

COST Action CA19109 “MedCyclones” – Working Group 3

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Overview article addressed to the scientific community, on the environmental and climate impacts of Mediterranean cyclones

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The review paper was finally submitted as planned to Reviews of Geophysics and its preprint is currently available online:

<https://doi.org/10.22541/essoar.172202069.91367609/v1>

Khodayar,S.; Kushta,J.; Catto,J.L.; Dafis,S.; Davolio,S.; Ferrarin, C.; Flaounas, E.; Groenemeijer,P.; Hatzaki, M.; Hochman, A.; Kotroni,V.; Landa,J.; Láng-Ritter,I.; Lazoglou, G.; Liberato, M.L.R.; Miglietta, M.M.; Papagiannaki,K.; Patlakas, P.; Stojanov,R.; Zittis, G. Mediterranean cyclones in a changing climate: a review on their socio-economic impacts, ESS Open Archive, 2024.

The paper categorizes the impact-based applications and sectors that would benefit from an efficient co-definition and co-design of needs. Further, this work reviews existing knowledge regarding the socio-economic impacts of Mediterranean cyclones, focusing on particularly vulnerable sectors in the region. As a result of this effort, knowledge gaps and the vulnerability of the main societal sectors are identified. The overarching goal of gathering knowledge on the socio-economic impacts of Mediterranean cyclones is to inform decision-makers on the state of the art, thus contributing to creating resilient communities in the face of climate change.



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