

Roberto Rudari



Board of Director member

Acrotec Foundation

Via A. Magliotto 2, 17100 Savona (Italy)

www.cimafoundation.org

WORK EXPERIENCE

Main responsibilities and competences:

Strategic guidance, administration responsibility

7 Jul 2017 – Present

Business or sector Administrative, strategic activities

Research Director at CIMA Research Foundation

CIMA Research Foundation

Via A. Magliotto 2, 17100 Savona (Italy)

www.cimafoundation.org

Main responsibilities and competences:

Research structure organization, Preparation & Management of research projects, Fundraising, Ph.D. students survey, Workshops and meetings organization

1 Jan 2014 – Present

Business or sector Professional, scientific and technical activities

Member of the CIMA Research Foundation Scientific Committee

CIMA Research Foundation

Via A. Magliotto 2, 17100 Savona (Italy)

www.cimafoundation.org

Main responsibilities and competences:

Research Strategy drafting revision and approval

1 Aug 2013 – Present

Business or sector Professional, scientific and technical activities

Project Leader at CIMA Research Foundation

19 May 2009 – Present

CIMA Research Foundation

Via A. Magliotto 2, 17100 Savona (Italy)

www.cimafoundation.org

Main responsibilities and competences:

01 Jan 2007 – Present

essional, scientific and technical activities

05 March 2006 – 18 May 2009

H2CU Main Contact for University of Genova

H2CU - SAPIENZA Università di
Roma Via Eudossiana 18, 00184
Roma (Italy) *Main responsibilities and
competences:*

*Responsible for the H2CU Honors Centre of Italian Universities grants at the University of
Genova; students exchange programmes and grants between Italy and USA*

Business or sector Education

03 March 2003 – 30 Dec
2005

Research Manager at University of Genova

University of Genova
Via Balbi 5, 16100 Genova (Italy)

Main responsibilities and competences:

*Preparation & Management of research projects, Fundraising, Ph.D. students survey,
Workshops and meetings organization*

Business or sector Research

02 March 2002 – 03 March
2003 *Preparation &
Management of research
projects, Fundraising, Ph.D.
students survey, Workshops
and meetings organization*

Researcher at National Research Council

National Research Council of Italy (CNR)
Via Madonna Alta 126, 06128 Perugia
(Italy) *Main responsibilities and competences:*

*Development of research projects related to Water management and Flood Risk for the
National
Group for prevention of Natural Disasters*

Business or sector Research

Post-Doc Position

Interuniversity Environmental Monitoring
Centre Via Cadorna 7, 17100 Savona (Italy)
Main responsibilities and competences:

Research activity in the field of Hydrologic Modelling

Business or sector Research

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EDUCATION AND TRAINING

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2 Feb 2000 – 21 May 2002

1 Sep 2000 – 1 Sep 2001

Curriculum vitae

hydraulics, Natural hazards management

Level in national or international classification: ISCED 6

Research Grant at Massachusetts Institute of Technology

Massachusetts Institute of Technology (University)
77 Massachusetts Avenue, MA 02139 Cambridge (United States)

Research Topic: Research, Education, Research activity related to the Ph. D. work of climatology of extreme precipitation.

Level in national or international classification: ISCED 6

09 Sep 1992 – 15 April 1998

Master of SC - Civil Engineering (summa cum Laude)

Università degli Studi di Genova . Facoltà di Ingegneria (University)
Via Balbi 5, 16100 Genova (Italy)

Mother tongue(s)

Foreign language(s)

English

French

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Social skills and competence Exercised teaching and communication skills. Excellent ability of dealing with public talks and exposition

Principal Subject: Civil and Environmental Engineering

09 April 1997 – 17 Nov 1997

Level in national or international classification: ISCED 5

MS thesis at VUB

Vrije Universiteit Brussel (University)
Pleinlaan 2, 1050 Brussel (Belgium)

Principal Subject: MS Thesis development within the Erasmus/Socrates International Program

Level in national or international classification: ISCED 5

PERSONAL SKILLS

Ph.D. in Hydraulic Engineering

University of Padova (University)
Via 8 Febbraio 1848, 2, 35121 Padova (Italy)
Research Topic: Fluid mechanics, Hydrology,

Italian

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
C1	C1	B2	B2	B2

Organisational skills
and
competences

ADDITIONAL INFORMATION

Great ability of relations with other people and of team building as well as a natural recognized leadership.

Skills in managing large complex project (Project Management): scheduling, human and financial resources, criticality analysis.

Technical skills and
competences

Exceptional skill in critical reasoning and Problem solving; ability in formalizing complex problems into mathematical models;
in-depth proven knowledge of geo-information use in emergency management services (EMS) for the Italian Civil protection;
in-depth proven knowledge of relevant remote sensing and GIS technology (See project and Publication references);
in-depth proven knowledge of EMS operational service process (See project and Publication references)

Computer skills and
competences

Database: Advanced
Internet/Mail: Advanced
Presentation tools: Advanced
Spreadsheet: Advanced
Text processing: Advanced
Programming languages (Fortran, C, Matlab)
Unix/linux

Driving licence

A, B



Assistant professor, Hydrology, Faculty of Engineering, University of Genova.

Research activities in basin geomorphology, Climate and weather predictability, continuous and distributed hydrologic modelling assisted by satellite and remotely sensed information. Other areas of interest are the characterization of joint probability distributions of land effects and vulnerability estimation to flood events, the improvement of combined hydro-meteorological forecast systems based on probabilistic concepts.

Operational and research experience in hydrology, with particular emphasis in flash-flood forecasting and statistical analysis of the extremes.

Programmer of the MIKE – DriFt rainfall-runoff model commercialized by DHI.

Expert in Disaster Risk Reduction policies in connection with EU, an all major International Organizations (e.g., UN-ISDR, UNITAR, UNEP, WMO) Initiatives (APFM, IFI) and NGO's

Guest editor of Hydrology and Earth System Sciences (HESS).

Since 2000: Teaching activity at the University of Genova (Italy) in the following fields: Hydrology for civil and environmental engineers; Sewing and water plants; Environmental hydraulics.

Since 2002: Experience as Scientific Director of a number of projects exceeding globally 3 million of Euro.

Author and co-author of 17 papers published on international refereed journals, 15 short papers published on proceedings of international conferences and 60 abstracts presented at international conferences.

Since 2005: referee for a number of international journals: Advances in Water Resources, International journal of Climatology, Journal of Hydrometeorology, Natural Hazards, Natural Hazard

and Earth System Sciences, Hydrology and Earth System Sciences, International Environmental Modelling and Software (Iemss), Physical Geography

Since 2009 consultant of WMO – Associated Program on Flood Management as an expert in DRR policies applied to the Integrated Flood Management: Risk assessment, Hazard mapping and Early Warning System

Since 2010 consultant of UN-ISDR in the context of the GAR for Global Flood Modelling, Global Vulnerability assessment, Global Risk index development

2011 Representative of the International Flood Initiative (IFI) to the Scientific Preparation workshop to the Global Platform on Disaster Risk Reduction

2012 Reviewer of the program Disaster Risk Reduction and Climate Change Adaptation in South Asia funded by CDKN

2012 representative for UNISD at the Regional Gulf Workshop organized and hosted by Gulf Cooperating Council (GCC)

Since 2013 member of the EU Data Losses Working Group, DG ECHO

2013 Coordinator of the Chapter on Floods and Landslides Risk for the Italian Climate Change Adaptation Strategy – Euro-Mediterranean Climate Centre, Ministry of the Environment

Since 2014 Coordinator of the Global Flood Record pillar within the Global Flood Partnership (<http://portal.gdacs.org/Global-Flood-Partnership>)

Since 2015 member of the WMO DRR User-Interface Expert Advisory Group on Hazard/Risk Analysis (UI-EAG HRA)

Since 2016 Steering Committee member of the Global Flood Partnership (<https://gfp.jrc.ec.europa.eu/>)

2017 leading author of the Flood Risk Assessment Chapter in the Words Into Action: implementation guides for the Sendai Framework - UNISDR

2017 Coordinator of the Chapter on Floods and Landslides Risk for the Italian Climate Change Adaptation Plan – Euro-Mediterranean Climate Centre, Ministry of the Environment

ANNEXES

Selected Publications :

1. Giannoni, F., G. Roth e R. Rudari, A Semi – Distributed Rainfall – Runoff Model Based on a Geomorphologic Approach, Physics and Chemistry of the Earth, 25/7-8, 665-671, [2000].
2. Ferraris L., Rudari R. and F. Siccardi, The uncertainty in the prediction of flash floods in the northern mediterranean environment, J. of Hydrometeorology, Vol. 3, No 6, pages 714-727, [2002].
3. Giannoni, F., Roth G., and R. Rudari, Can the behaviour of different basins be described by the same model's parameter set? A geomorphologic framework, Physics and Chemistry of the Earth, 28/6-7 pp. 289-295, 2003
4. Rudari R., D. Entekhabi e G. Roth, Terrain and Multiple Scale Interactions as Factors in Generating Extreme Precipitation Events, J. of Hydrometeorology, 5(3), 390-404, 2004.
5. Siccardi F., Boni G., Ferraris L., Rudari R., A hydro-meteorological approach for Probabilistic Flood Forecast, Journal of Geophysical Research, Vol. 110, No. D5, D05101 10.1029/2004JD005314, 2005.

6. Giannoni, F., Roth G., e R. Rudari, A procedure for drainage network identification from geomorphology and its application to the prediction of the hydrologic response, *Advances in Water Resources*, 28(6), 567-581, 2005, doi:10.1016/j.advwatres.2004.11.013.
7. Rudari R., D. Entekhabi e G. Roth, Large-Scale Atmospheric Patterns Associated with Mesoscale Features Leading to Extreme Precipitation Events in Northwestern Italy, *Advances in Water Resources*, 28(6), 601-614, 2005, doi:10.1016/j.advwatres.2004.11.017.
8. Gabellani S., Giannoni F., Parodi A., Rudari R., Taramasso A. C., Roth G., Applicability of a forecasting chain at different morphological environment, *Advances in Geosciences*, 2, 131– 134, 2005, SRef-ID: 1680-7359/adgeo/2005-2-131
9. Ghizzoni T., Lomazzi M., Roth G., Rudari R., Regional scale analysis of the altimetric stream network evolution, *Advances in Geosciences*, 7, 79-83, 2006, SRef-ID: 1680- 7359/adgeo/2006-7-79
10. Boni, G., Parodi, A., Rudari, R., Extreme rainfall events: learning from rain gauge time series, *J. of Hydrology*, 327, 304-314, 2006, doi:10.1016/j.jhydrol.2005.11.050
11. Boni, G., Ferraris, L., Giannoni, F., Roth, G., Rudari, R., Flood probability analysis for un- gauged watersheds by means of a simple distributed hydrologic model, *Advances in Water Resources*, 30(10), 2135-2144, 2007, doi:10.1016/j.advwatres.2006.08.009.
12. Giannoni, F., Roth G., Rudari, R., The value of the Italian civil protection system in Integrated Water Management for the Mediterranean environment, Chapter of book in *Integrated Water Management: Practical Experiences and Case Studies (Nato Science Series: IV: Earth and Environmental Sciences)*, Springer editions, ISBN-10: 1402065507, ISBN-13: 978-1402065507.
13. Ghizzoni T., Giannoni F., Roth G., Rudari R., The role of observation uncertainty in the calibration of hydrologic rainfall-runoff models, *Advances in Geosciences*, 12, 33-38, 2007, SRef-ID: www.adv-geosci.net/12/33/2007/
14. Gabellani, S., Silvestro, F., Rudari, R., and Boni, G.: General calibration methodology for a combined Horton-SCS infiltration scheme in flash flood modeling, *Nat. Hazards Earth Syst. Sci.*, 8, 1317-1327, 2008.
15. Segoni, S., L. Leoni, A. I. Benedetti, F. Catani, G. Righini, G. Falorni., S. Gabellani, R. Rudari, F. Silvestro, and N. Rebor, Towards a definition of a real-time forecasting network for rainfall induced shallow landslides, *Nat. Hazards Earth Syst. Sci.*, 9, 1–15, 2009; www.nat-hazards-earth-syst-sci.net/9/1/2009/
16. Ghizzoni, T., Roth, G., Rudari, R., Multivariate skew-t approach to the design of accumulation risk scenarios for the flooding hazard, *Advances in Water Resources* 33 (2010) 1243–1255
17. Ghizzoni, T., Roth, G., Rudari, R., Multisite flooding hazard assessment in the Upper Mississippi River, *Journal of Hydrology* (2012), (412-413), 101-113 <http://dx.doi.org/10.1016/j.jhydrol.2011.06.004>
18. Serpico, S. B., Dellepiane, S. , Boni, G., Moser, G., Angiati, E., and Rudari, R. (2012), information Extraction From Remote Sensing Images for Flood Monitoring and Damage Evaluation, *Proceedings of the IEEE* | Vol. 100, No. 10, 2946-2970, DOI:10.1109/JPROC.2012.2198030

19. Silvestro, F., Gabellani, S., Giannoni, F., Parodi, A., Rebora, N., Rudari, R., Siccardi, F. (2012) A hydrological analysis of the 4 November 2011 event in Genoa. *Natural Hazards and Earth System Sciences*, 12, 2743–2752.
20. Silvestro, F., Gabellani S., Delogu F., Rudari R., and Boni G.: Exploiting remote sensing land surface temperature in distributed hydrological modelling: the example of the Continuum model, *Hydrol. Earth Syst. Sci.* (2013), 17, 39-62, doi:10.5194/hess-17-392013
21. Pinto, J. G., S. Ulbrich, A. Parodi, R. Rudari, G. Boni, and U. Ulbrich, Identification and ranking of extraordinary rainfall events over Northwest Italy: The role of Atlantic moisture, *J. Geophys. Res. Atmos.* (2013), 118, doi:10.1002/jgrd.50179.
22. Lomazzi, M., D. Entekhabi, J. G. Pinto, G. Roth and R. Rudari, Synoptic Preconditions for Extreme Flooding during the Summer Asian Monsoon in the Mumbai Area, *J. of Hydromet.* (2013), 8, pp. , DOI: 10.1175/JHM-D-13-039.1
23. Rudari R., Come Cambia il Rischio Idrogeologico, *Ecoscienza*, Number 5, (2013), pp 3233, ISSN 2039-0424
24. Castellari, S.; Venturini, S.; Giordano, F.; Denti, A. Ballarin; Bigano, A.; Bindi, M.; Bosello, F.; Carrera, L.; Chiriaco, M.V.; Danovaro, R.; Desiato, F.; Filpa, A.; Fusani, S.; Gatto, M.; Gaudio, D.; Giovanardi, O.; Giupponi, C.; Gualdi, S.; Guzzetti, F.; Lapi, M.; Luise, A.; Marino, G.; Mysiak, J.; Montanari, A.; Pasella, D.; Pierantonelli, L.; Ricchiuti, A.; **Rudari, R.**; Sabbioni, C.; Sciortino, M.; Sinisi, L.; Valentini, R.; Viaroli, P.; Vurro, M. (2014), *Elementi per una Strategia Nazionale di Adattamento ai Cambiamenti Climatici*, Min. dell'Ambiente e della Tutela del Territorio e del Mare (ISBN 9788887728071) [Link al documento: 10278/3661002](#)
25. Castellari, S.; Venturini, S.; Denti, A. Ballarin; Bigano, A.; Bindi, M.; Bosello, F.; Carrera, L.; Chiriaco, M.V.; Danovaro, R.; Desiato, F.; Filpa, A.; Gatto, M.; Gaudio, D.; Giovanardi, O.; Giupponi, C.; Gualdi, S.; Guzzetti, F.; Lapi, M.; Luise, A.; Marino, G.; Mysiak, J.; Montanari, A.; Ricchiuti, A.; **Rudari, R.**; Sabbioni, C.; Sciortino, M.; Sinisi, L.; Valentini, R.; Viaroli, P.; Vurro, M. (2014), *Rapporto sullo stato delle conoscenze scientifiche su impatti, vulnerabilità ed adattamento ai cambiamenti climatici in Italia*, Min. dell'Ambiente e della Tutela del Territorio e del Mare (ISBN 9788887728095) [Link al documento: 10278/3661003](#)
26. Rudari R. Gabellani S., Delogu F. (2014). A simple model to map areas prone to surface water flooding. *International Journal of Disaster Risk Reduction*, <http://dx.doi.org/10.1016/j.ijdr.2014.04.006>
27. Montrasio, L., Valentino, R., Corina, A., Rossi, L. Rudari, R., (2014) A prototype system for space-time assessment of rainfall-induced shallow landslides in Italy. *NATURAL HAZARDS*, vol. 74, p. 1263-1290, ISSN: 0921-030X, doi: 10.1007/s11069-014-1239-8
28. Pulvirenti, L., Pierdicca, N., Boni, G., Fiorini, M., Rudari, R., (2014) Flood Damage Assessment through multi-temporal COSMO-SkyMed data and Hydrodynamic Models: the Albania 2010 Case Study. *IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING*, vol. 7, p. 2848-2855, ISSN: 1939-1404, doi: 10.1109/JSTARS.2014.2328012

29. T. de Groeve; J. Thielen; R. Brakenridge; R. Adler; L. Alfieri; D. Kull; F. Lindsay; O. Imperiali; F. Pappenberger; R. Rudari; P. Salamon; N. Villars; K. Wyjad, (2015) Joining Forces in a Global Flood Partnership, BAMS, <http://journals.ametsoc.org/doi/abs/10.1175/BAMS-D-14-00147.1>
30. Ward, P.J., Jongman, B., Salamon, P., Simpson, A., Bates, P., De Groeve, T., Muis, S., Coughlan de Perez, E., Rudari, R., Trigg, M.A., Winsemius, H.C., 2015. Usefulness and limitations of global flood risk models. *Nature Climate Change*, 5, 712-715, doi: 10.1038/nclimate2742 <http://www.nature.com/nclimate/journal/v5/n8/full/nclimate2742.html>.
31. Silvestro, F., Gabellani, S., Rudari, R., Delogu, F., Laiolo, P., and Boni, G.: Uncertainty reduction and parameter estimation of a distributed hydrological model with ground and remote-sensing data, *Hydrol. Earth Syst. Sci.*, 19, 1727-1751, doi:10.5194/hess-19-1727-2015, 2015. <http://www.hydrol-earth-syst-sci.net/19/1727/2015/hess-19-1727-2015.html>
32. Reborá, N., F. Silvestro, R. Rudari, C. Herold, L. Ferraris, 2016. Downscaling stream flow time series from monthly to daily scales using an auto-regressive stochastic algorithm: StreamFARM, DOI: 10.1016/j.jhydrol.2016.03.015; <http://www.sciencedirect.com/science/article/pii/S0022169416301202>
33. Silvestro F, Reborá N, Rossi L, Dolia D, Gabellani S, Pignone F, Trasforini E, Rudari R, De Angeli S, Masciulli C (2016). What if the 25 October 2011 event that struck Cinque Terre (Liguria) had happened in Genoa, Italy? Flooding scenarios, hazard mapping and damage estimation. *NATURAL HAZARDS AND EARTH SYSTEM SCIENCES*, vol. 16, p. 1737-1753, ISSN: 1561-8633, doi: 10.5194/nhess-16-1737-2016
34. Rudari R, Beckers J, De Angeli S, Rossi L, Trasforini E (2016). Impact of modelling scale on probabilistic flood risk assessment: the Malawi case. *E3S WEB OF CONFERENCES*, vol. 7, ISSN: 2267-1242, doi: 10.1051/e3sconf/20160704015
35. M A Trigg, C E Birch, J C Neal, P D Bates, A Smith, C C Sampson, D Yamazaki, Y Hirabayashi, F Pappenberger, E Dutra, P J Ward, H C Winsemius, P Salamon, F Dottori, R Rudari, M S Kappes, A L Simpson, G Hadzilacos and T J Fewtrell, The credibility challenge for global fluvial flood risk analysis, 2016 *Environ. Res. Lett.* 11 094014 doi:10.1088/1748- 9326/11/9/094014
36. M A Trigg, C E Birch, J C Neal, P D Bates, A Smith, C C Sampson, D Yamazaki, Y Hirabayashi, F Pappenberger, E Dutra, P J Ward, H C Winsemius, P Salamon, F Dottori, R Rudari, M S Kappes, A L Simpson, G Hadzilacos and T J Fewtrell, How Much do we really know about river flooding? 2016 *Environmental Science Journal for Teens*. pp 4, http://www.sciencejournalforkids.org/uploads/5/4/2/8/54289603/floods_article.pdf
37. P. Laiolo, S. Gabellani, L. Campo, F. Silvestro, F. Delogu, R. Rudari, L. Pulvirenti, G. Boni, F. Fascetti, N. Pierdicca, R. Crapolicchio, S. Hasenauer, S. Puca: Impact of different satellite soil moisture products on the predictions of a continuous distributed hydrological model, *International Journal of Applied Earth Observation and Geoinformation*, Volume 48, 2016, Pages 131-145, ISSN 0303-2434, <https://doi.org/10.1016/j.jag.2015.06.002>.
38. L Cenci, P Laiolo, S Gabellani, L Campo, F Silvestro, F Delogu, G Boni, and R Rudari, Assimilation of H-SAF Soil Moisture Products for Flash Flood Early Warning Systems. Case Study: Mediterranean Catchments, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 9, no. 12, pp. 5634-5646, Dec. 2016. doi:

10.1109/JSTARS.2016.2598475

39. Rudari, R., Massabò, M. and T. Bedrina Overview of Loss Data Storage at Global Scale, in Flood Damage Survey and Assessment: New Insights from Research and Practice, Geophysical Monograph 228, First Edition. Edited by Daniela Molinari, Scira Menoni, and Francesco Ballio. American Geophysical Union. Published 2017 by John Wiley & Sons, Inc.
40. Rudari et al., 2017, Flood Risk Assessment in "Words into Action guidelines: National disaster risk assessment", United Nations Office for Disaster Risk Reduction (UNISDR), <https://www.unisdr.org/we/inform/publications/52828>
41. Lorenzo Alfieri, Sagy Cohen, John Galantowicz, Guy J-P. Schumann, Mark A. Trigg, Ervin Zsoter, Christel Prudhomme, Andrew Kruczkiewicz, Erin Coughlan de Perez, Zachary Flamig, Roberto Rudari, Huan Wu, Robert F. Adler, Robert G. Brakenridge, Albert Kettner, Albrecht Weerts, Patrick Matgen, Saiful A.K.M Islam, Tom de Groeve, Peter Salamon, A global network for operational flood risk reduction, Environmental Science & Policy, Volume 84, 2018, Pages 149-158, ISSN 1462-9011, <https://doi.org/10.1016/j.envsci.2018.03.014>
42. Chiara, Arrighi; Lauro, Rossi; Eva, Trasforini; Roberto, Rudari; Luca, Ferraris; Marcello, Brugioni; Serena, Franceschini; Fabio, Castelli (2018). Quantification of flood risk mitigation benefits: A building-scale damage assessment through the RASOR platform. Journal of Environmental Management, vol. 207, pp. 92-104, ISSN:0301-4797 <https://doi.org/10.1016/j.jenvman.2017.11.017>
43. Bernhofen M. V., Whyman C., Trigg M., Sleight P.A., Smith A.M., Sampson C.C., Yamazaki D., Ward P.J., Rudari R., Pappenberger F., Dottori F., Salamon P., Winsemius H.C.. A first collective validation of global fluvial flood models for major floods in Nigeria and Mozambique, 2018, Environmental Research Letters, Volume 13, Number 10
44. F. Silvestro, L. Rossi, L. Campo, A. Parodi, E. Fiori, R. Rudari, L. Ferraris, Impact-based flash-flood forecasting system: Sensitivity to high resolution numerical weather prediction systems and soil moisture, Journal of Hydrology, Volume 572, 2019, Pages 388-402,
ISSN 0022-1694, <https://doi.org/10.1016/j.jhydrol.2019.02.055>.
(<http://www.sciencedirect.com/science/article/pii/S0022169419302124>)
45. Murnane RJ, Allegri G, Bushi A, Dabbeek J, de Moel H, Duncan M, Fraser S, Galasso C, Giovando C, Henshaw P, Horsburgh K, Huyck C, Jenkins S, Johnson C, Kamihanda G, Kijazi J, Kikwasi W, Kombe W, Loughlin S, Lovholt F, Masanja A, Mbongoni G, Minas S, Msabi M, Msechu M, Mtongori H, Nadim F, O'Hara M, Pagani M, Phillips E, Rossetto T, Rudari R, Sangana P, Silva V, Twigg J, Uhinga G, Verrucci E (2019). Data schemas for multiple hazards, exposure and vulnerability. DISASTER PREVENTION AND MANAGEMENT, vol. 28, p. 752-763, ISSN: 0965-3562, doi: 10.1108/DPM-09-2019-0293
46. Gignac-Eddy, A. Gomes, I. and Rudari, R. (Contributors): The Development Impact of Risk Analytics, A call to action for public and private collaboration, Insurance Development Forum, 2020, <https://www.insdevforum.org/report-development-impact-risk-analytics>
47. Alfieri, L., Cohen, S., Galantowicz, J., Schumann, G.J.-P., Trigg, M.A., Zsoter, E., Prudhomme, C., Kruczkiewicz, A., de Perez, E.C., Flamig, Z., Rudari, R., Wu, H., Adler,

- R.F., Brakenridge, R.G., Kettner, A., Weerts, A., Matgen, P., Islam, S.A., de Groeve, T., Dottori, F. and Salamon, P. (2021). Global Flood Partnership. In Global Drought and Flood (eds H. Wu, D.P. Lettenmaier, Q. Tang and P.J. Ward). <https://doi.org/10.1002/9781119427339.ch17>
48. Dottori, F., Alfieri, L., Rossi, L., Rudari, R., Ward, P.J. and Zhao, F. (2021). Global River Flood Risk Under Climate Change. In Global Drought and Flood (eds H. Wu, D.P. Lettenmaier, Q. Tang and P.J. Ward). <https://doi.org/10.1002/9781119427339.ch14>
49. Rudari, R. (Lead Author), Massabò, M. and Rossi, L. (Contributing Authors): United Nations Office for Disaster Risk Reduction (2021). GAR Special Report on Drought 2021. Geneva. <https://www.undrr.org/publication/gar-special-report-drought-2021>
50. De Giorgi, A.; Solarna, D.; Moser, G.; Tapete, D.; Cigna, F.; Boni, G.; Rudari, R.; Serpico, S.B.; Pisani, A.R.; Montuori, A.; et al. Monitoring the Recovery after 2016 Hurricane Matthew in Haiti via Markovian Multitemporal Region-Based Modeling. Remote Sens. 2021, 13, 3509. <https://doi.org/10.3390/rs13173509>
51. Silvia De Angeli, Bruce D. Malamud, Lauro Rossi, Faith E. Taylor, Eva Trasforini, Roberto Rudari, A multi-hazard framework for spatial-temporal impact analysis, International Journal of Disaster Risk Reduction, 2022, 102829, ISSN 2212-4209, <https://doi.org/10.1016/j.ijdr.2022.102829>.

- Projects:** 2002-2005 P.I. of several research projects in the field of Civil Protection commissioned by the National Group for prevention of Natural Disasters
- 2003-2005 P.I. of several research projects in the field of low flow estimation commissioned by the Regional Agency for the Environment of Liguria (ARPAL)
- 2004-2007 P.I. of the project SIGRA – Geographic Information System on Flood Risk for insurance purposes, commissioned by the National Association of the Insurance Companies (ANIA)
- 2005-2007: co-ordinator of research unit in the field of “innovations in hydrology - project DPCCIMA “Proscenio”
- Since November 2007: scientific responsible for CIMA Foundation of the project OPERA – integration between Earth Observation data and operational flash flood prediction systems – Italian Space Agency.
- 2005-2011 P.I. of a research project commissioned by Regione Autonoma Valle d’Aosta on the implementation of an operational system for issuing flood early warning based on a probabilistic approach
- 2010 – 2011 Key expert for the EC DG-ECHO for Risk prevention with focus on Floods, Storms and Droughts - Strengthening the EU disaster management capacity - Good Practices on Disaster Prevention
- 2011 – Present, scientific responsible of the Industrial project National Focal System financed by the Italian Space Agency
- 2010 – Present, Supporting Partner of the Associated Program on Flood Management (APFM) of the World Meteorological Organization (WMO)
- 2011 - present Consultant for the UN-ISDR Global Assessment Report (GAR) for GFM, vulnerability and Risk assessment.
- 2011 Expert Consultant for WMO at the Planning Commission of the Government of Pakistan on Integrated Flood Management.
- 2011– Present Member of the National Platform on Disaster Risk Reduction (Italy)
- 2012- 2014 Expert Member of the Catalyst FP7 Project Think Tank on Disaster Risk Reduction

- 2012 Expert Consultant to the Gulf Cooperation Council for the development of the Disaster Management Centre: Risk Assessment methodologies
- 2013-2017 Coordinator of the EU FP7 funded Project RASOR (Rapid Assessment and Spatialization Of Risk) – DG ENTR, Call SPACE
- 2013 Responsible of the project “Strengthening the Eastern Region's Institutional and Legislative Frameworks” – EU PPRD East Programme
- 2013 Responsible for the project “Study Tour for the Programme for the prevention, preparedness and response to man-made and natural disasters in the ENPI East Region – EuropeAid/129397/C/SER/Multi”: Moldova, Ukraine, Belarus, Armenia, Azerbaijan, Georgia
- 2013 Expert Consultant for UNISDR to the Seychelles Government – Division on Risk and Disaster Management for the “Preparation of the Disaster Management Act of the GoS”
- 2012-2013 Coordinator of the Chapter on Floods and Landslides Risk for the Italian Climate Change Adaptation Strategy – Euro-Mediterranean Climate Centre, Ministry of the Environment
- 2014-2018 non-key Expert on DRA and Electronic Regional Risk Atlas for the PPRD EAST 2 program on Disaster Risk Management – EC DG ECHO
- 2014-2017 Responsible for CIMA Foundation of the Framework contract with EU for the Copernicus-EMS service Risk and Recovery
- 2015-2017 PI of the project: “National-level Drought and Flood Risk Profiles in Sub-Saharan Africa” risk profiles for 9 countries in Africa financed by GFDRR-World Bank
- 2015 PI of the Project: “Flood Risk Modelling for Malawi” financed by GFDRR-World Bank
- 2017 – 2019 – responsible for CIMA of the project “South East Asia Flood Monitoring and Risk Assessment for Regional DRF Mechanism” financed by the World Bank
- 2016– 2019 Key Expert on Disaster Risk Management for the IPA- DRAM “Disaster Risk Assessment and Mapping in Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro, Serbia and Turkey” – EC DG – ECHO
- 2017– 2018 Coordinator of the Project Open Risk Data Dashboard: Development of Risk Information Definitions, Software Platform, and Initial Content – GFDRR – WBG
- 2017 – 2020 Project Manager of “Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities” – UNDRR - Africa
- 2018 – present Coordinator of the Project: eDrift - Disaster Risk Financing and Transfer – European Space Agency (ESA)
- 2018 – Present key expert on EWS in the project “Volta flood and Drought Management Project” – World Meteorological Organization, Adaptation Fund
- 2018 – 2020 Project Leader for CIMA, SEADRIF Flood Parametric insurance in Myanmar, Laos and Cambodia using EO Financed by WB-DRFI
- 2020 Project Manager, Horn of Africa partnership Regional IGAD Risk profile for IGAD applications in Food Security
- 2021 – Present Project Leader for CIMA, SEADRIF Flood Parametric insurance operational Service for Laos by SEADRIF Company Singapore.
- 2021 – present Key expert in Generali Italia, Flood Parametric insurance for business continuity in Italy
- 2021 – Present Project Leader of MPTF project on safe and orderly migration in the IGAD Region
- 2021 – Present Project Leader of the ESA – Global Development Assistance (GDA) Natural Disaster Resilience financed by European Space Agency.
- 2021 – Present Coordinator of Global Infrastructure Risk Model for the development of the Flagship report on Disaster and Climate Resilient Infrastructure financed by the Coalition for Disaster Resilient Infrastructure (CDRI)
- 2021-Present Team leader of the EDORA project: European Drought Observatory Risk Assessment, financed by the European Commission

