Following is a summary of your analysis for the submission:

In the Mountain Car environment, learning generally starts with a "flatline" at the minimum reward of -200 while the agent is still randomly exploring and only spikes when it accidentally finds the goal and propagates the reward back through the network. One common failure mode is premature convergence, where the decaying exploration rate (epsilon) does not allow the finding of the goal; the agent gets stuck in a suboptimal "do nothing" policy. Deep Q-Learning extends tabular methods by replacing the discrete Q-table with a Neural Network. While tabular methods suffer from continuous states due to the "curse of dimensionality" and sensitive discretization, the neural network approximates the Q-function and thereby allows the agent to generalize its learning across similar states for more stable performance.