



How natural hazards influence Internet searches

Adelina Geyer, Joan Martí, and Antonio Villaseñor

Institute of Earth Sciences Jaume Almera, CSIC, Barcelona, Spain (ageyer@ictja.csic.es)

Effective dissemination of correct and easy-to-understand scientific information is one of the most imperative tasks of natural hazard assessment and risk management, being the media and the population the two fundamental groups of receptors. It has been observed how during the occurrence of hazardous natural phenomena, media and population desperately seek for information in all possible channels. Traditionally, these have been the radio and television, but over the past decades, the Internet has also become a significant information resource. Nevertheless, how the Internet search behavior changes during the occurrence of natural phenomena of significant societal impact (i.e. involving important human and/or economic losses) has never been analyzed so far. Focusing mainly on volcanism, we use here for the first time Internet search data provided by Google Trends to examine the search patterns of volcanology-related terms and how these may change during unrest periods or volcanic crises. Results obtained allow us to evaluate, at a global and local scale, the interest of society towards volcanological phenomena and its potential background knowledge of Earth Sciences. We show here how Internet search data turns to be a promising tool for the global and local monitoring of awareness and education background of society on natural phenomena in general, and volcanic hazards in particular.