Carole Doucerain

Curriculum Vitae



Education

2020-2021 M.Sc. Master of Geosciences - 1st year, Ecole Normale Supérieure, Paris, M1.

2019–2020 B.Sc. Bachelor of Geosciences - 3rd year, Ecole Normale Supérieure, Paris, L3.

2017–2019 Two years of selective class to the competitive exams to the "Grandes Ecoles", Lycée Henri IV, Paris, L1/L2. Physics, chemistry, mathematics.

2017 High school diploma, Lycée Descartes, Montigny-le-Bretonneux, France, Science major.

2013–2015 Two years abroad, Saint Maur International School, Yokohama, Japan.

Experiences

Research internships:

2021-2022 Geostatistical team of the Centre of Geosciences, LES MINES DE PARIS, supervised by Chantal de Fouquet.

6 months *Topic*: Comparison of linear and non-linear geostatistical methods for the estimation of PAH (polycyclic aromatic hydrocarbons) content in French soils, based on the RMQS data.

2021 Centre for Hydrogeology and Geothermics (CHYN) of University of Neuchâtel, Suisse

5 months Master 1 internship (M1) supervised by Philippe Renard.

Topic: Surface mass balance modelling of the Tsanfleuron Glacier (Switzerland).

2020 Atmosphere, Space Observations Laboratory (LATMOS) of SORBONNE UNIVERSITY, Paris, France

6 weeks Bachelor internship (L3) supervised by Camille Viatte.

Topic: Analysis of fine particulate matter (PM_{2.5}) pollution events during the year 2020 in Paris.

Field Trips:

2019 Pedology and Cartography field trip in the French Alps, Dignes-les-Bains, France. (2 weeks)

Ornithology:

2022 One month volunteering in the bird ringing station of Antikythera, ABO (Antikythera Bird Observatory),

(May) Hellenic Ornithological Society, Greece Supervised by Christos Barboutis.

Languages

Français Mother tongue

English Written and spoken fluently

Two years in an English-speaking international high school, Japan

Skills

Computer Bash, Python, Latex

Data analysis PCA, inverse problems, geostastistics

Fields of interest

Geosciences Atmospheric pollution, climate change, organic pollutants, soil biogeochemistry, fluid dynamics, hydrogeology.

Hobbies Mountain hikking, juggling, bird watching, drawing.

Other Ornithology, Mathematics, Ecology.

Bibliography

2021 Published: Viatte, C., Petit, J.E., Yamanouchi, S., Van Damme, M., Doucerain, C., Germain-Piaulenne, E., Gros, V., Favez, O., Clarisse, L., Coheur, P.F., Strong, K., Clerbaux, C.; Ammonia and PM_{2.5} air pollution in Paris during the 2020 COVID lockdown. Atmosphere, 12, 160.