

Supplemental Digital Content

Parks RM, Nunez Y, Balalian A, Gibson EA, Hansen J, Raaschou-Nielsen O, Ketzel M, Khan J, Brandt J, Vermeulen R, Peters S, Goldsmith J, Re DB, Weisskopf MG, Kioumourtzoglou MA, Long-term traffic-related air pollutant exposure and amyotrophic lateral sclerosis diagnosis in Denmark: A Bayesian hierarchical analysis.

eTable 1. Summary of 5-year average pollutant concentrations of controls by socioeconomic status (all in $\mu\text{g}/\text{m}^3$).

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eFigure 1. Average concentration of included pollutants (EC, NO_x , CO, $\text{PM}_{2.5}$, O_3) in 1 km x 1 km resolution for year 2000 (middle of study period 1989-2013).

eFigure 2. Sensitivity of percentage change in odds of ALS diagnosis to (B) inclusion of O_3 ; (C) inclusion of parish-level SES; (D-F) single-pollution models; (G-N) various hyperpriors; and (O-P) more iterations per chain.

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Summary of 5-year average pollutant concentrations of controls by socioeconomic status (all in $\mu\text{g}/\text{m}^3$).

Pollutant	Overall, N = 19,298 ¹	Group 1 (Highest), N = 1,886 ¹	Group 2, N = 2,340 ¹	Group 3, N = 3,575 ¹	Group 4, N = 5,522 ¹	Group 5 (Lowest), N = 3,702 ¹	Group 9 (Unknown), N = 2,273 ¹
EC	0.85 (0.42)	0.89 (0.42)	0.84 (0.42)	0.79 (0.37)	0.85 (0.42)	0.84 (0.41)	0.92 (0.48)
NO_x	27 (20)	29 (20)	27 (20)	25 (17)	27 (20)	27 (19)	30 (23)
CO	237 (105)	244 (103)	233 (104)	225 (89)	237 (104)	237 (102)	258 (130)
non-EC PM_{2.5}	11.76 (2.37)	11.75 (2.21)	11.54 (2.24)	11.58 (2.30)	11.69 (2.34)	11.93 (2.43)	12.13 (2.62)
O₃	52.0 (6.0)	51.1 (5.9)	52.0 (5.9)	53.0 (5.6)	51.9 (5.9)	52.2 (5.9)	50.7 (6.4)

¹Mean (SD)

eTable 2. Summary of 5-year average pollutant concentrations of controls by civil status (all in $\mu\text{g}/\text{m}^3$).

Pollutant	Overall, N = 19,298 ¹	Married, N = 11,747 ¹	Divorced, N = 2,270 ¹	Widower, N = 3,498 ¹	Never married, N = 1,783 ¹
EC	0.85 (0.42)	0.81 (0.37)	0.92 (0.48)	0.90 (0.48)	0.91 (0.46)
NO_x	27 (20)	25 (17)	31 (23)	30 (23)	30 (22)
CO	237 (105)	228 (92)	252 (124)	252 (123)	247 (114)
non-EC PM_{2.5}	11.76 (2.37)	11.68 (2.33)	11.71 (2.33)	12.09 (2.51)	11.63 (2.31)
O₃	52.0 (6.0)	52.5 (5.6)	50.8 (6.4)	51.3 (6.5)	51.1 (6.3)

¹Mean (SD)

eTable 3. Summary of 5-year average pollutant concentrations of controls by last reported place of residence (all in $\mu\text{g}/\text{m}^3$).

Pollutant	Overall, N = 19,298 ¹	Greater Copenhagen, N = 6,450 ¹	Big cities of Denmark, N = 3,085 ¹	Rest of Denmark, N = 9,759 ¹	Greenland, N = 4 ¹
EC	0.85 (0.42)	1.39 (0.65)	0.87 (0.38)	0.75 (0.32)	0.59 (0.14)
NO_x	27 (20)	53 (33)	28 (18)	23 (15)	15 (4)
CO	237 (105)	379 (184)	237 (91)	216 (77)	181 (20)
non-EC PM_{2.5}	11.76 (2.37)	12.96 (2.67)	11.80 (2.33)	11.53 (2.29)	10.42 (1.49)
O₃	52.0 (6.0)	43.2 (6.3)	51.5 (5.2)	53.7 (5.1)	58.3 (4.7)

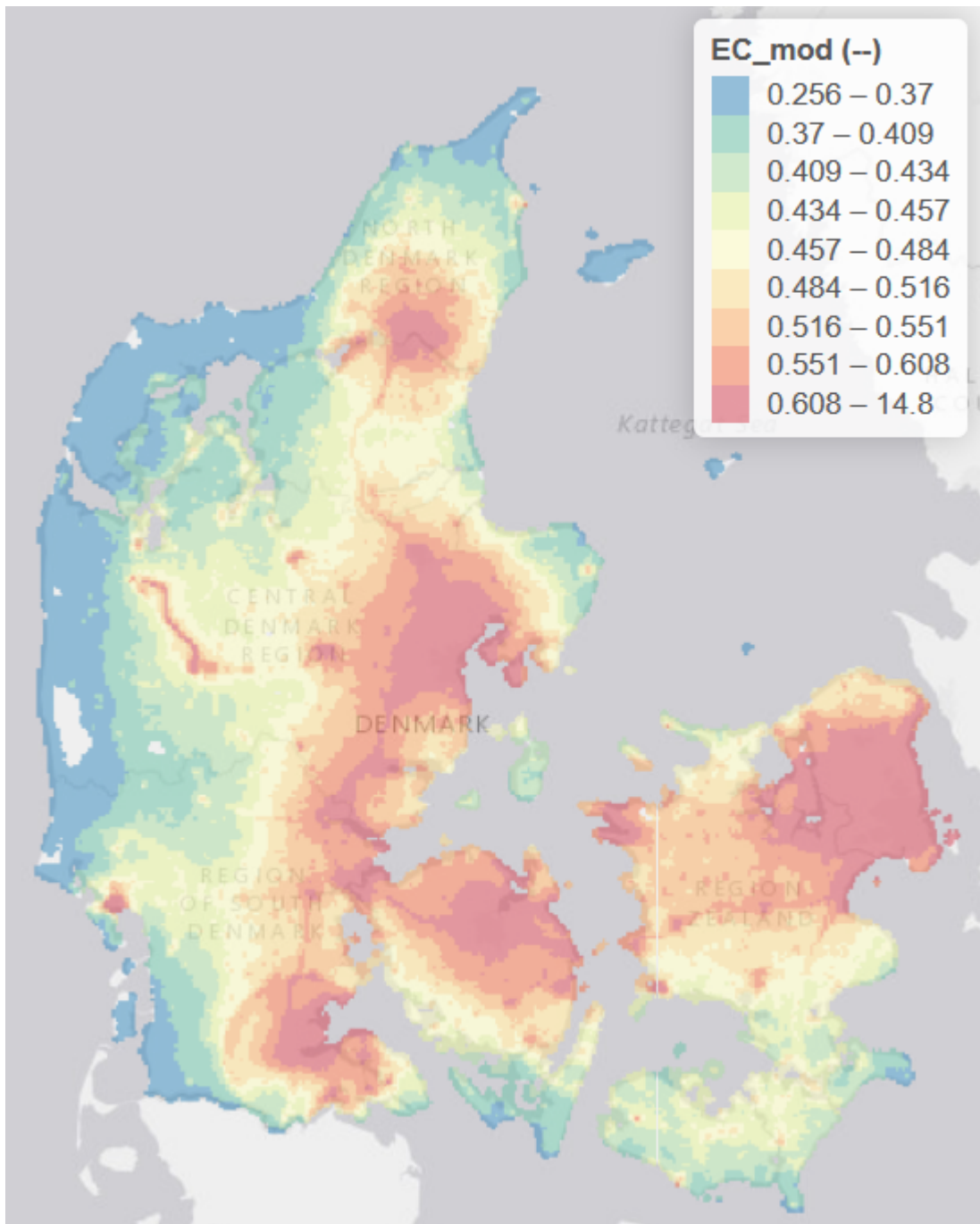
¹Mean (SD)

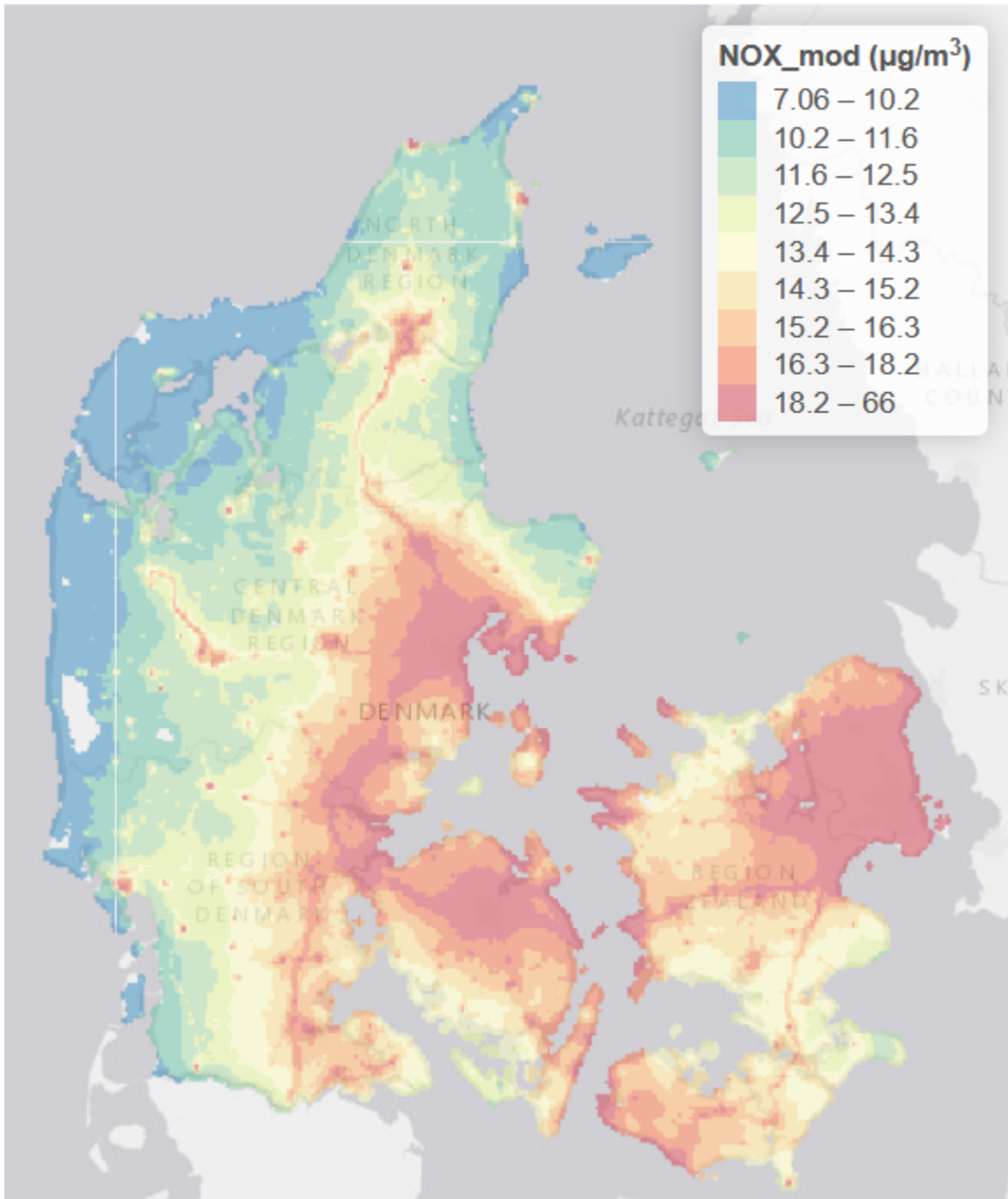
eTable 4. Summary of 5-year average pollutant concentrations by place of birth (all in $\mu\text{g}/\text{m}^3$).

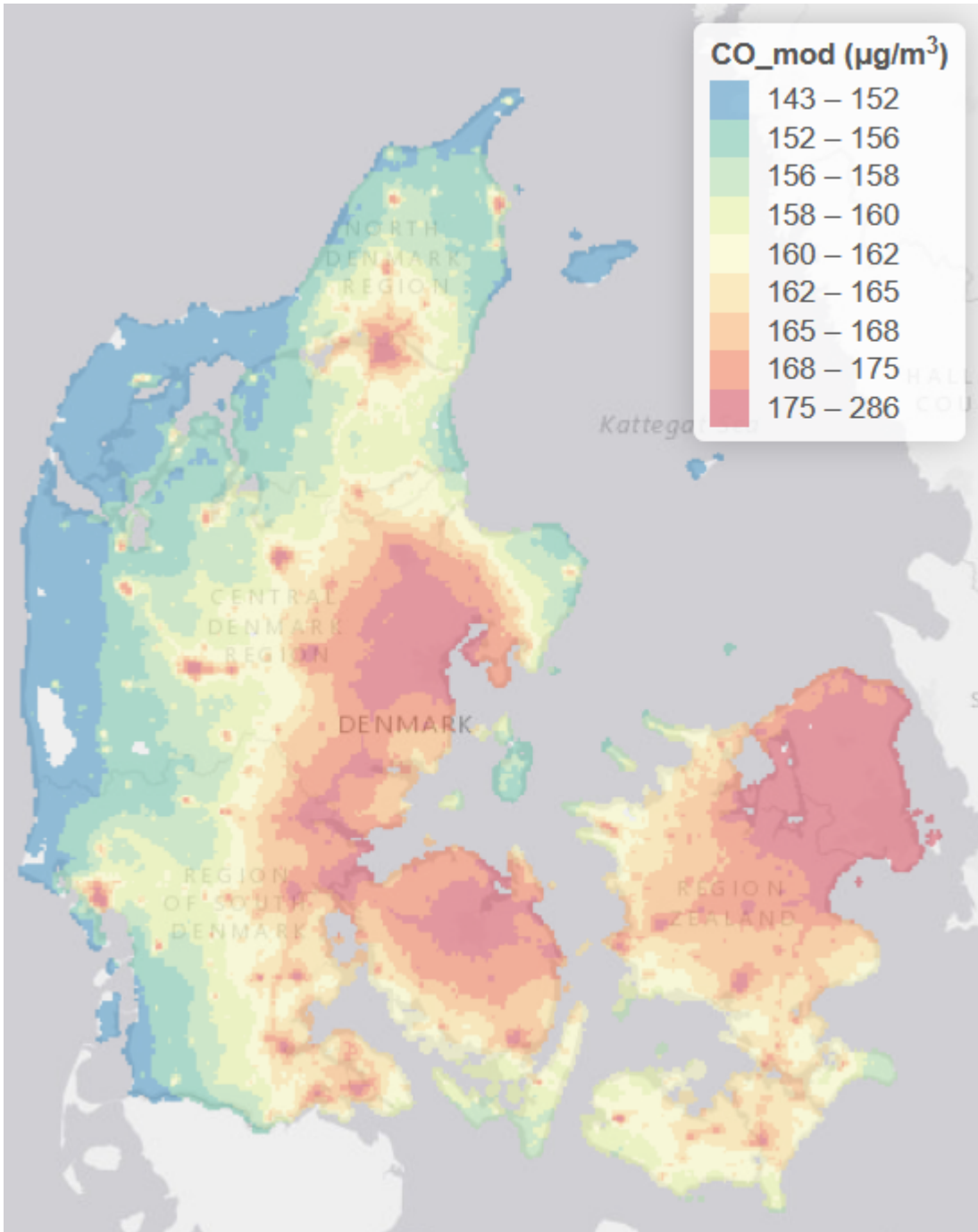
Pollutant	Overall, N = 19,298 ¹	Greater Copenhagen, N = 4,027 ¹	Big cities of Denmark, N = 6,566 ¹	Rest of Denmark, N = 7,461 ¹	Greenland, N = 190 ¹	Foreign, N = 943 ¹	Unknown, N = 111 ¹
EC	0.85 (0.42)	1.01 (0.51)	0.83 (0.40)	0.76 (0.35)	0.92 (0.36)	0.97 (0.43)	0.84 (0.36)
NO_x	27 (20)	35 (25)	26 (18)	23 (16)	30 (17)	33 (22)	28 (18)
CO	237 (105)	275 (136)	230 (96)	220 (86)	254 (92)	256 (111)	242 (96)
non-EC PM_{2.5}	11.76 (2.37)	12.07 (2.39)	11.66 (2.35)	11.68 (2.38)	12.07 (2.32)	11.59 (2.12)	12.32 (2.68)
O₃	52.0 (6.0)	48.9 (6.4)	52.4 (5.5)	53.6 (5.3)	50.3 (5.6)	49.3 (5.8)	52.2 (5.8)

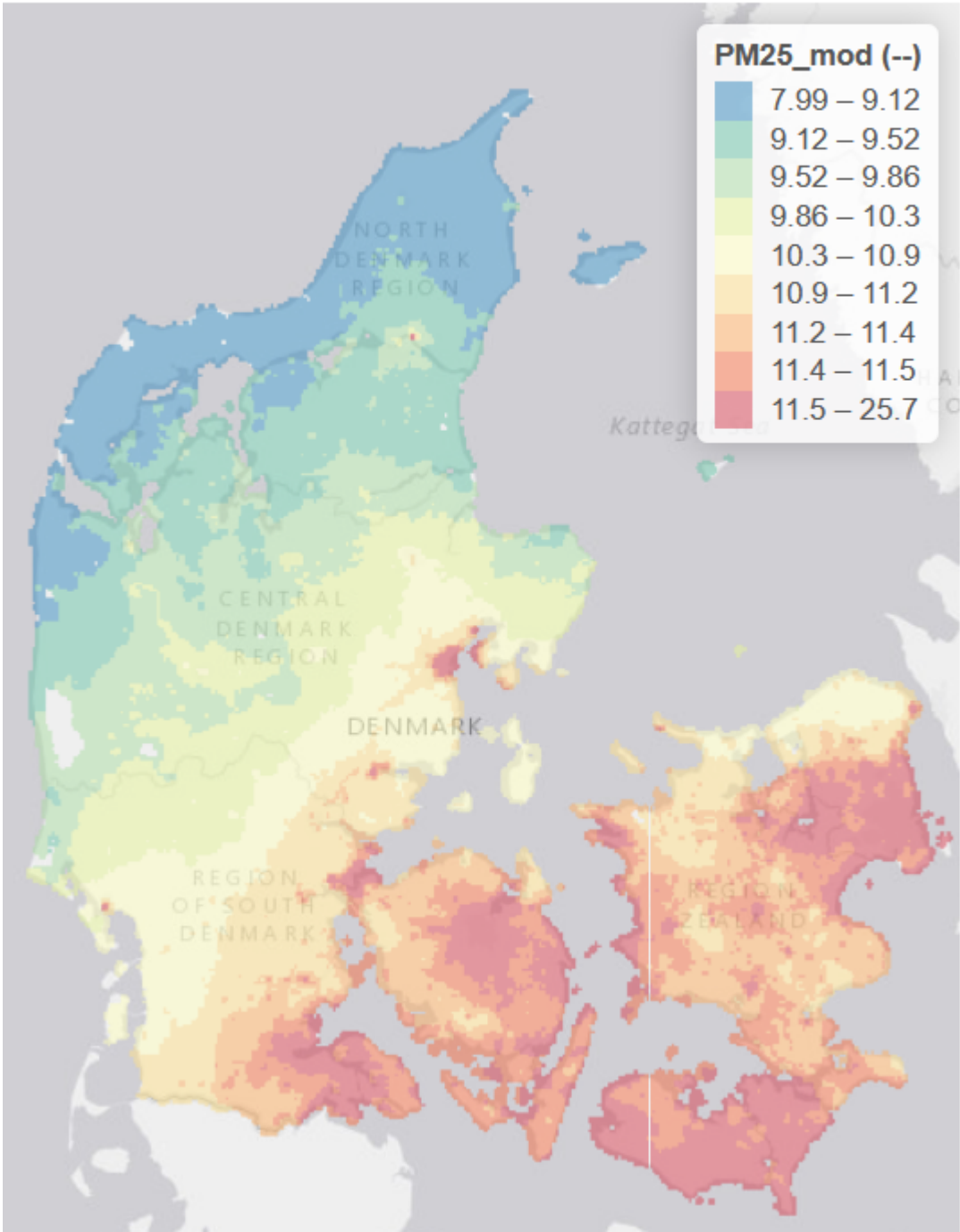
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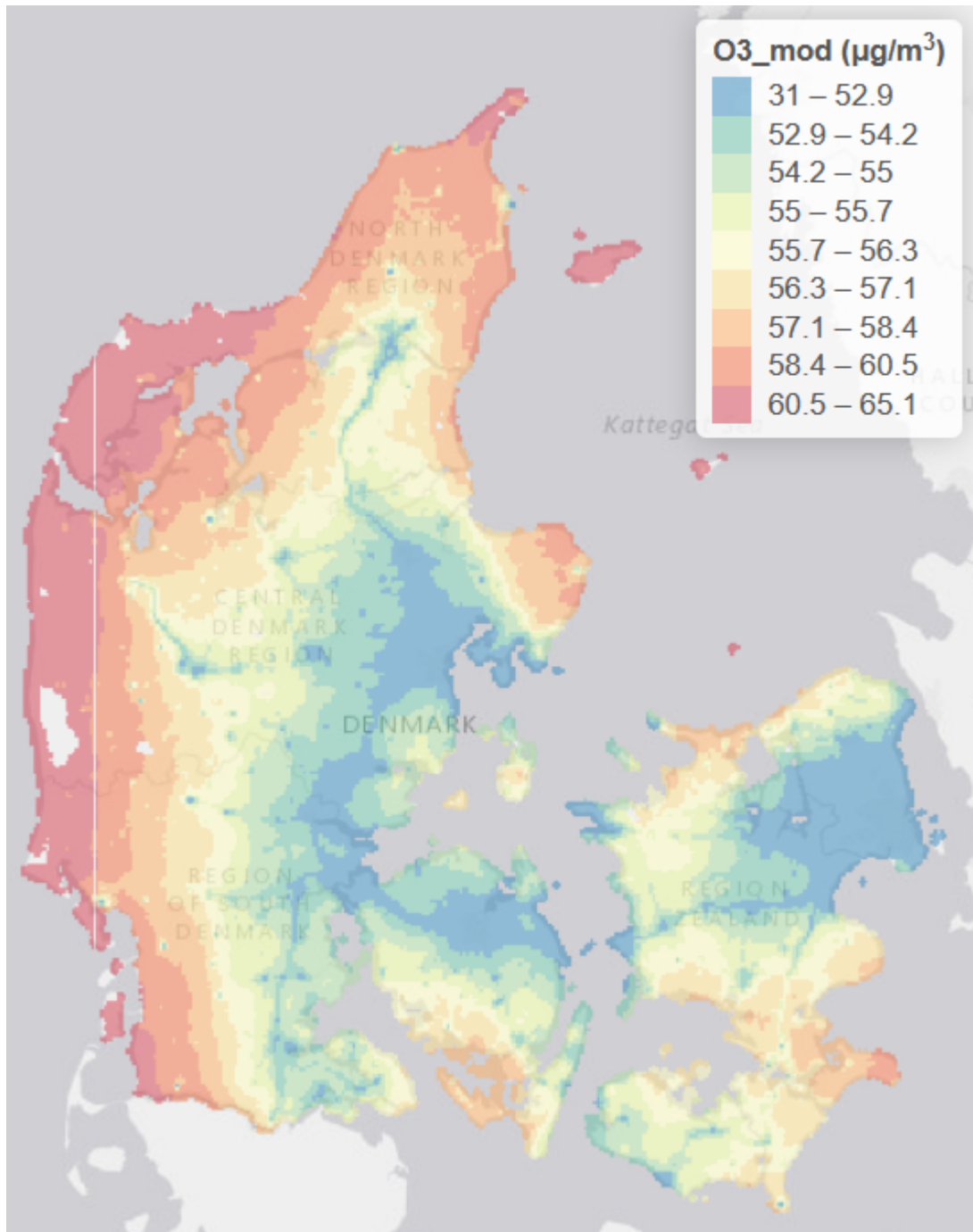
eFigure 1. Average concentration of included pollutants (EC, NO_x, CO, PM_{2.5}, O₃) in 1 km x 1 km resolution for year 2000 (middle of study period 1989-2013).











eFigure 1. Sensitivity of percentage change in odds of ALS diagnosis to (B) inclusion of O₃; (C) inclusion of parish-level SES; (D-F) single-pollution models; (G-N) various hyperpriors; and (O-P) more iterations per chain.

