DroneBasedReforestation Train & Test Metrics: Difficulty: 1, Task: 1 Out of Energy Count Entropy Tree Drop Count Recharge Energy Count Save Location Count Cumulative Distance Until Tree Drop 0.05 -0.05 0.05 -0.05 +source source source source source source 1.40 training training training training training --- training 9 1.35 Value 0.00 0.00 0.00 0.00 test test test test test test 1.30 --0.05-0.05-0.050.75 1.00 1.25 0.25 0.75 1.00 0.25 0.50 0.75 1.00 1.25 0.00 0.50 1.00 0.25 0.75 1.25 0.25 0.75 1.00 1.25 0.00 0.50 0.00 0.50 0.00 0.25 0.75 1.25 0.00 0.50 1.00 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 200 training training training training training source 0.00 0.00 0.00 = 100 · test test test training test -0.05-0.05-0.050.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 1.00 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.25 1e6 1e6 1e6 1e6 Step 1e6 Step Step Step Step 1e6 Extrinsic Value Estimate Cumulative Reward **Curiosity Reward Extrinsic Reward** Policy Loss Value Loss 100 source 0.03 2000 training Value 05 Value Value source source source N 1000 -80 Valu test training training training training test test test 1.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.50 0.75 0.25 0.50 0.75 0.25 0.50 0.75 1.00 1.25 1.25 0.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 1.25 1.00 1.25 0.00 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 **Epsilon** Learning Rate Beta Curiosity Forward Loss Curiosity Inverse Loss 0.20 0.50 source source source source source 0.004 စ္ 0.0002 training training training 9 0.25 - training training 0.15 <u>s</u> 0.002 test test test test 0.0000 0.000 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 0.00 1.00 0.25 0.25 0.25 0.50 1.00 1e6 1e6 1e6 1e6 1e6 Step