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Academic Curriculum Vitae

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Interests

PhD in environmental modeling at the Centre alpin de recherche sur les réseaux trophiques des écosystèmes limniques (CARRTEL), my research project is to study long-term soil erosion dynamics by coupling numerical models and lake sediment archives. I am particularly interested in soil erosion, paleo-environments and spatial modeling.

Degrees

- 2024: **PhD in environmental modeling**, INRAE, Université Savoie Mont-Blanc (France).
  - *Title*: « Quantifying soil erosion during the Holocene: contributions from integrating modelling and lake sediment archives ».
  - *Direction*: Jean-Philippe Jenny (INRAE), Georges-Marie Saulnier (CNRS) and Vincent Chanudet (EDF).
  - *Jury*: Chaired by Jérôme Poulenard (Université Savoie Mont-Blanc), and composed of Cédric Legoût (Université Grenoble-Alpes), Emmanuel Chapron (Université Toulouse Jean Jaurès), Olivier Évrard (CEA), Étienne Cossart (Université Lyon Jean Moulin), Jean-Philippe Jenny (INRAE), Georges-Marie Saulnier (CNRS) and Vincent Chanudet (EDF).

- 2021: **MS in earth and environmental sciences**, Université Rouen-Normandie (France).

- 2018: **BS in earth and environmental sciences**, Université of Caen and Rouen-Normandie (France).

Publications

- **Mazure, T**, Saulnier, G-M, Giguet-Covex, C, Sabatier, P, Bajard, M, Chanudet, V, Arnaud, F, and Jenny, J-P (2024). Half of the soil erosion in the Alps during the Holocene is explained by transient erosion crises as a consequence of rapid human land clearing. *The Holocene*, 34(9), 1290-1303. (Journal article).

- Jenny, J-P, Millet, L, Lauerwald, R, Colas, F, Masclaux, H, Prairie, Y, Regnier, P, A Ali, A, Arnaud, F, Carvalhais, N, Chanudet, C, Chapron, E, Durand, P, Domaizon, I, Dambrine, E, Dellinger, M, Etienne, D, Gaillardet, J, Galop, D, Gateuille, D, Giguet-Covex, C, Itier-Desgué, O, Jezequel, D, Lyautey, E, Marquer, L, Mazier, F, **Mazure, T**, Messager, E, Poulenard, J, Rius, D, Sabatier, P, Saulnier, G-M, Simonneau, A, Soares, L, Tran-Khac, V, Verneaux, V, and Ciais, P (2024). DEEP-C Consortium: Carbon sink or methane source–

local to global scale assessment of lentic waters' role in the climate system. *Research Ideas and Outcome*, 10: e136661. (Journal article).

- Desgué-Itier, O, Melo Vieira Soares, L, Anneville, O, Bouffard, D, Chanudet, V, Danis, P-A, Domaizon, I, Guillard, J, **Mazure, T**, Sharaf, N, Soulignac, F, Tran-Khac, V, Vinçon-Leite, B, and Jenny, J-P (2023). Past and future climate change effects on thermal regime and oxygen solubility of four peri-alpine lakes. *Hydrol. Earth Syst. Sci.*, 27, 837–859 (Journal article).

Communications

- **Mazure, T**, Messager, E, Mazier, F, Saulnier, G-M, Serge, M-A, Chanudet, V, and Jenny, J-P (2024). Quantifying the impacts of landscape opening on alpine soil erosion dynamics during the Holocene. *Q14 Conference 2024*. Rennes, France, February 26 - March 1st 2024 (Talk).

- Charef, Z, and **Mazure, T** (2023). Ce que l'érosion des sols en montagne peut nous apprendre sur le climat. *Alpine Mag* (Press article).

- **Mazure, T**, Saulnier, G-M, Chanudet V, Bajard, M, Arnaud, F, Sabatier, P and Jenny, J-P (2023). Coupling soil erosion model and lake sediment records reveals the importance of Alpine erosion crisis in total sediment exports during the Holocene. *TERENO-OZCAR Joint Meeting 2023*. Bonn, Germany, September 25 - 28 2023 (Talk).

- **Mazure, T**, Saulnier, G-M, Mazier, F, Serge, M-A, Messager, E, Arnaud, F, Jenny, J-P (2022). Quantifying soil erosion during the Holocene by coupling land surface modeling and paleoenvironmental approaches. *IAL-IPA Joint Meeting 2022*. San Carlos de Bariloche, Argentina, November 27 - December 1st 2022 (Talk).

- **Mazure, T**, Saulnier, G-M, Mazier, F, Serge, M-A, Messager, E, Arnaud, F, Jenny, J-P (2022). Quantifying soil erosion during the Holocene by coupling land surface modeling and paleoenvironmental approaches. *4èmes Journées De Modélisation Des Surfaces Continentales*. Grenoble, France, 6 - 7 October 2022 (Poster).

Education

- 2021 - 2024: « Erosion modeling at various temporal and spatial scales » lessons for MS in earth and environmental sciences, Université Savoie Mont-Blanc (France).

Other

- 2024: Science popularization at the Pint of Science festival (Grenoble, France).

- 2021 - 2022: Student representative position at the Science, Ingénierie, Environnement (SIE) doctoral council.