General guidelines for participants

- Details about the organisation, as well as logistic information will be provided Wednesday during the introductory **presentation of the workshop**
- During this introduction, you will be asked to briefly **introduce yourself**, including name, institute, expertise, current research interests, etc.
- All work presentations are **oral**
- The time allocated to each presentation is **15 minutes** for the exposition plus 5 minutes for open discussion
- The presenters are encouraged to present their works in a way that motivates further discussion. This is, rather than presenting finished or soon-to-be-published results, it would be interesting to put emphasis on on-going issues not yet solved, where the input for the community could be beneficial for the presented work. Further, through the presentation, it should be emphasised the aspects of the research where there is place for collaboration with other experts
- There are a number of topics proposed as breakout groups (see below). Please read them and think in what topic you are most interested. If you feel that some important topic is missing, please propose it. **We encourage and active participation of the attendants**. The topics for the breakout groups will be adapted according topics addressed during the discussions after the presentations.

Topics for breakout groups

- Can the studies of climate reconstructions be combined to a meaningful spatially resolved reconstruction (European-Mediterranean realm)?
- How can we intelligently use forward modelling approaches linking spatially resolved climate reconstructions with (regional) climate simulations?
- Can we address/reconstruct hydrological changes/reconstructions using RCMs to better represent the hydrological cycle?
- Can simulations help assess the consistency between proxies? e.g. with model analogues?
- Which regional paleosimulations are planned?
- Do we use additional/innovative tools for climate reconstructions, i.e. related to Machine Learning and which added value can we expect?
- What can we say about the potential to reduce different sources of uncertainties included in different numerical and statistical reconstruction approaches ? Perhaps not only reduce, but provide realistic uncertainties, i.e. not too optimistic or too pessimistic
- Do we need a data platform with (standardized) data infrastructure including a comprehensive provision of according metadata for PALEOLINK – can we integrate this into existing platform (e.g. PAGES initiatives)?
- Which recent approaches by other groups/initiatives are important for PALEOLINK?

Workshop participants

Organising committee

Juan José Gómez-Navarro (jjgomeznavarro@um.es)
Eduardo Zorita (eduardo.zorita@hzg.de)
Patrick Ludwig (patrick.ludwig@kit.edu)
Sebastian Wagner (sebastian.wagner@hzg.de)

Block I: Climate Reconstructions (chairman: Sebastian Wagner)

Paolo Montagna (paolo.montagna@bo.ismar.cnr.it). Abstract title: "Seawater Temperature and pH trends at intermediate water depths in the Ross Sea"

Gordon Bromley (gordon.bromley@nuigalway.ie). Abstract title: "A high-resolution glacial perspective on abrupt climate change: New food for model simulations"

David Pino (david.pino@upc.edu). Abstract title: "Synoptic patterns associated to Western Mediterranean basin coastal floods since 1960"

Josep Carles Balasch (cbalasch@macs.udl.cat). Abstract title: "The extreme floods in the Ebro River 1 basin since 1600 AD"

Markus Meier (markus.meier@io-warnemuende.de). Abstract title: "Reconstructing low-frequency climate variability of the Baltic Sea region"

Fernando Sánchez Rodrigo (frodrigo@ual.es). Abstract title: "Reconstruction of historical climate from documentary data: a case study from Granada (southern spain) 1706-1730."

Uzma Parveen (parveen.uzma5@gmail.com). Abstract title: "Reconstruction of paleoclimate during the Holocene in coastal Odisha, East Coast of India: Inferences from sediment proxies "

Block II: Climate modelling (chairman: Juan José Gómez-Navarro)

Johann Jungclaus & Sebastian Wagner (johann.jungclaus@mpimet.mpg.de). Abstract title: "Global climate model simulations in PMIP4 and beyond"

Igor Kröner (igor.kroener@awi.de). Abstract title: "Does model resolution matter?"

Patricio Velasquez (velasquez@climate.unibe.ch). Abstract title: "Bias-correction for precipitation over the Alps using orographic features"

Dimitris Herrera (dah386@cornell.edu). Abstract title: "A high-resolution hydroclimate dataset for the Caribbean Islands during the Last Millennium"

Andreas Lang (Andreas.lang@mpimet.mpg.de). Abstract title: "Simulating the long-term variability of extreme sea levels in the German Bight during the last Millennium using a regionally coupled GCM"

Patrick Ludwig (patrick.ludwig@kit.edu). Abstract title: “Perspectives of regional paleoclimate modelling”

Block III: Forward modelling (chairman: Patrick Ludwig)

Oliver Bothe (oliver.bothe@gmail.com). Abstract title: "Comparing quasi-local precipitation reconstructions to forward modelled pseudo tree growth from regional climate simulation output"

Block IV Model-data integration (chairman Patrick Ludwig)

Juan José Gómez-Navarro (jjgomeznavarro@um.es) Abstract title: "North Hemisphere atmospheric pattern enhancing Eastern Mediterranean Transient-type events during the past 1000 years"

Emmanuele Russo (russo@climate.unibe.ch). Abstract title: "Towards high-resolution climate reconstruction using an off-line data assimilation and COSMO-CLM Regional Climate Model"

Nadja Zeiher (nadja.zeiher@fau.de). Abstract title: "Searching for mesoscale processes in tree ring proxies with a high-resolution atmospheric model"

Stefanie Talento (stefanie.talento@geogr.uni-giessen.de). Abstract title: "Millennium-long Monsoon precipitation Reconstruction over Southeastern Asia: a Pseudo-Proxy Approach"

Detailed schedule

	Wednesday	
	12:30 - 13:30	*Registration*
	13:30 - 14:00	General overview and goals, logistic issues & presentation, SW: introduction of participants
Block I	14:00 - 14:20	Seawater Temperature and pH trends at intermediate water depths in the Ross Sea
	14:20 - 14:40	A high-resolution glacial perspective on abrupt climate change: New food for model simulations
	14:40 - 15:00	Synoptic patterns associated to Western Mediterranean basin coastal floods since 1960
	15:00 - 15:20	The extreme floods in the Ebro River 1 basin since 1600 AD
	15:20 - 15:40	Reconstructing low-frequency climate variability of the Baltic Sea region
	15:40 - 16:00	Reconstruction of historical climate from documentary data: a case study from granada (southern spain) 1706-1730
	16:00 - 16:30	*COFFEE BREAK*
	16:30 - 16:50	Reconstruction of paleoclimate during the Holocene in coastal Odisha, East Coast of India: Inferences from sediment proxies
Block II	16:50 - 17:10	Global climate model simulations in PMIP4 and beyond
	17:10 - 17:30	Does model resolution matter?
	17:30 - 17:50	Bias-correction for precipitation over the Alps using orographic features
	17:50 - 18:10	A high-resolution hydroclimate dataset for the Caribbean Islands during the Last Millennium
	Thursday	
Block II	9:00 - 9:20	Simulating the long-term variability of extreme sea levels in the German Bight during the last Millennium using a regionally coupled GCM
	9:20 - 9:40	Perspectives of regional paleoclimate modelling
Block III	9:40 - 10:00	Comparing quasi-local precipitation reconstructions to forward modelled pseudo tree growth from regional climate simulation output
	10:00 - 10:30	*COFFEE BREAK*
Block IV	10:30 - 10:50	North Hemisphere atmospheric pattern enhancing Eastern Mediterranean Transient-type events during the past 1000 years
	10:50 - 11:10	Towards high-resolution climate reconstruction using an off-line data assimilation and COSMO-CLM Regional Climate Model
	11:10 - 11:30	Searching for mesoscale processes in tree ring proxies with a high-resolution atmospheric model
	11:30 - 11:50	Millennium-long Monsoon precipitation Reconstruction over Southeastern Asia: a Pseudo-Proxy Approach
Breakout sessions	11:50 12:20	Discussion on which breakout groups to make
	12:20 - 14:00	*LUNCH BREAK (non-organised)*
	14:00 - 15:30	Breakout groups
	15:30 - 16:00	*COFFEE BREAK*
	16:00 - 17:15	Breakout groups
	17:15 - 17:30	Summary of breakout groups by raporteurs (Each 5 minuntes)
	18:30	*Guided visit*
	20:30	*Workshop's dinner*
	Friday	
	9:00 - 10:30	Synthesis of the breakouts groups
	10:30 - 11:00	*COFFEE BREAK*
	11:00 - 12:00	Outlook and who is leading what
	12:00	**END OF WORKSHOP**