

## Agenda 4<sup>th</sup> INARCH Workshop, 25 – 26 October 2018, Portillo, Chile

Thursday, October 25		
7:00 – 8:00	Breakfast	
8:30 – 8:50	Introductory remarks and goals for the workshop	James McPhee & John Pomeroy
<b>Catchment &amp; process hydrology; field observations and emerging techniques; INARCH regional activities (Chair: Tom Painter)</b>		
08:50 – 09:20	Runoff processes in alpine catchments: Challenges and opportunities	Sean Carey
09:20 – 09:50	The 2010 Chile Mega-drought and its impacts on snow and glacier hydrology	James McPhee
09:50 – 10:05	Short (3-4 minute) poster presentations	
	Sagehen Creek Watershed, Sierra Nevada, USA: A long-term dataset for investigating groundwater-mediated streamflow response to variable maritime snowmelt and rainfall	Sebastian Krogh (for Adrian Harpold)
	Current status of meteorological and snow observations and reanalysis available in the French Alps	Jesús Revuelto
	The key role of terrestrial imagery in semiarid mountainous areas: The snow monitoring system in Sierra Nevada (Spain)	Rafael Pimentel
	How interactions between climate and vegetation impact hydrological processes in mountain headwater basins	John Pomeroy (for Kabir Rasouli)
10:05 – 11:00	Morning break and Posters (size A0, portrait orientation)	
11:00 – 12:00	Panel discussion Panelists: S. Carey, J. McPhee; Rapporteur: F. Pellicciotti	
12:00 – 13:30	Lunch	
<b>Glaciers and climate change (Chair: Nacho Lopez Moreno)</b>		
13:30 – 14:00	The hydrological role of glaciers in the Atacama Desert	Shelley MacDonell
14:00 – 14:30	Glacier monitoring in Chile	Gino Casassa
14:30 – 15:00	The first national glacier inventory of Argentina	Mariano Masiokas
15:00 – 15:15	Short (3-4 minute) poster presentations	
	Ensemble Empirical Mode Decomposition for streamflow data analysis of snow-fed rivers along Central Andes of Argentina	Juan Rivera
	Snow depth distribution and storm events of high mountain Central Chile: An ew experimental setup	Thomas Shaw
15:00 – 16:30	Afternoon break and Posters (size A0, portrait orientation)	
16:30 – 17:30	Panel discussion Panelists: S. MacDonell, G. Casassa, M. Masiokas; Rapporteur: Juan Rivera	
17:30	Outdoor activity: Portillo overlook which can be accessed via the ski lift	
19:00	Dinner and social activities	

Friday, October 26		
7:00 – 8:00	Breakfast	
8:15 – 8:20	Workshop day-2 introduction	James McPhee
<b>Data and simulations; big data techniques; remote sensing; data assimilation and models (Chair: Shelley MacDonell)</b>		
8:20 – 8:50	A golden era for alpine catchments: the convergence of high-resolution atmospheric modeling, remote sensing, and hydrology	Ethan Gutmann
8:50 – 9:20	Decoupling of mountain snowpacks from hydrology due to climate warming	Nacho Lopez Moreno
9:20 – 9:50	NASA Decadal Survey Surface Biology and Geology imaging spectrometer mission	Tom Painter
9:50 – 10:00	Short (3-4 minute) poster presentations	
	Can MODIS reflectance assimilation improve snowpack simulations in alpine terrain?	Jesús Revuelto
	Simulating hydrological processes at two mountainous sites underlined by continuous permafrost in northern Yukon, Canada	Sebastian Krogh
	Impact of meteorological forcing data on snowpack and streamflow simulations in the Canadian Rockies	John Pomeroy (for Logan Fang)
10:00 – 11:00	Morning break and Posters (size A0, portrait orientation)	
11:00 – 12:00	Panel discussion Panelists: E. Gutmann, N. Lopez Moreno, T. Painter; Rapporteur: R. Rasmussen	
12:00 – 13:30	Brown bag lunch + Outdoor activity: walk along the Laguna del Inca shore	
<b>Linkages with other programs and global contribution/impact (Chair: John Pomeroy)</b>		
14:00 – 14:15	INARCH contributions to international initiatives and activities of working group on Climate Impacts on Global Mountain Water Security	Chris DeBeer
14:15 – 15:30	General discussion <ul style="list-style-type: none"> <li>• INARCH links to Future Earth (proposal for working group on Climate Impacts on Global Mountain Water Security), UNESCO International Hydrological Programme, GWF and Mountain Water Futures</li> <li>• Discussion on these and potential ANDEX linkage</li> <li>• Contribution of pre-assessment synthesis article(s) to inform IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (chapter on High Mountain Areas) and IPCC Sixth Assessment Report</li> <li>• WMO High Mountain Initiative</li> </ul>	
<b>Workshop close</b>		
15:30 – 16:00	Concluding comments, workshop statements and roundtable	
16:00	Departure and return to Santiago	