

## Dhouha Ouali

Canadian citizenship

Research associate

Pacific Climate Impacts Consortium

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## Professional experience

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| <b>05/2019 – present</b> | Research associate, Pacific Climate Impact Consortium (PCIC)-<br>University of Victoria (UVIC)   |
| <b>02/2018 – 04/2021</b> | Project and Knowledge Mobilization Manager, Climate-related<br>precipitation extremes project-Global Water Future (PCIC-UVIC)  |
| <b>02/2017–01/2018</b>   | Post-doctoral-Research associate, Pacific Climate Impact Consortium<br>(PCIC) – UVIC   |
| <b>11/2016 – 01/2017</b> | Climate scaling extreme analyst, Canadian Centre for Climate Modelling<br>and Analysis (CCCma)/ Environment and Climate Change Canada<br>(ECCC) (Casual research member) |

## RESEARCH DOMAINS

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- Civil and Environmental Engineering
- Water Sciences and Flood Hazards
- Statistical and Stochastic Hydrology
- Climate Change and Climate Variability
- Climate related Risks for Natural Hazards
- Statistical Downscaling

## Education

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- Ph. D. Water Sciences, National Institute of Scientific Research -Research Center of Water,  
Earth and Environment (INRS-ETE), Quebec, Canada, 2016
- MSc. Hydraulic and environmental modeling, watershed transfer, National school of  
engineering of Tunis (ENIT), Tunis El-Manar University, Tunis, Tunisia, 2011

- B.Eng. Hydro-meteorology, National school of engineering of Tunis (ENIT), Tunis El-Manar University, Tunis, Tunisia, 2009

## Scientific publications

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- D. Ouali, F. Chebana and T.B.M.J. Ouarda (2015). "Non-linear canonical correlation analysis in regional frequency analysis". *Stoch Environ Res Risk Assess.* DOI 10.1007/s00477-015-1092-7.
- D. Ouali, F. Chebana and T.B.M.J. Ouarda (2016). "Quantile regression in regional frequency analysis: a better exploitation of the available information". *Journal of Hydrometeorology.* DOI: 10.1175/JHM-D-15-0187.1
- D. Ouali, F. Chebana and T.B.M.J. Ouarda (2017). "Fully nonlinear statistical and machine learning approaches for hydrological frequency estimation at ungauged sites". *Journal of Advances in Modeling Earth Systems.* DOI: 10.1002/2016MS000830
- D. Ouali and Cannon, A. J. (2018). Estimation of rainfall intensity–duration–frequency curves at ungauged locations using quantile regression methods. *Stochastic Environmental Research and Risk Assessment*, 1-16. DOI: 10.1007/s00477-018-1564-7

## Conferences and workshops

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- D. Ouali, and Charles Curry : High-resolution 21st-century projections of rain and snow using regional climate model simulations over British Columbia, Canada, 55<sup>th</sup> CMOS congress, 2021
- D. Ouali: WinSETT Leadership Workshop Series: Women in Science, Engineering, Trades and Technology (WinSETT Centre). Certificate of completion. Victoria, BC, Canada, February- April, 2018.
- D. Ouali: Regional frequency analysis of hydro-meteorological extremes- PCIC seminars series- Victoria, BC, Canada, October 25th, 2018.
- D. Ouali, C. Seiler, F. Zwiers: Extratropical cyclones and generated surface wind speeds in coastal British Columbia. MEOPAR's Annual Scientific Meeting and Annual Training meeting, Montreal, QC, Canada, June 19-22, 2017.
- D. Ouali, F. Chebana, and T. B. M. J. Ouarda: On the use of estimated at site quantiles in regional frequency analysis. International workshop of Statistical Hydrology (STAHY), Quebec City, Quebec, Canada, September 26-27, 2016.
- D. Ouali, F. Chebana, and T. B. M. J. Ouarda: Non-linear delineation for regional frequency analysis, the 13th International Meeting on Statistical Climatology (IMSC), Canmore, Alberta, Canada, June 6-10, 2016.
- D. Ouali, F. Chebana, and T. B. M. J. Ouarda: Direct regional frequency analysis, estimation and evaluation using quantile regression. 68th National Canadian Water Resources Association (CWRA) conference, Winnipeg, Manitoba, Canada, June 24, 2015.

- D. Ouali, A. St-Hilaire: Study of suspended sediment transport events using copulas, CRMCANSSI Workshop on New Horizons in Copula Modeling, Montreal, Qc, Canada, December 15-18, 2014.
- D. Ouali, F. Chebana, and T. B. M. J. Ouarda: Local frequency analysis using quantile regression. Statistical Hydrology workshop (STAHY). Abu Dhabi, Émirats arabes unis, November 10-11, 2014.
- D. Ouali, F. Chebana, and T. B. M. J. Ouarda: Non-linearity in regional frequency analysis. Statistical Hydrology workshop (STAHY). Abu Dhabi, Émirats arabes unis, November 10-11, 2014.

## Honors and Awards

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| 2017 | Marine Environmental Observation Prediction and Response Network (MEOPAR) training award                          |
| 2016 | Best poster presentation award in STAHY: On the use of at-site estimated quantiles in regional frequency analysis |
| 2014 | Ken Thompson Scholarship - Canadian Water Resources Association (CWRA)  |

## Scientific activities

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- Reviewer for multiple scientific journals: Stochastic Environmental Research and Risk Assessment ; Hydrology; Applied Meteorology and Climatology; Advances in Modeling Earth Systems
- Training and Advising: Supervision of graduate students in the National Institute of Scientific Research (INRS)
- Member of:
  - The organizing committee for the Community Climate Science Seminar at the University of Victoria (CCSS)
  - International Association of Hydrological Sciences (IAHS)
  - International commission on statistical hydrology (ICSH)