

S4 Table. Grid search results: ESS of MH. We ran each MH algorithm with 3 chains for 5000 iterations and computed the ESS after discarding the first 2500 iterations. The reference variances of the filter posteriors are reported in [S5 Table](#) and [S6 Table](#).

Scale factor	90 IDs	270 IDs	810 IDs	2430 IDs	2400 (EGF)
1.4	71	24	4	3.3	3.14
1.2	71	15	7	3.6	3.32
1	115	12	11	3.3	3.04
0.8	63	16	6	3.2	3.22
0.6	82	7	6	3.6	3.13
0.4	63	8	6	3.8	3.08
0.2	52	5	5	3.4	3.29