## DroneBasedReforestation Train & Test Metrics: Difficulty: 10, Task: 0 Tree Drop Count Out of Energy Count Entropy Recharge Energy Count Save Location Count Cumulative Distance Until Tree Drop 0.05 -100 source source source Value 25 training training 9<u>n</u> 1.44 source 0.00 2.0 Valc training training test 1.42 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.25 0.50 0.50 1.00 0.25 0.50 0.75 1.00 0.75 1.00 1.25 0.00 0.25 0.00 1.00 0.00 0.25 0.75 0.00 0.25 0.50 1e6 1e6 1e6 Step Step 1e6 1e6 Step 1e6 Step **Cumulative Distance Reward** Curiosity Value Estimate Cumulative Tree Drop Reward Cumulative Normalized Distance Until Tree Drop Cumulative Distance to Existing Trees Episode Length 1.0 source source source source source 0.4 training <u>a</u> 350 = 0.2 ē 0.5 training 0.50 0.75 1.00 1.25 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.25 1.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 1e6 1e6 1e6 Step 1e6 Step Step 1e6 1e6 Step Extrinsic Value Estimate Cumulative Reward **Curiosity Reward Extrinsic Reward Policy Loss** Value Loss source source source source training training training Value 0.01 0.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.00 1.25 1.00 0.25 Step 1e6 1e6 Step 1e6 Step 1e6 Step 1e6 Step Step **Epsilon Curiosity Forward Loss** Learning Rate Beta Curiosity Inverse Loss 0.20 source source source source 0.004 e 0.0002 d training training training training 9 0.15 2.0 g test test <u>o</u> 0.002 0.0000 -0.000 0.50 0.00 0.25 0.50 0.75 0.25 0.50 0.75 1.00 0.00 1.00 0.25 0.25 0.50 1.00 0.25 0.50 1e6 1e6 1e6 1e6 Step 1e6