

Question 1 - part 3

According to the result of prediction only and combining prediction and measurement:

- Prediction only gives result states that have covariance increase after each prediction, hence confidence decrease over time. This can be seen by looking at the spread in the trajectory of the prediction. Compare to the actual state of the robot, the prediction seems not to match very well through time.
- On the contrary, when combine the prediction with measurement. We can observe that the prediction is now more match with the actual state of the robot throughout time. The covariance can also be seen not increase over time looking at the trajectory not spreading compare to using only prediction.