

Establishing Community Standards for Underwater Video Acquisition, Tagging, Archiving, and Access

Community Workshop

June 1-2, 2016

University of Rhode Island

Graduate School of Oceanography

Narragansett, Rhode Island

Background & Motivation

Video imagery is an integral part of underwater operations conducted with ROVs, HOVs, and AUVs. These data are critical for sampling, exploration, and observation activities during seafloor operations and are key records for immediate post-dive and post-cruise research by the shipboard participants. Video archives have the potential to provide broad significant scientific benefits long after data acquisition and have tremendous potential for engaging the public in exciting ocean science research. To achieve this potential, significant challenges must be addressed that will allow video archives to become accessible and include sufficient metadata to allow users to access the content relevant to their needs.

The technology for streaming and searching for video content on a variety of platforms (e.g. desktop, tablet, mobile, smart TV) has become mainstream, and the oceanographic research community has an opportunity to capitalize on these technologies. However, there has not been a coordinated effort within the oceanographic community to establish standards and guidelines to help mitigate the cost and effort required to get this high-value content online and accessible. These problems have been addressed and solved by others outside the ocean science community and already developed industry protocols and standards could be applicable to the protection and accessibility of deep submergence video data. This workshop will bring together science community stakeholders, video recording experts, and data managers and metadata specialists to develop consensus and best practices for video and complementary metadata to help move the community toward the common goal of broad public access to distributed video content for scientific research and public outreach.

Workshop Goals

- Summarize current state of video data standards/management including technical and Science-based needs and challenges to inform data managers, service providers, developers and metadata specialists to ensure that community needs are met
- Develop Recommendations for:
 - video file formats
 - logging standards (codecs, bit rates, aspect ratios, support for closed captioning, etc)
 - metadata standards & protocols
 - storage/archive media
- Develop ideas for moving the community forward:
 - implementation strategies
 - knowledge sharing for Operators
 - sharing of metadata to improve post-cruise access

Workshop Participation

[>> View Workshop Agenda <<](#)

To participate virtually during plenaries:

- Wednesday June 1: <https://rhody.webex.com/rhody/j.php?MTID=m2c67fcf2e08fdd64a4b0fa8ebfb99080>
Meeting number: 731 682 801
Meeting password: video61
- Thursday June 2: <https://rhody.webex.com/rhody/j.php?MTID=m577fc830fb3053f7fa648a2232448b1f>
Meeting number: 733 731 938

Meeting password: video62

[Webex Troubleshooting Guide](#)

Workshop Organizers

- Vicki Ferrini, Lamont-Doherty Earth Observatory
- Dwight Coleman, University of Rhode Island
- Adam Soule, Woods Hole Oceanographic Institution

Workshop Logistics & Contacts

Venue

University of Rhode Island - Graduate School of Oceanography
Coastal Institute ([View Map](#))
Narragansett Bay Campus
Narragansett, RI
<http://www.gso.uri.edu/>

Travel and Accommodations

[Hampton Inn, South Kingstown, RI](#)

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