

Method	Number of wavefield propagations	Number of Green's functions to store
Direct computation	$N_x N_y N_\omega$	$M_x M_y M_z N_x N_y N_\omega$
Plane-wave, receiver-side	$(1 + N_{p_{r_x}} N_{p_{r_y}}) N_s N_\omega$	0
Plane-wave, simultaneous	$N_{p_{s_x}} N_{p_{s_y}} N_{p_{r_x}} N_{p_{r_y}} N_\omega$	0
Random, receiver-side	$(1 + N_{\text{realize}}) N_s N_\omega$	0
Random, simultaneous	$2 N_{\text{realize}} N_\omega$	0