Table 1: Performance Results for NoisySphere_2D_sigma0.01 Problem

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
L-BFGS-Conservative	1.57e0	7.01e-2	1.46e0	1.66e0	97.0	80.0	0.002
QQN-StrongWolfe	9.23e-1	6.21e-1	2.83e-2	2.06e0	30.5	60.0	0.001
L-BFGS-Limited	1.64e0	6.02e-1	7.63e-1	2.63e0	31.4	45.0	0.001
L-BFGS	1.02e1	1.19e1	7.26e-2	3.76e1	33.2	40.0	0.001
GD-Momentum	2.45e0	8.96e-1	1.43e0	4.08e0	6.8	35.0	0.001
GD	2.20e0	6.02e-1	1.42e0	2.96e0	8.9	35.0	0.001
Adam-Fast	2.26e0	7.44e-1	1.40e0	4.41e0	12.3	35.0	0.001
QQN-Bisection-1	1.33e0	6.30e-1	2.16e-1	2.48e0	41.2	35.0	0.003
GD-AdaptiveMomentum	2.39e0	7.39e-1	1.45e0	3.76e0	6.6	30.0	0.001
GD-WeightDecay	2.30e0	5.19e-1	1.61e0	3.10e0	6.8	25.0	0.001
GD-Nesterov	2.82e0	9.93e-1	1.53e0	4.52e0	7.0	25.0	0.001
L-BFGS-MoreThuente	1.84e0	7.24e-1	1.12e-1	2.67e0	18.7	15.0	0.001
Adam-AMSGrad	2.10e0	2.73e-1	1.65e0	2.60e0	25.7	5.0	0.002
QQN-GoldenSection	2.04e0	2.79e-1	1.45e0	2.45e0	27.1	5.0	0.001
Trust Region-Adaptive	2.03e0	2.74e-1	1.67e0	2.62e0	4.2	0.0	0.000
Trust Region-Conservative	2.06e0	2.96e-1	1.68e0	2.87e0	5.0	0.0	0.000
L-BFGS-Aggressive	2.05e0	2.75e-1	1.69e0	2.57e0	5.5	0.0	0.000
Trust Region-Aggressive	2.09e0	2.18e-1	1.70e0	2.50e0	4.2	0.0	0.000
QQN-CubicQuadraticInterpolation	2.04e0	2.13e-1	1.70e0	2.34e0	9.2	0.0	0.001
Trust Region-Standard	2.10e0	2.61e-1	1.70e0	2.64e0	4.0	0.0	0.000
Adam	2.13e0	2.38e-1	1.72e0	2.60e0	21.4	0.0	0.001
Trust Region-Precise	2.19e0	2.25e-1	1.76e0	2.54e0	5.3	0.0	0.000
Adam-Robust	2.10e0	2.43e-1	1.76e0	2.74e0	16.9	0.0	0.001
Adam-WeightDecay	2.18e0	2.38e-1	1.76e0	2.70e0	27.6	0.0	0.002
QQN-Bisection-2	1.97e0	7.03e-3	1.96e0	1.97e0	2.4	0.0	0.000