

Dr Victor Maus

Senior Researcher

Curriculum Vitae

September 2021

📍 Welthandelsplatz 1, 1020 Vienna, Austria
🏠 victor-maus.com
☎ +43 1 31336 6176
✉ vwmaus1@gmail.com
🐦 @victor_maus
🔄 vwmaus
🌐 victor-maus-083a79191
🔗 wN2LseQAAAAJ&hl
📞 0000-0002-7385-4723

I am a researcher in Geoinformatics and Spatial Data Science with application in sustainability science, in particular land-use changes. I am the author of Time-Weighted Dynamic Time Warping (TWDTW) algorithm, to classify Earth observation time series in data-scarce conditions. I have implemented the TWDTW as open-source in my R package dtwSat. I have also led the production of the first-ever spatially-explicit global assessment of mining land use to assess the environmental impacts and sustainability of the global mining sector.

EDUCATION

2016	PhD in Earth System Science São José dos Campos, Brazil	National Institute for Space Research (INPE)
2011	MSc in Computational Modeling Juiz de Fora, Brazil	Federal University of Juiz de Fora (UFJF)
2009	BSc in Environmental Engineering Santa Maria, Brazil	Franciscan University (UFN)

CURRENT POSITIONS

2018-	Senior Researcher Vienna, Austria	Vienna University of Economics and Business (WU)
2016-	Research Scholar Laxenburg, Austria	International Institute for Applied Systems Analysis (IIASA)

PREVIOUS POSITIONS

2014-2016	Research Assistant Münster, Germany	University of Münster (WWU)
2012-2014	University Lecturer Itaqui, Brazil	Federal University of Pampa (UNIPAMPA)
2011-2012	Research Assistant São José dos Campos, Brazil	National Institute for Space Research (INPE)
2009-2011	Research Assistant Juiz de Fora, Brazil	Federal University of Juiz de Fora (UFJF)

FELLOWSHIPS AND AWARDS

SUPERVISION OF STUDENTS

TEACHING ACTIVITIES

INSTITUTIONAL RESPONSIBILITIES

REVIEWING ACTIVITIES

PUBLICATIONS

1. Luckeneder, S., Giljum, S., Schaffartzik, A., **Maus, V.**, & Tost, M. (2021). Surge in global metal mining threatens vulnerable ecosystems. *Global Environmental Change*, 69, 102303. <https://doi.org/10.1016/j.gloenvcha.2021.102303>
2. **Maus, V.**, Giljum, S., Gutschlhofer, J., Silva, D. M. da, Gass, S. L. B., Luckeneder, S., Lieber, M., & McCallum, I. (2020). A global-scale data set of mining areas. *Scientific Data*, 7(1), 289. <https://doi.org/10.1038/s41597-020-00624-w>

3. Bruckner, M., Wood, R., Moran, D., Kuschig, N., Wieland, H., **Maus, V.**, & Börner, J. (2019). FABIO—the construction of the food and agriculture biomass input-output model. *Environmental Science & Technology*, 53(19), 11302–11312. <https://doi.org/10.1021/acs.est.9b03554>
4. Stanimirova, R., Arévalo, P., Kaufmann, R. K., **Maus, V.**, Lesiv, M., Havlík, P., & Friedl, M. A. (2019). Sensitivity of global pasturelands to climate variation. *Earth's Future*. <https://doi.org/10.1029/2019EF001316>
5. **Maus, V.**, Câmara, G., Appel, M., & Pebesma, E. (2019). dtwSat: Time-Weighted Dynamic Time Warping for Satellite Image Time Series Analysis in R. *Journal of Statistical Software*, 88(5), 1–31. <https://doi.org/10.18637/jss.v088.i05>
6. Bruckner, M., Häyhä, T., Giljum, S., **Maus, V.**, Fischer, G., Tramberend, S., & Börner, J. (2019). Quantifying the global cropland footprint of the european union's non-food bioeconomy. *Environmental Research Letters*, 14(4), 045011. <https://doi.org/10.1088/1748-9326/ab07f5>
7. Hadi, Krasovskii, A., **Maus, V.**, Yowargana, P., Pietsch, S., & Rautiainen, M. (2018). Monitoring Deforestation in Rainforests Using Satellite Data: A Pilot Study from Kalimantan, Indonesia. *Forests*, 9(7). <https://doi.org/10.3390/f9070389>
8. See, L., Laso Bayas, J. C., Schepaschenko, D., Perger, C., Dresel, C., **Maus, V.**, Salk, C., Weichselbaum, J., Lesiv, M., McCallum, I., Moorthy, I., & Fritz, S. (2017). LACO-Wiki: A New Online Land Cover Validation Tool Demonstrated Using GlobeLand30 for Kenya. *Remote Sensing*, 9(7). <https://doi.org/10.3390/rs9070754>
9. Furlan, V. J. M., **Maus, V.**, Batista, I., & Bandarra, N. M. (2017). Production of docosahexaenoic acid by *Aurantiochytrium* sp. ATCC PRA-276. *Brazilian Journal of Microbiology*, 48(2), 359–365. <https://doi.org/10.1016/j.bjm.2017.01.001>
10. **Maus, V.**, Camara, G., Cartaxo, R., Sanchez, A., Ramos, F. M., & Queiroz, G. R. de. (2016). A time-weighted dynamic time warping method for land-use and land-cover mapping. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 9(8), 3729–3739. <https://doi.org/10.1109/JSTARS.2016.2517118>
11. Furlan, V. J. M., Castelo Paulo, M. do, **Maus, V.**, Ferreira, J., Batista, I., & Bandarrac, N. M. (2016). Production of docosahexaenoic acid (DHA) from *Thraustochytrium* sp. ATCC 26185 using different nitrogen concentrations. *Boletim Centro de Pesquisa de Processamento de Alimentos*, 34(2), 1–11. <https://doi.org/10.5380/cep.v34i2.53189>
12. See, L., Schepaschenko, D., Lesiv, M., McCallum, I., Fritz, S., Comber, A., Perger, C., Schill, C., Zhao, Y., **Maus, V.**, Siraj, M. A., Albrecht, F., Cipriani, A., Vakolyuk, M., Garcia, A., Rabia, A. H., Singha, K., Marcarini, A. A., Kattenborn, T., ... Obersteiner, M. (2015). Building a hybrid land cover map with crowdsourcing and geographically weighted regression. *ISPRS Journal of Photogrammetry and Remote Sensing*, 103, 48–56. <https://doi.org/10.1016/j.isprsjprs.2014.06.016>
13. **Maus, V.**, Costa, A. B. da, & Righes, A. A. (2009). Tratamento do lixiviado de aterro de resíduos sólidos urbanos por processo fenton. *Tecno-Lógica*, 13(1), 52–59. <https://doi.org/10.17058/tecnolog.v13i1.931>