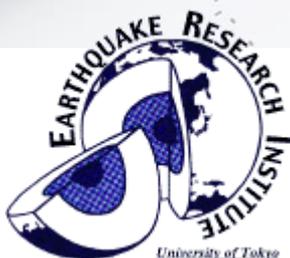
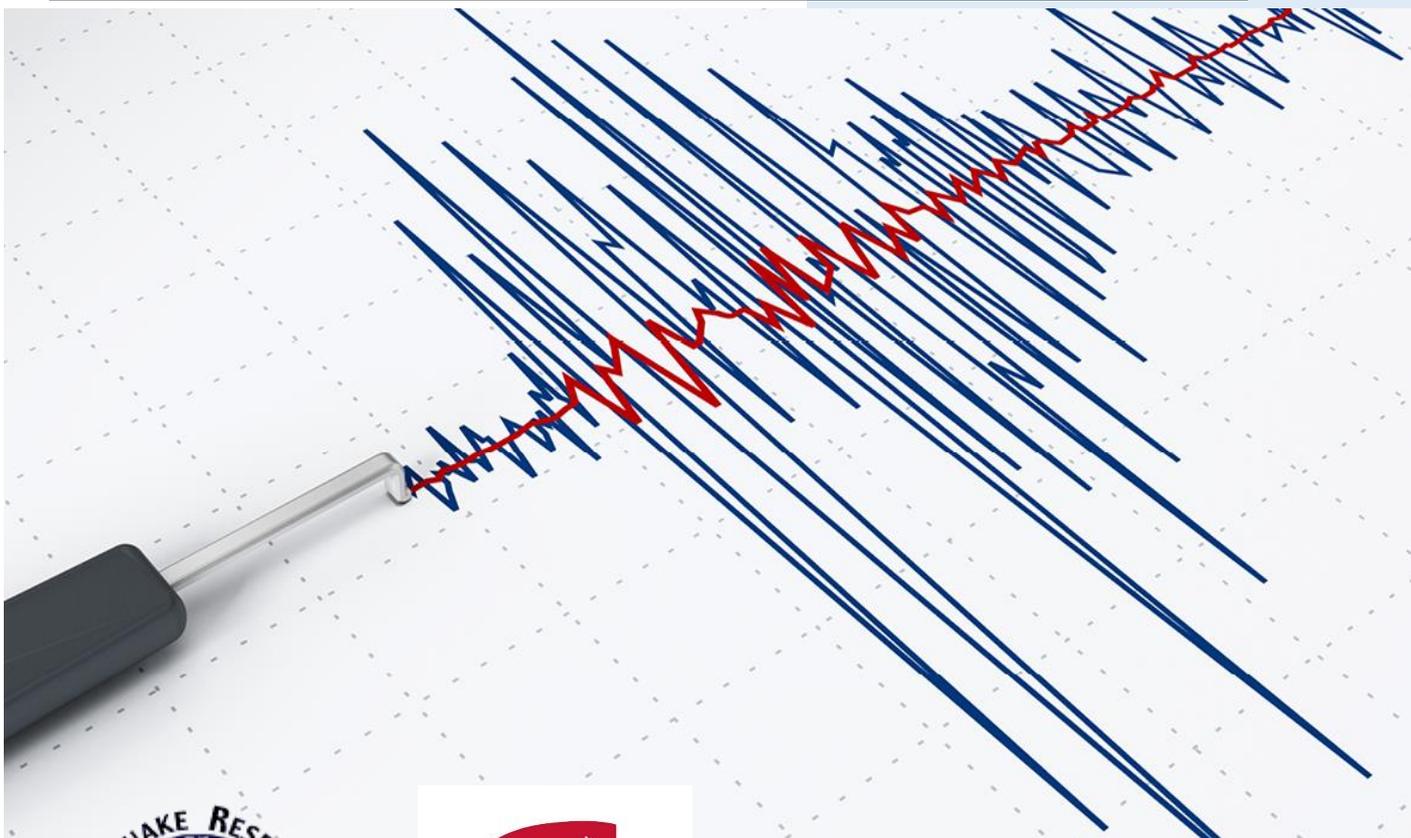


2018

New Zealand-Japan Joint Workshop on Slow Slip

Organizers: Martha Savage, Kimi Mochizuki, Laura Wallace, Cheryl Johannsen and Emily Brook.



26th- 27th February

Rutherford House, RHMZ03,

Victoria University of

Wellington

**School of
Geography, Environment and Earth Sciences**

Te Kura Tātai Aro Whenua

Workshop Schedule

Monday, February 26, 2018	
8:30am	Registration
8:45am	Welcome and convenor - <i>Martha Savage</i>
8:50am	Opening (Japanese Ambassador and Vice Chancellor)
9:10am	<i>Satoshi Ide</i> : World slow earthquakes and tremors in New Zealand
9:40am	<i>Laura Wallace</i> : Slow slip events at the Hikurangi subduction zone, New Zealand
10:10am	Morning Tea and Poster viewing
10:30am	<i>Phil Barnes</i> : Along-strike variations in Hikurangi margin structure, relation to SSE, and progress on IODP expeditions 372/375
11:00am	<i>Shuichi Kodaira</i> : Subduction structure around Japan; the Japan Trench, Nankai Trough and the southern Ryukyu Trench.
Theme 1:Shallow slow slip: Convenor Laura Wallace	
11:30am	<i>Kimi Mochizuki</i> : Seismicity including slow earthquakes offshore northern Hikurangi: results from HOBITSS and its pilot observation
11:50am	<i>Yoshihiro Ito</i> : Seismic waves triggering slow slip event on the pressure gauge records in the Hikurangi subducting margin
12:10pm	<i>Charles Williams</i> : Static and Time-Dependent Inversions of Slow Slip Along the Hikurangi Subduction Margin Using Numerical Green's Functions
12:30pm	Poster intro: 2 minutes for each poster
12:50pm	Lunch & posters
1:40pm	<i>Dan Bassett</i> : Seafloor structure near Hobbits (input from Dan Barker & Stuart Henrys and Becky Bell)
2:10pm	<i>Hiroshi Ichihara</i> : Pilot Ocean bottom electromagnetic survey in the Hikurangi subduction margin
2:30pm	<i>Naoki Uchida</i> : Shallow slow slip along the Japan trench estimated from the seismic and geodetic data
Theme 2: Areas with deeper slow slip and/or locking: Convenor Kimi Mochizuki	
2:50pm	<i>Wiebke Heise</i> : Imaging the transition from weakly to strongly coupled plate interface at the Hikurangi margin, New Zealand
3:10pm	Afternoon tea
3:30pm	<i>Tim Stern</i> : Nature of the subducted plate beneath Eastern North Island: lithospheric structure of the Hikurangi Plateau
3:50pm	<i>Martha Savage</i> : Wellington region structure and anisotropy
4:10pm	<i>Takuya Nishimura</i> : Interplate coupling along northern margin of Philippine Sea plate, estimated from GNSS and GPS-A data
4:30pm	Discussion
7:00pm	Conference dinner location Foxglove - 33 Queens Wharf

Tuesday, February 27, 2018

Theme 3: Kaikoura earthquake and relation between slow slip and earthquakes: Convenor Emily Warren-Smith

9:00am	<i>Ian Hamling</i> : Shattering a plate boundary: Complex multi-fault rupture during the 2016 Mw 7.8 Kaikoura earthquake, New Zealand
9:20am	<i>Bill Fry</i> : Seismicity and repeating events
9:35am	<i>Calum Chamberlain</i> : Low-frequency earthquakes on the deep extent of the Alpine Fault.
9:50am	<i>Yoshi Kaneko</i> : Rupture process of the 2016 M7.8 Kaikōura earthquake
10:10am	<i>Ryosuke Ando</i> : Dynamic rupture simulation of the 2016, Kaikoura earthquake: Physics underlying multi-segmented rupture
10:30am	Morning Tea
11:00am	<i>Bun'ichiro Shibazaki</i> : Modeling triggered slow slip events by the Kaikoura earthquake along the Hikurangi subduction plate interface
11:20am	<i>Matt Gerstenberger, Laura Wallace and Yoshi Kaneko</i> : Hazard models including slow slip
Theme 4: Geology and physics/modelling: Convenor Yoshi Ito	
11:40am	<i>Rick Sibson</i> : Dilatant Fault-Fracture Meshes - Sources for Seismic/Aseismic Shear
12:10pm	<i>Kohtaro Ujiie</i> : Geology of slow earthquake source
12:40pm	Lunch
1:30pm	<i>Heather Savage</i> : Frictional behavior of input sediments to the Hikurangi Trench, New Zealand
2:00pm	<i>Carolyn Boulton</i> : Geology and frictional properties of Hikurangi Subduction Zone sediments from surface outcrop and ODP 1124C borehole samples
2:20pm	<i>Yoshitaka Hashimoto</i> : Stochastic numerical simulation of regular and slow earthquakes
2:40pm	<i>Takahiro Hatano</i> : Tidal effects on seismic activity as probed by rupture nucleation process
3:00pm	Afternoon tea
3:30pm	<i>Akiko Takeo</i> : Size and interevent-time scalings of slow earthquakes
3:50pm	<i>Tetsuo Yamaguchi</i> : Slow to Fast Slip Transition and Laboratory Experiments Using Gels
4:10pm	<i>Takanori Matsuzawa</i> : Numerical simulation of the effect of earth tides on short-term slow slip events in the Shikoku region
4:30pm	Discussion

Field Trip to Kaikoura earthquake region: 28 February-2 March

Field Trip to Wellington Fault: 28 February

Public Lecture 28 February 6 PM

Post-Workshop Activities

Wednesday 28 Feb.—Field trip and tour of Wellington region. Field trip – Dee Ninis to lead. Top of Mt. Victoria followed by trip along motorway to GNS and views of the Wellington fault and its effects. 10 people

Wednesday 28 Feb—Public lecture. 6pm-7pm, at Rutherford House RHLT1, Victoria University. All Welcome

Wednesday 28 Feb-Friday 2 March —Field trip to go down to South Island to see Kaikoura fault ruptures with Tim Little's 3rd year Geology field camp. 9 people Emily Warren-Smith and Martha Savage to lead.

List of Posters

First Name:	Last Name:	Abstract Title
Miho	Asada	An initial idea of overlapping distribution of submarine mud volcanoes and slow slip events, ver. SSE symposium in N.Z.
Naofumi	Aso	Stochastic numerical simulation of regular and slow earthquakes
Pasan	Herath	Crust and upper mantle structure beneath eastern North Island, New Zealand along PEGASUS23 and 25 lines of SAHKE
Yuriko	Iwasaki	Continuous tremor activity accompanying 2014 Mw 6.8 slow-slip event in the Hikurangi subduction margin, New Zealand.
Motoyuki	Kido	Repeated GPS-Acoustic measurements above the vicinity of the slow-slip region in the Hikurangi subduction zone
Yuki	Miyake	Earthquake sequence simulations of a fault in viscoelastic material with spectral boundary integral equation method: The effect of interseismic stress relaxation on a behaviour of a rate-weakening patch
Tomoya	Muramoto	Evaluation of seafloor crustal deformation using ocean bottom pressure with non-tidal variability corrections on local array measurements: Application to the Hikurangi margin
Makoto	Otsubo	Pore fluid overpressures for tensile cracking at depth of shallow slow earthquakes: an example of Makimine mélanges, Kyushu, SW Japan
So	Ozawa	Earthquake Nucleation on Fractal Rough Faults
Hiromu	Sakaue	Estimation of the spatiotemporal evolution of slow slip events in the Tokai region, central Japan, during 1996 - 2016 using GNSS data
Takehito	Suzuki	Generalization of the Universal Law Observed in the Governing Equation System with Common Nullclines
Makoto	Uyeshima	A report on the subsurface electrical resistivity structure obtained from the Network-MT survey in the vicinity of area with a forthcoming slow slip event in the SW part of the Shikoku Island, SW Japan
Emily	Warren-Smith	Improved Focal Mechanisms and Stress Patterns of Seismicity Pertaining to Shallow Slow Slip in the Northern Hikurangi.
Pasan	Herath	Crust and upper mantle structure beneath eastern North Island, New Zealand along PEGASUS23 and 25 lines of SAHKE
Hubert	Zal	Temporal variations in seismic anisotropy during the 2014 Gisborne SSE, New Zealand