

# CURRICULUM VITAE ROBERTO COLOMBO

## PERSONAL INFORMATION

Roberto Colombo



📍 Via D. Berra 17, 20126 Milano (Italy)  
☎ +39 02 64482819 📠 +39 3356898566  
✉ [Roberto.colombo@unimib.it](mailto:Roberto.colombo@unimib.it)  
🌐 <https://itda-disat.it/>

Sex Male | Date of birth 25/11/1966 | Nationality Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input checked="" type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

## WORK EXPERIENCE

2019→ Associate Professor in Remote Sensing at the Department of Environmental Sciences (DISAT) University of Milano Bicocca (UNIMIB, Italy). He is leading the Remote Sensing of Environmental Dynamics Lab. activities to develop remote sensing tools for quantitative estimation of land surface properties from optical and thermal data. In this respect, he works with a wide range of Earth Observation data at different scales and geophysical methods, assimilating multi-source, multi-spectral and multi-temporal remote sensing data, from field to satellite level for modelling terrestrial and environmental dynamics.

2005-2018→ University Researcher at DISAT-UNIMIB. Research on remote sensing applications for environmental modelling and monitoring, with particular focus on eco-hydrology, vegetation and snow.

2003-2004 Postdoctoral fellow and Adjunct Professor at DISAT-UNIMIB. Estimation of biophysical and biochemical vegetation properties at different spatial and temporal scales by using field spectroscopy and airborne hyperspectral data.

2000-2002 Research Scientist at the Institute for Environment and Sustainability, Joint Research Centre European Commission (JRC-EC), Ispra (Va), Italy. Deriving drainage networks and catchment boundaries at European scale by combining Digital Elevation Data and Environmental Characteristics.

1996-1999 Research Scientist at the Istituto di Rilevamento sul Rischio Sismico, National Research Council, Milano. Remotely sensed data for the estimation of energy balance components in mountainous catchments (Landsat TM, AVHRR-NOAA and ERS data).

1994-1996. Research fellow at the Istituto Agronomico per l'Oltremare. Assimilation of optical and thermal data (Landsat and SPOT XS) in an integrated hydrological model for the Mareb River (Eritrea).

## EDUCATION AND TRAINING

Replace with dates (from - to)

1998 Post-graduate course on Space Techniques for Environmental Risks (STER), International Space University, Strasburg (France).

1993 Master on Remote Sensing and Natural Resources Evaluation. Istituto Agronomico per l'Oltremare, Italian Development Cooperation. Firenze (Italy).

1991 Laurea in Earth Science - University of Milano. Geomorphological analysis of the Niger River floodplain (Mali) by using Landsat-5 MSS data and field survey

## PERSONAL SKILLS

Mother tongue Italian

Other language(s) English (C1/C2 proficient user)

Job-related skills

- Management of working groups;
- Responsibility in scientific committees and ;project management;
- Academic Supervisor for Graduate students, PhD tutor and Post-doctoral advisees;
- Interest in space mission concepts and definition, airborne campaigns and field cal/val activities, engineering and design of proximal remote sensing instruments, algorithm development and land surface parameters, environmental modelling and new applications.

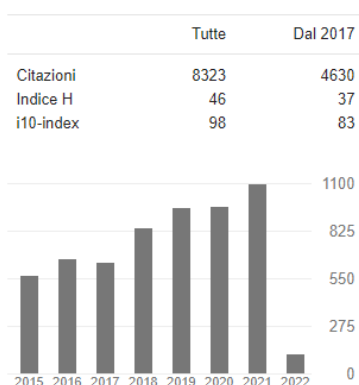
Digital skills

- Image Processing: Envi 5.2; ArcView 3.2; QGIS;
- Programming languages: IDL 7.2;
- Operational radiative transfer codes: MODTRAN, PROSAIL, SCOPE, ARTMO, SNICAR;
- Environmental models: FlamMap fire mapping and analysis system; Revised Universal Soil Loss Equation, Biome-BGC ecosystem process model; MOD17 MODIS for GPP/NPP; Growing Season Index and Degree Day phenological models; Soil Conservation Service - Curve Number (CN) method for runoff volume.

Current International Scientific Appointments

- Member of the FLEX MAG ESA Space Mission (2017-)
- Member of the CHIME MAG, ESA Space Mission (2018-)
- Member of the PRISMA Advisory Group per Data Exploitation (PAGE), ASI (2019-) and for PSG Space Missions.
- Member of the TIR-SBJ ASI Space Mission (2019-)
- Member of the Editorial Board of Remote Sensing Journal MDPI (2016-)

Evaluation metrics From Google Scholar @ 26 January 2020



## SELECTED PUBLICATIONS

TITOLO	CITATA DA	ANNO
<a href="#">Remote sensing of solar-induced chlorophyll fluorescence: Review of methods and applications</a> M Meroni, M Rossini, L Guanter, L Alonso, U Rascher, R Colombo, ... Remote Sensing of Environment 113 (10), 2037-2051	631	2009
<a href="#">Validation of global moderate-resolution LAI products: A framework proposed within the CEOS land product validation subgroup</a> JT Morisette, F Baret, JL Privette, RB Myneni, JE Nickeson, S Garrigues, ... IEEE Transactions on Geoscience and Remote Sensing 44 (7), 1804-1817	459	2006
<a href="#">Retrieval of leaf area index in different vegetation types using high resolution satellite data</a> R Colombo, D Bellingeri, D Fasolini, CM Marino Remote sensing of environment 86 (1), 120-131	446	2003
<a href="#">Integration of remote sensing data and GIS for accurate mapping of flooded areas</a> PA Brivio, R Colombo, M Maggi, R Tomasoni International Journal of Remote Sensing 23 (3), 429-441	420	2002
<a href="#">Estimation of leaf and canopy water content in poplar plantations by means of hyperspectral indices and inverse modeling</a> R Colombo, M Meroni, A Marchesi, L Busetto, M Rossini, C Giardino, ... Remote Sensing of Environment 112 (4), 1820-1834	249	2008
<a href="#">Inversion of a radiative transfer model with hyperspectral observations for LAI mapping in poplar plantations</a> M Meroni, R Colombo, C Panigada Remote sensing of environment 92 (2), 195-206	246	2004
<a href="#">Using digital repeat photography and eddy covariance data to model grassland phenology and photosynthetic CO2 uptake</a> M Migliavacca, M Galvagno, E Cremonese, M Rossini, M Meroni, ... Agricultural and Forest Meteorology 151 (10), 1325-1337	218	2011
<a href="#">Sun-induced fluorescence – a new probe of photosynthesis: First maps from the imaging spectrometer HyPlant</a> U Rascher, L Alonso, A Burkart, C Cilia, S Cogliati, R Colombo, A Damm, ... Global change biology 21 (12), 4673-4684	205	2015
<a href="#">Combining medium and coarse spatial resolution satellite data to improve the estimation of sub-pixel NDVI time series</a> L Busetto, M Meroni, R Colombo Remote Sensing of Environment 112 (1), 118-131	193	2008
<a href="#">Carving and adaptive drainage enforcement of grid digital elevation models</a> P Soille, J Vogt, R Colombo Water resources research 39 (12)	190	2003

Milano, 26/01/2022

