Initializing beliefs with a Uniform Distribution Uniform Belief with each cell value: 0.0001388888888888888 Initializing beliefs with a Uniform Distribution Update Step | Update Time: 0.025026798248291016 ----- UPDATE STATS -----GT index : (10, 10, 13) Bel index : (10, 13, 15) with prob = 0.9997148Bel bar prob at index = 0.0001388888888888888 GT : (0.000, 0.000, 90.000) Belief: (0.069, 0.262, 130.000) POS ERROR: (-0.069, -0.262, -40.000) ----- UPDATE STATS -----**Prediction Step** Uniform Belief with each cell value: 0.0035287999046416277 | Prediction Time: 2.1933295726776123 ----- PREDICTION STATS -----GT index : (9, 15, 2) Prior Bel index : (10, 14, 8) with prob = 0.0006394POS ERROR : (-0.196, 0.094, -120.000) ----- PREDICTION STATS -----Update Step | Update Time: 0.025020122528076172 ----- UPDATE STATS -----GT index : (9, 15, 2) Bel index : (8, 17, 16) with prob = 0.6282559Bel bar prob at index = 0.0003867482614839097 GT : (-0.127, 0.432, -130.000) Belief: (-0.206, 0.562, 150.000) POS ERROR: (0.079, -0.130, -280.000) ----- UPDATE STATS -----**Prediction Step**

----- PREDICTION STATS ------GT index : (1, 14, 2)

| Prediction Time: 1.984802484512329

Prior Bel index : (8, 14, 14) with prob = 0.0007329

Uniform Belief with each cell value: 0.010699631440277683

```
POS ERROR : (-0.912, 0.018, -240.000)
----- PREDICTION STATS -----
Update Step
  | Update Time: 0.024304866790771484
----- UPDATE STATS -----
          : (1, 14, 2)
GT index
Bel index : (3, 17, 2) with prob = 0.9999999
Bel_bar prob at index = 0.00019688077088706883
GT : (-1.118, 0.356, -130.000)
Belief: (-0.894, 0.562, -130.000)
POS ERROR: (-0.224, -0.206, 0.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 0.04417260260633321
  | Prediction Time: 0.9612395763397217
----- PREDICTION STATS -----
GT index
             : (1, 4, 2)
Prior Bel index : (4, 18, 7) with prob = 0.0007519
POS ERROR : (-0.387, -1.043, -100.000)
----- PREDICTION STATS -----
Update Step
  | Update Time: 0.026959896087646484
----- UPDATE STATS -----
GT index : (1, 4, 2)
Bel index : (3, 5, 7) with prob = 0.9533254
Bel_bar prob at index = 0.00016392792696950812
GT : (-1.143, -0.406, -130.000)
Belief: (-0.894, -0.338, -30.000)
POS ERROR: (-0.249, -0.069, -100.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 0.3269776981849589
  | Prediction Time: 1.8860642910003662
----- PREDICTION STATS -----
GT index
              : (9, 7, 2)
Prior Bel index : (3, 8, 7) with prob = 0.0005834
POS ERROR : (0.767, -0.065, -100.000)
----- PREDICTION STATS -----
```

```
Update Step
  | Update Time: 0.019426345825195312
----- UPDATE STATS -----
GT index : (9, 7, 2)
Bel index : (8, 3, 17) with prob = 0.99999999
Bel bar prob at index = 0.00030480864697707044
GT : (-0.127, -0.178, -130.000)
Belief: (-0.206, -0.488, 170.000)
POS ERROR: (0.079, 0.310, -300.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 0.12589629601967933
  | Prediction Time: 0.8771469593048096
----- PREDICTION STATS -----
GT index
           : (10, 15, 11)
Prior Bel index : (7, 3, 16) with prob = 0.0005797
POS ERROR : (0.420, 0.869, -100.000)
----- PREDICTION STATS -----
Update Step
  | Update Time: 0.033800601959228516
----- UPDATE STATS -----
GT index : (10, 15, 11)
Bel index : (11, 15, 7) with prob = 0.9981870
Bel_bar prob at index = 9.690556959746473e-05
GT : (0.076, 0.381, 50.000)
Belief: (0.206, 0.412, -30.000)
POS ERROR: (-0.130, -0.031, 80.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 0.0016592915034403842
  | Prediction Time: 1.797257900238037
----- PREDICTION STATS -----
              : (14, 15, 11)
GT index
Prior Bel index : (11, 14, 8) with prob = 0.0005784
POS ERROR : (0.353, 0.043, 60.000)
----- PREDICTION STATS -----
Update Step
```

| Update Time: 0.022290468215942383

```
----- UPDATE STATS -----
GT index : (14, 15, 11)
Bel index : (16, 15, 6) with prob = 0.8902130
Bel_bar prob at index = 0.00020087496481371053
GT : (0.559, 0.381, 50.000)
Belief: (0.894, 0.412, -50.000)
POS ERROR: (-0.335, -0.031, 100.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 3.3068468278526005e-05
  | Prediction Time: 1.7507050037384033
----- PREDICTION STATS -----
GT index
            : (17, 8, 11)
Prior Bel index : (15, 13, 5) with prob = 0.0005559
POS ERROR : (0.285, -0.364, 120.000)
----- PREDICTION STATS -----
Update Step
  | Update Time: 0.022135496139526367
----- UPDATE STATS -----
GT index : (17, 8, 11)
Bel index : (17, 9, 3) with prob = 0.9990782
Bel_bar prob at index = 0.00039769908420278114
GT : (1.041, -0.102, 50.000)
Belief: (1.031, -0.038, -110.000)
POS ERROR: (0.010, -0.064, 160.000)
----- UPDATE STATS -----
Prediction Step
Uniform Belief with each cell value: 5.937433325766598e-05
  | Prediction Time: 1.7654139995574951
----- PREDICTION STATS -----
            : (13, 4, 11)
GT index
Prior Bel index : (15, 10, 10) with prob = 0.0006107
POS ERROR : (-0.324, -0.469, 20.000)
----- PREDICTION STATS -----
Update Step
  | Update Time: 0.02112269401550293
----- UPDATE STATS -----
```

GT index : (13, 4, 11)

Bel index : (12, 7, 14) with prob = 0.9999999 Bel_bar prob at index = 0.00038541975062181955

GT : (0.432, -0.432, 50.000) Belief : (0.344, -0.187, 110.000)

POS ERROR: (0.088, -0.245, -60.000)

----- UPDATE STATS -----