

Anthony Sladen

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Address: *Géoazur* - Campus Azur
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CNRS researcher / geophysicist

UMR7329 *Géoazur*
Université Côte d'Azur

Citizenship & Family french. 2 children, 47 years-old

Research interest Fiber optic metrology, wave physics (acoustic, seismic, tsunami)

Research IDs & metrics Orcid: [0000-0003-4126-0020](https://orcid.org/0000-0003-4126-0020) / Research ID: [A-2532-2017](https://publons.com/researcher/2532/A-2532-2017)
H-index: 35, more than 60 peer-reviewed articles, 6000+ citations ([Google Scholar](https://scholar.google.com/citations?user=asladen))

Education & Research experience [Laboratoire *Géoazur*](#)
Sophia-Antipolis, France
- [CNRS](#), researcher - since 12/2010
- [NASA-JPL](#) center, researcher - 01/2010 to 11/2010
- HDR (French habilitation), May 20, 2025
- Post Doctoral position - 2007 to 2010
Multi-data and multi-physics analysis of large earthquakes
[California Institute of Technology](#), USA
- Post Doctoral position - 2005 to 2007
Tsunami hazard assessment in French Polynesia
[Commissariat à l'Energie Atomique](#), Bruyères-le-Châtel, France
- Ph.D - 2001 to 2005
Advisor: Raül Madariaga
[Ecole Normale Supérieure](#), Ulm, Paris

Award 2023 Research award of the city of Nice. 'SequoIA Analytics' project with 3 other colleagues on AI analysis of Distributed Acoustic Sensing data for the concept of smart-city.

Selected Synergistic activities 2024 Organizer 4th internat.I Cargèse school on earthquakes, Cargèse FR
2020 Organizer 3rd internat. Cargèse school on earthquakes, Cargèse FR
2019-2023 Elected member of the CNAP-TI committee
2015-2019 Elected member of the CNAP-TI committee
2015-2018 Elected member of the sci. committee of the Côte d'Azur Observatory
2012-2015 Co-head of the seismology research team, *Géoazur* laboratory

Advising Postdocs
- Lucie Rolland (2011-2013) "Ionospheric signals of the great Tohoku tsunami, Japan, 2011"
- Cédric Twardzik (2017-2019) "High-frequency analysis of GNSS data"
- Itzhak Lior (2019-2021) "Analysis of underwater DAS signals"
- Martijn van den Ende (2021-2022) "Deep learning methods for DAS signal analysis"
- Alister Trabattoni (2023) "Extraction of seismic signals in DAS data"

- Chu-Fang (Kim) Yang (2025-2026) "The DAS response to temperature signals"

PhD

- Quentin Bletery (2012-2016) "Multi-data and multi-physics analysis of the great Tohoku earthquake 2011, Japan". Short-listed for best "Le Monde" Ph.D. award.
- Théa Ragon (2016-2019) "Epistemic uncertainty quantification in earthquake source modeling". Best Univ. Côte d'Azur Ph.D. award. Post-doc Caltech, USA
- Daniel Mata (2019-2023) "Analysis of underwater DAS records for sea current analysis".
- Florian Zedek (2018-2024) « Locating the co-seismic deformation with multi-GNSS ionospheric sounding »
- Carlos Becceril (2018-2024) "Tsunami detection using DAS and seafloor fiber optic cables" Joint Ph.D. program with Univ. of Alcala, Spain. 2022 AGU J. Paros award.
- Yacine Khacef (2020-2024) "DAS for the concept of smart city"
- Edhah Munaibari (2020-2025) Defense scheduled Dec. 2025
- Amine Mohammedi (2024-) "Calibration of seafloor DAS measurements". Co-advised with colleagues at Ifremer and Univ. Montpellier
- Lihue Gaffoglio (2024-) "Seafloor subsurface imagery using DAS"
- Vanessa Carrillo-Barra (2024-) "Geophysical applications of DAS measurements"
- Laurine Andres (2025-) "Whale monitoring using DAS data of the LIDO observatory"

Selected projects with lead

2011-2013 ANR France-Japon TO-EOS Analysis of the 2011 M9.0 Japan earthquake combining Earth, Ocean, and Space data. PI.

2016-2018 IDEX JEDI University Côte d'Azur: development of a lightweight plow to trench fiber optic cables on the seafloor. PI.

2017-2023 ANR SEAFOOD Development of fiber sensing application underwater applications. PI.

2020-2024 Associate chair "Distributed dark fiber optic sensing for smart cities monitoring". Institut 3IA Côte d'Azur,

2021-2029 Creation of LIDO, the Ligurian Sea DAS Observatory. EquipEx MARMOR project.

2022-2026 Development of sub-micrometer distancemetry fiber optic sensors. EquipEx MARMOR.

2023-2024 Calibration of seafloor DAS measurements. MITI project

2024-2026 Project RI² "D-LIGHT" to develop in-situ measurements with fiber optic sensing. Co-PI with Pr. O. Bour (Univ. Rennes).

**Selected
publications
in last 3 years**

*(supervised
students in
bold)*

Bouffaut, L., Goestchel, Q., Rørstadbotnen, R. A., Sladen, A., Hartog, A., & Klinck, H. (2025). Estimating sound pressure levels from distributed acoustic sensing data using 20 Hz fin whale calls. *JASA Express Letters*, 5(4).

Becerril, C., Sladen, A., Ampuero, J. P., Vidal-Moreno, P. J., Gonzalez-Herraez, M., Kutschera, F., ... & Bouchette, F. (2024). Towards tsunami early-warning with Distributed Acoustic Sensing: Expected seafloor strains induced by tsunamis. *Authorea Preprints*.

Meulé, S., **Pelaez Quiñones, J.**, Bouchette, F., Sladen, A., Ponte, A., Maier, A., ... & Coyle, P. (2024). Reconstruction of nearshore surface gravity wave heights from distributed acoustic sensing data. *Earth and Space Science*, 11(11), e2024EA003589.

Capdeville, Y., & Sladen, A. (2024). DAS sensitivity to heterogeneity scales much smaller than the minimum wavelength. *Seismica*, 3(1).

Pelaez Quiñones, J. D., Sladen, A., *et al.* High resolution seafloor thermometry for internal wave and upwelling monitoring using DAS. *Scientific Reports* **13**, 17459 (2023).

Mata Flores, D., Sladen, A., Ampuero, J., Mercerat, E. D. & Rivet, D. Monitoring deep sea currents with seafloor DAS. *Earth and Space Science* **10**, e2022EA002723 (2023).