

Homework A.1 – 2D Marine Seismic Geometry

Given the following 2D marine seismic geometry configuration:

- Near trace number = 1
- Far trace number = 96
- Shot interval = 25 m
- Group interval = 25 m
- Near offset = 85 m
- First shot = 101, last shot = 1001
- First CDP = 1

Determine the geometry based on this seismic configuration:

1. What is the mid-point spacing?
2. What is the nominal (full) fold achieved with this configuration?
3. Assuming the first mid-point on the line is numbered 1001, at which mid-point is the nominal (full) fold reached?
4. What is the offset increment within a mid-point?
5. What is the total number of mid-points along the line?
6. How many traces are within a mid-point for the full-fold CDP?