

Detailed Program

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

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| 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 |
|-----------------|---|---|------------------------------|
| 9:00-13:30 | <u>Registration</u> | | Lobby (Building entrance) |
| 9:30-13:30 | <u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u> - Development of ISIMIP-FishMIP 3b protocol: Identification of future socioeconomic forcing data for 3b protocol | Olivier Maury | DP416 (on-site only) |
| 10:00-11:00 | <u>Parallel session 2: Sector meeting: Lakes</u> 10 mins presentations + 5 mins Q&A: - “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, remote presentation) - “Tracking climate zone shifts and the change of air-water temperature relationships in ISIMIP local lakes” (Dirk Schlabing, remote presentation) | Wim Thiery, Rafael Marcé, Don Pierson, Daniel Mercado-Bettin | DP107 |
| 11:00-12:00 | <u>Parallel session 3: Sector meeting: Water regional</u> - Status update and discussion on the Special Issue in preparation | Fred Hattermann, Valentina Krysanova | DP106 |
| 12:30-13:30 | <u>Sector meeting: Water global (1)</u> 10 mins presentations + 5 mins Q&A: - “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 | DP107 |

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| 13:30-15:00 | <p><u>Opening session</u> 10 mins presentations + 2 mins Q&A:</p> <ul style="list-style-type: none"> - Welcome (Radek Rinn, Vice Dean Riat CZU) - ISIMIP News and status update (Katja Frieler) - PROCLIAS News and status update (Christopher Reyer/Laura Dobor) - TG1.1: ISIMIP 3b Land use patterns (Edna Molina Bacca) - TG3.11: Expert elicitation of Heat-Health Action Plans (Aleš Urban) - TG1.7 High resolution climate forcing data (Johanna Malle) | <p>Katja Frieler, Christopher Reyer, Laura Dobor</p> | DP201 |
| 15:00-15:30 | Coffee break and Group Photo | | |
| 15:30-17:30 | <p><u>Parallel session 1: Automatic quality check / quality assessment of impact model output (TG 1.2)</u></p> <ul style="list-style-type: none"> - QC tool (45 min, around 20 min presentation): <ul style="list-style-type: none"> - Presenting / guide through QC-Tool functionalities (Matthias Büchner) - Application of QC in model development (Hannes Müller Schmied) - What happens when variable ranges are violated (workflow/documentation?) (Matthias Büchner) - Encourage users to use the qc tool on their side before submission to save computing time at PIK-side (not all data can be checked there due to time and computing limitations) (Matthias Büchner) - Discussing demand for additional features / open discussion - QA tool (45 min): <ul style="list-style-type: none"> - Presenting current QA-Tool functionalities (Jochen Klar) - Overview of NFDI4Earth proposal (Hannes Müller Schmied) - Presentation stream network assessment (Hannes Müller Schmied) - Call for contribution to the hackathon (Gerbrand Koren/Hannes Müller Schmied) - Discussing demand for other sectors & key features for the QA-tool - Open discussion (20 min) | <p>Hannes Müller Schmied</p> | DP201 |
| | <p><u>Parallel session 2: High resolution experiment (TG 1.7)</u></p> <ul style="list-style-type: none"> - Overview of the ISIMIP high-resolution experiment & first results - Next steps - <i>High-Climax (tbc)</i> | <p>Dirk Karger, Johanna Malle</p> | DP107 |
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| 15:30-17:30 | <p><u>Parallel session 3: Sector meeting: Energy fluctuations and Extremes</u></p> <p>10 mins presentations + 5 mins Q&A:</p> <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, Christian Otto , Michelle van Vliet | DP106 |
| | <p><u>Parallel session 4: Sector meeting: Labour</u></p> <ul style="list-style-type: none"> - Adaptation in the labour force - PROCLIAS TG presentation - Attributing historical changes in the labour force to climate change (Shouro Dasgupta, Simon Gosling) - Assessing macro-economic effects of climate impacts on labour productivity in the EU (Standardi) | Shouro Dasgupta | |
| 17:30-19:00 | <p><u>Poster Session 1 and Welcome reception</u></p> <ul style="list-style-type: none"> - “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 perfect storm? Concurrent climate extremes in East Africa” (Derrick Muheki) - “Quantifying Adaptive Capacity for Climate Risk Assessment: A Framework Using the Shared Socioeconomic Pathways (SSPs)” (Edward Byers) - “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) - “Future projections of anthropogenic perturbation of organic carbon burial in global lake sediments” (Ana I. Ayala) - “Using basin-scale physiographic attributes to improve river routing in JULES” (Aristeidis Koutroulis) - “ISIMIP data management and submission process” (Iliusi Vega del Valle, Matthias Büchner) | | Lobby (in front of DP201) |

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

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| 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 |
|-----------------|---|---------------------------------------|--------|
| 9:00-10:15 | <u>Plenary: ISIMIP sector presentation</u> Cross-sectoral Panel discussion | Christopher Reyer | DP201 |
| 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 | DP411A |
| 10:15-10:30 | Coffee Break | | |
| 10:30-12:00 | <u>Plenary: Presentation of ISIMIP 3a Simulation results</u> 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “The Effect of Climate Change on Global Wildfire Activity” (Seppel 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) | Matthias Mengel | DP201 |
| 12:00-13:15 | Lunch break | | |
| 12:15-14:15 | <u>Parallel session 1: Sector meeting Fisheries</u> Discussion on integration of future soc scenarios into 3b protocol | Julia Blanchard | DP416 |
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| 12:45-14:15 | <p><u>Parallel session 2: Sector meeting Forest</u> 10 mins presentations + 5 mins Q&A:</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 | DP201 |
| 13:15-14:15 | <p><u>Parallel session 3: Sector meeting Water global (2)</u> 10 mins presentations + 5 mins Q&A:</p> <ul style="list-style-type: none"> - “The impact of historical human water management and land-use change on the global risk of riverine ecological change” (Simon Gosling) - “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 | DP107 |
| 14:15-14:30 | 15 min Break | | |
| 14:30-15:30 | <p><u>Parallel session 1: Agriculture-Water-Food-Health Nexus</u> 10 mins presentations + 5 mins Q&A:</p> <ul style="list-style-type: none"> - “Food insecurity in the context of a changing climate” (Elizabeth Robinson) - “Quantifying food security and mitigation risks consequential to climate change impacts on crop yields” (Hermen Luchtenbelt) - “Attribution of historical changes in food security to climate change” (Shouro Dasgupta) | Shouro Dasgupta | DP201 |
| | <p><u>Parallel session 2: Career planning Panel for Early-Stage Researcher</u></p> <p>Brainstorming session with Early-Stage Researchers on what activities within PROCLIAS/ISIMIP would be particularly helpful focusing on technical skills but also career development etc.</p> | Katarina Merganičová | DP107 |
| | <p><u>Parallel session 3: Country-scale forest modeling</u></p> <p>Follow-up and discussion on previous forest session and follow-up project plans</p> | Christopher Reyer | DP106 |
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| 15:30-16:30 | <p>Poster Session 2 & Coffee Break</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” (Fabian Stenzel) - “Does higher spatial resolution increase the accuracy of simulated land-surface processes in complex terrain?” (Johanna T. Malle) - “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) - “Climate change impact on spatial and temporal fish habitats availability” (Vytautas Akstinas) - “Assessing the impact of climate change on erosion processes near bridges over rivers” (Kristina Potočki) - “ISIMIP data management and submission process” (Iliusi Vega del Valle, Matthias Büchner) | Lobby (In front of DP201) | |
| 16:30-17:30 | <p>Parallel session 1: Sector meeting Biomes/Permafrost/Fire</p> <ul style="list-style-type: none"> - Biomes, Permafrost, Fire sector overview (models, simulation status, paper plans, first results, main challenges) (C Reyer, J Chang/E Burke/F Li, C Burton, S Hantson; 15min each) - Planning of ISIMIP3b group III simulations (with changing future land-use etc...) (C Reyer, E Molina Bacca) - Open discussion on integration across the three sectors (20min) | <p>Christopher Reyer, Jinfeng Chang, Eleanor Burke, Fang Li, Chantelle Burton, Stijn Hantson</p> | DP201 |
| | <p>Parallel session 2: Sector meeting Water global 3 10 mins presentations + 5 mins Q&A:</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> | DP107 |
| | <p>Parallel session 3: Sector meeting Agriculture</p> <p>Informal Q+A session introducing ongoing activities</p> | <p>Jonas Jägermeyr</p> | DP106 |
| 19:00 | <p>Conference Dinner at Charles Bridge Prague (http://charlesbridge-prague.cz/en/welcome/) The Conference Dinner is on own costs, and for participants who registered for it beforehand, only.</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 |
|--------------|--|------------------------------------|--------|
| 9:00-10:00 | <u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u> 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “Potential impacts of solar radiation management on global fish biomass” (Kelsey E. Roberts) Discussion on climate mitigation and geoengineering scenarios - “The Ocean System Pathways (OSP) for driving marine ecosystems & fisheries models.” (Olivier Maury) Discussion on integration into FishMIP models | Derek Tittensor | DP416 |
| | <u>Parallel session 2: PROCLIAS WG4: Communication and Dissemination of climate impacts</u> 7 mins presentations: <ul style="list-style-type: none"> - “Stakeholders in climate litigation” (Rosa Pietroiusti) - “Incorporating stakeholder feedback into the modeling concept – a case study of Lake Victoria basin”. (Annika Schlemm) | Albert Nkwasa | DP201 |
| | <u>PROCLIAS Task group 3.2 & 3.11 workshop:</u> Expert elicitation on Heat-Health Action Plans <ul style="list-style-type: none"> - Please note that this is a separate event and participation is upon invitation only (for details see separate agenda). | Aleš Urban | DP411A |
| 10:00-11:00 | <u>Presentations from selected ISIMIP/PROCLIAS activities</u> 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - ISIMIP Interactive Viewer for the European Climate Risk Assessment - beta version (Julie Berckmans; remote presentation) - 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) | Laura Dobor | DP201 |
| 11:00-11:15 | Coffee Break to be continued | | |

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| 11:15-12:45 | <u>Presentation of ISIMIP 3b Simulation results</u> 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “Children disproportionately exposed to attributable heatwaves at low-latitude low-income countries” (Rosa Pietroiusti) - “Climate change risk to Eurasian Rangelands for Sustainability of Pastoralism” (Banzragch Nandintsetseg) - “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) - “Using ecological theory to evaluate and reduce uncertainties of a marine ecosystem model ensemble” (Camilla Novaglio) | Jacob Schewe | DP201 |
| 12:45-14:15 | Lunch Break & Brewery Visit (Participants who registered for the campus brewery visit will be approached on site and the tour will be organized in two groups.) | | |
| 14:15-15:00 | <u>Keynote</u> <ul style="list-style-type: none"> - Prof. Dr. Keywan Riahi (IIASA): “Challenges and opportunities of an integrated perspective on impacts, adaptation and mitigation” | Katja Frieler | DP201 |
| 15:00-15:30 | Coffee Break | | |
| 15:00-17:30 | <u>Parallel session 1: Sector meeting: Peat</u> (note the early start parallel to the Coffee Break) 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “Offsetting climate and land use effects on wetland methane emissions over 1901-2020” (Etienne Fluet-Chouinard, remote presentation) | Angela Gallego-Sala, Noah Smith, Michel Bechtold, Sarah Chadburn | DP106 |
| 15:30-17:30 | <u>Parallel session 2: Key risks across sectors</u> 10 mins presentations + 5 mins Q&A: <ul style="list-style-type: none"> - “Towards quantifying IPCC Key Risks for ecosystems and biodiversity” (Alex Köberle, remote presentation) - “Assessing energy availability for satisfying human needs along climate mitigation pathways” (Jarmo Kikstra) - “Urban heat and global inequality” (Steffen Lohrey, remote presentation) - “Protecting the power grid from extreme wind events: Increasing resilience by protecting critical lines” (Mehrnaz Anvari) - “The "conflict trap" reduces economic growth in the Shared Socioeconomic Pathways.” (Kristina Petrova) | Franziska Piontek, Christian Otto | DP201 |
| 15:30-17:00 | <u>Parallel session 3: Sector meeting: Water Quality 1</u> <ul style="list-style-type: none"> - Modeling Protocol | Maryna Strokal | DP107 |
| 17:30 | <u>Plenary: Wrap up and closing remarks</u> | Katja Frieler | |

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

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|--------------|--|--|-------|
| 9:00-11:00 | <p><u>Parallel session 1: Sector meeting: Fisheries and Marine Ecosystems</u></p> <ul style="list-style-type: none"> - 9:00-10:00 FishMIP FAO Policy Report: key highlights and next steps (Julia Blanchard & Camilla Novaglio) <li style="padding-left: 20px;">Discussion: Key modeling needs for making regional assessments more reliable for policy - 10:00-11:00 FAO Summary Report (Discussion) | Tyler Eddy | DP416 |
| 10:00-11:30 | <p><u>Parallel session 2: Sector meeting: Water quality (2)</u></p> <p>Regional modeling</p> | Ann van Griensven | DP107 |
| 11:00-17:00 | <p><u>Sector meeting: Fisheries and Marine Ecosystems</u></p> <p>Team writing session</p> | Kelsey Roberts & Camilla Novaglio | DP416 |
| 13:00-18:00 | <p><u>Parallel Session 1: Sector meeting Groundwater</u></p> <p><i>Program tba</i></p> | Robert Reinecke | DP106 |
| 13:00-14:00 | <p><u>Parallel Session 2: Sector meeting: Water quality (3)</u></p> <p>10 mins presentations + 5 mins Q&A:</p> <ul style="list-style-type: none"> - “Water quality protocols for intersectoral comparisons and climate change” (Maryna Strokal) - “Future water quality in Ukraine under climate change” (Vita Strokal) - “Climate change impacts on reservoir quality: a case study of Ukraine” (Anna Kurovska) - Progress updates and further discussions (Maryna Strokal) | Maryna Strokal, Ann van Griensven | DP107 |
| 14:00-15:30 | <p><u>Sector meeting: Lakes</u></p> <p>Discussion of future activities</p> | Daniel Mercado-Bettín, Don Pierson | DP107 |