### Cross-sectoral ISIMIP and PROCLIAS Workshop 22-26 April 2024

For exact session timings please refer to the detailed agenda; please note that the program and indicated venues may change slightly for individual sessions

Time (UTC+2)	Monday 22 April		y 23 April	Wednesday 24			Thursday 25 April		Friday 2	26 April
9:00-9:30		Registration		Registration PROCLIAS WG TG3.11: Heat warning catalogue	Sector meetings Fire/Peat; Water Quality; Forests (TG2.5)	PR	OCLIAS highlight	s	ISIMIP results an	· ·
10:00-10:30	Registration					PROCLIAS WG's  TG1.2 QC/QA TG3.2 Impact of	Early Career Session	Sector meeting	10-15 min pi	esentations
10:30-11:00		Sector meeting Fisheries	Side event	Opening sess  ISIMIP/PROCLIAS updates	ion	heat on labour TG4.2 Stakeholder mapping	Perspectives on future research pathways	Water regional	PROCLIAS TG2.1 State of the art	PROCLIAS <b>WG4</b>
11:00-11:30			THEMI			Poster S Coffee		Global water modelers side	and ways forward for impact attribution	Paper discussion
11:30-12:00	Side event	Contar monting		Coffee Brea	ık			meeting		
12:00-12:30	FireMIP	Sector meeting  Lakes								
12:30-13:00		Lakes		ISIMIP resul			ctoral presentatio			
13:00-13:30		Lunch Break		10-15 min presen	tations	panel discu	ssion on <b>Study pr</b>	ospects		
13:30-14:00		Lancii Break			1	ch Break				
14:00-14:30					Lun	cii break				
14:30-15:00		Sector meetings	Side event FireMIP	ScenarioMIP/IS General Introdu		Keyno	ote: Bart van den F	lurk		
15:00-15:30	Side events	Biodiversity;		Keynote: Brian (	D'Neill	Cross-s	ectoral panel discu	ssion		
15:30-16:00	FireMIP/	Peat; Water quality		ScenarioMIP/IS Task force insi			AR7 demands			
16:00-16:30	AgMIP-GGCMI	Tracor quality	Sector meetings	Coffee Brea			Coffee Break			
16:30-17:00			Agriculture; Biomes/PF/Fire/ Peat	ScenarioMIP/IS	IMIP4	Cross-s	ectoral panel discu	ission		
17:00-17:30		Sector meeting	, out	Data needs, IAM capacities,	ISIMIP4-Scenarios	In	npact monitoring			
Evening		Energy		Poster Session Welcome rece			Joint dinner			

# **Detailed Program**

## Monday 22.04.

Time (UTC+2)	Session	Session organisers (chair in bold)	Venue	
09:00-11:00	Registration			
11:00-13:30	Side event: FireMIP  • Welcome and on-going analyses /with FireMIP data, including previous studies, and new ISMIP3a studies)  For detailed Information see separate program	Chantelle Burton, Fang Li, Stijn Hantson, Matt Forrest	A56 Hasselmann Hall	
12:45-13:45	Lunch break			
13:45-18:00	Side event: FireMIP  • Further Analyses and Future Runs (with discussion of the ISIMIP3b future scenario runs)  • Coffee break (15:00-15:30)  • Keynote: Kirsten Thonicke (17:30)  For detailed Information see separate program	Chantelle Burton, Fang Li, Stijn Hantson, Matt Forrest	A56 Hasselmann Hall	
14:30-17:00	Side event: AgMIP-GGCMI  New Future of Ilfe grant project overview and protocol and scenario design General GGCMI research updates	Jonas Jägermeyr	A56 Telepresence room (0.38)	

### **Tuesday 23.4.**

Time (UTC+2)	Session	Session organisers (chair in bold)	Venue
09:00-12:00	Registration		
9:00-13:00	Side event: FireMIP For detailed Information see separate program	Chantelle Burton, <b>Fang Li</b> , Stijn Hantson, <b>Matt Forrest</b>	A56 Hasselmann Hall
	<ul> <li>Developments in Data, Understanding and Modelling, &amp; Fire Model Development Horizons</li> <li>Coffee (10:15-10:45)</li> </ul>		
10:00-12:00	Sector meeting: Fisheries  Advances in modeling, data, and tools (10:00-11:00)  BOATSv2: new developments & simulations" (Kim Scherrer)  "Presenting AquaMaps/AquaX" (Gabriel Reygondeau)  TBA  Discussion on AR7 needs, policy impacts, and future directions (11:00-12:00)  TBA  TBA  Discussion	Derek Tittensor, Julia Blanchard, Tyler Eddy	A56 Asien (2.33)
11:30-13:00	Sector meeting: Lakes  Welcome and agenda Current analysis using ISIMIP data ISIMIP local lakes sensitivity using LakeEnsembIR Increasing warm-season evaporation rates across European lakes under climate change Current status of the lake sector Discussion Adaptation options Plans for new analyses	Wim Thiery, Daniel Mercado, Isabel Ayala-Zamora, Robert Ladwig, Don Pierson	A56 Afrika (3.14)
13:00-14:00	Lunch break (to be contin	nued)	

14:00-15:30	Sector meeting: Peat  • Peatlands have the potential to emerge as significant contributors to future climate warming (Nitin Chaudary) (virtual)	Angela Gallego-Sala, Michel Bechtold, Noah Smith	A56 Telepresence room (0.38)
	Sector meeting: Biodiversity	Stefanie Heinicke, Christopher Reyer	House H, VR3
	<ul> <li>10 min presentations + 2 min Q&amp;A</li> <li>Will land-use change continue to be the main driver for biodiversity loss in the future? (Edouard Davi</li> <li>Comprehensive Expansion: Advancements in Downscaling Algorithms Beyond Temperature and Pre Karger)</li> <li>TBC (Damaris Zurell)</li> <li>ISIMIP update for Biodiversity Sector (Stefanie Heinicke, Christopher Reyer)</li> <li>Discussion</li> </ul>		
14:00-17:00	Sector meeting: Water quality	Maryna Strokal, Rohini Kumar	House H, VR1
	<ul> <li>10 min presentations + 2 min Q&amp;A</li> <li>TBC (Edward Jones)</li> <li>Mapping present and future patterns of SDG indicator 6:3.2 in Africa using models (Maria Theresa N</li> <li>Development of the next steps towards Fast track and ISIMIP3 protocols</li> </ul>		
14:30-15:30	Side event: FireMIP  • Fire model development horizons II and wrap (14:30-15:30)	Chantelle Burton, <b>Fang Li</b> , Stijn Hantson, <b>Matt Forrest</b>	A56 Hasselmann Hall
15:30-17:00	Sector meeting: Agriculture 10 min presentation + 2 min Q&A:	Jonas Jägermeyr, Sam Rabin	A56 Telepresence room (0.38)
	General updates GeoMIP involvement in ISIMIP and upcoming projects with Fisheries and Ag sector contribution GGCMI/ISIMIP 4 initial planning Validation of ISIMIP 3 crop simulations (Cornelia Auer)		
16:00-17:30	Sector meeting: Biomes/PF/Fire/Peat  • Sector presentations and discussion	Christopher Reyer et al.	A56 Hasselmann Hall
17:00-19:00	Sector meeting: Energy	Christian Otto	A56 Telepresence room (0.38)
	<ul> <li>Two 10-15 minute inputs: One presentation by Ed Byers (IIASA) on developments and ideas for potentials of climate impacts emulation in energy sector modelling followed by a presentation by Francesco Pietro Colelli (CMCC) on the impacts of climate change on hydropower demand and supply in Italy.</li> <li>Presentation of ideas for joint papers on the basis of ISIMIP3 data.</li> <li>Discussion of these paper ideas and the perspective for an "integrated assessment" paper combining the work from the different subsectors.</li> </ul>		

### Wednesday 24.04.

Time (UTC+2)	Session	Session organisers (chair in bold)	Venue		
09:00-10:00	Registration				
	PROCLIAS TG3.11: Heat warning catalogue	Aleš Urban	A56 Telepresence room (0.38)		
	<ul> <li>Changes in heat-mortality over time: Are countries adapting to heat fast enough? (Samuel Lüthi)</li> <li>Assessing the effects of the heat health warning system on mortality in 15 German cities: A difference-in-differences approach (Veronika Huber)</li> </ul>				
	Sector meeting: Fire/Peat  • Global Peat Fire Modelling: Opportunities and Challenges (Allan Spessa) (virtual)  • Fire and Peat discussion	Stijn Hantson, Michel Bechtold, et al.	A56 Hasselmann Hall		
	Sector meeting: Water quality  • Status update on the process towards Fast track and ISIMIP3 protocols	Maryna Strokal, Rohini Kumar	House H, VR 1		
	Sector meeting: Forests (TG2.5)	House H, VR 3			
	<ul> <li>10 min presentations + 2 min Q&amp;A</li> <li>Ecosystem dynamics in arid conditions should be increasingly considered in vegetation model's evaluation in Spanish pine forests (Agnish Kumar Das)</li> <li>Testing robustness and plausibility of Biome-BGCMuSo simulations at a large scale (Katarina Macconciling climate-smart forestry in Europe with constraints on forest protection and timber demand</li> </ul>				
10:00-11:30	Opening session  ■ ISIMIP/PROCLIAS updates and highlights (Katja Frieler, Christopher Reyer)  ■ ISIMIP QA/QC Tool (Hannes Müller Schmied, Jochen Klar)  ■ ISIMIP3b group III land use patterns (Edna Molina Bacca)  ■ EUCRA viewer (Jose Manuel Gutierrez) (virtual)	Christopher Reyer	A56 Hasselmann Hall		
11:30-12:00	Coffee break				
12:00-13:30	ISIMIP3a results ("from too dry to too wet")	Simon Gosling	A56 Hasselmann Hall		
	<ul> <li>10 min presentations + 5 min Q&amp;A</li> <li>The fingerprint of climate change in crop losses during recent heatwaves and droughts (Jonas Jägerr</li> <li>Attribution clarifies the complex impacts of climate change on vegetation biomass change (Akihiko Ito</li> <li>Impacts of past and future climate change on northern peatland hydrology: first results from the ISIMI</li> <li>Changing flood processes under future climate scenarios (Lina Stein)</li> <li>Towards validating reservoir operations in global hydrological models using satellite remote sensing -virtual).</li> <li>Summary of results on climate impact attribution on river discharge at the regional scale (from Topica (Valentina Krysanova)</li> </ul>	o, virtual). IP peatland sector (Michel Bechtold) - A case study in the CONUS (Naota Hanasaki,			
13:30-14:45	Lunch break (to be conti	nued)			

14:45-16:00	ScenarioMIP/ISIMIP4 General Introduction (Katja Frieler)  Keynote: Brian O'Neill "Scenarios for CMIP7: Status and Next Steps"  ScenarioMIP/ISIMIP4 ScenarioMIP task force insights (Nico Bauer) ESM perspectives (Chris Jones, Colin Jones)	Christian Otto	A56 Hasselmann Hall	
16:00-16:30	Coffee break			
16:30-17:30	ScenarioMIP/ISIMIP4 Recap (Katja Frieler) Open discussion with expert panel (Brian O'Neill, Nico Bauer, Bart van den Hurk, Colin Jones/Chris Jones): ISIMIP data needs, IAM capacities, ISIMIP4-Scenarios	Franziska Piontek, Katja Frieler	A56 Hasselmann Hall	
17:30-21:00	Poster Session I  Examining the contribution of human induced climate change on global soil moisture drought characteristics (Aris Koutroulis) Graphical representation of global water models participating in the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b) (Hannes Müll Schmied) Thirsty sectors: a layered model for managing scarce water resources (Ioan Sabin Taranu) (TBD) John Kim Assessing the impact of climate change on erosion processes near bridges over rivers – data and methodological challenges (Kristina Potočki) Global warming is projected to lead to increased freshwater growth potential and changes in pace of life in Atlantic salmon Salmo salar (Adrian Rinaldo) How multi-sectoral climate-related risks could cumulate and affect livestock in West Africa (Audrey Brouillet) Biosphere destabilization in ISIMIP3b scenarios (Fabian Stenzel) Climate impacts on crop losses: Using satellite data and spatial models to foster food security (Shannon de Roos)		A56 Hasselmann Hall	
	Welcome reception			

### **Thursday 25.04.**

Time (UTC+2)	Session	Session organisers (chair in bold)	Venue
09:00-10:00	PROCLIAS highlights from WG's 1-4  WG1: ISIMIP3a high-resolution sensitivity experiments (Johanna Malle/Dirk Karger)  WG2: (Sabine Undorf)  WG3: Understanding multiple climate risks (Simon Gosling)  WG4: (Albert Nkwasa)	Christopher Reyer	A56 Hasselmann Hall
10:00-11:00	Sector meeting: Water regional  Overview of results on climate impact attribution in our Special Issue (SI)  Discussion about a topic for further research and potential next SI	Valentina Krysanova, Fred Hattermann	House H, VR 1
	PROCLIAS TG1.2: Automatic quality check / quality assessment of impact model output  Recent developments and use-cases Way forward - discussing of further developments Continuation of the network	Hannes Müller Schmied	A56 Telepresence room (0.38)
	PROCLIAS TG3.2 Impact of heat on labour Program tbc	Shouro Dasgupta	House H, VR 3
	PROCLIAS TG4.2 Stakeholder mapping Program tbc	Liliana Zaharia, Gabriela Toroimac	A56 Asien (2.33)
	Early Career Session: Discussions on future research pathways:  Cross-sectoral research ideas Catering the demands from the upcoming IPCC AR7 cycle Addressing issues raised at COP28	Jacob Schewe, Christopher Reyer, Katja Frieler	A56 Hasselmann Hall
11:00-12:00	Poster Session II + Coffee Break  Climate change impact on wireless communications (Louis-François Pau)  Unveiling the Value of Cultural Forest Services: Overcoming Analytical Challenges for Informed Pole Education and capacity building on climate change and planetary health for healthcare professional Asaduzzaman)  Routing climate model runoff from CMIP6 to project future changes in global river discharge (Pauling The effect of extreme weather on coastal ecosystems and their services (Sarah Hülsen)  Results of the ISIMIP Lake Sector calibration study (Tom Lorimer)  Vary me a river: investigating the impacts of climate variability on hydropower and electricity system Haddad)  Assessing the Risk and Impact of Fire Weather under Different Climate Change Scenarios (Yi-Ling	ls in global context (Muhammed ne Seubert) ns planning in Switzerland (Yann Yasser	A56 Hasselmann Hall
	Global water modelers side meeting (upon invitation only)	Hannes Müller Schmied, Simon Gosling, Jacob Schewe	A56 Telepresence Room (0.38)

12:00-13:30	Cross-sectoral presentations and panel discussion  10 mins presentations + 2 min Q&A  • Global emergence of unprecedented exposure to climate extremes (Wim Thiery)  • Temporal Dynamics of Internal Mobility in Response to Climate Extremes: A Global Analysis (2000-2019) (Kristina Petrova)  • Interactive assessment of climate impacts and vulnerability hotspots using ISIMIP data & Climate impact emulation and integration to IAMs (Michaela Werning, Edward Byers)  • Regional economic climate impacts in Europe: preliminary results from the TRACE (PESETA 5) project (Ignazio Mongelli) (virtual)		A56 Hasselmann Hall	
	Cross-sectoral panel discussion: study prospects	Jacob Schewe		
13:30-14:30	Lunch break			
14:30-15:00	Keynote: Bart van den Hurk  "Impact assessments and scenarios in the Seventh IPCC Assessment Cycle: overview of current discussions"	Christopher Reyer	A56 Hasselmann Hall	
15:00-16:00	Cross-sectoral panel discussion: AR7 demands	Christopher Reyer	A56 Hasselmann Hall	
16:00-16:30	Coffee Break			
16:30-17:30	Cross-sectoral panel discussion: Impact monitoring	Matthias Mengel	A56 Hasselmann Hall	
Evening	Joint dinner at Augustiner at Bürgerbahnhof (on own costs)			

### Friday 26.04.

Time (UTC+2)	Session	Session organisers (chair in bold)	Venue
09:00-10:30	ISIMIP results and closing remarks	Veronika Huber	A56 Hasselmann Hall
	<ul> <li>10 mins presentations + 5 min Q&amp;A</li> <li>Exposure of Europe's critical transport infrastructure to climate extremes (Cristina Deidda)</li> <li>Estimating Flood Risk under Global Warming: An Approach from the Insurance Industry (Giulia Control of Insurance Ins</li></ul>		
10:30-11:30	PROCLIAS TG2.1: State of the art and ways forward for impact attribution  • How do ISIMIP3a detrended climate observations compare with GCM-based ISIMIP3b climate baselines? (Mel Thanatcha Brehon)	Veronika Huber, Sabine Undorf, Matthias Mengel	A56 Hasselmann Hall
10:30-12:00	PROCLIAS WG4  • Paper discussion: "Stakeholder Engagement in Climate Impact Attribution: Opportunities, Challenges, and Pathways to Impact"	Albert Nkwasa	A56 Telepresence Room (0.38)