DroneBasedReforestation Train & Test Metrics: Difficulty: 2, Task: 2 Entropy Out of Energy Count Tree Drop Count Recharge Energy Count Save Location Count Cumulative Distance Until Tree Drop 0.05 0.05 0.05 +1.46 source source source 500 source --- training training --- training 9 1.44 -A Z50 -0.00 0.00 0.00 test test training test 1.42 0.50 0.75 1.00 1.25 0.25 0.75 1.00 0.25 0.50 1.00 0.25 0.50 0.75 1.00 0.25 0.75 1.00 1.25 0.25 0.00 0.50 1.00 0.00 0.75 1.25 0.00 0.50 1e6 1e6 1e6 Step Step 1e6 1e6 Step 1e6 Step Cumulative Tree Drop Reward Curiosity Value Estimate **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 training training training training training 0.00 0.00 0.00 0.5 test test -0.05-0.05-0.050.25 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 0.50 1.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.00 1.25 1e6 1e6 1e6 1e6 Step 1e6 Step Step Step Step Step Extrinsic Value Estimate Cumulative Reward **Curiosity Reward Extrinsic Reward** Policy Loss Value Loss source source source source source source - 80.0 training training training training training training alue 02 Value - 02 0.00 0.25 0.50 0.75 1.00 1.25 0.25 0.50 0.75 1.00 0.00 0.25 1.00 0.25 1.00 0.75 1.00 0.25 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 0.004 စ္ 0.0002 training training training training 9 0.15 <u>0.002</u> test test 0.000 0.0000 -0.50 0.00 0.25 0.50 0.75 0.25 0.50 0.75 1.00 0.00 0.25 1.00 0.25 0.25 1.00 1e6 1e6 1e6 1e6 Step 1e6