



NEFELI MELITA

Nationality: Greek **Date of birth:** 17/09/1996 **Gender:** Female

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Home: 46 TINOU 0, 15253 ATHENS (Greece)

WORK EXPERIENCE

National Observatory of Athens – ATHENS, Greece

Management of Solar Energy Forecasting Techniques

[10/2025 – Current]

Wageningen University & Research, Meteorology and Air Quality Group – Wageningen, Netherlands

Atmospheric Monitoring of Aerosol in the Netherlands - CAINA Project

[05/2025 – 08/2025]

National Observatory of Athens – Athens, Greece

Technical Support in Modeling and Forecasting of Atmospheric Parameters' Impact on Solar Radiation and Energy Production - CIROCCO Project

[01/06/2024 – Current]

National Observatory of Athens – Athens, Greece

Solar Irradiation Forecasting

[01/05/2022 – 01/08/2022]

EDUCATION AND TRAINING

Doctor of Philosophy (PhD) in Atmospheric Sciences

University of Ioannina [12/2025 – Current]

City: Ioannina | Country: Greece | Website: <https://uoi.gr>

MSc Environment and Development

National Technical University of Athens [01/10/2023 – 01/02/2025]

City: Athens | Country: Greece | Website: <https://www.ntua.gr/en/>

Applied Mathematics

National and Kapodistrian University of Greece [2014 – 2022]

City: Athens | Country: Greece | Website: <https://en.uoa.gr/>

PUBLICATIONS

[2026]

Atmospheric Forcing on Solar Energy in Complex Terrain: A Digital Twin Assessment in an Intermontane Basin in Southern Balkans

Authors: Nefeli Melita, Panagiotis Kosmopoulos, Dimitris Kitsikopoulos, Dimitris G. Kaskaoutis, Ioanna-Mirto Chatzigeorgiou, Nikolaos Hatzianastassiou, Alexandros Papayannis | **Journal Name:** MDPI, Atmosphere

[2026]

Similarity-based solar power forecasting: A technical advance for global energy systems

Authors: Panagiotis Kosmopoulos, Harshal Dhake, Evangelia Gakou, Nefeli Melita, Yashwant Kashyap | Journal Name: ELSEVIER, ENERGY AND AI | Volume, Issue and Pages: Vol 24, 100761

[2025]

Analysis of air pollution in mountainous areas of Epirus using satellite and meteorological data, with the application of statistical models and machine learning techniques.

Authors: Melita Nefeli, Andronis Vassilis, Kosmopoulos Panagiotis, Karantzaos Konstantinos | Journal Name: To appear in the Proceedings of the 11th MIRC Conference 2025

[2024]

Multi-Layer Cloud Motion Vector Forecasting for Solar Energy Applications

Authors: Kosmopoulos, P., Dhake, H., Melita, N., Tagarakis, K., Georgakis, A., Stefas, A., Vaggelis, O., Korre, V., & Kashyap, Y. (2024) | Journal Name: Applied Energy | Volume, Issue and Pages: 353

DIGITAL SKILLS

Matlab, Python, QGIS, Big Data Management, Microsoft Office, Plots Development, Computer Vision

COMMUNICATION AND INTERPERSONAL SKILLS

Collaboration/Teamwork, Problem Solving, Creativity, Organizational Skills

LANGUAGE SKILLS

Mother tongue(s): Greek

Other language(s):

English

LISTENING C2 READING C2 WRITING C1

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

VOLUNTEERING

[07/2022 – 09/2022] North Pindos, Greece

Forest and Wildlife Protection and Conservation of North Pindos - Pindos Perivallontiki

[04/2022 – 05/2022] Nymfaio, Greece

Radio-Observation and Remote Sensing of Bears, Work at Bear and Wolf Shelter - ARKTUROS