

Ch. 7: Correction to Equations 7.7 and 7.8

Dix's Formula (Equation 7.7) is:

$$v_n = \sqrt{\frac{V_{rms,n}^2 t_n - V_{rms,n-1}^2 t_{n-1}}{t_n - t_{n-1}}} \quad (1)$$

where v_n is the nth layer velocity and the nth later is the layer above the nth interface, t_n is the two-way travel-time to the nth layer.

$V_{rms,n}$ is the rms-velocity for the nth layer:

$$V_{rms,n} = \sqrt{\frac{x^2}{2t_{o,n}\Delta T_n}} \quad (2)$$

where ΔT_n is the normal move-out for the nth reflection the station with an offset of x , and $t_{o,n}$ is the vertical incidence two-way travel time for the nth interface.

The layer thickness (Equation 7.8) is:

$$h = v_n \frac{(t_{o,n} - t_{o,n-1})}{2} \quad (3)$$