

GEOP 415
SPRING 2010
Homework # 3
(Due on 15/5/2010)

1. Given Figures 1-3 (70 points):
 1. Indicate an unconformity of type one.
 2. Indicate an unconformity of type two.
 3. Indicate the correlative conformity of an unconformity.
 4. Indicate a divergent seismic facies.
 5. Indicate a flat spot.
 6. Indicate a bright spot.
 7. Indicate an erosional truncation.
 8. Indicate a sigmoidal seismic facies.
 9. Indicate an onlap.
 10. Indicate a toplap.
 11. Indicate a downlap.
 12. Indicate a full seismic sequence.
 13. Indicate a single system tract and state its type.

2. Answer the following questions:
 - a. Figure 3 (15 points):
 - i. What was the depositional environment of the dipping layers in Figure 3?
 - ii. How did you know?
 - iii. Was the relative sea level rising, falling, or at standstill?
 - b. Figure 2 (15 points):
 - i. Is this a land or marine seismic section?
 - ii. How did you know?
 - iii. If marine, calculate the TWTT to the sea floor on the right end of this figure?

Figure 1

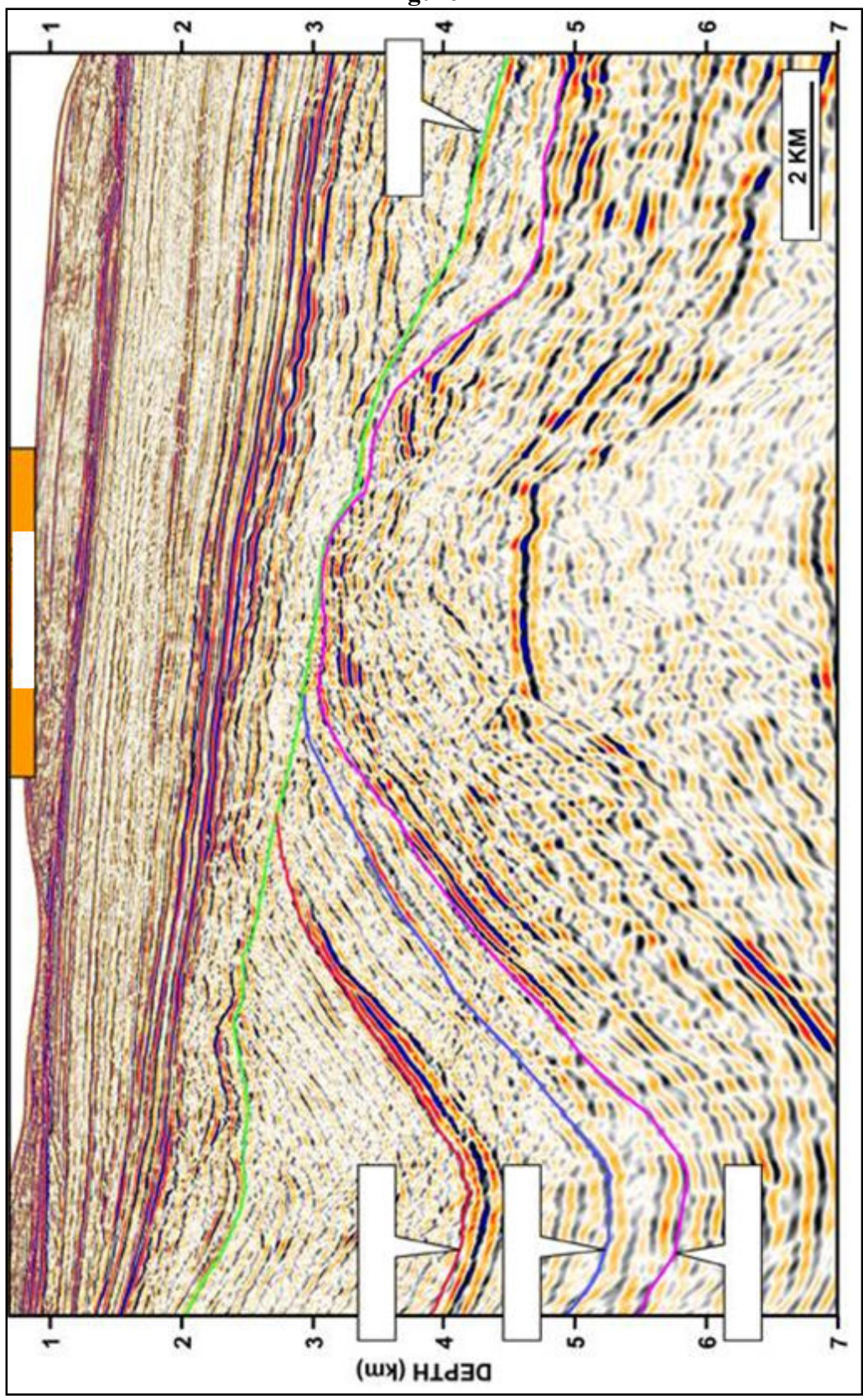


Figure 2

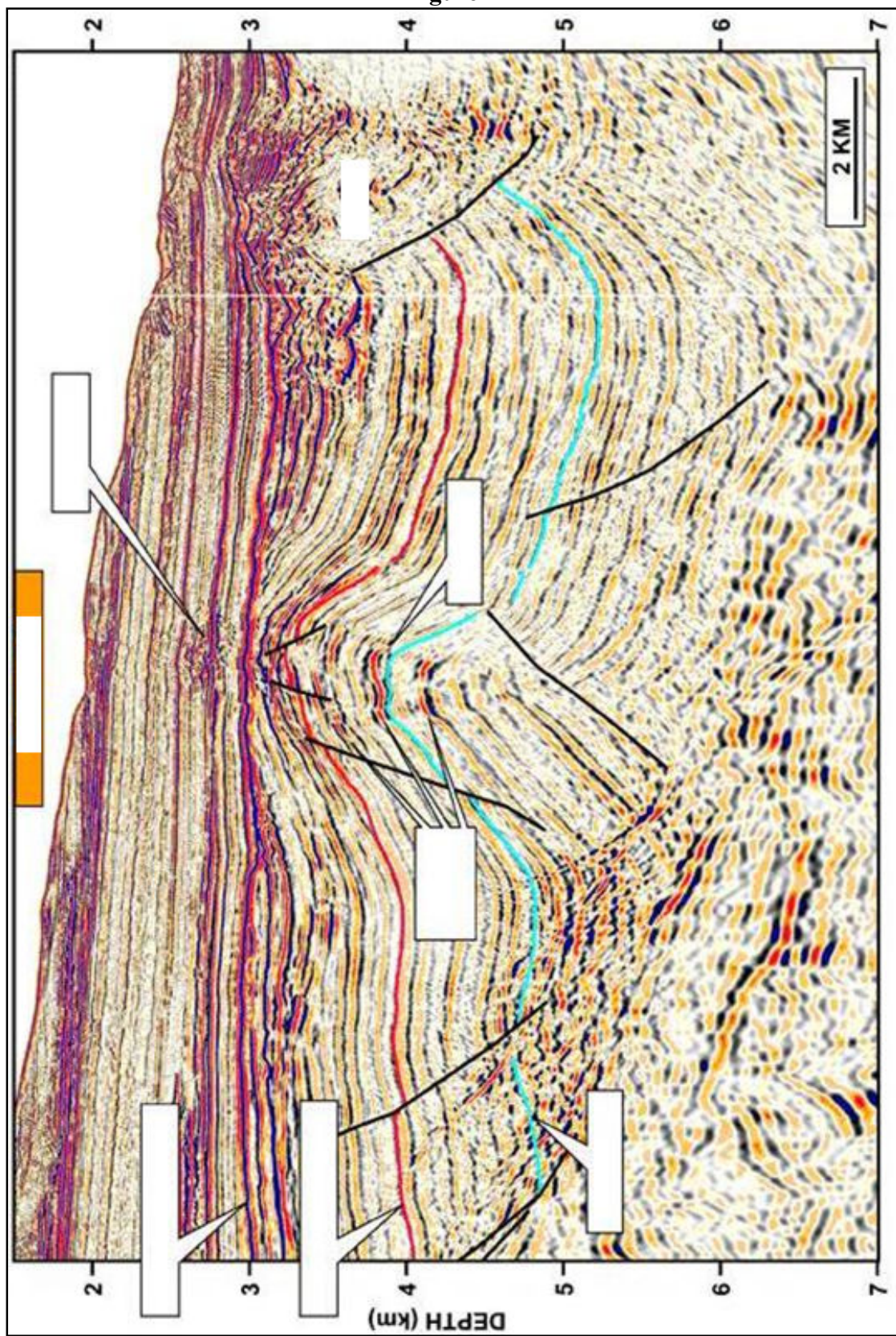


Figure 3

