

## Inter-Sectoral Impact Model Intercomparison Project

# How to participate in ISI-MIP2

ISI-MIP2 (phase 2 of the Inter-Sectoral Impact Model Intercomparison Project) is intended to cover projections of regional and global impacts of climate change for at least the following sectors: water, biomes, agriculture, health, infrastructure, energy, permafrost and fisheries. Additional sectors are sought on an ongoing basis, and will be added according to interest and available resources.

## 1. Simulation protocol

The project comprises a set of input scenarios, which are chosen to maximise comparability across sectors and scales, and to address the chosen focus research question of the simulation round. These scenarios include climate and socio-economic data, and other relevant specifications, such as land use data. All relevant information about input and output data and simulation scenarios will be compiled in the ISI-MIP simulation protocol.

## 2. Organisational Structure

The organisational structure of ISI-MIP2 is intentionally minimal. As in the first, fast-tracked phase (see [www.isi-mip.org](http://www.isi-mip.org) for information about the Fast Track), there will be a coordination team based at the Potsdam Institute for Climate Impact Research (PIK). The coordination team will be responsible for:

- coordinating the simulation protocol development,
- harmonization of the simulation protocol
- maintaining a project website ([www.isi-mip.org](http://www.isi-mip.org))
- maintaining a central data repository
- coordinating the project timeline,
- organisation of project-wide workshops,
- communication with sectoral coordinators,
- communication with participants,

- liaison with funding organisations and other partners.

In each sector there will be one or more sectoral coordinators, who will be responsible for:

- sector-specific simulation protocol development,
- communication with sector participants,
- organisation of sector-specific workshops,
- communication with ISI-MIP coordination team.

### 3. Data Repository

The core product of ISI-MIP is a public database of impact projections, similar to the CMIP database for climate projections. Participating in ISI-MIP means providing simulations to this repository following the ISI-MIP protocol.

The protocol lists the required output variables for each sector, and the format in which they must be provided. After the data submission deadline (to be determined and announced in the course of the project), there will be a phase (of several months) during which simulation data will only be available to ISI-MIP modelling groups and coordinators, in order to allow for a series of quality checks and initial analyses. Afterwards the data in the repository will be made available for unrestricted use.

### 4. Publication guidelines

**While the relevant section of the ISI-MIP repository is closed to the public** (i.e. both before and some months after the respective data submission deadline), ISI-MIP participants (modelers + coordinators) can start to analyze the data and develop paper ideas. However, during this time authors using ISI-MIP2 results are obliged to offer co-authorship to all modelling teams whose data is used for the paper. Potential co-authors should be sent an outline of the planned analysis early in the paper-writing process in order to avoid confusion and overlap. Modellers have to give their approval for the use of their data for the proposed study on an individual basis.

It is also strongly suggested that co-authorship be offered to the relevant sectoral coordinators, whose work on the modelling protocol contributes fundamentally to the existence of the simulation data.

**After the repository has been opened to the public**, publications have to acknowledge the modeling groups that provided the data, but an offer of co-authorship is not obligatory. This policy will be included in the terms of use for the data archive, and thus communicated to external data users as well. The relevant dates for the opening of the repository will be communicated via the website as well as by email to all participants.

## 5. What is ISI-MIP, and what is it not?

**Rules of participation:** Participating in ISI-MIP means observing the simulation protocol and placing simulation results in the ISI-MIP data repository. Project workshops and telephone conferences will be organised by the coordination team and the sectoral coordinators at regular intervals to facilitate communication amongst participants. Participation in telephone conferences or meetings is however not a prerequisite for participation in ISI-MIP. It is possible to join by providing adequate data to the archive, even after the official submission deadlines.

**Paper writing process:** There will be no restriction or quality check on the papers written using ISI-MIP data. The cross-sectoral ISI-MIP team will contribute to the paper writing process by writing own papers, but will not coordinate it. As in the CMIP climate model intercomparison exercise, the coordination task will be limited to designing the simulation protocol, with a focus on relevance to the scientific community and stakeholders, and ensuring that the data repository is maintained. The participants are however strongly encouraged to cooperate in publications across modeling teams and sectors to make the best possible use of the available data.

**Information about limitations of individual model results:** When submitting their data to the ISI-MIP archive, modelling groups will have the opportunity to provide additional information regarding limitations and caveats relevant for the end users of their data. This is made available to external users through a central website.

**Model validation:** The ISI-MIP coordination team will make no attempt at rating or weighting individual models e.g. according to their ability to reproduce historic observations. Individual papers may be written with regard to this topic and users may apply this information. However, there will be no “official” ISI-MIP statement with regard to model weightings or “best estimates”.