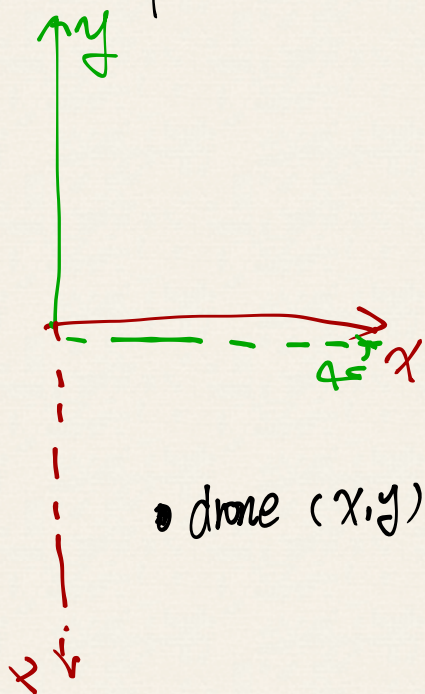


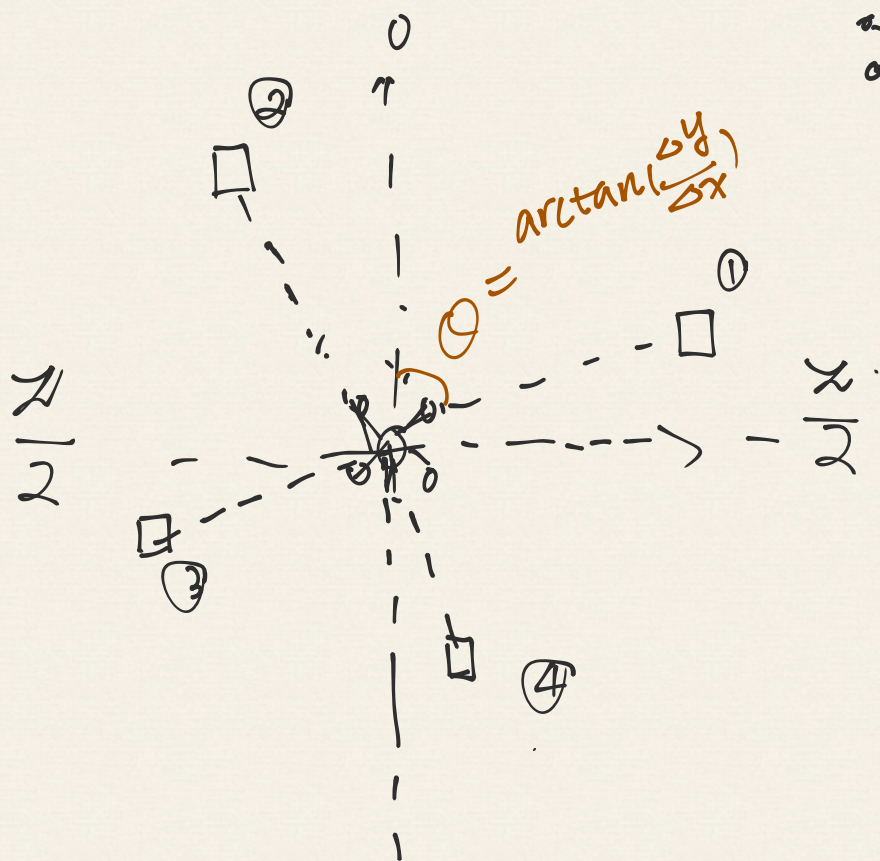
- Coordinates for obstacles: —
- for the drone: - - - -





Thus drone coordinates in "obstacle" space:

$$x_{\text{new}} = \text{data.y}$$

$$y_{\text{new}} = -\text{data.x}$$



 : drone

 : obstacles

$$\textcircled{1}: -\arctan\left(\frac{\Delta y}{\Delta x}\right) \quad \left. \vphantom{\arctan}\right\} y_o > y_d$$

$$\textcircled{2}: -\arctan\left(\frac{\Delta y}{\Delta x}\right)$$

$$\textcircled{3}: \frac{\pi}{2} + \arctan\left(\frac{\Delta y}{\Delta x}\right) \quad \left. \vphantom{\arctan}\right\} y_o < y_d$$

$$\textcircled{4}: \frac{\pi}{2} + \arctan\left(\frac{\Delta y}{\Delta x}\right)$$