

TABLE I: Calculated $J = 0$ $A+$ levels (in cm^{-1}) up to 20000 cm^{-1} , of CO_2 , on the AMES-2 PES, using $(N_{R_1} = N_{R_2}, l_x) = (80, 150)$ and $(50, 150)$. $\Delta_1 = (50, 150) - (80, 150)$. $\Delta_2 = \text{Huang2017} - (80, 150)$. $\Delta_3 = \text{Huang2022} - (80, 150)$.

The first level is the ZPE. All other levels are relative to the ZPE. The largest absolute Δ_i is in bold face.

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
1	2535.7993	2535.7993	2535.7992	2535.7992	0.0000	-0.0001	-0.0001
2	1285.4143	1285.4143	1285.4144	1285.4142	0.0000	0.0000	-0.0001
3	1388.1866	1388.1866	1388.1867	1388.1866	0.0000	0.0001	0.0000
4	2548.3662	2548.3662	2548.3662	2548.3659	0.0000	0.0001	-0.0003
5	2671.1397	2671.1397	2671.1397	2671.1396	0.0000	0.0001	-0.0001
6	2797.1330	2797.1330	2797.1331	2797.1329	0.0000	0.0001	-0.0001
7	3792.6790	3792.6790	3792.6790	3792.6786	0.0000	0.0000	-0.0004
8	3942.5215	3942.5215	3942.5216	3942.5213	0.0000	0.0000	-0.0002
9	4064.2622	4064.2622	4064.2622	4064.2620	0.0000	0.0001	-0.0001
10	4225.0924	4225.0924	4225.0925	4225.0922	0.0000	0.0001	-0.0002
11	4673.2993	4673.2993	4673.2994	4673.2994	0.0000	0.0001	0.0001
12	5022.3601	5022.3601	5022.3602	5022.3596	0.0000	0.0000	-0.0005
13	5197.2335	5197.2335	5197.2335	5197.2331	0.0000	0.0000	-0.0003
14	5329.6249	5329.6249	5329.6249	5329.6247	0.0000	0.0000	-0.0002
15	5475.5399	5475.5399	5475.5399	5475.5397	0.0000	0.0000	-0.0003
16	5667.6396	5667.6396	5667.6397	5667.6394	0.0000	0.0001	-0.0003
17	5915.2051	5915.2051	5915.2053	5915.2054	0.0000	0.0001	0.0002
18	6016.7038	6016.7038	6016.7039	6016.7039	0.0000	0.0001	0.0001
19	6240.0951	6240.0951	6240.0951	6240.0944	0.0000	0.0000	-0.0006
20	6435.5147	6435.5147	6435.5146	6435.5142	0.0000	0.0000	-0.0005
21	6588.3181	6588.3181	6588.3181	6588.3179	0.0000	0.0000	-0.0003
22	6725.2608	6725.2608	6725.2608	6725.2605	0.0000	0.0000	-0.0003
23	6903.9120	6903.9120	6903.9120	6903.9117	0.0000	0.0000	-0.0003
24	7121.7213	7121.7213	7121.7214	7121.7210	0.0000	0.0001	-0.0003
25	7133.8057	7133.8057	7133.8059	7133.8061	0.0000	0.0002	0.0004
26	7259.7735	7259.7735	7259.7736	7259.7737	0.0000	0.0001	0.0002
27	7377.7147	7377.7147	7377.7148	7377.7149	0.0000	0.0001	0.0002
28	7447.7049	7447.7049	7447.7049	7447.7042	0.0000	0.0000	-0.0007
29	7659.9777	7659.9777	7659.9776	7659.9771	0.0000	0.0000	-0.0006
30	7834.8462	7834.8462	7834.8462	7834.8459	0.0000	0.0000	-0.0004
31	7974.4252	7974.4252	7974.4252	7974.4249	0.0000	0.0000	-0.0003
32	8138.4537	8138.4537	8138.4537	8138.4534	0.0000	0.0000	-0.0003
33	8334.2034	8334.2034	8334.2036	8334.2039	0.0000	0.0002	0.0005
34	8345.4709	8345.4709	8345.4709	8345.4705	0.0000	0.0000	-0.0004
35	8488.3993	8488.3993	8488.3994	8488.3996	0.0000	0.0001	0.0003
36	8585.2001	8585.2001	8585.2002	8585.1998	0.0000	0.0001	-0.0004
37	8607.1538	8607.1538	8607.1539	8607.1540	0.0000	0.0001	0.0002
38	8646.5209	8646.5209	8646.5208	8646.5201	0.0000	-0.0001	-0.0008
39	8756.7858	8756.7858	8756.7859	8756.7860	0.0000	0.0001	0.0002
40	8872.9699	8872.9699	8872.9699	8872.9693	0.0000	-0.0001	-0.0007
41	9067.1750	9067.1749	9067.1749	9067.1745	0.0000	0.0000	-0.0005
42	9220.2797	9220.2797	9220.2797	9220.2794	0.0000	0.0000	-0.0003
43	9246.9304	9246.9304	9246.9305	9246.9302	0.0000	0.0001	-0.0002
44	9372.1437	9372.1437	9372.1437	9372.1433	0.0000	0.0000	-0.0003
45	9520.5495	9520.5495	9520.5497	9520.5501	0.0000	0.0002	0.0006
46	9567.0143	9567.0143	9567.0143	9567.0139	0.0000	0.0000	-0.0004
47	9698.8824	9698.8824	9698.8825	9698.8827	0.0000	0.0001	0.0004
48	9797.3942	9797.3942	9797.3942	9797.3939	0.0000	0.0000	-0.0004
49	9833.4278	9833.4278	9833.4278	9833.4279	0.0000	0.0001	0.0002
50	9837.5700	9837.5700	9837.5698	9837.5691	0.0000	-0.0001	-0.0009
51	9969.2562	9969.2562	9969.2563	9969.2564	0.0000	0.0001	0.0002

TABLE I – continued from previous page

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
52	10056.5011	10056.5011	10056.5012	10056.5007	0.0000	0.0001	-0.0004
53	10076.1816	10076.1816	10076.1815	10076.1809	0.0000	-0.0001	-0.0007
54	10150.1249	10150.1249	10150.1250	10150.1251	0.0000	0.0001	0.0002
55	10286.4208	10286.4208	10286.4208	10286.4203	0.0000	-0.0001	-0.0006
56	10444.8559	10444.8559	10444.8559	10444.8556	0.0000	0.0000	-0.0004
57	10458.1003	10458.1003	10458.1003	10458.0999	0.0000	0.0000	-0.0004
58	10546.6141	10546.6140	10546.6140	10546.6138	0.0000	0.0000	-0.0003
59	10605.5455	10605.5455	10605.5456	10605.5452	0.0000	0.0000	-0.0003
60	10695.3981	10695.3981	10695.3983	10695.3988	0.0000	0.0002	0.0006
61	10786.8122	10786.8122	10786.8122	10786.8119	0.0000	0.0000	-0.0004
62	10893.0974	10893.0974	10893.0976	10893.0978	0.0000	0.0002	0.0004
63	11007.2872	11007.2872	11007.2872	11007.2868	0.0000	0.0000	-0.0004
64	11021.6712	11021.6711	11021.6710	11021.6702	0.0000	-0.0002	-0.0009
65	11050.1946	11050.1946	11050.1947	11050.1948	0.0000	0.0001	0.0002
66	11181.2835	11181.2835	11181.2836	11181.2836	0.0000	0.0001	0.0001
67	11257.9202	11257.9203	11257.9202	11257.9198	0.0000	0.0000	-0.0004
68	11270.8505	11270.8505	11270.8504	11270.8497	0.0000	-0.0001	-0.0008
69	11347.8941	11347.8941	11347.8941	11347.8943	0.0000	0.0001	0.0002
70	11494.5031	11494.5031	11494.5030	11494.5024	0.0000	-0.0001	-0.0006
71	11532.4798	11532.4798	11532.4798	11532.4794	0.0000	0.0001	-0.0003
72	11556.2604	11556.2604	11556.2605	11556.2605	0.0000	0.0001	0.0001
73	11619.0792	11619.0792	11619.0791	11619.0787	0.0000	-0.0001	-0.0005
74	11684.4371	11684.4371	11684.4371	11684.4367	0.0000	0.0000	-0.0004
75	11749.3744	11749.3744	11749.3743	11749.3740	0.0000	-0.0001	-0.0004
76	11837.6392	11837.6392	11837.6392	11837.6388	0.0000	0.0000	-0.0003
77	11860.5275	11860.5275	11860.5278	11860.5282	0.0000	0.0002	0.0007
78	11860.5954	11860.5954	11860.5953	11860.5950	0.0000	0.0000	-0.0004
79	12005.4208	12005.4208	12005.4208	12005.4204	0.0000	0.0000	-0.0004
80	12074.0752	12074.0752	12074.0754	12074.0757	0.0000	0.0002	0.0005
81	12199.4922	12199.4921	12199.4919	12199.4912	0.0000	-0.0002	-0.0010
82	12215.0510	12215.0510	12215.0510	12215.0506	0.0000	0.0000	-0.0004
83	12252.7246	12252.7246	12252.7247	12252.7249	0.0000	0.0001	0.0002
84	12391.8858	12391.8858	12391.8859	12391.8859	0.0000	0.0001	0.0001
85	12457.0380	12457.0380	12457.0380	12457.0376	0.0000	0.0000	-0.0004
86	12457.9279	12457.9279	12457.9278	12457.9271	0.0000	-0.0001	-0.0008
87	12544.1452	12544.1452	12544.1453	12544.1454	0.0000	0.0001	0.0001
88	12693.0207	12693.0207	12693.0206	12693.0200	0.0000	-0.0001	-0.0007
89	12723.4363	12723.4363	12723.4363	12723.4360	0.0000	0.0000	-0.0004
90	12741.2170	12741.2170	12741.2171	12741.2171	0.0000	0.0000	0.0001
91	12775.8084	12775.8084	12775.8083	12775.8078	0.0000	-0.0002	-0.0006
92	12898.6710	12898.6710	12898.6710	12898.6705	0.0000	0.0000	-0.0005
93	12934.6942	12934.6942	12934.6941	12934.6937	0.0000	-0.0001	-0.0005
94	12965.1642	12965.1642	12965.1643	12965.1643	0.0000	0.0001	0.0001
95	13017.2095	13017.2094	13017.2097	13017.2102	0.0000	0.0002	0.0007
96	13019.9316	13019.9316	13019.9317	13019.9312	0.0000	0.0001	-0.0004
97	13052.7610	13052.7610	13052.7609	13052.7605	0.0000	0.0000	-0.0004
98	13065.3121	13065.3121	13065.3121	13065.3118	0.0000	0.0000	-0.0003
99	13191.5128	13191.5127	13191.5127	13191.5123	0.0000	-0.0001	-0.0005
100	13223.3930	13223.3930	13223.3930	13223.3927	0.0000	0.0000	-0.0003
101	13244.1221	13244.1221	13244.1223	13244.1227	0.0000	0.0002	0.0005
102	13371.5854	13371.5853	13371.5851	13371.5844	0.0000	-0.0002	-0.0010
103	13420.8904	13420.8904	13420.8904	13420.8900	0.0000	0.0000	-0.0004
104	13440.7311	13440.7311	13440.7312	13440.7314	0.0000	0.0001	0.0003
105	13596.7833	13596.7833	13596.7834	13596.7834	0.0000	0.0001	0.0001
106	13638.1719	13638.1719	13638.1718	13638.1710	0.0000	-0.0002	-0.0009
107	13653.8858	13653.8858	13653.8857	13653.8853	0.0000	0.0000	-0.0004

TABLE I – continued from previous page

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
108	13721.1470	13721.1471	13721.1473	13721.1470	0.0000	0.0003	-0.0001
109	13739.7659	13739.7659	13739.7659	13739.7659	0.0000	0.0000	0.0000
110	13883.1633	13883.1633	13883.1632	13883.1626	0.0000	-0.0001	-0.0007
111	13912.1295	13912.1295	13912.1295	13912.1291	0.0000	0.0000	-0.0003
112	13918.7908	13918.7908	13918.7906	13918.7901	0.0000	-0.0002	-0.0007
113	13924.2466	13924.2466	13924.2467	13924.2466	0.0000	0.0000	0.0000
114	14100.9878	14100.9878	14100.9877	14100.9872	0.0000	-0.0001	-0.0006
115	14101.9378	14101.9378	14101.9378	14101.9373	0.0000	-0.0001	-0.0006
116	14138.9974	14138.9973	14138.9974	14138.9975	0.0000	0.0000	0.0001
117	14166.5082	14166.5082	14166.5084	14166.5089	0.0000	0.0002	0.0007
118	14200.2781	14200.2781	14200.2781	14200.2777	0.0000	0.0000	-0.0004
119	14239.6133	14239.6133	14239.6133	14239.6128	0.0000	0.0000	-0.0005
120	14284.7961	14284.7961	14284.7961	14284.7957	0.0000	0.0000	-0.0004
121	14366.1646	14366.1646	14366.1646	14366.1641	0.0000	0.0000	-0.0005
122	14386.1154	14386.1154	14386.1154	14386.1155	0.0000	0.0000	0.0001
123	14404.7386	14404.7386	14404.7388	14404.7392	0.0000	0.0002	0.0005
124	14440.8334	14440.8334	14440.8334	14440.8331	0.0000	0.0000	-0.0003
125	14507.4955	14507.4955	14507.4955	14507.4950	0.0000	0.0000	-0.0004
126	14536.7037	14536.7037	14536.7037	14536.7032	0.0000	-0.0001	-0.0006
127	14538.4127	14538.4127	14538.4125	14538.4117	0.0000	-0.0002	-0.0010
128	14615.8688	14615.8688	14615.8690	14615.8692	0.0000	0.0001	0.0003
129	14625.4370	14625.4370	14625.4370	14625.4367	0.0000	0.0000	-0.0004
130	14791.2110	14791.2110	14791.2110	14791.2110	0.0000	0.0001	0.0001
131	14812.2011	14812.2010	14812.2009	14812.2002	0.0000	-0.0002	-0.0009
132	14848.4843	14848.4843	14848.4843	14848.4839	0.0000	0.0000	-0.0004
133	14874.6940	14874.6940	14874.6942	14874.6938	0.0000	0.0002	-0.0001
134	14934.7219	14934.7219	14934.7219	14934.7218	0.0000	0.0000	-0.0001
135	14978.2903	14978.2903	14978.2905	14978.2903	0.0000	0.0002	0.0000
136	15051.2391	15051.2390	15051.2389	15051.2382	0.0000	-0.0002	-0.0009
137	15065.8332	15065.8332	15065.8331	15065.8324	0.0000	-0.0001	-0.0008
138	15098.6717	15098.6717	15098.6717	15098.6714	0.0000	0.0000	-0.0003
139	15104.9550	15104.9550	15104.9551	15104.9549	0.0000	0.0000	-0.0001
140	15251.5754	15251.5754	15251.5753	15251.5747	0.0000	-0.0001	-0.0007
141	15295.6674	15295.6673	15295.6673	15295.6668	0.0000	-0.0001	-0.0006
142	15309.2089	15309.2089	15309.2091	15309.2097	0.0000	0.0002	0.0008
143	15310.2792	15310.2792	15310.2792	15310.2792	0.0000	0.0000	0.0000
144	15378.4311	15378.4311	15378.4311	15378.4307	0.0000	0.0000	-0.0004
145	15413.8895	15413.8895	15413.8895	15413.8889	0.0000	0.0000	-0.0006
146	15493.9172	15493.9172	15493.9172	15493.9168	0.0000	0.0000	-0.0004
147	15539.0881	15539.0881	15539.0882	15539.0877	0.0000	0.0001	-0.0004
148	15551.1110	15551.1110	15551.1110	15551.1109	0.0000	0.0001	-0.0001
149	15557.2776	15557.2776	15557.2778	15557.2782	0.0000	0.0002	0.0006
150	15656.1623	15656.1623	15656.1623	15656.1620	0.0000	0.0000	-0.0003
151	15678.1369	15678.1369	15678.1369	15678.1365	0.0000	0.0000	-0.0004
152	15696.6314	15696.6314	15696.6315	15696.6308	0.0000	0.0001	-0.0006
153	15700.3637	15700.3637	15700.3635	15700.3627	0.0000	-0.0002	-0.0010
154	15780.8227	15780.8227	15780.8228	15780.8230	0.0000	0.0001	0.0003
155	15809.4562	15809.4562	15809.4562	15809.4561	0.0000	0.0001	0.0000
156	15828.3955	15828.3955	15828.3955	15828.3952	0.0000	0.0000	-0.0003
157	15894.3086	15894.3086	15894.3086	15894.3080	0.0000	0.0001	-0.0006
158	15973.0786	15973.0786	15973.0786	15973.0787	0.0000	0.0001	0.0001
159	15980.5277	15980.5277	15980.5276	15980.5268	0.0000	-0.0001	-0.0009
160	15999.3235	15999.3235	15999.3235	15999.3231	0.0000	0.0001	-0.0004
161	16004.6236	16004.6236	16004.6239	16004.6235	0.0000	0.0002	-0.0001
162	16040.9180	16040.9180	16040.9180	16040.9176	0.0000	0.0000	-0.0004
163	16126.7331	16126.7331	16126.7332	16126.7330	0.0000	0.0000	-0.0001

TABLE I – continued from previous page

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
164	16140.1622	16140.1622	16140.1626	16140.1622	0.0000	0.0004	0.0000
165	16174.2676	16174.2676	16174.2674	16174.2666	0.0000	-0.0002	-0.0010
166	16241.7390	16241.7390	16241.7389	16241.7382	0.0000	-0.0001	-0.0008
167	16246.3957	16246.3957	16246.3962	16246.3958	0.0000	0.0005	0.0001
168	16282.3821	16282.3821	16282.3822	16282.3819	0.0000	0.0001	-0.0002
169	16285.1721	16285.1721	16285.1721	16285.1718	0.0000	0.0000	-0.0003
170	16389.6167	16389.6167	16389.6167	16389.6159	0.0000	0.0000	-0.0008
171	16445.9633	16445.9633	16445.9634	16445.9640	0.0000	0.0001	0.0007
172	16479.1624	16479.1624	16479.1625	16479.1624	0.0000	0.0001	-0.0001
173	16481.0405	16481.0405	16481.0405	16481.0399	0.0000	-0.0001	-0.0006
174	16554.3085	16554.3085	16554.3086	16554.3082	0.0000	0.0000	-0.0004
175	16572.4843	16572.4843	16572.4846	16572.4836	0.0000	0.0003	-0.0007
176	16692.4017	16692.4017	16692.4017	16692.4012	0.0000	0.0000	-0.0005
177	16702.6718	16702.6718	16702.6719	16702.6723	0.0000	0.0001	0.0005
178	16704.8048	16704.8048	16704.8051	16704.8046	0.0000	0.0003	-0.0002
179	16717.8652	16717.8652	16717.8658	16717.8648	0.0000	0.0005	-0.0004
180	16846.3199	16846.3199	16846.3200	16846.3196	0.0000	0.0000	-0.0004
181	16855.5687	16855.5687	16855.5696	16855.5682	0.0000	0.0009	-0.0006
182	16857.7685	16857.7686	16857.7683	16857.7675	0.0001	-0.0002	-0.0011
183	16866.6581	16866.6581	16866.6581	16866.6578	0.0000	0.0000	-0.0003
184	16936.6149	16936.6149	16936.6150	16936.6153	0.0000	0.0001	0.0003
185	16962.6204	16962.6204	16962.6207	16962.6204	0.0000	0.0003	-0.0001
186	17030.5463	17030.5463	17030.5464	17030.5461	0.0000	0.0000	-0.0003
187	17040.6095	17040.6095	17040.6105	17040.6090	0.0000	0.0009	-0.0006
188	17117.8709	17117.8709	17117.8713	17117.8708	0.0000	0.0004	-0.0001
189	17143.0018	17143.0018	17143.0019	17143.0019	0.0000	0.0001	0.0001
190	17143.5814	17143.5815	17143.5813	17143.5805	0.0000	-0.0001	-0.0009
191	17159.7094	17159.7094	17159.7094	17159.7090	0.0000	0.0000	-0.0004
192	17226.0328	17226.0328	17226.0337	17226.0325	0.0000	0.0008	-0.0003
193	17231.3279	17231.3279	17231.3279	17231.3275	0.0000	0.0000	-0.0003
194	17272.4841	17272.4841	17272.4845	17272.4838	0.0000	0.0004	-0.0003
195	17282.1828	17282.1828	17282.1840	17282.1828	0.0000	0.0012	0.0000
196	17289.1157	17289.1156	17289.1155	17289.1146	0.0000	-0.0002	-0.0011
197	17312.1468	17312.1468	17312.1470	17312.1467	0.0000	0.0002	-0.0002
198	17401.5151	17401.5151	17401.5172	17401.5152	0.0000	0.0022	0.0001
199	17411.4514	17411.4515	17411.4513	17411.4506	0.0000	-0.0001	-0.0008
200	17461.4023	17461.4023	17461.4026	17461.4021	0.0000	0.0003	-0.0002
201	17466.8578	17466.8578	17466.8578	17466.8574	0.0000	0.0001	-0.0004
202	17494.1579	17494.1579	17494.1579	17494.1575	0.0000	0.0001	-0.0004
203	17517.3060	17517.3060	17517.3062	17517.3051	0.0000	0.0002	-0.0009
204	17529.9573	17529.9573	17529.9597	17529.9574	0.0000	0.0024	0.0001
205	17577.3233	17577.3233	17577.3234	17577.3240	0.0000	0.0001	0.0007
206	17645.8476	17645.8475	17645.8479	17645.8474	0.0000	0.0004	-0.0002
207	17658.9304	17658.9304	17658.9304	17658.9298	0.0000	-0.0001	-0.0007
208	17716.7410	17716.7410	17716.7422	17716.7402	0.0000	0.0012	-0.0008
209	17727.8728	17727.8728	17727.8728	17727.8724	0.0000	0.0000	-0.0004
210	17841.3059	17841.3059	17841.3060	17841.3065	0.0000	0.0001	0.0006
211	17863.8101	17863.8101	17863.8111	17863.8099	0.0000	0.0010	-0.0002
212	17880.2759	17880.2759	17880.2784	17880.2753	0.0000	0.0025	-0.0005
213	17881.5273	17881.5273	17881.5272	17881.5268	0.0000	0.0000	-0.0005
214	18010.9089	18010.9094	18010.9087	18010.9078	0.0005	-0.0002	-0.0011
215	18011.4164	18011.4164	18011.4173	18011.4161	0.0000	0.0009	-0.0004
216	18014.6906	18014.6906	18014.6939	18014.6901	0.0000	0.0033	-0.0005
217	18069.0493	18069.0493	18069.0493	18069.0490	0.0000	0.0000	-0.0003
218	18084.8853	18084.8853	18084.8854	18084.8856	0.0000	0.0002	0.0003
219	18096.3556	18096.3556	18096.3569	18096.3560	0.0000	0.0013	0.0004

TABLE I – continued from previous page

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
220	18113.6702	18113.6702	18113.6711	18113.6700	0.0000	0.0009	-0.0001
221	18184.7554	18184.7554	18184.7598	18184.7549	0.0000	0.0044	-0.0006
222	18218.3868	18218.3868	18218.3880	18218.3867	0.0000	0.0012	-0.0001
223	18231.4266	18231.4266	18231.4267	18231.4264	0.0000	0.0001	-0.0002
224	18301.7239	18301.7241	18301.7238	18301.7229	0.0002	-0.0001	-0.0010
225	18302.6226	18302.6225	18302.6230	18302.6227	0.0000	0.0004	0.0001
226	18316.8033	18316.8034	18316.8035	18316.8030	0.0000	0.0002	-0.0003
227	18369.6187	18369.6187	18369.6228	18369.6183	0.0000	0.0041	-0.0003
228	18397.1922	18397.1922	18397.1921	18397.1910	0.0000	-0.0001	-0.0012
229	18403.0034	18403.0034	18403.0073	18403.0034	0.0000	0.0039	0.0000
230	18409.3918	18409.3918	18409.3949	18409.3915	0.0000	0.0032	-0.0003
231	18419.8149	18419.8148	18419.8149	18419.8145	0.0000	0.0000	-0.0003
232	18487.5212	18487.5212	18487.5222	18487.5210	0.0000	0.0010	-0.0002
233	18548.2276	18548.2276	18548.2379	18548.2278	0.0000	0.0103	0.0002
234	18575.4324	18575.4325	18575.4323	18575.4315	0.0001	-0.0001	-0.0008
235	18609.5092	18609.5092	18609.5160	18609.5087	0.0000	0.0068	-0.0005
236	18634.2712	18634.2712	18634.2722	18634.2705	0.0000	0.0011	-0.0007
237	18639.0736	18639.0735	18639.0746	18639.0730	0.0000	0.0010	-0.0005
238	18643.9235	18643.9235	18643.9238	18643.9232	0.0000	0.0003	-0.0003
239	18647.8028	18647.8028	18647.8033	18647.8024	0.0000	0.0005	-0.0004
240	18669.5257	18669.5257	18669.5403	18669.5260	0.0000	0.0146	0.0002
241	18694.9169	18694.9169	18694.9176	18694.9167	0.0000	0.0007	-0.0003
242	18703.7408	18703.7408	18703.7409	18703.7415	0.0001	0.0001	0.0007
243	18810.5412	18810.5412	18810.5430	18810.5410	0.0000	0.0018	-0.0002
244	18827.8109	18827.8108	18827.8249	18827.8111	0.0000	0.0140	0.0002
245	18830.0046	18830.0046	18830.0045	18830.0039	0.0000	0.0000	-0.0007
246	18849.2783	18849.2783	18849.2818	18849.2775	0.0000	0.0035	-0.0008
247	18898.8979	18898.8979	18898.8981	18898.8976	0.0000	0.0002	-0.0003
248	18974.2584	18974.2583	18974.2585	18974.2589	0.0000	0.0002	0.0005
249	18991.3336	18991.3336	18991.3336	18991.3332	0.0000	0.0001	-0.0004
250	19018.9199	19018.9199	19018.9241	19018.9196	0.0000	0.0042	-0.0003
251	19031.5755	19031.5755	19031.5833	19031.5749	0.0000	0.0079	-0.0005
252	19061.8931	19061.8932	19061.8931	19061.8926	0.0000	0.0000	-0.0006
253	19160.0253	19160.0269	19160.0252	19160.0242	0.0016	-0.0001	-0.0011
254	19170.6356	19170.6356	19170.6503	19170.6352	0.0000	0.0147	-0.0004
255	19175.3528	19175.3528	19175.3555	19175.3524	0.0000	0.0027	-0.0004
256	19205.1620	19205.1621	19205.1669	19205.1626	0.0000	0.0048	0.0005
257	19224.6357	19224.6357	19224.6361	19224.6360	0.0000	0.0004	0.0003
258	19262.5689	19262.5689	19262.5720	19262.5687	0.0000	0.0031	-0.0003
259	19263.5764	19263.5764	19263.5765	19263.5760	0.0000	0.0001	-0.0004
260	19308.0099	19308.0099	19308.0137	19308.0098	0.0000	0.0038	-0.0001
261	19312.2196	19312.2196	19312.2333	19312.2200	0.0000	0.0138	0.0005
262	19328.0446	19328.0446	19328.0621	19328.0441	0.0000	0.0175	-0.0004
263	19428.8733	19428.8733	19428.8735		0.0000	0.0002	
264	19454.2133	19454.2133	19454.2145		0.0000	0.0012	
265	19455.2644	19455.2653	19455.2643		0.0009	-0.0001	
266	19469.4725	19469.4725	19469.4738		0.0000	0.0013	
267	19499.0166	19499.0166	19499.0170		0.0000	0.0004	
268	19508.5978	19508.5978	19508.6146		0.0000	0.0168	
269	19515.0266	19515.0266	19515.0435		0.0000	0.0169	
270	19541.7570	19541.7570	19541.7637		0.0000	0.0067	
271	19606.1913	19606.1913	19606.1916		0.0000	0.0003	
272	19652.5446	19652.5446	19652.5481		0.0000	0.0035	
273	19679.3396	19679.3396	19679.3830		0.0000	0.0434	
274	19734.0400	19734.0405	19734.0399		0.0005	0.0000	
275	19738.2487	19738.2487	19738.2759		0.0000	0.0272	

TABLE I – continued from previous page

i	(80,150)	(50,150)	Huang2017	Huang2022	Δ_1	Δ_2	Δ_3
276	19746.9958	19746.9958	19746.9985		0.0000	0.0027	
277	19785.5860	19785.5860	19785.5889		0.0000	0.0029	
278	19808.6925	19808.6925	19808.7596		0.0000	0.0671	
279	19809.3701	19809.3701	19809.3749		0.0000	0.0048	
280	19825.6232	19825.6235	19825.6233		0.0004	0.0001	
281	19826.4285	19826.4284	19826.4307		0.0000	0.0022	
282	19829.6028	19829.6028	19829.6062		0.0000	0.0034	
283	19949.5100	19949.5100	19949.5855		0.0000	0.0755	
284	19969.9551	19969.9551	19969.9654		0.0000	0.0102	
285	19975.4813	19975.4813	19975.4889		0.0000	0.0076	
286	19988.2546	19988.2546	19988.2954		0.0000	0.0409	
287	19994.7367	19994.7370	19994.7367		0.0003	0.0000	