

Cross-sectoral ISIMIP and PROCLIAS Workshop 05-08 June 2023

General session: broad relevance	Break out session: of general interest	Technical break out session: for particularly interested audience	Closed session: upon invitation only
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Time (UTC+2)	Monday 05 June					Tuesday 06 June					Wednesday 07 June				Thursday 08 June				
9:00 - 10:00	Registration					ISIMIP sector presentation (9:00-10:15)					PROCLIAS Expert elicitation of Heat-Health Action Plans (T3.11) (9:30-12:00)	Sector meeting: Fisheries 1 (09:00-10:00)	PROCLIAS WG4: Outreach (09:00-10:00)	PROCLIAS Expert elicitation (09:00-10:00)	Sector meeting: Fisheries 2 (9:00-11:00)				
10:00 - 11:00						Sector meeting: Lakes (10:00-12:00)	Sector meeting: Fisheries (9:30-13:30)			Coffee Break (10:15-10:30)								Presentations from selected ISIMIP/PROCLIAS activities (10:00-11:00)	
11:00 - 12:00	Sector meeting: Water regional (11:00-12:00)			Presentation of ISIMIP 3a Simulation results (10:30-12:00)						Coffee Break (11:00-11:15)									
12:00 - 13:30	Sector meeting: Water global 1 (12:30-13:30)			Lunch Break (12:00-13:15)					Presentation of ISIMIP 3b Simulation results (11:15-12:45)				Sector meeting: Fisheries (11:00-17:00)						
13:30 - 15:05	5 min Break					Sector meeting: Forest (12:45-14:15)	Sector meeting: Water global 2 (13:15-14:15)			Sector meeting: Fisheries (12:15-14:15)	Lunch Break (12:45-14:15) Visit to Brewery in 2 groups					Sector meeting: Water quality 3 (13:00-14:00)			
	Opening Session (13:35-15:05)					15 min Break					Keynote: Prof. Dr. Keywan Riahi (IIASA) Closing remarks (Katja Frieler) (14:15-15:15)								
15:05 - 15:30	Coffee Break and Group Photo (25 min)					Plenary: Agriculture - Water - Food - Health Nexus (14:30-15:30)	Career planning Panel for Early-Stage Researcher (14:30-15:30)		Country-scale Forest modeling (14:30-15:30)			Coffee Break (30 min)							
15:30 - 17:30	Automatic QA/QC of impact model output (PROCLIAS TG1.2) (15:30-17:30)	High resolution forcing data (PROCLIAS TG1.7) (15:30-17:30)	Sector meeting: Energy (15:30-17:30)	Sector meeting: Labour (15:30-17:00)	Groundwater paper writing (15:30-17:30)			Poster session 2 (Coffee) (15:30-16:30)					Plenary: Key risks across sectors (15:45-17:45)		Sector meeting: Peat (15:45-18:15)	Sector meeting: Water Quality 1 (15:45-17:15)	Sector meeting: Groundwater (13:00-18:00)		
	Poster Session 1 (Welcome Reception)					Sector meeting: Biomes/Fire/Permafrost (16:30-17:30)			Sector meeting: Water global 3 (16:30-17:30)		Sector meeting: Agriculture (16:30-17:30)								
19:00						Conference Dinner (Charles Bridge Prague - own costs, registration needed) (19:00)													

Detailed Program

Monday 5.6. (note that on Monday we will have two slots with parallel sessions)

Plenary session: broad relevance	Break out session: of general interest	Technical break out session: for particularly interested audience	Closed session: upon invitation only
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Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue: tbc
9:00-13:30	<u>Registration</u>		
9:30-13:30	<u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u> - Development of ISIMIP-FishMIP 3b protocol and future socioeconomic forcing data	Julia Blanchard	
10:00-12:00	<u>Parallel session 2: Sector meeting: Lakes</u> - “The Footprint of global climate oscillations on surface temperatures across lakes” (Daniel Mercado-Bettin) - “The effect of climate change and eutrophication on lake water quality globally” (Annette Janssen) - “Tracking climate zone shifts and the change of air-water temperature relationships in ISIMIP local lakes” (Dirk Schlabing)	Wim Thiery , Rafael Marcé, Don Pierson, Daniel Mercado-Bettín	
11:00-12:00	<u>Parallel session 3: Sector meeting: Water regional (tbc)</u>	Fred Hattermann , Valentina Krysanova	
12:30-13:30	<u>Sector meeting: Water global (1)</u> - “WAYS model and global water resources assessment” (Jungo Liu, remote presentation) - “Validation of reservoir operation using satellite remote sensing for global hydrological models under ISIMIP” (Kedar Otta, remote presentation) - “Update on GLOBGM (1 km GLOBAL Groundwater Model): Progress and challenge” (Edwin Sutanudjaja, remote presentation)	Simon Gosling , Hannes Müller Schmied	
5 min break (to be continued)			

13:35-15:05	<u>Opening session</u> <ul style="list-style-type: none"> - Welcome (tba) - ISIMIP News and status update (Katja Frieler) - PROCLIAS News and status update (Christopher Reyer/Laura Dobor) - TG1.1: ISIMIP 3b Land use patterns (Edna Mollina Bacca) - TG3.11: Expert elicitation of Heat-Health Action Plans (Aleš Urban) - ISIMIP Interactive Viewer for the European Climate Risk Assessment - beta version (Hans-Martin Füssel) 	Katja Frieler, Christopher Reyer	
15:05-15:35	Coffee break and Group Photo		
15:35-17:30	<u>Parallel session 1: Automatic quality check / quality assessment of impact model output (TG 1.2)</u> <i>Program tbc</i>	Hannes Müller Schmied	
	<u>Parallel session 2: High resolution climate forcing data (TG 1.7)</u> <i>Program tbc</i>	Dirk Karger	
	<u>Parallel session 3: Sector meeting: Energy fluctuations and Extremes</u> <ul style="list-style-type: none"> - “Global gridded projections of household cooling energy demand to 2050” (Giacomo Falchetta) - “Observed changes in climate can empirically identify long-run adaptation: the extensive vs intensive margins of energy demand” (Francesco Colelli) - “Closing loops – the rapid emulation of climate risks and integration into IAMs” (Edward Byers) 	James Glynn, Michelle van Vliet, Christian Otto	
	<u>Parallel session 4: Sector meeting: Labour</u> <i>Program tbc</i>	Shouro Dasgupta	
	<u>Parallel session 5: Paper writing (Groundwater modeling)</u>	Robert Reinecke	
to be continued			

17:30-19:00

Poster Session 1 and Welcome reception

- "The effects of climate change on the ecosystem services of Gulf of Aqaba – environmental – economic perspective - initial results" (Shiri Zemah-Shamir)
- "Planning of Ecological Corridors for Adaptation to Climate Changes in Degraded Karst Forest Ecosystems" (Turgay Dindaroglu)
- "Interdependence among subregional crop production affects global crop failure risk" (Sifang Feng)
- "The evolution of the global population experiencing unprecedented exposure and its age of emergence" (Luke Grant)
- "The perfect storm? Concurrent climate extremes in East Africa" (Derrick Muheki)
- *tbw: "Quantifying Adaptive Capacity for Climate Risk Assessment: A Framework Using the Shared Socioeconomic Pathways (SSPs)" (Nicole van Maanen)*
- "Quantification of peatland-mediated feedbacks to the climate system" (Nitin Chaudhary)
- "Global surface water quality under uncertain climate and socio-economic change" (Edward R. Jones)
- "Burning down the house(s). Using ISIMIP-driven ConFire to assess fire severity likelihoods for property and infrastructure" (Douglas I Kelley)
- "Improving Community Land Model for Addressing Water Scarcity" (Ioan Sabin Taranu)
- "Future projections of anthropogenic perturbation of organic carbon burial in global lake sediments" (Ana I. Ayala)
- "Parametrize the routing routine of JULES land surface model to improve discharge simulation at a global scale" (Manolis Grillakis)
- "Using basin-scale physiographic attributes to improve river routing in JULES" (Aristeidis Koutroulis)

Tuesday 6.6. (note that on Tuesday we will have three slots with parallel sessions)

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Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue: tbc
9:00-10:15	Plenary: ISIMIP sector presentation <i>Program tbc</i>	tba	
9:30-15:30	PROCLIAS Task group 3.2 & 3.11 workshop: Expert elicitation on Heat-Health Action Plans Please note that this is a separate event and participation is upon invitation only (for details see separate agenda).	Aleš Urban	
10:15-10:30	Coffee Break		
10:30-12:00	Plenary: Presentation of ISIMIP 3a Simulation results 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “The Effect of Climate Change on Global Wildfire Activity” (Seppe Lampe) - “Evaluating simulated discharge in global hydrological models from ISIMIP3a” (Stefanie Heinicke) - “Attribution of climate change imprint on riverine nutrient export to African coastal waters” (Albert Nkwasa) - “Quantifying the contribution of climate change to heat-attributable mortality in Europe” (Thessa Beck) - “The burden of temperature-related stillbirths and neonatal deaths attributable to climate change – a global analysis across 29 Low- and Middle-income countries” (Asya Dimitrova) - “Attribution of historical change of vegetation biomass” (Akihiko Ito, remote presentation) 	tba	
12:00-13:15	Lunch break		
12:15-14:15	Parallel session 1: Sector meeting Fisheries General issues and protocol development	Julia Blanchard	
to be continued			

12:45-14:15	<p><u>Parallel session 2: Sector meeting Forest</u></p> <ul style="list-style-type: none"> - TG2.3: “Tree establishment in models of forest dynamics: protocol for a multi-model simulations and results from a PROCLIAS workshop” (Olalla Díaz-Yáñez) - “Strategies for climate-smart forestry in European forests under uncertain future climate” (Konstantin Gregor) - “Calibration and validation of the model Biome-BGCMuSo for simulation of SOC change in oak forests in Europe – results from STSM in Zvolen” (Doroteja Bitunjac, remote presentation) - “Effect of forest management choices on carbon sequestration and biodiversity at national scale” (Annikki Mäkelä) - “Data assimilation of forest status using Sentinel-2 data and a process-based model” (Francesco Minunno) - “Linking forest dynamics modelling with close-range photogrammetry and biodiversity assessments” (Merganičová Katarína) 	Christopher Reyer	
13:15-14:15	<p><u>Parallel session 3: Sector meeting Water global (2)</u></p> <ul style="list-style-type: none"> - “Reservoir air-conditioning: a sustainable seasonal thermal energy storage technology” (Julian David Hunt) - “Towards a theory of evaluation for global water models” (Sebastian Gnann) 	Hannes Müller Schmied, Simon Gosling	
14:15-14:30	15 min Break		
14:30-15:30	<p><u>Parallel session 1: Agriculture-Water-Food-Health Nexus</u></p> <ul style="list-style-type: none"> - “Quantifying food security and mitigation risks consequential to climate change impacts on crop yields” (Hermen Luchtenbelt) 	Shouro Dasgupta	
	<p><u>Parallel session 2: Career planning Panel for Early-Stage Researcher</u></p> <p><i>Program tbc</i></p>		
	<p><u>Parallel session 3: Country-scale forest modeling</u></p> <p><i>Program tbc</i></p>	Christopher Reyer	
to be continued			

15:30-16:30	<p><u>Poster Session 2 & Coffee Break</u></p> <ul style="list-style-type: none"> - “Climate change impact on wireless communications” (Louis-François Pau) - “Biosphere integrity indicators analyzed for future ISIMIP3b climate and land use scenarios” (Fabian Stenzel) - “Assessment of climate change-driven compound coastal-fluvial urban flooding” (Indiana A. Olbert) - “What happens to our ISIMIP simulations when we do not calibrate our lake models?” (Tom Lorimer) - “ISIMIP data for spatial compound event analysis” (Cristina Deidda) - “Potential future climate change impacts on afforestation and reforestation” (Sabine Mathesius) - “Does higher spatial resolution increase the accuracy of simulated land-surface processes in complex terrain?” (Johanna T. Malle) - “Assessing the impact of climate change on erosion processes near bridges over rivers” (Kristina Potočki) - “Application of Air2Stream model to predict river water temperature in two catchments for different climate change scenarios” (Jingshui Huang) - “Model evaluation strategy has an impact on the performance and interpretation of machine learning models for the prediction of maize yield variability” (Lily-belle Sweet) - <i>tbc: “Thermal conditions and diurnal mortality in cities of over 500 thousand inhabitants in Poland 1991-2019” (Joanna Wieczorek)</i> - “Climate change impact on spatial and temporal fish habitats availability” (Vytautas Akstinas) 		
16:30-17:30	<p><u>Parallel session 1: Sector meeting: Biomes/Fire/Permafrost</u></p> <p><i>Program tbc</i></p>	<p>Christopher Reyer, Jinfeng Chang, Eleanor Burke, Fang Li, Chantelle Burton, Stijn Hantson</p>	
	<p><u>Parallel session 2: Sector meeting Water global 3</u></p> <ul style="list-style-type: none"> - “Drought events from 1971-2001 and their propagation” (Amit Kumar) - “Agreements and divergent patterns in the reproducibility of hydrologic fluxes and storages simulated by ISIMIP global water models” (Yadu Pokhrel, remote presentation) - “Quantifying lifetime water scarcity” (Inne Vanderkelen, remote presentation) 	<p>Hannes Müller Schmied, Simon Gosling</p>	
	<p><u>Parallel session 3: Sector meeting Agriculture</u></p> <p><i>Program tbc</i></p>	<p>Jonas Jägermeyr</p>	
19:00	<p><u>Conference Dinner</u></p> <p>Participation at the Conference Dinner will be on own costs and upon registration only. We will share a registration link in due time. Venue: Charles Bridge Prague (http://charlesbridge-prague.cz/en/welcome/)</p>		

Wednesday 7.6. (note that on Wednesday we will have two slots with parallel sessions)

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Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue: tbc
9:00-10:00	<u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u> - “Potential impacts of solar radiation management on global fish biomass” (Kelsey E. Roberts) - “The Ocean System Pathways (OSP) for driving marine ecosystems & fisheries models.” (Olivier Maury) - “Using ecological theory to evaluate and reduce uncertainties of a marine ecosystem model ensemble” (Camilla Novaglio)	Julia Blanchard	
	<u>Parallel session 2: PROCLIAS WG4: Communication and Dissemination of climate impacts</u> <i>Program tbc</i>	Albert Nkwasa	
	PROCLIAS Task group 3.2 & 3.11 workshop: Expert elicitation on Heat-Health Action Plans - Please note that this is a separate event and participation is upon invitation only (for details see separate agenda).	Aleš Urban	
10:00-11:00	Presentations from selected ISIMIP/PROCLIAS activities - High resolution climate forcing data (Joanna Malle) - Automatic quality check / quality assessment of impact model output (Hannes Müller Schmied) - “Hot models” in CMIP 6 climate projections (Jacob Schewe) - “Mapping global gender inequality in water security” (Kaoru Kakinuma)	tba	
11:00-11:15	Coffee Break to be continued		

11:15-12:45	<p><u>Presentation of ISIMIP 3b Simulation results</u></p> <p>10 mins presentations + 5 mins Q&A:</p> <ul style="list-style-type: none"> - Children disproportionately exposed to attributable heatwaves at low-latitude low-income countries (Rosa Pietroiusti) - Does the rate of warming matter for heat-mortality? (Samuel Lüthi) - 1.5°C or not 1.5°C? That is the [burning] question: Fire as an example for assessing temperature thresholds of emerging impacts (Chantelle A. Burton, remote presentation) - Combining future projections of land-use and climate change to assess their impact on biodiversity (Chantal Hari) - More or less fish in future oceans? The importance of scale for climate change projections (Tyler D. Eddy) - Global change impacts on ecosystems and food: bridging the land-sea divide (Julia Blanchard) 		
12:45-14:15	<p>Lunch Break & Brewery Visit</p> <p>There will be the possibility to visit the campus brewery. The tour will last c. 20-30 min. and we plan to organize the tour in two groups. We will share a registration link in due time.</p>		
14:15-15:15	<p><u>Keynote and wrap up</u></p> <ul style="list-style-type: none"> - Prof. Dr. Keywan Riahi (IIASA): tba - Closing remarks (Katja Frieler) 	tba	
15:15-15:45	<p>Coffee Break</p>		
15:45-17:45	<p><u>Parallel session 3: Key risks across sectors</u></p> <ul style="list-style-type: none"> - “The "conflict trap" reduces economic growth in the Shared Socioeconomic Pathways.” (Kristina Petrova) - “Urban heat and global inequality” (Steffen Lohrey) - “Assessing energy availability for satisfying human needs along climate mitigation pathways” (Jarmo Kikstra) - “tba” (Alex Köberle) - “tba” (Mehrnaz Anvari) 	Franziska Piontek, Christian Otto	
15:45-18:15	<p><u>Parallel session 2: Sector meeting: Peat</u></p> <ul style="list-style-type: none"> - “Offsetting climate and land use effects on wetland methane emissions over 1901-2020” (Etienne Fluet-Chouinard, remote presentation) 	Sarah Chadburn, Angela Gallego-Sala, Noah Smith, Michel Bechtold	
15:45-17:15	<p><u>Parallel session 3: Sector meeting: Water Quality 1</u></p> <ul style="list-style-type: none"> - Modeling Protocol 	Maryna Strokol	

Thursday 8.6. (note that on Thursday we will have two slot with parallel sessions)

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Time (UTC+2)	Session	Session organisers (Chair in bold)	Venue: tbc
9:00-11:00	<u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u>	Julia Blanchard	
	Regional models and Special issue		
10:00-11:30	<u>Parallel session 2: Sector meeting: Water quality (2)</u>	Ann van Griensven	
	Regional modeling		
11:00-17:00	<u>Sector meeting: Fisheries and Marine Ecosystems</u>	Julia Blanchard	
	Development of ISIMIP/FishMIP 3b protocol and papers		
13:00-18:00	<u>Sector meeting: Groundwater</u>	Robert Reinecke	
	<i>Program tba</i>		
13:00-14:00	<u>Sector meeting: Water quality (3)</u>	Maryna Stokal, Ann van Griensven	
	<ul style="list-style-type: none"> - "Water quality protocols for intersectoral comparisons and climate change" (Maryna Stokal) - "Future water quality in Ukraine under climate change" (Vita Stokal) - "Climate change impacts on reservoir quality: a case study of Ukraine" (Anna Kurovska) - Progress updates and further discussions (Maryna Stokal) 		