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## APPLICATION OF INASAFE FOR DISASTER PREPAREDNESS : A CASE STUDY IN OSAKA CITY

Phuong VU-HOANG<sup>a,\*</sup>, Venkatesh RAGHAVAN<sup>a</sup>

<sup>a</sup>*Graduate School for Creative Cities, Osaka City University  
3-3-138 Sugimoto Sumiyoshi-ku, Osaka 558-8585, Japan.  
Email: [hoangphuongddc@gmail.com](mailto:hoangphuongddc@gmail.com)*

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### Abstract

In recent years, frequency of the hazards have increased all over the world due to the global climate change, and predicting the occurrence information of the disaster will be most important for disaster managers. In this study using open data sources and InaSAFE as a tool to analysis and evaluate the impact of disasters on people and infrastructure. InaSAFE is a QGIS plugin, a free and open source to help disaster managers better understand the likely impact of a specific disaster event. InaSAFE is developed by Indonesia and Australian government in collaborative work with the World Bank. In this case study, utilizing open data and open source solutions to assess the impact due to flood in Osaka city area. Impact assessment of infrastructure and population affected, evaluate the use of open data for flood scenario using InaSAFE, localization and customization of InaSAFE in order to adapt with other areas. The result of research help disaster managers answer these question form: " In the event of flood in Osaka city, how many exposure might be impacted?" and give some activity to preparedness disaster.

*Keywords:* InaSAFE, Osaka data, disaster preparedness.

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