

PROCLIAS TG 1.2 Automatic QC/QA tool

# QC/QA-session

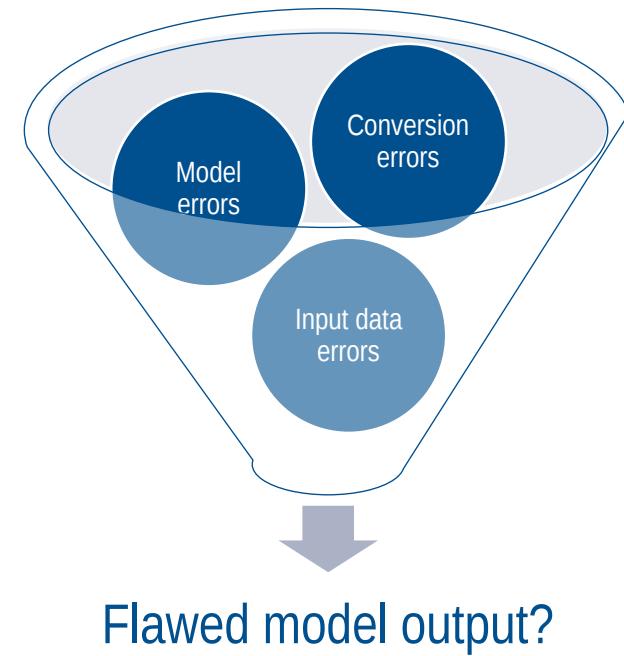
Hannes Müller Schmied<sup>1,2</sup> Iliusi Vega<sup>3</sup>, Matthias Büchner<sup>3</sup>, Jochen Klar<sup>3</sup>,  
Gerbrand Koren<sup>4</sup> + PROCLIAS TG1.2

<sup>1</sup>Goethe-University Frankfurt, <sup>2</sup>Senckenberg SBiK-F Frankfurt <sup>3</sup>Potsdam Institute for Climate Impact Research, Potsdam, <sup>4</sup>Copernicus Institute of Sustainable Development, Utrecht



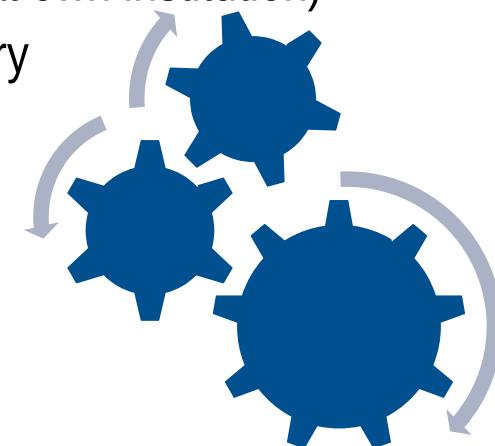
## Motivation & background

- Process-based impact models as valuable tools for simulating processes in a changing world (e.g., socio-economy, climate)
- Inter-Sectoral Model Intercomparison Project ([www.isimip.org](http://www.isimip.org)) act as umbrella for multiple sectors and ~ 100 modelling groups that follow a simulation protocol
- allows model intercomparison, evaluation and (cross-) sectoral (multi-) model impact assessments
- But: high quality model output is needed



## Objective

- Establish a QC/QA workflow with tools to
    - check plausibility of the model output and proper data format (Quality control, QC), and afterwards
    - assess key variables with benchmark data (Quality assessment, QA)
- Serves model development (e.g. tools can be run at own institution)  
→ Avoids publishing incorrect data at ISIMIP repository  
→ supports model intercomparison
- TG1.2 in PROCLIAS <https://proclias.eu>



## Agenda of this session

### QC tool (~45 min):

- presenting / guide through QC-Tool functionalities (Matthias Büchner)
- application in model development (Hannes Müller Schmied)
- what happens when variable ranges are violated (workflow/documentation?) (Matthias Büchner)
- Good practice - use the qc tool on modellers side before submission (Matthias Büchner)
- discussing demand for additional features / open discussion

### QA tool (~45 min):

- 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)
- discussing demand for other sectors & key features for the QA-tool

### open discussion (~20 min)