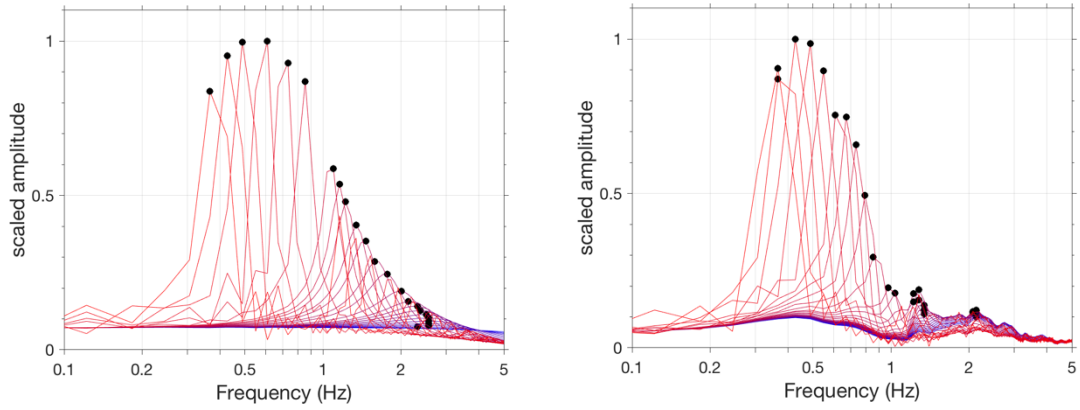


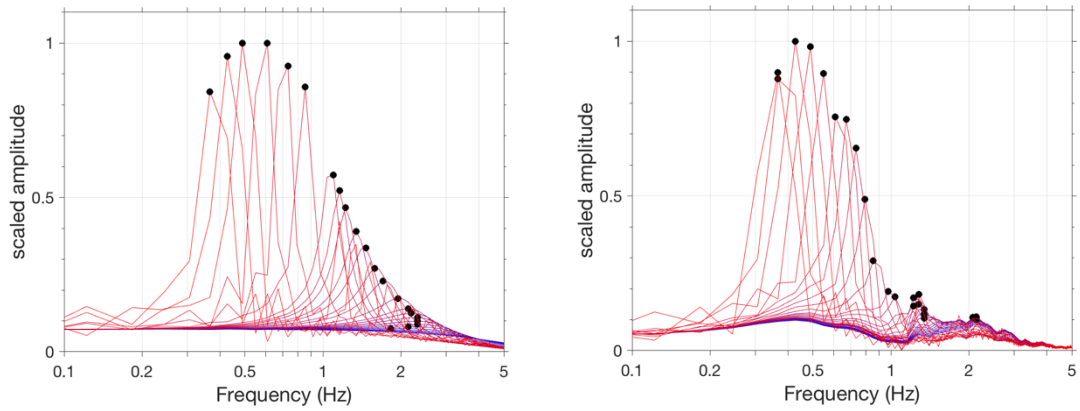
Additional file 2:

The scaled amplitude spectrum of infrasound waves estimated from the FDTD calculations. Dots indicate the peak frequencies under each calculation condition. The variation in line colors from blue to red is equivalent to the change in the conduit length from short to long.

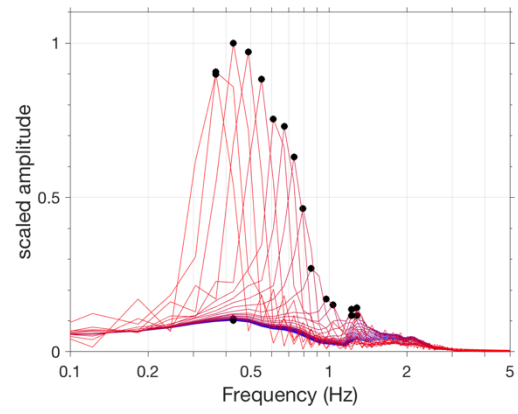
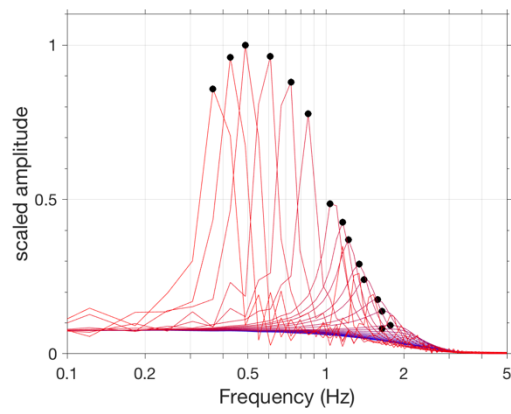
(a) $\tau=0.16$ s without (left) and with (right) consideration of the topography



(b) $\tau=0.31$ s without (left) and with (right) consideration of the topography



(c) $\tau=0.78$ s without (left) and with (right) consideration of the topography



(d) $\tau=1.55$ s without (left) and with (right) consideration of the topography

