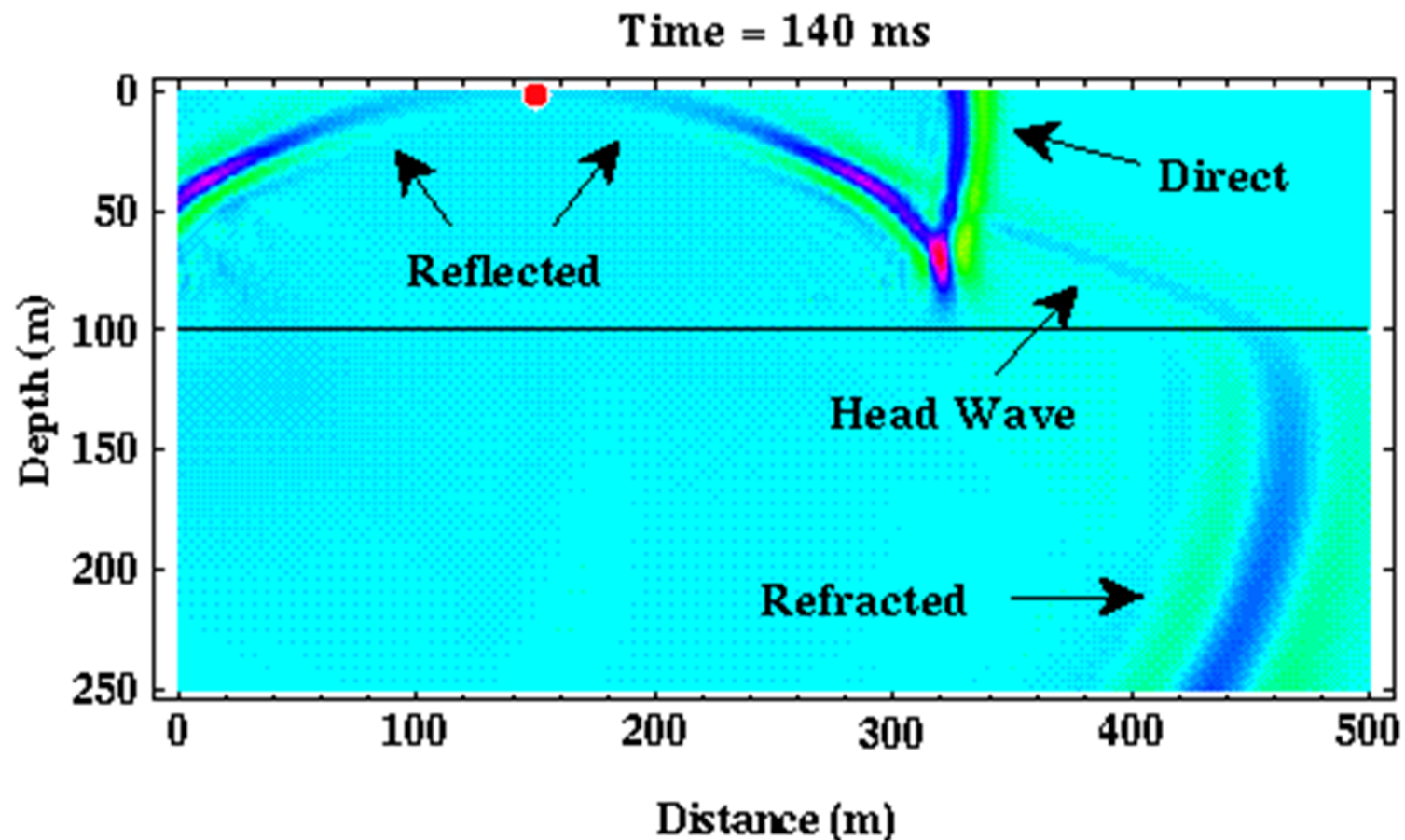


# Sísmica de Reflexión

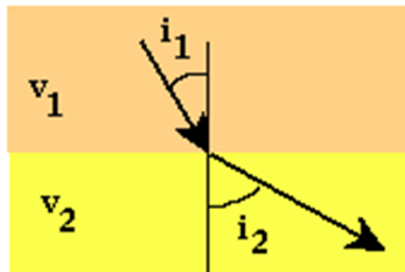


# Sísmica de Refracción

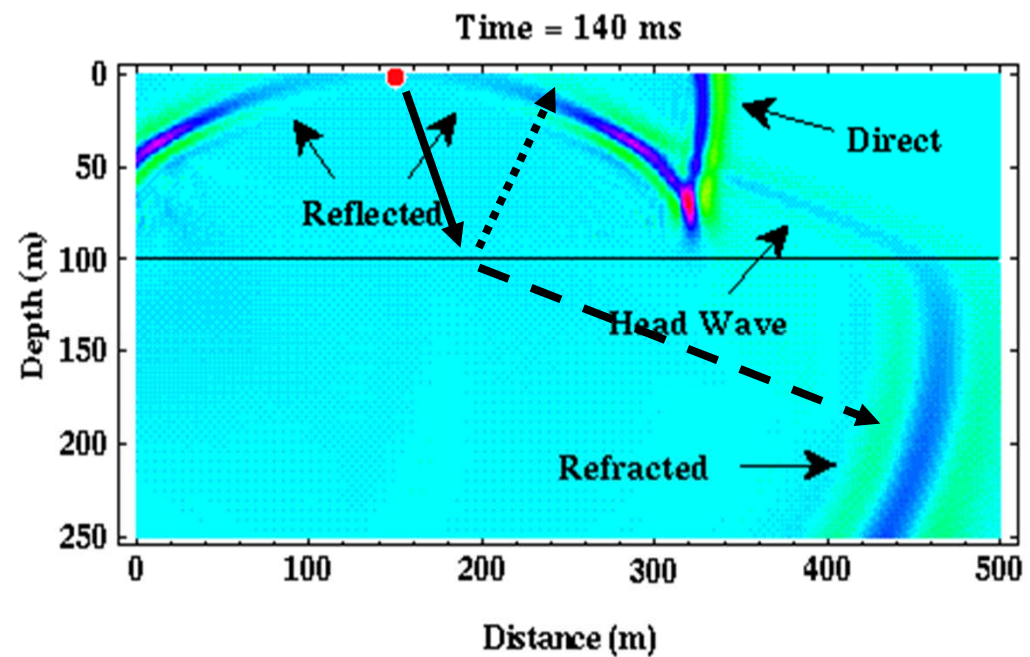
Ondas pasan de un medio de baja velocidad a otro de mayor velocidad



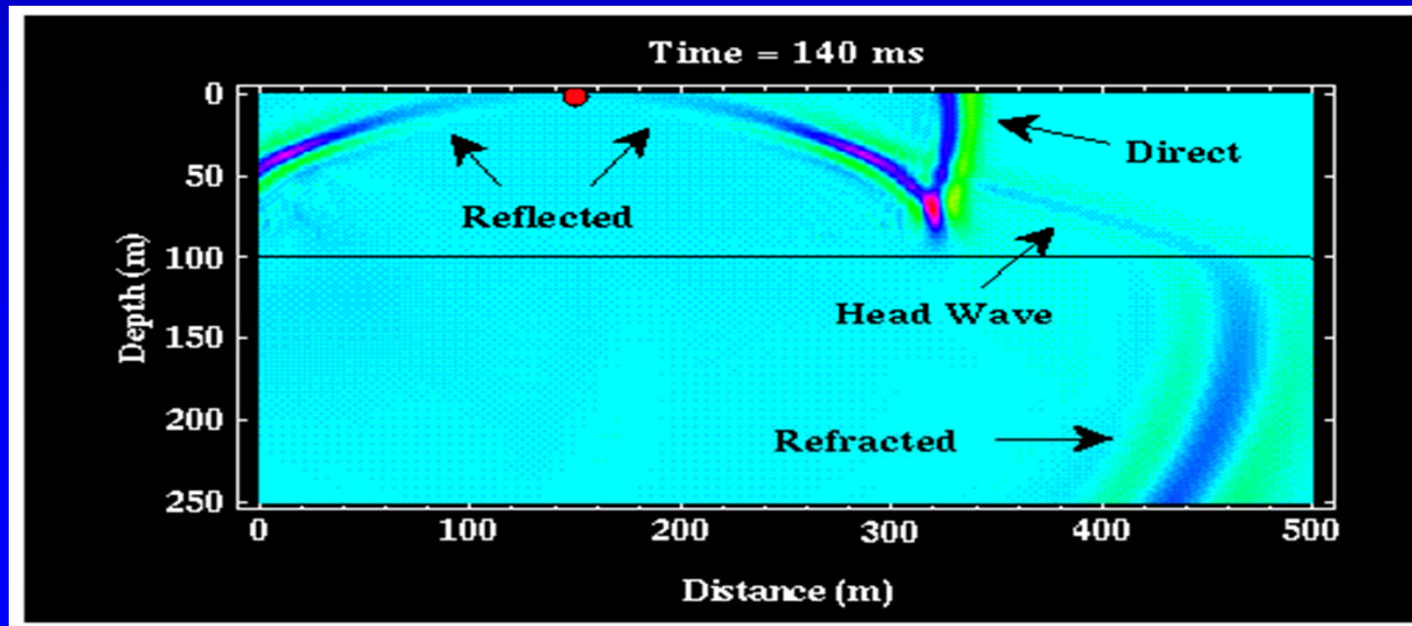
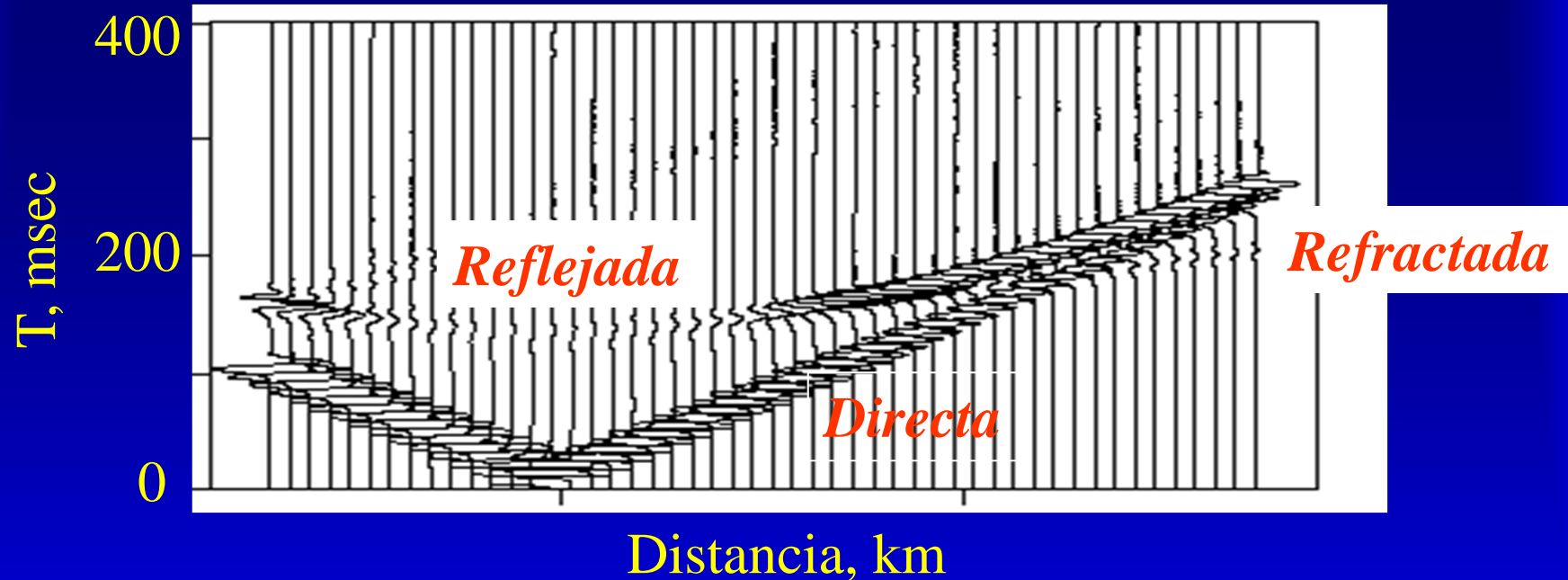
# Ley de Snell



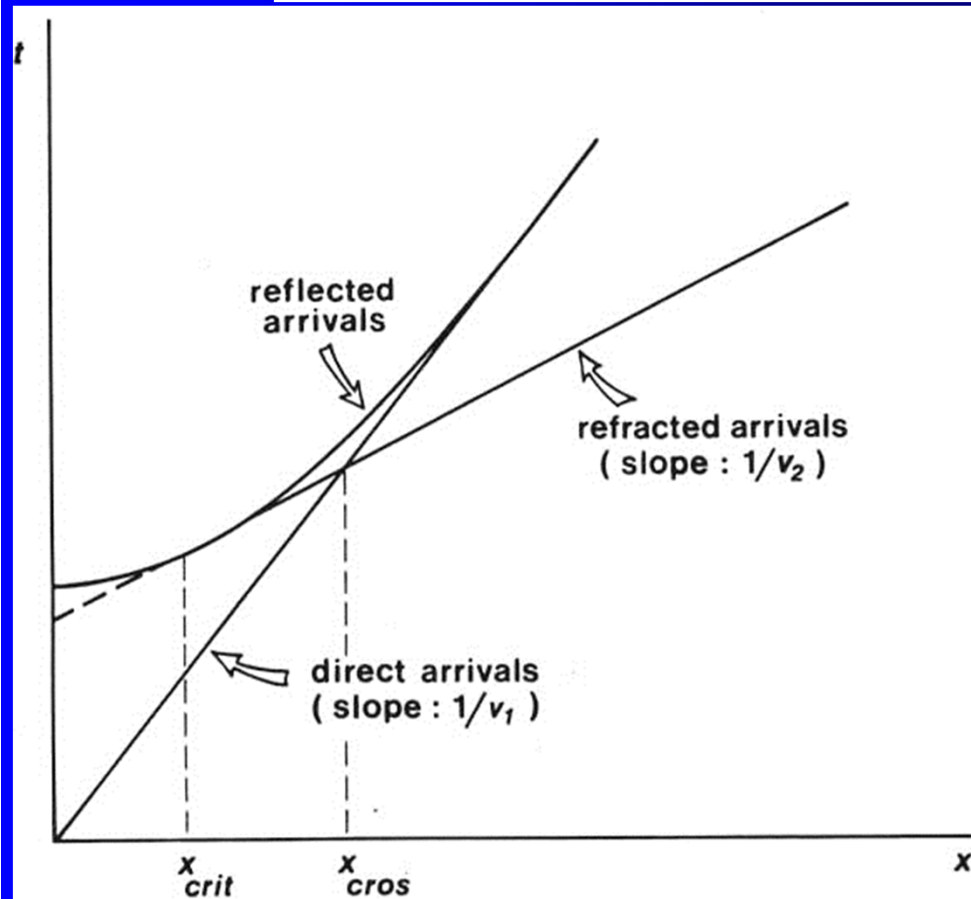
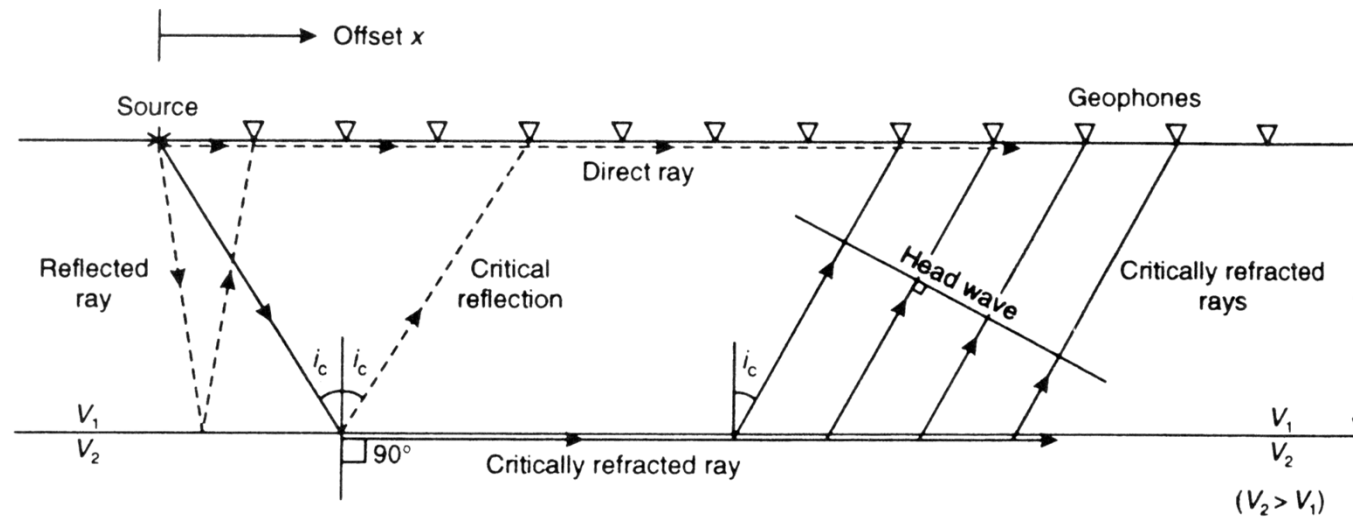
$$\frac{\sin i_1}{v_1} = \frac{\sin i_2}{v_2}$$



# Reflexión y Refracción







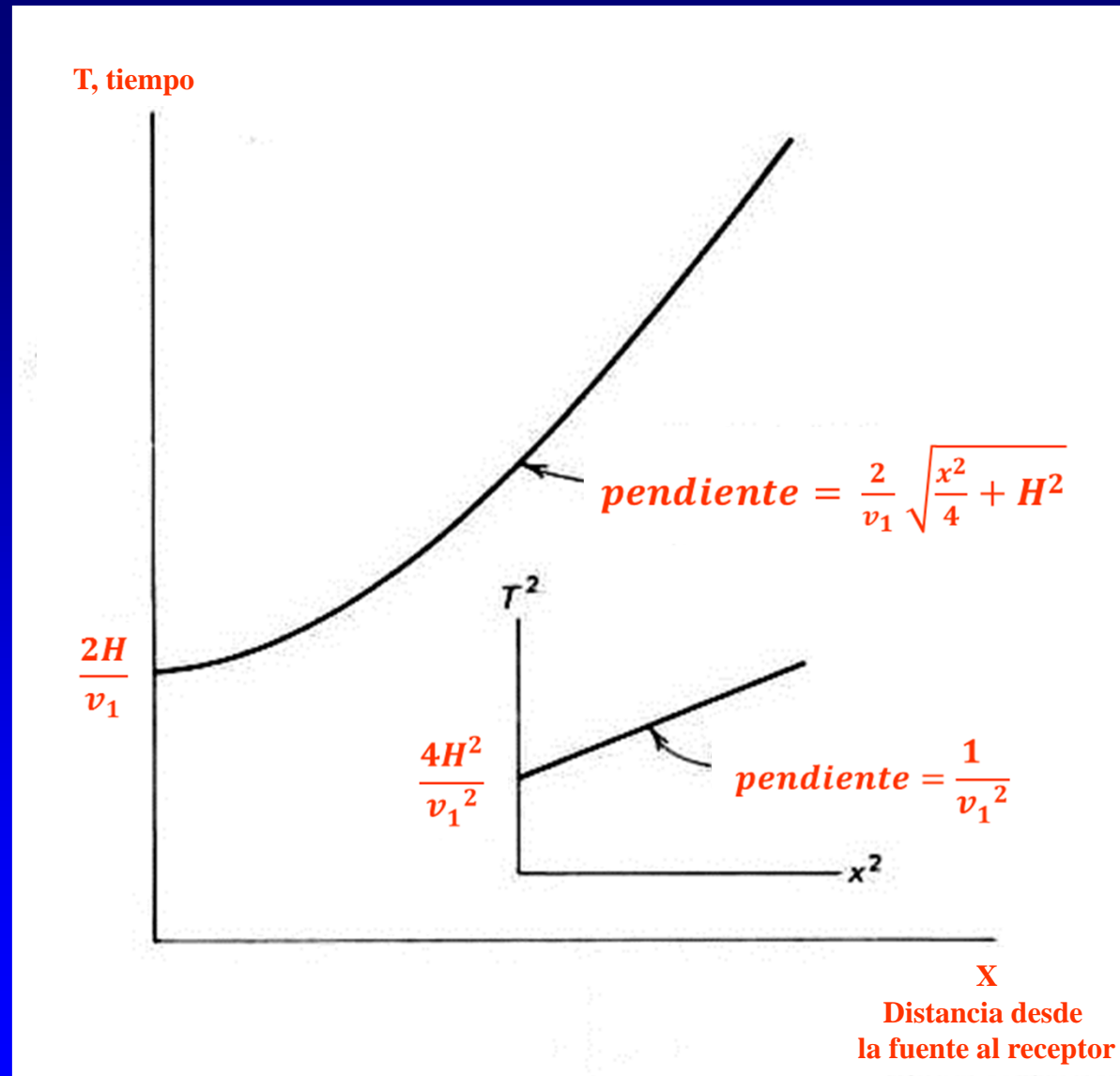
## Geometría básica de la reflexión

$$t_1 = \frac{x}{v_1}$$

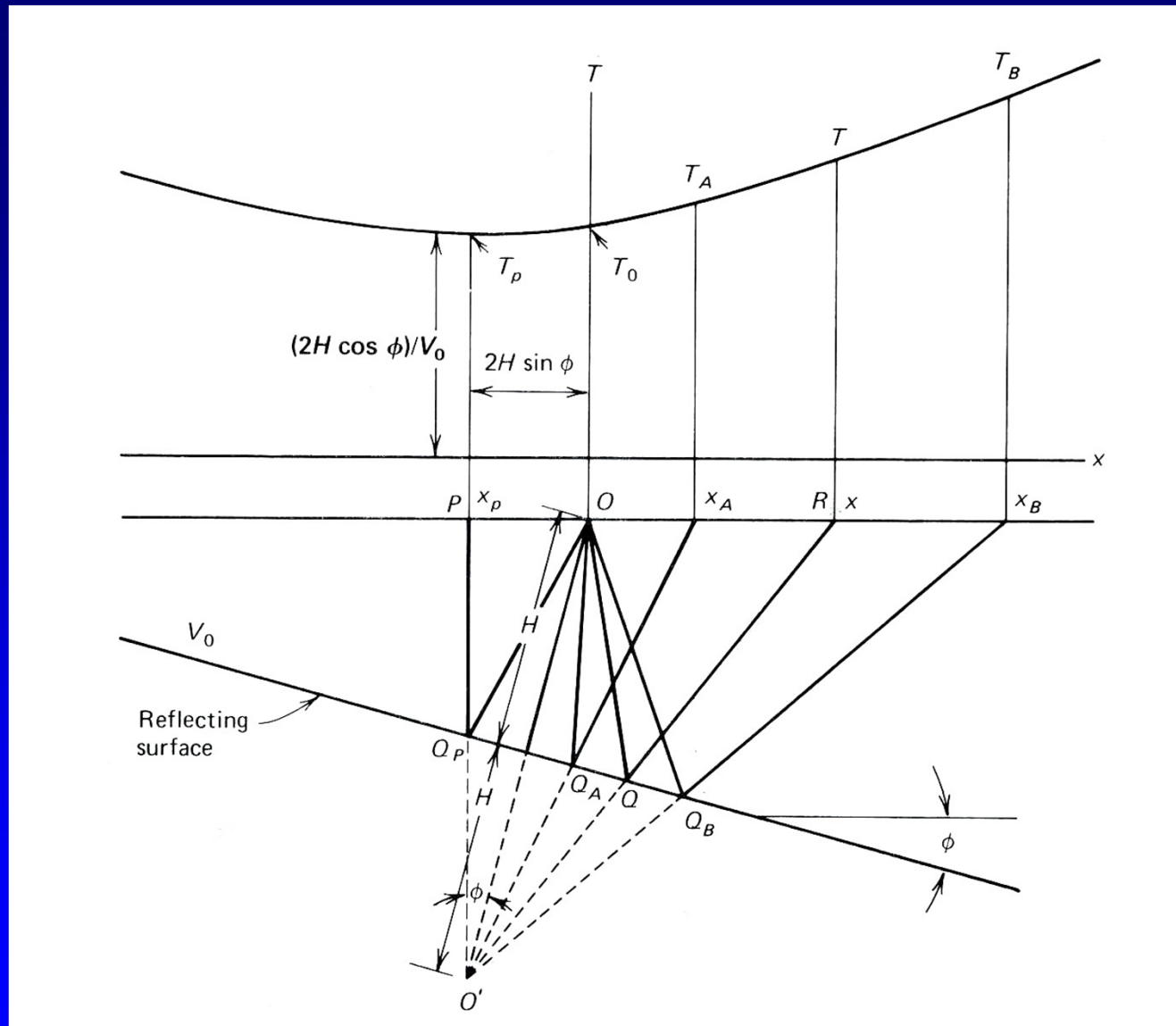
$$t_2 = \frac{2}{v_1} \sqrt{\frac{x^2}{4} + H^2}$$

$$t_3 = \frac{x}{v_2} + \frac{2H \sqrt{v_2^2 - v_1^2}}{v_1 v_2}$$

# Hipérbola de Reflexión



# Reflexión de un estrato inclinado



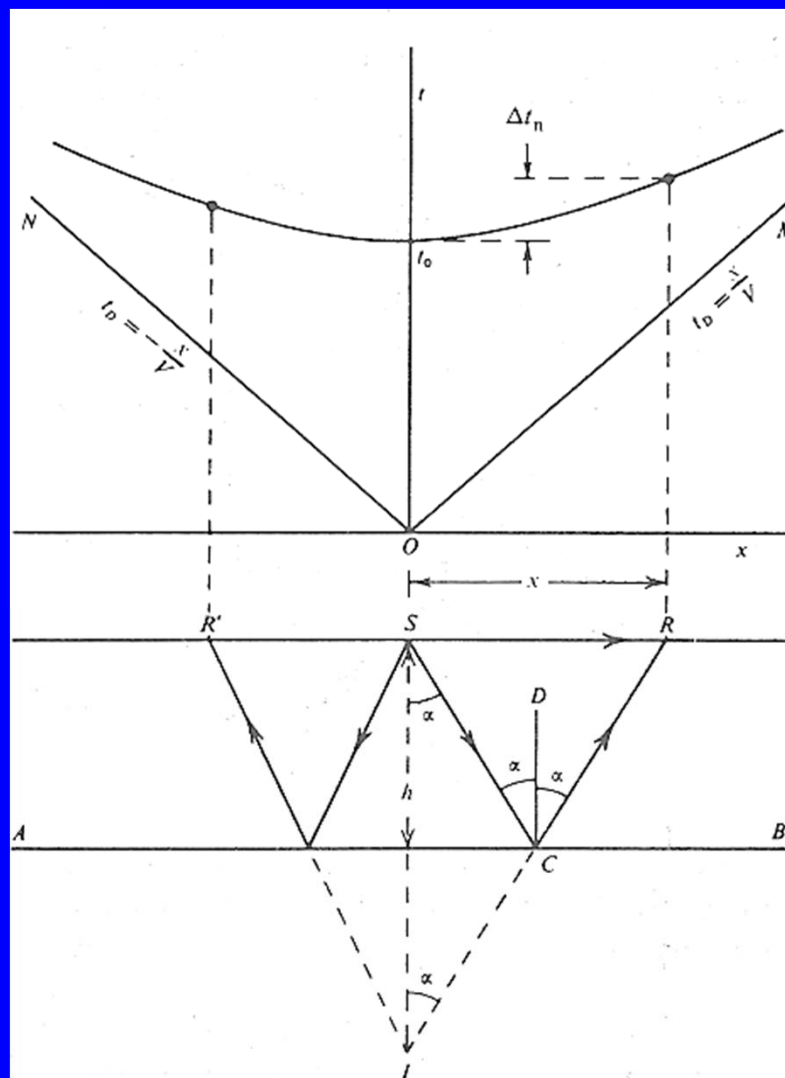
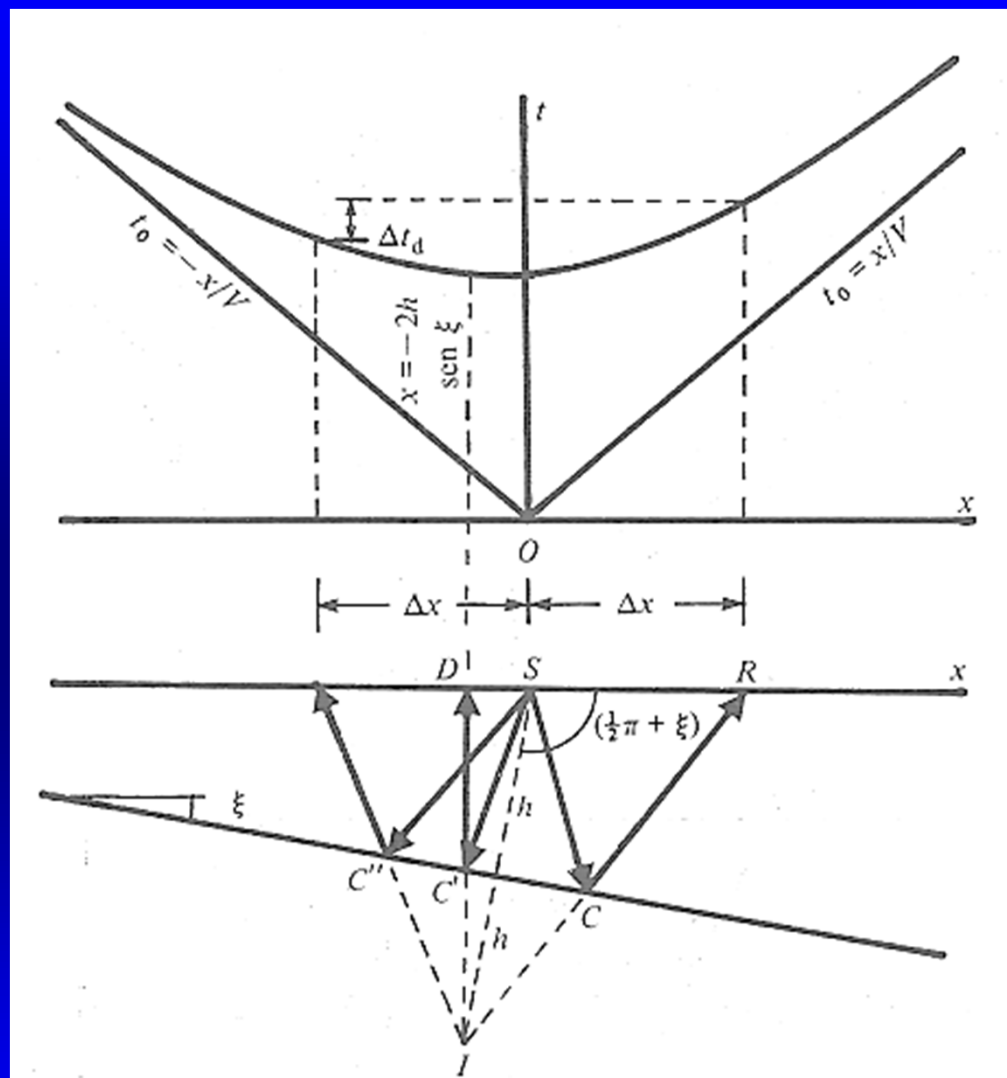
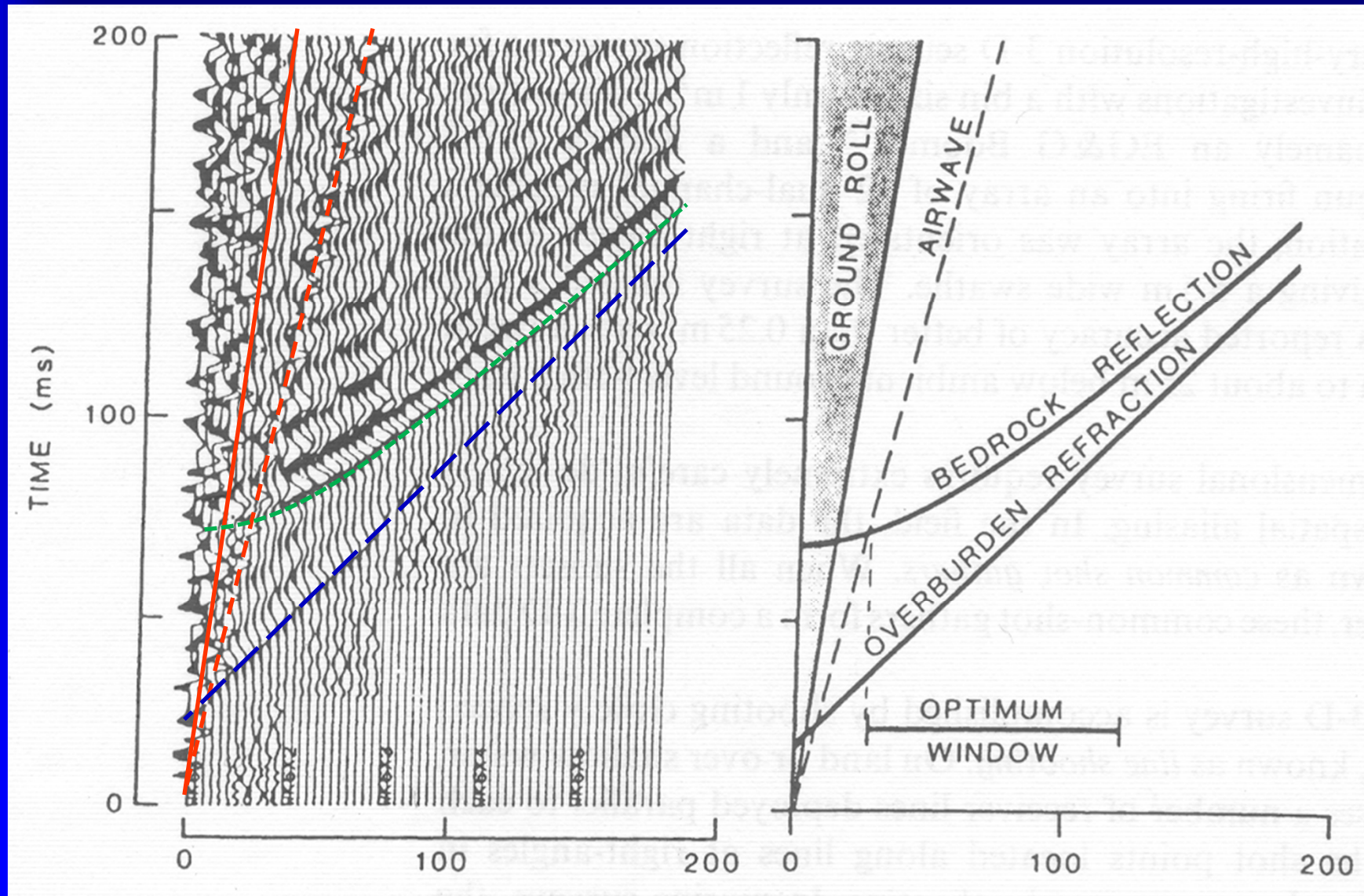


Figura 3.1 Curva de tiempo de propagación para un reflector horizontal.



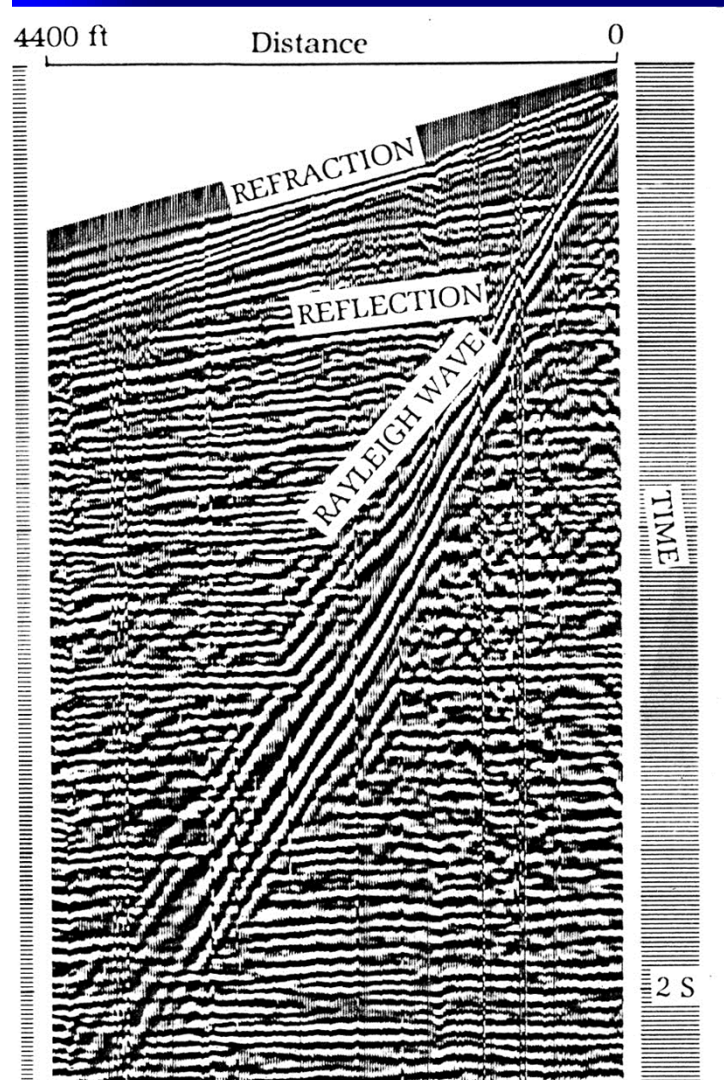


# Ejemplo del registro de un “disparo”

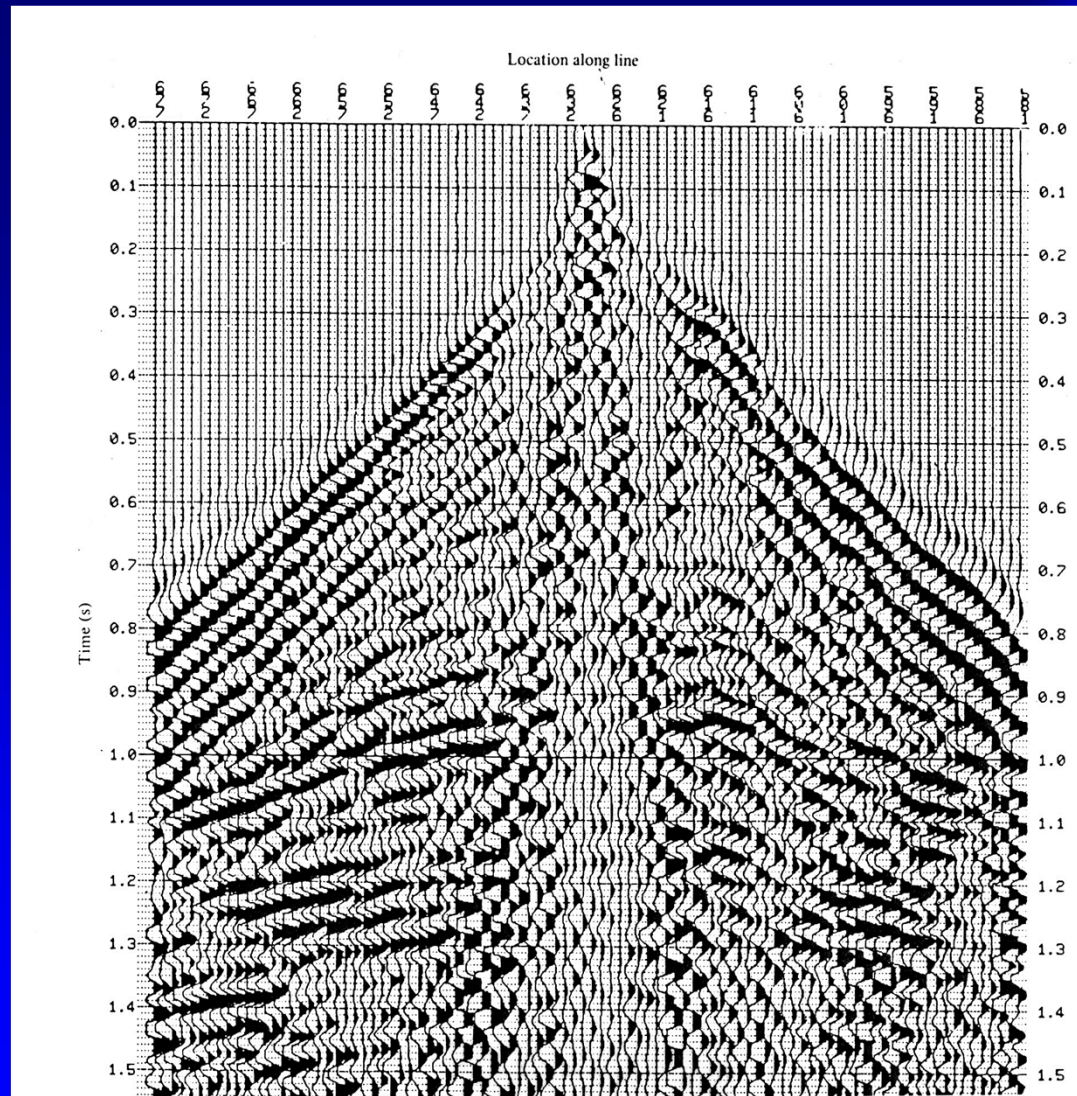




# Tipos de registro de un “disparo”

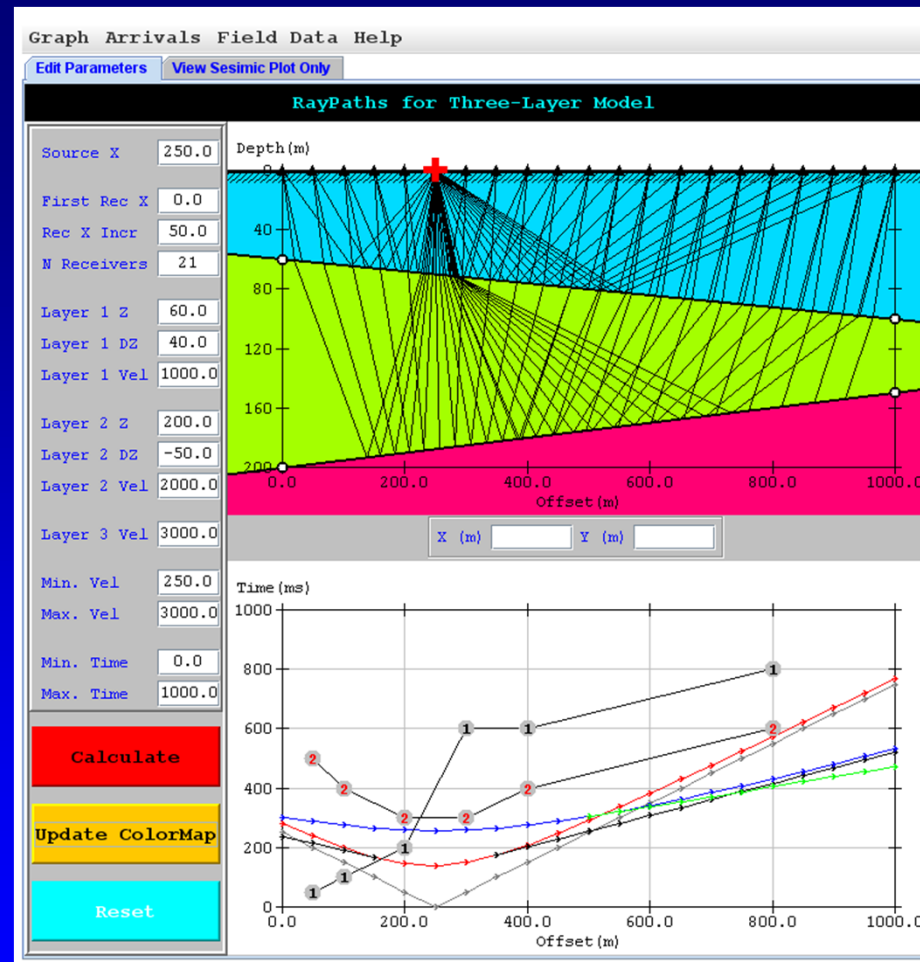


offend



split spread

# Applet de Java para simular la traza de rayos de Reflexión y de Refracción



<http://appliedgeophysics.lbl.gov/seismic/raytracing/index.html>