

GEOP 501 - Fall 2017 - Homework # 3

(Due date: 22/10/2017)

Given the attached data worksheet for the T-X data of various seismic events:

- (A) Define the direct-wave event and find its velocity.
- (B) Define the head-wave event and find its velocity.
- (C) Define the primary-reflection event and find its velocity.
- (D) Define the multiple-reflection event and find its velocity.
- (E) Define the ground-roll event and find its velocity.
- (F) Compute the thickness of the first layer.
- (G) Compute the critical angle and reflection coefficient between layers 1 and 2 using the information from previous parts. Assume equal densities for layers 1 and 2.