lightgbm alpha decay energy superheavy nuclei prediction table(ALL values are in unit of MeV)

Z	N	A	LDM_lgb	DZ_lgb	WS4_lgb	FRDM_lgb
119	113	232	17.841±0.006			
119	114	233	17.746±0.002			
119	115	234	17.740±0.000			
119	116	235	17.563±0.017			
119	117	236	17.432±0.017			
119	118	237	17.293±0.043			
119	119	238	17.210±0.057			
119	120	239	16.922±0.057			
119	121	240	16.602±0.051			
119	122	241	16.386±0.034			
119	123	242	16.246±0.017			
119	124	243	16.053±0.039			
119	125	244	15.822±0.046			
119	126	245	16.211±0.072			
119	127	246	17.131±0.065			
119	128	247	17.626±0.043			
119	129	248	17.677±0.037			
119	130	249	17.436±0.045			
119	131	250	17.175±0.055			
119	132	251	17.299±0.041			
119	133	252	17.210±0.017			
119	134	253	17.014±0.028			
119	135	254	16.762±0.001			
119	136	255	16.819±0.010			

119	137	256	16.944±0.000		
119	138	257	16.799±0.000		
119	139	258	16.651±0.006		
119	140	259	16.495±0.003		
119	141	260	16.395±0.005		
119	142	261	16.237±0.003		
119	143	262	16.071±0.003		
119	144	263	16.004±0.009		
119	145	264	15.971±0.009		
119	146	265	15.944±0.004		
119	147	266	15.856±0.005		
119	148	267	15.661±0.014		
119	149	268	15.337±0.017		
119	150	269	15.260±0.007		
119	151	270	15.136±0.003		
119	152	271	15.044±0.010		
119	153	272	15.204±0.025		
119	154	273	15.301±0.014		
119	155	274	15.291±0.002		
119	156	275	15.049±0.005		
119	157	276	14.981±0.003	14.822±0.002	
119	158	277	14.825±0.003	14.706±0.002	
119	159	278	14.728±0.003	14.630±0.003	
119	160	279	14.604±0.004	14.533±0.001	
119	161	280	14.536±0.005	14.470±0.004	14.346±0.001
119	162	281	14.398±0.004	14.369±0.003	14.192±0.002

119	163	282	14.297±0.003	14.322±0.001	14.053±0.001	
119	164	283	14.207±0.005	14.227±0.004	13.784±0.000	
119	165	284	14.102±0.005	14.197±0.005	13.633±0.001	13.683±0.000
119	166	285	13.995±0.008	14.111±0.004	13.654±0.002	13.988±0.000
119	167	286	13.887±0.003	14.050±0.003	13.485±0.001	13.719±0.002
119	168	287	13.760±0.007	13.989±0.003	13.323±0.000	13.322±0.003
119	169	288	13.664±0.004	12.937±0.006	13.229±0.003	13.491±0.001
119	170	289	13.547±0.005	12.789±0.004	13.164±0.000	13.425±0.001
119	171	290	13.481±0.003	13.657±0.011	13.118±0.003	13.271±0.001
119	172	291	13.306±0.002	13.499±0.093	13.017±0.013	13.176±0.022
119	173	292	13.029±0.007	13.464±0.043	12.922±0.008	13.145±0.002
119	174	293	12.784±0.007	13.272±0.022	12.661±0.001	12.894±0.037
119	175	294	12.843±0.016	12.795±0.032	12.741±0.002	12.854±0.000
119	176	295	12.672±0.007	12.389±0.003	12.708±0.002	12.844±0.000
119	177	296	12.446±0.005	12.133±0.004	12.440±0.003	13.010±0.000
119	178	297	12.377±0.015	11.911±0.004	12.353±0.001	12.824±0.003
119	179	298	12.180±0.005		12.686±0.001	13.063±0.000
119	180	299	12.063±0.012		12.673±0.000	13.000±0.004
119	181	300	12.030±0.007		12.556±0.004	13.050±0.003
119	182	301	11.566±0.009		12.315±0.001	12.960±0.004
119	183	302	11.594±0.019		12.356±0.002	13.009±0.002
119	184	303	11.434±0.003		12.371±0.002	13.026±0.004
119	185	304	11.282±0.005		12.865±0.002	13.794±0.001
119	186	305	11.126±0.014		13.349±0.000	13.777±0.001
119	187	306	11.070±0.018		13.158±0.002	13.842±0.003
119	188	307	10.907±0.008		12.771±0.003	13.277±0.008

119	189	308	10.853±0.003	12.128±0.004	12.153±0.000
119	190	309	10.682±0.008	11.360±0.001	11.605±0.000
119	191	310	10.535±0.012	10.933±0.002	10.648±0.003
119	192	311	10.498±0.002	10.791±0.004	10.215±0.002
119	193	312	10.323±0.010	10.667±0.006	9.853±0.001
119	194	313	10.258±0.003	9.410±0.003	10.027±0.001
119	195	314	10.133±0.014	9.046±0.005	9.441±0.002
119	196	315	10.043±0.003	8.731±0.004	9.328±0.000
119	197	316	9.964±0.002	8.821±0.008	9.116±0.002
119	198	317	9.849±0.015	9.236±0.008	9.013±0.008
119	199	318	9.680±0.013	9.086±0.009	12.460±0.010
119	200	319	9.670±0.022	9.041±0.044	12.714±0.002
119	201	320	9.540±0.002	8.865±0.015	12.565±0.032
119	202	321	9.355±0.009	8.649±0.009	10.027±0.013
119	203	322	9.359±0.009	8.573±0.006	10.145±0.028
119	204	323	9.190±0.005	7.935±0.001	10.225±0.010
119	205	324	9.062±0.002	8.650±0.000	10.072±0.009
119	206	325	8.881±0.007	8.745±0.003	9.811±0.001
119	207	326	8.750±0.007	8.819±0.004	9.395±0.002
119	208	327	8.600±0.004	8.476±0.007	7.828±0.005
119	209	328	8.491±0.003	8.292±0.007	9.106±0.005
119	210	329	8.338±0.005	7.872±0.002	8.064±0.003
119	211	330	8.228±0.002	7.727±0.003	7.912±0.002
119	212	331	8.069±0.004	7.672±0.001	6.137±0.003
119	213	332	7.959±0.003	7.628±0.001	6.089±0.003
119	214	333	7.799±0.005	7.448±0.000	6.159±0.000

119	215	334	7.687±0.003	7.339±0.002	6.165±0.001
119	216	335	7.525±0.004	7.070±0.002	6.582±0.000
119	217	336	7.414±0.003	7.146±0.003	6.454±0.002
119	218	337	7.252±0.004	6.338±0.002	6.532±0.001
119	219	338		6.276±0.003	6.434±0.002
119	220	339		5.883±0.002	6.092±0.001
119	221	340		6.016±0.003	
119	222	341		5.990±0.002	
119	223	342		6.051±0.003	
119	224	343		5.585±0.002	
119	225	344		5.362±0.003	
119	226	345		4.962±0.002	
119	227	346		4.666±0.003	
119	228	347		4.294±0.002	
119	229	348		4.429±0.003	
119	230	349		4.651±0.002	
119	231	350		4.731±0.003	
120	114	234	17.958±0.023		
120	115	235	17.857±0.038		
120	116	236	17.593±0.057		
120	117	237	17.427±0.049		
120	118	238	17.203±0.067		
120	119	239	17.077±0.095		
120	120	240	16.815±0.085		
120	121	241	16.553±0.060		
120	122	242	16.380±0.050		

120	123	243	16.283±0.042
120	124	244	16.171±0.048
120	125	245	16.005±0.072
120	126	246	16.332±0.065
120	127	247	17.273±0.071
120	128	248	17.947±0.093
120	129	249	17.858±0.058
120	130	250	17.602±0.072
120	131	251	17.393±0.084
120	132	252	17.473±0.074
120	133	253	17.523±0.049
120	134	254	17.475±0.025
120	135	255	17.173±0.015
120	136	256	17.223±0.037
120	137	257	17.277±0.036
120	138	258	17.137±0.047
120	139	259	17.008±0.048
120	140	260	16.866±0.049
120	141	261	16.725±0.059
120	142	262	16.640±0.058
120	143	263	16.476±0.065
120	144	264	16.456±0.072
120	145	265	16.367±0.075
120	146	266	16.369±0.073
120	147	267	16.304±0.075
120	148	268	16.104±0.075

120	149	269	15.770±0.083			
120	150	270	15.768±0.062			
120	151	271	15.597±0.067			
120	152	272	15.468±0.065	15.644±0.009		
120	153	273	15.680±0.047	15.669±0.063		
120	154	274	15.758±0.049	15.871±0.089		
120	155	275	15.752±0.068	15.966±0.002		
120	156	276	15.518±0.071	15.308±0.002		
120	157	277	15.423±0.070	15.220±0.001		
120	158	278	15.309±0.068	15.118±0.000		
120	159	279	15.192±0.073	15.033±0.000		
120	160	280	15.071±0.069	14.930±0.001		
120	161	281	14.980±0.071	14.860±0.001		
120	162	282	14.849±0.071	14.761±0.002		
120	163	283	14.785±0.076	14.715±0.000	14.397±0.001	
120	164	284	14.657±0.075	14.609±0.002	14.037±0.000	
120	165	285	14.549±0.079	14.547±0.002	13.927±0.001	
120	166	286	14.452±0.078	14.491±0.002	14.102±0.000	
120	167	287	14.313±0.078	14.414±0.000	13.916±0.000	13.810±0.005
120	168	288	14.215±0.079	14.353±0.006	13.773±0.000	13.794±0.001
120	169	289	14.114±0.088	13.430±0.001	13.782±0.002	13.615±0.004
120	170	290	14.007±0.085	13.240±0.003	13.714±0.000	13.651±0.000
120	171	291	13.900±0.088	14.056±0.003	13.578±0.000	13.738±0.006
120	172	292	13.780±0.085	13.771±0.006	13.506±0.000	13.658±0.003
120	173	293	13.618±0.093	13.667±0.002	13.413±0.010	13.541±0.002
120	174	294	13.372±0.085	13.087±0.000	13.218±0.005	13.346±0.013

120	175	295	13.325±0.089	13.477±0.172	13.301±0.004	13.341±0.007
120	176	296	13.090±0.084	12.702±0.080	13.376±0.001	13.506±0.011
120	177	297	12.969±0.093	12.680±0.004	13.137±0.007	13.570±0.005
120	178	298	12.845±0.085		12.951±0.005	13.078±0.000
120	179	299	12.719±0.087		13.265±0.003	13.679±0.003
120	180	300	12.532±0.049		13.297±0.001	13.510±0.001
120	181	301	12.468±0.112		13.069±0.000	13.541±0.004
120	182	302	12.339±0.088		12.877±0.004	13.437±0.002
120	183	303	12.065±0.068		12.821±0.004	13.402±0.000
120	184	304	11.858±0.078		12.726±0.000	13.391±0.001
120	185	305	11.825±0.082		13.252±0.001	14.130±0.002
120	186	306	11.543±0.061		13.782±0.005	14.129±0.008
120	187	307	11.523±0.064		13.492±0.002	13.445±0.003
120	188	308	11.363±0.042		12.927±0.005	12.822±0.004
120	189	309	11.262±0.040		12.152±0.000	11.585±0.004
120	190	310	11.133±0.044		11.519±0.002	11.165±0.002
120	191	311	11.101±0.024		11.223±0.002	10.611±0.005
120	192	312	10.876±0.012		11.257±0.003	10.584±0.000
120	193	313	10.782±0.003		11.055±0.001	10.355±0.000
120	194	314	10.698±0.014		10.775±0.002	10.169±0.000
120	195	315	10.483±0.010		9.463±0.009	9.969±0.001
120	196	316	10.428±0.003		9.183±0.004	9.737±0.002
120	197	317	10.343±0.018		9.992±0.003	9.605±0.001
120	198	318	10.291±0.006		10.065±0.008	9.540±0.004
120	199	319	10.207±0.009		9.912±0.003	12.955±0.001
120	200	320	10.025±0.017		9.671±0.006	13.025±0.005

120	201	321	9.868±0.007	9.418±0.026	12.657±0.005
120	202	322	9.836±0.013	9.358±0.042	10.304±0.009
120	203	323	9.629±0.009	9.020±0.007	10.180±0.012
120	204	324	9.616±0.007	7.953±0.003	10.558±0.009
120	205	325	9.554±0.002	7.732±0.008	10.270±0.022
120	206	326	9.416±0.004	9.267±0.001	10.164±0.007
120	207	327	9.277±0.001	8.674±0.001	8.414±0.000
120	208	328	9.085±0.008	8.465±0.002	8.261±0.009
120	209	329	8.964±0.005	8.604±0.000	8.082±0.002
120	210	330	8.823±0.005	8.385±0.006	7.834±0.006
120	211	331	8.704±0.003	8.112±0.008	6.739±0.008
120	212	332	8.562±0.006	7.979±0.001	6.320±0.003
120	213	333	8.442±0.003	7.977±0.003	6.360±0.001
120	214	334	8.295±0.006	7.909±0.001	6.308±0.005
120	215	335	8.175±0.003	7.765±0.001	7.392±0.000
120	216	336	8.026±0.006	6.533±0.001	7.285±0.000
120	217	337	7.904±0.002	6.310±0.002	7.078±0.003
120	218	338	7.753±0.004	6.334±0.001	6.857±0.002
120	219	339	7.634±0.002	7.563±0.002	6.597±0.003
120	220	340		6.800±0.001	
120	221	341		6.844±0.003	
120	222	342		6.840±0.001	
120	223	343		6.665±0.003	
120	224	344		6.386±0.001	
120	225	345		6.147±0.003	
120	226	346		5.840±0.001	

120	227	347		5.273±0.003
120	228	348		4.751±0.001
120	229	349		4.880±0.003
120	230	350		5.231±0.001
121	115	236	17.993±0.047	
121	116	237	17.720±0.071	
121	117	238	17.546±0.068	
121	118	239	17.375±0.079	
121	119	240	17.219±0.101	
121	120	241	16.949±0.108	
121	121	242	16.617±0.084	
121	122	243	16.409±0.056	
121	123	244	16.329±0.042	
121	124	245	16.187±0.049	
121	125	246	15.955±0.054	
121	126	247	16.288±0.053	
121	127	248	17.328±0.074	
121	128	249	18.055±0.061	
121	129	250	18.033±0.058	
121	130	251	17.793±0.068	
121	131	252	17.652±0.085	
121	132	253	17.865±0.076	
121	133	254	17.939±0.047	
121	134	255	17.876±0.019	
121	135	256	17.643±0.014	
121	136	257	17.475±0.047	

121	137	258	17.613±0.076	
121	138	259	17.468±0.084	
121	139	260	17.438±0.074	
121	140	261	17.245±0.081	
121	141	262	17.141±0.081	
121	142	263	16.994±0.083	
121	143	264	16.880±0.084	
121	144	265	16.791±0.087	
121	145	266	16.771±0.097	
121	146	267	16.735±0.090	
121	147	268	16.684±0.087	
121	148	269	16.483±0.098	
121	149	270	16.187±0.095	
121	150	271	16.087±0.086	
121	151	272	16.049±0.085	
121	152	273	15.850±0.081	
121	153	274	16.110±0.062	
121	154	275	16.114±0.074	
121	155	276	16.143±0.084	
121	156	277	15.940±0.086	
121	157	278	15.842±0.087	
121	158	279	15.741±0.090	
121	159	280	15.611±0.090	15.445±0.002
121	160	281	15.517±0.090	15.335±0.002
121	161	282	15.387±0.090	15.255±0.003
121	162	283	15.285±0.091	15.150±0.003

121	163	284	15.172±0.090	15.088±0.003		
121	164	285	15.084±0.092	14.997±0.001		
121	165	286	14.966±0.095	14.925±0.004	14.368±0.004	
121	166	287	14.829±0.096	14.845±0.000	14.526±0.000	
121	167	288	14.763±0.100	14.790±0.006	14.521±0.003	
121	168	289	14.609±0.100	14.710±0.001	14.393±0.001	
121	169	290	14.575±0.101	13.948±0.005	14.494±0.004	14.081±0.004
121	170	291	14.428±0.102	13.716±0.001	14.407±0.002	14.202±0.001
121	171	292	14.372±0.109	14.456±0.002	14.402±0.002	13.935±0.006
121	172	293	14.210±0.109	14.112±0.003	14.102±0.000	13.889±0.005
121	173	294	14.136±0.111	13.923±0.001	14.184±0.000	14.342±0.004
121	174	295	13.947±0.116	13.612±0.013	13.956±0.008	14.132±0.009
121	175	296	13.899±0.105	13.325±0.024	14.073±0.016	14.177±0.014
121	176	297	13.625±0.103	13.230±0.127	14.138±0.010	14.350±0.024
121	177	298	13.403±0.104		13.948±0.003	14.501±0.051
121	178	299	13.340±0.110		13.629±0.002	14.018±0.003
121	179	300	13.307±0.107		13.877±0.001	13.824±0.005
121	180	301	13.000±0.101		13.803±0.004	14.177±0.003
121	181	302	12.983±0.109		13.540±0.001	13.951±0.006
121	182	303	12.749±0.099		13.310±0.001	14.002±0.001
121	183	304	12.683±0.102		13.325±0.001	13.979±0.006
121	184	305	12.605±0.101		13.287±0.006	13.981±0.000
121	185	306	12.217±0.097		13.814±0.002	14.613±0.005
121	186	307	12.120±0.103		14.297±0.003	14.663±0.005
121	187	308	12.037±0.097		14.100±0.010	13.614±0.005
121	188	309	11.798±0.084		13.221±0.003	12.898±0.004

121	189	310	11.696±0.095	12.461±0.003	11.739±0.003
121	190	311	11.621±0.044	11.788±0.002	11.664±0.001
121	191	312	11.517±0.066	11.701±0.009	11.529±0.007
121	192	313	11.432±0.043	11.696±0.006	11.507±0.005
121	193	314	11.287±0.034	11.569±0.003	11.288±0.004
121	194	315	11.063±0.022	11.252±0.002	11.120±0.001
121	195	316	11.044±0.025	10.198±0.004	10.897±0.004
121	196	317	10.885±0.023	10.778±0.002	10.651±0.003
121	197	318	10.766±0.031	10.839±0.006	10.569±0.000
121	198	319	10.703±0.025	10.813±0.003	10.249±0.001
121	199	320	10.634±0.036	10.741±0.001	10.171±0.001
121	200	321	10.552±0.016	10.589±0.008	9.974±0.001
121	201	322	10.432±0.019	10.340±0.008	9.813±0.002
121	202	323	10.251±0.006	10.113±0.011	9.536±0.015
121	203	324	10.201±0.002	9.846±0.058	9.526±0.049
121	204	325	10.118±0.004	9.628±0.022	9.497±0.011
121	205	326	9.950±0.030	9.274±0.010	9.193±0.027
121	206	327	9.929±0.013	11.203±0.011	9.022±0.027
121	207	328	9.847±0.002	9.525±0.005	8.986±0.028
121	208	329	9.670±0.010	8.892±0.003	8.651±0.005
121	209	330	9.531±0.012	8.567±0.005	8.568±0.001
121	210	331	9.333±0.004	8.797±0.001	6.469±0.003
121	211	332	9.234±0.006	8.647±0.001	6.169±0.002
121	212	333	9.079±0.005	8.523±0.007	6.719±0.006
121	213	334	8.968±0.005	8.395±0.000	6.604±0.003
121	214	335	8.820±0.004	8.151±0.003	7.999±0.003

121	215	336	8.702±0.006	7.968±0.001	7.932±0.000
121	216	337	8.554±0.005	7.783±0.003	7.737±0.002
121	217	338	8.439±0.005	7.914±0.002	7.637±0.002
121	218	339	8.287±0.005	7.906±0.001	7.395±0.002
121	219	340	8.167±0.007	7.737±0.001	
121	220	341	8.016±0.006	8.167±0.002	
121	221	342		7.626±0.001	
121	222	343		7.742±0.003	
121	223	344		7.487±0.001	
121	224	345		7.175±0.003	
121	225	346		6.639±0.001	
121	226	347		6.324±0.003	
121	227	348		5.747±0.001	
121	228	349		5.352±0.003	
121	229	350		5.573±0.001	
122	116	238	17.813±0.103		
122	117	239	17.678±0.088		
122	118	240	17.552±0.099		
122	119	241	17.472±0.117		
122	120	242	17.185±0.123		
122	121	243	16.895±0.077		
122	122	244	16.740±0.071		
122	123	245	16.622±0.061		
122	124	246	16.411±0.059		
122	125	247	16.102±0.056		
122	126	248	16.409±0.054		

122	127	249	17.476±0.074
122	128	250	18.227±0.088
122	129	251	18.298±0.077
122	130	252	18.064±0.061
122	131	253	18.068±0.083
122	132	254	18.330±0.086
122	133	255	18.443±0.049
122	134	256	18.287±0.028
122	135	257	18.082±0.014
122	136	258	17.782±0.043
122	137	259	17.877±0.086
122	138	260	17.778±0.079
122	139	261	17.716±0.081
122	140	262	17.623±0.086
122	141	263	17.476±0.082
122	142	264	17.344±0.084
122	143	265	17.299±0.078
122	144	266	17.110±0.080
122	145	267	17.090±0.079
122	146	268	16.972±0.080
122	147	269	16.976±0.065
122	148	270	16.749±0.073
122	149	271	16.467±0.070
122	150	272	16.361±0.078
122	151	273	16.325±0.072
122	152	274	16.127±0.075

122	153	275	16.383±0.047			
122	154	276	16.408±0.056	16.750±0.064		
122	155	277	16.370±0.068	16.577±0.059		
122	156	278	16.218±0.077	16.202±0.006		
122	157	279	16.135±0.073	16.086±0.005		
122	158	280	15.989±0.081	15.953±0.007		
122	159	281	15.963±0.072	15.899±0.009		
122	160	282	15.795±0.080	15.776±0.007		
122	161	283	15.755±0.069	15.728±0.006		
122	162	284	15.587±0.071	15.593±0.007		
122	163	285	15.524±0.068	15.546±0.008		
122	164	286	15.385±0.069	15.430±0.006		
122	165	287	15.328±0.064	15.387±0.007		
122	166	288	15.184±0.074	15.268±0.008		
122	167	289	15.118±0.067	15.253±0.006	15.023±0.002	
122	168	290	14.986±0.075	15.126±0.006	15.048±0.002	
122	169	291	14.919±0.069	14.504±0.007	15.083±0.001	
122	170	292	14.770±0.078	14.241±0.007	14.990±0.002	
122	171	293	14.704±0.071	14.851±0.007	14.824±0.001	
122	172	294	14.552±0.082	14.530±0.006	14.630±0.002	14.397±0.003
122	173	295	14.510±0.073	14.300±0.008	14.770±0.000	14.441±0.001
122	174	296	14.368±0.078	14.010±0.008	14.690±0.002	14.862±0.002
122	175	297	14.292±0.077	13.747±0.010	14.674±0.001	14.862±0.003
122	176	298	14.077±0.084		14.631±0.006	15.052±0.003
122	177	299	13.906±0.073		14.487±0.002	14.594±0.007
122	178	300	13.821±0.079		14.195±0.003	14.637±0.011

122	179	301	13.700±0.077		14.328±0.003	14.419±0.004
122	180	302	13.447±0.082		14.167±0.005	14.737±0.010
122	181	303	13.367±0.073		13.892±0.001	14.505±0.002
122	182	304	13.175±0.074		13.668±0.000	14.563±0.005
122	183	305	13.073±0.041		13.777±0.000	14.474±0.001
122	184	306	12.954±0.098		13.762±0.000	14.578±0.002
122	185	307	12.872±0.085		14.416±0.003	15.239±0.004
122	186	308	12.578±0.068		14.891±0.002	15.212±0.002
122	187	309	12.400±0.072		14.275±0.000	13.715±0.001
122	188	310	12.306±0.084		13.399±0.003	13.054±0.002
122	189	311	12.120±0.073		12.724±0.006	12.646±0.002
122	190	312	12.055±0.072		12.139±0.003	12.646±0.000
122	191	313	11.811±0.062		12.160±0.003	12.628±0.001
122	192	314	11.758±0.048		12.085±0.002	12.476±0.002
122	193	315	11.630±0.059		12.042±0.004	12.400±0.002
122	194	316	11.581±0.059		11.699±0.005	12.136±0.002
122	195	317	11.378±0.041		11.460±0.003	11.984±0.003
122	196	318	11.212±0.035		10.691±0.003	11.708±0.003
122	197	319	11.264±0.040		11.738±0.006	11.585±0.006
122	198	320	10.969±0.035		11.700±0.002	11.297±0.003
122	199	321	10.972±0.037		11.607±0.001	11.176±0.005
122	200	322	10.766±0.040		11.227±0.001	10.612±0.010
122	201	323	10.745±0.040		11.148±0.001	10.340±0.006
122	202	324	10.611±0.041		12.211±0.004	10.112±0.005
122	203	325	10.554±0.019		12.074±0.007	8.769±0.005
122	204	326	10.350±0.019		10.221±0.004	9.812±0.001

122	205	327	10.378±0.021	10.091±0.039	9.868±0.008
122	206	328	10.195±0.035	11.758±0.017	9.624±0.042
122	207	329	10.047±0.043	11.784±0.016	9.325±0.022
122	208	330	10.002±0.018	9.130±0.002	9.181±0.023
122	209	331	9.895±0.027	9.248±0.003	8.730±0.006
122	210	332	9.714±0.032	9.008±0.005	7.148±0.014
122	211	333	9.605±0.035	9.100±0.006	7.139±0.002
122	212	334	9.400±0.027	8.798±0.003	6.904±0.006
122	213	335	9.318±0.032	8.819±0.002	8.696±0.005
122	214	336	9.146±0.032	8.585±0.003	8.604±0.010
122	215	337	9.055±0.030	8.409±0.002	8.481±0.009
122	216	338	8.889±0.031	8.154±0.004	8.290±0.009
122	217	339	8.790±0.031	8.339±0.002	8.198±0.003
122	218	340	8.625±0.028	9.259±0.000	
122	219	341	8.526±0.028	9.140±0.004	
122	220	342	8.361±0.028	9.050±0.003	
122	221	343	8.258±0.030	7.650±0.003	
122	222	344		8.159±0.002	
122	223	345		8.082±0.003	
122	224	346		7.746±0.001	
122	225	347		7.335±0.003	
122	226	348		6.668±0.001	
122	227	349		6.189±0.003	
122	228	350		5.740±0.001	
123	117	240	17.383±0.113		
123	118	241	17.262±0.121		

123	119	242	17.185±0.135
123	120	243	17.005±0.116
123	121	244	16.806±0.080
123	122	245	16.670±0.074
123	123	246	16.577±0.072
123	124	247	16.314±0.082
123	125	248	16.014±0.087
123	126	249	16.209±0.098
123	127	250	17.441±0.112
123	128	251	18.436±0.111
123	129	252	18.535±0.111
123	130	253	18.493±0.080
123	131	254	18.480±0.082
123	132	255	18.574±0.085
123	133	256	18.457±0.050
123	134	257	18.164±0.043
123	135	258	17.988±0.047
123	136	259	17.743±0.072
123	137	260	17.784±0.108
123	138	261	17.718±0.111
123	139	262	17.674±0.103
123	140	263	17.523±0.107
123	141	264	17.439±0.113
123	142	265	17.309±0.108
123	143	266	17.271±0.111
123	144	267	17.168±0.112

123	145	268	17.046±0.118		
123	146	269	17.031±0.117		
123	147	270	16.916±0.105		
123	148	271	16.747±0.113		
123	149	272	16.442±0.119		
123	150	273	16.419±0.108		
123	151	274	16.296±0.118		
123	152	275	16.166±0.104		
123	153	276	16.377±0.084		
123	154	277	16.497±0.093		
123	155	278	16.372±0.100		
123	156	279	16.220±0.107		
123	157	280	16.180±0.112		
123	158	281	16.056±0.115		
123	159	282	15.974±0.121		
123	160	283	15.856±0.116		
123	161	284	15.788±0.118		
123	162	285	15.692±0.115		
123	163	286	15.579±0.112		
123	164	287	15.464±0.111		
123	165	288	15.384±0.105		
123	166	289	15.255±0.109		
123	167	290	15.174±0.107		
123	168	291	15.072±0.111		
123	169	292	14.960±0.104		15.455±0.003
123	170	293	14.882±0.113		15.382±0.001

123	171	294	14.721±0.108	15.098±0.003	
123	172	295	14.661±0.111	14.952±0.001	
123	173	296	14.549±0.105	15.032±0.000	
123	174	297	14.451±0.109	15.217±0.003	15.139±0.003
123	175	298	14.375±0.106	15.144±0.004	14.832±0.004
123	176	299	14.262±0.110	15.128±0.002	14.992±0.003
123	177	300	14.091±0.109	14.808±0.009	14.921±0.008
123	178	301	13.985±0.110	14.466±0.015	14.952±0.020
123	179	302	13.866±0.101	14.625±0.004	14.805±0.045
123	180	303	13.534±0.104	14.599±0.002	15.138±0.049
123	181	304	13.484±0.111	14.366±0.001	15.099±0.002
123	182	305	13.403±0.106	14.232±0.001	15.080±0.004
123	183	306	13.146±0.102	14.242±0.004	15.198±0.004
123	184	307	13.088±0.114	14.265±0.001	15.151±0.006
123	185	308	12.905±0.102	14.837±0.001	15.803±0.001
123	186	309	12.771±0.102	15.266±0.002	15.786±0.005
123	187	310	12.737±0.117	14.577±0.004	14.028±0.000
123	188	311	12.356±0.112	13.673±0.001	13.261±0.001
123	189	312	12.222±0.116	12.909±0.003	13.254±0.004
123	190	313	12.184±0.111	12.680±0.007	13.327±0.001
123	191	314	11.913±0.112	12.646±0.004	13.216±0.002
123	192	315	11.762±0.140	12.638±0.001	13.136±0.001
123	193	316	11.722±0.089	12.529±0.000	12.989±0.000
123	194	317	11.523±0.098	12.195±0.001	12.711±0.004
123	195	318	11.483±0.116	11.887±0.005	12.566±0.003
123	196	319	11.298±0.108	11.525±0.001	12.299±0.003

123	197	320	11.115±0.091	12.251±0.002	12.221±0.002
123	198	321	10.987±0.083	12.244±0.007	11.975±0.006
123	199	322	10.938±0.100	12.122±0.010	11.786±0.005
123	200	323	10.727±0.092	11.789±0.003	11.324±0.004
123	201	324	10.685±0.093	11.663±0.018	10.886±0.006
123	202	325	10.543±0.113	12.283±0.004	10.533±0.009
123	203	326	10.446±0.105	12.434±0.008	10.316±0.006
123	204	327	10.341±0.112	12.296±0.013	10.141±0.007
123	205	328	10.184±0.083	12.320±0.008	10.126±0.007
123	206	329	10.009±0.088	12.113±0.011	9.692±0.004
123	207	330	9.981±0.090	12.294±0.027	9.683±0.000
123	208	331	9.779±0.112	10.121±0.035	9.116±0.040
123	209	332	9.723±0.125	9.908±0.015	9.072±0.016
123	210	333	9.677±0.099	9.711±0.003	9.478±0.019
123	211	334	9.556±0.101	9.524±0.006	7.736±0.007
123	212	335	9.401±0.107	9.548±0.012	9.346±0.003
123	213	336	9.234±0.106	9.425±0.010	9.169±0.002
123	214	337	9.089±0.103	7.315±0.009	8.962±0.008
123	215	338	8.976±0.108	7.255±0.004	8.871±0.012
123	216	339	8.838±0.107	7.177±0.003	8.723±0.012
123	217	340	8.721±0.107	9.010±0.007	
123	218	341	8.582±0.105	8.726±0.008	
123	219	342	8.458±0.105	8.492±0.008	
123	220	343	8.319±0.103	8.203±0.007	
123	221	344	8.196±0.103	8.026±0.009	
123	222	345	8.057±0.102	7.835±0.009	

123	223	346		8.139±0.008
123	224	347		7.942±0.008
123	225	348		7.806±0.008
123	226	349		7.205±0.008
123	227	350		6.838±0.008
124	118	242	17.131±0.046	
124	119	243	16.992±0.076	
124	120	244	16.873±0.089	
124	121	245	16.754±0.063	
124	122	246	16.725±0.045	
124	123	247	16.512±0.050	
124	124	248	16.362±0.043	
124	125	249	16.026±0.044	
124	126	250	16.194±0.076	
124	127	251	17.580±0.091	
124	128	252	18.681±0.089	
124	129	253	18.926±0.062	
124	130	254	18.909±0.058	
124	131	255	18.857±0.046	
124	132	256	18.647±0.044	
124	133	257	18.496±0.021	
124	134	258	18.162±0.007	
124	135	259	17.918±0.003	
124	136	260	17.789±0.014	
124	137	261	17.710±0.046	
124	138	262	17.627±0.068	

124	139	263	17.487±0.060
124	140	264	17.359±0.071
124	141	265	17.188±0.069
124	142	266	17.140±0.068
124	143	267	17.080±0.077
124	144	268	17.039±0.085
124	145	269	16.873±0.086
124	146	270	16.876±0.088
124	147	271	16.777±0.078
124	148	272	16.585±0.084
124	149	273	16.286±0.096
124	150	274	16.286±0.091
124	151	275	16.186±0.091
124	152	276	16.046±0.074
124	153	277	16.226±0.061
124	154	278	16.357±0.070
124	155	279	16.293±0.090
124	156	280	16.076±0.082
124	157	281	16.038±0.092
124	158	282	15.942±0.087
124	159	283	15.841±0.093
124	160	284	15.771±0.091
124	161	285	15.656±0.097
124	162	286	15.579±0.100
124	163	287	15.442±0.099
124	164	288	15.364±0.100

124	165	289	15.219±0.097		
124	166	290	15.136±0.096		
124	167	291	15.013±0.098		
124	168	292	14.933±0.086		
124	169	293	14.795±0.091		
124	170	294	14.679±0.085		
124	171	295	14.592±0.095		
124	172	296	14.483±0.088	15.179±0.006	
124	173	297	14.392±0.086	15.467±0.005	
124	174	298	14.264±0.079	15.709±0.006	
124	175	299	14.158±0.087	15.539±0.007	
124	176	300	14.056±0.082	15.321±0.004	14.941±0.000
124	177	301	13.965±0.084	15.158±0.006	14.841±0.000
124	178	302	13.844±0.089	14.855±0.002	14.427±0.002
124	179	303	13.682±0.088	14.891±0.014	14.959±0.005
124	180	304	13.410±0.080	14.958±0.003	15.478±0.007
124	181	305	13.323±0.084	14.832±0.002	15.536±0.003
124	182	306	13.279±0.093	14.808±0.001	15.575±0.004
124	183	307	13.027±0.087	14.717±0.010	15.623±0.005
124	184	308	12.941±0.089	14.669±0.005	15.645±0.001
124	185	309	12.772±0.093	15.223±0.003	15.185±0.004
124	186	310	12.652±0.070	15.472±0.001	15.065±0.004
124	187	311	12.519±0.102	14.735±0.002	14.068±0.004
124	188	312	12.439±0.103	13.883±0.002	13.318±0.007
124	189	313	12.178±0.099	13.475±0.006	10.125±0.004
124	190	314	11.984±0.104	13.211±0.002	10.103±0.003

124	191	315	11.929±0.111	13.186±0.000	10.132±0.003
124	192	316	11.669±0.111	13.203±0.002	13.589±0.008
124	193	317	11.626±0.130	12.977±0.006	13.338±0.004
124	194	318	11.439±0.140	12.560±0.003	13.220±0.002
124	195	319	11.305±0.135	12.140±0.002	12.919±0.005
124	196	320	11.149±0.121	11.928±0.003	12.755±0.010
124	197	321	11.076±0.119	11.855±0.004	7.179±0.004
124	198	322	10.852±0.119	12.262±0.004	12.258±0.006
124	199	323	10.645±0.119	12.221±0.006	11.762±0.004
124	200	324	10.623±0.114	12.047±0.007	11.449±0.009
124	201	325	10.421±0.119	11.895±0.010	10.940±0.008
124	202	326	10.347±0.107	12.297±0.006	9.406±0.005
124	203	327	10.231±0.116	12.432±0.008	9.430±0.004
124	204	328	10.153±0.126	11.231±0.009	9.425±0.009
124	205	329	10.048±0.120	11.106±0.010	10.884±0.009
124	206	330	9.917±0.113	12.446±0.001	9.570±0.001
124	207	331	9.741±0.099	12.625±0.005	9.534±0.011
124	208	332	9.697±0.103	10.772±0.047	9.274±0.048
124	209	333	9.608±0.101	10.598±0.019	9.569±0.015
124	210	334	9.406±0.132	10.242±0.009	9.284±0.022
124	211	335	9.405±0.134	10.111±0.001	8.455±0.022
124	212	336	9.334±0.119	9.926±0.002	9.765±0.027
124	213	337	9.161±0.119	9.994±0.004	11.112±0.009
124	214	338	9.020±0.122	7.725±0.007	9.490±0.003
124	215	339	8.832±0.114	7.639±0.007	9.305±0.009
124	216	340	8.708±0.112	7.590±0.003	

124	217	341	8.575±0.119	7.590±0.002
124	218	342	8.456±0.118	7.532±0.002
124	219	343	8.321±0.117	7.232±0.003
124	220	344	8.199±0.117	8.775±0.005
124	221	345	8.062±0.118	8.598±0.001
124	222	346	7.940±0.117	8.157±0.002
124	223	347	7.800±0.117	8.208±0.004
124	224	348		8.110±0.004
124	225	349		8.123±0.004
124	226	350		7.792±0.004
125	119	244	17.444±0.024	
125	120	245	17.229±0.051	
125	121	246	17.190±0.022	
125	122	247	16.898±0.023	
125	123	248	16.631±0.035	
125	124	249	16.211±0.010	
125	125	250	15.902±0.012	
125	126	251	15.926±0.032	
125	127	252	17.608±0.053	
125	128	253	18.995±0.024	
125	129	254	19.366±0.023	
125	130	255	19.302±0.025	
125	131	256	19.158±0.002	
125	132	257	18.745±0.031	
125	133	258	18.663±0.010	
125	134	259	18.474±0.032	

125	135	260	18.369±0.024
125	136	261	18.173±0.021
125	137	262	18.145±0.009
125	138	263	17.911±0.015
125	139	264	17.878±0.018
125	140	265	17.604±0.031
125	141	266	17.588±0.038
125	142	267	17.489±0.034
125	143	268	17.592±0.036
125	144	269	17.400±0.038
125	145	270	17.340±0.036
125	146	271	17.211±0.035
125	147	272	17.168±0.028
125	148	273	16.941±0.030
125	149	274	16.661±0.046
125	150	275	16.611±0.034
125	151	276	16.553±0.036
125	152	277	16.367±0.023
125	153	278	16.621±0.013
125	154	279	16.680±0.022
125	155	280	16.659±0.038
125	156	281	16.412±0.032
125	157	282	16.400±0.042
125	158	283	16.284±0.041
125	159	284	16.202±0.039
125	160	285	16.081±0.039

125	161	286	16.024±0.037		
125	162	287	15.878±0.041		
125	163	288	15.856±0.038		
125	164	289	15.667±0.043		
125	165	290	15.653±0.044		
125	166	291	15.462±0.043		
125	167	292	15.394±0.051		
125	168	293	15.266±0.045		
125	169	294	15.210±0.042		
125	170	295	15.054±0.039		
125	171	296	14.977±0.044		
125	172	297	14.830±0.040		
125	173	298	14.766±0.042		
125	174	299	14.579±0.036	16.395±0.002	
125	175	300	14.508±0.034	16.165±0.001	
125	176	301	14.378±0.031	15.838±0.000	
125	177	302	14.292±0.036	15.630±0.001	
125	178	303	14.141±0.032	15.387±0.001	14.693±0.002
125	179	304	14.084±0.036	15.526±0.002	14.792±0.001
125	180	305	13.857±0.036	15.540±0.008	14.621±0.002
125	181	306	13.690±0.044	15.474±0.007	14.995±0.013
125	182	307	13.613±0.038	15.437±0.001	15.046±0.047
125	183	308	13.368±0.042	15.386±0.003	16.358±0.039
125	184	309	13.226±0.040	15.266±0.002	16.294±0.002
125	185	310	13.235±0.039	15.902±0.001	11.279±0.001
125	186	311	12.941±0.030	15.745±0.003	10.902±0.000

125	187	312	12.922±0.056	15.035±0.001	9.777±0.004
125	188	313	12.721±0.031	14.216±0.001	9.205±0.000
125	189	314	12.653±0.036	13.957±0.003	9.748±0.006
125	190	315	12.572±0.048	13.716±0.005	9.753±0.001
125	191	316	12.269±0.053	13.651±0.000	9.658±0.001
125	192	317	12.092±0.051	13.569±0.005	9.689±0.007
125	193	318	12.087±0.052	13.254±0.002	9.760±0.002
125	194	319	11.763±0.050	12.752±0.000	13.530±0.005
125	195	320	11.639±0.087	12.381±0.003	13.353±0.004
125	196	321	11.571±0.089	12.209±0.002	7.317±0.002
125	197	322	11.464±0.068	12.213±0.002	6.916±0.006
125	198	323	11.439±0.082	12.327±0.003	12.518±0.004
125	199	324	11.218±0.091	12.315±0.001	11.894±0.006
125	200	325	10.947±0.090	12.235±0.005	11.540±0.003
125	201	326	10.864±0.078	12.369±0.000	11.110±0.004
125	202	327	10.724±0.077	12.519±0.007	11.116±0.006
125	203	328	10.475±0.072	12.527±0.015	9.541±0.005
125	204	329	10.378±0.062	11.683±0.004	9.801±0.003
125	205	330	10.242±0.068	11.441±0.006	9.769±0.006
125	206	331	10.155±0.074	11.296±0.004	9.968±0.005
125	207	332	10.041±0.080	11.194±0.004	9.783±0.004
125	208	333	9.947±0.073	11.120±0.006	9.906±0.007
125	209	334	9.798±0.057	10.891±0.004	9.754±0.014
125	210	335	9.782±0.054	10.011±0.048	10.179±0.017
125	211	336	9.674±0.062	10.502±0.004	10.112±0.001
125	212	337	9.472±0.089	10.218±0.004	9.533±0.017

125	213	338	9.469±0.070	10.135±0.000	9.853±0.030
125	214	339	9.325±0.069	10.205±0.001	12.063±0.016
125	215	340	9.229±0.072	8.050±0.003	
125	216	341	9.048±0.071	9.889±0.002	
125	217	342	8.875±0.066	9.759±0.003	
125	218	343	8.753±0.068	9.593±0.001	
125	219	344	8.628±0.070	8.936±0.004	
125	220	345	8.494±0.068	8.895±0.001	
125	221	346	8.375±0.068	8.797±0.001	
125	222	347	8.235±0.068	8.626±0.001	
125	223	348	8.117±0.069	8.568±0.001	
125	224	349	7.976±0.069	8.504±0.002	
125	225	350		8.505±0.001	
126	120	246	18.103±0.071		
126	121	247	17.928±0.024		
126	122	248	17.818±0.006		
126	123	249	17.239±0.009		
126	124	250	16.888±0.012		
126	125	251	16.550±0.013		
126	126	252	16.677±0.054		
126	127	253	18.357±0.052		
126	128	254	19.930±0.028		
126	129	255	20.098±0.004		
126	130	256	19.989±0.009		
126	131	257	19.799±0.008		
126	132	258	19.431±0.004		

126	133	259	19.271±0.020
126	134	260	19.301±0.033
126	135	261	19.153±0.033
126	136	262	18.977±0.011
126	137	263	18.860±0.004
126	138	264	18.691±0.002
126	139	265	18.493±0.009
126	140	266	18.331±0.020
126	141	267	18.213±0.026
126	142	268	18.215±0.017
126	143	269	18.198±0.024
126	144	270	18.130±0.023
126	145	271	17.904±0.021
126	146	272	17.857±0.016
126	147	273	17.717±0.010
126	148	274	17.554±0.009
126	149	275	17.246±0.021
126	150	276	17.243±0.013
126	151	277	17.135±0.012
126	152	278	17.008±0.005
126	153	279	17.190±0.005
126	154	280	17.296±0.001
126	155	281	17.181±0.013
126	156	282	16.994±0.003
126	157	283	16.943±0.007
126	158	284	16.906±0.018

126	159	285	16.761±0.011		
126	160	286	16.650±0.014		
126	161	287	16.593±0.009		
126	162	288	16.466±0.008		
126	163	289	16.359±0.005		
126	164	290	16.250±0.003		
126	165	291	16.181±0.005		
126	166	292	16.082±0.007		
126	167	293	15.965±0.010		
126	168	294	15.859±0.011		
126	169	295	15.765±0.007		
126	170	296	15.644±0.014		
126	171	297	15.552±0.006		
126	172	298	15.427±0.012		
126	173	299	15.305±0.002		
126	174	300	15.184±0.016		
126	175	301	15.045±0.011		
126	176	302	14.881±0.015	16.321±0.003	
126	177	303	14.731±0.003	16.093±0.008	
126	178	304	14.615±0.017	16.076±0.005	
126	179	305	14.468±0.010	16.182±0.007	
126	180	306	14.351±0.011	16.398±0.003	15.416±0.003
126	181	307	14.234±0.015	16.297±0.000	15.532±0.003
126	182	308	14.014±0.017	16.104±0.007	14.823±0.007
126	183	309	13.734±0.009	16.035±0.002	15.066±0.005
126	184	310	13.659±0.015	16.024±0.001	11.027±0.005

126	185	311	13.599±0.019		16.317±0.002	10.638±0.002
126	186	312	13.362±0.021		16.158±0.006	10.251±0.005
126	187	313	13.243±0.014		15.301±0.008	10.191±0.002
126	188	314	13.076±0.022		14.700±0.003	9.701±0.001
126	189	315	12.975±0.014		14.436±0.005	9.414±0.002
126	190	316	12.856±0.031		14.219±0.006	9.600±0.003
126	191	317	12.715±0.024		14.146±0.007	13.001±0.002
126	192	318	12.456±0.029		14.022±0.008	13.122±0.001
126	193	319	12.192±0.028		13.555±0.007	12.957±0.001
126	194	320	12.153±0.034		13.136±0.007	9.566±0.002
126	195	321	11.876±0.027		12.818±0.006	7.192±0.003
126	196	322	11.772±0.027		12.727±0.009	6.812±0.006
126	197	323	11.633±0.048		12.838±0.009	6.456±0.001
126	198	324	11.594±0.041		12.854±0.005	6.126±0.002
126	199	325	11.495±0.057		12.853±0.012	11.177±0.005
126	200	326	11.457±0.044		12.788±0.009	11.603±0.003
126	201	327	11.200±0.036		12.729±0.005	11.379±0.002
126	202	328	10.997±0.045		12.636±0.002	9.771±0.000
126	203	329	10.855±0.040		12.642±0.004	9.864±0.002
126	204	330	10.679±0.047		12.305±0.008	11.612±0.003
126	205	331	10.454±0.035		11.925±0.002	11.557±0.003
126	206	332	10.252±0.033		11.692±0.007	11.539±0.006
126	207	333	10.130±0.042		11.696±0.004	11.204±0.010
126	208	334	10.043±0.047		11.677±0.005	11.051±0.012
126	209	335	9.902±0.049		11.391±0.013	10.561±0.007
126	210	336	9.749±0.030		10.315±0.006	10.476±0.009

126	211	337	9.591±0.030	10.001±0.002	10.017±0.003
126	212	338	9.592±0.038	10.649±0.023	10.204±0.003
126	213	339	9.335±0.034	10.383±0.035	11.369±0.035
126	214	340	9.233±0.052	10.234±0.000	
126	215	341	9.193±0.038	10.418±0.002	
126	216	342	9.052±0.043	10.482±0.005	
126	217	343	8.896±0.043	10.301±0.002	
126	218	344	8.765±0.047	10.124±0.004	
126	219	345	8.591±0.039	10.972±0.002	
126	220	346	8.477±0.048	10.737±0.002	
126	221	347	8.344±0.044	10.686±0.003	
126	222	348	8.220±0.047	8.870±0.003	
126	223	349	8.090±0.041	8.805±0.004	
126	224	350	7.960±0.046	8.847±0.005	
126	225	351	7.832±0.042		