RUHOLLAH OJI

CONTACT

 Department Of Geography

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 Rasht

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 http://staff.guilan.ac.ir/oji/index.php?a=0&lg=1

EDUCATION

EDUCATION	
Ph.D., Climatology (Climate Change and Regional Climate Modeling), Department of Geography, Tarbiat Modares University, Tehran, Iran	2013
M.Sc., Climatology (Synoptic Map Patterns and Storm Tracking), Tehran University, Tehran, Iran	2006
B.Sc. , Physical Geography, Majored: Climatology , Shahid Beheshti University (National University of Iran), Tehran, Iran	2003
B.SC., Physical Geography, Majored: Climatology , Shanid Beneshti Oniversity (National Oniversity of Iran), Tenran, Iran	2003
EMPLOYMENT AND APPOINTMENTS	
Associate Professor, University of Guilan, Rasht, Iran <u>https://guilan.ac.ir/en/~oji</u>)	Sep 2022 – Present
Assistant Professor, University of Guilan, Rasht, Iran	Sep 2014 – Sep 2022
Adjunct Professor, Tarbiat Modares University, Tehran, Iran (<u>http://www.modares.ac.ir/en/</u>)	2013 - 2014
GIS Analyst, National Cartographic Center, Tehran, Iran (<u>http://www.ncc.org.ir/</u>)	2007 – 2014
FIELDS OF INTERESTS	
Climate	
Climate extremes; statistical models for environmental prediction and analysis; downscaling; predictive uncertainty; and	
assessing impacts of climate variability and change on environmental resources;	
Climate change detection and attribution.	
GIS Application	
Environmental Modeling and Mapping	
Spatial Analysis, Spatial interpolation and disaggregation of meteorological fields	
FELLOWSHIP AND SHORT-TERM VISIT	
Visiting Scientist, Pacific Climate Impacts Consortium (PCIC), University of Victoria, BC, Canada	2012 - 2013
Partial-Fellowship, Postgraduate Courses on Building Resilience to Climate Change, UNU, Tokyo, Japan	2011
TEACHING EXPERIENCE	
Department of Geography, University of Guilan, Rasht, Iran	2014 – Present
Computer Programming Basics for Geography, Undergrads	
	Spring
Probability and Statistics for Geography I, Undergrads	Spring
Principles of Climatology (Climatology II), Undergrads	Spring
Applications of Geographic Information Systems in Urban Planning (GIS II), Undergrads	Spring
Spatial Statistics and Geostatistics, Grads	Fall
Principles of Climatology (Climatology I), Undergrads	Fall
Climate of Iran, Undergrads	Fall
Principles of Geographic Information Systems (GIS I), Undergrads	Fall
Geographical Applications of Probability and Statistics, Undergrads	Fall
Data Analysis and Statistics for Geography, Grads	Fall
Natural Hazards (with emphases on climate extremes), Undergrads	Fall 2014 and 2015
Specialized Training Center, University of Guilan, Rasht, Iran	
Arial Photo Interpretation	2018-2020
ArcGIS Training Course	2015-2018
Specialized Training Center, Geomatics College, NCC, Iran	
Basic and advanced ArcGIS Training Courses	2012 – 2014

	Tarbiat Modares University, Tehran, Iran	5.11
	Programming Workshop- R Programing, Grads Climate Modeling, Grads	Fall Fall
	Statistical Modeling, Grads	Fall
	Programming Workshop, Grads	Spring
RESEA	RCH EXPERIENCES	
	General Directorate of Roads and Urban Development, Guilan Province, Iran Provincial Research collaboration	2024- 2025
	Increasing urban resilience to climate change (Case Study: Cities of Guilan province, Iran)	2024- 2025
	Responsibility: Principal Investigator	
	Rasht Municipality, Guilan Province, Iran	
	Provincial Research collaboration	2023- 2024
	Urban green space mapping and surveying (Case Study: Rasht City, Guilan province, Iran)	
	Responsibility: Principal Investigator	
	Meteorological Organization, Guilan Province, Iran	
	Provincial Research collaboration	2021- 2022
	Spatiotemporal query analytics for extreme climate data in Guilan province	
	Responsibility: Principal Investigator	
	Iran National Science Foundation (INSF)	
	National Research collaboration	2019- 2021
	Network Analysis of Climate Change Management in Iran (Using Social Network Analysis)	
	Responsibility: Principal Investigator	
	Iran National Science Foundation (INSF) and Russian Foundation for Basic Research (RFBR)	
	International Research collaboration	2017- 2021
	Physical Mechanisms of Extreme Precipitations over the Southern Coast of the Caspian Sea (Using Weather Research and	
	Forecasting (WRF) model)	
	Responsibility: Co-Principal Investigator	
	Guilan Regional Electric Company, Guilan Province, Iran	
	Provincial Research collaboration	2017-2019
	Wind and Radiation Energy Zoning for Generation of Electrical Power & Zoning Calculate Ice Thickness Based on Meteorological Data in Guilan province, Iran	
	Responsibility: Wind and Radiation Energy Zoning	
	Water Research Institute, Ministry of Energy, Iran National Research collaboration	2017
	Assessment of Climate Change Impacts on Hydrological Condition of Tashk-Bakhtegan Basin	2017
	Responsibility: Multi-site Downscaling of Precipitation and Temperature Extremes and Uncertainty analysis	
	Golestan University, Iran	
	Provincial Research collaboration	2014
	Climate change and Risk Assessment of Golestan Province, Iran	2021
	Responsibility: Climate Modeling	
	Behan Sad Consulting Engineers, Tehran, Iran	
	National Research collaboration	2011
	Drought monitoring of Iran	
	Responsibility: Interpolation of Precipitation and Temperature	

PUBLICATIONS

Journal Paper

Mazloom, K., Zolfaghari, H., **Oji, R**, Matzarakis, A. (2023). The Impacts of Global Warming on Tourism Climate in Iran. Geographical Space. URL: <u>http://geographical-space.iau-ahar.ac.ir/article-1-3894-fa.html</u> (In Persian)

Mazloom, K., Zolfaghari, H., **Oji, R**. Matzarakis, A. (2023). A comparison of physiologically equivalent temperature based on model simulation and site observation data for Iran. Air Quality, Atmosphere and Health. <u>https://doi.org/10.1007/s11869-023-01367-4</u>

Noroozinezhad, M., Yasouri, M., **Oji, R.** (2023). Assessing the level of economic sustainability of rural settlements in the county of Langroud. Journal of Geography and Planning, 27(86), 199-217. <u>https://doi.org/10.22034/qp.2023.50883.2985</u> (In Persian)

Noroozinezhad, M., Yasuri, M, **Oji, R.** (2023). Spatial analysis of economic sustainability in rural settlements of Langroud County. 11 (42):169-194 URL: <u>http://serd.khu.ac.ir/article-1-3885-fa.html</u> (In Persian) Roshan, G.R., **Oji, R.,** Fdez-Arróyabe, P. (2022). Future impact of cloudiness and wind changes on thermal comfort conditions in the city of Tabriz (Iran) in the frame of climate change, Sustainable Cities and Society, Volume 77, 103575, ISSN 2210-6707, <u>https://doi.org/10.1016/j.scs.2021.103575</u>.

Akhlāghi Yengejeh, N., Pirmorādiān, N., **Oji, R.,** & Ashrafzādeh, A. (2021). Performance evaluation of the penalized maximal T and F algorithms in the quality control of monthly and daily climatic time series on the southwest coast of the Caspian Sea. Geographical Studies of Coastal Areas Journal, 2(3), 53-78. doi: 10.22124/gscaj.2021.20765.1116 (In Persian)

Oji, R., Aghaeizadeh, E., Mirabimoghadam, M. (2021). The Effect of Urban Green Spaces Reduction on Surface Temperature and Relative Humidity Changes (Case study of Rasht City). Journal of Studies of Human Settlements Planning, 15(4), 1103-1118. (In Persian)

Toropov, P. A., Shestakova, A. A., Kislov, A. V., **Oji, R. (**2019). Heavy Precipitation on the Iranian Coast of the Caspian Sea. Journal of Oceanological Research, 47(5). DOI: 10.29006/1564-2291.JOR-2019.47(5).9 (In Russian)

Roshan, G.R., **Oji, R.,** & Attia, S. (2019). Projecting the impact of climate change on design recommendations for residential buildings in Iran, Building and Environment, Volume 155, Pages 283-297, ISSN 0360-1323, <u>https://doi.org/10.1016/j.buildenv.2019.03.053</u>.

Mirabimoghaddam, M., Aghaeizadeh, E., & **Oji, R**. (2019). An Investigation of Urban Green Space Suitability in Residential Complexes (Case Study: Rasht City). Geographical Urban Planning Research (GUPR); 7(2): 265-283. doi: 10.22059/jurbangeo.2019.230893.693 (In Russian)

Oji, R., & Ghafarian, P. (2018). Identification and Estimation of Extreme Rainfalls of Southern Coast of the Caspian Sea Using Extreme Value Analysis Theory. Journal of Oceanography. 9 (34):39-48. DOI: 98.1000/1562-1057.1397.9.39.0.34.1588.1606 (In Persian)

Oji, R. (2018). Comparison of Multi-site and Single-site Daily Precipitation and Temperature Extremes Downscaling (Case Study: Southern Coast of the Caspian Sea). Journal of the Earth and Space Physics. 44(2): 397-410. DOI: 10.22059/jesphys.2017.234927.1006908 (In Persian)

Farajzadeh, M., **Oji, R.**, Ghavidel, Y. & Massah Bavani, A.R. (2017). Evaluation of single-site and multisite SDSM techniques in terms of indices of climate extremes for the Midwest of Iran. Journal of the Earth and Space Physics. 43(1): 193-208. DOI: 10.22059/JESPHYS.2017.57734 (In Persian). Zolfaqari, H., Rahimi, H., & **Oji**, R. (2017). Assessment of climate change Effects on heating and cooling degree days of Iran. Geography and Sustainability of the Environment. 7(22): 1-20. (In Persian)

Ghavidel, Y., Alijahan, M., & **Oji, R.** (2015). An evaluation of deterministic and stochastic methods to interpolation Ardabil province precipitation. Geographical Space. 15(50): 209 - 231. (In Persian)

Farajzadeh, M., **Oji, R.,** Cannon, A.J., Ghavidel, Y. & Massah, A.R. (2015). An evaluation of single-site statistical downscaling techniques in terms of indices of climate extremes for the Midwest of Iran. Theoretical and Applied Climatology, 120(1-2): 377-390. DOI: 10.1007/s00704-014-1157-4 Davtalab, R., Salamat, A.R., & **Oji, R.** (2013). Water Harvesting from Fog and air Humidity in the Warm and Coastal Regions in the South of Iran. Irrigation and Drainage. 62(3): 281–288. DOI: 10.1002/ird.1720.

Roshan, G.R., **Oji**, **R.**, & Al-Yahyai, S. (2013). Impact of Climate Change on the Wheat Growing Season over Iran. Arabian Journal of Geoscience. 7(8): 3217–3226. DOI: 10.1007/s12517-013-0917-2.

Roshan, G.R., **Oji**, **R.**, Najafi, M.S., & Shahkuhi, E. (2012). Prospect of Climate Change Impacts on Wheat Degree-Days Variability in Different Climate Regions of Iran. Regional Planning. 4:93-108 (In Persian)

Jafarbeglou, M., Khoshakhlagh, F., & **Oji, R.** (2009). Seasonal Location and Frequency of Cyclonic Tracks in Wet Periods of Iran's Midwest. Physical Geography Research: 68: 71-84. ISSN 2008-360x (In Persian)

Khoshakhlagh, F., **Oji, R.,** Jafarbeglou, M. (2008). A Synoptic Study on Seasonal Patterns of Wet and Dry Spells in Midwest of Iran. Desert. 13(2):89-103. DOI: 10.22059/JDESERT.2008.36293

Oji, R., & Khoshakhlagh, F. (2007). A Statistical Study on Dry and Wet Spells of Iran's Midwest. Sepehr. (In Persian)

Conference Paper

*Oji, R. (*2019). Global Warming and Its Impact along the Silk Road. University of Guilan, Iran. International conference on people and environment along the Silk Road.

Oji, R., Ghafarian, P., (2018). Statistical characteristics of extreme rainfall in the south coast of the Caspian Sea, Ferdowsi University of Mashhad: 2nd National Iranian Climate Conference. (In Persian)

Davudi, M., & Oji, R. (2018). Evaluation of Climate and Environmental Potential of Saffron (Case Study: Lorestan Province), Ferdowsi University of Mashhad: 2nd National Iranian Climate Conference. (In Persian)

Zolfaqari H., Rahimi, H., & **Oji**, R. (2017). Estimation of Iran's domestic and commercial electricity consumption under climate change conditions based on the output of the EC-Earth general circulation model. National conference on climate change and energy security, Rasht, Iran. (In Persian) **Oji**, R. (2017). Strategies to Make the Iranian energy sector more resilient to climate change. National conference on climate change and energy security, Rasht, Iran. (In Persian)

Oji, R. (2017). Combining climate change adaptation and mitigation measures; Needs and Challenges. Iranian Association of geomorphology, Fifth national conference on geomorphology and environmental challenges, Mashhad, Iran. (In Persian)

Oji, R., & Davudi, M. (2015). Climate Change a Threat to Sustainable Development; A Case Study of Guilan Province. National conference on an Identification of Guilan Province development strategies, Rasht, Iran. (In Persian)

Oji, R., & Davudi, M. (2016). Climate Change Impacts on Snowfalls; A Case Study of Iran's Midwest. 5th Regional conference on climate Change, Tehran, Iran. (In Persian)

Book Chapter

Farid Mojtahedi, N., Abed, H., Negah, S., **Oji, R.,** Hadinejad Sabouri, S., & Momenpour, F. (2018). Climate of Guilan, Art Bureau Province of Guilan Publications, Rasht, Iran. (In Persian)

Akbarrinejad, V., Kazempoor, R., Shojaei, M., Rezaei, M., & Oji, R. (2014). Atlas of Iranian Sheep Breeds. Noorbakhsh Press, ISBN: 978-600-7309-03-2.

WORSHOPE, CONFERENCE, ETC.

Organizer, International Training Workshop on Detection and Attribution of Climate Extremes, University of Guilan, Rasht, Iran, June 26-27, 2018 Co-organizer, Seminar of The science of extremes and some implications for engineering applications, Guilan Regional Electric Company (GilREC), Rasht, Iran, June 25, 2018

Member of the Scientific Committee, National 2nd national conference on climatology of Iran, Ferdowsi University of Mashhad, Iran, May 9, 2018 Scientific Secretary and Co-organizer, 1st National Conference on Climate Change and Energy Security, University of Guilan, Rasht, Iran, October 24, 2017

Invited Speaker, Man-Made Global Warming, Guilan's Branch of Scientific Association of Passive Defense, Rasht, Iran, July 7, 2017 Member of the Organizing and Scientific Committee, National Conference on Identifying Approaches to Guilan Development, University of Guilan, Rasht, Iran, April 29, 2015

Member of the Scientific Committee, 22nd National Conference on Geomatics, National Cartographic Center, Tehran, Iran, October 18, 2015

EDUCATIONAL AND PEER REVIEW CONTRIBUTIONS

Educational Contributions

G Shahshahani, 2024-, M.Sc., University of Guilan, Supervisor

- F. Razmara, 2024-, M.Sc., University of Guilan, Supervisor
- Z. Kazemi, 2023-2024, M.A., University of Guilan, Supervisor
- F. jafari, 2023-2024, M.Sc. Student, University of Guilan, Iran, Supervisor
- K. Mazlum, 2018-2022, Ph.D. Student, Razi University, Iran, Advisor

M. Gurangi, 2022, M.Sc. Student, University of Guilan, Iran, Supervisor

- E. Seyfi, 2022, M.A. Student, University of Guilan, Iran, Supervisor
- H. Aliyar, 2022, M.A Student, University of Guilan, Iran, Supervisor
- M. Mahbubi, 2020-, M.Sc. Student, University of Guilan, Iran, Supervisor
- S. Ahmadi, 2019-2020, M.Sc., University of Tehran, Iran, Advisor

N. Akhlaghi, 2018-, M.Sc. Student, University of Guilan, Iran, Advisor

- B. Ghasemi, 2017-2018, M.Sc. Student, University of Guilan, Iran, Advisor
- H. Rahimi, 2015-2017, Ph.D. Student, Razi University, Iran, Advisor
- M. Mirbabi Moghadam, 2015-2016, M.Sc. Student, University of Guilan, Iran, Advisor
- R. Mohammadzadeh, 2015-2016, M.Sc. Student, University of Guilan, Iran, Advisor

Peer Review Contributions

- Journal of Meteorology and Atmospheric Physics (http://link.springer.com/journal/703)
- Journal of Environmental and Agricultural Sciences (http://agropub.com/Journals/index.php/JEAS)
- Journal of Natural Environment Change (<u>https://inec.ut.ac.ir</u>)
- Journal of Geography and Regional Development (http://scienceimpactfactor.com/?p=394)
- Journal of Spatial Planning (http://hsmsp.modares.ac.ir/)
- Journal of Water and Irrigation Management (https://jwim.ut.ac.ir/)
- Environmental Erosion Research Journal (http://magazine.hormozgan.ac.ir/)
- Journal of Oceanography (<u>http://joc.inio.ac.ir</u>)
- Geography and Sustainability of Environment (<u>http://ges.razi.ac.ir</u>)
- Earth Science Researches (http://esrj.sbu.ac.ir/)

GRADUATE COURSES TAKEN

Climate and Atmospheric Science

International training workshop on ecological monitoring and scientific practice in central and western Asia,	
Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences	2021
Virtual clinic on bias adjustment of climate model data, IS-ENES3, Europe/Vienna	2021
International Training Workshop on Detection and Attribution of Climate Extremes, University of Guilan, Rasht, Iran	2018
International Training Workshop on Climate Change and the Caspian See, National Institute of Oceanography and	
Atmospheric Science, Tehran, Iran	2016
NCL Workshop, Ferdowsi University, Mashhad, Iran	2016
CDO Workshop, Ferdusi University, Mashhad, Iran	2016
RegCM Modeling Workshop, Ferdusi University, Mashhad, Iran	2013
2 nd National Conference on Disaster Management-	
The Role of New Technologies in Reducing Vulnerability to Climate Hazards Workshops,	
National Disaster Management Organization, Tehran, Iran	2012
WRF Modeling Workshop, Ferdowsi University, Mashhad, Iran	2012

GIS Application on Climate Change, Tokyo, Japan (UN-CECA)	2011
GIS, RS & Mapping	
Advanced GIS, NCC, Tehran, Iran	2012
Basic Adobe Illustrator, NCC, Tehran, Iran	2010
Advanced Adobe Illustrator, NCC, Tehran, Iran	2010
Advanced Cartography, NCC, Tehran, Iran	2010
Advanced ArcGIS, NCC, Tehran, Iran	2009
Arial Photo Interpretation, NCC, Tehran, Iran	2007

TECHNICAL SKILLS

GIS

ArcGIS: Proficient

Climate Modeling and Downscaling

R packages of Statistical Downscaling, RegCM and WRF: Familiar

Programming

R: Familiar

LANGUAGES

Persian (Native or bilingual proficiency) Azerbaijani (Native or bilingual proficiency) English – Fair Arabic – Limited working proficiency

REFERENCES

M. Farajzadeh, Professor

Dept. Geography, Tarbiat Modares University, Tehran, Iran Email: <u>farajzam@modares.ac.ir</u>

Bohlul Alijani, Professor

Dept. Geography, Kharazmi University, Tehran, Iran Email: alijani@khu.ac.ir

Yusef Ghavidel, Associate Professor

Dept. Geography, Tarbiat Modares University, Tehran, Iran Email: ghavidel@modares.ac.ir

Last Update: 2024

Typography MS Office: Proficient

Statistical Software Excel: Proficient R & SPSS: Familiar

OS

WINDOWS: Proficient LINUX: Familiar