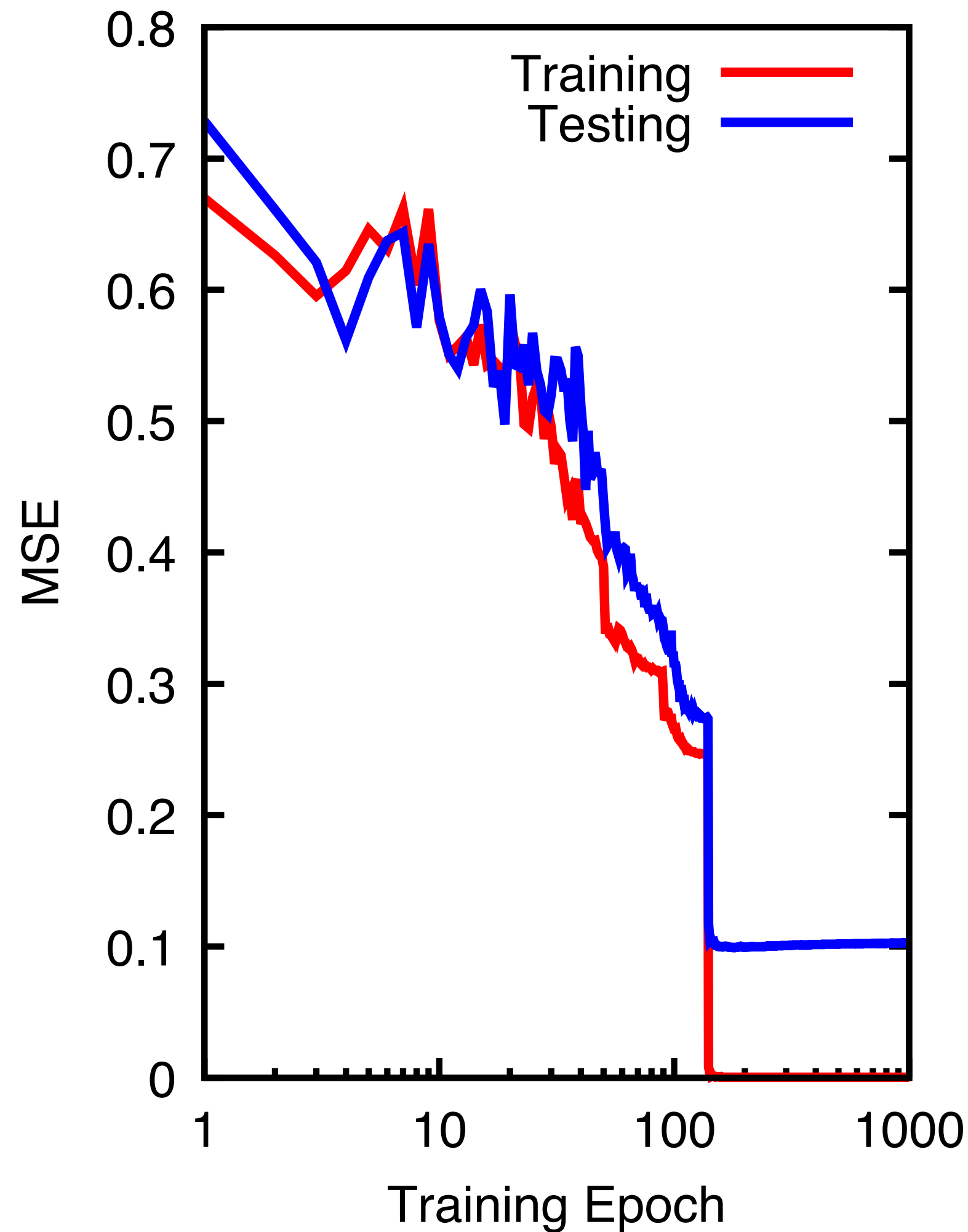
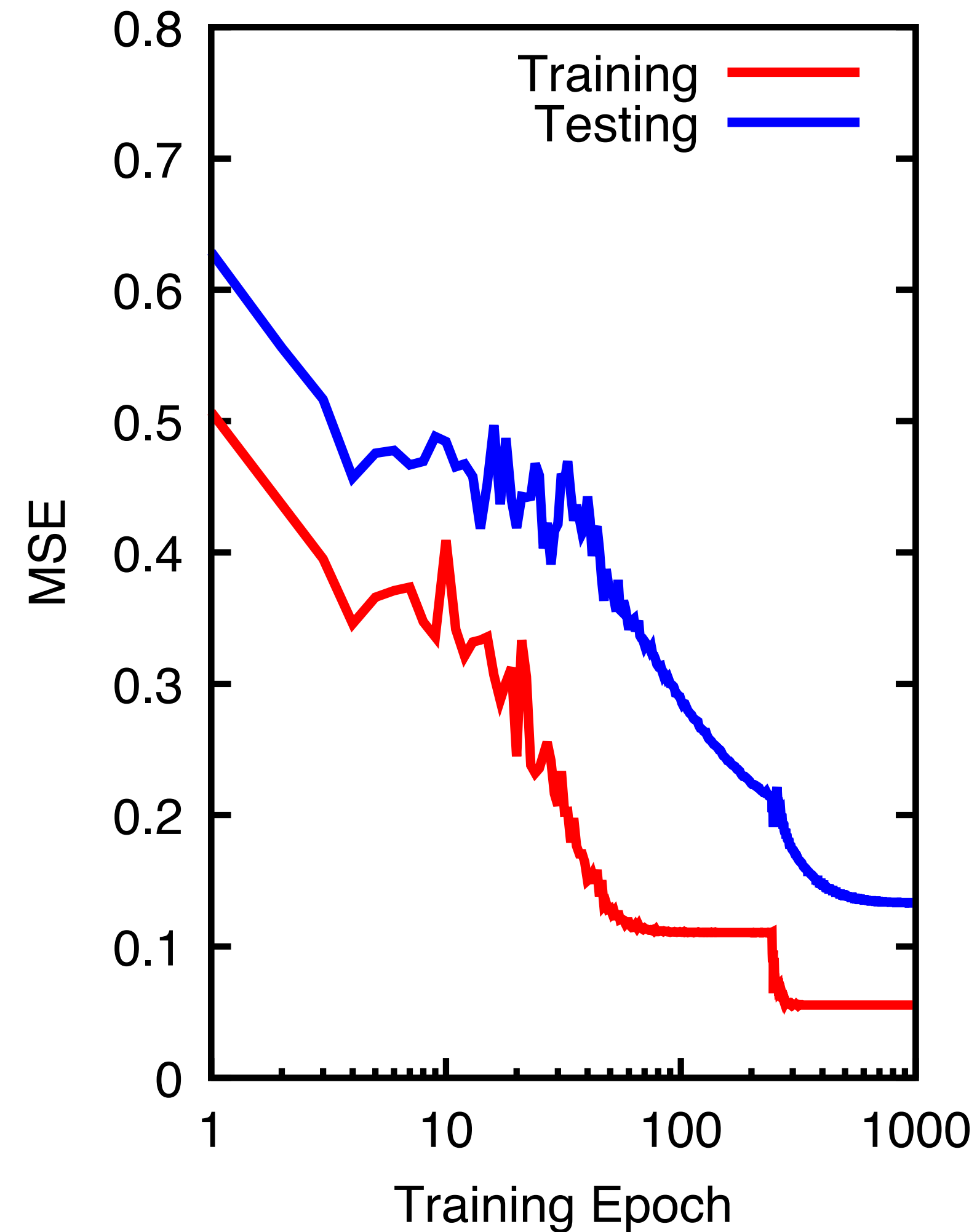


4 qubits — ferro only exposure, ferro->disorder testing

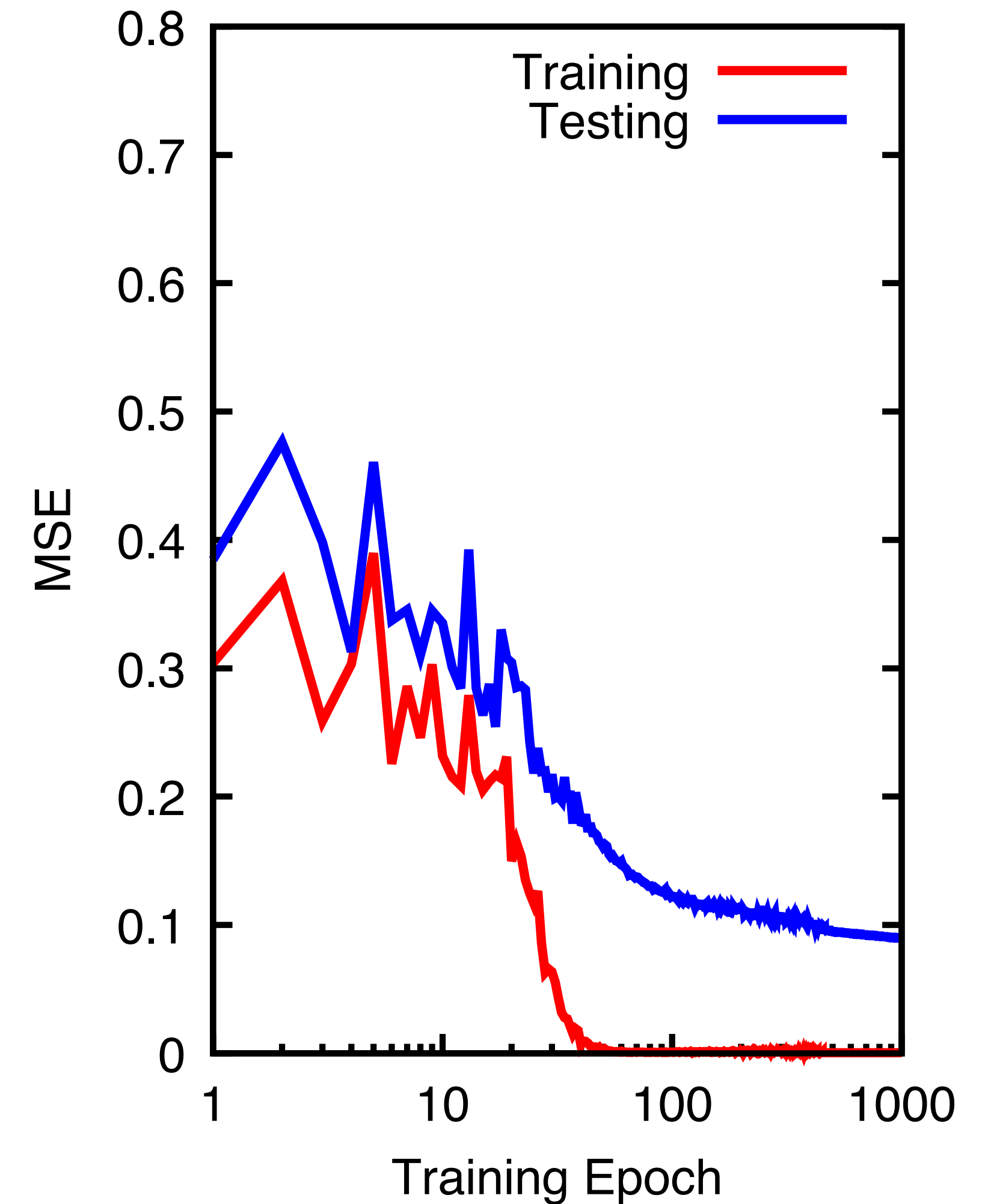
(a) Quadratic Cost



(b) Quadratic + Schrodinger Cost



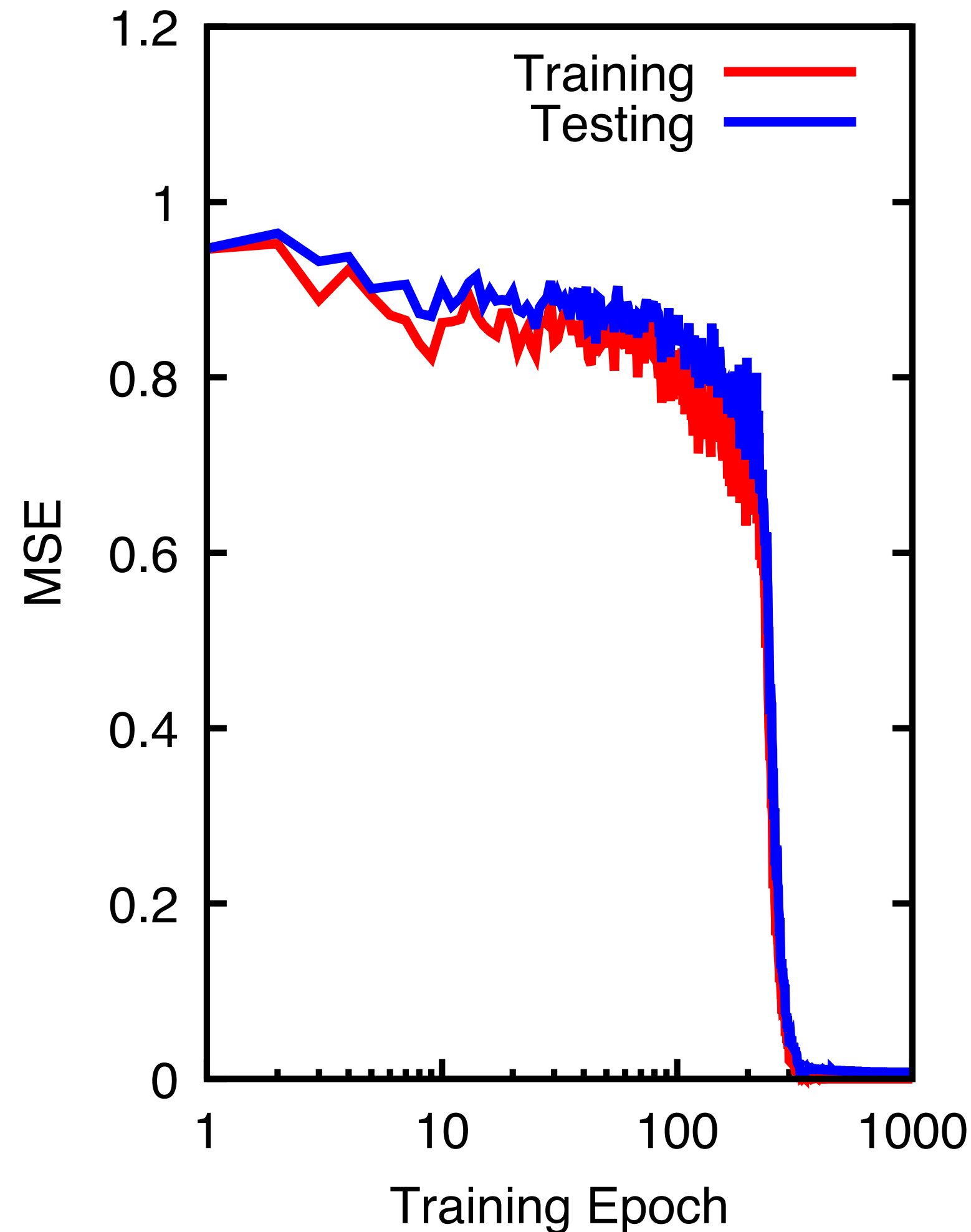
(c) Quadratic Cost + error modification



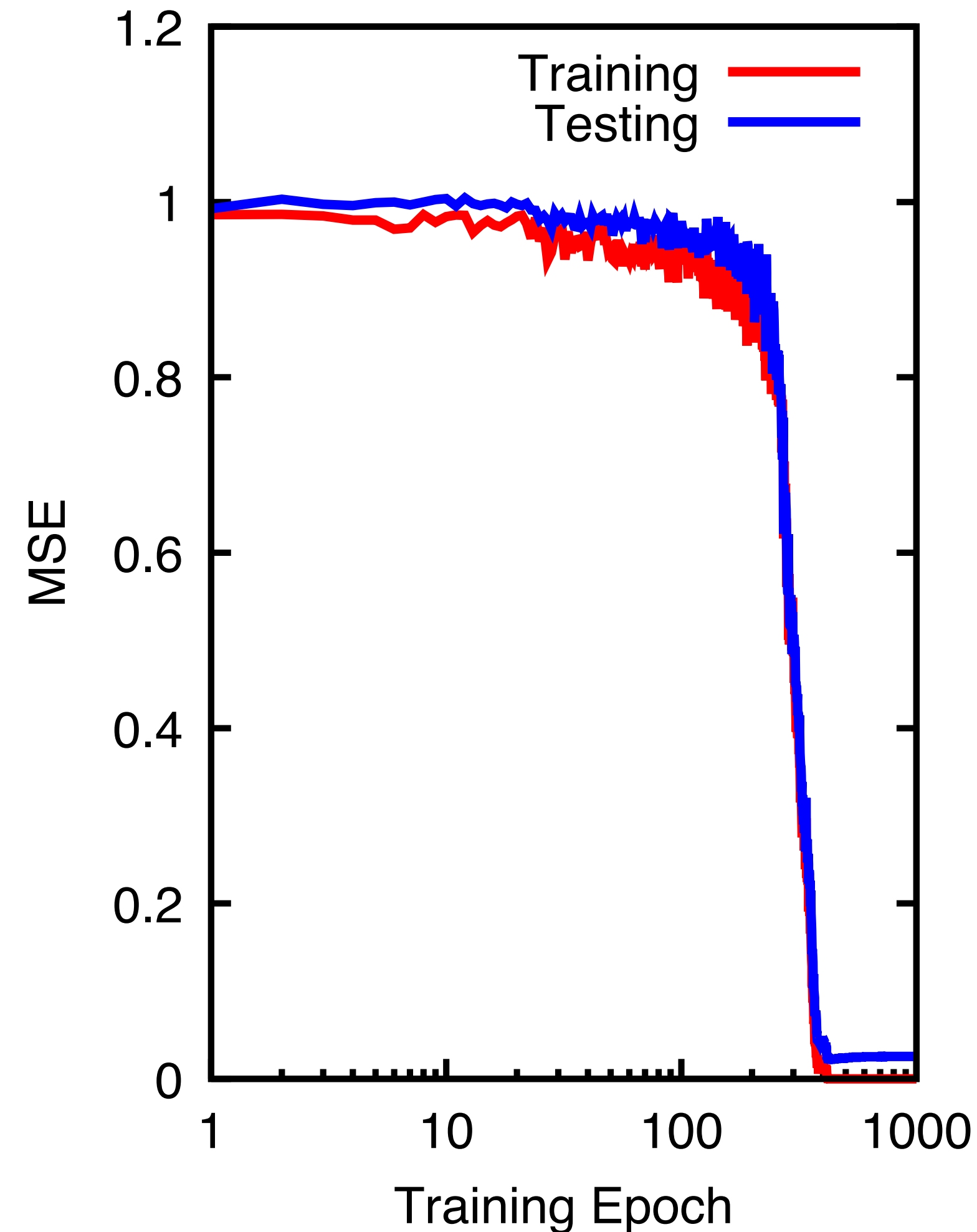
In the plots above, each network has equivalent topology, and was initialized to the same random state on interval $[-1:1]$. The network parameters were as follows: 1 hidden layer with 200 tanh activated neurons. Outputs are tanh activated also. Batch size 200, learning rate 0.02, lambda = 0.1, epochs = 1000 no cut-out. Run time on order of 1 CPU hour

6 qubits — ferro only exposure, ferro->disorder testing

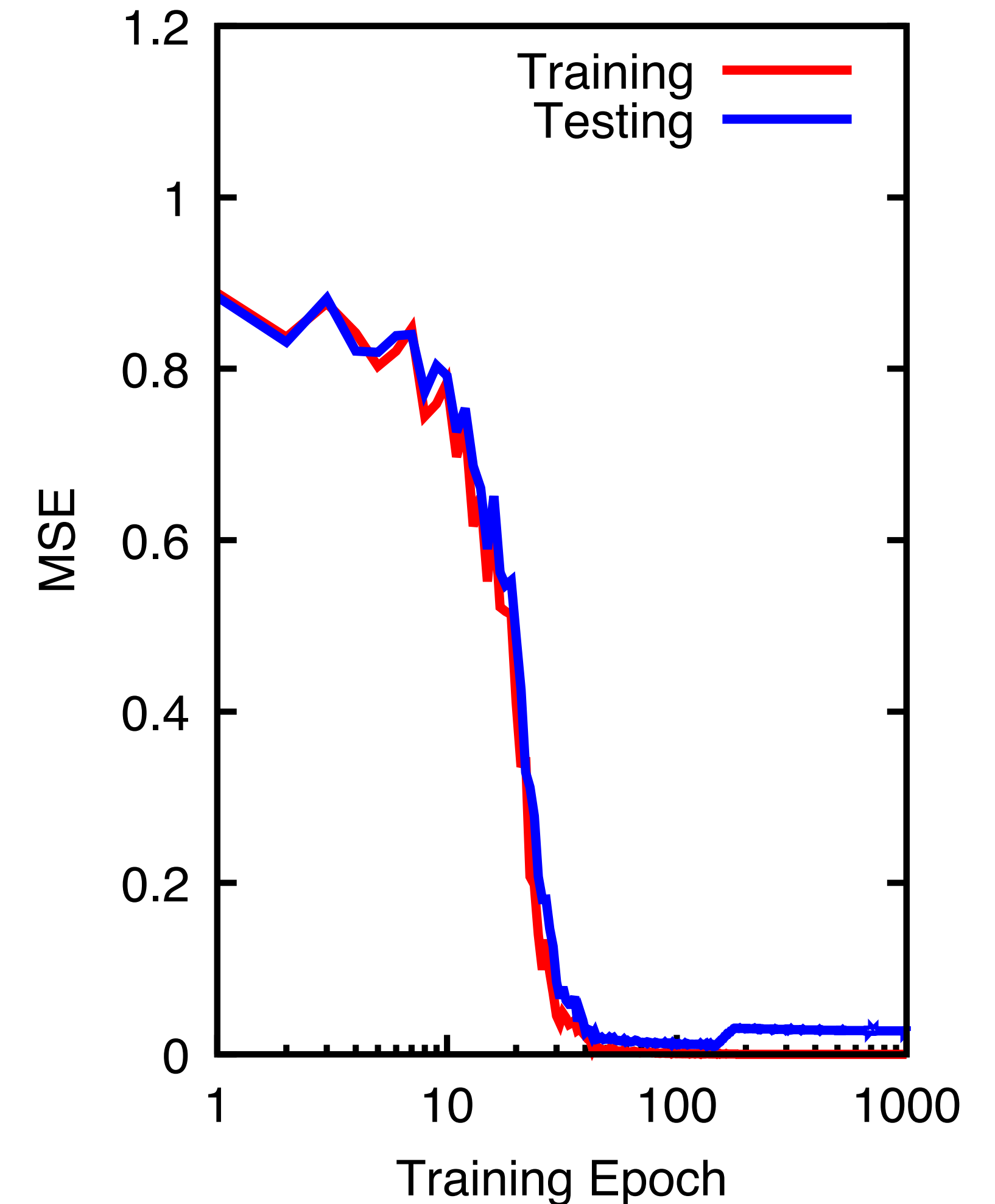
(a) Quadratic Cost



(b) Quadratic + Schrodinger Cost



(c) Quadratic Cost + error modification



In the plots above, each network has equivalent topology, and was initialized to the same random state on interval $[-1:1]$. The network parameters were as follows: 1 hidden layer with 300 tanh activated neurons. Outputs are tanh activated also. Batch size 500, learning rate 0.05, $\lambda = 0.5$, epochs = 1000 no cut-out. Runtime on order of 600 CPU hours