DroneBasedReforestation Train & Test Metrics: Difficulty: 1, Task: 1 Entropy Tree Drop Count Recharge Energy Count Save Location Count Out of Energy Count Cumulative Distance Until Tree Drop 0.05 -0.05 0.05 -0.05 +source source source source source source 1.40 0.4 training training training training training --- training 9 1.35 -Value 0.00 0.00 0.00 0.00 test test — test test test 1.30 -0.05-0.05-0.050.75 1.00 1.25 0.75 1.00 1.25 0.25 0.75 1.00 0.25 0.50 0.50 1.00 1.25 0.50 0.75 1.00 0.25 0.75 1.00 0.50 0.00 0.50 0.00 0.00 0.25 0.75 0.00 0.25 0.00 0.50 1e6 1e6 1e6 Step Step 1e6 Step Step 1e6 Step 1e6 Step Cumulative Tree Drop Reward **Cumulative Distance Reward** Cumulative Normalized Distance Until Tree Drop Cumulative Distance to Existing Trees Episode Length Curiosity Value Estimate 0.05 -0.05 0.05 source source source source source source training training training training training Value o training ~ 200 -0.00 0.00 0.00 == 100 d test test test test 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 0.25 0.50 0.75 1.00 0.25 0.50 0.75 1.00 1.25 1e6 1e6 1e6 1e6 Step 1e6 1e6 Step Step Step Step Step 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 source 0.02 test <sup>®</sup> 1000 training training training training 50 test test test 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.00 1.25 0.00 0.25 0.50 0.75 1.00 1.25 0.00 0.25 0.50 0.75 1.25 0.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 1.25 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Learning Rate **Epsilon** Beta Curiosity Forward Loss Curiosity Inverse Loss 0.20 0.50 source source source source 0.004 စ္ 0.0002 training training 9 0.25 - training training 0.15 <u>0.002</u> test test test test 0.000 0.0000 -0.50 0.00 0.25 0.50 0.75 0.25 0.50 0.75 1.00 1.00 0.25 0.25 1.00 0.00 0.25 1e6 1e6 1e6 1e6 Step Step 1e6