Publikationsliste der Projekte im AgroScapeLab Quillow (ASLQ), 2016-05/2019

2016-2017

1. Doetterl, S., Berhe, A. A., Nadeu, E., Wang, Z., Sommer, M., Fiener, P. (2016) Erosion, deposition and soil carbon: a review of process-level controls, experimental tools and models to address C cycling in dynamic landscapes. Earth-Science Reviews 154, 102-122.

2. Ellerbrock, R. H., Gerke, H. H., Deumlich, D. (2016) Soil organic matter composition along a slope in an erosion-affected arable landscape in North East Germany. Soil & Tillage Research 156, 209-218.
3. Wehrhan, M., Rauneker, P., Sommer, M. (2016) UAV-based estimation of carbon exports from heterogeneous soil landscapes - a case study from the CarboZALF experimental area. Sensors 16, 2, Article: 255.

4. Aldana Jague, E., Sommer, M., Saby, N. P. A., Cornelis, J.-T., Van Wesemael, B., Van Oost, K. (2016) High resolution characterization of the soil organic carbon depth profile in a soil landscape affected by erosion. Soil & Tillage Research 156, 185-193.

5. Miller, B. A., Koszinski, S., Hierold, W., Rogasik, H., Schröder, B., Van Oost, K., Wehrhan, M., Sommer, M. (2016) Towards mapping soil carbon landscapes: Issues of sampling scale and transferability. Soil & Tillage Research 156, 194-208.

6. Gerke, H. H., Rieckh, H., Sommer, M. (2016) Interactions between crop, water, and dissolved organic and inorganic carbon in a hummocky landscape with erosion-affected pedogenesis. Soil & Tillage Research 156, 230-244.

7. Sommer, M., Augustin, J., Kleber, M. (2016) Feedbacks of soil erosion on SOC patterns and carbon dynamics in agricultural landscapes - the CarboZALF experiment. Soil & Tillage Research 156, 182-184.

8. Specka, X., Nendel, C., Hagemann, U., Pohl, M., Hoffmann, M., Barkusky, D., Augustin, J., Sommer, M., Van Oost, K. (2016) Reproducing CO2 exchange rates of a crop rotation at contrasting terrain positions using two different modelling approaches. Soil & Tillage Research 156, 219-229.

9. Herbrich, M., Gerke, H. H. (2016) Autocorrelation analysis of high resolution weighing lysimeter time series as a basis for determination of precipitation. Journal of Plant Nutrition and Soil Science 179, 6, 784-798.

10. Pütz, T., Kiese, R., Wollschläger, U., Groh, J., Rupp, H., Zacharias, S., Priesack, E., Gerke, H. H., Gasche, R., Bens, O., Borg, E., Baessler, C., Kaiser, K., Herbrich, M., Munch, J.-C., Sommer, M., Vogel, H.-J., Vanderborght, J., Vereecken, H. (2016) TERENO-SOILCan: a lysimeter-network in Germany observing soil processes and plant diversity influenced by climate change. Environmental Earth Sciences 75, 18, Article: 1242.
11. Premke, K., Attermeyer, K., Augustin, J., Cabezas, A., Casper, P., Deumlich, D., Gelbrecht, J., Gerke, H. H., Geßler, A., Grossart, H.-P., Hilt, S., Hupfer, M., Kalettka, T., Kayler, Z., Lischeid, G., Sommer, M., Zak, D. (2016) The importance of landscape diversity for carbon fluxes at the landscape level: small-scale heterogeneity matters. Wiley Interdisciplinary Reviews: Water 3, 4, 601-617.

12. Reverey, F., Grossart, H.-P., Premke, K., Lischeid, G. (2016) Carbon and nutrient cycling in kettle hole sediments depending on hydrological dynamics: a review. Hydrobiologia 775, 1, 1-20.
13. Vogel, E., Deumlich, D., Kaupenjohann, M. (2016) Bioenergy maize and soil erosion - Risk assessment and erosion control concepts. Geoderma 261, 80-92.

14. Kleeberg, A., Neyen, M., Kalettka, T. (2016) Element-specific downward fluxes impact the metabolism and vegetation of kettle holes. Hydrobiologia 766, 1, 261-274.

15. Kleeberg, A., Neyen, M., Schkade, U.-K., Kalettka, T., Lischeid, G. (2016) Sediment cores from kettle holes in NE Germany reveal recent impacts of agriculture. Environmental Science and Pollution Research 23, 8, 7409-7424.
16. Lischeid, G., Kalettka, T., Merz, C., Steidl, J. (2016) Monitoring the phase space of ecosystems: concept and examples from the Quillow catchment, Uckermark. Ecological Indicators 65, 55-65.
17. Müller, F., Bergmann, M., Dannowski, R., Dippner, J. W., Gnauck, A., Haase, P., Jochimsen, M. C., Kasprzak, P., Kröncke, I., Kümmerlin, R., Küster, M., Lischeid, G., Meesenburg, H., Merz, C., Millat, G., Müller, J., Padisák, J., Schimming, C. G., Schubert, H., Schult, M., Selmeczy, G., Shatwell, T., Stoll, S., Schwabe, M., Soltwedel, T., Straile, D., Theuerkauf, M. (2016) Assessing resilience in long-term ecological data sets. Ecological Indicators 65, 10-43.
18. Nitzsche, K., Verch, G., Premke, K., Geßler, A., Kayler, Z. (2016) Visualizing land-use and management complexity within biogeochemical cycles of an agricultural landscape. Ecosphere 7, e01282.
19. Müller T, Behrendt U, Ruppel S, Waydbrink Gvd, Müller MEH (2016) Fluorescent pseudomonads in the phyllosphere of wheat: potential antagonists against fungal phytopathogens. Current Microbiology 72, 4, 383-389.
20. Pasquali M, Beyer M, Logrieco A, Audenaert K, Balmas V, Basler R, Boutigny A-L, Chrpová J, Czembor E, Gagkaeva T, González-Jaén MT, Hofgaard IS, Köycü ND, Hoffmann L, Levic J, Marin P, Miedaner T, Migheli Q, Moretti A, Müller MEH, Munaut F, Parikka P, Pallez-Barthel M, Piec J, Scauflaire J, Scherm B, Stankovic S, Thrane U, Uhlig S, Vanheule A, Yli-Mattila T, Vogelgsang S (2016) A European database of Fusarium graminearum and F. culmorum trichothecene genotypes. Frontiers in Microbiology 7, Article 406.
21. Müller MEH, Koszinski S, Bangs DE, Wehrhan M, Ulrich A, Verch G, Brenning A (2016) Crop biomass and humidity related factors reflect the spatial distribution of phytopathogenic Fusarium fungi and their mycotoxins in heterogeneous fields and landscapes. Precision Agriculture 17: 698-720.

22. Hoffmann, M., Wirth, S., Besler, H., Engels, C., Jochheim, H. Sommer, M., Augustin, J. (2017) Combining a root exclusion technique with continuous chamber and porous tube measurements for a pin-point separation of ecosystem respiration in croplands. J. Plant Nutr. Soil Sci.

23. Wis, F., Ghirardo, A., Schnitzler, J.-P., Nendel, C., Augustin, J., Hoffmann M., Grote, R. (2017) Net ecosystem fluxes and composition of BVOCs over a maize field - interaction of meteorology and phenological stages. Global Change Biology Bioenergy.

24. Hoffmann, M., Jurisch, N., Garcia Alba, D. J., Albiac Borraz, E., Schmidt, M., Huth, V., Rogasik, H., Rieckh, H., Verch, G., Sommer, M., Augustin, J. (2017) Detecting small-scale spatial heterogeneity and temporal dynamics of soil organic carbon (SOC) stocks: a comparison between automatic chamber-derived C budgets and repeated soil inventories. Biogeosciences 14, 4, 1003-1019.

25. Herbrich, M., Gerke, H.H. (2017). Scales of water retention dynamics observed in eroded Luvisols from arable hummocky soil landscape. Vadose Zone Journal (accepted).

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27. Nitzsche, K., Kalettka, T., Premke, K., Lischeid, G., Geßler, A., Kayler, Z. (2017) Land-use and hydroperiod affect kettle hole sediment carbon and nitrogen biogeochemistry. Science of the Total Environment 574, 46-56.
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30. Wulf, M.**,** Jahn, U.**,** Meier, K.**,** Radtke, M. (2017) Tree species composition of a landscape in north-eastern Germany in 1780, 1890 and 2010. Forestry 90, 2, 174-186.
31. Wulf, M.**,** Jahn, U.**,** Meier, K. (2016) Land cover composition determinants in the Uckermark (NE Germany) over a 220-year period. Regional Environmental Change 16, 6, 1793-1805.
32. Heggemann, T., Welp, G., Amelung, W., Angst, G., Franz, S. O., Koszinski, S.**,** Schmidt, K., Pätzold, S. (2017) Proximal gamma-ray spectrometry for site-independent in situ prediction of soil texture on ten heterogeneous fields in Germany using support vector machines. Soil & Tillage Research 168, 99-109.
33. Lischeid, G., Balla, D., Dannowski, R., Dietrich, O., Kalettka, T., Merz, C., Schindler, U., Steidl, J. (2017) Forensic hydrology: what function tells about structure in complex settings. Environmental Earth Sciences 76, 1, Article: 40.

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2. Herbrich, M., Gerke, H. H., Sommer, M. (2018) Root development of winter wheat in erosion-affected soils depending on the position in a hummocky ground moraine soil landscape. Journal of Plant Nutrition and Soil Science 181, 2, 147-157.
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4. Wilken, F., Baur, M., Sommer, M., Deumlich, D., Bens, O., Fiener, P. (2018) Uncertainties in rainfall kinetic energy-intensity relations for soil erosion modelling. Catena 171, 234-244.
5. Heinrich, I., Balanzategui, D., Bens, O., Blasch, G., Blume, T., Böttcher, F., Borg, E., Brademan, B., Brauer, A., Conrad, C., Dietze, E., Dräger, N., Fiener, P., Gerke, H. H., Güntner, A., Heine, I., Helle, G., Herbrich, M., Heussner, K.-U., Hohmann, C., Itzerott, S., Kaiser, K., Kappler, C., Koebsch, F., Liebner, S., Lischeid, G., Merz, B., Missling, K.-D., Morgner, M., Pinkerneil, S., Plessen, B., Raab, T., Rhutz, T., Sachs, T., Sommer, M., Spengler, D., Stender, V., Stüve, P., Wilken, F. (2018) Interdisciplinary geo-ecological research across time scales in the Northeast German Lowland Observatory (TERENO-NE). Vadose Zone Journal 17, 1, Article Number: 180116.
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9. Hoffmann, M., Pohl, M., Jurisch, N., Prescher, A.-K., Mendez Campa, E., Hagemann, U., Remus, R., Verch, G., Sommer, M., Augustin, J. (2018) Maize carbon dynamics are driven by soil erosion state and plant phenology rather than nitrogen fertilization form. Soil & Tillage Research 175, 255-266.
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11. Lucas-Moffat, A. M., Huth, V., Augustin, J., Brümmer, C., Herbst, M., Kutsch, W. L. (2018) Towards pairing plot and field scale measurements in managed ecosystems: Using eddy covariance to cross-validate CO2 fluxes modeled from manual chamber campaigns. Agricultural and Forest Meteorology 256-257, 362-378.
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16. Kazanjian, G., Flury, S., Attermeyer, K., Kalettka, T., Kleeberg, A., Premke, K., Köhler, J., Hilt, S. (2018) Primary production in nutrient-rich kettle holes and consequences for nutrient and carbon cycling. Hydrobiologia 806, 1, 77-93.
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