

# Ryo Okuwaki

PhD student

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rokuwaki@gmail.com  
https://rokuwaki.github.io

## Education

2016–Present	Ph.D. candidate, Science, University of Tsukuba, Advisor: Yuji Yagi
2014–2016	M.Sc., Science, University of Tsukuba, Advisor: Yuji Yagi
2010–2014	B.Sc., Science, University of Tsukuba, Advisor: Yuji Yagi

## Employment

2016–2019	Research Fellow Japan Society for the Promotion of Science (DC1)
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## Grants

2016–2019	Grant-in-Aid for the Japan Society for the Promotion of Science for Research Fellows (DC1), "Irregular rupture evolution during the large/great earthquakes: resolved by high-frequency radiation sources and co-seismic slip distribution", 2016-04-22/2019-03-31 (16J00298) <a href="https://aken.nii.ac.jp/en/grant/KAKENHI-PROJECT-16J00298/">https://aken.nii.ac.jp/en/grant/KAKENHI-PROJECT-16J00298/</a>
2018	Young Researcher Travel Support for 10th ACES (APEC Cooperation for Earthquake Science) International Workshop, Awaji Island Japan, September 2018
2015	Travel Grant for the 3rd international summer school on Earthquake Science, Lake-Yamanaka Japan, Earthquake Research Institute of the University of Tokyo and Southern California Earthquake Center, September 2015
2014	Travel Grant for the 2014 VISES Summer School, Oxnard CA, Southern California Earthquake Center and Earthquake Research Institute of the University of Tokyo, September 2014
2014	Travel Grant for the 2014 Annual Meeting of Seismological Society of America, Anchorage Ak, Seismological Society of Japan, April 2014

## Awards

2018	Outstanding Student Presentation Award, JpGU Meeting 2018, May 2018
2018	Best Student Award, Doctoral Program in Earth Evolution Sciences, University of Tsukuba, March 2018
2017	Outstanding Student Presentation Award, JpGU-AGU Joint Meeting 2017, May 2017
2015	Best Poster Presentation Award, Tsukuba Global Science Week 2015, September 2015
2014	Outstanding Student Presentation Awards, Seismological Society of Japan 2014 Fall Meeting, November 2014
2014	Outstanding Student Award (Provost's Prize), University of Tsukuba, March 2014

## Service

Journal Referee ( <a href="#">publons</a> )	Earth and Planetary Science Letters Earth, Planets and Space Journal of Asian Earth Sciences Journal of Geophysical Research - Solid Earth Pure and Applied Geophysics
Conference	Primary convener of the session in the AGU Fall Meeting 2018 Co-conveners: Wen yuan Fan, Valère Lambert, Zacharie Duputel S006: Earthquake Source Physics: Unified perspectives from Kinematic Source Imaging, Physics-based Modeling, Laboratory Experiments, and Earthquake Geology <a href="https://agu.confex.com/agu/fm18/meetingapp.cgi/Person/74822">https://agu.confex.com/agu/fm18/meetingapp.cgi/Person/74822</a>  Co-convener of the session in the JpGU Meeting 2019 with Saeko Kita, Tomohiro Ohuchi, and Marcel Thielmann S-CG52: Intrastab and intraplate earthquakes

## Visiting appointment

2016	University of California, Los Angeles (Prof. Lingsen Meng), September–October 2016
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## Invited talks

2018	Ryo Okuwaki & Yuji Yagi, "Shallow intraslab normal faulting: Rupture process of the Mw 8.1 2017 Chiapas Mexico earthquake", Japan Geoscience Union Meeting 2018, Chiba Japan, May 2018
2015	Ryo Okuwaki & Yuji Yagi, "High-frequency rupture related to the complex fault system and variable slip motions, insights from hybrid backprojection image of the Mw 7.9 2008 Wenchuan, China, earthquake", The 3rd international summer school on Earthquake Science, Lake-Yamanaka Japan, Earthquake Research Institute of the University of Tokyo and Southern California Earthquake Center, September 2015

## Publications

12 peer-reviewed articles published  
Total citations: 303 ([Google Scholar](#)), 149 ([ResearcherID](#))  
h-index: 7 ([Google Scholar](#)), 6 ([ResearcherID](#))

- (Under review) Okuwaki, R., Kasahara, A., Yagi, Y., Hirano, S., & Fukahata, Y., Backprojection to image slip, Geophys. J. Int., Oxford University Press, doi: 10.31223/osf.io/dghkw.
- Aránguiz, A., Urra, L., Okuwaki, R., & Yagi, Y., Development and application of a tsunami fragility curve of the 2015 tsunami in Coquimbo, Chile, Nat. Hazards Earth Syst. Sci., Copernicus Publications, 2018, doi: 10.5194/nhess-18-2143-2018.
- Okuwaki, R., & Yagi, Y., Role of geometric barriers in irregular-rupture evolution during the 2008 Wenchuan earthquake, Geophys. J. Int., Oxford University Press, 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, Geophys. Res. Lett., AGU, 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, a SpringerOpen Journal, 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 with the thermal structure around Aso volcano, Earth, Planets and Space, a SpringerOpen Journal, 2016, doi:10.1186/s40623-016-0492-3.
- Okuwaki, R., Yagi, Y., Aránguiz, R., González, J., & González, G., Rupture process during the 2015 Illapel, Chile earthquake: Zigzag-along-dip rupture episodes, Pure Appl. Geophys., Springer International Publishing, 2016, doi:10.1007/s00024-016-1271-6.
- Mai, M., Schorlemmer, D., Page, M., Ampuero, J-P., 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., Sekiguchi, H., Song, S., Somala, S., Thingbaijam, K., Twardzik, C., van Driel, M., Vyas, J., Wang, R., Yagi, Y., & Zielke, O., The Earthquake-Source Inversion Validation (SIV) Project, Seismol. Res. Lett., SSA, 2016, doi:10.1785/0220150231.
- Aranguiz, R., Gonzalez, G., Gonzalez, J., Catalan, P., 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 Appl. Geophys., Springer International Publishing, 2016, doi:10. 1007/s00024-015-1225-4.
- Yagi, Y., & Okuwaki, R., Integrated seismic source model of the 2015 Gorkha, Nepal, earthquake, Geophys. Res. Lett., AGU, 2015, doi:10.1002/2015GL064995.
- 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, a SpringerOpen Journal, 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, Sci. Rep., Nature Publishing Group, 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, Geophys. Res. Lett., AGU, 2014, doi:10.1002/2014GL060274.

## Research interests

Earthquake Seismology  
Geophysics

## Languages

Japanese (Mother tongue), English (Professional working proficiency)  
Fortran, Python, matplotlib, GMT, SAC, UNIX utilities

## Academic Societies

American Geophysical Union (AGU)  
Japan Geoscience Union (JpGU)  
Seismological Society of America (SSA)  
Seismological Society of Japan (SSJ)  
Southern California Earthquake Center (SCEC)

学歴	職歴
2016–現在	2016–2019
2014–2016	
2010–2014	

外部資金獲得歴

2016–2019	科学研究費 特別研究員奨励費「高周波励起源と断層すべりに基づく巨大地震の不規則な発展プロセスの解明」 2016-04-22/2019-03-31 (16J00298) <a href="https://kaken.nii.ac.jp/ja/grant/KAKENHI-PROJECT-16J00298/">https://kaken.nii.ac.jp/ja/grant/KAKENHI-PROJECT-16J00298/</a> <a href="https://kaken.nii.ac.jp/en/grant/KAKENHI-PROJECT-16J00298/">https://kaken.nii.ac.jp/en/grant/KAKENHI-PROJECT-16J00298/</a>
2018	Young Researcher Travel Support for 10th ACES (APEC Cooperation for Earthquake Science) International Workshop, Awaji Island Japan, September 2018
2015	Travel Grant for the 3rd international summer school on Earthquake Science, Lake-Yamanaka Japan, Earthquake Research Institute of the University of Tokyo and Southern California Earthquake Center, September 2015
2014	Travel Grant for the 2014 VISES Summer School, Oxnard CA, Southern California Earthquake Center and Earthquake Research Institute of the University of Tokyo, September 2014
2014	日本地震学会 海外渡航旅費助成金, 2014 Annual Meeting of Seismological Society of America, Anchorage Ak, 2014年4月

受賞歴

2018	学生優秀発表賞, 日本地球惑星科学連合2018年大会, 2018年5月
2018	地球進化科学専攻長賞, 筑波大学, 2018年3月
2017	学生優秀発表賞, JpGU-AGU Joint Meeting 2017, 2017年5月
2015	Best Poster Presentation Award, Tsukuba Global Science Week 2015, 2015年9月
2014	学生優秀発表賞, 日本地震学会2014年度秋季大会, 2014年11月
2014	筑波大学生命環境学群 学群長賞, 2014年3月

査読・学会

査読歴  
(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

学会運営

Primary convener of the session in the AGU Fall Meeting 2018  
Co-conveners: Wenyuan Fan, Valère Lambert, Zacharie Duputel  
S006: Earthquake Source Physics: Unified perspectives from Kinematic Source Imaging, Physics-based Modeling, Laboratory Experiments, and Earthquake Geology  
<https://agu.confex.com/agu/fm18/meetingapp.cgi/Person/74822>  
  
Co-convener of the session in the JpGU Meeting 2019 with Saeko Kita, Tomohiro Ohuchi, and Marcel Thielmann  
S-CG52: Intralab and intraplate earthquakes

渡航歴 (在外研究)

2016

University of California, Los Angeles (Prof. Lingsen Meng), September–October 2016

奥脇 亮

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## 招待講演

2018	Ryo Okuwaki & Yuji Yagi, "Shallow intraslab normal faulting: Rupture process of the Mw 8.1 2017 Chiapas Mexico earthquake", 日本地球惑星科学連合2018年大会, 千葉, 2018年5月
2015	Ryo Okuwaki & Yuji Yagi, "High-frequency rupture related to the complex fault system and variable slip motions, insights from hybrid backprojection image of the Mw 7.9 2008 Wenchuan, China, earthquake", The 3rd international summer school on Earthquake Science, Lake-Yamanaka Japan, Earthquake Research Institute of the University of Tokyo and Southern California Earthquake Center, 2015年9月

## 論文

査読付き論文12報  
引用数合計: 303 (Google Scholar), 149 (ResearcherID)  
h-指標: 7 (Google Scholar), 6 (ResearcherID)

- (Under review) Okuwaki, R., Kasahara, A., Yagi, Y., Hirano, S., & Fukahata, Y., Backprojection to image slip, Geophys. J. Int., Oxford University Press, doi: 10.31223/osf.io/dghkw.
- Aránguiz, A., Urra, L., Okuwaki, R., & Yagi, Y., Development and application of a tsunami fragility curve of the 2015 tsunami in Coquimbo, Chile, Nat. Hazards Earth Syst. Sci., Copernicus Publications, 2018, doi: 10.5194/nhess-18-2143-2018.
- Okuwaki, R., & Yagi, Y., Role of geometric barriers in irregular-rupture evolution during the 2008 Wenchuan earthquake, Geophys. J. Int., Oxford University Press, 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, Geophys. Res. Lett., AGU, 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, a SpringerOpen Journal, 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 with the thermal structure around Aso volcano, Earth, Planets and Space, a SpringerOpen Journal, 2016, doi:10.1186/s40623-016-0492-3.
- Okuwaki, R., Yagi, Y., Aránguiz, R., González, J., & González, G., Rupture process during the 2015 Illapel, Chile earthquake: Zigzag-along-dip rupture episodes, Pure Appl. Geophys., Springer International Publishing, 2016, doi:10.1007/s00024-016-1271-6.
- Mai, M., Schorlemmer, D., Page, M., Ampuero, J-P., 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., Sekiguchi, H., Song, S., Somala, S., Thingbaijam, K., Twardzik, C., van Driel, M., Vyas, J., Wang, R., Yagi, Y., & Zielke, O., The Earthquake-Source Inversion Validation (SIV) Project, Seismol. Res. Lett., SSA, 2016, doi:10.1785/0220150231.
- Aranguiz, R., Gonzalez, G., Gonzalez, J., Catalan, P., 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 Appl. Geophys., Springer International Publishing, 2016, doi:10. 1007/s00024-015-1225-4.
- Yagi, Y., & Okuwaki, R., Integrated seismic source model of the 2015 Gorkha, Nepal, earthquake, Geophys. Res. Lett., AGU, 2015, doi:10.1002/2015GL064995.
- 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, a SpringerOpen Journal, 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, Sci. Rep., Nature Publishing Group, 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, Geophys. Res. Lett., AGU, 2014, doi:10.1002/2014GL060274.

## 専門分野

地震学  
地球物理学

## 使用言語

日本語, 英語  
Fortran, Python, matplotlib, GMT, SAC, UNIX utilities

## 所属学会

アメリカ地球物理学連合 (AGU)  
日本地球惑星科学連合 (JpGU)  
アメリカ地震学会 (SSA)  
日本地震学会 (SSJ)  
南カルフォルニア地震センター (SCEC)

## その他の活動

地球惑星科学NYS事務局