

EGU21-16187, updated on 27 Jan 2022
<https://doi.org/10.5194/egusphere-egu21-16187>
EGU General Assembly 2021
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.



Warning and evacuation, case studies from Japan, Philippines and Dominica

Joanna Faure Walker and Rebekah Yore

Institute for Risk and Disaster Reduction, University College London, London, United Kingdom of Great Britain – England,
Scotland, Wales (j.faure-walker@ucl.ac.uk)

In order to be effective, warning systems need to both reach those at risk and prompt appropriate action. We study the efficacy of early warning systems in prompting residents to take appropriate action ahead of severe hazards in island countries that experience regular disasters, namely following the Great East Japan Earthquake and Tsunami in Japan, Typhoon Yolanda in The Philippines, and Hurricane Maria in Dominica. All these events were extreme in their impact and in addition had aspects which surprised residents such as the size of the tsunami, the storm surge and the late change in intensity which provided challenges with warning. We find that multiple forms of warning are needed in order for the whole population to be reached as no one form of warning reaches everyone. The timing of the warning is important for evacuation decisions including who stays and who evacuates. It is important that the whole cycle of a warning system is considered, and that it is viewed as a process, such that we consider the scientific, communications, social and infrastructure aspects of warning systems.