## DroneBasedReforestation Train & Test Metrics: Difficulty: 10, Task: 1 Entropy Recharge Energy Count Out of Energy Count Tree Drop Count Save Location Count Cumulative Distance Until Tree Drop 0.05 -0.05 0.05 -0.05 source source source source source source training training training training training --- training Value Value 0.00 0.00 0.00 0.00 test test test test test test 1.3 -0.05-0.05-0.050.75 1.00 1.25 0.75 0.50 0.75 1.00 1.25 0.25 0.75 1.00 0.25 0.50 0.25 0.50 1.00 0.00 0.25 0.50 1.00 1.25 0.25 0.75 1.00 1.25 0.25 0.00 0.50 0.00 0.00 0.75 1.25 0.00 0.50 1e6 1e6 1e6 Step Step 1e6 Step Step 1e6 Step 1e6 Step Curiosity Value Estimate Cumulative Tree Drop Reward **Cumulative Distance Reward** Cumulative Normalized Distance Until Tree Drop Cumulative Distance to Existing Trees Episode Length 0.05 -0.05 0.05 source source source source source source training training training training training Value training 200 ka 0.00 0.00 0.00 test test test - test test -0.05-0.05-0.050.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.25 0.75 1.00 0.00 0.25 0.50 1.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 1.25 1e6 1e6 1e6 Step 1e6 Step 1e6 Step Step Step 1e6 Step Extrinsic Value Estimate Cumulative Reward **Curiosity Reward Extrinsic Reward** Value Loss Policy Loss 100 source source 2000 Value 05 training Value 20 source source source 50 test ₹ 1000 · training training training training test test test 0.00 0.25 0.50 0.00 0.25 0.50 0.75 1.00 1.00 0.25 0.50 0.75 1.00 1.25 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.25 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.25 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step **Epsilon** Learning Rate Beta Curiosity Forward Loss Curiosity Inverse Loss 0.20 source source source source source 0.004 ي 0.0002 م training training training training training 9 0.15 Value - 5.0 <u>s</u> 0.002 test test test test 0.0000 0.000 0.00 0.50 0.50 0.00 0.25 0.50 0.75 0.25 0.50 0.75 1.00 0.25 1.00 0.25 0.25 1.00 0.50 1e6 1e6 1e6 1e6 Step 1e6