

THIRD SLOPE TECTONICS CONFERENCE

TRONDHEIM, 8-12 SEPTEMBER 2014
GEOLOGICAL SURVEY OF NORWAY,

Draft Programme

Third Slope Tectonic Conference

September 8-9th, 2014

Organized by the Geological Survey of Norway, Åknes/Tafjord Beredskap IKS
and University of Lausanne

PRELIMINARY DRAFT

Supporters:



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GEOLOGICAL SURVEY OF NORWAY,

DRAFT PROGRAMME AND CONTRIBUTIONS SEPTEMBER 8-9TH

Venue: Geological Survey of Norway, [Leiv Eirikssons vei 39](#)

Day 1: Monday September 8, 2014:

8:15 – 8:45	Registration & coffee
8:45 – 9:00	Welcome & introduction
9:00 – 10:30	Oral session 1: Slow rock slope deformation
10:30 – 11:00	Coffee break
11:00 – 12:00	Oral session 2: Rockslides & active tectonics
12:00 – 13:00	Lunch break
13:00 – 15:15	Oral session 3: Geological and tectonic control on landslide distribution
15:15 -15:45	Coffee break
15:45 -17:15	Oral session 4: Rapid rock slope failures
19:00	Dinner at To Tårn

Day 2: Tuesday September 9, 2014:

8:30 -10:45	Oral session 5: Monitoring & modelling of rock slopes
10:45 -11:15	Coffee break
11:15 -12:45	Oral session 5: Monitoring & modelling of rock slopes continued
12:45 -13:45	Lunch break
13:45 -15:00	Poster session
14:30 -15:00	Coffee break
15:00 -16:15	Oral session 6: Reactivation of pre-existing structures & formation of new structures in rock slopes
16:15	Discussion & conclusion

Day 3, 4, 5: Excursion (see separate programme)

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Monday, September 08, 2014

9:00-10:30 Oral session 1: Slow rock slope deformation
(Chairs: Crosta, G. & Dehls, J.F.)

9:00	F. Agliardi , M. Barbarano, G.B. Crosta, F. Riva & A. Zanchi <i>Inherited and active tectonic controls on the Piz Dora sackung system (Val Mustair)</i>
9:15	T. Oppikofer , G. Majala Dreiås, A. Saintot, R.L. Hermanns & J. Gosse <i>Geological and structural control of the Ivasnasen and Vollan unstable rock slopes (western Norway)</i>
9:30	M. Della Seta, C. Esposito , S. Martino & G. Scarascia Mugnozza <i>Morpho-structural evolution of slope-to-valley systems and related implications on slope-scale gravitational processes: new results from the Mt. Genzana case history (central Apennines, Italy)</i>
9:45	J. Lenart , P. Tábořík, T. Pánek, V. Blecha, O. Turský & J. Vilhelm <i>Deep-seated slope deformations headscarps detection by a combination of geophysical techniques (Outer Western Carpathians)</i>
10:00	J. Stemberk <i>Recent tectonic activity influencing the development of deep seated slope deformations: examples from the Bohemian Massif and Western Carpathians</i>
10:15	M. Chigira , T. Sakashima, J. Minagawa, A. Funayama & K. Shibuya <i>Prediction and stability assessment of potential sites of catastrophic landslides</i>

Coffee break (10:30-11:00)

11:00-12:00 Oral session 2: Rockslides & active tectonics
(Chairs: Scarascia-Mugnozza G. & Rohn J.)

11:00	A. Strom <i>Caldera-like collapses in non-volcanic regions - evidence of neotectonic detachment folding</i>
11:15	I. Baroň , L. Plan, B. Grasemann, I. Mitrović, J. Blahůt & J. Stemberk <i>Gravitational slope deformation triggered by neotectonic movement: first direct observations from the Emmerberg and Eisenstein Caves (Lower Austria)</i>
11:30	T. Redfield , R.L. Hermanns, T. Oppikofer, F.X. Yugsi Molina, P. Osmundsen & S. Sepulveda <i>What can we learn for seismic hazard in Scandinavia from medium magnitude earthquakes in the Chilean fjord land?</i>
11:45	S.A. Sepúlveda , V. Farías, V. Letelier & M. Farías <i>Megalandslides in the Tarapacá Region, northern Chile: A consequence of crustal fault active tectonics?</i>

Lunch (12:00-13:00)

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13:00-15:15 Oral session 3: Geological and tectonic control on landslide distribution
(Chair: J.-P. Malet, & I.A. Penna)

13:00	S. Yamasaki & Y. Yoshikawa <i>Searching for undiscovered tsunamigenic landslides, and the relationship between landslide morphology, process and tsunami</i>
13:15	F. Bucci , M. Santangelo, M. Cardinali, F. Fiorucci & F. Guzzetti <i>Distribution of landslide volume in tectonically-controlled mountain landscapes</i>
13:45	K. K. Panthi <i>Swalik formation and landslide hazard along Tinau valley, Nepal</i>
14:00	T. Saemundsson , H. Norddahl & H.G. Petursson <i>Rock avalanches, rock slides and rock falls in the Quaternary bedrock in Iceland</i>
14:15	L. Xie , E. Yan & L. Long <i>Research on Sensitivity of Reservoir Landslide Disaster-forming Factors in There-Gorge Based on Grey Correlation Method</i>
14:30	P. Migon <i>Large-scale slope remodelling by mass movements – Kamienne Mts, Sudetes (SW Poland)</i>
14:45	M. Rouai & Y. El Kharim <i>On Self-Organized Criticality of landslides in Rif Mountains (Morocco)</i>
15:00	M. Basharat , J. Rohn, M. Rustam Khan & Y. Srafraz <i>The Jhelum Fault and its relations to active mass movements in the Northeast Himalayas of Pakistan</i>

Coffee break (15:15-15:45)

15:45-17:15 Oral session 4: Rapid rock slope failures
(Chair: Strom A. & Agliardi F.)

15:45	D. Maserà, M. Giardino, L. Perotti, A.V. Poschinger, N. Calhoun & J. J. Clague <i>Application of geomorphology and geomatics in the study of the Flims and Tamins landslides, Switzerland</i>
16:00	A. Blais-Stevens , M. Geertsema, J.W. Schwab & Th. W.J. van Asch <i>A complex landslide triggered in an Eocene volcanic-volcaniclastic succession along Sutherland River, British Columbia, Canada</i>
16:15	I. Penna , A. Abellán, A. Pedrazzini, S. Daicz, M.-H. Derron, L. Fauqué, & M. Jaboyedoff <i>The role of tectonics on the occurrence of the Potrero de Leyes rock avalanche (Pampeanas ranges)</i>
16:30	D. Jarman , S. McColl, S. Cook & S. Hoon <i>Can valley rebound after concentrated erosion of bedrock drive montane rock slope failure? The Glen Roy (Scotland) geodetic datum.</i>
16:45	M. Ostermann <i>The Brenner Pass Rockslide Cluster - Characterisation, Dating and Geomorphologic Impacts</i>
17:00	P. Frattini, G.B. Crosta , E. Valbuzzi & F. Agliardi <i>Inventory of large landslides and rock avalanches in the European Alps</i>

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8:30-10:45 Oral session 5: Monitoring & modelling of rock slopes (Chair: Blikra L.H. & Yugsi Molina F.X.)

8:30	W. Xiang & L. Lang <i>Comprehensive field test site in Huangtupo Landslides</i>
8:45	F. Dammeier , C. Hammer, J.R. Moore, F. Haslinger & S. Loew <i>Automatic detection of rockslides in continuous seismic data</i>
9:00	L. Grämiger , J.R. Moore, V. Gischig & S. Loew <i>Beyond debuitressing: Thermo-hydro-mechanical stresses and induced rock mass damage during repeat glacial cycles</i>
9:15	P. Tábořík , J. Stemberk, F. Hartvich, J. Blahůt & T. Belov <i>Long-term monitoring of the active slope deformation Cereníšte using a complex of geophysical and geotechnical techniques (Czech Republic)</i>
10:00	Q. Tan <i>Stability analysis and prediction on Yanwanqiao west slope, Three Gorges Reservoir Region based on cut-through ratio study of the sliding surface</i>
10:15	P. Liščák & M. Fraštia <i>Kraľovany Rockslide - its tectonical predisposition and kinematics</i>
10:30	B. Nilsen <i>Challenges of rock slope stability analysis according to Eurocode 7, with particular emphasis on limit equilibrium analysis</i>

Coffee break (10:40-11:15)

11:15-12:45 Oral session 5: Monitoring & modelling of rock slopes, continued (Chair: Loew S. & Lovisolo M.)

11:15	J.-P. Malet , J. Gance, C. Doubre, A. Stumpf, J. Travelletti, D. Raucoules & M. de Michelle <i>Estimation of landslide slip surface geometry and rheology from multiple optical and SAR sensors</i>
11:30	R. Schlögel , C. Doubre, J-P. Malet & T. Lebourg <i>Kinematic of Deep-seated La Clapière Landslide (Tinée Valley, French Alps) monitored by DInSAR and ground-based measurements</i>
11:45	T. R. Lauknes , J. F. Dehls, L. H. Blikra, L. Rouyet, H. Ø. Eriksen, Y. Larsen & T. Grydland <i>InSAR monitoring of the Jettan Rockslide in northern Norway using high-resolution Radarsat-2 and TerraSAR-X satellite data</i>
12:00	L. Rouyet , L. Kristensen, M.-H. Derron, C. Michoud, L. H. Blikra, M. Jaboyedoff & T. R. Lauknes <i>Monitoring and characterization of Mannen/Børa rock slope (western Norway) using GB-InSAR and satellite InSAR</i>
12:15	A. Mathieu , J.-P. Malet & J. Travelletti <i>Characterization of rockslide dynamics by the joint analysis of LiDAR and stereo-photogrammetric point clouds</i>
12:30	R.L. Hermanns , J. Gosse, T.F. Redfield, T. Oppikofer & T. Eiken <i>Understanding long-term gravitational rock slope deformation by means of terrestrial cosmogenic nuclide dating</i>

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Lunch break (12:45-13:45)

13:45-15:00 Slope Tectonics Poster session

<p>M. Bacenetti, P. Cadoppi, M. Morelli, M. Giardino, L. Perotti & G. Perrone <i>Recent tectonic activity vs. evolution of mountain relief in the Germanasca Valley (Cottian Alps, NW-Italy)</i></p>
<p>I. Baroň, M. Kernstocková & W. Gasper <i>Reconstruction of a paleostress field of a mudslide</i></p>
<p>J. Cai, R. Tang & L. Xie <i>Controlling Factors Analysis and Mechanism Research of Toppling Deformation for Homogeneous Equal Thickness Anti-dip Layered Rock Slopes</i></p>
<p>S. Cao, X. Wei, L. Lang & J. Wang <i>Structural features of No.1 adjacent to river sliding debris of Huangtupo Landslides</i></p>
<p>G.B. Crosta, P. Frattini, F. Pena Reyes & F. Riva <i>Control of large slope instability on surface and subsurface hydrology</i></p>
<p>G.B. Crosta & R.L. Hermanns <i>Third look at suspect mega rockslide called the Lluta collapse, N-Chile</i></p>
<p>D. Jarman & M. Ostermann <i>Koefels landslide complex, Oetztal, Austria - a twin-source interpretation</i></p>
<p>O. Krasny, H. Semíková & P. Kucera <i>Seismo-Acoustic monitoring of hydraulic fracturing laboratory tests of rock samples</i></p>
<p>C. Li, S. Liao & J. Wang <i>The sensibility analysis of the maximum value of PGA amplification factor</i></p>
<p>S. Lu, S. Liao & J. Wang <i>The research of effects of discontinuity plan factors on amplification coefficient of peak ground acceleration</i></p>
<p>G. Sandøy, T. Oppikofer & B. Nilsen <i>Back-analysis of the 1756 Tjellefonna rockslide (western Norway)</i></p>
<p>R. Tang, E. Yan & J. Cai <i>Formation mechanism of hydraulic driven bedding landslide - A case study in Xintang landslide</i></p>
<p>T. Wen, X. Yi & Q. Tan <i>Energy change law of sandstone under loading and unloading conditions in high stress area, and its damage analysis</i></p>
<p>X. Yi & R. Yong <i>Distribution of lateral force acting on landslide stabilizing piles under different morphological characteristics</i></p>
<p>Y. Zhang, H. Tang & C. Li <i>Second-order Dynamic System Model for Landslide Based on Physical Model Test</i></p>

Coffee break (14:30-15:00)

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15:00-16:15 Oral session 6: Reactivation of pre-existing structures & formation of new structures in rock slopes (Chair: Chigira M. & Baron I.)

15:00	S. Loew , M. Ziegler & S. Bucher <i>Exfoliation Fracturing in the Central Aar Granite (Switzerland)</i>
15:15	M. Böhme , H.S.S. Bunkholt, J.F. Dehls, T. Eiken, H.Ø. Eriksen, J. Gosse, R.L. Hermanns, L. Kristensen, F.X. Yugsi Molina & T. Oppikofer <i>Understanding the deformation mechanism of the unstable rock slope Gamanjuni 3, northern Norway, for hazard and risk assessment</i>
15:30	F. Humair , J.-L. Epard, M. Jaboyedoff, D. Pana, A. Pedrazzini <i>The role of tectonics as influencing factors to gravitational slope deformations in Foreland Fold and Thrust Belts (FFTB): examples from the Jura Mountain belt and the Livingstone Range anticlinorium</i>
16:45	L.H. Blikra & I. Skrede <i>Structural control of large rockslides: Does surface data give us the correct picture?</i>
16:00	M. Jaboyedoff , M.-H. Derron & I. Penna <i>Beyond Slope Tectonics</i>

Organizers:

Geological Survey of Norway; [Åknes/Tafjord Beredskap IKS](#); [University of Lausanne](#)

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