## Cross-sectoral ISIMIP and PROCLIAS Workshop 16-19 May 2022

ISIMIP Sectoral session	Keynote	PROCLIAS WG1	PROCLIAS WG2	PROCLIAS WG3	PROCLIAS WG4
	,				

Time (UTC+2)	Monda	ay 16 May	Tuesday 17 Ma	зу	Wednesd	ay 18 May	Thursda	y 19 May
9:00-10:30	Regis	stration	Plenary: Climate Impact A Uncertainty Assessment (PR (9:00-10:30)		Plen Cross-sectoral ( (PROCLIA (9:00-	climate impacts AS WG 3)		Sector meeting: Fisheries and Marine Ecosystems (8:00-9:00)
			Coffee Break (10:30-11:00)	Break-out	15 min Parallel Break Cross-sectoral	out sessions:	Sector meeting: Water regional (2) (9:30-11:30)	Sector meeting: Forest (10:00-11:30)
10:30-12:30	Sector meeting: Lakes	Sector meeting: Water regional (1)	Break-out sessions:  • Vulnerability and	session: Open exchange	(TG3.5, 3 (11:00-	3.7, 3.11) 12:00)	15 mir	Break
	(10:30-12:30)	(10:30-12:30)	exposure modeling  Water Quality (TG3.9)  (11:00-12:30)	on methods for climate impact attribution (11:00-12:30)	'hot model' issue in CMIP6 climate projections (12:00-12:30)	Closed session: Paper writing (11:30-13:00)		sa workshop -12:30)
12:30-13:30	0-13:30 Lunch Break							
13:30-14:30	Keynote: Johan	g Session Rockström (PIK) 0-14:30)	Keynotes: Cath Senior (Met C Jakob Zscheischler (13:30-14:30)		Plenary: Communication and dissemination of climate impacts (PROCLIAS WG 4)			
	5 mir	n Break	5 min Break	0	(13:30- 5 min	,		
14:35-15:45	ISIMIP data and proto	nary: cols (PROCLIAS WG 1) 5-15:45)	Sector meeting: Labour (14:35-15:35)	Sector meeting Biomes, Fire, Permafrost (14:35-15:35)	Parallel Break-out ses and dissemination (15:05-	sions: Communication of climate impacts	ISIMIP Chelsa workshop	Closed Session: ISIMIP SAB meeting
15:45-16:10		and Group Photo 5-16:10)	Coffee Break and Poste (15:35-16:15)	er session	Coffee (15:40-	16:00)	(13:30-18:30)	(15:00-16:30)
16:10-17:40	ISIMIP data (TG1.1, 1	k-out sessions: and protocols .2, 1.3, 1.7) 0-17:40)	Parallel Sector mee Water global, Health, Agric fluctuations and Extre	ulture, Energy	Keynotes and c Camille Parmesan ( Brian O'Ne Closing remark: (16:00-	CNRS, UofP, UofTx) eill (PNNL) s (Katja Frieler)		
17:40-19:00	Welcome	Reception	(16:15-18:15)	,.				
19:00		7:40)	Conference Din (19:00)	ner	Conference (18:			

## **Detailed Program**

**Monday 16.5.** (note that on Monday we will have two slots with parallel sessions)

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue
9:00-10:30	<u>Registration</u>		A56: Atrium
10:30-12:30	Sector meeting: Lakes  - Input data for ISIMIP3 - Ongoing analysis using lake sector ISIMIP data - Changes in protocol for ISIMIP3	<b>Wim Thiery</b> , Rafael Marcé, Don Pierson, Daniel Mercado-Bettín	A56: Conference hall
	Sector meeting: Water regional (1)  - State of publications on attribution and detection - Presentation of studies - The planned Special Issue	Fred Hattermann, Valentina Krysanova	A56 Telepresence room (0.38)
12:30-13:30	Lunch Break		A56: Conference hall
13:30-14:30	Opening session  - Introductory Keynote: "tba" (Johan Rockström)  - Welcome, ISIMIP and PROCLIAS news and awards ceremony (Katja Frieler, Christopher Reyer)	Katja Frieler, Christopher Reyer	A56: Conference hall
	5 min break		
14:35-15:45	Plenary: ISIMIP data and protocols for climate impact modeling (PROCLIAS WG 1)  - Overview of PROCLIAS WG1 (Laura Dobor/Wim Thiery) - ISIMIP3: Simulation protocol and available forcing data (Katja Frieler) - ISIMIP3: land use patterns (TG1.1) (Miodrag Stevanovic) - ISIMIP3: High-resolution climate forcing data (TG1.7) (Dirk Karger) - ISIMIP: Automatic quality check / quality assessment of impact model output (TG1.2) (Hannes Müller PROCLIAS TG1.3: New data (Ann van Griensven/Alo Laas) - "Data for climate impact attribution in Europe" (Dominik Paprotny)	Laura Dobor, Wim Thiery, Stefan Lange er Schmied)	A56: Conference hall
15:45-16:10	Coffee break and <b>Group Photo</b> , to be continued		

16:10-17:40	Break out session 1: ISIMIP Land use patterns (TG 1.1)	<b>Miodrag Stevanovic</b> , Christopher Reyer	A56 Telepresence room (0.38)
	<ul> <li>Follow-up questions and discussion from the plenary talk</li> <li>Discussion about what additional documentation on model assumptions etc. is needed by impact m</li> <li>Discussion on the development of future global land-use patterns for impact simulations, especially</li> </ul>		
	Break out session 2: ISIMIP High resolution climate forcing data and experiments (TG 1.7)	<b>Dirk Karger</b> , Stefan Lange, Christopher Reyer	A56 Conference hall
	<ul> <li>ISIMIP3a: Overview of the high-resolution sensitivity experiment</li> <li>ISIMIP3a: Overview of the associated <u>ADOHRIS</u> project</li> <li>ISIMIP3a: (tentatively) Some early results of the sensitivity experiment</li> <li>ISIMIP3a: Direct human forcing data for the sensitivity experiment</li> <li>Alternative approach: Global climate modeling at the kilometer scale - input from and discussion wi modeler from NCAR)</li> </ul>	th Andrew Gettelman (climate	
	Break out session 3: Automatic quality check / quality assessment of impact model output (TG 1.2)	Hannes Müller Schmied	House H, VR1
	<ul> <li>Quality control as operational tool (isimip-qc) and goal to fill in the plausible ranges</li> <li>Generating ideas and sharing experiences about quality assessment tools across sectors</li> <li>Real world examples from the global water sector</li> <li>Develop next steps for both tools and involvement in the TG</li> </ul>		
	Break out session 4: New data (TG 1.3)	Ann van Griensven, Alo Laas	House H, VR3
	<ul> <li>New data from remote sensing for (lake) modeling (Alo Laas)</li> <li>Model evaluation using satellite based evapotranspiration (Ann van Griensven/James Celary Chaw</li> <li>Further suggestions and feedbacks on new data from the audience</li> </ul>	/anda/Albert Nkwasa)	
18:00	Welcome Reception		A56: Terrace in front of Conference hall

<u>Tuesday 17.5.</u> (note that on Tuesday we will have three slots with parallel sessions)

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue/Zoom link
9:00-10:30	Plenary: Climate Impact Attribution and Uncertainty Assessment (PROCLIAS WG 2)  - 9:00: Overview of PROCLIAS WG2 (Elvira de Eyto, Matthias Mengel) - 9:15: Climate litigation (TG2.2; Inga Menke) - 9:20: Uncertainty assessment (TG2.3; Diaz Yanez Olalla) - 9:25: ISIMIP attribution and where it stands (Matthias Mengel) - 9:45: Discussion on ISIMIP attribution (Matthias Mengel) - 10:00: Climate impact attribution using hist-nat simulations from GCMs (TG2.1; Lukas Gudmund	Matthias Mengel, <b>Elvira de Eyto</b> dsson)	A56 Conference hall
10:30-11:00	Coffee Break		
11:00-12:30	Parallel session 1: Vulnerability and exposure modeling	Christian Otto	A56 Conference hall
	<ul> <li>10 mins presentations + 2 mins Q&amp;A:</li> <li>11:00-11:12: "Risk modelling for climate adaptation" (Chris Fairless)</li> <li>11:12-11:26: "Climate-resilient Adaptation in Uganda - Climate Risk Analysis with CLIMADA" (Al. 11:26-11:38: "Uncertainty and sensitivity analysis for climate impact assessment and adaptation (Chahan Kropf)</li> <li>11:38-11:50: "Globally consistent tropical cyclones impact forecast system for population displaced to the compact of the compact forecast system for population displaced to the compact</li></ul>		
	Parallel session 2: Water Quality (TG3.9)	Maryna Strokal, Simon Gosling, Rafael Marcé, Martina Flörke, Michelle van Vliet	A56 Telepresence room (0.38)
	- Development of water quality protocol(s)		
	Parallel session 3: Open exchange on methods for climate impact attribution  - What are climate impacts?  - What does "climate impact attribution" mean?  - How does climate impact attribution relate to classical climate change attribution?  - What is needed for (quantitative) attribution statements we can trust?	Veronika Huber, Lukas Gudmundsson	House H, VR1
12:30-13:30	Lunch break, to be continued		A56 Conference hall

13:30-14:30	Keynotes  - Cath Senior: "The future direction for CMIP and climate modelling"  - Jakob Zscheischler: "Progress and challenges in compound event research"	Stefan Lange	A56 Conference hall			
	- Jakob Zscheischier: Progress and challenges in compound event research  5 min break					
14:35-15:35	Sector session: Labour  - "Incorporating adaptation in climate impacts on labour impacts - a framework" (Shouro Dasgupt - Case studies and deep-dives (Israel)	Shouro Dasgupta a, Elizabeth JZ Robinson, Simon Gosling)	A56 Telepresence room (0.38)			
	Sector session: Biomes/Fire/Permafrost  - Biomes/Fire/Permafrost Sector Overview and Simulation Status (Christopher Reyer, Jinfeng Ch Stijn Hantson)  - "Attributing globally observed permafrost warming to anthropogenic climate change" (Lukas Gud - "Towards a new burned area data set for fire model evaluation" (Seppe Lampe)		A56 Afrika (3.14)			
15:35-16:15	Coffee Break & Poster Session  - "Heat and precipitation extremes will occur closer together in a warming world. Assessing low-likelihood, high-impact events using large ensembles of climate model simulations" (Laura Suarez-Gutierrez, et al.) - "Present and future regional trends in lake and reservoir levels" (Inne Vanderkelen, Wim Thiery) - "Using interpretable machine learning to identify compound meteorological drivers of crop yield failure" (Lily-belle Sweet, Jakob Zscheischler) - "Assessment of people safety during climate change-driven coastal urban flooding" (Agnieszka Indiana Olbert, Jennifer Kirkpatrick) - "Detection and attribution of flow and sediment load in the Nile basin" (Albert Nkwasa, Annika Schlemn, Celray James Chawanda, Ann van Griensven) - "Climate Analog Approach for the Adaptation of Winter Wheat to Climate Change in France" (Burak Bulut, Mathieu Vrac, Nathalie de Noblet-Ducoudré) - "Future projections of the West Nile virus risk in Europe" (Diana Erazo)					
	to be continued					

16:15-18:15	Sector meeting: Water global	Simon Gosling, Hannes Müller Schmied	A56 Conference hall	
	- "Water scarcity assessment and multiple model intercomparison" (Junguo Liu) - "A comparison of global hydrological models using hydrological signatures" (Sebastian Gnann)			
	Sector meeting: Energy fluctuations and extremes	James Glynn, Michelle van Vliet, Christian Otto	House H, VR3	
	- Discuss recent progress with regard to the review paper - Illustrate the use of ISIMIP data for energy system modeling - Discuss the modeling protocol			
	Sector session: Health	Iliusi Vega del Valle	House H, VR1	
	<ul> <li>Health sector overview: Simulations status, publications related to simulation round ISIMIP2, po community and across ISIMIP sectors</li> <li>Open round to present projects</li> <li>"Deadly Heat Exposure in an Urbanized World" (Steffen Lohrey)</li> <li>Development of the ISIMIP3 health sector protocols</li> <li>Datasets and models available within the health community; e.g., mortality rates, AC, other socie functions for heat-related mortality, etc.</li> </ul>			
	Sector session: Agriculture	Jonas Jägermeyr, Sam Rabin	A56 Telepresence room (0.38)	
	- "Climate impacts on global agriculture emerge earlier in new generation of climate and crop mod - "Acceleration, deceleration and reversal of changes across global warming levels by region and crop model ensemble" (Alex Ruane)			
	Sector session: Peat	Sarah Chadburn, Angela Gallego-Sala, Noah Smith, Michel Bechtold	A56 Afrika (3.14)	
	<ul> <li>16:15 ISIMIP protocols general introduction</li> <li>16:25 New peat protocol</li> <li>16:35 Feedback and discussion</li> <li>16:45 Introduction to MOTHERSHIP and upcoming workshops and planned outputs</li> <li>16:55 General discussion and AOB</li> </ul>			
19:00	<u>Joint Dinner (on own costs)</u>		Augustiner im Bürgerbahnhof, Park Sanssouci	

## **Wednesday 18.5.** (note that on Wednesday we will have two slots with parallel sessions)

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue/Zoom link
9:00-10:45	Introduction to PROCLIAS Working Group 3 and its Task Groups (Simon Gosling and WG3 Task Group Leads)  "Cumulated worst and best cases projected climate-related cross-sectoral risks will all have emerged before 2050" (Audrey Brouillet)  "The kids aren't alright" (Wim Thiery)  "JRC recent developments in climate risk assessment, PESETA and beyond" (Juan-Carlos Ciscar)  "Heat stress, labour productivity and adaptation in Europe - a regional and occupational analysis" (Wojtek Szewczyk)  "Forecast of temperature-attributable mortality at lead times of up to 15 days for a very large ensemble of European regions" (Marcos Quijal-Zamorano)  "Climate impacts on global agriculture emerge earlier in new generation of climate and crop models" (Jonas Jägermeyr)		A56 Conference hall
10:45-11:00	Break		
11:00-12:00	Parallel session 1: Heat-related mortality (TG3.11)  - Progress on the HEWS catalogue, - Study design and preliminary results of the joint TG3.11+MCC paper - Alternative ways of integration adaptation to heat-mortality studies	Aleš Urban	House H, VR1
	Parallel session 2: Cross-sectoral risk assessment / uncertainty (TG3.7)  - Follow-up discussions on workshop in April	Wojtek Szewczyk, Juan Carlos Ciscar	A56 Conference hall
	Parallel session 3: PROCLIAS Task Group on Agroeconomy (TG3.5)  - Explain scope and on-going work  - Recruit submissions for the Belgrade workshop.	Louis-Francois Pau, <b>Tatjana Dragičević Radičević</b>	A56 Telepresence room (0.38)
11:30-13:00	Closed session: Paper writing related to previous workshop in Venice (2021)	Shouro Dasgupta	A56 Europa (0.24)
12:00-12:30	<ul> <li>'hot model' issue in CMIP6 climate projections</li> <li>Presentation of the commentary "Climate simulations: recognize the 'hot model' problem" by https://doi.org/10.1038/d41586-022-01192-2) (Stefan Lange)</li> <li>Invited comments: Colin Jones (Project Head of the UKESM Core Development Team)</li> <li>Open discussion</li> </ul>	Jacob Schewe Hausfather et al. (2022, Nature,	A56: Conference hall
12:30-13:30	Lunch Break, to be continued		

13:30-15:00	Plenary: Communication and dissemination of climate impacts (PROCLIAS WG 4)	A56 Conference hall	
	<ul> <li>Introduction to the PROCLIAS Working Group 4 progress so far and upcoming changes (30 to 10 ft.)</li> <li>TG 4.2 Stakeholder mapping: Current and Expected Outcomes (Liliana Zaharia, Gabriela to 10 ft.)</li> <li>New TG 4.4: ISIpedia (Martin Park)</li> <li>Visualisation of ISIMIP Data in the EUCRA context (Hans-Martin Füssel)</li> <li>What can go wrong in science communication? (Richard Black) (30 min)</li> <li>The role of science in closing the knowledge-action gap of the climate crisis (Veronika Huber Future/new activities, spontaneous Break out groups can form</li> </ul>		
	5 min Break		
15:05-15:40	Parallel session 1: PROCLIAS Stakeholder Mapping within WG4:	Liliana Zaharia, Gabriela Toroimac	A56 Telepresence room (0.38)
	- Current progress and expected outcomes		
	Parallel session 2: The role of science in closing the knowledge-action gap of the climate crisis	Veronika Huber	A56 Conference hall
	- Continuation of the plenary discussion		
	Parallel session 3: General brainstorm on new task groups in WG4	Inga Menke	A56 Asien (2.33)
	- Any ideas and new TGs are welcome to join		
	Parallel session 4: ISlpedia (TG 4.4) & Data Visualization (tbc)	Martin Park	A56 Afrika (3.14)
	- How to feature your research on ISIpedia		
15:40-16:00	Coffee Break		
16:00-17:30	Keynotes and wrap up	Katja Frieler	A56 Conference hall
	<ul> <li>Camille Parmesan: "Observed Impacts of Climate Change: From Species to Ecosystem Proc</li> <li>Brian O'Neill: "Large-scale impact modeling and the Key Risks of climate change"</li> <li>Closing remarks (Katja Frieler)</li> </ul>	cesses"	
18:30	Joint Dinner (on own costs)		ТВА

<u>Thursday 19.05.</u> (note that on Thursday we will have one slot with parallel sessions)

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue/Zoom link
8:00-9:00	Sector meeting: Fisheries and Marine Ecosystems  - 8:00-8:30 Session Keynote talk: "The potential impacts of climate change on agriculture communities" (Joshua Cinner, James Cook University): a cross sectoral paper about to CMIP6 results  - 8:30-9:00 "Towards FishMIP 2.0: Building Confidence in FishMIP Global and Regional Muniversity of Tasmania): this will cover our current 3a protocol and next steps for FishMIP.	be published applying both FishMIP and AgMip  Marine Ecosystem Models" (Julia Blanchard,	A56 Asien (2.33)
9:30-11:30	Sector meeting: Water regional (2)  - State of publications on attribution and detection - Presentation of studies - The planned Special Issue	Fred Hattermann, Valentina Krysanova	A56 Telepresence room (0.38)
10:00-11:30	Sector meeting: Forest  - ISIMIP Forest sector overview (2b data, 1*1km experiment, country scale simulations) ( - Towards a bottom-up assessment of the climate sensitivity of Europe's forests (Marc Gr - "Assessing the impact of drought and heatwaves on European forest tree mortality and events" (Tarunsinh Chaudhari) - "'Application of the process based model 3D-CMCC-FEM to simulate the productivity at Dalmonech)	uenig, Werner Rammer) productivity for the last two decades extreme	A56 Asien (2.33)
11:30-11:45	Br	eak	
11:45-18:30	ISIMIP Chelsa workshop      Basic concept of the downscaling     Overview of the code structure, modules, classes, functions, saga_api     Ingesting the ISIMIP3_BA data     Preparing the input data for a limited spatial extent     Running the model (Parameters, Parallelization, slurm, singularity)     for further information see separate program	Stefan Lange, Dirk Karger	A56, Telepresence room (0.38)