

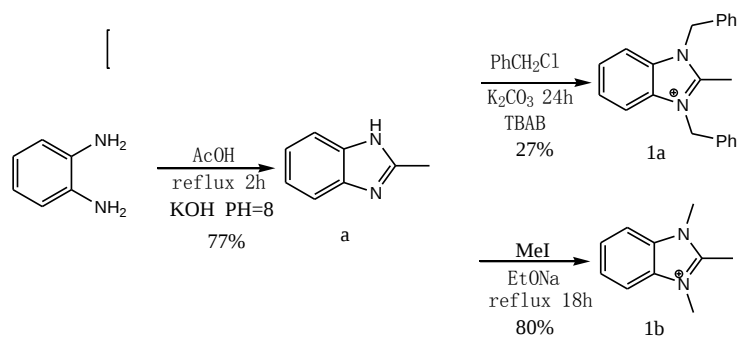
Combined experimental and theoretical studies on the regioselectivity and mechanism of synthesis of 1,2- benzimidazole squaraines

Guomin Xia, Zhiwei Wu, Yanli Yuan, Hongming Wang*

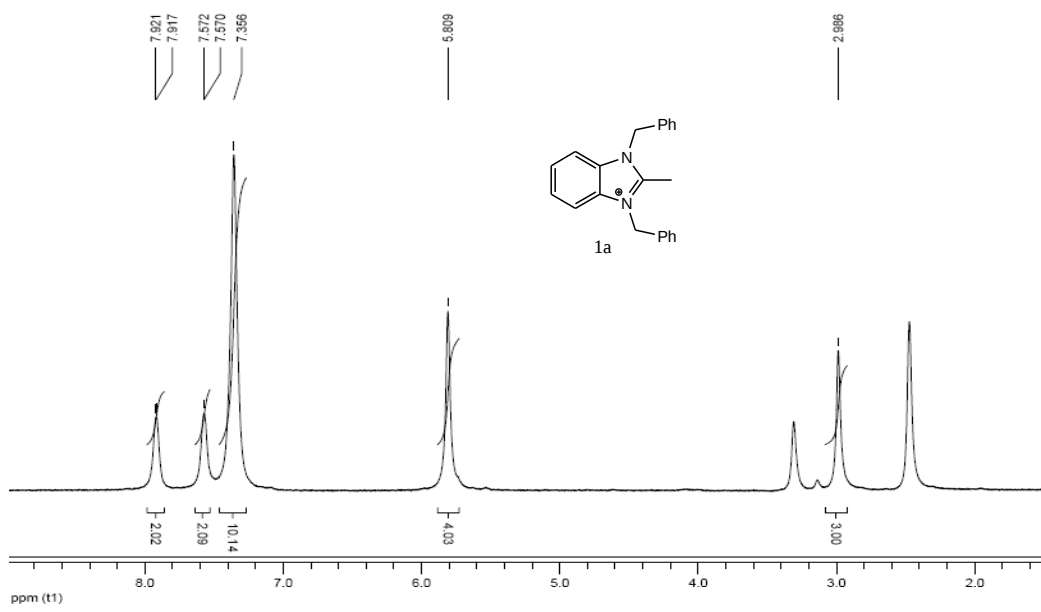
Hongmingwang@ncu.edu.cn

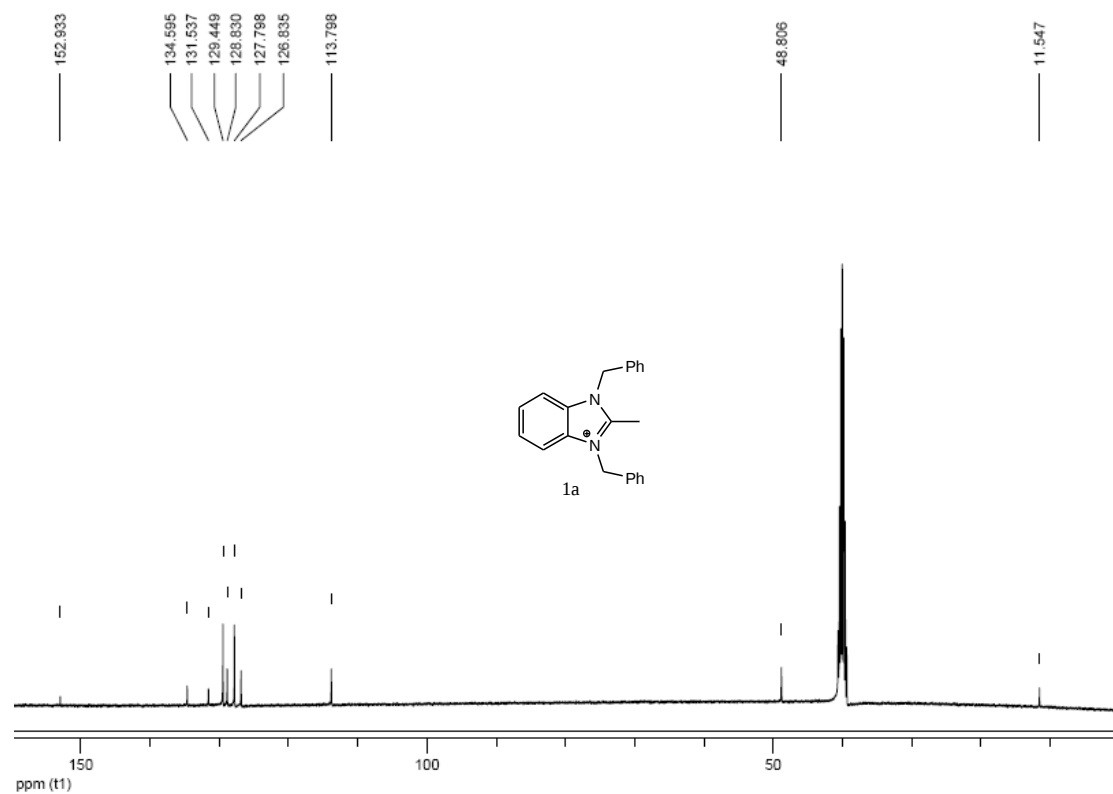
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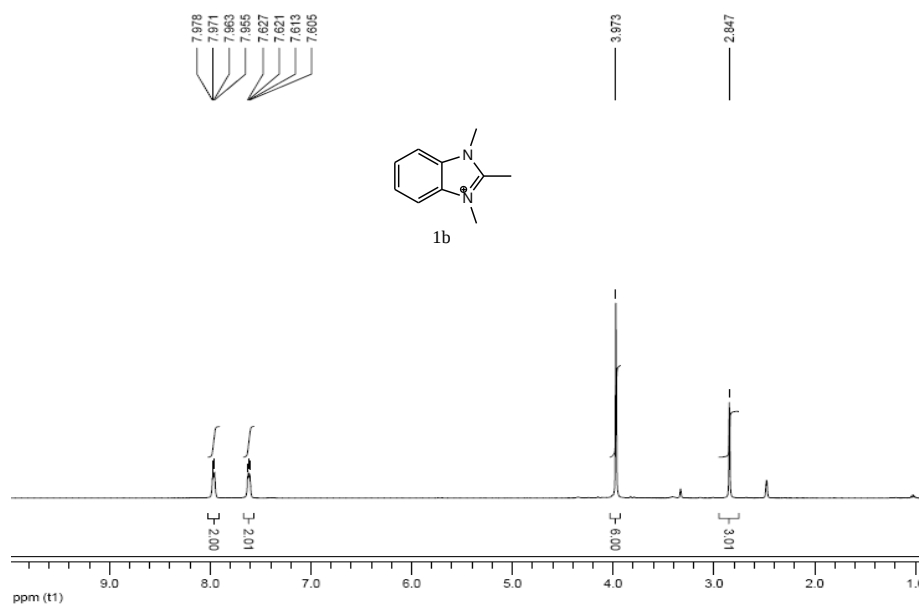


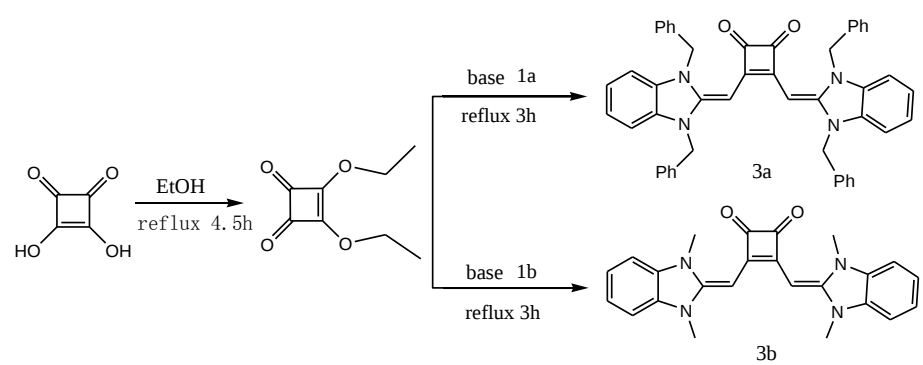
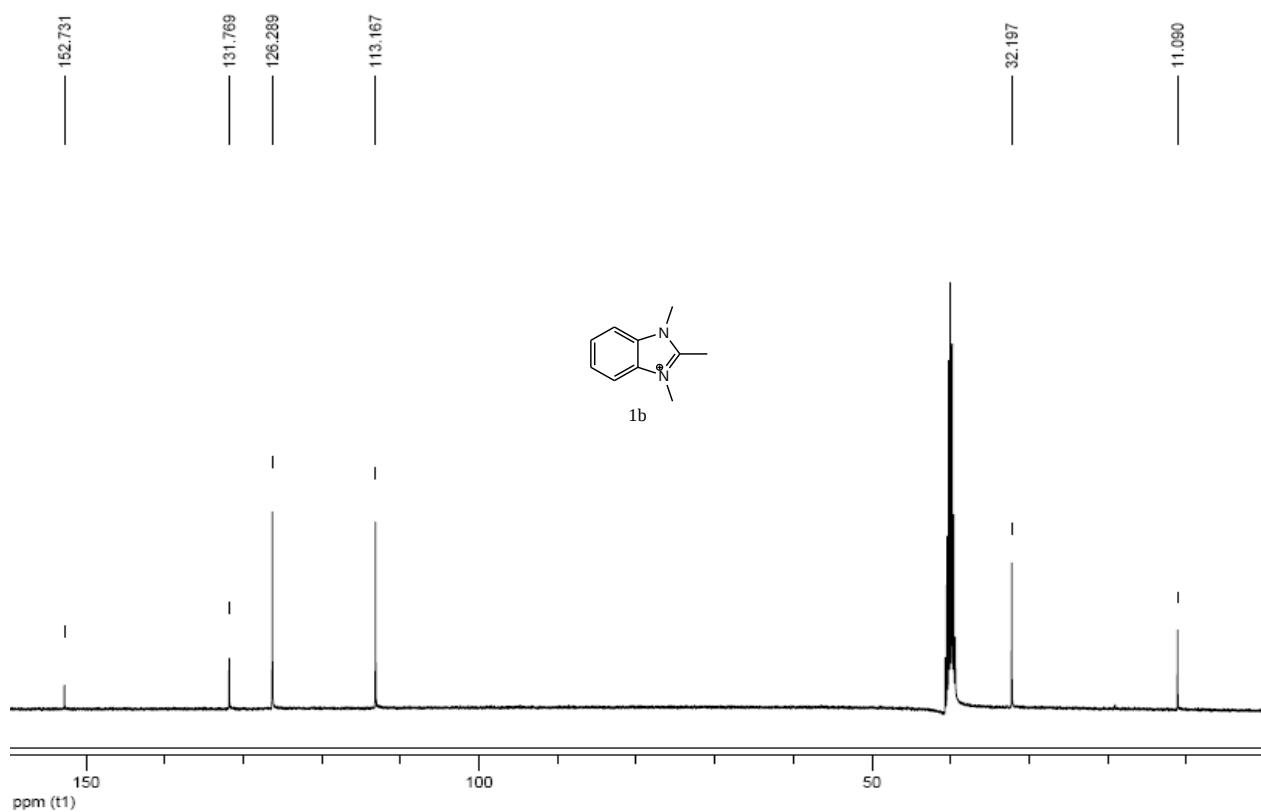
¹H and ¹³C NMR of 1a



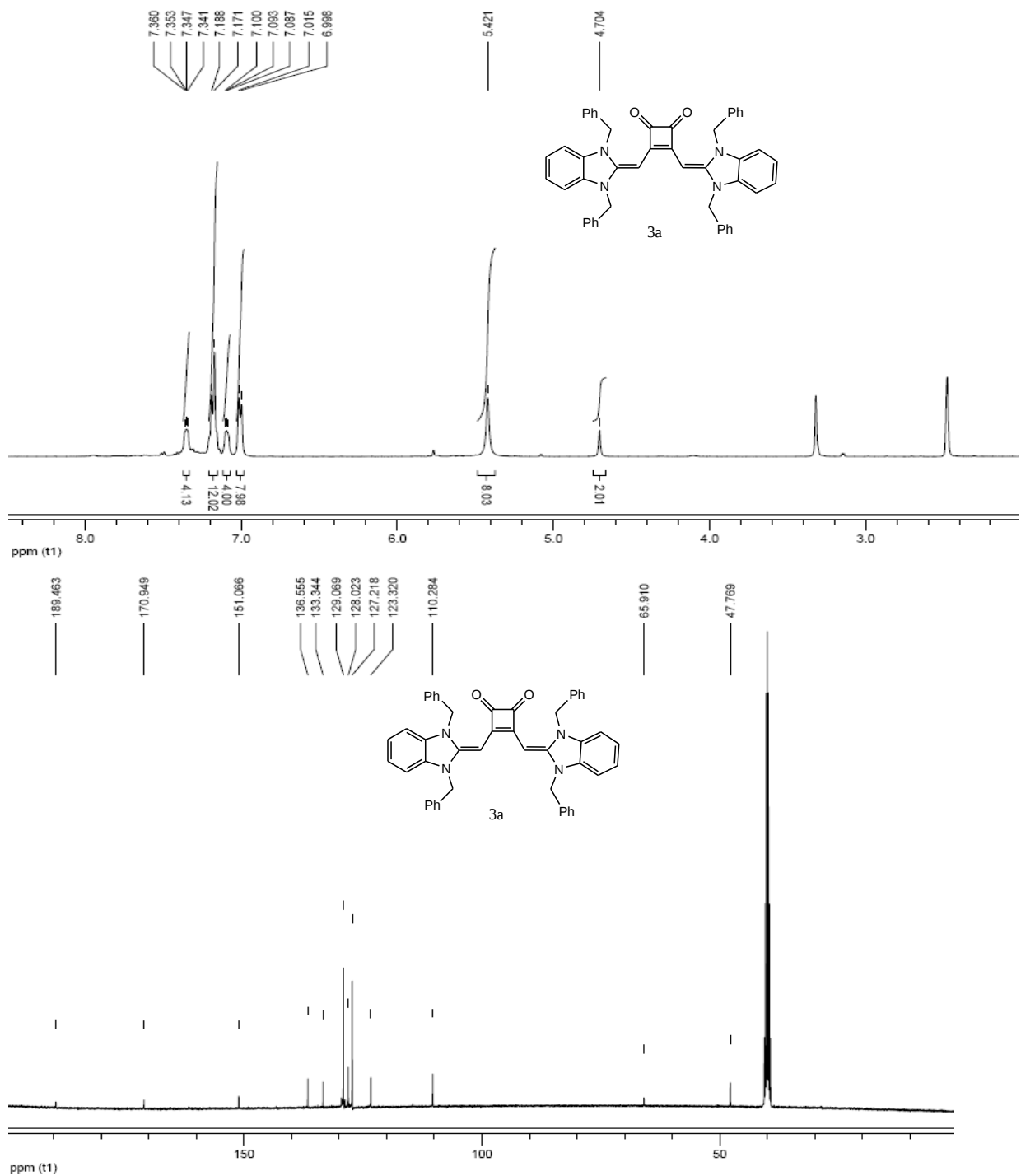


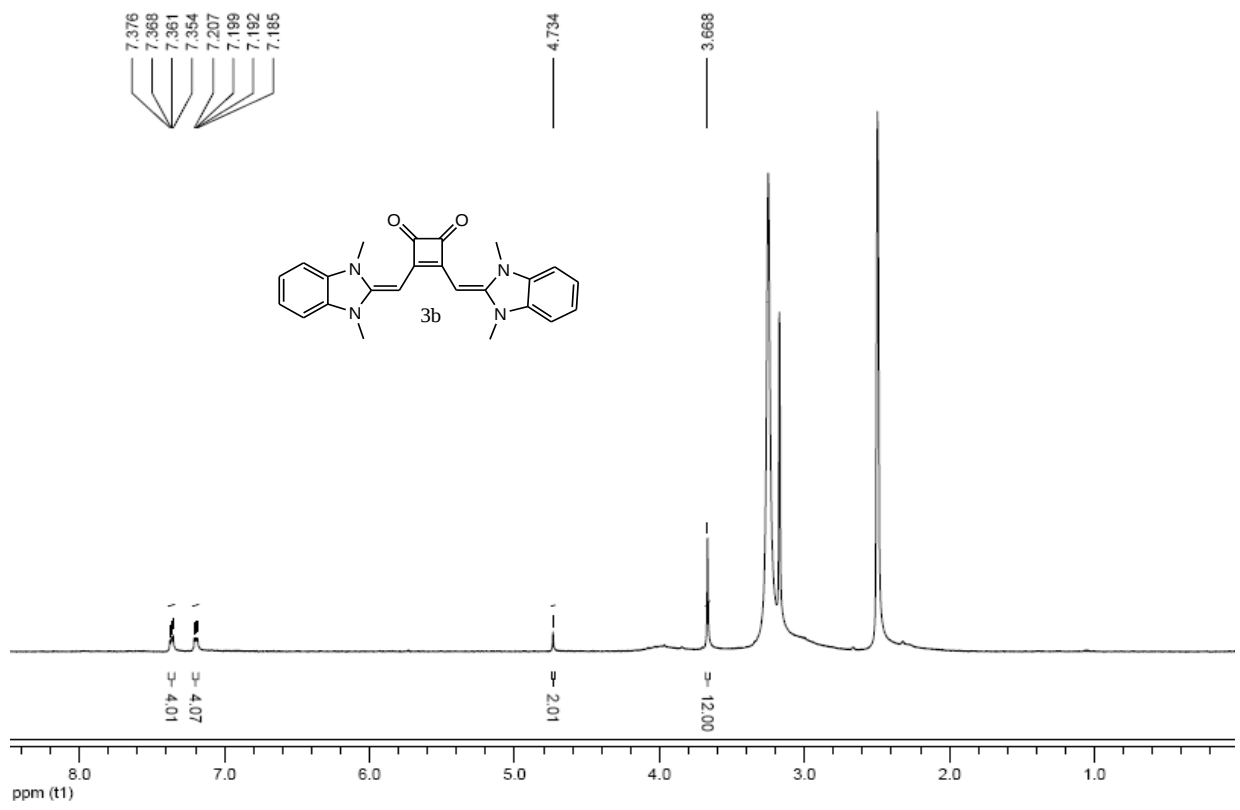
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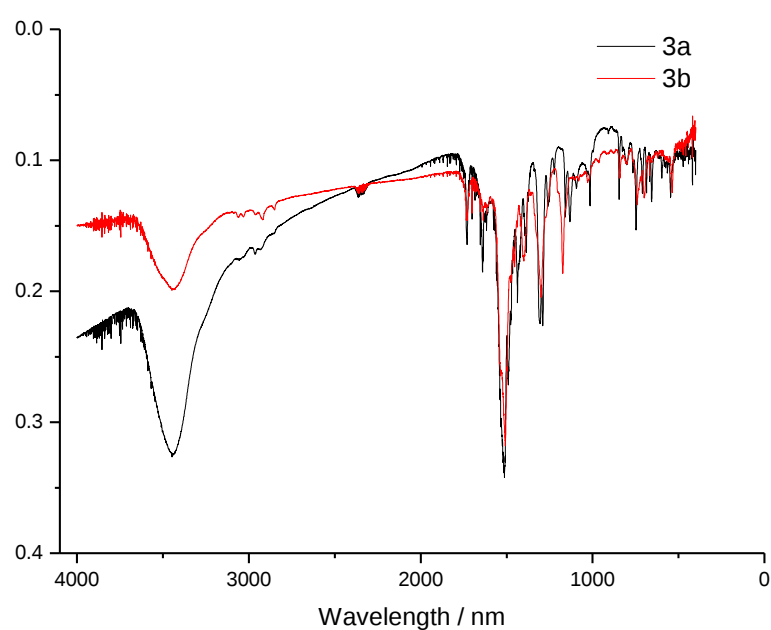




¹H and ¹³C NMR of 3a and 3b







FT-IR of 3a and 3b

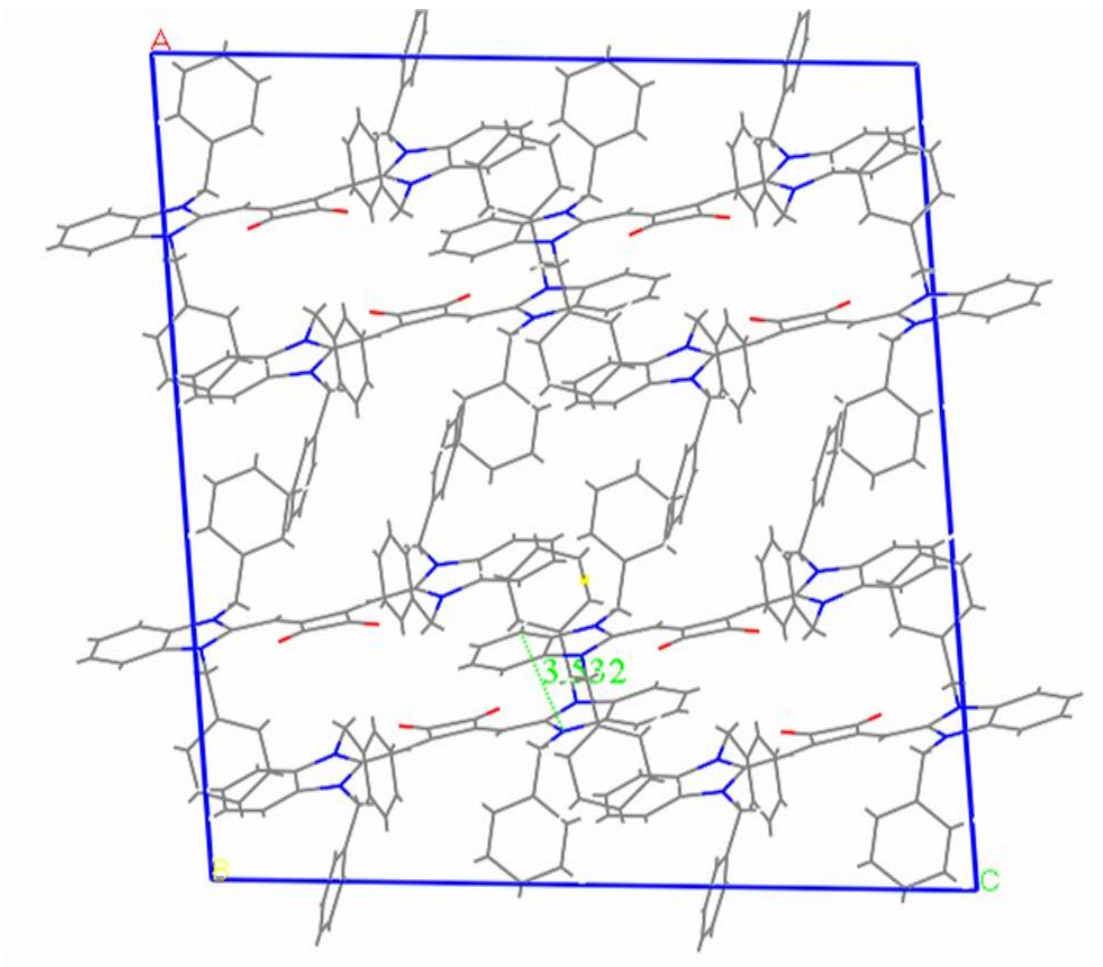


Figure S1. Unit cell diagram of 3b

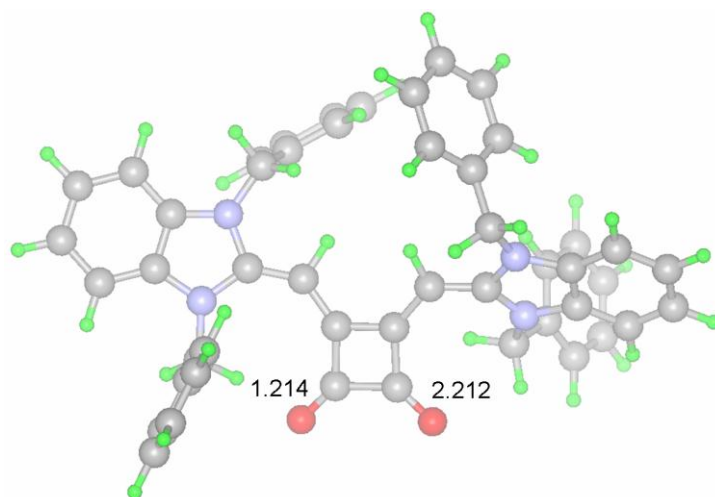


Figure S2. The optimized structure of 3a by DFT calculation.

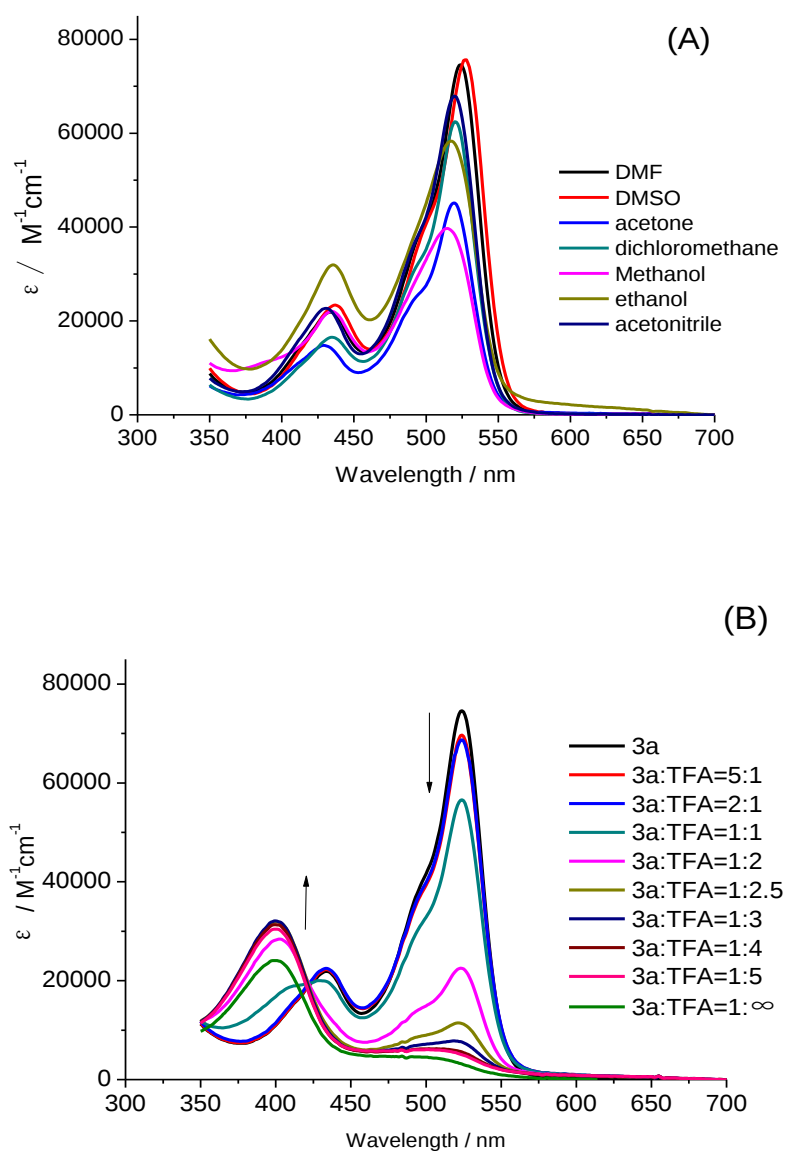


Figure S3. Absorption spectra of the 1,2-SQ 3a in various solvents (A). Absorption spectra change of 3a in acetone upon addition of different ratio of trifluoroacetic acid (TFA) (B).

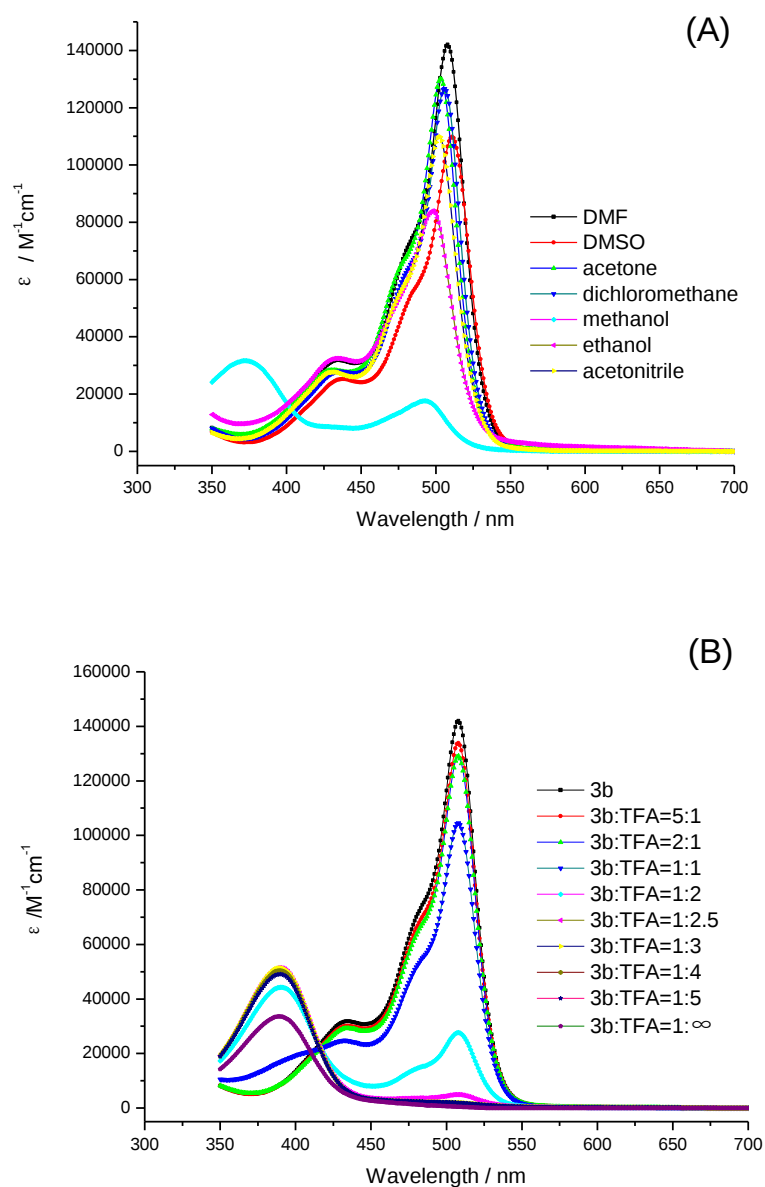


Figure S4. Absorption spectra of the 1,2-SQ 3b in various solvents (A). Absorption spectra change of 3a in acetone upon addition of different ratio of trifluoroacetic acid (TFA) (B).

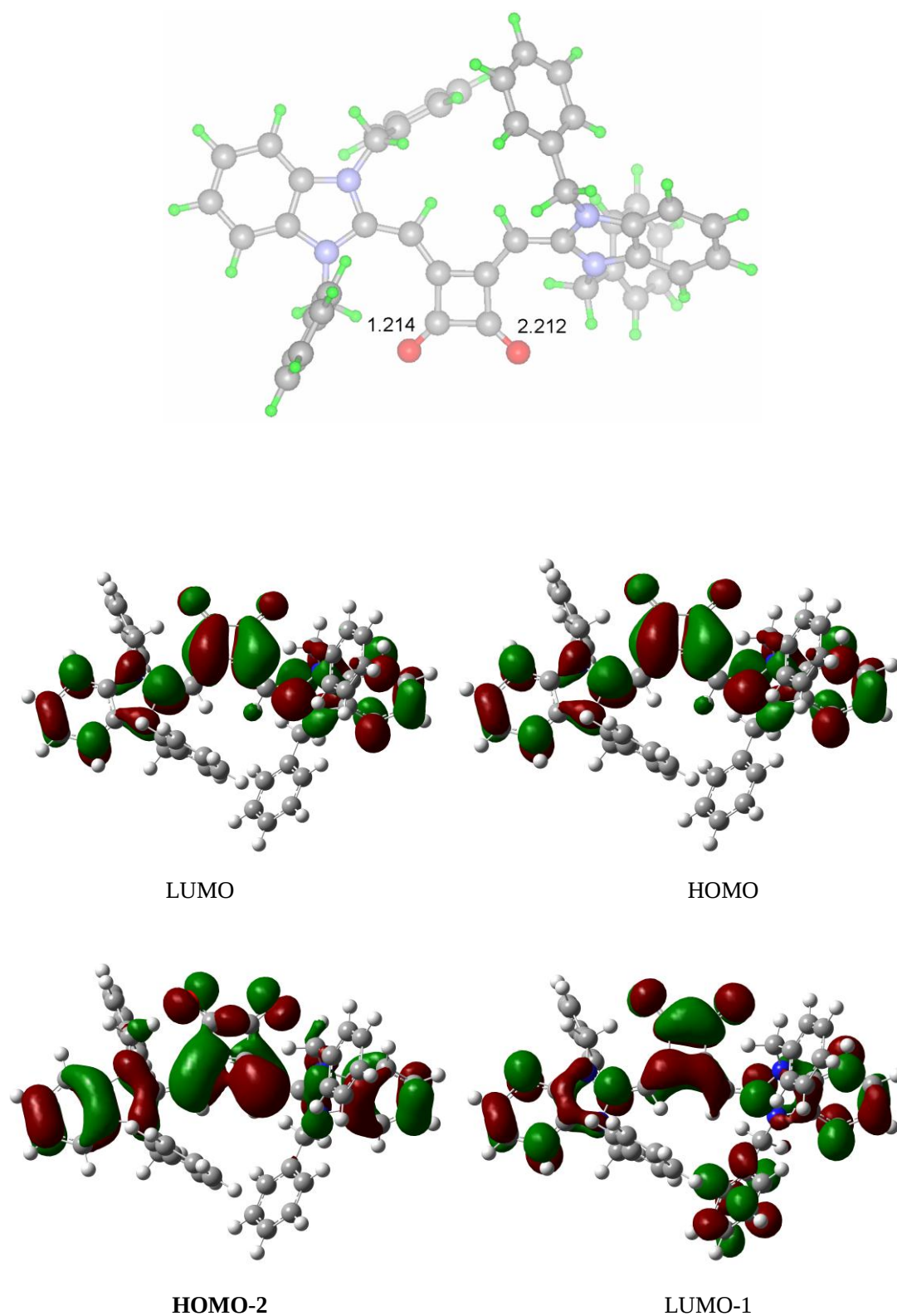
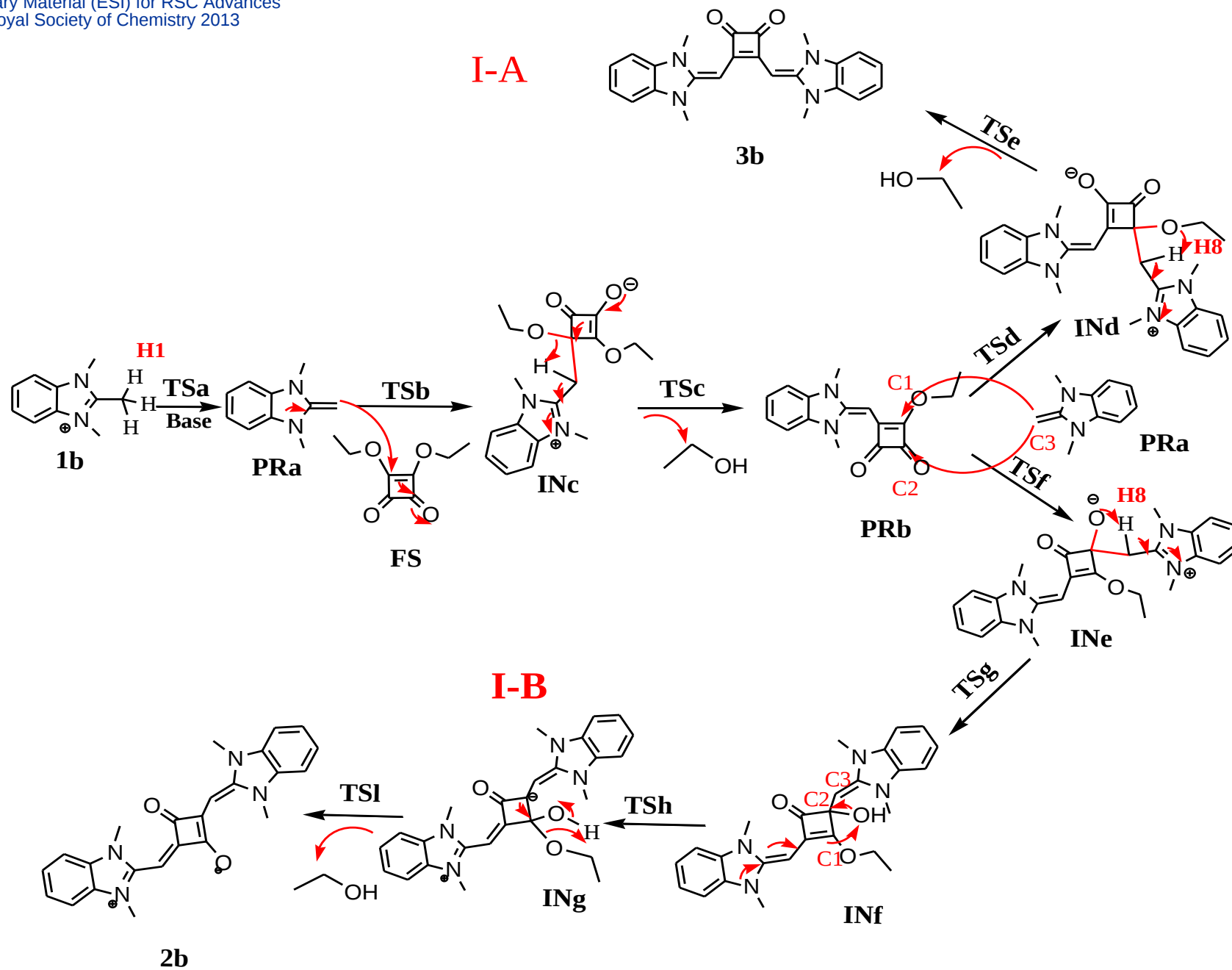
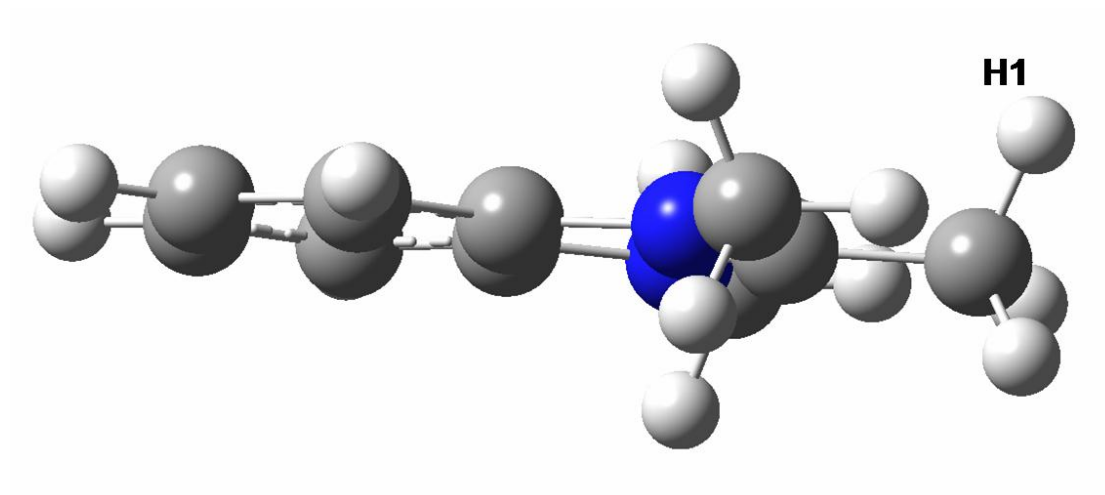


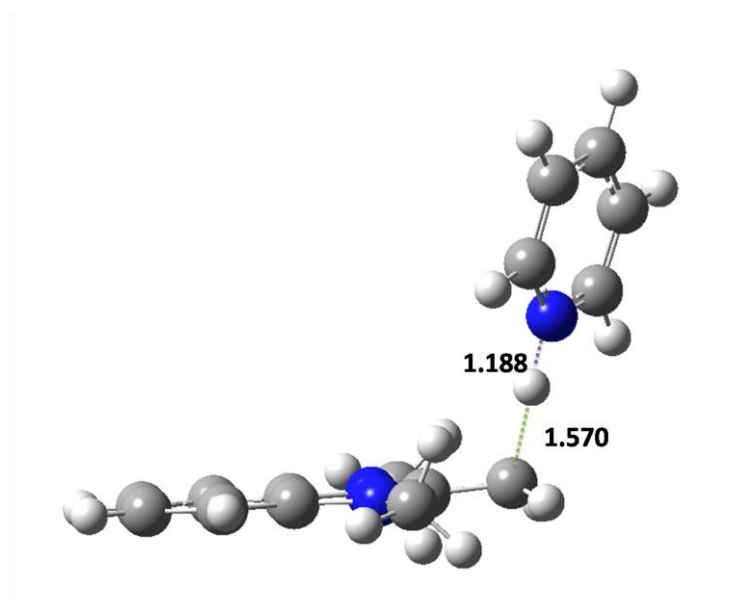
Figure S5. The FMO of 3a



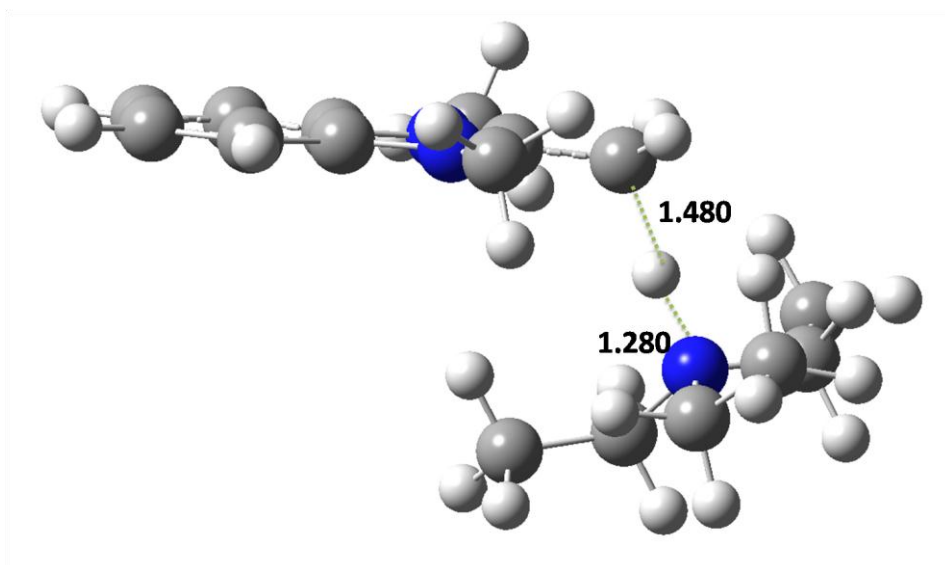
Scheme S3. Overall reaction mechanism for the synthesis of 2b and 3b.



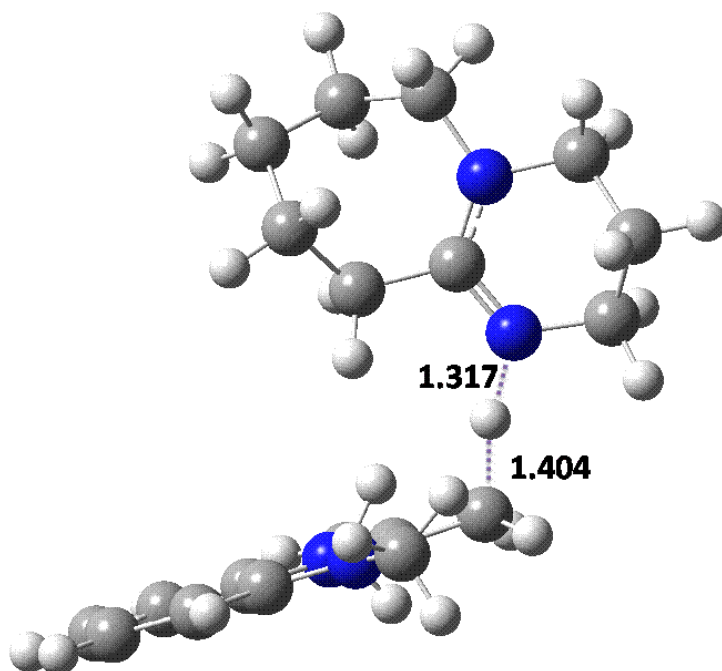
1b



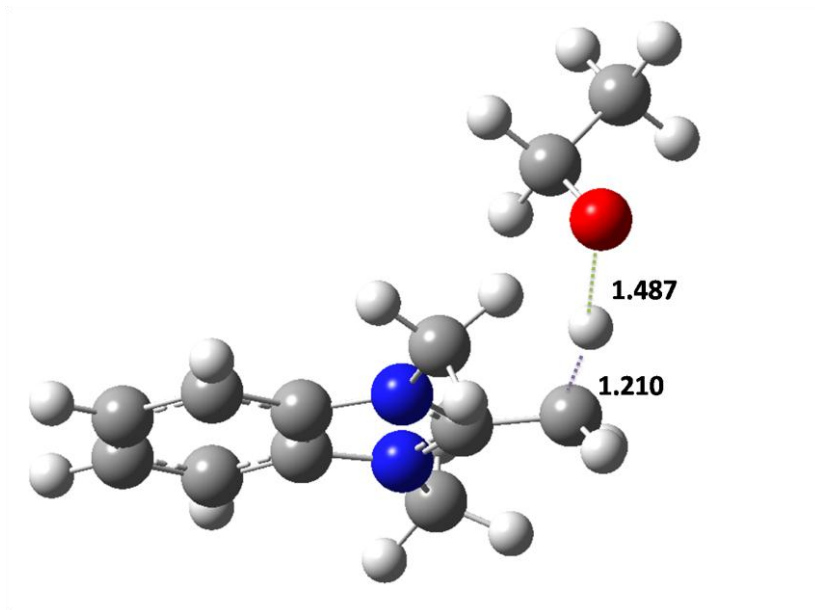
TSa4



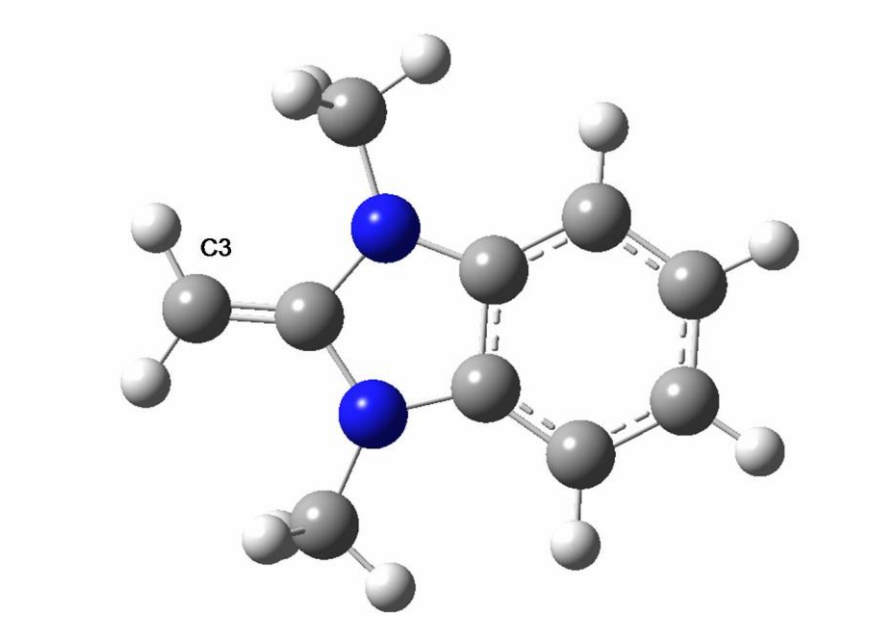
TSa3



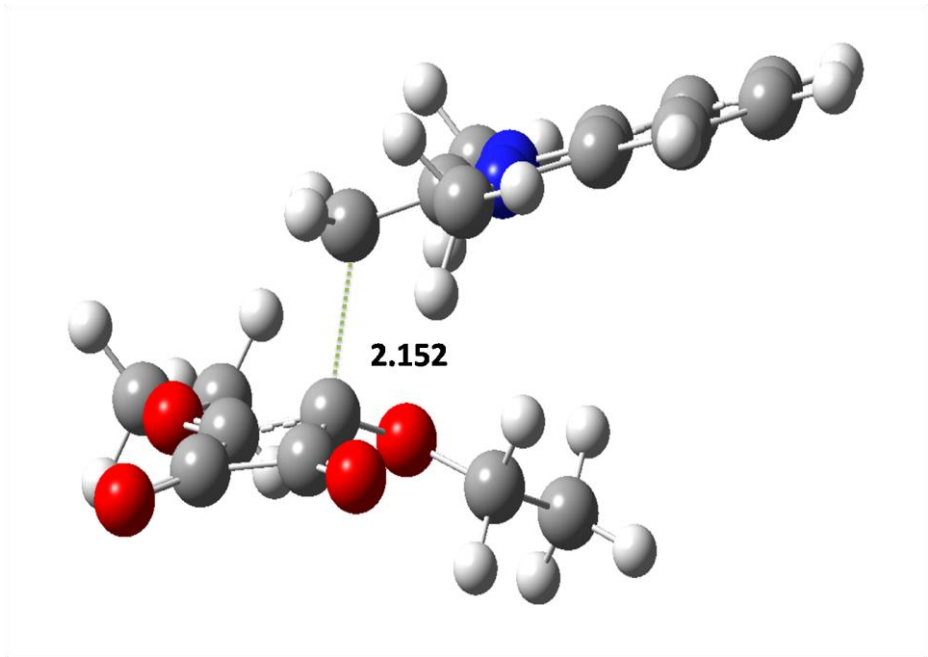
TSa2



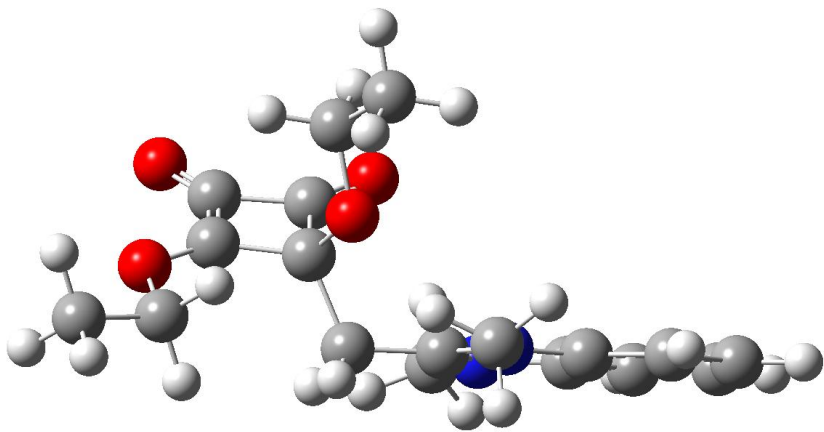
TSa1



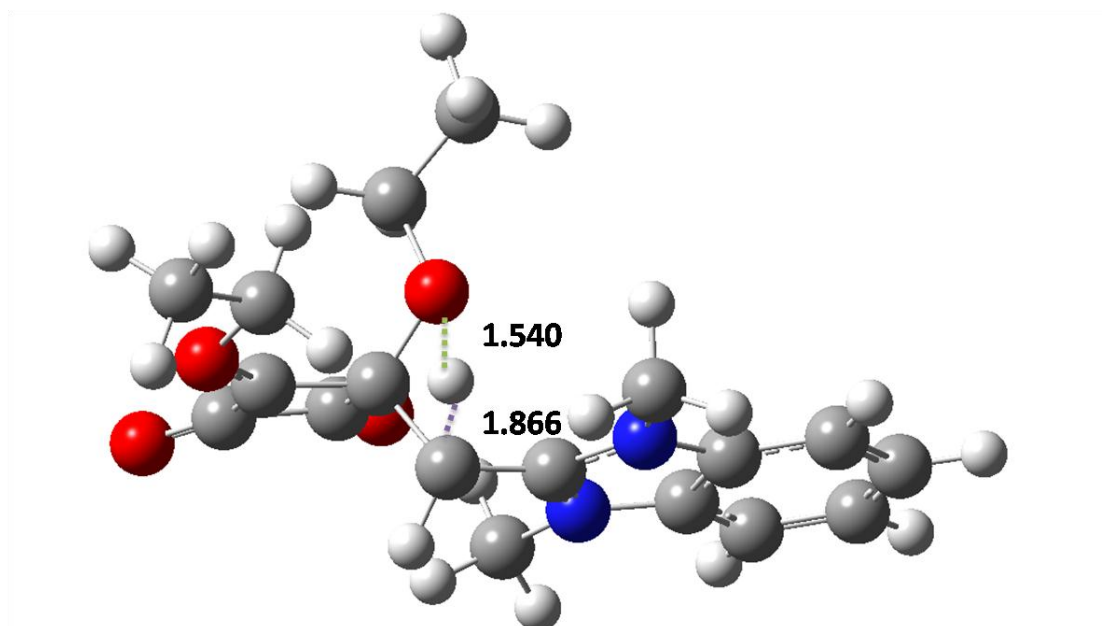
PRa



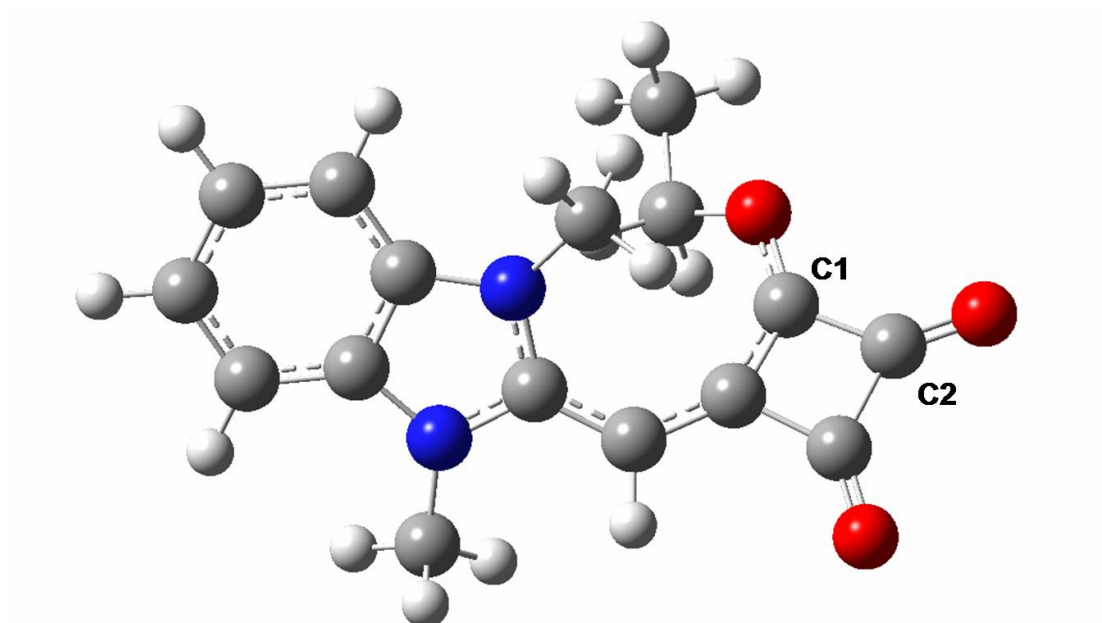
TSb



INC



TSC



PRb

Figure S6 The structures of TSa1, TSa2, TSa3, TSa4, M1, TSb, INc, TSc and PRb.

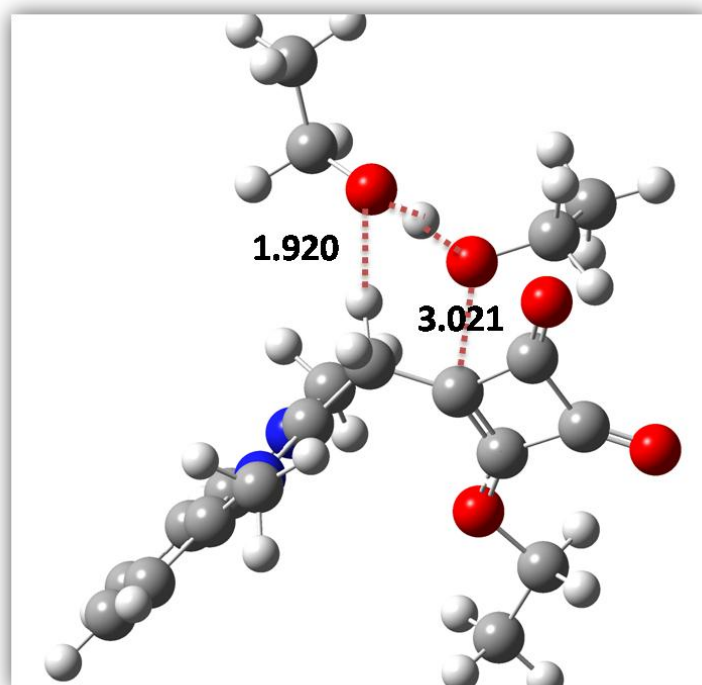
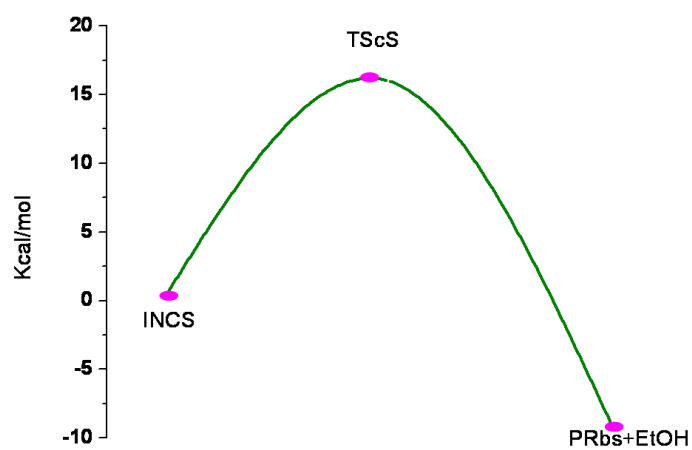
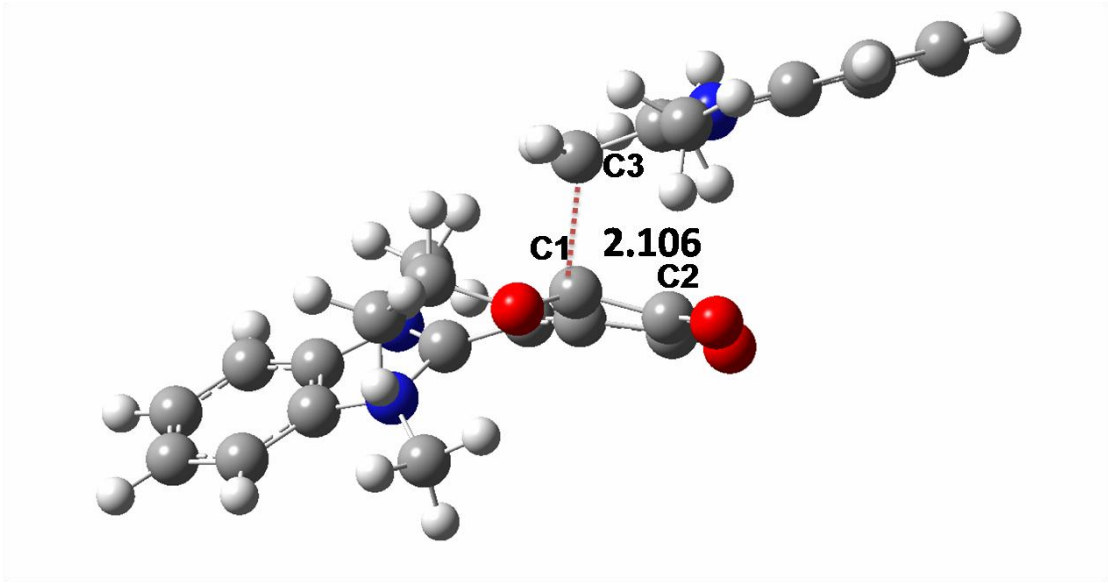
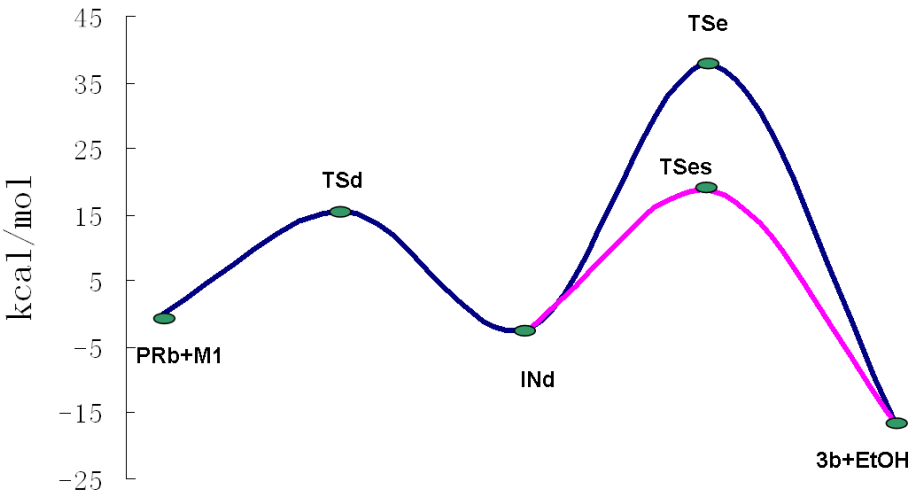
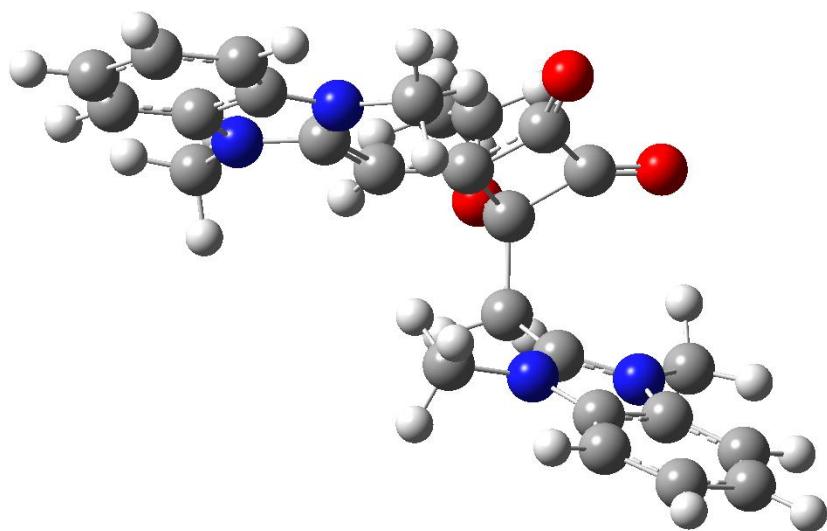


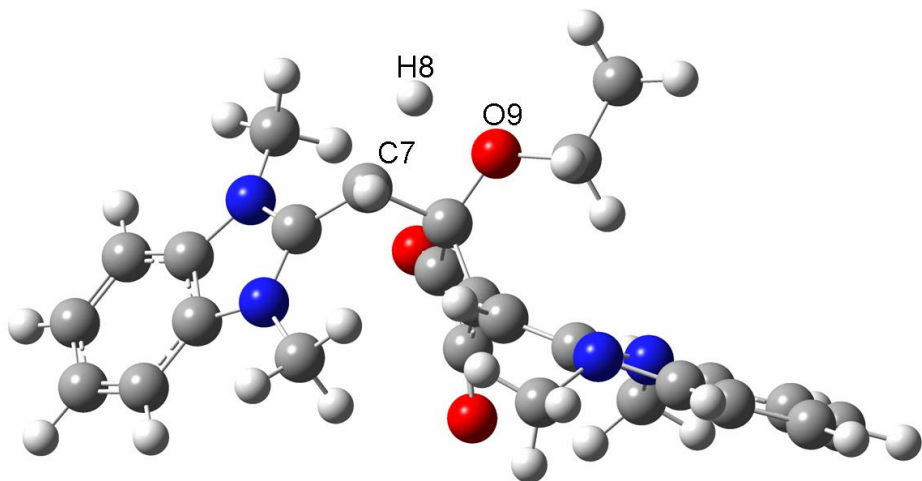
Figure S7. Energy profile for EtOH-assisted formation of PRb and the optimized structure of TScs.



TSd



INd



TSe

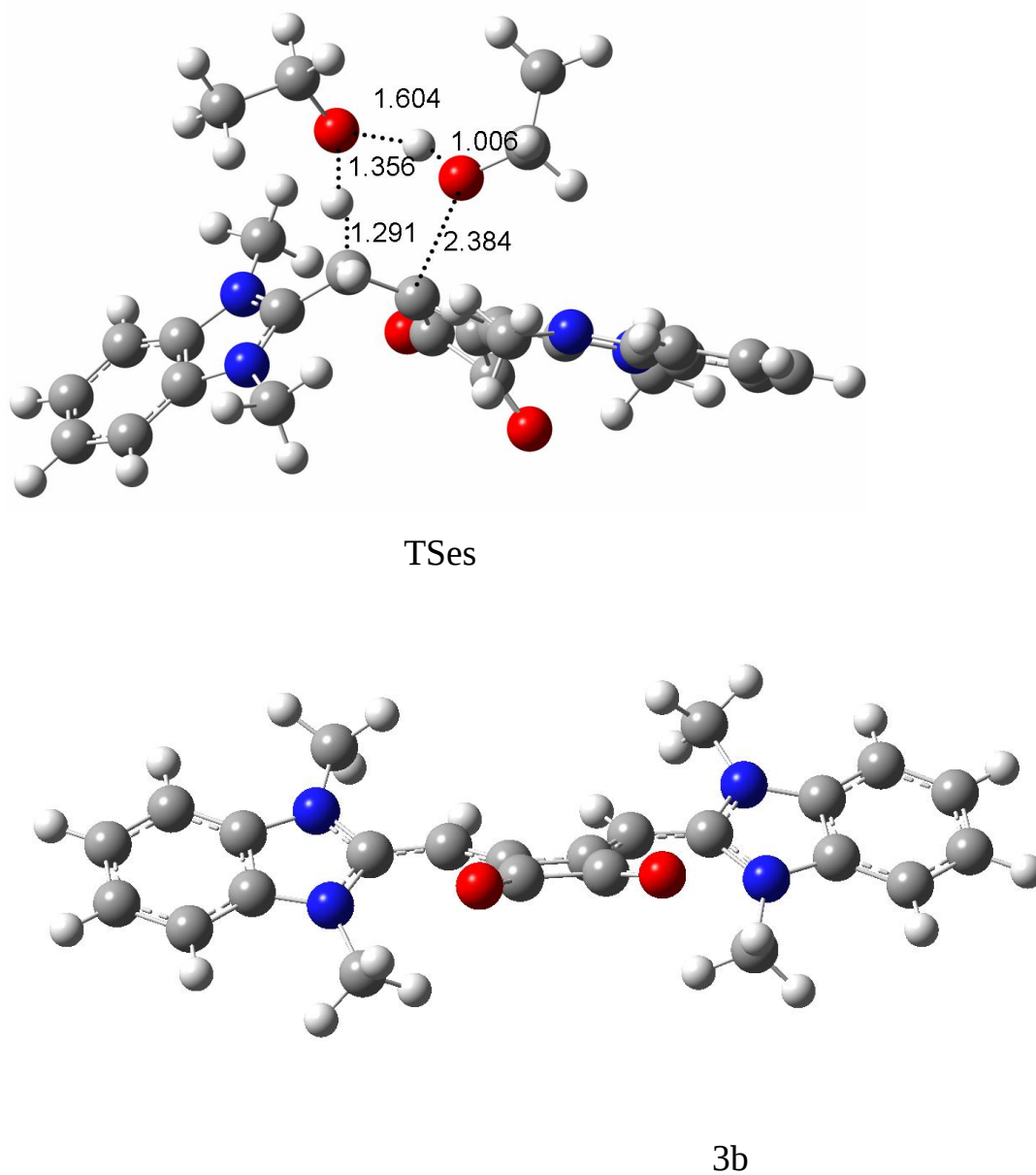
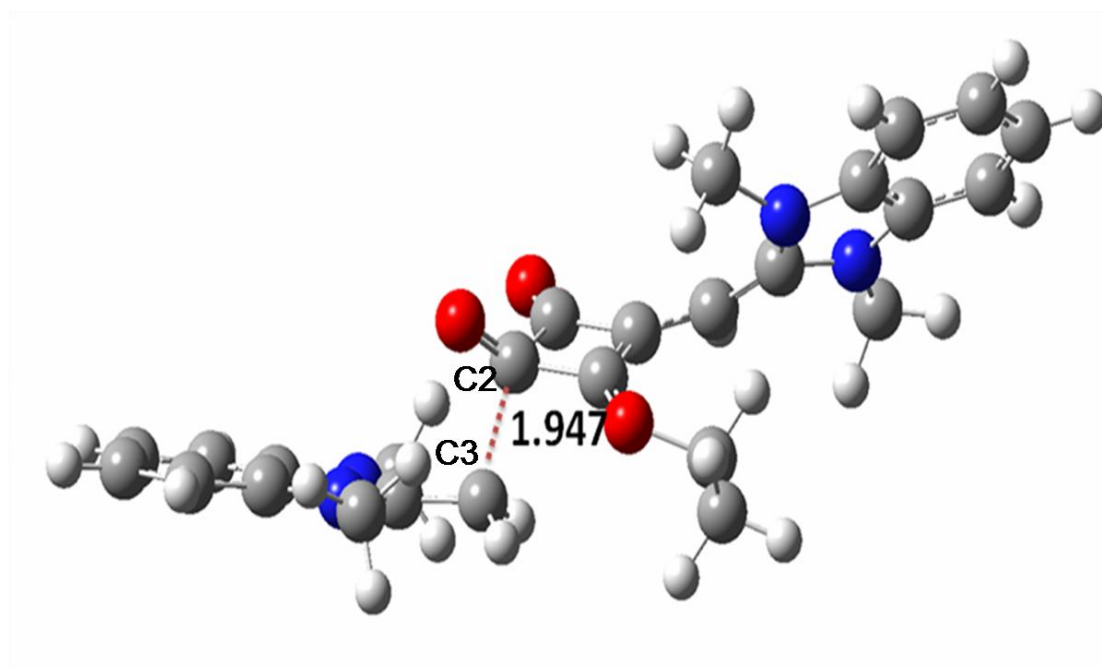
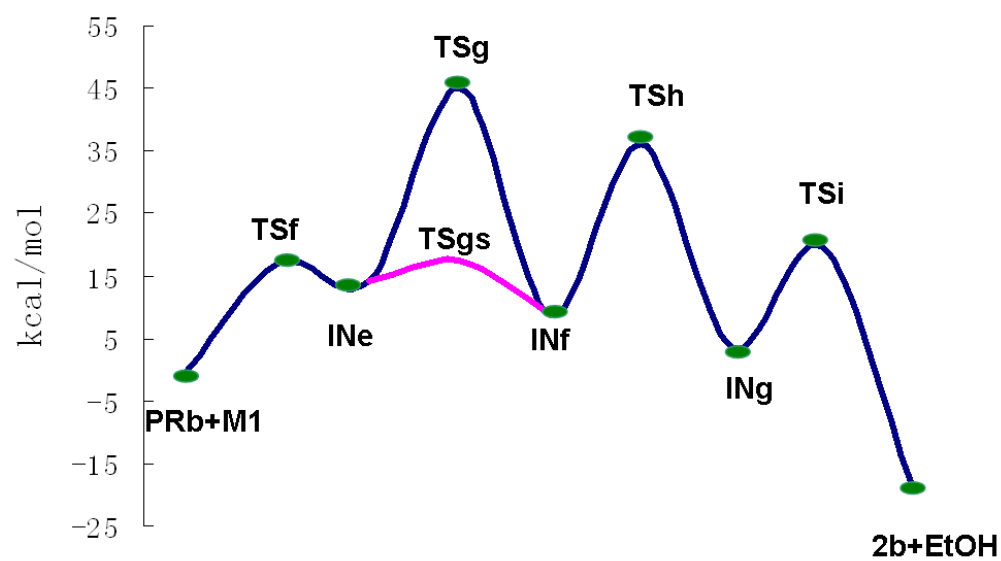
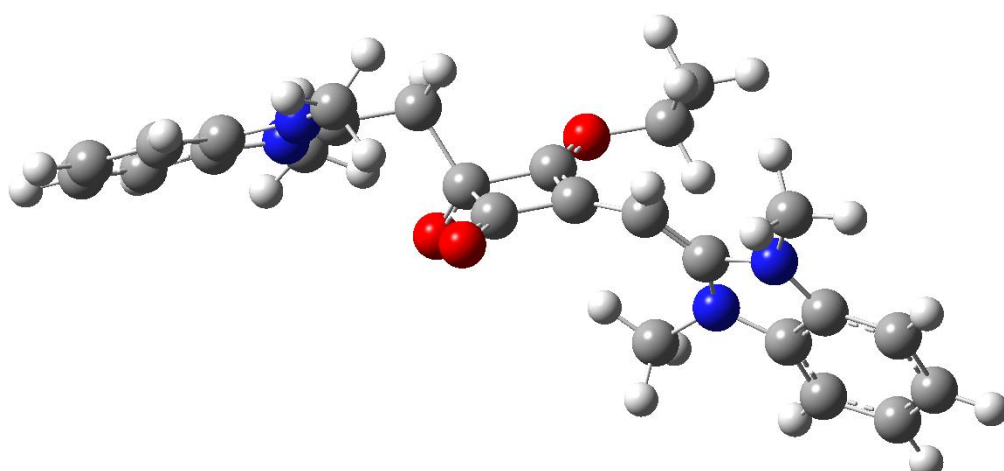


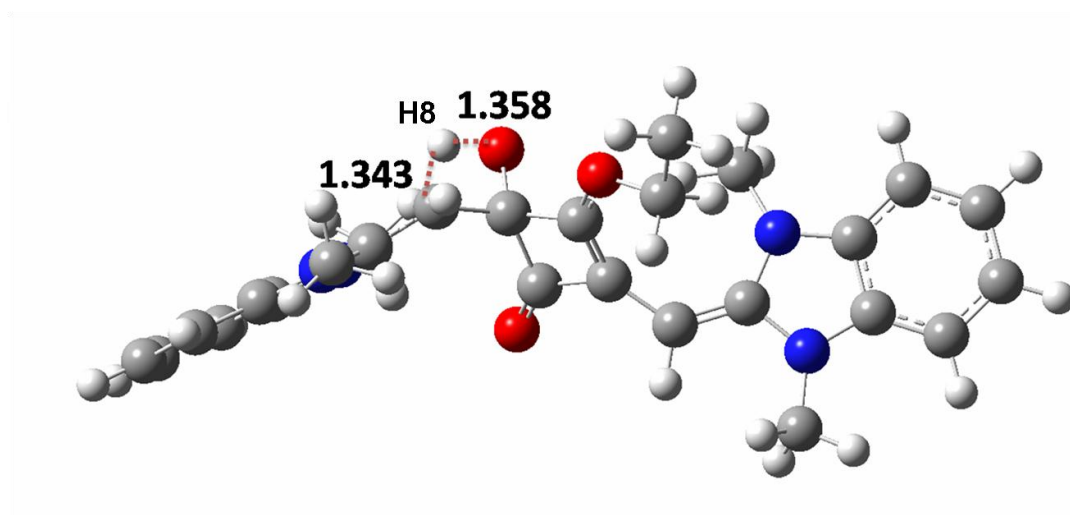
Figure S8. Energy profile for the formation from PRb to 3b and important stationary state structures.



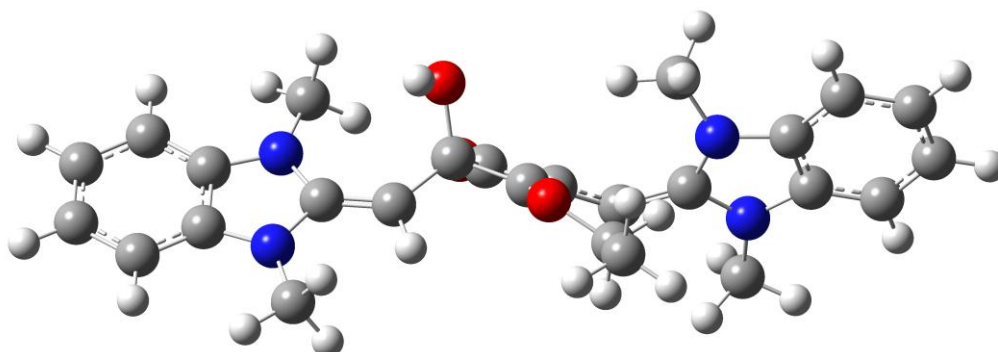
TSf



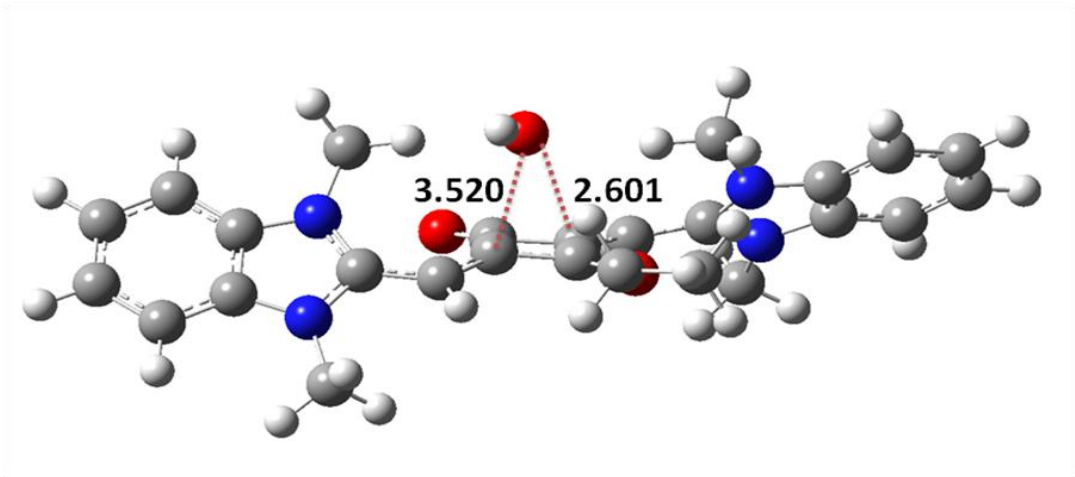
INe



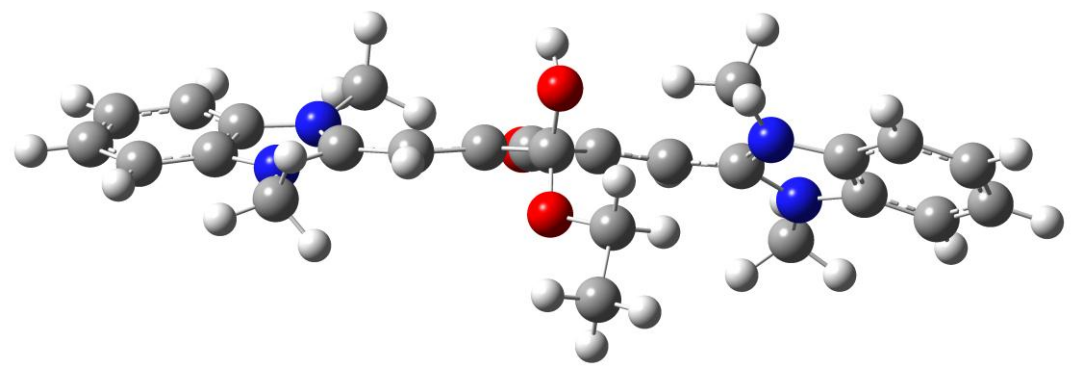
TSg



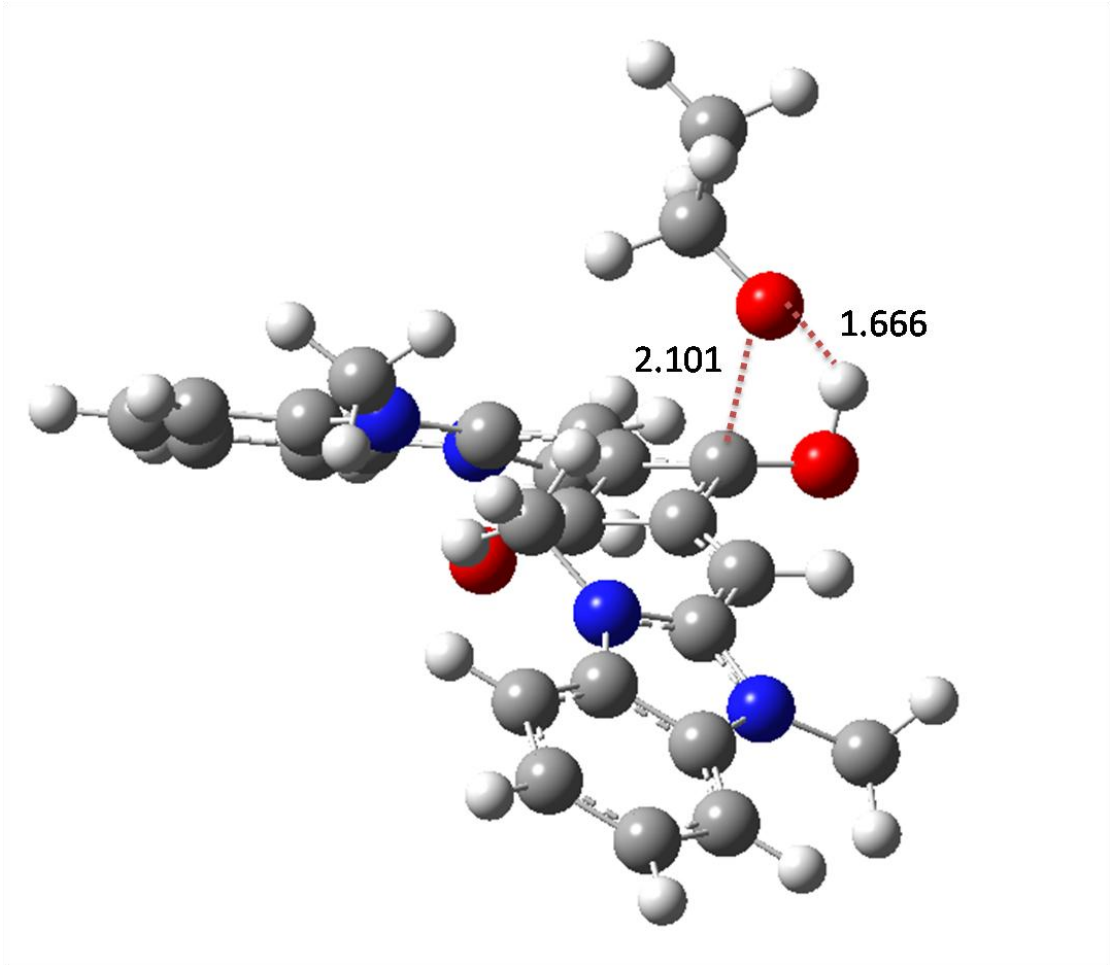
INf



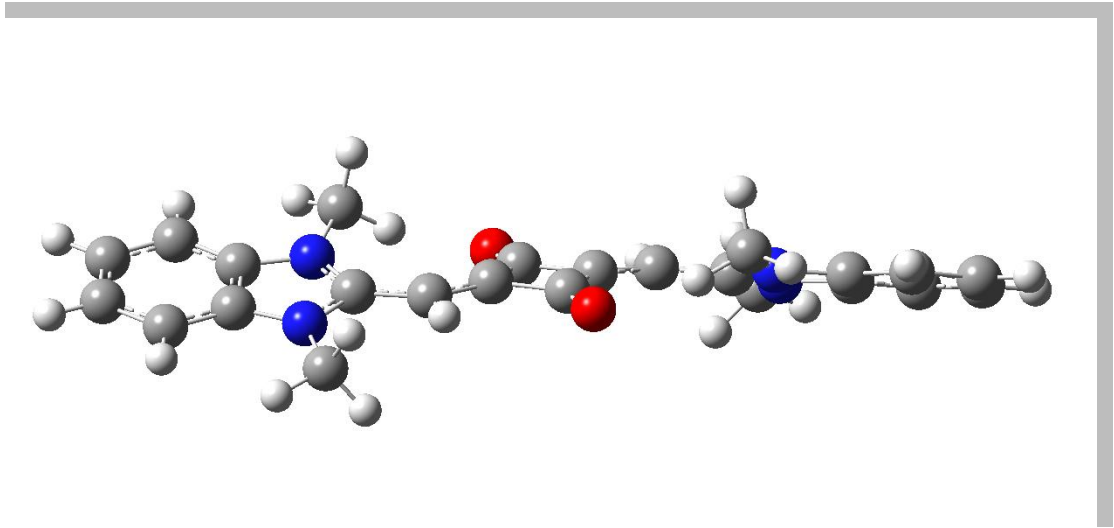
TSh



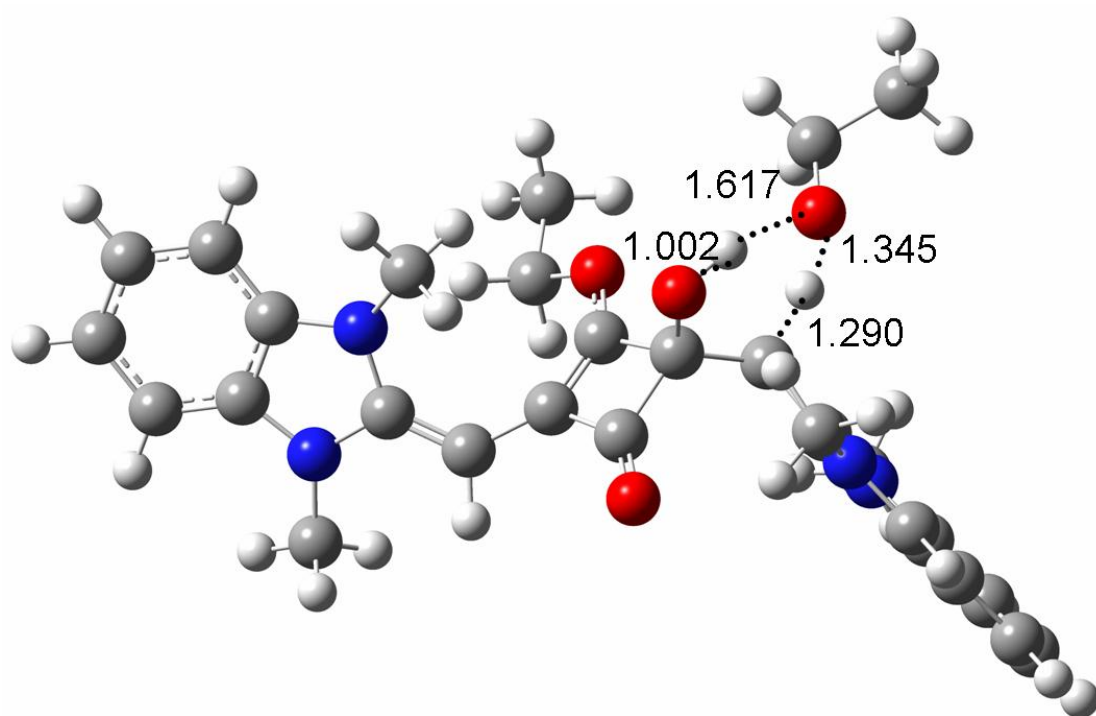
INg



TSi



2b



TSgs

Figure S9. Energy profile for the formation from PRb to 2b and important stationary state structures.

Table S1. Crystal data and structure refinement for 3a

Empirical formula	C ₄₈ H ₃₈ N ₄ O ₂
Formula weight	702.82
Temperature	296(2) K
Wavelength	0.71073 Å
Crystal system, space group	Monoclinic, C 2/c
Unit cell dimensions	a = 25.957(6) Å alpha = 90 deg. b = 11.995(3) Å beta = 94.994(3) deg. c = 23.968(5) Å gamma = 90 deg.
Volume	7434(3) Å ³
Z, Calculated density	1.256 Mg/m ³
Absorption coefficient	0.077 mm ⁻¹
F(000)	2960
Crystal size	0.36 × 0.30 × 0.28 mm
Theta range for data collection	2.22 to 28.35 deg.
Limiting indices	-14 ≤ h ≤ 33, -15 ≤ k ≤ 13, -31 ≤ l ≤ 27
Reflections collected / unique	12146 / 7754 [R(int) = 0.0788]
Completeness to theta = 28.35	83.7 %
Absorption correction	Semi-empirical from equivalents
Max. and min. transmission	0.979 and 0.973
Refinement method	Full-matrix least-squares on F ²
Data / restraints / parameters	7754 / 0 / 487
Goodness-of-fit on F ²	1.080
Final R indices [I > 2σ(I)]	R1 = 0.1005, wR2 = 0.1617
R indices (all data)	R1 = 0.2049, wR2 = 0.2009
Largest diff. peak and hole	0.219 and -0.236 e. Å ⁻³

Reference

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- [6] J. W. McIver, *Acc. Chem. Res.* **1974**, 7, 72.
- [7] (a) Cossi, M.; Barone, V.; Cammi, R.; Tomasi, J. *Chem. Phys. Lett.* **1996**, 255, 327. (b) M. T. Cancès, V. Mennucci, J. Tomasi, *J. Chem. Phys.* **1997**, 107, 3032. (c) V. Barone, M. Cossi, J. Tomasi, *J. Comput. Chem.* **1998**, 19, 404.

Cartesian coordinates of all reported structures:

1b

1	6	0	-0.533600	0.695954	-0.001341
2	6	0	-0.519747	-0.702685	-0.000998
3	6	0	-1.696656	-1.448021	0.000130
4	6	0	-2.886925	-0.730773	0.000405
5	6	0	-2.901180	0.675395	-0.000762
6	6	0	-1.725808	1.416908	-0.001792
7	6	0	1.590547	0.018909	-0.005007
8	1	0	-1.688141	-2.529822	0.000028
9	1	0	-3.826980	-1.268329	0.001169
10	1	0	-3.851919	1.193797	-0.001208
11	1	0	-1.741163	2.498630	-0.004213
12	7	0	0.819857	-1.084792	-0.001311
13	7	0	0.799275	1.108132	-0.000549
14	6	0	1.278409	-2.475073	0.004168
15	1	0	0.861319	-2.986715	0.871071
16	1	0	0.951896	-2.970349	-0.910154
17	1	0	2.361897	-2.503752	0.062791
18	6	0	1.204698	2.515484	0.005201
19	1	0	2.282465	2.592907	0.098065
20	1	0	0.885727	2.989876	-0.922646
21	1	0	0.740121	3.014561	0.854897
22	6	0	3.075404	0.004419	-0.004298
23	1	0	3.450244	-0.360825	0.955469
24	1	0	3.481681	0.997059	-0.175552
25	1	0	3.448074	-0.653519	-0.790927

M1

1	6	0	0.493465	0.706464	0.000018
2	6	0	0.493478	-0.706463	-0.000025
3	6	0	1.682613	-1.420929	-0.000069
4	6	0	2.885192	-0.696324	-0.000005
5	6	0	2.885192	0.696290	0.000057
6	6	0	1.682630	1.420909	0.000074
7	6	0	-1.675608	-0.000013	0.000003
8	1	0	1.691722	-2.503868	-0.000138
9	1	0	3.825493	-1.235254	-0.000008
10	1	0	3.825500	1.235210	0.000111
11	1	0	1.691745	2.503850	0.000120
12	7	0	-0.834568	-1.113875	0.000000
13	7	0	-0.834532	1.113890	-0.000077
14	6	0	-1.329546	-2.473729	0.000004
15	1	0	-1.939307	-2.664771	-0.888380
16	1	0	-0.489027	-3.164297	-0.000152

17	1	0	-1.939042	-2.664870	0.888555
18	6	0	-1.329493	2.473739	-0.000073
19	1	0	-1.938615	2.665070	0.888693
20	1	0	-0.488964	3.164303	-0.000720
21	1	0	-1.939599	2.664644	-0.888247
22	6	0	-3.030062	0.000024	0.000083
23	1	0	-3.581702	-0.927609	0.000119
24	1	0	-3.581671	0.927670	0.000184
TSa1					
1	6	0	-1.399365	-0.701294	-0.238721
2	6	0	-1.654402	0.637215	0.095762
3	6	0	-2.806663	1.010016	0.781479
4	6	0	-3.701856	-0.004396	1.113259
5	6	0	-3.450381	-1.341964	0.773619
6	6	0	-2.295043	-1.714467	0.090513
7	6	0	0.312704	0.543385	-0.976781
8	1	0	-3.001955	2.039527	1.051728
9	1	0	-4.610488	0.246783	1.646712
10	1	0	-4.170130	-2.103638	1.047751
11	1	0	-2.108238	-2.747456	-0.172259
12	7	0	-0.579764	1.381222	-0.390426
13	7	0	-0.169551	-0.720005	-0.890517
14	6	0	-0.440264	2.827277	-0.250308
15	1	0	-1.427847	3.282442	-0.303670
16	1	0	0.026337	3.079764	0.703640
17	1	0	0.164013	3.216383	-1.065984
18	6	0	0.552986	-1.907315	-1.354093
19	1	0	1.610428	-1.777015	-1.100068
20	1	0	0.157397	-2.775693	-0.831085
21	1	0	0.417134	-2.043408	-2.428947
22	6	0	1.605327	0.872827	-1.547889
23	1	0	1.802300	1.941764	-1.544148
24	1	0	2.446613	0.248368	-0.942373
25	1	0	1.686154	0.485648	-2.567582
26	6	0	3.164643	-0.457698	1.120837
27	6	0	4.466806	0.014378	1.793088
28	1	0	2.803748	-1.345495	1.687345
29	1	0	2.391556	0.328111	1.314450
30	1	0	4.342936	0.181051	2.870881
31	1	0	5.251358	-0.735962	1.647729
32	1	0	4.813822	0.948277	1.337373
33	8	0	3.315390	-0.720718	-0.223686

TSa2

1	6	0	3.251917	-0.246914	-0.696711
2	6	0	3.274742	0.149691	0.649896
3	6	0	4.176291	1.103974	1.107567
4	6	0	5.056324	1.650721	0.173334
5	6	0	5.034675	1.253252	-1.169210
6	6	0	4.131302	0.294200	-1.627654
7	6	0	1.677161	-1.420411	0.406085
8	1	0	4.204872	1.411995	2.144633
9	1	0	5.773144	2.395445	0.497213
10	1	0	5.735457	1.694781	-1.867270
11	1	0	4.125054	-0.015976	-2.664443
12	7	0	2.283792	-0.587404	1.298944
13	7	0	2.244597	-1.203973	-0.814908
14	6	0	1.955701	-0.527627	2.719049
15	1	0	2.260988	-1.446013	3.224220
16	1	0	2.479916	0.313628	3.165047
17	1	0	0.883836	-0.379047	2.849512
18	6	0	1.877902	-1.909135	-2.037560
19	1	0	0.799234	-2.053671	-2.066649
20	1	0	2.167502	-1.302969	-2.893393
21	1	0	2.378367	-2.878086	-2.095122
22	6	0	0.582780	-2.284993	0.681625
23	1	0	0.529814	-2.590055	1.724550
24	1	0	0.534529	-3.142871	0.014041
25	6	0	-2.339229	-0.079450	0.108681
26	6	0	-2.362116	3.278977	-0.214791
27	6	0	-3.561695	2.690903	0.538126
28	6	0	-1.261947	0.995395	0.116385
29	6	0	-2.837494	-2.424714	0.367360
30	6	0	-4.633325	-0.866365	-0.305867
31	6	0	-4.261337	1.554139	-0.202904
32	6	0	-3.976840	-2.201522	-0.619057
33	6	0	-1.471865	2.189297	-0.825513
34	1	0	-1.128591	1.343426	1.146538
35	1	0	-2.274981	-3.331850	0.132838
36	1	0	-0.495317	2.610525	-1.076824
37	1	0	-1.899073	1.833574	-1.768561
38	1	0	-1.775296	3.893571	0.475449
39	1	0	-2.713105	3.947198	-1.007398
40	1	0	-4.305199	3.474323	0.708622
41	1	0	-3.265219	2.337225	1.530333
42	1	0	-4.721000	-2.997809	-0.553357
43	1	0	-3.580306	-2.197608	-1.638518

44	1	0	-4.402390	1.810725	-1.260156
45	1	0	-5.259673	1.430102	0.223150
46	1	0	-5.288435	-0.561885	-1.125930
47	1	0	-5.250256	-0.938942	0.596752
48	1	0	-3.235133	-2.543800	1.383170
49	1	0	-0.338340	0.481974	-0.146795
50	7	0	-3.640410	0.212453	-0.110869
51	7	0	-1.911879	-1.299113	0.321357
52	1	0	-0.650778	-1.648171	0.473620

TSa3.

1	6	0	-2.488071	-0.704694	-0.189942
2	6	0	-2.486670	0.698800	-0.188175
3	6	0	-3.576797	1.424445	0.278018
4	6	0	-4.679050	0.699552	0.733319
5	6	0	-4.684712	-0.700143	0.722133
6	6	0	-3.587274	-1.427489	0.259150
7	6	0	-0.511459	-0.002383	-1.022844
8	1	0	-3.576953	2.506576	0.293444
9	1	0	-5.546019	1.233671	1.102687
10	1	0	-5.557427	-1.232961	1.079720
11	1	0	-3.601473	-2.509608	0.250823
12	7	0	-1.260151	1.099631	-0.717837
13	7	0	-1.252035	-1.104387	-0.697665
14	6	0	-0.834490	2.480532	-0.901866
15	1	0	-1.716378	3.111656	-0.991021
16	1	0	-0.231644	2.823292	-0.058247
17	1	0	-0.256240	2.568690	-1.820318
18	6	0	-0.830540	-2.479809	-0.931460
19	1	0	-1.491151	-3.147443	-0.383742
20	1	0	-0.875498	-2.724942	-1.994750
21	1	0	0.186009	-2.626579	-0.568351
22	6	0	0.822557	-0.012520	-1.501453
23	1	0	1.101398	0.889198	-2.040987
24	1	0	1.827703	-0.018831	-0.416255
25	1	0	1.074665	-0.909086	-2.062441
26	7	0	2.794019	-0.000713	0.422829
27	6	0	2.951527	1.413162	0.893276
28	1	0	1.978511	1.725403	1.270958
29	1	0	3.648566	1.413175	1.738665
30	6	0	4.021700	-0.473022	-0.294949
31	1	0	4.140797	0.172635	-1.163981
32	1	0	4.883185	-0.306164	0.361052
33	6	0	2.443215	-0.910893	1.558726

34	1	0	2.252043	-1.892587	1.127091
35	1	0	3.323798	-1.001182	2.204394
36	6	0	3.985862	-1.926610	-0.758594
37	1	0	4.862877	-2.102431	-1.385527
38	1	0	4.028329	-2.636447	0.068055
39	1	0	3.101336	-2.142224	-1.360700
40	6	0	1.228362	-0.484309	2.377768
41	1	0	0.994641	-1.286950	3.080638
42	1	0	1.406265	0.419462	2.961289
43	1	0	0.348061	-0.328827	1.751237
44	6	0	3.415525	2.405896	-0.169384
45	1	0	3.340616	3.410943	0.251635
46	1	0	4.453569	2.252350	-0.465997
47	1	0	2.789464	2.374395	-1.062981
TSa4					
1	6	0	2.384049	-0.641813	0.061285
2	6	0	2.283208	0.745431	-0.137481
3	6	0	3.205066	1.431909	-0.918421
4	6	0	4.229820	0.686997	-1.506472
5	6	0	4.325715	-0.695219	-1.314712
6	6	0	3.401392	-1.383839	-0.525842
7	6	0	0.581190	0.101652	1.200762
8	1	0	3.140451	2.502021	-1.067544
9	1	0	4.963593	1.193323	-2.121903
10	1	0	5.131247	-1.245695	-1.785467
11	1	0	3.480510	-2.453878	-0.383841
12	7	0	1.160393	1.171170	0.570639
13	7	0	1.330757	-1.004670	0.900165
14	6	0	0.671838	2.539206	0.665737
15	1	0	0.901155	2.970346	1.642928
16	1	0	1.146867	3.138609	-0.107349
17	1	0	-0.406694	2.561435	0.506346
18	6	0	1.047401	-2.346220	1.388073
19	1	0	0.180227	-2.775371	0.880843
20	1	0	1.913315	-2.978345	1.205775
21	1	0	0.858877	-2.319764	2.461781
22	6	0	-0.615937	0.124211	1.936258
23	1	0	-0.851235	1.073745	2.408333
24	1	0	-0.783174	-0.732503	2.581498
25	1	0	-1.819971	0.003452	0.936031
26	6	0	-2.953912	-1.113165	-0.562998
27	6	0	-4.076093	-1.213122	-1.369318
28	6	0	-5.030442	-0.198600	-1.317511
29	6	0	-4.837681	0.885937	-0.463794

30	6	0	-3.692836	0.924335	0.315105
31	1	0	-2.171647	-1.861589	-0.549138
32	1	0	-4.196701	-2.067416	-2.021419
33	1	0	-5.916899	-0.252681	-1.937149
34	1	0	-5.559686	1.688617	-0.400333
35	1	0	-3.473823	1.733563	1.000414
36	7	0	-2.787303	-0.061368	0.250078
TSb					
1	6	0	-2.949897	-0.857904	-0.332852
2	6	0	-2.908306	0.527171	-0.088373
3	6	0	-4.008621	1.202501	0.428719
4	6	0	-5.154816	0.452720	0.697909
5	6	0	-5.195285	-0.925387	0.457491
6	6	0	-4.092028	-1.604085	-0.062529
7	6	0	-0.909434	-0.100006	-0.928514
8	1	0	-3.985697	2.268142	0.616367
9	1	0	-6.028546	0.950703	1.100607
10	1	0	-6.099720	-1.479527	0.677691
11	1	0	-4.132326	-2.669925	-0.246084
12	7	0	-1.639554	0.962641	-0.458646
13	7	0	-1.708657	-1.212803	-0.851655
14	6	0	-1.158639	2.337976	-0.436988
15	1	0	-1.913755	2.967749	0.026569
16	1	0	-0.241369	2.400732	0.147195
17	1	0	-0.975552	2.696464	-1.452528
18	6	0	-1.286132	-2.550527	-1.246849
19	1	0	-0.435803	-2.870784	-0.641376
20	1	0	-2.114597	-3.238210	-1.097499
21	1	0	-1.008188	-2.562534	-2.302770
22	6	0	0.435372	-0.065996	-1.326127
23	1	0	0.799316	0.899341	-1.654399
24	1	0	0.766702	-0.893516	-1.939723
25	6	0	2.201891	-1.732318	0.244383
26	6	0	1.819785	-0.270985	0.308088
27	6	0	3.130052	0.034683	-0.198083
28	6	0	3.527206	-1.338264	-0.371070
29	8	0	3.784037	1.144557	-0.522671
30	8	0	1.641040	-2.771923	0.542037
31	8	0	4.511968	-1.945485	-0.792046
32	8	0	1.190203	0.433612	1.284462
33	6	0	3.261136	2.417349	-0.048779
34	6	0	4.268657	3.485399	-0.414216
35	1	0	3.109548	2.352524	1.030398
36	1	0	2.297475	2.601787	-0.528994

37	1	0	3.905948	4.461558	-0.083692
38	1	0	5.229617	3.292746	0.067453
39	1	0	4.419526	3.521794	-1.495322
40	6	0	0.398896	-0.333978	2.228275
41	6	0	-0.166141	0.630275	3.249636
42	1	0	1.044677	-1.076955	2.702087
43	1	0	-0.393275	-0.862468	1.692753
44	1	0	-0.749250	0.077852	3.990495
45	1	0	0.636953	1.158372	3.768531
46	1	0	-0.821347	1.365796	2.778456
INc					
1	6	0	3.108169	0.622641	-0.402061
2	6	0	3.017248	-0.770579	-0.300723
3	6	0	4.127348	-1.555338	0.006801
4	6	0	5.326921	-0.886562	0.218486
5	6	0	5.416046	0.513626	0.126538
6	6	0	4.309664	1.294747	-0.184741
7	6	0	0.997048	0.026596	-0.814300
8	1	0	4.064245	-2.633097	0.075971
9	1	0	6.214326	-1.458095	0.460983
10	1	0	6.369482	0.995688	0.303923
11	1	0	4.382041	2.372218	-0.248632
12	7	0	1.690413	-1.102051	-0.558645
13	7	0	1.836724	1.080328	-0.737782
14	6	0	1.183582	-2.475454	-0.614529
15	1	0	1.412915	-2.918084	-1.584979
16	1	0	1.665989	-3.051564	0.173351
17	1	0	0.115483	-2.465765	-0.427305
18	6	0	1.501711	2.494943	-0.907247
19	1	0	1.289307	2.938529	0.064325
20	1	0	2.342017	2.992785	-1.387169
21	1	0	0.627857	2.593539	-1.545395
22	6	0	-0.452206	0.101005	-1.150081
23	1	0	-0.720555	-0.792905	-1.715284
24	1	0	-0.620253	0.955443	-1.803449
25	6	0	-1.262876	1.513835	0.948287
26	6	0	-1.397005	0.228639	0.087831
27	6	0	-2.788976	0.737618	-0.108419
28	6	0	-2.672554	1.914697	0.668908
29	8	0	-3.866065	0.253346	-0.761827
30	8	0	-0.316010	1.947380	1.598362
31	8	0	-3.392481	2.886838	0.987499
32	8	0	-1.202918	-1.041451	0.767360
33	6	0	-3.704627	-0.968076	-1.513886

	34	6	0	-5.082208	-1.442429	-1.929926
	35	1	0	-3.198483	-1.711223	-0.891655
	36	1	0	-3.082995	-0.768027	-2.393529
	37	1	0	-4.998593	-2.358334	-2.520087
	38	1	0	-5.700497	-1.650623	-1.053852
	39	1	0	-5.583393	-0.685821	-2.537972
	40	6	0	-1.853963	-1.189194	2.033925
	41	6	0	-1.498576	-2.556218	2.590801
	42	1	0	-2.939700	-1.093506	1.913408
	43	1	0	-1.524302	-0.400317	2.719424
	44	1	0	-1.980227	-2.701799	3.561400
	45	1	0	-1.834726	-3.350580	1.919635
	46	1	0	-0.418560	-2.652269	2.726729
TSc						
	1	6	0	3.129862	-0.216073	0.685251
	2	6	0	2.860556	0.650781	-0.380056
	3	6	0	3.879465	1.169562	-1.176871
	4	6	0	5.176149	0.780252	-0.864117
	5	6	0	5.446053	-0.094091	0.204062
	6	6	0	4.429580	-0.609119	0.999386
	7	6	0	0.925999	0.099865	0.572265
	8	1	0	3.673506	1.839531	-2.000870
	9	1	0	5.998981	1.157333	-1.458833
	10	1	0	6.471421	-0.374834	0.410792
	11	1	0	4.641698	-1.284301	1.817683
	12	7	0	1.479925	0.827618	-0.414296
	13	7	0	1.900771	-0.530983	1.257748
	14	6	0	0.784077	1.662024	-1.403076
	15	1	0	1.252020	2.647023	-1.407642
	16	1	0	0.893685	1.204869	-2.387933
	17	1	0	-0.273791	1.777083	-1.131777
	18	6	0	1.724303	-1.539079	2.301793
	19	1	0	1.903195	-2.527958	1.877557
	20	1	0	2.425909	-1.344082	3.111277
	21	1	0	0.713114	-1.492125	2.693942
	22	6	0	-0.538064	-0.003199	0.838410
	23	1	0	-1.050802	0.964832	0.576955
	24	1	0	-0.700772	-0.147192	1.910075
	25	6	0	-0.544876	-2.203975	-0.713318
	26	6	0	-1.161897	-1.114323	0.065443
	27	6	0	-2.450586	-1.536748	-0.240543
	28	6	0	-1.967031	-2.680980	-1.087490
	29	8	0	-3.678628	-1.220911	0.027168

30	8	0	0.591254	-2.570355	-0.922709
31	8	0	-2.481152	-3.551594	-1.736563
32	8	0	-2.029368	2.129646	-0.248943
33	6	0	-3.940309	-0.043253	0.885813
34	6	0	-5.429741	0.206915	0.848777
35	1	0	-3.347190	0.788357	0.478288
36	1	0	-3.601163	-0.306747	1.890590
37	1	0	-5.664282	1.059367	1.490993
38	1	0	-5.760587	0.443013	-0.164973
39	1	0	-5.990290	-0.658493	1.210234
40	6	0	-2.702578	3.315869	-0.064114
41	6	0	-1.794416	4.560759	-0.071169
42	1	0	-3.274172	3.344290	0.895266
43	1	0	-3.477796	3.488635	-0.848602
44	1	0	-2.364356	5.483463	0.100047
45	1	0	-1.031093	4.481759	0.711261
46	1	0	-1.278220	4.654332	-1.032807
TSCs					
1	6	0	-2.774743	0.748802	-0.663582
2	6	0	-3.315765	0.552370	0.611992
3	6	0	-4.692273	0.513539	0.826656
4	6	0	-5.501327	0.678146	-0.290912
5	6	0	-4.957900	0.876294	-1.573172
6	6	0	-3.585430	0.916042	-1.784909
7	6	0	-1.093056	0.544100	0.778551
8	1	0	-5.114332	0.365797	1.811809
9	1	0	-6.577404	0.655077	-0.171319
10	1	0	-5.626134	1.002232	-2.416025
11	1	0	-3.169401	1.072334	-2.771222
12	7	0	-2.236683	0.422664	1.483496
13	7	0	-1.390275	0.735592	-0.518084
14	6	0	-2.379572	0.208956	2.925237
15	1	0	-3.088789	-0.600775	3.091087
16	1	0	-1.423976	-0.071600	3.356101
17	1	0	-2.742665	1.120690	3.400248
18	6	0	-0.447747	0.908915	-1.629753
19	1	0	-0.737343	0.227254	-2.429466
20	1	0	-0.509477	1.937210	-1.988577
21	1	0	0.577235	0.686603	-1.324103
22	6	0	0.284108	0.489447	1.344628
23	1	0	0.251158	0.725996	2.410461
24	1	0	0.910416	1.296220	0.900122
25	6	0	2.210647	-1.321253	1.799095

26	6	0	0.979945	-0.810433	1.166109
27	6	0	0.798460	-1.954881	0.417820
28	6	0	2.029452	-2.621154	0.973343
29	8	0	-0.129831	-2.281221	-0.442934
30	8	0	3.003313	-0.907190	2.609786
31	8	0	2.587396	-3.677696	0.836545
32	8	0	2.593499	0.707496	-1.167407
33	6	0	-0.015873	-3.590307	-1.108550
34	6	0	-1.314110	-3.837654	-1.839070
35	1	0	0.177837	-4.343835	-0.345506
36	1	0	0.834342	-3.538462	-1.790015
37	1	0	-1.257614	-4.799401	-2.354104
38	1	0	-2.154056	-3.868833	-1.142315
39	1	0	-1.498420	-3.060400	-2.583265
40	6	0	3.827990	0.073980	-1.096856
41	6	0	4.597288	0.131705	-2.423991
42	1	0	3.719597	-0.994827	-0.818901
43	1	0	4.468030	0.517356	-0.308370
44	1	0	5.556544	-0.396521	-2.364239
45	1	0	4.004106	-0.323867	-3.223871
46	1	0	4.793569	1.171653	-2.704538
47	6	0	2.780048	4.916061	0.303220
48	6	0	2.036733	3.748883	-0.348619
49	1	0	3.858347	4.729130	0.303151
50	1	0	2.591764	5.858183	-0.223666
51	1	0	2.460584	5.035848	1.343272
52	1	0	0.960185	3.999113	-0.386930
53	1	0	2.364427	3.656679	-1.397931
54	8	0	2.256249	2.547626	0.343538
55	1	0	2.473921	1.691903	-0.389431
PRb					
1	6	0	-4.812827	0.115717	0.544017
2	6	0	-4.991264	-1.033687	-0.241079
3	6	0	-6.243203	-1.388769	-0.730935
4	6	0	-7.313328	-0.551062	-0.412741
5	6	0	-7.135275	0.594838	0.371827
6	6	0	-5.877981	0.949574	0.863661
7	6	0	-2.807765	-0.892420	0.313606
8	1	0	-6.389266	-2.279088	-1.328690
9	1	0	-8.302449	-0.796868	-0.779746
10	1	0	-7.988431	1.221593	0.601340
11	1	0	-5.742342	1.840064	1.463905
12	7	0	-3.739583	-1.625505	-0.374226

13	7	0	-3.462479	0.171613	0.885894
14	6	0	-3.443121	-2.803146	-1.178924
15	1	0	-4.179208	-2.880362	-1.977268
16	1	0	-2.453780	-2.695473	-1.621666
17	1	0	-3.472587	-3.711615	-0.573302
18	6	0	-2.933915	1.010832	1.960107
19	1	0	-2.107301	0.489570	2.438572
20	1	0	-2.586884	1.974134	1.588553
21	1	0	-3.722566	1.170537	2.694925
22	6	0	-1.454682	-1.245894	0.433233
23	1	0	-1.238573	-2.305758	0.348697
24	6	0	1.023956	-0.876929	1.071917
25	6	0	-0.345370	-0.433675	0.653154
26	6	0	0.132679	0.897112	0.569318
27	6	0	1.477072	0.587877	1.054577
28	8	0	-0.348459	2.076394	0.175163
29	8	0	1.525913	-1.961978	1.271430
30	8	0	2.491395	1.209119	1.321789
31	6	0	-1.163544	2.100951	-1.034710
32	6	0	-1.449637	3.550118	-1.362536
33	1	0	-2.084052	1.539448	-0.865594
34	1	0	-0.596891	1.613796	-1.832430
35	1	0	-2.047873	3.607181	-2.275018
36	1	0	-2.006650	4.031753	-0.555947
37	1	0	-0.520315	4.100242	-1.523517
TSd					
1	6	0	4.832394	0.156356	-0.563421
2	6	0	4.327473	-1.149175	-0.447127
3	6	0	5.138202	-2.214488	-0.072495
4	6	0	6.481396	-1.934183	0.183890
5	6	0	6.986450	-0.633276	0.069822
6	6	0	6.170707	0.435265	-0.305700
7	6	0	2.634535	0.200404	-1.073315
8	1	0	4.746459	-3.218876	0.023224
9	1	0	7.142748	-2.739245	0.480514
10	1	0	8.033045	-0.448091	0.279763
11	1	0	6.570513	1.437583	-0.386697
12	7	0	2.975296	-1.091521	-0.768837
13	7	0	3.771117	0.960879	-0.960274
14	6	0	2.088644	-2.246771	-0.731966
15	1	0	2.543763	-3.071283	-1.282582
16	1	0	1.908173	-2.544843	0.303951
17	1	0	1.139152	-1.995426	-1.196151

18	6	0	3.793579	2.413199	-1.068717
19	1	0	3.255143	2.853421	-0.226668
20	1	0	4.826975	2.750608	-1.056863
21	1	0	3.338073	2.728335	-2.008200
22	6	0	1.345412	0.702495	-1.331861
23	1	0	0.634076	-0.002007	-1.745826
24	1	0	1.342373	1.666721	-1.823192
25	6	0	-4.754745	0.072133	0.150286
26	6	0	-4.785050	-1.236291	-0.361809
27	6	0	-5.960348	-1.791139	-0.852050
28	6	0	-7.114250	-0.998446	-0.814561
29	6	0	-7.087675	0.295726	-0.293111
30	6	0	-5.901148	0.852282	0.201952
31	6	0	-2.663268	-0.796766	0.329407
32	1	0	-5.993499	-2.801751	-1.238811
33	1	0	-8.045492	-1.405575	-1.190445
34	1	0	-7.998293	0.882194	-0.265818
35	1	0	-5.886551	1.855023	0.609616
36	7	0	-3.496124	-1.741485	-0.252984
37	7	0	-3.443098	0.335871	0.555558
38	6	0	-3.049074	-3.031596	-0.744327
39	1	0	-3.757343	-3.396092	-1.486708
40	1	0	-2.070941	-2.922017	-1.215810
41	1	0	-2.973345	-3.765428	0.063159
42	6	0	-3.157312	1.330790	1.586915
43	1	0	-2.086566	1.484047	1.674511
44	1	0	-3.619156	2.278294	1.310572
45	1	0	-3.556651	1.006334	2.553061
46	6	0	-1.337746	-1.024210	0.638798
47	1	0	-1.072907	-2.073283	0.740812
48	6	0	0.832413	-0.386697	1.851962
49	6	0	-0.283093	-0.123255	0.968477
50	6	0	0.334506	1.108849	0.470855
51	6	0	1.391226	0.975673	1.532255
52	8	0	-0.194384	2.329275	0.169886
53	8	0	1.179561	-1.345173	2.555634
54	8	0	2.294038	1.701520	1.916534
55	6	0	-1.151469	2.461964	-0.903520
56	6	0	-1.662911	3.889509	-0.884264
57	1	0	-1.962519	1.743196	-0.775572
58	1	0	-0.655756	2.247344	-1.853013
59	1	0	-2.376686	4.038060	-1.698295
60	1	0	-2.163194	4.117193	0.059403
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INd

1	6	0	3.108169	0.622641	-0.402061
2	6	0	3.017248	-0.770579	-0.300723
3	6	0	4.127348	-1.555338	0.006801
4	6	0	5.326921	-0.886562	0.218486
5	6	0	5.416046	0.513626	0.126538
6	6	0	4.309664	1.294747	-0.184741
7	6	0	0.997048	0.026596	-0.814300
8	1	0	4.064245	-2.633097	0.075971
9	1	0	6.214326	-1.458095	0.460983
10	1	0	6.369482	0.995688	0.303923
11	1	0	4.382041	2.372218	-0.248632
12	7	0	1.690413	-1.102051	-0.558645
13	7	0	1.836724	1.080328	-0.737782
14	6	0	1.183582	-2.475454	-0.614529
15	1	0	1.412915	-2.918084	-1.584979
16	1	0	1.665989	-3.051564	0.173351
17	1	0	0.115483	-2.465765	-0.427305
18	6	0	1.501711	2.494943	-0.907247
19	1	0	1.289307	2.938529	0.064325
20	1	0	2.342017	2.992785	-1.387169
21	1	0	0.627857	2.593539	-1.545395
22	6	0	-0.452206	0.101005	-1.150081
23	1	0	-0.720555	-0.792905	-1.715284
24	1	0	-0.620253	0.955443	-1.803449
25	6	0	-1.262876	1.513835	0.948287
26	6	0	-1.397005	0.228639	0.087831
27	6	0	-2.788976	0.737618	-0.108419
28	6	0	-2.672554	1.914697	0.668908
29	8	0	-3.866065	0.253346	-0.761827
30	8	0	-0.316010	1.947380	1.598362
31	8	0	-3.392481	2.886838	0.987499
32	8	0	-1.202918	-1.041451	0.767360
33	6	0	-3.704627	-0.968076	-1.513886
34	6	0	-5.082208	-1.442429	-1.929926
35	1	0	-3.198483	-1.711223	-0.891655
36	1	0	-3.082995	-0.768027	-2.393529
37	1	0	-4.998593	-2.358334	-2.520087
38	1	0	-5.700497	-1.650623	-1.053852
39	1	0	-5.583393	-0.685821	-2.537972
40	6	0	-1.853963	-1.189194	2.033925
41	6	0	-1.498576	-2.556218	2.590801
42	1	0	-2.939700	-1.093506	1.913408
43	1	0	-1.524302	-0.400317	2.719424

44	1	0	-1.980227	-2.701799	3.561400
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46	1	0	-0.418560	-2.652269	2.726729
TSe					
1	6	0	5.186882	-0.060352	-0.614828
2	6	0	4.938321	-1.182463	0.185460
3	6	0	5.962830	-1.846336	0.858048
4	6	0	7.247815	-1.346200	0.688084
5	6	0	7.500324	-0.224657	-0.122250
6	6	0	6.476980	0.438664	-0.787889
7	6	0	2.999806	-0.469390	-0.651206
8	1	0	5.770608	-2.706401	1.485869
9	1	0	8.074571	-1.830886	1.192646
10	1	0	8.517473	0.131578	-0.229430
11	1	0	6.677508	1.299481	-1.411494
12	7	0	3.568769	-1.414499	0.124121
13	7	0	3.954375	0.355830	-1.113452
14	6	0	2.879280	-2.468352	0.866201
15	1	0	3.420328	-3.404824	0.738268
16	1	0	2.833332	-2.198683	1.921268
17	1	0	1.870549	-2.586436	0.481212
18	6	0	3.748847	1.511420	-1.997546
19	1	0	4.574013	2.202299	-1.835506
20	1	0	3.752167	1.184802	-3.038990
21	1	0	2.803122	1.995227	-1.714783
22	6	0	1.545923	-0.406962	-0.987521
23	1	0	1.240240	-1.397144	-1.350578
24	1	0	1.393424	0.307442	-1.795536
25	6	0	-5.239315	0.036502	0.281059
26	6	0	-5.292232	-1.018245	-0.644033
27	6	0	-6.502439	-1.591036	-1.019220
28	6	0	-7.662104	-1.078156	-0.433643
29	6	0	-7.609248	-0.026579	0.488128
30	6	0	-6.393090	0.548962	0.863003
31	6	0	-3.126688	-0.428075	-0.361075
32	1	0	-6.551839	-2.398061	-1.738878
33	1	0	-8.621215	-1.504370	-0.702287
34	1	0	-8.527728	0.348501	0.923269
35	1	0	-6.354918	1.356270	1.583011
36	7	0	-3.980483	-1.289262	-1.013611
37	7	0	-3.900779	0.392293	0.422414
38	6	0	-3.558920	-2.365002	-1.898489
39	1	0	-4.344655	-3.117021	-1.937759

	40	1	0	-3.367277	-1.995624	-2.908765
	41	1	0	-2.652914	-2.825716	-1.505037
	42	6	0	-3.464640	1.635527	1.052382
	43	1	0	-2.551250	1.973845	0.566048
	44	1	0	-4.242258	2.386338	0.909358
	45	1	0	-3.265837	1.489994	2.111524
	46	6	0	-1.739206	-0.422936	-0.561304
	47	1	0	-1.421057	-0.854261	-1.503810
	48	6	0	-0.571054	0.240887	1.787847
	49	6	0	-0.722685	-0.045596	0.321803
	50	6	0	0.680457	0.012190	0.158227
	51	6	0	0.938961	0.290983	1.559454
	52	8	0	1.150828	2.247393	-0.755684
	53	8	0	-1.310493	0.291281	2.754018
	54	8	0	1.931124	0.426469	2.266525
	55	6	0	0.526462	3.217932	-0.034044
	56	6	0	-0.402735	4.117501	-0.877350
	57	1	0	1.229960	3.897072	0.509366
	58	1	0	-0.110796	2.781598	0.782744
	59	1	0	-0.912714	4.877274	-0.270599
	60	1	0	0.173219	4.629598	-1.656344
	61	1	0	-1.162086	3.505030	-1.375750
TSes						
	1	6	0	-4.948980	-0.608238	-0.288595
	2	6	0	-4.526856	-1.854632	0.192091
	3	6	0	-5.399474	-2.935943	0.293929
	4	6	0	-6.714407	-2.720482	-0.103704
	5	6	0	-7.139912	-1.470972	-0.585687
	6	6	0	-6.266610	-0.393838	-0.688718
	7	6	0	-2.773825	-0.461948	0.208283
	8	1	0	-5.072500	-3.900306	0.660244
	9	1	0	-7.425529	-3.535210	-0.043147
	10	1	0	-8.172244	-1.343843	-0.887789
	11	1	0	-6.599798	0.563110	-1.067616
	12	7	0	-3.172954	-1.727626	0.488889
	13	7	0	-3.839492	0.231373	-0.247419
	14	6	0	-2.334832	-2.842672	0.924698
	15	1	0	-2.807554	-3.338740	1.771795
	16	1	0	-2.210890	-3.552977	0.105907
	17	1	0	-1.360618	-2.473744	1.228681
	18	6	0	-3.826612	1.640934	-0.661170
	19	1	0	-3.389257	1.713231	-1.656463
	20	1	0	-4.852976	2.000919	-0.667068
	21	1	0	-3.240352	2.208883	0.064270

22	6	0	-1.427074	0.094608	0.428705
23	1	0	-0.918142	-0.473302	1.209607
24	1	0	-1.582412	1.221815	0.974677
25	6	0	5.339306	-0.627411	-0.369240
26	6	0	5.143745	-1.246664	0.875030
27	6	0	6.215252	-1.724359	1.622156
28	6	0	7.494648	-1.561264	1.087820
29	6	0	7.690895	-0.934954	-0.147619
30	6	0	6.614680	-0.454925	-0.896538
31	6	0	3.117708	-0.657223	0.048263
32	1	0	6.071895	-2.208049	2.579529
33	1	0	8.349591	-1.926636	1.643885
34	1	0	8.696079	-0.819048	-0.534645
35	1	0	6.777700	0.028467	-1.850764
36	7	0	3.776785	-1.223076	1.125126
37	7	0	4.082259	-0.262982	-0.845116
38	6	0	3.129469	-1.933329	2.219394
39	1	0	3.862442	-2.105497	3.004155
40	1	0	2.325145	-1.332781	2.641986
41	1	0	2.728149	-2.892253	1.882120
42	6	0	3.848256	0.436415	-2.102165
43	1	0	3.418444	1.422554	-1.909182
44	1	0	4.801840	0.565120	-2.607425
45	1	0	3.174921	-0.130594	-2.740148
46	6	0	1.727160	-0.499137	0.031989
47	1	0	1.280736	-0.683614	1.002459
48	6	0	0.601001	-0.110481	-2.438762
49	6	0	0.792467	-0.146060	-0.949015
50	6	0	-0.579083	0.175863	-0.768888
51	6	0	-0.833988	0.328258	-2.193961
52	8	0	-0.039921	3.058049	-0.369073
53	8	0	1.238032	-0.426889	-3.425889
54	8	0	-1.776714	0.637192	-2.913075
55	6	0	1.082551	3.870284	-0.079604
56	6	0	0.729946	5.351089	0.063032
57	1	0	1.789512	3.743621	-0.906898
58	1	0	1.595330	3.527748	0.832989
59	1	0	1.626675	5.957212	0.230365
60	1	0	0.233684	5.712383	-0.842286
61	1	0	0.051644	5.509390	0.906991
62	6	0	-1.675302	2.635692	2.935758
63	6	0	-2.574240	1.642077	3.682560
64	1	0	-1.990109	3.655553	3.220666
65	1	0	-0.644107	2.524738	3.324739

66	1	0	-2.271275	0.609808	3.481990
67	1	0	-2.524279	1.802449	4.765543
68	1	0	-3.617064	1.755530	3.369902
69	8	0	-1.723756	2.493853	1.545685
70	1	0	-0.647315	3.028448	0.419143
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2	6	0	-5.498125	-0.829127	0.027525
3	6	0	-6.559532	-1.653112	-0.333826
4	6	0	-7.674115	-1.045057	-0.910968
5	6	0	-7.723902	0.339368	-1.119483
6	6	0	-6.659467	1.165592	-0.759950
7	6	0	-3.576586	0.067619	0.776768
8	1	0	-6.528734	-2.723755	-0.178650
9	1	0	-8.517380	-1.658891	-1.203818
10	1	0	-8.606055	0.779537	-1.568525
11	1	0	-6.705007	2.234816	-0.921331
12	7	0	-4.270866	-1.098205	0.625440
13	7	0	-4.339018	1.076837	0.270377
14	6	0	-3.758350	-2.416989	0.981441
15	1	0	-4.563072	-3.141882	0.887511
16	1	0	-2.933444	-2.689630	0.320157
17	1	0	-3.412907	-2.415202	2.016279
18	6	0	-3.948701	2.484401	0.254701
19	1	0	-4.068321	2.930611	1.245066
20	1	0	-2.918736	2.555399	-0.085804
21	1	0	-4.584747	3.011583	-0.453034
22	6	0	-2.240359	0.202701	1.228134
23	1	0	-1.884928	-0.618437	1.841271
24	1	0	-2.020312	1.172343	1.663004
25	6	0	5.164006	0.234745	-0.784613
26	6	0	5.625380	-0.821475	0.023795
27	6	0	6.983447	-1.054776	0.194243
28	6	0	7.879310	-0.197166	-0.459858
29	6	0	7.422727	0.849212	-1.259738
30	6	0	6.050461	1.082597	-1.432199
31	6	0	3.347089	-0.855621	0.050756
32	1	0	7.345574	-1.873577	0.803236
33	1	0	8.944488	-0.357392	-0.340972
34	1	0	8.135104	1.497184	-1.756562
35	1	0	5.701693	1.903226	-2.046548
36	7	0	4.504468	-1.466002	0.529010
37	7	0	3.768563	0.200135	-0.762356
38	6	0	4.507006	-2.560709	1.478727

39	1	0	5.492418	-2.636580	1.935104
40	1	0	3.772543	-2.369438	2.264490
41	1	0	4.267342	-3.513603	0.997173
42	6	0	2.933907	0.819943	-1.785618
43	1	0	2.264342	0.074009	-2.216152
44	1	0	2.335804	1.642342	-1.390259
45	1	0	3.578611	1.206528	-2.573405
46	6	0	2.073564	-1.266585	0.339456
47	1	0	1.981797	-2.257435	0.770528
48	6	0	-0.451899	-1.147523	-0.411017
49	6	0	0.823249	-0.584201	0.086261
50	6	0	0.243043	0.659905	0.225035
51	6	0	-1.123420	0.273152	-0.364948
52	8	0	0.576800	1.856746	0.682038
53	8	0	-0.813248	-2.268095	-0.724468
54	8	0	-1.727592	0.863622	-1.301378
55	6	0	1.745150	1.982370	1.547314
56	6	0	1.826346	3.425979	1.993877
57	1	0	2.634806	1.682496	0.992599
58	1	0	1.611951	1.304393	2.393355
59	1	0	2.688941	3.558160	2.651419
60	1	0	1.942898	4.092250	1.136234
61	1	0	0.927556	3.715397	2.542653
Ine					
1	6	0	-5.553421	0.368109	-0.504527
2	6	0	-5.428415	-0.912418	0.053845
3	6	0	-6.415088	-1.880900	-0.120155
4	6	0	-7.530797	-1.517605	-0.866405
5	6	0	-7.657755	-0.233281	-1.421809
6	6	0	-6.672041	0.732319	-1.251499
7	6	0	-3.614251	0.274976	0.595782
8	1	0	-6.323930	-2.873607	0.300269
9	1	0	-8.319157	-2.243443	-1.023838
10	1	0	-8.543144	0.010592	-1.996074
11	1	0	-6.774576	1.721422	-1.677889
12	7	0	-4.212099	-0.929520	0.733346
13	7	0	-4.404222	1.068794	-0.155663
14	6	0	-3.640978	-2.089745	1.420623
15	1	0	-4.417996	-2.841395	1.530653
16	1	0	-2.809773	-2.486580	0.837129
17	1	0	-3.295861	-1.800609	2.412628
18	6	0	-4.097036	2.449085	-0.544781
19	1	0	-4.482657	3.147908	0.200382

20	1	0	-3.017142	2.516852	-0.669677
21	1	0	-4.570263	2.643950	-1.505520
22	6	0	-2.303902	0.655922	1.147190
23	1	0	-2.082848	0.058406	2.032666
24	1	0	-2.337773	1.705168	1.447326
25	6	0	5.030118	0.012389	-0.997764
26	6	0	5.553267	-0.925374	-0.087385
27	6	0	6.907839	-1.227596	-0.071063
28	6	0	7.735598	-0.569858	-0.994687
29	6	0	7.215217	0.345931	-1.905794
30	6	0	5.843952	0.649091	-1.922207
31	6	0	3.295491	-0.789836	0.249019
32	1	0	7.319213	-1.953424	0.619194
33	1	0	8.796880	-0.789879	-0.999926
34	1	0	7.872940	0.832037	-2.616765
35	1	0	5.441352	1.357706	-2.635052
36	7	0	4.487480	-1.394399	0.666001
37	7	0	3.656803	0.107409	-0.769470
38	6	0	4.570391	-2.320873	1.775336
39	1	0	5.615331	-2.467805	2.041662
40	1	0	4.043026	-1.916634	2.643642
41	1	0	4.133389	-3.292034	1.522230
42	6	0	2.765038	0.641344	-1.792657
43	1	0	1.743245	0.674257	-1.429471
44	1	0	3.073086	1.656170	-2.050576
45	1	0	2.798442	0.022375	-2.696070
46	6	0	2.075382	-1.059543	0.793866
47	1	0	2.038194	-1.912013	1.462691
48	6	0	-0.469600	-0.910971	0.013334
49	6	0	0.802280	-0.390329	0.541486
50	6	0	0.245429	0.860485	0.689885
51	6	0	-1.132341	0.531995	0.048533
52	8	0	0.627164	2.056111	1.101405
53	8	0	-0.842515	-2.010046	-0.374049
54	8	0	-1.431016	1.109537	-1.098084
55	6	0	1.947986	2.213720	1.698203
56	6	0	2.099510	3.668507	2.086977
57	1	0	2.700652	1.909411	0.969132
58	1	0	2.011631	1.554046	2.566245
59	1	0	3.080953	3.828334	2.539942
60	1	0	2.015679	4.315046	1.210550
61	1	0	1.335057	3.959679	2.810788
TSg					
1	6	0	5.365205	-0.810832	0.287826

2	6	0	5.609489	0.212128	-0.638997
3	6	0	6.808798	0.282488	-1.340795
4	6	0	7.752583	-0.713141	-1.089758
5	6	0	7.505870	-1.738209	-0.166526
6	6	0	6.305087	-1.805314	0.539157
7	6	0	3.555382	0.523361	0.243130
8	1	0	7.010204	1.074300	-2.050481
9	1	0	8.696804	-0.690326	-1.620253
10	1	0	8.262204	-2.494933	0.003442
11	1	0	6.114092	-2.599292	1.249266
12	7	0	4.467817	1.008608	-0.655039
13	7	0	4.101303	-0.584410	0.822749
14	6	0	4.279498	2.181319	-1.502123
15	1	0	5.003793	2.143171	-2.312586
16	1	0	3.278898	2.173023	-1.931830
17	1	0	4.425698	3.102340	-0.934502
18	6	0	3.541596	-1.371268	1.921951
19	1	0	4.323322	-1.526593	2.667076
20	1	0	2.708775	-0.823833	2.362915
21	1	0	3.177036	-2.327209	1.548878
22	6	0	2.322951	1.179691	0.561583
23	1	0	2.164915	2.066565	-0.044796
24	1	0	2.120236	1.321171	1.882088
25	6	0	-5.207482	-0.221391	0.468169
26	6	0	-5.467080	-0.935756	-0.715665
27	6	0	-6.767666	-1.216627	-1.110981
28	6	0	-7.811043	-0.763499	-0.289318
29	6	0	-7.552586	-0.065937	0.888874
30	6	0	-6.236640	0.214416	1.288805
31	6	0	-3.203179	-0.745700	-0.481644
32	1	0	-6.978792	-1.773835	-2.015005
33	1	0	-8.835186	-0.969315	-0.578012
34	1	0	-8.376307	0.265339	1.510159
35	1	0	-6.037082	0.754128	2.206110
36	7	0	-4.236403	-1.238988	-1.281251
37	7	0	-3.823838	-0.102475	0.597225
38	6	0	-4.022540	-1.893737	-2.555894
39	1	0	-4.970407	-1.961587	-3.086139
40	1	0	-3.323203	-1.312839	-3.162756
41	1	0	-3.620263	-2.903073	-2.426332
42	6	0	-3.215263	0.197227	1.889215
43	1	0	-2.134489	0.131078	1.824276
44	1	0	-3.484542	1.207217	2.205701
45	1	0	-3.565471	-0.513221	2.644539

46	6	0	-1.876471	-0.896335	-0.776816
47	1	0	-1.647249	-1.611111	-1.558687
48	6	0	0.520488	-0.919039	0.355021
49	6	0	-0.729003	-0.299564	-0.121674
50	6	0	-0.261335	0.936277	0.272745
51	6	0	1.020636	0.451062	0.940870
52	8	0	-0.654549	2.196872	0.222242
53	8	0	0.970947	-2.050171	0.313320
54	8	0	1.076889	0.586350	2.346816
55	6	0	-1.764494	2.550701	-0.655368
56	6	0	-1.948207	4.050344	-0.572336
57	1	0	-2.657221	2.016100	-0.328769
58	1	0	-1.510534	2.229524	-1.668006
59	1	0	-2.774910	4.354158	-1.218931
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TSgs					
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6	6	0	-5.868676	-2.054755	-1.280078
7	6	0	-3.210630	-0.078228	0.163677
8	1	0	-5.959922	-2.007614	2.655864
9	1	0	-7.644759	-3.279557	1.359877
10	1	0	-7.593919	-3.313407	-1.105255
11	1	0	-5.846357	-2.071234	-2.361942
12	7	0	-3.867795	-0.553389	1.263292
13	7	0	-3.854971	-0.552056	-0.936995
14	6	0	-3.505113	-0.281077	2.650580
15	1	0	-4.008085	-1.004443	3.287807
16	1	0	-2.430254	-0.393786	2.783720
17	1	0	-3.807420	0.726016	2.943424
18	6	0	-3.522994	-0.288557	-2.334464
19	1	0	-4.430815	0.005973	-2.862268
20	1	0	-2.790221	0.510819	-2.387074
21	1	0	-3.096608	-1.184471	-2.785909
22	6	0	-2.121230	0.866063	0.219859
23	1	0	-1.841327	1.034886	1.256905
24	1	0	-2.548548	1.994987	-0.240261
25	6	0	5.440955	-0.091589	-0.443094
26	6	0	5.674792	-1.349349	0.141299
27	6	0	6.966542	-1.796636	0.382287

28	6	0	8.026005	-0.949641	0.024161
29	6	0	7.792992	0.292538	-0.563569
30	6	0	6.486748	0.742007	-0.809389
31	6	0	3.419151	-1.070579	-0.066042
32	1	0	7.159603	-2.766800	0.822406
33	1	0	9.043736	-1.275675	0.204176
34	1	0	8.630172	0.923698	-0.837314
35	1	0	6.306083	1.707388	-1.265477
36	7	0	4.431915	-1.926290	0.366514
37	7	0	4.061294	0.067193	-0.564405
38	6	0	4.188565	-3.186781	1.039669
39	1	0	5.110495	-3.524354	1.509099
40	1	0	3.429547	-3.055593	1.814805
41	1	0	3.848427	-3.956307	0.340329
42	6	0	3.486924	1.051411	-1.474571
43	1	0	2.429051	0.855777	-1.613852
44	1	0	3.609298	2.062479	-1.079211
45	1	0	3.985133	0.991437	-2.446256
46	6	0	2.084585	-1.364734	0.022738
47	1	0	1.845659	-2.400244	0.234763
48	6	0	-0.314964	-0.785465	-0.918463
49	6	0	0.941447	-0.507444	-0.207326
50	6	0	0.455661	0.737511	0.142051
51	6	0	-0.850656	0.658719	-0.639477
52	8	0	0.830890	1.770260	0.875539
53	8	0	-0.785943	-1.755103	-1.483198
54	8	0	-0.858891	1.444174	-1.823050
55	6	0	1.908072	1.590011	1.844573
56	6	0	2.100264	2.908531	2.560876
57	1	0	2.811728	1.281726	1.318221
58	1	0	1.609599	0.795039	2.531611
59	1	0	2.899475	2.809202	3.299248
60	1	0	2.378070	3.696057	1.857124
61	1	0	1.187284	3.207689	3.080017
62	6	0	-2.344548	4.240752	-0.217090
63	6	0	-3.595463	5.054292	0.125318
64	1	0	-1.834489	3.962490	0.724881
65	1	0	-1.639107	4.894793	-0.757458
66	1	0	-4.114415	5.347823	-0.792298
67	1	0	-4.289829	4.460376	0.728020
68	1	0	-3.345410	5.962642	0.685401
69	8	0	-2.650182	3.107020	-0.986234
70	1	0	-1.444438	2.239395	-1.630041

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4	6	0	-8.168927	0.052394	0.387226
5	6	0	-7.947312	-1.146319	-0.288238
6	6	0	-6.649370	-1.556589	-0.627180
7	6	0	-3.569816	0.259174	0.069735
8	1	0	-7.284819	1.818313	1.273120
9	1	0	-9.180517	0.350285	0.637256
10	1	0	-8.787584	-1.773643	-0.561791
11	1	0	-6.485655	-2.484149	-1.160772
12	7	0	-4.575908	1.063067	0.618056
13	7	0	-4.219354	-0.863684	-0.439590
14	6	0	-4.330026	2.352610	1.229521
15	1	0	-5.276242	2.777416	1.556824
16	1	0	-3.674923	2.253678	2.099430
17	1	0	-3.865156	3.040484	0.516584
18	6	0	-3.591520	-2.035695	-1.031476
19	1	0	-3.344116	-1.872414	-2.082345
20	1	0	-2.681426	-2.287855	-0.488814
21	1	0	-4.284858	-2.872498	-0.949881
22	6	0	-2.248898	0.619885	0.077103
23	1	0	-2.029196	1.548883	0.585008
24	1	0	-1.737584	0.367461	-2.301871
25	6	0	5.302925	-0.110126	-0.624439
26	6	0	5.707528	-0.597456	0.631423
27	6	0	7.051805	-0.681974	0.966638
28	6	0	7.988628	-0.263436	0.010022
29	6	0	7.586752	0.210359	-1.237699
30	6	0	6.227512	0.293008	-1.576029
31	6	0	3.428088	-0.664588	0.544389
32	1	0	7.375351	-1.064057	1.926680
33	1	0	9.044302	-0.317596	0.248932
34	1	0	8.331804	0.519969	-1.961027
35	1	0	5.916026	0.661860	-2.545327
36	7	0	4.551905	-0.923452	1.328514
37	7	0	3.910218	-0.155590	-0.665005
38	6	0	4.487320	-1.383037	2.701651
39	1	0	5.462262	-1.253269	3.167235
40	1	0	3.753305	-0.794995	3.257920
41	1	0	4.208431	-2.439419	2.758739
42	6	0	3.181296	-0.097956	-1.926338
43	1	0	2.153832	-0.411975	-1.775331

44	1	0	3.184405	0.916751	-2.331623
45	1	0	3.648850	-0.767706	-2.653352
46	6	0	2.143250	-0.893741	0.959112
47	1	0	2.040148	-1.505360	1.847761
48	6	0	-0.346434	-1.267869	0.176558
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52	8	0	0.541381	1.884998	-0.396694
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54	8	0	-1.207644	-0.349089	-1.930299
55	6	0	1.684919	2.483865	0.284820
56	6	0	1.724062	3.947046	-0.097763
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2	6	0	5.715328	0.135775	-0.485693
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4	6	0	7.932688	-0.673773	-0.191608
5	6	0	7.487821	-1.529919	0.823348
6	6	0	6.145001	-1.569338	1.202533
7	6	0	3.490622	0.423742	-0.230025
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13	7	0	3.902467	-0.511336	0.681834
14	6	0	4.574518	1.762363	-2.053477
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18	6	0	3.134352	-1.021736	1.820166
19	1	0	2.208235	-0.445370	1.934512
20	1	0	2.889001	-2.071602	1.665062
21	1	0	3.747121	-0.912493	2.717714
22	6	0	2.207524	0.963145	-0.431929
23	1	0	2.187456	1.973883	-0.815468

	24	1	0	1.093861	1.430753	2.306706
	25	6	0	-5.182100	0.084148	0.436694
	26	6	0	-5.598566	-0.969083	-0.394524
	27	6	0	-6.945592	-1.204733	-0.641529
	28	6	0	-7.870218	-0.350684	-0.031129
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	32	1	0	-7.274253	-2.020724	-1.272336
	33	1	0	-8.927927	-0.507597	-0.206269
	34	1	0	-8.197902	1.329680	1.269100
	35	1	0	-5.782477	1.730516	1.702740
	36	7	0	-4.446986	-1.610766	-0.831077
	37	7	0	-3.790392	0.047296	0.496013
	38	6	0	-4.397190	-2.698080	-1.794287
	39	1	0	-5.319525	-2.703615	-2.372711
	40	1	0	-3.558021	-2.542810	-2.473408
	41	1	0	-4.282307	-3.665703	-1.298897
	42	6	0	-3.063048	0.703242	1.583870
	43	1	0	-2.004314	0.458174	1.568118
	44	1	0	-3.164691	1.784834	1.495093
	45	1	0	-3.490419	0.384778	2.539327
	46	6	0	-2.031061	-1.431251	-0.498547
	47	1	0	-1.915016	-2.465325	-0.800930
	48	6	0	0.557608	-1.122354	-0.202807
	49	6	0	-0.840401	-0.693763	-0.364007
	50	6	0	-0.391518	0.638667	-0.390911
	51	6	0	1.002737	0.322134	-0.179823
	52	8	0	-1.078683	1.749641	-0.578675
	53	8	0	1.125205	-2.200455	-0.161514
	54	8	0	0.456881	0.745513	2.068480
	55	6	0	-0.426859	3.012336	-0.249831
	56	6	0	-1.485340	4.092901	-0.237629
	57	1	0	0.329673	3.219612	-1.010050
	58	1	0	0.048886	2.876630	0.722422
	59	1	0	-1.014711	5.057838	-0.033511
	60	1	0	-1.989882	4.156747	-1.204440
	61	1	0	-2.232633	3.907317	0.536372
INg						
1	6	0	5.664472	-0.902060	0.126812	
2	6	0	5.957906	0.442496	-0.158488	
3	6	0	7.267994	0.873215	-0.339444	
4	6	0	8.281902	-0.082057	-0.225020	
5	6	0	7.991287	-1.417961	0.067201	

6	6	0	6.674491	-1.850018	0.250417
7	6	0	3.708084	0.231670	0.065892
8	1	0	7.503228	1.907644	-0.554027
9	1	0	9.312412	0.223983	-0.360492
10	1	0	8.799382	-2.134022	0.157350
11	1	0	6.457034	-2.884340	0.482962
12	7	0	4.745227	1.113292	-0.199914
13	7	0	4.282555	-1.010223	0.239775
14	6	0	4.573765	2.524629	-0.504878
15	1	0	5.518494	2.921957	-0.868475
16	1	0	3.819620	2.653381	-1.282670
17	1	0	4.273766	3.087082	0.383051
18	6	0	3.615793	-2.208046	0.736210
19	1	0	3.558894	-2.188087	1.829421
20	1	0	2.616303	-2.302479	0.309092
21	1	0	4.199860	-3.075642	0.431228
22	6	0	2.384056	0.666632	0.158599
23	1	0	2.301486	1.747842	0.167013
24	1	0	-0.099847	0.816225	2.326987
25	6	0	-5.431854	0.129591	0.491789
26	6	0	-5.656532	-0.944081	-0.384421
27	6	0	-6.940431	-1.275662	-0.804214
28	6	0	-7.995511	-0.498598	-0.317906
29	6	0	-7.772068	0.563493	0.563811
30	6	0	-6.481337	0.894283	0.987012
31	6	0	-3.426760	-0.806048	0.018595
32	1	0	-7.124936	-2.105775	-1.473868
33	1	0	-9.007295	-0.731285	-0.627846
34	1	0	-8.612736	1.140916	0.929277
35	1	0	-6.311359	1.714192	1.672813
36	7	0	-4.414606	-1.495262	-0.664244
37	7	0	-4.060050	0.200185	0.720834
38	6	0	-4.168564	-2.576507	-1.606197
39	1	0	-5.057948	-2.719311	-2.215976
40	1	0	-3.334131	-2.317356	-2.258789
41	1	0	-3.941660	-3.510670	-1.086698
42	6	0	-3.512335	0.962240	1.835929
43	1	0	-2.428330	0.956270	1.811737
44	1	0	-3.846877	1.998118	1.764303
45	1	0	-3.863312	0.540091	2.782252
46	6	0	-2.082431	-1.181493	-0.057148
47	1	0	-1.949215	-2.194582	-0.428252
48	6	0	0.432451	-1.215131	0.008905
49	6	0	-0.849267	-0.563226	0.163963

50	6	0	-0.168241	0.787248	0.379065
51	6	0	1.135894	0.035529	0.208879
52	8	0	-0.315226	1.791288	-0.600145
53	8	0	0.733844	-2.407353	-0.247859
54	8	0	-0.355378	1.448613	1.645085
55	6	0	-1.541480	2.532419	-0.622451
56	6	0	-1.457417	3.527267	-1.765990
57	1	0	-1.683416	3.050071	0.330528
58	1	0	-2.386996	1.851158	-0.772853
59	1	0	-2.378046	4.113716	-1.825589
60	1	0	-0.620972	4.214836	-1.617503
61	1	0	-1.314415	3.010792	-2.718314

TSi

1	6	0	4.796882	-1.348356	0.407370
2	6	0	5.477504	-0.742821	-0.661856
3	6	0	6.749866	-1.159557	-1.039153
4	6	0	7.319402	-2.208473	-0.315854
5	6	0	6.640696	-2.812922	0.749364
6	6	0	5.364833	-2.393106	1.128851
7	6	0	3.472485	0.269815	-0.431744
8	1	0	7.284208	-0.690640	-1.855297
9	1	0	8.308488	-2.558890	-0.585161
10	1	0	7.112046	-3.624827	1.289918
11	1	0	4.840175	-2.868773	1.947229
12	7	0	4.636239	0.242201	-1.162837
13	7	0	3.575392	-0.694915	0.537057
14	6	0	4.907638	1.076732	-2.325292
15	1	0	5.265116	2.064900	-2.026784
16	1	0	5.666707	0.592770	-2.936484
17	1	0	3.998621	1.184158	-2.916373
18	6	0	2.692949	-0.835644	1.693012
19	1	0	2.252419	0.135830	1.915331
20	1	0	1.894796	-1.545962	1.491060
21	1	0	3.290465	-1.156861	2.545324
22	6	0	2.435754	1.188754	-0.662669
23	1	0	2.732743	2.096207	-1.176972
24	1	0	-0.102978	3.811669	-0.682207
25	6	0	-4.714727	-1.446636	0.347488
26	6	0	-5.404575	-0.806882	-0.695915
27	6	0	-6.674571	-1.220805	-1.083635
28	6	0	-7.232631	-2.301771	-0.398554
29	6	0	-6.544951	-2.939725	0.640393
30	6	0	-5.271017	-2.522573	1.030883

31	6	0	-3.404422	0.213112	-0.435151
32	1	0	-7.216575	-0.726584	-1.879589
33	1	0	-8.219563	-2.650418	-0.677969
34	1	0	-7.006732	-3.775736	1.151729
35	1	0	-4.739001	-3.024292	1.828766
36	7	0	-4.573598	0.203682	-1.161912
37	7	0	-3.498173	-0.789141	0.497702
38	6	0	-4.851847	1.075308	-2.294568
39	1	0	-5.649221	0.634913	-2.889233
40	1	0	-5.162081	2.068576	-1.961828
41	1	0	-3.960587	1.164708	-2.915753
42	6	0	-2.606517	-0.977032	1.639280
43	1	0	-2.164989	-0.015885	1.900091
44	1	0	-3.196813	-1.335314	2.481890
45	1	0	-1.808606	-1.676576	1.401532
46	6	0	-2.377001	1.143480	-0.645899
47	1	0	-2.680276	2.047286	-1.163383
48	6	0	0.043896	0.045385	-0.119536
49	6	0	-1.013287	1.054544	-0.380971
50	6	0	0.020894	2.030974	-0.612529
51	6	0	1.077403	1.077981	-0.398971
52	8	0	0.076881	3.455663	0.930777
53	8	0	0.063528	-1.161570	0.110626
54	8	0	0.001143	3.127894	-1.402633
55	6	0	-0.729310	3.233245	2.027637
56	6	0	-0.194195	3.926297	3.289719
57	1	0	-0.803634	2.144390	2.245040
58	1	0	-1.778112	3.566202	1.870418
59	1	0	-0.826422	3.729073	4.163780
60	1	0	0.819535	3.576101	3.508186
61	1	0	-0.148070	5.009345	3.136311

2b

1	6	0	5.529441	-0.669435	0.205055
2	6	0	5.833064	0.620606	-0.260066
3	6	0	7.146918	1.016289	-0.490194
4	6	0	8.152266	0.081207	-0.237810
5	6	0	7.850934	-1.201725	0.232995
6	6	0	6.532286	-1.598076	0.464055
7	6	0	3.585298	0.454363	-0.031479
8	1	0	7.389451	2.009733	-0.844408
9	1	0	9.185706	0.359304	-0.406279
10	1	0	8.654293	-1.902550	0.425566
11	1	0	6.308049	-2.590203	0.833181

	12	7	0	4.624031	1.285794	-0.403378
	13	7	0	4.144981	-0.750260	0.321659
	14	6	0	4.463708	2.642388	-0.906620
	15	1	0	4.169829	3.326495	-0.107148
	16	1	0	5.411637	2.974554	-1.322905
	17	1	0	3.710303	2.663996	-1.694858
	18	6	0	3.455027	-1.860699	0.968199
	19	1	0	3.304219	-1.647946	2.030784
	20	1	0	2.495695	-2.052685	0.490886
	21	1	0	4.073005	-2.751356	0.871158
	22	6	0	2.256870	0.899265	-0.018400
	23	1	0	2.167683	1.974420	-0.140453
	24	6	0	-5.529531	0.669349	0.204899
	25	6	0	-5.833025	-0.620779	-0.260066
	26	6	0	-7.146843	-1.016636	-0.490072
	27	6	0	-8.152298	-0.081654	-0.237693
	28	6	0	-7.851095	1.201343	0.232993
	29	6	0	-6.532469	1.597875	0.463917
	30	6	0	-3.585247	-0.454241	-0.031618
	31	1	0	-7.389297	-2.010126	-0.844216
	32	1	0	-9.185712	-0.359901	-0.406080
	33	1	0	-8.654519	1.902089	0.425587
	34	1	0	-6.308340	2.590042	0.833003
	35	7	0	-4.623913	-1.285839	-0.403351
	36	7	0	-4.145070	0.750410	0.321321
	37	6	0	-4.463382	-2.642474	-0.906408
	38	1	0	-5.411572	-2.975284	-1.321569
	39	1	0	-3.710782	-2.663921	-1.695431
	40	1	0	-4.168304	-3.326180	-0.107041
	41	6	0	-3.455311	1.860860	0.968060
	42	1	0	-2.495714	2.052636	0.491203
	43	1	0	-4.073093	2.751593	0.870451
	44	1	0	-3.305148	1.648337	2.030791
	45	6	0	-2.256792	-0.898982	-0.018698
	46	1	0	-2.167456	-1.974098	-0.140988
	47	6	0	0.275107	-0.994513	0.057728
	48	6	0	-1.010920	-0.283207	0.069399
	49	6	0	-0.275059	0.994876	0.057869
	50	6	0	1.010971	0.283565	0.069450
	51	8	0	-0.546920	2.200190	0.015294
	52	8	0	0.546965	-2.199826	0.014962
3b						
1	6	0	-5.174385	-0.233118	-0.351247	
2	6	0	-5.126833	1.137352	-0.045669	

3	6	0	-6.287384	1.897145	0.046629
4	6	0	-7.502854	1.241803	-0.168703
5	6	0	-7.550155	-0.122641	-0.471923
6	6	0	-6.382699	-0.885102	-0.567187
7	6	0	-3.006264	0.343123	-0.086494
8	1	0	-6.258269	2.955617	0.271079
9	1	0	-8.425290	1.805965	-0.100236
10	1	0	-8.508535	-0.601232	-0.633864
11	1	0	-6.423403	-1.942954	-0.792913
12	7	0	-3.786493	1.462832	0.119147
13	7	0	-3.860945	-0.691947	-0.389857
14	6	0	-3.276373	2.759474	0.536290
15	1	0	-2.889001	3.326847	-0.313679
16	1	0	-4.082576	3.323998	1.000914
17	1	0	-2.479640	2.619764	1.267517
18	6	0	-3.471525	-1.969605	-0.979865
19	1	0	-3.365296	-2.738363	-0.218554
20	1	0	-4.225189	-2.255177	-1.713796
21	1	0	-2.515156	-1.842692	-1.486344
22	6	0	-1.610162	0.357368	-0.032176
23	1	0	-1.168840	1.339084	-0.165239
24	6	0	5.174364	-0.233134	-0.351382
25	6	0	5.126876	1.137270	-0.045480
26	6	0	6.287440	1.897033	0.046896
27	6	0	7.502887	1.241731	-0.168692
28	6	0	7.550134	-0.122641	-0.472233
29	6	0	6.382663	-0.885066	-0.567571
30	6	0	3.006279	0.343137	-0.086366
31	1	0	6.258342	2.955453	0.271591
32	1	0	8.425338	1.805861	-0.100170
33	1	0	8.508492	-0.601215	-0.634363
34	1	0	6.423358	-1.942866	-0.793546
35	7	0	3.786548	1.462768	0.119457
36	7	0	3.860902	-0.691910	-0.389993
37	6	0	3.276500	2.759305	0.537012
38	1	0	4.082699	3.323602	1.001920
39	1	0	2.889234	3.327010	-0.312784
40	1	0	2.479676	2.619384	1.268107
41	6	0	3.471300	-1.969408	-0.980231
42	1	0	2.515294	-1.842083	-1.487319
43	1	0	4.225298	-2.255320	-1.713675
44	1	0	3.364280	-2.738103	-0.218963
45	6	0	1.610188	0.357404	-0.032032
46	1	0	1.168869	1.339144	-0.164967

47	6	0	0.757737	-2.024301	0.893552
48	6	0	0.717401	-0.682414	0.270190
49	6	0	-0.717403	-0.682420	0.270164
50	6	0	-0.757732	-2.024294	0.893597
51	8	0	1.619568	-2.787644	1.314672
52	8	0	-1.619541	-2.787600	1.314770
3a					
1	6	0	3.018797	2.303583	2.573495
2	6	0	6.884204	-1.251732	2.460142
3	6	0	7.103351	-1.844554	1.215704
4	6	0	6.073145	-1.973073	0.280229
5	6	0	4.819020	-1.493638	0.635236
6	6	0	2.623465	-0.937806	0.760358
7	6	0	3.468771	-1.729931	-1.491341
8	6	0	4.436067	-0.938802	-2.352012
9	6	0	5.167116	-1.584247	-3.351076
10	6	0	6.017505	-0.864315	-4.189129
11	6	0	6.148036	0.512602	-4.033023
12	6	0	2.732116	3.661531	2.701012
13	6	0	5.418786	1.166187	-3.040077
14	6	0	4.566676	0.446098	-2.208891
15	6	0	1.263859	-0.767309	0.533681
16	6	0	0.405494	-1.507152	-0.304063
17	6	0	0.428912	-2.830589	-0.980208
18	6	0	-1.031693	-2.591586	-1.367374
19	6	0	-0.959207	-1.289025	-0.640779
20	6	0	-1.702959	-0.117631	-0.363732
21	6	0	-3.033185	0.262362	-0.434466
22	6	0	-5.296346	0.427653	-0.600178
23	6	0	1.649332	4.082283	3.470244
24	6	0	-6.654985	0.201024	-0.772882
25	6	0	-7.518678	1.287595	-0.600264
26	6	0	-7.031916	2.551552	-0.266672
27	6	0	-5.662709	2.776808	-0.087997
28	6	0	-4.807649	1.694676	-0.252636
29	6	0	-2.542162	2.638866	0.298034
30	6	0	-1.725999	3.313569	-0.793347
31	6	0	-0.472624	3.846219	-0.482075
32	6	0	0.269492	4.520755	-1.448789
33	6	0	-0.231941	4.664328	-2.740364
34	6	0	0.850824	3.135425	4.109725
35	6	0	-1.478307	4.129102	-3.058307
36	6	0	-2.222243	3.459035	-2.090284

37	6	0	-4.360607	-1.839283	-1.037132
38	6	0	-4.830342	-2.699516	0.123632
39	6	0	-4.539042	-2.382020	1.451685
40	6	0	-4.944271	-3.222652	2.486502
41	6	0	-5.642603	-4.394579	2.207638
42	6	0	-5.933843	-4.721113	0.884681
43	6	0	-5.532546	-3.877716	-0.147348
44	6	0	1.136322	1.778519	3.978098
45	6	0	2.224374	1.349529	3.212351
46	6	0	2.539816	-0.136455	3.136102
47	6	0	4.598627	-0.903512	1.889572
48	6	0	5.623275	-0.764519	2.816314
49	1	0	-1.064666	0.700887	-0.052127
50	1	0	-3.425233	-2.231986	-1.440783
51	1	0	-5.083360	-1.904805	-1.855911
52	1	0	-1.876560	2.245156	1.071246
53	1	0	-3.176333	3.378927	0.793351
54	1	0	3.153283	-0.427427	3.993708
55	1	0	1.613852	-0.715132	3.198200
56	1	0	-5.292439	3.763782	0.159795
57	1	0	-7.036764	-0.781796	-1.015531
58	1	0	2.448882	-1.462861	-1.758866
59	1	0	3.559664	-2.801107	-1.670484
60	1	0	-3.991103	-1.475480	1.681180
61	1	0	5.460136	-0.294009	3.777999
62	1	0	-7.722953	3.376928	-0.143617
63	1	0	8.091456	-2.211542	0.965271
64	1	0	7.703292	-1.163860	3.163851
65	1	0	-3.187854	3.039942	-2.348596
66	1	0	-4.711347	-2.960897	3.512872
67	1	0	0.506326	1.045968	4.473378
68	1	0	6.250829	-2.425196	-0.685500
69	1	0	-8.584589	1.140357	-0.726380
70	1	0	3.861691	1.985257	1.971093
71	1	0	-5.759705	-4.140357	-1.175829
72	1	0	-6.476207	-5.631737	0.655587
73	1	0	0.004284	3.452351	4.708589
74	1	0	5.067617	-2.657798	-3.476261
75	1	0	-5.957208	-5.048286	3.013282
76	1	0	3.358915	4.391402	2.200890
77	1	0	3.995134	0.962556	-1.444980
78	1	0	1.428869	5.138923	3.570651
79	1	0	-1.872314	4.230038	-4.063321
80	1	0	0.347301	5.182759	-3.495950

81	1	0	5.511359	2.239615	-2.917277
82	1	0	6.578429	-1.380683	-4.960077
83	1	0	-0.068398	3.726170	0.518442
84	1	0	1.243332	4.924003	-1.194515
85	1	0	6.811467	1.074433	-4.680754
86	1	0	0.788722	-0.022800	1.163609
87	7	0	3.250761	-0.554896	1.940277
88	7	0	3.605964	-1.465460	-0.054335
89	7	0	-3.426368	1.575100	-0.149307
90	7	0	-4.202168	-0.426900	-0.715501
91	8	0	1.242499	-3.713095	-1.151488
92	8	0	-1.863032	-3.216389	-1.995273