Supporting Information

In silico analysis of nanoplastics and β-amyloid fibrils interactions

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1.1 Polystyrene NP Coordinates

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POLYSTYRENE
 1800
    1STYR     B    1  14.833   8.322   5.673 -0.0485  0.1544  0.2538
    1STYR    R1    2  15.019   8.390   5.864 -0.0636  0.1444  0.2689
    1STYR    R2    3  15.285   8.357   5.897 -0.0619  0.1759  0.2879
    1STYR    R3    4  15.114   8.284   6.093 -0.0661  0.1716  0.2826
    2STYR     B    5  14.639   8.252   5.787 -0.0593  0.1367  0.2189
    2STYR    R1    6  14.722   8.070   5.635 -0.0170  0.1345  0.2431
    2STYR    R2    7  14.762   7.805   5.671 -0.0062  0.1363  0.2440
    2STYR    R3    8  14.638   7.893   5.448  0.0061  0.1318  0.2354
    3STYR     B    9  14.433   8.145   5.845 -0.0443  0.1333  0.2108
    3STYR    R1   10  14.659   8.128   6.012 -0.0856  0.1439  0.2521
    3STYR    R2   11  14.838   7.958   6.122 -0.0685  0.1764  0.2751
    3STYR    R3   12  14.741   8.164   6.266 -0.1172  0.1649  0.2594
    4STYR     B   13  14.205   8.105   5.904 -0.0541  0.1067  0.1630
    4STYR    R1   14  14.295   7.941   5.724 -0.0283  0.1099  0.2062
    4STYR    R2   15  14.321   7.676   5.681  0.0068  0.1100  0.2259
    4STYR    R3   16  14.200   7.831   5.496  0.0096  0.0845  0.2026
    5STYR     B   17  13.970   8.173   5.918 -0.0532  0.0974  0.1599
    5STYR    R1   18  14.007   7.927   5.975 -0.0488  0.1013  0.1505
    5STYR    R2   19  13.911   7.756   6.160 -0.0629  0.1027  0.1445
    5STYR    R3   20  13.925   7.681   5.901 -0.0146  0.0898  0.1507
    6STYR     B   21  13.906   8.419   5.877 -0.0498  0.0933  0.1364
    6STYR    R1   22  13.725   8.234   5.803 -0.0425  0.0380  0.1247
    6STYR    R2   23  13.577   8.165   5.588 -0.0353  0.0892  0.1032
    6STYR    R3   24  13.463   8.178   5.833 -0.0493  0.0557  0.0985
    7STYR     B   25  14.074   8.551   5.780 -0.0589  0.1011  0.1270
    7STYR    R1   26  13.873   8.687   5.869 -0.0849  0.0822  0.1266
    7STYR    R2   27  13.827   8.905   6.021 -0.1179  0.0910  0.1042
    7STYR    R3   28  13.713   8.885   5.777 -0.0931  0.0612  0.0950
    8STYR     B   29  14.289   8.540   5.663 -0.0468  0.1024  0.1719
    8STYR    R1   30  14.060   8.423   5.551 -0.0403  0.0777  0.1570
    8STYR    R2   31  13.974   8.191   5.444 -0.0009  0.0724  0.1367
    8STYR    R3   32  13.896   8.426   5.337 -0.0078  0.0678  0.1317
    9STYR     B   33  14.493   8.645   5.720 -0.0690  0.1282  0.1991
    9STYR    R1   34  14.467   8.649   5.476 -0.0461  0.1028  0.1917
    9STYR    R2   35  14.642   8.600   5.276 -0.0247  0.0981  0.2115
    9STYR    R3   36  14.465   8.803   5.254 -0.0220  0.0979  0.1881
   10STYR     B   37  14.668   8.764   5.785 -0.0689  0.1321  0.2132
   10STYR    R1   38  14.408   8.822   5.853 -0.0845  0.1142  0.1774
   10STYR    R2   39  14.246   8.878   6.062 -0.1219  0.1182  0.1472
   10STYR    R3   40  14.194   8.982   5.818 -0.0856  0.1029  0.1328
   11STYR     B   41  14.876   8.871   5.788 -0.0879  0.1340  0.2320
   11STYR    R1   42  14.788   8.766   6.014 -0.0915  0.1402  0.2326
   11STYR    R2   43  14.879   8.608   6.213 -0.1197  0.1515  0.2544
   11STYR    R3   44  14.719   8.818   6.269 -0.1327  0.1510  0.2193
   12STYR     B   45  15.009   9.041   5.684 -0.0641  0.1582  0.2353
   12STYR    R1   46  15.062   8.789   5.618 -0.0583  0.1436  0.2464
   12STYR    R2   47  15.078   8.620   5.408 -0.0262  0.1113  0.2746
   12STYR    R3   48  15.280   8.632   5.586 -0.0428  0.1562  0.2904
   13STYR     B   49  14.989   9.277   5.668 -0.1183  0.1289  0.2298
   13STYR    R1   50  14.977   9.163   5.913 -0.1156  0.1616  0.2205
   13STYR    R2   51  14.814   9.186   6.127 -0.1454  0.1655  0.1974
   13STYR    R3   52  15.081   9.168   6.162 -0.1489  0.1833  0.2340
   14STYR     B   53  14.843   9.415   5.527 -0.0925  0.1384  0.1963
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14STYR	R1	54	14.929	9.187	5.421	-0.0585	0.1380	0.2135
14STYR	R2	55	14.840	8.973	5.282	-0.0309	0.1337	0.2022
14STYR	R3	56	15.043	9.122	5.185	-0.0230	0.1409	0.2297
15STYR	B	57	14.670	9.575	5.494	-0.1203	0.1226	0.1653
15STYR	R1	58	14.844	9.524	5.287	-0.0572	0.1080	0.1881
15STYR	R2	59	14.843	9.466	5.023	-0.0064	0.1014	0.1893
15STYR	R3	60	15.031	9.631	5.125	-0.0567	0.1448	0.2129
16STYR	B	61	14.445	9.638	5.573	-0.1091	0.1060	0.1232
16STYR	R1	62	14.536	9.380	5.603	-0.1001	0.1204	0.1693
16STYR	R2	63	14.558	9.203	5.805	-0.0763	0.1176	0.1643
16STYR	R3	64	14.501	9.116	5.556	-0.0776	0.1183	0.1644
17STYR	B	65	14.312	9.842	5.532	-0.1071	0.1126	0.0963
17STYR	R1	66	14.385	9.689	5.323	-0.0774	0.1083	0.1355
17STYR	R2	67	14.501	9.719	5.081	-0.0436	0.0867	0.1489
17STYR	R3	68	14.274	9.575	5.104	-0.0373	0.0740	0.1330
18STYR	B	69	14.223	10.053	5.613	-0.1260	0.0895	0.0979
18STYR	R1	70	14.271	10.026	5.351	-0.1011	0.0967	0.0936
18STYR	R2	71	14.162	10.033	5.104	-0.0714	0.0658	0.0795
18STYR	R3	72	14.407	10.138	5.146	-0.0846	0.0882	0.0999
19STYR	B	73	14.014	10.130	5.717	-0.1589	0.0890	0.0838
19STYR	R1	74	14.232	10.263	5.795	-0.1675	0.1026	0.0758
19STYR	R2	75	14.358	10.349	6.019	-0.2067	0.1219	0.0906
19STYR	R3	76	14.275	10.527	5.833	-0.1880	0.1071	0.0680
20STYR	B	77	13.794	10.053	5.737	-0.1478	0.0686	0.0349
20STYR	R1	78	13.837	10.263	5.875	-0.1648	0.0950	0.0443
20STYR	R2	79	13.738	10.510	5.918	-0.1850	0.0929	0.0108
20STYR	R3	80	13.818	10.359	6.127	-0.2165	0.1095	0.0351
21STYR	B	81	13.637	9.930	5.870	-0.1487	0.0732	0.0463
21STYR	R1	82	13.883	9.817	5.813	-0.1320	0.0759	0.0649
21STYR	R2	83	14.108	9.711	5.918	-0.1350	0.0888	0.0845
21STYR	R3	84	13.992	9.596	5.703	-0.1187	0.0728	0.0843
22STYR	B	85	13.659	9.877	6.108	-0.1969	0.0945	0.0214
22STYR	R1	86	13.470	10.043	6.066	-0.1841	0.0802	0.0089
22STYR	R2	87	13.379	10.279	6.159	-0.2062	0.0834	-0.0204
22STYR	R3	88	13.206	10.079	6.106	-0.1913	0.0732	-0.0309
23STYR	B	89	13.752	9.718	6.245	-0.1993	0.1008	0.0574
23STYR	R1	90	13.894	9.939	6.233	-0.1976	0.1125	0.0675
23STYR	R2	91	14.022	10.106	6.403	-0.2235	0.1247	0.0752
23STYR	R3	92	14.136	10.039	6.167	-0.2003	0.1307	0.0847
24STYR	B	93	13.953	9.632	6.325	-0.1939	0.1145	0.0941
24STYR	R1	94	13.787	9.478	6.173	-0.1492	0.0985	0.0686
24STYR	R2	95	13.635	9.255	6.174	-0.1384	0.0911	0.0644
24STYR	R3	96	13.774	9.322	5.952	-0.1134	0.0827	0.0775
25STYR	B	97	14.055	9.458	6.448	-0.1936	0.1382	0.0967
25STYR	R1	98	14.204	9.670	6.395	-0.1992	0.1213	0.1106
25STYR	R2	99	14.435	9.751	6.280	-0.1922	0.1388	0.1369
25STYR	R3	100	14.358	9.856	6.516	-0.2296	0.1366	0.1257
26STYR	B	101	14.033	9.240	6.512	-0.1689	0.1394	0.1285
26STYR	R1	102	14.181	9.306	6.305	-0.1748	0.1005	0.1199
26STYR	R2	103	14.433	9.299	6.207	-0.1642	0.1404	0.1437
26STYR	R3	104	14.224	9.326	6.039	-0.1532	0.1009	0.1233
27STYR	B	105	13.911	9.047	6.561	-0.1890	0.1301	0.1071
27STYR	R1	106	14.103	9.123	6.741	-0.2236	0.1512	0.1259
27STYR	R2	107	14.313	9.036	6.886	-0.2333	0.1724	0.1530
27STYR	R3	108	14.138	9.209	6.995	-0.2621	0.1586	0.1287
28STYR	B	109	13.819	8.853	6.457	-0.1628	0.1060	0.1048
28STYR	R1	110	13.643	9.015	6.564	-0.1828	0.0950	0.0720
28STYR	R2	111	13.436	8.998	6.737	-0.2119	0.0951	0.0375
28STYR	R3	112	13.406	9.130	6.504	-0.1751	0.0887	0.0291
29STYR	B	113	13.880	8.649	6.376	-0.1375	0.1126	0.1241
29STYR	R1	114	14.070	8.779	6.484	-0.1702	0.1432	0.1515
29STYR	R2	115	14.254	8.698	6.664	-0.1830	0.1294	0.1585
29STYR	R3	116	14.325	8.864	6.464	-0.1669	0.1378	0.1713
30STYR	B	117	14.012	8.473	6.307	-0.1222	0.1292	0.1476
30STYR	R1	118	13.899	8.438	6.539	-0.1432	0.1143	0.1295
30STYR	R2	119	13.741	8.273	6.683	-0.1522	0.1198	0.1260
30STYR	R3	120	13.976	8.359	6.786	-0.1639	0.1327	0.1419
31STYR	B	121	14.067	8.249	6.342	-0.1119	0.1136	0.1593
31STYR	R1	122	14.264	8.417	6.299	-0.1243	0.1463	0.1782
31STYR	R2	123	14.466	8.490	6.136	-0.1046	0.1495	0.2040
31STYR	R3	124	14.506	8.477	6.403	-0.1355	0.1399	0.2082
32STYR	B	125	14.246	8.091	6.337	-0.0929	0.1566	0.2036
32STYR	R1	126	14.052	8.029	6.502	-0.1246	0.1346	0.1664

32STYR	R2	127	13.858	7.853	6.566	-0.1146	0.1210	0.1591
32STYR	R3	128	14.032	7.938	6.755	-0.1450	0.1548	0.1720
33STYR	B	129	14.406	8.016	6.506	-0.1074	0.1737	0.1895
33STYR	R1	130	14.362	7.863	6.278	-0.0880	0.1403	0.2189
33STYR	R2	131	14.301	7.607	6.221	-0.0735	0.1361	0.2227
33STYR	R3	132	14.484	7.738	6.073	-0.0509	0.1313	0.2461
34STYR	B	133	14.466	8.137	6.716	-0.1267	0.1948	0.1923
34STYR	R1	134	14.623	7.928	6.632	-0.1260	0.1624	0.2318
34STYR	R2	135	14.727	7.697	6.725	-0.1174	0.1807	0.2682
34STYR	R3	136	14.875	7.857	6.566	-0.1154	0.1721	0.2615
35STYR	B	137	14.454	8.342	6.831	-0.1704	0.1607	0.1937
35STYR	R1	138	14.372	8.147	6.975	-0.1847	0.1801	0.1965
35STYR	R2	139	14.160	8.090	7.132	-0.2021	0.1683	0.1687
35STYR	R3	140	14.408	8.020	7.211	-0.2085	0.1819	0.2011
36STYR	B	141	14.376	8.471	7.024	-0.1981	0.1945	0.1705
36STYR	R1	142	14.611	8.537	6.903	-0.1847	0.1785	0.2235
36STYR	R2	143	14.871	8.586	6.959	-0.1899	0.1863	0.2409
36STYR	R3	144	14.724	8.770	6.828	-0.1859	0.1805	0.2280
37STYR	B	145	14.186	8.610	7.098	-0.2065	0.1891	0.1620
37STYR	R1	146	14.315	8.488	7.300	-0.2225	0.1802	0.1684
37STYR	R2	147	14.302	8.309	7.502	-0.2397	0.1913	0.1772
37STYR	R3	148	14.410	8.553	7.545	-0.2867	0.2106	0.1855
38STYR	B	149	14.023	8.591	7.277	-0.2460	0.1637	0.1414
38STYR	R1	150	13.941	8.716	7.056	-0.2063	0.1534	0.1089
38STYR	R2	151	13.751	8.704	6.865	-0.2027	0.1254	0.1071
38STYR	R3	152	13.805	8.939	6.987	-0.2324	0.1352	0.1015
39STYR	B	153	13.896	8.622	7.480	-0.2509	0.1721	0.1209
39STYR	R1	154	13.889	8.381	7.371	-0.2294	0.1668	0.1349
39STYR	R2	155	13.890	8.128	7.466	-0.2308	0.1663	0.1335
39STYR	R3	156	13.755	8.187	7.240	-0.2109	0.1635	0.1209
40STYR	B	157	13.937	8.730	7.686	-0.2942	0.1766	0.1178
40STYR	R1	158	14.044	8.837	7.480	-0.2754	0.1741	0.1369
40STYR	R2	159	14.053	9.083	7.369	-0.2793	0.1644	0.1148
40STYR	R3	160	14.280	8.938	7.396	-0.2737	0.1790	0.1476
41STYR	B	161	13.891	8.859	7.880	-0.3289	0.1837	0.0910
41STYR	R1	162	14.145	8.810	7.839	-0.3110	0.2096	0.1489
41STYR	R2	163	14.389	8.923	7.811	-0.3102	0.2116	0.1638
41STYR	R3	164	14.352	8.725	7.990	-0.3228	0.2210	0.1717
42STYR	B	165	13.974	9.072	7.947	-0.3406	0.1651	0.1042
42STYR	R1	166	13.847	8.950	8.136	-0.3784	0.2098	0.1047
42STYR	R2	167	13.648	8.982	8.316	-0.3966	0.1765	0.0908
42STYR	R3	168	13.889	8.890	8.396	-0.3849	0.2222	0.1086
43STYR	B	169	13.914	9.280	8.053	-0.3766	0.1821	0.1071
43STYR	R1	170	14.127	9.276	7.883	-0.3576	0.1958	0.1256
43STYR	R2	171	14.216	9.365	7.644	-0.3385	0.1917	0.1312
43STYR	R3	172	14.387	9.340	7.851	-0.3579	0.2093	0.1494
44STYR	B	173	13.666	9.360	8.079	-0.3955	0.1586	0.0388
44STYR	R1	174	13.850	9.379	8.294	-0.4022	0.2091	0.0747
44STYR	R2	175	13.942	9.551	8.482	-0.4428	0.2332	0.0726
44STYR	R3	176	13.853	9.306	8.554	-0.4060	0.2214	0.0782
45STYR	B	177	13.494	9.225	7.964	-0.3670	0.1772	0.0450
45STYR	R1	178	13.394	9.403	8.118	-0.3746	0.1638	0.0391
45STYR	R2	179	13.207	9.397	8.313	-0.4211	0.1639	-0.0050
45STYR	R3	180	13.196	9.587	8.121	-0.3842	0.1546	-0.0165
46STYR	B	181	13.495	9.033	7.837	-0.3347	0.1727	0.0663
46STYR	R1	182	13.301	9.045	8.001	-0.3543	0.1552	0.0279
46STYR	R2	183	13.031	9.039	8.020	-0.3560	0.1364	-0.0022
46STYR	R3	184	13.182	8.902	8.197	-0.3659	0.1575	0.0225
47STYR	B	185	13.410	8.821	7.796	-0.2966	0.1507	0.0613
47STYR	R1	186	13.488	8.963	7.588	-0.2929	0.1346	0.0531
47STYR	R2	187	13.389	9.060	7.357	-0.2829	0.1363	0.0496
47STYR	R3	188	13.644	8.971	7.368	-0.2826	0.1385	0.0605
48STYR	B	189	13.487	8.611	7.701	-0.2838	0.1488	0.0703
48STYR	R1	190	13.479	8.631	7.972	-0.3286	0.1485	0.0618
48STYR	R2	191	13.620	8.585	8.198	-0.3552	0.2133	0.0919
48STYR	R3	192	13.366	8.495	8.177	-0.3361	0.1642	0.0681
49STYR	B	193	13.624	8.433	7.776	-0.2962	0.1429	0.1026
49STYR	R1	194	13.430	8.357	7.624	-0.2640	0.1312	0.0925
49STYR	R2	195	13.380	8.199	7.411	-0.2304	0.1224	0.0913
49STYR	R3	196	13.235	8.171	7.637	-0.2637	0.1295	0.0707
50STYR	B	197	13.638	8.209	7.855	-0.2857	0.1811	0.1331
50STYR	R1	198	13.851	8.359	7.900	-0.3037	0.1794	0.1229
50STYR	R2	199	14.120	8.360	7.869	-0.2979	0.1960	0.1731

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50STYR    R3  200  14.010   8.455   8.096 -0.3470  0.1993  0.1482
 1STYR     B  201  11.951   9.076   5.659 -0.0810 -0.0266 -0.1316
 1STYR    R1  202  11.715   9.123   5.545 -0.0642 -0.0459 -0.1588
 1STYR    R2  203  11.497   9.280   5.573 -0.0770 -0.0566 -0.1979
 1STYR    R3  204  11.468   9.018   5.516 -0.0547 -0.0650 -0.1704
 2STYR     B  205  12.042   9.266   5.769 -0.0920 -0.0143 -0.1291
 2STYR    R1  206  11.976   9.059   5.929 -0.1139 -0.0123 -0.1246
 2STYR    R2  207  12.068   8.888   6.115 -0.1220  0.0017 -0.1077
 2STYR    R3  208  11.832   9.012   6.152 -0.1261  0.0005 -0.1298
 3STYR     B  209  12.197   9.460   5.755 -0.1158 -0.0152 -0.1119
 3STYR    R1  210  11.939   9.505   5.834 -0.1388 -0.0397 -0.1435
 3STYR    R2  211  11.713   9.640   5.773 -0.1322 -0.0444 -0.1785
 3STYR    R3  212  11.808   9.642   6.026 -0.1670 -0.0359 -0.1655
 4STYR     B  213  12.268   9.607   5.936 -0.1390  0.0123 -0.1155
 4STYR    R1  214  12.475   9.522   5.808 -0.1254 -0.0116 -0.1040
 4STYR    R2  215  12.700   9.635   5.710 -0.1216  0.0137 -0.0663
 4STYR    R3  216  12.713   9.399   5.841 -0.1140  0.0261 -0.0445
 5STYR     B  217  12.436   9.648   6.092 -0.1811  0.0137 -0.1062
 5STYR    R1  218  12.232   9.493   6.168 -0.1568  0.0072 -0.1130
 5STYR    R2  219  12.034   9.477   6.351 -0.1827  0.0008 -0.1414
 5STYR    R3  220  12.177   9.256   6.286 -0.1678  0.0049 -0.1227
 6STYR     B  221  12.503   9.725   6.302 -0.1910  0.0335 -0.0903
 6STYR    R1  222  12.348   9.884   6.156 -0.1798  0.0147 -0.1030
 6STYR    R2  223  12.109  10.009   6.152 -0.1898 -0.0057 -0.1610
 6STYR    R3  224  12.334  10.144   6.087 -0.1887  0.0065 -0.1324
 7STYR     B  225  12.660   9.742   6.482 -0.2405  0.0485 -0.0797
 7STYR    R1  226  12.426   9.633   6.536 -0.2081  0.0509 -0.0910
 7STYR    R2  227  12.340   9.409   6.661 -0.2051  0.0429 -0.1032
 7STYR    R3  228  12.220   9.646   6.710 -0.2278  0.0335 -0.1129
 8STYR     B  229  12.862   9.838   6.541 -0.2449  0.0464 -0.0592
 8STYR    R1  230  12.804   9.847   6.284 -0.2005  0.0461 -0.0650
 8STYR    R2  231  12.771  10.021   6.080 -0.1925  0.0358 -0.0751
 8STYR    R3  232  12.903   9.789   6.040 -0.1615  0.0490 -0.0499
 9STYR     B  233  12.964  10.039   6.597 -0.2536  0.0600 -0.0494
 9STYR    R1  234  12.695  10.023   6.614 -0.2491  0.0573 -0.0707
 9STYR    R2  235  12.479  10.151   6.515 -0.2472  0.0315 -0.1087
 9STYR    R3  236  12.480  10.068   6.771 -0.2805  0.0355 -0.1072
10STYR     B  237  13.155  10.167   6.664 -0.2592  0.0922 -0.0532
10STYR    R1  238  12.974  10.270   6.488 -0.2549  0.0629 -0.0680
10STYR    R2  239  12.801  10.476   6.464 -0.2625  0.0525 -0.1022
10STYR    R3  240  12.943  10.393   6.249 -0.2190  0.0574 -0.0756
11STYR     B  241  13.295  10.210   6.861 -0.2994  0.0686 -0.0047
11STYR    R1  242  13.424  10.158   6.638 -0.2548  0.1092 -0.0208
11STYR    R2  243  13.628  10.001   6.556 -0.2277  0.1091  0.0455
11STYR    R3  244  13.631  10.266   6.504 -0.2354  0.1008  0.0021
12STYR     B  245  13.316  10.203   7.096 -0.3226  0.1314 -0.0134
12STYR    R1  246  13.067  10.220   6.994 -0.3082  0.1030 -0.0321
12STYR    R2  247  12.840  10.365   6.967 -0.3152  0.0848 -0.0703
12STYR    R3  248  12.827  10.103   7.031 -0.3047  0.0861 -0.0629
13STYR     B  249  13.277  10.049   7.275 -0.3188  0.1308 -0.0334
13STYR    R1  250  13.459  10.241   7.322 -0.3368  0.1344 -0.0004
13STYR    R2  251  13.519  10.418   7.517 -0.3703  0.1569 -0.0105
13STYR    R3  252  13.716  10.277   7.398 -0.3501  0.1398  0.0425
14STYR     B  253  13.374   9.850   7.380 -0.3175  0.1537  0.0026
14STYR    R1  254  13.132   9.933   7.466 -0.3323  0.1085 -0.0186
14STYR    R2  255  12.876   9.861   7.514 -0.3373  0.0978 -0.0607
14STYR    R3  256  13.022   9.979   7.708 -0.3823  0.1275 -0.0447
15STYR     B  257  13.635   9.832   7.381 -0.3339  0.1623  0.0346
15STYR    R1  258  13.497   9.888   7.613 -0.3687  0.1484  0.0019
15STYR    R2  259  13.472  10.073   7.808 -0.4219  0.1570 -0.0128
15STYR    R3  260  13.451   9.810   7.867 -0.3567  0.1559  0.0064
16STYR     B  261  13.734   9.894   7.163 -0.3221  0.1423  0.0496
16STYR    R1  262  13.817   9.665   7.261 -0.3047  0.1450  0.0603
16STYR    R2  263  13.834   9.400   7.212 -0.2828  0.1446  0.0697
16STYR    R3  264  14.051   9.536   7.296 -0.3019  0.1594  0.0954
17STYR     B  265  13.617   9.844   6.960 -0.2747  0.1403  0.0264
17STYR    R1  266  13.757  10.077   6.974 -0.2951  0.1301  0.0430
17STYR    R2  267  13.721  10.343   6.941 -0.3266  0.1258  0.0421
17STYR    R3  268  13.939  10.221   6.836 -0.2981  0.1560  0.0661
18STYR     B  269  13.412   9.763   6.891 -0.2722  0.1003  0.0192
18STYR    R1  270  13.606   9.608   6.827 -0.2746  0.0984  0.0458
18STYR    R2  271  13.691   9.352   6.831 -0.2297  0.1134  0.0663
18STYR    R3  272  13.646   9.475   6.595 -0.2082  0.1008  0.0555
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19STYR	B	273	13.177	9.781	6.912	-0.2603	0.0891	-0.0149
19STYR	R1	274	13.281	9.721	6.669	-0.2265	0.0892	-0.0060
19STYR	R2	275	13.292	9.790	6.409	-0.2176	0.0779	-0.0087
19STYR	R3	276	13.252	9.532	6.479	-0.2065	0.0788	0.0012
20STYR	B	277	13.031	9.719	7.090	-0.2885	0.0984	-0.0373
20STYR	R1	278	13.232	9.561	7.054	-0.2762	0.0965	0.0018
20STYR	R2	279	13.424	9.442	7.201	-0.2742	0.1270	0.0240
20STYR	R3	280	13.315	9.312	6.992	-0.2559	0.0951	0.0341
21STYR	B	281	12.977	9.516	7.210	-0.2961	0.0929	-0.0127
21STYR	R1	282	12.783	9.678	7.109	-0.2860	0.1007	-0.0496
21STYR	R2	283	12.547	9.791	7.175	-0.3046	0.0709	-0.0646
21STYR	R3	284	12.580	9.681	6.931	-0.2800	0.0622	-0.0574
22STYR	B	285	12.801	9.442	7.366	-0.3097	0.0990	-0.0411
22STYR	R1	286	13.046	9.449	7.466	-0.3259	0.1109	-0.0108
22STYR	R2	287	13.180	9.287	7.635	-0.3325	0.1254	0.0085
22STYR	R3	288	13.175	9.553	7.680	-0.3438	0.1280	-0.0082
23STYR	B	289	12.751	9.216	7.447	-0.2953	0.0974	-0.0472
23STYR	R1	290	12.641	9.296	7.212	-0.2758	0.0939	-0.0613
23STYR	R2	291	12.624	9.234	6.950	-0.2433	0.0725	-0.0584
23STYR	R3	292	12.404	9.318	7.084	-0.2666	0.0545	-0.0851
24STYR	B	293	12.799	9.027	7.591	-0.3107	0.1042	-0.0211
24STYR	R1	294	12.740	9.264	7.709	-0.3224	0.0952	-0.0289
24STYR	R2	295	12.836	9.428	7.901	-0.3654	0.1352	-0.0414
24STYR	R3	296	12.573	9.369	7.894	-0.3585	0.1077	-0.0685
25STYR	B	297	12.991	8.878	7.605	-0.3039	0.1192	0.0004
25STYR	R1	298	12.920	8.962	7.357	-0.2871	0.0964	0.0002
25STYR	R2	299	12.845	8.864	7.117	-0.2313	0.0748	-0.0086
25STYR	R3	300	13.027	9.063	7.131	-0.2617	0.1012	0.0142
26STYR	B	301	13.110	8.726	7.475	-0.2589	0.1252	0.0166
26STYR	R1	302	12.998	8.616	7.674	-0.3011	0.1287	0.0030
26STYR	R2	303	12.837	8.409	7.738	-0.3018	0.1318	0.0111
26STYR	R3	304	13.052	8.464	7.891	-0.2986	0.1337	0.0058
27STYR	B	305	13.069	8.515	7.371	-0.2501	0.1090	0.0264
27STYR	R1	306	13.275	8.640	7.289	-0.2361	0.1077	0.0643
27STYR	R2	307	13.532	8.584	7.225	-0.2319	0.1168	0.0730
27STYR	R3	308	13.388	8.752	7.070	-0.2283	0.1225	0.0758
28STYR	B	309	13.026	8.461	7.144	-0.2117	0.0892	0.0342
28STYR	R1	310	12.972	8.267	7.310	-0.2316	0.1143	0.0336
28STYR	R2	311	13.007	7.999	7.312	-0.1999	0.1185	0.0557
28STYR	R3	312	12.768	8.104	7.383	-0.2215	0.0949	0.0185
29STYR	B	313	12.890	8.348	6.981	-0.1900	0.0931	0.0093
29STYR	R1	314	13.168	8.375	6.953	-0.1930	0.1001	0.0400
29STYR	R2	315	13.408	8.253	6.956	-0.1839	0.1190	0.0831
29STYR	R3	316	13.360	8.449	6.778	-0.1738	0.1022	0.0618
30STYR	B	317	12.694	8.439	6.869	-0.1983	0.0602	-0.0047
30STYR	R1	318	12.667	8.454	7.122	-0.2203	0.0729	-0.0123
30STYR	R2	319	12.460	8.391	7.284	-0.2323	0.0622	-0.0317
30STYR	R3	320	12.632	8.587	7.355	-0.2553	0.0786	-0.0206
31STYR	B	321	12.556	8.625	6.850	-0.1933	0.0618	-0.0330
31STYR	R1	322	12.449	8.391	6.794	-0.1880	0.0519	-0.0353
31STYR	R2	323	12.311	8.247	6.612	-0.1494	0.0226	-0.0419
31STYR	R3	324	12.240	8.240	6.872	-0.1788	0.0315	-0.0496
32STYR	B	325	12.572	8.844	6.763	-0.1799	0.0501	-0.0607
32STYR	R1	326	12.436	8.822	6.989	-0.2141	0.0704	-0.0627
32STYR	R2	327	12.423	8.923	7.239	-0.2643	0.0693	-0.0648
32STYR	R3	328	12.198	8.893	7.093	-0.2389	0.0404	-0.0985
33STYR	B	329	12.646	8.974	6.591	-0.1730	0.0353	-0.0406
33STYR	R1	330	12.821	8.807	6.676	-0.1859	0.0741	-0.0191
33STYR	R2	331	12.980	8.609	6.584	-0.1827	0.0625	0.0118
33STYR	R3	332	13.074	8.784	6.767	-0.1957	0.0732	0.0083
34STYR	B	333	12.584	9.107	6.411	-0.1566	0.0416	-0.0579
34STYR	R1	334	12.392	8.967	6.547	-0.1839	0.0185	-0.0678
34STYR	R2	335	12.154	9.012	6.666	-0.2050	0.0145	-0.1078
34STYR	R3	336	12.191	8.788	6.520	-0.1730	0.0098	-0.0927
35STYR	B	337	12.654	9.316	6.324	-0.1612	0.0303	-0.0693
35STYR	R1	338	12.581	9.127	6.154	-0.1502	0.0232	-0.0548
35STYR	R2	339	12.651	8.994	5.930	-0.1076	0.0311	-0.0463
35STYR	R3	340	12.406	9.106	5.949	-0.1229	0.0030	-0.0760
36STYR	B	341	12.880	9.395	6.250	-0.1708	0.0490	-0.0390
36STYR	R1	342	12.866	9.341	6.511	-0.1966	0.0600	-0.0352
36STYR	R2	343	13.008	9.209	6.699	-0.2135	0.0761	-0.0111
36STYR	R3	344	12.914	9.457	6.750	-0.2420	0.0695	-0.0307
37STYR	B	345	13.052	9.209	6.251	-0.1459	0.0629	0.0001

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37STYR    R1  346  13.104   9.414   6.089 -0.1353  0.0494 -0.0011
37STYR    R2  347  13.160   9.461   5.829 -0.1271  0.0554  0.0017
37STYR    R3  348  13.312   9.572   6.022 -0.1512  0.0750  0.0095
38STYR     B  349  13.012   8.976   6.291 -0.1779  0.0764 -0.0037
38STYR    R1  350  13.086   9.058   6.050 -0.1291  0.0541  0.0060
38STYR    R2  351  13.032   9.048   5.786 -0.0928  0.0347 -0.0007
38STYR    R3  352  13.288   9.036   5.873 -0.1038  0.0533  0.0346
39STYR     B  353  12.964   8.785   6.170 -0.1098  0.0626  0.0121
39STYR    R1  354  13.202   8.803   6.279 -0.1451  0.0593  0.0336
39STYR    R2  355  13.461   8.798   6.201 -0.1392  0.0876  0.0513
39STYR    R3  356  13.386   8.672   6.427 -0.1386  0.0902  0.0529
40STYR     B  357  12.965   8.562   6.115 -0.1118  0.0321  0.0181
40STYR    R1  358  12.737   8.663   6.210 -0.1197  0.0383 -0.0164
40STYR    R2  359  12.474   8.697   6.163 -0.1177  0.0204 -0.0408
40STYR    R3  360  12.556   8.591   6.397 -0.1314  0.0402 -0.0271
41STYR     B  361  13.045   8.347   6.046 -0.0880  0.0621  0.0446
41STYR    R1  362  13.143   8.557   5.911 -0.0615  0.0533  0.0424
41STYR    R2  363  13.178   8.670   5.669 -0.0633  0.0322  0.0321
41STYR    R3  364  13.392   8.611   5.822 -0.0630  0.0625  0.0436
42STYR     B  365  13.150   8.181   6.197 -0.0921  0.0458  0.0636
42STYR    R1  366  13.048   8.084   5.967 -0.0706  0.0498  0.0456
42STYR    R2  367  12.880   7.889   5.883 -0.0320  0.0222  0.0322
42STYR    R3  368  13.117   7.926   5.759 -0.0176  0.0452  0.0666
43STYR     B  369  13.157   8.215   6.453 -0.1212  0.0807  0.0517
43STYR    R1  370  13.390   8.227   6.285 -0.1010  0.0746  0.0699
43STYR    R2  371  13.640   8.128   6.260 -0.0908  0.0860  0.1258
43STYR    R3  372  13.588   8.384   6.192 -0.0881  0.0824  0.1103
44STYR     B  373  12.922   8.185   6.555 -0.1409  0.0673  0.0127
44STYR    R1  374  13.100   8.022   6.653 -0.1365  0.0694  0.0479
44STYR    R2  375  13.131   7.758   6.695 -0.1413  0.0729  0.0728
44STYR    R3  376  13.144   7.930   6.902 -0.1370  0.0923  0.0564
45STYR     B  377  12.713   8.188   6.437 -0.1241  0.0535  0.0002
45STYR    R1  378  12.725   8.044   6.667 -0.1402  0.0634  0.0130
45STYR    R2  379  12.615   7.997   6.909 -0.1492  0.0613  0.0085
45STYR    R3  380  12.685   7.790   6.750 -0.1264  0.0626  0.0170
46STYR     B  381  12.649   8.201   6.203 -0.1121  0.0194  0.0056
46STYR    R1  382  12.754   7.969   6.301 -0.0952  0.0581  0.0067
46STYR    R2  383  12.953   7.786   6.291 -0.0831  0.0687  0.0511
46STYR    R3  384  12.696   7.705   6.307 -0.0802  0.0553  0.0306
47STYR     B  385  12.588   8.277   5.979 -0.0708  0.0324 -0.0111
47STYR    R1  386  12.384   8.262   6.158 -0.0919  0.0196 -0.0630
47STYR    R2  387  12.140   8.149   6.182 -0.0794 -0.0025 -0.0409
47STYR    R3  388  12.175   8.410   6.243 -0.1096  0.0150 -0.0982
48STYR     B  389  12.389   8.332   5.851 -0.0696 -0.0040 -0.0458
48STYR    R1  390  12.527   8.121   5.769 -0.0453  0.0150 -0.0221
48STYR    R2  391  12.499   7.861   5.703 -0.0346  0.0100 -0.0074
48STYR    R3  392  12.636   8.028   5.541 -0.0201  0.0011 -0.0046
49STYR     B  393  12.245   8.521   5.808 -0.0610 -0.0203 -0.0643
49STYR    R1  394  12.491   8.522   5.708 -0.0529  0.0059 -0.0366
49STYR    R2  395  12.617   8.544   5.471 -0.0323  0.0085 -0.0253
49STYR    R3  396  12.727   8.652   5.693 -0.0563  0.0145 -0.0163
50STYR     B  397  12.262   8.745   5.745 -0.0844  0.0197 -0.0876
50STYR    R1  398  12.014   8.639   5.749 -0.0694 -0.0236 -0.0917
50STYR    R2  399  11.793   8.627   5.596 -0.0476 -0.0649 -0.1199
50STYR    R3  400  11.771   8.672   5.861 -0.0873 -0.0286 -0.1292
 1STYR     B  401  16.281   9.986   5.866 -0.1660  0.2289  0.3381
 1STYR    R1  402  16.125  10.124   5.706 -0.1625  0.2187  0.3087
 1STYR    R2  403  16.080  10.384   5.650 -0.1681  0.2146  0.2942
 1STYR    R3  404  16.139  10.211   5.451 -0.1311  0.2114  0.3080
 2STYR     B  405  16.055   9.926   5.862 -0.1540  0.2082  0.2891
 2STYR    R1  406  16.172   9.914   6.095 -0.1847  0.2318  0.3196
 2STYR    R2  407  16.134   9.995   6.349 -0.2192  0.2545  0.3073
 2STYR    R3  408  16.237   9.750   6.300 -0.1981  0.2558  0.3431
 3STYR     B  409  15.865   9.789   5.858 -0.1398  0.1908  0.2980
 3STYR    R1  410  16.108   9.690   5.775 -0.1231  0.2222  0.3259
 3STYR    R2  411  16.292   9.497   5.817 -0.1146  0.2377  0.3587
 3STYR    R3  412  16.234   9.575   5.565 -0.0850  0.2242  0.3477
 4STYR     B  413  15.628   9.735   5.861 -0.1388  0.1808  0.2708
 4STYR    R1  414  15.741   9.883   5.656 -0.1323  0.1884  0.2882
 4STYR    R2  415  15.720  10.112   5.515 -0.1203  0.1798  0.2724
 4STYR    R3  416  15.802   9.886   5.393 -0.0999  0.1748  0.2955
 5STYR     B  417  15.540   9.519   5.937 -0.1366  0.2081  0.2744
 5STYR    R1  418  15.761   9.588   6.053 -0.1596  0.2062  0.2903
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5STYR	R2	419	15.997	9.478	6.124	-0.1624	0.2249	0.3289
5STYR	R3	420	15.835	9.584	6.313	-0.1916	0.2317	0.3000
6STYR	B	421	15.419	9.322	5.897	-0.1378	0.1729	0.2817
6STYR	R1	422	15.419	9.418	6.152	-0.1679	0.2008	0.2726
6STYR	R2	423	15.461	9.331	6.404	-0.2121	0.1909	0.2767
6STYR	R3	424	15.257	9.500	6.352	-0.2107	0.1831	0.2454
7STYR	B	425	15.441	9.122	5.751	-0.0966	0.1813	0.2924
7STYR	R1	426	15.662	9.273	5.765	-0.1065	0.1890	0.3093
7STYR	R2	427	15.929	9.241	5.794	-0.1068	0.2097	0.3342
7STYR	R3	428	15.832	9.393	5.592	-0.1001	0.1917	0.3175
8STYR	B	429	15.606	8.950	5.725	-0.0885	0.1739	0.3072
8STYR	R1	430	15.493	9.025	5.503	-0.0606	0.1894	0.2870
8STYR	R2	431	15.578	9.104	5.260	-0.0345	0.1549	0.2848
8STYR	R3	432	15.389	8.913	5.281	-0.0298	0.1511	0.2917
9STYR	B	433	15.739	8.793	5.845	-0.0764	0.2100	0.3259
9STYR	R1	434	15.492	8.854	5.934	-0.1014	0.1890	0.2793
9STYR	R2	435	15.404	8.933	6.177	-0.1256	0.1885	0.2708
9STYR	R3	436	15.252	8.769	6.025	-0.1037	0.1765	0.2618
10STYR	B	437	15.754	8.664	6.049	-0.0867	0.2230	0.3465
10STYR	R1	438	15.829	8.920	6.070	-0.1320	0.2331	0.3241
10STYR	R2	439	15.765	9.149	6.198	-0.1461	0.2308	0.3211
10STYR	R3	440	16.021	9.063	6.194	-0.1448	0.2339	0.3430
11STYR	B	441	15.882	8.640	6.252	-0.1167	0.2473	0.3473
11STYR	R1	442	15.629	8.554	6.253	-0.1220	0.1880	0.3187
11STYR	R2	443	15.488	8.328	6.299	-0.1367	0.1997	0.3318
11STYR	R3	444	15.391	8.567	6.379	-0.1334	0.2137	0.2947
12STYR	B	445	16.107	8.641	6.324	-0.1265	0.2565	0.3576
12STYR	R1	446	16.070	8.553	6.083	-0.0877	0.2245	0.3783
12STYR	R2	447	16.132	8.337	5.934	-0.0564	0.2239	0.3920
12STYR	R3	448	16.156	8.584	5.829	-0.0825	0.2212	0.3797
13STYR	B	449	16.315	8.735	6.365	-0.1427	0.2650	0.3990
13STYR	R1	450	16.286	8.473	6.409	-0.1307	0.2650	0.4185
13STYR	R2	451	16.390	8.234	6.337	-0.1185	0.2673	0.4284
13STYR	R3	452	16.327	8.281	6.595	-0.1344	0.2697	0.4241
14STYR	B	453	16.481	8.899	6.392	-0.1667	0.2754	0.4217
14STYR	R1	454	16.403	8.855	6.144	-0.1337	0.2249	0.4039
14STYR	R2	455	16.530	8.809	5.910	-0.1019	0.2416	0.4178
14STYR	R3	456	16.321	8.980	5.919	-0.1113	0.2312	0.3992
15STYR	B	457	16.601	9.033	6.547	-0.1597	0.2604	0.4218
15STYR	R1	458	16.754	8.918	6.372	-0.1427	0.2792	0.4434
15STYR	R2	459	16.977	8.767	6.345	-0.1294	0.2943	0.4678
15STYR	R3	460	16.948	8.992	6.198	-0.1391	0.2800	0.4477
16STYR	B	461	16.734	9.208	6.599	-0.2128	0.2991	0.4239
16STYR	R1	462	16.583	9.217	6.373	-0.1686	0.2770	0.4030
16STYR	R2	463	16.396	9.352	6.233	-0.1696	0.2542	0.3823
16STYR	R3	464	16.608	9.244	6.105	-0.1525	0.2631	0.4030
17STYR	B	465	16.922	9.305	6.715	-0.2001	0.3085	0.4603
17STYR	R1	466	16.870	9.046	6.768	-0.2103	0.3008	0.4540
17STYR	R2	467	16.993	8.805	6.770	-0.2012	0.3056	0.4777
17STYR	R3	468	16.864	8.893	6.991	-0.2389	0.3049	0.4562
18STYR	B	469	16.960	9.564	6.719	-0.2125	0.3054	0.4188
18STYR	R1	470	17.006	9.417	6.483	-0.2022	0.3228	0.4446
18STYR	R2	471	16.966	9.431	6.216	-0.1586	0.2996	0.4367
18STYR	R3	472	17.208	9.360	6.313	-0.1782	0.2950	0.4824
19STYR	B	473	16.807	9.679	6.544	-0.2184	0.2798	0.4145
19STYR	R1	474	16.814	9.810	6.770	-0.2494	0.3199	0.4062
19STYR	R2	475	16.856	10.065	6.848	-0.2813	0.3260	0.4038
19STYR	R3	476	16.643	9.929	6.942	-0.2823	0.3110	0.3797
20STYR	B	477	16.557	9.641	6.578	-0.2395	0.2769	0.3862
20STYR	R1	478	16.653	9.733	6.332	-0.2036	0.2872	0.3992
20STYR	R2	479	16.621	9.685	6.068	-0.1753	0.2737	0.3981
20STYR	R3	480	16.622	9.939	6.161	-0.1959	0.2779	0.3867
21STYR	B	481	16.474	9.506	6.765	-0.2407	0.2898	0.3770
21STYR	R1	482	16.327	9.722	6.718	-0.2315	0.2815	0.3568
21STYR	R2	483	16.212	9.924	6.855	-0.2665	0.2712	0.3430
21STYR	R3	484	16.062	9.768	6.694	-0.2335	0.2551	0.3277
22STYR	B	485	16.339	9.474	6.943	-0.2513	0.2787	0.3732
22STYR	R1	486	16.596	9.472	7.000	-0.2639	0.3078	0.4000
22STYR	R2	487	16.778	9.323	7.132	-0.2763	0.3136	0.4236
22STYR	R3	488	16.772	9.591	7.168	-0.2896	0.3133	0.4230
23STYR	B	489	16.111	9.449	7.004	-0.2566	0.2709	0.3648
23STYR	R1	490	16.190	9.333	6.774	-0.2195	0.2817	0.3533
23STYR	R2	491	16.162	9.106	6.631	-0.2072	0.2690	0.3710

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23STYR    R3  492  16.107   9.345   6.518 -0.1863  0.2598  0.3413
24STYR     B  493  15.951   9.540   7.138 -0.2809  0.2768  0.3316
24STYR    R1  494  16.211   9.594   7.192 -0.2978  0.2908  0.3419
24STYR    R2  495  16.367   9.807   7.248 -0.3112  0.2987  0.3495
24STYR    R3  496  16.387   9.582   7.396 -0.3300  0.3111  0.3712
25STYR     B  497  15.720   9.511   7.197 -0.2837  0.2500  0.2997
25STYR    R1  498  15.788   9.475   6.937 -0.2604  0.2497  0.3074
25STYR    R2  499  15.682   9.563   6.704 -0.2290  0.2371  0.2882
25STYR    R3  500  15.747   9.303   6.733 -0.2207  0.2412  0.3066
26STYR     B  501  15.555   9.651   7.284 -0.3123  0.2659  0.2819
26STYR    R1  502  15.800   9.699   7.360 -0.3255  0.2760  0.2973
26STYR    R2  503  15.971   9.706   7.570 -0.3357  0.2805  0.3054
26STYR    R3  504  15.966   9.910   7.393 -0.3328  0.2804  0.3052
27STYR     B  505  15.486   9.872   7.337 -0.3334  0.2461  0.2603
27STYR    R1  506  15.384   9.759   7.117 -0.3025  0.2433  0.2551
27STYR    R2  507  15.355   9.788   6.850 -0.2551  0.2265  0.2480
27STYR    R3  508  15.149   9.698   6.999 -0.2750  0.2158  0.2142
28STYR     B  509  15.326  10.026   7.251 -0.3178  0.2412  0.2560
28STYR    R1  510  15.522  10.140   7.375 -0.3366  0.2514  0.2471
28STYR    R2  511  15.543  10.334   7.561 -0.3696  0.2702  0.2315
28STYR    R3  512  15.723  10.320   7.360 -0.3440  0.2603  0.2551
29STYR     B  513  15.345  10.232   7.136 -0.3253  0.2296  0.2047
29STYR    R1  514  15.118  10.121   7.098 -0.3059  0.2186  0.1795
29STYR    R2  515  14.948  10.053   6.899 -0.2870  0.1929  0.1721
29STYR    R3  516  14.855  10.174   7.122 -0.3105  0.2076  0.1542
30STYR     B  517  15.422  10.299   6.929 -0.3086  0.2326  0.2187
30STYR    R1  518  15.377  10.488   7.108 -0.3296  0.2421  0.1953
30STYR    R2  519  15.251  10.726   7.124 -0.3562  0.2289  0.1834
30STYR    R3  520  15.483  10.688   7.256 -0.3782  0.2446  0.2270
31STYR     B  521  15.438  10.219   6.709 -0.2548  0.2268  0.2323
31STYR    R1  522  15.624  10.141   6.903 -0.3047  0.2448  0.2674
31STYR    R2  523  15.874  10.146   7.005 -0.3119  0.2586  0.2845
31STYR    R3  524  15.749   9.910   6.965 -0.3013  0.2523  0.2885
32STYR     B  525  15.253  10.111   6.570 -0.2516  0.1912  0.2232
32STYR    R1  526  15.191  10.348   6.686 -0.2670  0.2005  0.1970
32STYR    R2  527  15.066  10.570   6.595 -0.2784  0.1864  0.1782
32STYR    R3  528  15.009  10.475   6.841 -0.2959  0.1871  0.1744
33STYR     B  529  15.258   9.993   6.366 -0.2243  0.1972  0.2134
33STYR    R1  530  15.075   9.905   6.521 -0.2408  0.1971  0.1970
33STYR    R2  531  14.809   9.860   6.535 -0.2359  0.1633  0.1825
33STYR    R3  532  14.982   9.672   6.621 -0.2167  0.1913  0.2057
34STYR     B  533  15.242   9.904   6.172 -0.2134  0.1934  0.2332
34STYR    R1  534  15.485   9.890   6.294 -0.2021  0.1917  0.2441
34STYR    R2  535  15.668   9.920   6.491 -0.2447  0.2401  0.2766
34STYR    R3  536  15.730   9.989   6.237 -0.2054  0.2212  0.2810
35STYR     B  537  15.182   9.760   5.997 -0.1511  0.1598  0.2308
35STYR    R1  538  15.225  10.001   5.926 -0.1589  0.1936  0.2339
35STYR    R2  539  15.102  10.184   5.770 -0.1656  0.1606  0.2003
35STYR    R3  540  15.369  10.150   5.752 -0.1612  0.1829  0.2227
36STYR     B  541  15.137   9.710   5.784 -0.1218  0.1493  0.2071
36STYR    R1  542  14.988   9.591   5.980 -0.1558  0.1388  0.1958
36STYR    R2  543  14.719   9.569   5.961 -0.1559  0.1569  0.1744
36STYR    R3  544  14.836   9.599   6.203 -0.1730  0.1477  0.1838
37STYR     B  545  15.081   9.795   5.569 -0.1016  0.1353  0.1933
37STYR    R1  546  15.260   9.617   5.559 -0.0989  0.1653  0.2373
37STYR    R2  547  15.308   9.403   5.401 -0.0636  0.1598  0.2553
37STYR    R3  548  15.501   9.588   5.439 -0.0818  0.1759  0.2691
38STYR     B  549  14.936   9.928   5.436 -0.1082  0.1415  0.1986
38STYR    R1  550  15.188   9.958   5.387 -0.0954  0.1441  0.2190
38STYR    R2  551  15.341  10.174   5.333 -0.0976  0.1478  0.2273
38STYR    R3  552  15.375   9.946   5.193 -0.0756  0.1447  0.2379
39STYR     B  553  14.718  10.020   5.485 -0.1278  0.1235  0.1621
39STYR    R1  554  14.867  10.175   5.339 -0.1128  0.1250  0.1640
39STYR    R2  555  14.972  10.423   5.317 -0.1228  0.1294  0.1664
39STYR    R3  556  14.841  10.312   5.108 -0.0970  0.1165  0.1572
40STYR     B  557  14.661  10.228   5.566 -0.1369  0.1122  0.1330
40STYR    R1  558  14.674  10.047   5.743 -0.1530  0.1376  0.1522
40STYR    R2  559  14.516   9.951   5.940 -0.1648  0.1226  0.1356
40STYR    R3  560  14.780   9.988   5.984 -0.1741  0.1544  0.1656
41STYR     B  561  14.694  10.417   5.701 -0.1718  0.1225  0.1407
41STYR    R1  562  14.520  10.421   5.485 -0.1474  0.1047  0.1091
41STYR    R2  563  14.268  10.471   5.403 -0.1435  0.0973  0.0928
41STYR    R3  564  14.478  10.559   5.257 -0.1367  0.0934  0.1003
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42STYR     B  565  14.754  10.504   5.921 -0.1870  0.1502  0.1448
42STYR    R1  566  14.924  10.570   5.729 -0.1844  0.1623  0.1495
42STYR    R2  567  15.191  10.578   5.688 -0.1802  0.1623  0.1763
42STYR    R3  568  15.036  10.784   5.607 -0.1693  0.1721  0.1803
43STYR     B  569  14.888  10.409   6.098 -0.2275  0.1569  0.1625
43STYR    R1  570  14.725  10.587   6.182 -0.2291  0.1615  0.1182
43STYR    R2  571  14.738  10.797   6.352 -0.2471  0.1709  0.1079
43STYR    R3  572  14.537  10.618   6.374 -0.2362  0.1590  0.1117
44STYR     B  573  15.078  10.350   6.180 -0.2200  0.1363  0.1909
44STYR    R1  574  14.868  10.251   6.305 -0.2403  0.1870  0.1585
44STYR    R2  575  14.611  10.177   6.342 -0.2255  0.1300  0.1490
44STYR    R3  576  14.756  10.271   6.549 -0.2464  0.1382  0.1599
45STYR     B  577  15.319  10.381   6.152 -0.2203  0.2040  0.2086
45STYR    R1  578  15.170  10.604   6.165 -0.2521  0.1686  0.1878
45STYR    R2  579  15.178  10.840   6.296 -0.2598  0.1758  0.1754
45STYR    R3  580  15.112  10.833   6.034 -0.2237  0.1638  0.1666
46STYR     B  581  15.484  10.412   6.312 -0.2385  0.2079  0.2110
46STYR    R1  582  15.572  10.388   6.071 -0.2186  0.2153  0.2261
46STYR    R2  583  15.749  10.253   5.919 -0.1842  0.2068  0.2732
46STYR    R3  584  15.740  10.522   5.907 -0.1898  0.2056  0.2473
47STYR     B  585  15.700  10.405   6.394 -0.2591  0.2209  0.2543
47STYR    R1  586  15.543  10.597   6.490 -0.2746  0.2149  0.2225
47STYR    R2  587  15.551  10.864   6.525 -0.2944  0.2167  0.2129
47STYR    R3  588  15.455  10.705   6.721 -0.3076  0.2188  0.2082
48STYR     B  589  15.855  10.315   6.544 -0.2598  0.2420  0.2597
48STYR    R1  590  15.957  10.409   6.321 -0.2324  0.2315  0.2801
48STYR    R2  591  16.120  10.352   6.113 -0.2068  0.2445  0.2964
48STYR    R3  592  16.150  10.584   6.248 -0.2447  0.2509  0.2941
49STYR     B  593  16.063  10.306   6.647 -0.2536  0.2706  0.2870
49STYR    R1  594  15.895  10.488   6.740 -0.2785  0.2567  0.2771
49STYR    R2  595  15.793  10.573   6.975 -0.3167  0.2510  0.2625
49STYR    R3  596  15.884  10.752   6.795 -0.3246  0.2574  0.2649
50STYR     B  597  16.213  10.417   6.795 -0.2925  0.2529  0.3152
50STYR    R1  598  16.324  10.281   6.597 -0.2318  0.2646  0.3356
50STYR    R2  599  16.485  10.297   6.381 -0.2340  0.2576  0.3335
50STYR    R3  600  16.511  10.092   6.555 -0.2324  0.2631  0.3399
 1STYR     B  601  10.576   7.265   2.070  0.4410 -0.2797 -0.2093
 1STYR    R1  602  10.317   7.306   2.012  0.4549 -0.3082 -0.2437
 1STYR    R2  603  10.068   7.219   2.069  0.4531 -0.3136 -0.2598
 1STYR    R3  604  10.136   7.278   1.814  0.4683 -0.3123 -0.2554
 2STYR     B  605  10.533   7.470   1.946  0.4408 -0.2946 -0.1989
 2STYR    R1  606  10.773   7.463   2.072  0.4223 -0.2776 -0.1813
 2STYR    R2  607  11.038   7.487   2.025  0.4211 -0.2565 -0.1772
 2STYR    R3  608  10.929   7.599   2.246  0.4074 -0.2587 -0.1828
 3STYR     B  609  10.616   7.691   1.910  0.4345 -0.2932 -0.2141
 3STYR    R1  610  10.429   7.622   1.739  0.4463 -0.3301 -0.2441
 3STYR    R2  611  10.381   7.615   1.474  0.4770 -0.3165 -0.2501
 3STYR    R3  612  10.186   7.691   1.644  0.4614 -0.3122 -0.2698
 4STYR     B  613  10.579   7.904   1.816  0.4477 -0.2937 -0.2342
 4STYR    R1  614  10.828   7.848   1.864  0.4297 -0.2730 -0.1831
 4STYR    R2  615  11.067   7.874   1.740  0.4333 -0.2709 -0.1758
 4STYR    R3  616  11.045   7.927   2.004  0.4181 -0.2413 -0.1829
 5STYR     B  617  10.654   8.127   1.788  0.4224 -0.2974 -0.2412
 5STYR    R1  618  10.426   8.058   1.666  0.4593 -0.3086 -0.2568
 5STYR    R2  619  10.315   8.059   1.419  0.4741 -0.3160 -0.2635
 5STYR    R3  620  10.167   8.126   1.635  0.4548 -0.3324 -0.2717
 6STYR     B  621  10.838   8.288   1.834  0.4125 -0.2977 -0.2208
 6STYR    R1  622  10.781   8.208   1.576  0.4635 -0.2988 -0.2333
 6STYR    R2  623  10.874   8.076   1.360  0.4810 -0.3067 -0.2209
 6STYR    R3  624  10.733   8.304   1.328  0.4622 -0.3213 -0.2417
 7STYR     B  625  10.874   8.385   2.056  0.3970 -0.2593 -0.2195
 7STYR    R1  626  11.099   8.347   1.921  0.4020 -0.2497 -0.2023
 7STYR    R2  627  11.326   8.482   1.863  0.4102 -0.2552 -0.1829
 7STYR    R3  628  11.338   8.223   1.941  0.3986 -0.2506 -0.1660
 8STYR     B  629  10.719   8.454   2.225  0.3442 -0.2521 -0.2333
 8STYR    R1  630  10.792   8.209   2.237  0.3614 -0.2731 -0.2329
 8STYR    R2  631  10.665   7.972   2.262  0.3721 -0.2762 -0.2084
 8STYR    R3  632  10.890   8.021   2.403  0.3507 -0.2383 -0.1871
 9STYR     B  633  10.597   8.682   2.216  0.3383 -0.2737 -0.2756
 9STYR    R1  634  10.874   8.668   2.220  0.3447 -0.2643 -0.2403
 9STYR    R2  635  11.095   8.767   2.102  0.3561 -0.2565 -0.2124
 9STYR    R3  636  11.075   8.765   2.371  0.3111 -0.2327 -0.2155
10STYR     B  637  10.652   8.802   2.022  0.3525 -0.2809 -0.2511
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10STYR    R1  638  10.456   8.632   2.010  0.3832 -0.2878 -0.2772
10STYR    R2  639  10.355   8.394   1.933  0.4016 -0.2978 -0.2702
10STYR    R3  640  10.207   8.618   1.905  0.4048 -0.3026 -0.3268
11STYR     B  641  10.685   8.759   1.799  0.4002 -0.3030 -0.2666
11STYR    R1  642  10.760   8.992   1.917  0.3532 -0.2647 -0.2435
11STYR    R2  643  10.976   9.145   1.968  0.3534 -0.2678 -0.2348
11STYR    R3  644  10.736   9.261   1.928  0.3645 -0.2619 -0.2849
12STYR     B  645  10.859   8.675   1.655  0.4185 -0.2772 -0.2366
12STYR    R1  646  10.597   8.651   1.580  0.4238 -0.3056 -0.2607
12STYR    R2  647  10.449   8.686   1.357  0.4373 -0.3165 -0.2714
12STYR    R3  648  10.399   8.478   1.522  0.4378 -0.3177 -0.2728
13STYR     B  649  11.083   8.782   1.638  0.4207 -0.2617 -0.2329
13STYR    R1  650  11.067   8.553   1.513  0.4271 -0.2722 -0.2018
13STYR    R2  651  11.202   8.320   1.491  0.4568 -0.2576 -0.1765
13STYR    R3  652  11.135   8.459   1.269  0.4696 -0.2728 -0.1899
14STYR     B  653  11.113   9.023   1.572  0.3986 -0.2873 -0.2332
14STYR    R1  654  11.310   8.890   1.719  0.3825 -0.2552 -0.2080
14STYR    R2  655  11.568   8.813   1.713  0.3848 -0.2506 -0.1706
14STYR    R3  656  11.461   8.906   1.942  0.3536 -0.2399 -0.1895
15STYR     B  657  10.909   9.154   1.532  0.3989 -0.2889 -0.2539
15STYR    R1  658  10.960   8.979   1.345  0.4211 -0.2930 -0.2408
15STYR    R2  659  10.968   8.978   1.075  0.4632 -0.3065 -0.2395
15STYR    R3  660  10.839   8.780   1.207  0.4518 -0.3056 -0.2494
16STYR     B  661  10.681   9.122   1.496  0.4005 -0.3188 -0.2808
16STYR    R1  662  10.779   9.370   1.516  0.3847 -0.2909 -0.2802
16STYR    R2  663  10.801   9.610   1.392  0.3895 -0.2900 -0.2775
16STYR    R3  664  10.729   9.598   1.652  0.3598 -0.2930 -0.2858
17STYR     B  665  10.446   9.088   1.564  0.4058 -0.3242 -0.2927
17STYR    R1  666  10.520   9.119   1.296  0.4213 -0.3143 -0.2943
17STYR    R2  667  10.471   9.273   1.080  0.4423 -0.3219 -0.3044
17STYR    R3  668  10.490   9.005   1.053  0.4587 -0.3217 -0.2954
18STYR     B  669  10.343   9.045   1.779  0.3974 -0.2989 -0.3213
18STYR    R1  670  10.196   8.963   1.595  0.4008 -0.3336 -0.3245
18STYR    R2  671   9.939   8.996   1.519  0.4136 -0.3443 -0.3730
18STYR    R3  672  10.047   8.749   1.525  0.4171 -0.3419 -0.3339
19STYR     B  673  10.320   9.091   2.004  0.3340 -0.2989 -0.3109
19STYR    R1  674  10.275   9.284   1.830  0.3597 -0.3163 -0.3387
19STYR    R2  675  10.332   9.541   1.768  0.3472 -0.3154 -0.3463
19STYR    R3  676  10.076   9.457   1.773  0.3526 -0.3333 -0.3656
20STYR     B  677  10.283   9.022   2.223  0.3175 -0.2667 -0.3199
20STYR    R1  678  10.077   9.022   2.051  0.3452 -0.3141 -0.3368
20STYR    R2  679   9.878   8.877   1.941  0.3626 -0.3162 -0.3656
20STYR    R3  680   9.839   9.138   1.997  0.3482 -0.3193 -0.3610
21STYR     B  681  10.328   9.083   2.449  0.2864 -0.2726 -0.3113
21STYR    R1  682  10.334   9.284   2.269  0.3039 -0.2812 -0.3311
21STYR    R2  683  10.473   9.494   2.173  0.3001 -0.2766 -0.3264
21STYR    R3  684  10.210   9.520   2.227  0.2941 -0.2894 -0.3488
22STYR     B  685  10.349   9.272   2.589  0.2563 -0.2525 -0.3052
22STYR    R1  686  10.104   9.189   2.520  0.2740 -0.2802 -0.3585
22STYR    R2  687   9.866   9.154   2.642  0.2707 -0.2896 -0.3676
22STYR    R3  688   9.878   9.277   2.402  0.2731 -0.3058 -0.3758
23STYR     B  689  10.341   9.314   2.827  0.2380 -0.2623 -0.3197
23STYR    R1  690  10.231   9.495   2.678  0.2427 -0.2625 -0.3454
23STYR    R2  691  10.219   9.763   2.649  0.2208 -0.2652 -0.3618
23STYR    R3  692   9.991   9.619   2.661  0.2330 -0.2867 -0.3871
24STYR     B  693  10.405   9.178   3.009  0.2251 -0.2463 -0.3278
24STYR    R1  694  10.172   9.289   3.039  0.1996 -0.2460 -0.3639
24STYR    R2  695  10.039   9.426   3.230  0.1874 -0.2582 -0.3636
24STYR    R3  696   9.915   9.229   3.094  0.2039 -0.2667 -0.3663
25STYR     B  697  10.543   9.008   3.073  0.2041 -0.2414 -0.2839
25STYR    R1  698  10.665   9.220   3.011  0.2063 -0.2196 -0.2777
25STYR    R2  699  10.861   9.376   3.112  0.1907 -0.2021 -0.2741
25STYR    R3  700  10.884   9.276   2.862  0.2224 -0.2330 -0.2589
26STYR     B  701  10.563   8.790   3.082  0.2485 -0.2266 -0.2721
26STYR    R1  702  10.324   8.880   3.014  0.2277 -0.2671 -0.3045
26STYR    R2  703  10.137   8.881   2.820  0.2535 -0.2834 -0.3296
26STYR    R3  704  10.065   8.835   3.076  0.2201 -0.2673 -0.3360
27STYR     B  705  10.650   8.586   3.057  0.2641 -0.2407 -0.2541
27STYR    R1  706  10.586   8.724   2.846  0.2820 -0.2450 -0.2774
27STYR    R2  707  10.445   8.690   2.618  0.2962 -0.2611 -0.2838
27STYR    R3  708  10.674   8.834   2.615  0.2806 -0.2361 -0.2737
28STYR     B  709  10.531   8.370   3.051  0.2608 -0.2312 -0.2808
28STYR    R1  710  10.483   8.540   3.259  0.2376 -0.2374 -0.2781
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28STYR    R2  711  10.276   8.652   3.392  0.2106 -0.2412 -0.3164
28STYR    R3  712  10.483   8.545   3.529  0.2004 -0.2129 -0.2785
29STYR     B  713  10.307   8.357   2.969  0.2573 -0.2546 -0.2735
29STYR    R1  714  10.476   8.151   2.919  0.2854 -0.2427 -0.2597
29STYR    R2  715  10.502   7.883   2.937  0.2939 -0.2406 -0.2412
29STYR    R3  716  10.581   8.012   2.713  0.3264 -0.2490 -0.2348
30STYR     B  717  10.145   8.445   2.820  0.2925 -0.2694 -0.3247
30STYR    R1  718  10.056   8.383   3.068  0.2479 -0.2657 -0.3285
30STYR    R2  719   9.917   8.488   3.274  0.2439 -0.2543 -0.3371
30STYR    R3  720   9.881   8.230   3.205  0.2480 -0.2591 -0.3211
31STYR     B  721   9.929   8.391   2.753  0.3251 -0.2727 -0.3326
31STYR    R1  722  10.041   8.536   2.574  0.3037 -0.2847 -0.3271
31STYR    R2  723  10.094   8.555   2.310  0.3511 -0.2967 -0.3184
31STYR    R3  724   9.978   8.761   2.439  0.3148 -0.2963 -0.3516
32STYR     B  725   9.749   8.329   2.608  0.3178 -0.2743 -0.3481
32STYR    R1  726   9.733   8.533   2.802  0.2905 -0.2942 -0.3629
32STYR    R2  727   9.596   8.625   3.015  0.2510 -0.2899 -0.3900
32STYR    R3  728   9.691   8.799   2.831  0.2569 -0.2961 -0.3928
33STYR     B  729   9.777   8.156   2.425  0.3450 -0.3129 -0.3300
33STYR    R1  730   9.666   8.386   2.353  0.3359 -0.3156 -0.3576
33STYR    R2  731   9.676   8.590   2.178  0.3629 -0.3276 -0.3702
33STYR    R3  732   9.451   8.442   2.200  0.3562 -0.3204 -0.3880
34STYR     B  733   9.889   8.145   2.215  0.3844 -0.3121 -0.3288
34STYR    R1  734   9.665   7.999   2.240  0.3701 -0.3219 -0.3471
34STYR    R2  735   9.549   7.756   2.215  0.4033 -0.3396 -0.3308
34STYR    R3  736   9.434   7.973   2.102  0.3934 -0.3690 -0.3778
35STYR     B  737  10.069   8.101   2.066  0.4103 -0.2960 -0.3181
35STYR    R1  738   9.871   8.241   1.964  0.3970 -0.3290 -0.3401
35STYR    R2  739   9.682   8.236   1.771  0.4125 -0.3448 -0.3551
35STYR    R3  740   9.833   8.457   1.806  0.3896 -0.3311 -0.3412
36STYR     B  741  10.246   7.925   2.085  0.4068 -0.3009 -0.2930
36STYR    R1  742  10.229   8.115   2.276  0.3635 -0.2867 -0.2832
36STYR    R2  743  10.384   8.280   2.423  0.3425 -0.2717 -0.2776
36STYR    R3  744  10.208   8.115   2.545  0.3532 -0.2878 -0.2839
37STYR     B  745  10.159   7.691   2.094  0.4140 -0.3156 -0.2620
37STYR    R1  746  10.321   7.732   2.282  0.4050 -0.2694 -0.2593
37STYR    R2  747  10.531   7.606   2.397  0.3917 -0.2671 -0.2328
37STYR    R3  748  10.342   7.724   2.551  0.3702 -0.2704 -0.2565
38STYR     B  749   9.990   7.634   2.253  0.4226 -0.2924 -0.2913
38STYR    R1  750   9.919   7.672   1.999  0.4301 -0.3207 -0.3130
38STYR    R2  751   9.778   7.550   1.803  0.4359 -0.3395 -0.3055
38STYR    R3  752   9.768   7.819   1.830  0.4353 -0.3369 -0.3317
39STYR     B  753   9.918   7.706   2.477  0.3733 -0.3069 -0.2997
39STYR    R1  754   9.840   7.460   2.396  0.3846 -0.3036 -0.3011
39STYR    R2  755   9.606   7.326   2.373  0.3988 -0.3262 -0.3162
39STYR    R3  756   9.827   7.197   2.459  0.4033 -0.3023 -0.2917
40STYR     B  757   9.914   7.569   2.671  0.3653 -0.2973 -0.3001
40STYR    R1  758   9.930   7.811   2.727  0.3193 -0.2984 -0.2935
40STYR    R2  759   9.792   7.978   2.889  0.3083 -0.2826 -0.3191
40STYR    R3  760  10.062   7.973   2.900  0.3076 -0.2807 -0.3010
41STYR     B  761  10.054   7.512   2.850  0.3359 -0.2817 -0.2750
41STYR    R1  762   9.807   7.433   2.868  0.3488 -0.2893 -0.2993
41STYR    R2  763   9.603   7.434   3.045  0.3240 -0.2979 -0.3277
41STYR    R3  764   9.661   7.209   2.909  0.3614 -0.2993 -0.3095
42STYR     B  765  10.277   7.488   2.911  0.3283 -0.2551 -0.2535
42STYR    R1  766  10.200   7.350   2.705  0.3716 -0.2632 -0.2450
42STYR    R2  767  10.214   7.091   2.628  0.3720 -0.2690 -0.2255
42STYR    R3  768  10.265   7.288   2.450  0.4056 -0.2832 -0.2315
43STYR     B  769  10.496   7.435   2.856  0.3507 -0.2392 -0.2137
43STYR    R1  770  10.387   7.303   3.053  0.3166 -0.2386 -0.2270
43STYR    R2  771  10.342   7.046   3.121  0.3457 -0.2442 -0.2288
43STYR    R3  772  10.424   7.223   3.308  0.2980 -0.2296 -0.2214
44STYR     B  773  10.707   7.364   2.956  0.3208 -0.2167 -0.1954
44STYR    R1  774  10.655   7.280   2.707  0.3684 -0.2580 -0.1816
44STYR    R2  775  10.778   7.265   2.468  0.3941 -0.2525 -0.1688
44STYR    R3  776  10.649   7.050   2.566  0.4052 -0.2625 -0.1759
45STYR     B  777  10.828   7.446   3.149  0.2936 -0.2097 -0.1834
45STYR    R1  778  10.831   7.178   3.096  0.3454 -0.2164 -0.1839
45STYR    R2  779  11.005   6.972   3.088  0.3589 -0.2074 -0.1258
45STYR    R3  780  10.751   6.931   3.171  0.3455 -0.2118 -0.1685
46STYR     B  781  10.807   7.698   3.226  0.2958 -0.2131 -0.2144
46STYR    R1  782  10.893   7.624   2.959  0.3362 -0.2029 -0.1690
46STYR    R2  783  10.855   7.684   2.699  0.3410 -0.2329 -0.1767
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46STYR    R3  784  11.104   7.635   2.791  0.3411 -0.2076 -0.1632
47STYR     B  785  10.584   7.721   3.354  0.2589 -0.2104 -0.2015
47STYR    R1  786  10.750   7.924   3.399  0.2480 -0.2082 -0.2008
47STYR    R2  787  10.880   8.058   3.594  0.2251 -0.2003 -0.1910
47STYR    R3  788  10.695   8.184   3.444  0.2456 -0.2052 -0.2206
48STYR     B  789  10.362   7.691   3.303  0.2868 -0.2401 -0.2556
48STYR    R1  790  10.436   7.607   3.540  0.2553 -0.2053 -0.2323
48STYR    R2  791  10.417   7.395   3.706  0.2489 -0.2029 -0.2299
48STYR    R3  792  10.369   7.643   3.799  0.2090 -0.2051 -0.2442
49STYR     B  793  10.138   7.731   3.256  0.2856 -0.2509 -0.2807
49STYR    R1  794  10.264   7.920   3.389  0.2520 -0.2328 -0.2739
49STYR    R2  795  10.273   8.056   3.622  0.2316 -0.2305 -0.2744
49STYR    R3  796  10.277   8.190   3.388  0.2362 -0.2320 -0.2753
50STYR     B  797   9.905   7.744   3.273  0.2692 -0.2628 -0.2968
50STYR    R1  798  10.019   7.506   3.314  0.2889 -0.2526 -0.2748
50STYR    R2  799  10.033   7.303   3.492  0.2854 -0.2530 -0.2750
50STYR    R3  800   9.981   7.251   3.232  0.3088 -0.2540 -0.2795
 1STYR     B  801  11.274   7.369   3.163  0.3186 -0.1944 -0.1071
 1STYR    R1  802  11.282   7.258   2.928  0.3558 -0.1870 -0.1251
 1STYR    R2  803  11.351   7.311   2.672  0.3883 -0.2053 -0.1201
 1STYR    R3  804  11.107   7.210   2.727  0.3848 -0.2105 -0.1449
 2STYR     B  805  11.243   7.397   3.391  0.2847 -0.1755 -0.1343
 2STYR    R1  806  11.451   7.253   3.312  0.2880 -0.1750 -0.1055
 2STYR    R2  807  11.552   7.004   3.337  0.3159 -0.1611 -0.0789
 2STYR    R3  808  11.718   7.216   3.325  0.2906 -0.1404 -0.0626
 3STYR     B  809  11.235   7.374   3.623  0.2508 -0.1752 -0.1252
 3STYR    R1  810  11.049   7.254   3.507  0.2827 -0.1804 -0.1381
 3STYR    R2  811  10.783   7.217   3.538  0.2819 -0.2024 -0.1708
 3STYR    R3  812  10.949   7.004   3.531  0.3010 -0.1884 -0.1457
 4STYR     B  813  11.250   7.449   3.847  0.2327 -0.1556 -0.1538
 4STYR    R1  814  11.158   7.214   3.831  0.2307 -0.1610 -0.1321
 4STYR    R2  815  10.960   7.079   3.954  0.2343 -0.1721 -0.1387
 4STYR    R3  816  11.201   6.963   3.920  0.2399 -0.1608 -0.1360
 5STYR     B  817  11.258   7.627   4.003  0.2028 -0.1513 -0.1615
 5STYR    R1  818  11.360   7.390   4.079  0.2068 -0.1381 -0.1296
 5STYR    R2  819  11.337   7.202   4.272  0.1991 -0.1347 -0.1272
 5STYR    R3  820  11.578   7.251   4.160  0.2082 -0.1193 -0.1009
 6STYR     B  821  11.129   7.816   4.065  0.1771 -0.1530 -0.1715
 6STYR    R1  822  11.006   7.636   3.913  0.2033 -0.1619 -0.1644
 6STYR    R2  823  10.853   7.621   3.691  0.2294 -0.1706 -0.1819
 6STYR    R3  824  10.791   7.473   3.908  0.2237 -0.1880 -0.1954
 7STYR     B  825  11.077   7.960   4.243  0.1567 -0.1407 -0.1723
 7STYR    R1  826  11.057   7.695   4.287  0.1608 -0.1484 -0.1732
 7STYR    R2  827  10.884   7.497   4.349  0.1562 -0.1412 -0.1628
 7STYR    R3  828  11.123   7.512   4.474  0.1540 -0.1364 -0.1591
 8STYR     B  829  10.939   8.126   4.332  0.1394 -0.1580 -0.1891
 8STYR    R1  830  10.828   7.955   4.159  0.1563 -0.1676 -0.2204
 8STYR    R2  831  10.625   7.778   4.144  0.1562 -0.1670 -0.2256
 8STYR    R3  832  10.673   7.945   3.938  0.1806 -0.1876 -0.2367
 9STYR     B  833  10.839   8.333   4.318  0.1233 -0.1798 -0.2210
 9STYR    R1  834  11.062   8.288   4.172  0.1331 -0.1504 -0.1858
 9STYR    R2  835  11.298   8.407   4.116  0.1323 -0.1384 -0.1642
 9STYR    R3  836  11.164   8.275   3.922  0.1690 -0.1668 -0.1704
10STYR     B  837  10.664   8.486   4.335  0.1097 -0.1660 -0.2534
10STYR    R1  838  10.585   8.243   4.347  0.1121 -0.1840 -0.2552
10STYR    R2  839  10.459   8.048   4.486  0.1150 -0.1959 -0.2692
10STYR    R3  840  10.383   8.104   4.233  0.1299 -0.1949 -0.2735
11STYR     B  841  10.601   8.686   4.231  0.1165 -0.1666 -0.2560
11STYR    R1  842  10.634   8.482   4.073  0.1367 -0.1826 -0.2497
11STYR    R2  843  10.496   8.337   3.891  0.1788 -0.2093 -0.2604
11STYR    R3  844  10.758   8.391   3.851  0.1751 -0.1705 -0.2333
12STYR     B  845  10.437   8.764   4.081  0.1231 -0.1946 -0.2778
12STYR    R1  846  10.354   8.642   4.309  0.1053 -0.1989 -0.3019
12STYR    R2  847  10.188   8.675   4.520  0.0746 -0.1828 -0.3283
12STYR    R3  848  10.175   8.450   4.372  0.1043 -0.1993 -0.3060
13STYR     B  849  10.417   8.916   3.906  0.1294 -0.2032 -0.3077
13STYR    R1  850  10.240   8.727   3.901  0.1541 -0.2274 -0.2979
13STYR    R2  851   9.971   8.724   3.877  0.1574 -0.2349 -0.3356
13STYR    R3  852  10.119   8.530   3.761  0.1780 -0.2400 -0.3009
14STYR     B  853  10.354   8.983   3.693  0.1488 -0.2027 -0.3087
14STYR    R1  854  10.307   9.147   3.903  0.1186 -0.2111 -0.3221
14STYR    R2  855  10.094   9.299   3.968  0.0959 -0.2294 -0.3539
14STYR    R3  856  10.344   9.389   4.017  0.0812 -0.2027 -0.3280
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15STYR     B  857  10.408   9.083   3.472  0.1711 -0.2422 -0.3001
15STYR    R1  858  10.146   9.036   3.540  0.1716 -0.2241 -0.3308
15STYR    R2  859   9.918   8.913   3.463  0.1937 -0.2506 -0.3542
15STYR    R3  860   9.909   9.164   3.563  0.1559 -0.2458 -0.3692
16STYR     B  861  10.631   9.226   3.474  0.1650 -0.1983 -0.2941
16STYR    R1  862  10.660   8.959   3.519  0.1820 -0.1939 -0.2796
16STYR    R2  863  10.835   8.773   3.430  0.1857 -0.2084 -0.2424
16STYR    R3  864  10.777   8.789   3.693  0.1636 -0.1755 -0.2492
17STYR     B  865  10.703   9.261   3.716  0.1297 -0.1910 -0.2746
17STYR    R1  866  10.504   9.416   3.608  0.1361 -0.1965 -0.3063
17STYR    R2  867  10.247   9.499   3.615  0.1271 -0.2203 -0.3540
17STYR    R3  868  10.447   9.680   3.621  0.1089 -0.2002 -0.3469
18STYR     B  869  10.889   9.191   3.843  0.1173 -0.1910 -0.2513
18STYR    R1  870  10.783   9.422   3.916  0.1085 -0.1777 -0.2784
18STYR    R2  871  10.792   9.692   3.923  0.0779 -0.1765 -0.2858
18STYR    R3  872  10.715   9.553   4.141  0.0559 -0.1776 -0.2943
19STYR     B  873  10.900   9.119   4.069  0.0961 -0.1560 -0.2466
19STYR    R1  874  11.072   9.001   3.914  0.1276 -0.1632 -0.2343
19STYR    R2  875  11.163   8.752   3.863  0.1397 -0.1614 -0.2219
19STYR    R3  876  11.337   8.957   3.893  0.1324 -0.1608 -0.1824
20STYR     B  877  10.789   9.115   4.274  0.0806 -0.1551 -0.2399
20STYR    R1  878  11.025   9.240   4.260  0.0719 -0.1225 -0.2393
20STYR    R2  879  11.117   9.473   4.360  0.0591 -0.1225 -0.2275
20STYR    R3  880  11.276   9.255   4.356  0.0639 -0.1190 -0.2189
21STYR     B  881  10.544   9.129   4.330  0.0517 -0.1710 -0.3061
21STYR    R1  882  10.699   9.273   4.491  0.0634 -0.1628 -0.2867
21STYR    R2  883  10.730   9.527   4.577  0.0319 -0.1598 -0.2840
21STYR    R3  884  10.727   9.324   4.754 -0.0295 -0.1540 -0.2780
22STYR     B  885  10.481   9.009   4.544  0.0575 -0.1784 -0.2995
22STYR    R1  886  10.281   9.082   4.371  0.0613 -0.1881 -0.3088
22STYR    R2  887  10.065   8.979   4.245  0.0911 -0.1981 -0.3519
22STYR    R3  888  10.042   9.207   4.387  0.0509 -0.2018 -0.3523
23STYR     B  889  10.613   8.838   4.654  0.0457 -0.1558 -0.2710
23STYR    R1  890  10.458   8.976   4.811  0.0180 -0.1695 -0.2980
23STYR    R2  891  10.464   9.114   5.043 -0.0193 -0.1451 -0.3114
23STYR    R3  892  10.276   8.924   5.004 -0.0064 -0.1566 -0.3175
24STYR     B  893  10.788   8.696   4.688  0.0492 -0.1515 -0.2449
24STYR    R1  894  10.564   8.601   4.760  0.0716 -0.1614 -0.2729
24STYR    R2  895  10.404   8.384   4.745  0.0773 -0.1662 -0.2650
24STYR    R3  896  10.452   8.500   4.984  0.0379 -0.1289 -0.2749
25STYR     B  897  11.004   8.635   4.744  0.0594 -0.1175 -0.2214
25STYR    R1  898  10.872   8.793   4.911  0.0106 -0.1265 -0.2384
25STYR    R2  899  10.779   8.813   5.164 -0.0120 -0.1279 -0.2466
25STYR    R3  900  10.898   9.025   5.047 -0.0123 -0.1236 -0.2390
26STYR     B  901  11.187   8.508   4.716  0.0585 -0.1148 -0.1817
26STYR    R1  902  10.958   8.398   4.800  0.0611 -0.1341 -0.2192
26STYR    R2  903  10.786   8.196   4.753  0.0743 -0.1430 -0.2293
26STYR    R3  904  10.837   8.273   5.006  0.0303 -0.1186 -0.2277
27STYR     B  905  11.287   8.354   4.555  0.0758 -0.1197 -0.1802
27STYR    R1  906  11.199   8.612   4.472  0.0977 -0.1414 -0.2090
27STYR    R2  907  11.042   8.732   4.288  0.1047 -0.1358 -0.2113
27STYR    R3  908  11.294   8.820   4.329  0.0961 -0.1237 -0.1845
28STYR     B  909  11.462   8.197   4.549  0.0922 -0.1149 -0.1692
28STYR    R1  910  11.252   8.114   4.675  0.0693 -0.1319 -0.1792
28STYR    R2  911  11.176   8.020   4.917  0.0590 -0.1183 -0.1771
28STYR    R3  912  11.094   7.896   4.691  0.0862 -0.1436 -0.1731
29STYR     B  913  11.671   8.104   4.583  0.0975 -0.0878 -0.1303
29STYR    R1  914  11.589   8.146   4.328  0.1156 -0.1044 -0.1224
29STYR    R2  915  11.700   8.245   4.103  0.1364 -0.1207 -0.1192
29STYR    R3  916  11.531   8.035   4.089  0.1713 -0.1491 -0.1154
30STYR     B  917  11.841   7.929   4.548  0.1149 -0.0949 -0.0831
30STYR    R1  918  11.649   7.906   4.750  0.0957 -0.0958 -0.0998
30STYR    R2  919  11.609   7.873   5.015  0.0666 -0.0799 -0.1022
30STYR    R3  920  11.474   7.720   4.838  0.1063 -0.1094 -0.1073
31STYR     B  921  11.939   7.862   4.332  0.1376 -0.1109 -0.0742
31STYR    R1  922  12.098   7.828   4.531  0.1214 -0.0719 -0.0568
31STYR    R2  923  12.264   7.628   4.603  0.1262 -0.0612 -0.0377
31STYR    R3  924  12.345   7.885   4.624  0.1025 -0.0553 -0.0162
32STYR     B  925  11.885   7.763   4.130  0.1611 -0.1148 -0.0623
32STYR    R1  926  11.715   7.723   4.328  0.1505 -0.0987 -0.0778
32STYR    R2  927  11.594   7.531   4.474  0.1434 -0.1072 -0.0950
32STYR    R3  928  11.455   7.748   4.395  0.1404 -0.1149 -0.1109
33STYR     B  929  11.743   7.631   4.004  0.1926 -0.1352 -0.0967
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33STYR    R1  930  11.936   7.518   4.156  0.1895 -0.0864 -0.0558
33STYR    R2  931  11.983   7.351   4.363  0.1592 -0.0773 -0.0416
33STYR    R3  932  12.140   7.341   4.144  0.1831 -0.0961 -0.0237
34STYR     B  933  11.648   7.615   3.793  0.2314 -0.1532 -0.0956
34STYR    R1  934  11.905   7.620   3.800  0.2274 -0.1211 -0.0663
34STYR    R2  935  12.123   7.747   3.704  0.2292 -0.1113 -0.0490
34STYR    R3  936  12.118   7.477   3.716  0.2554 -0.1103 -0.0138
35STYR     B  937  11.667   7.587   3.562  0.2637 -0.1370 -0.0817
35STYR    R1  938  11.681   7.369   3.728  0.2468 -0.1346 -0.0909
35STYR    R2  939  11.579   7.121   3.754  0.2618 -0.1403 -0.0868
35STYR    R3  940  11.841   7.164   3.800  0.2515 -0.1169 -0.0507
36STYR     B  941  11.673   7.741   3.378  0.2633 -0.1565 -0.0913
36STYR    R1  942  11.477   7.778   3.562  0.2391 -0.1614 -0.1181
36STYR    R2  943  11.374   7.975   3.714  0.2057 -0.1662 -0.1345
36STYR    R3  944  11.210   7.813   3.573  0.2363 -0.1649 -0.1718
37STYR     B  945  11.838   7.873   3.252  0.2685 -0.1316 -0.0896
37STYR    R1  946  11.676   7.682   3.120  0.3083 -0.1375 -0.1012
37STYR    R2  947  11.700   7.464   2.963  0.3200 -0.1668 -0.0591
37STYR    R3  948  11.527   7.660   2.896  0.3325 -0.1742 -0.1139
38STYR     B  949  12.045   7.996   3.293  0.2517 -0.1355 -0.0719
38STYR    R1  950  11.848   8.026   3.475  0.2341 -0.1289 -0.0848
38STYR    R2  951  11.815   8.031   3.743  0.2200 -0.1218 -0.0867
38STYR    R3  952  11.692   8.214   3.588  0.2063 -0.1425 -0.1004
39STYR     B  953  12.287   7.950   3.362  0.2405 -0.1160 -0.0516
39STYR    R1  954  12.127   7.747   3.245  0.2935 -0.1297 -0.0603
39STYR    R2  955  12.061   7.489   3.288  0.2836 -0.1215 -0.0256
39STYR    R3  956  12.124   7.573   3.039  0.3126 -0.1631 -0.0324
40STYR     B  957  12.416   8.059   3.554  0.2353 -0.0936 -0.0257
40STYR    R1  958  12.281   8.218   3.368  0.2413 -0.1279 -0.0501
40STYR    R2  959  12.115   8.431   3.361  0.2440 -0.1258 -0.0490
40STYR    R3  960  12.325   8.417   3.192  0.2376 -0.1326 -0.0563
41STYR     B  961  12.451   8.282   3.650  0.2012 -0.0872 -0.0409
41STYR    R1  962  12.363   8.098   3.818  0.1886 -0.0798 -0.0318
41STYR    R2  963  12.167   8.071   4.002  0.1706 -0.0822 -0.0513
41STYR    R3  964  12.424   8.023   4.070  0.1661 -0.0643 -0.0217
42STYR     B  965  12.527   8.509   3.620  0.2007 -0.1020 -0.0388
42STYR    R1  966  12.485   8.433   3.870  0.1664 -0.0944 -0.0355
42STYR    R2  967  12.600   8.421   4.114  0.1405 -0.0788 -0.0224
42STYR    R3  968  12.352   8.525   4.087  0.1392 -0.0902 -0.0539
43STYR     B  969  12.594   8.675   3.459  0.1947 -0.0998 -0.0595
43STYR    R1  970  12.694   8.423   3.440  0.2286 -0.0787 -0.0056
43STYR    R2  971  12.716   8.232   3.251  0.2428 -0.0886  0.0059
43STYR    R3  972  12.926   8.287   3.412  0.2257 -0.0912  0.0294
44STYR     B  973  12.706   8.886   3.448  0.1881 -0.0667 -0.0355
44STYR    R1  974  12.648   8.800   3.215  0.2204 -0.0851 -0.0261
44STYR    R2  975  12.769   8.744   2.981  0.2415 -0.1120 -0.0089
44STYR    R3  976  12.560   8.915   2.987  0.2541 -0.0952 -0.0442
45STYR     B  977  12.649   9.117   3.498  0.1795 -0.0815 -0.0412
45STYR    R1  978  12.860   9.077   3.342  0.1942 -0.0778 -0.0144
45STYR    R2  979  12.948   9.162   3.101  0.2169 -0.0888 -0.0100
45STYR    R3  980  13.124   9.108   3.299  0.1971 -0.0633  0.0145
46STYR     B  981  12.435   9.173   3.597  0.1907 -0.0891 -0.0913
46STYR    R1  982  12.597   9.055   3.751  0.1265 -0.0831 -0.0425
46STYR    R2  983  12.694   9.080   4.001  0.1099 -0.0514 -0.0392
46STYR    R3  984  12.604   8.841   3.915  0.1533 -0.0718 -0.0287
47STYR     B  985  12.268   9.027   3.679  0.1601 -0.1132 -0.0853
47STYR    R1  986  12.222   9.284   3.691  0.1436 -0.1053 -0.0940
47STYR    R2  987  12.036   9.465   3.616  0.1414 -0.1234 -0.1322
47STYR    R3  988  12.134   9.468   3.868  0.0945 -0.1096 -0.1139
48STYR     B  989  12.208   8.808   3.714  0.1605 -0.1147 -0.0880
48STYR    R1  990  12.165   8.886   3.477  0.1820 -0.1164 -0.0949
48STYR    R2  991  11.961   8.886   3.300  0.1936 -0.1457 -0.1082
48STYR    R3  992  12.212   8.829   3.217  0.2035 -0.1316 -0.0876
49STYR     B  993  12.031   8.651   3.730  0.1594 -0.1126 -0.0893
49STYR    R1  994  11.993   8.910   3.810  0.1488 -0.1228 -0.1049
49STYR    R2  995  11.819   9.115   3.783  0.1502 -0.1260 -0.1383
49STYR    R3  996  11.914   9.050   4.027  0.1152 -0.1153 -0.1218
50STYR     B  997  12.019   8.430   3.806  0.1807 -0.1037 -0.0913
50STYR    R1  998  11.800   8.574   3.825  0.1662 -0.1046 -0.1181
50STYR    R2  999  11.535   8.549   3.782  0.1746 -0.1386 -0.1514
50STYR    R3 1000  11.625   8.683   3.998  0.1303 -0.1374 -0.1336
 1STYR     B 1001  13.871   9.699   7.894 -0.3801  0.1807  0.0938
 1STYR    R1 1002  13.784   9.792   8.133 -0.4215  0.2019  0.0543
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1STYR	R2	1003	13.637	9.997	8.229	-0.4461	0.1946	0.0323
1STYR	R3	1004	13.586	9.745	8.312	-0.4189	0.1968	0.0559
2STYR	B	1005	13.959	9.764	7.693	-0.3537	0.1834	0.0721
2STYR	R1	1006	13.801	9.549	7.694	-0.3530	0.1832	0.0805
2STYR	R2	1007	13.573	9.449	7.589	-0.3353	0.1592	0.0649
2STYR	R3	1008	13.791	9.291	7.615	-0.3220	0.1807	0.0844
3STYR	B	1009	14.032	9.970	7.591	-0.3557	0.1750	0.0767
3STYR	R1	1010	14.218	9.791	7.609	-0.3479	0.2069	0.1157
3STYR	R2	1011	14.460	9.729	7.711	-0.3598	0.2114	0.1469
3STYR	R3	1012	14.413	9.696	7.448	-0.3249	0.2116	0.1405
4STYR	B	1013	14.109	10.039	7.381	-0.3231	0.1602	0.0813
4STYR	R1	1014	14.116	10.221	7.574	-0.3856	0.1889	0.0661
4STYR	R2	1015	14.029	10.472	7.621	-0.3862	0.1897	0.0609
4STYR	R3	1016	14.282	10.403	7.684	-0.3891	0.1886	0.0720
5STYR	B	1017	14.182	9.974	7.168	-0.3340	0.1698	0.0928
5STYR	R1	1018	14.172	10.235	7.225	-0.3307	0.1762	0.0638
5STYR	R2	1019	14.322	10.459	7.250	-0.3446	0.1829	0.0873
5STYR	R3	1020	14.068	10.476	7.160	-0.3348	0.1728	0.0580
6STYR	B	1021	14.366	9.905	7.046	-0.3105	0.1702	0.1313
6STYR	R1	1022	14.142	9.826	6.951	-0.2748	0.1599	0.0988
6STYR	R2	1023	14.029	9.594	6.870	-0.2399	0.1428	0.0989
6STYR	R3	1024	13.991	9.820	6.727	-0.2371	0.1275	0.0742
7STYR	B	1025	14.576	9.835	6.966	-0.2884	0.1978	0.1547
7STYR	R1	1026	14.469	10.085	6.900	-0.2728	0.1695	0.1058
7STYR	R2	1027	14.524	10.349	6.896	-0.2897	0.1734	0.1254
7STYR	R3	1028	14.360	10.243	6.710	-0.2672	0.1732	0.1056
8STYR	B	1029	14.715	9.645	7.041	-0.2836	0.1879	0.1810
8STYR	R1	1030	14.571	9.610	6.819	-0.2410	0.1680	0.1544
8STYR	R2	1031	14.389	9.431	6.730	-0.2251	0.1595	0.1389
8STYR	R3	1032	14.590	9.512	6.568	-0.2133	0.1665	0.1569
9STYR	B	1033	14.793	9.426	6.977	-0.2465	0.2024	0.1964
9STYR	R1	1034	14.657	9.431	7.199	-0.2866	0.2150	0.1638
9STYR	R2	1035	14.436	9.301	7.283	-0.2899	0.2048	0.1395
9STYR	R3	1036	14.641	9.341	7.453	-0.3156	0.2255	0.1658
10STYR	B	1037	14.843	9.205	7.059	-0.2588	0.1958	0.2091
10STYR	R1	1038	14.790	9.220	6.795	-0.2043	0.1857	0.1910
10STYR	R2	1039	14.889	9.206	6.545	-0.1930	0.1756	0.1960
10STYR	R3	1040	14.645	9.104	6.599	-0.1967	0.1801	0.1885
11STYR	B	1041	15.019	9.060	7.138	-0.2415	0.1976	0.2202
11STYR	R1	1042	14.789	8.992	7.226	-0.2590	0.2023	0.2157
11STYR	R2	1043	14.692	8.922	7.468	-0.2893	0.1975	0.2022
11STYR	R3	1044	14.636	8.771	7.251	-0.2487	0.1928	0.1948
12STYR	B	1045	15.167	8.918	7.047	-0.2256	0.2067	0.2510
12STYR	R1	1046	15.188	9.166	6.969	-0.2481	0.2282	0.2491
12STYR	R2	1047	15.388	9.348	6.967	-0.2463	0.2264	0.2583
12STYR	R3	1048	15.212	9.337	6.762	-0.2350	0.2258	0.2486
13STYR	B	1049	15.280	8.729	7.003	-0.2182	0.2645	0.2853
13STYR	R1	1050	15.392	8.909	7.166	-0.2429	0.2198	0.2973
13STYR	R2	1051	15.528	8.919	7.399	-0.2694	0.2518	0.3115
13STYR	R3	1052	15.602	9.076	7.192	-0.2610	0.2413	0.3065
14STYR	B	1053	15.331	8.557	6.856	-0.1896	0.2182	0.2970
14STYR	R1	1054	15.223	8.771	6.749	-0.1972	0.2081	0.2780
14STYR	R2	1055	15.035	8.814	6.560	-0.1761	0.1829	0.2513
14STYR	R3	1056	15.258	8.966	6.566	-0.1831	0.1925	0.2641
15STYR	B	1057	15.459	8.374	6.763	-0.1521	0.2341	0.3146
15STYR	R1	1058	15.188	8.378	6.726	-0.1657	0.2289	0.2810
15STYR	R2	1059	14.963	8.232	6.751	-0.1492	0.2041	0.2850
15STYR	R3	1060	15.003	8.380	6.529	-0.1484	0.1725	0.2639
16STYR	B	1061	15.688	8.389	6.699	-0.1673	0.2287	0.3439
16STYR	R1	1062	15.628	8.425	6.961	-0.2065	0.2624	0.3376
16STYR	R2	1063	15.677	8.337	7.211	-0.2176	0.2668	0.3414
16STYR	R3	1064	15.678	8.602	7.158	-0.2390	0.2670	0.3418
17STYR	B	1065	15.891	8.492	6.717	-0.1663	0.2404	0.3564
17STYR	R1	1066	15.877	8.278	6.563	-0.1187	0.2455	0.3637
17STYR	R2	1067	15.929	8.190	6.313	-0.1112	0.2373	0.3682
17STYR	R3	1068	15.981	8.032	6.526	-0.1224	0.2423	0.3747
18STYR	B	1069	16.049	8.660	6.752	-0.1762	0.2635	0.3890
18STYR	R1	1070	15.807	8.740	6.696	-0.1950	0.2263	0.3282
18STYR	R2	1071	15.680	8.913	6.532	-0.1685	0.2495	0.3320
18STYR	R3	1072	15.618	8.906	6.795	-0.1970	0.2262	0.3248
19STYR	B	1073	16.280	8.678	6.812	-0.1886	0.2886	0.4006
19STYR	R1	1074	16.131	8.487	6.933	-0.1756	0.2760	0.3881
19STYR	R2	1075	16.091	8.404	7.187	-0.2287	0.2922	0.3851

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19STYR    R3 1076  16.123   8.223   6.990 -0.1884  0.2796  0.4032
20STYR     B 1077  16.426   8.842   6.890 -0.2019  0.2885  0.4062
20STYR    R1 1078  16.534   8.630   6.776 -0.1920  0.3006  0.4211
20STYR    R2 1079  16.718   8.441   6.831 -0.1973  0.3050  0.4543
20STYR    R3 1080  16.695   8.538   6.580 -0.1436  0.3160  0.4535
21STYR     B 1081  16.445   9.040   7.011 -0.2368  0.2887  0.3973
21STYR    R1 1082  16.466   8.819   7.147 -0.2346  0.3091  0.4195
21STYR    R2 1083  16.365   8.692   7.363 -0.2546  0.2918  0.3999
21STYR    R3 1084  16.632   8.702   7.325 -0.2496  0.3229  0.4425
22STYR     B 1085  16.388   9.135   7.219 -0.2663  0.3108  0.3710
22STYR    R1 1086  16.200   9.017   7.089 -0.2302  0.2844  0.3669
22STYR    R2 1087  15.952   9.049   6.988 -0.2184  0.2741  0.3342
22STYR    R3 1088  16.008   8.836   7.145 -0.2352  0.2869  0.3578
23STYR     B 1089  16.208   9.172   7.369 -0.2989  0.2704  0.3580
23STYR    R1 1090  16.445   9.131   7.473 -0.2931  0.3139  0.3903
23STYR    R2 1091  16.614   9.248   7.649 -0.3345  0.3347  0.4165
23STYR    R3 1092  16.558   8.985   7.670 -0.3224  0.3325  0.4209
24STYR     B 1093  15.986   9.214   7.424 -0.2837  0.2868  0.3373
24STYR    R1 1094  16.144   9.273   7.614 -0.3014  0.3088  0.3441
24STYR    R2 1095  16.227   9.460   7.791 -0.3531  0.3206  0.3562
24STYR    R3 1096  16.174   9.209   7.875 -0.3383  0.3154  0.3500
25STYR     B 1097  15.809   9.210   7.576 -0.3152  0.2903  0.3211
25STYR    R1 1098  15.961   8.987   7.546 -0.3022  0.2774  0.3459
25STYR    R2 1099  15.932   8.720   7.524 -0.2710  0.2734  0.3540
25STYR    R3 1100  16.120   8.822   7.689 -0.3060  0.3007  0.3772
26STYR     B 1101  15.583   9.302   7.585 -0.3159  0.2609  0.2907
26STYR    R1 1102  15.726   9.316   7.811 -0.3517  0.2922  0.3102
26STYR    R2 1103  15.831   9.477   8.000 -0.3605  0.3007  0.3078
26STYR    R3 1104  15.701   9.252   8.072 -0.3742  0.3102  0.3125
27STYR     B 1105  15.507   9.498   7.694 -0.3423  0.2665  0.2787
27STYR    R1 1106  15.323   9.379   7.528 -0.3117  0.2637  0.2394
27STYR    R2 1107  15.064   9.302   7.532 -0.3040  0.2375  0.2325
27STYR    R3 1108  15.163   9.434   7.318 -0.3080  0.2352  0.2292
28STYR     B 1109  15.326   9.645   7.681 -0.3483  0.2690  0.2333
28STYR    R1 1110  15.551   9.755   7.773 -0.3686  0.2861  0.2775
28STYR    R2 1111  15.664   9.887   7.980 -0.3880  0.3043  0.2765
28STYR    R3 1112  15.699   9.976   7.727 -0.3808  0.2935  0.2737
29STYR     B 1113  15.269   9.850   7.755 -0.3821  0.2492  0.2288
29STYR    R1 1114  15.100   9.759   7.588 -0.3402  0.2343  0.2037
29STYR    R2 1115  14.840   9.690   7.563 -0.3390  0.2383  0.1792
29STYR    R3 1116  14.961   9.831   7.367 -0.3220  0.2479  0.1966
30STYR     B 1117  15.178  10.064   7.712 -0.3863  0.2718  0.1982
30STYR    R1 1118  15.209   9.971   7.975 -0.4065  0.2732  0.2155
30STYR    R2 1119  15.323  10.043   8.209 -0.4369  0.2817  0.2277
30STYR    R3 1120  15.081   9.923   8.207 -0.4323  0.2727  0.2012
31STYR     B 1121  14.957  10.141   7.774 -0.3797  0.2338  0.1747
31STYR    R1 1122  15.096  10.301   7.613 -0.3832  0.2438  0.1861
31STYR    R2 1123  15.175  10.559   7.601 -0.3945  0.2470  0.1780
31STYR    R3 1124  15.052  10.445   7.389 -0.3690  0.2283  0.1732
32STYR     B 1125  14.768  10.037   7.878 -0.3984  0.2363  0.1685
32STYR    R1 1126  14.864  10.251   8.000 -0.4219  0.2403  0.1656
32STYR    R2 1127  14.961  10.343   8.235 -0.4559  0.2650  0.1701
32STYR    R3 1128  14.785  10.492   8.094 -0.4355  0.2503  0.1288
33STYR     B 1129  14.552  10.110   7.926 -0.4191  0.2406  0.1263
33STYR    R1 1130  14.637  10.133   7.674 -0.3771  0.2065  0.1433
33STYR    R2 1131  14.655  10.325   7.485 -0.3742  0.2100  0.1471
33STYR    R3 1132  14.565  10.079   7.419 -0.3447  0.2024  0.1350
34STYR     B 1133  14.328  10.058   7.967 -0.4149  0.2343  0.1045
34STYR    R1 1134  14.401  10.274   8.080 -0.4496  0.2270  0.1085
34STYR    R2 1135  14.378  10.388   8.324 -0.4742  0.2448  0.0979
34STYR    R3 1136  14.329  10.533   8.101 -0.4458  0.2302  0.0819
35STYR     B 1137  14.211   9.889   8.064 -0.4028  0.2131  0.0877
35STYR    R1 1138  14.082  10.112   8.021 -0.4257  0.1851  0.0768
35STYR    R2 1139  13.946  10.301   8.157 -0.4405  0.1886  0.0570
35STYR    R3 1140  13.853  10.212   7.919 -0.4058  0.1946  0.0412
36STYR     B 1141  14.241   9.656   8.156 -0.4070  0.2152  0.0997
36STYR    R1 1142  14.187   9.878   8.318 -0.4212  0.2340  0.0960
36STYR    R2 1143  14.008   9.982   8.491 -0.4542  0.2339  0.0622
36STYR    R3 1144  14.273  10.001   8.542 -0.4639  0.2314  0.1138
37STYR     B 1145  14.485   9.601   8.199 -0.3976  0.2397  0.1564
37STYR    R1 1146  14.320   9.410   8.275 -0.4206  0.2297  0.1321
37STYR    R2 1147  14.280   9.258   8.495 -0.4223  0.2381  0.1375
37STYR    R3 1148  14.302   9.141   8.253 -0.3778  0.2253  0.1475
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38STYR     B 1149  14.683   9.646   8.098 -0.3982  0.2371  0.1698
38STYR    R1 1150  14.631   9.801   8.296 -0.4276  0.2578  0.1367
38STYR    R2 1151  14.723   9.878   8.537 -0.4853  0.2551  0.1599
38STYR    R3 1152  14.653  10.064   8.355 -0.4564  0.2571  0.1507
39STYR     B 1153  14.879   9.605   7.978 -0.3617  0.2630  0.1889
39STYR    R1 1154  14.876   9.533   8.236 -0.4050  0.2702  0.2055
39STYR    R2 1155  15.010   9.568   8.467 -0.4437  0.2879  0.2254
39STYR    R3 1156  14.929   9.321   8.394 -0.3975  0.2766  0.2117
40STYR     B 1157  15.079   9.494   8.003 -0.4008  0.2523  0.2018
40STYR    R1 1158  14.859   9.350   7.959 -0.3599  0.2391  0.1997
40STYR    R2 1159  14.783   9.140   7.808 -0.3438  0.2357  0.1964
40STYR    R3 1160  14.703   9.157   8.066 -0.3841  0.2493  0.1830
41STYR     B 1161  15.205   9.307   7.968 -0.3680  0.2575  0.2343
41STYR    R1 1162  15.299   9.463   8.147 -0.3903  0.2646  0.2556
41STYR    R2 1163  15.400   9.413   8.392 -0.4100  0.2918  0.2694
41STYR    R3 1164  15.498   9.616   8.244 -0.4213  0.2967  0.2686
42STYR     B 1165  15.293   9.116   7.876 -0.3134  0.2611  0.2761
42STYR    R1 1166  15.171   9.069   8.089 -0.3651  0.2690  0.2563
42STYR    R2 1167  15.000   8.884   8.184 -0.3670  0.2679  0.2508
42STYR    R3 1168  15.217   8.954   8.328 -0.3768  0.2758  0.2618
43STYR     B 1169  15.219   8.934   7.745 -0.3119  0.2487  0.2547
43STYR    R1 1170  15.450   8.918   7.881 -0.3388  0.2652  0.2944
43STYR    R2 1171  15.713   8.857   7.865 -0.3317  0.2946  0.2985
43STYR    R3 1172  15.565   8.764   8.071 -0.3194  0.2963  0.3081
44STYR     B 1173  15.129   8.857   7.548 -0.2772  0.2426  0.2515
44STYR    R1 1174  15.012   8.757   7.750 -0.3059  0.2564  0.2567
44STYR    R2 1175  14.762   8.706   7.837 -0.3132  0.2359  0.2239
44STYR    R3 1176  14.953   8.516   7.857 -0.3038  0.2467  0.2360
45STYR     B 1177  15.072   8.668   7.418 -0.2699  0.2366  0.2664
45STYR    R1 1178  15.284   8.635   7.582 -0.2790  0.2475  0.2836
45STYR    R2 1179  15.370   8.476   7.782 -0.2824  0.2662  0.2998
45STYR    R3 1180  15.541   8.551   7.587 -0.2636  0.2969  0.3279
46STYR     B 1181  15.179   8.475   7.341 -0.2556  0.2155  0.2602
46STYR    R1 1182  14.925   8.449   7.394 -0.2426  0.2194  0.2401
46STYR    R2 1183  14.708   8.336   7.279 -0.2272  0.2052  0.2248
46STYR    R3 1184  14.768   8.282   7.537 -0.2541  0.2262  0.2355
47STYR     B 1185  15.165   8.308   7.181 -0.2263  0.2394  0.2748
47STYR    R1 1186  15.274   8.238   7.405 -0.2256  0.2548  0.3108
47STYR    R2 1187  15.231   8.056   7.600 -0.2504  0.2473  0.2984
47STYR    R3 1188  15.483   8.107   7.516 -0.2381  0.2634  0.3448
48STYR     B 1189  15.283   8.130   7.089 -0.2111  0.2322  0.2897
48STYR    R1 1190  15.031   8.081   7.148 -0.2001  0.2206  0.2673
48STYR    R2 1191  14.801   7.982   7.046 -0.1856  0.2009  0.2538
48STYR    R3 1192  14.880   7.912   7.295 -0.2016  0.2189  0.2639
49STYR     B 1193  15.252   7.935   6.965 -0.1744  0.2350  0.3003
49STYR    R1 1194  15.500   7.989   7.038 -0.1779  0.2460  0.3364
49STYR    R2 1195  15.745   8.002   6.925 -0.1644  0.2348  0.3645
49STYR    R3 1196  15.716   7.896   7.172 -0.1944  0.2559  0.3701
50STYR     B 1197  15.205   7.729   6.868 -0.1443  0.2196  0.3124
50STYR    R1 1198  15.301   7.920   6.708 -0.1470  0.2043  0.3115
50STYR    R2 1199  15.253   8.028   6.465 -0.1029  0.2012  0.3014
50STYR    R3 1200  15.506   7.972   6.541 -0.1144  0.2234  0.3571
 1STYR     B 1201  11.708   9.627   3.884  0.0932 -0.1221 -0.1956
 1STYR    R1 1202  11.883   9.773   4.009  0.0648 -0.1018 -0.1780
 1STYR    R2 1203  11.956   9.851   4.257  0.0168 -0.0844 -0.1692
 1STYR    R3 1204  11.935  10.033   4.059  0.0458 -0.0969 -0.1839
 2STYR     B 1205  11.612   9.629   3.684  0.1189 -0.1449 -0.1834
 2STYR    R1 1206  11.455   9.564   3.872  0.0953 -0.1429 -0.2124
 2STYR    R2 1207  11.294   9.365   3.958  0.1003 -0.1526 -0.2252
 2STYR    R3 1208  11.206   9.620   3.962  0.0884 -0.1568 -0.2226
 3STYR     B 1209  11.436   9.689   3.532  0.1415 -0.1523 -0.2161
 3STYR    R1 1210  11.645   9.527   3.444  0.1554 -0.1394 -0.1718
 3STYR    R2 1211  11.827   9.507   3.245  0.1681 -0.1324 -0.1610
 3STYR    R3 1212  11.737   9.284   3.368  0.1815 -0.1348 -0.1554
 4STYR     B 1213  11.389   9.675   3.307  0.1626 -0.1659 -0.2044
 4STYR    R1 1214  11.371   9.910   3.392  0.1070 -0.1574 -0.2378
 4STYR    R2 1215  11.446  10.167   3.351  0.1038 -0.1571 -0.2419
 4STYR    R3 1216  11.184  10.100   3.347  0.1058 -0.1641 -0.2605
 5STYR     B 1217  11.290   9.536   3.139  0.2023 -0.1888 -0.2275
 5STYR    R1 1218  11.126   9.637   3.322  0.1543 -0.1945 -0.2632
 5STYR    R2 1219  10.886   9.759   3.335  0.1421 -0.2142 -0.3012
 5STYR    R3 1220  10.946   9.561   3.508  0.1506 -0.1746 -0.2587
 6STYR     B 1221  11.332   9.319   3.065  0.2004 -0.1895 -0.2068
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6STYR	R1	1222	11.284	9.479	2.879	0.2297	-0.2081	-0.2147
6STYR	R2	1223	11.153	9.485	2.643	0.2655	-0.2101	-0.2347
6STYR	R3	1224	11.407	9.577	2.659	0.2581	-0.1965	-0.1938
7STYR	B	1225	11.431	9.124	3.112	0.2176	-0.1654	-0.1867
7STYR	R1	1226	11.279	9.223	3.295	0.1927	-0.1801	-0.2150
7STYR	R2	1227	11.081	9.139	3.459	0.1768	-0.1934	-0.2409
7STYR	R3	1228	11.298	9.263	3.562	0.1411	-0.1519	-0.2156
8STYR	B	1229	11.602	8.980	3.045	0.2282	-0.1759	-0.1620
8STYR	R1	1230	11.484	8.930	3.275	0.1890	-0.1418	-0.1716
8STYR	R2	1231	11.335	8.766	3.430	0.1918	-0.1705	-0.1992
8STYR	R3	1232	11.554	8.887	3.532	0.1749	-0.1634	-0.1713
9STYR	B	1233	11.593	8.760	2.949	0.2472	-0.1642	-0.1429
9STYR	R1	1234	11.790	8.919	2.880	0.2421	-0.1662	-0.1331
9STYR	R2	1235	11.885	9.024	2.650	0.2661	-0.1804	-0.1297
9STYR	R3	1236	12.056	8.930	2.837	0.2476	-0.1452	-0.0948
10STYR	B	1237	11.382	8.641	2.928	0.2401	-0.1983	-0.1912
10STYR	R1	1238	11.438	8.849	2.760	0.2859	-0.1824	-0.1644
10STYR	R2	1239	11.439	8.895	2.494	0.3080	-0.2069	-0.1687
10STYR	R3	1240	11.357	9.088	2.665	0.2814	-0.1957	-0.1940
11STYR	B	1241	11.265	8.500	3.063	0.2390	-0.1933	-0.1972
11STYR	R1	1242	11.517	8.501	3.114	0.2448	-0.1828	-0.1583
11STYR	R2	1243	11.695	8.526	3.316	0.2139	-0.1446	-0.1357
11STYR	R3	1244	11.699	8.307	3.158	0.2596	-0.1590	-0.1144
12STYR	B	1245	11.043	8.442	3.092	0.2599	-0.2030	-0.1931
12STYR	R1	1246	11.092	8.695	3.021	0.2562	-0.1821	-0.2041
12STYR	R2	1247	11.017	8.875	2.834	0.2429	-0.2102	-0.2258
12STYR	R3	1248	11.018	8.944	3.094	0.2169	-0.1852	-0.2322
13STYR	B	1249	10.945	8.219	3.104	0.2702	-0.1897	-0.1975
13STYR	R1	1250	11.087	8.353	3.313	0.2320	-0.1933	-0.2019
13STYR	R2	1251	11.059	8.452	3.563	0.1778	-0.2014	-0.2045
13STYR	R3	1252	11.290	8.334	3.490	0.2166	-0.1425	-0.1782
14STYR	B	1253	10.961	8.060	2.923	0.2975	-0.2159	-0.1836
14STYR	R1	1254	10.917	8.293	2.833	0.2871	-0.2294	-0.2190
14STYR	R2	1255	10.742	8.387	2.650	0.3083	-0.2339	-0.2415
14STYR	R3	1256	10.993	8.486	2.660	0.3030	-0.2237	-0.2057
15STYR	B	1257	11.134	8.066	2.753	0.3303	-0.2164	-0.1743
15STYR	R1	1258	11.193	8.003	3.011	0.2878	-0.2003	-0.1707
15STYR	R2	1259	11.374	8.039	3.209	0.2567	-0.1736	-0.1470
15STYR	R3	1260	11.258	7.798	3.174	0.2802	-0.1847	-0.1480
16STYR	B	1261	11.374	8.091	2.777	0.3065	-0.1846	-0.1469
16STYR	R1	1262	11.294	7.954	2.564	0.3512	-0.2204	-0.1482
16STYR	R2	1263	11.332	7.716	2.443	0.3738	-0.2180	-0.1460
16STYR	R3	1264	11.355	7.944	2.301	0.3770	-0.2162	-0.1425
17STYR	B	1265	11.507	8.272	2.723	0.3147	-0.1944	-0.1713
17STYR	R1	1266	11.631	8.046	2.724	0.3211	-0.1939	-0.1198
17STYR	R2	1267	11.757	7.870	2.563	0.3509	-0.1857	-0.1055
17STYR	R3	1268	11.858	7.926	2.807	0.3244	-0.1723	-0.0977
18STYR	B	1269	11.635	8.419	2.643	0.3194	-0.2051	-0.1175
18STYR	R1	1270	11.399	8.431	2.531	0.3311	-0.1907	-0.1518
18STYR	R2	1271	11.221	8.336	2.352	0.3504	-0.2208	-0.1552
18STYR	R3	1272	11.407	8.516	2.275	0.3471	-0.2199	-0.1610
19STYR	B	1273	11.753	8.588	2.537	0.3072	-0.2044	-0.1216
19STYR	R1	1274	11.767	8.351	2.430	0.3422	-0.1912	-0.1135
19STYR	R2	1275	11.956	8.181	2.339	0.3704	-0.1771	-0.0812
19STYR	R3	1276	11.716	8.194	2.216	0.3855	-0.2052	-0.1136
20STYR	B	1277	11.972	8.631	2.480	0.3120	-0.1894	-0.1051
20STYR	R1	1278	11.922	8.516	2.716	0.2985	-0.1793	-0.1064
20STYR	R2	1279	12.022	8.309	2.858	0.2941	-0.1579	-0.0718
20STYR	R3	1280	11.981	8.548	2.978	0.2619	-0.1482	-0.1018
21STYR	B	1281	12.125	8.770	2.372	0.3329	-0.1559	-0.0884
21STYR	R1	1282	12.216	8.606	2.558	0.3225	-0.1594	-0.0929
21STYR	R2	1283	12.365	8.605	2.783	0.2753	-0.1387	-0.0611
21STYR	R3	1284	12.392	8.406	2.602	0.3205	-0.1501	-0.0422
22STYR	B	1285	12.174	8.876	2.175	0.3339	-0.1741	-0.0872
22STYR	R1	1286	12.005	8.681	2.152	0.3655	-0.1815	-0.1021
22STYR	R2	1287	11.979	8.462	1.998	0.4056	-0.1906	-0.0961
22STYR	R3	1288	11.764	8.616	2.049	0.3812	-0.2175	-0.1164
23STYR	B	1289	12.108	8.936	1.955	0.3752	-0.1832	-0.0873
23STYR	R1	1290	12.368	8.864	2.020	0.3571	-0.1786	-0.0548
23STYR	R2	1291	12.626	8.946	2.014	0.3522	-0.1637	-0.0622
23STYR	R3	1292	12.564	8.690	1.951	0.3653	-0.1678	-0.0588
24STYR	B	1293	11.956	9.066	1.820	0.3840	-0.2143	-0.1316
24STYR	R1	1294	12.030	8.840	1.715	0.4023	-0.2050	-0.0942

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24STYR    R2 1295  12.141   8.752   1.485  0.4278 -0.1900 -0.0876
24STYR    R3 1296  11.933   8.619   1.593  0.4243 -0.2048 -0.1123
25STYR     B 1297  11.784   9.212   1.787  0.3424 -0.2244 -0.1735
25STYR    R1 1298  11.836   9.136   2.034  0.3409 -0.2126 -0.1314
25STYR    R2 1299  11.912   9.215   2.281  0.2975 -0.1814 -0.1280
25STYR    R3 1300  11.734   9.014   2.253  0.3192 -0.1997 -0.1342
26STYR     B 1301  11.582   9.329   1.827  0.3583 -0.2275 -0.1709
26STYR    R1 1302  11.614   9.228   1.575  0.3770 -0.2485 -0.1659
26STYR    R2 1303  11.510   9.066   1.385  0.4230 -0.2578 -0.1832
26STYR    R3 1304  11.610   9.308   1.317  0.4064 -0.2460 -0.1656
27STYR     B 1305  11.368   9.378   1.742  0.3649 -0.2547 -0.2173
27STYR    R1 1306  11.500   9.581   1.861  0.3291 -0.2329 -0.2089
27STYR    R2 1307  11.460   9.775   2.044  0.3026 -0.2322 -0.2153
27STYR    R3 1308  11.579   9.834   1.809  0.3158 -0.2285 -0.2078
28STYR     B 1309  11.165   9.500   1.783  0.3493 -0.2665 -0.2372
28STYR    R1 1310  11.246   9.470   1.527  0.3879 -0.2921 -0.2308
28STYR    R2 1311  11.177   9.392   1.278  0.4040 -0.2788 -0.2395
28STYR    R3 1312  11.293   9.632   1.316  0.3948 -0.2778 -0.2182
29STYR     B 1313  11.054   9.580   1.991  0.3114 -0.2666 -0.2343
29STYR    R1 1314  11.100   9.763   1.793  0.3351 -0.2593 -0.2545
29STYR    R2 1315  10.971   9.945   1.641  0.3385 -0.2732 -0.2739
29STYR    R3 1316  11.199  10.013   1.769  0.3112 -0.2483 -0.2385
30STYR     B 1317  10.969   9.535   2.209  0.2885 -0.2439 -0.2704
30STYR    R1 1318  11.208   9.435   2.173  0.3040 -0.2252 -0.2196
30STYR    R2 1319  11.455   9.414   2.281  0.2996 -0.2232 -0.2088
30STYR    R3 1320  11.320   9.192   2.207  0.3026 -0.2246 -0.2103
31STYR     B 1321  10.833   9.620   2.377  0.2797 -0.2704 -0.2886
31STYR    R1 1322  10.844   9.758   2.154  0.2932 -0.2646 -0.2914
31STYR    R2 1323  10.879  10.016   2.081  0.2732 -0.2641 -0.2994
31STYR    R3 1324  10.672   9.874   1.981  0.2904 -0.2866 -0.3035
32STYR     B 1325  10.702   9.542   2.560  0.2653 -0.2419 -0.2890
32STYR    R1 1326  10.814   9.357   2.419  0.2827 -0.2565 -0.2700
32STYR    R2 1327  10.974   9.144   2.463  0.2952 -0.2468 -0.2683
32STYR    R3 1328  10.745   9.115   2.323  0.2956 -0.2618 -0.2657
33STYR     B 1329  10.646   9.638   2.765  0.2236 -0.2457 -0.3056
33STYR    R1 1330  10.647   9.797   2.549  0.2250 -0.2471 -0.3103
33STYR    R2 1331  10.497   9.954   2.387  0.2536 -0.2595 -0.3491
33STYR    R3 1332  10.729  10.047   2.489  0.2342 -0.2508 -0.3127
34STYR     B 1333  10.781   9.795   2.892  0.1948 -0.2428 -0.3127
34STYR    R1 1334  10.551   9.691   2.994  0.1893 -0.2345 -0.3154
34STYR    R2 1335  10.309   9.750   3.099  0.1647 -0.2458 -0.3650
34STYR    R3 1336  10.465   9.564   3.217  0.1571 -0.2254 -0.3224
35STYR     B 1337  11.014   9.836   2.874  0.1940 -0.2150 -0.2741
35STYR    R1 1338  10.878  10.044   2.931  0.1926 -0.2159 -0.2913
35STYR    R2 1339  10.869  10.252   3.103  0.1514 -0.2101 -0.3004
35STYR    R3 1340  10.870  10.297   2.837  0.1769 -0.2203 -0.3021
36STYR     B 1341  11.222   9.926   2.907  0.1794 -0.2047 -0.2397
36STYR    R1 1342  11.145   9.924   2.654  0.1988 -0.2118 -0.2576
36STYR    R2 1343  11.217   9.854   2.403  0.2408 -0.2247 -0.2419
36STYR    R3 1344  11.144  10.108   2.456  0.2083 -0.2277 -0.2724
37STYR     B 1345  11.450   9.941   2.953  0.1841 -0.1930 -0.2245
37STYR    R1 1346  11.318  10.166   2.918  0.1731 -0.1941 -0.2465
37STYR    R2 1347  11.283  10.409   3.031  0.1533 -0.1902 -0.2608
37STYR    R3 1348  11.329  10.388   2.765  0.1932 -0.1996 -0.2532
38STYR     B 1349  11.650   9.814   2.962  0.1704 -0.1783 -0.2254
38STYR    R1 1350  11.679  10.076   2.998  0.1456 -0.1589 -0.2049
38STYR    R2 1351  11.794  10.264   3.154  0.1411 -0.1660 -0.1931
38STYR    R3 1352  11.782  10.299   2.887  0.1750 -0.1674 -0.1948
39STYR     B 1353  11.877   9.845   2.905  0.1966 -0.1628 -0.1671
39STYR    R1 1354  11.688   9.892   2.713  0.2151 -0.1814 -0.1992
39STYR    R2 1355  11.648   9.839   2.451  0.2375 -0.1969 -0.1995
39STYR    R3 1356  11.593  10.084   2.549  0.2224 -0.1932 -0.2173
40STYR     B 1357  12.084   9.730   2.884  0.1945 -0.1533 -0.1643
40STYR    R1 1358  12.038   9.953   2.733  0.2103 -0.1609 -0.1642
40STYR    R2 1359  12.142  10.195   2.672  0.2154 -0.1615 -0.1579
40STYR    R3 1360  12.034  10.042   2.478  0.2281 -0.1617 -0.1648
41STYR     B 1361  12.218   9.533   2.857  0.2303 -0.1378 -0.1035
41STYR    R1 1362  12.342   9.767   2.842  0.2027 -0.1297 -0.0977
41STYR    R2 1363  12.484   9.931   2.682  0.1990 -0.1251 -0.0963
41STYR    R3 1364  12.560   9.894   2.939  0.2020 -0.1285 -0.0976
42STYR     B 1365  12.229   9.315   2.762  0.2432 -0.1442 -0.0884
42STYR    R1 1366  11.991   9.423   2.777  0.2368 -0.1580 -0.1504
42STYR    R2 1367  11.737   9.371   2.854  0.2302 -0.1611 -0.1738
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42STYR    R3 1368  11.787   9.457   2.602  0.2530 -0.1664 -0.1711
43STYR     B 1369  12.294   9.189   2.561  0.2883 -0.1367 -0.0849
43STYR    R1 1370  12.468   9.365   2.667  0.2468 -0.1461 -0.0876
43STYR    R2 1371  12.645   9.553   2.588  0.2335 -0.1284 -0.0749
43STYR    R3 1372  12.719   9.365   2.767  0.2406 -0.1233 -0.0725
44STYR     B 1373  12.388   9.241   2.346  0.3039 -0.1499 -0.0956
44STYR    R1 1374  12.494   9.033   2.475  0.2956 -0.1470 -0.0561
44STYR    R2 1375  12.734   8.951   2.568  0.2885 -0.1288 -0.0213
44STYR    R3 1376  12.580   8.782   2.424  0.3268 -0.1370 -0.0528
45STYR     B 1377  12.330   9.296   2.122  0.3060 -0.1679 -0.0734
45STYR    R1 1378  12.571   9.356   2.182  0.3022 -0.1440 -0.0661
45STYR    R2 1379  12.827   9.326   2.101  0.3128 -0.1337 -0.0365
45STYR    R3 1380  12.730   9.572   2.154  0.2967 -0.1376 -0.0479
46STYR     B 1381  12.192   9.415   1.981  0.3318 -0.2015 -0.1167
46STYR    R1 1382  12.255   9.518   2.218  0.3064 -0.1580 -0.1189
46STYR    R2 1383  12.350   9.752   2.313  0.2757 -0.1467 -0.1155
46STYR    R3 1384  12.142   9.632   2.435  0.2806 -0.1673 -0.1274
47STYR     B 1385  12.143   9.513   1.767  0.3309 -0.2043 -0.1210
47STYR    R1 1386  12.334   9.320   1.783  0.3443 -0.1881 -0.0825
47STYR    R2 1387  12.405   9.095   1.651  0.3720 -0.1774 -0.0861
47STYR    R3 1388  12.592   9.279   1.715  0.3522 -0.1635 -0.0674
48STYR     B 1389  11.946   9.600   1.667  0.3634 -0.2208 -0.1515
48STYR    R1 1390  11.961   9.627   1.927  0.3210 -0.2036 -0.1401
48STYR    R2 1391  11.818   9.590   2.153  0.3162 -0.2010 -0.1427
48STYR    R3 1392  11.933   9.830   2.104  0.2702 -0.1845 -0.1700
49STYR     B 1393  11.821   9.641   1.476  0.3551 -0.2186 -0.1842
49STYR    R1 1394  12.009   9.442   1.471  0.3890 -0.2202 -0.1264
49STYR    R2 1395  12.034   9.183   1.399  0.4174 -0.2161 -0.1312
49STYR    R3 1396  12.228   9.359   1.335  0.4090 -0.1983 -0.1075
50STYR     B 1397  11.725   9.820   1.347  0.3830 -0.2418 -0.1923
50STYR    R1 1398  11.917   9.880   1.532  0.3585 -0.2323 -0.1694
50STYR    R2 1399  11.961  10.054   1.734  0.3167 -0.2189 -0.1718
50STYR    R3 1400  12.160   9.995   1.562  0.3394 -0.1962 -0.1533
 1STYR     B 1401  14.228   8.876   3.821  0.1581  0.0251  0.1440
 1STYR    R1 1402  14.407   8.702   3.912  0.1466  0.0347  0.1734
 1STYR    R2 1403  14.416   8.437   3.962  0.1710  0.0376  0.1840
 1STYR    R3 1404  14.494   8.613   4.151  0.1175  0.0540  0.1912
 2STYR     B 1405  14.073   8.993   3.951  0.1189  0.0166  0.1227
 2STYR    R1 1406  14.304   9.114   3.910  0.0939  0.0375  0.1443
 2STYR    R2 1407  14.509   9.230   4.042  0.0898  0.0235  0.1628
 2STYR    R3 1408  14.401   9.352   3.825  0.1258  0.0248  0.1456
 3STYR     B 1409  13.851   9.047   3.998  0.1211  0.0011  0.0961
 3STYR    R1 1410  13.900   8.936   3.760  0.1483 -0.0041  0.1156
 3STYR    R2 1411  13.873   8.972   3.494  0.1865 -0.0037  0.1117
 3STYR    R3 1412  13.802   8.737   3.607  0.1656 -0.0021  0.1020
 4STYR     B 1413  13.695   9.152   4.124  0.0773 -0.0062  0.0804
 4STYR    R1 1414  13.930   9.267   4.098  0.1020  0.0076  0.1012
 4STYR    R2 1415  14.036   9.502   4.020  0.1003  0.0109  0.1089
 4STYR    R3 1416  14.144   9.368   4.228  0.0870  0.0162  0.1192
 5STYR     B 1417  13.508   9.289   4.130  0.0808 -0.0143  0.0515
 5STYR    R1 1418  13.604   9.245   3.887  0.1297 -0.0202  0.0562
 5STYR    R2 1419  13.528   9.181   3.636  0.1506 -0.0098  0.0473
 5STYR    R3 1420  13.718   9.369   3.676  0.1371 -0.0013  0.0712
 6STYR     B 1421  13.379   9.424   4.000  0.0946 -0.0343  0.0286
 6STYR    R1 1422  13.255   9.309   4.196  0.0725 -0.0184  0.0148
 6STYR    R2 1423  13.099   9.349   4.412  0.0487 -0.0186 -0.0024
 6STYR    R3 1424  13.039   9.152   4.237  0.0685 -0.0190 -0.0087
 7STYR     B 1425  13.234   9.610   4.008  0.0651 -0.0235 -0.0138
 7STYR    R1 1426  13.493   9.658   3.971  0.0926 -0.0219  0.0255
 7STYR    R2 1427  13.701   9.809   4.054  0.0653  0.0022  0.0502
 7STYR    R3 1428  13.646   9.788   3.790  0.0937  0.0031  0.0442
 8STYR     B 1429  13.235   9.804   4.159  0.0437 -0.0204 -0.0213
 8STYR    R1 1430  13.129   9.823   3.900  0.0956 -0.0269 -0.0212
 8STYR    R2 1431  12.910   9.908   3.765  0.0980 -0.0486 -0.0388
 8STYR    R3 1432  13.157   9.960   3.669  0.1001 -0.0539 -0.0367
 9STYR     B 1433  13.198   9.787   4.395  0.0318 -0.0205 -0.0382
 9STYR    R1 1434  13.383   9.955   4.341  0.0293 -0.0280  0.0059
 9STYR    R2 1435  13.630  10.019   4.429  0.0169  0.0095  0.0135
 9STYR    R3 1436  13.443  10.211   4.399 -0.0088 -0.0176 -0.0007
10STYR     B 1437  13.046   9.775   4.560  0.0151 -0.0069 -0.0333
10STYR    R1 1438  13.003   9.958   4.379  0.0081 -0.0202 -0.0388
10STYR    R2 1439  12.820  10.069   4.213  0.0281 -0.0320 -0.0689
10STYR    R3 1440  12.977  10.227   4.366 -0.0090 -0.0220 -0.0408
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11STYR     B 1441  12.979   9.725   4.784 -0.0239  0.0019 -0.0309
11STYR    R1 1442  13.159   9.930   4.740 -0.0082 -0.0057 -0.0256
11STYR    R2 1443  13.194  10.196   4.773 -0.0346 -0.0001 -0.0430
11STYR    R3 1444  13.400  10.026   4.814 -0.0321  0.0183  0.0208
12STYR     B 1445  12.780   9.622   4.872 -0.0447 -0.0315 -0.0559
12STYR    R1 1446  12.993   9.478   4.885 -0.0306 -0.0111 -0.0163
12STYR    R2 1447  13.112   9.336   5.081 -0.0330  0.0074 -0.0012
12STYR    R3 1448  13.083   9.229   4.834  0.0016 -0.0027 -0.0009
13STYR     B 1449  12.565   9.666   4.932 -0.0293 -0.0327 -0.0890
13STYR    R1 1450  12.710   9.872   4.842 -0.0447 -0.0264 -0.0755
13STYR    R2 1451  12.688  10.070   4.661 -0.0043 -0.0299 -0.0844
13STYR    R3 1452  12.805  10.118   4.899 -0.0405 -0.0302 -0.0665
14STYR     B 1453  12.373   9.781   4.886 -0.0235 -0.0272 -0.1120
14STYR    R1 1454  12.384   9.634   5.112 -0.0553 -0.0332 -0.1089
14STYR    R2 1455  12.242   9.446   5.244 -0.0507 -0.0391 -0.1124
14STYR    R3 1456  12.374   9.637   5.382 -0.0845 -0.0174 -0.1100
15STYR     B 1457  12.246   9.949   4.774 -0.0301 -0.0495 -0.1169
15STYR    R1 1458  12.357   9.773   4.610  0.0024 -0.0449 -0.1145
15STYR    R2 1459  12.299   9.623   4.393  0.0393 -0.0676 -0.1087
15STYR    R3 1460  12.481   9.821   4.375  0.0388 -0.0664 -0.0996
16STYR     B 1461  12.118  10.131   4.892 -0.0286 -0.0510 -0.1640
16STYR    R1 1462  12.217  10.163   4.627 -0.0303 -0.0663 -0.1493
16STYR    R2 1463  12.378  10.317   4.475 -0.0245 -0.0675 -0.1444
16STYR    R3 1464  12.142  10.232   4.377 -0.0120 -0.0842 -0.1598
17STYR     B 1465  12.130  10.094   5.155 -0.0789 -0.0402 -0.1467
17STYR    R1 1466  11.889  10.042   5.012 -0.0548 -0.0550 -0.1812
17STYR    R2 1467  11.693   9.861   4.969 -0.0317 -0.0755 -0.2006
17STYR    R3 1468  11.630  10.115   5.036 -0.0647 -0.0841 -0.1990
18STYR     B 1469  12.350  10.063   5.262 -0.1064 -0.0389 -0.1386
18STYR    R1 1470  12.140  10.032   5.420 -0.1051 -0.0262 -0.1459
18STYR    R2 1471  12.043   9.849   5.593 -0.1299 -0.0322 -0.1660
18STYR    R3 1472  12.048  10.110   5.662 -0.1555 -0.0325 -0.1629
19STYR     B 1473  12.581  10.016   5.250 -0.0853 -0.0121 -0.0871
19STYR    R1 1474  12.489  10.248   5.144 -0.0747 -0.0246 -0.1160
19STYR    R2 1475  12.483  10.394   4.917 -0.0839 -0.0345 -0.1221
19STYR    R3 1476  12.543  10.512   5.152 -0.0984 -0.0194 -0.1260
20STYR     B 1477  12.752   9.859   5.323 -0.0831  0.0110 -0.0655
20STYR    R1 1478  12.603  10.003   5.505 -0.1218  0.0040 -0.0886
20STYR    R2 1479  12.452   9.967   5.726 -0.1397  0.0001 -0.1014
20STYR    R3 1480  12.615  10.181   5.708 -0.1387  0.0008 -0.0847
21STYR     B 1481  12.974   9.789   5.240 -0.0844  0.0178 -0.0181
21STYR    R1 1482  12.825   9.586   5.314 -0.0443 -0.0038 -0.0588
21STYR    R2 1483  12.880   9.360   5.450 -0.0745  0.0070 -0.0285
21STYR    R3 1484  12.708   9.353   5.242 -0.0478 -0.0048 -0.0500
22STYR     B 1485  13.144   9.951   5.195 -0.1101  0.0343 -0.0344
22STYR    R1 1486  13.092   9.896   5.455 -0.0958  0.0406 -0.0353
22STYR    R2 1487  13.021  10.025   5.681 -0.1494  0.0411 -0.0520
22STYR    R3 1488  13.225   9.848   5.684 -0.1403  0.0522 -0.0068
23STYR     B 1489  13.343  10.052   5.277 -0.0882  0.0323 -0.0118
23STYR    R1 1490  13.101  10.191   5.236 -0.0764  0.0158 -0.0517
23STYR    R2 1491  12.906  10.325   5.367 -0.1112 -0.0115 -0.0754
23STYR    R3 1492  12.997  10.417   5.130 -0.0872  0.0076 -0.0587
24STYR     B 1493  13.552   9.956   5.368 -0.0947  0.0438  0.0139
24STYR    R1 1494  13.449  10.177   5.483 -0.1163  0.0496 -0.0041
24STYR    R2 1495  13.378  10.286   5.720 -0.1680  0.0586 -0.0238
24STYR    R3 1496  13.534  10.425   5.549 -0.1503  0.0615 -0.0053
25STYR     B 1497  13.773   9.861   5.351 -0.0950  0.0595  0.0712
25STYR    R1 1498  13.740  10.090   5.238 -0.1040  0.0502  0.0421
25STYR    R2 1499  13.865  10.329   5.241 -0.1122  0.0545  0.0309
25STYR    R3 1500  13.776  10.226   5.008 -0.0896  0.0307  0.0328
26STYR     B 1501  13.869   9.660   5.277 -0.0694  0.0544  0.0652
26STYR    R1 1502  13.636   9.646   5.420 -0.0765  0.0577  0.0638
26STYR    R2 1503  13.548   9.524   5.644 -0.1100  0.0534  0.0483
26STYR    R3 1504  13.392   9.531   5.423 -0.0698  0.0422  0.0195
27STYR     B 1505  13.791   9.480   5.149 -0.0484  0.0510  0.0734
27STYR    R1 1506  13.867   9.686   5.010 -0.0414  0.0562  0.0694
27STYR    R2 1507  14.022   9.752   4.799 -0.0235  0.0356  0.0762
27STYR    R3 1508  13.763   9.829   4.806 -0.0235  0.0380  0.0475
28STYR     B 1509  13.720   9.274   5.088 -0.0316  0.0649  0.0692
28STYR    R1 1510  13.891   9.304   5.296 -0.0560  0.0781  0.0918
28STYR    R2 1511  14.137   9.263   5.399 -0.0695  0.0891  0.1290
28STYR    R3 1512  13.919   9.223   5.552 -0.0912  0.0754  0.0948
29STYR     B 1513  13.511   9.179   5.030 -0.0035  0.0282  0.0384
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29STYR	R1	1514	13.523	9.426	4.978	-0.0128	0.0372	0.0432
29STYR	R2	1515	13.398	9.661	5.024	-0.0469	0.0207	0.0354
29STYR	R3	1516	13.417	9.564	4.772	-0.0210	0.0217	0.0369
30STYR	B	1517	13.453	8.947	5.020	-0.0151	0.0388	0.0539
30STYR	R1	1518	13.424	9.084	5.248	-0.0273	0.0427	0.0342
30STYR	R2	1519	13.230	9.115	5.433	-0.0514	0.0157	0.0136
30STYR	R3	1520	13.489	9.107	5.509	-0.0577	0.0594	0.0404
31STYR	B	1521	13.621	8.799	4.922	0.0330	0.0151	0.0991
31STYR	R1	1522	13.465	8.979	4.760	0.0375	0.0272	0.0667
31STYR	R2	1523	13.310	8.958	4.540	0.0471	-0.0137	0.0637
31STYR	R3	1524	13.455	9.182	4.582	0.0342	0.0000	0.0358
32STYR	B	1525	13.624	8.562	4.892	0.0414	0.0287	0.0810
32STYR	R1	1526	13.504	8.647	5.116	-0.0018	0.0383	0.0759
32STYR	R2	1527	13.498	8.582	5.379	-0.0273	0.0417	0.0762
32STYR	R3	1528	13.267	8.626	5.245	-0.0159	0.0105	0.0458
33STYR	B	1529	13.606	8.476	4.649	0.0771	0.0102	0.1011
33STYR	R1	1530	13.725	8.330	4.876	0.0619	0.0316	0.1219
33STYR	R2	1531	13.717	8.110	5.032	0.0464	0.0492	0.1460
33STYR	R3	1532	13.954	8.218	4.963	0.0532	0.0443	0.1617
34STYR	B	1533	13.693	8.673	4.488	0.0918	0.0171	0.1142
34STYR	R1	1534	13.547	8.465	4.374	0.1200	0.0005	0.0734
34STYR	R2	1535	13.349	8.453	4.190	0.1348	-0.0155	0.0585
34STYR	R3	1536	13.565	8.292	4.167	0.1460	-0.0035	0.0789
35STYR	B	1537	13.819	8.885	4.480	0.0770	0.0178	0.0872
35STYR	R1	1538	13.847	8.694	4.282	0.0979	0.0138	0.1041
35STYR	R2	1539	14.051	8.583	4.145	0.1311	0.0343	0.1366
35STYR	R3	1540	13.809	8.609	4.029	0.1380	-0.0204	0.1095
36STYR	B	1541	13.870	9.128	4.527	0.0254	0.0360	0.0922
36STYR	R1	1542	14.082	8.979	4.483	0.0591	0.0297	0.1205
36STYR	R2	1543	14.304	8.963	4.330	0.0750	0.0415	0.1424
36STYR	R3	1544	14.324	8.944	4.599	0.0520	0.0635	0.1457
37STYR	B	1545	13.939	9.294	4.698	0.0117	0.0364	0.1016
37STYR	R1	1546	13.817	9.410	4.507	0.0543	0.0330	0.0753
37STYR	R2	1547	13.623	9.580	4.426	0.0390	-0.0024	0.0370
37STYR	R3	1548	13.883	9.649	4.398	0.0323	0.0340	0.0642
38STYR	B	1549	14.098	9.230	4.883	-0.0108	0.0529	0.1092
38STYR	R1	1550	14.214	9.365	4.689	0.0188	0.0521	0.1183
38STYR	R2	1551	14.438	9.342	4.540	0.0336	0.0690	0.1381
38STYR	R3	1552	14.382	9.575	4.665	0.0057	0.0644	0.1341
39STYR	B	1553	14.086	9.010	4.979	-0.0080	0.0596	0.1289
39STYR	R1	1554	14.321	9.140	4.995	0.0001	0.0718	0.1637
39STYR	R2	1555	14.513	9.233	5.161	-0.0170	0.0894	0.1737
39STYR	R3	1556	14.581	9.103	4.934	0.0065	0.0717	0.1908
40STYR	B	1557	14.052	8.785	4.919	0.0322	0.0805	0.1358
40STYR	R1	1558	14.003	8.863	5.170	0.0029	0.0604	0.1315
40STYR	R2	1559	13.806	8.863	5.354	-0.0329	0.0618	0.0934
40STYR	R3	1560	14.063	8.835	5.431	-0.0460	0.0842	0.1454
41STYR	B	1561	14.169	8.583	5.026	0.0109	0.0628	0.1312
41STYR	R1	1562	14.122	8.577	4.751	0.0629	0.0563	0.1580
41STYR	R2	1563	14.032	8.401	4.567	0.0822	0.0433	0.1611
41STYR	R3	1564	14.251	8.551	4.515	0.0697	0.0617	0.1611
42STYR	B	1565	14.366	8.492	4.933	0.0215	0.0771	0.1857
42STYR	R1	1566	14.305	8.359	5.143	0.0363	0.0850	0.1846
42STYR	R2	1567	14.411	8.249	5.366	-0.0156	0.0835	0.2087
42STYR	R3	1568	14.287	8.092	5.185	0.0299	0.0842	0.1767
43STYR	B	1569	14.496	8.327	4.827	0.0745	0.0852	0.2138
43STYR	R1	1570	14.590	8.580	4.830	0.0483	0.0912	0.2130
43STYR	R2	1571	14.810	8.720	4.900	0.0372	0.1021	0.2261
43STYR	R3	1572	14.697	8.758	4.657	0.0707	0.0702	0.2053
44STYR	B	1573	14.480	8.078	4.787	0.0760	0.0689	0.2254
44STYR	R1	1574	14.682	8.201	4.952	0.0460	0.1117	0.2288
44STYR	R2	1575	14.800	8.200	5.195	0.0182	0.1101	0.2423
44STYR	R3	1576	14.948	8.241	4.973	0.0424	0.1200	0.2603
45STYR	B	1577	14.252	7.976	4.737	0.0984	0.0689	0.2071
45STYR	R1	1578	14.415	7.822	4.881	0.0757	0.0859	0.2120
45STYR	R2	1579	14.418	7.682	5.112	0.0571	0.0839	0.2110
45STYR	R3	1580	14.497	7.565	4.882	0.0955	0.0923	0.2198
46STYR	B	1581	14.055	7.971	4.605	0.0987	0.0372	0.1673
46STYR	R1	1582	14.286	8.026	4.484	0.1328	0.0492	0.1963
46STYR	R2	1583	14.410	8.207	4.327	0.1422	0.0407	0.1939
46STYR	R3	1584	14.421	7.945	4.265	0.1416	0.0378	0.2059
47STYR	B	1585	13.816	7.967	4.620	0.1188	0.0406	0.1479
47STYR	R1	1586	13.968	7.820	4.801	0.1014	0.0483	0.1562

47STYR	R2	1587	13.991	7.781	5.067	0.0580	0.0631	0.1622
47STYR	R3	1588	14.007	7.571	4.898	0.1005	0.0556	0.1753
48STYR	B	1589	13.615	7.986	4.492	0.1002	0.0186	0.1245
48STYR	R1	1590	13.847	8.014	4.361	0.1182	0.0067	0.1386
48STYR	R2	1591	13.978	8.173	4.186	0.1420	0.0139	0.1629
48STYR	R3	1592	13.971	7.906	4.147	0.1664	0.0132	0.1629
49STYR	B	1593	13.532	7.861	4.301	0.1400	0.0040	0.0961
49STYR	R1	1594	13.674	7.716	4.469	0.1206	0.0159	0.1323
49STYR	R2	1595	13.664	7.482	4.604	0.1292	0.0203	0.1407
49STYR	R3	1596	13.886	7.548	4.464	0.1426	0.0422	0.1722
50STYR	B	1597	13.554	7.664	4.173	0.1847	0.0005	0.1379
50STYR	R1	1598	13.499	7.885	4.038	0.1858	-0.0089	0.1153
50STYR	R2	1599	13.592	8.017	3.821	0.2007	-0.0162	0.1172
50STYR	R3	1600	13.326	8.001	3.866	0.1971	-0.0239	0.0937
1STYR	B	1601	12.260	9.719	3.300	0.1431	-0.1104	-0.1084
1STYR	R1	1602	12.301	9.969	3.274	0.1467	-0.1270	-0.1198
1STYR	R2	1603	12.210	10.147	3.093	0.1634	-0.1356	-0.1366
1STYR	R3	1604	12.178	10.194	3.357	0.1218	-0.1323	-0.1422
2STYR	B	1605	12.408	9.683	3.478	0.1244	-0.1083	-0.0915
2STYR	R1	1606	12.340	9.482	3.295	0.1664	-0.1107	-0.0995
2STYR	R2	1607	12.454	9.289	3.145	0.1985	-0.1128	-0.0728
2STYR	R3	1608	12.200	9.260	3.233	0.1866	-0.1207	-0.1093
3STYR	B	1609	12.577	9.581	3.625	0.1067	-0.0871	-0.0815
3STYR	R1	1610	12.443	9.775	3.743	0.1004	-0.0959	-0.0950
3STYR	R2	1611	12.309	9.833	3.970	0.0705	-0.1031	-0.1107
3STYR	R3	1612	12.512	9.991	3.888	0.0698	-0.0905	-0.0883
4STYR	B	1613	12.803	9.495	3.643	0.1335	-0.0701	-0.0521
4STYR	R1	1614	12.741	9.619	3.421	0.1485	-0.0845	-0.0477
4STYR	R2	1615	12.768	9.583	3.155	0.1717	-0.1177	-0.0409
4STYR	R3	1616	12.841	9.817	3.267	0.1747	-0.1087	-0.0619
5STYR	B	1617	12.944	9.369	3.770	0.1150	-0.0615	-0.0160
5STYR	R1	1618	12.772	9.507	3.897	0.1135	-0.0691	-0.0586
5STYR	R2	1619	12.780	9.665	4.116	0.0709	-0.0515	-0.0694
5STYR	R3	1620	12.571	9.499	4.077	0.0858	-0.0658	-0.0892
6STYR	B	1621	13.097	9.183	3.761	0.1149	-0.0434	-0.0083
6STYR	R1	1622	13.138	9.415	3.608	0.1397	-0.0475	-0.0028
6STYR	R2	1623	13.341	9.586	3.556	0.1390	-0.0442	0.0051
6STYR	R3	1624	13.169	9.517	3.360	0.1519	-0.0524	-0.0033
7STYR	B	1625	13.042	8.958	3.742	0.1634	-0.0658	0.0122
7STYR	R1	1626	13.243	8.973	3.889	0.1216	-0.0451	0.0345
7STYR	R2	1627	13.350	8.876	4.118	0.1115	-0.0178	0.0507
7STYR	R3	1628	13.472	8.829	3.882	0.1506	-0.0006	0.0674
8STYR	B	1629	13.023	8.761	3.837	0.1627	-0.0691	0.0241
8STYR	R1	1630	13.123	8.775	3.592	0.1685	-0.0713	0.0294
8STYR	R2	1631	13.098	8.675	3.343	0.2182	-0.0701	0.0238
8STYR	R3	1632	13.342	8.737	3.439	0.1968	-0.0480	0.0639
9STYR	B	1633	12.962	8.539	3.842	0.1682	-0.0543	0.0123
9STYR	R1	1634	12.959	8.673	4.083	0.1324	-0.0469	0.0170
9STYR	R2	1635	13.037	8.673	4.341	0.0857	-0.0238	0.0314
9STYR	R3	1636	12.798	8.777	4.273	0.1012	-0.0227	-0.0224
10STYR	B	1637	12.961	8.317	3.864	0.1813	-0.0473	0.0206
10STYR	R1	1638	13.177	8.399	3.758	0.1806	-0.0622	0.0646
10STYR	R2	1639	13.328	8.321	3.548	0.1998	-0.0515	0.0744
10STYR	R3	1640	13.446	8.423	3.768	0.1764	-0.0174	0.0712
11STYR	B	1641	12.828	8.123	3.868	0.2070	-0.0530	0.0226
11STYR	R1	1642	12.978	8.183	4.083	0.1430	-0.0356	0.0416
11STYR	R2	1643	12.964	8.232	4.348	0.1051	-0.0448	0.0413
11STYR	R3	1644	13.166	8.083	4.249	0.1311	-0.0236	0.0624
12STYR	B	1645	12.848	7.910	3.947	0.1882	-0.0571	0.0490
12STYR	R1	1646	12.899	7.947	3.695	0.2210	-0.0761	0.0383
12STYR	R2	1647	13.088	7.893	3.510	0.2443	-0.0607	0.0576
12STYR	R3	1648	12.828	7.848	3.454	0.2532	-0.0771	0.0291
13STYR	B	1649	12.950	7.718	4.033	0.1881	-0.0282	0.0375
13STYR	R1	1650	12.694	7.708	3.931	0.2032	-0.0870	0.0225
13STYR	R2	1651	12.541	7.608	3.732	0.2225	-0.0749	0.0015
13STYR	R3	1652	12.446	7.615	3.984	0.2000	-0.0952	-0.0064
14STYR	B	1653	13.112	7.632	4.193	0.1826	-0.0187	0.0791
14STYR	R1	1654	13.147	7.585	3.924	0.2149	-0.0476	0.0843
14STYR	R2	1655	13.176	7.382	3.748	0.2418	-0.0571	0.0997
14STYR	R3	1656	13.339	7.597	3.733	0.2467	-0.0597	0.1154
15STYR	B	1657	13.165	7.655	4.447	0.1531	-0.0207	0.0772
15STYR	R1	1658	12.901	7.713	4.350	0.1526	-0.0336	0.0576
15STYR	R2	1659	12.645	7.633	4.382	0.1512	-0.0448	0.0179

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15STYR    R3 1660  12.703   7.896   4.373  0.1396 -0.0423  0.0151
16STYR     B 1661  13.078   7.826   4.586  0.1148 -0.0442  0.0604
16STYR    R1 1662  13.271   7.714   4.706  0.1004 -0.0007  0.0869
16STYR    R2 1663  13.484   7.780   4.859  0.0763  0.0305  0.1073
16STYR    R3 1664  13.301   7.604   4.951  0.0880  0.0113  0.0938
17STYR     B 1665  13.056   7.970   4.766  0.0989 -0.0166  0.0479
17STYR    R1 1666  12.904   7.754   4.772  0.1063 -0.0160  0.0272
17STYR    R2 1667  12.651   7.670   4.814  0.1068 -0.0229  0.0162
17STYR    R3 1668  12.858   7.530   4.916  0.1053 -0.0048  0.0444
18STYR     B 1669  12.921   7.999   4.956  0.0472 -0.0215  0.0433
18STYR    R1 1670  13.168   8.055   4.997  0.0565  0.0180  0.0547
18STYR    R2 1671  13.337   8.005   5.203  0.0197  0.0230  0.0862
18STYR    R3 1672  13.333   8.249   5.086  0.0365  0.0219  0.0835
19STYR     B 1673  12.886   8.146   5.144  0.0365 -0.0139  0.0160
19STYR    R1 1674  12.821   7.889   5.178  0.0245  0.0021  0.0437
19STYR    R2 1675  12.864   7.689   5.355  0.0318  0.0114  0.0525
19STYR    R3 1676  12.618   7.725   5.249  0.0356 -0.0158  0.0344
20STYR     B 1677  12.890   8.390   5.127  0.0259 -0.0181  0.0271
20STYR    R1 1678  12.974   8.284   5.353  0.0025  0.0160  0.0340
20STYR    R2 1679  13.187   8.283   5.518 -0.0308  0.0339  0.0775
20STYR    R3 1680  12.938   8.301   5.620 -0.0528  0.0213  0.0264
21STYR     B 1681  12.761   8.520   4.975  0.0466 -0.0172  0.0080
21STYR    R1 1682  13.001   8.476   4.894  0.0303  0.0035  0.0364
21STYR    R2 1683  13.188   8.642   4.793  0.0469 -0.0075  0.0491
21STYR    R3 1684  13.155   8.396   4.687  0.0601 -0.0167  0.0662
22STYR     B 1685  12.537   8.585   5.002  0.0056 -0.0411 -0.0348
22STYR    R1 1686  12.756   8.732   5.112 -0.0032 -0.0111 -0.0243
22STYR    R2 1687  12.911   8.805   5.320 -0.0317  0.0009 -0.0073
22STYR    R3 1688  12.876   8.974   5.113 -0.0142 -0.0057 -0.0157
23STYR     B 1689  12.335   8.539   4.876  0.0380 -0.0349 -0.0604
23STYR    R1 1690  12.557   8.450   4.767  0.0317 -0.0331 -0.0321
23STYR    R2 1691  12.663   8.228   4.654  0.0811 -0.0287  0.0051
23STYR    R3 1692  12.681   8.466   4.528  0.0875 -0.0339 -0.0036
24STYR     B 1693  12.154   8.411   4.836  0.0560 -0.0619 -0.0854
24STYR    R1 1694  12.349   8.306   4.986  0.0402 -0.0487 -0.0502
24STYR    R2 1695  12.480   8.070   4.989  0.0641 -0.0352 -0.0202
24STYR    R3 1696  12.422   8.195   5.221  0.0201 -0.0289 -0.0345
25STYR     B 1697  12.047   8.192   4.868  0.0600 -0.0614 -0.0927
25STYR    R1 1698  12.133   8.276   4.615  0.0875 -0.0448 -0.0730
25STYR    R2 1699  12.045   8.288   4.360  0.1142 -0.0908 -0.0847
25STYR    R3 1700  12.306   8.240   4.410  0.1148 -0.0517 -0.0489
26STYR     B 1701  11.953   8.164   5.116  0.0411 -0.0442 -0.0836
26STYR    R1 1702  12.053   7.938   4.984  0.0707 -0.0494 -0.0812
26STYR    R2 1703  11.983   7.683   4.929  0.0942 -0.0621 -0.0523
26STYR    R3 1704  12.224   7.736   5.038  0.0689 -0.0323 -0.0106
27STYR     B 1705  11.956   8.381   5.249  0.0072 -0.0419 -0.0852
27STYR    R1 1706  11.726   8.306   5.109  0.0108 -0.0837 -0.1208
27STYR    R2 1707  11.547   8.418   4.941  0.0239 -0.0853 -0.1359
27STYR    R3 1708  11.463   8.253   5.137  0.0077 -0.0768 -0.1357
28STYR     B 1709  12.145   8.511   5.338  0.0005 -0.0423 -0.0695
28STYR    R1 1710  12.061   8.277   5.460  0.0029 -0.0446 -0.0877
28STYR    R2 1711  11.983   8.175   5.697 -0.0091 -0.0297 -0.0853
28STYR    R3 1712  12.150   8.034   5.538  0.0040 -0.0369 -0.0652
29STYR     B 1713  12.239   8.729   5.307 -0.0134 -0.0236 -0.0757
29STYR    R1 1714  12.000   8.687   5.201  0.0150 -0.0450 -0.1135
29STYR    R2 1715  11.755   8.800   5.202  0.0026 -0.0718 -0.1320
29STYR    R3 1716  11.866   8.721   4.969  0.0252 -0.0675 -0.1227
30STYR     B 1717  12.283   8.892   5.139 -0.0076 -0.0232 -0.0627
30STYR    R1 1718  12.391   8.948   5.367 -0.0318 -0.0111 -0.0662
30STYR    R2 1719  12.617   9.011   5.501 -0.0469  0.0068 -0.0492
30STYR    R3 1720  12.399   9.170   5.521 -0.0570 -0.0038 -0.0755
31STYR     B 1721  12.414   9.061   5.052 -0.0137 -0.0329 -0.0723
31STYR    R1 1722  12.134   9.076   5.071 -0.0093 -0.0314 -0.1118
31STYR    R2 1723  11.900   9.129   4.949 -0.0086 -0.0647 -0.1276
31STYR    R3 1724  11.932   9.189   5.210 -0.0297 -0.0466 -0.1291
32STYR     B 1725  12.475   9.235   4.888  0.0047 -0.0292 -0.0719
32STYR    R1 1726  12.545   9.000   4.817  0.0279 -0.0322 -0.0500
32STYR    R2 1727  12.513   8.850   4.594  0.0550 -0.0347 -0.0522
32STYR    R3 1728  12.759   8.885   4.700  0.0441 -0.0213 -0.0313
33STYR     B 1729  12.310   9.317   4.726  0.0144 -0.0456 -0.1076
33STYR    R1 1730  12.539   9.314   4.627  0.0255 -0.0373 -0.0644
33STYR    R2 1731  12.656   9.214   4.405  0.0567 -0.0448 -0.0445
33STYR    R3 1732  12.706   9.468   4.482  0.0325 -0.0367 -0.0556
```

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 34STYR     B 1733  12.154   9.195   4.606  0.0464 -0.0563 -0.1005
 34STYR    R1 1734  12.085   9.431   4.714 -0.0146 -0.0902 -0.1305
 34STYR    R2 1735  11.950   9.660   4.668  0.0238 -0.0708 -0.1483
 34STYR    R3 1736  11.965   9.560   4.919 -0.0124 -0.0662 -0.1442
 35STYR     B 1737  11.962   9.106   4.511  0.0496 -0.0859 -0.1317
 35STYR    R1 1738  12.191   9.118   4.368  0.0674 -0.0837 -0.0972
 35STYR    R2 1739  12.295   9.203   4.134  0.0900 -0.0798 -0.0858
 35STYR    R3 1740  12.342   8.951   4.219  0.1079 -0.0713 -0.0703
 36STYR     B 1741  11.747   9.009   4.552  0.0400 -0.0866 -0.1358
 36STYR    R1 1742  11.954   8.867   4.443  0.0692 -0.0809 -0.1155
 36STYR    R2 1743  12.144   8.677   4.470  0.0730 -0.0727 -0.0826
 36STYR    R3 1744  12.003   8.697   4.240  0.0996 -0.0901 -0.1005
 37STYR     B 1745  11.551   8.974   4.675  0.0472 -0.0831 -0.1555
 37STYR    R1 1746  11.663   8.766   4.568  0.0579 -0.1052 -0.1418
 37STYR    R2 1747  11.632   8.565   4.389  0.1077 -0.1142 -0.1405
 37STYR    R3 1748  11.776   8.525   4.614  0.0773 -0.0914 -0.1169
 38STYR     B 1749  11.443   8.870   4.872  0.0373 -0.1016 -0.1689
 38STYR    R1 1750  11.291   9.033   4.729  0.0278 -0.1128 -0.2049
 38STYR    R2 1751  11.137   9.254   4.752  0.0097 -0.1224 -0.2336
 38STYR    R3 1752  11.044   9.039   4.619  0.0368 -0.1386 -0.2265
 39STYR     B 1753  11.369   9.030   5.059 -0.0034 -0.0788 -0.1730
 39STYR    R1 1754  11.331   8.769   5.107  0.0170 -0.0851 -0.1832
 39STYR    R2 1755  11.380   8.617   5.325 -0.0070 -0.0624 -0.1619
 39STYR    R3 1756  11.153   8.581   5.183  0.0094 -0.0784 -0.1843
 40STYR     B 1757  11.498   9.243   5.100 -0.0139 -0.0597 -0.2071
 40STYR    R1 1758  11.247   9.256   5.169 -0.0282 -0.0872 -0.2238
 40STYR    R2 1759  11.089   9.324   5.376 -0.0614 -0.1025 -0.2440
 40STYR    R3 1760  11.046   9.433   5.133 -0.0286 -0.0921 -0.2452
 41STYR     B 1761  11.533   9.413   4.928 -0.0106 -0.0895 -0.1924
 41STYR    R1 1762  11.611   9.478   5.181 -0.0574 -0.0722 -0.1778
 41STYR    R2 1763  11.566   9.678   5.356 -0.0824 -0.0635 -0.1941
 41STYR    R3 1764  11.814   9.576   5.329 -0.0765 -0.0582 -0.1608
 42STYR     B 1765  11.570   9.441   4.684  0.0110 -0.1151 -0.1799
 42STYR    R1 1766  11.373   9.601   4.798 -0.0209 -0.1109 -0.2141
 42STYR    R2 1767  11.115   9.668   4.754 -0.0177 -0.1170 -0.2431
 42STYR    R3 1768  11.287   9.850   4.855 -0.0284 -0.1066 -0.2435
 43STYR     B 1769  11.519   9.630   4.544  0.0113 -0.0947 -0.2002
 43STYR    R1 1770  11.661   9.454   4.421  0.0338 -0.1050 -0.1842
 43STYR    R2 1771  11.881   9.436   4.265  0.0641 -0.0972 -0.1425
 43STYR    R3 1772  11.654   9.309   4.193  0.0837 -0.1094 -0.1831
 44STYR     B 1773  11.497   9.721   4.331  0.0312 -0.1241 -0.2137
 44STYR    R1 1774  11.585   9.887   4.516  0.0005 -0.0951 -0.2191
 44STYR    R2 1775  11.521  10.130   4.615 -0.0125 -0.0978 -0.2208
 44STYR    R3 1776  11.780  10.066   4.573 -0.0080 -0.0900 -0.2052
 45STYR     B 1777  11.503   9.910   4.198  0.0314 -0.1315 -0.2134
 45STYR    R1 1778  11.277   9.872   4.311  0.0212 -0.1218 -0.2604
 45STYR    R2 1779  11.014   9.877   4.251  0.0245 -0.1357 -0.2761
 45STYR    R3 1780  11.105  10.008   4.468  0.0030 -0.1397 -0.2646
 46STYR     B 1781  11.473   9.993   3.985  0.0596 -0.1531 -0.2273
 46STYR    R1 1782  11.541  10.171   4.163  0.0312 -0.1214 -0.2160
 46STYR    R2 1783  11.460  10.404   4.272  0.0043 -0.1190 -0.2413
 46STYR    R3 1784  11.719  10.370   4.204  0.0167 -0.1122 -0.1975
 47STYR     B 1785  11.554  10.090   3.789  0.0708 -0.1409 -0.2349
 47STYR    R1 1786  11.286  10.034   3.825  0.0822 -0.1386 -0.2565
 47STYR    R2 1787  11.071   9.921   3.707  0.0968 -0.1624 -0.2606
 47STYR    R3 1788  11.039  10.136   3.867  0.0719 -0.1566 -0.2732
 48STYR     B 1789  11.709  10.257   3.724  0.0761 -0.1251 -0.2014
 48STYR    R1 1790  11.770  10.033   3.624  0.1113 -0.1171 -0.1963
 48STYR    R2 1791  11.838   9.913   3.392  0.1343 -0.1305 -0.1826
 48STYR    R3 1792  11.993   9.882   3.610  0.1059 -0.1282 -0.1620
 49STYR     B 1793  11.747  10.448   3.593  0.0802 -0.1336 -0.2101
 49STYR    R1 1794  11.501  10.411   3.707  0.0663 -0.1381 -0.2475
 49STYR    R2 1795  11.317  10.512   3.877  0.0384 -0.1531 -0.2688
 49STYR    R3 1796  11.244  10.432   3.630  0.0716 -0.1691 -0.2735
 50STYR     B 1797  11.929  10.574   3.495  0.0754 -0.1323 -0.1977
 50STYR    R1 1798  11.986  10.415   3.711  0.0596 -0.1316 -0.1785
 50STYR    R2 1799  12.099  10.426   3.956  0.0206 -0.1092 -0.1614
 50STYR    R3 1800  12.176  10.236   3.781  0.0736 -0.1036 -0.1443
18.00000  18.00000  18.00000
```

1.2 Polystyrene NP System Topology

```
#include "martini_v2.0_PEO_PS_CNP.itp"
#include "PS50.itp"

[ system ]
; name
 POLYSTYRENE

[ molecules ]
; name               number
PS50                  9
```

1.3 Polystyrene NP Topology

```
[ moleculetype ]
; molname  nrexcl
PS50       3

[ atoms ]
;  nr    type       resnr  residu    atom    cgnr        charge
   1    SCY           1  STYR       B        1     0.00000E+00
   2    STY           1  STYR       R1       2     0.00000E+00
   3    STY           1  STYR       R2       3     0.00000E+00
   4    STY           1  STYR       R3       4     0.00000E+00
   5    SCY           2  STYR       B        5     0.00000E+00
   6    STY           2  STYR       R1       6     0.00000E+00
   7    STY           2  STYR       R2       7     0.00000E+00
   8    STY           2  STYR       R3       8     0.00000E+00
   9    SCY           3  STYR       B        9     0.00000E+00
  10    STY           3  STYR       R1      10     0.00000E+00
  11    STY           3  STYR       R2      11     0.00000E+00
  12    STY           3  STYR       R3      12     0.00000E+00
  13    SCY           4  STYR       B       13     0.00000E+00
  14    STY           4  STYR       R1      14     0.00000E+00
  15    STY           4  STYR       R2      15     0.00000E+00
  16    STY           4  STYR       R3      16     0.00000E+00
  17    SCY           5  STYR       B       17     0.00000E+00
  18    STY           5  STYR       R1      18     0.00000E+00
  19    STY           5  STYR       R2      19     0.00000E+00
  20    STY           5  STYR       R3      20     0.00000E+00
  21    SCY           6  STYR       B       21     0.00000E+00
  22    STY           6  STYR       R1      22     0.00000E+00
  23    STY           6  STYR       R2      23     0.00000E+00
  24    STY           6  STYR       R3      24     0.00000E+00
  25    SCY           7  STYR       B       25     0.00000E+00
  26    STY           7  STYR       R1      26     0.00000E+00
  27    STY           7  STYR       R2      27     0.00000E+00
  28    STY           7  STYR       R3      28     0.00000E+00
  29    SCY           8  STYR       B       29     0.00000E+00
  30    STY           8  STYR       R1      30     0.00000E+00
  31    STY           8  STYR       R2      31     0.00000E+00
  32    STY           8  STYR       R3      32     0.00000E+00
  33    SCY           9  STYR       B       33     0.00000E+00
  34    STY           9  STYR       R1      34     0.00000E+00
  35    STY           9  STYR       R2      35     0.00000E+00
  36    STY           9  STYR       R3      36     0.00000E+00
  37    SCY          10  STYR       B       37     0.00000E+00
  38    STY          10  STYR       R1      38     0.00000E+00
  39    STY          10  STYR       R2      39     0.00000E+00
  40    STY          10  STYR       R3      40     0.00000E+00
  41    SCY          11  STYR       B       41     0.00000E+00
  42    STY          11  STYR       R1      42     0.00000E+00
  43    STY          11  STYR       R2      43     0.00000E+00
  44    STY          11  STYR       R3      44     0.00000E+00
  45    SCY          12  STYR       B       45     0.00000E+00
  46    STY          12  STYR       R1      46     0.00000E+00
  47    STY          12  STYR       R2      47     0.00000E+00
  48    STY          12  STYR       R3      48     0.00000E+00
  49    SCY          13  STYR       B       49     0.00000E+00
```

50	STY	13	STYR	R1	50	0.00000E+00
51	STY	13	STYR	R2	51	0.00000E+00
52	STY	13	STYR	R3	52	0.00000E+00
53	SCY	14	STYR	B	53	0.00000E+00
54	STY	14	STYR	R1	54	0.00000E+00
55	STY	14	STYR	R2	55	0.00000E+00
56	STY	14	STYR	R3	56	0.00000E+00
57	SCY	15	STYR	B	57	0.00000E+00
58	STY	15	STYR	R1	58	0.00000E+00
59	STY	15	STYR	R2	59	0.00000E+00
60	STY	15	STYR	R3	60	0.00000E+00
61	SCY	16	STYR	B	61	0.00000E+00
62	STY	16	STYR	R1	62	0.00000E+00
63	STY	16	STYR	R2	63	0.00000E+00
64	STY	16	STYR	R3	64	0.00000E+00
65	SCY	17	STYR	B	65	0.00000E+00
66	STY	17	STYR	R1	66	0.00000E+00
67	STY	17	STYR	R2	67	0.00000E+00
68	STY	17	STYR	R3	68	0.00000E+00
69	SCY	18	STYR	B	69	0.00000E+00
70	STY	18	STYR	R1	70	0.00000E+00
71	STY	18	STYR	R2	71	0.00000E+00
72	STY	18	STYR	R3	72	0.00000E+00
73	SCY	19	STYR	B	73	0.00000E+00
74	STY	19	STYR	R1	74	0.00000E+00
75	STY	19	STYR	R2	75	0.00000E+00
76	STY	19	STYR	R3	76	0.00000E+00
77	SCY	20	STYR	B	77	0.00000E+00
78	STY	20	STYR	R1	78	0.00000E+00
79	STY	20	STYR	R2	79	0.00000E+00
80	STY	20	STYR	R3	80	0.00000E+00
81	SCY	21	STYR	B	81	0.00000E+00
82	STY	21	STYR	R1	82	0.00000E+00
83	STY	21	STYR	R2	83	0.00000E+00
84	STY	21	STYR	R3	84	0.00000E+00
85	SCY	22	STYR	B	85	0.00000E+00
86	STY	22	STYR	R1	86	0.00000E+00
87	STY	22	STYR	R2	87	0.00000E+00
88	STY	22	STYR	R3	88	0.00000E+00
89	SCY	23	STYR	B	89	0.00000E+00
90	STY	23	STYR	R1	90	0.00000E+00
91	STY	23	STYR	R2	91	0.00000E+00
92	STY	23	STYR	R3	92	0.00000E+00
93	SCY	24	STYR	B	93	0.00000E+00
94	STY	24	STYR	R1	94	0.00000E+00
95	STY	24	STYR	R2	95	0.00000E+00
96	STY	24	STYR	R3	96	0.00000E+00
97	SCY	25	STYR	B	97	0.00000E+00
98	STY	25	STYR	R1	98	0.00000E+00
99	STY	25	STYR	R2	99	0.00000E+00
100	STY	25	STYR	R3	100	0.00000E+00
101	SCY	26	STYR	B	101	0.00000E+00
102	STY	26	STYR	R1	102	0.00000E+00
103	STY	26	STYR	R2	103	0.00000E+00
104	STY	26	STYR	R3	104	0.00000E+00
105	SCY	27	STYR	B	105	0.00000E+00
106	STY	27	STYR	R1	106	0.00000E+00
107	STY	27	STYR	R2	107	0.00000E+00
108	STY	27	STYR	R3	108	0.00000E+00
109	SCY	28	STYR	B	109	0.00000E+00
110	STY	28	STYR	R1	110	0.00000E+00
111	STY	28	STYR	R2	111	0.00000E+00
112	STY	28	STYR	R3	112	0.00000E+00
113	SCY	29	STYR	B	113	0.00000E+00
114	STY	29	STYR	R1	114	0.00000E+00
115	STY	29	STYR	R2	115	0.00000E+00
116	STY	29	STYR	R3	116	0.00000E+00
117	SCY	30	STYR	B	117	0.00000E+00
118	STY	30	STYR	R1	118	0.00000E+00
119	STY	30	STYR	R2	119	0.00000E+00
120	STY	30	STYR	R3	120	0.00000E+00
121	SCY	31	STYR	B	121	0.00000E+00
122	STY	31	STYR	R1	122	0.00000E+00

123	STY	31	STYR	R2	123	0.00000E+00
124	STY	31	STYR	R3	124	0.00000E+00
125	SCY	32	STYR	B	125	0.00000E+00
126	STY	32	STYR	R1	126	0.00000E+00
127	STY	32	STYR	R2	127	0.00000E+00
128	STY	32	STYR	R3	128	0.00000E+00
129	SCY	33	STYR	B	129	0.00000E+00
130	STY	33	STYR	R1	130	0.00000E+00
131	STY	33	STYR	R2	131	0.00000E+00
132	STY	33	STYR	R3	132	0.00000E+00
133	SCY	34	STYR	B	133	0.00000E+00
134	STY	34	STYR	R1	134	0.00000E+00
135	STY	34	STYR	R2	135	0.00000E+00
136	STY	34	STYR	R3	136	0.00000E+00
137	SCY	35	STYR	B	137	0.00000E+00
138	STY	35	STYR	R1	138	0.00000E+00
139	STY	35	STYR	R2	139	0.00000E+00
140	STY	35	STYR	R3	140	0.00000E+00
141	SCY	36	STYR	B	141	0.00000E+00
142	STY	36	STYR	R1	142	0.00000E+00
143	STY	36	STYR	R2	143	0.00000E+00
144	STY	36	STYR	R3	144	0.00000E+00
145	SCY	37	STYR	B	145	0.00000E+00
146	STY	37	STYR	R1	146	0.00000E+00
147	STY	37	STYR	R2	147	0.00000E+00
148	STY	37	STYR	R3	148	0.00000E+00
149	SCY	38	STYR	B	149	0.00000E+00
150	STY	38	STYR	R1	150	0.00000E+00
151	STY	38	STYR	R2	151	0.00000E+00
152	STY	38	STYR	R3	152	0.00000E+00
153	SCY	39	STYR	B	153	0.00000E+00
154	STY	39	STYR	R1	154	0.00000E+00
155	STY	39	STYR	R2	155	0.00000E+00
156	STY	39	STYR	R3	156	0.00000E+00
157	SCY	40	STYR	B	157	0.00000E+00
158	STY	40	STYR	R1	158	0.00000E+00
159	STY	40	STYR	R2	159	0.00000E+00
160	STY	40	STYR	R3	160	0.00000E+00
161	SCY	41	STYR	B	161	0.00000E+00
162	STY	41	STYR	R1	162	0.00000E+00
163	STY	41	STYR	R2	163	0.00000E+00
164	STY	41	STYR	R3	164	0.00000E+00
165	SCY	42	STYR	B	165	0.00000E+00
166	STY	42	STYR	R1	166	0.00000E+00
167	STY	42	STYR	R2	167	0.00000E+00
168	STY	42	STYR	R3	168	0.00000E+00
169	SCY	43	STYR	B	169	0.00000E+00
170	STY	43	STYR	R1	170	0.00000E+00
171	STY	43	STYR	R2	171	0.00000E+00
172	STY	43	STYR	R3	172	0.00000E+00
173	SCY	44	STYR	B	173	0.00000E+00
174	STY	44	STYR	R1	174	0.00000E+00
175	STY	44	STYR	R2	175	0.00000E+00
176	STY	44	STYR	R3	176	0.00000E+00
177	SCY	45	STYR	B	177	0.00000E+00
178	STY	45	STYR	R1	178	0.00000E+00
179	STY	45	STYR	R2	179	0.00000E+00
180	STY	45	STYR	R3	180	0.00000E+00
181	SCY	46	STYR	B	181	0.00000E+00
182	STY	46	STYR	R1	182	0.00000E+00
183	STY	46	STYR	R2	183	0.00000E+00
184	STY	46	STYR	R3	184	0.00000E+00
185	SCY	47	STYR	B	185	0.00000E+00
186	STY	47	STYR	R1	186	0.00000E+00
187	STY	47	STYR	R2	187	0.00000E+00
188	STY	47	STYR	R3	188	0.00000E+00
189	SCY	48	STYR	B	189	0.00000E+00
190	STY	48	STYR	R1	190	0.00000E+00
191	STY	48	STYR	R2	191	0.00000E+00
192	STY	48	STYR	R3	192	0.00000E+00
193	SCY	49	STYR	B	193	0.00000E+00
194	STY	49	STYR	R1	194	0.00000E+00
195	STY	49	STYR	R2	195	0.00000E+00

```
 196    STY           49  STYR       R3     196     0.00000E+00
 197    SCY           50  STYR       B      197     0.00000E+00
 198    STY           50  STYR       R1     198     0.00000E+00
 199    STY           50  STYR       R2     199     0.00000E+00
 200    STY           50  STYR       R3     200     0.00000E+00


[ bonds ]
;  ai  aj   funct
   1     2    1     0.270000 8000.000000
   1     6    1     0.270000 8000.000000
   5     6    1     0.270000 8000.000000
   5    10    1     0.270000 8000.000000
   9    10    1     0.270000 8000.000000
   9    14    1     0.270000 8000.000000
  13    14    1     0.270000 8000.000000
  13    18    1     0.270000 8000.000000
  17    18    1     0.270000 8000.000000
  17    22    1     0.270000 8000.000000
  21    22    1     0.270000 8000.000000
  21    26    1     0.270000 8000.000000
  25    26    1     0.270000 8000.000000
  25    30    1     0.270000 8000.000000
  29    30    1     0.270000 8000.000000
  29    34    1     0.270000 8000.000000
  33    34    1     0.270000 8000.000000
  33    38    1     0.270000 8000.000000
  37    38    1     0.270000 8000.000000
  37    42    1     0.270000 8000.000000
  41    42    1     0.270000 8000.000000
  41    46    1     0.270000 8000.000000
  45    46    1     0.270000 8000.000000
  45    50    1     0.270000 8000.000000
  49    50    1     0.270000 8000.000000
  49    54    1     0.270000 8000.000000
  53    54    1     0.270000 8000.000000
  53    58    1     0.270000 8000.000000
  57    58    1     0.270000 8000.000000
  57    62    1     0.270000 8000.000000
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  61    66    1     0.270000 8000.000000
  65    66    1     0.270000 8000.000000
  65    70    1     0.270000 8000.000000
  69    70    1     0.270000 8000.000000
  69    74    1     0.270000 8000.000000
  73    74    1     0.270000 8000.000000
  73    78    1     0.270000 8000.000000
  77    78    1     0.270000 8000.000000
  77    82    1     0.270000 8000.000000
  81    82    1     0.270000 8000.000000
  81    86    1     0.270000 8000.000000
  85    86    1     0.270000 8000.000000
  85    90    1     0.270000 8000.000000
  89    90    1     0.270000 8000.000000
  89    94    1     0.270000 8000.000000
  93    94    1     0.270000 8000.000000
  93    98    1     0.270000 8000.000000
  97    98    1     0.270000 8000.000000
  97   102    1     0.270000 8000.000000
 101   102    1     0.270000 8000.000000
 101   106    1     0.270000 8000.000000
 105   106    1     0.270000 8000.000000
 105   110    1     0.270000 8000.000000
 109   110    1     0.270000 8000.000000
 109   114    1     0.270000 8000.000000
 113   114    1     0.270000 8000.000000
 113   118    1     0.270000 8000.000000
 117   118    1     0.270000 8000.000000
 117   122    1     0.270000 8000.000000
 121   122    1     0.270000 8000.000000
 121   126    1     0.270000 8000.000000
 125   126    1     0.270000 8000.000000
 125   130    1     0.270000 8000.000000
```

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 129   130    1     0.270000 8000.000000
 129   134    1     0.270000 8000.000000
 133   134    1     0.270000 8000.000000
 133   138    1     0.270000 8000.000000
 137   138    1     0.270000 8000.000000
 137   142    1     0.270000 8000.000000
 141   142    1     0.270000 8000.000000
 141   146    1     0.270000 8000.000000
 145   146    1     0.270000 8000.000000
 145   150    1     0.270000 8000.000000
 149   150    1     0.270000 8000.000000
 149   154    1     0.270000 8000.000000
 153   154    1     0.270000 8000.000000
 153   158    1     0.270000 8000.000000
 157   158    1     0.270000 8000.000000
 157   162    1     0.270000 8000.000000
 161   162    1     0.270000 8000.000000
 161   166    1     0.270000 8000.000000
 165   166    1     0.270000 8000.000000
 165   170    1     0.270000 8000.000000
 169   170    1     0.270000 8000.000000
 169   174    1     0.270000 8000.000000
 173   174    1     0.270000 8000.000000
 173   178    1     0.270000 8000.000000
 177   178    1     0.270000 8000.000000
 177   182    1     0.270000 8000.000000
 181   182    1     0.270000 8000.000000
 181   186    1     0.270000 8000.000000
 185   186    1     0.270000 8000.000000
 185   190    1     0.270000 8000.000000
 189   190    1     0.270000 8000.000000
 189   194    1     0.270000 8000.000000
 193   194    1     0.270000 8000.000000
 193   198    1     0.270000 8000.000000
 197   198    1     0.270000 8000.000000


[ constraints ]
;  ai  aj  funct length
   2     3    1     0.270000
   3     4    1     0.270000
   4     2    1     0.270000
   6     7    1     0.270000
   7     8    1     0.270000
   8     6    1     0.270000
  10    11    1     0.270000
  11    12    1     0.270000
  12    10    1     0.270000
  14    15    1     0.270000
  15    16    1     0.270000
  16    14    1     0.270000
  18    19    1     0.270000
  19    20    1     0.270000
  20    18    1     0.270000
  22    23    1     0.270000
  23    24    1     0.270000
  24    22    1     0.270000
  26    27    1     0.270000
  27    28    1     0.270000
  28    26    1     0.270000
  30    31    1     0.270000
  31    32    1     0.270000
  32    30    1     0.270000
  34    35    1     0.270000
  35    36    1     0.270000
  36    34    1     0.270000
  38    39    1     0.270000
  39    40    1     0.270000
  40    38    1     0.270000
  42    43    1     0.270000
  43    44    1     0.270000
  44    42    1     0.270000
  46    47    1     0.270000
```

47	48	1	0.270000
48	46	1	0.270000
50	51	1	0.270000
51	52	1	0.270000
52	50	1	0.270000
54	55	1	0.270000
55	56	1	0.270000
56	54	1	0.270000
58	59	1	0.270000
59	60	1	0.270000
60	58	1	0.270000
62	63	1	0.270000
63	64	1	0.270000
64	62	1	0.270000
66	67	1	0.270000
67	68	1	0.270000
68	66	1	0.270000
70	71	1	0.270000
71	72	1	0.270000
72	70	1	0.270000
74	75	1	0.270000
75	76	1	0.270000
76	74	1	0.270000
78	79	1	0.270000
79	80	1	0.270000
80	78	1	0.270000
82	83	1	0.270000
83	84	1	0.270000
84	82	1	0.270000
86	87	1	0.270000
87	88	1	0.270000
88	86	1	0.270000
90	91	1	0.270000
91	92	1	0.270000
92	90	1	0.270000
94	95	1	0.270000
95	96	1	0.270000
96	94	1	0.270000
98	99	1	0.270000
99	100	1	0.270000
100	98	1	0.270000
102	103	1	0.270000
103	104	1	0.270000
104	102	1	0.270000
106	107	1	0.270000
107	108	1	0.270000
108	106	1	0.270000
110	111	1	0.270000
111	112	1	0.270000
112	110	1	0.270000
114	115	1	0.270000
115	116	1	0.270000
116	114	1	0.270000
118	119	1	0.270000
119	120	1	0.270000
120	118	1	0.270000
122	123	1	0.270000
123	124	1	0.270000
124	122	1	0.270000
126	127	1	0.270000
127	128	1	0.270000
128	126	1	0.270000
130	131	1	0.270000
131	132	1	0.270000
132	130	1	0.270000
134	135	1	0.270000
135	136	1	0.270000
136	134	1	0.270000
138	139	1	0.270000
139	140	1	0.270000
140	138	1	0.270000
142	143	1	0.270000
143	144	1	0.270000

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 144   142    1     0.270000
 146   147    1     0.270000
 147   148    1     0.270000
 148   146    1     0.270000
 150   151    1     0.270000
 151   152    1     0.270000
 152   150    1     0.270000
 154   155    1     0.270000
 155   156    1     0.270000
 156   154    1     0.270000
 158   159    1     0.270000
 159   160    1     0.270000
 160   158    1     0.270000
 162   163    1     0.270000
 163   164    1     0.270000
 164   162    1     0.270000
 166   167    1     0.270000
 167   168    1     0.270000
 168   166    1     0.270000
 170   171    1     0.270000
 171   172    1     0.270000
 172   170    1     0.270000
 174   175    1     0.270000
 175   176    1     0.270000
 176   174    1     0.270000
 178   179    1     0.270000
 179   180    1     0.270000
 180   178    1     0.270000
 182   183    1     0.270000
 183   184    1     0.270000
 184   182    1     0.270000
 186   187    1     0.270000
 187   188    1     0.270000
 188   186    1     0.270000
 190   191    1     0.270000
 191   192    1     0.270000
 192   190    1     0.270000
 194   195    1     0.270000
 195   196    1     0.270000
 196   194    1     0.270000
 198   199    1     0.270000
 199   200    1     0.270000
 200   198    1     0.270000


[ angles ]
;  ai   aj   ak  funct
    1     2     3    1   136.000000  100.000000
    1     2     4    1   136.000000  100.000000
    1     6     7    1   136.000000  100.000000
    1     6     8    1   136.000000  100.000000
    2     1     6    1   120.000000   25.000000
    1     6     5    1    52.000000  550.000000
    5     6     7    1   136.000000  100.000000
    5     6     8    1   136.000000  100.000000
    5    10    11    1   136.000000  100.000000
    5    10    12    1   136.000000  100.000000
    6     5    10    1   120.000000   25.000000
    5    10     9    1    52.000000  550.000000
    9    10    11    1   136.000000  100.000000
    9    10    12    1   136.000000  100.000000
    9    14    15    1   136.000000  100.000000
    9    14    16    1   136.000000  100.000000
   10     9    14    1   120.000000   25.000000
    9    14    13    1    52.000000  550.000000
   13    14    15    1   136.000000  100.000000
   13    14    16    1   136.000000  100.000000
   13    18    19    1   136.000000  100.000000
   13    18    20    1   136.000000  100.000000
   14    13    18    1   120.000000   25.000000
   13    18    17    1    52.000000  550.000000
   17    18    19    1   136.000000  100.000000
   17    18    20    1   136.000000  100.000000
```

17	22	23	1	136.000000	100.000000
17	22	24	1	136.000000	100.000000
18	17	22	1	120.000000	25.000000
17	22	21	1	52.000000	550.000000
21	22	23	1	136.000000	100.000000
21	22	24	1	136.000000	100.000000
21	26	27	1	136.000000	100.000000
21	26	28	1	136.000000	100.000000
22	21	26	1	120.000000	25.000000
21	26	25	1	52.000000	550.000000
25	26	27	1	136.000000	100.000000
25	26	28	1	136.000000	100.000000
25	30	31	1	136.000000	100.000000
25	30	32	1	136.000000	100.000000
26	25	30	1	120.000000	25.000000
25	30	29	1	52.000000	550.000000
29	30	31	1	136.000000	100.000000
29	30	32	1	136.000000	100.000000
29	34	35	1	136.000000	100.000000
29	34	36	1	136.000000	100.000000
30	29	34	1	120.000000	25.000000
29	34	33	1	52.000000	550.000000
33	34	35	1	136.000000	100.000000
33	34	36	1	136.000000	100.000000
33	38	39	1	136.000000	100.000000
33	38	40	1	136.000000	100.000000
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33	38	37	1	52.000000	550.000000
37	38	39	1	136.000000	100.000000
37	38	40	1	136.000000	100.000000
37	42	43	1	136.000000	100.000000
37	42	44	1	136.000000	100.000000
38	37	42	1	120.000000	25.000000
37	42	41	1	52.000000	550.000000
41	42	43	1	136.000000	100.000000
41	42	44	1	136.000000	100.000000
41	46	47	1	136.000000	100.000000
41	46	48	1	136.000000	100.000000
42	41	46	1	120.000000	25.000000
41	46	45	1	52.000000	550.000000
45	46	47	1	136.000000	100.000000
45	46	48	1	136.000000	100.000000
45	50	51	1	136.000000	100.000000
45	50	52	1	136.000000	100.000000
46	45	50	1	120.000000	25.000000
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49	50	52	1	136.000000	100.000000
49	54	55	1	136.000000	100.000000
49	54	56	1	136.000000	100.000000
50	49	54	1	120.000000	25.000000
49	54	53	1	52.000000	550.000000
53	54	55	1	136.000000	100.000000
53	54	56	1	136.000000	100.000000
53	58	59	1	136.000000	100.000000
53	58	60	1	136.000000	100.000000
54	53	58	1	120.000000	25.000000
53	58	57	1	52.000000	550.000000
57	58	59	1	136.000000	100.000000
57	58	60	1	136.000000	100.000000
57	62	63	1	136.000000	100.000000
57	62	64	1	136.000000	100.000000
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57	62	61	1	52.000000	550.000000
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61	62	64	1	136.000000	100.000000
61	66	67	1	136.000000	100.000000
61	66	68	1	136.000000	100.000000
62	61	66	1	120.000000	25.000000
61	66	65	1	52.000000	550.000000
65	66	67	1	136.000000	100.000000
65	66	68	1	136.000000	100.000000
65	70	71	1	136.000000	100.000000

65	70	72	1	136.000000	100.000000
66	65	70	1	120.000000	25.000000
65	70	69	1	52.000000	550.000000
69	70	71	1	136.000000	100.000000
69	70	72	1	136.000000	100.000000
69	74	75	1	136.000000	100.000000
69	74	76	1	136.000000	100.000000
70	69	74	1	120.000000	25.000000
69	74	73	1	52.000000	550.000000
73	74	75	1	136.000000	100.000000
73	74	76	1	136.000000	100.000000
73	78	79	1	136.000000	100.000000
73	78	80	1	136.000000	100.000000
74	73	78	1	120.000000	25.000000
73	78	77	1	52.000000	550.000000
77	78	79	1	136.000000	100.000000
77	78	80	1	136.000000	100.000000
77	82	83	1	136.000000	100.000000
77	82	84	1	136.000000	100.000000
78	77	82	1	120.000000	25.000000
77	82	81	1	52.000000	550.000000
81	82	83	1	136.000000	100.000000
81	82	84	1	136.000000	100.000000
81	86	87	1	136.000000	100.000000
81	86	88	1	136.000000	100.000000
82	81	86	1	120.000000	25.000000
81	86	85	1	52.000000	550.000000
85	86	87	1	136.000000	100.000000
85	86	88	1	136.000000	100.000000
85	90	91	1	136.000000	100.000000
85	90	92	1	136.000000	100.000000
86	85	90	1	120.000000	25.000000
85	90	89	1	52.000000	550.000000
89	90	91	1	136.000000	100.000000
89	90	92	1	136.000000	100.000000
89	94	95	1	136.000000	100.000000
89	94	96	1	136.000000	100.000000
90	89	94	1	120.000000	25.000000
89	94	93	1	52.000000	550.000000
93	94	95	1	136.000000	100.000000
93	94	96	1	136.000000	100.000000
93	98	99	1	136.000000	100.000000
93	98	100	1	136.000000	100.000000
94	93	98	1	120.000000	25.000000
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101	106	108	1	136.000000	100.000000
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101	106	105	1	52.000000	550.000000
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105	106	108	1	136.000000	100.000000
105	110	111	1	136.000000	100.000000
105	110	112	1	136.000000	100.000000
106	105	110	1	120.000000	25.000000
105	110	109	1	52.000000	550.000000
109	110	111	1	136.000000	100.000000
109	110	112	1	136.000000	100.000000
109	114	115	1	136.000000	100.000000
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113	114	115	1	136.000000	100.000000
113	114	116	1	136.000000	100.000000
113	118	119	1	136.000000	100.000000
113	118	120	1	136.000000	100.000000

114	113	118	1	120.000000	25.000000
113	118	117	1	52.000000	550.000000
117	118	119	1	136.000000	100.000000
117	118	120	1	136.000000	100.000000
117	122	123	1	136.000000	100.000000
117	122	124	1	136.000000	100.000000
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121	126	127	1	136.000000	100.000000
121	126	128	1	136.000000	100.000000
122	121	126	1	120.000000	25.000000
121	126	125	1	52.000000	550.000000
125	126	127	1	136.000000	100.000000
125	126	128	1	136.000000	100.000000
125	130	131	1	136.000000	100.000000
125	130	132	1	136.000000	100.000000
126	125	130	1	120.000000	25.000000
125	130	129	1	52.000000	550.000000
129	130	131	1	136.000000	100.000000
129	130	132	1	136.000000	100.000000
129	134	135	1	136.000000	100.000000
129	134	136	1	136.000000	100.000000
130	129	134	1	120.000000	25.000000
129	134	133	1	52.000000	550.000000
133	134	135	1	136.000000	100.000000
133	134	136	1	136.000000	100.000000
133	138	139	1	136.000000	100.000000
133	138	140	1	136.000000	100.000000
134	133	138	1	120.000000	25.000000
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137	138	140	1	136.000000	100.000000
137	142	143	1	136.000000	100.000000
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137	142	141	1	52.000000	550.000000
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149	150	152	1	136.000000	100.000000
149	154	155	1	136.000000	100.000000
149	154	156	1	136.000000	100.000000
150	149	154	1	120.000000	25.000000
149	154	153	1	52.000000	550.000000
153	154	155	1	136.000000	100.000000
153	154	156	1	136.000000	100.000000
153	158	159	1	136.000000	100.000000
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157	162	164	1	136.000000	100.000000
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161	162	163	1	136.000000	100.000000
161	162	164	1	136.000000	100.000000
161	166	167	1	136.000000	100.000000
161	166	168	1	136.000000	100.000000
162	161	166	1	120.000000	25.000000

161	166	165	1	52.000000	550.000000
165	166	167	1	136.000000	100.000000
165	166	168	1	136.000000	100.000000
165	170	171	1	136.000000	100.000000
165	170	172	1	136.000000	100.000000
166	165	170	1	120.000000	25.000000
165	170	169	1	52.000000	550.000000
169	170	171	1	136.000000	100.000000
169	170	172	1	136.000000	100.000000
169	174	175	1	136.000000	100.000000
169	174	176	1	136.000000	100.000000
170	169	174	1	120.000000	25.000000
169	174	173	1	52.000000	550.000000
173	174	175	1	136.000000	100.000000
173	174	176	1	136.000000	100.000000
173	178	179	1	136.000000	100.000000
173	178	180	1	136.000000	100.000000
174	173	178	1	120.000000	25.000000
173	178	177	1	52.000000	550.000000
177	178	179	1	136.000000	100.000000
177	178	180	1	136.000000	100.000000
177	182	183	1	136.000000	100.000000
177	182	184	1	136.000000	100.000000
178	177	182	1	120.000000	25.000000
177	182	181	1	52.000000	550.000000
181	182	183	1	136.000000	100.000000
181	182	184	1	136.000000	100.000000
181	186	187	1	136.000000	100.000000
181	186	188	1	136.000000	100.000000
182	181	186	1	120.000000	25.000000
181	186	185	1	52.000000	550.000000
185	186	187	1	136.000000	100.000000
185	186	188	1	136.000000	100.000000
185	190	191	1	136.000000	100.000000
185	190	192	1	136.000000	100.000000
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185	190	189	1	52.000000	550.000000
189	190	191	1	136.000000	100.000000
189	190	192	1	136.000000	100.000000
189	194	195	1	136.000000	100.000000
189	194	196	1	136.000000	100.000000
190	189	194	1	120.000000	25.000000
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193	194	195	1	136.000000	100.000000
193	194	196	1	136.000000	100.000000
193	198	199	1	136.000000	100.000000
193	198	200	1	136.000000	100.000000
194	193	198	1	120.000000	25.000000
193	198	197	1	52.000000	550.000000
197	198	199	1	136.000000	100.000000
197	198	200	1	136.000000	100.000000

2.1 Polypropylene NP Coordinates

```
POLYPROPYLENE
 1800
    1IPP     C1    1   2.665   5.221   6.357  0.3598 -0.3395  0.2734
    1IPP     C2    2   2.734   5.151   6.076  0.3428 -0.3337  0.2622
    1IPP     C3    3   2.733   4.862   6.007  0.3849 -0.3373  0.2714
    1IPP     C4    4   2.974   4.692   6.038  0.4110 -0.2847  0.2394
    1IPP     C5    5   3.196   4.656   5.844  0.3884 -0.2649  0.2280
    1IPP     C6    6   3.463   4.784   5.863  0.3785 -0.2218  0.1985
    1IPP     C7    7   3.547   4.998   5.676  0.3249 -0.2133  0.1942
    1IPP     C8    8   3.730   4.939   5.451  0.3144 -0.1917  0.1600
    1IPP     C9    9   4.028   4.971   5.453  0.3037 -0.1449  0.1329
    1IPP    C10   10   4.227   4.750   5.472  0.3466 -0.1083  0.1263
    1IPP    C11   11   4.380   4.678   5.716  0.3835 -0.0786  0.1093
    1IPP    C12   12   4.236   4.511   5.914  0.4270 -0.0937  0.1315
    1IPP    C13   13   4.059   4.646   6.107  0.4240 -0.1278  0.1349
    1IPP    C14   14   3.937   4.850   5.930  0.3806 -0.1452  0.1515
    1IPP    C15   15   4.164   5.037   5.886  0.3404 -0.1081  0.1230
    1IPP    C16   16   4.265   5.191   6.118  0.3430 -0.0937  0.1073
    1IPP    C17   17   4.056   5.387   6.195  0.3125 -0.1201  0.1247
    1IPP    C18   18   3.827   5.260   6.334  0.3485 -0.1472  0.1516
    1IPP    C19   19   3.641   5.100   6.165  0.3711 -0.1900  0.1677
    1IPP    C20   20   3.372   5.174   6.063  0.3411 -0.2299  0.1894
    1IPP    C21   21   3.152   5.077   6.235  0.3668 -0.2601  0.2251
    1IPP    C22   22   3.279   4.857   6.385  0.4251 -0.2368  0.2192
    1IPP    C23   23   3.348   4.588   6.282  0.4452 -0.2303  0.2085
    1IPP    C24   24   3.631   4.521   6.224  0.4659 -0.1866  0.1847
    1IPP    C25   25   3.667   4.395   5.959  0.4530 -0.1868  0.1863
    1IPP    C26   26   3.526   4.137   5.993  0.4938 -0.2092  0.2103
    1IPP    C27   27   3.409   4.101   6.266  0.5298 -0.2139  0.2186
    1IPP    C28   28   3.114   4.112   6.315  0.5344 -0.2674  0.2484
    1IPP    C29   29   2.962   4.362   6.369  0.5002 -0.2871  0.2649
    1IPP    C30   30   2.990   4.414   6.660  0.5230 -0.2812  0.2544
    1IPP    C31   31   3.247   4.548   6.726  0.4998 -0.2268  0.2238
    1IPP    C32   32   3.497   4.402   6.662  0.5201 -0.1988  0.2020
    1IPP    C33   33   3.581   4.203   6.865  0.5710 -0.1824  0.2068
    1IPP    C34   34   3.644   4.394   7.083  0.5626 -0.1676  0.1923
    1IPP    C35   35   3.819   4.616   6.991  0.5163 -0.1272  0.1648
    1IPP    C36   36   4.110   4.607   7.046  0.5298 -0.0930  0.1378
    1IPP    C37   37   4.169   4.745   7.303  0.5301 -0.0737  0.1275
    1IPP    C38   38   4.143   5.039   7.350  0.4830 -0.0909  0.1296
    1IPP    C39   39   4.326   5.248   7.243  0.4425 -0.0484  0.1004
    1IPP    C40   40   4.589   5.214   7.375  0.4614 -0.0114  0.0708
    1IPP    C41   41   4.695   5.018   7.180  0.4824 -0.0061  0.0644
    1IPP    C42   42   4.601   4.736   7.179  0.5203  0.0066  0.0786
    1IPP    C43   43   4.773   4.517   7.279  0.5672  0.0033  0.0723
    1IPP    C44   44   4.917   4.424   7.038  0.5554  0.0386  0.0666
    1IPP    C45   45   4.764   4.263   6.841  0.5512 -0.0014  0.0748
    1IPP    C46   46   4.687   4.396   6.586  0.5220 -0.0154  0.0866
    1IPP    C47   47   4.421   4.525   6.562  0.4766 -0.0504  0.1059
    1IPP    C48   48   4.405   4.817   6.601  0.4445 -0.0628  0.1072
    1IPP    C49   49   4.346   4.940   6.864  0.4579 -0.0656  0.1043
    1IPP    C50   50   4.059   5.016   6.877  0.4492 -0.1059  0.1382
    1IPP    C51   51   3.972   5.275   6.762  0.3909 -0.1214  0.1352
    1IPP    C52   52   4.032   5.483   6.964  0.3736 -0.1148  0.1262
    1IPP    C53   53   3.901   5.452   7.229  0.4091 -0.1141  0.1395
    1IPP    C54   54   3.624   5.534   7.294  0.4171 -0.1651  0.1648
    1IPP    C55   55   3.390   5.350   7.314  0.4310 -0.2088  0.1890
    1IPP    C56   56   3.213   5.307   7.078  0.4201 -0.2392  0.2117
    1IPP    C57   57   2.962   5.451   7.008  0.3884 -0.2768  0.2371
    1IPP    C58   58   2.691   5.332   7.032  0.4230 -0.3081  0.2668
    1IPP    C59   59   2.578   5.174   6.805  0.4139 -0.3355  0.2705
    1IPP    C60   60   2.461   4.905   6.858  0.4595 -0.3614  0.2949
    1IPP    C61   61   2.626   4.658   6.870  0.5016 -0.3275  0.2838
    1IPP    C62   62   2.745   4.692   7.139  0.5186 -0.3093  0.2709
    1IPP    C63   63   2.926   4.928   7.154  0.4845 -0.2644  0.2494
    1IPP    C64   64   3.199   4.853   7.063  0.4901 -0.2348  0.2221
    1IPP    C65   65   3.383   4.721   7.254  0.5257 -0.1978  0.2132
    1IPP    C66   66   3.540   4.923   7.403  0.5173 -0.1733  0.1874
    1IPP    C67   67   3.733   5.023   7.202  0.4774 -0.1528  0.1688
    1IPP    C68   68   3.602   5.128   6.958  0.4312 -0.1743  0.1723
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1IPP    C69   69   3.537   4.909   6.770  0.4404 -0.1902  0.1893
1IPP    C70   70   3.716   4.854   6.540  0.4448 -0.1648  0.1640
1IPP    C71   71   3.969   4.699   6.553  0.4656 -0.1244  0.1433
1IPP    C72   72   3.965   4.403   6.536  0.5024 -0.1267  0.1530
1IPP    C73   73   4.021   4.242   6.780  0.5585 -0.1158  0.1557
1IPP    C74   74   4.306   4.185   6.839  0.5732 -0.0681  0.1245
1IPP    C75   75   4.389   3.969   6.652  0.5911 -0.0631  0.1198
1IPP    C76   76   4.485   4.049   6.382  0.5423 -0.0493  0.1113
1IPP    C77   77   4.292   4.233   6.252  0.5163 -0.0830  0.1262
1IPP    C78   78   4.031   4.161   6.129  0.4948 -0.1301  0.1488
1IPP    C79   79   4.015   4.078   5.843  0.4898 -0.1330  0.1644
1IPP    C80   80   4.055   4.269   5.618  0.4393 -0.1221  0.1556
1IPP    C81   81   3.877   4.505   5.581  0.4071 -0.1645  0.1634
1IPP    C82   82   3.590   4.484   5.509  0.3885 -0.2113  0.1840
1IPP    C83   83   3.489   4.373   5.252  0.3824 -0.2217  0.2087
1IPP    C84   84   3.468   4.515   4.990  0.3285 -0.2344  0.2080
1IPP    C85   85   3.262   4.716   4.916  0.3021 -0.2783  0.2203
1IPP    C86   86   3.329   5.001   4.862  0.2482 -0.2592  0.1953
1IPP    C87   87   3.433   5.087   5.124  0.2567 -0.2395  0.2017
1IPP    C88   88   3.217   5.030   5.315  0.2915 -0.2735  0.2134
1IPP    C89   89   3.240   4.749   5.406  0.3398 -0.2671  0.2162
1IPP    C90   90   3.058   4.537   5.303  0.3669 -0.3014  0.2390
1IPP    C91   91   2.777   4.528   5.400  0.3665 -0.3318  0.2640
1IPP    C92   92   2.731   4.501   5.693  0.4077 -0.3325  0.2776
1IPP    C93   93   2.783   4.243   5.829  0.4571 -0.3281  0.2754
1IPP    C94   94   3.073   4.242   5.890  0.4693 -0.2833  0.2597
1IPP    C95   95   3.218   4.245   5.630  0.4426 -0.2620  0.2385
1IPP    C96   96   3.357   4.000   5.536  0.4760 -0.2462  0.2243
1IPP    C97   97   3.652   4.023   5.564  0.4553 -0.2029  0.1983
1IPP    C98   98   3.830   4.046   5.327  0.4409 -0.1717  0.1786
1IPP    C99   99   4.054   3.851   5.326  0.4781 -0.1463  0.1652
1IPP   C100  100   4.296   3.893   5.496  0.4775 -0.1055  0.1394
1IPP     C1  101   2.158   5.092   4.695  0.2144 -0.4454  0.3248
1IPP     C2  102   2.180   5.385   4.738  0.1608 -0.4460  0.3175
1IPP     C3  103   2.249   5.495   5.003  0.1818 -0.4274  0.3072
1IPP     C4  104   2.022   5.523   5.191  0.2011 -0.4662  0.3286
1IPP     C5  105   1.890   5.779   5.263  0.1602 -0.4812  0.3296
1IPP     C6  106   1.999   5.954   5.478  0.1602 -0.4528  0.3181
1IPP     C7  107   1.935   5.901   5.763  0.1883 -0.4582  0.3319
1IPP     C8  108   1.724   6.037   5.921  0.1896 -0.4915  0.3431
1IPP     C9  109   1.784   6.305   6.034  0.1651 -0.4755  0.3385
1IPP    C10  110   1.963   6.331   6.270  0.1898 -0.4418  0.3050
1IPP    C11  111   2.231   6.453   6.232  0.1409 -0.4169  0.2896
1IPP    C12  112   2.223   6.750   6.261  0.1147 -0.4001  0.2798
1IPP    C13  113   2.158   6.922   6.027  0.0569 -0.4200  0.2781
1IPP    C14  114   2.004   6.819   5.794  0.0613 -0.4509  0.2975
1IPP    C15  115   2.126   6.640   5.590  0.0575 -0.4387  0.2968
1IPP    C16  116   2.075   6.366   5.692  0.1256 -0.4361  0.2970
1IPP    C17  117   2.269   6.215   5.857  0.1501 -0.4023  0.2865
1IPP    C18  118   2.380   5.974   5.727  0.1781 -0.3911  0.2860
1IPP    C19  119   2.547   6.075   5.507  0.1472 -0.3756  0.2587
1IPP    C20  120   2.371   6.214   5.314  0.1051 -0.4031  0.2765
1IPP    C21  121   2.286   5.997   5.132  0.1146 -0.4338  0.2807
1IPP    C22  122   2.507   5.851   4.999  0.1270 -0.3899  0.2780
1IPP    C23  123   2.582   5.903   4.717  0.0857 -0.3878  0.2658
1IPP    C24  124   2.408   5.749   4.532  0.0937 -0.4172  0.2805
1IPP    C25  125   2.166   5.916   4.557  0.0689 -0.4594  0.3119
1IPP    C26  126   2.011   5.868   4.804  0.1055 -0.4774  0.3168
1IPP    C27  127   1.810   5.652   4.790  0.1400 -0.5004  0.3458
1IPP    C28  128   1.547   5.727   4.673  0.1110 -0.5425  0.3702
1IPP    C29  129   1.601   5.819   4.396  0.0816 -0.5369  0.3621
1IPP    C30  130   1.767   6.064   4.417  0.0293 -0.5210  0.3393
1IPP    C31  131   1.677   6.348   4.399 -0.0135 -0.5325  0.3422
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1IPP    C33  133   1.977   6.662   4.149 -0.0821 -0.4864  0.3049
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1IPP    C41  141   2.390   7.035   5.610 -0.0014 -0.3946  0.2584
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1IPP    C48  148   2.602   6.660   5.406  0.0412 -0.3673  0.2408
1IPP    C49  149   2.394   6.740   5.210  0.0038 -0.3940  0.2560
1IPP    C50  150   2.291   6.532   5.025  0.0175 -0.4226  0.2725
1IPP    C51  151   2.502   6.403   4.860  0.0219 -0.4017  0.2590
1IPP    C52  152   2.615   6.640   4.723 -0.0271 -0.3713  0.2380
1IPP    C53  153   2.422   6.728   4.517 -0.0592 -0.4174  0.2638
1IPP    C54  154   2.445   6.711   4.223 -0.0846 -0.4185  0.2465
1IPP    C55  155   2.519   6.980   4.124 -0.1382 -0.4111  0.2473
1IPP    C56  156   2.259   7.119   4.078 -0.1675 -0.4404  0.2641
1IPP    C57  157   2.165   7.049   3.805 -0.1799 -0.4659  0.2771
1IPP    C58  158   2.251   6.766   3.773 -0.1399 -0.4606  0.2759
1IPP    C59  159   2.539   6.742   3.706 -0.1466 -0.4152  0.2399
1IPP    C60  160   2.650   6.569   3.491 -0.1407 -0.4012  0.2462
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1IPP    C63  163   3.098   6.018   3.575 -0.0409 -0.3197  0.2097
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1IPP    C66  166   2.561   5.631   3.608  0.0114 -0.4050  0.2695
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1IPP    C72  172   2.062   6.336   4.700  0.0195 -0.4542  0.3081
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1IPP    C79  179   1.619   6.059   4.980  0.0857 -0.5190  0.3523
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1IPP    C82  182   1.567   5.391   5.372  0.2324 -0.5249  0.3746
1IPP    C83  183   1.808   5.362   5.545  0.2501 -0.4794  0.3469
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1IPP    C93  193   2.560   5.348   4.125  0.1102 -0.3891  0.2675
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1IPP    C95  195   2.165   5.625   3.944  0.0617 -0.4644  0.3084
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1IPP    C97  197   1.992   5.539   4.375  0.1004 -0.4874  0.3249
1IPP    C98  198   1.835   5.291   4.427  0.1568 -0.5081  0.3532
1IPP    C99  199   1.650   5.262   4.659  0.1930 -0.5235  0.3850
1IPP   C100  200   1.770   5.207   4.927  0.2142 -0.5086  0.3564
1IPP     C1  201   5.242   5.864   5.488  0.1687  0.0512  0.0005
1IPP     C2  202   5.033   5.746   5.664  0.2196  0.0263  0.0103
1IPP     C3  203   5.042   5.750   5.963  0.2423  0.0287  0.0177
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1IPP     C7  207   5.288   5.326   6.683  0.3864  0.0776  0.0086
1IPP     C8  208   5.469   5.158   6.849  0.4174  0.1180 -0.0174
1IPP     C9  209   5.367   4.892   6.934  0.4730  0.1018 -0.0010
1IPP    C10  210   5.122   4.843   7.094  0.4993  0.0657  0.0271
1IPP    C11  211   5.101   4.846   7.390  0.5177  0.0738  0.0367
1IPP    C12  212   5.265   4.621   7.493  0.5831  0.0993  0.0266
1IPP    C13  213   5.217   4.353   7.375  0.5937  0.0897  0.0389
1IPP    C14  214   5.400   4.298   7.146  0.5946  0.1046  0.0233
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1IPP	C15	215	5.343	4.417	6.879	0.5402	0.0875	0.0081
1IPP	C16	216	5.178	4.270	6.680	0.5457	0.0670	0.0357
1IPP	C17	217	5.305	4.120	6.458	0.5441	0.0801	0.0334
1IPP	C18	218	5.377	4.339	6.272	0.4954	0.0946	0.0149
1IPP	C19	219	5.626	4.479	6.348	0.4787	0.1170	-0.0243
1IPP	C20	220	5.564	4.674	6.563	0.4619	0.1185	-0.0038
1IPP	C21	221	5.461	4.937	6.475	0.4165	0.1110	-0.0059
1IPP	C22	222	5.636	5.163	6.389	0.3877	0.1400	-0.0289
1IPP	C23	223	5.796	5.338	6.567	0.3522	0.1532	-0.0478
1IPP	C24	224	5.673	5.558	6.726	0.3468	0.1385	-0.0403
1IPP	C25	225	5.543	5.793	6.598	0.2954	0.1213	-0.0352
1IPP	C26	226	5.257	5.852	6.652	0.2936	0.0733	-0.0102
1IPP	C27	227	5.033	5.691	6.541	0.3015	0.0351	0.0208
1IPP	C28	228	4.814	5.819	6.385	0.2752	-0.0018	0.0454
1IPP	C29	229	4.593	5.969	6.518	0.2593	-0.0294	0.0628
1IPP	C30	230	4.389	5.810	6.666	0.3138	-0.0519	0.0782
1IPP	C31	231	4.170	5.644	6.552	0.3160	-0.0984	0.1085
1IPP	C32	232	3.881	5.704	6.511	0.2906	-0.1503	0.1409
1IPP	C33	233	3.691	5.646	6.731	0.3331	-0.1690	0.1514
1IPP	C34	234	3.692	5.885	6.906	0.3082	-0.1662	0.1489
1IPP	C35	235	3.890	5.913	7.126	0.3441	-0.1182	0.1278
1IPP	C36	236	4.179	5.943	7.061	0.3132	-0.0869	0.1057
1IPP	C37	237	4.379	5.729	7.113	0.3634	-0.0410	0.0801
1IPP	C38	238	4.542	5.768	7.359	0.3692	-0.0206	0.0621
1IPP	C39	239	4.766	5.964	7.344	0.3591	0.0141	0.0368
1IPP	C40	240	5.059	5.910	7.343	0.3512	0.0678	0.0134
1IPP	C41	241	5.252	5.890	7.117	0.3427	0.0876	-0.0014
1IPP	C42	242	5.305	5.614	7.023	0.3671	0.0958	-0.0122
1IPP	C43	243	5.457	5.428	7.199	0.4195	0.1206	-0.0148
1IPP	C44	244	5.753	5.399	7.198	0.4242	0.1643	-0.0573
1IPP	C45	245	5.902	5.235	7.000	0.4214	0.1908	-0.0513
1IPP	C46	246	6.152	5.363	6.899	0.3997	0.2208	-0.0876
1IPP	C47	247	6.132	5.602	6.725	0.3420	0.2165	-0.0884
1IPP	C48	248	6.085	5.826	6.916	0.3323	0.2176	-0.0951
1IPP	C49	249	5.808	5.861	7.022	0.3272	0.1563	-0.0577
1IPP	C50	250	5.647	6.093	6.928	0.2828	0.1483	-0.0582
1IPP	C51	251	5.608	6.317	7.121	0.2665	0.1471	-0.0466
1IPP	C52	252	5.343	6.314	7.254	0.2835	0.1056	-0.0268
1IPP	C53	253	5.120	6.343	7.060	0.2528	0.0717	-0.0019
1IPP	C54	254	5.039	6.613	6.968	0.2060	0.0457	-0.0029
1IPP	C55	255	4.823	6.764	7.105	0.2026	0.0173	0.0221
1IPP	C56	256	4.544	6.692	7.026	0.1967	-0.0278	0.0453
1IPP	C57	257	4.379	6.839	6.827	0.1639	-0.0541	0.0648
1IPP	C58	258	4.435	6.817	6.537	0.1402	-0.0442	0.0551
1IPP	C59	259	4.334	6.612	6.346	0.1367	-0.0803	0.0580
1IPP	C60	260	4.496	6.367	6.317	0.1809	-0.0517	0.0516
1IPP	C61	261	4.747	6.441	6.177	0.1470	-0.0085	0.0294
1IPP	C62	262	4.759	6.414	5.885	0.1320	-0.0170	0.0343
1IPP	C63	263	4.835	6.130	5.864	0.1731	0.0048	0.0301
1IPP	C64	264	4.615	5.931	5.855	0.1940	-0.0454	0.0488
1IPP	C65	265	4.473	5.859	6.107	0.2306	-0.0613	0.0765
1IPP	C66	266	4.189	5.897	6.184	0.2397	-0.1007	0.1022
1IPP	C67	267	4.078	6.118	6.347	0.2166	-0.1078	0.1091
1IPP	C68	268	4.047	6.105	6.642	0.2504	-0.1100	0.1177
1IPP	C69	269	4.181	6.324	6.790	0.2314	-0.0897	0.0885
1IPP	C70	270	4.477	6.328	6.780	0.2419	-0.0500	0.0655
1IPP	C71	271	4.673	6.204	6.967	0.2686	-0.0066	0.0368
1IPP	C72	272	4.864	5.991	6.884	0.3060	0.0243	0.0276
1IPP	C73	273	4.771	5.709	6.899	0.3327	0.0072	0.0458
1IPP	C74	274	4.820	5.505	7.109	0.3879	0.0208	0.0484
1IPP	C75	275	4.997	5.291	7.004	0.4157	0.0445	0.0329
1IPP	C76	276	4.871	5.139	6.780	0.4111	0.0109	0.0406
1IPP	C77	277	4.816	4.848	6.771	0.4669	0.0164	0.0618
1IPP	C78	278	5.048	4.702	6.657	0.4646	0.0382	0.0419
1IPP	C79	279	5.043	4.624	6.371	0.4496	0.0358	0.0417
1IPP	C80	280	5.139	4.812	6.162	0.4060	0.0434	0.0250
1IPP	C81	281	4.925	5.010	6.109	0.3810	0.0117	0.0441
1IPP	C82	282	4.672	4.932	5.977	0.3713	-0.0333	0.0741
1IPP	C83	283	4.518	4.755	6.158	0.4161	-0.0568	0.0871
1IPP	C84	284	4.666	4.500	6.122	0.4410	-0.0258	0.0830
1IPP	C85	285	4.645	4.337	5.872	0.4544	-0.0444	0.0873
1IPP	C86	286	4.519	4.070	5.883	0.4830	-0.0516	0.1057
1IPP	C87	287	4.744	3.923	6.010	0.5412	-0.0181	0.0945

1IPP	C88	288	4.997	3.929	5.853	0.5092	0.0085	0.0573
1IPP	C89	289	5.194	4.147	5.902	0.4891	0.0545	0.0309
1IPP	C90	290	5.081	4.421	5.936	0.4461	0.0214	0.0451
1IPP	C91	291	4.989	4.626	5.740	0.3878	0.0133	0.0495
1IPP	C92	292	5.180	4.833	5.643	0.3499	0.0499	0.0296
1IPP	C93	293	5.256	5.069	5.804	0.3249	0.0605	0.0082
1IPP	C94	294	5.100	5.312	5.738	0.2928	0.0237	0.0221
1IPP	C95	295	4.810	5.332	5.797	0.2924	-0.0074	0.0523
1IPP	C96	296	4.682	5.483	6.017	0.2918	-0.0246	0.0534
1IPP	C97	297	4.757	5.391	6.287	0.3233	-0.0094	0.0589
1IPP	C98	298	4.619	5.158	6.407	0.3868	-0.0304	0.0690
1IPP	C99	299	4.389	5.266	6.559	0.3661	-0.0518	0.0891
1IPP	C100	300	4.464	5.373	6.825	0.3869	-0.0473	0.0848
1IPP	C1	301	5.582	5.401	5.868	0.2840	0.1010	-0.0330
1IPP	C2	302	5.823	5.229	5.865	0.3035	0.1456	-0.0491
1IPP	C3	303	5.845	4.979	5.704	0.3329	0.1450	-0.0534
1IPP	C4	304	5.996	4.953	5.450	0.3067	0.1674	-0.0653
1IPP	C5	305	5.858	4.911	5.192	0.2890	0.1376	-0.0430
1IPP	C6	306	5.715	4.653	5.220	0.3439	0.1079	-0.0298
1IPP	C7	307	5.845	4.390	5.175	0.3724	0.1382	-0.0318
1IPP	C8	308	5.840	4.294	4.895	0.3623	0.1318	-0.0295
1IPP	C9	309	5.571	4.186	4.824	0.3648	0.0781	-0.0038
1IPP	C10	310	5.494	3.936	4.968	0.4216	0.0772	0.0221
1IPP	C11	311	5.260	3.894	5.149	0.4499	0.0438	0.0402
1IPP	C12	312	5.238	3.973	5.435	0.4646	0.0455	0.0385
1IPP	C13	313	5.039	4.188	5.484	0.4308	0.0030	0.0558
1IPP	C14	314	4.771	4.061	5.482	0.4623	-0.0264	0.0810
1IPP	C15	315	4.747	3.995	5.193	0.4339	-0.0390	0.0822
1IPP	C16	316	4.788	4.230	5.016	0.3859	-0.0278	0.0823
1IPP	C17	317	5.063	4.259	4.906	0.3606	-0.0019	0.0401
1IPP	C18	318	5.264	4.349	5.105	0.3751	0.0429	0.0307
1IPP	C19	319	5.174	4.570	5.282	0.3607	0.0388	0.0342
1IPP	C20	320	5.188	4.848	5.187	0.3072	0.0275	0.0176
1IPP	C21	321	5.435	5.011	5.205	0.2752	0.0709	0.0007
1IPP	C22	322	5.507	5.165	5.447	0.2859	0.0962	-0.0219
1IPP	C23	323	5.426	5.450	5.461	0.2407	0.0664	-0.0113
1IPP	C24	324	5.651	5.619	5.370	0.1992	0.1042	-0.0491
1IPP	C25	325	5.886	5.570	5.546	0.2330	0.1494	-0.0663
1IPP	C26	326	6.121	5.394	5.491	0.2431	0.1892	-0.0808
1IPP	C27	327	6.358	5.523	5.367	0.2161	0.2262	-0.1036
1IPP	C28	328	6.372	5.478	5.074	0.2025	0.2113	-0.1163
1IPP	C29	329	6.619	5.430	4.915	0.1856	0.2459	-0.1328
1IPP	C30	330	6.706	5.662	4.752	0.1244	0.2641	-0.1529
1IPP	C31	331	6.775	5.926	4.870	0.1098	0.2853	-0.1552
1IPP	C32	332	6.509	6.044	4.922	0.0904	0.2269	-0.1360
1IPP	C33	333	6.343	6.051	4.675	0.0675	0.2057	-0.1256
1IPP	C34	334	6.168	5.811	4.649	0.0951	0.1741	-0.0957
1IPP	C35	335	6.257	5.525	4.655	0.1517	0.1783	-0.1039
1IPP	C36	336	6.387	5.371	4.436	0.1438	0.2005	-0.1108
1IPP	C37	337	6.682	5.318	4.425	0.1520	0.2447	-0.1350
1IPP	C38	338	6.874	5.533	4.349	0.1120	0.2800	-0.1692
1IPP	C39	339	6.896	5.684	4.093	0.0633	0.2662	-0.1703
1IPP	C40	340	7.074	5.620	3.864	0.0471	0.3004	-0.1853
1IPP	C41	341	6.932	5.590	3.605	0.0225	0.2687	-0.1661
1IPP	C42	342	6.765	5.348	3.566	0.0649	0.2435	-0.1426
1IPP	C43	343	6.522	5.370	3.735	0.0714	0.2073	-0.1191
1IPP	C44	344	6.560	5.253	4.006	0.1228	0.2235	-0.1412
1IPP	C45	345	6.430	4.999	4.090	0.1730	0.2017	-0.1087
1IPP	C46	346	6.144	5.018	4.172	0.1724	0.1577	-0.0782
1IPP	C47	347	6.041	5.050	4.449	0.1998	0.1530	-0.0653
1IPP	C48	348	5.992	4.808	4.618	0.2484	0.1511	-0.0598
1IPP	C49	349	5.731	4.665	4.638	0.2821	0.0973	-0.0265
1IPP	C50	350	5.521	4.751	4.832	0.2800	0.0884	-0.0019
1IPP	C51	351	5.323	4.962	4.763	0.2471	0.0430	0.0087
1IPP	C52	352	5.427	5.240	4.748	0.1949	0.0638	-0.0132
1IPP	C53	353	5.438	5.406	4.994	0.1940	0.0602	-0.0115
1IPP	C54	354	5.240	5.613	5.072	0.1745	0.0437	0.0045
1IPP	C55	355	5.311	5.881	4.970	0.1297	0.0442	-0.0021
1IPP	C56	356	5.547	6.014	5.088	0.1060	0.0802	-0.0484
1IPP	C57	357	5.513	6.201	5.316	0.1056	0.0835	-0.0379
1IPP	C58	358	5.705	6.216	5.541	0.1298	0.1224	-0.0617
1IPP	C59	359	5.692	5.950	5.669	0.1808	0.1140	-0.0592
1IPP	C60	360	5.496	5.866	5.873	0.2094	0.0950	-0.0274

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1IPP    C61  361   5.593   5.866   6.153  0.2367  0.1196 -0.0406
1IPP    C62  362   5.731   5.617   6.231  0.2774  0.1383 -0.0440
1IPP    C63  363   6.026   5.604   6.215  0.2943  0.1875 -0.0790
1IPP    C64  364   6.131   5.560   5.941  0.2733  0.2005 -0.0949
1IPP    C65  365   6.283   5.751   5.771  0.2224  0.2125 -0.1061
1IPP    C66  366   6.168   5.973   5.608  0.1740  0.2005 -0.1071
1IPP    C67  367   6.015   5.954   5.354  0.1502  0.1643 -0.0979
1IPP    C68  368   6.120   5.864   5.093  0.1397  0.1846 -0.0898
1IPP    C69  369   5.898   5.698   4.986  0.1473  0.1328 -0.0735
1IPP    C70  370   5.883   5.411   5.058  0.1996  0.1436 -0.0592
1IPP    C71  371   5.957   5.202   4.863  0.2204  0.1376 -0.0661
1IPP    C72  372   6.215   5.067   4.917  0.2442  0.1931 -0.0888
1IPP    C73  373   6.452   5.062   4.738  0.2222  0.2189 -0.1132
1IPP    C74  374   6.465   4.854   4.527  0.2357  0.2149 -0.1057
1IPP    C75  375   6.551   4.604   4.662  0.2803  0.2308 -0.1060
1IPP    C76  376   6.320   4.476   4.797  0.3269  0.2057 -0.0781
1IPP    C77  377   6.188   4.637   5.008  0.3141  0.1829 -0.0788
1IPP    C78  378   6.305   4.680   5.278  0.3371  0.2137 -0.0908
1IPP    C79  379   6.252   4.461   5.471  0.3928  0.2052 -0.0728
1IPP    C80  380   5.986   4.479   5.599  0.4064  0.1632 -0.0470
1IPP    C81  381   5.953   4.530   5.888  0.4196  0.1563 -0.0318
1IPP    C82  382   5.928   4.278   6.042  0.4769  0.1751 -0.0403
1IPP    C83  383   5.662   4.157   5.990  0.4963  0.1270 -0.0118
1IPP    C84  384   5.629   3.966   5.765  0.4967  0.1193 -0.0043
1IPP    C85  385   5.684   4.121   5.518  0.4411  0.1182 -0.0044
1IPP    C86  386   5.490   4.345   5.505  0.4148  0.0760  0.0081
1IPP    C87  387   5.553   4.605   5.633  0.3930  0.1041 -0.0116
1IPP    C88  388   5.496   4.622   5.924  0.4078  0.0943  0.0009
1IPP    C89  389   5.607   4.859   6.064  0.3889  0.1182 -0.0187
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1IPP    C94  394   6.305   5.289   6.355  0.3568  0.2389 -0.1108
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1IPP    C96  396   6.280   5.138   5.841  0.3328  0.2290 -0.0957
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1IPP    C98  398   6.549   4.737   5.752  0.3769  0.2560 -0.1124
1IPP    C99  399   6.703   4.735   5.499  0.3588  0.2784 -0.1242
1IPP   C100  400   6.709   4.469   5.365  0.3790  0.2671 -0.1178
1IPP     C1  401   6.139   9.077   5.825 -0.2846  0.1964 -0.1742
1IPP     C2  402   6.391   9.181   5.707 -0.3258  0.2343 -0.1916
1IPP     C3  403   6.468   9.050   5.452 -0.3234  0.2412 -0.2121
1IPP     C4  404   6.637   8.808   5.424 -0.2875  0.2622 -0.2189
1IPP     C5  405   6.497   8.546   5.433 -0.2419  0.2461 -0.1988
1IPP     C6  406   6.476   8.381   5.679 -0.2052  0.2369 -0.1836
1IPP     C7  407   6.720   8.270   5.803 -0.1574  0.2835 -0.2067
1IPP     C8  408   6.839   8.034   5.669 -0.1509  0.3013 -0.2216
1IPP     C9  409   7.116   8.069   5.570 -0.1582  0.3450 -0.2529
1IPP    C10  410   7.353   7.931   5.682 -0.1321  0.3973 -0.2585
1IPP    C11  411   7.463   8.030   5.938 -0.1133  0.3981 -0.2754
1IPP    C12  412   7.300   7.920   6.160 -0.0854  0.3939 -0.2601
1IPP    C13  413   7.041   8.036   6.078 -0.1007  0.3394 -0.2373
1IPP    C14  414   7.095   8.326   6.075 -0.1477  0.3488 -0.2451
1IPP    C15  415   7.147   8.452   5.813 -0.1923  0.3602 -0.2588
1IPP    C16  416   7.424   8.466   5.706 -0.2058  0.3862 -0.2784
1IPP    C17  417   7.564   8.723   5.755 -0.2360  0.4125 -0.3095
1IPP    C18  418   7.490   8.968   5.601 -0.2946  0.3975 -0.3084
1IPP    C19  419   7.303   9.175   5.708 -0.3234  0.3727 -0.2849
1IPP    C20  420   7.006   9.180   5.681 -0.3295  0.3336 -0.2570
1IPP    C21  421   6.859   9.033   5.893 -0.2811  0.3126 -0.2569
1IPP    C22  422   6.782   8.750   5.857 -0.2415  0.2972 -0.2262
1IPP    C23  423   6.487   8.765   5.848 -0.2373  0.2522 -0.2036
1IPP    C24  424   6.325   8.665   6.074 -0.2037  0.2290 -0.1781
1IPP    C25  425   6.268   8.379   6.124 -0.1599  0.2300 -0.1694
1IPP    C26  426   6.092   8.237   5.933 -0.1545  0.1881 -0.1450
1IPP    C27  427   5.799   8.272   5.920 -0.1589  0.1463 -0.1153
1IPP    C28  428   5.699   8.126   6.157 -0.1085  0.1381 -0.1034
1IPP    C29  429   5.814   7.858   6.193 -0.0819  0.1516 -0.1139
1IPP    C30  430   6.111   7.849   6.184 -0.0531  0.1996 -0.1333
1IPP    C31  431   6.260   7.868   6.438 -0.0445  0.2390 -0.1614
1IPP    C32  432   6.302   8.130   6.569 -0.0723  0.2331 -0.1701
1IPP    C33  433   6.084   8.110   6.769 -0.0521  0.2128 -0.1465
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1IPP    C36  436   5.974   7.531   6.566  0.0259  0.1841 -0.1170
1IPP    C37  437   6.135   7.376   6.761  0.0665  0.2161 -0.1294
1IPP    C38  438   6.300   7.571   6.913  0.0512  0.2466 -0.1485
1IPP    C39  439   6.516   7.698   6.755  0.0216  0.2776 -0.1831
1IPP    C40  440   6.804   7.625   6.756  0.0235  0.3165 -0.2056
1IPP    C41  441   6.911   7.859   6.905  0.0066  0.3416 -0.2128
1IPP    C42  442   6.828   8.092   6.741 -0.0474  0.3356 -0.2124
1IPP    C43  443   7.003   8.145   6.508 -0.0763  0.3393 -0.2375
1IPP    C44  444   7.219   8.347   6.520 -0.1090  0.3873 -0.2708
1IPP    C45  445   7.109   8.622   6.499 -0.1591  0.3594 -0.2541
1IPP    C46  446   7.030   8.731   6.234 -0.1956  0.3521 -0.2524
1IPP    C47  447   7.236   8.840   6.049 -0.2338  0.3625 -0.2778
1IPP    C48  448   7.312   9.098   6.174 -0.2508  0.3975 -0.2829
1IPP    C49  449   7.077   9.277   6.197 -0.2806  0.3599 -0.2786
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1IPP    C51  451   6.669   8.983   6.308 -0.2285  0.2949 -0.2177
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1IPP    C55  455   5.867   8.737   6.030 -0.2100  0.1597 -0.1204
1IPP    C56  456   5.594   8.778   5.919 -0.2435  0.1139 -0.1042
1IPP    C57  457   5.382   8.589   6.009 -0.2062  0.0852 -0.0852
1IPP    C58  458   5.363   8.323   5.877 -0.1725  0.0775 -0.0768
1IPP    C59  459   5.153   8.246   5.683 -0.1788  0.0406 -0.0578
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1IPP    C63  463   5.361   7.844   6.309 -0.0485  0.0921 -0.0729
1IPP    C64  464   5.399   8.057   6.515 -0.0674  0.1068 -0.0701
1IPP    C65  465   5.427   8.353   6.485 -0.1113  0.0948 -0.0771
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1IPP     C4  504   6.288   6.449   5.997  0.1228  0.2199 -0.1283
1IPP     C5  505   6.521   6.524   5.827  0.1065  0.2560 -0.1445
1IPP     C6  506   6.368   6.640   5.605  0.0667  0.2244 -0.1325
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1IPP	C15	515	5.867	6.504	5.859	0.1128	0.1502	-0.0778
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1IPP	C21	521	5.823	6.441	6.472	0.1841	0.1632	-0.0705
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1IPP	C26	526	5.518	6.596	6.183	0.1348	0.1101	-0.0595
1IPP	C27	527	5.662	6.853	6.187	0.0916	0.1364	-0.0671
1IPP	C28	528	5.551	7.087	6.044	0.0431	0.1084	-0.0607
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1IPP	C32	532	5.780	7.848	5.716	-0.1026	0.1449	-0.1056
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1IPP	C51	551	4.859	6.748	6.493	0.1337	0.0095	0.0110
1IPP	C52	552	4.921	6.962	6.687	0.1286	0.0273	-0.0048
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1IPP	C66	566	5.971	7.185	6.160	0.0323	0.1800	-0.1244
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1IPP	C69	569	5.294	7.352	6.316	0.0204	0.0721	-0.0344
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1IPP    C49  649   3.102   7.285   6.178  0.0202 -0.2792  0.1808
1IPP    C50  650   3.375   7.184   6.125  0.0262 -0.2382  0.1358
1IPP    C51  651   3.292   6.969   5.939  0.0441 -0.2375  0.1779
1IPP    C52  652   3.148   6.760   6.093  0.0965 -0.2615  0.1745
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1IPP    C56  656   3.184   5.921   6.290  0.2550 -0.2609  0.2022
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1IPP    C58  658   3.410   5.448   6.401  0.3329 -0.2059  0.1971
1IPP    C59  659   3.319   5.288   6.633  0.3896 -0.2215  0.2016
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1IPP    C62  662   2.813   4.797   6.445  0.4290 -0.3094  0.2666
1IPP    C63  663   2.519   4.810   6.410  0.4323 -0.3503  0.2863
1IPP    C64  664   2.379   4.558   6.340  0.4606 -0.3814  0.3105
1IPP    C65  665   2.443   4.505   6.055  0.4518 -0.3755  0.3131
1IPP    C66  666   2.300   4.642   5.831  0.3978 -0.4052  0.3125
1IPP    C67  667   2.388   4.908   5.727  0.3517 -0.3881  0.3069
1IPP    C68  668   2.607   4.940   5.529  0.3160 -0.3678  0.2834
1IPP    C69  669   2.892   4.920   5.608  0.3354 -0.3129  0.2514
1IPP    C70  670   3.058   5.112   5.762  0.3266 -0.2898  0.2325
1IPP    C71  671   3.228   5.325   5.641  0.2741 -0.2534  0.2021
1IPP    C72  672   3.201   5.619   5.669  0.2214 -0.2728  0.2015
1IPP    C73  673   2.964   5.773   5.576  0.1929 -0.3044  0.2288
1IPP    C74  674   2.849   5.781   5.304  0.1710 -0.3316  0.2372
1IPP    C75  675   2.931   5.977   5.099  0.1188 -0.3274  0.2267
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1IPP    C77  677   2.925   6.346   5.407  0.0909 -0.3159  0.2130
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1IPP    C13  713   7.016   6.938   5.870  0.0480  0.3355 -0.2120
1IPP    C14  714   7.016   6.658   5.770  0.0833  0.3315 -0.1954
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1IPP	C42	742	7.950	6.759	5.815	0.0695	0.4838	-0.2937
1IPP	C43	743	7.677	6.674	5.737	0.0817	0.4271	-0.2781
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1IPP	C46	746	7.711	6.531	5.055	0.0199	0.4285	-0.2753
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1IPP	C76	776	8.031	7.153	5.324	-0.0346	0.4814	-0.3082
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1IPP	C81	781	7.347	7.349	5.241	-0.0809	0.3725	-0.2421
1IPP	C82	782	7.312	7.474	4.974	-0.1134	0.3554	-0.2527
1IPP	C83	783	7.047	7.578	4.891	-0.1658	0.3211	-0.2289
1IPP	C84	784	6.818	7.425	5.001	-0.1204	0.2926	-0.2065
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1IPP    C15  815   4.010   7.826   5.031 -0.1711 -0.1467  0.0770
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1IPP    C67  867   3.789   8.522   5.409 -0.2494 -0.1770  0.0715
1IPP    C68  868   3.901   8.778   5.510 -0.2866 -0.1682  0.0587
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1IPP    C70  870   3.874   8.859   5.036 -0.3388 -0.1713  0.0658
1IPP    C71  871   4.128   8.759   4.919 -0.3302 -0.1314  0.0413
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1IPP    C83  883   4.023   6.944   6.442  0.1048 -0.1212  0.0834
1IPP    C84  884   4.018   6.931   6.147  0.0693 -0.1265  0.1016
1IPP    C85  885   3.759   6.948   6.004  0.0523 -0.1776  0.1164
1IPP    C86  886   3.658   6.697   5.887  0.0916 -0.1835  0.1379
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1IPP    C78 1078   4.862   8.502   5.115 -0.2831 -0.0177 -0.0333
1IPP    C79 1079   4.964   8.764   5.024 -0.3272 -0.0002 -0.0442
1IPP    C80 1080   5.026   8.923   5.266 -0.3195  0.0094 -0.0527
1IPP    C81 1081   4.789   9.045   5.396 -0.3338 -0.0164 -0.0383
1IPP    C82 1082   4.670   9.290   5.276 -0.3719 -0.0512 -0.0256
1IPP    C83 1083   4.375   9.319   5.241 -0.3959 -0.0842  0.0050
1IPP    C84 1084   4.209   9.222   5.014 -0.3979 -0.1272  0.0190
1IPP    C85 1085   4.213   9.439   4.810 -0.4531 -0.1170  0.0060
1IPP    C86 1086   4.459   9.408   4.647 -0.4651 -0.0904 -0.0128
1IPP    C87 1087   4.692   9.438   4.830 -0.4434 -0.0381 -0.0330
1IPP    C88 1088   4.840   9.691   4.874 -0.4889 -0.0325 -0.0500
1IPP    C89 1089   5.079   9.749   4.707 -0.5086  0.0092 -0.0847
1IPP    C90 1090   5.325   9.620   4.809 -0.4829  0.0477 -0.0999
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1IPP    C92 1092   5.359   9.740   5.315 -0.4479  0.0605 -0.1072
1IPP    C93 1093   5.395   9.491   5.472 -0.3936  0.0748 -0.1130
1IPP    C94 1094   5.155   9.314   5.474 -0.3704  0.0425 -0.0762
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1IPP    C96 1096   5.145   8.881   5.731 -0.2692  0.0384 -0.0716
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1IPP    C98 1098   4.814   8.514   5.834 -0.2071 -0.0187 -0.0233
1IPP    C99 1099   4.920   8.457   6.107 -0.1622 -0.0005 -0.0242
1IPP   C100 1100   5.077   8.222   6.199 -0.1237  0.0436 -0.0416
1IPP     C1 1101   5.970   7.992   5.265 -0.1852  0.1654 -0.1332
1IPP     C2 1102   6.008   7.712   5.359 -0.1253  0.1583 -0.1218
1IPP     C3 1103   5.969   7.501   5.157 -0.1207  0.1518 -0.1145
1IPP     C4 1104   5.687   7.420   5.111 -0.0936  0.1035 -0.0839
1IPP     C5 1105   5.502   7.576   4.940 -0.1460  0.0820 -0.0741
1IPP     C6 1106   5.262   7.734   5.011 -0.1565  0.0379 -0.0523
1IPP     C7 1107   4.983   7.631   5.019 -0.1645 -0.0013 -0.0294
1IPP     C8 1108   4.814   7.613   4.775 -0.1646 -0.0280  0.0049
1IPP     C9 1109   4.636   7.822   4.660 -0.2268 -0.0607  0.0094
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1IPP    C15 1115   5.082   8.013   3.986 -0.3095 -0.0037 -0.0329
1IPP    C16 1116   5.254   7.958   4.223 -0.2873  0.0181 -0.0477
1IPP    C17 1117   5.151   7.855   4.484 -0.2351  0.0141 -0.0509
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1IPP    C20 1120   4.924   8.457   4.666 -0.3167 -0.0151 -0.0294
1IPP    C21 1121   5.205   8.513   4.735 -0.3077  0.0344 -0.0678
1IPP    C22 1122   5.444   8.469   4.565 -0.3298  0.0542 -0.0893
1IPP    C23 1123   5.486   8.176   4.542 -0.2856  0.0682 -0.0939
1IPP    C24 1124   5.553   7.991   4.764 -0.2307  0.0752 -0.0823
1IPP    C25 1125   5.826   7.898   4.836 -0.2037  0.1242 -0.1100
1IPP    C26 1126   5.932   7.666   4.684 -0.1841  0.1505 -0.1213
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1IPP    C33 1133   6.245   6.547   4.421 -0.0359  0.1789 -0.1197
1IPP    C34 1134   6.312   6.816   4.314 -0.0951  0.1922 -0.1327
1IPP    C35 1135   6.118   6.955   4.137 -0.1264  0.1519 -0.1134
1IPP    C36 1136   6.110   6.874   3.851 -0.1520  0.1424 -0.1179
1IPP    C37 1137   6.271   7.011   3.642 -0.1905  0.1650 -0.1392
1IPP    C38 1138   6.201   7.291   3.576 -0.2374  0.1592 -0.1343
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1IPP    C43 1143   5.963   8.263   3.285 -0.4231  0.1195 -0.1308
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1IPP    C50 1150   5.655   8.100   3.923 -0.3291  0.0859 -0.0961
1IPP    C51 1151   5.669   7.825   4.035 -0.2753  0.0802 -0.0941
1IPP    C52 1152   5.746   7.860   4.319 -0.2580  0.1010 -0.1032
1IPP    C53 1153   5.996   8.018   4.342 -0.2761  0.1384 -0.1332
1IPP    C54 1154   6.224   7.960   4.159 -0.2880  0.1732 -0.1459
1IPP    C55 1155   6.417   7.738   4.194 -0.2487  0.2006 -0.1734
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1IPP    C57 1157   6.576   7.581   4.660 -0.1640  0.2392 -0.1899
1IPP    C58 1158   6.341   7.608   4.838 -0.1726  0.2033 -0.1499
1IPP    C59 1159   6.369   7.762   5.088 -0.1578  0.2187 -0.1583
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1IPP    C61 1161   6.393   7.537   5.552 -0.0745  0.2343 -0.1603
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1IPP    C63 1163   6.495   7.060   5.549 -0.0012  0.2344 -0.1590
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1IPP    C66 1166   6.251   7.151   4.873 -0.0915  0.1965 -0.1404
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1IPP    C72 1172   6.005   7.893   3.720 -0.3228  0.1319 -0.1273
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1IPP    C79 1179   5.076   7.566   3.917 -0.2467 -0.0084 -0.0353
1IPP    C80 1180   4.926   7.614   4.168 -0.2307 -0.0258 -0.0140
1IPP    C81 1181   4.981   7.446   4.408 -0.1839 -0.0185 -0.0172
1IPP    C82 1182   4.811   7.216   4.486 -0.1429 -0.0423  0.0088
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1IPP    C85 1185   4.539   7.122   5.140 -0.0614 -0.0649  0.0376
1IPP    C86 1186   4.795   7.233   5.238 -0.0648 -0.0231  0.0031
1IPP    C87 1187   4.843   7.391   5.485 -0.0645 -0.0055 -0.0065
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1IPP    C14 1214   7.040   8.858   4.484 -0.3959  0.3097 -0.2463
1IPP    C15 1215   6.890   8.697   4.283 -0.3796  0.2788 -0.2402
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1IPP    C22 1222   6.529   7.577   3.390 -0.3044  0.2041 -0.1815
1IPP    C23 1223   6.604   7.295   3.333 -0.2701  0.2181 -0.1788
1IPP    C24 1224   6.709   7.111   3.542 -0.2129  0.2384 -0.1721
1IPP    C25 1225   6.974   7.179   3.659 -0.2110  0.2741 -0.2093
1IPP    C26 1226   7.239   7.078   3.565 -0.2145  0.3281 -0.2377
1IPP    C27 1227   7.358   6.833   3.688 -0.1574  0.3347 -0.2400
1IPP    C28 1228   7.491   6.852   3.954 -0.1226  0.3709 -0.2489
1IPP    C29 1229   7.776   6.876   4.033 -0.1359  0.4090 -0.2743
1IPP    C30 1230   7.922   6.625   4.099 -0.0879  0.4370 -0.2925
1IPP    C31 1231   7.840   6.470   4.340 -0.0324  0.4271 -0.2871
1IPP    C32 1232   7.869   6.593   4.609 -0.0221  0.4346 -0.2914
1IPP    C33 1233   7.590   6.685   4.653 -0.0347  0.4007 -0.2537
1IPP    C34 1234   7.468   6.811   4.413 -0.0812  0.3583 -0.2539
1IPP    C35 1235   7.517   7.100   4.370 -0.1400  0.3813 -0.2505
1IPP    C36 1236   7.393   7.210   4.615 -0.1152  0.3633 -0.2602
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1IPP    C39 1239   6.917   7.495   4.190 -0.2146  0.2819 -0.2078
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1IPP    C46 1246   6.017   8.433   3.998 -0.3758  0.1340 -0.1427
1IPP    C47 1247   6.120   8.329   3.741 -0.3835  0.1470 -0.1538
1IPP    C48 1248   6.258   8.500   3.541 -0.4303  0.1694 -0.1652
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1IPP    C54 1254   6.554   7.424   3.824 -0.2375  0.2191 -0.1696
1IPP    C55 1255   6.413   7.302   4.055 -0.1860  0.2103 -0.1580
1IPP    C56 1256   6.605   7.167   4.235 -0.1546  0.2342 -0.1875
1IPP    C57 1257   6.689   7.020   3.994 -0.1566  0.2352 -0.1749
1IPP    C58 1258   6.557   6.775   3.896 -0.1227  0.2219 -0.1612
1IPP    C59 1259   6.730   6.539   3.932 -0.0819  0.2481 -0.1726
1IPP    C60 1260   6.939   6.509   3.722 -0.1040  0.2729 -0.1946
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1IPP    C62 1262   6.997   6.039   3.550 -0.0576  0.2742 -0.1965
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1IPP    C75 1275   7.350   7.914   4.673 -0.2316  0.3543 -0.2651
1IPP    C76 1276   7.508   7.883   4.922 -0.1907  0.3882 -0.2837
1IPP    C77 1277   7.399   7.921   5.195 -0.1782  0.3744 -0.2712
1IPP    C78 1278   7.457   8.189   5.312 -0.2102  0.3944 -0.2858
1IPP    C79 1279   7.728   8.235   5.427 -0.1957  0.4388 -0.3034
1IPP    C80 1280   7.814   8.040   5.635 -0.1525  0.4483 -0.3058
1IPP    C81 1281   8.020   7.864   5.513 -0.1377  0.4767 -0.3442
1IPP    C82 1282   7.916   7.810   5.241 -0.1374  0.4669 -0.3047
1IPP    C83 1283   7.718   7.595   5.188 -0.1271  0.4162 -0.3033
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1IPP    C96 1296   7.972   6.955   4.924 -0.0523  0.4527 -0.3060
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1IPP     C2 1302   6.453   4.683   6.612  0.4743  0.2675 -0.0946
1IPP     C3 1303   6.657   4.502   6.492  0.4842  0.2867 -0.1186
1IPP     C4 1304   6.939   4.519   6.583  0.4939  0.3357 -0.1478
1IPP     C5 1305   7.094   4.767   6.529  0.4515  0.3562 -0.1626
1IPP     C6 1306   7.124   4.851   6.246  0.4125  0.3614 -0.1736
1IPP     C7 1307   7.316   4.701   6.077  0.4226  0.3864 -0.1909
1IPP     C8 1308   7.606   4.735   6.128  0.4191  0.4365 -0.2219
1IPP     C9 1309   7.679   5.017   6.075  0.3620  0.4410 -0.2274
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1IPP    C12 1312   8.005   4.892   5.509  0.3358  0.4907 -0.2597
1IPP    C13 1313   7.834   4.797   5.285  0.3130  0.4417 -0.2457
1IPP    C14 1314   7.575   4.830   5.424  0.3329  0.4144 -0.2220
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1IPP    C16 1316   7.309   4.453   5.667  0.4085  0.3795 -0.1834
1IPP    C17 1317   7.030   4.540   5.724  0.4128  0.3379 -0.1510
1IPP    C18 1318   6.893   4.534   5.988  0.4294  0.3159 -0.1401
1IPP    C19 1319   6.694   4.319   6.038  0.4734  0.2958 -0.1192
1IPP    C20 1320   6.406   4.368   5.976  0.4564  0.2420 -0.0915
1IPP    C21 1321   6.295   4.515   6.208  0.4492  0.2340 -0.0799
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1IPP    C31 1331   7.893   5.930   5.672  0.1848  0.4683 -0.2860
1IPP    C32 1332   7.824   6.036   5.404  0.1413  0.4480 -0.2637
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1IPP    C40 1340   6.685   4.806   5.049  0.2932  0.2571 -0.1329
1IPP    C41 1341   6.921   4.864   4.880  0.2746  0.2952 -0.1614
1IPP    C42 1342   6.916   4.928   4.590  0.2373  0.2923 -0.1584
1IPP    C43 1343   7.020   4.688   4.451  0.2543  0.3021 -0.1554
1IPP    C44 1344   7.315   4.655   4.483  0.2644  0.3368 -0.1820
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1IPP    C47 1347   7.342   4.503   5.207  0.3592  0.3707 -0.1937
1IPP    C48 1348   7.108   4.671   5.277  0.3459  0.3346 -0.1733
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1IPP    C50 1350   7.189   4.981   5.705  0.3392  0.3545 -0.1857
1IPP    C51 1351   6.921   4.980   5.832  0.3511  0.3152 -0.1479
1IPP    C52 1352   6.718   5.180   5.744  0.3062  0.2840 -0.1331
1IPP    C53 1353   6.704   5.471   5.804  0.2686  0.2832 -0.1476
1IPP    C54 1354   6.705   5.709   5.624  0.2149  0.2747 -0.1472
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1IPP    C60 1360   6.948   6.192   6.517  0.2220  0.3311 -0.1907
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1IPP    C62 1362   7.062   6.696   6.488  0.1473  0.3509 -0.2146
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1IPP    C64 1364   7.456   6.699   6.143  0.1124  0.4070 -0.2455
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1IPP    C69 1369   7.108   5.712   5.859  0.2492  0.3363 -0.1837
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1IPP    C74 1374   7.971   5.335   5.183  0.2248  0.4690 -0.2623
1IPP    C75 1375   8.220   5.260   5.326  0.2550  0.5125 -0.3013
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1IPP    C12 1512   3.604   7.665   2.054 -0.4621 -0.2918  0.1112
1IPP    C13 1513   3.824   7.465   2.030 -0.4245 -0.2485  0.1002
1IPP    C14 1514   3.946   7.338   2.269 -0.3897 -0.2261  0.0888
1IPP    C15 1515   3.772   7.163   2.433 -0.3379 -0.2466  0.1127
1IPP    C16 1516   3.594   7.313   2.614 -0.3427 -0.2691  0.1301
1IPP    C17 1517   3.684   7.290   2.894 -0.3092 -0.2521  0.1156
1IPP    C18 1518   3.517   7.130   3.078 -0.2746 -0.2706  0.1361
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1IPP    C22 1522   3.175   6.456   3.441 -0.1216 -0.3151  0.1826
1IPP    C23 1523   3.458   6.415   3.523 -0.1084 -0.2726  0.1606
1IPP    C24 1524   3.622   6.164   3.515 -0.0713 -0.2353  0.1602
1IPP    C25 1525   3.762   6.033   3.284 -0.0764 -0.2360  0.1308
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1IPP    C27 1527   4.080   6.325   3.028 -0.1480 -0.1884  0.0928
1IPP    C28 1528   4.137   6.393   2.747 -0.1967 -0.1875  0.0993
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1IPP    C37 1537   4.892   7.719   3.148 -0.3499 -0.0537 -0.0186
1IPP    C38 1538   4.704   7.593   3.341 -0.3207 -0.0857  0.0029
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1IPP    C41 1541   4.632   7.317   2.731 -0.3283 -0.1087  0.0201
1IPP    C42 1542   4.812   7.551   2.698 -0.3737 -0.0795 -0.0049
1IPP    C43 1543   4.640   7.788   2.735 -0.3968 -0.1054  0.0183
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1IPP    C50 1550   3.720   6.511   2.838 -0.1951 -0.2536  0.1312
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1IPP    C62 1562   4.005   5.581   3.089 -0.0267 -0.1873  0.1241
1IPP    C63 1563   3.711   5.626   3.085 -0.0274 -0.2387  0.1492
1IPP    C64 1564   3.595   5.791   2.866 -0.0766 -0.2790  0.1666
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1IPP    C89 1589   2.554   7.101   3.063 -0.2684 -0.4261  0.2343
1IPP    C90 1590   2.692   6.852   3.148 -0.2143 -0.3979  0.2254
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1IPP    C92 1592   2.895   6.597   2.765 -0.2122 -0.3734  0.2128
1IPP    C93 1593   2.897   6.786   2.537 -0.2740 -0.3850  0.2181
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1IPP    C95 1595   2.985   6.564   2.096 -0.2741 -0.3816  0.2072
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1IPP    C98 1598   3.562   6.273   2.239 -0.2116 -0.2821  0.1601
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1IPP   C100 1600   4.053   6.337   2.312 -0.2252 -0.2065  0.0999
1IPP     C1 1601   4.866   8.672   3.084 -0.5150 -0.0573 -0.0274
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1IPP    C37 1637   3.129   7.819   2.789 -0.4089 -0.3460  0.1646
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1IPP    C60 1660   4.754   7.647   2.261 -0.4252 -0.0999  0.0052
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1IPP    C62 1662   5.124   7.915   2.480 -0.4534 -0.0371 -0.0495
1IPP    C63 1663   5.147   7.864   2.772 -0.4111 -0.0387 -0.0403
1IPP    C64 1664   5.108   8.101   2.947 -0.4305 -0.0224 -0.0390
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1IPP    C72 1672   3.735   8.290   3.316 -0.4336 -0.2208  0.0902
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1IPP    C81 1681   4.038   8.506   3.958 -0.3911 -0.1673  0.0506
1IPP    C82 1682   4.335   8.521   3.958 -0.3891 -0.1345  0.0226
1IPP    C83 1683   4.497   8.752   4.051 -0.4189 -0.0910  0.0008
1IPP    C84 1684   4.534   8.970   3.854 -0.4769 -0.1132 -0.0086
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1IPP    C86 1686   4.082   9.238   3.821 -0.5249 -0.1685  0.0248
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1IPP    C93 1693   4.966   8.592   3.560 -0.4494 -0.0363 -0.0401
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1IPP    C96 1696   4.594   8.264   3.355 -0.4295 -0.0971  0.0123
1IPP    C97 1697   4.405   8.405   3.534 -0.4179 -0.1198  0.0128
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1IPP    C99 1699   4.062   8.083   3.795 -0.3436 -0.1703  0.0588
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1IPP    C14 1714   5.454   7.239   2.507 -0.3440  0.0254 -0.0676
1IPP    C15 1715   5.372   7.514   2.584 -0.3748  0.0041 -0.0541
1IPP    C16 1716   5.562   7.648   2.770 -0.3790  0.0426 -0.0761
1IPP    C17 1717   5.697   7.458   2.955 -0.3300  0.0675 -0.0869
1IPP    C18 1718   5.541   7.337   3.175 -0.2865  0.0410 -0.0743
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1IPP    C20 1720   5.672   7.399   3.658 -0.2460  0.0828 -0.0888
1IPP    C21 1721   5.785   7.127   3.693 -0.2050  0.0853 -0.0888
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1IPP    C26 1726   5.555   6.145   4.120 -0.0103  0.0628 -0.0341
1IPP    C27 1727   5.608   5.891   4.264  0.0479  0.0741 -0.0482
1IPP    C28 1728   5.537   5.625   4.154  0.0793  0.0676 -0.0219
1IPP    C29 1729   5.272   5.491   4.133  0.1006  0.0225  0.0041
1IPP    C30 1730   5.173   5.314   4.352  0.1421  0.0138  0.0095
1IPP    C31 1731   5.221   5.024   4.317  0.1885  0.0184  0.0190
1IPP    C32 1732   5.502   4.940   4.362  0.2112  0.0645 -0.0111
1IPP    C33 1733   5.686   4.947   4.131  0.1742  0.0909 -0.0252
1IPP    C34 1734   5.746   5.228   4.058  0.1235  0.1007 -0.0428
1IPP    C35 1735   5.640   5.367   3.817  0.0882  0.0673 -0.0345
1IPP    C36 1736   5.830   5.348   3.589  0.0670  0.0989 -0.0526
1IPP    C37 1737   6.088   5.498   3.583  0.0394  0.1432 -0.0788
1IPP    C38 1738   6.135   5.748   3.429 -0.0182  0.1361 -0.0904
1IPP    C39 1739   6.116   6.023   3.541 -0.0564  0.1436 -0.1041
1IPP    C40 1740   5.850   6.153   3.528 -0.0610  0.1003 -0.0766
1IPP    C41 1741   5.820   6.281   3.262 -0.1017  0.0944 -0.0753
1IPP    C42 1742   6.009   6.509   3.267 -0.1585  0.1104 -0.0964
1IPP    C43 1743   5.948   6.748   3.433 -0.1759  0.1084 -0.0915
1IPP    C44 1744   5.800   6.963   3.293 -0.2138  0.0845 -0.0887
1IPP    C45 1745   5.979   7.043   3.072 -0.2519  0.1026 -0.1100
1IPP    C46 1746   6.257   7.073   3.173 -0.2484  0.1517 -0.1443
1IPP    C47 1747   6.452   6.848   3.197 -0.2109  0.1890 -0.1446
```

```
  1IPP    C48 1748   6.536   6.694   3.439 -0.1601  0.2071 -0.1605
  1IPP    C49 1749   6.418   6.433   3.520 -0.1141  0.1866 -0.1403
  1IPP    C50 1750   6.197   6.438   3.718 -0.0958  0.1573 -0.1115
  1IPP    C51 1751   6.296   6.419   3.997 -0.0674  0.1849 -0.1302
  1IPP    C52 1752   6.339   6.161   4.137 -0.0076  0.1845 -0.1149
  1IPP    C53 1753   6.087   6.020   4.204  0.0259  0.1493 -0.1005
  1IPP    C54 1754   5.947   6.169   4.418  0.0249  0.1404 -0.0902
  1IPP    C55 1755   5.800   6.068   4.655  0.0552  0.1175 -0.0594
  1IPP    C56 1756   5.509   6.123   4.640  0.0507  0.0743 -0.0380
  1IPP    C57 1757   5.372   6.357   4.765  0.0176  0.0544 -0.0294
  1IPP    C58 1758   5.210   6.337   5.014  0.0528  0.0341 -0.0206
  1IPP    C59 1759   4.916   6.381   5.017  0.0372 -0.0079  0.0148
  1IPP    C60 1760   4.793   6.648   5.060  0.0086 -0.0312  0.0197
  1IPP    C61 1761   4.852   6.885   4.893 -0.0554 -0.0235  0.0031
  1IPP    C62 1762   4.634   6.844   4.699 -0.0529 -0.0608  0.0300
  1IPP    C63 1763   4.721   6.703   4.455 -0.0545 -0.0509  0.0317
  1IPP    C64 1764   4.702   6.412   4.511 -0.0105 -0.0505  0.0230
  1IPP    C65 1765   4.949   6.270   4.598  0.0319 -0.0205  0.0176
  1IPP    C66 1766   5.144   6.145   4.411  0.0241  0.0080 -0.0015
  1IPP    C67 1767   5.177   5.853   4.371  0.0609  0.0142  0.0044
  1IPP    C68 1768   5.314   5.682   4.575  0.1203  0.0293 -0.0072
  1IPP    C69 1769   5.604   5.652   4.639  0.1165  0.0871 -0.0339
  1IPP    C70 1770   5.791   5.466   4.500  0.1390  0.1079 -0.0522
  1IPP    C71 1771   5.990   5.576   4.307  0.1036  0.1351 -0.0741
  1IPP    C72 1772   5.977   5.600   4.012  0.0771  0.1313 -0.0739
  1IPP    C73 1773   5.869   5.833   3.865  0.0056  0.1072 -0.0615
  1IPP    C74 1774   5.585   5.855   3.780  0.0078  0.0630 -0.0488
  1IPP    C75 1775   5.509   5.731   3.523 -0.0025  0.0500 -0.0256
  1IPP    C76 1776   5.528   5.896   3.279 -0.0536  0.0423 -0.0347
  1IPP    C77 1777   5.338   6.122   3.243 -0.0854  0.0098 -0.0140
  1IPP    C78 1778   5.044   6.099   3.198 -0.1065 -0.0407  0.0121
  1IPP    C79 1779   4.906   6.322   3.337 -0.1100 -0.0585  0.0140
  1IPP    C80 1780   4.784   6.334   3.608 -0.0880 -0.0679  0.0302
  1IPP    C81 1781   4.497   6.404   3.647 -0.0891 -0.1070  0.0516
  1IPP    C82 1782   4.420   6.676   3.552 -0.1483 -0.1325  0.0639
  1IPP    C83 1783   4.540   6.919   3.669 -0.1761 -0.0990  0.0424
  1IPP    C84 1784   4.761   6.930   3.471 -0.1810 -0.0780  0.0115
  1IPP    C85 1785   4.982   6.733   3.489 -0.1609 -0.0231 -0.0002
  1IPP    C86 1786   5.232   6.823   3.619 -0.1621  0.0073 -0.0345
  1IPP    C87 1787   5.373   7.001   3.432 -0.2111  0.0253 -0.0414
  1IPP    C88 1788   5.143   7.169   3.355 -0.2468 -0.0099 -0.0277
  1IPP    C89 1789   5.027   7.368   3.540 -0.2560 -0.0301 -0.0147
  1IPP    C90 1790   4.802   7.290   3.720 -0.2237 -0.0590  0.0143
  1IPP    C91 1791   4.869   7.150   3.974 -0.1824 -0.0361 -0.0096
  1IPP    C92 1792   4.935   6.863   3.936 -0.1364 -0.0373  0.0059
  1IPP    C93 1793   4.755   6.629   3.961 -0.0969 -0.0659  0.0263
  1IPP    C94 1794   4.858   6.398   4.117 -0.0489 -0.0368  0.0230
  1IPP    C95 1795   4.892   6.112   4.043 -0.0189 -0.0343  0.0161
  1IPP    C96 1796   5.141   5.989   3.936  0.0020 -0.0104  0.0045
  1IPP    C97 1797   5.132   5.958   3.641 -0.0187 -0.0074  0.0012
  1IPP    C98 1798   5.003   5.700   3.575  0.0032 -0.0268  0.0088
  1IPP    C99 1799   5.153   5.458   3.664  0.0585 -0.0174  0.0152
  1IPP   C100 1800   5.332   5.313   3.476  0.0580  0.0173 -0.0009
10.00000  10.00000  10.00000
```

2.2 Polypropylene NP System Topology

```
#include "martini_v2.0_PEO_PS_CNP.itp"
#include "PP100.itp"

[ system ]
; name
 POLYPROPYLENE

[ molecules ]
; name               number
IPP                   18
```

2.3 Polypropylene NP Topology

```
[moleculetype]
 ; molname     nrexcl
   IPP       2

 [atoms]
 ; id type   resnr residu  atom   cgnr charge
   1  SC1      1     IPP   C1      1   0
   2  SC1      1     IPP   C2      2   0
   3  SC1      1     IPP   C3      3   0
   4  SC1      1     IPP   C4      4   0
   5  SC1      1     IPP   C5      5   0
   6  SC1      1     IPP   C6      6   0
   7  SC1      1     IPP   C7      7   0
   8  SC1      1     IPP   C8      8   0
   9  SC1      1     IPP   C9      9   0
  10  SC1      1     IPP   C10    10   0
  11  SC1      1     IPP   C11    11   0
  12  SC1      1     IPP   C12    12   0
  13  SC1      1     IPP   C13    13   0
  14  SC1      1     IPP   C14    14   0
  15  SC1      1     IPP   C15    15   0
  16  SC1      1     IPP   C16    16   0
  17  SC1      1     IPP   C17    17   0
  18  SC1      1     IPP   C18    18   0
  19  SC1      1     IPP   C19    19   0
  20  SC1      1     IPP   C20    20   0
  21  SC1      1     IPP   C21    21   0
  22  SC1      1     IPP   C22    22   0
  23  SC1      1     IPP   C23    23   0
  24  SC1      1     IPP   C24    24   0
  25  SC1      1     IPP   C25    25   0
  26  SC1      1     IPP   C26    26   0
  27  SC1      1     IPP   C27    27   0
  28  SC1      1     IPP   C28    28   0
  29  SC1      1     IPP   C29    29   0
  30  SC1      1     IPP   C30    30   0
  31  SC1      1     IPP   C31    31   0
  32  SC1      1     IPP   C32    32   0
  33  SC1      1     IPP   C33    33   0
  34  SC1      1     IPP   C34    34   0
  35  SC1      1     IPP   C35    35   0
  36  SC1      1     IPP   C36    36   0
  37  SC1      1     IPP   C37    37   0
  38  SC1      1     IPP   C38    38   0
  39  SC1      1     IPP   C39    39   0
  40  SC1      1     IPP   C40    40   0
  41  SC1      1     IPP   C41    41   0
  42  SC1      1     IPP   C42    42   0
  43  SC1      1     IPP   C43    43   0
  44  SC1      1     IPP   C44    44   0
  45  SC1      1     IPP   C45    45   0
  46  SC1      1     IPP   C46    46   0
  47  SC1      1     IPP   C47    47   0
  48  SC1      1     IPP   C48    48   0
  49  SC1      1     IPP   C49    49   0
  50  SC1      1     IPP   C50    50   0
  51  SC1      1     IPP   C51    51   0
```

```
 52  SC1      1     IPP   C52    52   0
 53  SC1      1     IPP   C53    53   0
 54  SC1      1     IPP   C54    54   0
 55  SC1      1     IPP   C55    55   0
 56  SC1      1     IPP   C56    56   0
 57  SC1      1     IPP   C57    57   0
 58  SC1      1     IPP   C58    58   0
 59  SC1      1     IPP   C59    59   0
 60  SC1      1     IPP   C60    60   0
 61  SC1      1     IPP   C61    61   0
 62  SC1      1     IPP   C62    62   0
 63  SC1      1     IPP   C63    63   0
 64  SC1      1     IPP   C64    64   0
 65  SC1      1     IPP   C65    65   0
 66  SC1      1     IPP   C66    66   0
 67  SC1      1     IPP   C67    67   0
 68  SC1      1     IPP   C68    68   0
 69  SC1      1     IPP   C69    69   0
 70  SC1      1     IPP   C70    70   0
 71  SC1      1     IPP   C71    71   0
 72  SC1      1     IPP   C72    72   0
 73  SC1      1     IPP   C73    73   0
 74  SC1      1     IPP   C74    74   0
 75  SC1      1     IPP   C75    75   0
 76  SC1      1     IPP   C76    76   0
 77  SC1      1     IPP   C77    77   0
 78  SC1      1     IPP   C78    78   0
 79  SC1      1     IPP   C79    79   0
 80  SC1      1     IPP   C80    80   0
 81  SC1      1     IPP   C81    81   0
 82  SC1      1     IPP   C82    82   0
 83  SC1      1     IPP   C83    83   0
 84  SC1      1     IPP   C84    84   0
 85  SC1      1     IPP   C85    85   0
 86  SC1      1     IPP   C86    86   0
 87  SC1      1     IPP   C87    87   0
 88  SC1      1     IPP   C88    88   0
 89  SC1      1     IPP   C89    89   0
 90  SC1      1     IPP   C90    90   0
 91  SC1      1     IPP   C91    91   0
 92  SC1      1     IPP   C92    92   0
 93  SC1      1     IPP   C93    93   0
 94  SC1      1     IPP   C94    94   0
 95  SC1      1     IPP   C95    95   0
 96  SC1      1     IPP   C96    96   0
 97  SC1      1     IPP   C97    97   0
 98  SC1      1     IPP   C98    98   0
 99  SC1      1     IPP   C99    99   0
100  SC1      1     IPP   C100  100   0

[bonds]
;  i    j   funct   length  force.c.
   1    2      1     0.298  48000
   2    3      1     0.298  48000
   3    4      1     0.298  48000
   4    5      1     0.298  48000
   5    6      1     0.298  48000
   6    7      1     0.298  48000
   7    8      1     0.298  48000
   8    9      1     0.298  48000
   9   10      1     0.298  48000
  10   11      1     0.298  48000
  11   12      1     0.298  48000
  12   13      1     0.298  48000
  13   14      1     0.298  48000
  14   15      1     0.298  48000
  15   16      1     0.298  48000
  16   17      1     0.298  48000
  17   18      1     0.298  48000
  18   19      1     0.298  48000
  19   20      1     0.298  48000
  20   21      1     0.298  48000
  21   22      1     0.298  48000
```

22	23	1	0.298	48000
23	24	1	0.298	48000
24	25	1	0.298	48000
25	26	1	0.298	48000
26	27	1	0.298	48000
27	28	1	0.298	48000
28	29	1	0.298	48000
29	30	1	0.298	48000
30	31	1	0.298	48000
31	32	1	0.298	48000
32	33	1	0.298	48000
33	34	1	0.298	48000
34	35	1	0.298	48000
35	36	1	0.298	48000
36	37	1	0.298	48000
37	38	1	0.298	48000
38	39	1	0.298	48000
39	40	1	0.298	48000
40	41	1	0.298	48000
41	42	1	0.298	48000
42	43	1	0.298	48000
43	44	1	0.298	48000
44	45	1	0.298	48000
45	46	1	0.298	48000
46	47	1	0.298	48000
47	48	1	0.298	48000
48	49	1	0.298	48000
49	50	1	0.298	48000
50	51	1	0.298	48000
51	52	1	0.298	48000
52	53	1	0.298	48000
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60	61	1	0.298	48000
61	62	1	0.298	48000
62	63	1	0.298	48000
63	64	1	0.298	48000
64	65	1	0.298	48000
65	66	1	0.298	48000
66	67	1	0.298	48000
67	68	1	0.298	48000
68	69	1	0.298	48000
69	70	1	0.298	48000
70	71	1	0.298	48000
71	72	1	0.298	48000
72	73	1	0.298	48000
73	74	1	0.298	48000
74	75	1	0.298	48000
75	76	1	0.298	48000
76	77	1	0.298	48000
77	78	1	0.298	48000
78	79	1	0.298	48000
79	80	1	0.298	48000
80	81	1	0.298	48000
81	82	1	0.298	48000
82	83	1	0.298	48000
83	84	1	0.298	48000
84	85	1	0.298	48000
85	86	1	0.298	48000
86	87	1	0.298	48000
87	88	1	0.298	48000
88	89	1	0.298	48000
89	90	1	0.298	48000
90	91	1	0.298	48000
91	92	1	0.298	48000
92	93	1	0.298	48000
93	94	1	0.298	48000
94	95	1	0.298	48000

```
  95   96      1     0.298  48000
  96   97      1     0.298  48000
  97   98      1     0.298  48000
  98   99      1     0.298  48000
  99  100      1     0.298  48000

[angles]
;  i    j    k    funct   angle   force.c.
   1    2    3     10       119     78
   2    3    4     10       119     78
   3    4    5     10       119     78
   4    5    6     10       119     78
   5    6    7     10       119     78
   6    7    8     10       119     78
   7    8    9     10       119     78
   8    9   10     10       119     78
   9   10   11     10       119     78
  10   11   12     10       119     78
  11   12   13     10       119     78
  12   13   14     10       119     78
  13   14   15     10       119     78
  14   15   16     10       119     78
  15   16   17     10       119     78
  16   17   18     10       119     78
  17   18   19     10       119     78
  18   19   20     10       119     78
  19   20   21     10       119     78
  20   21   22     10       119     78
  21   22   23     10       119     78
  22   23   24     10       119     78
  23   24   25     10       119     78
  24   25   26     10       119     78
  25   26   27     10       119     78
  26   27   28     10       119     78
  27   28   29     10       119     78
  28   29   30     10       119     78
  29   30   31     10       119     78
  30   31   32     10       119     78
  31   32   33     10       119     78
  32   33   34     10       119     78
  33   34   35     10       119     78
  34   35   36     10       119     78
  35   36   37     10       119     78
  36   37   38     10       119     78
  37   38   39     10       119     78
  38   39   40     10       119     78
  39   40   41     10       119     78
  40   41   42     10       119     78
  41   42   43     10       119     78
  42   43   44     10       119     78
  43   44   45     10       119     78
  44   45   46     10       119     78
  45   46   47     10       119     78
  46   47   48     10       119     78
  47   48   49     10       119     78
  48   49   50     10       119     78
  49   50   51     10       119     78
  50   51   52     10       119     78
  51   52   53     10       119     78
  52   53   54     10       119     78
  53   54   55     10       119     78
  54   55   56     10       119     78
  55   56   57     10       119     78
  56   57   58     10       119     78
  57   58   59     10       119     78
  58   59   60     10       119     78
  59   60   61     10       119     78
  60   61   62     10       119     78
  61   62   63     10       119     78
  62   63   64     10       119     78
  63   64   65     10       119     78
  64   65   66     10       119     78
  65   66   67     10       119     78
```

```
  66   67   68     10       119     78
  67   68   69     10       119     78
  68   69   70     10       119     78
  69   70   71     10       119     78
  70   71   72     10       119     78
  71   72   73     10       119     78
  72   73   74     10       119     78
  73   74   75     10       119     78
  74   75   76     10       119     78
  75   76   77     10       119     78
  76   77   78     10       119     78
  77   78   79     10       119     78
  78   79   80     10       119     78
  79   80   81     10       119     78
  80   81   82     10       119     78
  81   82   83     10       119     78
  82   83   84     10       119     78
  83   84   85     10       119     78
  84   85   86     10       119     78
  85   86   87     10       119     78
  86   87   88     10       119     78
  87   88   89     10       119     78
  88   89   90     10       119     78
  89   90   91     10       119     78
  90   91   92     10       119     78
  91   92   93     10       119     78
  92   93   94     10       119     78
  93   94   95     10       119     78
  94   95   96     10       119     78
  95   96   97     10       119     78
  96   97   98     10       119     78
  97   98   99     10       119     78
  98   99  100     10       119     78

[ dihedrals ]
;  ai   aj   ak   al       funct  phi     k       n
   1    2    3    4        9   100.00  3.10      1
   1    2    3    4        9   190.00 -5.90      2
   2    3    4    5        9   100.00  3.10      1
   2    3    4    5        9   190.00 -5.90      2
   3    4    5    6        9   100.00  3.10      1
   3    4    5    6        9   190.00 -5.90      2
   4    5    6    7        9   100.00  3.10      1
   4    5    6    7        9   190.00 -5.90      2
   5    6    7    8        9   100.00  3.10      1
   5    6    7    8        9   190.00 -5.90      2
   6    7    8    9        9   100.00  3.10      1
   6    7    8    9        9   190.00 -5.90      2
   7    8    9   10        9   100.00  3.10      1
   7    8    9   10        9   190.00 -5.90      2
   8    9   10   11        9   100.00  3.10      1
   8    9   10   11        9   190.00 -5.90      2
   9   10   11   12        9   100.00  3.10      1
   9   10   11   12        9   190.00 -5.90      2
  10   11   12   13        9   100.00  3.10      1
  10   11   12   13        9   190.00 -5.90      2
  11   12   13   14        9   100.00  3.10      1
  11   12   13   14        9   190.00 -5.90      2
  12   13   14   15        9   100.00  3.10      1
  12   13   14   15        9   190.00 -5.90      2
  13   14   15   16        9   100.00  3.10      1
  13   14   15   16        9   190.00 -5.90      2
  14   15   16   17        9   100.00  3.10      1
  14   15   16   17        9   190.00 -5.90      2
  15   16   17   18        9   100.00  3.10      1
  15   16   17   18        9   190.00 -5.90      2
  16   17   18   19        9   100.00  3.10      1
  16   17   18   19        9   190.00 -5.90      2
  17   18   19   20        9   100.00  3.10      1
  17   18   19   20        9   190.00 -5.90      2
  18   19   20   21        9   100.00  3.10      1
  18   19   20   21        9   190.00 -5.90      2
  19   20   21   22        9   100.00  3.10      1
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20	21	22	23	9	100.00	3.10	1
20	21	22	23	9	190.00	-5.90	2
21	22	23	24	9	100.00	3.10	1
21	22	23	24	9	190.00	-5.90	2
22	23	24	25	9	100.00	3.10	1
22	23	24	25	9	190.00	-5.90	2
23	24	25	26	9	100.00	3.10	1
23	24	25	26	9	190.00	-5.90	2
24	25	26	27	9	100.00	3.10	1
24	25	26	27	9	190.00	-5.90	2
25	26	27	28	9	100.00	3.10	1
25	26	27	28	9	190.00	-5.90	2
26	27	28	29	9	100.00	3.10	1
26	27	28	29	9	190.00	-5.90	2
27	28	29	30	9	100.00	3.10	1
27	28	29	30	9	190.00	-5.90	2
28	29	30	31	9	100.00	3.10	1
28	29	30	31	9	190.00	-5.90	2
29	30	31	32	9	100.00	3.10	1
29	30	31	32	9	190.00	-5.90	2
30	31	32	33	9	100.00	3.10	1
30	31	32	33	9	190.00	-5.90	2
31	32	33	34	9	100.00	3.10	1
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32	33	34	35	9	100.00	3.10	1
32	33	34	35	9	190.00	-5.90	2
33	34	35	36	9	100.00	3.10	1
33	34	35	36	9	190.00	-5.90	2
34	35	36	37	9	100.00	3.10	1
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35	36	37	38	9	100.00	3.10	1
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36	37	38	39	9	100.00	3.10	1
36	37	38	39	9	190.00	-5.90	2
37	38	39	40	9	100.00	3.10	1
37	38	39	40	9	190.00	-5.90	2
38	39	40	41	9	100.00	3.10	1
38	39	40	41	9	190.00	-5.90	2
39	40	41	42	9	100.00	3.10	1
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40	41	42	43	9	100.00	3.10	1
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41	42	43	44	9	100.00	3.10	1
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42	43	44	45	9	100.00	3.10	1
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43	44	45	46	9	100.00	3.10	1
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44	45	46	47	9	100.00	3.10	1
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45	46	47	48	9	100.00	3.10	1
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46	47	48	49	9	100.00	3.10	1
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66	67	68	69	9	100.00	3.10	1
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68	69	70	71	9	100.00	3.10	1
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69	70	71	72	9	100.00	3.10	1
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73	74	75	76	9	100.00	3.10	1
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74	75	76	77	9	100.00	3.10	1
74	75	76	77	9	190.00	-5.90	2
75	76	77	78	9	100.00	3.10	1
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76	77	78	79	9	100.00	3.10	1
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77	78	79	80	9	100.00	3.10	1
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78	79	80	81	9	100.00	3.10	1
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79	80	81	82	9	100.00	3.10	1
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90	91	92	93	9	190.00	-5.90	2
91	92	93	94	9	100.00	3.10	1
91	92	93	94	9	190.00	-5.90	2
92	93	94	95	9	100.00	3.10	1

92	93	94	95	9	190.00	-5.90	2
93	94	95	96	9	100.00	3.10	1
93	94	95	96	9	190.00	-5.90	2
94	95	96	97	9	100.00	3.10	1
94	95	96	97	9	190.00	-5.90	2
95	96	97	98	9	100.00	3.10	1
95	96	97	98	9	190.00	-5.90	2
96	97	98	99	9	100.00	3.10	1
96	97	98	99	9	190.00	-5.90	2
97	98	99	100	9	100.00	3.10	1
97	98	99	100	9	190.00	-5.90	2

3.1 Polyethylene NP Coordinates

```
POLYETHYLENE
 1120
    1PE      C1    1  11.451  17.082  11.380  0.2420 -0.2185  0.0258
    1PE      C2    2  11.751  16.942  11.101  0.2223 -0.1860 -0.0309
    1PE      C3    3  12.118  17.068  10.967  0.2001 -0.1806 -0.0543
    1PE      C4    4  12.506  17.056  11.107  0.2139 -0.2076 -0.0937
    1PE      C5    5  12.630  16.877  11.491  0.2467 -0.2154 -0.1175
    1PE      C6    6  12.421  16.937  11.882  0.2995 -0.2677 -0.1069
    1PE      C7    7  12.052  17.150  12.014  0.3056 -0.2735 -0.0295
    1PE      C8    8  11.659  17.207  12.231  0.3238 -0.3044  0.0089
    1PE      C9    9  11.453  17.509  12.470  0.3362 -0.3343  0.0532
    1PE     C10   10  11.274  17.916  12.383  0.3234 -0.3278  0.1042
    1PE     C11   11  10.996  18.103  12.065  0.3031 -0.2969  0.1543
    1PE     C12   12  10.679  18.096  11.733  0.2723 -0.2867  0.2003
    1PE     C13   13  10.365  18.083  11.423  0.2281 -0.2379  0.2079
    1PE     C14   14   9.939  18.190  11.366  0.2265 -0.2499  0.2689
    1PE     C15   15   9.593  18.511  11.279  0.2237 -0.2352  0.3364
    1PE     C16   16   9.623  18.960  11.240  0.2110 -0.2440  0.3891
    1PE     C17   17  10.011  19.191  11.172  0.1958 -0.2174  0.3574
    1PE     C18   18  10.394  19.000  11.044  0.1861 -0.2100  0.2924
    1PE     C19   19  10.581  18.596  11.128  0.1953 -0.2302  0.2421
    1PE     C20   20  10.830  18.239  11.231  0.2146 -0.2034  0.1922
    1PE     C21   21  11.150  17.951  11.085  0.2003 -0.2046  0.1350
    1PE     C22   22  11.519  17.713  10.974  0.2040 -0.1923  0.0666
    1PE     C23   23  11.775  17.436  11.195  0.2004 -0.2131  0.0139
    1PE     C24   24  11.758  17.378  11.649  0.2589 -0.2585  0.0234
    1PE     C25   25  11.597  17.646  11.970  0.3009 -0.2887  0.0483
    1PE     C26   26  11.517  18.073  11.971  0.2989 -0.2699  0.1092
    1PE     C27   27  11.362  18.483  12.032  0.2799 -0.2937  0.1534
    1PE     C28   28  11.056  18.812  12.043  0.2944 -0.2907  0.2212
    1PE     C29   29  10.626  18.907  12.112  0.2947 -0.3045  0.2694
    1PE     C30   30  10.285  18.723  11.916  0.2885 -0.2966  0.2838
    1PE     C31   31  10.263  18.576  11.515  0.2427 -0.2470  0.2822
    1PE     C32   32  10.066  18.644  11.161  0.2151 -0.2159  0.3097
    1PE     C33   33   9.894  18.844  10.824  0.1567 -0.1807  0.3343
    1PE     C34   34  10.014  19.235  10.648  0.1537 -0.1643  0.3558
    1PE     C35   35  10.318  19.499  10.855  0.1543 -0.1944  0.3578
    1PE     C36   36  10.446  19.439  11.298  0.2115 -0.2324  0.3431
    1PE     C37   37  10.453  19.069  11.560  0.2382 -0.2629  0.3076
    1PE     C38   38  10.723  18.714  11.639  0.2568 -0.2534  0.2468
    1PE     C39   39  11.032  18.430  11.661  0.2644 -0.2592  0.1925
    1PE     C40   40  11.235  18.073  11.552  0.2458 -0.2462  0.1367
    1PE     C41   41  11.669  17.889  11.526  0.2593 -0.2393  0.0697
    1PE     C42   42  12.016  17.864  11.263  0.2136 -0.2034  0.0294
    1PE     C43   43  12.381  18.027  11.056  0.2002 -0.1820  0.0178
    1PE     C44   44  12.417  18.327  10.740  0.1677 -0.1655  0.0484
    1PE     C45   45  12.059  18.456  10.521  0.1424 -0.1514  0.0862
    1PE     C46   46  11.666  18.476  10.726  0.1620 -0.1711  0.1299
    1PE     C47   47  11.565  18.689  11.108  0.2068 -0.1934  0.1670
    1PE     C48   48  11.847  18.838  11.411  0.2268 -0.2364  0.1388
    1PE     C49   49  12.284  18.748  11.435  0.2260 -0.2313  0.0931
    1PE     C50   50  12.507  18.354  11.420  0.2265 -0.2240  0.0288
    1PE     C51   51  12.409  17.929  11.566  0.2483 -0.2435 -0.0045
    1PE     C52   52  12.109  17.694  11.820  0.2830 -0.2521  0.0137
    1PE     C53   53  11.997  17.608  12.259  0.3128 -0.3116  0.0072
    1PE     C54   54  11.779  17.906  12.518  0.3553 -0.3322  0.0715
    1PE     C55   55  11.724  18.325  12.364  0.3285 -0.3210  0.1114
    1PE     C56   56  11.873  18.459  11.942  0.2927 -0.2774  0.1072
    1PE     C57   57  12.013  18.290  11.542  0.2389 -0.2351  0.0741
    1PE     C58   58  12.048  18.419  11.111  0.2050 -0.1882  0.0859
    1PE     C59   59  12.015  18.820  10.903  0.1738 -0.1727  0.1270
    1PE     C60   60  11.709  19.162  10.984  0.1705 -0.1796  0.1872
    1PE     C61   61  11.364  19.140  11.289  0.2204 -0.2299  0.2196
    1PE     C62   62  11.363  18.831  11.615  0.2528 -0.2515  0.1812
    1PE     C63   63  11.544  18.438  11.542  0.2475 -0.2614  0.1461
    1PE     C64   64  11.596  18.194  11.148  0.2024 -0.1939  0.1048
    1PE     C65   65  11.874  18.037  10.815  0.1732 -0.1825  0.0585
    1PE     C66   66  12.182  17.896  10.548  0.1518 -0.1461  0.0163
    1PE     C67   67  12.429  17.616  10.292  0.1330 -0.1204 -0.0261
    1PE     C68   68  12.760  17.354  10.158  0.0910 -0.1010 -0.0797
```

1PE	C69	69	12.919	16.952	10.274	0.1330	-0.1068	-0.1369
1PE	C70	70	12.750	16.643	10.558	0.1501	-0.1321	-0.1547
1PE	C71	71	12.381	16.655	10.802	0.1826	-0.1606	-0.1127
1PE	C72	72	11.961	16.551	10.863	0.1882	-0.1760	-0.0938
1PE	C73	73	11.737	16.294	11.119	0.2381	-0.1956	-0.0900
1PE	C74	74	11.638	15.873	11.123	0.2165	-0.2018	-0.1279
1PE	C75	75	11.428	15.606	10.828	0.1940	-0.1741	-0.1236
1PE	C76	76	11.184	15.395	10.497	0.1620	-0.1545	-0.1066
1PE	C77	77	10.888	15.368	10.133	0.1388	-0.0974	-0.0775
1PE	C78	78	10.754	15.338	9.681	0.1010	-0.0714	-0.0796
1PE	C79	79	10.680	15.338	9.222	0.0287	-0.0328	-0.0814
1PE	C80	80	10.435	15.313	8.830	0.0164	0.0017	-0.0432
1PE	C1	81	11.324	18.517	10.374	0.1132	-0.1294	0.1531
1PE	C2	82	10.959	18.333	10.441	0.1376	-0.1490	0.1904
1PE	C3	83	10.637	18.265	10.728	0.1617	-0.1753	0.2097
1PE	C4	84	10.248	18.219	10.935	0.1675	-0.1936	0.2466
1PE	C5	85	9.820	18.336	10.848	0.1701	-0.1898	0.2947
1PE	C6	86	9.616	18.227	10.464	0.1376	-0.1685	0.3075
1PE	C7	87	9.886	18.020	10.113	0.1071	-0.1343	0.2572
1PE	C8	88	10.345	18.035	10.037	0.0990	-0.1144	0.2242
1PE	C9	89	10.754	17.933	10.227	0.1243	-0.1323	0.1793
1PE	C10	90	10.892	17.851	10.628	0.1468	-0.1560	0.1449
1PE	C11	91	10.678	17.819	11.015	0.1952	-0.2019	0.1669
1PE	C12	92	10.783	17.727	11.434	0.2329	-0.2544	0.1579
1PE	C13	93	10.688	17.496	11.812	0.2839	-0.2781	0.1305
1PE	C14	94	10.810	17.092	11.975	0.3139	-0.2776	0.0767
1PE	C15	95	10.834	16.645	12.042	0.3168	-0.3000	0.0419
1PE	C16	96	10.887	16.311	11.742	0.2763	-0.2880	0.0009
1PE	C17	97	10.950	16.398	11.288	0.2222	-0.2106	0.0024
1PE	C18	98	11.345	16.614	11.172	0.2332	-0.1988	-0.0034
1PE	C19	99	11.691	16.651	11.476	0.2654	-0.2307	-0.0573
1PE	C20	100	11.665	16.917	11.810	0.2858	-0.2685	-0.0169
1PE	C21	101	11.308	17.216	11.852	0.2819	-0.2604	0.0424
1PE	C22	102	10.991	17.227	11.529	0.2592	-0.2497	0.0753
1PE	C23	103	11.023	16.992	11.170	0.2123	-0.2090	0.0576
1PE	C24	104	11.320	17.016	10.847	0.1892	-0.1626	0.0076
1PE	C25	105	11.675	17.243	10.719	0.1781	-0.1538	0.0180
1PE	C26	106	12.067	17.414	10.621	0.1598	-0.1596	-0.0165
1PE	C27	107	12.335	17.547	10.945	0.1914	-0.1738	-0.0196
1PE	C28	108	12.250	17.427	11.391	0.2219	-0.2268	-0.0213
1PE	C29	109	12.084	17.025	11.495	0.2506	-0.2343	-0.0320
1PE	C30	110	12.182	16.653	11.308	0.2352	-0.2162	-0.0923
1PE	C31	111	12.290	16.264	11.149	0.2055	-0.1994	-0.1542
1PE	C32	112	12.170	15.850	11.299	0.2445	-0.2078	-0.1767
1PE	C33	113	12.120	15.785	11.776	0.2781	-0.2493	-0.1526
1PE	C34	114	11.910	16.118	12.062	0.3380	-0.2864	-0.1283
1PE	C35	115	11.578	16.390	11.896	0.3070	-0.2779	-0.0389
1PE	C36	116	11.375	16.273	11.518	0.2576	-0.2516	-0.0553
1PE	C37	117	11.114	15.942	11.419	0.2536	-0.2395	-0.0608
1PE	C38	118	10.654	15.948	11.484	0.2605	-0.2521	-0.0047
1PE	C39	119	10.379	16.313	11.606	0.2747	-0.2602	0.0632
1PE	C40	120	10.293	16.679	11.362	0.2413	-0.2319	0.0965
1PE	C41	121	10.587	16.834	11.060	0.2171	-0.1973	0.0866
1PE	C42	122	10.954	16.621	10.842	0.1982	-0.1754	0.0164
1PE	C43	123	10.890	16.264	10.603	0.1685	-0.1666	-0.0046
1PE	C44	124	10.471	16.120	10.533	0.1751	-0.1620	0.0171
1PE	C45	125	10.114	16.371	10.642	0.1729	-0.1762	0.0989
1PE	C46	126	10.102	16.760	10.889	0.1836	-0.1991	0.1233
1PE	C47	127	10.236	17.170	11.057	0.2184	-0.2140	0.1576
1PE	C48	128	10.642	17.336	11.120	0.2138	-0.2106	0.1259
1PE	C49	129	11.061	17.460	11.056	0.1964	-0.2024	0.1006
1PE	C50	130	11.311	17.577	11.409	0.2204	-0.2350	0.0692
1PE	C51	131	11.140	17.685	11.812	0.2932	-0.2658	0.1085
1PE	C52	132	11.031	17.517	12.183	0.3187	-0.3160	0.0876
1PE	C53	133	11.130	17.124	12.360	0.3490	-0.3220	0.0481
1PE	C54	134	11.311	16.788	12.121	0.3113	-0.3022	0.0094
1PE	C55	135	11.195	16.721	11.684	0.2764	-0.2680	0.0312
1PE	C56	136	10.772	16.779	11.549	0.2681	-0.2535	0.0657
1PE	C57	137	10.500	17.105	11.545	0.2598	-0.2473	0.1173
1PE	C58	138	10.080	17.143	11.548	0.2663	-0.2610	0.1598
1PE	C59	139	9.811	16.960	11.256	0.2264	-0.2288	0.1626
1PE	C60	140	9.781	16.507	11.162	0.2125	-0.2217	0.1241
1PE	C61	141	10.152	16.230	11.149	0.2294	-0.2195	0.0653

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1PE     C62  142  10.530  16.354  10.971  0.2109 -0.1967  0.0376
1PE     C63  143  10.527  16.653  10.594  0.1711 -0.1561  0.0667
1PE     C64  144  10.166  16.818  10.392  0.1225 -0.1478  0.1292
1PE     C65  145   9.845  16.643  10.192  0.1240 -0.1333  0.1407
1PE     C66  146   9.803  16.215  10.168  0.1311 -0.1292  0.1021
1PE     C67  147  10.012  15.910  10.388  0.1578 -0.1512  0.0404
1PE     C68  148  10.148  15.845  10.801  0.1825 -0.1711  0.0170
1PE     C69  149  10.531  15.845  11.004  0.2109 -0.1996 -0.0102
1PE     C70  150  10.962  15.881  10.943  0.1959 -0.1963 -0.0317
1PE     C71  151  11.288  16.161  10.905  0.1967 -0.1808 -0.0483
1PE     C72  152  11.428  16.510  10.692  0.1834 -0.1688 -0.0370
1PE     C73  153  11.681  16.769  10.491  0.1506 -0.1312 -0.0283
1PE     C74  154  12.080  16.912  10.501  0.1483 -0.1365 -0.0586
1PE     C75  155  12.486  17.098  10.548  0.1618 -0.1446 -0.0848
1PE     C76  156  12.741  17.436  10.672  0.1744 -0.1505 -0.0967
1PE     C77  157  12.702  17.893  10.640  0.1524 -0.1514 -0.0377
1PE     C78  158  12.540  18.144  10.275  0.1299 -0.1219  0.0070
1PE     C79  159  12.191  18.016  10.036  0.0917 -0.0922  0.0443
1PE     C80  160  11.962  17.649  10.088  0.1016 -0.0929  0.0205
1PE      C1  161   9.508  17.962   8.819 -0.0405 -0.0101  0.2870
1PE      C2  162   9.421  17.863   9.252  0.0135 -0.0366  0.2947
1PE      C3  163   9.376  17.569   9.607  0.0450 -0.0819  0.2787
1PE      C4  164   9.362  17.342  10.020  0.1059 -0.1266  0.2554
1PE      C5  165   9.449  17.020  10.346  0.1349 -0.1517  0.2178
1PE      C6  166   9.773  17.028  10.631  0.1670 -0.1767  0.1889
1PE      C7  167  10.145  17.281  10.579  0.1621 -0.1663  0.1671
1PE      C8  168  10.485  17.156  10.253  0.1333 -0.1202  0.1345
1PE      C9  169  10.378  16.846   9.919  0.0978 -0.1065  0.1014
1PE     C10  170   9.948  16.839   9.716  0.0709 -0.0699  0.1451
1PE     C11  171   9.725  17.216   9.626  0.0710 -0.0802  0.1896
1PE     C12  172   9.785  17.585   9.903  0.0836 -0.1083  0.2357
1PE     C13  173  10.162  17.598  10.175  0.1174 -0.1414  0.1976
1PE     C14  174  10.568  17.555   9.984  0.0855 -0.1259  0.1368
1PE     C15  175  10.688  17.316   9.638  0.0685 -0.0571  0.1236
1PE     C16  176  10.777  16.877   9.538  0.0526 -0.0561  0.0652
1PE     C17  177  10.652  16.480   9.686  0.0886 -0.0699  0.0239
1PE     C18  178  10.535  16.096   9.724  0.0860 -0.0830  0.0052
1PE     C19  179  10.472  15.724   9.509  0.0680 -0.0660 -0.0146
1PE     C20  180  10.133  15.619   9.217  0.0343 -0.0245  0.0281
1PE     C21  181   9.763  15.874   9.095  0.0117 -0.0263  0.0678
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1PE     C23  183  10.014  16.579   8.796 -0.0121  0.0124  0.1151
1PE     C24  184  10.437  16.490   8.890  0.0043 -0.0080  0.0572
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1PE     C26  186  10.149  16.107   9.382  0.0562 -0.0540  0.0609
1PE     C27  187   9.808  16.441   9.342  0.0352 -0.0427  0.1145
1PE     C28  188   9.897  16.895   9.183  0.0233 -0.0259  0.1582
1PE     C29  189  10.287  17.016   8.968 -0.0031 -0.0030  0.1397
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1PE     C31  191  10.933  16.463   8.899 -0.0019  0.0081  0.0114
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1PE     C34  194  10.891  15.788   9.841  0.1009 -0.0883 -0.0339
1PE     C35  195  10.884  16.125  10.113  0.1037 -0.1201 -0.0097
1PE     C36  196  11.240  16.366  10.243  0.1387 -0.1233 -0.0218
1PE     C37  197  11.629  16.441  10.051  0.1225 -0.1145 -0.0592
1PE     C38  198  11.981  16.716  10.038  0.1078 -0.0888 -0.0764
1PE     C39  199  12.409  16.724  10.185  0.1248 -0.1077 -0.1169
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1PE     C41  201  13.026  16.623   9.664  0.0687 -0.0571 -0.1830
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1PE     C54  214  10.191  17.279   9.788  0.0729 -0.0895  0.1628
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1PE     C58  218  10.356  16.407  10.155  0.1197 -0.1300  0.0723
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1PE     C75  235  10.789  15.751  10.469  0.1528 -0.1565 -0.0397
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1PE     C77  237  10.106  15.834   9.857  0.1027 -0.0903  0.0368
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1PE      C6  246  11.651  15.898  11.648  0.2600 -0.2432 -0.1058
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1PE     C23  263  10.138  16.445  12.077  0.3185 -0.3034  0.0952
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1PE     C26  266  10.152  17.558  12.285  0.3127 -0.3189  0.2071
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1PE     C30  270   9.221  18.082  12.176  0.3093 -0.3303  0.3334
1PE     C31  271   9.364  17.659  12.145  0.3084 -0.3275  0.2947
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1PE     C33  273   9.955  17.567  12.765  0.3706 -0.3720  0.2257
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1PE     C36  276  10.537  16.916  12.345  0.3329 -0.3278  0.0952
1PE     C37  277  10.291  16.632  12.553  0.3649 -0.3630  0.1016
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1PE     C54  294  10.144  19.200  11.992  0.2680 -0.2914  0.3658
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1PE     C57  297  10.164  18.232  11.894  0.2780 -0.2790  0.2399
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1PE     C60  300  10.147  18.654  12.804  0.3637 -0.3784  0.3003
1PE     C61  301   9.759  18.750  12.564  0.3476 -0.3575  0.3449
1PE     C62  302   9.735  18.865  12.123  0.3048 -0.3085  0.3584
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1PE     C64  304   9.183  18.793  11.450  0.2238 -0.2484  0.4149
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1PE     C67  307   9.279  17.656  11.143  0.2079 -0.2256  0.2954
1PE     C68  308   9.384  17.252  11.290  0.2354 -0.2198  0.2403
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1PE     C71  311   9.810  17.849  12.021  0.2976 -0.3085  0.2494
1PE     C72  312   9.570  18.108  11.778  0.2720 -0.2808  0.2974
1PE     C73  313   9.467  18.042  11.381  0.2363 -0.2351  0.3078
1PE     C74  314   9.733  17.886  11.031  0.2074 -0.2108  0.2679
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1PE     C76  316  10.310  17.571  11.415  0.2238 -0.2429  0.1811
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1PE     C78  318  10.491  17.888  12.145  0.2969 -0.3061  0.2040
1PE     C79  319  10.775  17.847  12.468  0.3356 -0.3357  0.1601
1PE     C80  320  10.990  17.526  12.707  0.3800 -0.3562  0.0963
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1PE      C2  322  13.535  14.692   7.240 -0.1486  0.1882 -0.4279
1PE      C3  323  13.680  15.107   7.093 -0.1516  0.2051 -0.3888
1PE      C4  324  13.504  15.466   6.915 -0.1934  0.2010 -0.3399
1PE      C5  325  13.210  15.776   7.064 -0.1768  0.2002 -0.2811
1PE      C6  326  13.040  15.763   7.460 -0.1312  0.1468 -0.2893
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1PE      C8  328  13.068  15.615   8.251 -0.0607  0.0840 -0.2906
1PE      C9  329  12.873  15.258   8.414 -0.0427  0.0743 -0.2935
1PE     C10  330  12.774  14.805   8.485 -0.0208  0.0574 -0.3391
1PE     C11  331  12.851  14.366   8.596 -0.0084  0.0550 -0.3768
1PE     C12  332  12.874  14.184   9.019  0.0376  0.0103 -0.3917
1PE     C13  333  12.946  14.452   9.386  0.0486 -0.0197 -0.3807
1PE     C14  334  13.049  14.888   9.367  0.0604 -0.0355 -0.3432
1PE     C15  335  12.915  15.298   9.316  0.0651 -0.0134 -0.3147
1PE     C16  336  12.648  15.562   9.071  0.0347 -0.0034 -0.2503
1PE     C17  337  12.225  15.668   9.004  0.0264  0.0014 -0.1982
1PE     C18  338  11.810  15.652   9.179  0.0371 -0.0133 -0.1473
1PE     C19  339  11.518  15.675   9.523  0.0749 -0.0582 -0.1177
1PE     C20  340  11.262  15.461   9.800  0.0964 -0.0913 -0.1247
1PE     C21  341  11.355  15.137  10.100  0.1313 -0.1207 -0.1626
1PE     C22  342  11.695  15.138  10.410  0.1639 -0.1330 -0.1795
1PE     C23  343  12.099  15.336  10.341  0.1537 -0.1317 -0.2164
1PE     C24  344  12.216  15.485   9.952  0.1134 -0.0932 -0.2070
1PE     C25  345  12.024  15.291   9.558  0.0768 -0.0562 -0.2080
1PE     C26  346  12.018  14.855   9.463  0.0571 -0.0545 -0.2517
1PE     C27  347  12.184  14.536   9.753  0.0951 -0.0692 -0.3011
1PE     C28  348  12.623  14.569   9.922  0.1169 -0.0729 -0.3387
1PE     C29  349  12.846  14.956   9.846  0.1098 -0.0804 -0.3375
1PE     C30  350  12.635  15.328   9.721  0.0937 -0.0720 -0.2770
1PE     C31  351  12.385  15.590   9.483  0.0654 -0.0300 -0.2137
1PE     C32  352  12.023  15.797   9.596  0.0842 -0.0521 -0.1608
1PE     C33  353  11.916  15.960  10.002  0.1068 -0.0973 -0.1319
1PE     C34  354  12.142  15.840  10.356  0.1414 -0.1239 -0.1564
1PE     C35  355  12.561  15.706  10.351  0.1385 -0.1209 -0.2069
1PE     C36  356  12.905  15.639  10.048  0.1154 -0.0954 -0.2712
1PE     C37  357  13.138  15.374   9.765  0.0998 -0.0480 -0.2984
1PE     C38  358  13.418  15.237   9.455  0.0584 -0.0295 -0.3586
1PE     C39  359  13.626  14.942   9.183  0.0434 -0.0089 -0.4262
1PE     C40  360  13.623  14.671   8.812  0.0066  0.0422 -0.4262
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1PE     C41  361  13.454  14.451   8.442 -0.0377  0.0714 -0.4403
1PE     C42  362  13.110  14.539   8.170 -0.0663  0.0848 -0.4101
1PE     C43  363  12.985  14.949   8.048 -0.0720  0.1010 -0.3374
1PE     C44  364  13.208  15.218   7.782 -0.0905  0.1317 -0.3442
1PE     C45  365  13.589  15.080   7.580 -0.1359  0.1526 -0.3892
1PE     C46  366  13.821  14.702   7.684 -0.1133  0.1515 -0.4406
1PE     C47  367  13.625  14.348   7.892 -0.0930  0.1205 -0.4625
1PE     C48  368  13.219  14.191   7.772 -0.0973  0.1287 -0.4311
1PE     C49  369  12.846  14.428   7.722 -0.0818  0.1300 -0.3654
1PE     C50  370  12.601  14.597   8.051 -0.0824  0.0956 -0.3499
1PE     C51  371  12.385  14.431   8.427 -0.0334  0.0574 -0.3217
1PE     C52  372  12.370  14.275   8.863  0.0084  0.0148 -0.3287
1PE     C53  373  12.423  14.382   9.319  0.0496 -0.0366 -0.3281
1PE     C54  374  12.537  14.796   9.476  0.0891 -0.0343 -0.3103
1PE     C55  375  12.439  15.140   9.246  0.0476 -0.0241 -0.2789
1PE     C56  376  12.066  15.206   9.036  0.0125 -0.0056 -0.2266
1PE     C57  377  11.661  15.168   9.202  0.0279 -0.0193 -0.1937
1PE     C58  378  11.572  15.092   9.632  0.0760 -0.0655 -0.1796
1PE     C59  379  11.871  14.968   9.941  0.1149 -0.0843 -0.2209
1PE     C60  380  12.306  14.997   9.975  0.1145 -0.0949 -0.2716
1PE     C61  381  12.617  15.208  10.220  0.1413 -0.1043 -0.2883
1PE     C62  382  13.050  15.240  10.309  0.1537 -0.0997 -0.3120
1PE     C63  383  13.426  15.435  10.174  0.1452 -0.0899 -0.3383
1PE     C64  384  13.697  15.467   9.827  0.0920 -0.0603 -0.3576
1PE     C65  385  13.920  15.353   9.443  0.0529 -0.0406 -0.3992
1PE     C66  386  14.118  15.070   9.135  0.0275  0.0126 -0.4567
1PE     C67  387  14.067  14.884   8.725 -0.0008  0.0557 -0.4421
1PE     C68  388  13.801  14.874   8.362 -0.0503  0.0861 -0.4289
1PE     C69  389  13.502  14.831   8.044 -0.0690  0.0915 -0.3943
1PE     C70  390  13.275  14.702   7.700 -0.1094  0.1299 -0.3838
1PE     C71  391  13.101  14.920   7.364 -0.1449  0.1693 -0.3409
1PE     C72  392  13.187  15.308   7.257 -0.1571  0.1781 -0.3318
1PE     C73  393  13.508  15.548   7.441 -0.1419  0.1685 -0.3475
1PE     C74  394  13.612  15.509   7.864 -0.1096  0.1229 -0.3445
1PE     C75  395  13.442  15.279   8.245 -0.0443  0.0957 -0.3538
1PE     C76  396  13.278  14.932   8.494 -0.0176  0.0664 -0.3647
1PE     C77  397  13.118  14.694   8.862  0.0092  0.0269 -0.3797
1PE     C78  398  12.692  14.661   9.005  0.0291  0.0104 -0.3355
1PE     C79  399  12.343  14.798   8.773 -0.0092  0.0318 -0.2829
1PE     C80  400  12.301  14.915   8.317 -0.0610  0.0573 -0.2720
1PE      C1  401  11.412  17.499   8.940 -0.0093  0.0029  0.0739
1PE      C2  402  11.539  17.561   8.487 -0.0479  0.0514  0.0374
1PE      C3  403  11.893  17.761   8.263 -0.0987  0.0744  0.0437
1PE      C4  404  12.156  17.935   7.962 -0.1164  0.1027  0.0289
1PE      C5  405  12.196  18.348   7.820 -0.1404  0.1216  0.0708
1PE      C6  406  12.009  18.701   8.032 -0.1074  0.0935  0.1003
1PE      C7  407  11.710  18.738   8.378 -0.0709  0.0588  0.1558
1PE      C8  408  11.588  18.898   8.805 -0.0326  0.0077  0.1891
1PE      C9  409  11.634  18.858   9.245  0.0086 -0.0080  0.1675
1PE     C10  410  11.827  18.627   9.594  0.0438 -0.0658  0.1306
1PE     C11  411  12.204  18.431   9.734  0.0704 -0.0747  0.0697
1PE     C12  412  12.600  18.214   9.743  0.0666 -0.0527  0.0194
1PE     C13  413  12.701  17.780   9.772  0.0794 -0.0572 -0.0450
1PE     C14  414  12.415  17.441   9.794  0.0798 -0.0534 -0.0360
1PE     C15  415  12.206  17.182  10.072  0.1081 -0.1093 -0.0610
1PE     C16  416  11.790  17.205  10.240  0.1323 -0.1128 -0.0076
1PE     C17  417  11.473  17.445  10.068  0.0894 -0.1029  0.0609
1PE     C18  418  11.538  17.830   9.840  0.0843 -0.0744  0.0928
1PE     C19  419  11.807  18.115   9.610  0.0536 -0.0497  0.0890
1PE     C20  420  12.091  18.229   9.270  0.0157 -0.0241  0.0605
1PE     C21  421  12.118  18.053   8.864 -0.0221  0.0243  0.0431
1PE     C22  422  11.692  18.016   8.633 -0.0581  0.0439  0.0838
1PE     C23  423  11.324  18.236   8.734 -0.0397  0.0280  0.1394
1PE     C24  424  11.131  18.162   9.133  0.0194 -0.0263  0.1516
1PE     C25  425  11.388  17.935   9.372  0.0185 -0.0425  0.1037
1PE     C26  426  11.771  17.820   9.169  0.0133 -0.0233  0.0550
1PE     C27  427  11.928  17.604   8.783 -0.0228  0.0256  0.0207
1PE     C28  428  12.333  17.600   8.636 -0.0384  0.0263 -0.0284
1PE     C29  429  12.634  17.798   8.873 -0.0134  0.0178 -0.0428
1PE     C30  430  12.550  17.984   9.271  0.0177 -0.0209  0.0109
1PE     C31  431  12.248  17.862   9.564  0.0363 -0.0521  0.0166
1PE     C32  432  11.918  17.592   9.597  0.0638 -0.0687  0.0200
1PE     C33  433  11.514  17.442   9.519  0.0428 -0.0383  0.0545
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1PE     C34  434  11.219  17.115   9.635  0.0518 -0.0572  0.0633
1PE     C35  435  10.948  17.099   9.993  0.0961 -0.1140  0.0682
1PE     C36  436  10.951  17.405  10.304  0.1281 -0.1307  0.0915
1PE     C37  437  11.270  17.500  10.577  0.1700 -0.1478  0.0649
1PE     C38  438  11.671  17.698  10.492  0.1385 -0.1412  0.0577
1PE     C39  439  11.762  18.102  10.304  0.1158 -0.1247  0.0912
1PE     C40  440  11.531  18.298   9.987  0.0838 -0.0980  0.1286
1PE     C41  441  11.121  18.168   9.860  0.0764 -0.0946  0.1560
1PE     C42  442  10.735  18.357   9.966  0.0934 -0.0948  0.2130
1PE     C43  443  10.665  18.697  10.267  0.1046 -0.1229  0.2459
1PE     C44  444  10.844  18.774  10.699  0.1618 -0.1694  0.2483
1PE     C45  445  11.239  18.936  10.806  0.1683 -0.1688  0.2122
1PE     C46  446  11.605  18.929  10.538  0.1283 -0.1333  0.1628
1PE     C47  447  11.648  18.819  10.102  0.0950 -0.1032  0.1718
1PE     C48  448  11.475  18.979   9.727  0.0636 -0.0663  0.1908
1PE     C49  449  11.168  18.872   9.432  0.0436 -0.0445  0.2235
1PE     C50  450  11.179  18.661   9.037 -0.0232 -0.0127  0.1894
1PE     C51  451  11.216  18.684   8.570 -0.0628  0.0334  0.1872
1PE     C52  452  11.312  18.494   8.144 -0.1056  0.0793  0.1690
1PE     C53  453  11.686  18.266   8.016 -0.1084  0.0930  0.0947
1PE     C54  454  11.988  18.277   8.334 -0.0757  0.0673  0.0597
1PE     C55  455  11.870  18.461   8.770 -0.0479  0.0155  0.0986
1PE     C56  456  11.615  18.359   9.140 -0.0149 -0.0193  0.1155
1PE     C57  457  11.371  18.430   9.520  0.0303 -0.0575  0.1447
1PE     C58  458  11.143  18.656   9.894  0.0760 -0.0984  0.2086
1PE     C59  459  11.136  18.946  10.234  0.1130 -0.1216  0.2247
1PE     C60  460  10.963  19.259  10.489  0.1382 -0.1412  0.2864
1PE     C61  461  10.794  19.307  10.907  0.1806 -0.1807  0.3004
1PE     C62  462  10.859  19.040  11.251  0.1853 -0.2159  0.2512
1PE     C63  463  11.079  18.672  11.225  0.2031 -0.2174  0.2037
1PE     C64  464  11.189  18.414  10.892  0.1824 -0.1839  0.1946
1PE     C65  465  11.353  18.078  10.637  0.1630 -0.1585  0.1229
1PE     C66  466  11.258  17.881  10.251  0.1140 -0.1113  0.1033
1PE     C67  467  11.057  17.675   9.879  0.0868 -0.0953  0.1180
1PE     C68  468  11.052  17.571   9.456  0.0398 -0.0450  0.0916
1PE     C69  469  11.014  17.244   9.167  0.0160 -0.0304  0.0843
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1PE     C71  471  11.369  17.072   8.409 -0.0566  0.0526  0.0177
1PE     C72  472  11.605  17.231   8.082 -0.0790  0.0789  0.0115
1PE     C73  473  11.920  17.423   7.889 -0.1075  0.1108  0.0032
1PE     C74  474  12.180  17.497   7.556 -0.1456  0.1434 -0.0189
1PE     C75  475  12.050  17.654   7.142 -0.1958  0.1835  0.0122
1PE     C76  476  11.660  17.864   7.088 -0.2085  0.1785  0.0736
1PE     C77  477  11.378  17.952   7.421 -0.1605  0.1479  0.1031
1PE     C78  478  11.212  18.156   7.765 -0.1311  0.1086  0.1607
1PE     C79  479  10.806  18.206   7.906 -0.1170  0.1040  0.1791
1PE     C80  480  10.404  18.034   8.054 -0.0924  0.0821  0.2183
1PE      C1  481  11.087  14.966   9.682  0.0906 -0.0688 -0.1434
1PE      C2  482  11.176  15.270   9.340  0.0426 -0.0499 -0.1342
1PE      C3  483  11.323  15.569   9.032  0.0335 -0.0074 -0.1136
1PE      C4  484  11.296  15.812   8.658 -0.0105  0.0290 -0.0941
1PE      C5  485  11.099  16.198   8.474 -0.0445  0.0544 -0.0340
1PE      C6  486  11.131  16.645   8.474 -0.0396  0.0515  0.0132
1PE      C7  487  10.875  17.002   8.309 -0.0694  0.0584  0.0621
1PE      C8  488  10.527  16.900   8.039 -0.0961  0.0763  0.1015
1PE      C9  489  10.451  16.449   7.951 -0.0986  0.0870  0.0662
1PE     C10  490  10.697  16.097   8.119 -0.0821  0.0895  0.0233
1PE     C11  491  10.909  15.739   8.313 -0.0614  0.0505 -0.0592
1PE     C12  492  10.863  15.580   8.741 -0.0188  0.0153 -0.0650
1PE     C13  493  10.561  15.780   9.015  0.0255 -0.0091 -0.0119
1PE     C14  494  10.195  16.040   8.871 -0.0014 -0.0025  0.0479
1PE     C15  495   9.908  15.945   8.539 -0.0509  0.0269  0.0637
1PE     C16  496   9.887  15.645   8.204 -0.0618  0.0554  0.0394
1PE     C17  497   9.993  15.569   7.768 -0.1021  0.0901  0.0241
1PE     C18  498  10.100  15.757   7.378 -0.1496  0.1359  0.0161
1PE     C19  499  10.076  16.156   7.184 -0.1613  0.1683  0.0691
1PE     C20  500   9.960  16.582   7.156 -0.1851  0.1544  0.1238
1PE     C21  501   9.860  16.976   7.319 -0.1594  0.1468  0.1707
1PE     C22  502   9.850  17.288   7.603 -0.1367  0.1153  0.1950
1PE     C23  503   9.686  17.645   7.784 -0.1283  0.0934  0.2319
1PE     C24  504   9.611  18.015   7.585 -0.1527  0.1210  0.2771
1PE     C25  505   9.567  18.069   7.145 -0.1950  0.1470  0.2990
1PE     C26  506   9.603  17.731   6.860 -0.2304  0.1926  0.2700
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1PE     C27  507   9.750  17.319   6.935 -0.2235  0.1825  0.2002
1PE     C28  508   9.999  16.971   6.821 -0.1995  0.1966  0.1496
1PE     C29  509  10.043  16.569   6.640 -0.2324  0.2072  0.1098
1PE     C30  510   9.786  16.233   6.780 -0.2277  0.1998  0.0957
1PE     C31  511   9.546  16.295   7.171 -0.1682  0.1568  0.1279
1PE     C32  512   9.437  16.695   7.367 -0.1691  0.1263  0.1763
1PE     C33  513   9.350  17.137   7.309 -0.1860  0.1273  0.2278
1PE     C34  514   9.475  17.563   7.335 -0.1595  0.1268  0.2748
1PE     C35  515   9.894  17.676   7.284 -0.1804  0.1512  0.2414
1PE     C36  516  10.198  17.368   7.199 -0.1770  0.1677  0.1737
1PE     C37  517  10.348  16.926   7.175 -0.1748  0.1587  0.1231
1PE     C38  518  10.459  16.548   6.934 -0.2100  0.1963  0.0657
1PE     C39  519  10.348  16.141   6.746 -0.2162  0.1993  0.0271
1PE     C40  520  10.044  15.800   6.817 -0.1894  0.2037  0.0383
1PE     C41  521   9.686  15.806   7.108 -0.1756  0.1460  0.0710
1PE     C42  522   9.652  15.955   7.555 -0.1262  0.1220  0.0875
1PE     C43  523   9.703  16.088   8.007 -0.0805  0.0734  0.1053
1PE     C44  524   9.665  16.383   8.350 -0.0617  0.0396  0.1229
1PE     C45  525   9.649  16.819   8.471 -0.0460  0.0338  0.1749
1PE     C46  526  10.014  17.045   8.542 -0.0508  0.0197  0.1611
1PE     C47  527  10.433  16.827   8.528 -0.0538  0.0206  0.0949
1PE     C48  528  10.659  16.486   8.442 -0.0550  0.0390  0.0330
1PE     C49  529  10.642  16.087   8.626 -0.0222  0.0217  0.0029
1PE     C50  530  10.414  15.728   8.519 -0.0179  0.0498 -0.0103
1PE     C51  531  10.391  15.570   8.117 -0.0771  0.0637 -0.0299
1PE     C52  532  10.455  15.771   7.730 -0.1269  0.1094 -0.0003
1PE     C53  533  10.507  16.074   7.442 -0.1489  0.1362  0.0188
1PE     C54  534  10.379  16.484   7.422 -0.1532  0.1536  0.0687
1PE     C55  535  10.164  16.780   7.695 -0.1343  0.1059  0.1025
1PE     C56  536  10.050  16.713   8.159 -0.0805  0.0771  0.1184
1PE     C57  537  10.183  16.344   8.386 -0.0512  0.0417  0.0754
1PE     C58  538  10.209  16.027   8.120 -0.0768  0.0619  0.0325
1PE     C59  539  10.097  16.145   7.709 -0.1148  0.1244  0.0597
1PE     C60  540   9.796  16.461   7.632 -0.1212  0.1214  0.1182
1PE     C61  541   9.653  16.873   7.815 -0.1175  0.0908  0.1819
1PE     C62  542   9.370  17.255   7.820 -0.1238  0.0846  0.2496
1PE     C63  543   9.226  17.687   7.961 -0.1028  0.0633  0.2906
1PE     C64  544   9.335  18.143   7.991 -0.1028  0.0676  0.3210
1PE     C65  545   9.624  18.458   7.798 -0.1314  0.0996  0.3365
1PE     C66  546   9.891  18.418   7.407 -0.1774  0.1231  0.3009
1PE     C67  547  10.071  18.134   7.094 -0.1981  0.1587  0.2720
1PE     C68  548  10.118  17.773   6.834 -0.2199  0.1886  0.2152
1PE     C69  549  10.249  17.385   6.685 -0.2434  0.2059  0.1768
1PE     C70  550  10.465  16.992   6.629 -0.2430  0.2042  0.1185
1PE     C71  551  10.643  16.683   6.361 -0.2591  0.2553  0.0580
1PE     C72  552  10.863  16.432   6.062 -0.2849  0.2720  0.0212
1PE     C73  553  11.238  16.242   5.893 -0.2916  0.2783 -0.0419
1PE     C74  554  11.612  16.097   5.685 -0.3403  0.3075 -0.0839
1PE     C75  555  12.046  15.981   5.537 -0.3415  0.3403 -0.1510
1PE     C76  556  12.440  15.726   5.484 -0.3292  0.3414 -0.2037
1PE     C77  557  12.772  15.509   5.731 -0.3168  0.3215 -0.2735
1PE     C78  558  12.954  15.216   6.042 -0.2783  0.2868 -0.3093
1PE     C79  559  13.079  15.018   6.441 -0.2337  0.2644 -0.3308
1PE     C80  560  13.233  14.960   6.870 -0.1897  0.2144 -0.3733
1PE      C1  561  11.728  15.473   9.965  0.0902 -0.0957 -0.1621
1PE      C2  562  11.657  15.652  10.362  0.1629 -0.1328 -0.1571
1PE      C3  563  11.661  16.094  10.491  0.1533 -0.1335 -0.0953
1PE      C4  564  12.005  16.359  10.384  0.1483 -0.1264 -0.1085
1PE      C5  565  12.359  16.225  10.111  0.1072 -0.0811 -0.1467
1PE      C6  566  12.510  15.876   9.865  0.0953 -0.0864 -0.2106
1PE      C7  567  12.844  15.766   9.529  0.0633 -0.0364 -0.2610
1PE      C8  568  13.209  15.684   9.257  0.0374 -0.0288 -0.3062
1PE      C9  569  13.584  15.534   9.082  0.0135  0.0104 -0.3468
1PE     C10  570  13.991  15.511   8.944  0.0031  0.0367 -0.3814
1PE     C11  571  14.313  15.314   8.702 -0.0217  0.0388 -0.4351
1PE     C12  572  14.271  15.109   8.285 -0.0546  0.0888 -0.4541
1PE     C13  573  13.943  15.131   7.943 -0.0775  0.1198 -0.4226
1PE     C14  574  14.014  15.413   7.571 -0.1097  0.1538 -0.4055
1PE     C15  575  14.410  15.623   7.640 -0.1206  0.1629 -0.4128
1PE     C16  576  14.569  15.572   8.063 -0.0691  0.1262 -0.4315
1PE     C17  577  14.374  15.729   8.442 -0.0446  0.0820 -0.3994
1PE     C18  578  14.366  15.840   8.882  0.0088  0.0295 -0.3783
1PE     C19  579  14.273  15.708   9.315  0.0351 -0.0164 -0.3958
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1PE     C20  580  14.081  15.815   9.718  0.0747 -0.0517 -0.3712
1PE     C21  581  13.729  15.961   9.979  0.1233 -0.0789 -0.3192
1PE     C22  582  13.327  15.930  10.229  0.1376 -0.1227 -0.2758
1PE     C23  583  13.048  15.722  10.533  0.1743 -0.1219 -0.2770
1PE     C24  584  12.773  15.393  10.704  0.1875 -0.1412 -0.2735
1PE     C25  585  12.331  15.293  10.779  0.2001 -0.1693 -0.2402
1PE     C26  586  11.967  15.591  10.804  0.1889 -0.1763 -0.1869
1PE     C27  587  12.043  16.028  10.800  0.1708 -0.1715 -0.1427
1PE     C28  588  12.424  16.203  10.607  0.1892 -0.1362 -0.1637
1PE     C29  589  12.824  16.159  10.382  0.1440 -0.1185 -0.2134
1PE     C30  590  13.199  16.414  10.271  0.1363 -0.1029 -0.2218
1PE     C31  591  13.343  16.779  10.038  0.1184 -0.0748 -0.2122
1PE     C32  592  13.293  17.056   9.687  0.0777 -0.0548 -0.1724
1PE     C33  593  13.309  17.241   9.279  0.0319 -0.0174 -0.1506
1PE     C34  594  13.529  17.303   8.882 -0.0119  0.0230 -0.1707
1PE     C35  595  13.758  17.355   8.491 -0.0414  0.0573 -0.1858
1PE     C36  596  13.986  17.268   8.109 -0.0816  0.0946 -0.2163
1PE     C37  597  14.098  16.924   7.838 -0.1105  0.1304 -0.2564
1PE     C38  598  14.229  16.626   7.538 -0.1331  0.1710 -0.3170
1PE     C39  599  14.364  16.204   7.624 -0.1144  0.1529 -0.3489
1PE     C40  600  14.459  16.060   8.052 -0.0902  0.1259 -0.3810
1PE     C41  601  14.355  16.238   8.484 -0.0482  0.0745 -0.3676
1PE     C42  602  13.970  16.405   8.650 -0.0266  0.0593 -0.2989
1PE     C43  603  13.707  16.482   9.013  0.0171  0.0291 -0.2764
1PE     C44  604  13.370  16.747   9.135  0.0179  0.0118 -0.2134
1PE     C45  605  13.129  16.997   8.862 -0.0019  0.0331 -0.1656
1PE     C46  606  13.247  17.144   8.449 -0.0557  0.0726 -0.1551
1PE     C47  607  13.598  16.962   8.207 -0.0733  0.1062 -0.2086
1PE     C48  608  13.672  16.507   8.216 -0.0658  0.1007 -0.2753
1PE     C49  609  13.528  16.192   8.522 -0.0295  0.0712 -0.2738
1PE     C50  610  13.429  16.062   8.958 -0.0033  0.0104 -0.2855
1PE     C51  611  13.283  16.206   9.365  0.0300 -0.0152 -0.2549
1PE     C52  612  13.410  16.334   9.791  0.0897 -0.0557 -0.2481
1PE     C53  613  13.783  16.465   9.978  0.1038 -0.0765 -0.2899
1PE     C54  614  14.190  16.327   9.846  0.0939 -0.0652 -0.3474
1PE     C55  615  14.328  16.187   9.433  0.0575 -0.0030 -0.3565
1PE     C56  616  14.299  16.368   9.018 -0.0064  0.0216 -0.3390
1PE     C57  617  14.143  16.799   8.925 -0.0057  0.0275 -0.2887
1PE     C58  618  13.813  16.983   9.194  0.0194 -0.0065 -0.2214
1PE     C59  619  13.675  16.698   9.527  0.0433 -0.0317 -0.2480
1PE     C60  620  13.816  16.269   9.478  0.0656 -0.0161 -0.2957
1PE     C61  621  13.923  16.016   9.092  0.0106  0.0180 -0.3349
1PE     C62  622  13.916  15.900   8.637 -0.0207  0.0431 -0.3360
1PE     C63  623  13.972  16.085   8.215 -0.0537  0.1117 -0.3420
1PE     C64  624  14.154  16.495   8.107 -0.0723  0.1018 -0.3097
1PE     C65  625  14.079  16.855   8.396 -0.0541  0.0856 -0.2663
1PE     C66  626  13.709  16.865   8.682 -0.0375  0.0472 -0.2226
1PE     C67  627  13.353  16.658   8.566 -0.0330  0.0588 -0.2097
1PE     C68  628  13.175  16.699   8.150 -0.0872  0.1001 -0.1787
1PE     C69  629  13.218  17.097   7.910 -0.1186  0.1275 -0.1475
1PE     C70  630  13.386  17.479   8.091 -0.0998  0.0942 -0.1499
1PE     C71  631  13.337  17.642   8.531 -0.0457  0.0486 -0.1168
1PE     C72  632  13.114  17.612   8.938 -0.0130  0.0321 -0.0878
1PE     C73  633  13.108  17.714   9.381  0.0324 -0.0278 -0.0958
1PE     C74  634  13.219  17.595   9.805  0.0713 -0.0695 -0.1022
1PE     C75  635  13.274  17.311  10.149  0.1153 -0.0916 -0.1356
1PE     C76  636  13.208  17.208  10.585  0.1521 -0.1338 -0.1414
1PE     C77  637  12.947  16.989  10.882  0.1974 -0.1727 -0.1316
1PE     C78  638  12.804  16.589  11.068  0.2213 -0.1951 -0.1660
1PE     C79  639  12.755  16.139  10.976  0.2032 -0.1813 -0.2085
1PE     C80  640  12.486  15.781  10.872  0.2089 -0.1688 -0.2094
1PE      C1  641  13.642  15.814   9.473  0.0744 -0.0236 -0.3281
1PE      C2  642  13.303  15.840   9.738  0.0873 -0.0496 -0.2760
1PE      C3  643  12.969  16.116   9.857  0.1087 -0.0843 -0.2149
1PE      C4  644  12.603  16.302   9.665  0.0695 -0.0580 -0.1718
1PE      C5  645  12.173  16.261   9.639  0.0701 -0.0496 -0.1289
1PE      C6  646  11.722  16.188   9.564  0.0625 -0.0536 -0.0953
1PE      C7  647  11.471  16.065   9.200  0.0182 -0.0098 -0.0973
1PE      C8  648  11.423  16.305   8.839 -0.0064  0.0135 -0.0601
1PE      C9  649  11.549  16.727   8.779 -0.0036  0.0197 -0.0292
1PE     C10  650  11.745  17.121   8.715 -0.0223  0.0164 -0.0138
1PE     C11  651  12.005  17.291   8.391 -0.0680  0.0543 -0.0172
1PE     C12  652  12.346  17.490   8.139 -0.0923  0.1053 -0.0385
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1PE     C13  653  12.571  17.853   8.243 -0.0934  0.0888 -0.0231
1PE     C14  654  12.470  18.238   8.465 -0.0640  0.0511  0.0313
1PE     C15  655  12.273  18.665   8.478 -0.0687  0.0622  0.0789
1PE     C16  656  12.090  18.909   8.815 -0.0373  0.0212  0.1093
1PE     C17  657  12.159  18.754   9.234  0.0157 -0.0178  0.1164
1PE     C18  658  12.521  18.486   9.276  0.0097 -0.0199  0.0271
1PE     C19  659  12.741  18.300   8.909 -0.0258  0.0188  0.0039
1PE     C20  660  12.950  18.046   8.574 -0.0627  0.0671 -0.0418
1PE     C21  661  13.081  17.896   8.178 -0.0876  0.0935 -0.0720
1PE     C22  662  13.105  17.840   7.743 -0.1369  0.1300 -0.0644
1PE     C23  663  12.976  18.025   7.357 -0.1784  0.1496 -0.0379
1PE     C24  664  12.620  18.212   7.169 -0.1847  0.1835  0.0028
1PE     C25  665  12.304  18.515   7.318 -0.1760  0.1705  0.0561
1PE     C26  666  12.354  18.816   7.669 -0.1451  0.1255  0.0890
1PE     C27  667  12.555  18.667   8.048 -0.1184  0.0928  0.0539
1PE     C28  668  12.750  18.265   8.022 -0.0945  0.1094  0.0045
1PE     C29  669  12.606  17.966   7.716 -0.1252  0.1226 -0.0189
1PE     C30  670  12.257  17.987   7.444 -0.1705  0.1467  0.0204
1PE     C31  671  12.118  18.141   7.035 -0.2051  0.1849  0.0409
1PE     C32  672  12.390  18.284   6.715 -0.2267  0.2022  0.0274
1PE     C33  673  12.826  18.140   6.653 -0.2559  0.2425 -0.0201
1PE     C34  674  13.045  17.812   6.885 -0.2289  0.1998 -0.0821
1PE     C35  675  12.910  17.554   7.207 -0.1898  0.1791 -0.0877
1PE     C36  676  12.746  17.490   7.611 -0.1537  0.1426 -0.0767
1PE     C37  677  12.853  17.463   8.043 -0.1097  0.0862 -0.0811
1PE     C38  678  12.845  17.517   8.501 -0.0627  0.0503 -0.0857
1PE     C39  679  12.723  17.265   8.867 -0.0153  0.0266 -0.1100
1PE     C40  680  12.675  16.791   8.875 -0.0104  0.0071 -0.1232
1PE     C41  681  12.589  16.318   8.823 -0.0058  0.0360 -0.1667
1PE     C42  682  12.293  16.069   8.696 -0.0136  0.0433 -0.1565
1PE     C43  683  12.166  16.016   8.280 -0.0658  0.0580 -0.1535
1PE     C44  684  12.395  16.149   7.887 -0.0990  0.1046 -0.1717
1PE     C45  685  12.855  16.176   7.845 -0.1075  0.1195 -0.2134
1PE     C46  686  13.131  16.131   8.205 -0.0691  0.0894 -0.2446
1PE     C47  687  13.065  16.030   8.616 -0.0273  0.0404 -0.2538
1PE     C48  688  12.895  15.989   9.025  0.0114  0.0161 -0.2288
1PE     C49  689  12.493  16.027   9.250  0.0470 -0.0103 -0.1985
1PE     C50  690  12.056  16.103   9.168  0.0335 -0.0038 -0.1373
1PE     C51  691  11.835  16.453   9.103  0.0103 -0.0125 -0.0778
1PE     C52  692  11.981  16.869   9.096  0.0100  0.0021 -0.0443
1PE     C53  693  12.237  17.130   8.828 -0.0214  0.0173 -0.0396
1PE     C54  694  12.503  17.138   8.452 -0.0550  0.0406 -0.0851
1PE     C55  695  12.750  16.982   8.115 -0.0845  0.0990 -0.1149
1PE     C56  696  12.633  16.606   8.005 -0.1107  0.1110 -0.1371
1PE     C57  697  12.314  16.480   8.301 -0.0564  0.0804 -0.1333
1PE     C58  698  12.224  16.630   8.749 -0.0072  0.0382 -0.1150
1PE     C59  699  12.368  16.539   9.202  0.0194 -0.0048 -0.1308
1PE     C60  700  12.820  16.425   9.254  0.0364 -0.0126 -0.1806
1PE     C61  701  13.068  16.452   8.897  0.0018  0.0320 -0.2027
1PE     C62  702  12.875  16.484   8.473 -0.0377  0.0600 -0.1750
1PE     C63  703  12.650  16.116   8.324 -0.0602  0.0589 -0.1946
1PE     C64  704  12.662  15.723   8.564 -0.0201  0.0347 -0.2390
1PE     C65  705  13.041  15.567   8.775 -0.0123  0.0322 -0.2889
1PE     C66  706  13.440  15.651   8.634 -0.0133  0.0389 -0.3120
1PE     C67  707  13.580  15.769   8.270 -0.0478  0.0635 -0.3110
1PE     C68  708  13.549  16.033   7.961 -0.0957  0.1252 -0.2919
1PE     C69  709  13.351  16.357   7.824 -0.1057  0.1414 -0.2363
1PE     C70  710  13.124  16.671   7.660 -0.1382  0.1395 -0.2004
1PE     C71  711  12.858  17.002   7.566 -0.1512  0.1419 -0.1374
1PE     C72  712  12.440  17.072   7.687 -0.1331  0.1291 -0.0869
1PE     C73  713  12.204  16.979   8.061 -0.0950  0.0909 -0.0757
1PE     C74  714  11.931  16.779   8.389 -0.0775  0.0659 -0.0571
1PE     C75  715  11.862  16.353   8.584 -0.0399  0.0344 -0.0943
1PE     C76  716  11.803  15.927   8.744 -0.0194  0.0404 -0.1180
1PE     C77  717  11.723  15.479   8.719 -0.0207  0.0268 -0.1659
1PE     C78  718  11.431  15.134   8.756  0.0096  0.0082 -0.1707
1PE     C79  719  11.055  15.035   8.537 -0.0218  0.0369 -0.1273
1PE     C80  720  10.726  15.261   8.334 -0.0528  0.0514 -0.0731
1PE      C1  721  10.273  18.541   9.987  0.0825 -0.1136  0.2569
1PE      C2  722  10.333  18.322   9.617  0.0625 -0.0683  0.2403
1PE      C3  723  10.131  18.262   9.255  0.0128 -0.0289  0.2746
1PE      C4  724  10.233  18.350   8.830 -0.0189  0.0124  0.2601
1PE      C5  725  10.486  18.135   8.556 -0.0504  0.0311  0.2127
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1PE      C6  726  10.499  17.713   8.597 -0.0450  0.0280  0.1788
1PE      C7  727  10.172  17.477   8.779 -0.0395  0.0130  0.1934
1PE      C8  728   9.748  17.532   8.657 -0.0300  0.0149  0.2255
1PE      C9  729   9.622  17.787   8.282 -0.0681  0.0536  0.2459
1PE     C10  730   9.883  18.061   8.032 -0.0915  0.0685  0.2838
1PE     C11  731  10.121  18.414   7.861 -0.1285  0.1087  0.2719
1PE     C12  732  10.148  18.788   7.642 -0.1507  0.1159  0.3006
1PE     C13  733  10.415  18.904   7.303 -0.1882  0.1471  0.2867
1PE     C14  734  10.683  18.614   7.079 -0.2010  0.1734  0.2545
1PE     C15  735  10.621  18.171   6.963 -0.2138  0.1851  0.2007
1PE     C16  736  10.461  17.805   7.202 -0.1939  0.1596  0.1854
1PE     C17  737  10.583  17.703   7.609 -0.1358  0.1081  0.1664
1PE     C18  738  10.973  17.691   7.806 -0.1260  0.1083  0.1095
1PE     C19  739  11.153  17.468   8.152 -0.0879  0.0769  0.0822
1PE     C20  740  11.051  17.457   8.588 -0.0452  0.0356  0.0999
1PE     C21  741  10.683  17.272   8.717 -0.0410  0.0098  0.1092
1PE     C22  742  10.427  17.273   8.376 -0.0616  0.0417  0.1365
1PE     C23  743  10.586  17.511   8.090 -0.0939  0.0880  0.1556
1PE     C24  744  10.830  17.848   8.251 -0.0920  0.0684  0.1452
1PE     C25  745  10.936  17.930   8.696 -0.0361  0.0192  0.1396
1PE     C26  746  10.837  17.704   9.035 -0.0037 -0.0256  0.1471
1PE     C27  747  10.519  17.429   9.177  0.0158 -0.0209  0.1556
1PE     C28  748  10.072  17.432   9.285  0.0193 -0.0471  0.1881
1PE     C29  749   9.635  17.415   9.163  0.0118 -0.0363  0.2466
1PE     C30  750   9.288  17.505   8.865 -0.0324 -0.0073  0.2736
1PE     C31  751   9.312  17.414   8.413 -0.0695  0.0327  0.2669
1PE     C32  752   9.699  17.280   8.195 -0.0769  0.0579  0.2061
1PE     C33  753  10.091  17.185   8.020 -0.1073  0.0731  0.1494
1PE     C34  754  10.388  17.230   7.679 -0.1276  0.1148  0.1403
1PE     C35  755  10.657  17.277   7.340 -0.1683  0.1414  0.1280
1PE     C36  756  10.691  17.421   6.928 -0.1938  0.1860  0.1132
1PE     C37  757  10.885  17.767   6.782 -0.2295  0.1895  0.1448
1PE     C38  758  11.167  18.025   6.977 -0.2093  0.1747  0.1512
1PE     C39  759  11.504  18.317   6.935 -0.2218  0.1933  0.1351
1PE     C40  760  11.831  18.586   7.082 -0.2013  0.1721  0.1208
1PE     C41  761  11.885  18.746   7.503 -0.1619  0.1414  0.1303
1PE     C42  762  11.563  18.751   7.816 -0.1313  0.1257  0.1610
1PE     C43  763  11.117  18.726   7.738 -0.1527  0.1185  0.2062
1PE     C44  764  10.917  18.966   7.420 -0.1723  0.1337  0.2453
1PE     C45  765  11.121  19.338   7.237 -0.1967  0.1564  0.2652
1PE     C46  766  11.575  19.441   7.314 -0.1881  0.1614  0.2343
1PE     C47  767  11.841  19.240   7.646 -0.1496  0.1299  0.1778
1PE     C48  768  11.700  19.150   8.070 -0.1169  0.0791  0.1728
1PE     C49  769  11.283  19.015   8.202 -0.0988  0.0644  0.2150
1PE     C50  770  10.882  18.785   8.201 -0.0895  0.0697  0.2325
1PE     C51  771  10.512  18.529   8.166 -0.0799  0.0823  0.2652
1PE     C52  772  10.101  18.401   8.357 -0.0779  0.0525  0.2580
1PE     C53  773  10.001  17.993   8.543 -0.0544  0.0374  0.2435
1PE     C54  774  10.097  17.629   8.293 -0.0674  0.0686  0.1930
1PE     C55  775  10.158  17.647   7.855 -0.1166  0.1137  0.1983
1PE     C56  776  10.142  17.978   7.583 -0.1539  0.1306  0.2467
1PE     C57  777  10.417  18.277   7.444 -0.1577  0.1309  0.2402
1PE     C58  778  10.632  18.574   7.621 -0.1453  0.1156  0.2281
1PE     C59  779  10.598  18.942   7.825 -0.1375  0.1009  0.2795
1PE     C60  780  10.910  19.232   7.913 -0.1312  0.0927  0.2742
1PE     C61  781  11.323  19.209   7.720 -0.1465  0.1224  0.2361
1PE     C62  782  11.436  18.961   7.364 -0.1863  0.1722  0.1925
1PE     C63  783  11.201  18.761   7.039 -0.1976  0.1905  0.2023
1PE     C64  784  11.050  18.457   6.739 -0.2446  0.2182  0.1936
1PE     C65  785  11.234  18.115   6.494 -0.2503  0.2454  0.1392
1PE     C66  786  11.398  17.705   6.625 -0.2485  0.2188  0.1028
1PE     C67  787  11.237  17.449   6.975 -0.2040  0.1832  0.0713
1PE     C68  788  11.014  17.612   7.311 -0.1825  0.1506  0.1131
1PE     C69  789  10.866  18.034   7.395 -0.1792  0.1535  0.1659
1PE     C70  790  11.045  18.391   7.344 -0.1774  0.1553  0.1743
1PE     C71  791  11.455  18.476   7.414 -0.1666  0.1480  0.1576
1PE     C72  792  11.813  18.230   7.452 -0.1761  0.1452  0.1007
1PE     C73  793  11.804  17.842   7.629 -0.1482  0.1250  0.0648
1PE     C74  794  11.508  17.749   7.942 -0.1078  0.0945  0.0791
1PE     C75  795  11.293  18.002   8.260 -0.0786  0.0608  0.1240
1PE     C76  796  10.937  18.315   8.389 -0.0605  0.0601  0.1880
1PE     C77  797  10.797  18.456   8.790 -0.0322  0.0106  0.2240
1PE     C78  798  10.633  18.192   9.091 -0.0050 -0.0207  0.2044
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1PE     C79  799  10.347  17.878   9.049 -0.0026 -0.0274  0.2068
1PE     C80  800   9.917  17.846   9.046  0.0010 -0.0281  0.2472
1PE      C1  801  11.505  14.637   8.615 -0.0108  0.0379 -0.2310
1PE      C2  802  11.887  14.578   8.365 -0.0266  0.0568 -0.2780
1PE      C3  803  12.121  14.503   7.983 -0.0733  0.0989 -0.2901
1PE      C4  804  12.241  14.634   7.564 -0.1170  0.1411 -0.2924
1PE      C5  805  12.220  14.704   7.096 -0.1688  0.1805 -0.2858
1PE      C6  806  12.113  14.887   6.690 -0.1845  0.2069 -0.2716
1PE      C7  807  12.259  14.943   6.272 -0.2456  0.2703 -0.2602
1PE      C8  808  12.412  15.288   6.031 -0.2739  0.2818 -0.2471
1PE      C9  809  12.153  15.614   5.894 -0.2985  0.3079 -0.1875
1PE     C10  810  11.721  15.656   5.898 -0.2992  0.2880 -0.1583
1PE     C11  811  11.275  15.723   5.957 -0.2840  0.2723 -0.0984
1PE     C12  812  10.907  15.923   6.133 -0.2837  0.2636 -0.0366
1PE     C13  813  10.794  16.169   6.499 -0.2427  0.2391  0.0043
1PE     C14  814  10.926  16.524   6.736 -0.2161  0.2035  0.0010
1PE     C15  815  11.312  16.710   6.778 -0.2208  0.2064 -0.0121
1PE     C16  816  11.657  16.670   6.470 -0.2372  0.2399 -0.0400
1PE     C17  817  11.651  16.502   6.046 -0.2821  0.2918 -0.0477
1PE     C18  818  11.954  16.468   5.705 -0.3369  0.3170 -0.0949
1PE     C19  819  12.325  16.671   5.781 -0.3206  0.3244 -0.1160
1PE     C20  820  12.321  16.892   6.144 -0.2828  0.2841 -0.0811
1PE     C21  821  11.951  17.078   6.384 -0.2733  0.2398 -0.0367
1PE     C22  822  11.728  17.451   6.291 -0.2619  0.2570  0.0160
1PE     C23  823  11.727  17.604   5.869 -0.3112  0.3023  0.0275
1PE     C24  824  11.732  17.304   5.526 -0.3517  0.3337  0.0146
1PE     C25  825  11.531  16.861   5.537 -0.3498  0.3298 -0.0166
1PE     C26  826  11.163  16.749   5.786 -0.2962  0.3144  0.0142
1PE     C27  827  10.934  17.049   6.064 -0.2865  0.2818  0.0562
1PE     C28  828  11.110  17.420   6.254 -0.2866  0.2619  0.0931
1PE     C29  829  11.335  17.778   6.122 -0.2844  0.2571  0.0960
1PE     C30  830  11.708  17.973   6.285 -0.2802  0.2665  0.0665
1PE     C31  831  11.949  17.837   6.647 -0.2428  0.2284  0.0471
1PE     C32  832  12.172  17.457   6.691 -0.2185  0.2253 -0.0171
1PE     C33  833  12.414  17.293   6.392 -0.2496  0.2588 -0.0706
1PE     C34  834  12.599  17.506   6.086 -0.2895  0.2892 -0.0575
1PE     C35  835  12.436  17.676   5.703 -0.3247  0.3218 -0.0384
1PE     C36  836  12.254  17.416   5.366 -0.3688  0.3398 -0.0319
1PE     C37  837  12.459  17.026   5.221 -0.3789  0.3721 -0.0825
1PE     C38  838  12.718  16.736   5.451 -0.3626  0.3566 -0.1387
1PE     C39  839  13.130  16.641   5.622 -0.3338  0.3297 -0.2035
1PE     C40  840  13.559  16.709   5.728 -0.3194  0.3254 -0.2343
1PE     C41  841  13.886  16.830   6.015 -0.2966  0.3042 -0.2532
1PE     C42  842  13.926  17.163   6.314 -0.2704  0.2893 -0.2151
1PE     C43  843  13.592  17.302   6.571 -0.2462  0.2428 -0.1764
1PE     C44  844  13.179  17.218   6.542 -0.2306  0.2486 -0.1406
1PE     C45  845  12.900  17.131   6.239 -0.2580  0.2777 -0.1220
1PE     C46  846  12.814  16.837   5.959 -0.3117  0.2976 -0.1519
1PE     C47  847  12.747  16.417   5.874 -0.3067  0.3135 -0.1832
1PE     C48  848  12.492  16.251   5.532 -0.3468  0.3352 -0.1634
1PE     C49  849  12.245  16.543   5.277 -0.3499  0.3493 -0.1064
1PE     C50  850  12.044  16.913   5.467 -0.3604  0.3553 -0.0537
1PE     C51  851  11.869  16.939   5.888 -0.3056  0.2953 -0.0278
1PE     C52  852  11.485  17.005   6.099 -0.3028  0.2644  0.0025
1PE     C53  853  11.198  16.715   6.298 -0.2698  0.2544  0.0166
1PE     C54  854  11.289  16.304   6.409 -0.2335  0.2329 -0.0442
1PE     C55  855  11.588  16.028   6.218 -0.2785  0.2664 -0.0955
1PE     C56  856  11.995  16.088   6.041 -0.2849  0.2787 -0.1218
1PE     C57  857  12.340  16.344   6.153 -0.2774  0.2651 -0.1535
1PE     C58  858  12.655  16.609   6.372 -0.2552  0.2552 -0.1567
1PE     C59  859  12.684  16.948   6.665 -0.2202  0.2262 -0.1264
1PE     C60  860  12.752  17.404   6.721 -0.2283  0.2176 -0.0877
1PE     C61  861  12.951  17.671   6.407 -0.2653  0.2564 -0.0747
1PE     C62  862  13.271  17.502   6.121 -0.2895  0.2928 -0.1320
1PE     C63  863  13.414  17.073   6.094 -0.2913  0.2870 -0.1880
1PE     C64  864  13.258  16.664   6.145 -0.2818  0.2869 -0.2166
1PE     C65  865  13.107  16.273   6.191 -0.2664  0.2866 -0.2240
1PE     C66  866  12.756  16.094   6.322 -0.2570  0.2529 -0.2156
1PE     C67  867  12.464  16.228   6.639 -0.2145  0.2275 -0.1644
1PE     C68  868  12.535  16.557   6.951 -0.2058  0.1900 -0.1430
1PE     C69  869  12.548  16.949   7.172 -0.1808  0.1821 -0.1131
1PE     C70  870  12.466  17.371   7.168 -0.1803  0.1818 -0.0223
1PE     C71  871  12.500  17.771   6.938 -0.2147  0.2035 -0.0319
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1PE     C72  872  12.455  17.828   6.501 -0.2689  0.2293 -0.0132
1PE     C73  873  12.156  17.697   6.187 -0.2876  0.2742 -0.0014
1PE     C74  874  12.145  17.333   5.931 -0.3048  0.2948 -0.0237
1PE     C75  875  12.499  17.145   5.725 -0.3305  0.3292 -0.0826
1PE     C76  876  12.919  17.343   5.740 -0.3195  0.3225 -0.1007
1PE     C77  877  12.933  17.799   5.871 -0.3359  0.3145 -0.0602
1PE     C78  878  12.573  18.033   6.055 -0.3073  0.2865 -0.0045
1PE     C79  879  12.181  18.197   6.262 -0.2954  0.2787  0.0580
1PE     C80  880  11.889  18.344   6.597 -0.2521  0.2288  0.0898
1PE      C1  881  11.873  14.736   8.966  0.0062 -0.0000 -0.2380
1PE      C2  882  11.908  15.020   8.608 -0.0126  0.0256 -0.2235
1PE      C3  883  11.933  15.261   8.242 -0.0567  0.0674 -0.2145
1PE      C4  884  11.718  15.387   7.870 -0.1009  0.1116 -0.1692
1PE      C5  885  11.830  15.494   7.449 -0.1470  0.1512 -0.1756
1PE      C6  886  12.232  15.581   7.303 -0.1537  0.1678 -0.2092
1PE      C7  887  12.554  15.810   7.547 -0.1303  0.1431 -0.2191
1PE      C8  888  12.643  15.721   7.990 -0.0932  0.1086 -0.2327
1PE      C9  889  12.449  15.368   8.142 -0.0600  0.0847 -0.2415
1PE     C10  890  12.255  15.113   7.826 -0.0856  0.1046 -0.2571
1PE     C11  891  12.348  15.100   7.377 -0.1467  0.1596 -0.2531
1PE     C12  892  12.365  15.244   6.960 -0.1877  0.2074 -0.2540
1PE     C13  893  12.356  15.602   6.707 -0.2056  0.2192 -0.2151
1PE     C14  894  12.340  15.837   6.314 -0.2517  0.2652 -0.1985
1PE     C15  895  12.543  15.929   5.919 -0.3048  0.2883 -0.2012
1PE     C16  896  12.949  16.007   5.696 -0.3191  0.3250 -0.2481
1PE     C17  897  13.365  16.211   5.764 -0.3104  0.3233 -0.2654
1PE     C18  898  13.691  16.355   6.073 -0.3014  0.3080 -0.2781
1PE     C19  899  13.939  16.403   6.463 -0.2460  0.2646 -0.3115
1PE     C20  900  13.834  16.458   6.899 -0.2084  0.2288 -0.2832
1PE     C21  901  13.978  16.264   7.268 -0.1529  0.1883 -0.3121
1PE     C22  902  14.176  15.847   7.253 -0.1635  0.1913 -0.3701
1PE     C23  903  14.044  15.502   6.947 -0.2033  0.2240 -0.3951
1PE     C24  904  13.812  15.477   6.530 -0.2266  0.2501 -0.3640
1PE     C25  905  13.340  15.466   6.449 -0.2453  0.2698 -0.3274
1PE     C26  906  12.997  15.406   6.768 -0.2185  0.2204 -0.3016
1PE     C27  907  12.742  15.515   7.148 -0.1624  0.1807 -0.2653
1PE     C28  908  12.742  15.347   7.595 -0.1347  0.1602 -0.2873
1PE     C29  909  12.699  14.904   7.656 -0.1130  0.1326 -0.3217
1PE     C30  910  12.684  14.669   7.275 -0.1410  0.1604 -0.3359
1PE     C31  911  12.707  14.867   6.851 -0.1954  0.2096 -0.3161
1PE     C32  912  12.607  15.191   6.529 -0.2454  0.2375 -0.2836
1PE     C33  913  12.743  15.560   6.333 -0.2491  0.2523 -0.2510
1PE     C34  914  13.062  15.744   6.111 -0.2742  0.2861 -0.2754
1PE     C35  915  13.473  15.894   6.146 -0.2728  0.2943 -0.3051
1PE     C36  916  13.884  15.926   6.308 -0.2574  0.2721 -0.3466
1PE     C37  917  14.095  15.970   6.715 -0.2224  0.2383 -0.3570
1PE     C38  918  14.343  16.275   6.941 -0.2123  0.2297 -0.3564
1PE     C39  919  14.247  16.720   7.023 -0.1882  0.2234 -0.2833
1PE     C40  920  13.924  16.962   6.793 -0.2205  0.2426 -0.2343
1PE     C41  921  13.628  16.787   6.476 -0.2542  0.2688 -0.2337
1PE     C42  922  13.452  16.369   6.544 -0.2226  0.2469 -0.2621
1PE     C43  923  13.364  16.272   6.978 -0.2010  0.2079 -0.2480
1PE     C44  924  13.535  16.526   7.324 -0.1607  0.1821 -0.2479
1PE     C45  925  13.839  16.873   7.306 -0.1552  0.1883 -0.2384
1PE     C46  926  13.724  17.293   7.153 -0.1927  0.1887 -0.1863
1PE     C47  927  13.323  17.375   6.996 -0.2115  0.2142 -0.1562
1PE     C48  928  13.011  17.089   7.011 -0.2013  0.2039 -0.1371
1PE     C49  929  12.988  16.693   7.172 -0.1646  0.1780 -0.1653
1PE     C50  930  12.691  16.522   7.465 -0.1466  0.1434 -0.1463
1PE     C51  931  12.414  16.250   7.375 -0.1457  0.1472 -0.1567
1PE     C52  932  12.446  15.949   7.054 -0.1785  0.1827 -0.2056
1PE     C53  933  12.777  15.849   6.757 -0.2105  0.2264 -0.2460
1PE     C54  934  13.161  15.930   6.575 -0.2363  0.2545 -0.2630
1PE     C55  935  13.566  15.904   6.686 -0.2183  0.2271 -0.3058
1PE     C56  936  13.718  15.881   7.088 -0.1659  0.1999 -0.3345
1PE     C57  937  13.518  16.045   7.449 -0.1461  0.1637 -0.2930
1PE     C58  938  13.115  16.240   7.414 -0.1464  0.1760 -0.2463
1PE     C59  939  12.869  16.197   7.096 -0.1841  0.1813 -0.2010
1PE     C60  940  12.941  16.372   6.701 -0.2183  0.2332 -0.1822
1PE     C61  941  13.151  16.737   6.648 -0.2388  0.2327 -0.1956
1PE     C62  942  13.449  16.867   6.953 -0.1975  0.2083 -0.1942
1PE     C63  943  13.356  17.005   7.376 -0.1682  0.1755 -0.1763
1PE     C64  944  13.275  17.413   7.518 -0.1408  0.1609 -0.1262
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1PE     C65  945  13.420  17.774   7.277 -0.1928  0.1642 -0.1177
1PE     C66  946  13.649  17.738   6.857 -0.2190  0.2154 -0.1451
1PE     C67  947  14.025  17.460   6.768 -0.2337  0.2276 -0.1922
1PE     C68  948  14.231  17.246   7.122 -0.1806  0.2025 -0.2472
1PE     C69  949  14.078  17.338   7.538 -0.1422  0.1507 -0.2258
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1PE     C72  952  13.842  16.370   7.729 -0.1226  0.1530 -0.2929
1PE     C73  953  13.967  15.917   7.729 -0.1247  0.1444 -0.3495
1PE     C74  954  14.063  15.613   8.052 -0.0668  0.1098 -0.3857
1PE     C75  955  13.900  15.415   8.427 -0.0432  0.0810 -0.3883
1PE     C76  956  13.651  15.190   8.725  0.0030  0.0533 -0.3898
1PE     C77  957  13.254  15.164   8.947  0.0186  0.0296 -0.3509
1PE     C78  958  12.809  15.118   8.878  0.0125  0.0254 -0.3115
1PE     C79  959  12.435  15.275   8.683 -0.0217  0.0372 -0.2423
1PE     C80  960  12.180  15.585   8.524 -0.0211  0.0599 -0.1949
1PE      C1  961   9.249  18.422   8.829 -0.0349 -0.0076  0.3567
1PE      C2  962   9.429  18.717   8.543 -0.0693  0.0210  0.3757
1PE      C3  963   9.736  18.749   8.220 -0.1037  0.0498  0.3412
1PE      C4  964  10.161  18.879   8.146 -0.0885  0.0723  0.3174
1PE      C5  965  10.506  19.139   8.290 -0.0866  0.0546  0.3059
1PE      C6  966  10.554  19.484   8.581 -0.0573  0.0329  0.3351
1PE      C7  967  10.236  19.641   8.907 -0.0228 -0.0021  0.3819
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1PE     C11  971  10.440  18.753   8.606 -0.0515  0.0266  0.2675
1PE     C12  972  10.823  18.988   8.693 -0.0403  0.0259  0.2724
1PE     C13  973  11.150  19.167   8.984 -0.0115  0.0033  0.2368
1PE     C14  974  11.258  19.358   9.404  0.0325 -0.0272  0.2485
1PE     C15  975  11.105  19.302   9.849  0.0538 -0.0849  0.2657
1PE     C16  976  10.719  19.158  10.037  0.0882 -0.1081  0.2882
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1PE     C18  978   9.999  18.851  10.315  0.1123 -0.1329  0.3460
1PE     C19  979   9.595  18.740  10.451  0.1324 -0.1605  0.3706
1PE     C20  980   9.383  18.589  10.802  0.1680 -0.2019  0.3696
1PE     C21  981   9.345  18.166  10.914  0.1793 -0.1995  0.3266
1PE     C22  982   9.416  17.798  10.644  0.1613 -0.1838  0.2951
1PE     C23  983   9.410  17.853  10.178  0.1095 -0.1304  0.2785
1PE     C24  984   9.307  18.276  10.069  0.1001 -0.1284  0.3601
1PE     C25  985   9.119  18.500  10.394  0.1276 -0.1656  0.3901
1PE     C26  986   8.897  18.269  10.728  0.1552 -0.2139  0.3788
1PE     C27  987   8.934  17.803  10.760  0.1669 -0.1967  0.3349
1PE     C28  988   9.046  17.543  10.394  0.1319 -0.1520  0.2884
1PE     C29  989   8.968  17.670   9.951  0.0877 -0.0985  0.3204
1PE     C30  990   9.159  17.995   9.704  0.0673 -0.1015  0.3361
1PE     C31  991   9.606  18.078   9.684  0.0640 -0.0880  0.2881
1PE     C32  992   9.984  17.889   9.563  0.0357 -0.0740  0.2528
1PE     C33  993  10.401  17.772   9.557  0.0551 -0.0586  0.1831
1PE     C34  994  10.785  17.991   9.524  0.0370 -0.0491  0.1713
1PE     C35  995  10.867  18.445   9.485  0.0394 -0.0447  0.2057
1PE     C36  996  10.645  18.777   9.677  0.0506 -0.0703  0.2623
1PE     C37  997  10.231  18.869   9.576  0.0474 -0.0691  0.3205
1PE     C38  998   9.895  18.592   9.634  0.0450 -0.0863  0.3048
1PE     C39  999   9.774  18.481  10.042  0.0856 -0.1164  0.3237
1PE     C40 1000  10.087  18.371  10.420  0.1257 -0.1477  0.2650
1PE     C41 1001  10.337  18.663  10.658  0.1513 -0.1732  0.2702
1PE     C42 1002  10.482  19.091  10.548  0.1480 -0.1589  0.3024
1PE     C43 1003  10.342  19.450  10.313  0.1074 -0.1353  0.3582
1PE     C44 1004  10.029  19.544   9.994  0.0905 -0.1159  0.3806
1PE     C45 1005   9.625  19.496   9.817  0.0705 -0.1034  0.4449
1PE     C46 1006   9.270  19.246   9.850  0.0545 -0.1121  0.4461
1PE     C47 1007   9.063  18.934   9.604  0.0488 -0.0844  0.4289
1PE     C48 1008   9.185  18.776   9.206 -0.0062 -0.0314  0.3898
1PE     C49 1009   9.580  18.822   9.021 -0.0236 -0.0173  0.3623
1PE     C50 1010   9.984  18.714   9.149  0.0050 -0.0192  0.3303
1PE     C51 1011  10.427  18.660   9.154  0.0041 -0.0288  0.2684
1PE     C52 1012  10.744  18.900   9.185  0.0014 -0.0329  0.2741
1PE     C53 1013  10.767  19.222   9.496  0.0340 -0.0509  0.2876
1PE     C54 1014  10.396  19.364   9.703  0.0594 -0.0830  0.3475
1PE     C55 1015   9.986  19.307   9.528  0.0356 -0.0686  0.3767
1PE     C56 1016   9.959  19.194   9.111 -0.0046 -0.0350  0.3647
1PE     C57 1017  10.340  19.129   8.907 -0.0157 -0.0156  0.3297
```

```
1PE     C58 1018  10.680  19.388   9.043 -0.0048 -0.0053  0.3086
1PE     C59 1019  10.577  19.700   9.355  0.0077 -0.0430  0.3459
1PE     C60 1020  10.144  19.785   9.501  0.0253 -0.0565  0.4021
1PE     C61 1021   9.727  19.706   9.317  0.0201 -0.0441  0.4472
1PE     C62 1022   9.490  19.316   9.261  0.0117 -0.0506  0.4228
1PE     C63 1023   9.597  18.973   9.502  0.0330 -0.0616  0.3901
1PE     C64 1024   9.785  19.013   9.897  0.0699 -0.0938  0.3750
1PE     C65 1025   9.647  19.222  10.273  0.1058 -0.1492  0.4090
1PE     C66 1026   9.515  19.189  10.722  0.1446 -0.1899  0.4037
1PE     C67 1027   9.193  19.019  10.977  0.1742 -0.2023  0.4374
1PE     C68 1028   8.856  18.774  10.846  0.1649 -0.1862  0.4484
1PE     C69 1029   8.686  18.757  10.436  0.1326 -0.1698  0.4604
1PE     C70 1030   8.840  18.705  10.017  0.0897 -0.1261  0.4302
1PE     C71 1031   8.913  18.446   9.656  0.0478 -0.0871  0.3945
1PE     C72 1032   9.072  18.249   9.272  0.0103 -0.0586  0.3659
1PE     C73 1033   9.009  17.969   8.899 -0.0217 -0.0196  0.3464
1PE     C74 1034   9.178  18.009   8.456 -0.0611  0.0355  0.3305
1PE     C75 1035   9.577  18.263   8.416 -0.0652  0.0392  0.3043
1PE     C76 1036   9.755  18.394   8.805 -0.0400 -0.0084  0.3045
1PE     C77 1037   9.597  18.356   9.237  0.0068 -0.0359  0.3385
1PE     C78 1038   9.399  18.528   9.617  0.0376 -0.0927  0.3537
1PE     C79 1039   9.349  18.774  10.001  0.0652 -0.1215  0.3966
1PE     C80 1040   9.166  19.005  10.357  0.1244 -0.1487  0.4329
1PE      C1 1041  11.327  15.546   7.561 -0.1390  0.1313 -0.1200
1PE      C2 1042  11.032  15.249   7.421 -0.1458  0.1485 -0.1237
1PE      C3 1043  10.886  14.889   7.644 -0.1172  0.1027 -0.1282
1PE      C4 1044  11.077  14.746   8.039 -0.0699  0.0751 -0.1542
1PE      C5 1045  11.480  14.534   8.031 -0.0698  0.0852 -0.2285
1PE      C6 1046  11.739  14.481   7.641 -0.1120  0.1319 -0.2524
1PE      C7 1047  11.741  14.590   7.198 -0.1591  0.1743 -0.2472
1PE      C8 1048  11.573  14.853   6.858 -0.1789  0.2002 -0.2087
1PE      C9 1049  11.654  15.122   6.509 -0.2159  0.2503 -0.1904
1PE     C10 1050  11.568  15.540   6.376 -0.2398  0.2449 -0.1404
1PE     C11 1051  11.218  15.811   6.494 -0.2499  0.2351 -0.0842
1PE     C12 1052  10.832  15.681   6.671 -0.2242  0.2090 -0.0554
1PE     C13 1053  10.786  15.315   6.953 -0.1844  0.1929 -0.0902
1PE     C14 1054  11.059  14.945   7.027 -0.1890  0.1801 -0.1564
1PE     C15 1055  11.348  14.842   7.361 -0.1390  0.1533 -0.1774
1PE     C16 1056  11.383  15.046   7.753 -0.1106  0.1031 -0.1650
1PE     C17 1057  11.063  15.281   7.941 -0.0941  0.0875 -0.1313
1PE     C18 1058  10.660  15.323   7.777 -0.1189  0.1291 -0.0761
1PE     C19 1059  10.472  15.392   7.364 -0.1444  0.1412 -0.0465
1PE     C20 1060  10.495  15.741   7.057 -0.1826  0.1737 -0.0116
1PE     C21 1061  10.785  16.084   7.013 -0.1765  0.1819 -0.0095
1PE     C22 1062  11.212  16.152   6.901 -0.2011  0.1874 -0.0502
1PE     C23 1063  11.610  16.293   6.865 -0.2117  0.2103 -0.0601
1PE     C24 1064  11.778  16.706   6.959 -0.1972  0.2020 -0.0517
1PE     C25 1065  11.529  17.032   7.112 -0.1830  0.1831 -0.0028
1PE     C26 1066  11.104  17.030   7.278 -0.1820  0.1554  0.0468
1PE     C27 1067  10.819  16.949   6.989 -0.2113  0.1782  0.0530
1PE     C28 1068  10.981  17.056   6.599 -0.2372  0.2298  0.0622
1PE     C29 1069  11.440  17.161   6.574 -0.2417  0.2299  0.0375
1PE     C30 1070  11.716  17.398   6.868 -0.2182  0.1989  0.0116
1PE     C31 1071  11.644  17.442   7.358 -0.1576  0.1678  0.0350
1PE     C32 1072  11.327  17.351   7.664 -0.1509  0.1288  0.0622
1PE     C33 1073  10.912  17.176   7.765 -0.1268  0.1148  0.0744
1PE     C34 1074  10.699  16.819   7.567 -0.1361  0.1230  0.0614
1PE     C35 1075  10.898  16.533   7.248 -0.1731  0.1727  0.0223
1PE     C36 1076  11.339  16.564   7.252 -0.1795  0.1599 -0.0255
1PE     C37 1077  11.476  16.870   7.562 -0.1269  0.1259 -0.0126
1PE     C38 1078  11.257  16.876   7.960 -0.0926  0.0986  0.0101
1PE     C39 1079  10.933  16.588   8.007 -0.1006  0.0703  0.0235
1PE     C40 1080  10.858  16.312   7.678 -0.1166  0.1218 -0.0020
1PE     C41 1081  11.163  16.108   7.414 -0.1364  0.1393 -0.0397
1PE     C42 1082  11.557  15.911   7.318 -0.1600  0.1606 -0.0984
1PE     C43 1083  11.927  15.946   7.067 -0.1715  0.1904 -0.1395
1PE     C44 1084  12.103  16.325   6.983 -0.1945  0.1943 -0.1141
1PE     C45 1085  12.158  16.663   7.294 -0.1735  0.1517 -0.0914
1PE     C46 1086  12.183  16.580   7.728 -0.1325  0.1229 -0.0982
1PE     C47 1087  11.910  16.278   7.946 -0.1096  0.1018 -0.1035
1PE     C48 1088  11.632  15.947   7.829 -0.1005  0.1138 -0.0998
1PE     C49 1089  11.349  15.685   8.043 -0.0725  0.0928 -0.0901
1PE     C50 1090  11.365  15.398   8.334 -0.0468  0.0644 -0.1385
```

```
  1PE     C51 1091  11.513  14.994   8.264 -0.0483  0.0538 -0.1898
  1PE     C52 1092  11.815  14.886   7.949 -0.0847  0.0839 -0.2280
  1PE     C53 1093  11.847  14.984   7.526 -0.1211  0.1493 -0.2313
  1PE     C54 1094  11.916  15.101   7.124 -0.1683  0.1737 -0.2138
  1PE     C55 1095  11.879  15.447   6.870 -0.2004  0.2072 -0.1754
  1PE     C56 1096  11.529  15.729   6.861 -0.2045  0.2175 -0.1301
  1PE     C57 1097  11.131  15.692   7.072 -0.1840  0.1856 -0.0841
  1PE     C58 1098  10.862  15.713   7.403 -0.1484  0.1393 -0.0605
  1PE     C59 1099  10.937  15.791   7.809 -0.1283  0.1169 -0.0734
  1PE     C60 1100  11.188  16.140   7.984 -0.0895  0.1006 -0.0353
  1PE     C61 1101  11.408  16.420   7.741 -0.1216  0.1250 -0.0545
  1PE     C62 1102  11.768  16.343   7.468 -0.1487  0.1521 -0.0758
  1PE     C63 1103  12.051  15.978   7.540 -0.1453  0.1393 -0.1523
  1PE     C64 1104  12.097  15.700   7.900 -0.1011  0.1062 -0.1761
  1PE     C65 1105  11.785  15.726   8.256 -0.0601  0.0698 -0.1474
  1PE     C66 1106  11.549  16.074   8.326 -0.0496  0.0652 -0.0796
  1PE     C67 1107  11.536  16.501   8.217 -0.0639  0.0637 -0.0406
  1PE     C68 1108  11.763  16.767   7.933 -0.1085  0.1093 -0.0364
  1PE     C69 1109  11.940  17.021   7.599 -0.1435  0.1262 -0.0316
  1PE     C70 1110  12.028  17.137   7.186 -0.1786  0.1734 -0.0169
  1PE     C71 1111  12.196  16.979   6.820 -0.2159  0.2094 -0.0777
  1PE     C72 1112  12.171  16.641   6.563 -0.2469  0.2194 -0.0906
  1PE     C73 1113  11.960  16.265   6.500 -0.2437  0.2302 -0.1082
  1PE     C74 1114  11.921  15.839   6.559 -0.2289  0.2311 -0.1531
  1PE     C75 1115  12.051  15.417   6.374 -0.2348  0.2487 -0.2174
  1PE     C76 1116  11.868  15.189   6.037 -0.2802  0.2695 -0.2093
  1PE     C77 1117  11.415  15.228   5.953 -0.2817  0.2953 -0.1543
  1PE     C78 1118  11.125  15.333   6.297 -0.2525  0.2485 -0.1271
  1PE     C79 1119  11.243  15.331   6.730 -0.2046  0.2064 -0.1217
  1PE     C80 1120  11.455  15.292   7.130 -0.1670  0.1755 -0.1604
20.31205  20.31205  20.31205
```

3.2 Polyethylene NP System Topology

```
#include "martini_v2.0_PEO_PS_CNP.itp"

#include "PE160.itp"

[ system ]
; name
 POLYETHYLENE

[ molecules ]
; name               number
PE                   14
```

3.3 Polyethylene NP Topology

```
[moleculetype]
 ; molname     nrexcl
 PE               3

 [atoms]
 ; id   type    resnr   residu  atom    cgnr    charge
  1 C1           1 PE C1               1           0
  2 C1           1 PE C2               2           0
  3 C1           1 PE C3               3           0
  4 C1           1 PE C4               4           0
  5 C1           1 PE C5               5           0
  6 C1           1 PE C6               6           0
  7 C1           1 PE C7               7           0
  8 C1           1 PE C8               8           0
  9 C1           1 PE C9               9           0
  10 C1           1 PE C10             10           0
  11 C1           1 PE C11             11           0
  12 C1           1 PE C12             12           0
  13 C1           1 PE C13             13           0
  14 C1           1 PE C14             14           0
  15 C1           1 PE C15             15           0
  16 C1           1 PE C16             16           0
  17 C1           1 PE C17             17           0
  18 C1           1 PE C18             18           0
  19 C1           1 PE C19             19           0
  20 C1           1 PE C20             20           0
  21 C1           1 PE C21             21           0
  22 C1           1 PE C22             22           0
  23 C1           1 PE C23             23           0
  24 C1           1 PE C24             24           0
  25 C1           1 PE C25             25           0
  26 C1           1 PE C26             26           0
  27 C1           1 PE C27             27           0
  28 C1           1 PE C28             28           0
  29 C1           1 PE C29             29           0
  30 C1           1 PE C30             30           0
  31 C1           1 PE C31             31           0
  32 C1           1 PE C32             32           0
  33 C1           1 PE C33             33           0
  34 C1           1 PE C34             34           0
  35 C1           1 PE C35             35           0
  36 C1           1 PE C36             36           0
  37 C1           1 PE C37             37           0
  38 C1           1 PE C38             38           0
  39 C1           1 PE C39             39           0
  40 C1           1 PE C40             40           0
  41 C1           1 PE C41             41           0
  42 C1           1 PE C42             42           0
  43 C1           1 PE C43             43           0
  44 C1           1 PE C44             44           0
  45 C1           1 PE C45             45           0
  46 C1           1 PE C46             46           0
  47 C1           1 PE C47             47           0
```

```
 48 C1           1 PE C48            48          0
 49 C1           1 PE C49            49          0
 50 C1           1 PE C50            50          0
 51 C1           1 PE C51            51          0
 52 C1           1 PE C52            52          0
 53 C1           1 PE C53            53          0
 54 C1           1 PE C54            54          0
 55 C1           1 PE C55            55          0
 56 C1           1 PE C56            56          0
 57 C1           1 PE C57            57          0
 58 C1           1 PE C58            58          0
 59 C1           1 PE C59            59          0
 60 C1           1 PE C60            60          0
 61 C1           1 PE C61            61          0
 62 C1           1 PE C62            62          0
 63 C1           1 PE C63            63          0
 64 C1           1 PE C64            64          0
 65 C1           1 PE C65            65          0
 66 C1           1 PE C66            66          0
 67 C1           1 PE C67            67          0
 68 C1           1 PE C68            68          0
 69 C1           1 PE C69            69          0
 70 C1           1 PE C70            70          0
 71 C1           1 PE C71            71          0
 72 C1           1 PE C72            72          0
 73 C1           1 PE C73            73          0
 74 C1           1 PE C74            74          0
 75 C1           1 PE C75            75          0
 76 C1           1 PE C76            76          0
 77 C1           1 PE C77            77          0
 78 C1           1 PE C78            78          0
 79 C1           1 PE C79            79          0
 80 C1           1 PE C80            80          0

[bonds]
; i j  funct   length  force.c.
          1           2           1  0.46000001           2000
          2           3           1  0.46000001           2000
          3           4           1  0.46000001           2000
          4           5           1  0.46000001           2000
          5           6           1  0.46000001           2000
          6           7           1  0.46000001           2000
          7           8           1  0.46000001           2000
          8           9           1  0.46000001           2000
          9          10           1  0.46000001           2000
         10          11           1  0.46000001           2000
         11          12           1  0.46000001           2000
         12          13           1  0.46000001           2000
         13          14           1  0.46000001           2000
         14          15           1  0.46000001           2000
         15          16           1  0.46000001           2000
         16          17           1  0.46000001           2000
         17          18           1  0.46000001           2000
         18          19           1  0.46000001           2000
         19          20           1  0.46000001           2000
         20          21           1  0.46000001           2000
         21          22           1  0.46000001           2000
         22          23           1  0.46000001           2000
         23          24           1  0.46000001           2000
         24          25           1  0.46000001           2000
         25          26           1  0.46000001           2000
         26          27           1  0.46000001           2000
         27          28           1  0.46000001           2000
         28          29           1  0.46000001           2000
         29          30           1  0.46000001           2000
         30          31           1  0.46000001           2000
         31          32           1  0.46000001           2000
         32          33           1  0.46000001           2000
         33          34           1  0.46000001           2000
         34          35           1  0.46000001           2000
         35          36           1  0.46000001           2000
         36          37           1  0.46000001           2000
         37          38           1  0.46000001           2000
```

```
          38          39           1  0.46000001            2000
          39          40           1  0.46000001            2000
          40          41           1  0.46000001            2000
          41          42           1  0.46000001            2000
          42          43           1  0.46000001            2000
          43          44           1  0.46000001            2000
          44          45           1  0.46000001            2000
          45          46           1  0.46000001            2000
          46          47           1  0.46000001            2000
          47          48           1  0.46000001            2000
          48          49           1  0.46000001            2000
          49          50           1  0.46000001            2000
          50          51           1  0.46000001            2000
          51          52           1  0.46000001            2000
          52          53           1  0.46000001            2000
          53          54           1  0.46000001            2000
          54          55           1  0.46000001            2000
          55          56           1  0.46000001            2000
          56          57           1  0.46000001            2000
          57          58           1  0.46000001            2000
          58          59           1  0.46000001            2000
          59          60           1  0.46000001            2000
          60          61           1  0.46000001            2000
          61          62           1  0.46000001            2000
          62          63           1  0.46000001            2000
          63          64           1  0.46000001            2000
          64          65           1  0.46000001            2000
          65          66           1  0.46000001            2000
          66          67           1  0.46000001            2000
          67          68           1  0.46000001            2000
          68          69           1  0.46000001            2000
          69          70           1  0.46000001            2000
          70          71           1  0.46000001            2000
          71          72           1  0.46000001            2000
          72          73           1  0.46000001            2000
          73          74           1  0.46000001            2000
          74          75           1  0.46000001            2000
          75          76           1  0.46000001            2000
          76          77           1  0.46000001            2000
          77          78           1  0.46000001            2000
          78          79           1  0.46000001            2000
          79          80           1  0.46000001            2000

[angles]
; i j k       funct   angle   force.c.
           1           2           3           2   180.00000       82.000000
           2           3           4           2   180.00000       82.000000
           3           4           5           2   180.00000       82.000000
           4           5           6           2   180.00000       82.000000
           5           6           7           2   180.00000       82.000000
           6           7           8           2   180.00000       82.000000
           7           8           9           2   180.00000       82.000000
           8           9          10           2   180.00000       82.000000
           9          10          11           2   180.00000       82.000000
          10          11          12           2   180.00000       82.000000
          11          12          13           2   180.00000       82.000000
          12          13          14           2   180.00000       82.000000
          13          14          15           2   180.00000       82.000000
          14          15          16           2   180.00000       82.000000
          15          16          17           2   180.00000       82.000000
          16          17          18           2   180.00000       82.000000
          17          18          19           2   180.00000       82.000000
          18          19          20           2   180.00000       82.000000
          19          20          21           2   180.00000       82.000000
          20          21          22           2   180.00000       82.000000
          21          22          23           2   180.00000       82.000000
          22          23          24           2   180.00000       82.000000
          23          24          25           2   180.00000       82.000000
          24          25          26           2   180.00000       82.000000
          25          26          27           2   180.00000       82.000000
          26          27          28           2   180.00000       82.000000
          27          28          29           2   180.00000       82.000000
          28          29          30           2   180.00000       82.000000
```

```
          29          30          31           2   180.00000       82.000000
          30          31          32           2   180.00000       82.000000
          31          32          33           2   180.00000       82.000000
          32          33          34           2   180.00000       82.000000
          33          34          35           2   180.00000       82.000000
          34          35          36           2   180.00000       82.000000
          35          36          37           2   180.00000       82.000000
          36          37          38           2   180.00000       82.000000
          37          38          39           2   180.00000       82.000000
          38          39          40           2   180.00000       82.000000
          39          40          41           2   180.00000       82.000000
          40          41          42           2   180.00000       82.000000
          41          42          43           2   180.00000       82.000000
          42          43          44           2   180.00000       82.000000
          43          44          45           2   180.00000       82.000000
          44          45          46           2   180.00000       82.000000
          45          46          47           2   180.00000       82.000000
          46          47          48           2   180.00000       82.000000
          47          48          49           2   180.00000       82.000000
          48          49          50           2   180.00000       82.000000
          49          50          51           2   180.00000       82.000000
          50          51          52           2   180.00000       82.000000
          51          52          53           2   180.00000       82.000000
          52          53          54           2   180.00000       82.000000
          53          54          55           2   180.00000       82.000000
          54          55          56           2   180.00000       82.000000
          55          56          57           2   180.00000       82.000000
          56          57          58           2   180.00000       82.000000
          57          58          59           2   180.00000       82.000000
          58          59          60           2   180.00000       82.000000
          59          60          61           2   180.00000       82.000000
          60          61          62           2   180.00000       82.000000
          61          62          63           2   180.00000       82.000000
          62          63          64           2   180.00000       82.000000
          63          64          65           2   180.00000       82.000000
          64          65          66           2   180.00000       82.000000
          65          66          67           2   180.00000       82.000000
          66          67          68           2   180.00000       82.000000
          67          68          69           2   180.00000       82.000000
          68          69          70           2   180.00000       82.000000
          69          70          71           2   180.00000       82.000000
          70          71          72           2   180.00000       82.000000
          71          72          73           2   180.00000       82.000000
          72          73          74           2   180.00000       82.000000
          73          74          75           2   180.00000       82.000000
          74          75          76           2   180.00000       82.000000
          75          76          77           2   180.00000       82.000000
          76          77          78           2   180.00000       82.000000
          77          78          79           2   180.00000       82.000000
          78          79          80           2   180.00000       82.000000

 [dihedrals]
 ; i  j  k  h     funct   c0 c1 c2 c3 c4 c5
    1    2     3      4     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    2    3     4      5     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    3    4     5      6     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    4    5     6      7     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    5    6     7      8     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    6    7     8      9     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    7    8     9     10     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    8    9    10     11     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
    9   10    11     12     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   10   11    12     13     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
```

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   11   12    13     14     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   12   13    14     15     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   13   14    15     16     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   14   15    16     17     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   15   16    17     18     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   16   17    18     19     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   17   18    19     20     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   18   19    20     21     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   19   20    21     22     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   20   21    22     23     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   21   22    23     24     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   22   23    24     25     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   23   24    25     26     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   24   25    26     27     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   25   26    27     28     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   26   27    28     29     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   27   28    29     30     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   28   29    30     31     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   29   30    31     32     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   30   31    32     33     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   31   32    33     34     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   32   33    34     35     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   33   34    35     36     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   34   35    36     37     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   35   36    37     38     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   36   37    38     39     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   37   38    39     40     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   38   39    40     41     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   39   40    41     42     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   40   41    42     43     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   41   42    43     44     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   42   43    44     45     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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2.01571006E-02   0.0000000
   44   45    46     47     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   45   46    47     48     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   46   47    48     49     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
```

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   47   48    49     50     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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   49   50    51     52     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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2.01571006E-02   0.0000000
   52   53    54     55     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   53   54    55     56     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   54   55    56     57     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   55   56    57     58     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   56   57    58     59     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   57   58    59     60     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   58   59    60     61     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   59   60    61     62     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   60   61    62     63     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   61   62    63     64     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   62   63    64     65     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   63   64    65     66     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   64   65    66     67     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   65   66    67     68     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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2.01571006E-02   0.0000000
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2.01571006E-02   0.0000000
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2.01571006E-02   0.0000000
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2.01571006E-02   0.0000000
   70   71    72     73     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
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   74   75    76     77     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   75   76    77     78     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   76   77    78     79     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
2.01571006E-02   0.0000000
   77   78    79     80     11  -19.665600       0.5092800      1.12000000     -4.40827012E-02 -
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```