

SMS 491, 2012, Sounds in the ocean
Assignment 5. Ray tracing.

Using a ray tracing routine such as 'ray_trace.m':

1. Generate several rays to see how their path varies based on initial depth and direction (relative to the horizontal).
2. Repeat with a file of depth and sound speeds (e.g. the one you saved earlier).
3. Evaluate how daily warming can affect sound propagation by using two profiles 100m in depth. Compare ray propagation of an isothermal surface mixed layer and a layer with T increasing from 30m to the surface by 2°C.