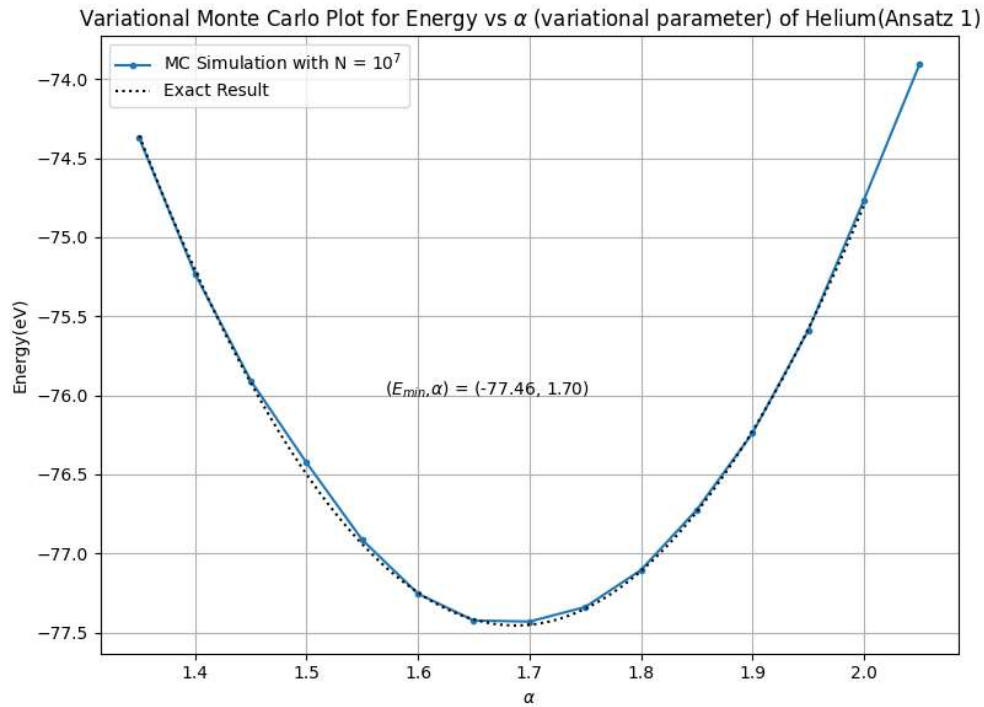


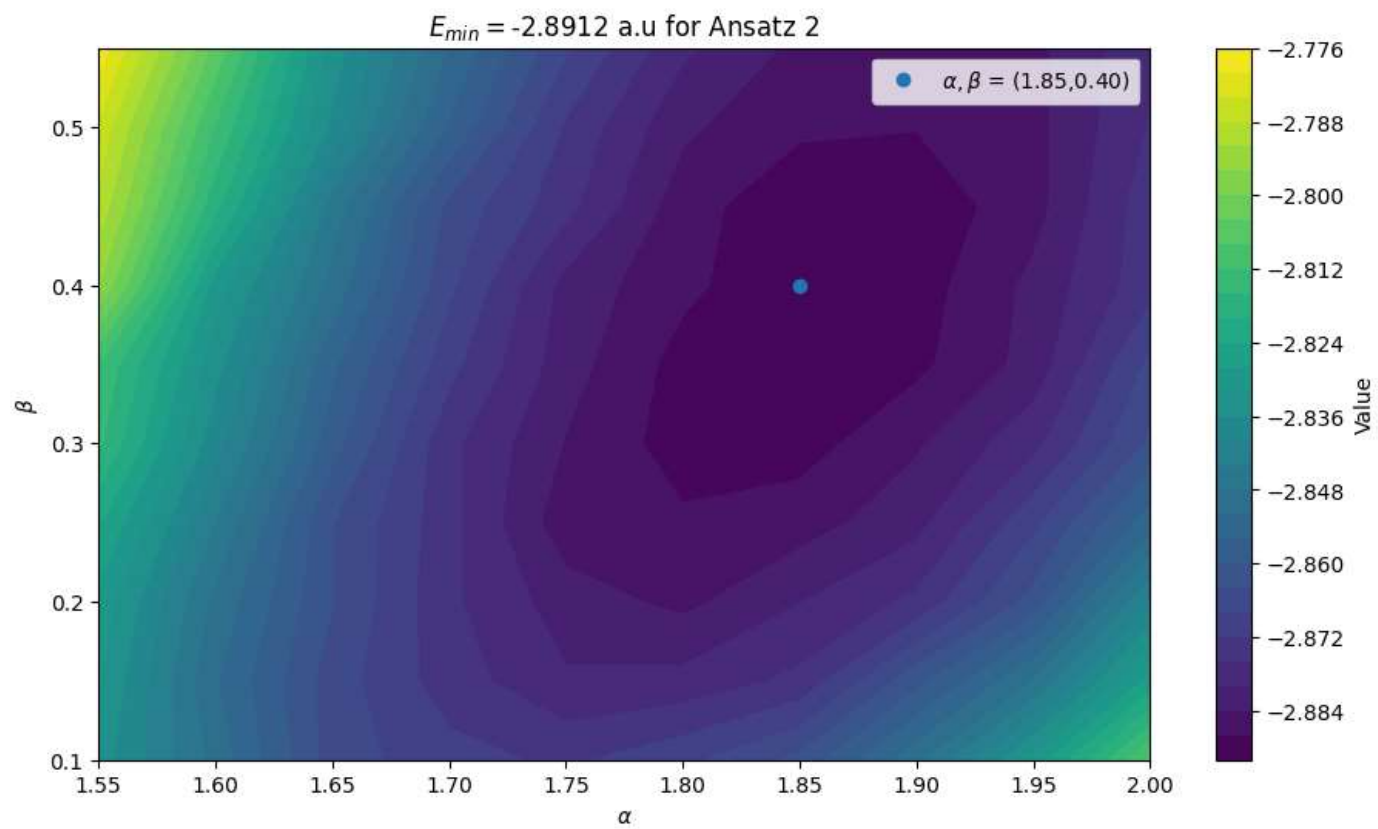
Helium VMC



Helium Ansatz 1

alpha	Energy (a.u.)	Energy (eV)	Variance (a.u.)
1.35	-2.73	-74.38	1.41
1.40	-2.77	-75.23	1.38
1.45	-2.79	-75.91	1.49
1.50	-2.81	-76.43	1.12
1.55	-2.83	-76.91	1.05
1.60	-2.84	-77.25	1.05
1.65	-2.85	-77.42	0.91
1.70	-2.85	-77.43	0.90
1.75	-2.84	-77.34	0.86
1.80	-2.83	-77.11	0.80
1.85	-2.82	-76.73	0.88
1.90	-2.80	-76.24	0.85
1.95	-2.78	-75.59	0.93
2.00	-2.75	-74.77	1.09
2.05	-2.72	-73.91	1.30

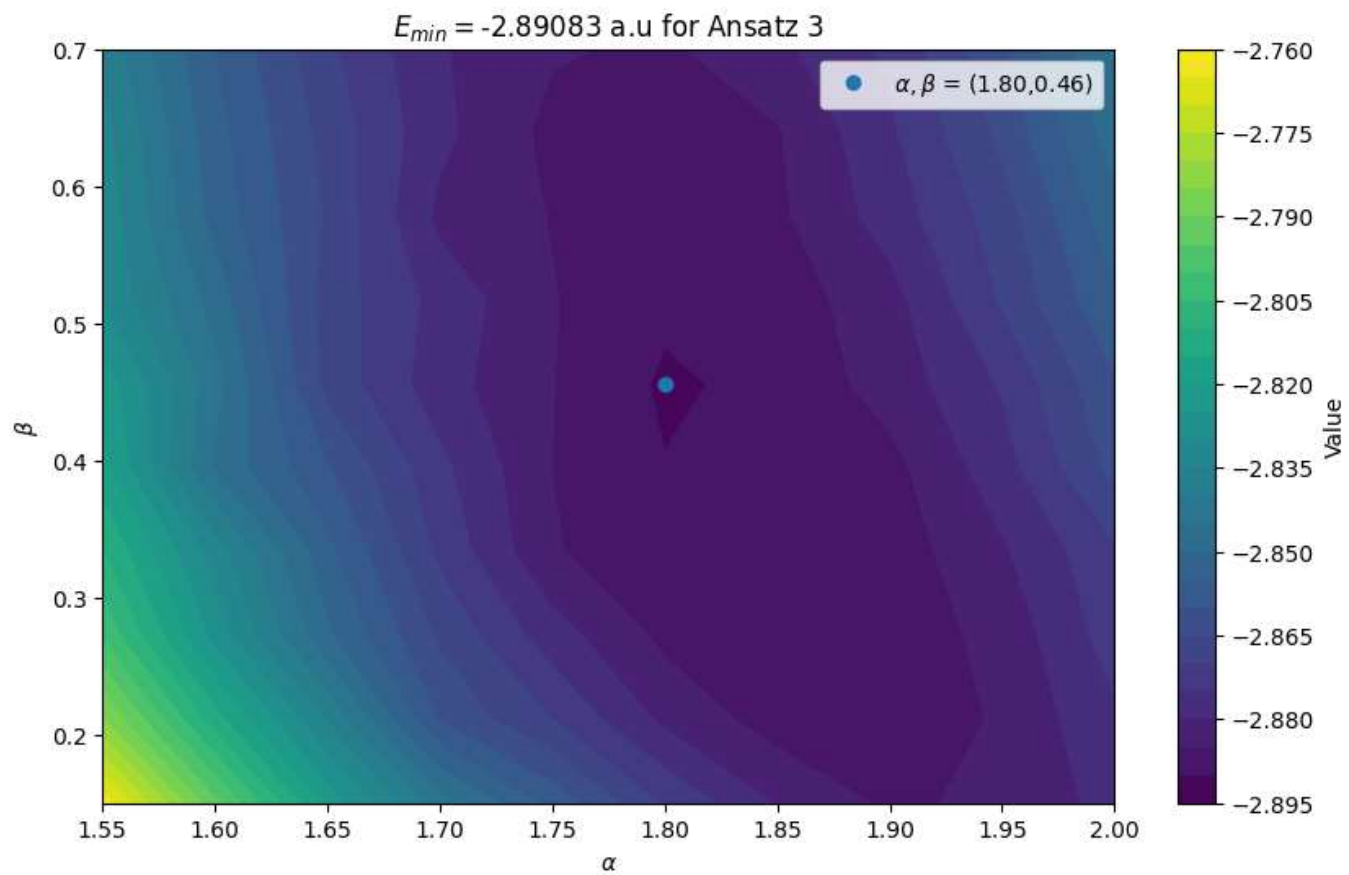
Average R_{12} for Ansatz 1 = 1.288 bohr



Ansatz 2

α	β	Energy (a.u.)	Variance (a.u.)
1.80	0.35	-2.88957	0.195
1.80	0.40	-2.88707	0.188
1.80	0.45	-2.88630	0.220
1.85	0.35	-2.89053	0.136
1.85	0.40	-2.89118	0.132
1.85	0.45	-2.89105	0.144
1.90	0.35	-2.88904	0.092
1.90	0.40	-2.88998	0.090
1.90	0.45	-2.89066	0.094

Average R12 for Ansatz 2 = 1.3784bohr



Ansatz 3

α	β	Energy (a.u.)	Variance (a.u.)
1.75	0.39	-2.88506	0.252
1.75	0.46	-2.88487	0.248
1.75	0.52	-2.88475	0.238
1.80	0.39	-2.88980	0.183
1.80	0.46	-2.89083	0.183
1.80	0.52	-2.88890	0.174
1.85	0.39	-2.88992	0.125
1.85	0.46	-2.88860	0.129
1.85	0.52	-2.88768	0.130

Average R12 for Ansatz 3 = 1.3717bohr