## The Propagation Channel

The propagation channel - The space between the antennas!



- \* Ideally, the channel is free-space (i.e., nothing).
- \* In reality, the channel is full of stuff!

  E.G., buildings, trees, rain, plasma, gasses, and the earth.

**Problem:** This "stuff" modifies the **propagating** wave. Therefore, we must consider the e.m. phenomena of:

- \* scattering
- \* refraction
- \* reflection
- \* diffraction
- \* extinction





