



EGU Galileo conference:
Perturbations of earth surface dynamics caused by extreme events
 13-19 October 2019 Nepal

Jointly organized with:
Nepal Geological Society
NGS



time	Sunday 13th	Monday 14th	Tuesday 15th	Wednesday 16th	Thursday 17th	Friday 18th	Saturday 19th
7:00		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
8:00		Opening Talk (1h) (Andermann)	Keynote 2 (Anselmetti)		Keynote 3 (Manga)	Keynote 6 (Buma)	Bus 2 to KTM for 7 am flights
10:00		Keynote 1 (Tipper)	Talk 6 (Ghazoui) Talk 7 (Korup) Talk 8 (Attal)		Talk 9 (Goren) Talk 10 (Illien) Poster Pop-ups	Talk 15 (Booth) Talk 16 (Croissant) Poster Pop-ups	Bus 3 to KTM for all other flights
		Coffee break	Coffee break	Field visit	Coffee break	Coffee break	
10:30		Opening Ceremony (NGS) 1H	Boarding buses and driving	(Cook ++)	Talk 11 (Gajurel) Keynote 4 (Rathburn)	Keynote 7 (Howarth)	
12:30		Talk 1 (Paudyal) Talk 2 (Marc by Hovius) Talk 3 (Jones) Talk 4 (Graf)			Talk 12 (Garankina) Talk 13 (Darby)	Talk 17 (Märki) Talk 18 (Duval) Talk 19 (Liu)	
		Lunch break		“Mountain View” Lunch	Riverbank Picnic	Lunch break	Lunch break
13:30		Talk 5 (Veh) Pop ups	Field visit		Breakout discussion “Commonalities and scales of events” Group work	Breakout discussion “Rapid response board and mobile unit”	
15:30		Poster	Giant boulders Mega landslide Bit of GLOF and Earthquake	Field visit			
		Coffee break	(Cook, Huber)	Cook (++)	Coffee break	Coffee break	
16:00	Ice Breaker (17:30) roof top	Break out discussion “Morality of working in disaster areas”			Keynote 5 (Gran) Talk 14 (Van Wyk de Vries) Posters	Roundup (Hovius) Poster	
18:00		Dinner	Dinner	Dinner	Dinner	Gala Dinner BBQ	
		Posters+Drinks	Discussion+Drinks	Discussions+ Drinks	Poster+ Drinks	Drinks Bus 1 to KTM for 2 am flights	

Keynote talks: 1h incl. questions

Talk: 15 min

Poster pop-up: 3 min



Daily schedule

Sunday 13th October 2019 – Kathmandu –

18:00 Ice Breaker, roof top Hotel View Bhrikuti
Dinner, Red Drops Restaurant

Monday 14th October 2019 – Kathmandu –

7:00 – 8:00 Breakfast, Red Drops Restaurant
8:00 – 9:00 **Christoff Andermann**, Opening Talk, program details and overarching conference topic
9:00 – 10:00 **Ed Tipper**, Keynote 1 – *Sediment composition and flux in the Narayani and Koshi Rivers in the Nepal Himalaya following the 2015 Ghorka Earthquakes* –
10:00 – 10:30 Coffee break, roof top
10:30 – 11:30 Opening Ceremony organized by NGS with local dignitaries
11:30 – 11:45 **Kabi Raj Paudyal**, Talk 1 – *Geological setting and adverse geological structures for extreme events in Nepal Himalaya* –
11:45 – 12:00 **Odin Marc by Niels Hovius**, Talk 2 – *Long-term erosion of the Nepal Himalayas by bedrock landsliding: the role of monsoons, earthquakes and giant landslides* –
12:00 – 12:15 **Joshua Jones**, Talk 3 – *Quantifying earthquake preconditioning of monsoon-triggered landslides in Nepal: Implications for landslide susceptibility modelling* –
12:15 – 12:30 **Emma Graf**, Talk 4 – *Source to sink: The journey of landslide sediment following the 2015 Gorkha earthquake* –
12:30 – 13:30 Lunch break
13:30 – 13:45 **Georg Veh**, Talk 5 – *Frequency and hazard from Himalayan glacial lake outburst flood* –
13:45 – 14:15 Pop ups
14:15 – 15:30 Poster
15:30 – 16:00 Coffee break, roof top
16:00 – 18:00 Break out discussion, “Morality of working in disaster areas”
18:00 – 19:00 Dinner, Red Drops Restaurant
19:00 Poster + Drinks

Tuesday 15th October 2019 – Kathmandu and Borderlands –

7:00 – 8:00 Breakfast, Red Drops Restaurant
8:00 – 9:00 **Flavio Anselmetti**, Keynote 2 – *Geologic archives of disturbances: Reconstructing event catalogues of natural hazards using lake sediments* –



- 9:00 – 9:15 **Zakaria Ghazoui**, Talk 6 – *Does the seismic cycle slip towards randomness?* –
- 9:15 – 9:30 **Oliver Korup**, Talk 7 – *Learning Latent Patterns of Himalayan Hazards* –
- 9:30 – 9:45 **Mikael Attal**, Talk 8 – *Legacy of extreme events: Are all landscapes born free and equal?* –
- 10:00 – 10:30 Coffee break, roof top
- 10:30 – 12:30 Boarding buses and driving
- 12:30 – 13:30 “Mountain View” Lunch stop, Dhulikhel
- 13:30 – 18:00 **Kristen Cook** and **Marius Huber**, Field visit – *Giant boulders, Mega landslide, GLOF and Gorkha Earthquake* –
- 18:00 – 19:00 Dinner, Borderlands
- 19:00 Discussion + Drinks

Wednesday 16th October 2019 – Borderlands –

- 7:00 – 8:00 Breakfast
- 8:00 – 12:30 **Kristen Cook**, Field visit
- 12:30 – 13:30 Riverbank Picnic
- 13:30 – 18:00 **Kristen Cook**, Field visit
- 18:00 – 19:00 Dinner, Borderlands
- 19:00 Discussion + Drinks

Thursday 17th October 2019 – Borderlands –

- 7:00 – 8:00 Breakfast
- 8:00 – 9:00 **Michael Manga**, Keynote 1 – *Streamflow response to earthquakes* –
- 9:00 – 9:15 **Liran Goren**, Talk 9 – *Downstream mobilization of very large boulders during riverbed liquefaction: Insights from grain-scale simulations* –
- 9:15 – 9:30 **Luc Illien**, Talk 10 – *Understanding Seismic Velocity variations after the 2015 Gorkha Earthquake, Nepal* –
- 9:30 – 10:00 Pop ups
- 10:00 – 10:30 Coffee break
- 10:30 – 10:45 **Ananta Prasad Gajurel**, Talk 11, – *A remarkable contrast in stable isotopic composition of Nepalese rivers before and after Gorkha Earthquake Mw 7.9* –
- 10:45 – 11:45 **Sara Rathburn**, Keynote 4 – *Fires, Floods, and Debris Flows: Assessing Sediment Flux, Geomorphic Impacts, and Fluvial System Recovery Following Extreme Events* –



- 11:45 – 12:00 **Ekaterina Garankina**, Talk 12, – *Relict debris flows and modern slushflows as agents of severe landscape transformation in the low Subarctic Mountains of NW Russia: Magnitudes, affects and age* –
- 12:00 – 12:15 **Stephen Darby**, Talk 13 – *The new normal? A major decline in the Mekong’s fluvial sediment load is driven by shifting tropical storms and extreme anthropogenic pressure* –
- 12:30 – 13:30 Lunch break
- 13:30 – 15:30 Breakout discussion, “Commonalities and scales of events”, Group work
- 15:30 – 16:00 Coffee break
- 16:00 – 17:00 **Karen Gran**, Keynote 5 – *Fluvial recovery following volcanic eruptions* –
- 17:00 – 17:15 **Maximillian Van Wyk de Vries**, Talk 14 – *Balancing the scales: Can volcanism tip West Antarctica over the edge?* –
- 17:15 – 18:00 Poster
- 18:00 – 19:00 Dinner
- 19:00 Poster + Drinks

Friday 18th October 2019 – Borderlands –

- 7:00 – 8:00 Breakfast
- 8:00 – 9:00 **Brian Buma**, Keynote 6 – *When do the plants matter? Improving our understanding of landslides and ecology via interdisciplinary research* –
- 9:00 – 9:15 **Adam Booth**, Talk 15 – *Coarse wood inhibits debris flow runout in forested southeast Alaska, United States* –
- 9:15 – 9:30 **Thomas Croissant**, Talk 16 – *Post-seismic export of organic carbon - a reduced-complexity approach* –
- 9:30 – 10:00 Pop ups
- 10:00 – 10:30 Coffee break
- 10:30 – 11:30 **Jamie Howarth**, Keynote 7, – *Earthquake-induced landsliding enhances carbon export and burial in the deep ocean over millennial timescales* –
- 11:30 – 11:45 **Lena Märki**, Talk 17 – *Organic and inorganic long-term carbon budget of the Himalayan erosion after the 2015 Gorkha earthquake* –
- 11:45 – 12:00 **Alison Duvall**, Talk 18 – *M9 Earthquakes and Landscapes of the Cascadia Subduction Zone* –
- 12:00 – 12:15 **Weiming Liu**, Talk 19 – *Study on the relationship between dam and river geomorphologic evolution in the upper Indus river* –
- 12:30 – 13:30 Lunch break
- 13:30 – 15:30 Breakout discussion, “Rapid response board and mobile unit”
- 15:30 – 16:00 Coffee break



16:00 – 17:00 **Niels Hovius**, Roundup

17:00 – 18:00 Poster

18:00 – 19:00 Gala Dinner – BBQ, Borderlands

19:00 Drinks,

20:00 Bus 1 to KTM (for 2AM flights)

Saturday 19th October 2019 – Borderlands –

2:00 Bus 2 to KTM (for 7AM flights)

7:00 – 8:00 Breakfast

9:00 Bus 3 to KTM (for all other flights)

Poster pop ups

Monday 14th of October

- 1) **Kristen Cook**, Glacial lake outburst floods and fluvial erosion in the Himalaya – insights from the 2016 Bhote Koshi GLOF
- 2) **Marius Huber**, Assessing provenance, exposure timing and emplacement processes of large exotic boulders in central Himalayan river valleys
- 3) **Katie Schide**, Using Cosmogenic Nuclides to Evaluate the Role of Coseismic Landsliding on Measured Erosion Rates Following the Mw 7.8 Gorkha Earthquake, Nepal

Additional contributions from Nepal

Thursday 17th of October

- 4) **Brian Yanites**, The propagation of extreme landslide events through the fluvial systems of Taiwan
- 5) **Dan Parsons**, Sediment flux, morphodynamics and the complex evolution of flood hazard
- 6) **Monique Fort**, Geomorphic impacts of the intense monsoon 2018 in Kali Gandaki Valley, Nepal Himalaya
- 7) **Sujay Bandyopadhyay**, Century-Sckale Flood Response in the Rarh Region of Lower Gangetic Plains, India: towards understanding of Climate and Humans' Interaction
- 8) **Elisabeth Schönfeldt**, Giant landslides in the Patagonian Andean foreland



- 9) **David Puhl**, Linking earthquake-induced mass wasting with increased suspended sediment transport in Himalayan rivers
- 10) **Erich Herzig**, Looking for Past and Future Landslides triggered by the Seattle Fault
- 11) **Johanna Eidmann**, Analyzing Post-Flood Recover After an Extreme Flood: North St. Vrain Creek, CO
- 12) **Seth Williams**, The Erosive Power of Earthquakes: Quantifying Landscape Response to a Large Magnitude Seismic Event through Joint Detrital Termochronometry and Cosmogenic Nuclide Analysis in Kaikoura, New Zealand
- 13) **Sean Gallen**, Rapid alluvial fan and terrace development in response to a large, high-magnitude rockfall in the Klados Gorge, Crete, Greece
- 14) **Maarten Lupker**, Landslide signatures in fluvial sediments from paired cosmogenic nuclides

Friday 18th of October

- 15) **Abra Atwood**, Response of chemical weathering and hillslope hydrology along an exhumation gradient in central Nepal: new insights from groundwater transit times and geochemistry
- 16) **Genevieve Hughes**, Impact of Coseismic Landslides on Himalayan Chemical Weathering
- 17) **Kristy Guerin**, Ferruginous nodules as a novel medium to evaluate the mineralogical and geochemical impact of palaeowildfires
- 18) **Hridaya Bastola**, Modeling channel responses to change in rainfall frequency and intensity using non-dimensional equations
- 19) **Shaun Williams**, Development Perturbations on Coastal Tsunami Risk: Examples from New Zealand and Samoa
- 20) **Melanie Fischer**, Identification of key predictors for the susceptibility of Himalayan glacial lakes to sudden outburst floods
- 21) **Daniel McGrath**, The beginning and end of a glacier-dammed lake – insights from Lago Cachet Dos, Chile
- 22) **Scott Mc Coy**, Environmental controls of glacial lake outburst flood duration and magnitude from ice-dammed lakes
- 23) **Daniel Garcia-Castellanos**, Outburst floods from overtopping lakes and the long-term evolution of landscape. From Lake Bonneville to the Zanclean flood
- 24) **Christian Mohr**, Ecogeomorphic Processes and Carbon Fluxes in Disturbed Patagonian Rainforests
- 25) **Christoff Andermann**, Gorkha earthquake observatory, Nepal

Sunday 13th - Tuesday 15th morning:
Hotel View Bhrikuti (N27.5978, E85.3716)



Tuesday 15th - Saturday 19th morning:
Boarderlands resort (N27.8551, E85.8775)

