458	-0.765484
6	3.993530	-0.446780	-0.224314
6	4.626617	-1.515352	-1.060907
6	0.317594	0.112722	1.691189
6	4.445294	-0.434371	1.202596
1	-4.146868	1.779032	-0.540985
1	-6.059313	0.378611	-0.222743
1	-5.754699	-1.251982	-0.824492
1	-5.782592	-0.951963	0.900412
1	-3.529930	-2.336454	-0.198859
1	-3.086349	-1.592048	1.308741
1	-1.013567	-2.017761	-0.017411
1	-1.758028	-1.276039	-1.418335
1	0.819247	-0.599644	-0.260505
1	-1.785728	1.974785	0.497893
1	-1.686936	1.743534	-1.187868
1	-0.176119	-0.787287	2.047758
1	1.366306	0.042213	1.964235
1	-0.116535	0.979679	2.182049

h_{10}

6	1.827459	-0.977026	-0.742820
6	3.263539	-0.678318	-1.019522
6	3.950102	0.274506	-0.395147
6	3.277615	1.158401	0.614578
6	1.767934	1.233365	0.414169
6	1.116037	-0.034619	0.112111
6	5.404012	0.510348	-0.624120
6	-0.213814	-0.320484	0.633406
6	-1.091569	-1.261280	-0.183480
6	-2.504919	-1.408128	0.386461
6	-3.218832	-0.104598	0.588727
6	-3.998774	0.525013	-0.294474
6	-4.676632	1.812294	0.055868
6	0.122234	-0.896591	2.046691
6	-4.292185	0.019432	-1.671672
1	3.748276	-1.318808	-1.741670
1	5.824572	-0.211271	-1.317555
1	5.575358	1.510390	-1.021565
1	5.954889	0.443662	0.314173
1	3.678554	2.168253	0.554593
1	3.503928	0.807784	1.623789
1	1.247139	1.786221	1.192315
1	1.573130	1.778727	-0.528691
1	-0.731140	0.626924	0.801776
1	1.671647	-1.989917	-0.354441
1	1.223806	-0.998086	-1.666238
1	0.755323	-0.239153	2.636286
1	-0.822203	-1.003511	2.572335
1	0.589562	-1.875042	1.973486

1	0.480573	2.416264	0.158924
1	0.742308	1.669729	-1.406702
1	2.817310	2.508839	-0.519295
1	2.658624	1.613105	0.958806
1	2.928822	0.317138	-1.826948
1	4.268194	-1.498376	-2.086608
1	4.433300	-2.503907	-0.643420
1	5.709763	-1.393351	-1.079326
1	4.263608	-1.402153	1.670851
1	5.521897	-0.269758	1.249103
1	3.974648	0.334076	1.807984

1	-0.628384	-2.246283	-0.256684
1	-1.173536	-0.864396	-1.196717
1	-3.060719	-2.053709	-0.290274
1	-2.465734	-1.949919	1.331618
1	-3.109238	0.355759	1.564952
1	-4.432825	2.142920	1.061969
1	-5.759196	1.703117	-0.011549
1	-4.400388	2.601724	-0.643604
1	-5.365257	-0.123844	-1.798771
1	-3.990350	0.754338	-2.418490
1	-3.800458	-0.919784	-1.905711

h_{13}

6	1.717166	-0.905176	-0.810460
6	3.122221	-0.482284	-1.088184
6	3.795804	0.383803	-0.336776
6	3.141858	1.037700	0.844778
6	1.619956	1.040472	0.751234
6	1.017206	-0.187617	0.250275
6	5.221970	0.737933	-0.587834
6	-0.246894	-0.659928	0.800907
6	-1.186072	-1.426824	-0.119998
6	-1.859533	-0.555667	-1.183926
6	-2.604331	0.621130	-0.624332
6	-3.882561	0.644760	-0.237833
6	-4.507287	1.900479	0.283234
6	0.257962	-1.552137	1.981990
6	-4.802350	-0.533410	-0.297839
1	3.596985	-0.956710	-1.934530
1	5.635356	0.176813	-1.420088
1	5.323841	1.800900	-0.804826
1	5.828225	0.535228	0.295165
1	3.478171	2.068649	0.935944
1	3.457127	0.540304	1.764483
1	1.125710	1.400111	1.650528
1	1.324452	1.737326	-0.056449
1	-0.771827	0.182793	1.252950
1	1.627602	-1.981435	-0.628248
1	1.069692	-0.769005	-1.691975
1	0.937588	-1.034405	2.654071
1	-0.626247	-1.828528	2.550494
1	0.733989	-2.458753	1.619044
1	-1.958920	-1.857816	0.515048
1	-0.669637	-2.268868	-0.583051
1	-1.118828	-0.195215	-1.901636
1	-2.524338	-1.195828	-1.760592
1	-2.049688	1.550418	-0.549166
1	-3.802898	2.727584	0.311832
1	-4.903430	1.749978	1.287624
1	-5.350084	2.194811	-0.342355
1	-5.191522	-0.760519	0.694882
1	-5.666286	-0.304943	-0.921856
1	-4.335711	-1.432295	-0.688697

h_{14}

6	-1.487144	0.661824	-1.076063
6	-2.746669	-0.134707	-1.167855
6	-3.303360	-0.758883	-0.134009
6	-2.651585	-0.727075	1.217015
6	-1.158792	-0.429252	1.147539
6	-0.754403	0.583224	0.183950
6	-4.598498	-1.490766	-0.230078
6	0.360887	1.474019	0.485887
6	1.216875	1.952927	-0.678931
6	2.094699	0.855524	-1.283330
6	3.025396	0.248808	-0.282115
6	3.214738	-1.043244	-0.002317
6	4.237781	-1.463477	1.007405
6	-0.367968	2.659731	1.194593
6	2.499781	-2.181328	-0.662491
1	-3.222857	-0.151452	-2.137301
1	-5.033466	-1.411051	-1.221498
1	-4.463923	-2.546739	0.002767
1	-5.315626	-1.096463	0.490041
1	-2.785589	-1.682728	1.720160
1	-3.148019	0.012500	1.848880
1	-0.693446	-0.276947	2.118637
1	-0.644153	-1.305839	0.706616
1	0.990238	0.994708	1.237198
1	-1.637469	1.719550	-1.321563
1	-0.753386	0.355827	-1.837826
1	-0.992055	2.344977	2.027136
1	0.411861	3.305734	1.589391
1	-0.969040	3.232808	0.493945
1	1.857594	2.745270	-0.292191
1	0.600962	2.419536	-1.447998
1	1.482497	0.091242	-1.761834
1	2.674406	1.310568	-2.088516
1	3.643705	0.965593	0.249437
1	4.733895	-0.612065	1.464831
1	5.000033	-2.088209	0.541358
1	3.785343	-2.063760	1.797409
1	3.209766	-2.797161	-1.214851
1	2.048930	-2.836260	0.084282
1	1.729375	-1.873589	-1.363698

h_{15}

6	0.634920	-0.373311	-0.691639
6	1.711057	-1.397582	-0.570597
6	2.905769	-1.142241	-0.043046

h_{16}

6	-0.775796	0.220942	-0.871748
6	-1.929167	1.161518	-0.781430
6	-2.996027	0.940471	-0.018086

6	3.252291	0.252151	0.392245
6	2.424509	1.306179	-0.340419
6	0.997013	0.998486	-0.412018
6	3.943631	-2.189895	0.172808
6	0.012269	2.075408	-0.263159
6	-1.411480	1.846692	-0.795317
6	-2.485955	1.315416	0.161941
6	-2.314071	-0.065915	0.722599
6	-2.850361	-1.197942	0.251275
6	-2.665457	-2.495553	0.973742
6	0.047294	2.487133	1.235321
6	-3.679562	-1.285623	-0.990224
1	1.452330	-2.398068	-0.884689
1	3.586518	-3.174651	-0.112256
1	4.842240	-1.969327	-0.402722
1	4.239915	-2.224630	1.221393
1	4.302852	0.456824	0.195704
1	3.126118	0.350602	1.472723
1	2.619094	2.321590	-0.006465
1	2.707526	1.263957	-1.406781
1	0.456147	2.927673	-0.790401
1	-0.289069	-0.615846	-0.139868
1	0.229522	-0.315760	-1.718233
1	1.039376	2.790086	1.554804
1	-0.616343	3.338997	1.353533
1	-0.303694	1.688776	1.881603
1	-1.375407	1.220299	-1.687083
1	-1.754521	2.821049	-1.142627
1	-2.595116	2.013357	0.991821
1	-3.427211	1.375745	-0.380541
1	-1.764181	-0.140736	1.655859
1	-2.053707	-2.386276	1.865449
1	-2.207355	-3.244296	0.326512
1	-3.631203	-2.900823	1.275998
1	-3.260861	-2.022491	-1.676353
1	-4.683905	-1.632513	-0.746566
1	-3.770268	-0.343950	-1.521888

6	-3.112622	-0.337889	0.760576
6	-2.291441	-1.467075	0.146768
6	-0.945786	-1.087358	-0.275974
6	-4.104924	1.923880	0.139007
6	0.156581	-2.033633	-0.099047
6	1.371551	-1.969894	-1.043943
6	2.588473	-1.129359	-0.645984
6	2.443122	0.353799	-0.766944
6	2.721081	1.293798	0.144275
6	2.597094	2.746776	-0.196683
6	0.532702	-1.855777	1.402163
6	3.203162	1.025698	1.534965
1	-1.836014	2.081502	-1.339690
1	-3.910233	2.840962	-0.408385
1	-5.046569	1.504963	-0.214941
1	-4.246400	2.176938	1.189956
1	-4.151313	-0.659840	0.801032
1	-2.811024	-0.172211	1.797202
1	-2.298948	-2.381503	0.734662
1	-2.744276	-1.722032	-0.828989
1	-0.288535	-3.029695	-0.164260
1	0.175586	0.636114	-0.494109
1	-0.490254	0.008942	-1.915086
1	-0.309356	-2.041798	2.062489
1	1.301308	-2.590387	1.627802
1	0.931180	-0.865154	1.599143
1	1.040557	-1.689918	-2.045478
1	1.713434	-2.999958	-1.136377
1	2.926965	-1.415010	0.346472
1	3.389644	-1.438605	-1.320832
1	2.158826	0.700238	-1.756642
1	2.244308	2.902356	-1.213024
1	3.562334	3.243618	-0.098395
1	1.918008	3.254293	0.489359
1	4.189509	1.468080	1.675000
1	2.549789	1.501418	2.267271
1	3.283470	-0.028704	1.778316

h_{17}

6	-1.874641	-1.237759	-0.126588
6	-3.314294	-1.139410	-0.514830
6	-4.038306	-0.031012	-0.387822
6	-3.445615	1.205050	0.222230
6	-2.227783	0.907647	1.095092
6	-1.298952	-0.065009	0.523563
6	-5.450798	0.071094	-0.854556
6	0.133720	0.138524	0.605755
6	1.036594	-1.092698	0.540239
6	2.396625	-0.872433	1.209572
6	3.214678	0.262360	0.667741
6	4.170384	0.191755	-0.263351
6	4.941966	1.408938	-0.667142
6	0.310157	1.067799	-0.651712
6	4.574773	-1.065372	-0.965896
1	-3.744270	-2.026896	-0.955481
1	-5.781094	-0.841861	-1.340182
1	-6.119668	0.278079	-0.019652
1	-5.562192	0.893288	-1.561523
1	-4.186969	1.708694	0.839709
1	-3.180808	1.916042	-0.563194

h_{18}

6	-2.035059	1.286287	0.092960
6	-3.489969	0.995205	0.269456
6	-4.022297	-0.216072	0.134045
6	-3.172734	-1.385995	-0.267370
6	-1.881448	-0.966749	-0.966881
6	-1.203410	0.175481	-0.358809
6	-5.463247	-0.500354	0.391191
6	0.239475	0.194293	-0.220035
6	0.934486	1.554325	-0.181464
6	2.409864	1.479510	-0.579922
6	3.274316	0.711014	0.368176
6	4.069312	-0.329252	0.101549
6	4.920280	-0.932990	1.175935
6	0.356619	-0.582002	1.142288
6	4.228092	-0.970451	-1.241614
1	-4.105254	1.833921	0.560514
1	-5.991101	0.381416	0.740845
1	-5.953823	-0.859131	-0.513213
1	-5.571107	-1.282993	1.142226
1	-3.726763	-2.034947	-0.942976
1	-2.944070	-1.995709	0.609342

1	-1.718455	1.801550	1.445824
1	-2.577712	0.372570	1.994421
1	0.362957	0.758780	1.474220
1	-1.230249	-1.566978	-0.945398
1	-1.716982	-2.028681	0.629327
1	-0.200592	2.020219	-0.547350
1	1.381407	1.243146	-0.720420
1	-0.012199	0.576769	-1.566447
1	1.185008	-1.386316	-0.499275
1	0.551757	-1.931666	1.041238
1	2.231306	-0.707407	2.275836
1	2.945954	-1.808819	1.139440
1	3.036579	1.233174	1.118698
1	4.616317	2.297214	-0.132211
1	4.846179	1.594779	-1.737311
1	6.005026	1.267996	-0.471253
1	4.470122	-0.946615	-2.044655
1	5.627824	-1.277731	-0.780925
1	3.999712	-1.936176	-0.667200

1	-1.200895	-1.793805	-1.152462
1	-2.148880	-0.554503	-1.955293
1	0.687890	-0.456877	-0.972481
1	-1.582865	1.759060	0.968403
1	-1.870706	2.044651	-0.693913
1	-0.073063	-1.578944	1.102750
1	1.425973	-0.672414	1.318072
1	-0.088992	-0.023795	1.961119
1	0.842249	1.994727	0.812298
1	0.437627	2.235710	-0.872976
1	2.484083	1.086100	-1.592267
1	2.774920	2.507037	-0.632570
1	3.285276	1.095116	1.383912
1	4.782861	-0.439180	2.134156
1	5.975312	-0.865177	0.910034
1	4.700018	-1.993978	1.298947
1	5.254086	-0.853819	-1.591160
1	4.047719	-2.043689	-1.174893
1	3.573820	-0.562271	-2.005460

h_{19}

6	-2.160641	-1.320609	-0.296931
6	-3.580259	-0.868061	-0.220182
6	-3.926452	0.416170	-0.195108
6	-2.857995	1.469887	-0.150104
6	-1.589492	0.959693	0.535048
6	-1.134611	-0.331179	0.016842
6	-5.340628	0.884013	-0.234717
6	0.283558	-0.634083	-0.094534
6	0.827339	-0.689186	1.378174
6	2.357022	-0.669850	1.403327
6	2.919407	0.556725	0.771270
6	3.831863	0.639410	-0.204478
6	4.305097	1.972860	-0.691893
6	0.655049	-1.868012	-0.892588
6	4.492623	-0.528769	-0.864465
1	-4.332268	-1.642322	-0.259428
1	-6.036204	0.055015	-0.321341
1	-5.587439	1.449337	0.663557
1	-5.498100	1.551481	-1.082169
1	-3.206530	2.339322	0.403311
1	-2.633597	1.825383	-1.158139
1	-0.789739	1.695080	0.565463
1	-1.864332	0.729118	1.577252
1	0.776377	0.256250	-0.510093
1	-1.916864	-1.743074	-1.280616
1	-1.952506	-2.175682	0.365571
1	0.250749	-1.832288	-1.901989
1	1.733817	-1.926531	-0.988766
1	0.316485	-2.785576	-0.414817
1	0.447857	-1.589283	1.861684
1	0.461408	0.168216	1.939540
1	2.634617	-0.700270	2.459818
1	2.755624	-1.579122	0.963290
1	2.559256	1.491484	1.191038
1	3.800016	2.795518	-0.193235
1	4.149707	2.071170	-1.766489
1	5.376602	2.080785	-0.523001
1	4.347834	-0.489425	-1.944273

h_{20}

6	2.162798	1.383588	-0.288717
6	3.554631	0.855102	-0.171217
6	3.842783	-0.431666	0.002539
6	2.749021	-1.459015	0.034522
6	1.485092	-0.988847	-0.678025
6	1.096863	0.390795	-0.399093
6	5.233356	-0.932371	0.198166
6	-0.300633	0.748811	-0.264771
6	-0.574619	0.382421	1.243692
6	-2.082440	0.314161	1.516168
6	-2.768768	-0.743698	0.723139
6	-3.826476	-0.611606	-0.085186
6	-4.411858	-1.805640	-0.771953
6	-0.680557	2.180361	-0.589537
6	-4.546984	0.670717	-0.356609
1	4.342548	1.593803	-0.190109
1	5.954191	-0.120926	0.220111
1	5.313225	-1.485041	1.134404
1	5.512673	-1.619580	-0.600045
1	-0.911179	0.036441	-0.829041
1	2.038975	2.013689	-1.185150
1	1.909313	2.082446	0.516220
1	-0.401419	2.443003	-1.607788
1	-1.756753	2.295960	-0.514660
1	-0.224785	2.896733	0.090653
1	-0.105370	1.130271	1.881393
1	-0.135632	-0.584114	1.490476
1	-2.173955	0.092764	2.582256
1	-2.531625	1.292359	1.371393
1	-2.372345	-1.745422	0.859710
1	-3.860789	-2.716208	-0.553461
1	-4.429750	-1.662329	-1.852548
1	-5.446441	-1.953227	-0.461970
1	-4.585261	0.867054	-1.428199
1	-5.581510	0.590936	-0.022643
1	-4.112181	1.534990	0.135012
1	3.085191	-2.377837	-0.442069
1	2.521018	-1.726436	1.068666

1	5.569002	-0.485657	-0.698168
1	4.146945	-1.492976	-0.505967
1	1.710780	-0.922185	-1.757648
1	0.647831	-1.675808	-0.583671

h'$_1$

6	1.435526	-1.022944	-0.642608
6	2.763730	-1.450501	-0.087547
6	3.790779	-0.608108	-0.043420
6	3.578334	0.789839	-0.553341
6	2.193797	1.316735	-0.205289
6	1.093236	0.371262	-0.367759
6	5.147538	-0.976779	0.447506
6	-0.297970	0.757413	-0.203718
6	-0.602670	0.385981	1.294471
6	-2.113020	0.314309	1.539810
6	-2.781986	-0.742143	0.728980
6	-3.818513	-0.608079	-0.105996
6	-4.387369	-1.800473	-0.809527
6	-0.646597	2.200725	-0.517434
6	-4.530666	0.675375	-0.394189
1	2.848179	-2.474248	0.244816
1	5.196480	-2.018137	0.750674
1	5.892052	-0.812774	-0.331606
1	5.435236	-0.356042	1.295776
1	-0.920428	0.064354	-0.780684
1	0.613724	-1.694419	-0.405448
1	1.474856	-1.012043	-1.751440
1	-0.347854	2.472931	-1.527557
1	-1.721477	2.336218	-0.456678
1	-0.187425	2.896009	0.182229
1	-0.146667	1.135985	1.939705
1	-0.161315	-0.577282	1.548551
1	-2.227445	0.088823	2.602775
1	-2.562516	1.291666	1.389257
1	-2.390116	-1.744520	0.873980
1	-3.842894	-2.711956	-0.578597
1	-4.377780	-1.655422	-1.890020
1	-5.429635	-1.947728	-0.526207
1	-4.542335	0.872640	-1.466244
1	-5.573203	0.596755	-0.085798
1	-4.106639	1.538627	0.108455
1	4.325998	1.468969	-0.150825
1	3.709464	0.805512	-1.638247
1	2.139412	1.558866	0.869760
1	1.957434	2.261542	-0.696263

h'$_2$

6	1.228688	-0.732086	-0.956688
6	2.347450	-1.532761	-0.352895
6	3.494961	-0.956058	-0.011220
6	3.634576	0.523470	-0.238107
6	2.338532	1.266657	0.051392
6	1.115746	0.622285	-0.418989
6	4.661008	-1.693205	0.549794
6	-0.189480	1.252257	-0.308796
6	-0.752733	0.658463	1.034903
6	-2.251527	0.949738	1.183555
6	-3.088924	0.473233	0.039735
6	-3.657596	-0.730499	-0.087251
6	-4.502441	-1.059621	-1.277116
6	-0.221405	2.769380	-0.325106
6	-3.543420	-1.828460	0.922250
1	2.181098	-2.592950	-0.234637
1	4.462600	-2.757439	0.631990
1	5.538123	-1.557327	-0.082911
1	4.921152	-1.313018	1.537422
1	-0.837911	0.827957	-1.081694
1	0.268531	-1.242073	-0.969274
1	1.449338	-0.518413	-2.022577
1	0.259259	3.169347	-1.215381
1	-1.250918	3.112972	-0.336297
1	0.256681	3.199031	0.552770
1	-0.201570	1.090481	1.870269
1	-0.605563	-0.419911	1.058973
1	-2.557181	0.479382	2.117230
1	-2.399403	2.018327	1.329034
1	-3.276398	1.194450	-0.748022
1	-4.552098	-0.236427	-1.984424
1	-5.518821	-1.301572	-0.966035
1	-4.119768	-1.938903	-1.795820
1	-4.531834	-2.100565	1.292634
1	-3.132188	-2.727336	0.461980
1	-2.926263	-1.574143	1.778581
1	4.426183	0.939530	0.380277
1	3.933801	0.705839	-1.273300
1	2.173726	1.337419	1.139179
1	2.358815	2.308584	-0.272733

h'$_3$

6	2.217468	1.297239	-0.756946
6	2.975414	0.037700	-1.084896
6	3.273622	-0.843008	-0.135647
6	2.814067	-0.542518	1.264026
6	1.431175	0.089417	1.274401
6	1.172644	1.081428	0.241421
6	4.058031	-2.086877	-0.369762
6	-0.086456	1.816542	0.161992
6	-0.884019	1.230557	-1.067254
6	-1.174772	-0.269954	-1.109606
6	-2.051827	-0.822495	-0.024065
6	-3.386295	-0.871020	-0.028992

h'$_4$

6	-1.996860	-1.455749	-0.487829
6	-2.616663	-0.126857	-0.820434
6	-2.587678	0.884641	0.040801
6	-1.906699	0.675371	1.364394
6	-0.691535	-0.229200	1.247833
6	-0.792104	-1.344198	0.332195
6	-3.228774	2.205235	-0.211904
6	0.299135	-2.306079	0.165215
6	0.984708	-1.941628	-1.207162
6	1.305984	-0.476975	-1.498432
6	2.276663	0.159244	-0.551546
6	2.301417	1.431790	-0.139379

6	-4.138172	-1.486952	1.108343
6	-0.906547	1.901944	1.436846
6	-4.245247	-0.342140	-1.133179
1	3.274143	-0.097499	-2.113471
1	4.364441	-2.180154	-1.407084
1	4.952943	-2.095350	0.252443
1	3.476503	-2.968200	-0.100158
1	0.178984	2.824115	-0.175559
1	1.851845	1.834476	-1.627299
1	2.886161	2.009117	-0.233266
1	-0.342198	2.372779	2.239807
1	-1.783046	2.516580	1.252799
1	-1.263128	0.933001	1.770546
1	-0.356854	1.512550	-1.976735
1	-1.820447	1.785786	-1.058220
1	-1.636631	-0.450125	-2.079730
1	-0.238005	-0.830933	-1.145771
1	-1.553011	-1.262971	0.832728
1	-3.475552	-1.857085	1.886257
1	-4.746650	-2.320245	0.756919
1	-4.824615	-0.767287	1.554880
1	-4.881765	-1.134286	-1.526963
1	-4.914771	0.430530	-0.754545
1	-3.683651	0.079024	-1.961309
1	2.799275	-1.442543	1.873646
1	3.526603	0.134600	1.742135
1	0.649077	-0.665173	1.091524
1	1.145839	0.500122	2.246333

6	3.402319	1.928294	0.745059
6	1.275429	-2.422485	1.323496
6	1.307154	2.477148	-0.541616
1	-3.105953	-0.046782	-1.779638
1	-3.725252	2.234234	-1.177007
1	-3.968732	2.422534	0.558455
1	-2.491677	3.007179	-0.177245
1	-0.167479	-3.277692	-0.020564
1	-1.845372	-2.100056	-1.350142
1	-2.668718	-2.029028	0.181528
1	0.770862	-2.732450	2.236843
1	2.014335	-3.184149	1.090129
1	1.807520	-1.495311	1.513636
1	0.356963	-2.324757	-2.008137
1	1.900710	-2.530663	-1.218087
1	1.731728	-0.460958	-2.504557
1	0.386065	0.105023	-1.576173
1	3.093309	-0.479672	-0.233299
1	4.112362	1.144999	0.995404
1	3.003842	2.342013	1.671927
1	3.948138	2.735228	0.255974
1	0.954173	3.029803	0.329509
1	1.787044	3.209726	-1.191261
1	0.447262	2.086008	-1.078273
1	-1.602255	1.625059	1.797835
1	-2.619294	0.239574	2.069264
1	0.194094	0.304991	0.839206
1	-0.308650	-0.576160	2.210526

h'$_5$

6	-1.750768	-0.127517	1.401237
6	-2.483999	-1.333348	0.890794
6	-3.363758	-1.233570	-0.100749
6	-3.596472	0.122526	-0.705767
6	-2.312519	0.935219	-0.794382
6	-1.438435	0.867504	0.375454
6	-4.158729	-2.378743	-0.624414
6	-0.247267	1.686489	0.504013
6	0.821643	0.748226	-0.193191
6	2.236865	1.057941	0.304251
6	3.241045	0.321630	-0.520066
6	3.915924	-0.780780	-0.179821
6	4.908863	-1.385383	-1.121270
6	-0.278403	3.069964	-0.119772
6	3.781431	-1.497096	1.126053
1	-2.282960	-2.272816	1.383454
1	-3.943736	-3.297408	-0.087249
1	-5.225663	-2.173485	-0.536775
1	-3.953703	-2.541015	-1.682383
1	0.035212	1.733298	1.557088
1	-0.877786	-0.361862	2.006901
1	-2.405146	0.460849	2.076346
1	-1.057674	3.685967	0.323609
1	0.667992	3.572166	0.054952
1	-0.432988	3.030134	-1.195255
1	0.746224	0.909593	-1.268069
1	0.619669	-0.307718	-0.013454
1	2.421389	2.129129	0.226664
1	2.312045	0.800674	1.358644

h'$_6$

6	-2.151636	0.142439	1.413077
6	-3.059529	-0.972180	0.987798
6	-3.711816	-0.926184	-0.169430
6	-3.500717	0.269343	-1.055851
6	-2.062866	0.767390	-1.006766
6	-1.457344	0.822646	0.321470
6	-4.667025	-1.973575	-0.625619
6	-0.169930	1.450996	0.567115
6	0.821342	0.247501	0.309309
6	2.200326	0.521094	0.918078
6	3.092137	-0.657249	0.704416
6	4.100822	-0.761373	-0.166547
6	4.915206	-2.014141	-0.239506
6	0.176797	2.665920	-0.276025
6	4.530099	0.314074	-1.112850
1	-3.182295	-1.792783	1.678641
1	-4.775873	-2.766322	0.108200
1	-5.650146	-1.539170	-0.807363
1	-4.337655	-2.415680	-1.565650
1	-0.092464	1.675580	1.632621
1	-1.466166	-0.121351	2.216514
1	-2.745735	0.981369	1.831699
1	-0.577686	3.443780	-0.180910
1	1.117485	3.088532	0.062116
1	0.288968	2.414456	-1.328140
1	0.911260	0.101342	-0.766247
1	0.432400	-0.679420	0.731215
1	2.624144	1.422408	0.484576
1	2.084524	0.705949	1.987315

1	3.429832	0.745148	-1.499622
1	4.977334	-0.832589	-2.053832
1	4.643603	-2.417497	-1.351593
1	5.899396	-1.411732	-0.666910
1	3.511726	-2.539592	0.956143
1	4.737480	-1.508024	1.649474
1	3.042407	-1.062606	1.792214
1	-4.026356	0.035768	-1.700710
1	-4.330616	0.667204	-0.107047
1	-1.674578	0.542950	-1.602929
1	-2.485642	1.975088	-1.073881

1	2.882096	-1.513552	1.335140
1	4.575737	-2.764916	0.468405
1	5.964044	-1.800427	-0.033268
1	4.875377	-2.442504	-1.241276
1	5.557607	0.611110	-0.902513
1	4.521465	-0.061474	-2.136085
1	3.911312	1.205140	-1.077470
1	-3.755233	0.036752	-2.087080
1	-4.175381	1.073778	-0.752919
1	-1.406895	0.050724	-1.530132
1	-1.916090	1.706474	-1.539410

h'$_7$

6	-1.834529	0.185209	1.533180
6	-1.835727	-1.265806	1.111404
6	-2.407577	-1.634049	-0.030624
6	-3.020807	-0.552779	-0.876612
6	-2.155321	0.697875	-0.885649
6	-1.533444	1.043775	0.386844
6	-2.502941	-3.043730	-0.500560
6	-0.612335	2.161174	0.520042
6	0.835587	1.526943	0.628156
6	1.320090	0.717125	-0.567197
6	2.791174	0.463672	-0.451802
6	3.395549	-0.682071	-0.129847
6	4.888459	-0.762394	-0.063363
6	-0.690170	3.244367	-0.540350
6	2.692284	-1.967344	0.174196
1	-1.368427	-1.970768	1.782457
1	-2.057656	-3.735665	0.207708
1	-3.545701	-3.326604	-0.643846
1	-2.007129	-3.165391	-1.463413
1	-0.774693	2.586414	1.514719
1	-1.194136	0.394797	2.384615
1	-2.854778	0.486745	1.830756
1	-1.673545	3.709523	-0.562707
1	0.031358	4.022951	-0.308929
1	-0.463170	2.876802	-1.537440
1	0.902026	0.924160	1.530987
1	1.481751	2.390523	0.780813
1	0.772206	-0.221997	-0.636353
1	1.134181	1.264547	-1.493459
1	3.417914	1.325355	-0.650667
1	5.359383	0.188999	-0.293687
1	5.263818	-1.507150	-0.765407
1	5.214614	-1.075139	0.928685
1	2.990642	-2.737020	-0.537845
1	2.983547	-2.330076	1.160061
1	1.609029	-1.892244	0.151247
1	-3.175468	-0.890552	-1.898113
1	-4.011995	-0.310073	-0.484611
1	-1.327167	0.612454	-1.601606
1	-2.688357	1.587604	-1.240867

h'$_8$

6	1.486482	-0.858268	-0.956083
6	2.753424	-1.353385	-0.315241
6	3.742886	-0.515997	-0.021082
6	3.555519	0.938619	-0.350343
6	2.129527	1.406648	-0.090944
6	1.075086	0.456628	-0.454131
6	5.040135	-0.939753	0.575184
6	-0.325844	0.758010	-0.264948
6	-0.483249	0.099589	1.176111
6	-1.708970	-0.809739	1.250019
6	-2.988179	-0.108564	0.941190
6	-3.871991	-0.398109	-0.018874
6	-5.136212	0.392604	-0.150548
6	-0.756734	2.210177	-0.294278
6	-3.737786	-1.512356	-1.008901
1	2.825175	-2.414077	-0.126086
1	5.080872	-2.013686	0.729319
1	5.868287	-0.656794	-0.074584
1	5.206485	-0.446363	1.532566
1	-0.934986	0.155330	-0.939070
1	0.667309	-1.572426	-0.919398
1	1.650845	-0.661436	-2.032323
1	-0.602302	2.646431	-1.279159
1	-1.817250	2.267708	-0.069581
1	-0.228042	2.812664	0.440651
1	-0.548127	0.933165	1.874210
1	0.393716	-0.478719	1.478893
1	-1.557882	-1.673866	0.606003
1	-1.739259	-1.197118	2.271217
1	-3.230744	0.710251	1.610467
1	-5.200169	1.189354	0.585268
1	-6.004698	-0.254181	-0.025241
1	-5.217942	0.832931	-1.144593
1	-4.552339	-2.225000	-0.879489
1	-3.824852	-1.129539	-2.025889
1	-2.806060	-2.064264	-0.931580
1	4.241939	1.559110	0.220500
1	3.805603	1.102065	-1.401395
1	1.972725	1.621186	0.974283
1	1.907125	2.360654	-0.577777

h'$_9$

6	-1.945925	-0.044329	1.443720
6	-3.035816	-0.924706	0.896933
6	-3.805033	-0.513616	-0.106276

h'$_{10}$

6	1.472197	1.039355	0.778515
6	2.880512	1.416345	0.461433
6	3.728347	0.605203	-0.165277

6	-3.553197	0.857525	-0.668690
6	-2.067012	1.185487	-0.739170
6	-1.262481	0.717199	0.392703
6	-4.926695	-1.311146	-0.675314
6	0.166480	0.925135	0.455093
6	0.576379	-0.449261	-0.238797
6	1.709356	-1.155736	0.507384
6	2.950140	-0.339013	0.677805
6	4.047779	-0.381452	-0.083472
6	5.234406	0.470537	0.240132
6	0.754511	2.130275	-0.250147
6	4.220679	-1.259092	-1.282130
1	-3.169746	-1.888215	1.365675
1	-5.042183	-2.263566	-0.167135
1	-5.865027	-0.763058	-0.590219
1	-4.767245	-1.502054	-1.736349
1	0.501821	0.864993	1.489826
1	-1.238189	-0.568151	2.081395
1	-2.377252	0.753186	2.077245
1	0.453297	3.055345	0.237140
1	1.837794	2.067570	-0.215743
1	0.462264	2.175908	-1.296448
1	0.860959	-0.188460	-1.256992
1	-0.262651	-1.146409	-0.323108
1	1.342282	-1.470544	1.485895
1	1.915021	-2.073869	-0.040355
1	2.965247	0.330002	1.531113
1	5.066913	1.091811	1.115710
1	5.488433	1.117492	-0.599789
1	6.109443	-0.151663	0.428342
1	4.452288	-0.655224	-2.159664
1	5.068040	-1.929209	-1.137822
1	3.350417	-1.865000	-1.513798
1	-3.986429	0.958400	-1.660727
1	-4.058416	1.597625	-0.043400
1	-1.606489	0.748425	-1.633828
1	-1.882011	2.257830	-0.855607

6	3.277187	-0.742607	-0.646162
6	1.762680	-0.827048	-0.844330
6	0.988080	-0.222508	0.232748
6	5.158327	0.952684	-0.403595
6	-0.228026	-0.823561	0.768563
6	-1.182514	-1.456845	-0.241872
6	-1.823171	-0.456621	-1.205594
6	-2.553829	0.664749	-0.527453
6	-3.840275	0.676770	-0.168754
6	-4.447933	1.878057	0.484133
6	0.349473	-1.893906	1.744087
6	-4.786641	-0.460789	-0.388082
1	3.203613	2.385675	0.811397
1	5.416929	1.912286	0.033052
1	5.813316	0.194498	0.025842
1	5.374341	0.990332	-1.470947
1	-0.762209	-0.085624	1.366783
1	0.749677	1.760905	0.353162
1	1.238866	1.087009	1.846907
1	1.033937	-1.478182	2.479310
1	-0.501158	-2.309767	2.278521
1	0.844637	-2.698392	1.207162
1	-1.965709	-1.937384	0.343329
1	-0.682745	-2.252435	-0.795046
1	-1.061275	-0.038271	-1.868121
1	-2.492085	-1.012211	-1.859761
1	-1.981123	1.565066	-0.330234
1	-3.726219	2.678629	0.623345
1	-4.868783	1.620835	1.456268
1	-5.270163	2.263971	-0.118473
1	-5.205360	-0.792678	0.562236
1	-5.629135	-0.136263	-0.998669
1	-4.333093	-1.319887	-0.872497
1	3.750226	-0.978048	-1.597532
1	3.608416	-1.515918	0.050055
1	1.499972	-0.175755	-1.695992
1	1.418643	-1.824048	-1.100272

h'$_{11}$

6	-0.887741	-0.456103	1.151028
6	-2.122719	-1.259103	0.917414
6	-3.045618	-0.926361	0.018732
6	-2.846080	0.268060	-0.868095
6	-1.371411	0.646107	-1.025959
6	-0.630067	0.639409	0.229671
6	-4.323526	-1.675341	-0.149565
6	0.342071	1.668127	0.584498
6	1.277120	2.133619	-0.532404
6	2.115275	1.016374	-1.152623
6	2.841731	0.196528	-0.133671
6	2.922132	-1.134777	-0.049355
6	3.752962	-1.784201	1.014384
6	-0.558403	2.833507	1.086481
6	2.271738	-2.096712	-0.995535
1	-2.263525	-2.116459	1.559016
1	-4.414486	-2.482108	0.571084
1	-5.176984	-1.008722	-0.024682
1	-4.395871	-2.098238	-1.151190
1	0.928034	1.314046	1.431675

h'$_{12}$

6	-0.632445	-1.443912	-1.133262
6	-1.905905	-0.655127	-1.210915
6	-2.612906	-0.396242	-0.117333
6	-2.100178	-0.919645	1.193563
6	-0.578011	-0.890000	1.308163
6	0.176200	-1.150762	0.066727
6	-3.910787	0.334635	-0.118375
6	1.605825	-1.539753	0.116387
6	2.427943	-1.015120	-1.068074
6	2.509011	0.507283	-1.031746
6	1.148093	1.110155	-0.979845
6	0.655306	1.955602	-0.048286
6	-0.684040	2.589803	-0.220582
6	2.302165	-1.320748	1.450861
6	1.381273	2.382686	1.182269
1	-2.233561	-0.338546	-2.190212
1	-4.214296	0.616494	-1.122289
1	-4.697964	-0.283909	0.312983
1	-3.851429	1.236669	0.491010
1	1.518748	-2.627641	-0.046992

1	0.034514	-1.055921	1.021146
1	-0.783764	-0.103037	2.181831
1	-1.209388	2.541531	1.906568
1	0.111437	3.608341	1.451749
1	-1.159443	3.252598	0.283875
1	1.934414	2.874928	-0.077609
1	0.721604	2.662600	-1.306264
1	1.493691	0.388918	-1.790447
1	2.836193	1.486318	-1.824441
1	3.406195	0.771870	0.593851
1	4.202237	-1.055963	1.683849
1	4.555687	-2.369990	0.566069
1	3.159378	-2.479439	1.609187
1	3.034488	-2.655112	-1.538615
1	1.684678	-2.839272	-0.453199
1	1.633250	-1.624556	-1.736465
1	-3.244879	0.068054	-1.860720
1	-3.415465	1.117282	-0.484430
1	-0.879244	-0.168258	-1.583678
1	-1.217547	1.555790	-1.598156

1	-0.053053	-1.408143	-2.048531
1	-0.876606	-2.512529	-0.986823
1	1.874604	-1.923223	2.248034
1	3.346614	-1.606657	1.362406
1	2.269655	-0.280415	1.762257
1	1.994344	-1.345217	-2.009689
1	3.421258	-1.456316	-1.020705
1	3.123934	0.829239	-0.196142
1	3.018418	0.845581	-1.935070
1	0.533939	0.956105	-1.860074
1	-1.200417	2.237607	-1.106716
1	-0.566754	3.671764	-0.292439
1	-1.317804	2.409998	0.649117
1	1.449735	3.470275	1.204817
1	0.816443	2.107379	2.076465
1	2.385301	1.984465	1.271113
1	-2.527836	-0.365189	2.025935
1	-2.448831	-1.948458	1.314377
1	-0.220479	0.058331	1.714773
1	-0.233242	-1.620780	2.045090

h'$_{19}$

6	1.564807	1.288945	0.016765
6	3.040794	1.508374	0.011618
6	3.926707	0.516197	0.007687
6	3.472388	-0.912762	-0.044366
6	2.061033	-1.072303	-0.610166
6	1.102530	-0.086670	-0.127242
6	5.398360	0.742077	0.084178
6	-0.280057	-0.421576	0.184107
6	-0.953373	-1.429288	-0.752796
6	-2.469751	-1.469264	-0.553187
6	-3.128436	-0.164498	-0.868211
6	-3.937460	0.562041	-0.092286
6	-4.547893	1.830404	-0.603544
6	-0.161203	-0.969898	1.638241
6	-4.349054	0.198253	1.300009
1	3.368084	2.536845	0.053337
1	5.638701	1.795647	0.187056
1	5.823454	0.210183	0.935442
1	5.894973	0.360950	-0.807684
1	-0.876132	0.491365	0.227475
1	1.075265	1.789261	-0.839035
1	1.059195	1.752430	0.869958
1	0.302043	-0.262692	2.321339
1	-1.174379	-1.148607	1.987306
1	0.384523	-1.909351	1.668133
1	-0.539689	-2.425775	-0.601832
1	-0.748878	-1.149988	-1.787610
1	-2.856174	-2.239771	-1.222804
1	-2.708965	-1.807819	0.452319
1	-2.942849	0.204330	-1.872600
1	-4.223388	2.062171	-1.614364
1	-4.297332	2.672649	0.042050
1	-5.635507	1.755857	-0.606981
1	-4.124372	1.011940	1.990084
1	-5.428174	0.049947	1.342304
1	-3.881547	-0.706658	1.675335
1	4.149130	-1.497998	-0.663930

h'$_{20}$

6	1.492988	-1.021319	-0.857951
6	2.898745	-1.402825	-0.528085
6	3.757619	-0.587601	0.077357
6	3.363600	0.816229	0.429283
6	2.176909	1.330781	-0.389130
6	1.102822	0.354024	-0.550576
6	5.134905	-1.006777	0.466536
6	-0.299145	0.695817	-0.431645
6	-0.506992	0.502126	1.119071
6	-2.003893	0.472236	1.457475
6	-2.724584	-0.668894	0.826108
6	-3.825646	-0.628628	0.068262
6	-4.440047	-1.892392	-0.447244
6	-0.710179	2.083147	-0.896170
6	-4.567880	0.615005	-0.305892
1	3.186399	-2.412983	-0.780260
1	5.317368	-2.051523	0.234966
1	5.882527	-0.404486	-0.048871
1	5.292738	-0.861681	1.535335
1	4.200667	1.491788	0.262995
1	3.138166	0.880860	1.495807
1	1.813976	2.295029	-0.048162
1	2.519848	1.474168	-1.427376
1	-0.912875	-0.075121	-0.902936
1	0.750984	-1.718829	-0.462420
1	1.315275	-1.070144	-1.948113
1	-0.401983	2.264506	-1.923154
1	-1.792190	2.161153	-0.867277
1	-0.306246	2.872818	-0.267305
1	-0.016130	1.316682	1.649875
1	-0.057632	-0.431977	1.456551
1	-2.050112	0.380003	2.545352
1	-2.456863	1.429130	1.215202
1	-2.314077	-1.648451	1.052085
1	-3.869606	-2.772195	-0.162460
1	-4.521478	-1.869453	-1.534161
1	-5.453652	-2.007061	-0.062933

1	3.525753	-1.354635	0.952815
1	2.096141	-0.822375	-1.686064
1	1.683780	-2.088093	-0.546893
1	-4.661929	0.691651	-1.389267
1	-5.583541	0.571549	0.087414
1	-4.114975	1.528985	0.064718

TS(a-b)$_1$

6	-0.351208	-0.050238	-0.272339
6	-2.996072	0.508621	-0.108968
6	-2.791862	0.452604	1.375519
6	-1.676481	-0.516244	1.819579
6	-0.962886	-1.106495	0.614842
6	-2.010855	-1.758374	-0.284139
6	-2.682255	-0.552846	-0.882682
1	-2.938407	-0.541966	-1.933767
6	-3.627371	1.738381	-0.660290
1	-3.791362	1.671736	-1.731552
1	-4.588007	1.917796	-0.177087
1	-3.011587	2.614686	-0.452993
1	-3.741731	0.148079	1.818780
1	-2.617728	1.460069	1.752655
1	-0.978425	-0.015949	2.487386
1	-2.093162	-1.342485	2.389968
1	-0.175555	-1.793337	0.939459
1	-1.571703	-2.390423	-1.049512
1	-2.694045	-2.388348	0.284996
6	0.020863	1.267545	0.227054
1	1.107860	1.161709	0.419320
1	-0.042034	2.030055	-0.544996
1	-0.469690	1.583616	1.136645
6	0.275441	-0.435840	-1.548234
1	0.320735	0.410160	-2.229415
1	-0.246334	-1.250700	-2.034411
6	1.745294	-0.926743	-1.275906
1	1.736138	-1.722741	-0.536404
1	2.033666	-1.391315	-2.219380
6	2.723635	0.143593	-0.949221
1	2.829333	0.911618	-1.707871
6	3.531772	0.216481	0.117612
6	4.534421	1.320299	0.235749
1	4.482503	2.015247	-0.597410
1	5.543750	0.910400	0.272792
1	4.392542	1.877011	1.162146
6	3.558179	-0.768991	1.242090
1	4.517239	-1.286871	1.258268
1	3.472402	-0.254793	2.199163
1	2.779917	-1.523772	1.189217

TS(b-c)$_1$

6	0.995545	0.186654	-0.325810
6	2.285022	0.447951	0.824680
6	3.477853	0.409101	-0.165841
6	3.090468	-0.507712	-1.334104
6	1.724587	-1.038940	-0.925215
6	1.907012	-1.888344	0.333724
6	2.003479	-0.824578	1.348931
1	1.714629	-0.983206	2.384215
6	2.200789	1.648462	1.723979
1	1.353932	1.595540	2.403628
1	3.108089	1.739712	2.318320
1	2.110208	2.557926	1.135765
1	4.362891	0.066743	0.364874
1	3.679718	1.430404	-0.476926
1	3.035583	0.040945	-2.270019
1	3.804778	-1.313188	-1.482194
1	1.188293	-1.542541	-1.723958
1	1.076017	-2.554093	0.559919
1	2.803242	-2.517946	0.340589
6	0.932248	1.427315	-1.189050
1	0.406588	1.159189	-2.106071
1	0.363235	2.215583	-0.703517
1	1.897220	1.825077	-1.479547
6	-0.376363	-0.070801	0.300578
1	-0.631704	0.776859	0.937251
1	-0.370684	-0.941421	0.957636
6	-1.500796	-0.270012	-0.720598
1	-1.669230	0.647315	-1.277067
1	-1.197052	-1.025025	-1.450510
6	-2.759161	-0.720658	-0.049194
1	-2.707607	-1.704393	0.405875
6	-3.917790	-0.064408	0.040530
6	-5.088332	-0.680512	0.741574
1	-4.855309	-1.664127	1.140108
1	-5.933293	-0.781335	0.060153
1	-5.423836	-0.047655	1.563393
6	-4.186329	1.291447	-0.532341
1	-4.982682	1.234323	-1.274561
1	-4.538835	1.966351	0.247561
1	-3.323594	1.749170	-1.005972

TS(c-d)$_1$

6	-0.879751	0.189809	0.370800
6	-1.864894	0.970768	-0.249266
6	-3.649744	-0.821193	0.139138
6	-2.566726	-1.687166	0.820171
6	-1.278786	-1.264316	0.095211
6	-1.817883	-1.068782	-1.333335
6	-2.846362	-0.011990	-0.891305
1	-3.451450	0.456473	-1.661075
6	-1.764070	2.377671	-0.726417
1	-1.605263	2.340988	-1.803730
1	-2.690181	2.921422	-0.556477
1	-0.938217	2.922057	-0.280294

TS(d-c1)$_1$

6	-0.925197	-0.239547	0.162907
6	-2.118714	-0.871065	-0.221411
6	-2.979920	1.146292	-1.164426
6	-1.673644	1.853069	-0.737920
6	-1.323831	1.157982	0.601662
6	-2.723744	0.957594	1.174930
6	-3.224871	0.138952	-0.010366
1	-4.227134	-0.274067	0.036937
6	-1.433744	-1.492766	1.336590
1	-2.438712	-1.735385	1.669481
1	-0.875574	-2.383827	1.089396
1	-0.968852	-0.944127	2.150429

1	-4.370682	-1.437158	-0.391607
1	-4.224764	-0.208602	0.829098
1	-2.524745	-1.572861	1.900362
1	-2.735533	-2.744449	0.634387
1	-0.450008	-1.951323	0.230604
1	-1.073930	-0.688828	-2.031501
1	-2.271460	-1.963477	-1.753585
6	-1.907599	1.041669	1.550799
1	-1.749186	0.240768	2.266683
1	-1.393326	1.945377	1.840733
1	-2.983257	1.183562	1.509397
6	0.539190	0.561395	0.673538
1	0.875848	0.021704	1.557660
1	0.623978	1.624091	0.892305
6	1.461903	0.221624	-0.508244
1	1.415282	-0.842692	-0.724500
1	1.098501	0.739190	-1.399133
6	2.864573	0.653538	-0.224801
1	3.007287	1.726759	-0.163292
6	3.936180	-0.123009	-0.051183
6	5.278626	0.484850	0.210876
1	5.236981	1.569889	0.244432
1	5.987815	0.194648	-0.564421
1	5.685819	0.127576	1.156848
6	3.936317	-1.617952	-0.106186
1	4.602299	-1.964417	-0.896375
1	4.324282	-2.027629	0.826373
1	2.958064	-2.054572	-0.281673
1	-3.816320	1.838337	-1.211960
1	-2.906624	0.669802	-2.138819
1	-0.884187	1.772768	-1.480612
1	-1.832512	2.912501	-0.555743
1	-0.597416	1.679371	1.214631
1	-2.761216	0.448584	2.133647
1	-3.259689	1.897320	1.275180
6	-2.288059	-2.041373	-1.124699
1	-2.594700	-1.666486	-2.099900
1	-1.377668	-2.615761	-1.258067
1	-3.078919	-2.697423	-0.769797
6	0.462121	-0.572641	-0.289971
1	0.656000	0.073442	-1.148370
1	0.505673	-1.591809	-0.670351
6	1.564214	-0.349755	0.747339
1	1.557140	0.686350	1.076684
1	1.360430	-0.959093	1.631375
6	2.902711	-0.729882	0.198815
1	3.033407	-1.789643	0.008908
6	3.931837	0.075949	-0.070186
6	5.212234	-0.480986	-0.609646
1	5.167448	-1.558734	-0.739001
1	6.041351	-0.252469	0.060139
1	5.454067	-0.029390	-1.571853
6	3.941682	1.558278	0.132906
1	4.721034	1.834984	0.842886
1	4.182590	2.063371	-0.802440
1	3.001934	1.960784	0.498066

TS(a1-b1)$_1$

6	-0.330262	-0.052118	0.397352
6	-2.998104	-0.412897	0.097379
6	-2.837440	0.250513	-1.237677
6	-1.655573	1.242646	-1.308520
6	-0.906480	1.286233	0.012613
6	-1.917933	1.560942	1.124381
6	-2.615963	0.232114	1.220646
1	-2.832350	-0.199222	2.188743
6	-3.662969	-1.743847	0.124261
1	-3.781842	-2.123624	1.134495
1	-4.649351	-1.680608	-0.335887
1	-3.097750	-2.471073	-0.460242
1	-3.770450	0.777648	-1.446034
1	-2.765322	-0.508894	-2.015856
1	-0.992794	0.983153	-2.131368
1	-2.014092	2.247092	-1.518463
1	-0.092722	2.017371	-0.028357
1	-1.448174	1.832363	2.063733
1	-2.589676	2.377866	0.862004
6	0.312297	-0.226313	1.700794
1	0.071064	0.519431	2.445960
1	0.178224	-1.230680	2.093459
1	1.389359	-0.159324	1.458051
6	0.005916	-1.064975	-0.608117
1	-0.728669	-1.113366	-1.402982
1	0.113193	-2.048579	-0.157866
6	1.382597	-0.669232	-1.266263
1	1.422065	-1.287186	-2.163695
1	1.349020	0.361881	-1.607885

TS(b1-c1)$_1$

6	-1.021104	0.498896	-0.176693
6	-2.206662	-0.086694	0.938401
6	-2.167901	-1.592294	0.551121
6	-1.763492	-1.681378	-0.926314
6	-1.706603	-0.223817	-1.359927
6	-3.116627	0.357196	-1.250564
6	-3.194381	0.591296	0.201002
1	-3.845918	1.344788	0.634921
6	-2.036092	0.233546	2.396977
1	-2.813444	-0.251148	2.984713
1	-1.080631	-0.136343	2.758901
1	-2.083454	1.302582	2.590094
1	-3.141197	-2.033329	0.751709
1	-1.462033	-2.083199	1.215338
1	-0.797762	-2.165028	-1.044341
1	-2.476694	-2.249470	-1.517558
1	-1.241881	-0.060722	-2.327545
1	-3.264894	1.291049	-1.791427
1	-3.922930	-0.304934	-1.584816
6	-0.928940	2.015019	-0.284439
1	-1.818227	2.506932	-0.669158
1	-0.699061	2.451537	0.684959
1	-0.112741	2.273586	-0.953763
6	0.320999	-0.046271	0.296157
1	0.238691	-1.067318	0.657439
1	0.675354	0.552437	1.133548
6	1.395738	-0.026405	-0.808001
1	1.028780	-0.563982	-1.683782
1	1.596424	0.991902	-1.128363

6	2.576522	-0.952882	-0.427182
1	2.685041	-1.988957	-0.125296
6	3.553912	-0.104721	-0.079516
6	4.738566	-0.591095	0.693614
1	4.664553	-1.646575	0.938895
1	4.857022	-0.026804	1.618663
1	5.652405	-0.439302	0.119206
6	3.599263	1.346728	-0.436198
1	3.750905	1.952020	0.457369
1	4.452700	1.541660	-1.085639
1	2.711544	1.707132	-0.946414

6	2.643736	-0.688294	-0.318968
1	2.581296	-1.766390	-0.219915
6	3.800687	-0.104981	0.004445
6	4.963554	-0.926682	0.465261
1	4.727313	-1.986560	0.499960
1	5.287367	-0.614314	1.458352
1	5.816979	-0.789379	-0.198969
6	4.069607	1.364776	-0.065244
1	4.402740	1.731830	0.905555
1	4.879815	1.566510	-0.766100
1	3.210990	1.955480	-0.369037

TS(a-h)$_1$

6	1.162469	-0.833975	-1.373481
6	2.345291	0.075720	-1.238214
6	2.890917	0.453462	-0.085990
6	2.376229	-0.076226	1.218759
6	1.557577	-1.350025	1.052573
6	0.574458	-1.263866	-0.065608
6	4.032352	1.411710	-0.010033
6	-0.768377	-1.627706	0.073393
6	-1.729828	-1.647056	-1.083586
6	-2.739646	-0.486734	-0.980652
6	-2.048642	0.837199	-0.935166
6	-1.988822	1.701690	0.088704
6	-1.278271	3.010455	-0.063133
6	-1.308754	-2.180159	1.363197
6	-2.656252	1.510612	1.414868
1	2.741171	0.454382	-2.170168
1	4.309851	1.786218	-0.990712
1	3.780035	2.264136	0.621033
1	4.906534	0.936973	0.435114
1	-0.472513	-0.385565	0.220490
1	1.441257	-1.757589	-1.894712
1	0.407902	-0.364263	-1.999507
1	-0.920504	-1.691632	2.249610
1	-2.390696	-2.104666	1.380488
1	-1.050967	-3.237266	1.419476
1	-2.257388	-2.599380	-1.043338
1	-1.214042	-1.611285	-2.037849
1	-3.387106	-0.538172	-1.854824
1	-3.382945	-0.632244	-0.116413
1	-1.564452	1.136901	-1.859015
1	-0.798564	3.108383	-1.032770
1	-0.524032	3.140733	0.712856
1	-1.983099	3.834173	0.050713
1	-1.945642	1.655905	2.228496
1	-3.427617	2.269305	1.547527
1	-3.127105	0.540980	1.538691
1	3.212277	-0.291074	1.883214
1	1.788211	0.692420	1.726651
1	2.228867	-2.157390	0.743557
1	1.106371	-1.660588	1.987606

TS(h-a2$_{exo}$)$_1$

6	1.209822	-0.742600	-1.373067
6	0.597378	-1.267679	-0.118734
6	1.559772	-1.429339	1.012897
6	2.701486	-0.460252	0.999488
6	2.909594	0.451382	0.054543
6	2.008694	0.534923	-1.140543
6	-0.746843	-1.638682	0.003433
6	-1.724230	-1.609288	-1.142471
6	-2.745383	-0.470915	-0.959740
6	-2.066120	0.856171	-0.862448
6	-2.009150	1.678764	0.195479
6	-1.313617	3.000512	0.094557
6	4.026271	1.439040	0.117030
6	-1.267662	-2.280863	1.260829
6	-2.663378	1.425435	1.517680
1	3.366397	-0.519726	1.849626
1	4.593826	1.347231	1.038120
1	4.709392	1.303960	-0.721276
1	3.644194	2.458044	0.052641
1	2.599901	0.732186	-2.033926
1	1.334462	1.388385	-1.036973
1	0.486847	-0.609432	-2.168442
1	1.896770	-1.534202	-1.687208
1	-0.482708	-0.411386	0.210548
1	1.051648	-1.396268	1.973402
1	1.925634	-2.460654	0.926809
1	-0.900017	-1.828304	2.174928
1	-2.351606	-2.248484	1.279401
1	-0.967812	-3.328381	1.262540
1	-2.236154	-2.570614	-1.151669
1	-1.225442	-1.508543	-2.100519
1	-3.411141	-0.485050	-1.821588
1	-3.368387	-0.666504	-0.090532
1	-1.588034	1.195036	-1.776228
1	-0.862185	3.154655	-0.881780
1	-0.541947	3.097963	0.858404
1	-2.021848	3.810795	0.267581
1	-1.948973	1.554072	2.330638
1	-3.448609	2.163053	1.683618
1	-3.114017	0.442530	1.608290

TS(h-i)$_1$

6	-0.688513	-0.063725	1.173795
6	-1.807121	-0.996790	0.994776
6	-2.761896	-0.753801	0.089906

TS(a1'-i)$_1$

6	-1.445432	1.066896	-0.935895
6	-2.460069	1.197007	-0.067957
6	-3.073664	0.029484	0.636263

6	-2.658132	0.456708	-0.793486	6	-2.785381	-1.340202	0.026292
6	-1.217104	0.900050	-1.013971	6	-1.497039	-1.474316	-0.759788
6	-0.446102	0.961723	0.259828	6	-0.921142	-0.233176	-1.337961
6	-3.977352	-1.598607	-0.050764	1	-4.151956	0.180212	0.683238
6	0.590112	2.004872	0.505411	1	-0.998714	1.936396	-1.393989
6	1.703687	1.997221	-0.549675	1	-3.581376	-1.575613	-0.677387
6	2.654343	0.805089	-0.456090	1	-2.828898	-2.111235	0.792838
6	2.050306	-0.511869	-0.841093	1	-0.478347	-0.321543	-2.323969
6	2.094262	-1.676942	-0.176121	1	0.252050	-0.286986	-0.711752
6	1.533059	-2.925656	-0.783036	1	-2.748587	0.072558	1.678079
6	-0.112511	3.365220	0.582277	6	-3.019001	2.534261	0.271310
6	2.727178	-1.869573	1.166043	1	-4.058765	2.594325	-0.050061
1	-1.867497	-1.839760	1.665430	1	-2.466795	3.342700	-0.197205
1	-4.008874	-2.393897	0.687130	1	-3.017276	2.687822	1.350231
1	-4.875219	-0.989654	0.057609	6	0.885828	-2.343629	-0.744992
1	-4.019757	-2.043932	-1.044597	1	1.906719	-2.009862	-0.596701
1	1.039507	1.804108	1.479807	1	0.718373	-2.503758	-1.806929
1	0.267971	-0.364584	0.464427	1	0.754452	-3.301085	-0.242248
1	-0.935489	3.363531	1.293912	6	0.046171	-0.965261	1.280339
1	0.608069	4.108357	0.913648	6	1.456557	-0.495505	1.631752
1	-0.490914	3.680948	-0.386838	1	-0.660192	-0.170607	1.505653
1	2.277369	2.911512	-0.405144	1	-0.245186	-1.826911	1.883769
1	1.275270	2.068269	-1.551138	6	1.864086	0.667175	0.782836
1	3.491399	0.998215	-1.129730	1	2.161440	-1.319623	1.559390
1	3.083405	0.767019	0.543804	1	1.448037	-0.200398	2.682007
1	1.613222	-0.535516	-1.835614	1	-1.556719	-2.287156	-1.472782
1	1.089100	-2.747075	-1.758654	6	2.975445	0.812023	0.051471
1	0.781499	-3.377132	-0.134951	6	-0.118811	-1.383321	-0.161612
1	2.321127	-3.668904	-0.903909	6	3.230135	2.077673	-0.706840
1	2.044161	-2.382129	1.844261	1	3.393461	1.873368	-1.765222
1	3.599302	-2.516518	1.070040	1	4.136774	2.560828	-0.342756
1	3.054389	-0.948034	1.636136	1	2.411367	2.785963	-0.612174
1	-3.110813	0.252119	-1.761729	6	4.074764	-0.197824	-0.049180
1	-3.255044	1.260315	-0.353461	1	4.999417	0.227818	0.340605
1	-0.704411	0.171562	-1.650153	1	4.271607	-0.450968	-1.091167
1	-1.159688	1.849599	-1.538193	1	3.885135	-1.114435	0.500191
1	-0.223381	0.008069	2.151102	1	1.179313	1.510489	0.812131