

IAHS Bureau: International Commissions (IC)

President Name: Richard M. Petrone

International Commission: ICCLAS

Names of participants and role(s) of each officer:

Role	Name of person
President	Richard M. Petrone
Past-President	Harald Kunstmann
President-elect	Christopher J. White
VP	Tirtha Banerjee
VP	Lindsay Beevers
VP	Shanshui Yuan
Secretary	Rodolfo Nóbrega
ECC	P. James Dennedy-
	Frank

Which UPH(s) does the Commission contribute to? (No 1-23: check

https://www.tandfonline.com/doi/full/10.1080/02626667.2019.1620507)

1. Is the hydrological cycle regionally accelerating/decelerating under climate and environmental change, and are there tipping points (irreversible changes)?

5. What causes spatial heterogeneity and homogeneity in runoff, evaporation, subsurface water and material fluxes (carbon and other nutrients, sediments), and in their sensitivity to their controls (e.g. snow fall regime, aridity, reaction coefficients)?

9. How do flood-rich and drought-rich periods arise, are they changing, and if so why?

20. How can we disentangle and reduce model structural/parameter/input uncertainty in hydrological prediction?

Which Theme and WG of HELPING Decade the Commission contribute to? (See current status here <u>https://iahs.info/Initiatives/Topic-for-the-Next-IAHS-decade/helping-working-groups/</u>)

The interdisciplinarity of ICCLAS and expertise within our community have us poised to contribute to **Theme 1: Helping with Global and Local Interactions** within HELPING. Of particular interest are involvement in the following HELPING working groups:

WG2: Decomposing Complexity

WG7: Understanding Drivers and Feedbacks of Soil Moisture Availability

WG8: Deep Explanation and Evaluation of Hydrological Changes



Work plan (note the table cells can be expanded to fit the content)

	2024/25 Summary of Progress	2025 – Work plan
COMMUNITY	In collaboration with GLASS, ICCLAS	ICLASS plans to take the next steps
PAPER	aims to write an opinion paper that focusses on problem #1 in the paper by Bloschl et al. (2019): "Is the hydrological cycle regionally accelerating/decelerating under climate and environmental change, and are there tipping points (irreversible changes)?" This would be led by Drs. Anne Verhoef, Kirsten Findell, Harald Kunstmann, Peter van Oevelen, Richard Petrone, Christopher White, Jan Polcher and Xubin Zeng. The goal that we have discussed is to develop a peer- reviewed paper written using a workshop format (including quiz-like tools such as Mentimeter (https://www.mentimeter.com/feat	on this initiative with GLASS later in 2025.
	ures/quiz-presentations)) and related social media or other tools, as outlined in the Bloschl et al.	
	(2019) paper. ICCLAS and GLASS are in the early stages of planning for this collaborative piece.	
DIGITAL WATER GLOBE	ICCLAS secretary will introduce the DWG in the coming commission meeting and will be responsible to upload the study cases – suggested by all commission officers - onto the DWG.	ICCLAS secretary is currently gathering papers from the ICCLAS committee for uploading to the DWG. Papers from Chris White are already available on DWG.
OTHER INITIATIVES	ICCLAS has begun discussions on organizing a Special Issue in a prominent hydrological sciences journal on an ICCLAS-related topic to be determined that will address one of the commission's primary scientific objectives, likely aligned to the 21 Unsolved Problems in Hydrology paper from 2019.	ICCLAS is organizing a Special Issue in HSJ on an ICCLAS-related topic to be determined that will address one of the commission's primary scientific objectives, likely aligned to the 21 Unsolved Problems in Hydrology paper from 2019. Rodolfo Nóbrega, Richard Petrone and Chris White are currently working on the proposal for HSJ.
OTHER INITIATIVES	ICCLAS is currently reviewing ways in which the Commission can better work with early career hydrologists. A meeting will be organised through the ECC to start discussions in early 2024.	Under the leadership of James Dennedy-Frank (ICCLAS ECC Rep.) ICCLAS will work on ways in which the Commission can better work with early career hydrologists. A meeting will be organised through



		the ECC to start discussions in early 2025.	
OTHER INITIATIVES	ICCLAS will initiate regular (e.g., 6 monthly) internal ICCLAS planning and progress meetings from early 2024 onwards.	ICCLAS will continue with regular meetings every ~6 months for internal planning and progress reporting.	