

PERSONAL INFORMATION

Name	EMILIANA VALENTINI
ORCID ID	0000-0002-4257-7858
webpage	https://www.isp.cnr.it/index.php/en/about-us/staff/item/278-valentini-emiliana
LinkedIn	https://www.linkedin.com/in/emiliana-valentini-8710b62b/?originalSubdomain=it

WORK EXPERIENCE

- | | |
|------------------------------------|---|
| • Dates (from - to) | July 2020 – today |
| • Name and address of the employer | National Research Council of Italy – Institute of Polar Sciences (CNR – ISP) |
| • Occupation or position held | Researcher (Ecosystems and Natural resources) – full and permanent |
| • Dates (from - to) | September 2020 – today |
| • Name and address of the employer | Sapienza University of Rome, Faculty of Mathematical, Natural and Physical Sciences |
| • Occupation or position held | Lecturer in Remote Sensing and GIS, Ecobiology MD - temporary |
| • Dates (from - to) | September 2011 – June 2020 |
| • Name and address of the employer | Italian Institute for Environmental Protection and Research (ISPRA) |
| • Occupation or position held | Research Technician in Geography – full and permanent |

EDUCATION AND TRAINING

- | | |
|--|--|
| • Dates (from - to) | February – July 2016 |
| • Name and type of organisation providing education and training | Italian Society for International Organization and the Italian Space Agency (SIOI-ASI) |
| • Principal subjects/occupational skills covered | Legal, political, scientific, industrial and economic disciplines regarding the themes of the exploration and the use of outer space |
| • Title of qualification awarded | Master in Space Institutions and Policies |
| • Dates (from - to) | February 2008 – June 2011 |
| • Name and type of organisation providing education and training | Institute for Marine Applied Research (ICRAM – ISPRA) |
| • Principal subjects/occupational skills covered | Co-investigator in coastal vulnerability to erosion and flood, costal pollution assessment, wetland restoration, coastal and marine biodiversity analyses. |
| • Title of qualification awarded | Research fellows |
| • Dates (from - to) | 2009 – 2013 |
| • Name and type of organisation providing education and training | Tuscia, University of Viterbo, Department for Innovation in Biological, Agro-food and Forest Systems |
| • Principal subjects/occupational skills covered | Application of remote sensing to coastal ecosystems
http://dspace.unitus.it/handle/2067/2800 |
| • Title of qualification awarded | Doctorate in Ecology and Biological Resources Management |
| • Dates (from - to) | 1999 - 2006 |
| • Name and type of organisation providing education and training | Sapienza, University of Rome |
| • Principal subjects/occupational skills covered | Life Sciences and Ecology |
| • Title of qualification awarded | Graduate in biology |

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE
OTHER LANGUAGES

ITALIAN
ENGLISH, FRENCH

SCIENTIFIC SKILLS AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

- Research interests (5 Key words): ecology, geography, spatial analyses, polar sciences, biodiversity.
- European Research Council (ERC) panels: LS8; PE6-8-10; SH2-7
- Author of 44 publication on Scientific Journals.
- Author of more than 100 proceedings, poster and oral communications at international scientific level
- Supervisor of BD and MD and PhD courses and thesis

RELEVANT ROLES AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

- 2023-2025 PI of STRENGTH project, STRENGTHening the space - science network for monitoring rapidly shifting landscapes. Funded through the bilateral research agreements CNR-VAST (Vietnam).
- 2023-2025 Responsible for CNR ISP of iSCORE (Infrastructure on Snow COVer Reflectance and sEasonality. Funded by the national PRA – INFRA 2021, prot. CNR - AMMCEN n. 0083853/2022.
- 06/05/2024 – 06/05/2026 Co-Investigator in HOLISTIC project, Overview of the supraglacial Lake-Ice-Snow Timing and Climate causality. Funded by the national PNRA2022/0000073 for supporting Antarctic studies
- 5/12/2024 – 27/01/2025 – Participation to the 50° Italian scientific expedition in Antarctica at the Mario Zucchelli Station (MZS) of Baia Terra Nova. Funded by PNRA - Programma Nazionale di Ricerche in Antartide
- 2015-2019 PI for ISPRA in ECOPOTENTIAL project, SC5-EU/H2020 project, Improving Future Ecosystem Benefits through Earth Observations.
- 2015-2018 CoPI for ISPRA in Joint European Coastal Mapping Programme, DGMARE/EMODNET-EU.
- 2015-today Collaborator in Copernicus Users' Uptake projects (FP-CUP), EO oriented capacity buildings, training and infosessions for users engagements.
- 2017-today Collaborator to CHIME Requirements Consolidation Study, ESA/EU for future Sentinel hyperspectral satellite mission exploitation and CHEES, ESA/ESTEC CHIME E2E performance simulator.
- 2009–2022 Collaborator of international research projects: OVERSEE, ASI-PrismaScienza, Global ECV Multisensor Mapping for Coastal Ecosystem Services Protection; ECOSTRESS, ECHO-EU/H2020, Ecological Coastal Strategies and Tools for Resilient European Societies; GREEN, ECHO-EU/H2020, Green infrastructures for disaster risk reduction protection: evidence, policy instruments and marketability; THESEUS ENV-EU/FP7, Innovative technologies for safer European coasts in a changing climate; MERMAID OCEAN-EU/FP7, Innovative Multi-Purpose Off-Shore Platforms; Planning, Design and Operation; CLARA EU/H2020, Climate forecast enabled knowledge services for the development of climatic and derivatives services through direct brokers; GIS and Vulnerability Assessment for UNDP-Provision of Services to Caribbean OCTs. Lot1: GIS and Vulnerability Assessment.
- Member of: Ecosystem Services Partnership, GEO-BON Ecosystem Structure WG, American Geophysical Union Biogeosciences, SIOS Remote sensing network.
- Associate as researcher to the IUSS Pavia and ISPRA.

PUBLICATION INDEXES (SCOPUS)

- NUMBER OF PUBLICATIONS: 44
- TOTAL NUMBER OF CITATIONS: 803
- SCOPUS H-INDEX: 17

**10 MOST RELEVANT
PUBLICATIONS**
In the last 10 years.

1. Valentini, E., Nghiem, S. V., Thy, P. T. M., Sapio, S., Bresciani, M., Giardino, C., ... & Taramelli, A. (2025). Multisensor mapping of land use/land cover pattern in mangrove ecosystems: a case study in C  n Gi   Biosphere Reserve, Vietnam. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. <https://doi.org/10.1109/JSTARS.2025.3584799>
2. Valentini E., Sapio S., Schiavon E., Righini M., Monteleone B., Taramelli A. (2024) Development of a Pre-Automatized Processing Chain for Agricultural Monitoring Using a Multi-Sensor and Multi-Temporal Approach. *Land*. 13(1):91. <https://doi.org/10.3390/land13010091>.
3. Valentini, E., Taramelli, A., Marinelli, C., Martin, L. P., Fassari, M., Troffa, S., Mzid, N., Casa, R., and Pignatti, S. (2023). Hyperspectral mixture models in the CHIME mission implementation for topsoil texture retrieval. *Journal of Geophysical Research: Biogeosciences*, 128(9), e2022JG007272. <https://doi.org/10.1029/2022JG007272>.
4. Ventura, D., Napoleone, F., Cannucci, S., Alleaume, S., Valentini, E., Casoli, E., & Burrascano, S. (2022). Integrating low-altitude drone based-imagery and OBIA for mapping and manage semi natural grassland habitats. *Journal of Environmental Management*, 321, 115723. <https://doi.org/10.1016/j.jenvman.2022.115723>.
5. Taramelli, A., Valentini, E., Piedelobo, L., Righini, M., & Cappucci, S. (2021). Assessment of State Transition Dynamics of Coastal Wetlands in Northern Venice Lagoon, Italy. *Sustainability*, 13(8), 4102. <https://doi.org/10.3390/su13084102>.
6. Valentini, E., Taramelli, A., Cappucci, S., Filipponi, F., & Nguyen Xuan, A. (2020). Exploring the Dunes: The Correlations between Vegetation Cover Pattern and Morphology for Sediment Retention Assessment Using Airborne Multisensor Acquisition. *Remote Sensing*, 12(8), 1229. <https://doi.org/10.3390/rs12081229>.
7. Guerra, C. A., Rosa, I. M., Valentini, E., Wolf, F., Filipponi, F., Karger, D. N., ... & Eisenhauer, N. (2020). Global vulnerability of soil ecosystems to erosion. *Landscape Ecology*, 1-20. <https://doi.org/10.1007/s10980-020-00984-z>
8. Filipponi, F., Valentini, E., Nguyen Xuan, A., Guerra, C. A., Wolf, F., Andrzejak, M., & Taramelli, A. (2018). Global MODIS Fraction of Green Vegetation Cover for Monitoring Abrupt and Gradual Vegetation Changes. *Remote Sensing*, 10(4). <https://doi.org/10.3390/rs10040653>
9. Taramelli, A., Valentini, E., Cornacchia, L., Monbaliu, J., & Sabbe, K. (2018). Indications of dynamic effects on scaling relationships between channel sinuosity and vegetation patch size across a salt marsh platform. *Journal of Geophysical Research: Earth Surface*. 23(10), pp. 2714–2731. <https://doi.org/10.1029/2017JF004540>
10. Valentini E., Filipponi, F., Nguyen Xuan, A., Passarelli, F. M., & Taramelli, A. (2016). Earth Observation for Maritime Spatial Planning: Measuring, Observing and Modeling Marine Environment to Assess Potential Aquaculture Sites. *Sustainability*, 8(6), 519. <https://doi.org/10.3390/su8060519>
11. Valentini, E., Taramelli, A., Filipponi, F., & Giulio, S. (2015). An effective procedure for EUNIS and Natura 2000 habitat type mapping in estuarine ecosystems integrating ecological knowledge and remote sensing analysis. *Ocean & Coastal Management*, 108, 52-64. <https://doi.org/10.1016/j.ocecoaman.2014.07.015>
12. Giardino, C., Bresciani, M., Valentini, E., Gasperini, L., Bolpagni, R., & Brando, V. E. (2015). Airborne hyperspectral data to assess suspended particulate matter and aquatic vegetation in a shallow and turbid lake. *Remote Sensing of Environment*, 157, 48-57. <https://doi.org/10.1016/j.rse.2014.04.034>

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Roma, 04 Sept 2025

Emiliana Valentini