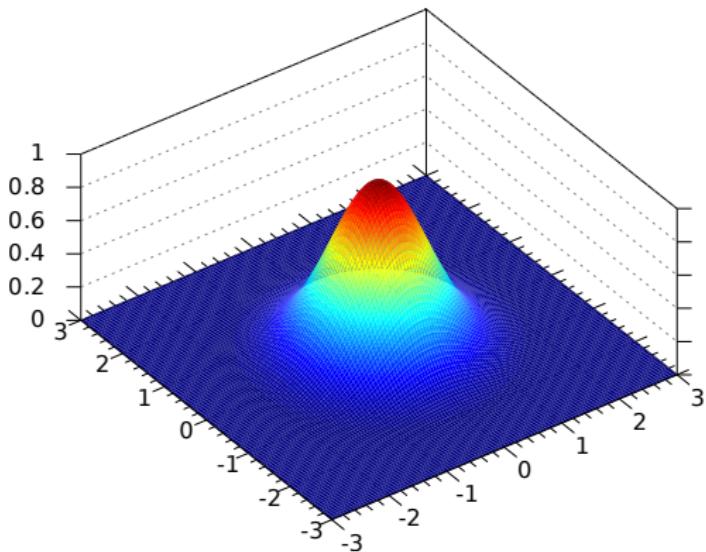
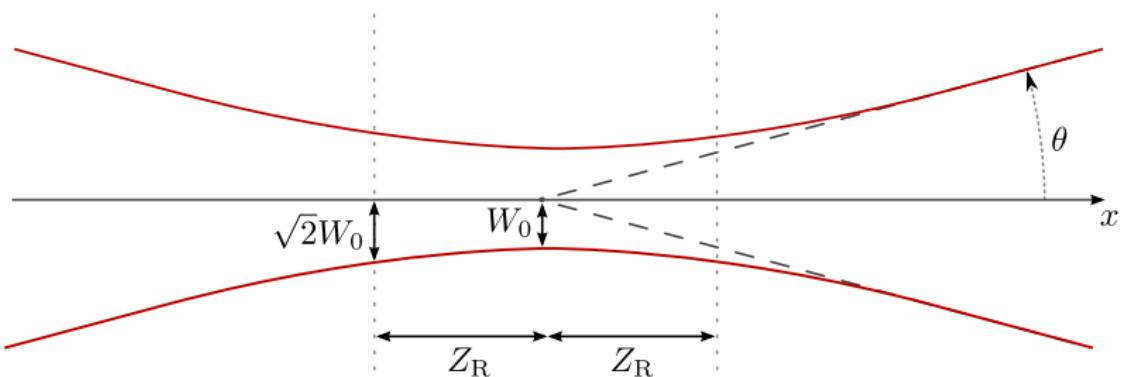


Studies of near-gaussian beams

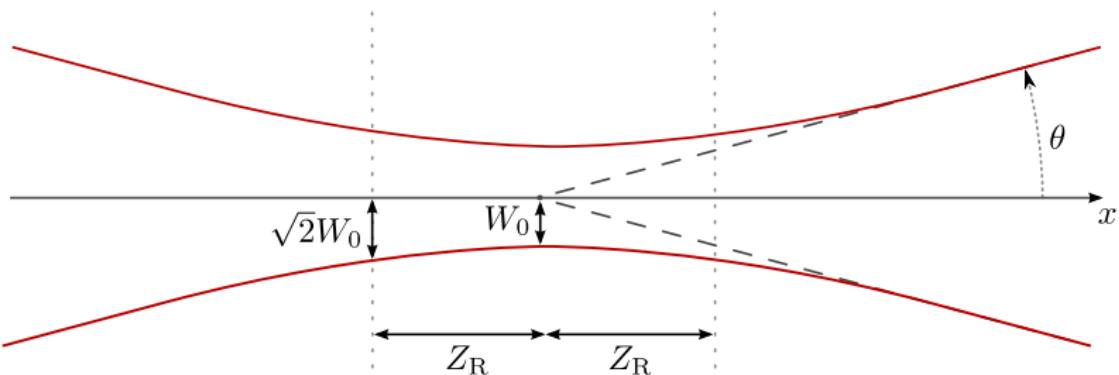


Jonas van den Brink

Ingen laserstråle har konstant bredde

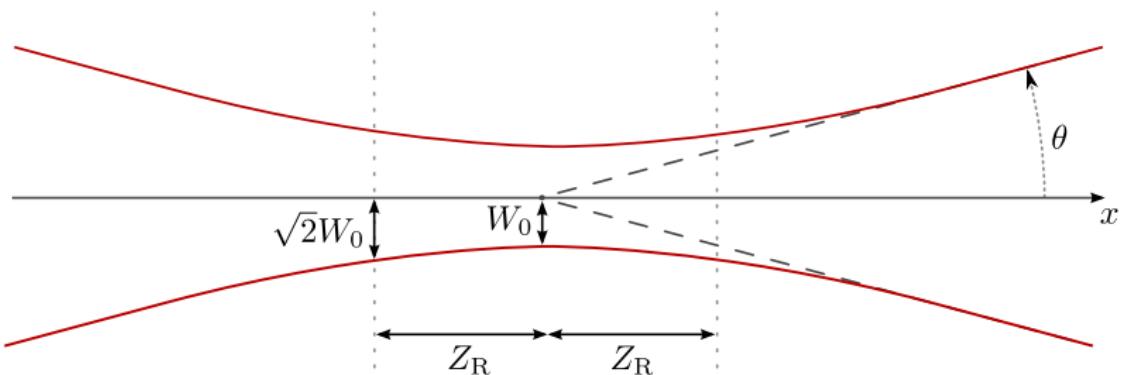


Ingen laserstråle har konstant bredde



For en gaussisk beam har vi $\theta = \frac{\lambda}{\pi W_0}$.

Ingen laserstråle har konstant bredde

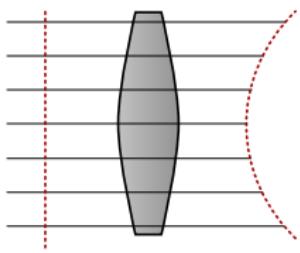


For en gaussisk beam har vi $\theta = \frac{\lambda}{\pi w_0}$.

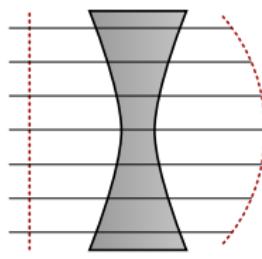
Definerer strålekvalitet

$$\text{BPP} = \theta \cdot w_0, \quad M^2 = \frac{\text{BPP}}{\text{BPP}_G}.$$

Linser endrer krumningsradien

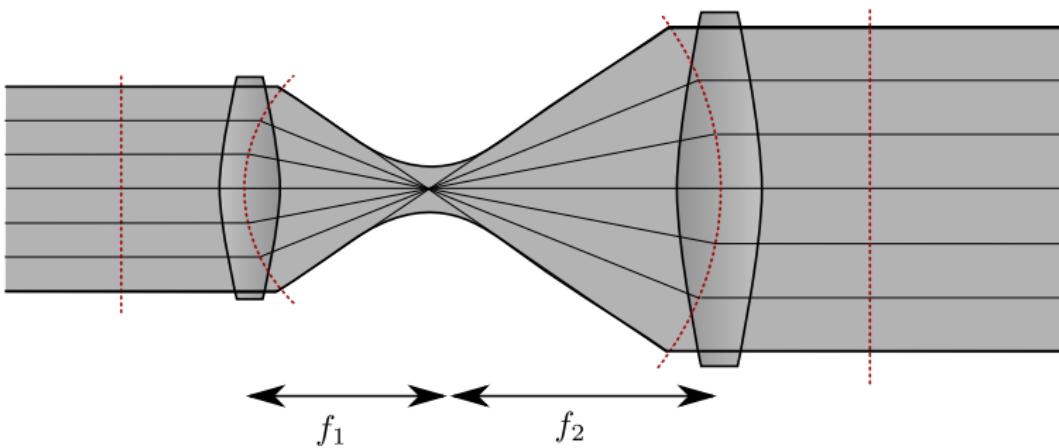


Convex

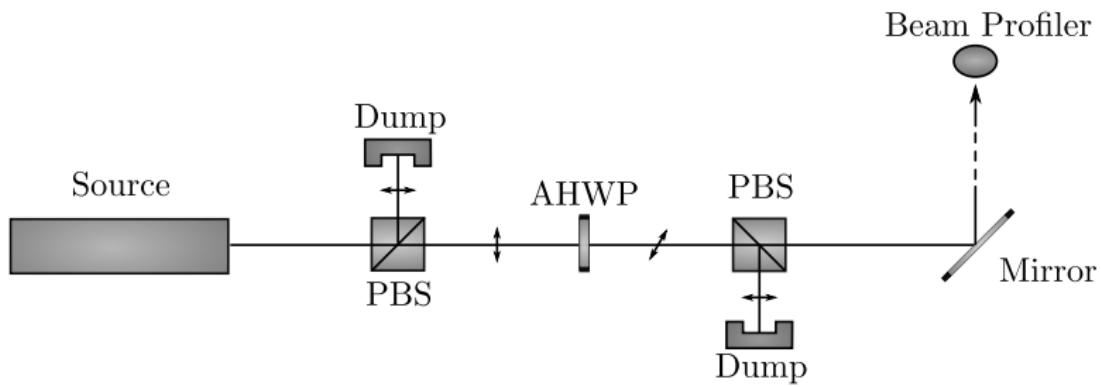


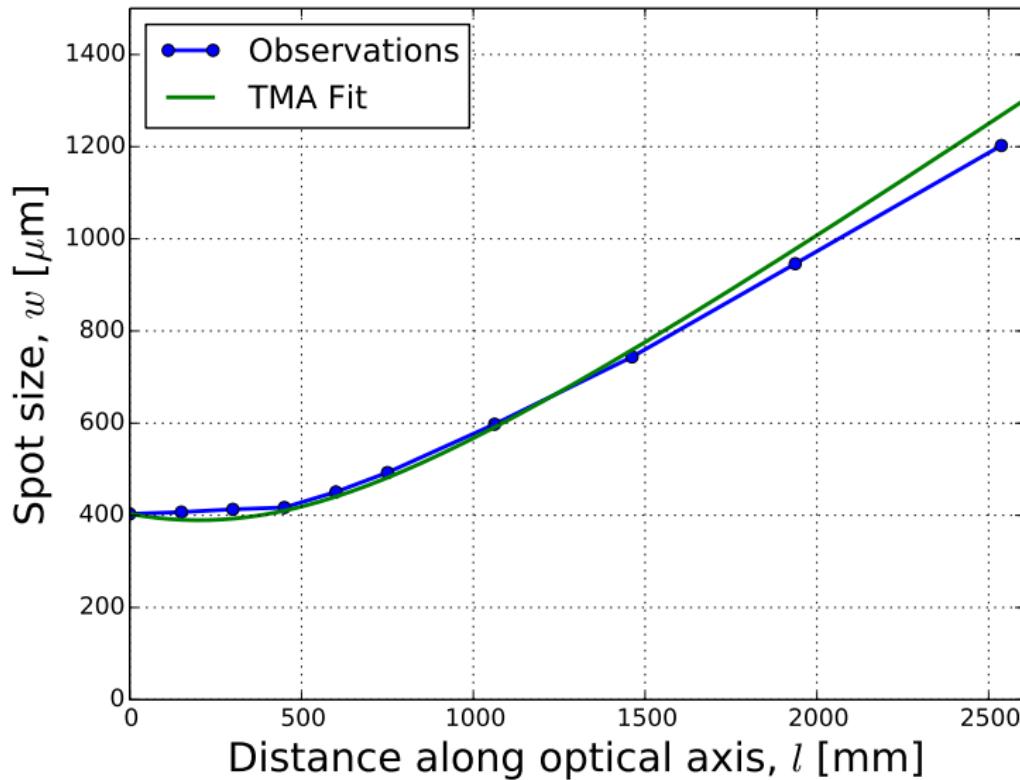
Concave

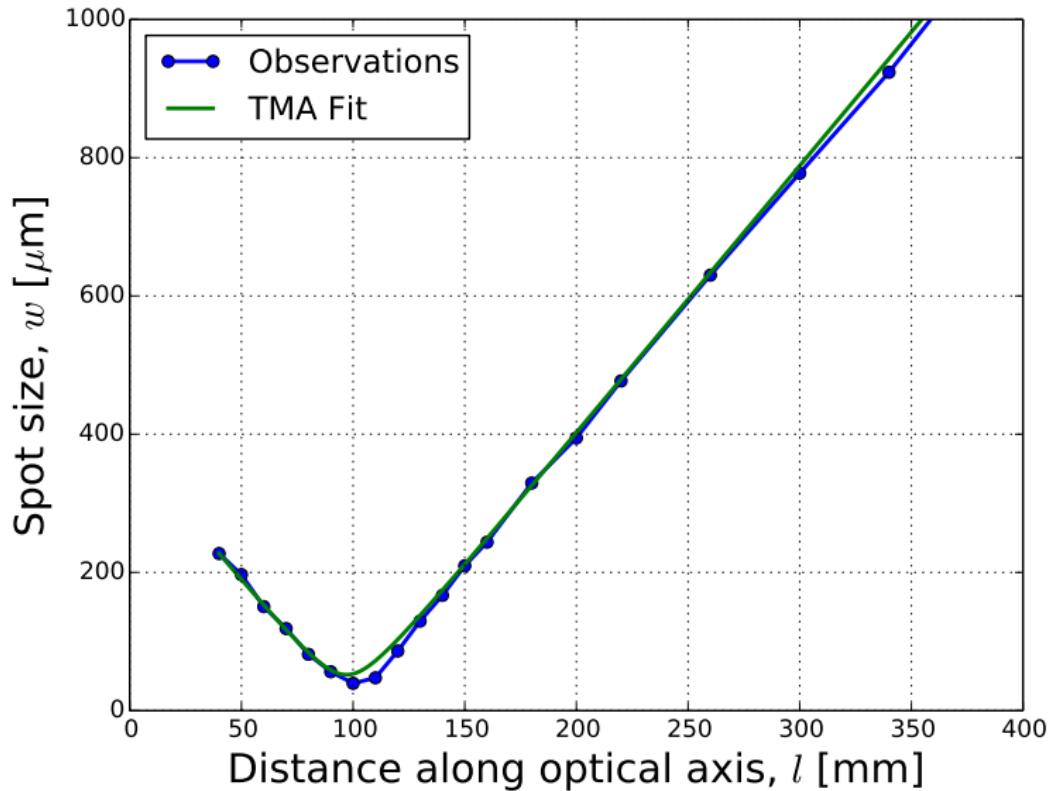
Vi kan lage en beam expander
fra to bikonvekse linser

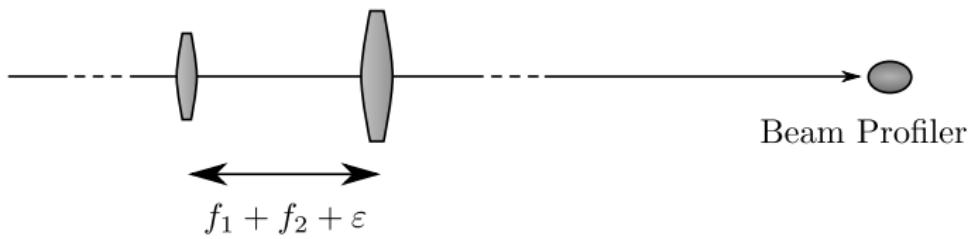




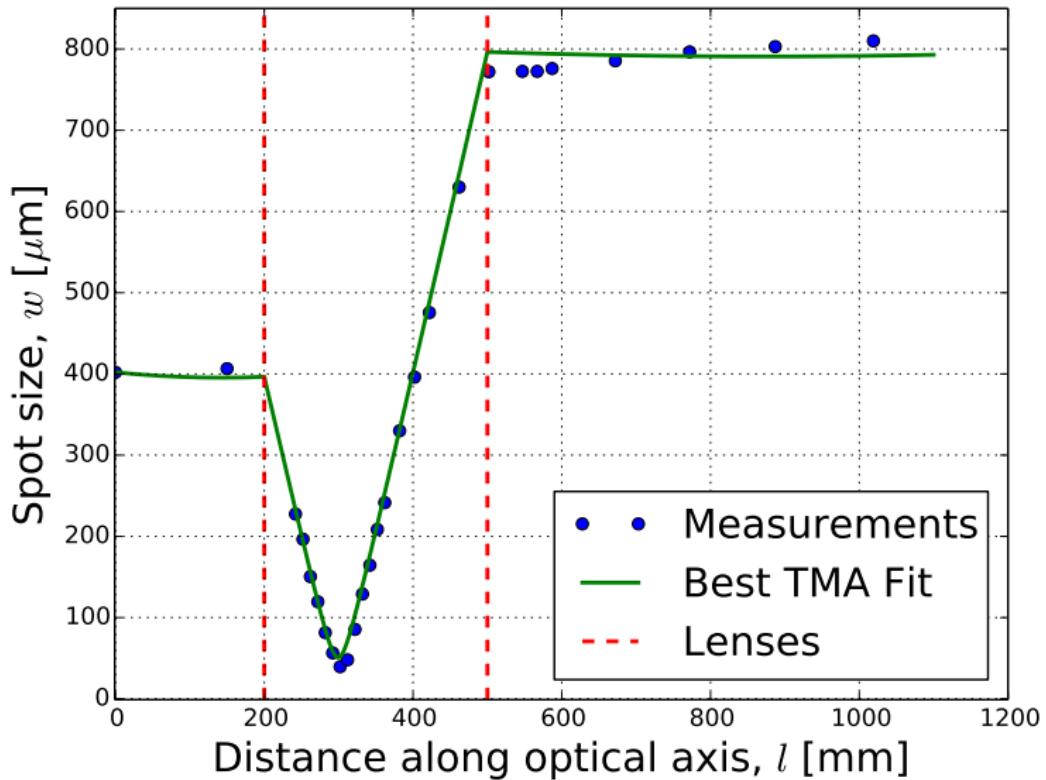




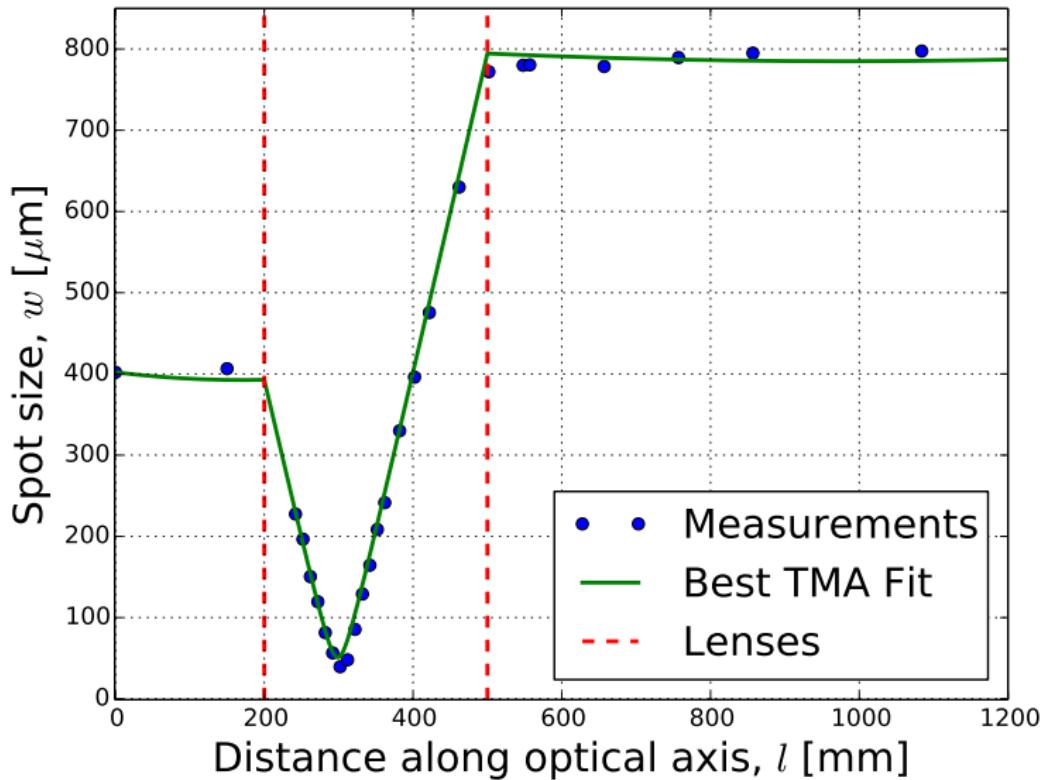




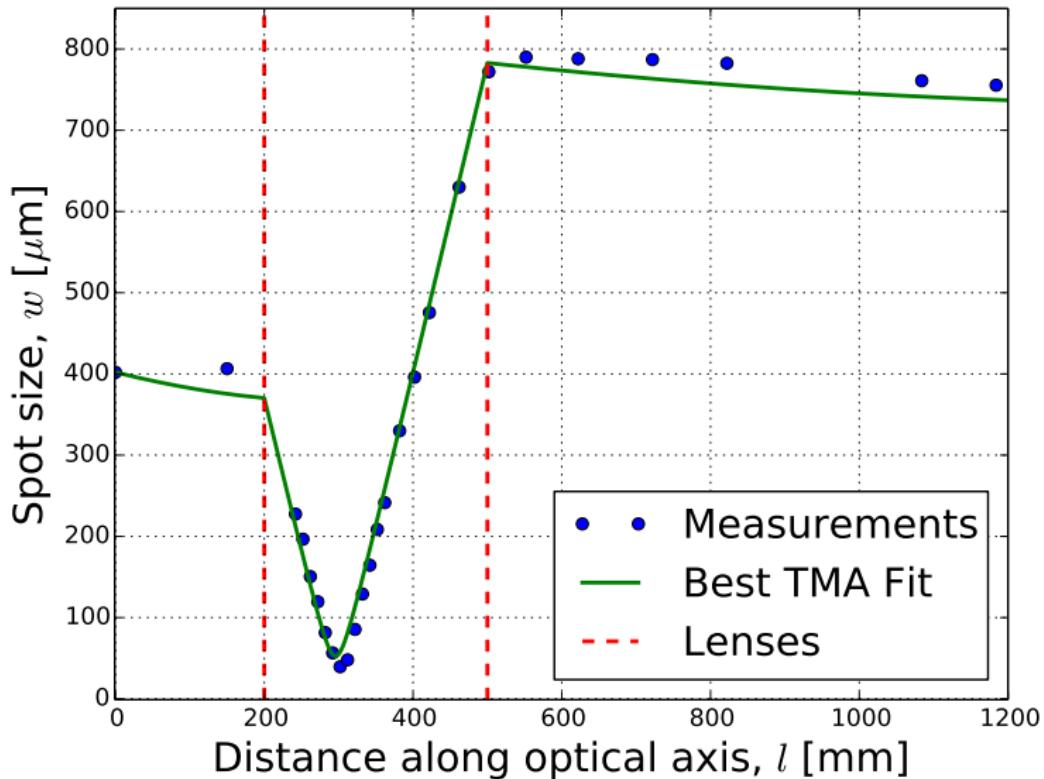
Dataset 0

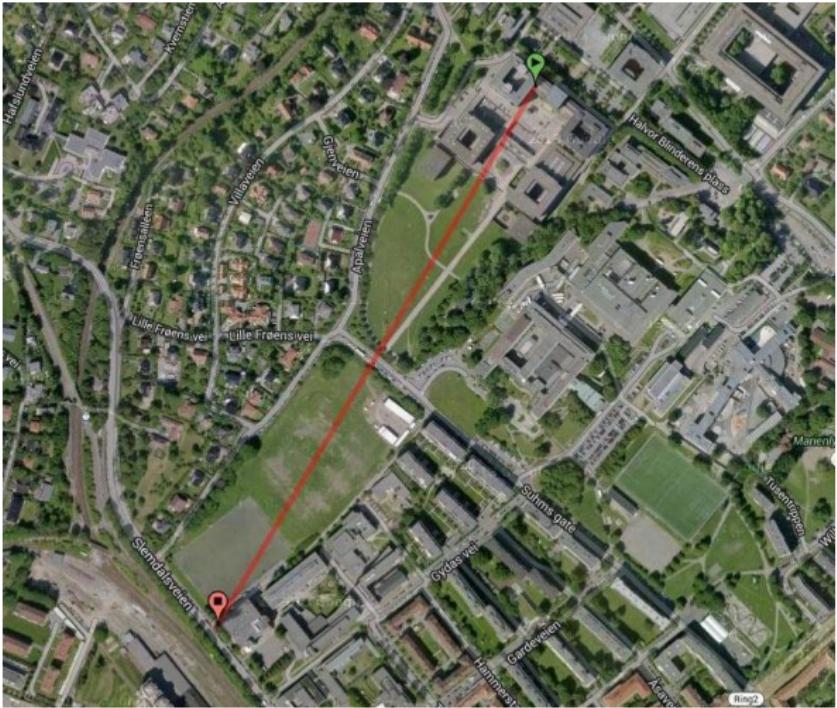


Dataset 1



Dataset 2





$$d \approx 710 \text{ m}$$



