

Curriculum Vitae¹

- MORON Vincent
- Born on Feb 16, 1968 at Nuits-Saint-Georges (Côte d'Or - France)
- Citizenship : french
- Family status : married (5/9/1995), two childrens (29/1/1998 et 1/8/2001)
- Home address : 5 rue de la Tour, 84360 Lauris (tél. : 33 (0)4 90 08 43 39)
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Academic background

- o « **Habilitation à diriger des recherches** » of **geography** (« *Sensibilité de l'atmosphère aux températures de surface océanique : concepts, outils et résultats* ») defended on 12/7/2000 at the University of Aix-Marseille (rank : « très honorable avec félicitations à l'unanimité du jury »)
- o **PhD of geography** (« *Variabilité des précipitations en Afrique tropicale au nord de l'équateur (1933-1990) et relations avec les températures de surface océanique et la dynamique de l'atmosphère* ») defended on 6/14/1993 at the University of Bourgogne (rank : « très honorable avec félicitations à l'unanimité du jury »)

Current Positions

- o Professor of Physical Geography (Climatology) at Aix-Marseille University from September 2001 (Lecturer from 1997 to 2001 at the same university)
- o Research Scientist at the Centre d'Enseignement et de Recherche en Géosciences de l'Environnement from January 2000
- o Adjunct Senior Research Scientist at the International Research Institute for Climate and Society (IRI, Columbia University, New York, USA) (from September 2004)

Expertise & edition

My expertise covers the diagnostic analysis of the contemporaneous variability of climate, with a special focus on the tropical rainfall, from daily to interannual time scales, using advanced statistical methods applied to various databases of observed, reanalyzed and simulated climate variations. Most of my research is dedicated to the conceptual analysis of scale's interaction in tropical climate. My recent work is, for example, about the decomposition of a seasonal amount of rainfall into frequency and mean intensity and then into various intra-seasonal descriptors (aka onset, demise of the rainy season, dry and wet spells, etc.). This decomposition may help to define and extract the main spatially-coherent and potentially predictable signals at regional scale and from different sources at interannual (as ENSO) or intraseasonal (as MJO) time scales. In particular, I use my expertise in the following tasks ;

- Associate Editor of the *International Journal of Climatology* since February 2018
- Associate Editor of the *Journal of Climate* since July 2017
- Peer-review of 2 to 12 papers/year for the *Journal of Climate*, *Climate Dynamics*, the *International Journal of Climatology*, *Geophysical Research Letters*, the *Journal of Geophysical Research*, *Tellus*, the *Quarterly Journal of the Meteorological Society*, *Water Resources Research*, etc. (from 1994)
- Expertise on ANR projects (from 2007)
- Expertise on NSF projects (from 2005)
- Expertise on CNRS and IRD projects (from 1998)

¹ This CV has been updated on January 10 2020.

Overall, this expertise seems to me relevant for a position of member of the CLIVAR/GEWEX Monsoons Panel. I have a rather comprehensive knowledge of various rainy seasons across the Tropical Zone, since I worked on the African Sahel, Equatorial East Africa, Indian monsoon, the maritime continent and NW Tropical Pacific, the area around the Southern Pacific Convergence Zone and the Caribbean basin. As a geographer, I also have a particular sensitivity to the question of the interaction between climate variability and its impacts on the environment and society, especially through agriculture and forest fires.

Bibliometry

92 peer-reviewed papers from 1994, h-index (www.google.scholar.com) = 33 (<http://scholar.google.fr/citations?user=DiOGVU0AAAAAJ&hl=fr>). Research Gate score = 42.34 (percentile = 97.5%) (https://www.researchgate.net/profile/Vincent_Moron/stats)

Papers published in international journals and books since 2017 (21)

- 2020-3 : **Moron V**, Bombardi R, Hendon H, Marshall A, Sahai AK, Chattopadhyay R (2020) *Monsoon sub-seasonal prediction*. Chapter n°26 in « The Multiscale Global Monsoon System », eds :C.P. Chang, K.J. Ha, R. H. Johnson, D. Kim, G.N. Lau, B. Wang. World Scientific Series on Asia-Pacific Weather and Climate, Vol. 11. World Scientific, Singapore. (in press)
- 2020-2 : **Moron V**, Robertson AW (2020) Tropical rainfall subseasonal-to-seasonal predictability types. *NPJ Climate and Atmospheric Sciences*, in press
- 2020-1 : Bombardi RJ, **Moron V**, Goodnight JS (2020) Detection, variability, and predictability of monsoon onset and withdrawal dates : a review. *International Journal of Climatology*, in press. <https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/joc.6264>
- 2019-7 : Barbero R, Fowler H, Blenkinsop S, Westra S, **Moron V**, Lewis E, Lenderink G, Guerreiro S, Li W, Kendon E, Chan S, Villalobos R, Mishra V, Haider A (2019) A synthesis of hourly and daily precipitation extremes in different climatic regions. *Weather and Climate Extremes*, **26**, <https://doi.org/10.1016/j.wace.2019.100219>
- 2019-6 : Gerlitz L, Steirou E, Schneider C, **Moron V**, Vorogushyn S, Merz B (2019) Variability of the cold season climate in Central Asia – Part II: Hydro-climatic Predictability. *Journal of Climate*, **32**, 6015–6033. <http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-18-0892>.
- 2019-5 : Camberlin P, Barraud G, Bigot S, Dewitte O, Makanzu F, Maki Matoso JC, Martiny N, Monsieus E, **Moron V**, Pellarin T, Philippon N, Sahani M, Samba G (2019) Evaluation of remote sensed rainfall products over Central Africa, *Quarterly Journal of the Royal Meteorological Society*, **145**, 2115-2138. <https://rmets.onlinelibrary.wiley.com/doi/10.1002/qj.3547>
- 2019-4 : **Moron V**, Barbero R, Evans J, Westra S, Fowler H (2019) Weather types and hourly to multi-day rainfall characteristics in Tropical Australia, *Journal of Climate*, **32**, 3983-4011. <http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-18-0384.1>
- 2019-3 : Robertson AW, **Moron V**, Vigaud N, Acharya N, Greene AM, Pai DS (2019) Multi-scale variability and predictability of monsoon precipitation over India, *Mausam*, **70**, 277-292.
- 2019-2 : Philippon N, Cornu G, Monteil L, Gond V, **Moron V**, Pergaud J, Sèze G, Bigot S, Camberlin P, Doumenge C, Fayolle A, Ngomanda A (2019) The light-deficient climates of Western Central African evergreen forests, *Environmental Research Letters*, **14**, 034007, <https://doi.org/10.1088/1748-9326/aaf5d87>
- 2019-1: **Moron V**, Robertson AW, Wang L (2019). *Weather within Climate : Sub-seasonal predictability of tropical rainfall daily rainfall characteristics*. The gap between weather and

climate forecasting : sub-seasonal to seasonal prediction, Robertson AW, Vitart F. eds., Elsevier, 47-64. <https://doi.org/10.1016/B978-0-12-811714-9.00003-6>.

- 2018-5 : Gaucherel C, Frelat R, Polidori L, El Hage M, Cudennec C, Mondesir P, **Moron V** (2018) Weak relationships between landforms and hydro-climatologic processes : a case study in Haiti. *Hydrology Research*, **50**, 744-760. <https://doi.org/10.2166/nh.2018.041>
- 2018-4 : **Moron V**, Robertson AW, Vitart F (2018) Editorial : Sub-seasonal to Seasonal predictability and prediction of monsoon climates, *Frontiers in Environmental Science*, **6**, DOI: 10.3389/fenvs.2018.00083.
- 2018-3 : Gerlitz L, Steinou E, Schneider C, Moron V, Vorogushyn S, Merz B (2018) Variability of the cold season climate in Central Asia – Part I: Weather types and their tropical and extratropical drivers, *Journal of Climate*, **31**, 7185-7207. <https://doi.org/10.1175/JCLI-D-17-0715.1>.
- 2018-2 : Ruffault J, Curt T, St Martin P, Moron V, Trigo R (2018) Extreme Wildfire occurrence in response to Global Change type Droughts in the Northern Mediterranean , *Natural Hazards and Earth System Science*, **18**, 847-856. <https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-415/>
- 2018-1 : **Moron V**, Oueslati B, Pohl B, Janicot S (2018) Daily weather types in February–June (1979–2016) and temperature variations in Tropical North Africa. *Journal of Applied Meteorology and Climate*, **57**, 1171-1195. <https://doi.org/10.1175/JAMC-D-17-0105.1>.
- 2017-5 : Pichard G, Roucaute E, **Moron V**, Arnaud-Fassetta G (2017) Hydrology-climatology of the Lower Rhône Valley (LRhV): historical flood reconstruction (1300 AD-2000 AD) based on documentary and instrumental sources, *Hydrological Science Journal*, **62**, 1772-1795. <http://dx.doi.org/10.1080/02626667.2017.1349314>.
- 2017-4 : Oueslati B, Pohl B, **Moron V**, Rome S, Janicot S (2017) Characterisation of heat waves in the Sahel and associated physical mechanisms. *Journal of Climate*, **30**, 3095-3105. <http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-16-0432.1>
- 2017-3 : **Moron V**, Robertson AW, Pai DS (2017) On the spatial coherence of subseasonal Indian rainfall anomalies, *Climate Dynamics*, **49**, 3403-3423. DOI: 10.1007/s00382-017-3520-5.
- 2017-2 : Ruffault J, **Moron V**, Trigo R, Curt T (2017) Daily synoptic atmospheric conditions associated with large fires in southern France (1973-2013), *International Journal of Climatology*, **37**, 524-533. <http://onlinelibrary.wiley.com/enhanced/exportCitation/doi/10.1002/joc.4680>.
- 2017-1 : Gaucherel C, **Moron V** (2017) Potential stabilizing points to mitigate tipping point interactions in Earth climate. *International Journal of Climatology*, **37**, 399-408. <http://onlinelibrary.wiley.com/enhanced/exportCitation/doi/10.1002/joc.4712>