DroneBasedReforestation Train & Test Metrics: Difficulty: 9, Task: 2 Out of Energy Count Entropy Tree Drop Count Recharge Energy Count Save Location Count Cumulative Distance Until Tree Drop 1.475 0.05 0.05 -0.05 +source source source source 400 --- training Value 200 training --- training 1.450 0.00 0.00 0.00 test test training test 1.425 -0.50 0.75 1.00 1.25 0.75 1.00 0.25 0.50 0.75 1.00 1.25 0.25 0.75 1.00 1.25 0.25 0.75 1.00 1.25 0.25 0.00 0.25 0.50 1.00 0.00 0.50 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 value 0.5 -0.00 0.00 0.00 ≥ 300 × test 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 Step Step Step Step Step 1e6 Extrinsic Reward Extrinsic Value Estimate Cumulative Reward **Curiosity Reward** Policy Loss Value Loss source source source source training training training Value - 02 Value 20 <u>n</u> 20 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 1.25 0.00 0.25 0.50 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 source 0.004 ტ 0.0002 ე training training training training training 0.15 를 0.5 -<u>s</u> 0.002 test test test 0.000 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