

## Curriculum Vitae

(ver. 19/11/2017)

Title; Dr.  
Last Name; Ito  
First Name; Yoshihiro  
Institution; Disaster Prevention Research Institute, Kyoto University  
Department; Research Center for Earthquake Prediction  
Position; Associate Professor  
Office Address; Gokasyo, Uji, Kyoto, 611-0011, Japan  
Phone; +81-774-38-4240  
Fax; +81-774-38-4240  
e-mail; ito.yoshihiro.4w@kyoto-u.ac.jp  
Date of Birth; 25/10/73  
Citizenship; Japan

### Education

B.S.E, Faculty of Education, Utsunomiya University (04/92-03/96)  
M.ed., Graduate school of Education, Utsunomiya University (04/96-03/98)  
Ph. D., Graduate school of Science, Tohoku University (03/98-02/03)

### Professional Experience

Research Associate, Tohoku University (Researcher of Japanese Antarctic Research Expedition) (10/00-03/02)  
Technical Staff, National Research Institute for Earth Science and Disaster Prevention, (03/03-03/06)  
Research Fellow, National Research Institute for Earth Science and Disaster Prevention, (04/06-03/07)  
Assistant Professor, Graduate School of Science, Tohoku University (04/07-08/13)  
Associate Professor, Disaster Prevention Research Institute, Kyoto University (09/13-present)  
  
Invited Researcher, National Research Institute for Earth Science and Disaster Prevention, (07/07-present)  
Visiting Senior Scientist, Japan Agency for Marine-Earth Science and Technology, (04/15-present)  
Invited Lecturer, Faculty of Education, Utsunomiya University (10/07-03/10)  
Invited Lecturer, Faculty of Life and Environmental Science, University of Yamanashi (11/15)  
Invited Lecturer, Faculty of Science, University of the Ryukyus (11/15)

### Memberships

Seismological Society of Japan  
Geological Society of Japan  
Geodetic Society of Japan  
Seismological Society of America  
American Geophysical Union

### Major Background;

Earthquake seismology

### Awards:

The 2014 Editors' Citation for Excellence in Refereeing - Geophysical Research Letters, March 13, 2015

The 2015 Editors' Citation for Excellence in Refereeing - Geophysical Research Letters, April 19, 2016

### Peer-reviewed papers;

65. Katakami, S., Y. Yamashita, H. Yakihara, H. Shimizu, **Y. Ito**, and K. Ohta (2017), Tidal Response in Shallow tectonic tremors, *Geophys. Res. Lett.*, 44, 9699-9706, doi:10.1002/2017GL074060.
64. **Ito, Y.**, M. J. Ikari, K. Ujiie, and A. J. Kopf (2017), Coseismic slip propagation on the Tohoku plate boundary fault facilitated by slip-dependent weakening during slow fault slip, *Geophys. Res. Lett.*, 44, 8749–8756, doi:10.1002/2017GL074307.
63. Kubota, T., R. Hino, D. Inazu **Y. Ito**, T. Inuma, Y. Ohta, S. Suzuki, and K. Suzuki (2016), Coseismic slip model of offshore moderate interplate earthquakes on March 9, 2011 in Tohoku using tsunami waveforms, *Earth, Planet. Sci. Lett.*, 458, 241-251, doi:10.1016/j.epsl.2016.10.047.
62. Muto, J., B. Shibazaki, T. Inuma, **Y. Ito**, Y. Ohta, S. Miura, and Y. Nakai (2016), Heterogeneous rheology controlled postseismic deformation of the 2011 Tohoku-Oki earthquake, *Geophys. Res. Lett.*, 43, 4971-4978, doi:10.1002/2016GL068113.
61. Wallace, L., S. Webb, **Y. Ito**, K. Mochizuki, R. Hino, S. Henrys, S. Schwartz, and A. Sheehan (2016), Slow slip near the trench at the Hikurangi subduction zone, New Zealand, *Science*, 352, 701–704, doi:10.1126/science.aaf2349.
60. Harris, R., L. Wallace, S. Webb, **Y. Ito**, K. Mochizuki, H. Ichihara, S. Henrys, A. Tréhu, S. Schwartz, A. Sheehan, D. Saffer, and R. Lauer (2016), Investigations of shallow slow slip offshore of New Zealand, *Eos*, 97, doi:10.1029/2016EO048945.
59. Kubota, T., R. Hino, D. Inazu, **Y. Ito**, and T. Inuma (2015), Complicated rupture process of the  $M_w$  7.0 intraslab strike-slip earthquake in the Tohoku region on 10 July 2011 revealed by near-field pressure records, *Geophys. Res. Lett.*, 42, 9733–9739, doi:10.1002/2015GL066101.
58. **Ito, Y.**, and M. J. Ikari (2015), Velocity- and slip-dependent weakening in simulated fault gouge: Implications for multi-mode fault slip, *Geophys. Res. Lett.*, doi:10.1002/2015GL065829.
57. Ikari, M. J., **Y. Ito**, K. Ujiie, and A. J. Kopf (2015), Spectrum of slip behaviour in Tohoku fault zone samples at plate tectonic slip rates, *Nature Geoscience*, doi:10.1038/ngeo2547.
56. Ghosh, A., E. Uesca-Pérez, E. Brodsky, and **Y. Ito** (2015), Very low frequency earthquakes (VLFs) in Cascadia migrate with tremor, *Geophys. Res. Lett.*, 42, 3228–3232. doi: 10.1002/2015GL063286.
55. **Ito, Y.**, R. Hiino, S. Suzuki, and Y. Kaneda (2015), Episodic tremor and slip near the Japan Trench prior to the 2011 Tohoku–Oki earthquake, *Geophys. Res. Lett.*, 42, 6, 1725-1731, doi:10.1002/2014GL062986.
54. Nakatani, Y. K. Mochizuki, M. Shinohara, T. Yamada, **Y. Ito**, Y. Murai, and T. Sato (2015), Changes in seismicity before and after the 2011 Tohoku earthquake around its southern limit revealed by dense ocean-bottom seismic array data, *Geophys. Res. Lett.*, 42: 1384-1389. doi:10.1002/2015GL063140.

53. Asano, Y., K. Obara, T. Matsuzawa, H. Hirose, and **Y. Ito** (2015), Possible shallow slow slip events in Hyuga-nada, Nankai subduction zone, inferred from migration of very low frequency earthquakes, *Geophys. Res. Lett.*, 42, doi:10.1002/2014GL062165.
52. Romano, F., E. Trasatti, S. Lorito, C. Piromallo, A. Piatanesi, **Y. Ito**, D. Zhao, K. Hirata, P. Lanucara and M. Cocco (2014), Structural control on the Tohoku earthquake rupture process investigated by 3D FEM, tsunami and geodetic data, *Scientific Reports*, doi:10.1038/srep05631.
51. **Ito, Y.**, and R. Hino (2013), Velocity reduction in an offshore region after the 2011 Tohoku-Oki earthquake, revealed from ocean-bottom seismic records, *Proceedings of the 11th SEGJ International Symposium*, 523-526, doi: 10.1190/segj112013-131.
50. Hino, R., **Y. Ito**, Y. Ohta, T. Inuma, and D. Inazu (2013), Ocean bottom pressure records of the 2011 Tohoku-Oki earthquake, *Proceedings of the 11th SEGJ International Symposium*, 462-465, doi: 10.1190/segj112013-117.
49. Hino, R., D. Inazu, Y. Ohta, **Y. Ito**, S. Suzuki, T. Inuma, Y. Osada, M. Kido, H. Fujimoto, Y. Kaneda (2013), Was the 2011 Tohoku-Oki earthquake preceded by aseismic preslip? Examination of seafloor vertical deformation data near the epicenter, *Mar. Geophys. Res.*, doi:10.1007/s11001-013-9208-2.
48. Arai, K., H. Naruse, R. Miura, K. Kawamura, R. Hino, **Y. Ito**, D. Inazu, M. Yokokawa, N. Izumi, M. Maruyama, T. Kasaya (2013), Tsunami-generated turbidity current of the 2011 Tohoku-Oki earthquake, *Geology*, 41, 1195-1198, doi:10.1130/G34777.1
47. Muto, J., B. Shibazaki, **Y. Ito**, T. Inuma, M. Ohzono (2013), Two-dimensional viscosity structure of the northeastern Japan islands arc-trench system, *Geophys. Res. Lett.*, 40, 4604-4608, doi:10.1002/grl.50906.
46. Davis, E., M. Kinoshita, K. Becker, K. Wang, Y. Asano, **Y. Ito** (2013), Episodic deformation and inferred slow slip at the Nankai subduction zone during the first decade of CORK borehole pressure and VLFE monitoring, *Earth Planet. Sci. Lett.*, 368, 110-118.
45. **Ito, Y.**, R. Hino, M. Kido, H. Fujimoto, Y. Osada, D. Inazu, Y. Ohta, T. Inuma, M. Ohzono, S. Miura, M. Mishina, K. Suzuki, T. Tsuji, J. Ashi (2013), Episodic slow slip events in the Japan subduction zone before the 2011 Tohoku-Oki earthquake, *Tectonophysics*, 600, 14-26.
44. Tsuji, T., K. Kawamura, T. Kanamatsu, T. Kasaya, K. Fujikura, **Y. Ito**, T. Tsuru, and M. Kinoshita (2013), Extension of continental crust by anelastic deformation during the 2011 Tohoku-oki earthquake: The role of extensional faulting in the generation of a great tsunami, *Earth. Planet. Sci. Lett.*, 364, 44-58.
43. Shinohara, M., Y. Machida, T. Yamada, K. Nakahigashi, T. Shinbo, K. Mochizuki, Y. Murai, R. Hino, **Y. Ito**, T. Sato, H. Shiobara, K. Uehira, H. Yakiwara, K. Obana, N. Takahashi, S. Kodaira, K. Hirata, H. Tsushima, and T. Iwasaki, Precise aftershock distribution of the 2011 off the Pacific coast of Tohoku earthquake revealed by ocean bottom seismometer network, *Earth Planet Space*, 64, 1137-1148.
42. Nakahigashi, K., M. Shinohara, K. Mochizuki, T. Yamada, R. Hino, T. Sato, K. Uehira, Y. **Y. Ito**, Murai and T. Kanazawa (2012), P-wave velocity structure in the southernmost source region of the 2011 Tohoku earthquake, off the Boso Peninsula deduced by an ocean bottom seismographic survey, *Earth Planet Space*, 64, 1149-1156.
41. Suzuki, K., R. Hino, **Y. Ito**, Y. Yamamoto, S. Suzuki, H. Fujimoto, M. Shinohara,

- M. Abe, Y. Kawaharada, Y. Hasegawa, and Y. Kaneda (2012), Seismicity near the hypocenter of the 2011 off the Pacific coast of Tohoku earthquake deduced by using ocean bottom seismographic data, *Earth Planet Space*, 64, 1125-1135.
40. **Ito, Y.**, and K. Shiomi (2012), Seismic scatterers within subducting slab revealed from ambient noise autocorrelation, *Geophys. Res. Lett.*, 39, L1903, doi:10.1029/2012GL053321.
  39. Hasegawa, A., K. Yoshida, Y. Asano, T. Okada, T. Iinuma, **Y. Ito** (2012), Change in stress field after the 2011 great Tohoku-Oki earthquake, *Earth. Planet. Sci. Lett.*, 355–356, 231–243.
  38. **Ito, Y.**, K. Shiomi, J. Nakajima, and R. Hino (2012), Autocorrelation analysis of ambient noise in northeastern Japan subduction zone, *Tectonophysics*, 572–573, 38–46.
  37. Ohta, Y., R. Hino, D. Inazu, M. Ohzono, **Y. Ito**, M. Mishina, T. Iinuma, J. Nakajima, Y. Osada, K. Suzuki, H. Fujimoto, K. Tachibana, T. Demachi, S. Miura (2012), Geodetic constraints on afterslip characteristics following the March 9, 2011, Sanriku-oki earthquake, Japan, *Geophys. Res. Lett.*, 39, L16304, doi:10.1029/2012GL052430.
  36. Nakahigashi, K., M. Shinohara, E. Kurashimo, T. Yamada, A. Kato, T. Takanami, K. Uehira, **Y. Ito**, T. Iidaka, T. Igarashi, H. Sato, R. Hino, K. Obana, Y. Kaneda, N. Hirata, T. Iwasaki T. Kanazawa (2012), Seismic structure of the source region of the 2007 Chuetsu-oki earthquake revealed by offshore-onshore seismic survey: asperity zone of intraplate earthquake delimited by crustal inhomogeneity, *Tectonophysics*, 562–563, 34–47.
  35. Iinuma, T., R. Hino, M. Kido, D. Inazu, Y. Osada, **Y. Ito**, M. Ohzono, H. Tsushima, S. Suzuki, H. Fujimoto, S. Miura (2012), Coseismic slip distribution of the 2011 off the Pacific Coast of Tohoku Earthquake (M9.0) refined by means of seafloor geodetic data, *J. Geophys. Res.*, 117, B07409, doi:10.1029/2012JB009186.
  34. Yoshida, K., A. Hasegawa, T. Okada, T. Iinuma, **Y. Ito**, and Y. Asano (2012), Stress before and after the 2011 Great Tohoku-oki earthquake, and induced earthquake in inland areas of eastern Japan, *Geophys. Res. Lett.*, 39, L03302, doi:10.1029/2011GL049729.
  33. Koga, S., **Y. Ito**, R. Hino, M. Shinohara, and N. Umino (2012), Focal Mechanisms of Small Earthquakes within the Pacific Plate near the Japan Trench, *Zisin*, 64, 75-90 (in Japanese with English abstract).
  32. Kido, M., Y. Osada, H. Fujimoto, R. Hino, and **Y. Ito** (2011), Trench-normal variation in observed seafloor displacements associated with the 2011 Tohoku-Oki earthquake, *Geophys. Res. Lett.*, 38, L24303, doi:10.1029/2011GL050057.
  31. Shibazaki, B., T. Matsuzawa, A. Tsutsumi, K. Ujiie, A. Hasegawa, and **Y. Ito** (2011), 3D modeling of the cycle of a great Tohoku-oki earthquake, considering frictional behavior at low to high slip velocities, *Geophys. Res. Lett.*, 38, L21305, doi:10.1029/2011GL049308.
  30. Saito, T., **Y. Ito**, D. Inazu, and R. Hino (2011), Tsunami source of the 2011 Tohoku-Oki earthquake, Japan: Inversion analysis based on dispersive tsunami simulations, *Geophys. Res. Lett.*, 38, L00G19, doi:10.1029/2011GL049089.
  29. **Ito, Y.**, T. Tsuji, Y. Osada, M. Kido, D. Inazu, Y. Hayashi, H. Tsushima, R. Hino, and H. Fujimoto (2011), Frontal wedge deformation near the source region of the 2011 Tohoku-Oki earthquake, *Geophys. Res. Lett.*, 38, L00G05, doi:10.1029/2011GL048355.
  28. Y. Asano, T. Saito, **Y. Ito**, K. Shiomi, H. Hirose, T., Matsumoto, S. Aoi, S. Hori, and S. Sekiguchi (2011), Spatial distribution and focal mechanisms of aftershocks of the 2011 Mw 9.0 earthquake in eastern Japan, *Earth Planet Space*, 63, 669-673.
  27. Shinohara, M., T. Yamada, K. Nakahigashi, S. Sakai, K. Mochizuki, K. Uehira, **Y.**

- Ito**, R. Azuma, Y. Kaiho, T. No, H. Shiobara, R. Hino, Y. Murai, H. Yakiwara, T. Sato, Y. Machida, T. Shinbo, T. Isse, H. Miyamachi, K. Obana, N. Takahashi, S. Kodaira, Y. Kaneda, K. Hirata, S. Yoshikawa, K. Obara, T. Iwasaki, and N. Hirata (2011), Aftershock observation of the 2011 off the Pacific coast of Tohoku Earthquake by using ocean bottom seismometer network, *Earth Planet Space*, 63, 835-840.
26. Tsuji, T., **Y. Ito**, M. Kido, Y. Osada, H. Fujimoto, J. Ashi, M. Kinoshita, and T. Matsuoka (2011), Potential Tsunamigenic Fault of the 2011 Off-Tohoku Earthquake, *Earth Planet Space*, 63, 831-834. [[Link](#)]
25. **Ito**, **Y.**, K. Obara, T. Matsuzawa, and T. Maeda (2009), Very-low-frequency earthquakes related to small asperities on the plate boundary interface at the locked to aseismic transition, *J. Geophys. Res.*, 114, B00A13, doi:10.1029/2008JB006036.
24. Nakamichi, H., H. Kumagai, M. Nakano, M. Okubo, F. Kimata, **Y. Ito**, and K. Obara (2009), Source mechanism of a very-long-period event at Mt Ontake, central Japan: Response of a hydrothermal system to magma intrusion beneath the summit, *J. Vol. Geotherm. Res.*, 187, 167–177.
23. **Ito**, **Y.**, Y. Asano, and K. Obara (2009), Very-low-frequency earthquakes indicate a transpressional stress regime in the Nankai accretionary prism, *Geophys. Res. Lett.*, L20309, doi:10.1029/2009GL039332.
22. Hino, R., R. Azuma, **Y. Ito**, K. Suzuki, H. Tsushima, S. Suzuki, M. Miyashita, T. Tomori, M. Arizono, G. Tange (2009), Insight into complex rupturing of the immature bending normal fault in the outer slope of the Japan Trench from aftershocks of the 2005 Sanriku earthquake (Mw = 7.0) located by ocean bottom seismometry, *Geochem. Geophys. Geosyst.*, 10, Q07O18, doi:10.1029/2009GC002415.
21. Yamamoto, Y., R. Hino, K. Suzuki, **Y. Ito**, T. Yamada, M. Shinohara, T. Kanazawa, G. Aoki, M. Tanaka, K. Uehira, G. Fujie, Y. Kaneda, T. Takanami, and T. Sato (2008), Spatial heterogeneity of the mantle wedge structure and interplate coupling in the NE Japan forearc region, *Geophys. Res. Lett.*, L23304, doi:10.1029/2008GL036100.
20. Shinohara, M., T. Kanazawa, T. Yamada, K. Nakahigashi, S. Sakai, R. Hino, Y. Murai, A. Yamazaki, K. Obana, **Y. Ito**, K. Iwakiri, R. Miura, Y. Machida, K. Mochizuki, K. Uehira, M. Tahara, A. Kuwano, S. Amamiya, S. Kodaira, T. Takanami, Y. Kaneda, and T. Iwasaki (2008), Precise aftershock distribution of the 2007 Chuetsu-oki Earthquake obtained by using an ocean bottom seismometer network, *Earth Planets Space*, 60, 1121–1126.
19. Asano, Y., K. Obara, and **Y. Ito** (2008), Spatiotemporal distribution of very-low frequency earthquakes in Tokachi-oki near the junction of the Kuril and Japan trenches revealed by using array signal processing, *Earth Planets Space*, 60, 871–875.
18. Shiomi, K., M. Matsubara, **Y. Ito**, and K. Obara (2008), Simple relationship between seismic activity along Philippine Sea slab and geometry of oceanic Moho beneath southwest Japan, *Geophys. J. Int.*, 173, 1018–1029.
17. **Ito**, **Y.**, K. Obara, K. Shiomi, S. Sekine, and H. Hirose (2007), Slow Earthquakes Coincident with Episodic Tremors and Slow slip events, *Science*, 315, 503-506 (Published online 30 November 2006).
16. **Ito**, **Y.**, S. Sekiguchi, T. Okada, R. Honda, K. Obara and S. Hori (2006), Performance of regional distance centroid moment tensor inversion applied to the 2004 mid-Niigata prefecture earthquake, Japan, *Geophys. J. Int.*, 167, 1317-1331.

15. Matsumura, M., **Y. Ito**, H. Kimura, K. Obara, S. Sekiguchi, S. Hori, and K. Kasahara (2006), Development of Accurate and Quick Analysis System for Source Parameters (AQUA), *Zisin*, 59, 167-184 (in Japanese with English abstract)
14. Matsumoto, T., **Y. Ito**, and H. Matsubayashi (2006), Spatial Distribution of F-net Moment Tensor Solutions of the Mid Niigata Prefecture Earthquake in 2004, *Zisin*, 58, 427-443 (in Japanese with English Abstract)
13. **Ito, Y.** and K. Obara (2006), Very low frequency earthquakes within a accretionary prisms are very low stress-drop earthquakes, *Geophys. Res. Lett.*, 33, doi:10.1029/2006GL025883.
12. Davis, E. E. , K. Becker, K. Wang, K. Obara, **Y. Ito**, and M. Kinoshita (2006), A discrete episode of seismic and aseismic deformation of the Nankai trough subduction zone accretionary prism and incoming Philippine Sea plate, *Earth Planet. Sci. Lett.*, 242, 73–84.
11. Tahara, M., H. Shimizu , M. Nakata and **Y. Ito** (2006), Focal depth distribution using sP depth phase and implications for plate coupling in the Hyuganada region, Japan, *Phys. Earth Planet. Int.*, 155, 219-235.
10. Matsumoto, T., **Y. Ito**, H. Matsubayashi and S. Sekiguchi (2006), Spatial distribution of F-net moment tensors for the 2005 West Off Fukuoka Prefecture Earthquake determined by the extended method of the NIED F-net routine, *Earth Planets Space*, 58, 63–67.
9. **Ito, Y.**, K. Obara, T. Takeda, K. Shiomi, T. Matsumoto, S. Sekiguchi, and S. Hori (2006), Initial-rupture fault, main-shock fault, and aftershock faults: Fault geometry and bends inferred from centroid moment tensor inversion of the 2005 west off Fukuoka prefecture earthquake, *Earth Planets Space*, 58, 69-74.
8. **Ito, Y.** and K. Obara (2006), Dynamic deformation of the accretionary prism excites very low frequency earthquakes, *Geophys. Res. Lett.*, 33, doi:10.1029/2005GL025270.
7. Nakamura, T, S. Suzuki, H. Sadedhi, S. M. F. Aghda, T. Matsushima, **Y. Ito**, S. K. Hosseini, A. J. Gandomi, and M. Maleki (2005), Source fault structure of the 2003 Bam earthquake, southern Iran, inferred from the aftershock distribution and its relation to the heavily damaged area: existence of the Arg-e-Bam fault proposed, *Geophys. Res. Lett.*, 32, doi:10.1029/2005GL022631.
6. Obara, K. and **Y. Ito** (2005), Very low frequency earthquakes excited by the 2004 off the Kii peninsula earthquakes: A dynamic deformation process in the large accretionary prism, *Earth Planets Space*, 57, 321–326.
5. **Y. Ito**, T. Matsumoto, H. Kimura, H. Matsubayashi, K. Obara, and S. Sekiguchi (2005), Spatial distribution of centroid moment tensor solutions for the 2004 off Kii peninsula earthquakes, *Earth, Planets Space*, 57, 351–356.
4. Obara, K., Y. Haryu, **Y. Ito**, and K. Shiomi (2004), Low frequency events occurred during the sequence of aftershock activity of the 2003 Tokachi-Oki earthquake; a dynamic process of the tectonic erosion by subducted seamount, *Earth Planets Space*, 56, 347–351.
3. **Ito, Y.**, H. Matsubayashi, H. Kimura, T. Matsumoto, Y. Asano, S. Sekiguchi (2004), Spatial distribution for moment tensor solutions of the 2003 Tokachi-oki earthquake (MJMA=8.0) and aftershocks, *Earth Planets Space*, 56, 301-306.
2. Okada, T., N. Umino, **Y. Ito**, T. Matsuzawa, A. Hasegawa, and M. Kamiya (2001), Source Processes of 15 September 1998 M 5.0 Sendai, Northeastern Japan,

Earthquake and Its M 3.8 Foreshock by Waveform Inversion, 2001, *Bull. Seismol. Soc. Am.* 91, 1607–1618.

1. Umino, N., **Y. Ito**, T. Igarashi, and A. Hasegawa (2001), 1964 M6.9 Oga-oki Earthquake: Slip Preceding the 1983 Japan Sea Earthquake ? , *Zisin*, 53, 263–268 (in Japanese).