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Boundary condition control on inter-aquifer flow in the subsurface of Berlin (Germany) – new insights from 3-D numerical modelling

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These supplementary figures show the results of the presented paper for the entire model area. We chose to use different visualizations in the manuscript because we think that these were more illustrative. However, we include these here for completeness sake.

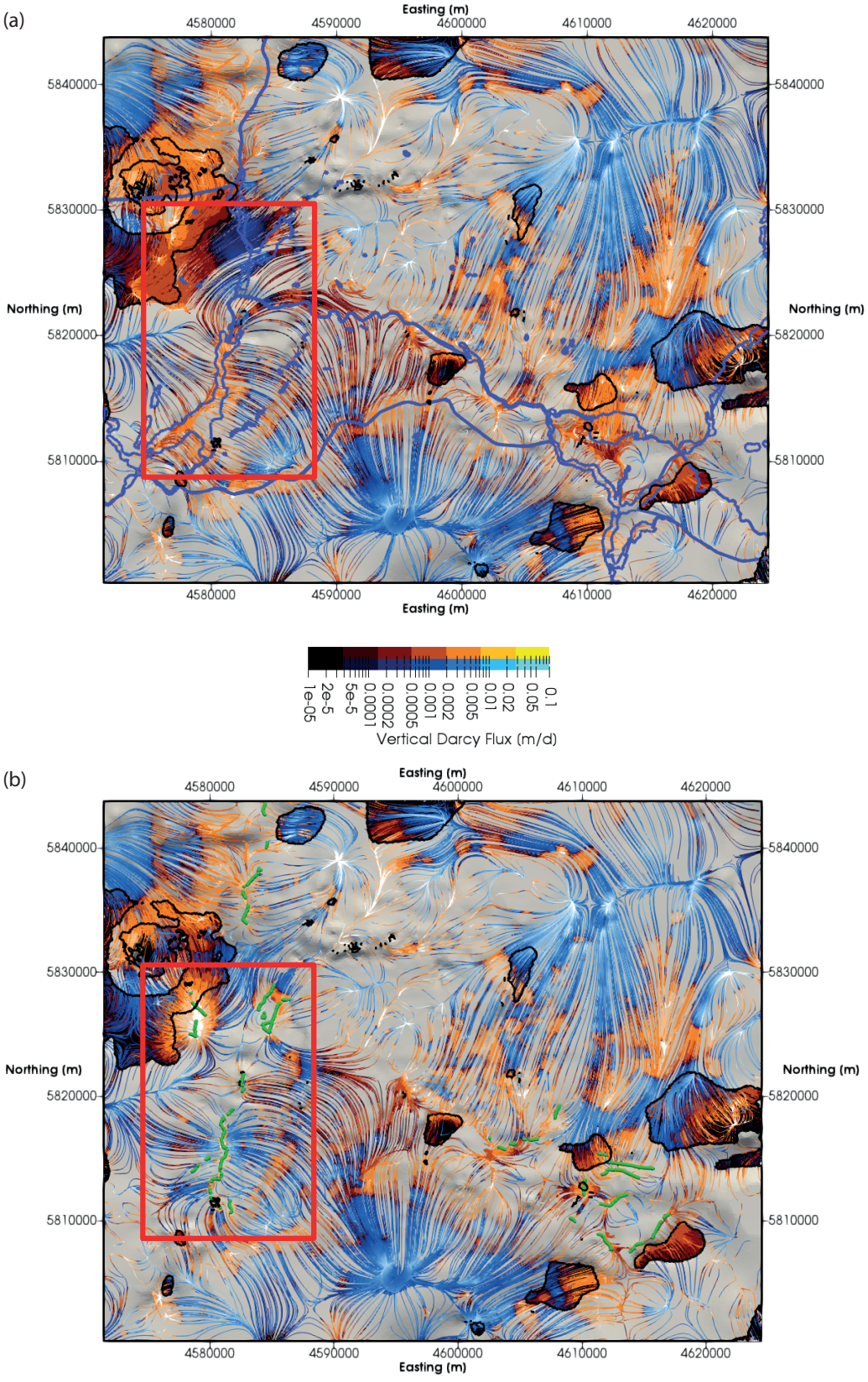

Fig. S 1. Impact of well pumping in model 2 (M2). (a) Flow dynamics before pumping (b) flow dynamics after pumping. (a,b) Pathways were derived from the modelled nodal volumetric flux through the Streamtracer filter of Paraview (Squillacote et al., 2007) and plotted on the top of the Rupelian aquitard. The colour-coding represents the Darcy flux in vertically positive (uprising in orange) or negative (infiltrating in blue) direction. Termination points of lines correlate with either sites of recharge (light blue) or discharge (yellow). White outlines = extent of lakes and rivers. (b) Green spheres = well positions. Grey backdrop: top of Rupelian with discontinuities in black outlines. Coordinates [m] in Gauß-Krüger DHDN Zone 4.

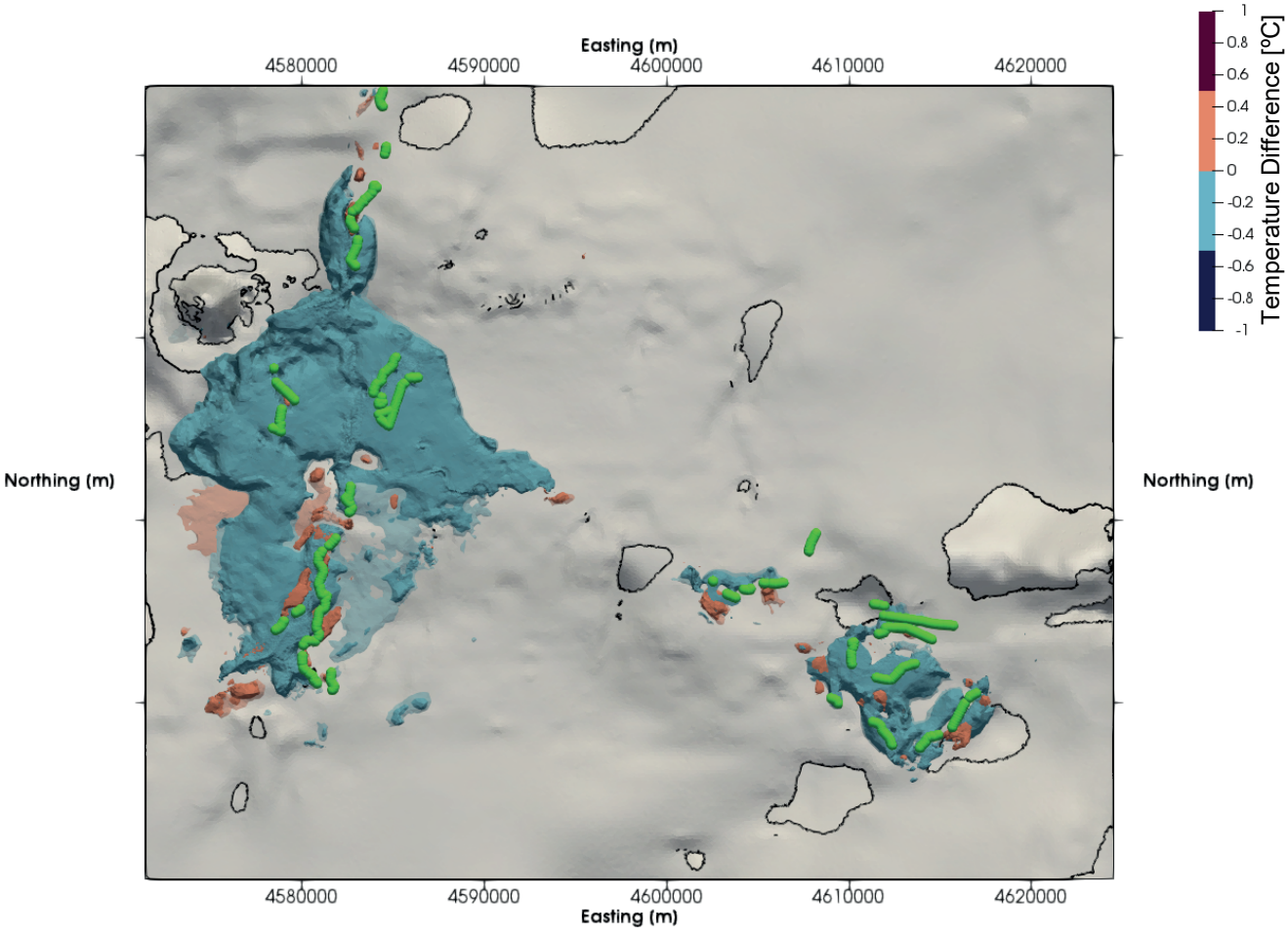

Fig. S 2. Thermal tracer for M2: Temperature difference between after and before well pumping. Blue colours = cooling of subsurface, red colours = heating of subsurface. Grey backdrop: top of Rupelian with discontinuities in black outlines. Coordinates [m] in Gauß-Krüger DHDN Zone 4.

References

Squillacote, A. H., Ahrens, J., Law, C., Geveci, B., Moreland, K., and King, B.: The Paraview Guide, vol. 366, Kitware, 2007.