PERSONAL INFORMATION

Fabio Madonna

Consiglio Nazionale delle Ricerche. Istituto di Metodologie per l'Analisi Ambientale

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Sex Male | Nationality Italy

POSITION

Principal Research Scientist

WORK EXPERIENCE

2020- Adjunct Professor

University of Salerno, Italy

Faculty member, Department of Chemistry and Biology
PhD supervisor at Department of Physics

Business or sector Government / Research

2011- Research Scientist

Consiglio Nazionale delle Ricerche (CNR)

Research scientist on Atmospheric Sciences and ground-based remote sensing at the CNR-IMAA Atmospheric Observatory (CIAO) at CNR.
Leader of the C3S2 311 contract (2021-2025) in the frame of the Copernicus Climate Change Service (C3S)
Leader of the C3S 311a Lot3 contract (2017-2021) in the frame of the Copernicus Climate Change Service (C3S)
Coordinator of the project "OSCAR: Observation System for Climate Application at Regional scale" FESR programme 2007-2014
Business or sector Government / Research

EDUCATION AND TRAINING

2003-2007 PhD in Methods and Technologies for the environmental monitoring

University of Basilicata, Potenza, Italy

Ground-based remote sensing

1998-2003 Degree in physics cum laude

University of Rome "La Sapienza", Rome, Italy

Ground-based remote sensing

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	A1	A1	A1	A1	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user

Common European Framework of Reference for Languages

Communication skills

Adjunct Professor at University of Salerno (Dep. Of Chemistry and Biology)
Tutor of undergraduate, PhD and post-doc students
Invited speaker at conferences
Media appearances (print, TV, online)
Project scientific reporting and reporting to general public

Organisational / managerial skills

Technical and service manager of the C3S 311a Lot3 contract (2017-2021)
Member of the WG-GRUAN (2011-present), co-chair GRUAN task team “Scheduling”
Coordinator and WP leader in National and international projects (OSCAR, ACTRIS-IT, GAIA-CLIM)
Supervised PhD student to completion
PI of the TransNational Access Activities) for the CIAO station for EU FP7 ACTRIS (Aerosols, Clouds, and Trace gases Research InfraStructure Network)
Reviewer of EURAMET for project in metrology

Job-related skills

Observational data analysis
Database construction
Dataset creation, homogenization and advanced statistical analysis
Expert of ground based remote sensing technologies
Atmospheric measurement uncertainty analysis
Validation of field measurement techniques, models, and satellite data records

Computer skills

R, IDL, Fortran, Visual basic, Matlab, JAVA, Windows, OS, Linux
MS Office
ZEMAX
Website design

Other skills

Scientific assessments

ADDITIONAL INFORMATION

Publications

50 peer-reviewed papers

Most relevant publications

Madonna, F., et al.: The new Radiosounding HARMonization (RHARM) dataset of homogenized radiosounding temperature, humidity and wind profiles with uncertainties. Part I: and Part II, submitted to Journal of Geophys. Res., 2021

Madonna, F., et al.: Use of automatic radiosonde launchers to measure temperature and humidity profiles from the GRUAN perspective, Atmos. Meas. Tech., 13, 3621–3649, https://doi.org/10.5194/amt-13-3621-2020, 2020.

Lolli, S., Madonna, F., et al..: Impact of varying lidar measurement and data processing techniques in evaluating cirrus cloud and aerosol direct radiative effects, Atmos. Meas. Tech., 11, 1639-1651, https://doi.org/10.5194/amt-11-1639-2018, 2018.

Thorne, P. W., Madonna, F., et al.: Making better sense of the mosaic of environmental measurement networks: a system-of-systems approach and quantitative assessment, Geosci. Instrum. Method. Data Syst., 6, 453-472, https://doi.org/10.5194/gi-6-453-2017, 2017.

G. E. Bodeker et al. (2016): Reference Upper-Air Observations for Climate: From Concept to Reality. Bull. Amer. Meteor. Soc., 97, 123–135.doi: http://dx.doi.org/10.1175/BAMS-D-14-00072.1