



International Conference

Global change at basin and fjord scale and future water management challenges in Patagonia

Coyhaique: November 7, 8 and 9, 2018

Place: Regional Museum of Coyhaique,

Address: Km. 3 road to Coyhaique Alto.

More Information: contacto@ciep.cl

Wenesday 7 th November 2018		
Time	Speaker	Title
08:30-09:00 am	Registration and Welcoming words	Welcoming words
09:00-09:30 General Introduction I	Dr. Rene Garreaud Dept. of Geophysics, CR2 Center, University of Chile, Chile (rgarreau@dgf.uchile.cl)	Climate change in Patagonia: what we should expect in the next 50 years ?
Fjord ecosystems		
09:30-09:55	Dr. Ivan Pérez-Santos Centro I+D "i~mar", Los Lagos University & COPAS Sur Austral, Chile, Seguel Rojas IFOP & COPAS Sur Austral, Chile and Dr. Wolfgang Schneider, IMO & Dep. of Oceanography, University of Concepción, Chile (ivan.perez@ulagos.cl)	Synoptic scale variability of surface winds and expected changes in the ocean-atmosphere dynamics of the eastern Austral Pacific Ocean.
09:55-10:20	Dr. Giovanni Daneri, Paulina Montero, CIEP & COPAS Sur Austral, Chile, Dr. Marcelo Gutiérrez, COPAS Sur Austral University of Concepción, Chile	Biological productivity and microbial diversity in fjord ecosystems under varying global change

	(gdaneri@ciep.cl)	scenarios.
10:20-10:45	Dr. Humberto Gonzalez IDEAL Center, University Austral of Chile, Chile (hgonzale@uach.cl)	Freshwater input in Sub-Antarctic and Antarctic ecosystems: Physico-chemical scenarios and possible consequences for biological processes.
10:45-11:05	Coffee break	
11:05-11:30	Dr. Leonardo Castro COPAS Sur Austral, University of Concepción, Chile (lecastro@oceanografia.udec.cl)	Potential effects of environmental variations in spawning habitats on the fate of early life stages of fishery resources in northern Patagonia.
11:30-11:55	Dr. Rodrigo Torres CIEP, Chile & IDEAL Center, Chile (rtorres@ciep.cl)	Iron and silicate limitation in coastal waters of Chile and its relation with climatic change.
11:55-12:20	Dr. Fabián Tapia COPAS Sur Austral, University of Concepción, Chile (ftapia@oceanografia.udec.cl)	Seasonal patterns and inter-annual trends in atmospheric and plankton dynamics through northern Patagonia.
12:20-12:45	Dr. Gonzalo Saldías Dept. Of Physics, Faculty of Sciences, University of Bio-Bio, Chile & MUSELS, Chile & IDEAL, Chile (gsaldias@ubiobio.cl)	Freshwater structure and its seasonal variability off western Patagonia.
12:45-14:25	Lunch Break	
14:25-14:50	Dr. Cristian Vargas EULA, Faculty of Environmental Sciences & MUSELS Center, University of Concepción, Chile (crvargas@udec.cl)	Aquaculture and Multiple-stressors under Global Change: Insight on Advances and Challenges for the Mussel Industry in Northern Patagonia (MUSELS).
14:50-15:15	Dr. Eduardo Quiroga , Pontificia Universidad Católica Valparaíso, COPAS Sur Austral, University of Concepción, Chile (eduardo.quiroga@pucv)	Temporal variability of benthic communities in glacial environments (glaciomarine and

		glaciofluvial): potential effects of Climate changes on Patagonian fjords.
15:15-15:40	Dr. Giorgio Bavestrello , University of Genova, Italy (giorgio.bavestrello@unige.it)	Benthic assemblages and gradients physical parameters in the Puyuhuapi-Jacaf canal system. Establishing a base line in an age of global change.
15:40-16:05	Coffee break	
Ice and Snow		
16:05-16:30	Dr. Jon Hawkings University of Bristol, UK (jhawkings@fsu.edu)	Effects of glacial meltwater input on Patagonian fjord biogeochemistry.
16:30-16:55	Dr. Andrés Rivera Centro de Estudios Científicos (CECs) y Departamento de Geografía, Universidad de Chile, Chile (arivera@cecs.cl)	Southern Patagonia Icefield calving glaciers dynamics response to climate change.
16:55-17:20	Dr. Cristian Mattar University of Aysén, Chile (cristian.mattar@uaysen.cl)	Snow cover decrease in Aysén river basin, Patagonia, Chile.
17:20-17:45	Dr. Carlos Moffat , University of Delaware, USA (cmoffat@udel.edu)	Fjord dynamics and the retreat of Patagonian glaciers.
Thursday 8th November 2018	Speaker	Title
08:00-08:30 General Introduction II	Dr. Jemma Wadham , University of Bristol, UK (j.l.Wadham@bristol.ac.uk)	Investigating the impacts of retreating Patagonian glaciers on riverine discharge and nutrient export to fjord ecosystems.
Lake and river ecosystems		
08:30-08:55	Dr. Brian Reid , Dr. Anna Astorga CIEP, Chile (brian.reid@ciep.cl)	Understanding river flows and river loading: connections,

		teleconnections and forcing between ecosystems in Patagonia.
08:55-09:20	Dr. Claudio Meier , University of Memphis, USA (cimeier@memphis.edu)	Modelling hyporheic exchange flow under bars of gravel-bed rivers.
09:20-09:45	Michael Rush , University of Colorado, USA Fulbright CIEP (Michael.Rush-1@colorado.edu)	Land use and local climate effects on the thermal hydrology of a forested headwater stream: a case study Coyhaique Alto.
09:45-10:10	Dr. Alejandro Dussillant , University of Aysén, Chile (alejandro.dussillant@uaysen.cl)	Catchment water resources & hazards in Patagonia-Aysén: Monitoring and modelling change.
Terrestrial ecosystems		
10:10-10:35	Dr. Mark Olson , UNAM, Mexico (molson@ib.unam.mx)	Tree mortality, an increasing worldwide phenomenon.
10:35-10:55	Coffee break	
10:55-11:20	Dr. Alex Fajardo , CIEP, Chile (alex.fajardo@ciep.cl)	The 2016 drought event in Aysén and its effects on tree growth and carbon balance.
11:20-11:45	Dr. Frida Piper , CIEP, Chile (fpiper@ciep.cl)	The role of drought on treeline elevation.
11:45-12:10	Dr. Julieta Rosell , UNAM (julieta.rosell@gmail.com)	Bark traits associated with drought and other challenges.
12:10-12:35	Paulo Moreno , Dr. Anna Astorga, Dr. Brian Reid, CIEP, Chile (paulo.moreno@ciep.cl)	Analysis of intact forested watersheds in Southern Patagonia (41-56°).
12:35-14:00	Lunch	
14:00-14:25	Dr. Mylthon Jiménez , University Austral of Chile, Chile (mylthonjimenez@uach.cl)	Effects of climate change on tree species performance in the Chilean

		temperate rainforest.
14:25-14:50	Dr. Daniel Soto University of Aysén, Chile; Klaus J. Puettmann, Oregon State University, Corvallis, OR, USA; Thomas A. Spies, USDA Forest Service, Corvallis, OR, USA. (daniel.soto@uaysen.cl)	Linking succession and multiple equilibrium models: insights to overcome arrested succession in forest restoration.
14:50-15:15	Dr. Carlos Zamorano , University of Aysén, Chile (carlos.zamorano@uaysen.cl)	Restoring forest for biodiversity, erosion regulation and water provision: A spatial multicriteria approach to identify priority areas.
15:15-15:40	Dr. Elizabeth Ulloa , University of Aysén, Chile (elizabeth.ulloa@uaysen.cl)	Biochemical and physiological changes in cultivars under water deficit.
15:40-16:05	Dr. Mauricio Gonzalez , University of Aysén, Chile (mauricio.gonzalez@uaysen.cl)	Agroecology, biodiversity and climate change.
16:05-16:30	Coffee break	
16:30-16:55	Dr. Angela Hernandez , CIEP, Chile (angela.hernandez@ciep.cl)	Patagonian Landscape: Spatio-temporal dynamics over the past three decades.
16:55-18:30	Round Table I	
18:30-19:30	Wine and posters	
Friday 9th November 2018		
09:00-09:30 General Introduction III	Dr. Antonio Jesús González Barrios , University of Córdoba, Spain (ajgbarrios@gmail.com)	The water Framework Directive in Europe and the sustainable management of hydrological basins: associated environmental, economic and social risks.
09:30-09:55	Alain Bernard , Office International de l'Eau, France	Environmental focus on the institutional

	(a.bernard@oieau.fr)	experience and technical management of hydrological resources in France.
09:55-10:20	M^a Victoria Gil Cerezo , University of Córdoba, Spain (victoria.gil@uco.es)	Environmental Mediation: strategy for participatory management of socio-environmental water conflicts.
10:20-10:45	Dr. Carolina Baeza , EULA, University of Concepción, Chile (anabaeza@udec.cl)	Water Safety Plan: a risk management approach for securing safe drinking water supply considering the future water availability under climate change.
10:45-11:10	Coffee Break	
11:10-11:35	Xaviera De La Vega P. , Asesora en Medioambiente y Sustentabilidad (xdelavega@cnid.cl)	Estrategia Nacional de Innovación y los Recursos Hídricos.
11:35-12:00	Dr. Trace Gale and collaborators, CIEP, Chile (tracegale.ciep@gmail.com)	Climate change and future perspectives for the tourist industry in Aysén.
12:00-12:25	Fabien Bourlon , CIEP, Chile & University of Grenoble, France. (fabienbourlon@ciep.cl)	Scientific Tourism, participatory research in mountainous areas to enhance environmental awareness.
12:25-12:50	Lunch (quick snack)	
12:50-14:00	Madeleine Hamame , CIEP, Chile; Dr. Sergio Neira (COPAS Sur Austral, University of Concepción, Chile. (mhamame@ciep.cl)	Climate change and future perspectives for fisheries in Aysén
14:00-14:25	Dr. Andrea Nardini , International water consultant, ex Director Italian Centre for Fluvial Restoration, Italy (nardiniok@gmail.com)	Making decisions based on incomplete/uncertain scientific evidence on

		geomorphic issues in the Magdalena basin (Colombia).
14:25-14:50	Dr. Laura Saija , University of Catania, Italy (saija.laura@gmail.com)	Reconnecting people with water ecosystems: practices to bridge the gap between expert and common knowledge.
14:50-15:15	Dr. Amalia Nuevo Delaunay , Cesar Mendez, Paulo Moreno, Javier Carranza CIEP, Chile y Juan-Luis García, Instituto de Geografía, Pontificia Universidad Católica de Chile. (amalia.nuevo@ciep.cl)	Hydrological changes and its influence on human populations on a long term scale.
15:15-15:40	Prof. Antonio Cancelliere , Department of Civil Engineering and Environment, University of Catania, Italy (antonino.cancelliere@unict.it)	Modelling shallow landslide triggering in a climate change context.
15:40-17:00	Coffee Break & Round table II	
17:00-	Asado Patagón, closure	