



## Paolo Mazzetti

Date of birth: 21/08/1967

Nationality: Italian

## CONTACT

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## WORK EXPERIENCE

**01/03/2024 – CURRENT** Montelibretti (RM), Italy

**Acting Director of CNR-IIA** Institute of Atmospheric Pollution Research - National Research Council of Italy

**01/03/2018 – 29/02/2024** Sesto Fiorentino (FI), Italy

**Head of the Division of Florence of CNR-IIA** Institute of Atmospheric Pollution Research - National Research Council of Italy

**31/05/2011 – CURRENT** Sesto Fiorentino (FI), Italy

**Research scientist** Institute of Atmospheric Pollution Research - National Research Council of Italy

- Research project management
- Research activity in geospatial information and knowledge modeling
- Design of cyber-infrastructures for multidisciplinary applications

**14/07/2005 – 30/05/2011** Tito Scalo (PZ), Italy

**Research scientist** Institute of Methodology for Environmental Analysis - National Research Council of Italy

- Research project management
- Research activity in geospatial information and knowledge modeling;
- Design of cyber-infrastructures for multidisciplinary applications;
- Grid technology

**31/05/1995 – 13/07/2005** Prato

**Research consultant** University of Florence, CNR, Politecnico di Milano, PIN

Research activity in microwave remote sensing (weather radar); geospatial data sharing

**31/05/1995 – 29/04/2010** Florence, Italy

**Adjunct Professor** University of Florence

- Professor of "Telematics" class for the degree in Information Engineering
- Supervisor of more than 40 thesis for the degree in Information Engineering

## EDUCATION AND TRAINING

**08/2016 – 12/2021**

**Degree in Logic, Philosophy and History of Science** University of Florence

**Field of study** Philosophy and ethics | **Final grade** cum laude | **Thesis** 'It from Bit': il problema del rapporto tra informazione e realtà (in Italian) / 'It from Bit': issues in the relationship between information and reality

**31/08/1986 – 19/12/1993** Florence, Italy

## Degree in Electronic Engineering University of Florence

**Field of study** Information and Communication Technologies | **Final grade** cum laude | **Thesis** Impiego del radar per la predizione dell'attenuazione e nell'osservazione di campi di precipitazione ad elevata dinamica (in Italian) / Use of radar for attenuation prediction and observation of highly dynamic precipitation fields

## LANGUAGE SKILLS

**MOTHER TONGUE(S):** Italian

**Other language(s):**

English

Listening C2

Spoken production C2

Reading C2

Spoken interaction C2

Writing C2

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

## DIGITAL SKILLS

Microsoft Office | Microsoft Word | Microsoft Excel | Microsoft Powerpoint | Outlook | Zoom | Skype | Google Drive | Google Docs | Team-work oriented | Good listener and communicator | Organizational and planning skills | Internet user | Decision-making | Critical thinking | Gmail | Reliability | Responsibility | Research and analytical skills | Analytical skills | Python programming language

## ADDITIONAL INFORMATION

### Research Interests

**CURRENT**

**Summary**

## Honours and awards

### 2017 Città di Firenze

**"Fiorino d'argento"** Awarded in the context of the Florence Academic Leader Programme 2017 (FALP 2017)

### 2014 Geospatial World

**Geospatial World Innovation Award** Member of the CNR-IIA working group awarded in section "Technology Innovation in Interoperability" for the "GEOSS Brokering Framework"

### 2011 ISESS

**Best paper at the ISESS 2011** Author of the paper "Environmental Information Systems on the Internet - A Need for Change" awarded in 'eEnvironment and Cross-border Services in Digital Agenda for Europe' track

### 2008 EGEE

**Best application demo at EGEE'08 Conference** Author of the "G-RISICO: A Wild Fire Risk Assessment application running on an advanced Grid infrastructure" application

## Networks and memberships

**08/03/2023 – CURRENT**

**Chair of the European Chapter of the International Society for Digital Earth (ISDE)** ISDE is an international organization principally promoting academic exchange, science and technology innovation, education, and international collaboration towards Digital Earth (<http://www.digitalearth-isde.org/>)

**2021 – 2022**

**Agriculture of Data Core Group** Member representing ERA-PLANET - European Research Area Network on Earth Observation

**2018 – CURRENT**

**National Working Group on Land Degradation Neutrality** Member

**2018 – CURRENT**

**International Society for Digital Earth Council** Member

**2018 – CURRENT**

**GEOSS Infrastructure Development Task Team** Principal Representative of Italy

**2018 – 2022**

**GEO Programme Board** Principal Representative of Italy

**2017 – 2019** Geneva, Switzerland

**GEOSS Expert Advisory Group** Member

**EuroGEOSS Coordination Group** Representative of Italy

**02/2016 – CURRENT** Montelibretti (RM), Italy

**Governing Board of CNR-IIA** Member

**2013 – CURRENT**

**Arctic Data Committee** Representative of Italy

**2013 – 2016** Vienna, Austria

**Earth and Space Science Informatics (ESSI) Division of the European Geosciences Union (EGU)** Deputy President

**2013 – 2015**

**GEO Institutions and Development Implementing Board (IDIB)** Member

**2009 – 2011**

**GEOSS Evaluation Team on "Architecture and Data Management"** Member

**2009 – 2011** Tito Scalo (PZ), Italy

**Governing Board of CNR-IMAA** Member

## Projects

**01/09/2022 – 28/02/2027**

**HORIZON TRIGGER (SoluTions foR mUltiGatinG climate-induced hEalth tReaths)** PI for CNR-IIA

**11/2021 – 12/2025**

**HIS-Central (Implementation of the central node of the Italian Hydrologic Information System)** Project Coordinator

**31/10/2021 – 29/04/2025**

**H2020 I-CHANGE (Individual Change of HAbits Needed for Green European transition)** Work package leader of "Observation integration and interoperability of data"

**01/06/2022 – 31/12/2024**

**ESA DAB4GPP** Project Coordinator

**01/09/2022 – 29/02/2024**

**DIGITAL GREAT (The Green Deal Data Space Foundation and its Community of Practice)** PI for CNR-IIA

**31/12/2020 – 29/06/2023**

**LIFE20 NewLife4Drylands (Remote sensing oriented nature based solutions towards a new life for drylands)** Project Coordinator

**2015 – CURRENT**

**H2020 ERA-PLANET (The European network for observing our changing planet)**

- Until February 2018:
  - Work Package Leader of SMURBS “ERA-PLANET principles and KETs for interoperability”;
  - Work Package Leader of GEOEssential “Interoperability, Data Sharing and Management development”, “Knowledge Management services”;
  - Work Package Leader of IGOSP “Interoperability, mid-stream and down-stream services”;
- Since March 2018:
  - Coordinator of CNR-IIA-Firenze unit activities in ERA-PLANET and in the Transnational Projects SMURBS, GEOEssential, IGOSP, ICUPE;
  - Work Package Leader of ERA-PLANET “Strategic research policy development, coordination of European programs and supporting International Policies”
  - Member of the ERA-PLANET Steering Committee

**2017 – 2019**

**ESA DAB4EDGE (GEO-DAB Support for European Direction in GEOSS Common Infrastructure Enhancements)** Project Coordinator

**2003 – 2006**

**P.O.N. Revilab (Potenziamento della rete ad alta velocità per l'interconnessione dei laboratori CNR-IMAA)** Scientific and Technical Coordinator

**2014 – 2019**

**H2020 ECOPOTENTIAL (Improving Future Ecosystem Benefits through Earth Observations)** Until February 2018: Work Package Leader of "ECOPOTENTIAL Virtual Laboratory Platform";

Since March 2018: Coordinator of CNR-IIA-Firenze unit activities in the project

**2013 – 2017**

**CIP-PSp ENERGIC-OD (European NEtwork for Redistributing Geospatial Information to Communities - Open Data)** Technical Coordinator

**2012 – 2016**

**FP7 MED-SUV (MEDiterranean SUpersite Volcanoes)** Task Leader of "Multidisciplinary Interoperability Infrastructure"

**2012 – 2015**

**FP7 IASON (Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas)** Work package leader of "Assessment of existing and on-going research efforts in the Mediterranean and Black Sea"

**2011 – 2015**

**MIUR PNR ND-SoS-Ina (NextData System of Systems Infrastructure)** Scientific responsible for CNR-IIA Unit

**2011 – 2015**

**ESA Prod-Trees (Enriching EO Ontology Services Using Product Trees)** Work Package Leader of "User requirement" and "Enhancement specification"

**2010 – 2014**

**FP7 EARTH SERVER (European Scalable Earth Science Environment)** Coordinator of Networking Activities

**2010 – 2013**

**FP7 ENVIROFI (Environmental Observation Web in Future Internet)** Task Leader of "Stakeholder Analysis: Communities, Architectures and Technologies"

**2009 – 2013**

**FP7 UncertWeb (The uncertain enabled model web)** Task Leader of "Discovery and access methodology and services"

**2009 – 2012**

**FP7 EGIDA (Coordinating Earth and Environment projects for GEOSS)** Work package Leader of "EGIDA Methodology and Use-Cases"

**2008 – 2011**

**FP7 G-MOSAIC (Gmes for Management of Operations, Situation Awareness and Intelligence for regional Crises)** Activity coordinator of "Standards for Earth Observation data"

**2007 – 2011**

**FP7 SAFER (Services and Applications For Emergency Response)** Activity Coordinator of "Gateway service network development"

**2005 – 2008**

**FP6 CYCLOPS (CYber-Infrastructure for CiviL protection ProcedureS)** Work package Leader of "Research and Innovation strategies definition"

## **Publications**

### **Bibliometric Indicators**

Scopus) h-index: 19; citations: 1367  
Web of Science) h-index: 19; citations: 1217; Author Impact: 80th percentile  
Google Scholar) h-index: 23; citations: 2285

### **Publications list**

Publication list available at Google Scholar (<https://scholar.google.it/citations?user=i9Bn80IAAAJ&hl=it>)

Most relevant publications:

- P. Mazzetti *et al.*, "Knowledge formalization for Earth Science informed decision-making: The GEOEssential Knowledge Base," *Environmental Science & Policy*, vol. 131, pp. 93–104, May 2022, doi: [10.1016/j.envsci.2021.12.023](https://doi.org/10.1016/j.envsci.2021.12.023).
  - S. Nativi, P. Mazzetti, and M. Craglia, "Digital Ecosystems for Developing Digital Twins of the Earth: The Destination Earth Case," *Remote Sensing*, vol. 13, no. 11, p. 2119, May 2021, doi: [10.3390/rs13112119](https://doi.org/10.3390/rs13112119).
  - G. Giuliani, B. Chatenoux, A. Benvenuti, P. Lacroix, M. Santoro, and P. Mazzetti, "Monitoring land degradation at national level using satellite Earth Observation time-series data to support SDG15—exploring the potential of data cube," *Big Earth Data*, pp. 1–20, 2020.
  - G. Giuliani *et al.*, "Knowledge generation using satellite earth observations to support sustainable development goals (SDG): A use case on Land degradation," *International Journal of Applied Earth Observation and Geoinformation*, vol. 88, p. 102068, Jun. 2020, doi: [10.1016/j.jag.2020.102068](https://doi.org/10.1016/j.jag.2020.102068).
  - S. Nativi, P. Mazzetti, and M. Craglia, "A view-based model of data-cube to support big earth data systems interoperability," *Big Earth Data*, vol. 1, no. 1–2, pp. 75–99, Dec. 2017, doi: [10.1080/20964471.2017.1404232](https://doi.org/10.1080/20964471.2017.1404232).
  - P. Baumann *et al.*, "Big data analytics for earth sciences: the EarthServer approach," *International Journal of Digital Earth*, vol. 9, no. 1, pp. 3–29, 2016.
  - C. Granell *et al.*, "Future Internet technologies for environmental applications," *Environmental Modelling & Software*, vol. 78, pp. 1–15, 2016.
  - S. Nativi, P. Mazzetti, M. Santoro, F. Papeschi, M. Craglia, and O. Ochiai, "Big data challenges in building the global earth observation system of systems," *Environmental Modelling & Software*, vol. 68, pp. 1–26, 2015.
  - S. Nativi, P. Mazzetti, and G. N. Geller, "Environmental model access and interoperability: The GEO Model Web initiative," *Environmental Modelling & Software*, 2012, doi: <https://doi.org/10.1016/j.envsoft.2012.03.007>.
  - L. Bastin *et al.*, "Managing uncertainty in integrated environmental modelling: The UncertWeb framework," *Environmental Modelling & Software*, vol. 39, pp. 116–134, 2013, doi: [10.1016/j.envsoft.2012.02.008](https://doi.org/10.1016/j.envsoft.2012.02.008).
  - D. Havlik *et al.*, "From sensor to observation web with environmental enablers in the future internet," *Sensors*, vol. 11, no. 4, pp. 3874–3907, 2011.
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