



The Knowledge Capsules: Very Short Films on Earth Science for Mainstream Audiences

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The Knowledge Capsules are outreach and communication videos that present practical science research to mainstream audiences and take viewers on a journey into different aspects of Earth science and natural hazards. The innovative shorts are the result of an interdisciplinary development and production process. They include a combination of interviews, visualizations of scientific research, and documentation of fieldwork. They encapsulate research insights about volcanoes, tsunamis, and climate change in Southeast Asia. These short films were actively distributed free-of-charge during 2012-2014 and all of them are available online.

The paper provides an overview of the motivations, process and accomplished results. Our approach for producing the Knowledge Capsules includes: an engaging mix of information and a fresh delivery style, a style suitable for a primary audience of non-scientists, a simple but experientially rich production style, Diagrams and animations based on the scientists' visuals, and a running time between five and twenty minutes. The completed Knowledge Capsules include: "Coastal Science" on Coastal Hazards, "The Ratu River Expedition" on Structural Geology, "Forensic Volcano Petrology by Fidel Costa, Volcano Petrology, "A Tale of Two Tsunamis" on Tsunami Stratigraphy, "Unlocking Climate Secrets" on Marine Geochemistry, and "Earth Girl 2: A Casual Strategy Game to Prepare for the Tsunami" on Natural Hazards and Science Outreach.