

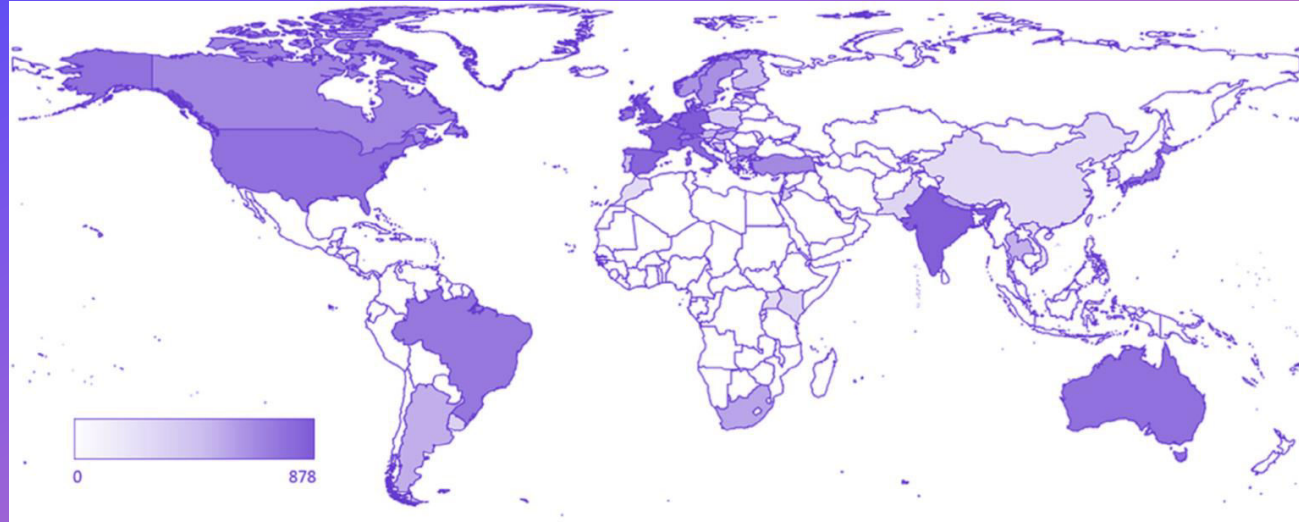


# Progress and Perspectives in Hydrological Modelling and Forecasting



Antara Dasgupta and the Joint  
Virtual Workshop ECMWF-CEMS-  
C3S-HEPEX-GFP Team

# The Joint Virtual Workshop



Map of the average global views of the workshop (darker shading indicates higher views)

Co-organised by the European Centre for Medium-Range Weather Forecasts (ECMWF), the Copernicus Emergency Management (CEMS) and Climate Change (C3S) Services, the Hydrological Ensemble Prediction EXperiment (HEPEX), and the Global Flood Partnership (GFP).



Climate  
Change Service  
climate.copernicus.eu



# Research Themes



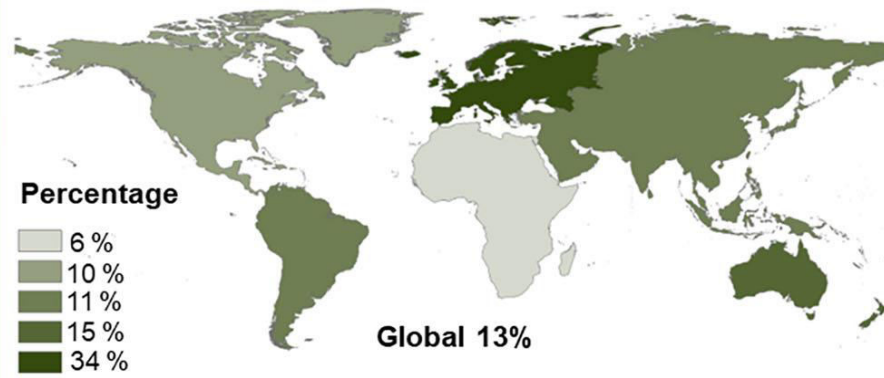
+



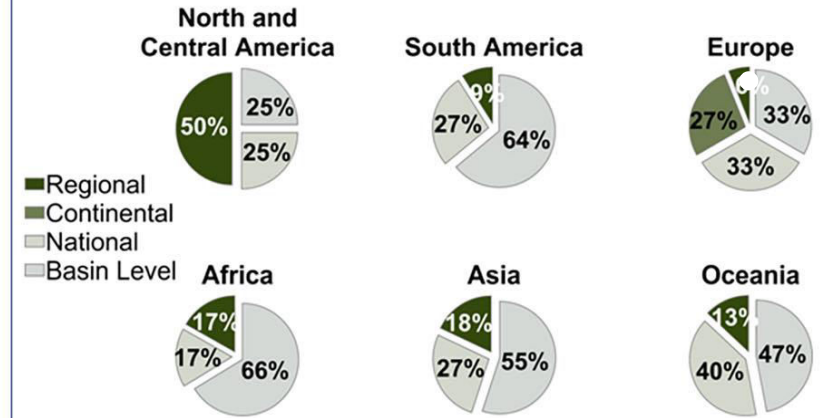
**Where is the field of global  
to local hydrological  
forecasting moving as a  
whole?**

# Statistical analysis of the workshop

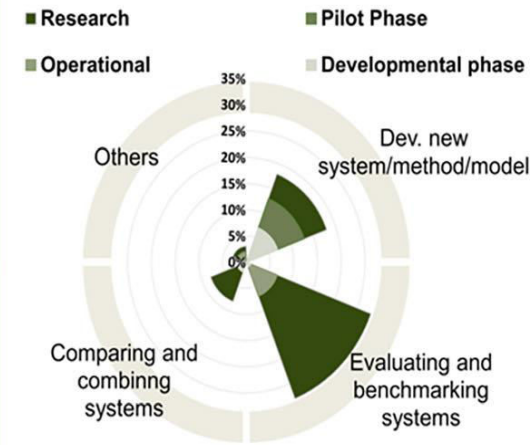
(a) Distribution of study locations



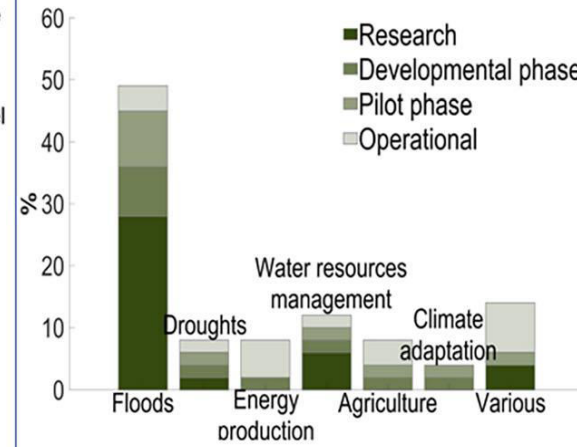
(b) Spatial scale by continent



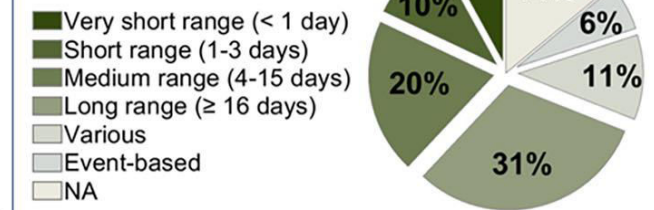
(c) Type of study



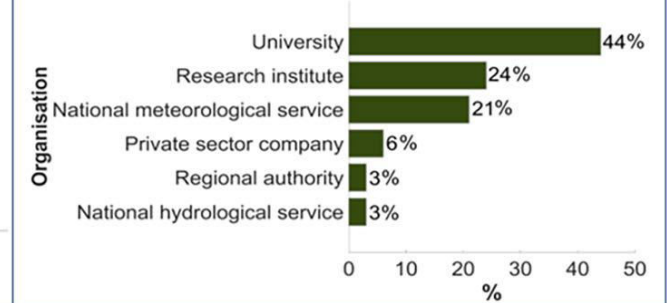
(d) Application – systems' status

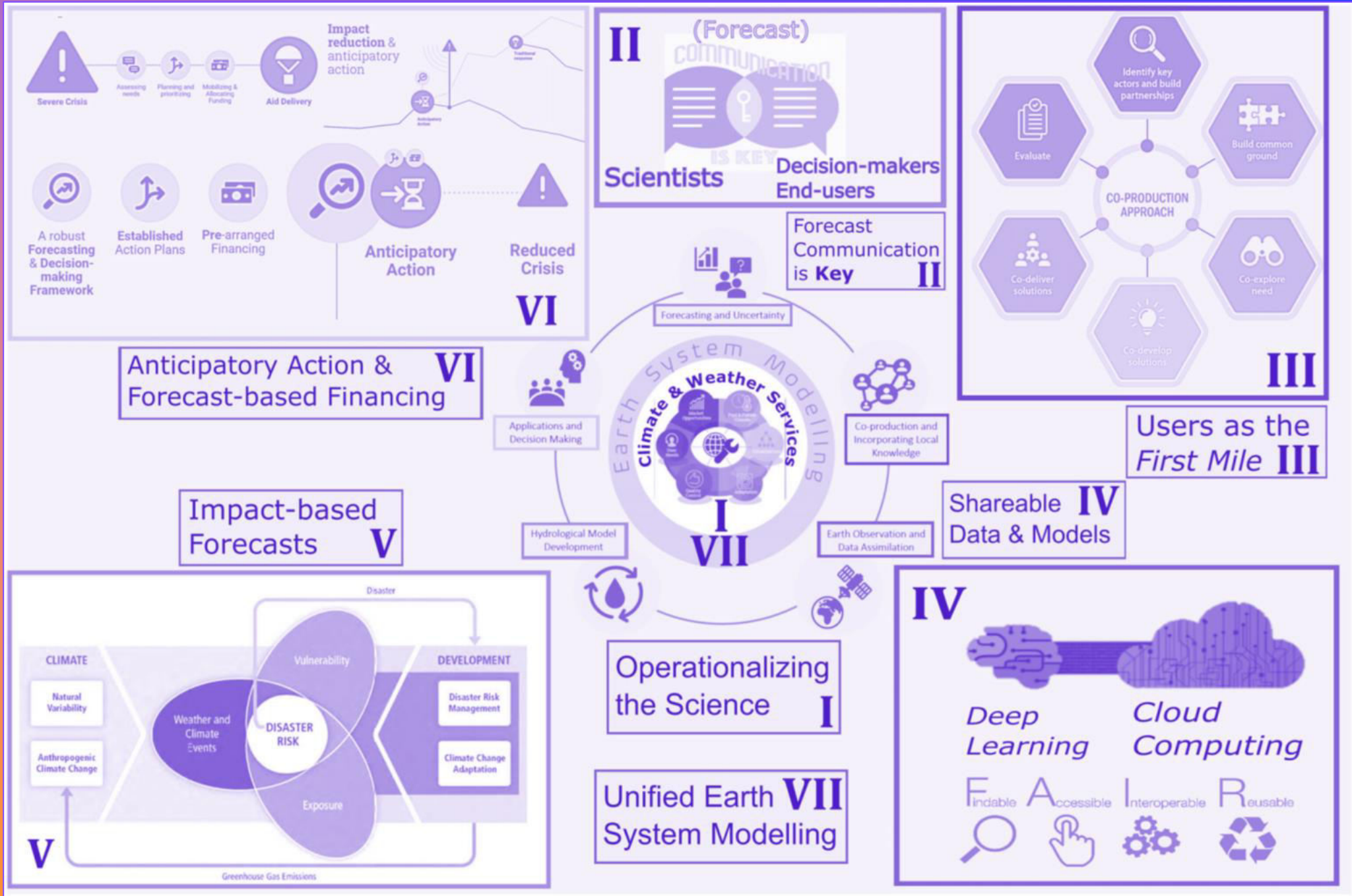


(e) Temporal scale

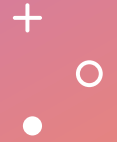


(f) Participants' sector





**How effective was the digital format in bringing a global audience together and enhancing accessibility?**



# ECMWF's Gather.Town

Interactive sessions took place in the Weather Room including Sci-Art, info booths, and a demo on the Climate Data Store (CDS).



Participants joined the EC-HEPEX early career hangout session to meet their peers and to foster discussions on global hydrological forecasting and how it can be better linked to local scale needs.

Excellent!

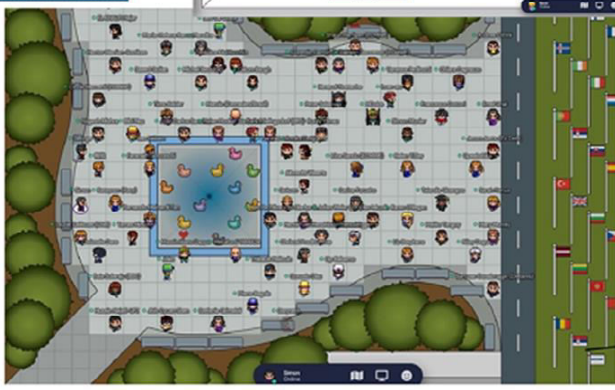


Best online experience ever!



The workshop's Gather.Town environment was designed to be a replica of ECMWF HQ.

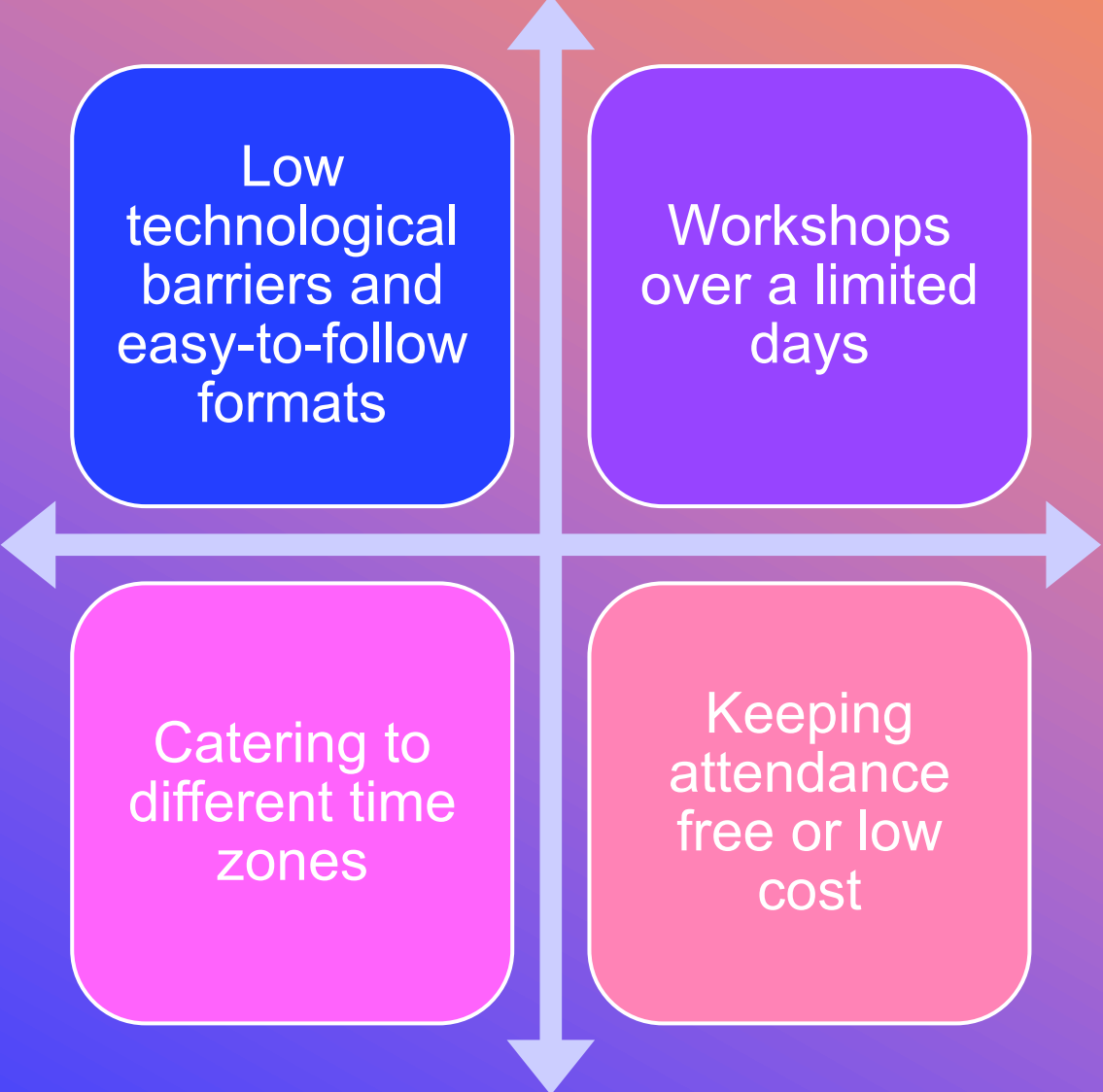
Poster sessions and lively scientific discussions were hosted in dedicated Gather.Town rooms.



Attendees of the workshop gathered in ECMWF Gather.Town courtyard for a virtual workshop photo!



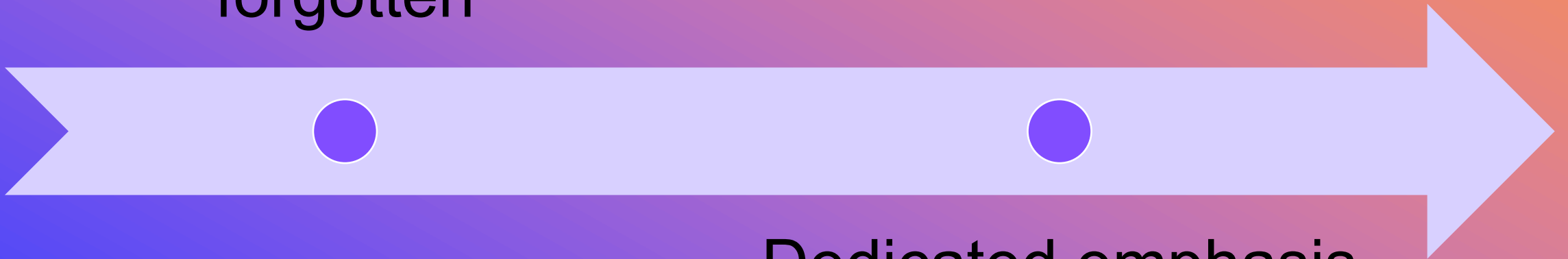
# What was good?



# The way forward

The right to be forgotten

Dedicated emphasis on networking



# The Team



**Antara Dasgupta**  
Jun.-Prof.,  
RWTH Aachen



**Louise Arnal**  
Research Associate,  
USask



**Rebecca Emerton**  
Scientist,  
ECMWF



**Shaun Harrigan**  
Scientist,  
ECMWF



**Gwyneth Matthews**  
PhD Student,  
UniReading



**Ameer Muhammad**  
Scientist,  
UManitoba



**Karen O'Regan**  
UI Officer,  
ECMWF



**Teresa Pérez-Ciria**  
Postdoc, LMU



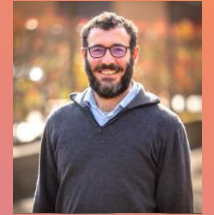
**Emixi Valdez**  
PhD Student,  
UniLaval



**Bart van Osnabrugge**  
Postdoc, USask



**Micha Werner**  
Assoc. Prof.,  
IHE Delft



**Carlo Buontempo**  
Director, C3S



**Hannah Cloke**  
Prof,  
UniReading



**Florian Pappenberger**  
Director of  
Forecasts,  
ECMWF



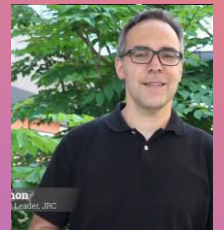
**Ilias G. Pechlivanidis**  
Senior  
Researcher,  
SMHI



**Christel Prudhomme**  
Env. Forecasts  
Team Lead,  
ECMWF



**Maria-Helena Ramos**  
Researcher,  
INRAE



**Peter Salamon**  
Scientific Proj.  
Lead, JRC

**A metaphor for reading  
our destiny in the night  
sky constellations,  
and how far we have  
advanced as a  
community in terms of  
predicting future hydro-  
meteorological events.**

Imagined by Sci-Artist:  
*Louise Arnal*



**Hydrological Constellations**

HEPEX23

+



o



# GET IN TOUCH!

Antara Dasgupta

[antara.dasgupta@rwth-aachen.de](mailto:antara.dasgupta@rwth-aachen.de)

## JOIN THE EC-HEPEX SLACK!

