1 Heading controller

Heading is normally controlled by using the aileron to roll the aircraft. When observing the ground using a fixed camera, the roll required to make a turn makes it difficult to observe the ground while turning. In an attempt to reduce this change in roll different controllers can be used. The benefit of having controllers that can change heading without roll is that these can be used with existing trajectory planners. This section will look into different strategies and different controllers that can be used.

1.1 Rudder as a heading control surface

1.1.1 PID-controller