## DroneBasedReforestation Train & Test Metrics: Difficulty: 10, Task: 3 Entropy Tree Drop Count Recharge Energy Count Save Location Count Out of Energy Count Cumulative Distance Until Tree Drop 1.425 source source source source training training training training Value 1.400 -0.00 training 1.375 -0.50 0.75 1.00 0.00 0.25 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 1.25 0.00 0.25 0.50 0.00 0.25 0.50 0.00 0.25 0.50 0.75 1e6 1e6 1e6 Step Step Step 1e6 1e6 1e6 Step Cumulative Tree Drop Reward **Cumulative Distance Reward** Cumulative Distance to Existing Trees Curiosity Value Estimate Cumulative Normalized Distance Until Tree Drop **Episode Length** source source 0.2 9 0.1 training training 0.5 · 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.25 0.25 0.50 1.00 1.25 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.00 1.25 1e6 Step 1e6 1e6 Step Step 1e6 1e6 **Cumulative Reward** Extrinsic Value Estimate **Curiosity Reward** Extrinsic Reward **Policy Loss** Value Loss 50 source training Value 25 source training 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.00 0.25 0.50 0.75 1.00 0.00 0.25 1.00 1.25 0.00 0.25 0.50 0.75 1.25 0.75 1.00 1.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 1.25 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step **Epsilon Curiosity Forward Loss** Learning Rate Beta Curiosity Inverse Loss 0.20 source source source source source 0.004 training training training Value - 5.0 training training 0.15 0.8 Alu <u>s</u> 0.002 test test 0.000 1.00 0.50 1.00 0.50 0.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.00 0.25 0.25 0.50 0.25 1e6 1e6 1e6 1e6 1e6