



UNIVERSITÄT
HEIDELBERG
ZUKUNFT
SEIT 1386



U.S. GLOBAL
DEVELOPMENT
LAB
Powered by USAID



IWH SYMPOSIUM

Geospatial Analysis of Disasters

Measuring Welfare Impacts of Emergency Relief

July 18-19, 2016 at Heidelberg University, Germany

Natural disasters and man-made catastrophes pose a serious threat to the stability and prosperity of countries and the well-being and lives of many individuals worldwide. Methodological advances and better availability of geospatial data are revolutionizing research on economic development after disasters and the allocation and effects of disaster relief and other forms of humanitarian aid. In order to spur this research agenda, we invite outstanding researchers to discuss how to use geospatial methods for measuring economic losses and recovery and other welfare indicators after disasters. Specifically, participants will work together to discuss and identify reliable, standard outcome measures of the welfare impacts of disasters at low levels of spatial and temporal aggregation.

This interdisciplinary workshop will be hosted by the [Research Center of Distributional Conflict and Globalization](#) in collaboration with the [GIScience Group](#) at Heidelberg University. Generous funding by [AidData](#), the [U.S. Global Development Lab powered by USAID](#) and the [German Research Foundation \(DFG\)](#) is gratefully acknowledged. The workshop brings together researchers from economics, geography, computer science, political science, sociology, and other relevant disciplines. The goal of the workshop is to stimulate and advance the debate about reliable geospatial measures of the welfare impacts of emergency relief and to foster research collaborations.

Location: The workshop will take place at Heidelberg University's [International Academic Forum \(IWH\)](#) on July 18-19, 2016 (IWH Symposium). Heidelberg University is one of Germany's Universities of Excellence and is the country's oldest university. The city of Heidelberg is considered one of the most beautiful in Germany and is located only a short train ride from Frankfurt Airport.

We look forward to welcoming you at Heidelberg University.

Andreas Fuchs and Vera Z. Eichenauer

Research Center for Distributional Conflict and Globalization, Heidelberg University

Sven Kunze

Chair of International and Development Politics, Heidelberg University

João Porto de Albuquerque and Hongchao Fan

GIScience Research Group, Heidelberg University

PROGRAM

(as of July, 14th 2016)

Monday, July 18

- 8:15am-8:45am **Registration**
- 8:45am-9:00am **Opening remarks**, Andreas Fuchs (Heidelberg University)
- 9:00am-10:30am **Paper session 1: Welfare effects of storms**
Chair: Andreas Fuchs (Heidelberg University)
- Paper 1: **Amir Jina** (University of Chicago). *Environmental Catastrophe and Economic Growth*. Discussion openers: Sven Kunze, Jeroen Klomp.
 - Paper 2: **Sven Kunze** (Heidelberg University). *The Effect of Tropical Cyclones on Economic Development Disentangled*. Discussion openers: Amir Jina, Eric Strobl.
 - Paper 3: **Laura Bakkensen** (University of Arizona). *Wind Versus Rain: Tropical Cyclone Losses Under Climate Change* (with Doo-Sun Park and Raja Sarkar). Discussion openers: Robert Elliott, Anselm Schultes.
- 10:30am-11:00am Coffee break
- 11:00am-12:30pm **Paper session 2: The effects of disaster aid**
Chair: Axel Dreher (Heidelberg University)
- Paper 4: **Vera Z. Eichenauer** (Heidelberg University). **Andreas Fuchs** (Heidelberg University) and **Sven Kunze** (Heidelberg University). *Analyzing the Effectiveness of Emergency Aid from Outer Space*. Discussion openers: Jeroen Klomp, Ilan Noy.
 - Paper 5: **Paul Raschky** (Monash University). *Government Relief and Post Disaster Settlement Patterns* (with Asadul Islam). Discussion openers: Christian Bjørnskov, Joshua Busby.
 - Paper 6: **Claire Zanuso** (Université Paris-Dauphine). *Build Back Better: The Long-lasting Impact of the 2010 Earthquake in Haiti* (with Camille Saint-Macary). Discussion openers: Robert Elliott, Kristina Czura.
- 12:30am-1:45pm Lunch break
- 1:45pm-3:15pm **Paper session 3: Economic responses to natural disasters**
Chair: Sven Kunze (Heidelberg University)
- Paper 7: **Robert Elliott** (University of Birmingham) and **Eric Strobl** (École Polytechnique). *Natural Disasters and Plant Survival: The Impact of the Kobe Earthquake* (with Matthew A Cole and Toshihiro Okubo). Discussion openers: Richard Bluhm, Claire Zanuso.

- Paper 8: **Kristina Czura** (LMU Munich) and **Stefan Klonner** (Heidelberg University). *Credit Networks' Responses to a Natural Disaster: Evidence from Roscas and the Indian Ocean Tsunami*. Discussion openers: Pierre-Guillaume Méon, Gerald Leppert.
- Paper 9: **Eric Strobl** (École Polytechnique). *The Inflationary Costs of Extreme Weather in Developing Countries* (with Andreas Heinen and Jeetendra Khadan). Discussion openers: Laura Bakkensen, João Porto de Albuquerque.

3:15pm-3:45pm

Coffee break

3:45pm-5:15pm

Paper session 4: Non-economic effects of disasters and disaster aid

Chair: João Porto de Albuquerque (University of Warwick)

- Paper 10: **Martin C. Steinwand** (Stony Brook University). *Climate Change and Political Survival: Effects of Meteorological Drought and Precipitation Flooding* (with Oleg Smirnov, Tingyin Xiao and Minghua Zhang). Discussion openers: Laura Bakkensen, Axel Dreher.
- Paper 11: **Alan Fuchs Tarlovsky** (World Bank). *Voter Response to Natural Disaster Aid: Quasi-Experimental Evidence from Drought Relief Payments in Mexico*. Discussion openers: Riaz Ahmed, Ariel BenYishay.
- Paper 12: **Pierre-Guillaume Méon** (Université libre de Bruxelles). *Does a Disaster in the Backyard Affect Donations for a Faraway Cause? Evidence from a Natural Experiment in Flanders (Belgium)* (with Philip Verwimp). Discussion openers: Alan Fuchs Tarlovsky, Stefan Klonner.

5:15pm-5:45pm

Coffee break

5:45pm-6:45pm

Discussion session 1: How can we measure the impact of disasters and post-disaster aid using geospatial data and methods?

Chair: Vera Z. Eichenauer (Heidelberg University)

- Discussion input 1: **Norman Kerle** (University of Twente). *Post-disaster Recovery Assessment with Remote Sensing and Economic Modelling*.
- Discussion input 2: **Richard Bluhm** (University of Hanover). *Uses and Abuses of the Night Lights Data*.
- Discussion input 3: **Ariel BenYishay** (College of William and Mary). *Geospatial Impact Evaluation: Opportunities and Lessons for the Evaluation of Emergency Relief*.
- Discussion with panelists and participants

6:45pm-7:15pm

Break

8:00pm-10:30pm

Dinner (by invitation only)

Tuesday, July 19

8:45am-10:15am

Paper session 5: Vulnerability and disaster preparedness

Chair: Hongchao Fan (Heidelberg University)

- Paper 13: **Joshua Busby** (University of Texas-Austin). *In Harm's Way: Climate Security Vulnerability in Asia* (with Todd Smith, Nisha Krishnan and Charles Wight). Discussion openers: Martin C. Steinwand, Sebastian Ziaja.
- Paper 14: **Timo Goeschl** (Heidelberg University). *Natural Hazards and Disaster Preparedness: Crowding Effects of Public Insurance on Private Self-insurance* (with Shunsuke Managi). Discussion openers: Paul Schaudt, Malte Lech.
- Paper 15: **Ilan Noy** (Victoria University of Wellington). *The Measurement of Disaster Risk: An Example from Tropical Cyclones in the Philippines* (with Rio Yonson and JC Gaillard). Discussion openers: Luisito Bertinelli, Benjamin Herfort.

10:15am-10:45am

Coffee break

10:45am-12:45pm

Discussion session 2: How can we predict and assess the welfare impact of disasters? Measurement and Applications

Chair: Vera Z. Eichenauer (Heidelberg University)

Part I: Measurement

- Discussion input 4: **Stephan Jäger** (Geomer GmbH). *Measuring Vulnerability and Risk at Different Scales*.
- Discussion input 5: **Ilan Noy** (Victoria University of Wellington). *The Measurement of Exit, Voice, and Loyalty Post-Disaster*.
- Discussion input 6: **André Gröger** (Goethe University Frankfurt). *Searching for a Better Life: Nowcasting Demand for International Migration* (with Tobias Stöhr).
- Discussion with panelists and participants

Part II: Applications

- Discussion input 7: **Amir Jina** (University of Chicago). *Flooding Impacts in Bangladesh*.
- Discussion input 8: **Jeroen Klomp** (Wageningen University). *Agricultural Development and Natural Disasters: Evidence from Outer Space*.
- Discussion input 9: **Malte Lech** (DEval) and **Gerald Leppert** (DEval), *Impact Evaluation of a Complex Intervention on Land Use Planning and Disaster Risk Management in the Philippines*.
- Discussion with panelists and participants

12:45pm-1:45pm

Lunch break

1:45pm-3:15pm

Paper session 6: Crowdsourcing, conflicts and lightnings

Chair: Ariel BenYishay (College of William and Mary)

- Paper 16: **Benjamin Herfort** (Heidelberg University) and **João Porto de Albuquerque** (University of Warwick). *Crowdsourcing Geographic Information from Satellite Imagery: a Typology and Case studies in Humanitarian Mapping*. Discussion openers: Stephan Jäger, Norman Kerle.
- Paper 17: **Richard Bluhm** (University of Hanover) and **Melvin H. L. Wong** (University of Hanover). *Grievance meets Opportunity: Shocks, Inequality and Conflict at the Local Level*. Discussion openers: André Gröger, Paul Raschky.
- Paper 18: **Luisito Bertinelli** (University of Luxembourg) and **Eric Strobl** (École Polytechnique). *The Impact of Air Pollution on Child Mortality*. Discussion openers: Timo Goeschl, Melvin H. L. Wong.

3:15pm-3:20pm

Closing remarks, Andreas Fuchs (Heidelberg University)

3:45pm-9:15pm

Social program (*by invitation only*)

We thank the IWH for providing its premises for the workshop.

LIST OF PARTICIPANTS

Alan Fuchs Tarlovsky	World Bank
Amir Jina	University of Chicago
André Gröger	Goethe University Frankfurt
Andreas Fuchs	Heidelberg University
Angelika Müller	Heidelberg University
Anselm Schultes	Potsdam Institute for Climate Impact Research
Ariel BenYishay	AidData & College of William and Mary
Axel Dreher	Heidelberg University
Benjamin Herfort	Heidelberg University
Christian Bjørnskov	Aarhus University
Claire Zanuso	Université Paris-Dauphine
Eric Strobl	École Polytechnique
Gerald Leppert	DEval
Gerda Asmus	Heidelberg University
Hongchao Fan	Heidelberg University
Ilan Noy	Victoria University of Wellington
Jeroen Klomp	Wageningen University
João Porto de Albuquerque	University of Warwick & Heidelberg University
Joshua Busby	University of Texas in Austin
Kristina Czura	LMU Munich
Laura Bakkensen	University of Arizona
Luisito Bertinelli	Université du Luxembourg
Malte Lech	DEval
Martin C. Steinwand	Stony Brook University
Melvin H. L. Wong	University of Hanover
Norman Kerle	University of Twente
Paul Raschky	Monash University
Paul Schaudt	University of Hanover
Pierre-Guillaume Méon	Université libre de Bruxelles
Riaz Ahmed	Heidelberg University
Richard Bluhm	University of Hanover
Robert Elliott	University of Birmingham
Sebastian Ziaja	Heidelberg University
Stefan Klonner	Heidelberg University
Stephan Jäger	Geomer
Sven Kunze	Heidelberg University
Thomas Wencker	Heidelberg University
Timo Goeschl	Heidelberg University
Vera Z. Eichenauer	Heidelberg University

