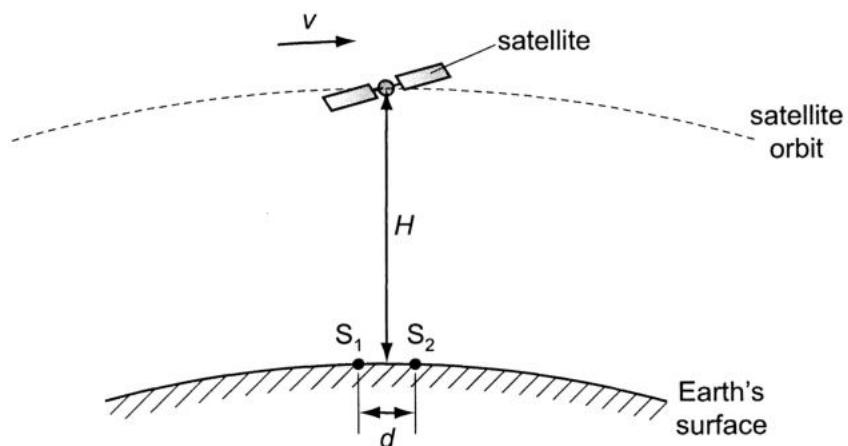


**24** Two coherent sources  $S_1$  and  $S_2$  of radio waves are separated by a distance  $d$ .

A satellite is travelling overhead in the direction shown.



The satellite, travelling at speed  $v$  and at altitude  $H$ , detects  $f$  maxima of intensity of the radio waves per unit time.

What is the wavelength of the radio waves?

A  $\frac{d}{fH}$

B  $\frac{df}{H}$

C  $\frac{df}{vH}$

D  $\frac{dv}{fH}$