

ERWAN PINEAU Ph.D. | PALEOCEANOGRAPHY

(+33) 619-141-873
erwan22110@live.fr

Paleoclimatologist seeking a postdoctoral position focused on understanding the dynamics and biogeochemical evolution of the global ocean during the Cenozoic.

EDUCATION

| | |
|--|-------------------------|
| CEREGE | Aix-en-Provence, France |
| <i>Ph.D. - Paleoceanography</i> | 2023 - 2026 |
| IUEM & ENSTA Bretagne | Brest, France |
| <i>M.S - Ocean and Climate Physics & Engineering Degree in Hydrography</i> | 2020 - 2023 |
| UBO | Brest, France |
| <i>B.S - Hydrography</i> | 2019 - 2020 |

PUBLICATIONS

1. Erwan Pineau, Camille Lique, Anta-Clarisso Sarr, Jean-Baptiste Ladant, Olivier Aumont, Thomas Gorgues and Yannick Donnadieu. *Processes influencing the oxygen deficient zone in the equatorial Pacific During the middle Miocene*, in preparation.
2. Bram Vaes, Alexis Licht, Yannick Donnadieu, Erwan Pineau, Pierre Maffre, Thomas B. Chalk, Zijian Zhang and Pietro Sternai. *Correcting paleolatitude bias improves Cenozoic greenhouse climate models and model-proxy agreement*, in preparation.
3. Erwan Pineau, Camille Lique, David Ferreira, Thierry Huck, Jean-Baptiste Ladant, Emma Fabre, Jeanne-Millot Weil and Yannick Donnadieu. *AMOC evolution across the Cenozoic through a shift of the isopycnal upwelling from the Equator to the Southern Ocean*, *Geophysical Research Letters*, 2026.
4. Leny Montheil, Alexis Licht, K. Christopher Beard, Grégoire Métais, Pauline Coster, Bram Vaes, Yannick Donnadieu, Erwan Pineau, Laurent Husson and Guillaume Dupont-Nivet. *Across ancient oceans: Eocene dispersal routes of Asian terrestrial mammals to Europe, Afro-Arabia and South America*, *Earth-Science Review*, 2025.
5. Erwan Pineau, Yannick Donnadieu, Pierre Maffre, Camille Lique, Thierry Huck, Anthony Gramouillé, and Jean-Baptiste Ladant. *A model based study of the emergence of north atlantic deep water during the cenozoic: A tale of geological and climatic forcings*. *Paleoceanography and Paleoclimatology*, 2025.

SKILLS

| | |
|--|---------|
| Modeling | 2 years |
| • Earth System Model: IPSL-CM5A2 | |
| • Ocean biogeochemical model: PISCESv2 | |
| Analysis | |
| • Lagrangian: ARIANE | |
| • Python | |
| • Ferret | |
| • QGIS/ArcGIS | |
| Writing/Illustration | 5 years |
| • Latex | |
| • Inkscape | |

**RESEARCH
EXPERIENCE**

CEREGE | Aix-en-Provence, France

2023.11 - today

Ph.D. supervised by Yannick Donnadieu and Camille Lique:

Stability / instability of the Atlantic Meridional Oceanic Circulation: What the past can tell us and what were consequences on the oceanic carbon sink?

- 1st chapter: Processes influencing the NADW formation across the Cenozoic^[5].
- 2nd chapter: Evolution of the structure and intensity of the AMOC from 40 Ma to the pre-industrial period^[3].
- 3rd chapter: Oxygen Minimum Zone in the East Tropical Pacific during the middle Miocene^[1].
- 4th chapter: The relationship between the AMOC and the ACC in response to the deepening of the Drake Passage.

CEREGE | Aix-en-Provence, France

2023.04 - 2023.09

Research internship supervised by Yannick Donnadieu:

Evolution of the oceanic circulation over the past 55 Ma using a global Earth model

- Sensitivity analysis: paleogeography, straits opening/closing, orography & pCO₂.
- Thermal and fresh water budgets.
- Model-data comparison.

IFREMER | Brest, France

2022.06 - 2022.09

Research internship supervised by Fanny Ardhuin:

Qualification of a sea ice drift dataset in Antarctica

- Data processing and statistical analysis.
- Colocalization algorithm.

LOPS | Brest, France

2021.05 - 2021.07

Research internship supervised by Olivier Arzel:

Impact of the hydrological cycle on the Dansgaard-Oeschger events

- Sensitivity and data analysis

**CONFERENCE/
SUMMER
SCHOOL**

Talk, Ocean Sciences Meeting,

Glasgow, Scotland

February 2026

Poster, 15th International Conference on Palaeoceanography,

Bangalore, India

September 2025

Seminar, LOPS,

Brest, France

April 2025

Poster, European Geosciences Union,

Vienna, Austria

April 2024

Summer school, Urbino Summer School in Paleoclimatology,

Urbino, Italia

July-August 2023

REFERENCES

Yannick Donnadieu;

donnadieu@cerege.fr

Researcher, CEREGE

Camille Lique

camille.lique@ifremer.fr

Researcher, IFREMER/LOPS

Jean-Baptiste Ladant;

jean-baptiste.ladant@lsce.ipsl.fr

Researcher, LSCE/CEA