

Impuls response
farm land

$\alpha \sim 10-15 \text{ dB}$

delay $0.7 \mu\text{s} \rightarrow 210 \text{ m}$

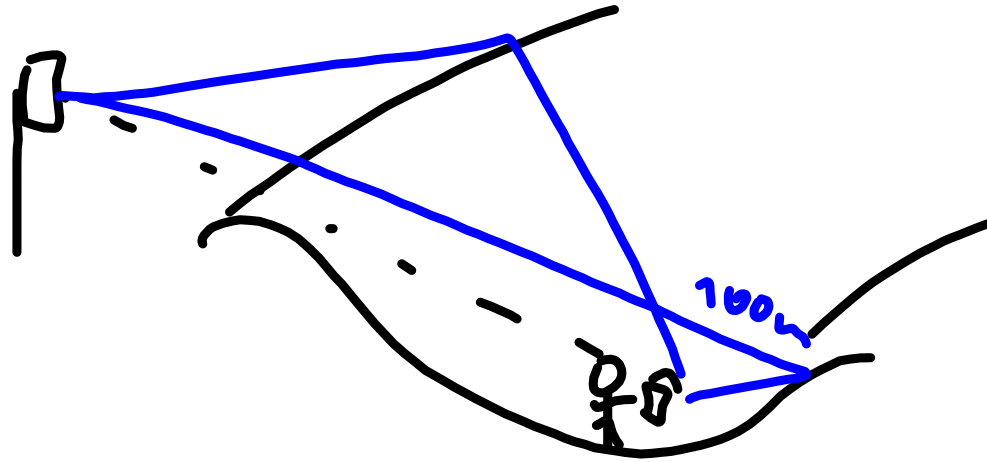
$358 \text{ m/s} = \frac{d}{t}$

$\alpha = 358 \cdot 0.7 \text{E-}6$
 $2.1 \text{E}2 \text{ m}$

Urban 48m
18m
delay 140, 200/300 ns
3 main incoming

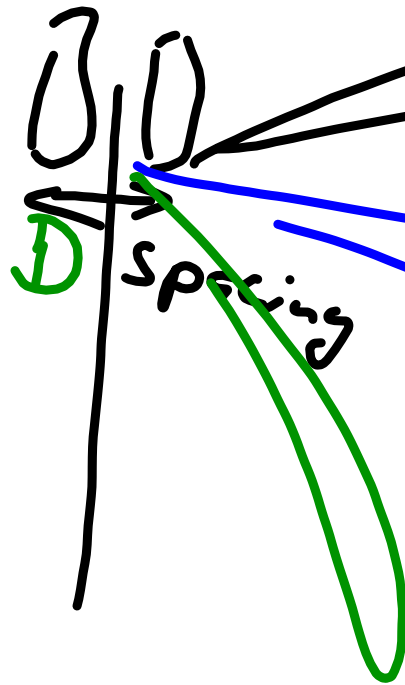
$160 \text{E-}9$
 $358 \cdot 60 \text{E-}9$
 78 m

Rural farmland



Multi MIMO

900 MHz



Capacity = $B \log_2(1 + SNR)$

Gain $\sim \left(\frac{D}{\lambda}\right)^2$