

Publications (State 2024)

Dating Methods

- Schellmann, G., **Schielein, P.**, Burow, Chr. & Radtke, U. (2020): Accuracy of ESR Dating of small gastropods from loess and fluvial deposits in the Bavarian Alpine Foreland. *Quaternary International*, 556, 198-215, <https://doi.org/10.1016/j.quaint.2019.07.026>
- **Schielein, P.**, Burow, Chr., Pajon, J., Consiegra, R.R., Zhao, J. & Schellmann, G. (2019): ESR and U/Th dating results for Last Interglacial coral reef terraces at the northern coast of Cuba. *Quaternary International*, 556, 216-229, <https://doi.org/10.1016/j.quaint.2019.11.041>

Fluvial and Coastal Geomorphology

- Schellmann, G., **Schielein, P.**, Rähle, W. & Burow, Ch. (2019): The formation of Middle and Upper Pleistocene terraces (*Übergangsterrassen* and *Hochterrassen*) in the Bavarian Alpine Foreland - new numeric dating results (ESR, OSL, ¹⁴C) and gastropod fauna analysis. *E&G Quaternary Science Journal*, 68, 141-164, <https://doi.org/10.5194/egqsj-68-141-2019>
- **Schielein, P.**, Schellmann, G., Lomax, J., Preusser, F. & Fiebig, M. (2015): Chronostratigraphy of the Hochterrassen in the lower Lech valley [Northern Alpine Foreland]. *E&G Quaternary Science Journal*, 64, 15-8, <https://doi.org/10.3285/eg.64.1.02>
- **Schielein, P.** & Lomax, J. (2013): The effect of fluvial environments on sediment bleaching and Holocene luminescence ages - A case study from the German Alpine Foreland. *Geochronometria*, 40 (4), 283-293, <https://doi.org/10.2478/s13386-013-0120-y>
- Schellmann, G., Gesslein, B. & **Schielein, P.** (2012): Neue Befunde zur Würmlöß-Stratigraphie in der Kiesgrube Gewanne I (Augsburger Hochterrasse). - In: GREGOR, H.-J. (Hrsg.): Die Eiszeit in Bobingen. Neue Befunde und Ergebnisse aus Kiesgruben der Fa. LAUTER (Landkreis Augsburg, Bayern), *Documenta naturae*, 191, 35-36, ISBN: 978-3-86544-191-1, [Documenta naturae](https://doi.org/10.3285/eg.64.1.02), 191
- **Schielein, P.** (2012): Jungquartäre Flussgeschichte des Lechs unterhalb von Augsburg und der angrenzenden Donau. *Bamberger Geogr. Schr.*, SF 9, <https://doi.org/10.20378/irb-572>
- **Schielein, P.**, SCHELLMANN, G. & LOMAX, J. (2011): Stratigraphy of Late Quaternary fluvial terraces at the confluence of Lech and Danube valleys. *E&G Quaternary Science Journal*, Vol. 60 (4), 414-424, <https://doi.org/10.3285/eg.60.4.02>
- **Schielein, P.** (2010): Neuzeitliche Flusslaufverlagerungen des Lechs und der Donau im Lechmündungsgebiet - qualitative und quantitative Analysen historischer Karten. *Bamberger Geogr. Schr.*, 24, 215-241.
- **Schielein, P.**, Zschau, J., Woith, H. & Schellmann, G. (2007): Tsunamigefährdung im Mittelmeer - Eine Analyse geomorphologischer und historischer Zeugnisse. *Bamberger Geogr. Schr.*, 22, 153-199.

Geoarchaeology, Paleoenvironment Reconstruction and Soil Science

- Leceta, F.; Binder, C.; Mader, C.; Mächtle, B.; Marsh, E.; Dietrich, L.; Reindel, M.; Eitel, B.; **Meister, J.** (2024): The impact of agriculture on tropical mountain soils in the western Peruvian Andes: a pedo-geoarchaeological study of terrace agricultural systems in the Laramate region (14.5°S). *SOIL*, 10, 727–761, <https://doi.org/10.5194/soil-10-727-2024>
- Garbe, P.; El-Raouf, A.; Es-Senussi, A.; Lange-Athinodorou, E.; **Meister, J.** (2024): Lost and potentially found: The location of the 'Temple of Hermes' at ancient Bubastis in the Nile Delta (Egypt), *E&G Quaternary Science Journal*, 73(1), 95-99, <https://doi.org/10.5194/egqsj-73-95-2024>
- Mader, C.; Godde, P.; Behl, M.; Binder, C.; E. Hägele; Isla, J.; Leceta, F.; Lyons, M.; Marsh, E.; Odenthal, R.; Fernengel, E.; Stryjski, P.; Weber, A.K.; Reindel, M.; **Meister, J.** (2024): An integrative approach to ancient agricultural terraces and forms of dependency: the case of Cutamalla in the prehispanic Andes, *Frontiers in Environmental Archaeology*, 3, <https://doi.org/10.3389/fearc.2024.1328315>

- Garbe, P., El-Raouf, A. A., Es-Senussi, A., Lange-Athinodorou, E., & **Meister, J.** (2024): Holocene landscape reconstruction in the surroundings of the Temple of Pepi I at ancient Bubastis, southeastern Nile Delta (Egypt), *Geoarchaeology*, 39, 17–34, <https://doi.org/10.1002/gea.21981>
- Qader, W.; Mir, S.; **Meister, J.**; Dar, R.A.; Madella, M.; Rashid, I. (2023): Sedimentological perspective on phytolith analysis in palaeoecological reconstruction, *Earth-Science Reviews*, 244, 104549, <https://doi.org/10.1016/j.earscirev.2023.104549>
- Mader, C.; Reindel, M.; Isla, J.; Behl, M.; **Meister, J.**; Hölzl, S. (2023): In the land of the apu: Cerro Llamocca as a sacred mountain and central place in the pre-Columbian Andes of southern Peru, *Journal of Archaeological Science: Reports*, 49, 104045, <https://doi.org/10.1016/j.jasrep.2023.104045>
- Garbe, P.; Lange-Athinodorou, E.; **Meister, J.** (2023) : Mensch-Umwelt-Beziehungen im altägyptischen Nildelta, *Geographische Rundschau*, 75 (5), 10–16, <https://www.westermann.de/anlage/4654308/Mensch-Umwelt-Beziehungen-im-altaegyptischen-Nildelta>
- Hermann, N.; Stadtmann, R.; **Meister, J.**; Kirchner, A. (2022): Importance of substrate genesis for Mediterranean soil evolution – An example from a limestone hillslope in the Estremadura (W-Portugal), *Catena*, 218, 106566, <https://doi.org/10.1016/j.catena.2022.106566>
- Kirchner, A.; Hermann, H.; Madras, P.; Müller, I.; **Meister, J.**; Schattner, T. (2022): A pedo-geomorphological view on land use and its potential in the surroundings of the ancient Hispano-Roman city Munigua (Seville, SW-Spain), *E&G Quaternary Science Journal*, 71, 123–143, <https://doi.org/10.5194/egqsj-71-123-2022>
- Dietrich, L., Dietrich, O., **Meister, J.** (2022): Hermetic Cereal Storage in the Bronze Age: Evidence from the Gáva Culture Settlement at Rotbav, Transylvania, *Documenta Praehistorica*, 49, 2–10, <https://doi.org/10.4312/dp.49.1>
- Trappe, J.; Büdel, C.; **Meister, J.**; Baumhauer, R. (2022): Combining geophysical and geomorphological data to reconstruct the development of the relief of a medieval castle site in the Spessart low mountain range, Germany, *Earth Surface Processes and Landforms*, 47(1), 228–241, <https://doi.org/10.1002/esp.5242>
- **Meister, J.**; Garbe, P.; Trappe, J.; Ullmann, T.; Es-Senussi, A.; Baumhauer, R.; Lange-Athinodorou, E.; El-Raouf, A. (2021): The sacred waterscape of the Temple of Bastet at ancient Bubastis, Nile Delta (Egypt), *Geosciences*, 11, 385, <https://doi.org/10.3390/geosciences11090385>
- **Meister, J.**; Lange-Athinodorou, E.; Ullmann, T. (2021): Preface: Special issue “Geoarchaeology of the Nile Delta”, In: *E&G Quaternary Science Journal*, 70(2), 187–190, <https://doi.org/10.5194/egqsj-70-187-2021>
- Scherer, S.; Höpfer, B.; Deckers, K.; Fischer, E.; Fuchs, M.; Kandeler, E.; Lechterbeck, E.; Lehndorff, E.; Lomax, J.; Marhan, S.; Marinova, E.; **Meister, J.**; Poll, C.; Rahimova, H.; Rösch, M.; Wroth, K.; Zastrow, J.; Knopf, T.; Scholten, T.; Kühn, P. (2021): Middle Bronze Age land use practices in the north-western Alpine foreland – A multi-proxy study of colluvial deposits, archaeological features and peat bogs, *SOIL*, 7, 269–304, <https://doi.org/10.5194/soil-7-269-2021>
- Kraushaar, S.; Konzett, M.; Kiep, J.; Siebert, C.; **Meister, J.** (2021): Suitability of phytoliths as a quantitative process tracer for soil erosion studies, *Earth Surface Processes and Landforms*, 46(9), 1797–1808, <https://doi.org/10.1002/esp.5121>
- Näser, C.; Gussone, M.; Kennedy, W.; Klein, T.; Knitter, D.; Krause, J.; **Meister, J.**; Schmid, S.G.; Schütt, B.; Bebermeier, W.; Gerlach, I.; Kohlmeyer, K.; Marzoli, D.; Müller-Neuhof, B.; von Rummel, P.; Sack, D.; Wulf-Rheidt, W. (2021): Investigating Marginality within the Framework of Socio-Ecological Interaction Models, In: Knitter, D.; Schier, W.; Schütt, B. (Hrsg.), Berlin: Edition Topoi, 74, DOI: 10.17171/3-7, <https://www.edition-topoi.org/books>.
- Dietrich, L.; Götting-Martin, E.; Hertzog, J.; Schmitt-Kopplin, P.; McGovern, P.E.; Hall, G.R.; Petersen, W.C.; Zarnkow, M.; Hutzler, M.; Jacob, F.; Ullman, C.; Notroff, J.; Ulbrich, M.; Flöter, E.; Heeb, J.; **Meister, J.**; Dietrich, O. (2020): Investigating the function of Pre-Pottery Neolithic stone troughs from Göbekli Tepe – An integrated approach, *Journal of Archaeological Science: Reports*, 34, 102618, <https://doi.org/10.1016/j.jasrep.2020.102618>

- Lehnhardt, E.; Błazejewski, A.; Madera, P.; **Meister, J.** (2019): Pielgrzymowice - An iron smelting site of the Przeworsk culture from the Roman period in Silesia, *Przegląd Archeologiczny*, vol. 67: 177-230, PL ISSN 0079-7138, <https://doi.org/10.23858/PA67.2019.009>
- Lange-Athinodorou, E.; Abd el-Raouf, A.; Ullmann, T.; Trappe, J.; **Meister, J.**; Baumhauer, R. (2019): The Sacred Canals of the Temple of Bastet at Bubastis (Egypt): New Findings from Geomorphological Investigations and Electrical Resistivity Tomography (ERT), *Journal of Archaeological Science: Reports*, 26, 101910, <https://doi.org/10.1016/j.jasrep.2019.101910>
- Dietrich, L.; **Meister, J.**; Dietrich, O.; Notroff, J.; Kiep, J.; Heeb, J.; Beuger, A.; Schütt, B. (2019): Cereal processing at Early Neolithic Göbekli Tepe, southeastern Turkey, *PLoS ONE*, 14(5): e0215214, <https://doi.org/10.1371/journal.pone.0215214>
- **Meister, J.**; Knitter, K.; Krause, J.; Müller-Neuhof, B.; Schütt B. (2019): A pastoral landscape for millennia: Investigating pastoral mobility in northeastern Jordan using quantitative spatial analyses, *Quaternary International*, 501, 364-378, <https://dx.doi.org/10.1016/j.quaint.2017.08.038>
- **Meister, J.**; Rettig, R.; Schütt B. (2018): Ancient runoff agriculture at Early Bronze Age Jawa (Jordan): Water availability, efficiency and food supply capacity, *Journal of Archaeological Science: Reports*, vol. 22: 359-371, <https://doi.org/10.1016/j.jasrep.2016.06.033>
- **Meister, J.**; Krause, J.; Müller-Neuhof, B. (2018): Early Bronze Age Jawa – an artificial Oasis in the Basalt Desert. In: Berking, J. & Schütt, B. [Eds]: *Water Harvesting in Drylands – Water Knowledge from the Past for our Present and Future*, 40-47, München, Verlag Dr. Friedrich Pfeil, ISBN: 978-3-89937-238-0
- **Meister, J.** (2017): *Human-Environmental Interactions in Northeastern Jordan* (Dissertation), http://www.diss.fu-berlin.de/diss/receive/FUDISS_thesis_000000105316
- **Meister, J.**; Krause J.; Müller-Neuhof B.; Portillo M.; Reimann T.; Schütt B. (2017): Desert agricultural systems at EBA Jawa (Jordan): Integrating archaeological and paleoenvironmental records, *Quaternary International*, vol. 434 (Part B): 33–50, <https://doi.org/10.1016/j.quaint.2015.12.086>
- Bebermeier, W.; **Meister, J.**; Withanachchi, C. R.; Middelhaufe, I.; Schütt, B. (2017): Tank cascade systems as a sustainable measure of watershed management in South Asia, In: *Water*, 9(3), 231: 1-16, <https://doi.org/10.3390/w9030231>
- Bebermeier, W.; Beck, D.; Gerlach, I.; Klein, T.; Knitter, D.; Kohlmeyer, K.; Krause, J.; Marzoli, D.; **Meister, J.**; Müller-Neuhof, B.; Näser, C.; von Rummel, P.; Sack, D.; Schmid, S. G.; Schütt, B.; Wulf-Rheidt, U. (2016): Ancient Colonization of Marginal Habitats. A Comparative Analysis of Case Studies from the Old World. *eTopoi. Journal for Ancient Studies*, Special Volume 6: Space and Knowledge, Topoi Research Group Articles. 1–44, <http://journal.topoi.org/index.php/etopoi/article/view/250/258>
- Schütt, B.; Bebermeier, W.; **Meister, J.**; Withanachchi, C. R. (2013): Characterisation of the Rota Wewa tank cascade system in the vicinity of Anuradhapura, Sri Lanka, *Die Erde*, vol. 144 (1): 51-68, <https://doi.org/10.12854/erde-144-4>
- Berking, J.; **Meister, J.**; Ullrich, B.; Schott, M.; Kaufmann, G.; Schütt, B. (2011): Geoarchaeological Methods for Landscape Reconstruction at the Excavation Site of Naga, Central Sudan, *Die Erde*, vol. 142 (3): 289-313, <https://www.die-erde.org/index.php/die-erde/article/view/37>

Quaternary Geology

- Schellmann, G., **Schielein, P.**, Burow, Ch. & Radtke, U. (2020): Accuracy of ESR Dating of small gastropods from loess and fluvial deposits in the Bavarian Alpine Foreland. *Quaternary International*, 556, 198-215, doi.org/10.1016/j.quaint.2019.07.026
- **Schielein, P.**, Burow, Chr., Pajon, J., Consiegra, R.R., Zhao, J. & Schellmann, G. (2019): ESR and U/Th dating results for Last Interglacial coral reef terraces at the northern coast of Cuba. *Quaternary International*, 556, 216-229, doi.org/10.1016/j.quaint.2019.11.041

- Schellmann, G., **Schielein, P.**, Rähle, W. & Burow, Ch. (2019): The formation of Middle and Upper Pleistocene terraces (*Übergangsterrassen* and *Hochterrassen*) in the Bavarian Alpine Foreland - new numeric dating results (ESR, OSL, ¹⁴C) and gastropod fauna analysis. *E&G Quaternary Science Journal*, 68, 141-164, doi.org/10.5194/egqsj-68-141-2019
- **Schielein, P.** & Schellmann, G. (2016): Quartärgeologische Karte 1:25.000 des Lech- und Schmuttertals auf Blatt 7531 Gersthofen mit Erläuterungen. – Kartierungsergebnisse aus dem Jahr 2011. *Bamberger Geogr. Schr.*, SF 12, 41–73, <https://doi.org/10.20378/irb-40949>
- **Schielein, P.** & Schellmann, G. (2016): Quartärgeologische Karte 1:25.000 des Lech- und Schmuttertals auf Blatt 7431 Thierhaupten mit Erläuterungen. – Kartierungsergebnisse aus dem Jahr 2011. *Bamberger Geogr. Schr.*, SF 12, 107–34, <https://doi.org/10.20378/irb-40949>
- **Schielein, P.** & Schellmann, G. (2016): Quartärgeologische Karte 1:25.000 des Lechtals auf Blatt 7331 Rain mit Erläuterungen. – Kartierungsergebnisse aus den Jahren 2008 und 2009. *Bamberger Geogr. Schr.*, SF 12, 135–166, <https://doi.org/10.20378/irb-40949>
- **Schielein, P.** & Schellmann, G. (2016): Quartärgeologische Karte 1:25.000 des Lech- und Donautals auf Blatt 7231 Genderkingen mit Erläuterungen. – Kartierungsergebnisse aus den Jahren 2008 und 2009. *Bamberger Geogr. Schr.*, SF 12, 167–192, <https://doi.org/10.20378/irb-40949>
- **Schielein, P.** & Schellmann, G. (2016): Quartärgeologische Karte 1:25.000 des Wertachtals auf Blatt 7730 Großaitingen mit Erläuterungen. – Kartierungsergebnisse aus den Jahren 2014 und 2015. *Bamberger Geogr. Schr.*, SF 12, 323–356, <https://doi.org/10.20378/irb-40949>
- **Schielein, P.**, Schellmann, G., Lomax, J., Preusser, F. & Fiebig, M. (2015): Chronostratigraphy of the Hochterrassen in the lower Lech valley [Northern Alpine Foreland]. *E&G Quaternary Science Journal*, 64, 15-28, doi.org/10.3285/eg.64.1.02
- **Schielein, P.** & Lomax, J. (2013): The effect of fluvial environments on sediment bleaching and Holocene luminescence ages - A case study from the German Alpine Foreland. *Geochronometria*, 40 (4), 283-293, DOI: <https://doi.org/10.2478/s13386-013-0120-y>
- Schellmann, G., Gesslein, B. & **Schielein, P.** (2012): Neue Befunde zur Würmlöß-Stratigraphie in der Kiesgrube Gewanne I (Augsburger Hochterrasse). - In: GREGOR, H.-J. (Hrsg.): Die Eiszeit in Bobingen. Neue Befunde und Ergebnisse aus Kiesgruben der Fa. LAUTER (Landkreis Augsburg, Bayern). *Documenta naturae*, 191,35-36
- **Schielein, P.** (2012): Jungquartäre Flussgeschichte des Lechs unterhalb von Augsburg und der angrenzenden Donau. *Bamberger Geogr. Schr.*, SF 9, <https://doi.org/10.20378/irb-572>
- **Schielein, P.**, Schellmann, G. & Lomax, J. (2011): Stratigraphy of Late Quaternary fluvial terraces at the confluence of Lech and Danube valleys. *E&G Quaternary Science Journal*, Vol. 60 (4), 414-424, <https://doi.org/10.3285/eg.60.4.02>
- **Schielein, P.** (2010): Neuzeitliche Flusslaufverlagerungen des Lechs und der Donau im Lechmündungsgebiet - qualitative und quantitative Analysen historischer Karten. *Bamberger Geogr. Schr.*, 24, 215-241.

Remote Sensing

- Ullmann, T.; Möller, E.; Baumhauer, B.; Lange-Athinodorou, E.; **Meister, J.** (2022): A new Google Earth Engine tool for spaceborne detection of buried palaeogeographical features – examples from the Nile Delta (Egypt). *E&G Quaternary Science Journal*, 71, 243–247, <https://doi.org/10.5194/egqsj-71-243-2022>
- Lanz, Peter; Marino, Armando; Brinkhoff, Thomas, Köster, F. & **Möller, M.** (2021): The Inflate SAR Campaign The Inflate SAR Campaign: Testing SAR Vessel Detection Systems for Refugee Rubber Inflatables. *Remote Sens.*, 13(8), 1487, <https://doi.org/10.3390/rs13081487>
- Ullmann, T., Nill, L., Schiestl, R., Trappe, J., Lange-Athinodorou, E., Baumhauer, R., and **Meister, J.** (2020): Mapping buried paleogeographical features of the Nile Delta (Egypt) using the Landsat archive, *E&G Quaternary Science Journal*, 69, 225–245, <https://doi.org/10.5194/egqsj-69-225-2020>
- Mwaniki, M.W., **Möller, M.S.** & Schellmann, G. (2015a): Application of remote sensing technologies to map the structural geology of central Region of Kenya. – *IEEE Journal of Selected*

Topics in Applied Earth Observations and Remote Sensing, 8: 1855-1867 ([DOI: 10.1109/JSTARS.2015.2395094](https://doi.org/10.1109/JSTARS.2015.2395094)).

- Mwaniki, M.W., **Möller, M.S.** & Schellmann, G. (2015b): Landslide inventory knowledge based multi-sources classification time series mapping: A case study of Central Region of Kenya. – *GI Forum – Journal for Geographic Information Science*, 1: 209-219 ([DOI: 10.13140/RG.2.1.1645.4241](https://doi.org/10.13140/RG.2.1.1645.4241)).
- Mwaniki, M.W., **Möller, M.S.** & Schellmann, G. (2015c): A comparison of Landsat 8 (OLI) and Landsat 7 (ETM+) in mapping geology and visualising lineaments: A case study of central region Kenya. – *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XL-7/W3, 2015: 897-903; Berlin (36th International Symposium on Remote Sensing of Environment, 11-15 May 2015, <https://doi.org/10.5194/isprsarchives-XL-7-W3-897-2015>
- Seitz, R., Troycke, A., **Grubert, B.** & Rebhan, P. (2010): Wo stehen Bayerns Fichten? – IN: LWF, *Waldforschung aktuell* 75: 62-63, ISSN 1435-4098, https://mediatum.ub.tum.de/doc/1320414/209fcf8um1r2dyo21r2xbewwm8.a75_waldpaedagogik_web.pdf

Die Dozenten der Physischen Geographie sind auch im [Research Gate](#) gelistet.