

The frequency of the local KLBK radio waves is 590 kHz.

Estimate the wavelength of KLBK radio waves.

- A) The wavelength is about the size of a bean (≈ 1 cm).
- B) The wavelength is about the size of a man (≈ 2 m).
- C) The wavelength is about the size of UT stadium (≈ 500 m).
- D) The wavelength is about the size of UT campus (≈ 10 km).

$$\lambda = \frac{c}{f} = \frac{3 \times 10^8}{600 \times 10^3} \approx 500 \text{ m. So it is of the size of UT Memorial stadium.}$$

Answer **C**.