

LAMACLIMA - Land Management for Climate Mitigation and Adaptation

Publications

Hertog, Steven J. de; Havermann, Felix; Vanderkelen, Inne; Guo, Suqi; Luo, Fei; Manola, Iris et al. (2022): The biogeophysical effects of idealized land cover and land management changes in Earth system models. In *Earth Syst. Dynam.* 13 (3), pp. 1305–1350. DOI: 10.5194/esd-13-1305-2022.

Humpenöder, Florian; Popp, Alexander; Schleussner, Carl-Friedrich; Orlov, Anton; Windisch, Michael Gregory; Menke, Inga et al. (2022): Overcoming global inequality is critical for land-based mitigation in line with the Paris Agreement. In *Nature communications* 13 (1), p. 7453. DOI: 10.1038/s41467-022-35114-7.

Lejeune, Quentin; Davin, Edouard L.; Duveiller, Grégory; Crezee, Bas; Meier, Ronny; Cescatti, Alessandro; Seneviratne, Sonia I. (2020): Biases in the albedo sensitivity to deforestation in CMIP5 models and their impacts on the associated historical radiative forcing. In *Earth Syst. Dynam.* 11 (4), pp. 1209–1232. DOI: 10.5194/esd-11-1209-2020.

Nath, Shruti; Gudmundsson, Lukas; Schwaab, Jonas; Duveiller, Gregory; Hertog, Steven Johan de; Guo, Suqi et al. (2022): TIMBER v0.1: a conceptual framework for emulating temperature responses to tree cover change. DOI: 10.5194/egusphere-2022-1024.

Nath, Shruti; Lejeune, Quentin; Beusch, Lea; Seneviratne, Sonia I.; Schleussner, Carl-Friedrich (2022): MESMER-M: an Earth system model emulator for spatially resolved monthly temperature. In *Earth Syst. Dynam.* 13 (2), pp. 851–877. DOI: 10.5194/esd-13-851-2022.

Orlov, Anton; Daloz, Anne Sophie; Sillmann, Jana; Thiery, Wim; Douzal, Clara; Lejeune, Quentin; Schleussner, Carl (2021): Global Economic Responses to Heat Stress Impacts on Worker Productivity in Crop Production. In *EconDisCliCha* 5 (3), pp. 367–390. DOI: 10.1007/s41885-021-00091-6.

Orlov, Anton; Hertog, Steven de; Havermann, Felix; Guo, Suqi; Luo, Fei; Manola, Iris et al. (2023): Changes in Land Cover and Management Affect Heat Stress and Labor Capacity. In *Earth's Future* 11 (3), Article e2022EF002909. DOI: 10.1029/2022EF002909.

Pongratz, Julia; Schwingshackl, Clemens; Bultan, Selma; Obermeier, Wolfgang; Havermann, Felix; Guo, Suqi (2021): Land Use Effects on Climate: Current State, Recent Progress, and Emerging Topics. In *Curr Clim Change Rep* 7 (4), pp. 99–120. DOI: 10.1007/s40641-021-00178-y.

Portmann, Raphael; Beyerle, Urs; Davin, Edouard; Fischer, Erich M.; Hertog, Steven de; Schemm, Sebastian (2022): Global forestation and deforestation affect remote climate via adjusted atmosphere and ocean circulation. In *Nature communications* 13 (1), p. 5569. DOI: 10.1038/s41467-022-33279-9.

Windisch, Michael G.; Davin, Edouard L.; Seneviratne, Sonia I. (2021): Prioritizing forestation based on biogeochemical and local biogeophysical impacts. In *Nat. Clim. Chang.* 11 (10), pp. 867–871. DOI: 10.1038/s41558-021-01161-z.

Windisch, Michael Gregory; Humpenöder, Florian; Lejeune, Quentin; Schleussner, Carl-Friedrich; Lotze-Campen, Hermann; Popp, Alexander (2022): Accounting for local temperature effect substantially alters afforestation patterns. In *Environ. Res. Lett.* 17 (2), p. 24030. DOI: 10.1088/1748-9326/ac4f0e.

Open-access data files

Hertog, Steven de (2023): Data for „The biogeophysical effects of idealized land cover and land management changes in Earth system models“ by De Hertog et al. (2023): DOKU at DKRZ. Available online at <http://hdl.handle.net/21.14106/999d7e61966d7c9f0cf6eaca101db5b2ee783b90>.

Orlov, Anton; Hertog, Steven de; Havermann, Felix; Guo, Suqi; Luo, Fei; Manola, Iris et al. (2023): Signal-separated multi-year monthly hourly mean values of near-surface temperature, relative humidity, solar radiation, wet bulb glob temperature, environmental stress index, and labour capacity: DOKU at DKRZ. Available online at <http://hdl.handle.net/21.14106/20982c66bcd4a5d2dc59b820224bcde21b53f27f>.

Webinars

Webinar: 'Future of Land Cover, Land Management and Climate Change' (2020). Available online at <https://www.youtube.com/watch?v=6sWvioW4GRk>. Video. Youtube.com: Climate Analytics.

Webinar: 'Effects of Irrigation on Climate Change' (2020). Video. Youtube.com: Climate Analytics. Available online at <https://www.youtube.com/watch?v=IQqvzOudNwE>.

Webinar: 'Forest Management and Land Cover Change Under a Changing Climate' (2020). Available online at <https://www.youtube.com/watch?v=RZ1yVNKuv5w>. Video. Youtube.com: Climate Analytics.

Webinar: Final LAMACLIMA workshop (2023). Available online at <https://www.youtube.com/watch?v=nsbmKtMba6E>. Video: Climate Analytics.

Blog Posts

Yesil, Burcu; Hegarty, Mike; Lejeune, Quentin; Fyson, Claire; Menke, Inga (2020): Understanding the complex relationship between land and climate. Climate Analytics. Available online at <https://climateanalytics.org/blog/2020/understanding-the-complex-relationship-between-land-and-climate/>.