Curriculum Vitae April 14, 2019

# Ryo Okuwaki

Geological Survey of Japan,

National Institute of Advanced Industrial Science and Technology (AIST)

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Education	Ph.D. (Science), University of Tsukuba	03/2019
	M.Sc. (Science), University of Tsukuba	03/2016
	B.Sc. (Science). University of Tsukuba	03/2014

Employment Research Fellow (PD) 04/2019—Present

Japan Society for the Promotion of Science

Geological Survey of Japan, AIST / Mentor: Takahiko Uchide

Research Fellow (DC1) 04/2016-03/2019

Japan Society for the Promotion of Science University of Tsukuba / Mentor: Yuji Yagi

Grant Grant-in-Aid for JSPS Fellows 2016–2019

Irregular rupture evolution during the large/great earthquakes: resolved by high-frequency radiation sources and co-seismic slip distribution (16J00298)

Young Researcher Travel Support 2018

 $10{\rm th}$  ACES (APEC Cooperation for Earthquake Science) International Workshop, Awaji Island Japan, ACES

Travel Grant 2015

The 3rd international summer school on Earthquake Science, Lake-Yamanaka Japan, Earthquake Research Institute of the University of Tokyo and Southern California Earthquake Center

Travel Grant 2014

The 2014 VISES Summer School, Oxnard CA, Southern California Earthquake Center and Earthquake Research Institute of the University of Tokyo

Travel Grant 2014

The 2014 Annual Meeting of Seismological Society of America, Anchorage Ak, Seismological Society of Japan

## Award President Prize, University of Tsukuba 2019

Outstanding Student Presentation Award, JpGU Meeting 2018	2018
Best Student Award, Doctoral Program in Earth Science Evolution, University of Tsukuba	2017
Outstanding Student Presentation Award, JpGU-AGU Joint Meeting 2017	2017
Best Poster Presentation Award, Tsukuba Global Science Week 2015	2015
Outstanding Student Presentation Awards, Seismol. Society of Japan 2014 Fall Meeting	2014
Outstanding Student Award (Provost Prize), University of Tsukuba	2014

### Service Journal referee (publons)

Earth and Planetary Science Letters Earth, Planets and Space Journal of Asian Earth Sciences Journal of Geophysical Research - Solid Earth Pure and Applied Geophysics

Ture and Applied Geophys

Tectonophysics

#### Conference convener

- Co-convener 2019 with Saeko Kita, Tomohiro Ohuchi, and Marcel Thielmann

with Saeko Kita, Tomohiro Ohuchi, and Marcel Thielmann JpGU Meeting 2019, S-CG50: Intraslab and intraplate earthquakes

- Primary convener 2018

with Wenyuan Fan, Valére Lambert, and Zacharie Duputel AGU Fall Meeting 2018, S006: Earthquake Source Physics: Unified perspectives from Kinematic Source Imaging, Physics-based Modeling, Laboratory Experiments, and Earthquake Geology

2015

Visiting appt. Uuniversity of California, Los Angeles 09/2016–10/2016

Lingsen Meng

Invited talk JpGU Meeting 2018, Session: Intraslab and intraplate earthquake 2018

The 3rd international summer school on Earthquake Science

Research interest Geophysics

Earthquake Seismology

Language Japanese (Mother tongue), English (Professional working proficiency)

Fortran, Python, matplotlib, GMT, SAC, UNIX utilities

Affiliated society American Geophysical Union (AGU), Japan Geoscience Union (JpGU), Seismological Society of

America (SSA), Seismological Society of Japan (SSJ), Southern California Earthquake Center

(SCEC)

Publication 13 peer-reviewed articles published

Total citations: 355 (Google Scholar), 254 (Web of Science), 268 (Scopus)

h-index: 8 (Google Scholar), 7 (Web of Science), 8 (Scopus)

 Okuwaki, R., Kasahara, A., Yagi, Y., Hirano, S., & Fukahata, Y., Backprojection to image slip, Geophysical Journal International, 216, 1529–1537, March 2019. doi:10.1093/gji/ggy505

12. Aránguiz, R., Urra, L., **Okuwaki, R.**, & Yagi, Y., Development and application of a tsunami fragility curve of the 2015 tsunami in Coquimbo, Chile, *Natural Hazards and Earth System Sciences*, 18, 2143–2160, August 2018. doi:10.5194/nhess-18-2143-2018

11. **Okuwaki, R.**, & Yagi, Y., Role of geometric barriers in irregular-rupture evolution during the 2008 Wenchuan earthquake, *Geophysical Journal International*, 212, 1657–1664, March 2018.

doi:10.1093/gji/ggx502

 Okuwaki, R., & Yagi, Y., Rupture Process During the Mw 8.1 2017 Chiapas Mexico Earthquake: Shallow Intraplate Normal Faulting by Slab Bending, Geophysical Research Letters, 44, 11816–11823, December 2017. doi:10.1002/2017GL075956

 Miyakawa, A., Sumita, T., Okubo, Y., Okuwaki, R., Otsubo, M., Uesawa, S., & Yagi, Y., Volcanic magma reservoir imaged as a low-density body beneath Aso volcano that terminated the 2016 Kumamoto earthquake rupture, Earth, Planets and Space, 68, 9 pages, December 2016. doi:10.1186/s40623-016-0582-2

- Yagi, Y., Okuwaki, R., Enescu, B., Kasahara, A., Miyakawa, A., & Otsubo, M., Rupture process of the 2016 Kumamoto earthquake in relation to the thermal structure around Aso volcano, Earth, Planets and Space, 68, 6 pages, July 2016. doi:10.1186/s40623-016-0492-3
- 7. Okuwaki, R., Yagi, Y., Aránguiz, R., González, J., & González, G., Rupture Process During the 2015 Illapel, Chile Earthquake: Zigzag-Along-Dip Rupture Episodes, *Pure and*

- $Applied\ Geophysics,\ 173,\ 1011-1020,\ April\ 2016.$  doi:10.1007/s00024-016-1271-6
- Mai, P. M., Schorlemmer, D., Page, M., Ampuero, J., Asano, K., Causse, M., Custodio, S., Fan, W., Festa, G., Galis, M., Gallovic, F., Imperatori, W., Käser, M., Malytskyy, D., Okuwaki, R., Pollitz, F., Passone, L., Razafindrakoto, H. N. T., Sekiguchi, H., Song, S. G., Somala, S. N., Thingbaijam, K. K. S., Twardzik, C., van Driel, M., Vyas, J. C., Wang, R., Yagi, Y., & Zielke, O., The Earthquake- Source Inversion Validation (SIV) Project, Seismological Research Letters, 87, 690–708, April 2016. doi:10.1785/0220150231
- Aránguiz, R., González, G., González, J., Catalán, P. A., Cienfuegos, R., Yagi, Y., Okuwaki, R., Urra, L., Contreras, K., Del Rio, I., & Rojas, C., The 16 September 2015 Chile Tsunami from the Post-Tsunami Survey and Numerical Modeling Perspectives, Pure and Applied Geophysics, 173, 333–348, February 2016. doi:10.1007/s00024-015-1225-4
- Yagi, Y., & Okuwaki, R., Integrated seismic source model of the 2015 Gorkha, Nepal, earthquake, Geophysical Research Letters, 42, 6229–6235, August 2015. doi:10.1002/2015GL064995
- 3. Yagi, Y., **Okuwaki**, **R.**, Enescu, B., & Fukahata, Y., Unusual low-angle normal fault earthquakes after the 2011 Tohoku-oki megathrust earthquake, *Earth*, *Planets and Space*, 67, 7 pages, June 2015. doi:10.1186/s40623-015-0271-6
- Okuwaki, R., Yagi, Y., & Hirano, S., Relationship between High-frequency Radiation and Asperity Ruptures, Revealed by Hybrid Back-projection with a Non-planar Fault Model, Scientific Reports, 4, 6 pages, November 2014. doi:10.1038/srep07120
- Yagi, Y., Okuwaki, R., Enescu, B., Hirano, S., Yamagami, Y., Endo, S., & Komoro, T., Rupture process of the 2014 Iquique Chile earthquake in relation with the foreshock activity, Geophysical Research Letters, 41, 4201–4206, June 2014. doi:10.1002/2014GL060274

#### Manuscript being prepared

- Fault scarps confining rupture evolution during the 2015 Gorkha Nepal earthquake, in prep.
- Inchworm-like slip evolution across geometric barriers during the 2018 Palu Indonesia earthquake, in prep.
- Development of an inversion method to extract information on fault geometry from teleseismic data, *submitted*. doi:10.31223/osf.io/q58t7 (preprint in EarthArXiv)
- The 2018 Palu Tsunami as a combination of several landslides and co-seismic tsunami effects, submitted.