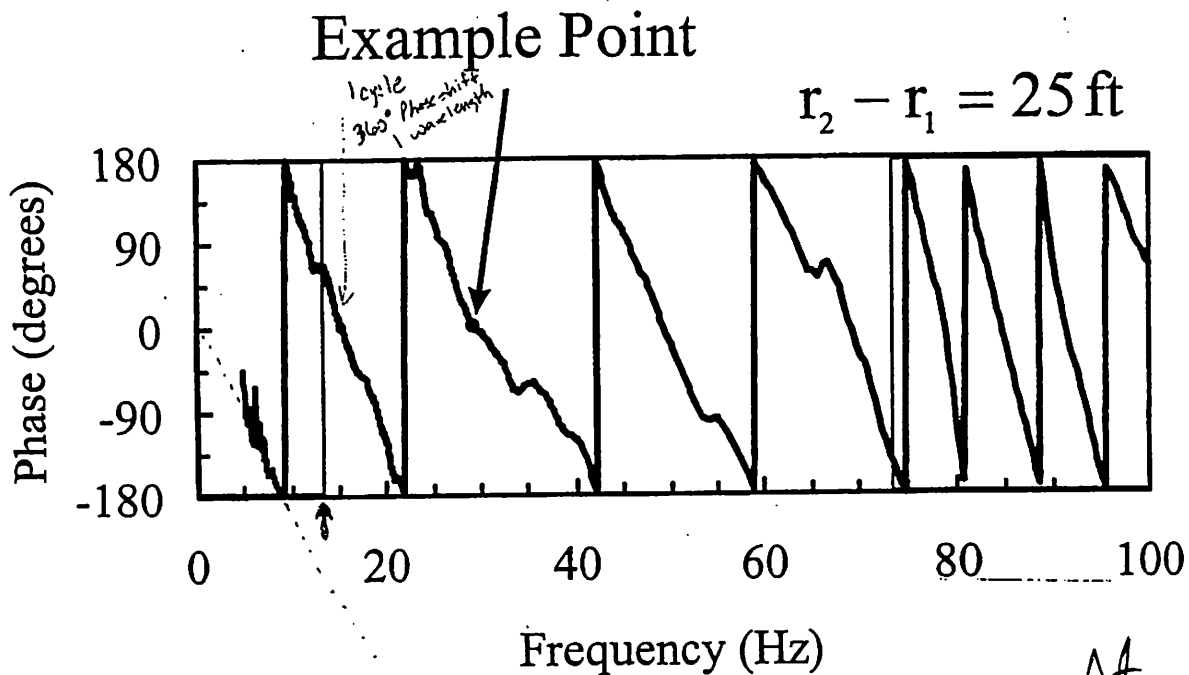


Dispersion Calculations



$$f = 29.3 \text{ Hz}$$

$$\Theta_{Y_1 Y_2} = 720^\circ = (2 \cdot 360)$$

$$\Delta t = \frac{\phi}{2\pi f}$$

$$C = V_R = \frac{\Delta x}{\Delta t} = \frac{(r_2 - r_1) 2\pi f}{\phi}$$

$$V_R = c = \frac{360^\circ \cdot f}{\Theta_{Y_1 Y_2}} (r_2 - r_1) = \frac{360^\circ \cdot 29.3 \text{ Hz}}{720^\circ} (50 \text{ ft} - 25 \text{ ft})$$

$$V_R = c = 366 \text{ ft/sec} \quad \text{rayleigh wave velocity}$$

repeat for all frequencies

$$\lambda = \frac{c}{f} = \frac{366 \text{ ft/sec}}{29.3 \text{ Hz}} = 12.5 \text{ ft}$$