# Zafar Iqbal

## Assistant Professor

NUST Institute of Civil Engineering

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2024- Present

## **About**

Dr. Zafar Iqbal is working as Assistant Professor in the NUST Institute of Civil Engineering. Dr. Zafar Iqbal has a PhD in Hydrology and Water Resources. Dr. Zafar Iqbal has published 20 research articles & conference papers having a citation count of 678, carried out 0 projects and filed 0 intellectual property.

### Qualifications

PhD in Hydrology and Water Resources	2019 - 2022
Univeristi Tecknologi Malaysia, Malaysia	
MDbil in Hydrology and Water December	
MPhil in Hydrology and Water Resources	2017 - 2019

# **Experience**

Assistant Professor

NUST Institute of Civil Engineering	
Assistant Professor  NUST Institute of Civil Engineering	2023 - 2024
Graduate Research Assistant University Technology Malaysia , UTM, Skudai, Malaysia	2019 - 2022

### **Awards**

# **Best Postgraduate Student Award**

Best Postgraduate Student Award 2019 (MPhil)

# **Best Postgraduate Student Award**

Best Postgraduate Student Award 2022 (PhD)

# **HEC-HRDI Scholarship**

HEC-HRDI Scholarship for MS-PhD.

### **Research Articles**

Mapping water dynamics in Borneo's biodiversity hotspot: a satellite-based analysis	2025
Zafar Iqbal Zeeshan Tahir Virk Mohammed Magdy Hamed Ali Torabi Haghighi Shamsuddin Shahid Zaher Mundher Yaseen	

Impact Factor: 2.700 | Quartile: 3

DOI: https://doi.org/10.1007/s00704-025-05631-8

# Hydro-Climatic variability in the Potohar Plateau of Indus River Basin under CMIP6 climate projections

Ahsan Ullah Khan SHAKIL AHMAD Khalil Ahmad Muhammad Azmat Zakir Hussain Dahri Muhammad Wasif Khan Zafar Iqbal

Theoretical and Applied Climatology, Volume 156, Article Number 20

Theoretical and Applied Climatology, Volume:156, Issue:7, Article Number 413

Impact Factor: 2.800 | Quartile: 3 | Citations: 2 DOI: https://doi.org/10.1007/s00704-024-05274-1

# Monitoring spatiotemporal changes in urban flood vulnerability of Peninsular Malaysia from satellite nighttime light data

Ghaith Falah Ziarh Eun-Sung Chung Ashraf Dewan Md Asaduzzaman Mohammed Magdy Hamed Zafar Iqbal Shamsuddin Shahid Journal of Hydro-environment Research, Volume 55, Pages 20-29

Impact Factor: 2.400 | Quartile: 2

DOI: https://doi.org/10.1016/j.jher.2024.05.003

2024

2024

#### CMIP6 in Peninsular Malaysia

Zulfaqar Sa'adi Nor Eliza Alias Zulkifli Yusop Mohammed Magdy Hamed Prabhakar Shukla Mohamad Rajab Houmsi Nur Athirah Mohamad Mohammed Sanusi Shiru Nurzalikha Sa'adi Mohd Khairul Idlan Muhammad Zafar Iqbal Umer Jeelanie Banday

Atmospheric Research, Volume:304, Article Number:107407

Impact Factor: 5.5 | Quartile: 1 | Citations: 5 DOI: 10.1016/j.atmosres.2024.107407

# Application of relative importance metrics for CMIP6 models selection in projecting basin-scale rainfall

2024

#### over Johor River basin, Malaysia

Zulfaqar Sa'adi Nor Eliza Alias Zulkifli Yusop Zafar Iqbal Mohamad Rajab Houms Lama Nasrallah Houmsi Muhammad Wafiy Adli Ramli Mohd Khairul Idlan Muhammad

Science of The Total Environment, Volume 912, Article Number 169187

Impact Factor: 9.8 | Quartile: 1 | Citations: 17

DOI: https://doi.org/10.1016/j.scitotenv.2023.169187

### Effect of Stress Ratio K due to Varying Overburden Topography on Crack Intensity of Tunnel Liner

2023

Amber Islam Rini Asnida Abdullah Izni Syahrizal Ibrahim Goh Thian Lai Muhammad Hamid Chaudry Muhammad Junaid Zafar Iqbal Norhadziana Jamal Azizul Faiz Abd Aziz Adam Salim

Journal of Performance of Constructed Facilities, Volume 37, Issue 04, Article Number 4281

Impact Factor: 2.317 | Quartile: 3 | Citations: 7

DOI: 10.1061/JPCFEV.CFENG-4281

# Diminishing evapotranspiration paradox and its cause in the Middle East and North Africa

2023

Zafar Iqbal Mohammed Magdy Hamed Mohamed Salem Nashwan Ahmed Farouk Kineber Shamsuddin Shahid

Atmospheric Research, Volume 289, Article Number 106760

Impact Factor: 5.965 | Quartile: 1 | Citations: 23 DOI: https://doi.org/10.1016/j.atmosres.2023.106760

# Long-term trend analysis of extreme climate in Sarawak tropical peatland under the influence of climate change

2023

Zulfaqar Sa'adi Zaher Mundher Yaseen Aitazaz Ahsan Farooque Nur Athirah Mohamad Mohd Khairul Idlan Muhammad Zafar Iqbal

Weather and Climate Extremes, Volume 40, Article Number 100554

Impact Factor: 7.761 | Quartile: 1 | Citations: 23 DOI: https://doi.org/10.1016/j.wace.2023.100554

## Spatiotemporal changes in Hourly Wet Bulb Globe temperature in Peninsular Malaysia

2023

Mohamad Rajab Houmsi Zulhilmi Ismail Ilya Khairanis Othman Daeng Siti Maimunah Ishak Mohammed Magdy Hamed Zafar Iqbal Shamsuddin Shahid Stochastic Environmental Research and Risk Assessment, Volume 37, Issue 6, Pages 2327-2347

Impact Factor: 3.821 | Quartile: 1 | Citations: 12 DOI: https://doi.org/10.1007/s00477-023-02396-2

# Performance evaluation of CMIP6 GCMs for the projections of precipitation extremes in Pakistan

2023

Zulfiqar Ali Mohammad Magdy Hamed Mohd Khairul Idlan Muhammad Zafar Iqbal Shamsuddin Shahid

Climate Dynamics, Pages 1-16

Impact Factor: 4.901 | Quartile: 2 | Citations: 29 DOI: https://doi.org/10.1007/s00382-023-06831-6

# Distributed Hydrological Model Based on Machine Learning Algorithm: Assessment of Climate Change

2022

Impact on Floods

Zafar Iqbal Shamsuddin Shahid Tarmizi Ismail Zulfaqar Sa'adi Aitazaz Farooque Zaher Mundher Yaseen

Sustainability, Volume 14, Issue 11, Article Number 6620

Impact Factor: 3.9 | Quartile: 2 | Citations: 14 DOI: https://doi.org/10.3390/su14116620

# Bias correction method of high-resolution satellite-based precipitation product for Peninsular Malaysia

2022

Zafar Iqbal Shamsuddin Shahid Kamal Ahmed Xiaojun Wang Tarmizi Ismail Hamza Farooq Gabriel

Theoretical and Applied Climatology, Volume 148, Pages 1429-1446

Impact Factor: 3.179 | Quartile: 2 | Citations: 27

**DOI:** 10.1007/s00704-022-04007-6

## Historical trends in crop water demand over semiarid region of Syria

2021

Zafar Iqbal Rajab Homsi Shamsuddin Shahid Ghaith Falah Ziarh Atif Muhammad Ali

Theoretical and Applied Climatology, Volume 146, Issue 1-2, Pages 555-566

Impact Factor: 3.410 | Quartile: 3 | Citations: 7

Evaluation of CMIP6 GCM rainfall in mainland Southeast Asia	2021
Zafar Iqbal Shamsuddin Shahid Tarmizi Ismail Ghaith Falah Ziarh Kamal Ahmed Eun-Sung Chung	
Atmospheric Research, Volume 254, Article Number 105525	
Impact Factor: 5.965   Quartile: 1   Citations: 147	
<b>DOI:</b> https://doi.org/10.1016/j.atmosres.2021.105525	
Quantitative assessment of precipitation changes under CMIP5 RCP scenarios over the northern sub-	2020
Himalayan region of Pakistan	
Zafar Iqbal Kamal Ahmed Najeebullah Khan Balach Rasheed Nadeem Nawaz Irfan Malik Mohammad Noor	
Environment, Development and Sustainability, Volume 22, Issue 8, Pages 7831-7845	
Impact Factor: 3.219   Quartile: 2   Citations: 14	
<b>DOI:</b> https://doi.org/10.1007/s10668-019-00548-5	
A non-local model output statistics approach for the downscaling of cmip5 gcms for the projection of	2020
rainfall in peninsular malaysia	
Muhammad Noor Tarmizi bin Ismail, Shahid Ullah Nadeem Nawaz Kamal Ahmed Zafar Iqbal	
Journal of Water and Climate Change, Volume 11, Issue 4, Pages 944-955	
Impact Factor: 1.900   Quartile: 3   Citations: 15	
<b>DOI:</b> https://doi.org/10.2166/wcc.2019.041	
Evaluation of global climate models for precipitation projection in sub-Himalaya region of Pakistan	2020
Zafar Iqbal Shamsuddin Shahid Kamal Ahmed Tarmizi Ismail Najeebullah Khan Zeeshan Tahir Virk Waqas Johar	
Atmospheric Research, Volume 245, Article Number 105061	
Impact Factor: 5.369   Quartile: 1   Citations: 52	
<b>DOI:</b> https://doi.org/10.1016/j.atmosres.2020.105061	
Multi-model ensemble predictions of precipitation and temperature using machine learning algorithms	2020
Kamal Ahmed D.A. Sachindra Shamsuddin Shahid Nadeem Nawaz Najeebullah Khan Zafar Iqbal	
Atmospheric Research, Volume 236, Article Number 104806	
Impact Factor: 4.676   Quartile: 1   Citations: 209	
<b>DOI:</b> https://doi.org/10.1016/j.atmosres.2019.104806	
Spatial distribution of the trends in precipitation and precipitation extremes in the sub-Himalayan	2019
region of Pakistan	
Shamsuddin Shahid Kamal Ahmed Termizi Ismail Nadeem Nawaz Zafar Iqbal	
Theoretical and Applied Climatology, Volume 137, Issue 3-4, Pages 2755-2769	
Impact Factor: 2.882   Quartile: 2   Citations: 75	
<b>DOI:</b> https://doi.org/10.1007/s00704-019-02773-4	

# **Editorial Activities**

Atmospheric Research	2023
Reviewed Papers for Journals	
Impact Factor: 5.5	
PLOS One	2023
Reviewed Papers for Journals	
Impact Factor: 3.5	
AMS Tropical Meteorology and Tropical Cyclones Committee	2023
Reviewed Papers for Journals	
Impact Factor: N/A	
Atmospheric Research	2023
Reviewed Papers for Journals	
Impact Factor: 2	
PLOS ONE	2023
Reviewed Papers for Journals	
Impact Factor: 3.5	
Knowledge-Based Engineering and Sciences	2022
Reviewed Papers for Journals	
Impact Factor: N/A	
Journal of Hydro-environment Research	2022
Reviewed Papers for Journals	
Impact Factor: 2.8	
PLOS One	2022
Reviewed Papers for Journals	
Impact Factor: 3.5	
Geocarto International	2022
Reviewed Papers for Journals	
Impact Factor: 3.3	
International Journal of Climatolog	2022
Reviewed Papers for Journals	
Impact Factor: 3.6	
International Journal of Climatology	2021
Reviewed Papers for Journals	
Impact Factor: 3.6	