



MICKAËL LALANDE

CONTACT

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Driving licence

SOCIAL NETWORKS

@LalandeMickael

@mickaellalande

@mickaellalande

mickaellalande.github.io

COMPUTER SKILLS

- Python (xarray, proplot, dask, pandas, scipy, xesmf, etc.)
- Jupyter Lab/Notebook
- Linux
- GitHub
- Latex (Overleaf)
- Fortran (basic level)
- Climate models:
LMDZ/ORCHIDEE (IPSL)
- Supercomputer: Jean-Zay, TGCC

LANGUAGES

- French (native speaker)
- English (fluent)

RESEARCH INTERESTS

Mountainous Area - High Mountain Asia - Global Climate Models - CMIP6 - Snow Cover Parameterization

PROFESSIONAL EXPERIENCE

PhD Student

Institut des Géosciences de l'Environnement | Oct 2019 - Sep 2022

Cryosphere and climate modeling in the High Mountain Asia
(supervised by Martin Ménégoz and Gerhard Krinner)

↳ CMIP6 - LMDZ/ORCHIDEE (IPSL GCM) - Snow Cover Parameterization

Master thesis

Institut des Géosciences de l'Environnement | Feb 2019 - Jul 2019

Identification and filtering of oceanic chaos by Machine Learning
(supervised by Thierry Penduff and Redouane Lguensat)

↳ Oceanography - Chaos - Deep Learning - Spatial Altimetry

Research intern

Institut des Géosciences de l'Environnement | May 2018 - Jul 2018

Impact of Arctic sea ice variability on the northern latitude
(supervised by Olga Zolina and María Santolaria-Otín)

↳ Hydrological cycle - Models - Reanalyses

EDUCATION

Master in Atmosphere, Climate, and Continental Surfaces
Université Grenoble Alpes | 2017 - 2019

Bachelor's degree in Physics
Université Grenoble Alpes | 2013 - 2014

Bachelor's degree in Earth and Environmental Sciences
Université Grenoble Alpes | 2012 - 2013

Preparatory classes for French "Grandes Ecoles" CPGE
Lycée Joffre, Montpellier | 2009 - 2011

SCIENCE POPULARIZATION



Science et Climat

YouTube channel created in 2019

www.youtube.com/c/ScienceetClimat



Allodocs Podcast

#21: How can we make climate projections until 2100, when we can't predict the weather in 10 days?



FLASH | OSUG

Is the current global warming due to human activity?



HMA | OSUG

Exacerbated warming in the High Mountain Asia

HOBBIES

- Hiking
- Snowboard
- Guitar

TRAVELS

- **Japan** (1 year Working Holiday Visa in Kyoto)
- **New Zealand** (3 months backpacking)

PUBLICATIONS

Lalande, M., Ménégoz, M., Krinner, G., Naegeli, K., & Wunderle, S. (2021). **Climate change in the High Mountain Asia in CMIP6**. *Earth System Dynamics*, 12(4), 1061–1098. <https://doi.org/10.5194/esd-12-1061-2021>

TALKS

Lalande, M., Ménégoz, M., and Krinner, G., Ottlé, C: **Aptation of a snow cover scheme for complex topography areas: regional calibration over High Mountain Asia and application in global models**, 3rd International Conference on Snow Hydrology, 1–4 Feb 2022, Grenoble, France.

Lalande, M., Ménégoz, M., and Krinner, G.: **Climate change in the High Mountain Asia simulated with CMIP6 models**, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-8365, <https://doi.org/10.5194/egusphere-egu21-8365>, 2021.

TEACHING

Climatic and Environmental Variability course

Université Grenoble Alpes | 2020 - 2021

- **Tutored project (~ 6h)**
https://github.com/mickaellalande/variabilite_climatique
- **Python introduction (3h)**
- **Practical works (6h)**

ERCA school

Université Grenoble Alpes | 2022

- **Practical works (4h)**
<https://github.com/mickaellalande/ERCA>

SUMMER SCHOOL

Mountain Research School

LabEx ITTEM & OSUG, massif des Écrins (French Alps) | 2021

Interdisciplinarity between Human and Social Sciences and Earth and Environmental Sciences within mountain territories.