

CURRICULUM VITAE 01/2021

ILIAS G. PECHLIVANIDIS

MEng, DIC, PhD

Senior Researcher in Hydrology and Water Resources
Project Manager of the [EFAS](#) Dissemination Centre
Co-Chair of the [HEPEX](#) scientific initiative
Reference Group Member of the [CNDS](#) centre
Chair of the EGU HS subdivision on [Hydrological Forecasting](#)



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RESEARCH INTERESTS

- Hydrological forecasting at different spatiotemporal scales (from catchment to continental/global scales, and from short to decadal time horizons)
- Seamless and Impact-based (user-tailored) forecasting
- Communication of forecast - User engagement and understanding of user needs
- Assimilation of Earth Observation and in-situ data in hydrological services
- Climate services - Improved prediction of extremes
- Process understanding of hydrological systems and modelling under uncertainty
- Prediction in ungauged / non-stationary catchments
- Impacts of environmental change (land use, climate and population) on water resources
- Water resources management and societal adaptation

CURRENT PROFESSIONAL ROLE

- Oct 2020-
Today **SMHI / Swedish Meteorological and Hydrological Institute (Sweden)**
Senior Scientist in the Hydrology Research and Development (R&D) unit
Role involves: (1) ensuring financial resources for the scientific field's sustainability, (2) ensuring work with high scientific quality including encouraging and initiating publishing, (3) developing and actively participating in internal and external networks, (4) Principal Investigator and coordinator of international projects and proposals, (5) enhancing SMHI operational hydrological services at several hydro-climatic regions, (6) setting up and improving performance of the HYPE hydrological model, and (7) senior analyst of hydrological forecasts.
- Mar 2018-
Today **Copernicus Emergency Management Service (CEMS)**
Project Manager of the European Flood Awareness Service (EFAS, www.efas.eu)
Dissemination Centre
Role involves: (1) establishing effective work allocation and performance criteria to steer and monitor progress, (2) assuring that outputs are documented in the appropriate formats and management configuration and changes are controlled and all activities are implemented as designed and outlined in the relevant work plans, (3) coordinating and communicating with all partners on a management level in order to safeguard timely delivery and quality of work, (4) coordinating with SMHI general management to assure the availability of in-house resources, (5) approving and release all documentation,

reports and deliverables, (6) managing/performing all project control activities, and (7) planning human resources and their allocation.

Feb 2018-
Today

Hydrologic Ensemble Prediction Experiment / HEPEX

Co-Chair of the HEPEX scientific initiative (<https://hepex.irstea.fr>)

Role involves: (1) organizing scientific exchange between participants through workshops and sessions or meetings during major science conferences, (2) planning and coordinating community experiments or testbeds, (3) organizing publications on specific topics of interest through special issues in scientific journals, (4) highlighting operational or experimental real-time examples or cases of hydrologic ensemble prediction systems (HEPS) to help practitioners find out about how ensemble prediction is being used around the world for various applications, and (5) maintaining online community interaction and HEPS-related resources via the HEPEX website and other social media channels.

EDUCATION

2005-2009 **Ph.D. Imperial College London (UK)**

Environmental and Water Resources Eng., Department of Civil and Environmental Eng.
Dissertation: *“The significance of spatial variability of rainfall on runoff generation”*.
(funded by EPSRC). Supervisors: Prof. Howard S. Wheater and Prof. Neil McIntyre

2000-2005 **M.Eng. Democritus University of Thrace (Greece)**

Ecological Engineering and Technology, Departm. of Environmental Eng. (5 year study)
Thesis: *“Water quality assessment of a free water surface constructed wetland: The Vassova Lagoon case”*. Supervisor: Prof. V. Tsihrintzis. 1st Class Distinction: 8.63/10

PROFESSIONAL EXPERIENCE

Sep 2017- Sep 2020	SMHI / Swedish Meteorological and Hydrological Institute (Sweden) Scientific Leader in the Hydrology Research and Development (R&D) unit Role involves: (1) leading the research activities under the scientific field of <i>Forecasting of Water Variables</i> , (2) ensuring financial resources for the scientific field’s sustainability, (3) ensuring work with high scientific quality including encouraging and initiating publishing, (4) developing and actively participating in internal and external networks, (5) Principal Investigator and coordinator of international projects and proposals, (6) enhancing SMHI operational hydrological services at several hydro-climatic regions, (7) setting up and improving performance of the HYPE hydrological model, and (8) senior analyst of hydrological forecasts.
Sep 2012 - Sep 2017	SMHI / Swedish Meteorological and Hydrological Institute (Sweden) Senior Researcher in Hydrology and Water Resources Role involves: (1) co- Principal Investigator (co-PI) of international projects, (2) coordinating national and international proposals, (3) setting up SMHI’s operational hydrological services at the continental scale, (4) setting up and improving performance of the HYPE hydrological model, (5) senior analyst of hydrological performance and forecasts, (6) Officer on Duty for the European Flood Awareness System (EFAS, www.efas.eu).
Dec 2011 - Sep 2012	National Observatory of Athens (Greece) Scientific consultant at the Institute of Environmental Research and Sustainable Development. Project title: <i>“Representation of the spatial-temporal distribution of precipitation in the Mornos Region and simulation of its hydrological behaviour”</i> . Duties include: i) field work -measure river velocities and generate water level – discharge curves (rating curves), ii) development of GIS-based tools to simulate the

	hydrological cycle at the regional scale, and iii) use of developed tools for hydrological forecasting under uncertainty.
Sep 2011 - May 2012	Hellenic Army General Staff (Greece) – Off research period for obligatory service Scientific consultant including duties such as: i) estimate the hydro-climatic characteristics (curve numbers, runoff coefficients, precipitation frequency analysis) of the Evros Region, and ii) calculate the hydrological response of the region for extreme events.
Jul 2011 - Aug 2011	Victoria University of Wellington (New Zealand) Teaching Fellow including duties such as: i) managing tutors, ii) coordination and delivery of laboratories, iii) preparation of lecturing, iv) delivering lectures, v) student consultation, and vi) setting and marking assignments and the final examination.
May 2010- Jul 2011	Victoria University of Wellington (New Zealand) Research Fellow in: (i) catchment-scale hydrological modelling within a diagnostic framework, and (ii) extension and application of the multi-criteria LUCI GIS tool under different hydro-climatic environments.
Nov 2009- May 2010	Bangor University of Wales (UK) and Victoria University of Wellington (New Zealand) Postdoctoral Fellow (Bangor University) and Academic Visitor (Victoria University) in the development of computationally efficient hydrological algorithms within a geographic information system (GIS) framework.
Jul 2009- Feb 2011	Technological Educational Institute of Thessaloniki (Greece) Adjunct Research Assistant in the Laboratory of Hydraulic and Environmental Engineering, Department of Civil Infrastructures Projects. Participation in two projects. The first project aimed to measure the turbulent characteristics and evaluate the entrainment in stratified flows in an open channel using the PIV method”. The 2 nd project was entitled: “Identifying the optimal geometrical and hydrodynamic properties of downstream reservoirs (fishponds) lateral to the river flow for fish habitat”.
2008	Imperial College London (UK) Research Assistant in the development of computationally efficient hydrological algorithms within a geographic information system (GIS) framework. Collaboration between Imperial College London and Bangor University (funded by FRMRC).
2002 -2009	Aristotle University of Thessaloniki (Greece) Adjunct Research Assistant in the Laboratory of Hydraulic and Environmental Engineering, Department of Civil and Environmental Engineering. Experiments include tsunamis, velocity, temperature, conductivity profiles, shear stresses and saline wedge intrusion.
2003 -2005	EU Research Projects Research Assistant in the project entitled “Contribution in ascertainment and in measurement of wedge’s length and in the profile of speeds into mixed fluids: Application to saline wedges”.

EXPERIENCE IN OPERATIONAL HYDROLOGICAL SERVICES

2020- Today	Contact researcher at SMHI for the global hydrological status and outlook provided to WMO’s HydroSOS Demonstration Portal (https://eip.ceh.ac.uk/hydrology/HydroSOS)
2018- Today	Leading Researcher of the operational WATER-SIS seasonal forecasting service at ECMWF under the Copernicus Climate Change Service (C3S)
2014- Today	Analyst of short to medium range, sub-seasonal and seasonal ensemble hydrological forecasts based on the E-HYPE model at the pan European scale.
2014- Today	Senior Analyst of SMHI’s operational short to medium range ensemble hydrological forecasts based on the S-HYPE and HBV models in Sweden.

2013- Today	Officer on duty for European Flood Awareness System (EFAS) system. Medium range ensemble hydrological forecasting based on LISFLOOD and E-HYPE models in Europe.
2016-2018	Leading Researcher and Co-Developer of the Space-O portal (https://portal.space-o.eu/portal/)
2018- 2019	Leading Researcher of the GLORIOUS world-wide seasonal forecasting service (http://glorious.smhi.se/seasonal-forecasts)
2017- 2018	Leading Researcher of the SWICCA pan-European seasonal forecasting service (http://swicca.eu/seasonal-forecasts-map/)
2017	Officer on duty for the Aristotle global multi-hazard monitoring service. Responsible for the Flooding hazard, providing forecasts and knowledge over numerous extreme phenomena.

TEACHING EXPERIENCE

VICTORIA UNIVERSITY OF WELLINGTON (NEW ZEALAND): 2009 - 2011

- GEOG 220 - Hydrology and Climate (BSc students) - *Organiser*
- GEOG 223 - Physical Environmental Processes: Field Methods (BSc students) - *Organiser*
- PHYG 417 - Hydrological Processes and Modelling (MSc students)

IMPERIAL COLLEGE LONDON (UK): 2005 - 2009

- Rainfall-Runoff Modelling (MSc students)
- Mathematics (MSc students)
- Hydrology (BSc/MSc students)
- System Analysis (BSc students)
- Urban Hydrology (BSc/MSc students)
- Surveying (BSc students)
- MatLab (BSc students)
- Wastewater Treatment (BSc/MSc students)

FIELD EXPERIENCE

- 2012 Installation of snow-gauge pillow measuring snow depth and water equivalent in Sweden
- 2011 - 2012 Installation of rain- (3), snow- (2), and flow-gauges (2) in the Mornos Region, Greece
- 2010 - 2011 Field methods teaching assistant; demonstrating stream gauging (GEOG 223 course)
- 2004 - 2005 Principal investigator; monitor the water quality of a wetland (MEng final year project)

VISITING - EXCHANGE PROGRAMS

- Sept. 2019 Research visitor to the HYCAR group at IRSTEA research centre, Antony, France
- Sept. 2019 Ambassador of the EFAS service to the Hellenic National Meteorological Service (HNMS) and General Secretariat for Civil Protection, Athens, Greece

ACHIEVEMENTS AND AWARDS

- 2020-Today: **Chair** of the European Geosciences Union (EGU) Hydrological Sciences Subdivision on Hydrological Forecasting (www.egu.eu)
- 2019-Today: **Reference Group Member** of the Centre of Natural Hazards and Disaster Science (CNDS) (www.cnds.se)
- 2018-Today: **Co-Chair** of the HEPEX initiative (<https://hepex.irstea.fr>)
- 2019: **Award** (travel) for research exchange program between Sweden and France
- 2016-2017: HEPEX **Invited Guest** Columnist

- 2015: ASCE **Outstanding Reviewer** for the Journal of Hydrologic Engineering
- 2012: ASCE **Outstanding Reviewer** for the Journal of Hydrologic Engineering
- 2012: **Reference letter** from the Greek Defence Minister Fragos Fragoulis for my scientific contribution to military projects
- 2008: **Award** from the Technical Chamber of Greece for graduating 1st from the Department of Environmental Engineering at the Democritus University of Thrace during undergraduate studies
- 2008: iEMSs Society’s **Student Paper Commendation** for excellent paper and presentation
- 2008: Old Centralian’s Trust postgraduate **travel award** to iEMSs 2008 conference
- 2008: British Hydrological Society **travel award** to EGU hydrological conference
- 2007: British Hydrological Society **travel award** to CEMEPE hydrological conference
- 2004-2005: **Highest graduation grades** among graduates in the Department of Environmental Engineering, 3rd highest in the Faculty of Engineering, Democritus University of Thrace, Greece
- 2000-2005: **Annual awards and scholarships** from the Greek National Scholarship Foundation

PROFESSIONAL AFFILIATIONS

- Centre of Natural Hazards and Disaster Science (CNDS) – *Reference group*
- Hydrologic Ensemble Predictions Experiment (HEPEX) – *Co-Chair*
- Global Flood Partnership (GFP)
- Institution of Civil Engineers (ICE)
- British Hydrological Society (BHS)
- American/European Geophysical Society
- Technical Chamber of Greece
- Environmental Modelling & Software Society (EMS)
- European Water Association (EWA)

JOURNAL EDITOR

- 2018-2019 **Guest Editor** in the **WATER** journal. Special issue on “Hydrology, Water Resources Management and Protection of the Marine Environment”
- 2016-2019 **Guest Editor** in **Hydrology and Earth System Sciences (HESS)** journal. Special issue on “Seasonal Hydrological Forecasting”
- 2017-2019 **Guest Editor** in **Hydrology and Earth System Sciences (HESS)** journal. Special issue on “The Changing Water Cycle of the Indogangetic plains”
- 2012-Today **Associate Editor** on *Hydrology & Water Resources* for the **Global NEST** Journal
- 2015 **Guest Editor** in the special issue of the **Global NEST** Journal “*Climate Change Impacts and Societal Adaptation in the Indian Subcontinent*”. The editorial board consists of D. Sharma (Central University of Rajasthan), D.F. Lekkas (University of Aegean) & I.G. Pechlivanidis
- 2012 **Guest Editor** in the special issue of the **Global NEST** Journal “*Water Resources, Hydrology & Hydraulics: Bringing together recent developments in technology and applications*” (vol. 14, no. 3, pp. 253-392). The editorial board consisted of C. Onof (Imperial College London), D.F. Lekkas (University of Aegean) and I.G. Pechlivanidis

PROJECT PRINCIPAL INVESTIGATOR AND MANAGER

Role highlighted in bold

EU Horizon 2020	2021-2025	“CLINT: Climate Intelligence: extreme events detection, attribution and adaptation design using machine learning”, (nr), 6 M Euros, 15 partners (PI)
	2019-2022	“PrimeWater: Delivering advanced predictive tools from medium to seasonal range for water dependent industries exploiting the cross-cutting potential for EO and hydro-ecological modeling”, (nr 870497), 2 M Euros, 10 partners (PI)

	2019-2022	“HYPOS: HYdro-POwer-Suite”, (nr 870504), 2 M Euros, 5 partners (co-PI)
	2019-2023	“E-SHAPE Showcases: Applications powered by Europe”, (nr 820852), 15 M Euros, 55 partners (PI)
	2017-2020	“S2S4E: Sub-seasonal to Seasonal climate forecasting for Energy”, (nr 776786), 4.8 M Euros, 12 partners (PI)
	2017-2020	“CLARA: Climate forecast enabled knowledge services”, (nr 730482), 4 M Euros, 10 partners (co-PI)
	2016-2019	“IMPRES: Learn from today to anticipate tomorrow”, (nr 641811), 8 M Euros, 23 partners (SMHI’s co-Project Manager)
	2016-2018	“Space-O: Space assisted water quality forecasting platform for optimized decision making in water supply services”, (nr 603663), 2 M Euros, 8 partners (PI)
Swedish Energimyndigheten	2018-2021	“Long-term forecasts of wind and hydropower supply in a fluctuating climate – Importance for production planning and investments in energy storage and power transmission”, (nr 46412-1), 400 K Euros, 3 partners (SMHI’s Project Manager)
Copernicus Climate Change Service (C3S)	2018-2021	“WaterSIS- operational”, (nr C3S_424), 2 M Euros, SMHI as Contractor (co-PI)
	2019-2020	“Demonstrating the potential of the Copernicus Climate Data Store for Kenyan smallholder farmers: a scalable adaptation services approach” (nr C3S_429_Lot1), 75,000 Euros, SMHI as sub-contractor, (co-PI)
	2017-2019	“GLORIOUS: Global users in the Copernicus Climate Change Service”, (nr C3S_422_Lot1), 2 M Euros, SMHI as Contractor (co-PI)
	2015-2017	“SWICCA: Service for water indicators in climate change adaptation”, (nr C3S_441_Lot1), 2 M Euros, SMHI as Contractor (co-PI)
Swedish Research Council (VR)	2016-2018	“WaterRain-Him: Changes in Water Resources and Adaptation options in the Indian-Himalayan basins”, (nr. 348-2014-33), SMHI as Coordinator, 300 K Euros, 4 partners (co-PI and Project Leader)
Swedish Secretariat for Environmental Earth System Sciences (SSEESS)	2015-2016	“Participatory analyses to sustain the lifeline of the Ganga River Basin under future conditions”, (grant nr. KVA/2015/111/75), 9 K Euros (PI and Coordinator)
	2014-2016	“ISI-MIP2: Inter-Sectoral Impact Model Intercomparison Project phase 2”, SMHI contributes at the water sector with results from E-HYPE, Arctic-HYPE, India-HYPE and Niger-HYPE at 6 focus regions, 10 partners (SMHI’s Project Manager)
EU FP7	2013-2016	“EUPORIAS – European Provision Of Regional Impact Assessment on a Seasonal to decadal timescale”, (nr 308291), 9 M Euros, 24 partners (SMHI’s Project Manager)
Swedish International Development Cooperation Agency (Sida)	2012-2013	“Assessment of climate change impacts on water resources in the Luni river basin, Rajasthan, India, using CORDEX results”, (AKT-2012-022), SMHI coordinates, 210 K Euros, 2 partners (Consortium’s Project Manager)

Athens Water Supply and Sewerage Company (EYDAP SA)	Dec 2011- May 2012	“Representation of the spatial-temporal distribution of precipitation in the Mornos Region and simulation of its hydrological behaviour”, (Sub-contractor)
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TRAINING TOOLS - GAMES - GAMIFICATION - SCIART

- 2018 **Co-developer** (Crochemore L., Cantone C., Photiadou C., Pechlivanidis I.) of the SciArt interactive game for training users in the water-sector “Call4Water: Seasonal forecasting for water management in different certainty and reliability contexts”

INVITED SPEAKER at key events - EVENT ORGANISER

2020

- “Seamless blending of forecasts timescales: application for hydropower”, 4 Dec. 2020, **Invited Speaker** at the “Climate forecasting for energy” online workshop, organized by S2S4E project and the Open Energy Modelling initiative
- “Challenges in understanding and prediction of hydrological responses: From data availability to water services”, 24-26 Nov. 2020, **Invited Speaker** at the “Actions aimed at the Internationalization of Doctoral programs 2020” programme, organized by Polytechnic University of Valencia
- “Hydrological modelling and prediction: Always look on the bright side”, 1 Jul. 2020, **Invited Speaker** at the Hydrology Modeling for Energy Models workshop, organized by Rte and IPSL
- “Hydro-climatic forecasts for the upcoming spring flood season”, 23 Apr. 2020, **Invited Speaker** at the S2S4E H2020 project webinar organised by BSC, online webinar

2019

- “Hydro-climatic services for the hydropower sector: Towards a success story”, 11 Dec. 2019, **Invited Speaker** at the COP25, side event “Climate Information for Hydropower Resilience and Operations” organised by IPCC and WMO, Madrid, Spain
- “Seasonal hydro-climatic services in the hydropower sector”, 13 Nov. 2019, **Invited Speaker** at the Climate Sprint: Accelerating Climate Solutions, Paris, France
- “Seasonal forecasts for water management: Challenges and opportunities for (co-) evolving services and knowledge”, 28 Oct. 2019, **Invited Speaker** at the Copernicus Climate Change Service (C3S) General Assembly, Warsaw, Poland
- “Large scale hydrological services: challenges and opportunities for the co-evolution of knowledge”, 10 Sept. 2019, **Invited Speaker** at HYCAR research unit of IRSTEA, Antony, France
- 16th International Conference on Environmental Science and Technology (CEST2019), 4 - 7 Sept. 2019, Rhodes, Greece. Acting as **convener** and **chairman** in the *Hydrology & Water Resources Management* session.
- “IUGG/IAHS 2019 – Session H14a - Sub-Seasonal to Seasonal Predictions: Skill and Limits for Decision-Based Forecasting”, 8-18 July 2019, **Session co-convener**, Montreal, Canada
- “Towards the co-evolution of hydro-climatic services and knowledge”, 25 June 2019, **Invited Speaker** at the *CLARA Horizon 2020 project General Assembly*, Norrköping, Sweden
- “Large-scale early warning services for the water sector – State of the art and challenges”, 21 Mar. 2019, **Invited Speaker** at the *CNDS Symposium* by the Centre of Natural Hazards and Disaster Science, Stockholm, Sweden
- “EGU 2019 – PICO session HS4.3.1/NH1.35 - Operational forecasting and warning systems for natural hazards: challenges and innovation”, 7-12 April 2019, **Session Convener**, Vienna, Austria

2018

- “Global Climate services and climate innovation: Challenges and added-value”, 5 Dec. 2018, **Invited Speaker** at the side event of *24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24)*, Katowice, Poland
- “Sub-seasonal and seasonal forecasting: Research activities and diagnostic tools”, 28 Nov. 2018, **Invited Speaker**, Hydropower Day seminar, SMHI, Norrköping, Sweden
- “Global and continental hydro-climatic forecasting services: challenges and information extraction to meet the user needs”, 6 - 8 Mar. 2018, **Invited Speaker** at the *Howard Wheeler Symposium – Hydrology 2058: learning from the past, shaping the future* organized by the Global Institute for Water Security, University of Saskatchewan, Saskatoon, Canada
- “SMHI’s pan-European seasonal forecasting service: moving from data providers towards knowledge purveyors”, 24 - 25 Jan. 2018, **Invited Speaker** at the *Seasonal Forecasting: Meeting User Needs* workshop organized by BHS / Water@Loughborough / Water@Reading, Loughborough, UK
- “EGU 2018 – PICO session HS4.5/NH1.14 - Operational forecasting and warning systems for natural hazards: challenges and innovation”, 8-13 April 2018, **Session Convener**, Vienna, Austria

2017

- “Relevant EU-projects for the hydropower sector: IMPREX and S2S4E”, 7 Dec. 2017, **Invited Speaker**, organized by Energiforsk, Stockholm, Sweden
- “The pan-European seasonal hydrological forecasting services developed by SMHI for C3S”, 23 Nov. 2017, **Invited Speaker**, webinar organized by WMO
- “The pan-European seasonal hydrological forecasting services developed by SMHI for C3S and WW-HYPE developments”, 22 Nov. 2017, **Invited Speaker**, Hydropower Day seminar, SMHI, Norrköping, Sweden
- “HYPE-course 2017: Multi-basin modelling using local data in World-Wide HYPE”, 4 - 6 Sept. 2017, **Lecturer**, organized by SMHI, Norrköping, Sweden
- 15th International Conference on Environmental Science and Technology (CEST2017), 31 Aug. - 3 Sept. 2017, Rhodes, Greece. Acting as **convener** and **chairman** in the *Hydrology & Water Resources Management* session.
- “Big Data Analysis in Earth Sciences”, 28 Aug. - 1 Sept. 2017, **Scientific Committee** at EarthBiAS 2017 3rd International Summer School, organized by the University of Aegean and the Global Network for Environmental Science and Technology (GNEST), Rhodes, Greece.
- “Advancing hydrological forecasting services at the pan-European scale: A SPACE-O perspective”, **Invited Author in the SPACE-O Newsletter**, 15 June 2017, <http://www.space-o.eu/advancing-hydrological-forecasting-services-at-the-european-scale-a-space-o-perspective/>
- “EGU 2017 – PICO session HS4.5/NH1.13 - Operational forecasting and warning systems for natural hazards: challenges and innovation”, 23-28 April 2017, **Session Convener**, Vienna, Austria
- “International workshop on Changes in Water Resources and Adaptation options in the Ganges region”, 09-10 March 2017, **Organising and Scientific Committee**, hosted by the Indian National Institute of Hydrology, Roorkee, India

2016

- “Key hydrological challenges at the large scale and lessons learnt”, 5 October 2016, **Invited Speaker**, organized by the water and environmental management research center, University of Bristol, Bristol, UK
- “Uncertainty in operational hydrological forecasting: Insights from SMHI’s services”, **Invited Author in the HEPEX blog**, 15 November 2016, <https://hepex.irstea.fr/uncertainty-in-operational-hydrological-forecasting-insights-from-smhis-services/>
- “EGU 2016 – PICO session HS4.5/NH1.10 - Operational forecasting and warning systems for natural hazards: challenges and innovation”, 17-22 April 2016, **Session Convener**, Vienna, Austria

2015

- “International workshop on Hydro-meteorological modelling and forecasting”, 9-10 December 2015, **Invited Speaker**, organized by the Norwegian Water Resources and Energy Directorate (NVE), Lillehammer, Norway

- “International workshop on Changes in Water Resources and Adaptation options in the upper Ganges region”, 16-17 November 2015, **Organising and Scientific Committee**, organized by the Indian National Institute of Hydrology, Roorkee, India
- “HEPEX workshop on seasonal hydrological forecasting”, 21-23 September 2015, **Organising and Scientific Committee**, organized by HEPEX and the Swedish Meteorological and Hydrological Institute (SMHI), Norrköping, Sweden
- “Big Data Analysis in Earth Sciences”, 31-4 September 2015, **Scientific Committee** at EarthBiAS 2015 International Summer School, organized by the University of Aegean and the Global Network for Environmental Science and Technology (GNEST), Rhodes, Greece

2014

- “SMHI’s goals for seasonal hydrological forecasting at the pan-European scale and Sweden”, **Invited Guest Author in the HEPEX blog**, 5 December 2014, <http://hepex.irstea.fr/smhis-goals-for-seasonal-hydrological-forecasting-at-the-pan-european-scale-and-sweden/>
- “Summer course on hydrological modelling at the pan-European scale”, 29-30 July 2014, **Lecturer**, organized by the Swedish Meteorological and Hydrological Institute (SMHI), Norrköping, Sweden
- “Big Data Analysis in Earth Sciences”, 7-11 July 2014, **Scientific Committee** at EarthBiAS 2014 International Summer School, organized by the University of Aegean and the Global Network for Environmental Science and Technology (GNEST), Rhodes, Greece

2013

- International Conference on Climate Change Impacts and Societal Adaptation (CCISA 2013), 6-8 November 2013, Kinshargarh, India. Acting as **conference organiser**.
- 13th International Conference on Environmental Science and Technology (CEST2013), 5-7 September 2013, Athens, Greece. Acting as **co-convener** and **chairman** in the *Hydrology & Water Resources Management* session. The session was convened by Christian Onof (Imperial College London), Thorsten Wagener (University of Bristol), Demetris F. Lekkas (University of Aegean) and Ilias G. Pechlivanidis

2012

- “The India-HYPE project focus”, 31 October 2012, **Invited Speaker** - presented at the National Institute of Hydrology, Roorkee, India
- “Analysis and Simulation of Environmental Systems”, 4-22 June 2012, **Scientific Committee** at MAENDI 2012 International Summer School, organized by the University of Aegean, Samos, Greece

2011

- 12th International Conference on Environmental Science and Technology (CEST2011), 8-10 September 2011, Rhodes Island, Greece. Acting as **co-convener** and **chairman** in the *Hydrological modeling and uncertainty* session. The session was convened by Christian Onof (Imperial College London), Demetris Koutsoyiannis (National Technical University of Athens), Demetris F. Lekkas (University of Aegean) and Ilias G. Pechlivanidis

2010

- “Diagnostic Model Evaluation and the Use of Entropy as a Model Diagnostic in Rainfall-Runoff Modelling”, May 2010, **Invited Speaker** - organized by the Department of Civil and Environmental Engineering, National Technical University of Athens, Greece
- “Effects of Spatial Rainfall on Floods: New Insights”, February 2010, **Invited Speaker** - organized by the School of Geography, Environment and Earth Sciences, Victoria University of Wellington, New Zealand

JOURNAL REVIEWER

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|---|-------------------------------------|
| • Water Resources Research | • Hydrological Processes |
| • Hydrology and Earth System Sciences | • Hydrological Sciences Journal |
| • Environmental Modelling & Software | • Journal of Hydrologic Engineering |
| • Journal of Hydroinformatics | • Global Nest Journal |
| • Natural Hazards and Earth System Sciences | • Urban Water Journal |
| • Hydrology Research | • Water Resources Management |

EXTERNAL EXAMINER and (CO-) SUPERVISION

UNIVERSITY OF OSLO (NORWAY): MARCH 2021, PHD EXTERNAL EXAMINER

Trine Jahr Hegdahl, "*Hydrological ensemble prediction systems: from evaluating daily streamflow forecasts to exploring the impact of selected flood events in a future climate*" (supervised by K. Engeland, L. Tallaksen, I. Steinsland and A. Singleton)

UPPSALA UNIVERSITY (SWEDEN): SEPTEMBER 2019, PHD EXTERNAL EXAMINER

Kaycee Okoli, "*Flood frequency analysis with uncertain river flow data*" (supervised by G. Di Baldassarre, M. Mazzoleni and K. Breinl)

KTH (SWEDEN): 2017, MSc THESIS REPORT

Hedvig Winther, "*Climate change impacts on water resources of the Ganges: Suitable adaptation options for agriculture in the Indian-Himalayan region*" (thesis co-supervision with Dr Daniel Franzen (KTH), Dr. P. Bueker (SEI-York) and Ms Y. Ran (SEI-Stockholm))

SMHI (SWEDEN): JULY 2016 – JULY 2017

Dr Louise Crochemore, (acting as Post-Doctoral mentor)

UPPSALA UNIVERSITY (SWEDEN): 2013, MFS PROJECT REPORT

Pierong R., and Takman M., "*Measuring and understanding of processes using the HYPE hydrological model in the North-western Indian region*" (co-supervision with Prof. A. Rodhe)

IMPERIAL COLLEGE LONDON (UK): 2008 - 2009, MASTER THESES

2009 Kissa A., "*Preparatory modelling for flood forecasting in the Roding River*" (co-advised)
 2008 Zhang W., "*The significance of spatial rainfall variability on flood generation: Application to the Upper Lee catchment, UK*" (co-supervision with Dr N. McIntyre)

EXTERNAL EXPERT AND PROJECT EVALUATOR

2016-Today Student **prize evaluator** for the EGU conference, 17-22 April, Vienna, Austria
 2012-2016 **External expert** for the "Prediction of streamflow - Regionalisation of rainfall-runoff models in Korea" project; funded by the Korean Research Foundation
 2012 **Evaluator** of Romanian funding programs for research; sponsored by the National Council for Research and Development
 2010 Student **prize evaluator** for the iEMSs 2010 conference, July, Ottawa, Canada

SKILLS

COMPUTING

- MATLAB
- ArcGIS / Global Mapper
- Python
- LUCI* (involved in the development)
- SPSS
- LaTeX
- Compaq Visual FORTRAN
- EndNote

- R
- LabVIEW

*LUCI is a multi-criteria GIS toolbox implemented for spatially explicit evaluation of trade-offs in changing land use on hydrology, productivity and biodiversity. It has been designed explicitly as a negotiation tool while it meets a key need for models and visualizations that can be applied to any landscape with readily available data for parameterization (funded by FRMRC).

TRANSFERABLE SKILLS AND COURSES UNDERTAKEN

- 2020: *Communicative leadership* course focusing on: (1) rhetoric and communication practices, (2) encouraging creativity, (3) diversity and inclusion, and (4) norms and biases
- 2019: *Understanding Group and Leader (UGL)* course focusing on: (1) be able to distinguish different stages in a group's development and their own approach to these, (2) work with reflection and learning individually and in groups, (3) understand the impact of emotions on individual and group level, (4) understand that there is a need for different leadership styles, (5) get knowledge of conflicts and how to handle these, (6) be able to take and give developing feedback, (7) be able to communicate directly and clearly, and (8) get increased self-awareness and personal development
- 2014: Results-Based Management course (2-day course for successful proposal writing)
- Project Management for Researchers, IDEA Summer School 2007 "*Succeeding in Europe*" course (focusing on managing research, making grant applications, getting published, entrepreneurship and inter-cultural awareness, and career management)
- Graduate Teaching Assistant
- Examination Administration and Problem Sheet Marking Skills Training
- Reference Manager
- Research Skills Development Course
- Efficient Reading
- Interview Success
- Negotiation and Influencing Skills Workshop

REPRESENTATION - LEADERSHIP

- 2019-Today: Reference Group Member of the Centre of Natural Hazards and Disaster Science (CNDS <https://www.cnds.se>)
- 2018-Today: Co-chair of HEPEX international initiative (Hydrologic Ensemble Prediction Experiment <https://hepex.irstea.fr>)
- 2018-Today: Project Manager of the European Flood Awareness System (EFAS www.efas.eu) operating under the Copernicus Emergency Management Service
- 2017-Today: Scientific Leader of Forecasts of Water Variables at SMHI's Hydrology Research unit
- 2007-2008: Postgraduate Safety Representative at Imperial College London
- 2006-2008: Postgraduate Departmental Representative of around 125 PhD students at Imperial College London
- 2000-2005: Vice-President of Undergraduate students at Democritus University Thrace, Greece

LANGUAGES

- English (fluent)
- Swedish (basic)
- Greek (mother tongue)

OTHER SKILLS

Valid EU driving licence acquired in June 2000

PUBLICATIONS AND CONFERENCE CONTRIBUTIONS

JOURNAL PUBLICATIONS (RECOMMENDED ARE HIGHLIGHTED WITH BOLD)

Emphasis on Hydrology

2020

- JH1 Girons Lopez, M., Crochemore, L., Pechlivanidis, I.G., 2020, '*Benchmarking an operational hydrological model for providing seasonal forecasts in Sweden*', Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-542>, in review, 2020.
- JH2 Ziogas A., Pechlivanidis I.G., Romas E., Tzimas A., 2020, '*Climate service derived indicators to assess the impact of climate change on river assimilative capacity*', Climate Services (submitted)
- JH3 Giuliani M., Crochemore L., Pechlivanidis I.G., Castelletti A., 2020, '*Isolating the role of end-user behaviour in the assessment of seasonal forecast value*', Hydrol. Earth Syst. Sci. Disc., <https://doi.org/10.5194/hess-2019-659>, in review, 2020
- JH4 Kiesel J., Stanzel P., Kling H., Jähnig S., Fohrer N., Pechlivanidis I.G., 2020, '*Streamflow-based evaluation of climate model sub-selection methods for impact assessments*', Climatic Change, <https://doi.org/10.1007/s10584-020-02854-8>
- JH5 Hundecha Y., Arheimer B., Berg P., Capell R., Musuuza J., Pechlivanidis I.G., Photiadou C., 2020, '*Effect of model calibration strategy on climate projections of hydrological indicators at a continental scale*', Climatic Change, <https://doi.org/10.1007/s10584-020-02874-4>
- JH6 Macian-Sorribes H., Pechlivanidis I.G., Crochemore L., Pulido-Velazquez M., 2020, '*Fuzzy post-processing to advance the quality of continental seasonal hydrological forecasts for river basin management*', Journal of Hydrometeorology, doi: <https://doi.org/10.1175/JHM-D-19-0266.1>
- JH7 Wörman A., Bertacchi Uvo C., Brandimarte L., Busse S., Crochemore L., Girons Lopez M., Hao S., Pechlivanidis I.G., Riml J., 2020, '*Virtual energy storage gain resulting from the spatio-temporal coordination of hydropower over Europe*', Applied Energy, doi: 10.1016/j.apenergy.2020.115249
- JH8 **Pechlivanidis I.G., Crochemore L., Rosberg J., Bosshard T., 2020, '*What are the key drivers controlling the forecasts of seasonal streamflow volumes?*', Water Resources Research, doi: **10.1029/2019WR026987****
- JH9 Contreras E., Herrero J., Crochemore L., Pechlivanidis I.G., Photiadou C., Aguilar C., Polo M.J., 2020, '*Advances in the definition of needs and specifications for a climate service tool aimed at small hydropower plants operation and management*', Energies, 13, 1827, <https://doi.org/10.3390/en13071827>
- JH10 Lavers D., Ramos M-H., Magnusson L., Pechlivanidis I.G., Klein B., Prudhomme C., Arnal L., Crochemore L., van den Hurk B., Weerts A., Harrigan S., Cloke H., Richardson D., Pappenberger F., 2020, '*A vision for hydrological prediction*', Atmosphere, 11(3), 237, <https://doi.org/10.3390/atmos11030237>
- JH11 Musuuza J., Gustafsson D., Pimentel R., Crochemore L., Pechlivanidis I.G., 2020, '*Impact of satellite and in-situ data assimilation on hydrological predictions*', Remote Sensing, 12, 811, <https://doi.org/10.3390/rs12050811>
- JH12 **Crochemore L., Ramos M-H., Pechlivanidis I.G., 2020, '*Can continental model convey useful seasonal hydrologic information at the catchment scale?*', Water Resources Research, 56, e2019WR025700. <https://doi.org/10.1029/2019WR025700>**

2018

- JH13 Nijzink R.C., Almeida S., Pechlivanidis I.G., Capell R., Gustafsson D., Arheimer B., Parajka J., Freer J., Han D., Wagener T., Nooijen R.R.P., Savenije H.H.G., Hrachowitz M., 2018, '*Constraining conceptual hydrological models with multiple information sources*' Water Resources Research, 54 (10), <https://doi.org/10.1029/2017WR021895>
- JH14 **Pechlivanidis I.G., Gupta H., Bosshard T., 2018, '*An information theory approach to identifying a representative subset of hydro-climatic simulations for impact modeling studies*', Water Resources Research, doi:10.1029/2017WR022035.**

2017

- JH15 Krysanova, V., Vetter T., Eisner S., Huang S., Pechlivanidis I.G., Strauch M., Aich V., Arheimer B., Chamorro A., Gelfan A., van Griensven A., Kumar R., Kundu D., Lobanova A., Mishra V., Plötner S.,

Reinhardt J., Seidou O., Wang X., Wortmann M., Zeng X., Hattermann F.F., 2017, Intercomparison of regional-scale hydrological models and climate change impacts projected for 12 large river basins worldwide – A synthesis, *Environ. Res. Lett.*, 12(10), doi:10.1088/1748-9326/aa8359.

JH16 Pechlivanidis, I. G., McIntyre N., Wheeler H. S., 2017, The significance of spatial variability of rainfall on simulated runoff: an evaluation based on the Upper Lee catchment, UK, *Hydrol. Res.*, 1–13, doi:10.2166/nh.2016.038.

JH17 Pechlivanidis I.G., Arheimer B., Donnelly C., Hundecha Y., Huang S., Aich V., Samaniego L., Eisner S., Shi P., 2017, ‘Analysis of hydrological extremes at different hydro-climatic regimes under present and future conditions’, *Clim. Change*, 141, 467-481, doi:10.1007/s10584-016-1723-0.

JH18 Samaniego L., Kumar R., Breuer L., Chamorro A., Flörke M., Pechlivanidis I.G., Schäfer D., Shah H., Vetter T., Wortmann M., Zeng X., 2017, ‘Propagation of forcing and model uncertainty into hydrological drought characteristics in a multi-model century-long experiment in continental river basins’, *Clim. Change*, 141, 435-449, doi:10.1007/s10584-016-1778-y.

JH19 Vetter T., Reinhardt J., Flörke M., van Griensven A., Hattermann F., Huang S., Koch H., Pechlivanidis I.G., Plötner S., Seidou O., Buda S., Vervoort W., Krysanova V., 2017, ‘Evaluation of sources of uncertainty in projected hydrological changes under climate change in 12 large-scale river basins’, *Clim. Change*, 141, 419-433, doi:10.1007/s10584-016-1794-y.

JH20 Olsson, J., Pers B.C., Bengtsson L., Pechlivanidis I.G., Berg P., Körnich H., 2017, ‘Distance-dependent depth-duration analysis in high-resolution hydro-meteorological ensemble forecasting: A case study in Malmö City, Sweden’, *Environ. Model. Softw.*, 93, 381–397, doi:10.1016/j.envsoft.2017.03.025.

2016

JH21 Nijzink R., Hutton C., Pechlivanidis I.G., Capell R., Arheimer B., Freer J., Han D., Wagener W., McGuire K., Savenije H., Hrachowitz M., 2016, ‘The evolution of root-zone moisture capacities after deforestation: a step towards hydrological predictions under change?’, *Hydrol. Earth Syst. Sci.*, 20, 4775-4799, doi:10.5194/hess-20-4775-2016.

JH22 Pechlivanidis I.G., Olsson J., Bosshard T., Sharma D., Sharma K.C., 2016, ‘Multi-basin modelling of future hydrological fluxes in the Indian subcontinent’, *Water Journal*, 8(5), 177, 1-21, doi: 10.3390/w8050177

JH23 Hundecha Y., Arheimer B., Donnelly C., Pechlivanidis I.G., 2016, ‘A regional parameter estimation scheme for a pan-European multi-basin model’, *Journal of Hydrology: Regional Studies*, doi: 10.1016/j.ejrh.2016.04.002

JH24 Pechlivanidis I.G., Jackson B., McMillan H., Gupta H., 2016, ‘Robust informational entropy-based descriptors of flow in catchment hydrology’, *Hydrological Sciences Journal*, 61(1), 1-18, doi: 10.1080/02626667.2014.983516

2015

JH25 Pechlivanidis I.G., Arheimer, B., 2015, ‘Large-scale hydrological modelling by using modified PUB recommendations: the India-HYPE case’, *Hydrol. Earth Syst. Sci.*, 19, 4559-4579, doi: 10.5194/hess-19-4559-2015

JH26 Pechlivanidis I.G., Olsson J., Sharma D., Bosshard T., Sharma K.C., 2015, ‘Assessment of the climate change impacts on the water resources of the Luni region, India’, *Global NEST Journal*, 17(1), 29-40

JH27 Andersson J.C.M., Pechlivanidis I.G., Gustafsson D., Donnelly C., Arheimer B., 2015, ‘Key factors for improving large-scale hydrological model performance’, *European Water*, 49, 77-88.

JH28 Pechlivanidis I.G., Anastasiadis S., Lekkas D.F., 2015, ‘Development and testing of the MWBMT toolbox to predict runoff response at the ungauged catchment of Mornos, Greece’, *European Water*, 49, 3-18.

2014

JH29 Pechlivanidis I.G., Jackson B., McMillan H., Gupta H., 2014, ‘Use of an entropy-based metric in multi-objective calibration to improve model performance’, *Water Resources Research*, 50, 8066-8083, doi: 10.1002/2013WR014537

JH30 Pechlivanidis, I.G., Bosshard, T., Spångmyr, H., Lindström, G., Gustafsson, D., and Arheimer, B., 2014, ‘Uncertainty in the Swedish Operational Hydrological Forecasting Systems’, *ASCE: Vulnerability, Uncertainty, and Risk*, 253-262. doi: 10.1061/9780784413609.026

2013

JH31 Anastasiadis S., Boglis A., Pechlivanidis I.G., Lekkas D.F., Baltas E., 2013, '*Application of GIS-based Clark's Unit hydrograph and transfer function model to describe runoff response in a small catchment - Case study: Lykoremma River, Greece*', Fresenius Environmental Bulletin, 22(7B), 2152-2158

2012

JH32 Lekkas D.F., Pechlivanidis I.G., Onof C., 2012, '*Foreword: Water Resources, Hydrology and Hydraulics: Bringing together recent developments in technology and applications*', Global NEST Journal, 14, ISSN: 1790-7632

JH33 Pechlivanidis I.G., Jackson B., McMillan H., Gupta H., 2012, '*Using an informational entropy-based metric as a diagnostic of flow duration to drive model parameter identification*', Global NEST Journal, 14(3): 325-334

2011

JH34 Pechlivanidis I.G., Jackson B., McIntyre N., Wheater H.S., 2011, '*Catchment scale hydrological modelling: A review of model types, calibration approaches and uncertainty analysis methods in the context of recent developments in technology and applications*', Global NEST Journal, 13 (3): 193-214

2010

JH35 Pechlivanidis I.G., McIntyre N., Wheater H.S., 2010, '*Calibration of the semi-distributed PDM rainfall-runoff model in the Upper Lee catchment, UK*', Journal of Hydrology, 386 (1-4): 198-209

Emphasis on Hydraulics / Fluid Mechanics and Environmental Engineering**2015**

JF1 Keramaris E., Pechlivanidis G.I., Pechlivanidis I.G., 2015, 'The different impact of half-separated gravel and vegetated bed in open channels', Environmental Processes, 2(1): 123-132, doi: 10.1007/s40710-015-0103-5

JF2 Pechlivanidis G.I., Keramaris E., Pechlivanidis I.G., 2015, 'Experimental study of the effects of grass vegetation and gravel bed on the turbulent flow using particle image velocimetry', Journal of Turbulence, 16(1): 1-14, doi: 10.1080/14685248.2014.946605

JF3 Pechlivanidis G.I., Keramaris E., Pechlivanidis I.G., Samaras G.A., 2015, '*Shear stress estimation in the linear zone over impermeable and permeable beds in open channels*', Desalination and Water Treatment, 58(4): 2181-2189, doi: 10.1080/19443994.2014.933622

2012

JF4 Pechlivanidis G.I., Keramaris E., Pechlivanidis I.G., Samaras G.A., 2012, '*Measuring the turbulent characteristics in an open channel using the PIV method*', Global NEST Journal, 14(3): 378-385

2006

JF5 Akratos C.S., Tsihrintzis V.A., Pechlivanidis I.G., Sylaios G.K., Jerrentrup H., 2006, '*A free water surface constructed wetland for the treatment of agricultural drainage entering Vassova Lagoon, Kavala, Greece*', Fresen. Environ. Bull. Vol. 15, No. 7/8/9 (Reference No. F-25-382 MESAEP)

CONFERENCE PROCEEDINGS / CONTRIBUTIONS**Emphasis on Hydrology****2020**

CH1 Photiadou C., Arheimer B., Gyllensvärd F., Berg P., Andersson J., Pechlivanidis I., 2020, 'The HYPEweb global climate and water service: Addressing user needs for water-related sectors by providing scientific estimates of past, present and future water resources across the globe' WMO data conference, 16-19 Nov., Virtual Conference

CH2 Crochemore L., Cantone C., Photiadou C., Pechlivanidis I., 2020, 'Call For Water – A serious game on the role of forecast performance in decision-making' International Conference, presented on the International Environmental Modelling and Software Society (iEMSs), 14-18 Sept., Brussels

- CH3 Bosshard T. et al., 2020, 'Continental and global hydro-climatic forecasting services to address user needs for the water-related sectors' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH4 Klein B. et al., 2020, 'Does the application of multiple hydrological models improve seasonal streamflow forecasting skill?' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH5 Verkade J. et al., 2020, 'HEPEX: Connecting the dots in hydrologic ensemble predictions' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH6 Saoudi Y. et al., 2020, 'Assessing the value of hydroclimatic services for hydropower megadams: the case of the Grand Ethiopian Renaissance Dam' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH7 Musuuza J. et al., 2020, 'Impact of satellite and in situ data assimilation on hydrological predictions' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH8 Pechlivanidis I.G. et al., 2020, 'Seasonal streamflow forecasting – Which are the drivers controlling the forecast quality?' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH9 van den Hurk B. et al., 2020, 'Added seasonal forecasting skill from land surface parameterization' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH10 Wörman A. et al., 2020, 'Virtual energy storage-gain due to spatiotemporal coordination of hydropower over Europe' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- CH11 Crochemore L., Ramos M-H., Pechlivanidis I., 2020, 'Can continental models convey useful seasonal hydrologic information at the catchment scale?' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 3-8 May, Vienna, Austria
- 2019**
- CH12 Macian-Sorribes H., Pechlivanidis I.G., Marcos-Garcia P., Crochemore L., 2019, '*Estimating the added value of seasonal forecasting systems through hydro-economic stochastic programming and model predictive control in the Jucar River Basin (Spain)*', International Conference, presented on the American Geosciences Union (AGU) General Assembly, 9-13 December, San Francisco
- CH13 Giuliani M., Crochemore L., Pechlivanidis I., Castelletti A., 2019, 'Isolating the role of end-user behavior in the assessment of seasonal forecast value', International Conference, presented on the American Geosciences Union (AGU) General Assembly, 9-13 December, San Francisco
- CH14 Castelletti A., Giuliani M., Ramos M-H., Pulido-Velazquez M., Gustafsson D., Macian-Sorribes H., Crochemore L., Pechlivanidis I., Thirel G., Cassagnole M., 2019, 'Six challenges to successfully inform hydropower operation by improved hydro-meteorological forecasts', International Conference, presented on the American Geosciences Union (AGU) General Assembly, 9-13 December, San Francisco
- CH15 Giuliani M., Crochemore L., Pechlivanidis I., Castelletti A., 2019, 'Six challenges to successfully inform hydropower operation by improved hydro-meteorological forecasts', Climate-fit.city – Making climate services a reality in Europe, 13-14 November, Brussels, Belgium
- CH16 Giuliani M., Crochemore L., Pechlivanidis I., Castelletti A., 2019, 'Isolating the role of end-user behavior in the assessment of seasonal forecast value', International conference ClimRisk19 (Climate Risk: implications for ecosystem services and society, challenges, solutions), 23-25 October, Trento, Italy
- CH17 Salamon P., Thiemig V., Prudhomme C., Schweim C., Garcia-Padilla M., Pechlivanidis I., 2019, 'EFAS - Europäische Hochwasservorhersage und seine Möglichkeiten', National conference organized by BfG (Hydrologische Vorhersagen auf unterschiedlichen Skalen – Methoden, Produkte und Nutzungen), 23-24 September, Koblenz, Germany
- CH18 Verkade J., Boucher M-A., Pappenberger F., Pechlivanidis I., Prudhomme C., Ramos M-H, Wang Q.J., Wetterhall F., Wood A., 2019, 'HEPEX: a community of practice for the advancement of hydrologic ensemble predictions', European Meteorological Society (EMS) 2019, 9-13 September, Copenhagen, Denmark

- CH19 Pechlivanidis I., Gupta H., Bosshard T., 2019, 'What is the optimum ensemble range of hydro-climatic simulations for impact modeling studies?', International Conference, in CEST 2019: Hydrology and Water Resources, 4-7 September, Rhodes, Greece
- CH20 Romas E., Ziogas A., Pechlivanidis I., Tzimas A., 2019, 'Climate change impact on river assimilative capacity: a case study application of water related climatic indicators', International Conference, in CEST 2019: Hydrology and Water Resources, 4-7 September, Rhodes, Greece
- CH21 Kandris K., Romas E., Tzimas A., Pechlivanidis I., Giardino C., Bresciani M., Schenk K., Bernert H., 2019, 'A computationally efficient metamodeling-based approach for the automatic calibration of coupled hydrodynamic and water quality models', International Conference, in CEST 2019: Hydrology and Water Resources, 4-7 September, Rhodes, Greece
- CH22 Crochemore L., Arnal L., Andersson H., Cantone C., Eggen B., Gallo F., Gyllensvärd F., Liggins F., Pechlivanidis I., Photiadou C., 2019, 'Experiences on Role-playing Games for Education in Hydrological Forecasting', International Conference, presented on the IUGG/IAHS 2019 General Assembly, 8-18 July, Montreal, Canada
- CH23 Crochemore L., Bosshard T., Pechlivanidis I., 2019, 'Complementarity in Skill between Sub-seasonal and Seasonal Forecast Products Over Europe', International Conference, presented on the IUGG/IAHS 2019 General Assembly, 8-18 July, Montreal, Canada
- CH24 Macian-Sorribes H., Pechlivanidis I., Crochemore L., Pulido-Velazquez M., 2019, 'Estimating the economic added-value of improved seasonal forecasts for the Jucar river basin (Eastern Spain)' International Conference, presented on the 4th European Climate Change Adaptation conference (ECCA 2019), 28-31 May, Lisbon, Portugal
- CH25 Wörman A., Riml J., Uvo C.B., Pechlivanidis I., 2019, 'Analyzing spatiotemporal covariance and climatic driven fluctuations in runoff to assess regulatory needs in hydropower production' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH26 Prodhomme C., Wetterhall F., Ramos M-H., Wood A., Wang Q.J., Verkade J., Pechlivanidis I., Boucher M-A., 2019, 'Future of HEPEX: bridging the gap between researchers and practitioners to advance hydrologic ensemble predictions' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH27 Macian-Sorribes H., Marcos-Garcia P., Pechlivanidis I., Pulido-Velazquez M., Crochemore L., 2019, 'Estimating the economic value of forecasting systems using hydroeconomic stochastic programming in the Jucar River system (Spain)' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH28 Crochemore L., Cantone C., Photiadou C., Pechlivanidis I., 2019, 'A serious game on the role of forecast uncertainty and reliability in risk-based decision-making' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH29 Pechlivanidis I., Gupta H., Bosshard T., 2019, 'How to identify a representative subset of hydro-climatic simulations for impact modeling studies?' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH30 Ramos M-H., Castelletti A., Pulido-Velazquez M., Gustafsson D., Giuliani M., Macian-Sorribes H., Cassagnole M., Crochemore L., Pechlivanidis I., Thirel G., 2019, 'Policy brief: making climate services impactful on hydropower reservoir optimization' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH31 Romas E., Kandris K., Tzimas A., Pechlivanidis I., Giardino C., Bresciani M., Schenk K., Bernert H., 2019, 'Enhancing model-based predictions of chlorophyll-a, turbidity and temperature in surface water reservoirs through the assimilation of earth-observation-driven water quality parameters' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH32 Girons M., Crochemore L., Pechlivanidis I., 2019, 'Evaluation of the potential of an operational hydrological model for providing seasonal forecasts in Sweden' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria
- CH33 Magnusson L., Pechlivanidis I., Knight J., de Moel H., Weerts A., van den Hurk B., Arnal L., Hunink J., 2019, 'Imprex risk outlook tool – demonstration of use of (semi-)operational products' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria

CH34 Photiadou C., Gyllensvärd F., Pechlivanidis I., Crochemore L., Bosshard T., Arheimer B., Buontempo C., 2019, 'Global seasonal hydrological forecasts – a Copernicus Climate Service (C3S) experience' International Conference, presented on the European Geosciences Union (EGU) General Assembly, 8-12 April, Vienna, Austria

2018

CH35 Wood A., Ramos M-H., Wetterhall F., Wang QJ, Pechlivanidis I.G., Verkade J., Pappenberger F., Thielen J., 2018, 'HEPEX's 15 years of successful collaboration to advance ensemble streamflow forecasting for risk-based decision-making in water management' International Conference, presented on the American Geosciences Union (AGU) General Assembly, 10-14 December, Washington D.C., USA

CH36 Pimentel R., Gustafsson D., Giardino C., Bresciani M., Romas E., Tzimas A., Schenk K., Pechlivanidis I.G., 2018, '*Earth Observations as key elements in the development of water information systems and decision support tools*', Singapore International Water Week, 8-12 July, Singapore

CH37 Pechlivanidis I.G., Gupta H., Bosshard T., 2018, 'How to identify a representative subset of hydro-climatic simulations for impact modeling studies? An information theory approach', 2nd workshop on Information Theory and the Earth Sciences, 16-19 May, Santander, Spain

CH38 Crochemore L. et al., 2018, '*Understanding and evaluating catchment memory from a global hydrological model*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH39 Crochemore L. et al., 2018, '*On the added-value of high resolution meteorological forcings for continental scale impact modelling*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH40 Macian-Sorribes H. et al., 2018, '*A fuzzy post-processing approach for applying pan-European hydrological forecasts to a Mediterranean river basin management*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH41 Pimentel R. et al., 2018, '*Correction of high elevation precipitation at global scale for hydrological modelling*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH42 Pimentel R. et al., 2018, '*The added value of combining Earth Observation in a data assimilation scheme to develop water information systems*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH43 Crochemore L., Pechlivanidis I.G., 2018, '*Regionalizing sensitivity of long-term forecasts over Europe*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH44 Ramos M-H. et al., 2018, '*The history of HEPEX – a community of practice in hydrologic prediction*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH45 Wanders N. et al., 2018, '*High-resolution hydrological seasonal forecasting for water resources management over Europe*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH46 Giuliani M. et al., 2018, '*From seasonal forecast skill to end-user economic benefit: the case of the Lake Como*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH47 Nijzink R. et al., 2018, '*Constraining conceptual hydrological models with multiple information sources*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH48 Pechlivanidis I.G. et al., 2018, '*Pan-European seasonal forecasting services: Limitations and need for knowledge purveyors*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH49 Olsson J. et al., 2018, '*Dealing with rainfall location uncertainty in flood forecasting: a distance-dependent depth-duration approach*', International Conference, presented on the European Geosciences Union General Assembly, 8-13 April, Vienna, Austria

CH50 Pechlivanidis I.G., 2018, '*Continental and global hydro-climatic forecasting services: challenges and information extraction to meet the user needs*', Howard Wheater Symposium - Hydrology 2058: learning from the past, shaping the future, 6-8 March, Saskatoon, Canada

- CH51 Crochemore L., Lindskog M., Landelius T., Pechlivanidis I.G., 2018, '*How much can continental hydrological forecasting services be benefited from high-resolution NWP systems?*', International HEPEX workshop on *Breaking the Barriers*, 6-8 February, Melbourne, Australia
- CH52 Pechlivanidis I.G., Crochemore L., Gyllensvärd F., Bosshard T., Berg P., Arheimer B., 2018, '*An operational pan-European seasonal hydro-climatic forecasting service*', International HEPEX workshop on *Breaking the Barriers*, 6-8 February, Melbourne, Australia
- CH53 Crochemore L., Pechlivanidis I.G., 2018, '*Skill sensitivity in Europe and site-specific diagnostics based on catchment characteristics*', International HEPEX workshop on *Breaking the Barriers*, 6-8 February, Melbourne, Australia

2017

- CH54 Pechlivanidis I.G., Crochemore L., Photiadou C., Gyllensvärd F., Arheimer B., 2017, '*An operational pan-European seasonal hydro-climatic forecasting service*', International workshop on *Seasonal forecasting: Meeting User Needs*, 24-25 January, Loughborough, UK
- CH55 Pechlivanidis I.G., Crochemore L., Bosshard T., 2017, '*Seasonal hydrological forecasting in Europe: Analysis of skill and its key driving factors*', International Conference, in CEST 2017: Hydrology and Water Resources, 31 Aug. - 2 Sept., Rhodes, Greece
- CH56 Pechlivanidis I.G., Hoshin H., Bosshard T., 2017, '*What is the optimum ensemble range of hydro-climatic simulations for impact modeling studies?*', International Conference, in CEST 2017: Hydrology and Water Resources, 31 Aug. - 2 Sept., Rhodes, Greece
- CH57 Tzimas A., Romas E., Pechlivanidis I.G., Pimentel R., Schenk K., Boultsadakis G., Giardino C., Bresciani M., Cross K., Jenkins S., Latorre C., 2017, '*Space assisted water quality forecasting platform for optimized decision making in water supply services*', International Conference, in CEST 2017: Hydrology and Water Resources, 31 Aug. - 2 Sept., Rhodes, Greece
- CH58 Nijzink R., Almeida S., Pechlivanidis I.G., Capell R., Gustafsson D., Arheimer B., Freer J., Han D., Wagener T., Parajka J., Savenije H.H.G., Hrachowitz M., 2017, '*The added value of remote sensing products in constraining hydrological models*', International Conference, presented on the IAHS 2017 Scientific Assembly, 10-14 July, Port Elizabeth, South Africa
- CH59 Nijzink R., Hutton C., Pechlivanidis I.G., Capell R., Arheimer B., Freer J., Han D., Wagener T., McGuire K., Savenije H.H.G., Hrachowitz M., 2017, '*The evolution of root zone moisture storage capacities after deforestation: a step towards hydrological predictions under change?*', International Conference, presented on the IAHS 2017 Scientific Assembly, 10-14 July, Port Elizabeth, South Africa
- CH60 Pechlivanidis I.G., Gupta H., Bosshard T., 2017, '*Can we really identify a representative subset of hydro-climatic simulations for impact modeling studies?*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH61 Pechlivanidis I.G., Crochemore L., 2017, '*What is the relative role of initial hydrological conditions and meteorological forcing to the seasonal hydrological forecasting skill? Analysis along Europe's hydro-climatic gradient*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH62 Pechlivanidis I.G., McIntyre N., Wheeler H.S., 2017, '*The significance of spatial variability of rainfall on streamflow: A synthetic analysis at the Upper Lee catchment, UK*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH63 Arheimer B., Andersson J., Crochemore L., Donnelly C., Gustafsson D., Hasan A., Isberg K., Pechlivanidis I.G., 2017, '*Global, continental and regional water balance estimates from HYPE catchment modelling*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH64 Almeida S., Nijzink R., Pechlivanidis I.G., Capell R., Gustafsson D., Wagener T., Freer J., Parajka J., Hrachowitz M., Arheimer B., Savenije H.H.G., Han D., 2017, '*The impact of prior parameter ranges on model behaviour using Global Sensitivity Analysis*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH65 Nijzink R., Hutton C., Pechlivanidis I.G., Capell R., Arheimer B., Freer J., Han D., Wagener T., McGuire K., Savenije H.H.G., Hrachowitz M., 2017, '*The evolution of root zone moisture storage capacities after deforestation: a step towards hydrological predictions under change?*', International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria
- CH66 Nijzink R., Almeida S., Pechlivanidis I.G., Capell R., Gustafsson D., Arheimer B., Freer J., Han D., Wagener T., Sleziak P., Parajka J., Savenije H.H.G., Hrachowitz M., 2017, '*The added value of remote*

sensing products in constraining hydrological models, International Conference, presented on the European Geosciences Union General Assembly, 23-28 April, Vienna, Austria

2016

- CH67 Pechlivanidis I.G., Gupta H.V., Bosshard T., 2016, *'Identification of representative hydroclimatic projections based on the MIMR concept'*, Workshop on "Information Theory and The Earth Sciences", 25-27 April, Zugspitze, Germany
- CH68 Pechlivanidis I.G., Bosshard T., Rosberg J., 2016, *'Analysis of the seasonal hydrological forecasting skill over Europe: Which are the control drivers?'*, International Conference on Climate Science and Climate Services, 5-7 October, Exeter, UK
- CH69 Pechlivanidis I.G., Spangmyr H., Bosshard T., 2016, *'Identification of the drivers controlling the seasonal hydrological forecasting skill in Europe'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH70 Donnelly C., Andersson J., Arheimer B., Berg P., Bosshard T., Hundecha Y., Olsson J., Pechlivanidis I.G., Yang W., 2016, *'Lessons learnt from top-down large-scale and bottom-up small scale impact studies'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH71 Samaniego L., Kumar R., Pechlivanidis I.G., Breuer L, Wortmann M., Vetter T., Flörke M., Chamorro A., Schäfer D., Shah H., Zeng X., 2016, *'Disentangling the uncertainty of hydrological drought characteristics in a multi-model century-long experiment in continental river basins'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH72 Guse B., Pechlivanidis I.G., Pfannerstill M., Donnelly C., Arheimer B., Fohrer N., 2016, *'Same catchment, different models, same dominant processes? – How temporal patterns of dominant parameters vary between two hydrological models'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH73 Donnelly C., Wetterhall F., Hundecha Y., Spångmyr H., Pechlivanidis I.G., 2016, *'Two models are better than one – Operational multi-model hydrological forecasting over the European continent'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH74 Strömbäck L., Arheimer B., Andersson J., Donnelly C., Gustafsson D., Isberg K., Pechlivanidis I.G., Strömquist J., 2016, *'Open hydrological data on hypeweb.smhi.se'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH75 Hutton C., Nijzink R., Pechlivanidis I.G., Capell R., Wagener T., Freer J., Han D., Hrachowitz M., Arheimer B., 2016, *'Catchment prediction in changing environments (CAPICHE): A model inter-comparison experiment'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH76 Nijzink R., Hutton C., Pechlivanidis I.G., Capell R., Arheimer B., Wagener T., Savenije H.H.G., Hrachowitz M., 2016, *'The evolution of root zones storage capacity after land use change'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria
- CH77 Pechlivanidis I.G., Arheimer B., 2016, *'Analysis of spatial flow patterns across the Indian subcontinent via multi-basin hydrological modelling'*, International Conference, presented on the European Geosciences Union General Assembly, 17-22 April, Vienna, Austria

2015

- CH78 Nijzink R., Hutton C., Capell R., Pechlivanidis I.G., Hrachowitz M., Savenije H., 2015, *'Evolution of root zone storage after land use change'*, AGU 2015, 14-18 December, San Francisco, USA
- CH79 Samaniego L., Kumar R., Schaefer D., Huang S., Yang T., Mishra V., Eisner S., Vetter T., Pechlivanidis I.G., Liersch S., Flörke M., Krysanova V., 2015, *'Propagation of model and forcing uncertainty into hydrological drought characteristics in a multi-model century-long experiment in continental river basins'*, AGU 2015, 14-18 December, San Francisco, USA
- CH80 Pechlivanidis I.G., Spangmyr H., Bosshard T., Olsson J., 2015, *'Ensemble seasonal hydrological forecasting in Europe: ECMWF vs. Climatology'*, International HEPEX workshop on Seasonal Hydrological Forecasting, 21-23 September, Norrköping, Sweden

- CH81 Pechlivanidis I.G., Olsson J., Arheimer B., 2015, '*Analysis of meteorological and hydrological extremes in the Indian subcontinent under present and future conditions*', International Conference, in CEST 2015: Catchment Hydrology, 3-5 September, Rhodes, Greece
- CH82 Pechlivanidis I.G., Hundecha Y., Donnelly C., Arheimer B., 2015, '*Analysis of hydrological extremes along a hydro-climatic gradient under present and future conditions*', International Conference, presented on the 26th IUGG General Assembly, 22 June-2 July, Prague, Czech Republic
- CH83 Pechlivanidis I.G., Donnelly C., Arheimer B., 2015, '*E-HYPE: How variations in continental scale precipitation affect pan-European forecasts for flood warning, seasonal anomalies and inflows to seas*', International Conference, presented on the 26th IUGG General Assembly, 22 June-2 July, Prague, Czech Republic
- CH84 Pechlivanidis I.G., Spangmyr H., Bosshard T., Gustafsson D., Olsson J., 2015, '*Ensemble seasonal hydrological forecasting at the pan-European scale*', International Conference, presented on the European Geosciences Union General Assembly, 12-17 April, Vienna, Austria
- CH85 Donnelly C., Andersson J., Arheimer B., Gustafsson D., Hundecha Y., Pechlivanidis I.G., 2015, '*Spatiotemporal model evaluation across Europe: A methodology based on expert knowledge, multiple datasets, physiography, flow signatures and performance metrics*', International Conference, presented on the European Geosciences Union General Assembly, 12-17 April, Vienna, Austria
- CH86 Strömbäck L., Andersson J., Donnelly C., Gustafsson D., Isberg K., Pechlivanidis I.G., Strömqvist J., Arheimer B., 2015, '*Providing open hydrological data for decision making and research – hypeweb.smhi.se*', Poster, presented on the European Geosciences Union General Assembly, 12-17 April, Vienna, Austria
- CH87 Strömbäck L., Andersson J., Donnelly C., Gustafsson D., Isberg K., Pechlivanidis I.G., Strömqvist J., Arheimer B., 2015, '*Repurposing of open data through large scale hydrological modelling – hypeweb.smhi.se*', International Conference, presented on the European Geosciences Union General Assembly, 12-17 April, Vienna, Austria
- CH88 Pechlivanidis I.G., Olsson J., Bosshard T., Sharma D., Sharma K.C., Arheimer B., 2015, '*The impact of climate change on water resources: Assessment at the scale of the Indian subcontinent*', Poster, presented on the European Geosciences Union General Assembly, 12-17 April, Vienna, Austria
- 2014**
- CH89 Pechlivanidis I.G., Bosshard T., Spangmyr H., Lindström G., Olsson J., Arheimer B., 2014, '*Evaluating the performance in the Swedish operational hydrological forecasting systems*', International Conference, presented on the European Geosciences Union General Assembly, 27 April - 02 May, Vienna, Austria
- CH90 Pechlivanidis I.G., Gustafsson D., Arheimer B., 2014, '*Identification of the HYPE hydrological model over the Indian subcontinent*', International Conference, presented on the European Geosciences Union General Assembly, 27 April - 02 May, Vienna, Austria
- 2013**
- CH91 Pechlivanidis I.G., Olsson J., Arheimer B., Bosshard T., Gustafsson D., 2013, '*Assessment of the climate change impacts on the water resources of the Indian subcontinent*', in International Conference on Climate Change Impacts and Societal Adaptation (CCISA2013), 6-8 November, Kishangarh, India
- CH92 Bosshard T., Olsson J., Foster K., Pechlivanidis I.G., 2013, '*Analysis and bias-correction of three CORDEX-SA projections*', in International Conference on Climate Change Impacts and Societal Adaptation (CCISA2013), 6-8 November, Kishangarh, India
- CH93 Bosshard T., Foster K., Pechlivanidis I.G., Olsson J., 2013, '*Bias-correction of regional CORDEX projections over the Indian sub-continent*', in International Conference on Regional Climate, CORDEX2013, 4-7 November, Brussels, Belgium
- CH94 Pechlivanidis I.G., Anastasiadis S., Lekkas D.F., 2013, '*Development of a semi-distributed rainfall-runoff model to predict runoff response in the ungauged catchment of Mornos, Greece*', in CEST 2013: Catchment Hydrology, 5-7 September, Athens, Greece
- CH95 Andersson J.C.M., Pechlivanidis I.G., Gustafsson D., Donnelly C., Arheimer B., 2013, '*Key factors for improving large scale hydrological model performance*', in CEST 2013: Catchment Hydrology, 5-7 September, Athens, Greece
- CH96 Gustafsson, D., Isberg, K., Dahne, J., Pechlivanidis, I.G., Rosberg, J., Stromqvist, J., 2013, '*Adaption of a high resolution semi-distributed hydrological model for simulation of the Arctic Ocean drainage basin*

using remote sensing snow and ice data, in IAHS: Knowledge for the Future, 22-26 July, Gothenburg, Sweden

CH97 Donnelly C., Arheimer B., Bosshard T., Pechlivanidis I.G., 2013, *'Uncertainties beyond ensembles and parameters – Experiences of impact assessments using the HYPE model at various scales'*, in IMPACTS WORLD 2013, 27-30 May, Potsdam, Germany

2011

CH98 Pechlivanidis I.G., Jackson B., McMillan H., Gupta H., 2011, *'Use of informational entropy-based metrics to drive model parameter identification'*, in CEST 2011: Hydrological modelling and uncertainty analysis, 8-10 September, Rhodes, Greece

CH99 Pechlivanidis I.G., Jackson B., McMillan H., Gupta H., 2011, *'Using entropy as a diagnostic of flow duration for rainfall-runoff model calibration'*, in IUGG 2011: Expert judgement versus statistical goodness-of-fit for hydrological model evaluation, 28 June-7 July, Melbourne, Australia

2010

CH100 Pechlivanidis I.G., Jackson B., McMillan H., 2010, *'The use of entropy as a model diagnostic in rainfall-runoff modelling'*, in iEMSs 2010: International Congress on Environmental Modelling and Software, Vol. 2, pp. 1780-1787, 5-8 July, Ottawa, Canada

2009

CH101 Pechlivanidis I.G., McIntyre N., Wheater H.S., 2009, *'Balancing the complexity of the model and available information for a successful semi-distributed model identification'*, International Conference, presented on the NZHS and NZFSS Joint Conference 2009: Waters for the Future: Balancing its values, Northland, New Zealand

2008

CH102 Pechlivanidis I.G., McIntyre N., Wheater H.S., Jackson B.M., Orellana, B., 2008, *'Relation of spatial rainfall characteristics to runoff: An analysis of observed data'*, International Conference, presented on the BHS 2008: Sustainable Hydrology for the 21st Century, Proc. 10th BHS National Hydrology Symposium, pp. 86-94, Exeter, UK

CH103 Pechlivanidis I.G., McIntyre N., Wheater H.S., 2008, *'The significance of spatial variability of rainfall on runoff'*, in iEMSs 2008: International Congress on Environmental Modelling and Software, Vol. 1, pp. 478-485, 7-10 July, Barcelona, Spain

CH104 Orellana B., Pechlivanidis I.G., Wheater H.S., McIntyre N., Wagener T., 2008, *'A toolbox for the identification of parsimonious semi-distributed rainfall-runoff models: Application to the Upper Lee catchment'*, in iEMSs 2008: International Congress on Environmental Modelling and Software, Vol. 1, pp. 670-677, 7-10 July, Barcelona, Spain

CH105 Pechlivanidis I.G., McIntyre N., Wheater H.S., Moore R.J., 2008, *'Intercomparison of lumped versus distributed hydrological model on the Upper Lee catchment'*, International Conference, presented on the European Geosciences Union General Assembly, 13-18 April, Vienna, Austria

2007

CH106 Pechlivanidis I.G., McIntyre N., Wheater H.S. 2007, *'Relating conceptual rainfall-runoff model structure and parameters to catchment characteristics: A case study on the Upper Lee catchment'*, Research poster meeting, presented on the HYDRA Postgraduate Research Poster Meeting, 17 December, University College London, London, UK

CH107 Pechlivanidis I.G., Segond M-L, McIntyre N., Wheater H.S., 2007, *'Comparison of spatial deterministic and stochastic models for infilling missing precipitation records'*, International Conference, presented on the 1st International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE), pp. 925-931, 24-28 June, Skiathos, Greece

Emphasis on Hydraulics / Fluid Mechanics and Environmental Engineering

2015

CF1 Pechlivanidis G.I., Keramaris E., Yannopoulos P., Pechlivanidis I.G., 2015, *'Experimental study of a turbulent buoyant jet in a quiescent or flowing ambient fluid'*, in CEST 2015: Water Resources and Hydraulics, 3-5 September, Rhodes, Greece

2014

CF2 Keramaris E., Pechlivanidis G.I., Pechlivanidis I.G., 2014, '*Effects of a half-separated (impermeable and permeable) bed on the velocity distribution in open channels*', International Conference, presented on the 12th International Conference on the Protection and Restoration of the Environment (PRE XII), 29 June - 4 July, Skiathos, Greece

2013

CF3 Keramaris E., Pechlivanidis G.I., Pechlivanidis I.G., Samaras G.A., 2013, '*The impact of lateral walls on the velocity profile in an open channel using the PIV method*', in CEST 2013: Water Resources and Hydraulics, 5-7 September, Athens, Greece

2012

CF4 Pechlivanidis G.I., Keramaris E., Pechlivanidis I.G., 2012, '*Influence of turbulent characteristics of the flow in permeable and impermeable beds*', National Conference, presented on the 12th National Conference of the Hellenic Hydro-technical Association, October, Patra, Greece

CF5 Pechlivanidis G.I., Keramaris E., Pechlivanidis I.G., Samaras G.A., 2012, '*Measuring the vorticity above vegetated beds using a Particle Image Velocimetry technique*', International Conference, presented on the 11th International Conference on the Protection and Restoration of the Environment (PRE XI), 3-5 July, Thessaloniki, Greece

2009

CF6 Pechlivanidis G.I., Pechlivanidis I.G., Samaras G.A., Dermisis V., 2009, '*Experimental evaluation of the entrainment in stratified flows*', National Conference, presented on the 11th National Conference of Hellenic Hydro-technical Association, 27-30 May, Volos, Greece

2008

CF7 Pechlivanidis G.I., Pechlivanidis I.G., Samaras G.A., Tasoula E., Dermisis V., 2008, '*Control of the saline wedge intrusion by using broad-crested orthogonal weir*', International Conference, presented on the 1st International Conference on Fluvial Hydraulics (River Flow 2008), 3-5 September, Cesme-Izmir, Turkey

2006

CF8 Pechlivanidis G.I., Pechlivanidis I.G., Samaras G.A., Dermisis V., 2006, '*A simultaneous calibration of multiple sensors of anemometers in a laboratory channel or closed conduit*', National Conference, presented on the 10th National Conference of Hellenic Hydro-technical Association, Xanthi, Greece

CF9 Pechlivanidis G.I., Samaras G.A., Tasoula E., Pechlivanidis I.G., 2006, '*Depletion of saline wedge length through low-lying broad-crested orthogonal weir*', National Conference, presented on the 10th National Conference of Hellenic Hydro-technical Association, Xanthi, Greece

2005

CF10 Pechlivanidis G.I., Dermisis V., Pechlivanidis I.G., 2005, '*The control of salt water intrusion in estuaries of rivers and canals*', National Conference, presented on the 5th Congress of Greek Water Resource Treatment, Xanthi, Greece

REPORTS (SELECTED)

- S2S4E Climate Services for Clean Energy project (Bloomfield H., Brayshaw D., Sillmann J., Hermansen E., Aaheim A., Pechlivanidis I.G., Jimenez I., Soret A., Nicodemou A.), **2020**, S2S4E (Grant agreement 776787) White Report on '*How subseasonal and seasonal forecasts can help the integration of renewables into Europe's energy sector*', November, Oslo, Norway
- Pechlivanidis I.G., Crochemore L., Soret A., Lledo L., Manrique-Sunen A., Brayshaw D., Gonzalez P., Perez A.C., Bloomfield H., Catalano F., Cionnini I., Loukos H., Noel T., **2020**, S2S4E (Grant agreement 776787) Deliverable 4.4, Report on '*Skill assessment and comparison of methods for sub-seasonal and seasonal forecast systems for the energy sector*' selected case studies', February, Norrköping, Sweden
- Weert A., Silvestro F., Magnusson L., Klein B., Pechlivanidis I.G., **2019**, IMPREX (Grant agreement 641811) Deliverable 4.3, Report on '*End-user-focused report on the advances in the forecast skill of hydrological extremes through data assimilation, seamless predictions and multi-modelling*', July, Delft, the Netherlands
- Knight J., Magnusson L., Klein B., Arnal L., Pechlivanidis I.G., **2019**, IMPREX (Grant agreement 641811) Deliverable 14.5, Report on '*Development and delivery of a hydro-meteorological monthly to seasonal risk outlook tool for the European continent*', July, Exeter, United Kingdom

- Berg P., Photiadou C., Pechlivanidis I.G., **2019**, Copernicus C3S Operational Water-SIS (Contract number 2018/C3S_424_SMHI/SC1) Milestone 2.1, Report on 'Routines for pre- and post-processing CIIIs and seasonal forecast', April, Norrköping, Sweden
- Pechlivanidis I.G., Capell R., Musuuza J., Berg P., Fahleson T., Arheimer B., Borg M., **2019**, Copernicus C3S Operational Water-SIS (Contract number 2018/C3S_424_SMHI/SC1) Deliverable 2.3, Report on 'Multi-model ensemble of water relevant variables in seasonal forecasts in the EC Flow', January, Norrköping, Sweden
- Pechlivanidis I.G., Crochemore L., Soret A., Lledo L., Manrique-Sunen A., Brayshaw D., Gonzalez P., Perez A.C., Bloomfield H., Catalano F., Cionnni I., **2018**, S2S4E (Grant agreement 776787) Deliverable 4.1, Report on 'Benchmarking skill assessment of current sub-seasonal and seasonal forecast systems for users' selected case studies', December, Norrköping, Sweden
- Vigo I., Badal M., Jimenez I., Soret A., Kielmanowicz D., Salel M., Aaheim H.A., Hermansen A., Sillmann J., Photiadou C., Pechlivanidis I.G., Hernandez K., **2018**, S2S4E (Grant agreement 776787) Deliverable 2.1, Report on 'User needs and decision-making processes that can benefit from S2S forecasts', December, Barcelona, Spain
- Pechlivanidis I.G., Crochemore L., Strömquist J., Pimentel R., Musuuza J., **2017**, SPACE-O (Grant agreement 730005) Deliverable 6.3, Report on 'Validation of the hydrological model service', August, Norrköping, Sweden
- Pechlivanidis I.G., Romas E., Tzimas A., **2017**, SPACE-O (Grant agreement 730005) Deliverable 4.1, Report on 'Hydrological forecasting service', October, Norrköping, Sweden
- Cross K., Latorre C., Malheiro R., Tsimi C., Bazdanis G., Dessena M., Pechlivanidis I.G., Giardino C., Boultadakis G., Schenk K., **2017**, SPACE-O (Grant agreement 730005) Deliverable 7.1, Report on 'Dissemination and communication plan', April, den Hague, the Netherlands
- Boultadakis G., Giannakoulis A., Romas E., Schenk K., Pechlivanidis I.G., Giardino C., **2017**, SPACE-O (Grant agreement 730005) Deliverable 2.3, Report on 'Functional design', April, Brussels, Belgium
- Arnal L., Cloke H., Magnusson L., Klein B., Meissner D., de Tomas A., Hunink J., Pechlivanidis I.G., Crochemore L., Suarez S., Solera A., Knight J., Liggins F., Weerts A., Ramos M-H., Thirel G., **2017**, IMPREX (Grant agreement 641811) Deliverable 4.2, Report on 'The sensitivity of sub-seasonal to seasonal streamflow forecasts to meteorological forcing quality, modelled hydrology and the initial hydrological conditions', March, Reading, UK
- Romas E., Bazdanis G., Dessena M., Pechlivanidis I.G., Giardino C., **2016**, SPACE-O (Grant agreement 730005) Deliverable 2.1, Report on 'Case study workflow design', December, Athens, Greece
- Ramos M-H., Norville J., Thirel G., Pappenberger F., Pechlivanidis I.G., **2016**, IMPREX (Grant agreement 641811) Deliverable 4.1, Report on 'Verification score card', October, Paris, France
- Hutjes, R., Jimenez, I., Davis, M., Pechlivanidis, I.G., Williams, K., Fallon, P., Nicklin, K., Challinor, A., Fernandez, J., Gutierrez, J.M., Jönsson, A.M., Cardoso, R.M., Miranda, P., Greuell, W., Ogutu, G., Biemans, H., Supit, I., **2015**, EUPORIAS (Grant agreement 308291) Deliverable 23.3, Report on 'Quantifying uncertainty in impact models', October, Wageningen, the Netherlands.
- Fallon, P., Williams, K., Buontempo, C., Newton, P., Hutjes, R., Greuell, W., Supit, I., Nicklin, K., Pechlivanidis, I.G., García-Manzanas, R., Jönsson, A-M., Lowe, R., Pouget, L., Ceron, J-P., Dubus, L., **2014**, EUPORIAS (Grant agreement 308291) Deliverable 23.3, Report on 'Initialisation of impacts models for seasonal predictions', July, MetOffice, Exeter, UK.
- Pechlivanidis I.G., Olsson J., Arheimer B., **2013**, 'Assessment of Climate Change Impacts on Water Resources in the Luni River Basin, Rajasthan, India, using the CORDEX results', prepared for The Swedish International Development cooperation Agent (SIDA), December, Sweden.
- Ballinger J., Jackson B., Pechlivanidis I.G., Ries W., **2011**, 'Potential flooding and inundation on the Hutt River', prepared for the New Zealand Climate Change Research Institute
- Pechlivanidis I.G., Kigobe M., Clark J., **2008**, 'European Geosciences Union General Assembly', prepared for The Newsletter of the British Hydrological Society, August, No. 98, UK.

WORKSHOP PARTICIPATION (SELECTED)

- *Hydrology Modeling for Energy Models*, **2020**, organized by Rte and IPSL, 1 July, online

- *H-SAF and HEPEX: Satellite inspired hydrology in an uncertain future*, **2019**, hosted by ECMWF, 25-28 November, Reading, UK
- *HEPEX: Breaking the Barriers*, **2018**, hosted by the University of Melbourne and CSIRO, 6-8 February, Melbourne, Australia
- *Seasonal Forecasting: Meeting User Needs*, **2017**, hosted by the University of Loughborough, 24-25 January, Loughborough, UK
- *Changes in Water Resources and Adaptation options in the Ganges region*, **2017**, hosted by the Indian National Institute of Hydrology, 09-10 March, Roorkee, India
- *International workshop on Hydro-meteorological modelling and forecasting*, **2015**, organized by the Norwegian Hydrological Institute, 9-10 December, Lillehammer, Norway
- *Changes in Water Resources and Adaptation options in the upper Ganges region*, **2015**, organised by the Indian National Institute of Hydrology, 16-17 November, Roorkee, India
- HEPEX workshop on Seasonal Hydrological Forecasting, **2015**, organised by HEPEX and the Swedish Meteorological and Hydrological Institute, 21-23 September, Norrköping, Sweden
- *Adaptation and mitigation options for tackling the impacts of climate change on water resources in the Luni River Basin*, **2013**, organised by the Central University of Rajasthan and the Swedish Meteorological and Hydrological Institute, 6 November, Kishangarh, India
- *Expert judgement versus statistical goodness-of-fit for hydrological model evaluation*, **2011**, organised by the International Association of Hydrological Sciences, 3-4 July, Melbourne, Australia
- *Complexity reduction strategies for effective use of process based models in environmental decision making*, **2010**, organised by the International Congress on Environmental Modelling and Software (iEMS), 5-8 July, Ottawa, Canada
- *Managing with Uncertainty*, **2009**, organised by the NZHS and NZFSS Joint Conference 2009: Waters for the Future: Balancing its values, 23-27 November, Northland, New Zealand
- *Evaluating the impact of data and associated uncertainty on hydrological model predictions*, **2008**, organised by the International Congress on Environmental Modelling and Software (iEMS), 7-10 July, Barcelona, Spain
- *Bayesian uncertainty analysis in hydrological modelling*, **2008**, organised by the European Geosciences Union, 10-12 April, Vienna, Austria
- *Workshop on uncertainty in water quality and quantity modelling*, **2007**, organised by the Hydrological Modelling Department from the Helmholtz Centre for Environmental Research-UFZ, 21-22 May, Magdeburg, Germany

DOCTORAL PROJECT DESCRIPTION

TITLE

The significance of spatial variability of rainfall on runoff generation

DESCRIPTION

Flooding is becoming an increasingly common problem across Europe, where floods from rivers, estuaries and the sea threaten millions of people as well as causing significant economic impacts. The magnitude and nature of flood hydrographs is strongly influenced by the spatial variation and accuracy of rainfall and varies as a function of catchment scale and type, rainfall properties and catchment antecedent conditions.

In the content of flood management, my PhD dissertation investigated the relationship between spatial rainfall and runoff production, for a range of scales and catchment types aiming to an effective design of rain gauge and radar networks. The study was based on 12 years of hourly rainfall and runoff data, 17 rain gauges (1x1 km² spatial resolution), and 14 flow stations from the 1040 Km² Upper Lee catchment, UK. Continuous-time, semi-distributed rainfall-runoff modelling was considered due to the potential to represent the effects of spatially variable inputs such as rainfall and also to simulate the changing antecedent moisture conditions that determine the storm runoff for a given rainfall event.

The project objectives were:

- Evaluate the potential of spatial-temporal rainfall properties (with emphasis on spatial rainfall variability) to explain hydrological catchment response
- Develop a calibration strategy for parsimonious, conceptual, semi-distributed hydrological models capable of representing the catchment heterogeneity and predicting runoff at ungauged sites
- Investigate the significance of spatial variability of rainfall on flood runoff generation as a function of catchment scale and type, spatial-temporal rainfall properties, and antecedent catchment conditions
- Investigate the different sources of uncertainty (lack of model structure and parameter identifiability, data uncertainty) and their propagation to the results
- Provide guidance on the effective design of rain gauge and radar networks and spatial resolution of rainfall for hydrological applications given the catchment scale and type

REFEREES

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<p>Dr Carlo Buontempo <i>Director of Copernicus Climate Change Service (C3S)</i> Copernicus Department, C3S Section</p>	<p>Dr Peter Salamon <i>European Commission</i> Directorate-General Joint Research Centre Disaster Risk Management unit</p>

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INTERESTS, HOBBIES AND VOLUNTEERING WORK

My main hobby is performing the Korean martial art Taekwondo and the self-defence method Phylatto. I am a 3rd Dan degree black belt and an associated instructor of the Phylatto method. I have been appointed as the instructor of the SMHI-IF self-defence club since November 2012 (volunteering). I have been also acting as the instructor for SMHI's boxing club since January 2015 (volunteering). I am also a Taekwondo instructor at the Yong-Gi TKD sport-centre in Norrköping, Sweden (volunteering). In addition, I had been appointed as the team captain and assistant instructor at Imperial College Union Taekwondo Club (2006-2009) and Victoria University of Wellington Taekwondo Club (2009-2011). Other interests include Aikido, Kung Fu, boxing, football, volleyball, swimming, squash, running, basketball, table tennis, salsa and Greek traditional dancing. Finally, I have been studying traditional Greek Byzantine music between 2006 and 2009.

ATHLETIC ACHIEVEMENTS

- 2011: AMI Round the Bays - 7 km run (363 place out of 2993)
- 2011: North Island Development *Taekwondo* tournament 1st Place
- 2011: New Zealand Open *Taekwondo* tournament 2nd Place
- 2010: North Island Development *Taekwondo* tournament 2nd Place
- 2010: Wellington Region *Taekwondo* Championships 1st Place
- 2007: IDEA League *Taekwondo* Championships 1st Place
- 2006: British Student *Taekwondo* Federation National Student Championships 3rd Place
- 2006: London Capital *Taekwondo* Cup 2nd Place
- 2006: IDEA League *Volleyball* Championships 3rd Place
- 2004: Greek National Student *Taekwondo* Championships 2nd Place
- 1998: Greek National *Taekwondo* Championships 3rd Place
- 1995-1998: Greek National Student *Volleyball* Championships 1st Place