

MONDAY POSTER SESSIONS 1 (0900 TO 1230)

ESB ATRIUM

ES01 (POSTER): FORMS AND PROCESSES OF BEDROCK EROSION IN FLUVIAL AND GLACIAL LANDSCAPES

POSTER	AUTHORS	TITLE
P01-ES01	<u>Clare Wilkinson</u> [*] , David Harbor, and Simon D. Levy	Sensing fluid pressure during plucking events in a natural bedrock channel

ES04 (POSTER): MORPHODYNAMICS OF RIVERS

POSTER	AUTHORS	TITLE
P01-ES04	<u>Simon Gauthier-Fauteux</u> [*] , Brett Eaton	Linking fluvial dynamics to white sturgeon habitat in the Nechako River, BC
P02-ES04	<u>Kai Tsuruta</u> [*] , Marwan A. Hassan, Simon D. Donner, and Younes Alila	Development and application of a large-scale, mechanistic, distributed suspended sediment transport model on the Fraser River Basin, British Columbia, Canada
P03-ES04	<u>Dan Haught</u> [*] , Jeremy Venditti, and Michael Church	Acoustically derived annual and instantaneous sediment flux on the Fraser River, BC, Canada
P04-ES04	<u>Lucy MacKenzie</u> [*] , and Brett Eaton	Large grains and channel stability
P05-ES04	<u>Maria Elgueta</u> [*] , Marwan Hassan, and Garry Clarke	Experiment on the effects of episodic sediment supply on bedload transport variability and grain size dependence
P06-ES04	Lara Middleton, <u>Peter Ashmore</u> ¹ , and Pauline Leduc	Braiding planform dynamics in a proglacial river

ES05 (POSTER): THE INTERACTION BETWEEN CLIMATE AND TECTONICS IN LATE CENOZOIC LANDSCAPE EVOLUTION

POSTER	AUTHORS	TITLE
P01-ES05	<u>Evelyn Moorhouse</u> [*] , and Lindsay M. Schoenbohm	Fold segment linkage and uplift rates along the Janauri and Chandigarh anticlines, Northwestern India
P02-ES05	<u>Jeremy Rimando</u> [*] , Lindsay Schoenbohm, Carlos Costa, Andres Richar	Quaternary deformation at the Andean orogenic front: testing tectonic models of surface faulting at the La Rinconada Fault Zone, West-Central Argentina
P03-ES05	<u>Lindsay M. Schoenbohm</u> , James A. McCarthy, Paul R. Bierman, Dylan Rood, and Alan J. Hidy	Late Quaternary Tectonics, Incision, and Landscape Evolution of the Calchaquí River Catchment, Eastern Cordillera, NW Argentina
P04-ES05	<u>Erin G. Seagren</u> [*] and Lindsay Schoenbohm	Morphometric and geomorphic evidence of drainage reorganization in intermontane basins of NW Argentina

ES12 (POSTER): COASTAL SEDIMENT DYNAMICS AND MORPHOLOGICAL RESPONSE: ADVANCES IN OBSERVATION AND PREDICTION

POSTER	AUTHORS	TITLE
P01-ES12	<u>Jonathan D. Brickman</u> [*] , Ryan P. Mulligan, W. Andy Take	Non-Hydrostatic Numerical Modelling of Landslide Tsunami Evolution
P02-ES12	<u>Guillaume Marie</u> and Alain Le Roux [*]	Boulder transport by sea ice on a shore platform of St. Lawrence marine estuary (Quebec, Canada)
P03-ES12	<u>Bernard Bauer</u> , Ian Walker, Robin Davidson-Arnott, Patrick Hesp, Irene Delgado-Fernandez, and Jeff Ollerhead	Scale-dependent perspectives on beach-dune dynamics: A decade of field research at Greenwich Dunes, Prince Edward Island
P04-ES12	<u>Chris Houser</u> , Phil Wernette and Bradley Weymer	Scale dependent behavior the foredune: Implications for barrier island response to storms and sea level rise

ES12 (POSTER): COASTAL SEDIMENT DYNAMICS AND MORPHOLOGICAL RESPONSE: ADVANCES IN OBSERVATION AND PREDICTION - CONTINUED		
P05-ES12	<u>Philip D. Osborne</u> , Greg Curtiss, and Eduardo Sierra-Carrascal	Morphodynamic response of a mixed beach, Puget Sound, WA
P06-ES12	<u>Nicole Couture</u> and Gavin Manson	A national-scale coastal sensitivity index

H09 (POSTER): MEASURING AND MODELLING GLACIER CHANGE		
POSTER	AUTHORS	TITLE
P01-H09	<u>J. Crompton*</u> , G. Flowers	The influence of bedrock fracture intensity on glacier dynamics
P02- H09	<u>B. Pelto</u> , B. Menounos, V. Radic & S. Marshall	Evaluation of Methods Used to Estimate Ice Thickness, Columbia and Rocky Mountains, Canada
P03- H09	<u>H. Williams</u> , M. Koppes & V. Radic	Determining the influence of glacier hypsometry on sensitivity to climate change
P04- H09	<u>A. Pulwiczki</u> & G. Flowers	Multi-scale investigation of snow accumulation on alpine glaciers
P05- H09	<u>L. Thomson</u>	The stability of White Glacier changes since 1960
P06- H09	<u>G.C. Racz</u> , C. Schoof & E. Haber	Estimating permeability of the subglacial drainage system using inverse modelling
P07- H09	M. <u>Tessema</u> , V. Radic & B. Menounos	Modeling surface glacier melt with the use of dynamically downscaled climate fields over Castle Creek Glacier, British Columbia, Canada

H01 (POSTER): HYDRO-CLIMATIC IMPACTS AND ADAPTATION		
POSTER	AUTHORS	TITLE
P02-H01	<u>C. Muneeppeerakul</u> & R. Muneeppeerakul	Optimal use of weather index insurance with traditional coping strategies across geographical scales

J01 (POSTER): SATELLITE REMOTE SENSING FOR EARTH SCIENCE APPLICATIONS		
POSTER	AUTHORS	TITLE
P01-J01	J. Murfitt, <u>A. Robinson</u> & L. Brown	Canadian Lake Depth Inventory using Landsat 8 OLI/TIRS

MONDAY POSTER SESSIONS 2 (1400 TO 1730)
ESB ATRIUM

H14 (POSTER): GENERAL HYDROLOGY		
POSTER	AUTHORS	TITLE
P01-H14	<u>L. Morales-Marin</u> , H. Wheeler, K. Lindenschmidt & F. Yassin	A new solute transport model for large scale cold region catchments: A theoretical framework
P02- H14	<u>J.M. Buttle</u>	Mediating stream baseflow response to climate change: the role of basin storage
P03- H14	<u>D.E. Carlyle-Moses</u> & T.G. Pypker	Rainfall Partitioning by the Canopy of a Lone Ponderosa Pine (Pinus ponderosa)
P04-H14	<u>W. Floyd</u> , M. Korver, C. Owen, J. McPhail & R. Brunsting	Stage-discharge rating curve development using an automated salt dilution system on British Columbia's Central Coast
P05-H14	<u>M. Elshamy</u> , A. Pietroniro & H.S. Wheeler	Modelling the hydrology and streamflow of the Mackenzie River Basin

H06 (POSTER): ADVANCES IN COLD REGIONS HYDROLOGY		
POSTER	AUTHORS	TITLE
P01-H06	<u>S. Budhathoki</u> , A. Ireson & J. Steeves	Quantifying snowmelt infiltration and runoff
P02-H06	<u>M. Rabie</u> , G. Ali, C. Spence, S. Bansah, V.T. Tang & S. Carey	Investigating streamflow generation and streamflow sources during a wetting-up period in an engineered prairie watershed
P03-H06	<u>W. Tang</u> , S.K. Carey, R. Rolick & B. Kurylyk	Using wavelet analysis to evaluate the spatio-temporal variability of stream temperature in two alpine watersheds
P04-H06	<u>A. Szeitz</u> & R.D. Moore	Modelling snow density from snow depth combined with air temperature time series interpolated from the North American Regional Re-analysis
P05-H06	<u>R.L. Rolick</u> , S.K. Carey & B.L. Kurylyk	Thermal regimes of streams within an alpine discontinuous permafrost catchment, southern Yukon Territory
P06-H06	<u>S.S. Ariano</u> & L.C. Brown	The influence of consecutive El Niño and La Niña events on lake ice in Central Ontario
P07-H06	<u>A. Robinson</u> & L.C. Brown	Lake ice modelling of two high arctic lakes
P08-H06	<u>J. Peters</u> & S.F. Lamoureux	Landscape controls over subsurface water flow pathways in the Canadian High Arctic
P09-H06	<u>J.R. Adams</u> & W.L. Quinton	On the similarity of land-cover among lowland peatland complexes in the southern Taiga Plains discontinuous permafrost region, NWT
P10-H06	<u>H. Gleason</u> , S. Déry, J. Rex, V. Foord, R. Kabzems & C. Mottishaw	Forecasting of Spring Runoff Events in the Kiskatinaw Watershed, Dawson Creek, British Columbia
P11-H06	<u>E. Mathieu</u> , W. Quinton & O. Sonnetag	The effects of wildfire on snowmelt and ground thaw on a permafrost peat plateau, Scotty Creek, Northwest Territories
P12-H06	<u>H. Bonn</u> , S. Carey & B.L. Kurylyk	Measuring and modeling infiltration and water movement in frozen ground, Wolf Creek, Yukon
P13-H06	<u>L. Langs</u> & R. Petrone	Methods investigating alpine forest water use under varying environmental conditions in the Canadian Rocky Mountains
P14-H06	<u>Z. Lv</u> & J.W. Pomeroy	Detecting intercepted snow on mountain needleleaf forest canopies using satellite remote sensing
P15-H06	<u>M.C. Elmes</u> , D.K. Thompson & J.S. Price	Monitoring the hydrological response of a burned moderate-rich fen watershed in the Athabasca Oil Sands Region, Alberta

SE01 (POSTER): GEOPHYSICAL STUDIES OF STRUCTURE AND TECTONICS OF THE CANADIAN CORDILLERA		
POSTER	AUTHORS	TITLE
P01-SE01	<u>P. Audet</u> , A. Schaeffer, M. McLellan, A. Tarayoun & C. Sole	Structure and deformation of the northern Canadian Cordillera: A broadband seismic reconnaissance study
P02-SE01	<u>C. Esteve</u> , A. Schaeffer, P. Audet, Louisa Murray-Berquist, S. Cairns, B. Elliott, H. Falck & D. Snyder	A preliminary teleseismic investigation of the crust and mantle lithosphere obtained from BISN in the western Canadian Arctic

SE04 (POSTER): RECENT TRENDS IN EXPLORATION GEOPHYSICS		
POSTER	AUTHORS	TITLE
P01-SE04	<u>D. W. Kouhi</u> & K. F. Tiampo	Applying structural joint inversion and lateral interpolation techniques to get the most out of airborne geophysical data at Thor Lake, NT
P02-SE04	<u>R. Maedel</u> , A. Braun & D. Ball	Forward and cooperative inverse modeling of petrophysical and geophysical data in Zone 58 at Raglan Mine, Québec, Canada
P03-SE04	C. Walter, <u>A. Braun</u> & G. Fotopolous	Orientation Considerations for Multi-Rotor UAV Magnetometry Surveys

TUESDAY POSTER SESSIONS 1 (0900 TO 1230)

ESB ATRIUM

B04 (POSTER): MINE RECLAMATION: MULTIDISCIPLINARY STUDIES FROM ACROSS MINING SECTORS

POSTER	AUTHORS	TITLE
B04-06	<u>D.L. Pratt</u> & J.J. McDonnell	A Freezable Environmental Test Slope for Cold Regions Reclamation Cover System Studies
B04-08	<u>X. Yu</u> * & A. Ulrich	Role of Microbial Mats in Water Capped Tailings: Turbidity Removal and Chemical Flux Mitigation
B04-17	<u>L.A. Swerhone</u> *, J.A. Nesbitt, VM.B.J. Lindsay	Geochemical Considerations for Including Petroleum Coke in Oil Sands Mine Closure Landscapes
B04-19	<u>C.R.C. Cilia</u> * & M.B.J. Lindsay	Assessing Salt Transport within Layered Oil Sands Mine Wastes: Field and Laboratory Experiments
B04-22	<u>S.L. Strilesky</u> *, S.K. Carey, E.R. Humphreys, R.M. Petrone, G.B. Drewitt, & G. Sutherland	Filling in a Forest Patchwork: A Multi-Site Analysis of Conventional and Constructed Patches of the Canadian Boreal Forest
B04-23	<u>C.J. Vessey</u> * & M.B.J. Lindsay	Influence of Ion Exchange Reactions on Salt Migration in Oil Sands Reclamation Soil Cover Materials: Laboratory Column Experiments
B04-24	<u>K. Dompierre</u> , L. Barbour, & J. Zettl	Characterizing Mass Release from Oil Sands Fluid Fine Tailings with Multiple Tracers
B04-29	<u>S. Chang</u> *, E. Tedford, & G. Lawrence	Heat Budget and Fluxes at Base Mine Lake
B04-30	<u>S.E. Irvine</u> *, M. Strack, & J.S. Price	DOC Transport in a Constructed Watershed in the Athabasca Oil Sands Region, Alberta
B04-31	<u>S. Poon</u> *, J. Brandon, & A. Ulrich	A Mechanistic Study of CO ₂ -Induced Turbidity Reduction in Water Capped Tailings

H010 (POSTER): CATCHMENT HYDROLOGICAL AND BIOGEOCHEMICAL BEHAVIOUR IN HUMAN-DOMINATED LANDSCAPES

POSTER	AUTHORS	TITLE
P01-B01	<u>C.J. Oswald</u> , S. Melles, M. Macrae & C. Wellen	Untangling the hydrologic and land use/cover drivers of impaired water quality in an agricultural catchment in southern Ontario
P02-B01	<u>A. Kayembe</u> * & C.P.J. Mitchell	Assessing nested and cumulative hydrological and chloride behaviour of a highly urbanized watershed

SE05 (POSTER): INDUCED EARTHQUAKES: SOURCE PROCESSES AND HAZARD ASSESSMENT

POSTER	AUTHORS	TITLE
P01-SE05	<u>S. D. Thorpe</u> , K. F. Tiampo, S. V. Samsonov, M. Shirzaei & P. J. González	Time series analysis of surface deformation associated with fluid injection and induced seismicity in Timpson, Texas using DInSAR methods
P02-SE05	<u>J. Kubanek</u> , Y. Liu & R. M. Harrington	Monitoring ground motion associated with fluid injection and earthquakes in the western Canadian sedimentary basin (WCSB)
P03-SE05	<u>A. Amini</u> , E. Eberhardt	An investigation on the effects of hydraulic fracturing injection volume and rate on the magnitude of induced seismic events

SE06 (POSTER): SOLID EARTH GEOPHYSICS: GENERAL CONTRIBUTIONS

POSTER	AUTHORS	TITLE
P01-SE06	<u>J. Onwuemeke</u> *, Y. Liu, R. Harrington, A. Pena-Castro, A. Martell & F. A. Darbyshire	Events Relocation and Stress Inversion for Charlevoix Seismic Zone using Recent Earthquake and Newly Recorded Waveform Data

SE06 (POSTER): SOLID EARTH GEOPHYSICS: GENERAL CONTRIBUTIONS - CONTINUED		
P02-SE06	<u>A. Pena-Castro*</u> , J. Onwuemeka, Y. Liu, R. Harrington, A. Martell & F. Darbyshire	Earthquake Focal Mechanism solutions in the Charlevoix Seismic zone suggest stress heterogeneity in the impact structure
P03-SE06	A. Esmailzadeh, G. R. Brooks & <u>C. Samson</u>	Evidence of synchronous mass transport deposits from sub-bottom profiling at Lac de l'Argile, Quebec
P04-SE06	<u>J. Hutchinson*</u> , H. Kao, K. Obana & G. Spence	Initial results from the SeaJade 2 project: Characteristics of the April 2014 Nootka sequence and the corresponding seismogenic structures
P05-SE06	<u>G. Savard*</u> & M. G. Bostock	Updated 3D Seismic Model of southern Vancouver Island and Earthquake Relocations Using Double-Difference Tomography and Low Frequency Earthquakes
P06-SE06	T. Akuhara, <u>M. Bostock</u> & A. Kato	Low velocity zones along subducting plates: comparative study between southwest Japan and Cascadia subduction zones
P07-SE06	<u>R. Campbell*</u> & A. W. Frederiksen	Layer Stripping the Effect of Sedimentary Basins on Teleseismic Data Using Transfer Functions
P08-SE06	<u>F. Vervaeet*</u> & F. A. Darbyshire	Moho depth and bulk crustal properties in northern Quebec and Labrador
P09-SE06	<u>A. Foster</u> , F. A. Darbyshire & A. Schaeffer	Preliminary phase-velocity structure of the central Canadian Shield
P10-SE06	<u>A. P. Kuponiyi*</u> , H. Kao, J. Cassidy, F. Darbyshire, S. E. Dosso & J. Gosselin	Broadband Dispersion Measurement and Implications for Constraining Deep Earth Structures
P11-SE06	<u>P. J.A. McCausland</u> , M. Deng, J. Umoh & D. W. Holdsworth	Reliable, non-destructive bulk volume and density determination of meteorites using medical X-ray micro computed tomography (microCT)
P12-SE06	<u>B. Lynch</u> , C. McAnuff, C. Samson	Computing synthetic 3D images of rock walls for various sensors and mobile platforms
P13-SE06	C. McAnuff, <u>C. Samson</u> , D. Melanson & C. Polowick	Imagine rock walls with a Lidar mounted on an unmanned aerial vehicle

TUESDAY POSTER SESSIONS 2 (1400 TO 1730)

ESB ATRIUM

ES14 (POSTER): ADVANCES IN EARTH SURFACE PROCESSES		
POSTER	AUTHORS	TITLE
ES14-07	<u>Marco G. Jorge*</u> , Tracy A. Brennand, Jonathan E. Cripps	Canada's digital elevation
ES14-08	<u>Antoine Prince*</u> , Jan Franssen, and Jean-François Lapierre	Modelling of depth to bedrock and soil composition attributes at the catchment scale

ES06 (POSTER): PROFESSIONAL GEOSCIENCE I: RIVER RESTORATION IN CANADA, FROM PLANNING TO EFFECTIVENESS MONITORING		
POSTER	AUTHORS	TITLE
P02-ES06	<u>Kimisha Ghunowa*</u> , Bruce MacVicar, and Peter Ashmore	Spatial Decision Support Tool for Cumulative Stream Power Modeling

ES07 (POSTER): FROM NATURAL SCIENCE TO REGIONAL PRACTICES IN CANADA		
POSTER	AUTHORS	TITLE
P01-ES07	<u>Peter Ashmore</u> , Julia Howett, and Imran Khan	Meander Belt Width Procedures: Developing a Regional Model for Southern Ontario
P02-ES07	<u>Roger T.J. Phillips</u>	Defining Geoscience: Facing the challenges of professional regulation and environmental geoscience education
P03-ES07	<u>Joanna Eyquem</u> and Roger T.J. Phillips	Challenges for the regulation of increasingly diverse and mobile: Professional Geoscientists within and between the Canadian Provinces

H02 (POSTER): RECENT ADVANCES IN PEATLAND HYDROLOGY, PART 1: PEATLAND RESTORATION AND ECOHYDROLOGICAL PROCESSES		
POSTER	AUTHORS	TITLE
P01-H02	<u>E. Kessel</u> , G. Sutherland, C.M. Wells, T. Weber & R.M. Petrone	Impacts of road construction and removal on the hydrologic and geochemical function of two peatlands within the Athabasca oil sands region, Alberta, Canada
P05-H02	<u>R. Ingram</u> & J. Waddington	Peatland recovery from wildfire in northern Alberta: Implications for reclamation design of oil sands mining leases
P02-H02	<u>S. Touchette</u> , M. Strack & I. Strachan	Impact of spatial variability on carbon dioxide and methane exchange from graminoid species in restored peatlands
P04-H02	<u>G. Sutherland</u> , R.M. Petrone and J.S. Price	Examining site-scale fluxes of carbon and water over the first four years of a constructed fen-upland watershed in Alberta, Canada.
P03-H02	<u>M. Gaultier</u> , J. Hughes and S. Howie	Inferring bog hydrology and soil chemistry using testate amoebae in the Fraser Lowland, British Columbia

H04 (POSTER): RECENT ADVANCES IN PEATLAND HYDROLOGY, PART 2: FLOW AND TRANSPORT OF WATER, SOLUTE, AND ENERGY IN ORGANIC SOILS		
POSTER	AUTHORS	TITLE
P01-H04	<u>C. Ackley*</u> , S. Tank, F. Rezanezhad, W. Quinton & C. McCarter	Hydro-ecological impacts of wildfire on a permafrost plateau, Scotty Creek, NWT
P02- H04	<u>B. Gharedaghloo*</u> , F. Rezanezhad, & J. Price	Using pore scale simulations to characterize transport properties of peat in variably saturated condition: a micro- to meso-scale approach
P03- H04	<u>O. Sutton*</u> & J. Price	Numerical modelling of sodium transport and fate at a constructed fen watershed, Athabasca Oil Sands Region, Alberta
P04- H04	<u>E.D. Kessel</u> & J.S. Price	The field scale transport of Na ⁺ and Cl ⁻ through a peat deposit of a constructed fen peatland in a post-mined landscape of the Athabasca Oil Sands Region

H11 (POSTER): HYDRO-ECOLOGICAL AND HYDROGEOMORPHIC IMPACTS OF FOREST DISTURBANCE AND MANAGEMENT		
POSTER	AUTHORS	TITLE
P01-H11	<u>K.D. Bladon</u> & R.P. Cole	Soil hydraulic properties and subsurface flow pathways following wildfire in the Cascade Mountains, Oregon
P02- H11	<u>A.M. Martens*</u> , U. Silins, K.D. Bladon, C.H.S. Williams, M. Wagner & E. Luchkow	Stable isotope analysis of food web dynamics in aquatic ecosystems following severe wildfire in Alberta's Rocky Mountains
P04- H11	<u>S. Spencer*</u> , U. Silins & A. Anderson	Temporal variation in precipitation-runoff dynamics and implications for resilience in the eastern slopes of Alberta's Rocky Mountains
P05- H11	<u>M. Howard*</u> , U. Silins & A. Anderson	Quantifying and forecasting erosion from off highway vehicle trails in Front-Range Rocky Mountain watersheds

H11 (POSTER): HYDRO-ECOLOGICAL AND HYDROGEOMORPHIC IMPACTS OF FOREST DISTURBANCE AND MANAGEMENT - CONTINUED		
P06- H11	<u>D. Greenacre*</u> , U. Silins & M. Dyck	Influence of alternative forest harvesting strategies on coupled spatial patterns of snowpack accumulation/melt and soil moisture storage
P07- H11	<u>S. Karpyshin*</u> , U. Silins & M. Dyck	Transpiration response of residual Lodgepole pine after strip and partial-cut harvesting in Alberta's southern Rocky Mountains
P08- H11	<u>C.H.S. Williams*</u> , U. Silins, K.D. Bladon & A. Anderson	Muted rainfall-runoff response to increased net rainfall after wildfire in Alberta's mountain headwaters
P09- H11	<u>K. Herlein</u> , U. Silins, C.H.S. Williams, A.M. Martens, M.J. Wagner, K. Hawthorn, M. Stone & M.B. Emelko	Long-term suspended sediment yields in wildfire affected mountain streams in southwestern Alberta

WEDNESDAY POSTER SESSIONS 1 (0900 TO 1230)
ESB ATRIUM

B03 (POSTER): PHYSICAL AND BIOGEOCHEMICAL LAND SURFACE PROCESSES IN A CHANGING CLIMATE		
POSTER	AUTHORS	TITLE
P01-B03	<u>M.Q. Morison*</u> , R.M. Petrone, M.L. Macrae & L. Fishback	Impacts of hydroclimatic change on nutrient cycling in thermokarst-impacted northern peatlands
P02-B03	<u>J. Tian*</u> , Z. Lindo & B. Branfireun	Climate change alters peatland carbon cycling through plant biomass allocation

B07 (POSTER): TERRESTRIAL-AQUATIC INTERACTIONS: MEASUREMENT AND MODELLING		
POSTER	AUTHORS	TITLE
P01-B07	<u>M. Strack</u> , V. Daté, F. Nwaishi, R. Andersen & J. Price	Methane emissions from fens in the Athabasca Oil Sands Region, Alberta
P03-B07	<u>G. Thiel*</u> , M. Lafrenière, J. Fouché, & S. Lamoureux	Spatial controls on the lability of dissolved organic matter in a High Arctic watershed
P04-B07	<u>J. Vanrobaeys*</u> , D. Lobb & P. Owens	The effectiveness of vegetative buffers for reducing phosphorus losses from agricultural runoff in northern climates
P05-B07	<u>H. Yao</u> , A. Paterson, C. McConnell, R. Ingram, T. Field, A. James, & L. Molot	Non-significant trends in ammonia, nitrate and organic nitrogen at headwater lakes of south-central Ontario under declined loading
P06-B07	<u>M.J. McDowell*</u> & M.S. Johnson	Investigating water balance impacts of Mountain Pine Beetle infestation and forest harvest in British Columbia
P07-B07	<u>K. Kieta</u> & P. Owens	Phosphorus loss from grass buffer strip species undergoing freezing and thawing

C01 (POSTER): WHAT THE FLUX?! SURFACE-ATMOSPHERE EXCHANGE OF ENERGY AND MASS		
POSTER	AUTHORS	TITLE
P01-C01	<u>Megan Cowan*</u> , Jon Warland, Claudia Wagner-Riddle, Shannon Brown, Aaron Berg	Comprehensive measurement of all energy budget components to improve closure
P02-C01	<u>Tobias KD Weber</u> , Lars Gerling, Sascha Iden, Wolfgang Durner, and Stephan Weber	Inverse modelling of net ecosystem exchange in a mountainous peatland: influence of distributional assumptions on parameter estimates and total carbon fluxes

C01 (POSTER): WHAT THE FLUX?! SURFACE-ATMOSPHERE EXCHANGE OF ENERGY AND MASS - CONTINUED		
P03-C01	Amal Roy, Aaron J. Glenn , Sanjayan Satchithanantham, and Henry F. Wilson	Soil nitrous oxide and methane fluxes in contrasting riparian plant communities on a stream reach floodplain in southwestern Manitoba
P04-C01	Andrew VanderZaag , Hambaliou Baldé, Sean McGinn, Aaron Glenn, and Ray Desjardins	Inverse dispersion measurements of methane emissions from manure storages in regions across Canada

ES09 (POSTER): IN HONOUR OF JOHN CLAGUE, ONE OF CANADA'S FOREMOST EARTH SCIENTISTS		
POSTER	AUTHORS	TITLE
P01-ES09	Marta Chiarle , Giovanni Mortara, Luigi Perotti, Marco Giardino	Glacier-related hazards in a changing mountain environment: an Italian-Canadian perspective
P02-ES09	Janice Brahney ¹ , Brian Menounos ² , Thomas W.D. Edwards ³ , and John Clague ⁴	Cause and Consequence of Lake Level Change in Kluane Lake, Yukon Territory
P03-ES09	Andrée Blais-Stevens , John J. Clague, Menounos, B., and Brahney, J.	Paleoseismic evidence for repeated Holocene displacements along the Denali Fault in southwest Yukon Territory
P04-ES09	Nancy Calhoun , John J. Clague, and Andreas von Poschinger	The catastrophic Flims landslide and associated Bonaduz gravel, Vorderrhein River Valley, Switzerland
P05-ES09	Lionel E. Jackson Jr. ¹ and Brent C. Ward ¹	A Late Pleistocene stratigraphic record from geotechnical drilling, Evergreen Line Tunnel, Greater Vancouver, BC

G03 (POSTER): GENERAL GEODESY		
POSTER	AUTHORS	TITLE
P01-G03	Yara Mohajerani , Isabella Velicogna, and Tyler Sutterley	Optimization of Spherical Cap Mascon Processing on the Ice Sheets for the GRACE and GRACE-FO Missions
P02-G03	John Crowley , Jianliang Huang, Goran Pavlic, and Marc Véronneau	Fewer stripes and more signals: a combined least-squares de-striping and statistical filter
P03-G03	Hojjat Kabirzadeh , Ricky Kao, Jeong Woo Kim, and Michael G. Sideris	Assessment of temporal gravity variations before large earthquakes in Western Canada
P04-G03	Theron Finley , Lucinda Leonard, Kristin Morell, Christine Regalla	Bending the Olympic Orocline: A neotectonic model of deformation in the northern Cascadia forearc

H03 (POSTER): RECENT ADVANCES IN ISOTOPES AS TRACERS OF HYDROLOGY AND EARTH-SYSTEM SCIENCE		
POSTER	AUTHORS	TITLE
P01-H03	J. Taulu , T. Prowse & T. Edwards	Quantifying seasonal contributions of snow and glacial melt to streamflow in the Upper Athabasca River, Alberta, Canada
P02-H03	A. Coles, S. Chad , A. Al Masum, M.F. Nehemy, A. Niazi, C.A. Ross, T. Vogel, K. Janzen & J.J. McDonnell	Improving prairie snowmelt process understanding with high-resolution stable isotope tracing
P03-H03	J. Exler , A. Christen, M. Merckens & R.D. Moore	Water and energy fluxes at a disturbed and rewetted white beakrush-sphagnum site in a raised bog near Vancouver, British Columbia.
P04-H03	S. Bansah , A. Haque, J. Laing & G. Ali	Spatio-temporal assessment of mean transit times in a Canadian prairie watershed
P05-H03	Y. Yi , J. Gibson, J. Birks & P. Shaw	Regional Survey of Lake Water for Isotopic Characterization and Water Yield Estimations in BC
P06-H03	Q. Chang , M. Hayashi, Z. Sun, S. Want & R. Ma	Using multiple tracers to identify source water and flow paths in an alpine catchment in the Qilian Mountain, Qinghai-Tibet Plateau, China

WEDNESDAY POSTER SESSIONS 2 (1400 TO 1730)

ESB ATRIUM

B08 (POSTER): GENERAL BIOGEOSCIENCES		
POSTER	AUTHORS	TITLE
P01-B08	<u>A. Schevers*</u> , S. Lamoureux, & M. Lafrenière	Long-term dissolved inorganic nitrogen fluxes from paired watersheds in the Canadian High Arctic
P02-B08	<u>D.M. Stewart*</u> , U. Silins, M. Emelko, & M. Stone ³	Regulation of post-logging N turnover and mobile N by solar insolation in a steep mountainous Rocky Mountain watershed
P03-B08	<u>M.A. Haque*</u> , C. Ross, A. Schmall, S. Bansah, M. Macrae & G. Ali	Phosphorus sorption dynamics in geographically isolated wetlands in the Prairie Pothole Region
P04-B08	F. Jalilian, <u>Z. Xu*</u> , C. Valeo, R.B. Bhiladvala, A. Chu, & J. He	Biofilm monitoring in situ of bioretention cells
P05-B08	<u>R. Thomas*</u> , C. Valeo, & U.T. Khan	Fuzzy set theory applied to spatial interpolation and modelling of dioxins and furans in marine sediments
P06-B08	<u>K. Xu*</u> , Z. Xu, C. Valeo, J. He	Influence of rainfall and temperature on the distribution of bacterial contaminants in nearshore areas of the southern Vancouver Island
P07-B08	M. Ricord, <u>M. Oelbermann</u> , L. Phillips, B. Seuradge, & L. Echarte	Impact of cereal-legume intercropping on greenhouse gas emissions and microbial functionality

ES13 (POSTER): COMPUTER MODELS AND STATISTICAL METHODS IN EARTH SCIENCES		
POSTER	AUTHORS	TITLE
P01-ES13	Matthew T. Pratola, <u>Ofir Harari</u> , Derek Bingham and Gwenn Flowers	Design and Analysis of Experiments on Non-Convex Regions, with Application to Glacier Mass-Balance Estimation
P02-ES13	<u>Valentina Radic</u> , Kathi Unglert, and Mark Jellinek	Machine Learning Method for Pattern Recognition in Volcano Seismic Spectra
P03-ES13	<u>Scott McDougall</u> , Nafis Jalil, Jordan Aaron, Andrew Mitchell, John Whittall, Damian McClarty and Marc-André Brideau	Development of an online database and empirical hazard mapping tool for rock avalanche runout estimation
P04-ES13	<u>Hossein Foroozand*</u> and Steven V. Weijs	Hydrologic Forecasting in Mountain Basin Using Ensembles of ANN and BNN Models: A Case Study of Kashkan River Basin
P05-ES13	<u>John Lindsay</u> , Wanhong Yang, Duncan D. Hornby	Drainage network analysis of topologically noisy vector stream data using a priority-flood algorithm
P06-ES13	<u>Kathryn De Rego*</u> , J. Wes Lauer, Brett Eaton and Marwan Hassan	Numerical modeling of channel width change and migration on decadal timescales

H08 (POSTER): SNOW LEVEL AND PRECIPITATION: TRENDS, EXTREMES, AND IMPACTS		
POSTER	AUTHORS	TITLE
P01-H08	<u>J.H. Sherwood</u> , S.J. Ketcheson, & J.S. Price	Landform controls on snow dynamics in a fen watershed in the Western Boreal Plains, Canada
P02-H08	<u>M.M. Brugman</u> , T. Smith, R. Mo, J. Goosen, G. Pearce, J. Bau, A. Besson, J. Hay, C. Yu, L. West, M. Loney & D. Simpson	Precipitation forecasting during major winter storms in Pacific and Yukon region
P03-H08	<u>T. Atkinson</u> , M.M. Brugman, C. Emond, J. Goosen & T. Smith	Validation of a new snow level algorithm for the winter of 2016/2017

H05 (POSTER): INSIGHTS INTO ENVIRONMENTAL/HYDROLOGICAL MODELS USING SENSITIVITY AND UNCERTAINTY ANALYSIS, AND INFORMATION THEORY		
POSTER	AUTHORS	TITLE
P01-H05	<u>M. Rohanizadegan</u> , J. Pomeroy & R. Petrone	Improving meteorological forcing of mountain evapotranspiration calculations

H13 (POSTER): ADVANCES IN HYDROECOLOGY IN CANADA		
POSTER	AUTHORS	TITLE
P01-H13	<u>J. Lindsay</u> , J. Cockburn, R. Bhamjee, J. Tweedie & K. Roberts	Evaluating low-flow conditions from channel characteristics and water level
P02-H13	<u>A.J.F. Mertens*</u> , K. Devito & D. Olefeldt	Controls on lake chemistry across the Western Boreal Forest: Setting reference conditions
P03-H13	<u>H. Jerreat-Poole*</u> , T.D. Prowse & D. Jelinski	A Review on Changing Water Temperature in Alpine Basins in the Western Cordillera of Canada and the Implications for Local Fish Populations

SE02 (POSTER) : THE EARTHQUAKE CYCLE: SQUARING THE CIRCLE		
POSTER	AUTHORS	TITLE
P01-SE02	T. Hayward* & <u>M. Bostock</u>	Slip behaviour of the Queen Charlotte plate boundary before and after the 2012, M_w 7.8 Haida Gwaii earthquake: evidence from repeating earthquakes
P02-SE02	<u>H. Yu</u> , Y. Liu & Y. Huang	Constraining the frictional parameters used in an earthquake cycle modeling
P03-SE02	<u>E. Nissen</u> , E. Karasozen, E. Bergman & A. Ghods	Rupture directivity effects in large Iranian seismic sequences reassessed with calibrated earthquake relocations