



Videos for Science Communication and Nature Interpretation: The TIB|AV-Portal as Resource.

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Scientific audiovisual media such as videos of research, interactive displays or computer animations has become an important part of scientific communication and education. Dynamic phenomena can be described better by audiovisual media than by words and pictures. For this reason, scientific videos help us to understand and discuss environmental phenomena more efficiently. Moreover, the creation of scientific videos is easier than ever, thanks to mobile devices and open source editing software. Video-clips, webinars or even the interactive part of a PICO are formats of scientific audiovisual media used in the Geosciences. This type of media translates the location-referenced Science Communication such as environmental interpretation into computed-based Science Communication. A new way of Science Communication is video abstracting. A video abstract is a three- to five-minute video statement that provides background information about a research paper. It also gives authors the opportunity to present their research activities to a wider audience. Since this kind of media have become an important part of scientific communication there is a need for reliable infrastructures which are capable of managing the digital assets researchers generate.

Using the reference of the usecase of video abstracts this paper gives an overview over the activities by the German National Library of Science and Technology (TIB) regarding publishing and linking audiovisual media in a scientifically sound way. The German National Library of Science and Technology (TIB) in cooperation with the Hasso Plattner Institute (HPI) developed a web-based portal (av.tib.eu) that optimises access to scientific videos in the fields of science and technology. Videos from the realms of science and technology can easily be uploaded onto the TIB|AV Portal. Within a short period of time the videos are assigned a digital object identifier (DOI). This enables them to be referenced, cited, and linked (e.g. to the relevant article or further supplement materials). By using media fragment identifiers not only the whole video can be cited, but also individual parts of it. Doing so, users are also likely to find high-quality related content (for instance, a video abstract and the corresponding article or an expedition documentary and its field notebook).

Based on automatic analysis of speech, images and texts within the videos a large amount of metadata associated with the segments of the video is automatically generated. These metadata enhance the searchability of the video and make it easier to retrieve and interlink meaningful parts of the video. This new and reliable library-driven infrastructure allow all different types of data be discoverable, accessible, citable, freely reusable, and interlinked. Therefore, it simplifies Science Communication