

## **From infotainment to tools of interaction - A critical perspective on the use of film/video in geoscience**

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In times of omnipresent digitisation and interconnectedness, the way how we generate and experience knowledge on geo-related themes is strongly influenced by audiovisual media representations. Moving images are powerful tools and have significant potential to communicate science in novel ways. Major research frameworks such as Horizon 2020 strongly encourage the use of audiovisual media in order to communicate science “more effectively” to the public. An increasing number of geoscientists produce films themselves, while most of them still delegate this task to media professionals to whom they provide their scientific expert knowledge. Usually, the intention behind these outreach efforts is to take advantage of the suitability of the medium to convey “scientific facts”, or to motivate certain cognitive/behavioural responses of different target audiences. Undoubtedly, film has a great potential for representing geoscientific knowledge and thus has become a key instrument for geoscience communication. However, the use of images also raises fundamental ethical and representational concerns. While the latter have provoked intense debates in sub-disciplines such as visual anthropology or film geography, the geosciences have paid only little attention to questions on how distinct practices and disciplinary paradigms create filmic representations. Given the fact that the use of scientific images and film is far from being “objective” and that the way how we create and experience images is always context-specific and strongly influenced by the relationship between film maker, film subjects/informants and audience, a series of important questions arises: What do we know about the use of film in geosciences beyond the realm of information and representational purposes? What can we learn from using film as a reflexive, process-oriented and dialogue-based medium? How can film help us to better understand ethical and representational dimensions of our interaction with the public? What are the phenomenological qualities of film and how can they be made productive for science communication? This article explores the potential for novel approaches to use film in geology not only as outreach tool, but also as method of joint knowledge production in inter- and transdisciplinary collaboration. In order to provide evidence for the above-mentioned observations, a historical perspective on the use of film in geosciences as well as an in-depth analysis of recent art-science-collaborations will be given.