Norwegian Hydrological Council

8th Conference on
Modelling Hydrology, Climate and Land Surface Processes

Scandic Victoria Lillehammer Hotel, 2–4 September 2025

Programme

Tuesday 02 September 2025		**Title**
1000 - 1100	Registration	
1100 - 1110	Introduction	
1110 - 1200	**Björn Klöve**	Observing and modelling climate-land-energy-water interactions in cold climate
1200 - 1300	Lunch	
1300 - 1735	**Session 1: Local impacts of global climate change: data, methods, and communication strategies**	
1300 - 1345	**Benjamin Sanderson**	Towards emissions and activity-driven Earth System Modelling
1345 - 1405	A.Dyrrdal et al.	New national climate and hydrological projections for Norway
1405 - 1425	K.Valseth et al.	CAMELS-Nordic, a large-scale hydrometeorological and catchment properties dataset for Norway and Sweden
1425 - 1445	K. Engeland et al.	Climate change impacts on hydropower production and water availability in Drammen river basin in Norway
1445 - 1500	*Coffee break*	
1500 - 1520	A.Nair et al.	Understanding Land–Atmosphere Coupling During Dry Extremes in Norway: A Multi-Reanalysis Comparison
1520 - 1540	K.Ødemark et al.	Extreme Event Attribution Service at MET Norway: Storyline attribution of storm Hans
1540 - 1600	L.Wang et al.	Identifying mechanisms of soil moisture drought using causality decomposition: A case study in the Yellow River Basin, China

1600 - 1620	M.Osuch et al.	Thawing Permafrost and High Arctic Catchment Response: A Case Study from Fuglebekken, SW Spitsbergen
1620 - 1635	*Coffee break*	
1635 - 1655	S.Huang et al.	Impacts of empirical and physical evaporation methods on changes in hydrological components and drought propagations under climate change scenarios
1655 - 1715	S.Nordeide et al.	Using LSTM for streamflow prediction in ungauged catchments in Norway
1715 - 1735	N.Maurin et al.	Assessing Green Roof hydrological performance Under Climate Variability and Change Using High-Resolution Convection-Permitting Climate models
1735 - 18:30	Break	
18:30	Dinner	

Wednesday 03 September 2025		
0900 - 1255	**Session 2: Changing climate and seasonal snow dynamics in cold regions**	
0900 - 0945	**Richard Essery**	Snow modelling on climatological, meteorological and hydrological scales
0945 - 1005	T.Saloranta et al.	Projected changes in snow avalanche activity in Norway in a future climate towards 2100
1005 - 1025	K.Aalstad et al.	Global ensemble-based snow reanalysis
1025 - 1045	O.Silantyeva et al.	Assessing snow sublimation in Norway: insights from field and laboratory work of SnowSub project
1045 - 1105	*Coffee break*	
1105 - 1125	A.Alphonse et al.	Evaluating Model Performance in Simulating Ground Thermal Regimes: A Multi-Model Comparison

1125 - 1145	J.Oprel et al.	Assessing potential benefits of physics-based snow modelling for Norwegian hydropower production planning
1145 - 1205	H.Sodemann	Obtaining physical constraints for hydrological model calibration from citizen science snow collection in Scandinavia
1205 - 1215	*Coffee break*	
1215 - 1235	Y.Yilmaz et al.	Investigating Snowpack and Streamflow Changes with Snow Data Assimilation in Hardangervidda
1235 - 1255	C.Zwart et al.	Water extraction from the atmosphere by topography: using novel water isotope observations to obtain better SWE estimates
1255 - 1350	Lunch	
1350 - 1530	**Poster session**	
1350 - 1430	Poster presentation in plenary session (2 min pr. poster)	
1430 - 1530	Poster session (authors and titles at last page)	
1530 - 1545	Coffee break	
1545 - 1600	A.H. Evensen and A.Breili	Excursion presentation
1600 - 1815	Excursion to flood mitigation measures at Røyslimoen	
1930	Conference Dinner	

Thursday 04 September 2025		
0900 - 1255	**Session 3: Impact of runoff dynamics on water quality and ecosystems**	
0900 - 0945	**Gesa Weyhenmeyer**	Challenges and Opportunities of an Unfrozen Future on Ecosystem Services from Lakes
0945 - 1005	S.Anmarkrud et al.	Inverse modelling of vertical temperature in shallow lakes
1005 - 1025	G.Riise	Long term changes in lake color diversity in a boreal lake district of Norway
1025 - 1045	M.Norling et al.	Predicting DOC fluxes from boreal headwater catchments: a simple, transferable process-based modelling approach
1045 - 1105	*Coffee break*	
1105 - 1125	L.Jackson-Blake	Nitrate sources and fluxes in a changing Arctic: a dynamic modelling study on Svalbard
1125 - 1145	N.Hanselmann et al.	Integrating Freeze-Thaw Dynamics into the HBV Model for Improved Hydrological Simulation in Svalbard
1145 - 1205	R.Barneveld et al.	Modelling the hydrology of peat restoration
1205 - 1215	*coffee break*	
1215 - 1235	S.Bakke et al.	Estimating low flow indices anywhere – is LSTM the way to go?
1235 - 1255	T.Skaugen	The hydrological signature of landslides-towards the forecasting of landslides using hydrological models
1255 - 1300	Conference closure	
1300 - 1400	Lunch	

Wednesday 03 September 2025	
1350 - 1530	**Poster session**
K.Tunheim et al.	Klimakverna: Understanding municipal needs for localized climate change information
M.Eide et al.	Mitigating urban runoff and pollution in Oslo Fjord: mapping source area and predicting spatiotemporal variability
K.Grunewald et al.	Assessing the performance of Tåsenveien rain garden in Oslo under present and future climate change scenarios
A.Skålevåg et al.	Extreme Event Attribution Service at MET Norway: Probabilistic attribution of the exceptionally warm Arctic summer of 2024
T.Venstad et al.	Assessing Hectometric Resolution in NWP Models and Its Influence on the Representation of Precipitation in Norway's Coastal Regions with Complex Orography
J.Ånonsen et al.	Evaluating persistence in Northern European weather patterns in a changing climate
D.Treichler et al.	Performance of high-resolution snow Depth data from ICESat-2 spaceborne laser altimetry
M.Ahlbäck et al.	Temporal Dynamics and Hydrological Impacts of Snow-Atmosphere Vapor Exchanges in a High-Altitude Catchment
M.Mazzolini et al.	Data assimilation of sparse snow depth observation with optimized spatial transfer of information
H.Erlandsen et al.	The Climate-Ecological Observatory for Arctic Tundra (COAT) - weather & snow - observations & models
A.Alphonse et al.	Surface Temperature Variability in the High Arctic: UAV Thermal Monitoring of Groundwater and Surface Water Interactions
M.Peter et al.	Improving modeling of thermo-hydrological changes in permafrost ground connected to lake level changes in the Qinghai-Tibet-Plateau
I.Nilsen et al.	Observed long-term trends in snow conditions for Norway
I.Mužić at al.	Evaluating Land-Atmosphere Interactions in the coupled WRF-CTSM model over Nordic Fennoscandia