receiver depth = 30 m receiver depth = 90 m SOUND SPEED SOURCE n = 234 events n = 159 events =HYCOM Baseline Chosen Weights 1445 MINIMAL BOUNCE CRITERIA Minimal bounce 1440 NEAREST BOUNCE CRITERIA X. Direct path 1 bounce 2 bounces 3 bounces 1435 4 bounces NAIVE CALCULATION From GPS and modem data ± 1430 п 1425 1.05 1.1 1.15 1.2 1.25 1 1.05 1.1 1.15 1.2 1.25 one way travel time [s] one way travel time [s]

Group velocity predictions for a source depth = 20 m