



The "Multi-hazard" effect of Tropical cyclones

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A tropical cyclone (also known as a hurricane, typhoon, willy-willy, or baguio) is one of the strongest atmospheric hazards. It is accompanied with very strong winds, heavy rain, high ocean waves and damaging storm surge which can produce extensive coastal flooding. However in many cases the damage caused by tropical cyclone (TC) winds or storm surge has been incorrectly attributed to earthquakes. There are many examples when TCs appear with earthquakes simultaneously.

TC is affected by El-Niño. For example, the Western Pacific basin experiences a change in the location of where tropical cyclones form during El Niño events, without a major change in how many develop each year. Other El Niño impacts include a decrease in the sea level, the possibility of coral bleaching in the marine environment and an increased risk of a tropical cyclone affecting Samoa.

TCs exemplify how many different severe weather phenomena have dependences on each other, creating in "multi-hazard" effect. In this paper the author analyses this multi-hazard effect in the SW Pacific and South Indians Oceans.