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

ISIMIP Sectoral	l session Keynote	PROCLIAS WG1	PROCLIAS WG2 PROCLIA	AS WG3 PRO	CLIAS WG4									
Time (UTC+2)	Monda	ay 16 May	Tuesday 17 M	ау	Wednesc	lay 18 May	Thursda	y 19 May						
9:00-10:30	Regi	stration	<b>Plenary:</b> Climate Impact A Uncertainty Assessment (PR (9:00-10:30)		Plenary: Cross-sectoral climate impacts (PROCLIAS WG 3) (9:00-10:45)			Sector meeting: Fisheries and Marine Ecosystems (8:00-9:00)						
			Coffee Break	(	15 min Break		Sector meeting:	Sector meeting:						
			(10:30-11:00)			-out sessions:	Water regional (2) (9:30-11:30)	Forest						
10:30-12:30	Sector meeting: Lakes	Sector meeting: Water regional (1)	<ul><li>Break-out sessions:</li><li>Vulnerability and</li></ul>	Break-out session: Open exchange	(TG3.5, 3	climate impacts 3.7, 3.11) ·12:00)		(10:00-11:30) n Break						
	(10:30-12:30)	(10:30-12:30)	<ul> <li>exposure modeling</li> <li>Water Quality (TG3.9) (11:00-12:30)</li> </ul>	on methods for climate impact attribution (11:00-12:30)	Coffee break and Poster session (12:00-12:30)Closed session: Paper writing (12:00-12:30)		ISIMIP Chelsa workshop (11:45-12:30)							
12:30-13:30				Lunch	Break									
13:30-14:30	Keynote: Ottma	<b>g Session</b> ır Edenhofer (PIK) 0-14:30)	Keynotes: Cath Senior (Met 0 Jakob Zscheischler (13:30-14:30)	· (UFŹ)	impacts (PRO	ssemination of climate CLIAS WG 4)								
	5 mir	n Break	5 min Break		(13:30-15:00)									
					Sector meeting:	Sector meeting:	Sector meeting:			Sector meeting	5 min Break			
14:35-15:45	Plenary: ISIMIP data and protocols (PROCLIAS WG 1) (14:35-15:45)	Biomes, Fire,		Parallel Break-out sessions: Communication and dissemination of climate impacts (15:05-15:40)			sa workshop							
15:45-16:10		e Break 5-16:10)	Coffee Break and Post (15:35-16:15)		Coffee Break (15:40-16:00)		(13:30-18:30)							
16:10-17:40	Parallel Brea ISIMIP data (TG1.1, 1	<b>k-out sessions:</b> and protocols .2, 1.3, 1.7) 0-17:40)	Parallel Sector meetings: Water global, Health, Agriculture, Energy fluctuations and Extremes, Peat		Keynotes and closing remarks: TBC Brian O'Neill (PNNL) Closing remarks (Katja Frieler) (16:00-17:30)									
17:40-19:00	Welcome	Reception	(16:15-18:15)											
	(17:40)				Conference Dinner (18:30)									
19:00			Conference Din (19:00)	iner	(18)	.30)								

# **Detailed Program**

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue/Zoom link
9:00-10:30	Registration	A56: Foyer	
10:30-12:30	Sector meeting: Lakes - Input data for ISIMIP3 - Ongoing analysis using lake sector ISIMIP data - Changes in protocol for ISIMIP3	Wim Thiery, Rafael Marcé, Don Pierson, Daniel Mercado-Bettín	 Zoom Link:
	Sector meeting: Water regional (1)	<b>Fred Hattermann</b> , Valentina Krysanova	 Zoom Link:
12:30-13:30	Lunch Break		A56: Conference hall
13:30-14:30	Opening session	Katja Frieler, Christopher Reyer	A56: Conference hall Zoom Link:
	<ul> <li>Introductory Keynote: "tba" (Johan Rockström)</li> <li>Welcome, ISIMIP and PROCLIAS news and awards ceremony (Katja Frieler, Christopher Reyer)</li> </ul>		
	5 min break		
14:35-15:45	Plenary: ISIMIP data and protocols for climate impact modeling (PROCLIAS WG 1)	<b>Laura Dobor,</b> Wim Thiery, Stefan Lange	 Zoom Link:
	<ul> <li>Overview of PROCLIAS WG1 (Laura Dobor/Wim Thiery)</li> <li>ISIMIP Group III forcing data (Katja Frieler)</li> <li>Land use patterns (TG1.1) (Miodrag Stevanovic)</li> <li>High-resolution climate forcing data (TG1.7) (Dirk Karger)</li> <li>Data quality (TG1.2) (Hannes Müller Schmied)</li> <li>New data (TG1.3) (Ann van Griensven)</li> <li>"tba" (Dominik Paprotny)</li> </ul>		
15:45-16:10	Coffee break, to be continued		

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

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) Zoom Link:
	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 Zoom Link:
	<ul> <li>Overview of the ISIMIP3a high-resolution sensitivity experiment</li> <li>Overview of the associated <u>ADOHRIS</u> project</li> <li>(tentatively) Some early results of the sensitivity experiment</li> <li>Non-climate input data for the sensitivity experiment</li> <li>Global climate modeling at the kilometer scale - input from and discussion with Andrew Gettelman (climate modeler from NCAR)</li> </ul>		
	Break out session 3: Data quality (TG 1.2)	Hannes Müller Schmied	H, seminar Zoom Link:
	<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	H seminar room Zoom Link:
18:00	Welcome Reception		A56: Terrace in front of Conference hall

## Tuesday 17.5. (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)	- Zoom Link:
10:30-11:00	Coffee Break		
11:00-12:30	<ul> <li>Parallel session 1: Vulnerability and exposure modeling</li> <li>10 min presentations: <ul> <li>"A risk model for everyone: making extreme weather impact models accessible to decision-mak</li> <li>"Globally consistent tropical cyclones impact forecast system for population displacement" (Pui</li> <li>"Uncertainty and sensitivity analysis for climate impact assessment and adaptation options apple Kropf)</li> <li>"Rapid changes in return periods of heat-related mortality extremes" (Samuel Lüthi)</li> <li>"Climate-resilient Adaptation in Uganda - Climate Risk Analysis with CLIMADA" (Arun Rana)</li> <li>"Many-hazard Risk Assessment with the CLIMADA Data API" (Zélie Stalhandske)</li> <li>"Downscaling FireMIP output to a suitable scale for probabilistic wildfire risk assessment of ecol</li> </ul> </li> </ul>	Man Kam) raisal modeling with CLIMADA" (Chahan	A56 conference hall Zoom Link:
	Parallel session 2: Water Quality (TG3.9) - Development of water quality protocol(s)	H seminar Zoom Link:	
	<ul> <li>Parallel session 3: Open exchange on methods for climate impact attribution</li> <li>What are climate impacts?</li> <li>What does "climate impact attribution" mean?</li> <li>How does climate impact attribution relate to classical climate change attribution?</li> <li>What is needed for (quantitative) attribution statements we can trust?</li> </ul>	Veronika Huber, Lukas Gudmundsson	 Zoom Link:
12:30-13:30	Lunch break, to be continued		A56: Conference hall

13:30-14:30	Kevnotes	Stefan Lange		
10.00-14.00	Cath Senior: "The future direction for CMIP and climate modelling"     Jakob Zscheischler: "TBA"		- Zoom Link:	
	5 min break,			
14:35-15:35	Sector session: Labour	Shouro Dasgupta	A 56 Telepresence	
	<ul> <li>"Incorporating adaptation in climate impacts on labour impacts - a framework" (Shouro Dasgupta</li> <li>Case studies and deep-dives (Israel)</li> </ul>	a, Elizabeth JZ Robinson, Simon Gosling)	Zoom Link:	
	Sector session: Biomes/Fire/Permafrost	<b>Christopher Reyer,</b> Jinfeng Chang, Eleanor Burke, Fang Li, Chantelle Burton, Stijn Hantson	H seminar room Zoom Link:	
	<ul> <li>Biomes/Fire/Permafrost Sector Overview and Simulation Status (Christopher Reyer, Jinfeng Chang, Eleanor Burke, Fang Li, Chantelle Burton, Stijn Hantson)</li> <li>"Attributing globally observed permafrost warming to anthropogenic climate change" (Lukas Gudmundsson)</li> <li>"Benchmarking of ISIMIP3a outputs by biome models" (Akihiko Ito)</li> <li>"Towards a new burned area data set for fire model evaluation" (Seppe Lampe)</li> </ul>			
15:35-16:15	15:35-16:15 <b>Coffee Break &amp; Poster Session</b> <ul> <li>"Modelling cereal production under climate change in the Euro-Mediterranean Region" (Valentina Mereu, et al.)</li> <li>"A modelling platform to assess the impact of climate change on crop water requirements at local and regional scale" (Sara Masia, et al.)</li> <li>"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.)</li> <li>"Present and future regional trends in lake and reservoir levels" (Inne Vanderkelen, Wim Thiery)</li> <li>"Changes in likelihood and intensity of spatially co-occurring hot, dry and wet extremes" (Bianca Biess, et al.)</li> <li>"Using interpretable machine learning to identify compound meteorological drivers of crop yield failure" (Lily-belle Sweet, Jakob Zscheischler)</li> <li>"Assessment of people safety during climate change-driven coastal urban flooding" (Agnieszka Indiana Olbert, Jennifer Kirkpatrick)</li> <li>"Detection and attribution of flow and sediment load in the Nile basin" (Albert Nkwasa, Annika Schlemn, Celray James Chawanda, Ann van Griensven)</li> <li>"Climate Analog Approach for the Adaptation of Winter Wheat to Climate Change in France" (Burak Bulut, Mathieu Vrac, Nathalie de Noblet-Ducoudré)</li> </ul>			
	to be continued			

16:15-18:15	<ul> <li>Sector meeting: Water global</li> <li>"Water scarcity assessment and multiple model intercomparison" (Junguo Liu)</li> <li>"A comparison of global hydrological models using hydrological signatures" (Sebastian Gnann)</li> </ul>	A56 Conference hall Zoom Link:		
	Sector meeting: Energy fluctuations and extremes	 Zoom Link:		
	<ul> <li>Discuss recent progress with regard to the review paper</li> <li>Illustrate the use of ISIMIP data for energy system modeling</li> <li>Discuss the modeling protocol</li> </ul>			
	Sector session: Health	 Zoom Link:		
	community and across ISIMIP sectors <ul> <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> </ul>	ector overview: Simulations status, publications related to simulation round ISIMIP2, possible collaborations within the health sector ty and across ISIMIP sectors ind to present projects y Heat Exposure in an Urbanized World" (Steffen Lohrey) nent of the ISIMIP3 health sector protocols and models available within the health community; e.g., mortality rates, AC, other socio-economic data, regional		
	Sector session: Agriculture	Jonas Jägermeyr, Sam Rabin	H, seminar Zoom Link:	
	<ul> <li>"Climate impacts on global agriculture emerge earlier in new generation of climate and crop mod</li> <li>"Acceleration, deceleration and reversal of changes across global warming levels by region and crop model ensemble" (Alex Ruane)</li> </ul>			
19:00	Conference Dinner		tba	

### Wednesday 18.5. (note that on Wednesday we will have one slot with parallel sessions)

Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue/Zoom link
9:00-10:45	Plenary: Cross-sectoral climate impacts (PROCLIAS WG 3)       Simon Gosling, Jacob Schewe, Shiri Zemah-Shamir, Louis-Francois Pau         - 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)		 Zoom Link:
10:45-11:00	Break		
11:00-12:00       Parallel session 1: Heat-related mortality (TG3.11)       Aleš Urban         - 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	H, seminar Zoom Link:
	Parallel session 2: Cross-sectoral risk assessment / uncertainty (TG3.7)       Wojtek Szewczyk, Juan Carlos Ciscar         - Follow-up discussions on workshop in April       - Follow-up discussions on workshop in April		A 56 conference hall Zoom Link:
	Parallel session 3: PROCLIAS Task Group on Agroeconomy (TG3.5)         - Explain scope and on-going work         - Recruit submissions for the Belgrade workshop.	A56 Telepresence Zoom Link:	
12:00-12:30	Closed session: Paper writing related to previous workshop in Venice (2021)	Shouro Dasgupta	A56 Europa
	<ul> <li>Coffee Break &amp; Poster Session (continued from day before)</li> <li>"Modelling cereal production under climate change in the Euro-Mediterranean Region" (Valer "A modelling platform to assess the impact of climate change on crop water requirements at I</li> <li>"Heat and precipitation extremes will occur closer together in a warming world. Assessing low climate model simulations" (Laura Suarez-Gutierrez, et al.)</li> <li>"Present and future regional trends in lake and reservoir levels" (Inne Vanderkelen, Wim Thie "Changes in likelihood and intensity of spatially co-occurring hot, dry and wet extremes" (Biar "Using interpretable machine learning to identify compound meteorological drivers of crop yie "Assessment of people safety during climate change-driven coastal urban flooding" (Agniesz "Detection and attribution of flow and sediment load in the Nile basin" (Albert Nkwasa, Annika "Climate Analog Approach for the Adaptation of Winter Wheat to Climate Change in France" ( Noblet-Ducoudré)</li> </ul>	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)       Inga Menke, Ann van Griensven, Martin Park         - Introduction to the PROCLIAS Working Group 4 progress so far and upcoming changes (30 min)       -         - TG 4.2 Stakeholder mapping: Current and Expected Outcomes (Liliana Zaharia, Gabriela Ioana-Toroimac)       -         - New TG 4.4: ISIpedia (Martin Park)       -         - Visualisation of ISIMIP Data in the EUCRA context (Hans-Martin Füssel)       -         - What can go wrong in science communication? (Richard Black) (30 min)       -         - The role of science in closing the knowledge-action gap of the climate crisis (Veronika Huber) (30 min)       -         - Future/new activities, spontaneous Break out groups can form       -		A56 Conference hall Zoom Link:
	5 min Break		
15:05-15:40	Parallel session 1: PROCLIAS Stakeholder Mapping within WG4: - Current progress and expected outcomes	Liliana Zaharia, Gabriela Toroimac	 Zoom Link:
	Parallel session 2: The role of science in closing the knowledge-action gap of the climate crisis         - Continuation of the plenary discussion	Veronika Huber	A56 Conference hall Zoom Link:
	Parallel session 3: General brainstorm on new task groups in WG4 - Any ideas and new TGs are welcome to join	Inga Menke	 Zoom Link:
	Parallel session 4: ISIpedia (TG 4.4) & Data Visualization (tbc) - How to feature your research on ISIpedia	Martin Park	 – Zoom Link:
15:40-16:00	Coffee Break		
16:00-17:30	Keynotes and wrap up         - Camille Parmesan TBC         - Brian O'Neill ("TBA")         - Closing remarks (Katja Frieler)	Katja Frieler	A56 Conference hall Zoom Link:
18:30	Conference Dinner		ТВА

### **Thursday 19.05.** (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       Julia Blanchard         - 8:00-8:30 Session Keynote talk: "The potential impacts of climate change on agriculture and fisheries production in 72 tropical coastal communities" (Joshua Cinner, James Cook University): a cross sectoral paper about to be published applying both FishMIP and AgMip CMIP6 results         - 8:30-9:00 "Towards FishMIP 2.0: Building Confidence in FishMIP Global and Regional Marine Ecosystem Models" (Julia Blanchard, University of Tasmania): this will cover our current 3a protocol and next steps for FishMIP this year and beyond		 Zoom Link:
9:30-11:30	Sector meeting: Water regional (2) -		 Zoom Link:
10:00-11:30	Sector meeting: Forest       Christopher Reyer         - ISIMIP Forest sector overview (2b data, 1*1km experiment, country scale simulations) (C. Reyer)       -         - Towards a bottom-up assessment of the climate sensitivity of Europe's forests (Marc Gruenig, Werner Rammer,tbc.)       -         - "Assessing the impact of drought and heatwaves on European forest tree mortality and productivity for the last two decades extreme events" (Tarunsinh Chaudhari)       -         - "Carbon dynamics in a simulated managed mixed forest under climate change. The case study of the forest site of Collelongo, Italy" (Saponaro Vincenzo)       -         (Alessio Collatti/Riccardo Testolin?, Daniela Dalmonech?)       -       (Francesco Minunno)		 Zoom Link:
11:30-11:45	Break		
11:45-18:30	<ul> <li><u>ISIMIP Chelsa workshop</u></li> <li>Basic concept of the downscaling</li> <li>Overview of the code structure, modules, classes, functions, saga_api</li> <li>Ingesting the ISIMIP3_BA data</li> <li>Preparing the input data for a limited spatial extent</li> <li>Running the model (Parameters, Parallelization, slurm, singularity)</li> <li>for further information see separate program</li> </ul>	Stefan Lange, Dirk Karger	A56, Telepresence room (0.38)