All manuscripts are freely accessible online at thearagon.github.io/publications.

PUBLICATIONS

As of April 11, 2025:

- **12** peer-reviewed manuscripts, including **8 as first author**
- 3 editorials (non peer-reviewed, #11, 12 and 15)
- 6 manuscripts in preparation or in review

Underlined names are advised students or postdocs.

21) Nutz, A., P. Poirier, **T. Ragon** , M. Schuster. **(in prep)** Structural and sedimentological context of the Shungura Fm (Lower Omo Valley, Ethiopia).

20) Koene, T., R. Mallick, **T. Ragon**, M. Simons. **(in prep)** Historically Consistent and Geodetically Constrained Bayesian Inference of Megathrust Rheology.

19) B. Lovery, M. Radiguet, M. Chlieh, E. Norabuena, J.C. Villegas-Lanza, J. Cresseaux, **T. Ragon**, A. Tsapong-Tsague, H. Tavera, and A. Socquet. **(in review at GRL)** Viscoelastic Relaxation Following the 2001 Mw8.4 Arequipa Earthquake and its Impact on the Interseismic Coupling of the South Peru Subduction.

18) L. Pereiaslov, **T. Ragon**, Y. Liu, C. Milliner, M. G. Bato, M. Govorcin, E. Fielding, M. Simons. **(in prep)** Bayesian Slip Model of the 2023 Mw 7.9 and Mw 7.8 Türkiye-Syria Earthquake Doublet from Geodetic Data. for *JGR Solid Earth*

17) **Ragon, T.**, A. Gao, Z. Ross. **(in review at JGR Solid Earth)** DeepGEM: A Bayesian strategy for joint estimates of Source time functions and Empirical Green's functions.

16) **Ragon, T.**, M. Simons. **(in prep, delayed)** Revisiting the 2001 Mw 8.4 Peru earthquake: can we improve estimates of near-trench slip with accurate Green's functions? for *Earth and Planetary Science Letters*

15) Mark, H., **Ragon, T.**, Funning, G., Hicks, S. P., Rowe, C., Teplitzky, S., Convers, J., Karasözen, E., Corona-Fernandez , R. D., & Fagereng, Åke. **(2023)** Editorial workflow of a community-led, all-volunteer scientific journal: lessons from the launch of Seismica *Seismica*, 2(2). doi:10.26443/seismica.v2i2.1091. Open access .

14) L. Langer, **Ragon, T.**. **(2023)** Accuracy of Finite Fault Slip Estimates in Subduction Zone Regions With Topographic Green's Functions and Seafloor Geodesy *Journal of Geophysical Research, Solid Earth*, 128, e2023JB026559. doi:10.1029/2023JB026559. Open access

13) **Ragon, T.**, M. Simons. **(2023)** A secondary zone of uplift measured after megathrust earthquakes: caused by early downdip afterslip? *Geophysical Research Letters*, 50, e2022GL101510. doi:10.1029/2022GL101510. preprint available

12) Rowe, C., Agius, M., Convers, J., Funning, G., Galasso, C. ., Hicks, S., Huynh, T., Lange, J. ., Lecocq, T., Mark, H., Okuwaki, R., **Ragon, T.**, Rychert, C., Teplitzky, S., & van den Ende, M. (Authors in alphabetical order) **(2022)** The launch of Seismica: a seismic shift in publishing. *Seismica*, 1(1). doi:10.26443/seismica.v1i1.255. Free access link

11) M. Schuster, F. Zainescu, A. Nutz, J.E.A. Storms, H. van der Vegt, G. Bozetti, J.-H. May, S.M. May, J.R. Boisserie, **T. Ragon**, F. Bouchette, J.-F. Ghienne **(2022)** Le delta de l'Omo, un delta à dominante rivière en contexte lacustre *Géochronique*, 162. doi:.

10) Nutz, A., **T. Ragon**, M. Schuster. **(2021)** Cenozoic tectono-sedimentary evolution of the northern Turkana Depression (East African Rift System) and its significance for continental rifts. *Earth and Planetary Science Letters*, –. doi:10.1016/j.epsl.2021.117285. PDF

9) **Ragon, T.**, M. Simons. **(2021)** Accounting for uncertain 3D elastic structure in fault slip estimates *Geophysical Journal International*, 224(2), 1404–1421. doi:10.1093/gji/ggaa526. Free access link

8) **Ragon, T.**, M. Simons, Q. Bletery, O. Cavalié, E. Fielding. **(2020)** A stochastic view of the 2020 Elazığ M_w6.8 earthquake (Turkey) *Geophysical Research Letters*, 48. doi:10.1029/2020GL090704. Free access link

7) Nutz, A., M. Schuster, D. Barboni, G. Gassier, C. Robin, **T. Ragon**, J.F. Ghienne, J.-L. Rubino. **(2020)** Plio-Quaternary sedimentation in West Turkana (Turkana Depression, Kenya, East African Rift System): paleolake Turkana fluctuations, paleolandscapes and controlling factors *Earth-Science Reviews*, . doi:10.1016/j.earscirev.2020.103415. PDF

6) Bletery, Q., O. Cavalié, J.-M. Nocquet, **T. Ragon**. **(2020)** Interseismic coupling along the North and East Anatolian Faults *Geophysical Research Letters*, 47, e2020GL087775. doi:10.1029/2020GL087775. PDF

5) **Ragon, T.***, L. Langer*, A. Sladen, J. Tromp (* equally contributing authors). **(2020)** Impact of topography on earthquake static slip estimates *Tectonophysics*, . doi:10.1016/j.tecto.2020.228566. Preprint on EarthArxiv

4) **Ragon, T.**, A. Sladen, Q. Bletery, M. Vergnolle, O. Cavalie, A. Avallone, J. Balestra, B. Delouis. **(2019)** Joint inversion of co-seismic and early post-seismic slip to optimize the information content in geodetic data: application to the 2009 Mw6.3 L'Aquila earthquake, Central Italy *JGR Solid Earth*, 124, 10522– 10543. doi:10.1029/2018JB017053. Free access link

3) **Ragon, T.**, A. Sladen, M. Simons. **(2019)** Accounting for uncertain fault geometry in earthquake source inversions — II: Application to the 2016 Mw6.1 Amatrice earthquake. *Geophysical Journal International*, 218(1),689–707. doi:10.1093/gji/ggz180. Free access link

2) **Ragon, T.**, A. Nutz, M. Schuster, J.F. Ghienne, G. Ruffet, J.-L. Rubino. **(2019)** Evolution of the northern Turkana Depression (East African Rift System, Kenya) during the Cenozoic rifting: new insights from the Ekitale Basin (28-25.5 Ma). *Geological Journal*, 54: 3468– 3488. doi:10.1002/gj.3339. Preprint

1) **Ragon, T.**, A. Sladen, M. Simons. **(2018)** Accounting for uncertain fault geometry in earthquake source inversions — I: theory and simplified application. *Geophysical Journal International*, 214(2), 1174-1190. doi:10.1093/gji/ggy187. Free access link

INVITED SEMINARS & KEYNOTES

2024 ISTerre, Grenoble, France, Grand séminaire.
Uncertainties in finite-fault slip inversions: how critical is the forward model?

2023 Jet Propulsion Laboratory, NASA, USA.
Earthquake source and slip estimates : how critical are inaccuracies in the forward model ?

2022 ITES, Strasbourg, France.
Earthquake source and slip estimates : how critical are inaccuracies in the forward model ?

2022 **Keynote**, CIG Crustal Deformation Modeling Workshop, Golden, USA.
The future of finite-fault modeling: how critical are structural heterogeneities?

2022 **Keynote**, Geoprism workshop, Deformation at plate boundaries, Hawaii, USA.
On and off-fault deformation: similar research directions for subduction zones and rift systems?

2022 Brown bag seminar, Caltech, USA.
A secondary zone of uplift observed after megathrust earthquakes: caused by rapid down-dip afterslip?

2021 Isterre, Université de Grenoble, France.
On-fault deformation estimates: can we mitigate the effect of our approximations ?

2021 Laboratoire de Géologie de l'ENS, Paris, France.
On-fault deformation estimates: can we mitigate the effect of our approximations ?

2021 Géoazur, Nice, France.
How to hamper the effect of Earth's structure approximations on on-fault deformation estimates ?

2020 Brown bag seminar, Caltech, USA.
Accounting for uncertainties in finite-fault slip estimates.

2019 Institut de Physique du Globe (IPGP), Paris, France.
Accounting for uncertainties in finite-fault slip estimates.

ORAL PRESENTATIONS

Invited talks are in blue.

15) **T. Ragon**, M. Simons. Assumptions on elastic structure in finite-fault models: the case of the secondary zone of uplift measured after megathrust earthquakes, EGU Meeting, Vienna, **2024**

14) L. Langer, **T. Ragon**. Topography of subduction zones: when to account for it in fault slip estimates? SSA meeting, Puerto Rico, **2023**

13) A. Nutz, **T. Ragon**, M. Schuster. Histoire tecto-sédimentaire cénozoique de la Dépression Nord du Turkana et implications pour l'évolution des rifts continentaux, ASF, Brest, France, **2022**.

12) J.Jiang, **T. Ragon**, C. Liang, M. Simons. Bayesian inference of megathrust faulting during and after the 2010 Maule earthquake: Quantifying uncertainties and spatiotemporal source processes in 3D structures, SEG-AGU joint workshop on Convergent Margins, **2022**.

11) **Ragon, T.**, A. Nutz, M. Schuster. From fault-driven to flexural subsidence: modes of early continental rifting in the northern Turkana Depression (East African Rift, Kenya). *eLightning presentation*, AGU Fall meeting, New Orleans, **2021**.

10) E. J. Fielding, C. Liang, M.-H. Huang, Z. Liu, **T. Ragon**, D. Bekaert, M. Simons. Imaging Complex Fault Slip of Large Earthquakes with Sentinel-1 and ALOS-2 SAR analysis and Other Geodetic and Seismic Data. IGARSS Symposium, **2021, invited**.

9) Bletery, Q., O. Cavalié, J.-M. Nocquet, **T. Ragon**. Interseismic coupling along the North and East Anatolian Faults. EGU General Assembly, **2020, invited**.

8) A. Nutz, M. Schuster, D. Barboni, G. Gassier, B. Van Bocxlaer, C. Robin, **T. Ragon**, J-F. Ghienne, J-L Rubino. Plio-Pleistocene sedimentation in West Turkana (East African Rift System; Kenya). GSA 2020 Connects Online, **2020**.

7) A. Nutz, **Ragon, T.**, M. Schuster, J.-F. Ghienne, G. Ruffet, J.L. Rubino. Caractérisation d'un micro-bassin « Early syn-rift » dans la Dépression du Turkana (Rift Est-Africain) : implications pour les modèles d'initiation de l'ouverture. 17e Congrès de Sédimentologie Français, Oct 2019, Beauvais, France, **2019**.

6) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertain fault geometry in source inversion problems. AGU Fall Meeting 2018, Washington, USA, **2018, invited**.

5) L. Langer, **T. Ragon**, A. Sladen, J. Tromp. Impact of 3D Green's Functions with Topography on Coseismic Slip Model Inversions. AGU Fall Meeting 2018, Washington, USA, **2018**.

4) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertain fault geometry in source inversion problems. 19th General Assembly of Wegener, Grenoble, France, **2018**.

3) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertain fault geometry in source inversion problems. PhD students annual conference of the doctoral school of fundamental and applied sciences EDSFA, Nice, France, **2018**.

2) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertainties related to the fault geometry in source inversion problems. G2, Nice, Fr, **2017**.

1) **Ragon, T.**, A. Nutz, M. Schuster, J.L. Rubino, M. Bez. The Topernawi Fm (Turkana depression, EARS, Kenya): a recording of early rift opening? Congress of the French Association of Sedimentologists (ASF), Chambéry, Fr, **2015**

POSTERS

Since 2019, I submit posters in sessions I convene at international conferences (such as AGU). Posters from students I supervise(d) are in blue.

18) Kohne, T., R. Mallick, **T. Ragon**, M. Simons. Historically Consistent and Geodetically Constrained Bayesian Inference of Megathrust Rheology. AGU Fall Meeting **2023**.

17) Peresiav, L., **T. Ragon**, M. Simons. Stochastic Slip Model of the 2023 Mw 7.8 and Mw 7.6 Türkiye-Syria Earthquake Doublet from Geodetic Data. AGU Fall Meeting **2023**.

16) **Ragon, T.**, M. Simons. A secondary zone of uplift measured after megathrust earthquakes: caused by early downdip afterslip? SZ4D Community Meeting, **2022**.

15) L. Langer, **T. Ragon**. Topography in subduction zones: when to account for it for fault slip estimates? SZ4D Community Meeting, **2022**.

14) **Ragon, T.**, M. Simons. The secondary zone of uplift of the 2010 Maule event: unseen afterslip because of neglected 3D elastic crustal structure? SCEC Meeting **2022**.

13) **Ragon, T.**, M. Simons. The secondary zone of uplift of the 2010 Maule event: unseen afterslip because of neglected 3D elastic crustal structure? AGU Fall Meeting **2021**.

12) **Ragon, T.**, M. Simons. Accounting for uncertain 3D elastic structure in fault slip estimates. AGU Fall Meeting, online, **2020**.

11) L. Langer, **T. Ragon**, A. Sladen, J. Tromp. Impact of 3D Green's Functions with Topography on Coseismic Slip Model Inversions. AGU Fall Meeting 2019, Washington, USA, **2019**.

10) **Ragon, T.**, A. Sladen, M. Vergnolle, Q. Bletery, A. Avallone, O. Cavalié, J. Balestra, B. Delouis. Optimizing the information content available in geodetic data to jointly estimate co-seismic and early afterslip models. AGU Fall Meeting 2019, Washington, USA, **2019**.

9) A. Nutz, **Ragon, T.**, M. Schuster, J.L. Rubino. Cenozoic rifting in the northern Turkana depression (EARS, Kenya): new insights from the Oligocene (28-25 Ma) Ekitale basin. EGU General Assembly, Vienna, **2019**.

8) **Ragon, T.**, A. Sladen, M. Vergnolle, Q. Bletery, A. Avallone, O. Cavalié. Optimizing the information content available in geodetic data to jointly estimate co-seismic and early afterslip models. AGU Fall Meeting 2018, Washington, USA, **2018**.

7) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertain fault geometry in source inversion problems. Workshop on Modeling Earthquake Source Processes, Caltech, USA, **2018**.

6) **Ragon, T.**, A. Sladen, M. Simons. Accounting for uncertainties on the fault geometry in source inversion problems. AGU Fall Meeting, New Orleans, USA, **2017**.

4) **Ragon, T.**, A. Sladen, Q. Bletery, M. Simons. Accounting for uncertainty on the fault geometry in source inversion problems. Cargèse School on Earthquakes, Fr, **2017**.

4) A. Nutz, **Ragon, T.**, M. Schuster, J.F. Ghienne. Very early rift sedimentation in the Turkana depression (EARS, Kenya): example of the Topernawi Formation. IAS Fall Meeting, Toulouse, Fr, **2017**.

3) **Ragon, T.**, A. Sladen, M. Simons. Influence of Fault Geometry Uncertainties on the Slip Distribution of Continental Earthquakes. CIG Crustal Deformation Modeling Workshop, Golden, USA, **2017**.

2) **Ragon, T.**, A. Sladen, Q. Bletery, M. Simons, F. Magnoni, A. Avallone, O. Cavalié, M. Vergnolle. Influence of epistemic uncertainties on the slip distribution of continental earthquakes: application to the 2009 L'Aquila (Mw6. 3) and 2016 Amatrice (Mw6. 0) earthquakes, central Italy. AGU Fall Meeting, San Francisco, USA, **2016**.

1) **Ragon, T.**, A. Nutz*, M. Schuster, J.F. Ghienne. Very early rift sedimentation in the Turkana depression (EARS, Kenya): example of the Topernawi Formation. AGU Fall Meeting, San Francisco, USA, **2015**.