Jonas Jägermeyr

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Education

2012 – 2017	**Ph.D. in Geography (Dr. rer. nat., with distinction, summa cum laude)**, Potsdam Institute for Climate Impact Research (PIK) and Humboldt University of Berlin, Germany, (link to dissertation)
2011	**Graduation in Geography (Diploma, with distinction, top of class)**, Humboldt University of Berlin, Germany and NASA Ames Research Center, Mountain View, CA, USA, minors: Mathematics and Meteorology, (link to thesis)

Professional experience

5/2020 – pres.	**Associate Research Scientist** Columbia University, Climate School, Center for Climate Systems Research and **NASA Collaborator** Goddard Institute for Space Studies, NY, USA
1/2018 – pres.	**Guest Scientist** Potsdam Institute for Climate Impact Research, Germany
1/2018 – 5/2020	**Postdoctoral Research Scientist** University of Chicago, IL, Department of Computer Science
4/2017 – 12/2017	**Research staff** Potsdam Institute for Climate Impact Research, Germany
5/2022 – pres.	**Consultant** Weather Promise, Berlin, Germany
2/2019 – 1/2020	**Consultant** Praedictus Climate Solutions, Washington D.C.

Community service

2018 – pres.	**Co-lead and coordination** of the Global Gridded Crop Model Intercomparison (GGCMI) within AgMIP
2017 – pres.	**Lead** of the ISIMIP agriculture sector at PIK, Germany
2021 – pres.	**Co-lead** of the Columbia University Climate School research hub Healthy and Sustainable Food Systems Network
2021 – pres.	**Associate Deputy Editor** for journal *Climatic Change*
2021 – pres.	**Associate Editor** for journal *Anthropocene*
2020 – 2022	**Editorial Board Member** for journal *Agriculture*
2018 – 2020	**Guest Associate Editor** for journal *Frontiers in Sustainable Food Systems*

2017 – pres.	**Supervision** of postdoctoral researcher and graduate research assistant at Columbia University, NY and PhD candidate at Centre for Environmental and Sustainability Research, Portugal
2018 – pres.	**Member and scientific contribution** to FAO expert committee for SDG guideline development for environmental flow implementation
2019 – pres.	**Expert Reviewer** for IPCC 6th Assessment Report, Working Group II
2015 – pres.	**Reviewing activity** for *Nature*, *Nature Climate Change*, *Nature Food*, *Nature Sustainability*, *Environmental Research Letters* (IOP trusted reviewer), *Earth System Dynamics*, *Earth's Future*, and others

Peer-reviewed journal articles

2022

Lesk, C., Anderson, W., Rigden, A., Coast, O., **Jägermeyr, J.**, McDermid, S., Davis, K.F., Konar, M., Compound heat and moisture extreme impacts on global crop yields under climate change, *Nature Reviews: Earth and Environment*, 3, pages 872–889, (link).

Xia, L., Robock, A., Scherrer, K., Harrison, C., Bodirsky, B., Weindl, I., **Jägermeyr, J.**, Bardeen, C. Toon, O., Heneghan, R., Global food insecurity and famine from reduced crop, marine fishery and livestock production due to climate disruption from nuclear war soot injection, *Nature Food*, (link).

Chrysafi, A., Virkki, V., Jalava, M., Sandström, V., ... **Jägermeyr, J.**, Quantifying Earth system interactions for sustainable food production: an expert elicitation. *Nature Sustainability*, (link).

Cinner, J.E., Thiault, L., Diedrich, A., Gurney, G., Pollnac, R., **Jägermeyr, J.**, Potential impacts of climate change on agriculture and fisheries production in 72 tropical coastal communities, *Nature Communications*, 13, 3530, (link).

Minoli, S., **Jägermeyr, J.**, Asseng, S., Urfels, A., Müller, C. Global crop yields can be lifted by timely adaptation of growing periods to climate change, *Nature Comm.*, 13, 7079, (link).

Hedlund, J., Carlsen, H., Croft, S., West, C., Bodin, Ö., Stokeld, E., **Jägermeyr, J.**, Müller, C., Impacts of climate change on global food trade networks, *Environ. Res. Lett.*, 0–68, (link).

Heinicke, S., Frieler, K., **Jägermeyr, J.**, Mengel, M., Global gridded crop models underestimate yield responses to droughts and heatwaves. *Environ. Res. Lett.*, 0–68, (link).

Hochman, G., Zhang, H., Xia, L., Robock, A., Saketh, A., van der Mensbrugghe, D. Y., **Jägermeyr, J.**, Economic incentives modify agricultural impacts of nuclear war. *Environ. Res. Lett.*, 17(5), 054003. (link).

Bo, Y., **Jägermeyr, J.**., Yin, Z., Jiang, Y., Xu, J., Liang, H., Global benefits of non-continuous flooding to reduce greenhouse gases and irrigation water use without rice yield penalty. *Global Change Biology*, pp. 0–2. (link).

Yao, Y., Vanderkelen, I., Lombardozzi, D., Swenson, D., Lawrence, D., **Jägermeyr, J.**, Grant, L., Thiery, W., Implementation and evaluation of irrigation techniques in the Community Land Model, Journal of Advances in Modeling Earth Systems, (link).

Nkwasa, A., Chawanda, C.J., **Jägermeyr, J.**, Griensven, A., Improved representation of agricultural land use and crop management for large-scale hydrological impact simulation in Africa using SWAT+, *Hydrology and Earth System Sciences*, 26, 71–89, (link).

2021

Jägermeyr, J., Müller, C., Ruane, A., Elliott, J., Balkovic, J., Castillo , O., Faye, B., Foster , I., Folberth, C., Franke, J., Fuchs, K., Guarin, J., Heinke, J., Hoogenboom, G., Iizumi, T., Jain, A.K., Kelly, D., Khabarov, N., Lange, S., Lin, T., Liu, W., Mialyk, O., Minoli, S., Moyer, E., Okada, M., Phillips, M., Porter, C., Rabin, S., Scheer, C., Schneider, J., Schyns, J., Skalsky, R., Smerald, A., Stella, T., Stephens, H., Webber, H., Zabel, F., Rosenzweig, C., Climate impacts on global agriculture emerge earlier in new generation of climate and crop models, *Nature Food*, 2, pp. 873–885, (link).

Thiery, W., Lange, S., Rogelj, J., Schleussner, C.F., **Jägermeyr, J.**, et al. Intergenerational inequities in exposure to climate extremes, *Science*, 3(2), (link).

Falkendal, T., Otto, C., Schewe, J., **Jägermeyr, J.**, Konar, M., Kummu, M., Watkins, B., and Puma, M. J., Grain export restrictions during COVID-19 risk food insecurity in many low- and middle-income countries, *Nature Food*, 2(1), pp. 11–14, (link).

Liu, W., Ye, T., Liu, X., Shi, P., Müller, C., **Jägermeyr, J.**, Future climate change significantly alters interannual wheat yield variability over half of harvested areas, *Environ. Res. Lett.*, 16, 094045, (link).

Zabel, F., Müller, C., Elliott, J., Minoli, S., **Jägermeyr, J.**, et al., Large Potential for Crop Production Adaptation Depends on Available Future Varieties, *Global Change Biology*, gcb.15649, (link).

Franke, J.A., Müller, C., Minoli, S., Elliott, J., Folberth, C., Izaurralde, R.C., Gardner, C., **Jägermeyr, J.**, et al., Agricultural breadbaskets shift poleward given adaptive farmer behavior under climate change, *Global Change Biology*, gcb.15868, (link).

Brás, T., J. Seixas, N. Carvalhais, **Jägermeyr, J.**, Severity of drought and heatwave crop losses tripled over the last five decades in Europe, *Environ. Res. Lett.*, vol. 16, no. 6, p. 06501, (link)

Wang, X., Ciais, P., Müller, C., Elliott, J., Mueller, N., **Jägermeyr, J.**, Global irrigation contribution to wheat and maize yield, *Nature Communications*, 12(1), p. 1235, (link).

Siderius, C., Biemans, H., Conway, D., Immerzeel, W., **Jägermeyr, J.**, Ahmad, B., Hellegers, P., Financial Feasibility of Water Conservation in Agriculture, *Earth's Future*, 9(3), pp. 1–21, (link).

Bardeen, C.G., Kinnison, D.G., Toon, O.B., Mills, M.J., Vitt, F., Xia, L., **Jägermeyr, J.**, et al., Extreme Ozone Loss Following Nuclear War Results in Enhanced Surface Ultraviolet Radiation, *Journal of Geophysical Research: Atmospheres*, 126(18), (link).

Ruane, A., Phillips M, Müller, C, Elliott, J., **Jägermeyr, J.**, et al., Strong regional influence of climatic forcing datasets on global crop model ensembles, *Agr. For. Met*, 300, p. 108313., (link).

Müller, C., **Jägermeyr, J.**, Franke, J., et al., Exploring uncertainties in global crop yield projections in a large ensemble of crop models and CMIP5 and CMIP6 climate scenarios, *Environ. Res. Lett.*, 16(3), p. 034040, (link).

2020

Jägermeyr, J., Robock, A., Elliott, J., Müller, C., Xia, L., Khabarov, N., Folberth, C., Schmid, E., Liu, W., Zabel, F., Rabin, S., Puma, M.J., Heslin, A.C., Franke, J., Foster, I., Asseng, S., Bardeen, C.G., Toon, O.B., Rosenzweig, C., A regional nuclear conflict would compromise global food security, *Proc. Natl. Acad. Sci.*, vol. 117, no. 13, pp. 7071–7081, (link).

Jägermeyr, J., Agriculture's Historic Twin-Challenge Toward Sustainable Water Use and Food Supply for All, *Front. Sustain. Food Syst.*, vol. 4, no. 35, pp. 1–16, (link), invited perspective paper.

Scherrer, K., Harrison, C., Heneghan, R., Galbraith, E., Bardeen, C., Coupe, J., **Jägermeyr, J.**, Marine wild-capture fisheries after nuclear war, *Proc. Natl. Acad. Sci.* p. 202008256, (link).

Lange, S., Volkholz, J., Geiger, T., **Jägermeyr, J.**, et al., Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales, *Earth's Future*, 8(12), (link).

Zhai, R., Tao, F., Lall, U., Fu, B., Elliott, J., **Jägermeyr, J.**, Larger Drought and Flood Hazards and Adverse Impacts on Population and Economic Productivity under 2.0 than 1.5°C Warming, *Earth's Future*, 4, (link).

Schauberger, B., **Jägermeyr, J.**, Gornott, C., A systematic review of local to regional yield forecasting approaches and frequently used data resources, *European Journal of Agronomy*, vol. 120, 126153 (link).

Franke, J., Müller, C., Elliott, J., Ruane, A., **Jägermeyr, J.** et al., The GGCMI Phase II experiment: global gridded crop model simulations under uniform changes in CO_2, temperature, water, and nitrogen levels (protocol version 1.0), *Geosci. Model Dev.*, 13, 2315-2336, (link).

Franke, J., Müller, C., Elliott, J., Ruane, A., Snyder, A., **Jägermeyr, J.**, et al. The GGCMI Phase II emulators: global gridded crop model responses to changes in CO_2, temperature, water, and nitrogen (version 1.0), *Geosci. Model Dev.*,13, 3995-4018, (link).

Gerten, D., Heck, V., **Jägermeyr, J.**, Bodirsky, B.L., Fetzer, I., Jalava, M., Kummu, M., Lucht, W., Rockström, J., Schaphoff, S., Schellnhuber, H.J. Feeding ten billion people is possible within four terrestrial planetary boundaries. *Nature Sustainability*, vol. 3, no. 3, pp. 200–208, (link).

2019

Huang, G., Hoekstra, A., Krol, M, Galindo, A., **Jägermeyr, J.**, Yu, C., Wang, R., Water-Saving Agriculture Can Deliver Deep Water Cuts for China, *Resources, Conservation & Recycling*, 154, article number: 104578, (link).

Minoli, S., Müller, C., Elliott, J., Ruane, A., **Jägermeyr, J.**, et al., Global response patterns of major rainfed crops to adaptation by maintaining current growing periods and irrigation. *Earth's Future*, 1-38, (link).

Brás, T.A., **Jägermeyr, J.**, Seixas, J., Exposure of the EU-28 food imports to extreme weather disasters in exporting countries, *Food Security*, (link).

Stenzel, F., Gerten, D., Werner, C., **Jägermeyr, J.**, Freshwater requirements of large-scale bioenergy plantations for limiting global warming to 1.5°C. *Environ. Res. Lett.*, 14(8): 084001, (link).

2018 **Jägermeyr, J.** and Frieler, K. Spatial variations in crop phenology pivotal to reproduce global fluctuations in maize and wheat yields. *Science Advances*, Vol. 4, no. 11, eaat4517, (link).

Schaphoff, S., von Bloh, W., Rammig, A., Thonicke, K., Biemans, H., Forkel, M., Gerten, D., Heinke, J., **Jägermeyr, J.**, et al. LPJmL4 – a dynamic global vegetation model with managed land: Part I – Model description. *Geoscientific Model Development*, 11(4), 1343-1375, (link).

Schaphoff, S., Forkel, M., Müller, C., Knauer, J., von Bloh, W., Gerten, D., **Jägermeyr, J.**, et al. LPJmL4 - a dynamic global vegetation model with managed land: Part II - Model evaluation. *Geoscientific Model Development*, 11(4), 1377-1403, (link).

Rufin, P., Levers, C. Baumann, M., **Jägermeyr, J.**, Krueger, T., Kuemmerle, T., Hostert, P. Global-scale patterns and determinants of cropping frequency in irrigation dam command areas. *Global Environmental Change*, 50, 110–122, (link).

2017 **Jägermeyr, J.**, Pastor, A., Biemans, H., Gerten, D. Reconciling irrigated food production with environmental flows for Sustainable Development Goals implementation. *Nature Communications*, 8, article number: 15900, (link).

Kummu, M., Fader, M., Gerten, D., Guillaume, J., Jalava, M., **Jägermeyr, J.**, et al. Bringing it all together: linking measures to secure nations' food supply. *Current Opinion in Environmental Sustainability*, 29, 98-117, (link) .

Frieler, K. et al. (incl. **Jägermeyr, J.**) Assessing the impacts of 1.5°C global warming - simulation protocol of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b), Geoscientific Model Development, 10(12), 4321-4345, (link).

2016 **Jägermeyr, J.**, Gerten, D., Schaphoff, S., Heinke, J., Lucht, W., Rockström, J. Integrated crop water management might sustainably halve the global food gap. *Environ. Res. Lett.*, 11(2): 025002, (link), (awarded ERL Highlights 2016).

Wang-Erlandsson, L., Bastiaanssen, W. G. M., Gao, H., **Jägermeyr, J.**, et al. Global root zone storage capacity from satellite-based evaporation. *Hydrology and Earth System Sciences*, 20(4), 1459-1481, (link).

2015 **Jägermeyr, J.**, Gerten, D., Heinke, J., Schaphoff, S., Kummu, M., Lucht, W. Water savings potentials of irrigation systems: global simulation of processes and linkages. *Hydrology and Earth System Sciences*, 19(7), 3073-3091, (link).

2014 **Jägermeyr, J.**, Gerten, D., Lucht, W., Hostert, P., Migliavacca, M., Nemani, R. A high-resolution approach to estimating ecosystem respiration at continental scales using operational satellite data. *Global Change Biology*, 20(4), 1191-1210, (link).

2013 Gerten, D., Hoff, H., Rockström, J., **Jägermeyr, J.**, et al. Towards a revised planetary boundary for consumptive freshwater use: Role of environmental flow requirements. *Current Opinion in Environmental Sustainability*, 5(6), 551-558, (link).

2010 Kabir, M. H., Endlicher, W., **Jägermeyr, J.** Calculation of bright roof-tops for solar PV applications in Dhaka Megacity, Bangladesh. *Renewable Energy*, 35(8), 1760-1764, (link).

Peer-reviewed journal articles (pending)

2022 Kornhuber, K. Lesk, C. Schleussner, C.-F., **Jägermeyr, J.**, Pfleiderer, P., Horton, R., Risks of synchronized harvest failures underestimated in model projections, *Nature Communications*, submitted.

Orlov, A., **Jägermeyr, J.**, Daloz, A., Sillmann, J., Minoli, S., Okada, M., Liu, W., Smerald, A., Lin, T.-S., Jain, A., Folberth, C., Müller, C., Human heat stress could offset economic benefits of the CO2 fertilisation effect in crop production, *Nature Communications*, submitted.

Steinbuks, J., Judd, K., **Jägermeyr, J.**, Hertel, T. Modeling Uncertainty in Large Natural Resource Allocation Problems, *JAERE*, in revision.

McDermid, S., Rabin, S., Wada, Y., Brocca, Y., Chen, F., Cook, B.I., Dorigo, W., Hanasaki, N., **Jägermeyr, J.**, From Farm to Globe: Understanding the role of irrigation in the Earth system with a convergent research approach, *Science*, submitted.

Fei, C., **Jägermeyr, J.**, McCarl, B., Mencos, E., Mutter, C., Phillips, M., Ruane, A., Schultz, P., Vargo, A. Climate Change Impacts on U.S. Agriculture, Anthropocene, (submitted).

Wang, B., **Jägermeyr, J.**, O'Leary, G., Wallach, D., Feng, P., Li, L., Liu, D.L. Yu, Q., Asseng, S., Rosenzweig, C., Strengthening impact science is needed to reduce uncertainty (to be submitted to Science).

Liu, K, Harrison, M.T., Yan, H., Liu, D.L., Meinke, H., Hoogenboom, H., Wang, B., Peng, B., Guan, K., **Jägermeyr, J.**, Wang, E., Zhang, F., Yin, X., Archontoulis, S., Nie, L., Badea, A., Man, J., Wallach, D., Zhao, J., Borrego Benjumea, A., Zhang, Y., Wang, W., Fahad, S., Tao, F., Zhang, Z., Rötter, R., Yuan, Y., Zhu, M., Dai, P., Nie, J., Yang, Y., Tian, X., Zhou, M., Silver lining to a climate crisis: multiple prospects for alleviating crop waterlogging under future climates, *Nature Comm.*, in revision.

Book chapters, solicited articles, other publications

2018 Gerten, D. & **Jägermeyr, J.** The potential impact of improved water management to alleviate water scarcity and hunger: a global perspective. In: Allan, T., Bromwich, B., Colman, T., Keulertz, M. (Eds.): *The Oxford Handbook of Water, Food and Society.* Oxford University Press (link).

2017 **Jägermeyr, J.** Managing water better is central to attaining our development goals. *The Water Blog*, World Bank (link).

Jägermeyr, J. Assessing opportunities to increase global food production within the safe operating space for human freshwater use. *Humboldt University of Berlin*, dissertation, (link).

Jägermeyr, J. To the Last Drop. *The Mark News*, syndicated worldwide (print and online) (link).

2016 Press release, Better water management could halve the global food gap (link), with extended media coverage (incl. TV, print and online), 2016, Potsdam Institute for Climate Impact Research.

Jägermeyr, J. & Gerten, D. Bessere Wassernutzung könnte globales Nahrungsdefizit reduzieren *Hydrologie und Wasserbewirtschaftung*, 60(2), 153-155.

2011 **Jägermeyr, J.**, A Continental-Scale Estimate of Ecosystem Respiration Using MODIS Land Surface Temperature and Enhanced Vegetation Index. *Humboldt University of Berlin*, diploma thesis, (link).

Open data publications and model code contributions

2021 GGCMI Phase 3 crop projection archive – harmonized CMIP6-based crop model projections from 1850 to 2100 for 12 global gridded crop models and 4 crops, doi: 10.1038/s43016-021-00400-y, (link).

GGCMI Phase 3 crop calendar – global gridded observational planting and harvest dates for 18 crops, harmonized and gap-filled for global modeling applications, doi: 10.5281/zenodo.5062513, (link).

N application rates from mineral fertilizer and manure – global gridded observational fertilizer application rates for 18 crops, harmonized and gap-filled for global modeling applications, doi: 10.5281/zenodo.4954582, (link).

2019 GGCMI phase 2 – global gridded crop model simulations under uniform changes in CO_2, temperature, water, and nitrogen levels, (link).

2018 LPJmL4 – a dynamic global vegetation model with managed land, (link).

2017 ISIMIP2b – Inter-Sectoral Impact Model Intercomparison Project data base, (link)

2015 Global gridded data set of crop-specific irrigation efficiencies and irrigation systems, (link).

Teaching

2022

Pratt Institute, Brooklyn, New York, creative writing seminar Science meets Art – Speculating the Environment: Speculating the Environment – Climate change implications for global agriculture.

Utah State University, Climate Adaptation Science Center Seminar: Climate change implications for global agriculture.

Utah State University, Faculty Seminar: Climate change implications for global agriculture.

University of Louisiana at Lafayette, Seminar at the School of Geosciences on Sustainable Intensification: Sustainable intensification – how to attain the SDGs within Planetary Boundaries.

NASA Trees Around the GLOBE, Student Research Campaign Seminar: Global crop modeling and climate-related implications for future food productivity.

CGIAR Big data in Ag, Community of Practice for Crop modeling Seminar: Potential climate-related impacts on future maize and wheat yields.

DAFA Deutsche Agrarforschungsallianz, Landwirtschaft im Klimawandel Workshop-Serie: Agrarforschung zum Klimawandel und Erträge: Climate impacts on global agriculture emerge earlier in new generation of climate and crop models (in German).

PIK Science Discussions Seminar: Potential food system disturbance due to nuclear conflict and climate-related shocks.

Selected scientific presentations

2022

Jägermeyr, J. Potential food system disruptions due to regional nuclear conflict, invited briefing to The White House OSTP Council of Economic Advisors, Apr 27.

Jägermeyr, J. Potential food system disruptions due to regional nuclear conflict, invited briefing to The UK Government Cabinet Office, July 18.

Jägermeyr, J., Scenarios for Climate and Societal Futures, invited keynote, Scenarios Forum 2022, Jun 20-22, Vienna.

Jägermeyr, J., Potential food system disruptions due to regional nuclear conflict, invited keynote panel, ICAN Nuclear Ban Week 2022, Jun 18-19, Vienna.

Jägermeyr, J., A composite global crop calendar for agricultural modeling and climate change trend detection, Phenology 2022, Jun 22-24, Avignon.

Jägermeyr, J., Climate impacts on global agriculture emerge earlier in new generation of climate and crop models, invited presentation, invited, EGU General Assembly, May 23-27, Vienna.

Jägermeyr, J., Potential climate-related impacts on future maize and wheat yields, invited seminar, CGIAR global seminar, Jan 11.

2021 **Jägermeyr, J.**, Climate impacts on global agriculture emerge earlier in new generation of climate and crop models, invited keynote, AGU Fall Meeting, Dec 13-17, New Orleans.

Del Mel, M., **Jägermeyr, J.**, Ruane, A., Rosenzweig, C., An Assessment of Irrigated Agriculture and Drought-related Hazard Risks for the Aral Sea Region, invited keynote, COP26 side event, Nov 1.

Jägermeyr, J., Potential food system disturbance due to nuclear conflict and climate-related shocks, invited keynote, Science Discussion, Potsdam Institute for Climate Impact Research, March 3.

2020 **Jägermeyr, J.**, Christoph Müller, Alex Ruane, Cynthia Rosenzweig, et al., Ensemble estimates of future extreme event impacts on global crop productivity, *AGU*, 13-17 Dec, virtual.

Jägermeyr, J., Christoph Müller, Alex Ruane, Corey Lesk, Katja Frieler, Joshua Elliott, GGCMI modelers, Cynthia Rosenzweig, et al., CMIP6 climate and crop model ensemble estimates of future extreme event impacts on crops, *iCROPM*, Feb, Montpellier, France.

2019 **Jägermeyr, J.**, Rosenzweig, C., Ruane, A., Mutter, C. Modeling opportunities for climate-smart approaches – anticipating extreme events and shocks, *invited* oral presentation, *GACSA Annual Forum*, 15-16 June, 2019, Bonn, Germany.

Jägermeyr, J., Müller, C., Elliott, J., et al. Global gridded crop modeling - understanding crop yield fluctuations, *invited* oral presentation, *Cross-sectoral ISIMIP workshop*, 04-07 June 2019, Paris, France.

Jägermeyr, J., Müller, C., Elliott, J., et al. Global gridded crop modeling within AgMIP, *invited* oral presentation, *Next-Generation Food Shock Modeling workshop*, Aspen Global Change Institute, 20-24 May, 2019, Colorado.

Jägermeyr, J., Xia, L., Müller, C., Elliott, J., et al. A regional nuclear conflict has global implications for food security, oral presentation, *3rd Agriculture and Climate Change Conference*, 24-26 March 2019, Budapest, Hungary.

2018 **Jägermeyr, J.**, Pastor, A., Biemans, H., Gerten, D. Reconciling irrigated food production with environmental flows for SDG implementation, oral presentation, *7th AgMIP Global Workshop*, 23-27 April 2018, San Jose, Costa Rica.

2018 **Jägermeyr, J.**, Pastor, A., Biemans, H., Gerten, D. Reconciling irrigated food production with environmental flows for SDG implementation, oral presentation, *Nexus 2018*, 16-18 April 2018, Chapel Hill, North Carolina, USA.

2017 **Jägermeyr, J.** & Frieler, K., Local cultivar phenology key to representing extreme weather impacts on global maize yields, invited oral presentation, *Impacts World 2017*, 11-13 October 2017, Potsdam, Germany.

2016 **Jägermeyr, J.**, Gerten, D., Schaphoff, S., Heinke, J., Lucht, W., Rockström, J., Integrated crop water management might sustainably halve the global food gap, plenary talk, *International Crop Modelling Symposium*, 15-17 March 2016, Berlin, Germany.

2015 **Jägermeyr, J.**, Gerten, D., Lucht, W., Heinke, J., Planetary opportunities in crop water management - potential to outweigh cropland expansion, invited plenary talk, *Our Common Future under Climate Change*, 7–10 July 2015, Paris, France.

2014 **Jägermeyr, J.**, Gerten, D., Lucht, W., Heinke, J., Planetary opportunities in crop water management - potential to outweigh cropland expansion, oral presentation, *EGU 2014* - European Geosciences Union General Assembly, Vienna, Austria, 27 April – 02 May 2014.

Invited workshop contributions

- Summary panelist at Food Security Strategies for a Changing World, Cornell University, April 8, 2022
- Stone Barns Center for Food and Agriculture, April 6, 2022
- Ensemble estimates of future extreme event impacts on global crop productivity, AgMIP 8 global workshop, 2020
- Global gridded crop modeling, ISIMIP global workshop, 2020
- Building Resilient Agricultural Systems Supported by Near-Term Climate and Yield Forecasts, session convener, AGU Fall Meeting, 2019
- Global food system vulnerabilities relevant to US institutions in a changing climate, Thomson Reuters, New York, NY, 2019
- Penn State Emergency Food Resilience Workshop, Pennsylvania State University, PA, 2019
- Monitoring and Evaluation for Climate-Smart Agriculture, FAO, Rome, Italy, 2019
- Forecasting crop yields from data, models and expert knowledge, Paris, France, 2018
- Building a Collaborative Vision for Training FEWS Leaders, Missoula, MT, 2018

Grants and Awards

- FFAR grant "Evaluating the relative influence of maize breeding, field management, and environmental setting on crop production and sustainability targets", PI Jägermeyr
- NASA grant "Ag Out – An Enhanced IMERG-based Agricultural Outlook System to Support Food Security and Agriculture in the Developing World", PI Jägermeyr
- UNDP grant "An Assessment of Irrigated Agriculture and Drought-related Hazard Risks for the Aral Sea Region", PI Jägermeyr
- USAID grant "Improving Drought Monitoring and Forecasting for MENA", PI Jägermeyr
- USDA grant "Multi-Breadbasket Failures and Shocks to Food Systems: AgMIP Simulations", PI Jägermeyr
- EPA grant "EPA's Activities Examining Sectoral Impacts of Climate Change" (68HERH20F0177) (2020 – 2021), PI Jägermeyr

- Open Philanthropy Project grant extension "Environmental and Human Impacts of Nuclear War", PI: Robock, A. and Toon, B. (2020 – 2023)
- NSF grant 2129627 "Collaborative Research: Global Agricultural Impacts of Stratospheric Aerosol Climate Intervention", PI Xia
- NSF grant 1934955 "Collaborative Research: Disentangling Environmental Change and Social Factors as Drivers of Migration", PI: McDermid, S. and Bell, A. (2019 – 2024)
- Open Philanthropy Project grant "Environmental and Human Impacts of Nuclear War", PI: Robock, A. and Elliott, J. (2018 – 2020)
- Publication awarded by the editors of Environmental Research Letters, 2016
- Humboldt University award for outstanding dissertation
- Humboldt University award for best diploma thesis

Public outreach

- Active Twitter channel: @JonasJaegermeyr
- Collaboration with artist-in-residence Kate Doyle, at NASA GISS, NY, 2019
- Actor in climate change theater play "Klimaprinzessin", Potsdam Institute for Climate Impact Research, Germany, 2017

Society memberships

- AAAS, AGU, EGU

References and letters of recommendation available on request. Last update December 10, 2022.