

Contact

Dhouha Ouali

Research associate

Pacific Climate Impacts Consortium

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Education

- Ph. D. in Water Sciences, National Institute of Scientific Research -Research Center of Water, Earth and Environment (INRS-ETE), Quebec, Canada (2013- 2016).
- MSc. in Water Sciences, National Institute of Scientific Research -Research Center of Water, Earth and Environment (INRS-ETE), Quebec, Canada. (Direct passage, 2012).
- MSc. in hydraulic and environmental modeling, watershed transfer, National school of engineering of Tunis (ENIT), Tunis El-manar University, Tunis, Tunisia (2009-2011).
- Hydro-meteorological engineering degree, National school of engineering of Tunis (ENIT), Tunis El-manar University, Tunis, Tunisia (2006-2009).

Research interests

- Flood risk assessment
- Climate change and climate variability
- Hydrological and watershed modelling
- Extra tropical cyclones

Career

- Nov. 2016 - Jan 2017: Climate scaling extreme analyst in the Canadian Centre for Climate Modelling and Analysis (CCCma)/ Environment and Climate Change Canada- UVIC; (Casual research member).
- Feb 2017-present: Research associate in The Pacific Climate Impact Consortium (PCIC)-Canada.

Scientific publications

1. 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.
2. 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
3. D. Ouali, F. Chebana and T.B.M.J. Ouarda (2017). "Fully nonlinear regional hydrological frequency analysis". Submitted.
4. D. Ouali, F. Chebana and T.B.M.J. Ouarda (2017). "Hydro-meteorological extremes in a changing climate: a non-linear semi parametric approach ". To be submitted.
5. D. Ouali, A.J. Cannon (2017). "Intensity–Duration–Frequency curves estimation in a regional framework using quantile regression". In preparation.

Scientific Reports

1. D. Ouali, W. Snoussi, J. Chahed and K. Mrabet, (2009): Modelling of the atmospheric dispersion of the odour using ADMS code;
2. D. Ouali, Z. Bargaoui and S. Chbil. (2011): Multivariate modelling of hydro-meteorological extremes -Application: Grape downy mildew (<http://ressources.sfds.asso.fr/pdf/JdS2011-Mercredi.pdf>);
3. D. Ouali, A. St-Hilaire. (2015): Bivariate analysis of suspended sediments transport using copula.

Conference participations

1. D. Ouali, F. Chebana, and T. B. M. J. Ouarda (Canada, UAE): On the use of estimated atsite quantiles in regional frequency analysis. International workshop of Statistical Hydrology (STAHY), Quebec City, Quebec, Canada, September 26-27, 2016.
2. D. Ouali, F. Chebana, and T. B. M. J. Ouarda (Canada, UAE): Non-linear delineation for regional frequency analysis, the 13th International Meeting on Statistical Climatology (IMSC), Canmore, Alberta, Canada, June 6-10, 2016.
3. D. Ouali, F. Chebana, and T. B. M. J. Ouarda (Canada, UAE): Direct regional frequency analysis, estimation and evaluation using quantile regression. 68th National Canadian Water Resources Association (CWRA) conference, Winnipeg, Manitoba, Canada, June 24, 2015.
4. 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.
5. D. Ouali, F. Chebana, and T. B. M. J. Ouarda (Canada, UAE): Local frequency analysis using quantile regression. Statistical Hydrology workshop (STAHY). Abu Dhabi, November 10-11, 2014.

6. D. Ouali, F. Chebana, and T. B. M. J. Ouarda (Canada, UAE): Non-linearity in regional frequency analysis. Statistical Hydrology workshop (STAHY). Abu Dhabi, November 10-11, 2014.
7. D. Ouali, F. Chebana, and T. B. M. J. Ouarda: The Nonlinear Aspect in Regional Flood Frequency Analysis. Annual Water Initiative for the Future (WatIF): Graduate Conference, Kingston, ON, May 4-6, 2014.
8. D. Ouali, A. St-Hilaire: Multivariate analysis of sediments. Workshop of the Canadian scientific hydrology observatory. St-Jacques de Madawaska, NB, Canada, October 28-29, 2013.
9. D. Ouali, Z. Bargaoui, S. Chbil - Multivariate modelling of hydro-meteorological extremes - Application: Grape downy mildew. «43rd Days of Statistics of the French Society of Statistics (SFDS), Tunis, Tunisia, May 23- 27, 2011.

Awards

- Ken Thompson Scholarship - Canadian Water Resources Association, 2014.
- Best poster award in STAHY 2016: On the use of at-site estimated quantiles in regional frequency analysis.