

The disasters caused by tsunamis in the last 10 years have highlighted the need for a thorough understanding of the global tsunami hazard and risk. At present, the 2004 and 2011 tsunamis hint that their induced risk are dominated by large infrequent events. However, an in-depth understanding of how contributions from tsunami sources of different location, strength, and frequency govern the hazard and risk is presently not clear. A first global analysis of tsunami hazard using earthquake sources was conducted in 2008 on behalf of the UN-ISDR Global Assessment Report (GAR9). Recently, this initiative has resulted in the first fully probabilistic global tsunami hazard assessment (GAR15). Economic loss calculations have also been included to assess the risk. Still, this complex assessment is premature. Further efforts are needed, requiring joint expertise covering a wide range of topics such as the understanding of sources, uncertainties, and vulnerability and exposure. Therefore, there is a dire need for an interdisciplinary effort delivering data and tools that may help decision makers in assessing their tsunami hazard and risk, and the associated uncertainties. To this end, we propose to establish a Global Tsunami Model (GTM) network that will emphasize tsunami hazard and risk analysis on a global scale. The GTM network will be based on the initial work in GAR, but a broader community will now be involved. The motivation, the needs, and a possible governance scheme for such a GTM will be discussed, as a result of the first two GTM meetings held in 2015.