## AerialWildfireSuppression Train & Test Metrics: Difficulty: 4, Task: 7 Entropy Water Drop Water Pickup **Preparing Trees Extinguishing Trees Reward Preparing Trees Reward** 0.05 -0.05 0.05 -0.05 0.05 2.00 source source source source source — training training training training training 9 1.75 · Value Value Value Value 0.00 0.00 0.00 0.00 0.00 test — test test — test — test 1.50 -0.05-0.05-0.05-0.050.0 1.5 1.5 1.5 0.5 0.5 0.5 1.5 1.0 0.5 1.5 1.0 1.5 0.0 1.0 0.0 1.0 0.0 0.5 1.0 0.0 0.5 0.0 1.0 1e6 1e6 Step 1e6 1e6 1e6 1e6 Step Step Step Step Step **Extinguishing Trees** Fire too Close to City Fire Out Crash Count Episode Length Extrinsic Value Estimate 0.05 0.05 0.05 source source source source source training training training training 0.00 0.00 0.00 test test test training test -0.05-0.05 --0.05 0.0 1.0 1.5 0.0 1.5 0.5 1.5 0.0 1.5 0.0 1.0 0.0 0.5 1.5 0.0 0.5 1.5 1.0 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Step 1e6 Cumulative Reward Extrinsic Reward Policy Loss Learning Rate Epsilon Value Loss 0.20 0.06 100 -100 source source source Value 5000 J 2000.0 Alue training Value Value Value 20.0 Nalue - 0.15 source test - training test test 0.04 test -100 -100 0.0000 0.5 1.0 1.5 0.0 0.5 1.5 1.5 0.0 0.0 0.5 1.0 1.5 0.5 1.0 1.5 0.0 0.5 1.0 0.5 1.5 0.0 1e6 1e6 1e6 1e6 1e6 Step 1e6 Step Step Step Step Step Beta source 0.004 training 8 0.002 · test 0.000

0.5

0.0

1.0

Step

1.5

1e6