

Stochastic Block Model Prior with Ordering Constraints for Gaussian Graphical Models

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1 Recap table

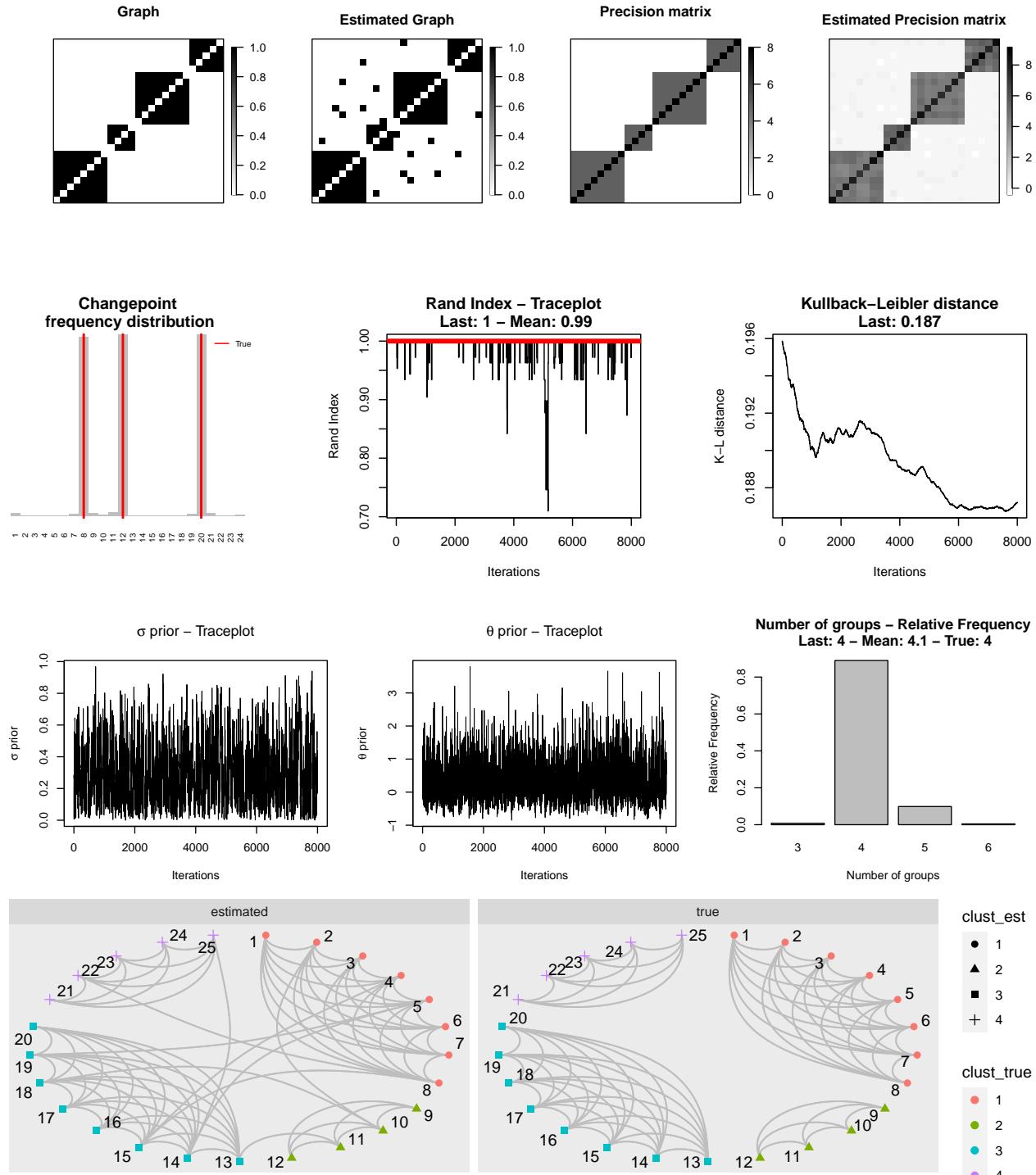
sim_id	n	p	Data				Analysis							
			data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
Group 1: varying seed														
01	500	25	BD	22111996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4150000 mins
02	500	25	BD	31051999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4120000 mins
03	500	25	BD	27051999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4170000 mins
04	500	25	BD	29061999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4150000 mins
05	500	25	BD	12091997	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4170000 mins
06	500	25	BD	27091999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4180000 mins
07	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.4110000 mins
Group 2: varying beta_sig2														
08	500	25	BD	27121996	25	0.062	8,4,8,5	8,4,8,5	0.066	0.034	1.000	0.191	0.033	1.4260000 mins
09	500	25	BD	27121996	25	0.078	8,4,8,5	8,4,8,5	0.080	0.043	1.000	0.186	0.030	1.2360000 mins
10	500	25	BD	27121996	25	0.093	8,4,8,5	8,4,8,5	0.075	0.039	1.000	0.188	0.033	1.2310000 mins
11	500	25	BD	27121996	25	0.108	8,4,8,5	8,4,8,5	0.079	0.049	1.000	0.188	0.030	1.2310000 mins
12	500	25	BD	27121996	25	0.124	8,4,8,5	8,4,8,5	0.067	0.040	1.000	0.188	0.030	1.2350000 mins
13	500	25	BD	27121996	25	0.139	8,4,8,5	8,4,8,5	0.060	0.035	1.000	0.188	0.030	1.2310000 mins
14	500	25	BD	27121996	25	0.154	8,4,8,5	8,4,8,5	0.056	0.030	1.000	0.193	0.033	1.2300000 mins
15	500	25	BD	27121996	25	0.169	8,4,8,5	8,4,8,5	0.047	0.024	1.000	0.191	0.030	1.2280000 mins
16	500	25	BD	27121996	25	0.185	8,4,8,5	8,4,8,5	0.034	0.022	1.000	0.189	0.030	1.2260000 mins
17	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.1830000 mins
Group 3: varying initial partition														
18	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.1820000 mins
19	500	25	BD	27121996	singletons	0.2	8,4,8,5	8,4,8,5	0.020	0.015	1.000	0.189	0.030	1.2660000 mins
Group 4: varying group numerosities														
20	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1.000	0.187	0.030	1.1800000 mins
21	500	25	BD	27121996	25	0.2	1,10,2,9,3	1,10,2,9,3	0.072	0.109	1.000	0.181	0.033	1.2740000 mins
22	500	25	BD	27121996	25	0.02	1,3,2,4,2,3,3,4,3	18,7	0.397	1.020	0.129	0.126	0.020	1.1200000 mins
23	500	25	BD	27121996	25	0.2	12,13	12,13	0.129	0.073	1.000	0.255	0.040	1.3830000 mins
Group 5: varying n														
24	500	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.082	0.046	1.000	0.187	0.030	1.1900000 mins
25	400	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.072	0.036	1.000	0.221	0.023	1.1650000 mins
26	300	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.070	0.041	1.000	0.336	0.030	1.1600000 mins
27	200	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.074	0.045	1.000	0.532	0.030	1.1520000 mins
28	100	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.111	0.241	1.000	1.487	0.087	1.1220000 mins
29	50	25	BD	27121996	25	0.1	8,4,8,5	20,5	0.236	0.539	0.273	4.212	0.190	1.0920000 mins
30	20	25	BD	27121996	25	0.1	8,4,8,5	25	0.280	0.241	0.000	11.854	0.230	1.0720000 mins
Group 6: varying p														
31	500	5	BD	27121996	5	0.0625	3,2	3,2	0.543	0.752	1.000	0.006	0.000	0.8150333 mins
32	500	10	BD	27121996	10	0.0625	5,5	5,5	0.188	0.115	1.000	0.028	0.022	0.8538167 mins
33	500	15	BD	27121996	15	0.0625	5,5,5	5,5,5	0.129	0.087	1.000	0.045	0.029	1.0100000 mins
34	500	20	BD	27121996	20	0.0625	5,5,5,5	5,5,5,5	0.103	0.070	1.000	0.118	0.037	1.1140000 mins
35	500	25	BD	27121996	25	0.0625	5,5,5,5,5	5,5,5,5,5	0.104	0.074	1.000	0.170	0.023	1.2340000 mins
36	500	30	BD	27121996	30	0.0625	5,5,5,5,5,5	5,5,5,5,5,5	0.080	0.061	1.000	0.140	0.014	1.3970000 mins
37	500	35	BD	27121996	35	0.0625	5,5,5,5,5,5,5	5,5,5,5,5,5,5	0.066	0.149	1.000	0.205	0.015	1.6340000 mins
38	500	40	BD	27121996	40	0.0625	5,5,5,5,5,5,5,5	5,5,5,5,5,5,5,5	0.061	0.384	1.000	0.282	0.013	1.9220000 mins
39	500	45	BD	27121996	45	0.0625	5,5,5,5,5,5,5,5,5	5,5,5,5,5,5,5,5,5	0.071	0.761	0.756	0.396	0.013	2.3790000 mins
40	500	50	BD	27121996	50	0.0625	5,5,5,5,5,5,5,5,5	25,5,5,5,5	0.059	0.853	0.364	0.367	0.010	2.9640000 mins
Group 7: using noised block structure														
41	500	25	B	27121996	25	0.2	8,4,8,5	8,4,8,5	0.013	0.104	1.000	0.176	0.047	0.9807000 mins

2 Simulations

2.1 Group 1

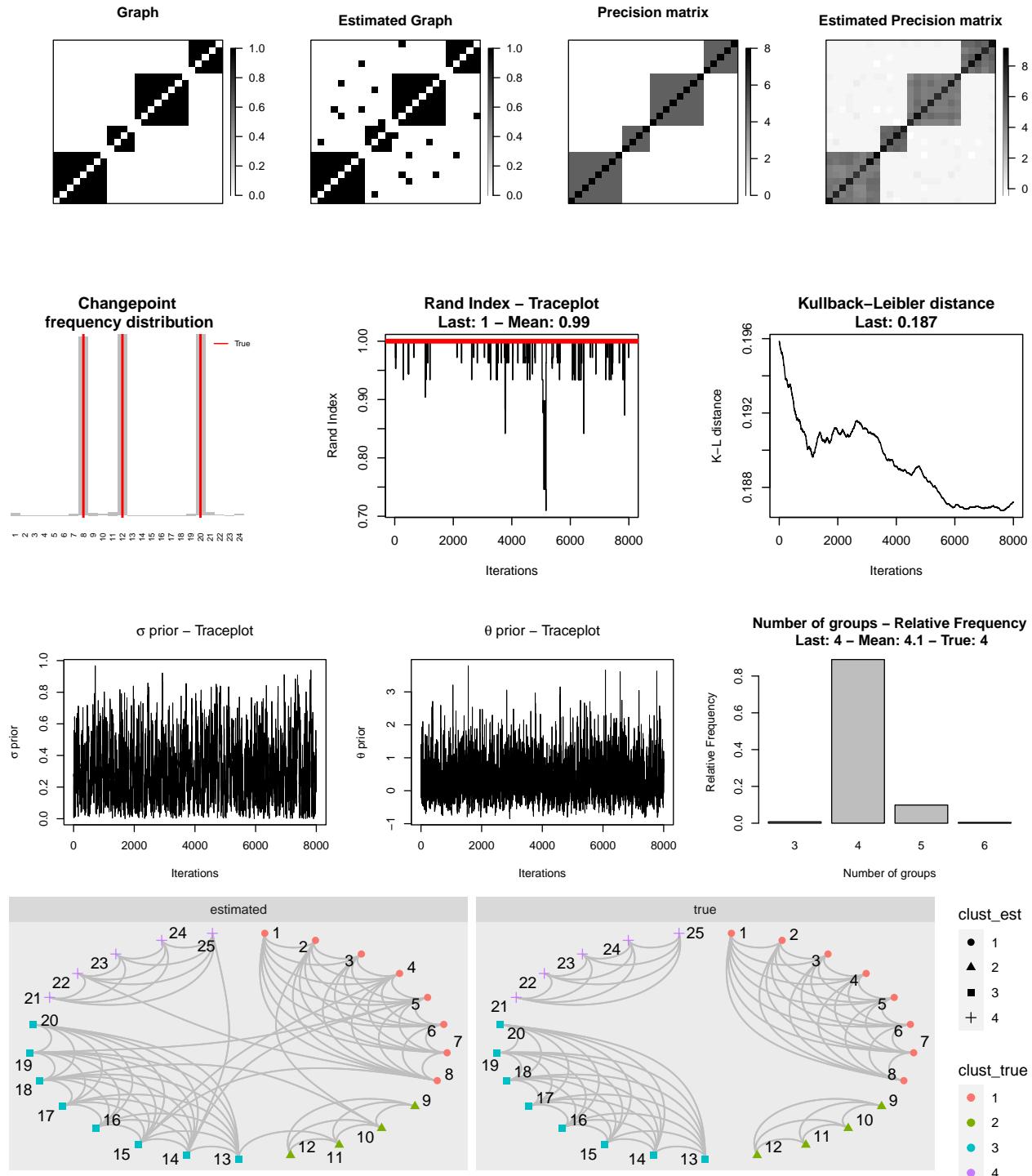
2.1.1 Simulation ID: 01

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
01	500	25	BD	22111996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.415 mins



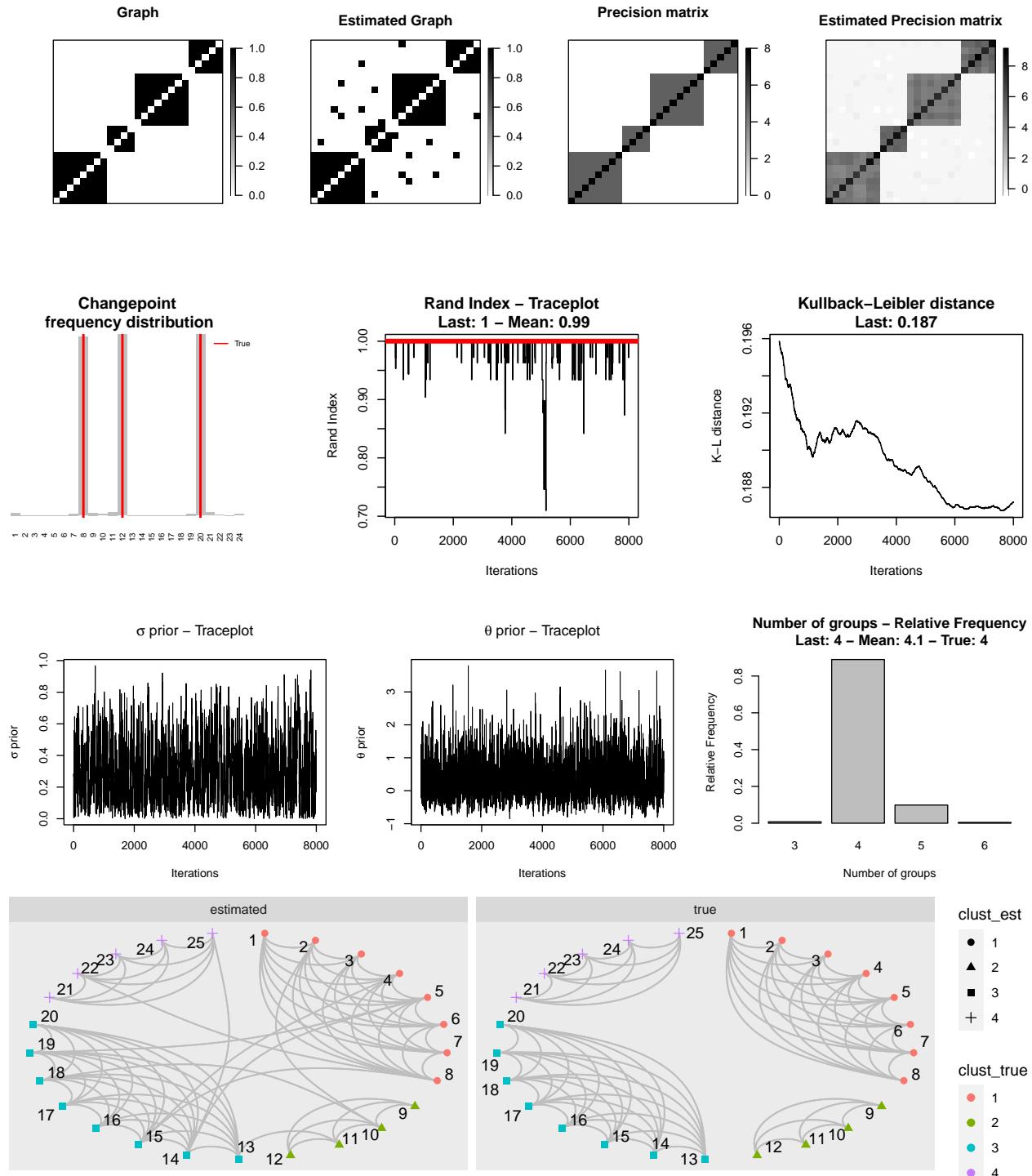
2.1.2 Simulation ID: 02

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
2	02	500	25	BD	31051999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.412 mins



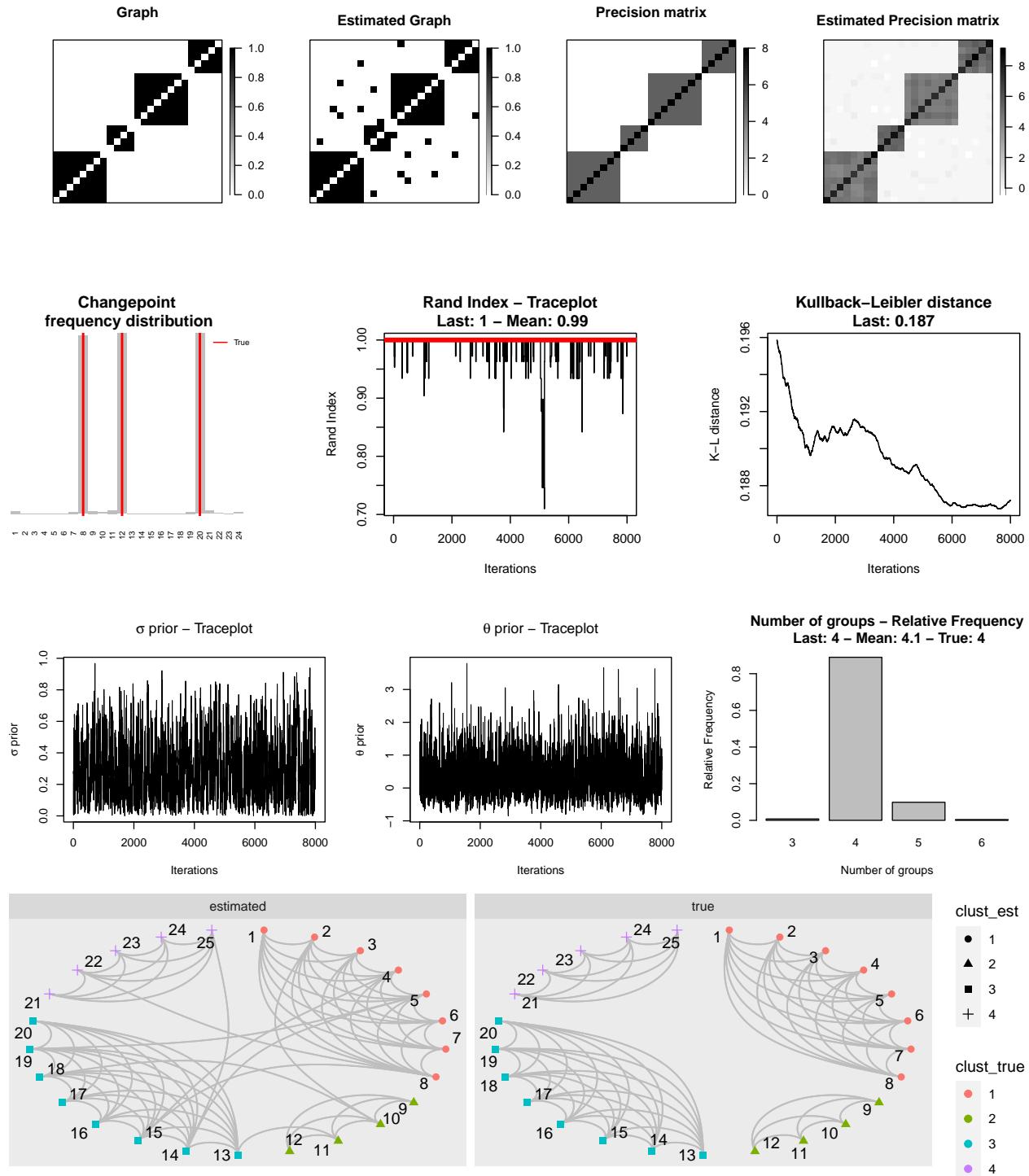
2.1.3 Simulation ID: 03

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
3	03	500	25	BD	27051999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.417 mins



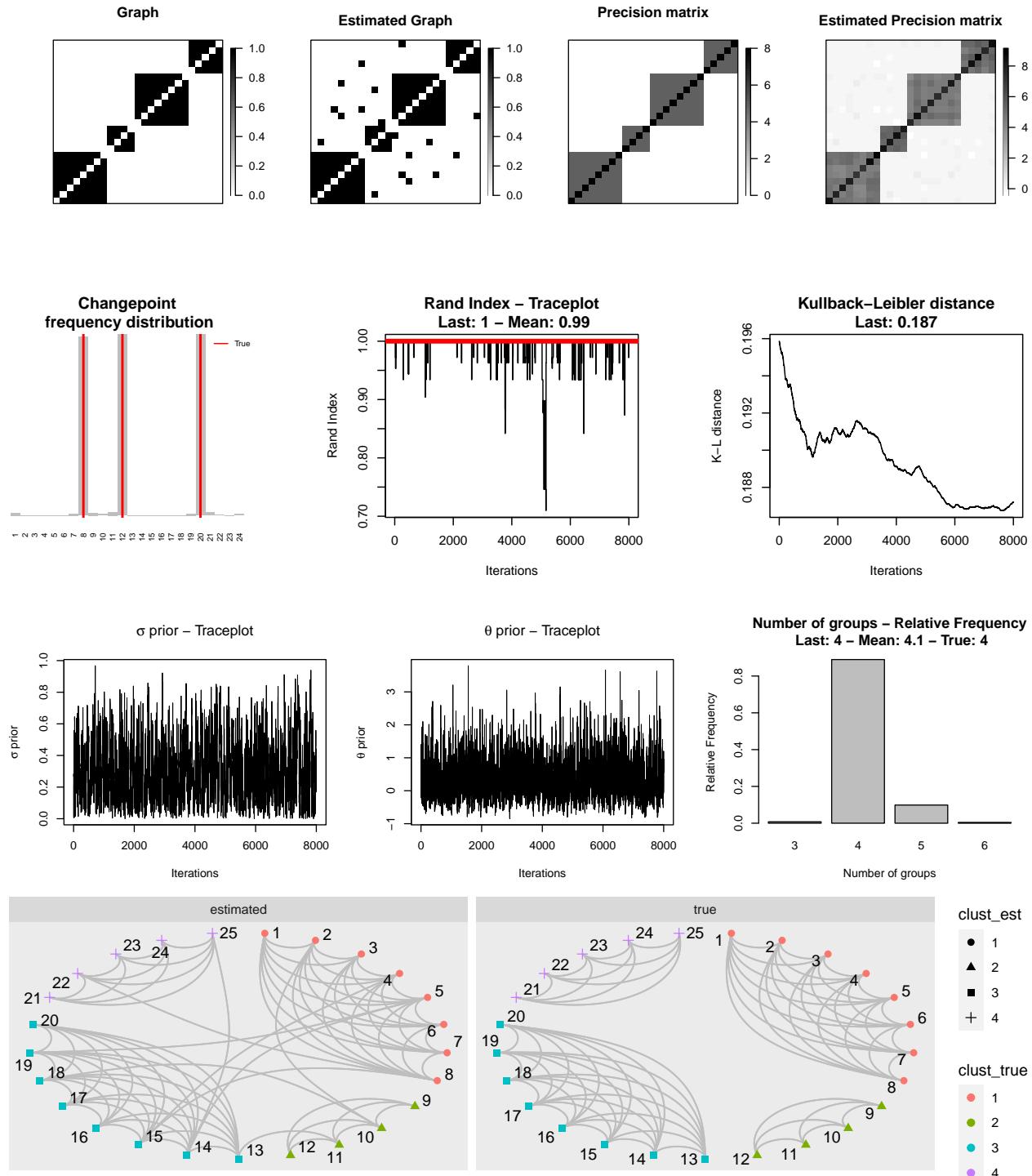
2.1.4 Simulation ID: 04

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
4	04	500	25	BD	29061999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.415 mins



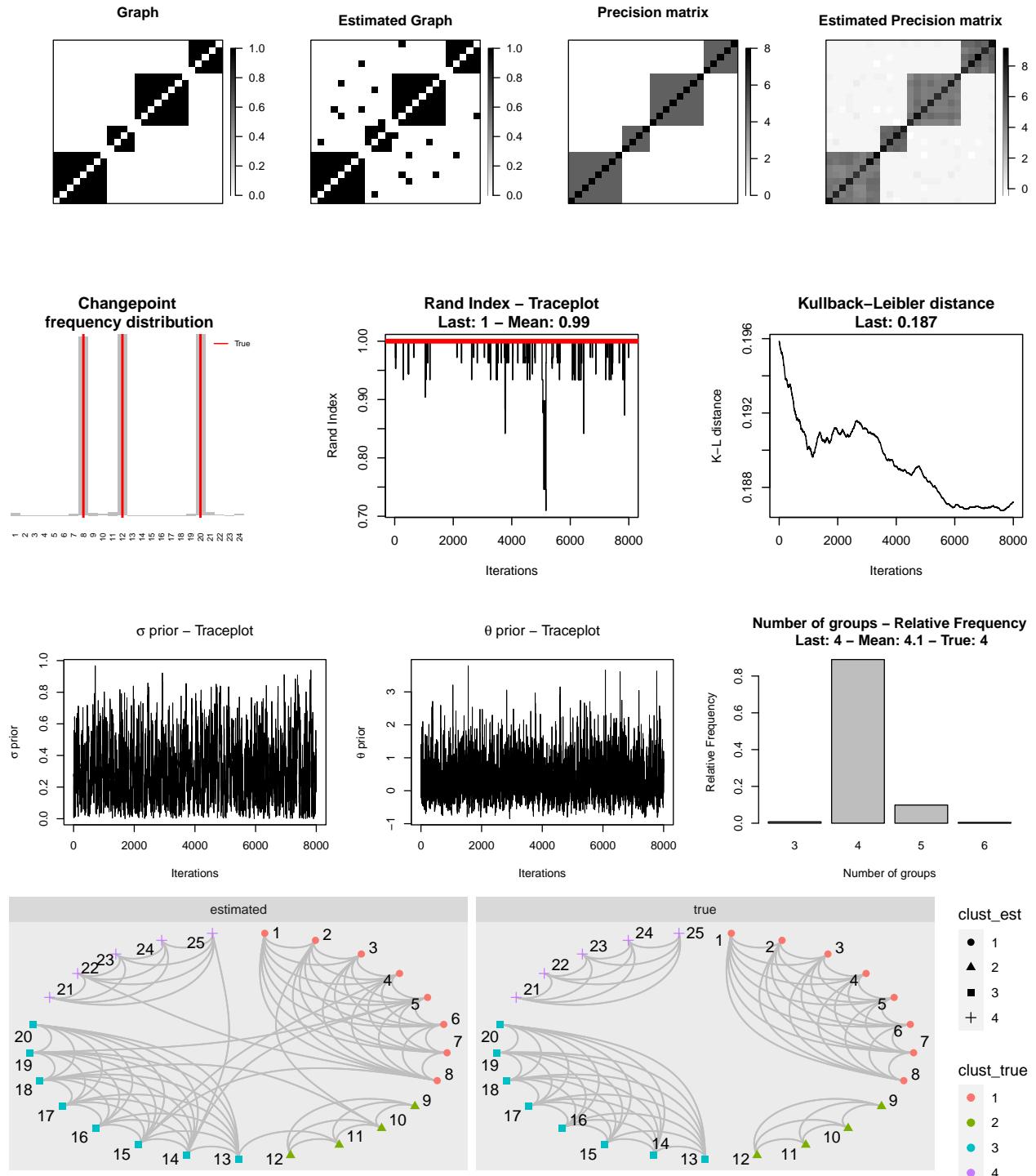
2.1.5 Simulation ID: 05

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
5	05	500	25	BD	12091997	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.417 mins



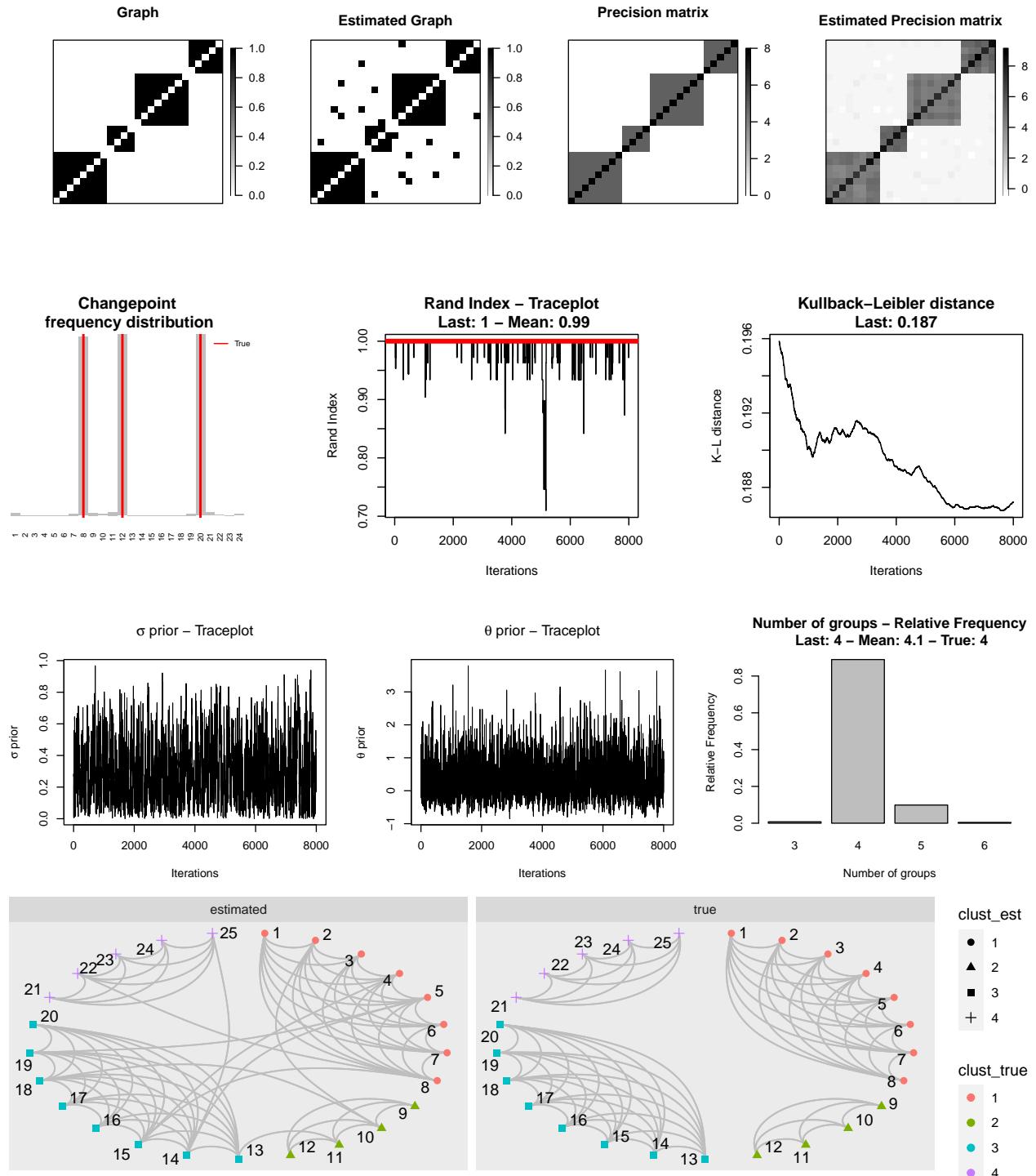
2.1.6 Simulation ID: 06

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
6	06	500	25	BD	27091999	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.418 mins



2.1.7 Simulation ID: 07

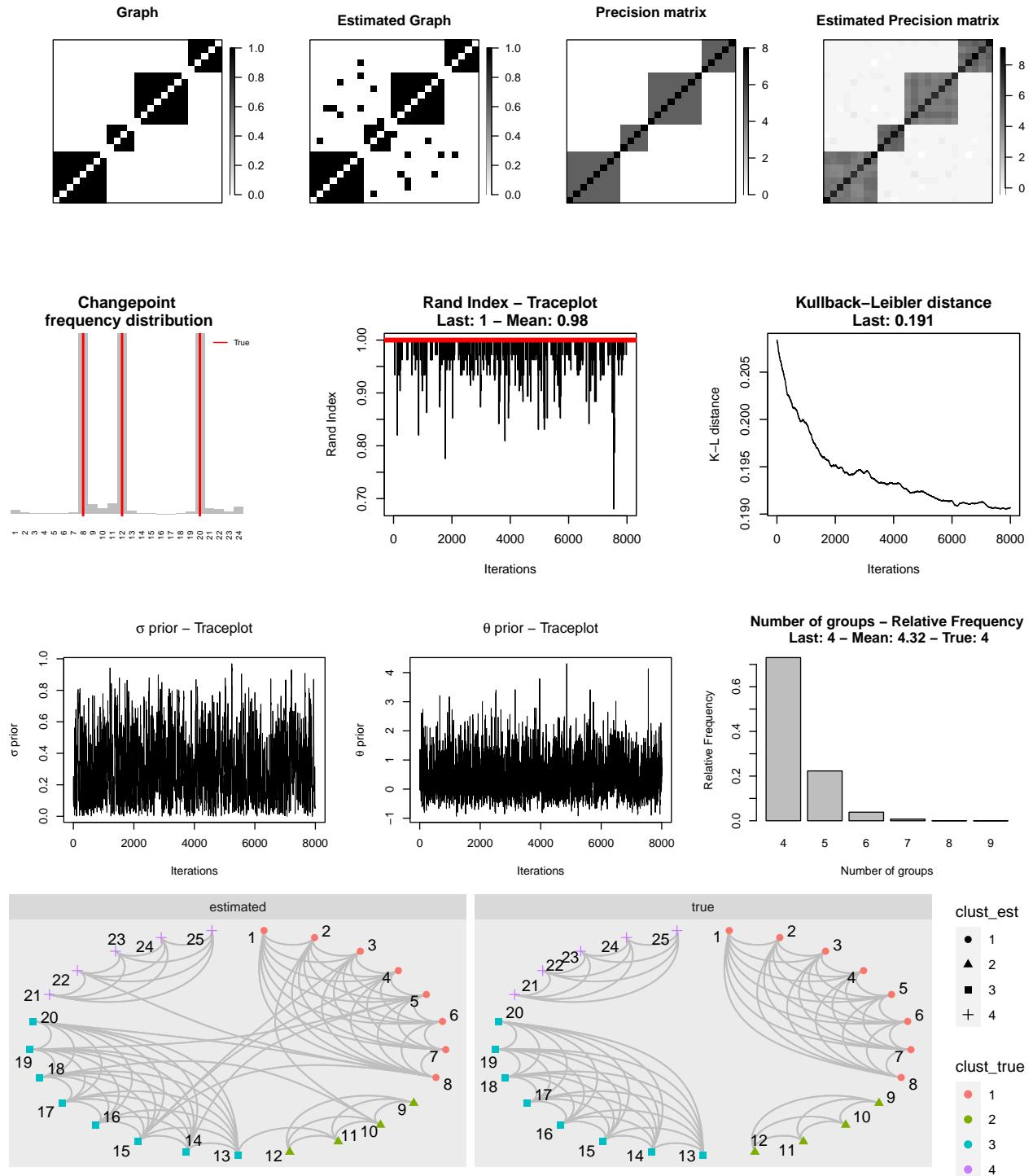
sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
7	07	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.411 mins



2.2 Group 2

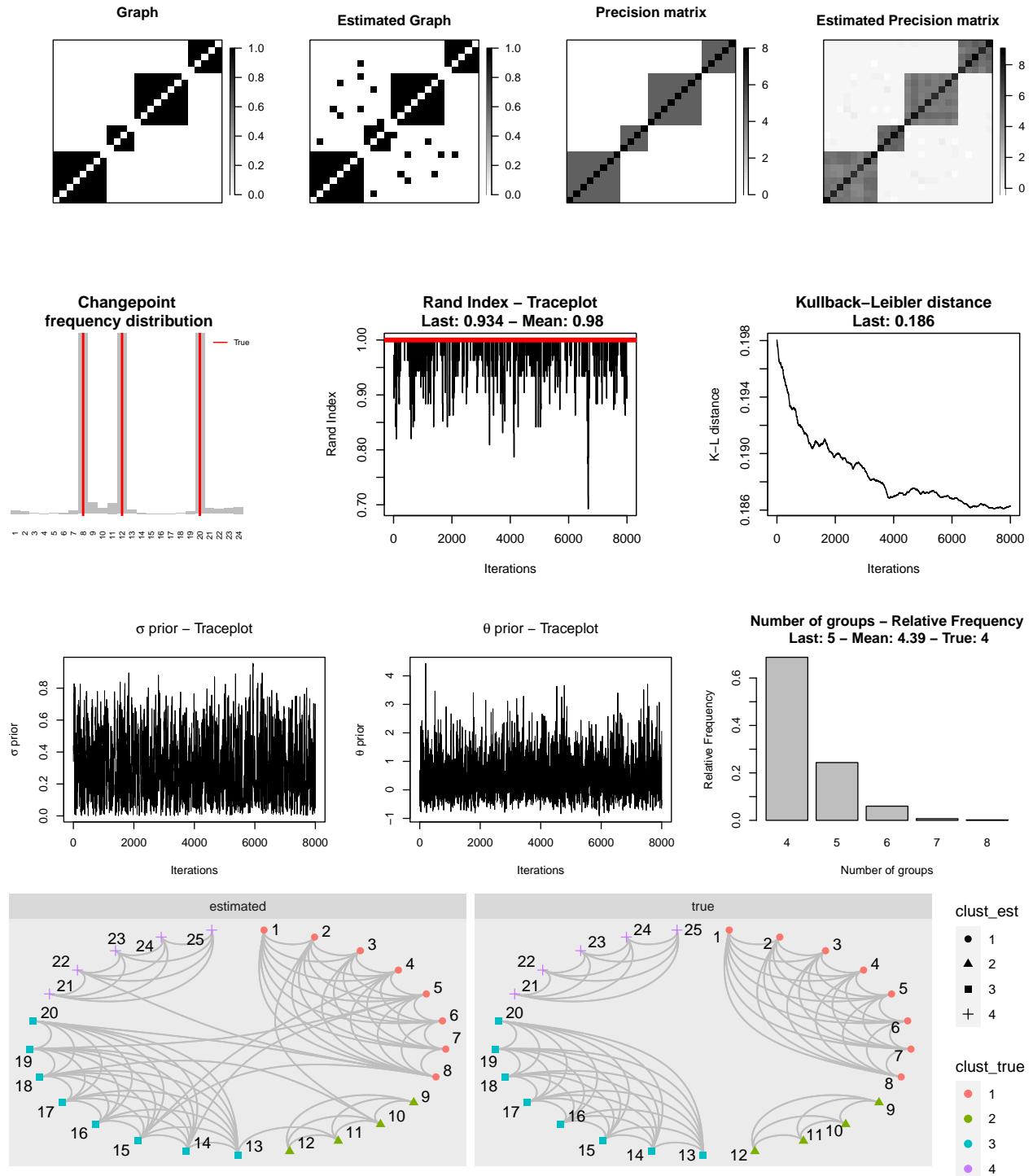
2.2.1 Simulation ID: 08

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
8	08	500	25	BD	27121996	25	0.062	8,4,8,5	8,4,8,5	0.066	0.034	1	0.191	0.033	1.426 mins



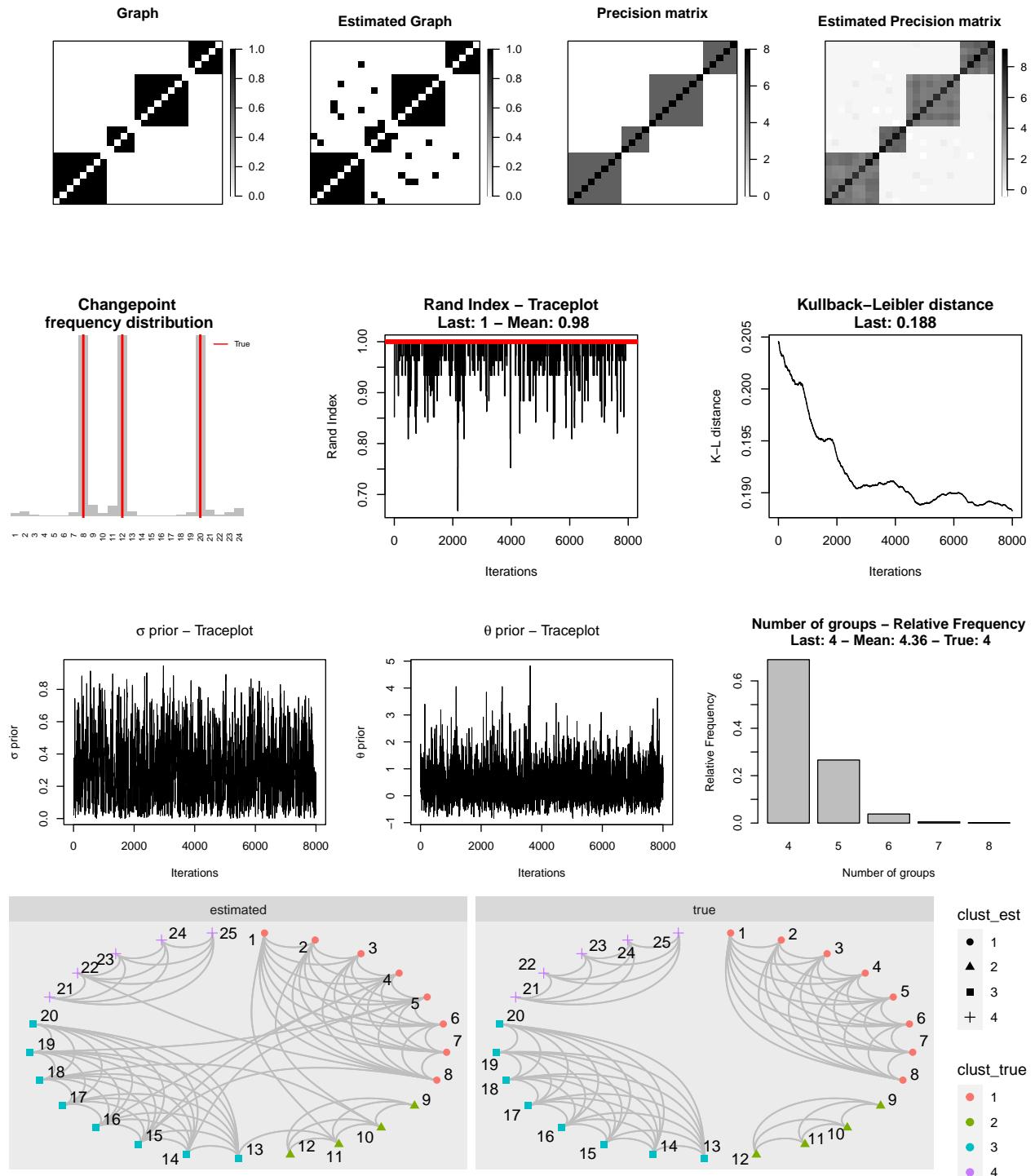
2.2.2 Simulation ID: 09

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
9	09	500	25	BD	27121996	25	0.078	8,4,8,5	8,4,8,5	0.08	0.043	1	0.186	0.03	1.236 mins



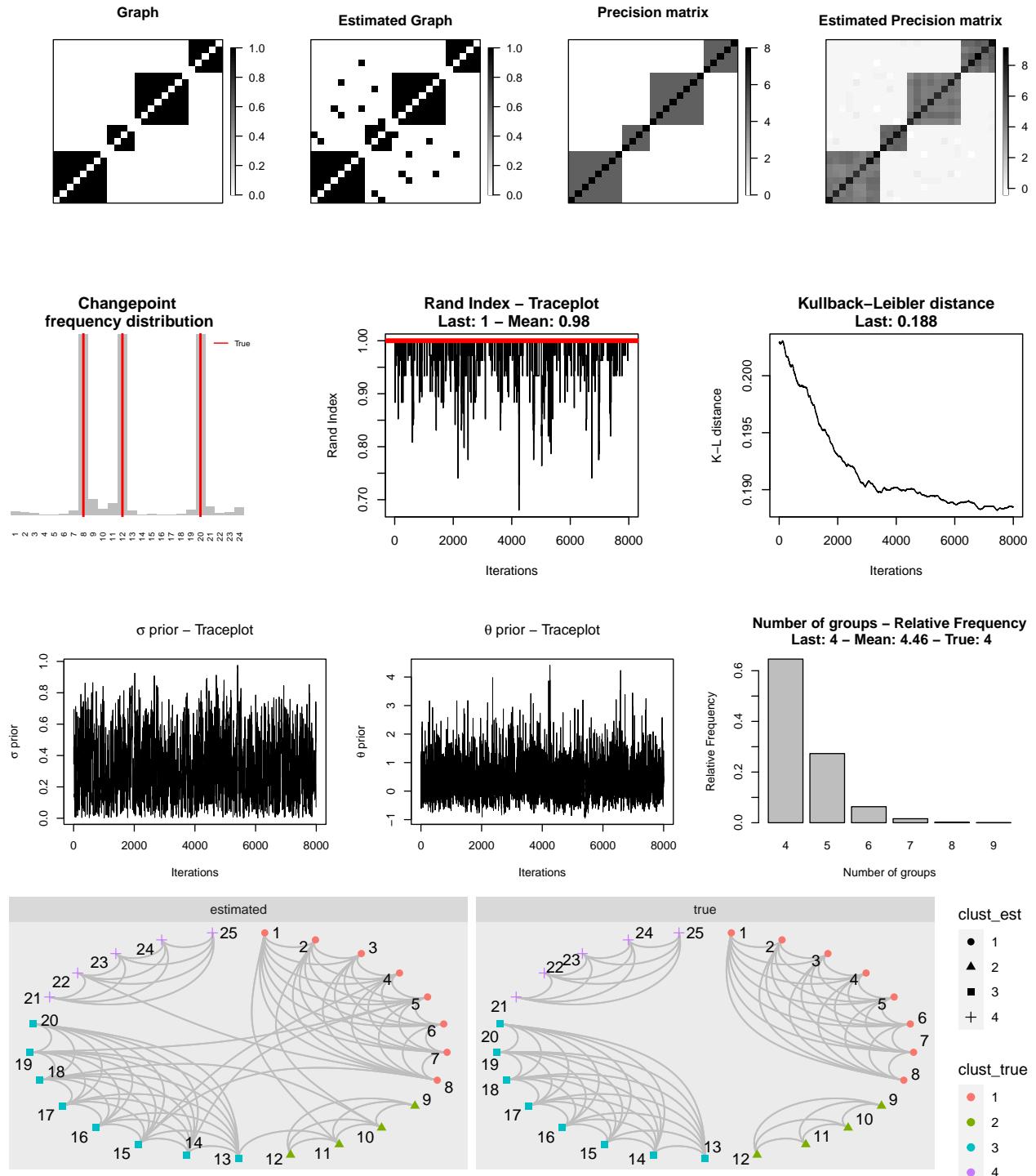
2.2.3 Simulation ID: 10

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
10	10	500	25	BD	27121996	25	0.093	8,4,8,5	8,4,8,5	0.075	0.039	1	0.188	0.033	1.231 mins



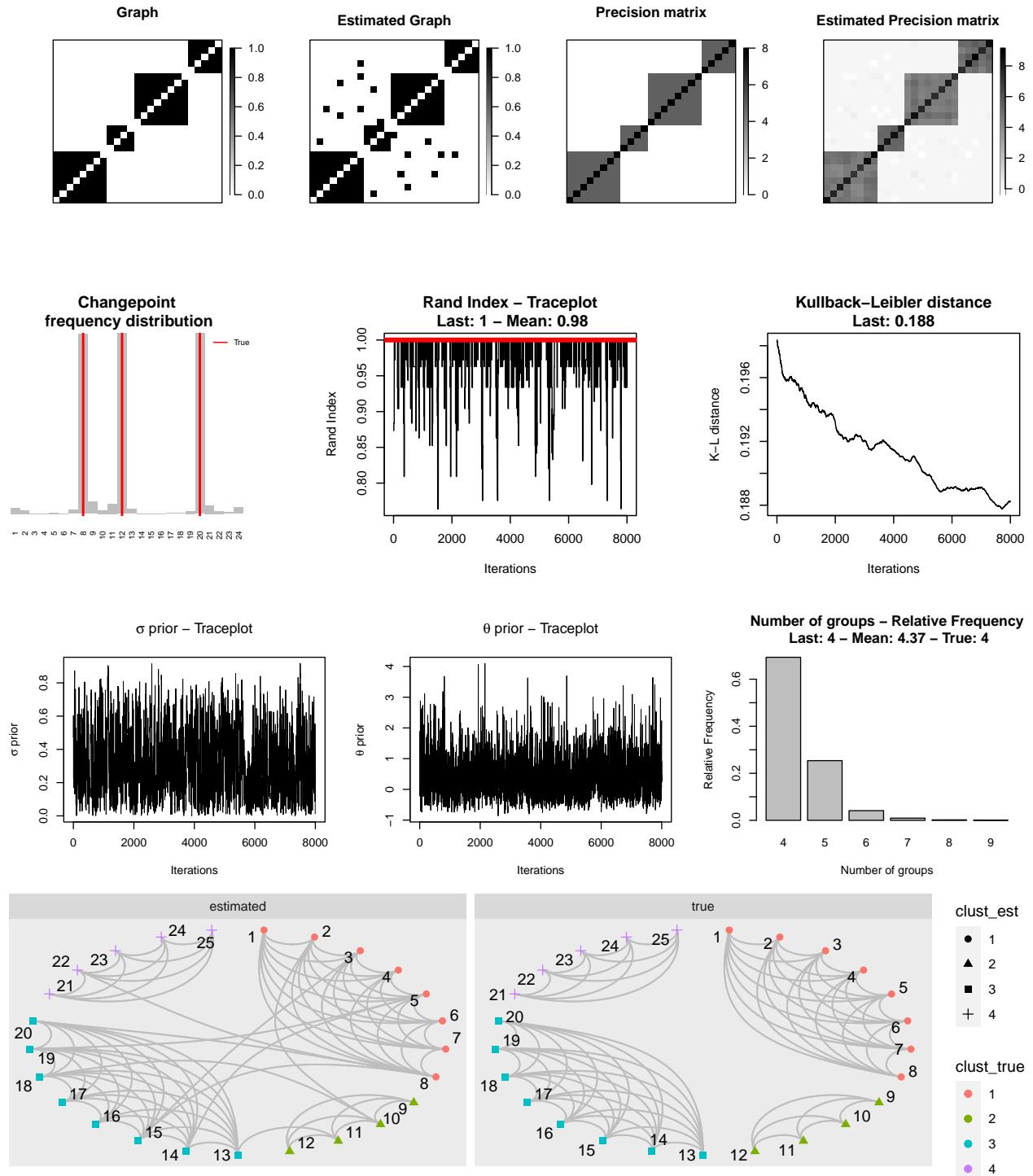
2.2.4 Simulation ID: 11

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
11	11	500	25	BD	27121996	25	0.108	8,4,8,5	8,4,8,5	0.079	0.049	1	0.188	0.03	1.231 mins



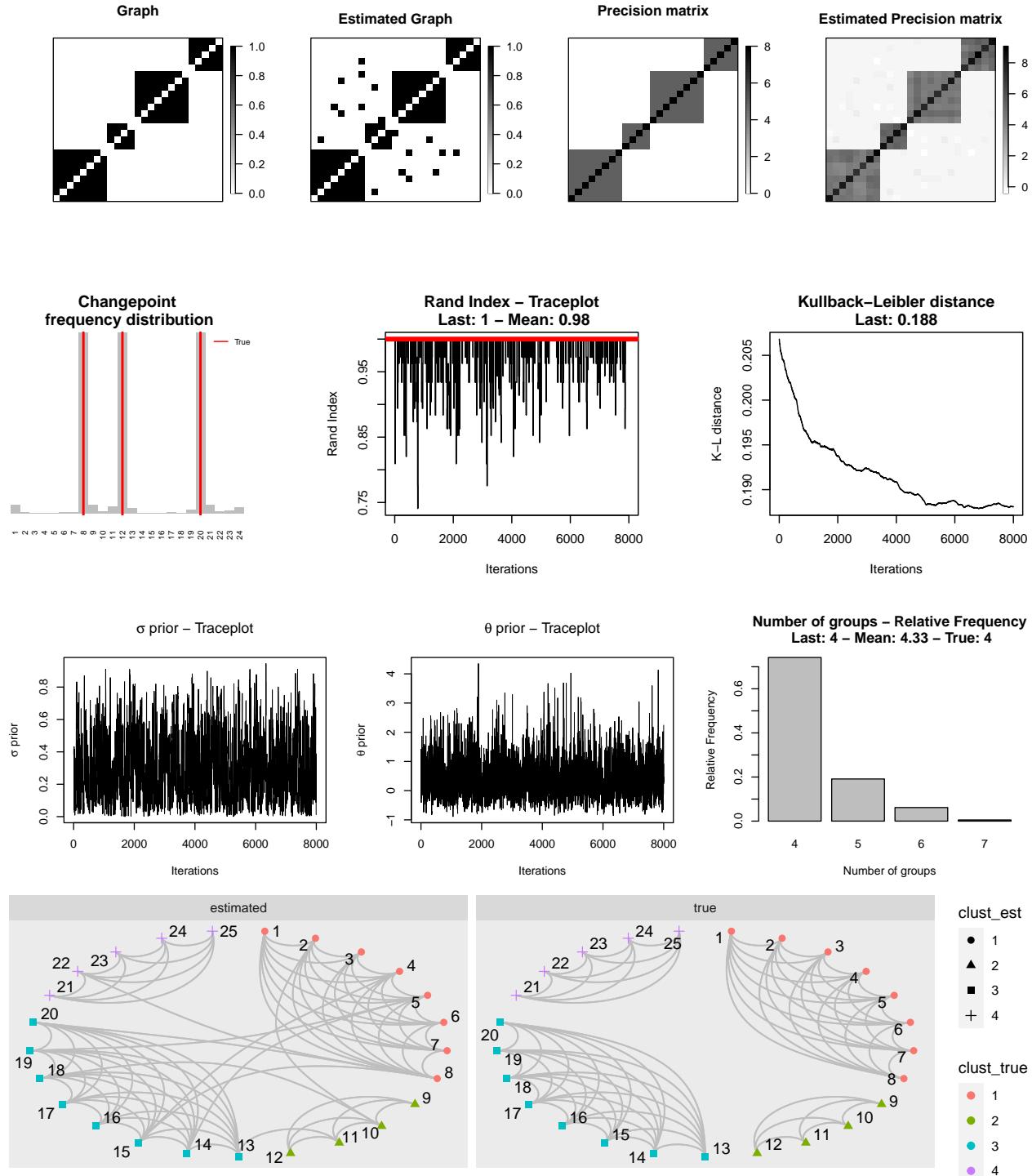
2.2.5 Simulation ID: 12

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
12	12	500	25	BD	27121996	25	0.124	8,4,8,5	8,4,8,5	0.067	0.04	1	0.188	0.03	1.235 mins



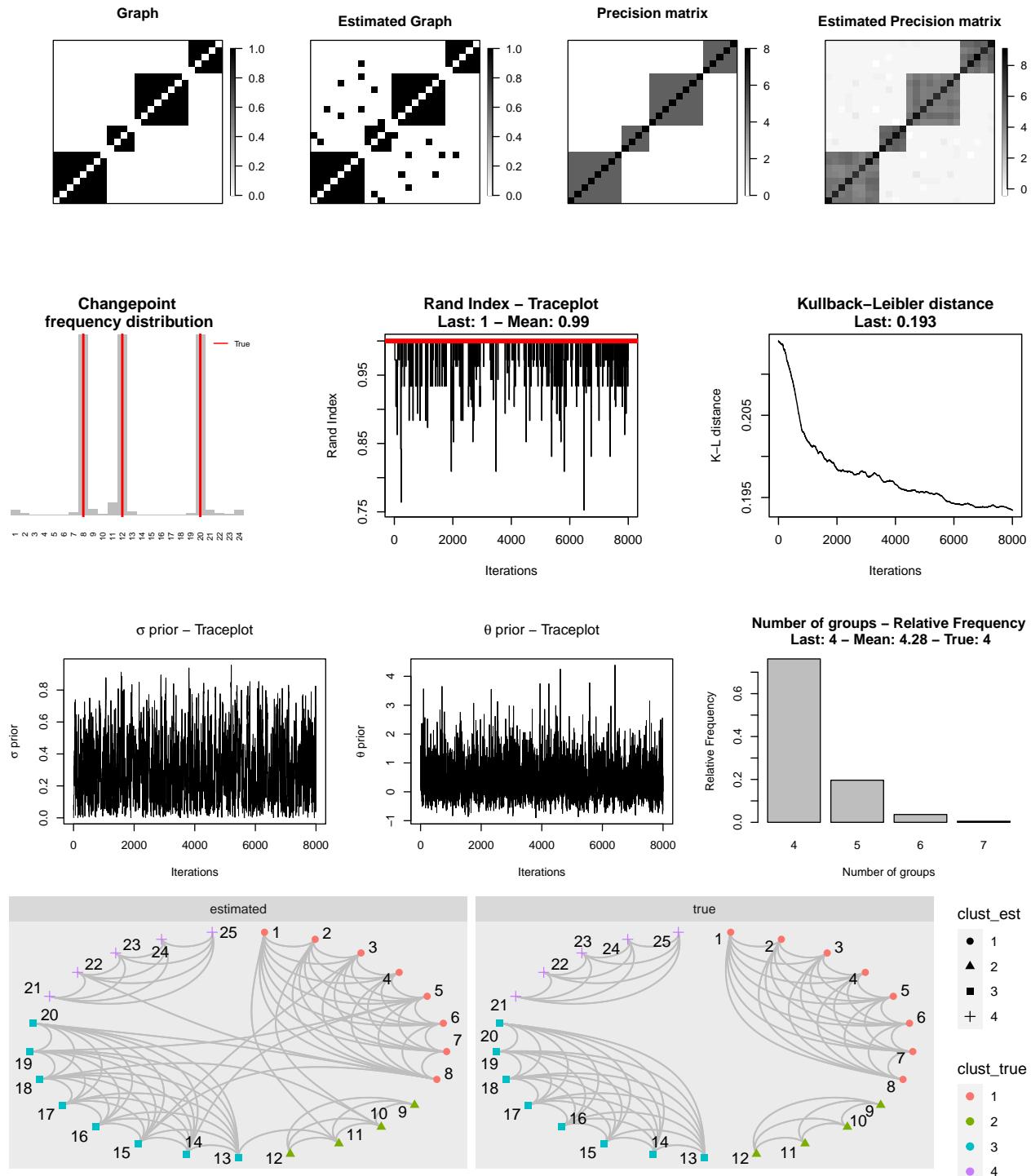
2.2.6 Simulation ID: 13

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
13	13	500	25	BD	27121996	25	0.139	8,4,8,5	8,4,8,5	0.06	0.035	1	0.188	0.03	1.231 mins



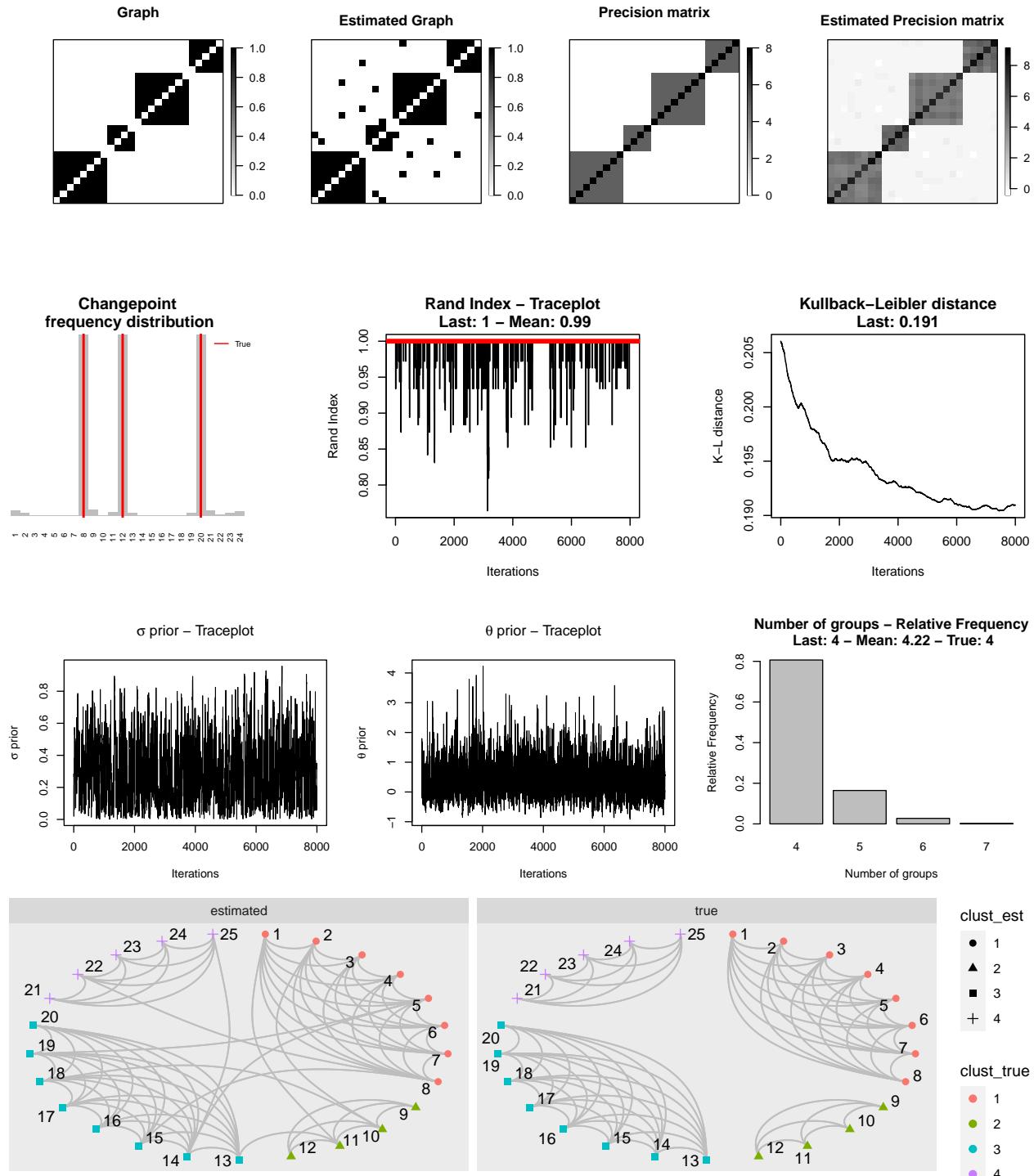
2.2.7 Simulation ID: 14

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
14	14	500	25	BD	27121996	25	0.154	8,4,8,5	8,4,8,5	0.056	0.03	1	0.193	0.033	1.23 mins



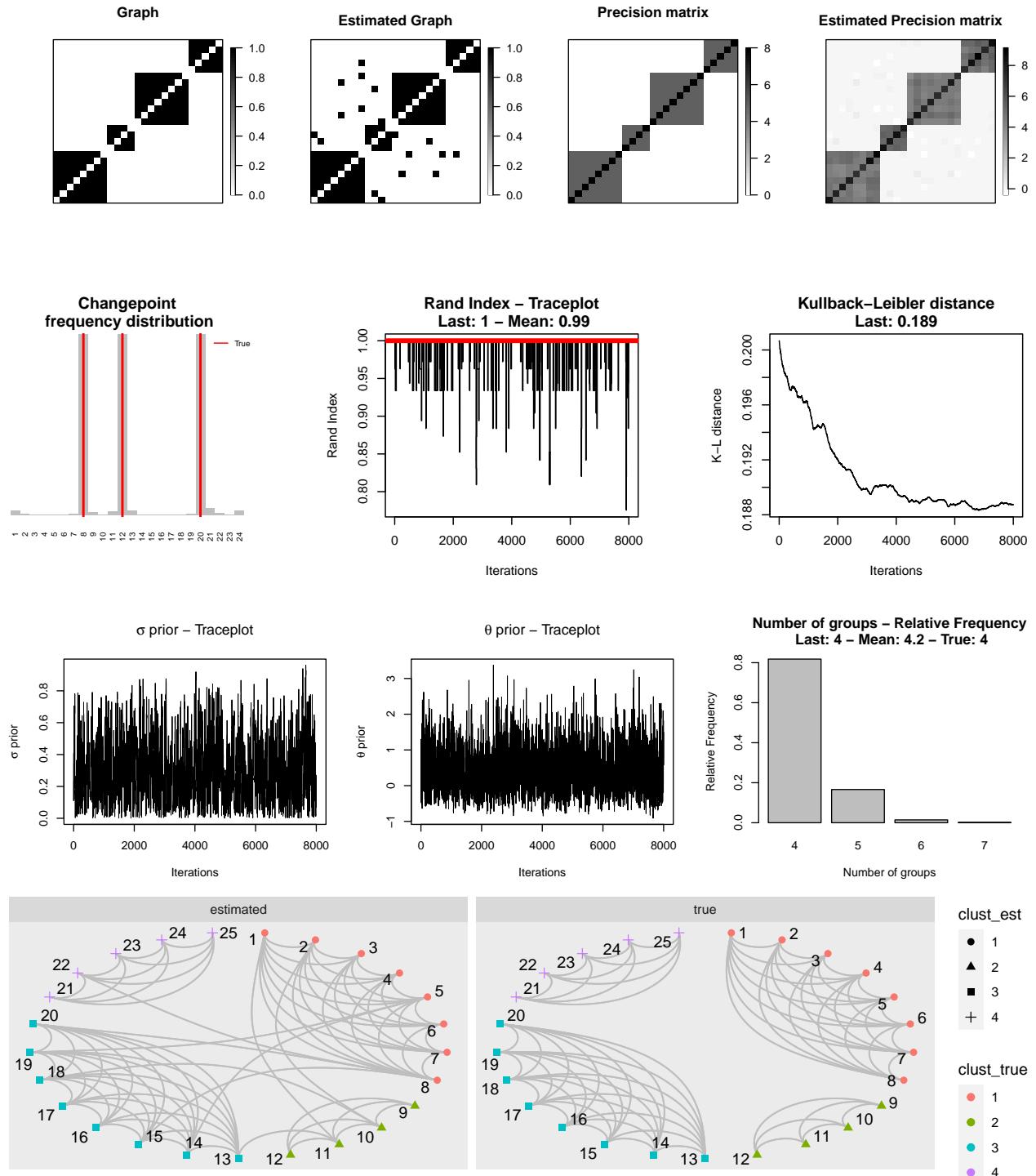
2.2.8 Simulation ID: 15

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
15	15	500	25	BD	27121996	25	0.169	8,4,8,5	8,4,8,5	0.047	0.024	1	0.191	0.03	1.228 mins



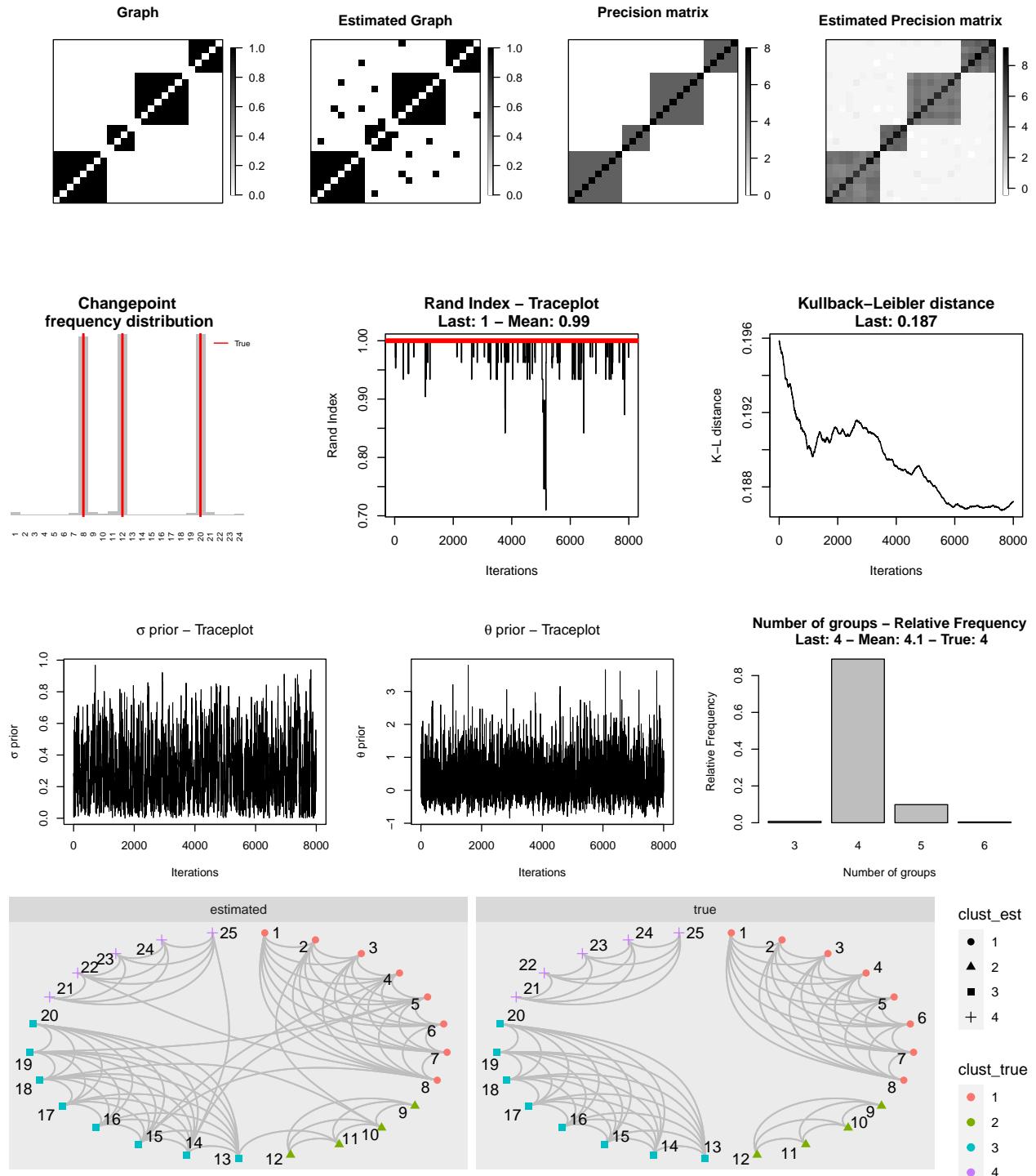
2.2.9 Simulation ID: 16

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
16	16	500	25	BD	27121996	25	0.185	8,4,8,5	8,4,8,5	0.034	0.022	1	0.189	0.03 1.226 mins



2.2.10 Simulation ID: 17

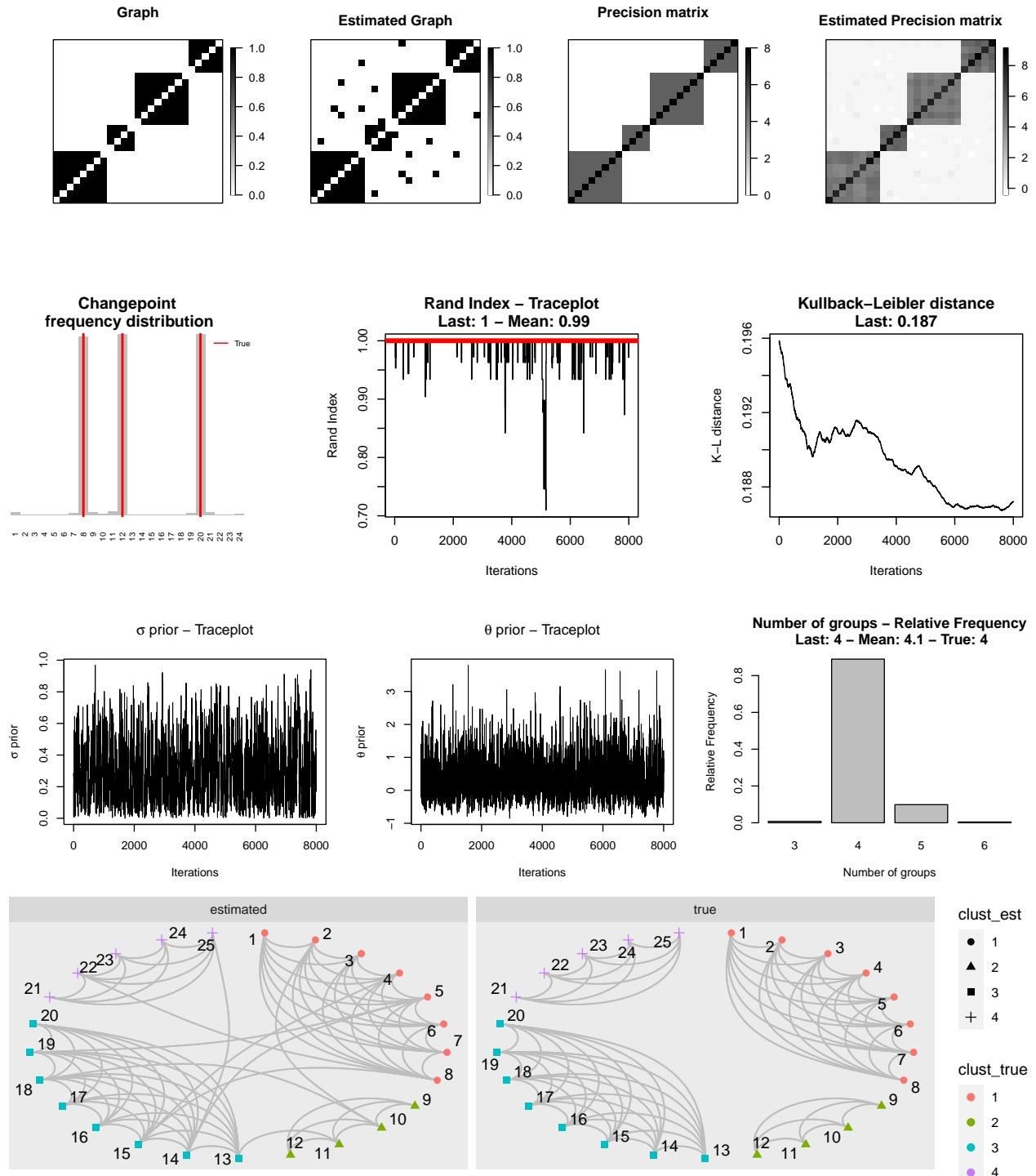
sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
17	17	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.183 mins



2.3 Group 3

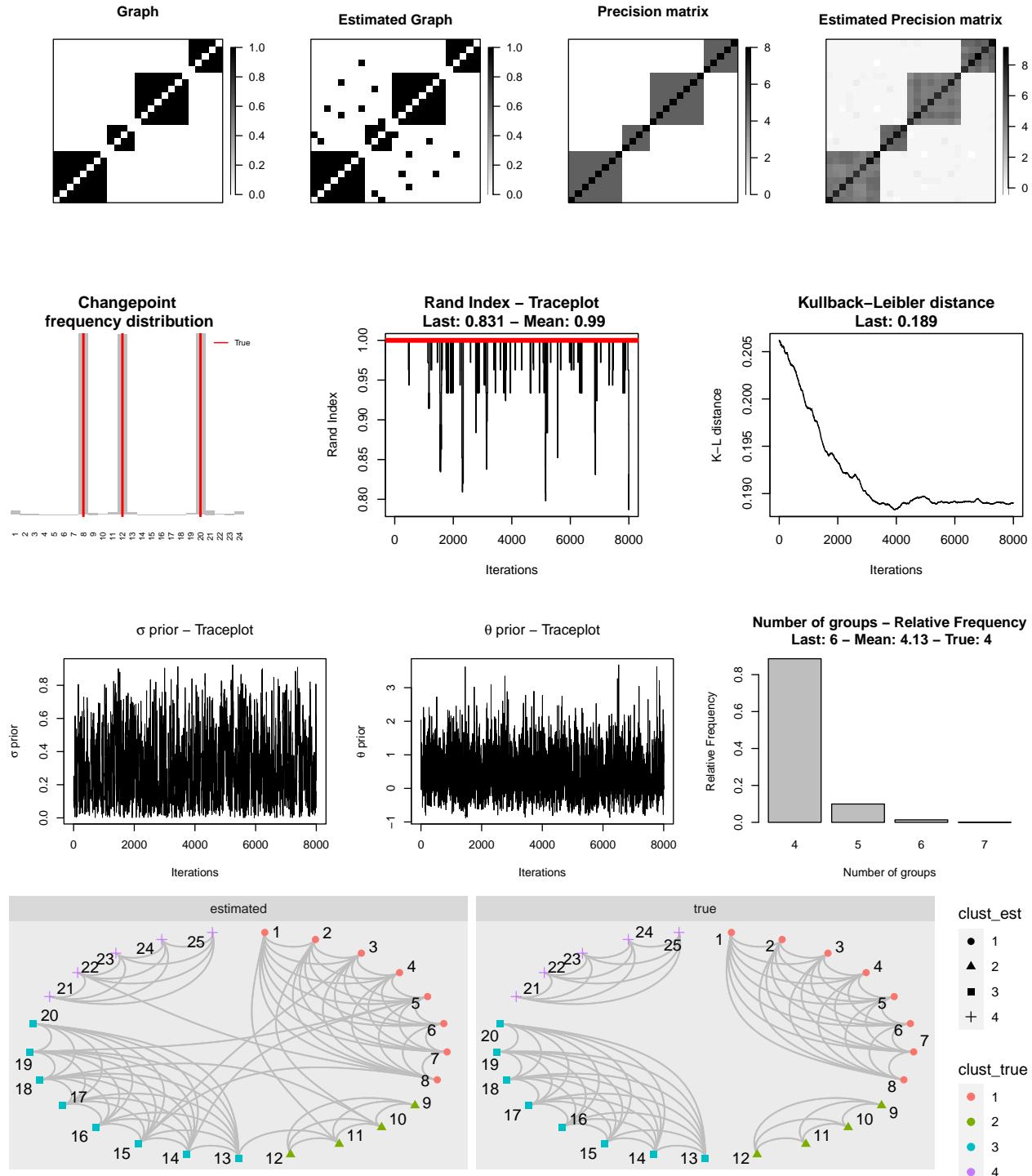
2.3.1 Simulation ID: 18

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
18	18	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.182 mins



2.3.2 Simulation ID: 19

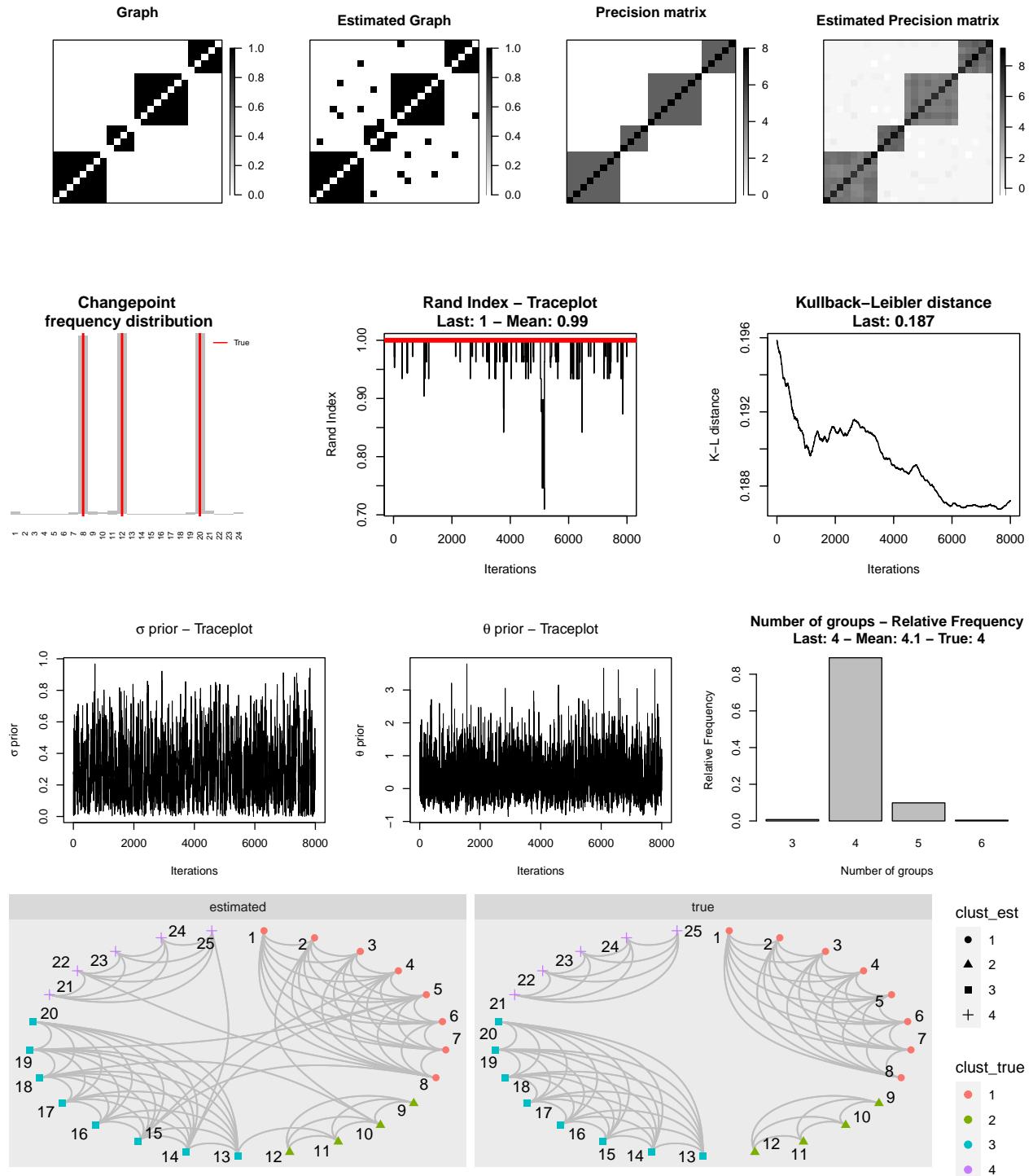
sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
19	19	500	25	BD	27121996	singletons	0.2	8,4,8,5	8,4,8,5	0.02	0.015	1	0.189	0.03	1.266 mins



2.4 Group 4

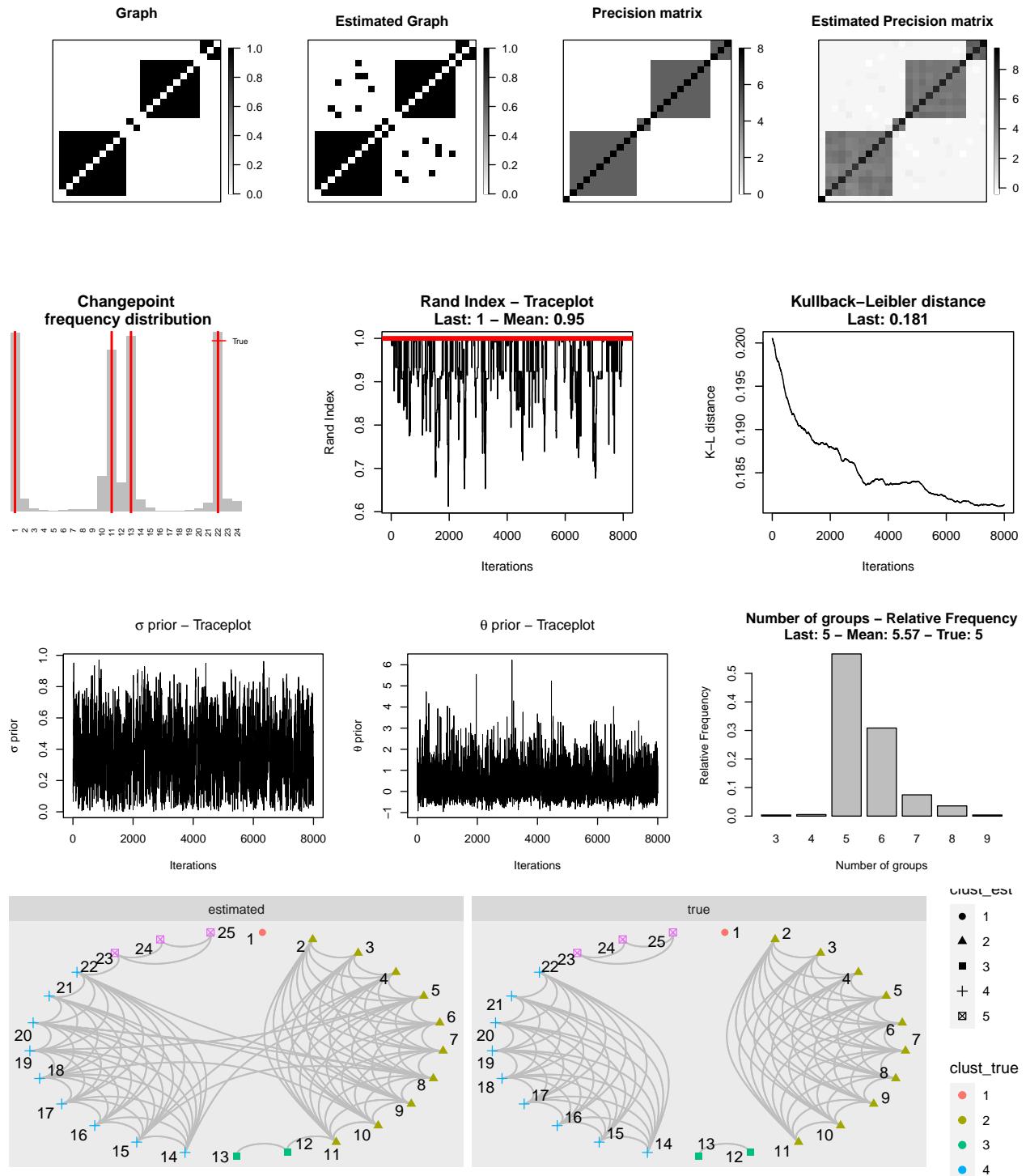
2.4.1 Simulation ID: 20

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
20	20	500	25	BD	27121996	25	0.2	8,4,8,5	8,4,8,5	0.019	0.017	1	0.187	0.03	1.18 mins



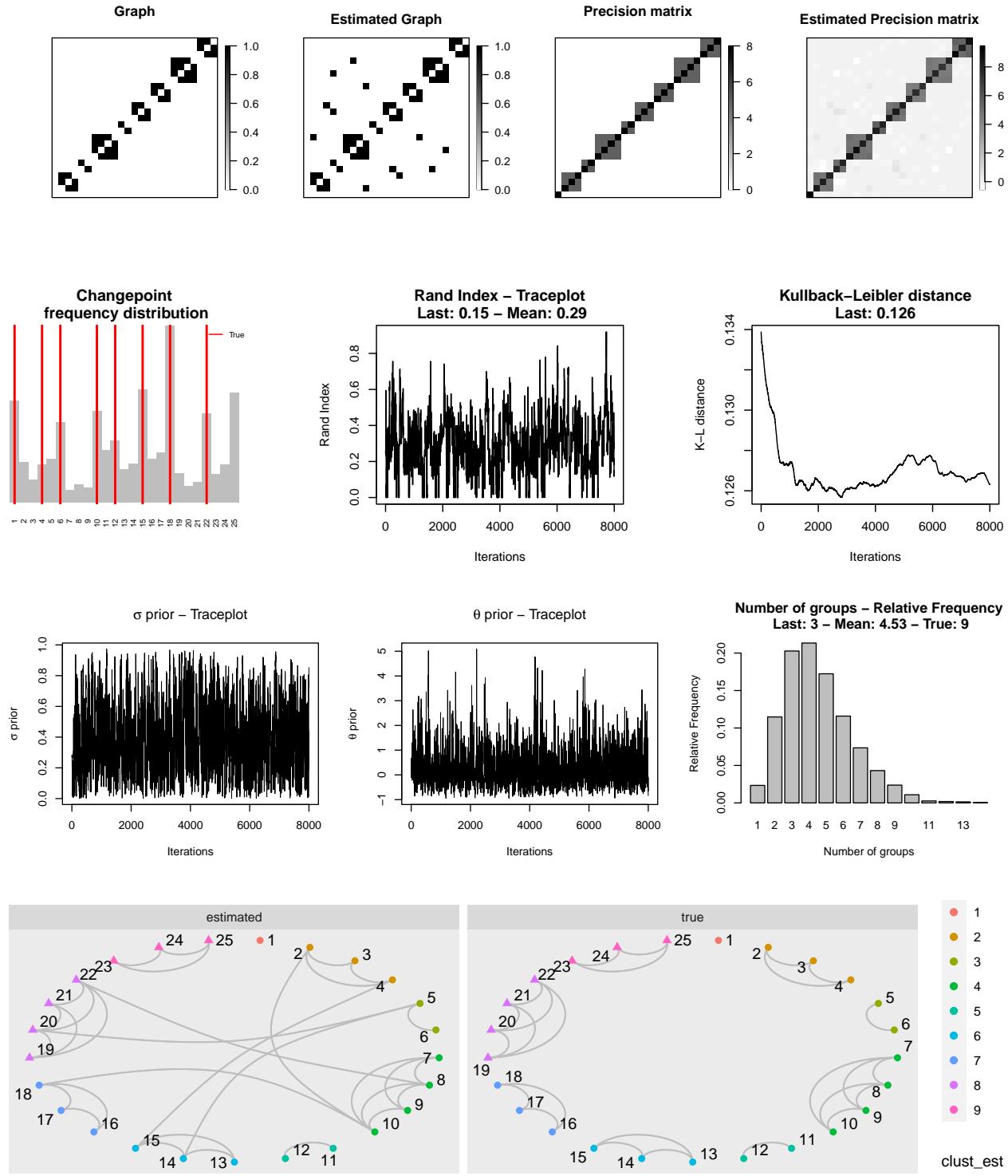
2.4.2 Simulation ID: 21

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
21	21	500	25	BD	27121996	25	0.2	1,10,2,9,3	1,10,2,9,3	0.072	0.109	1	0.181	0.033	1.274 mins



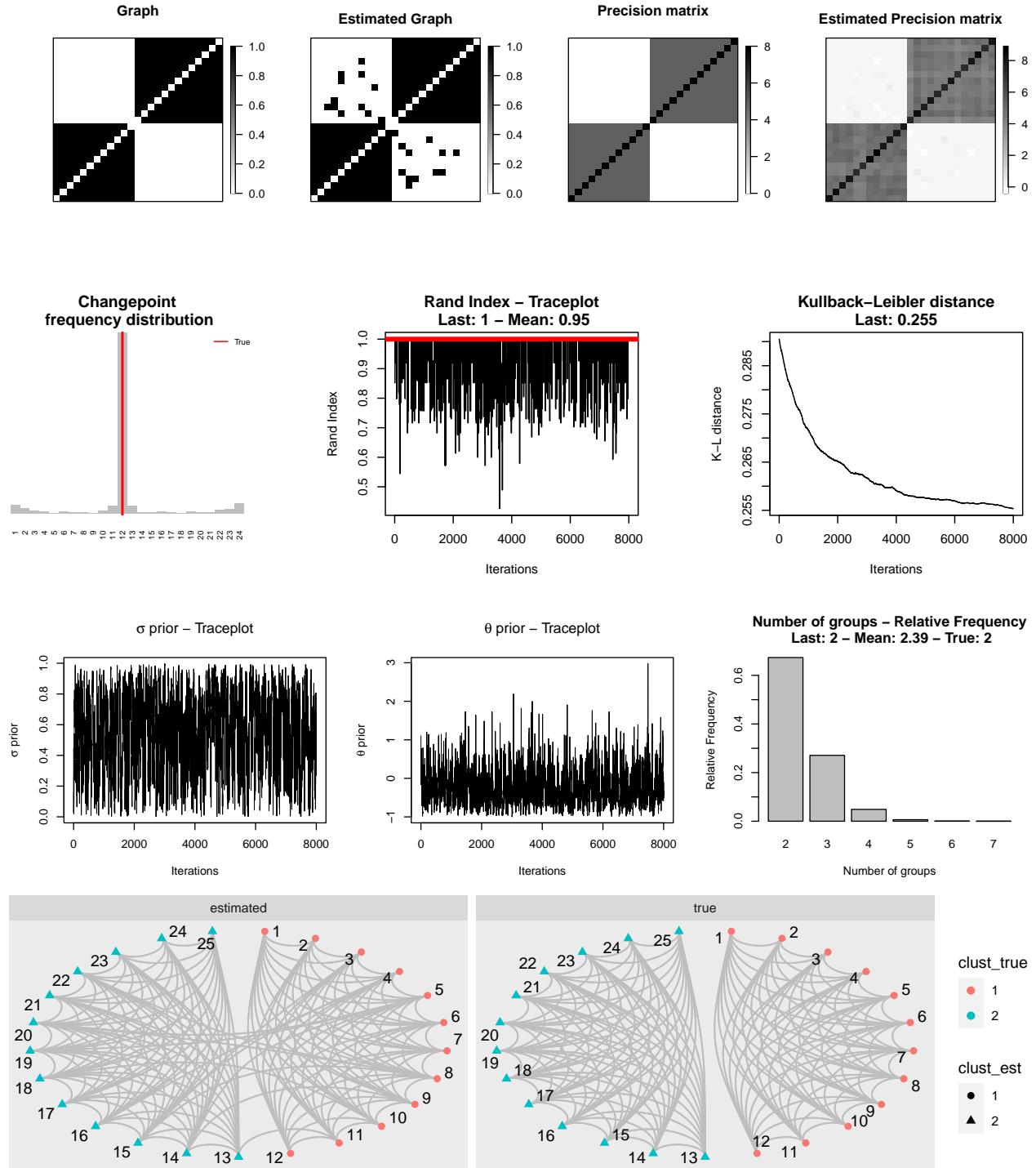
2.4.3 Simulation ID: 22

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
22	22	500	25	BD	27121996	25	0.02	1,3,2,4,2,3,3,4,3	18,7	0.397	1.02	0.129	0.126	0.02 1.12 mins



2.4.4 Simulation ID: 23

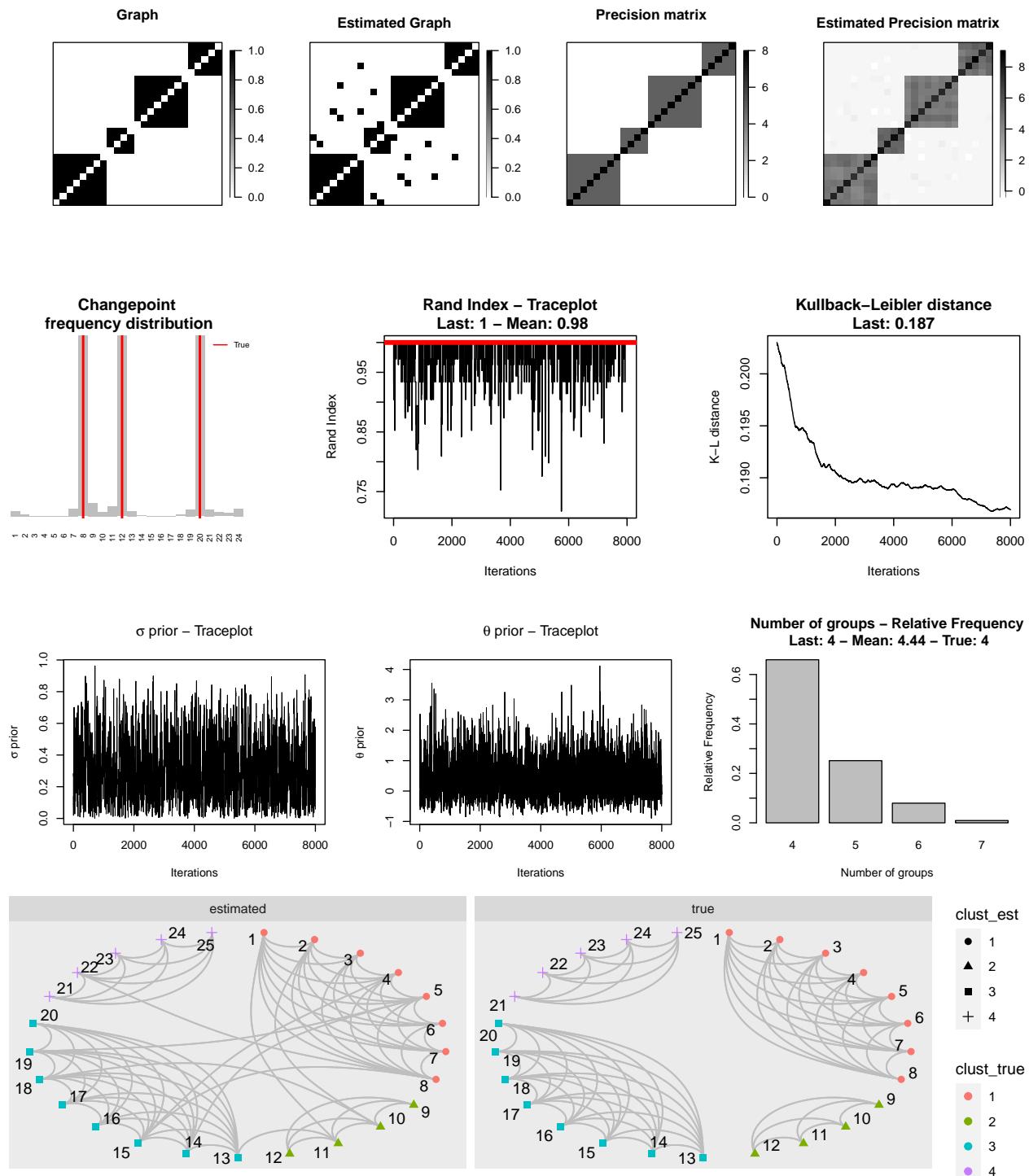
sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
23	23	500	25	BD	27121996	25	0.2	12,13	12,13	0.129	0.073	1	0.255	0.04	1.383 mins



2.5 Group 5

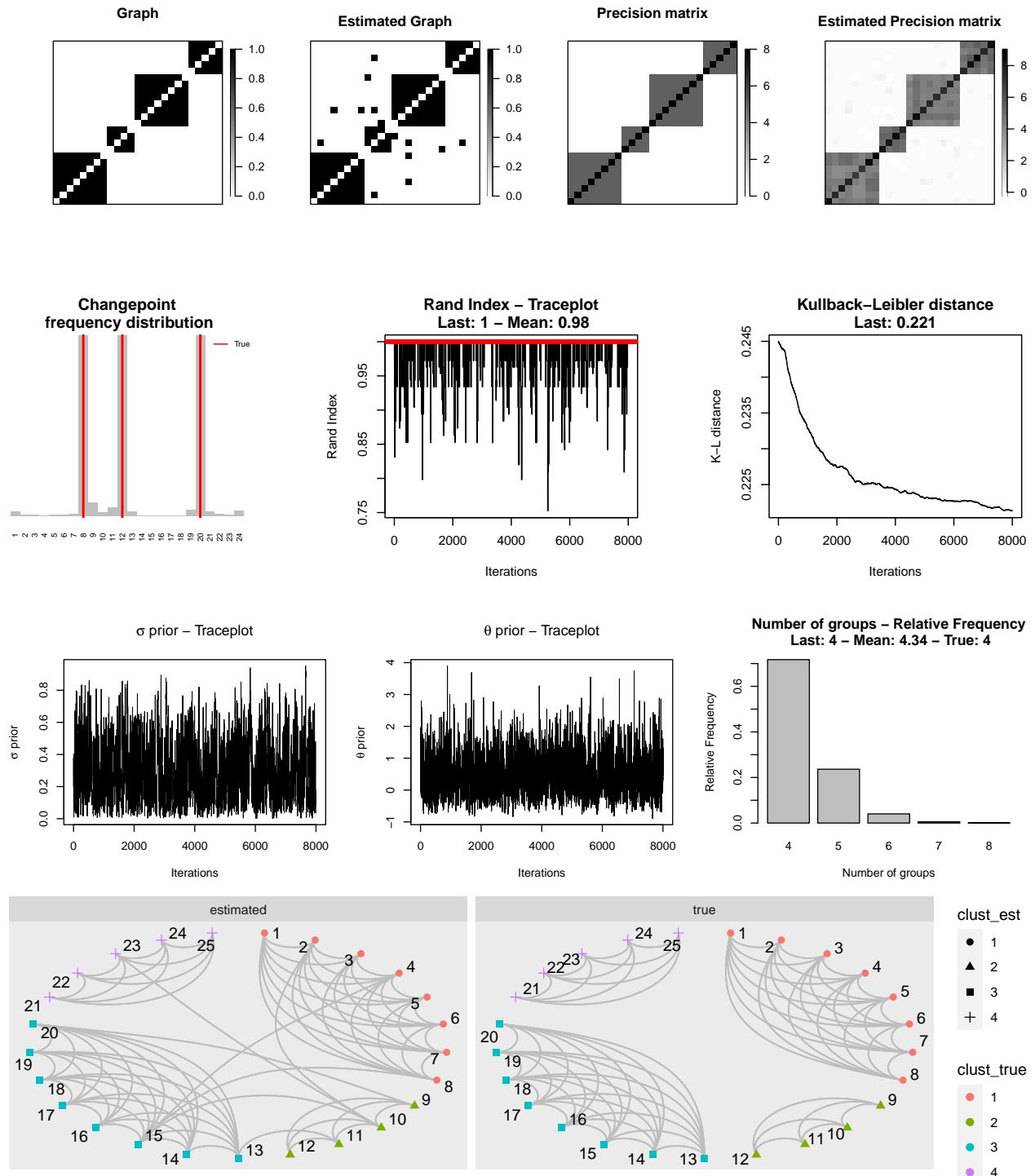
2.5.1 Simulation ID: 24

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
24	24	500	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.082	0.046	1	0.187	0.03	1.19 mins



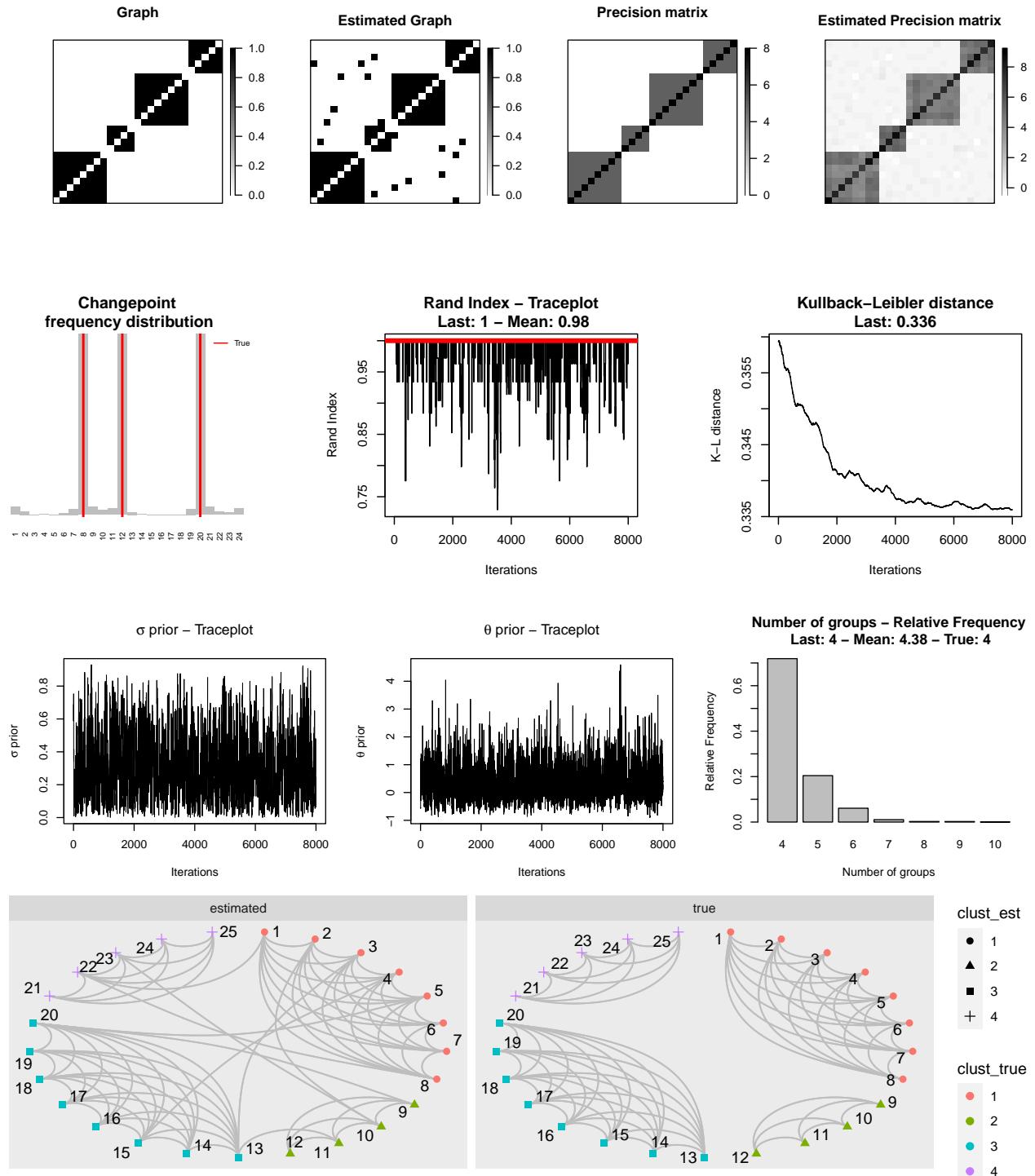
2.5.2 Simulation ID: 25

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
25	25	400	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.072	0.036	1	0.221	0.023	1.165 mins



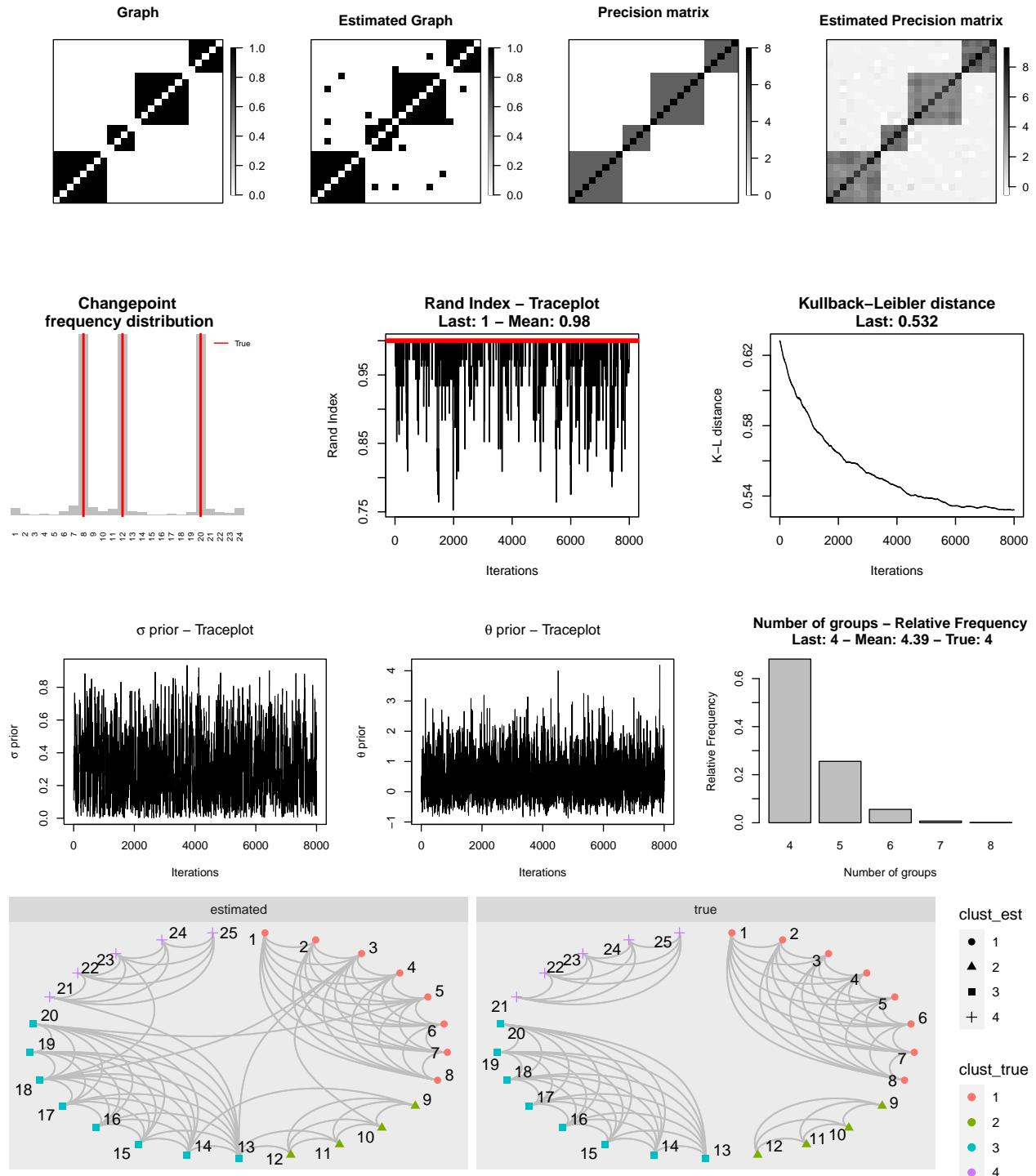
2.5.3 Simulation ID: 26

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
26	26	300	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.07	0.041	1	0.336	0.03	1.16 mins



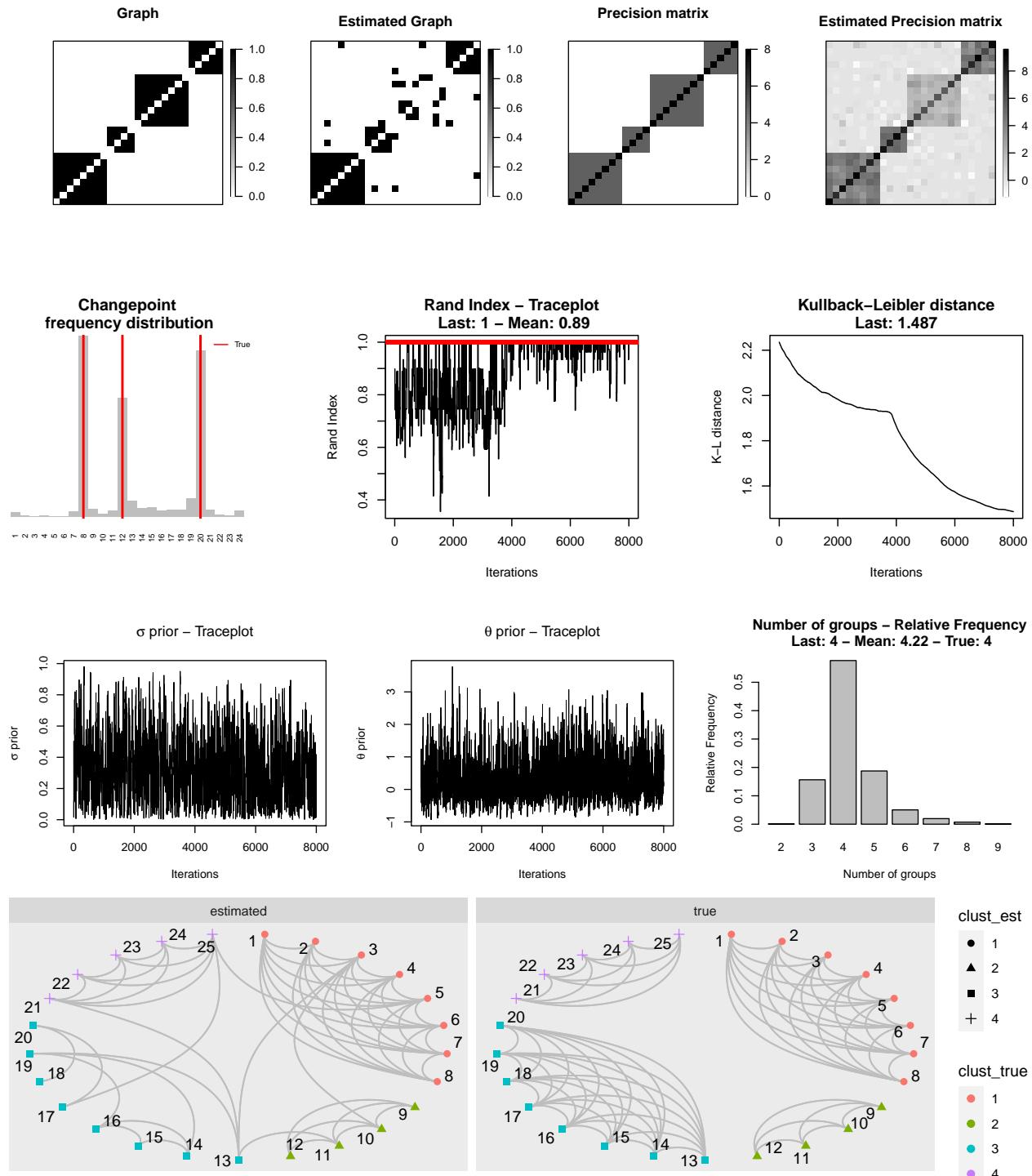
2.5.4 Simulation ID: 27

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
27	27	200	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.074	0.045	1	0.532	0.03	1.152 mins



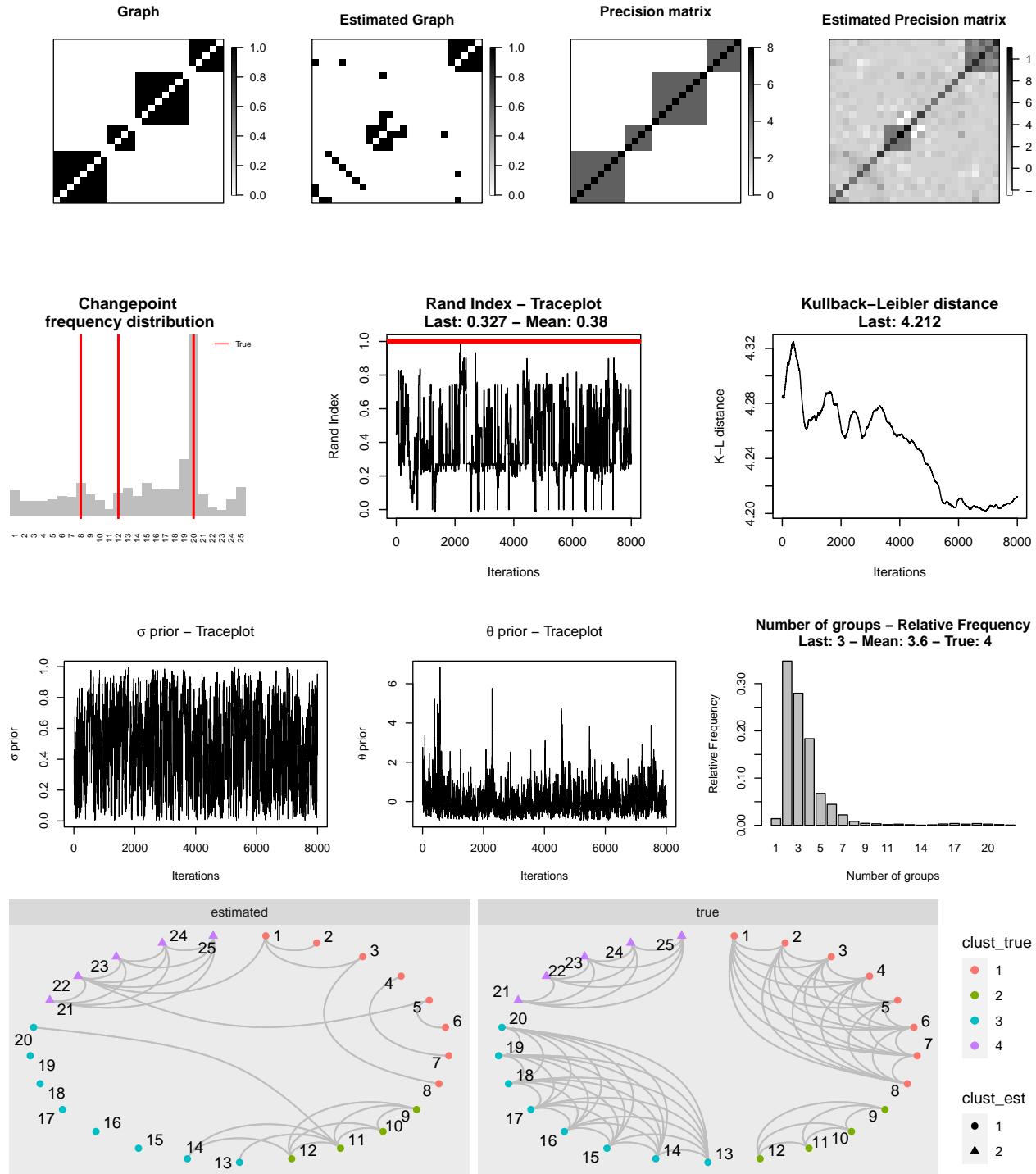
2.5.5 Simulation ID: 28

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
28	28	100	25	BD	27121996	25	0.1	8,4,8,5	8,4,8,5	0.111	0.241	1	1.487	0.087	1.122 mins



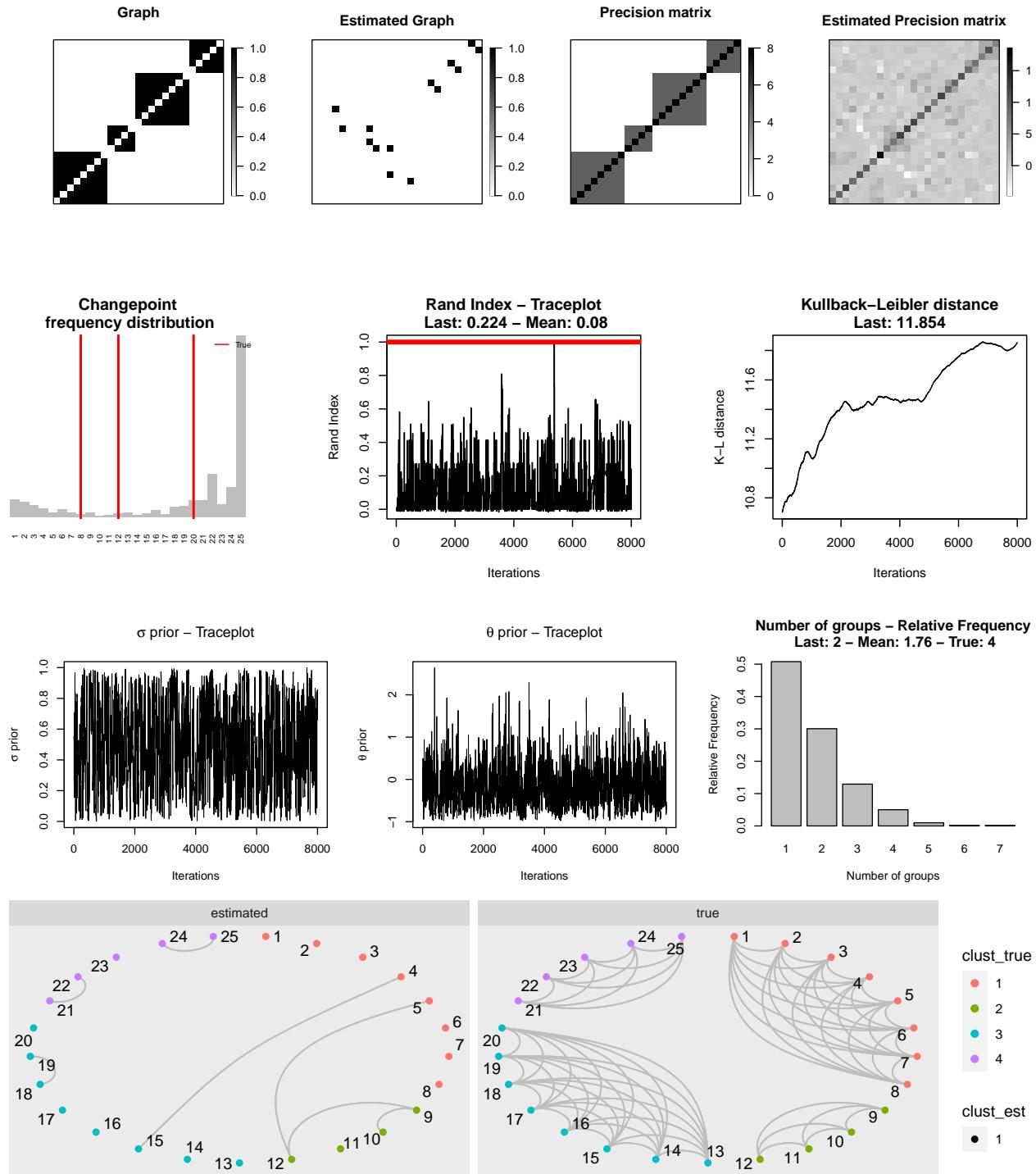
2.5.6 Simulation ID: 29

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
29	29	50	25	BD	27121996	25	0.1	8,4,8,5	20,5	0.236	0.539	0.273	4.212	0.19	1.092 mins



2.5.7 Simulation ID: 30

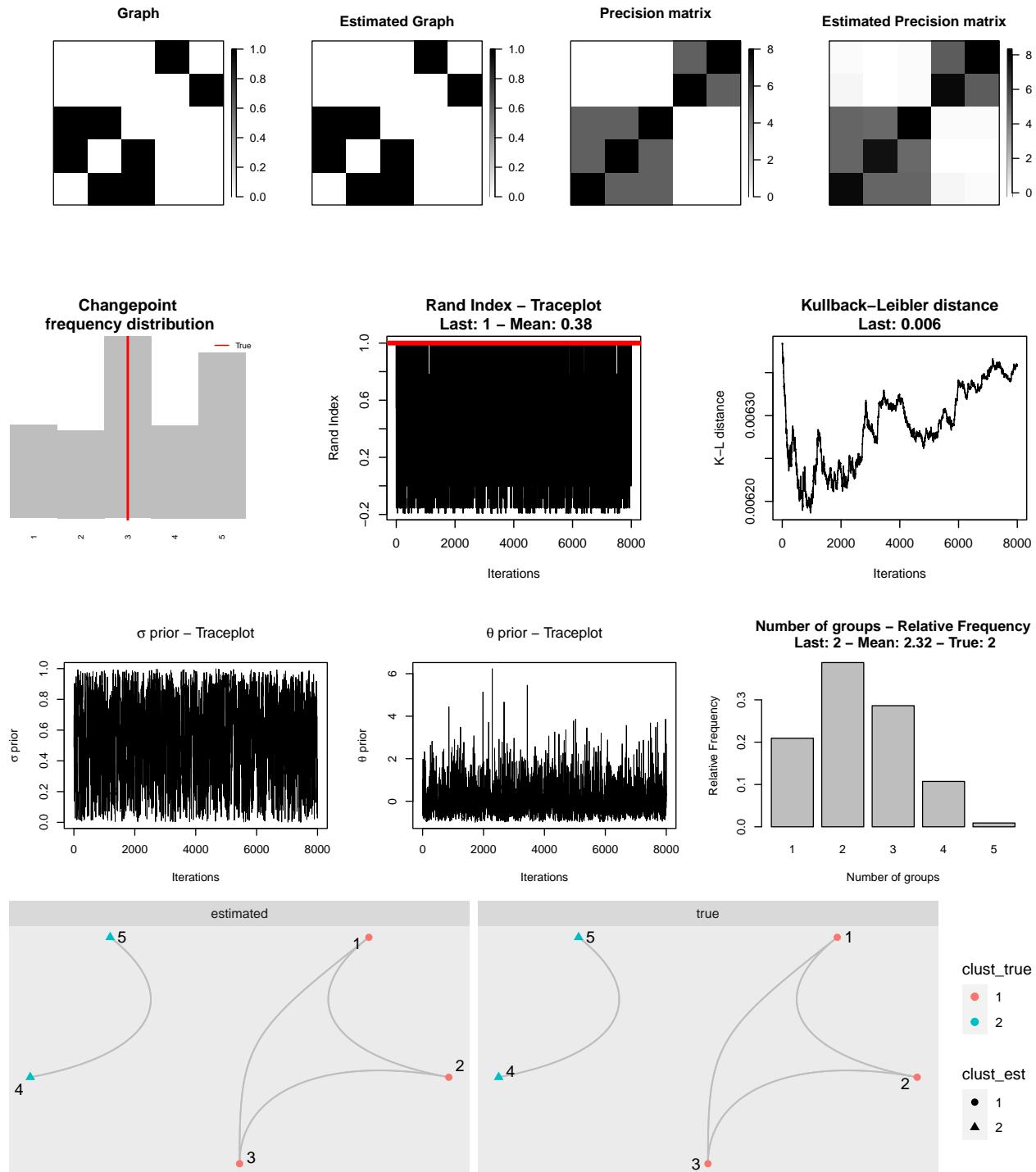
sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
30	30	20	25	BD	27121996	25	0.1	8,4,8,5	25	0.28	0.241	0	11.854	0.23	1.072 mins



2.6 Group 6

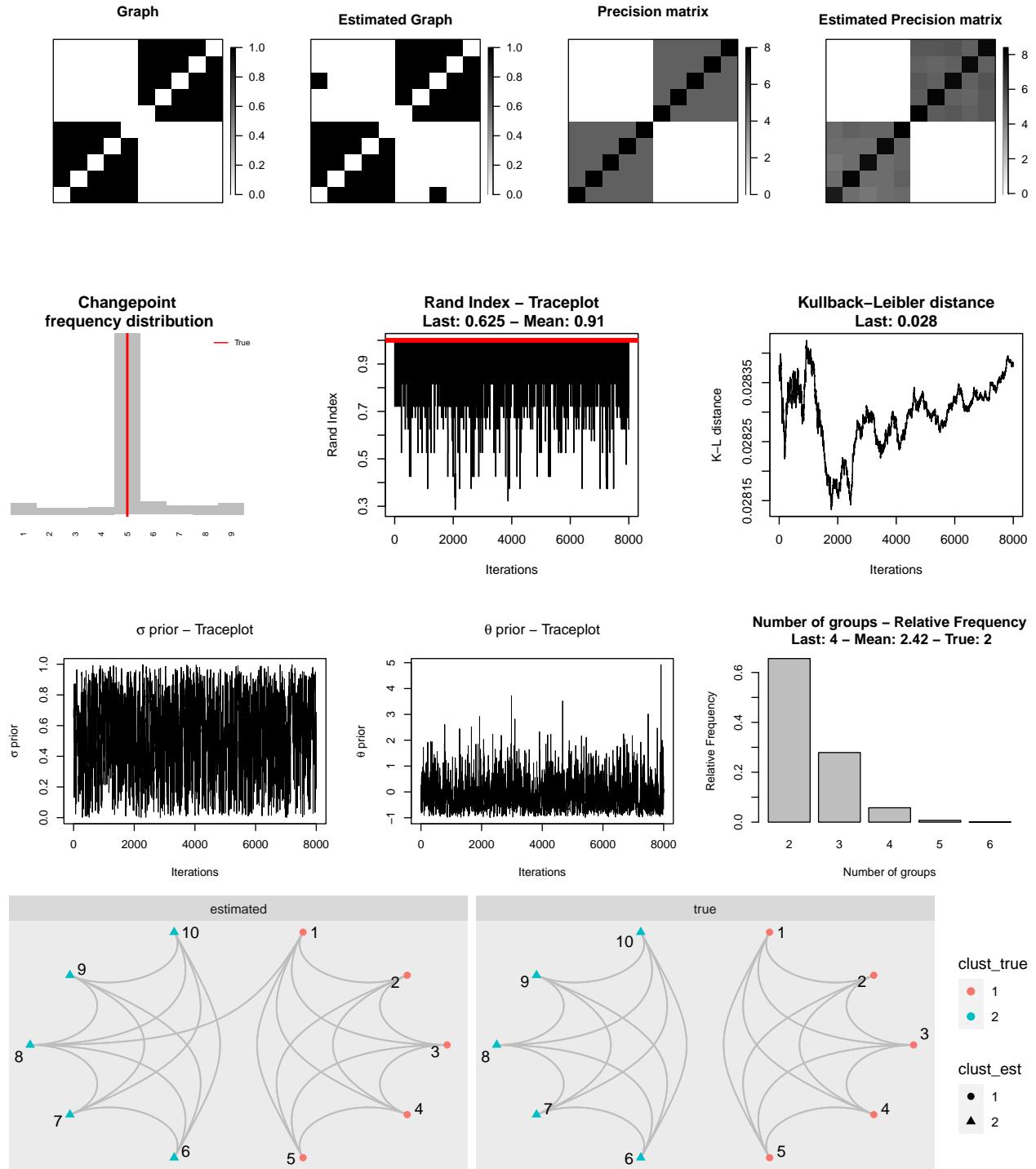
2.6.1 Simulation ID: 31

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
31	31	500	5	BD	27121996	5	0.0625	3,2	3,2	0.543	0.752	1	0.006	0 0.8150333 mins



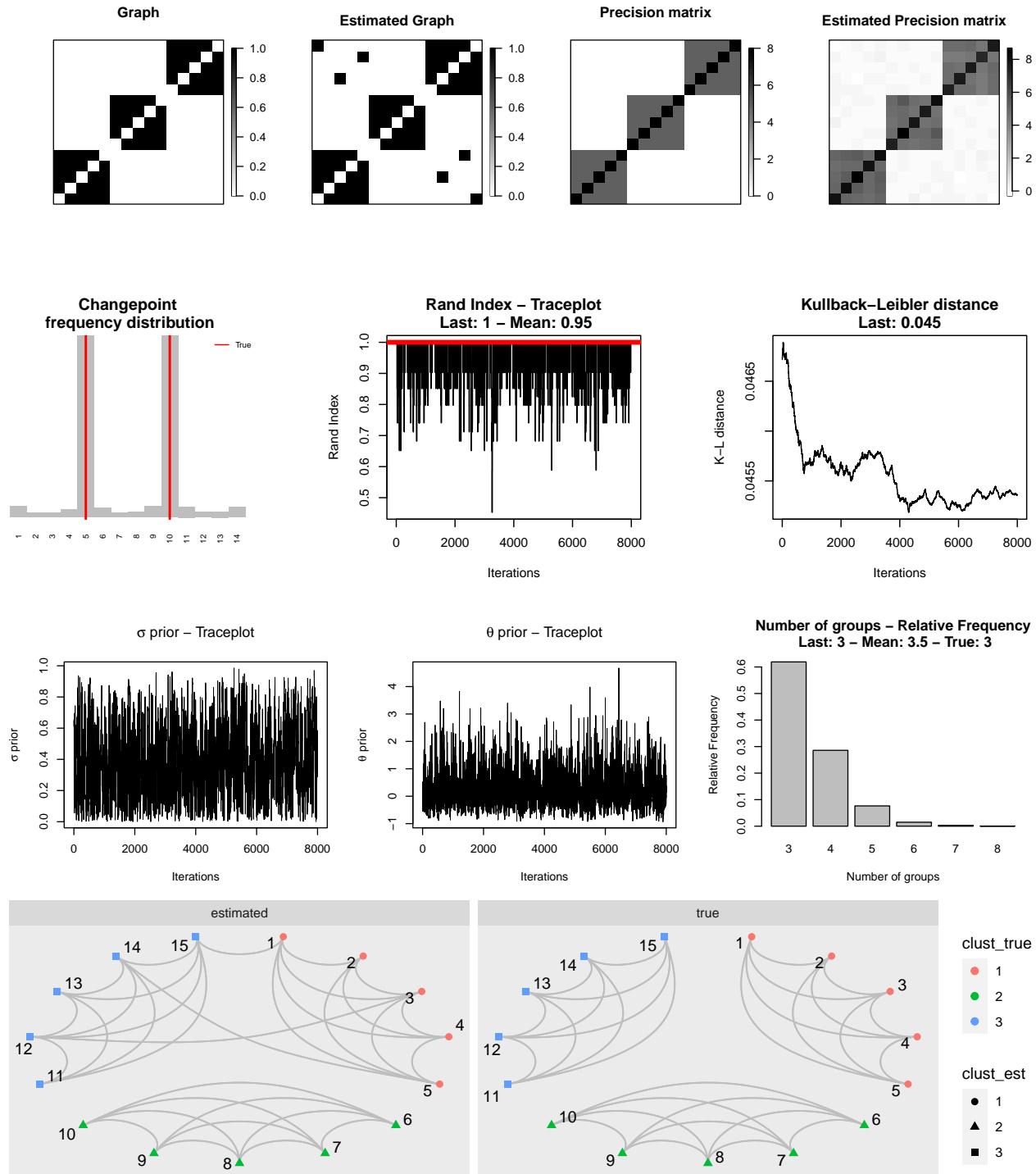
2.6.2 Simulation ID: 32

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
32	32	500	10	BD	27121996	10	0.0625	5,5	0.188	0.115	1	0.028	0.022	0.8538167 mins



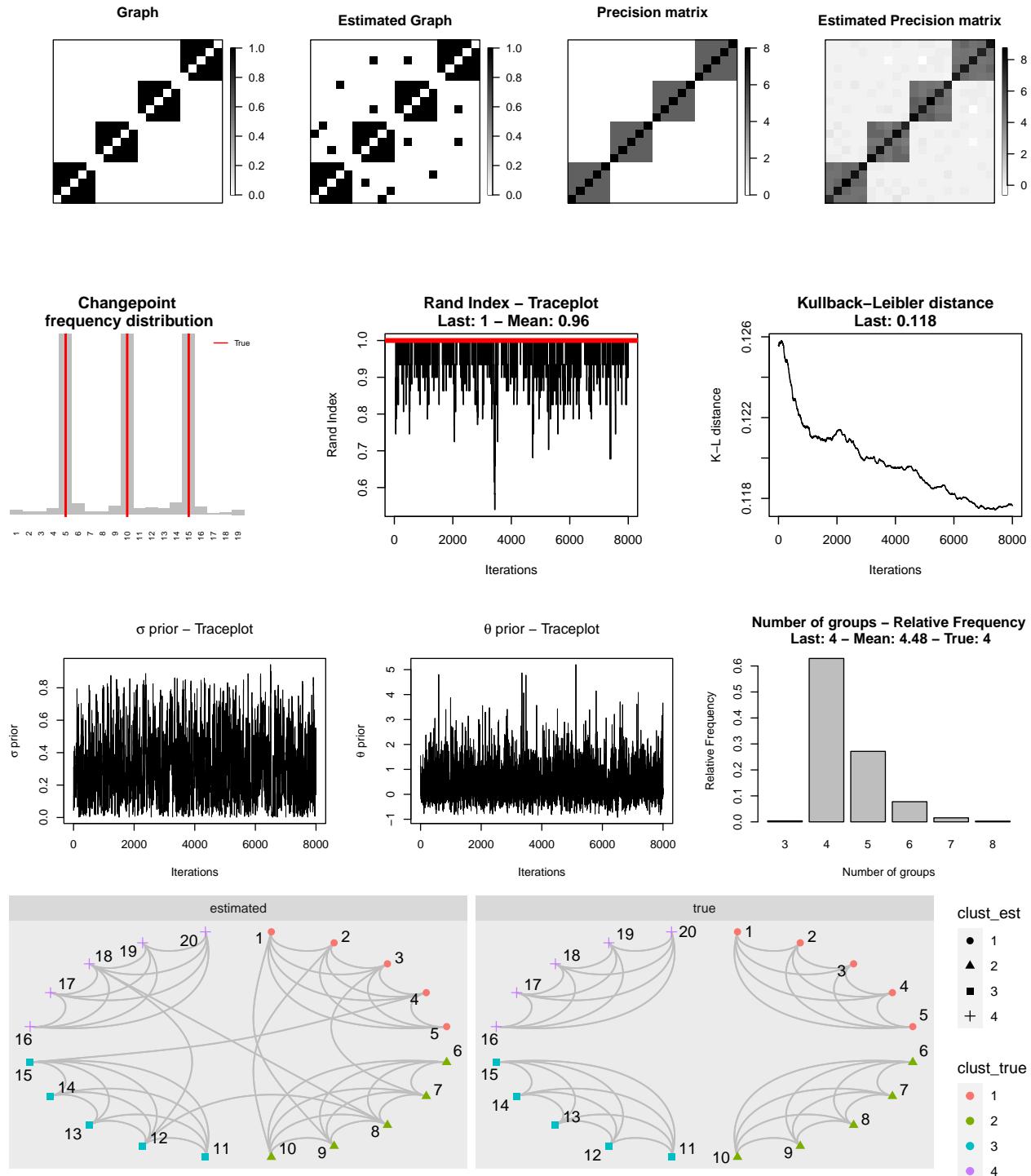
2.6.3 Simulation ID: 33

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
33	33	500	15	BD	27121996	15	0.0625	5,5,5	5,5,5	0.129	0.087	1	0.045	0.029	1.01 mins



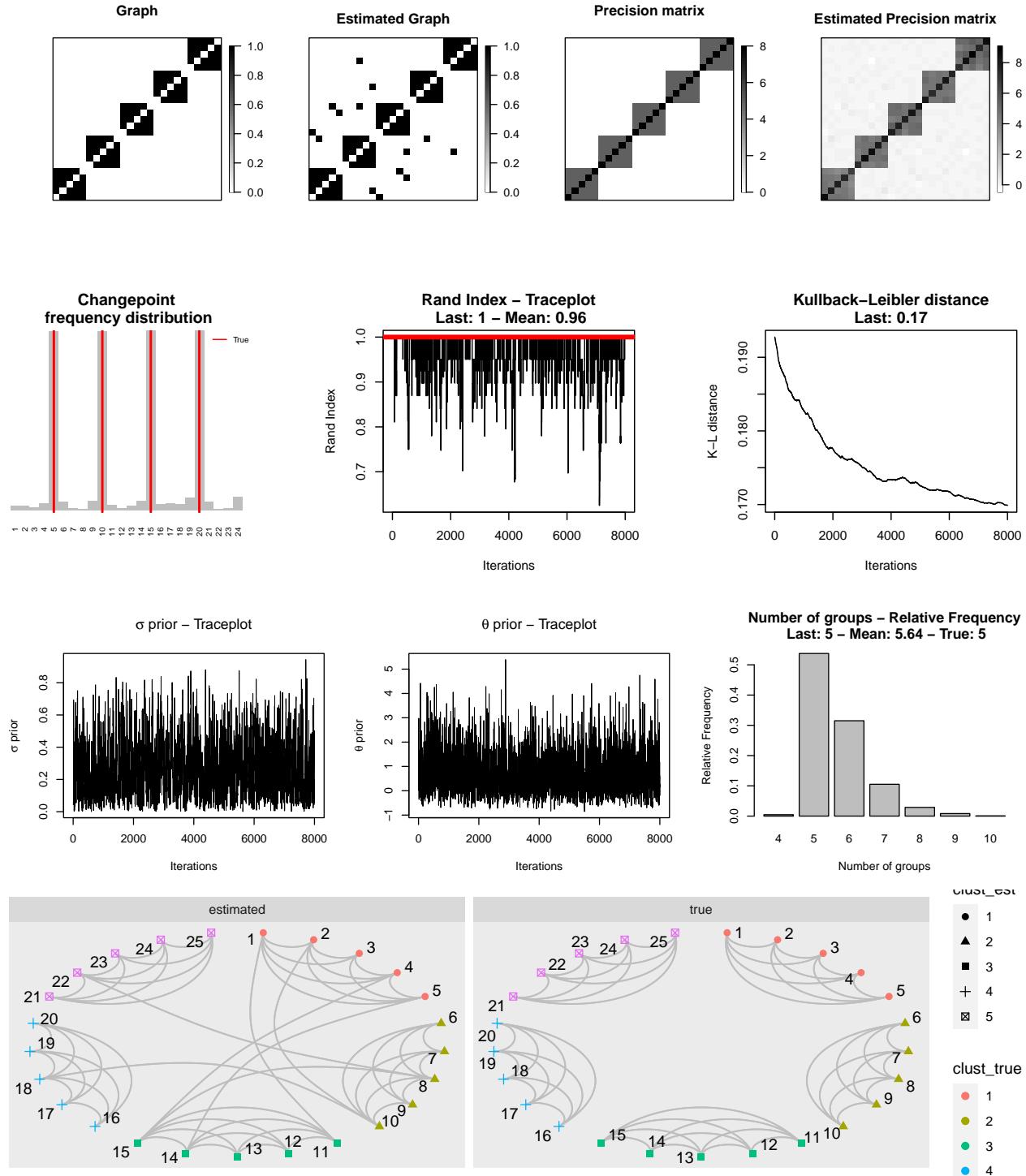
2.6.4 Simulation ID: 34

	sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
34	34	500	20	BD	27121996	20	0.0625	5,5,5,5	5,5,5,5	0.103	0.07	1	0.118	0.037	1.114 mins



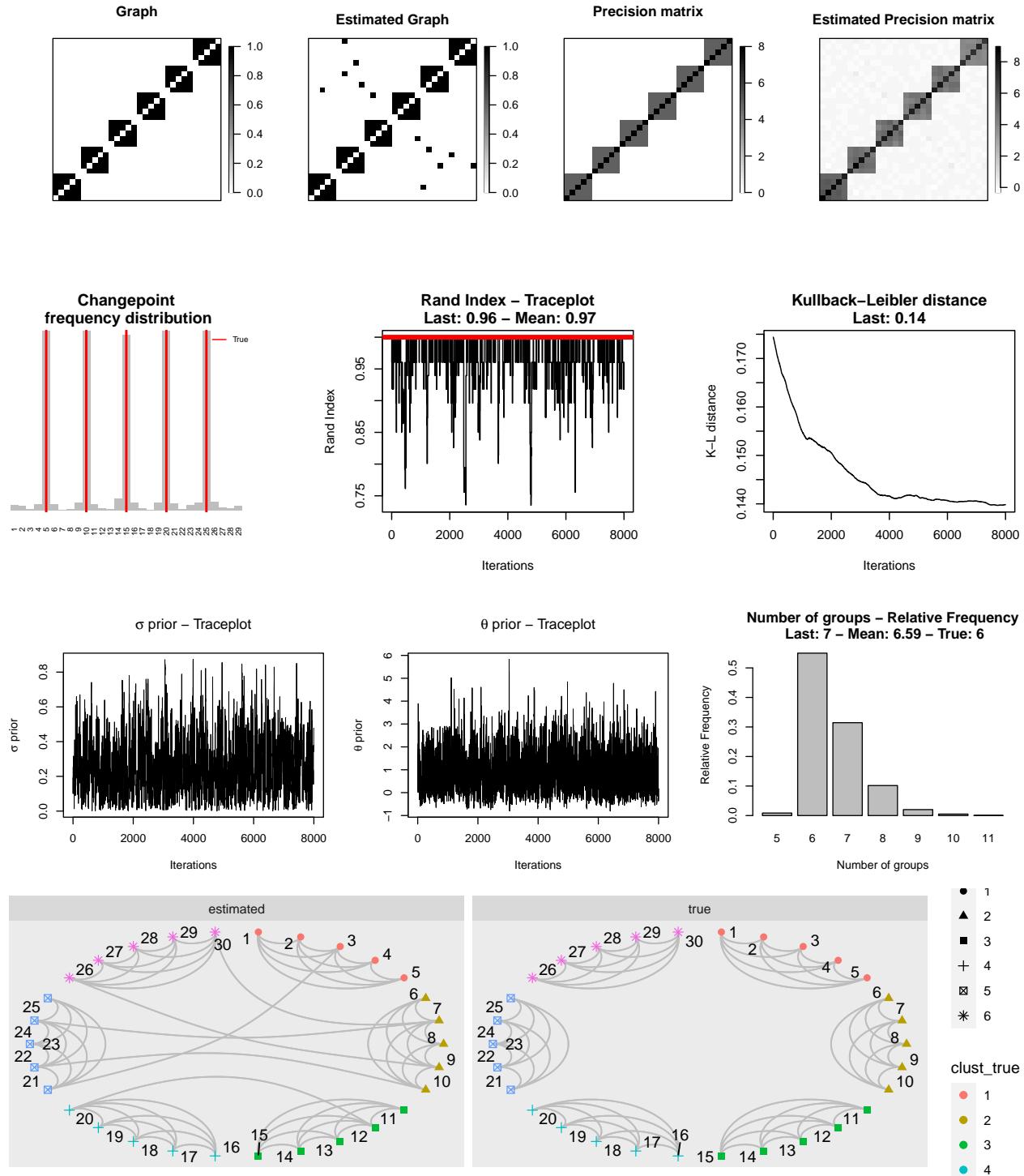
2.6.5 Simulation ID: 35

	sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
35	35	500	25	BD	27121996	25	0.0625	5,5,5,5,5	5,5,5,5,5	0.104	0.074	1	0.17	0.023	1.234 mins



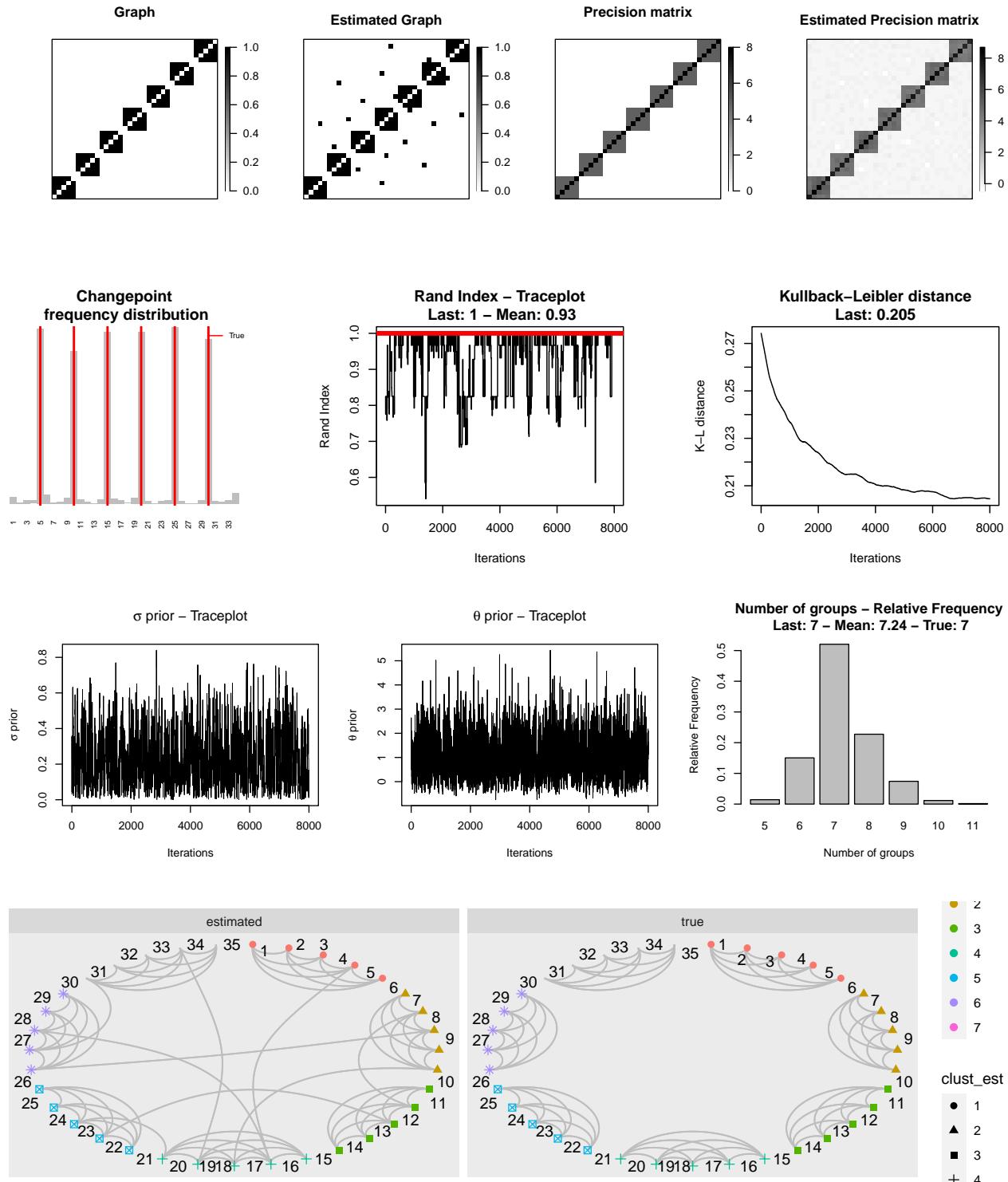
2.6.6 Simulation ID: 36

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
36	36	500	30	BD	27121996	30	0.0625	5,5,5,5,5	0.08	0.061	1	0.14	0.014	1.397 mins



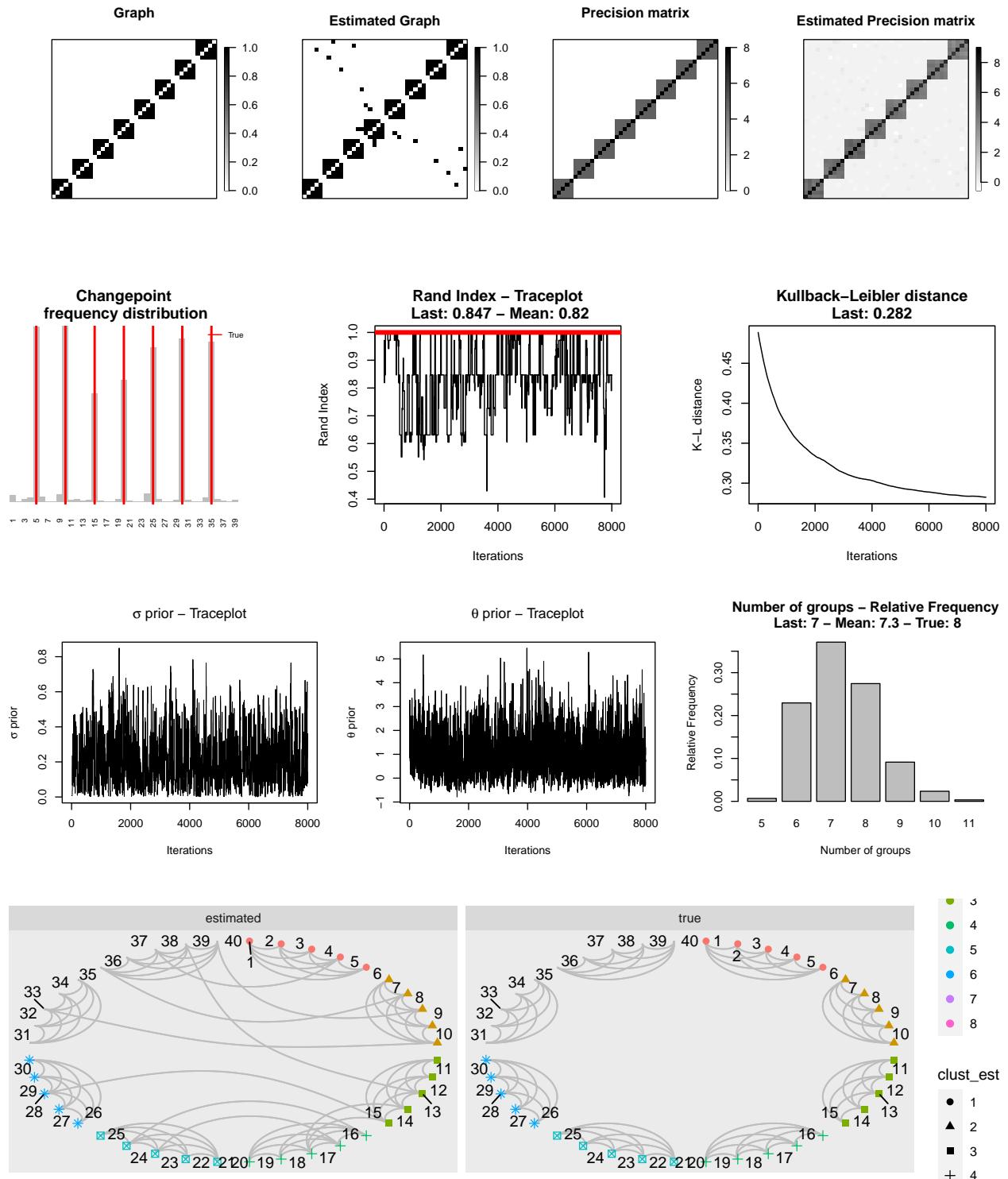
2.6.7 Simulation ID: 37

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time
37	37	500	35	BD	27121996	35	0.0625	5,5,5,5,5,5	0.066	0.149	1	0.205	0.015	1.634 mins



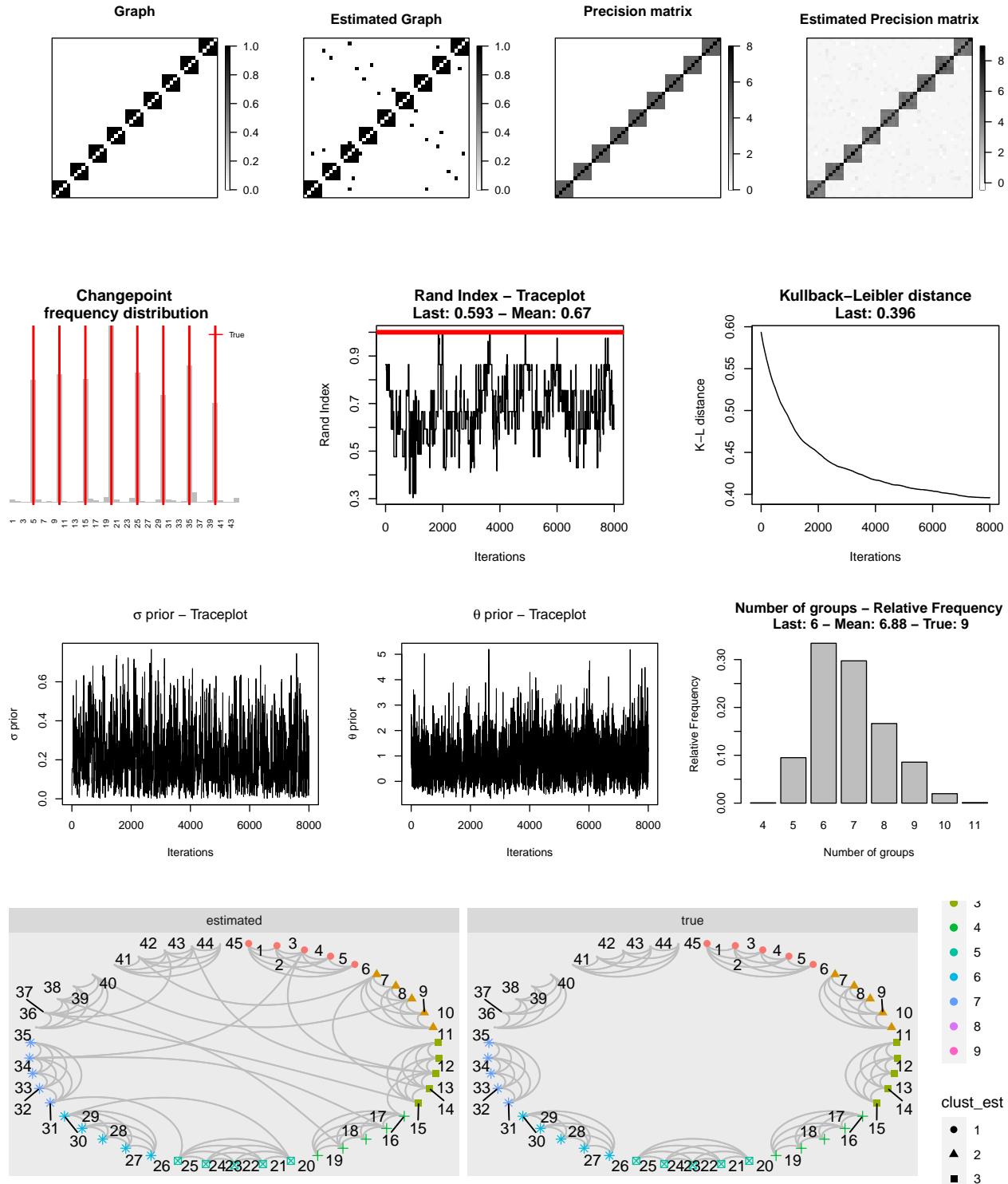
2.6.8 Simulation ID: 38

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
38	38	500	40	BD	27121996	40	0.0625	5,5,5,5,5,5,5	5,5,5,5,5,5,5	0.061	0.384	1	0.282	0.013	1.922 mins



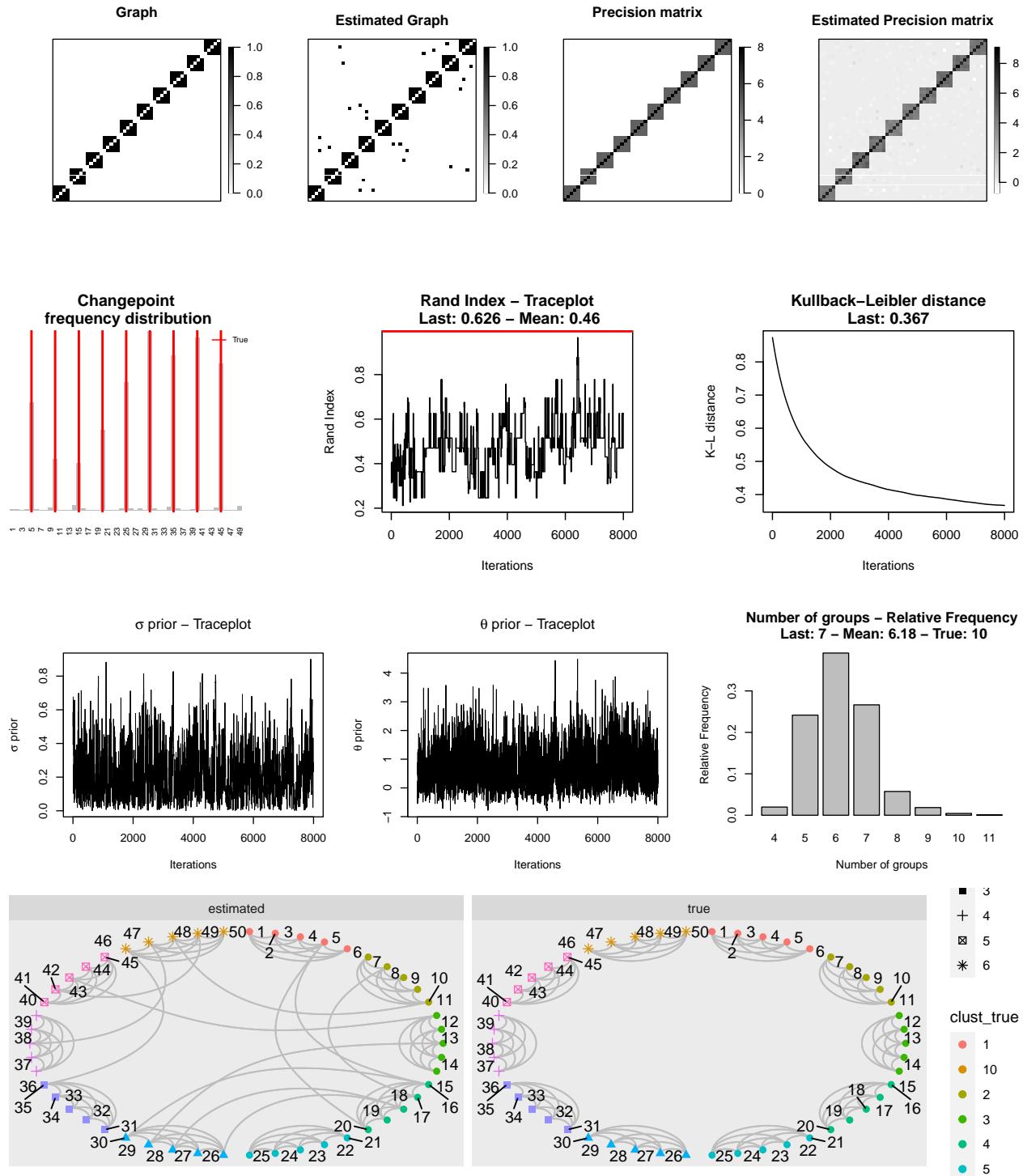
2.6.9 Simulation ID: 39

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
39	39	500	45	BD	27121996	45	0.0625	5,5,5,5,5,5,5,5	5,5,5,5,5,10,10	0.071	0.761	0.756	0.396	0.013	2.379 mins



2.6.10 Simulation ID: 40

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
40	40	500	50	BD	27121996	50	0.0625	5,5,5,5,5,5,5,5	25,5,5,5,5,5	0.059	0.853	0.364	0.367	0.01	2.964 mins



2.7 Group 7

2.7.1 Simulation ID: 41

sim_id	n	p	data_gen	seed	rho0	beta_sig2	rho_true	rho_est	accept	VI	RI	KL	SHD	time	
41	41	500	25	B	27121996	25	0.2	8,4,8,5	8,4,8,5	0.013	0.104	1	0.176	0.047	0.9807 mins

