

Natacha Volto

Contact Information

LIENSs – UMR 7266 CNRS - La Rochelle University
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Education

2015 Diploma of Higher Specialist Studies in Remote sensing and geomatics applied to the Environment, Paris Diderot Univ.
2005 Diploma of Higher Specialist Studies in Safety and Environment protection, Reims Univ.
2004 Master in Physics, Wollongong (Australia) and Pau (France) Universities

Professional background

Since 2016 GIS engineer in LIENSs, CNRS - La Rochelle University, Responsible for promoting the use of satellite imagery and related softwares, Responsible of the photogrammetry processing for the LIENSs UAV Platform
2015 In charge of studies on the multi-scale approach to mapping and monitoring the plant production in the Sahelian region for the IRD, Paris 7 Diderot University (5 months) : integrated into the CERISE project, NDVI images processing of multi-sensors satellites from 1982 to 2013

Research projects

2022-2024 Member of the Fondation de France ADAPTOM project : Feedback on the potential of nature-based solutions to reduce coastal risks and promote adaptation to climate change in French island overseas territories
2018-2023 Member of the ANR DELTA : Deltas under the impact of global change
2017-2022 Member of the ANR OURAGAN TIREX : Sharing learning from post-disaster research for strengthening individual and collective response and adaptation capacities in the context of climate change
2015-2021 Member of the ANR STORISK : Small islands in the face of climate change : towards risk and adaptation trajectories

Publications

Articles

- I. In collaboration with V. Duvat, S. Costa, O. Maquaire, C. Pignon-Mussaud and R. Davidson, Assessing atoll island physical robustness: application to Rangiroa Atoll, French Polynesia. *Geomorphology*, Elsevier, 2021, <10.1016/j.geomorph.2021.107871>
- II. In collaboration with V. Duvat, L. Stahl, A. Moatty, S. Defosse, J. Desarthe, D. Grancher and V. Pillet, Understanding interlinkages between long-term trajectory of exposure and vulnerability, path dependency and cascading impacts of disasters in Saint-Martin (Caribbean). *Global Environmental Change*, Elsevier, 2021, 67, <10.1016/j.gloenvcha.2021.102236>
- III. In collaboration with V. Duvat, Applying Directional Filters to Satellite Imagery for the Assessment of Tropical Cyclone. *Journal of Coastal Research*, Coastal Education and Research Foundation, 2020, 36 (4), pp.732-740. <10.2112/JCOASTRES-D-19-00153.1>
- IV. In collaboration with V. Duvat, V. Pillet, H. Terorotua and V. Laurent, Contribution of moderate climate events to atoll island building (Fakarava Atoll, French Polynesia). *Geomorphology*, Elsevier, 2020, 354, pp.107057. <10.1016/j.geomorph.2020.107057>
- V. In collaboration with V. Duvat, V. Pillet, Y. Krien, R. Cécé and D. Bernard, High human influence on beach response to tropical cyclones in small islands: Saint-Martin Island, Lesser Antilles. *Geomorphology*, Elsevier, 2019, 325, pp.70-91. <10.1016/j.geomorph.2018.09.029>

- VI. In collaboration with V. Duvat and C. Salmon, Impacts of category 5 tropical cyclone Fantala (April 2016) on Farquhar Atoll, Seychelles Islands, Indian Ocean. *Geomorphology*, Elsevier, 2017, 298, pp.41 - 62. (10.1016/j.geomorph.2017.09.022)
- VII. Note on the use of CROP-VGT software applied to NDVI images of the VEGETATION sensor. *Photo-Interprétation. European Journal of Applied Remote Sensing*, Editions Eska, 2015, 51 (1), pp.29-33

Posters

- I. In collaboration with N. Lachaussée, T. Guyot, N. Long and X. Bertin, Evaluation of the vertical accuracy of the digital model surface from images acquired with the eBee X RTK. *Journées Drones et Capteurs Embarqués 'Le réseau Drones & Cap' du CNRS*, 2021 (DOI : 10.3390/rs8050387)
- II. Detection of sedimentary features in post-cyclone situations through the use of spatial filters. 14^{ème} Colloque GEORISQUE 2018 - CYCLONES, 2018

Online

<https://lienss.univ-larochelle.fr/Volto-Natacha-1322>