

Open science cyber-infrastructure framework for next generation disaster analytics

ABSTRACT

The open science movement is gaining popularity due to the stability of data storage and network technologies besides the availability of open data portal in many countries. However, a case study that focuses on the requirement and design of the cyber-infrastructure for open science is limited. This paper reports the assessment of existing infrastructure for disaster information management as an open science activity based on the Sendai Framework. A framework that combines the open data quality and the next generation repository system requirements based on a case study on the flood and forest fire management in Malaysia and Indonesia is proposed. This paper fills the gap between the focus on open data framework and the next generation repository system based on the requirements from a recent international collaboration on climate research studies.

Keyword: Open science; Next generation repository system; Open data; Disaster analytics