

Video Standards & Data Management

Vicki Ferrini, LDEO

2016 Workshop

- Co-conveners: V. Ferrini, D. Coleman, A. Soule
- Goal: Move the community toward the common goal of broad public access to distributed video content for scientific research and public outreach.
- > 40 participants (+ ~30 remote)



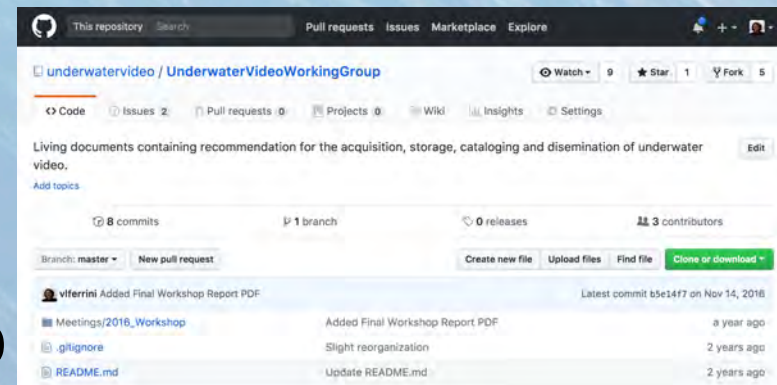
2016 Workshop Highlights

- Consensus on Best Practices
 - Acquisition/Recording
 - Metadata
 - Access -- video should be *open access*
- Roadmap Developed
 - Short-term & long-term goals
- Identified Ongoing Challenges and Opportunities
 - Online access
 - Long-term storage
 - At-risk media
 - Annotation capabilities



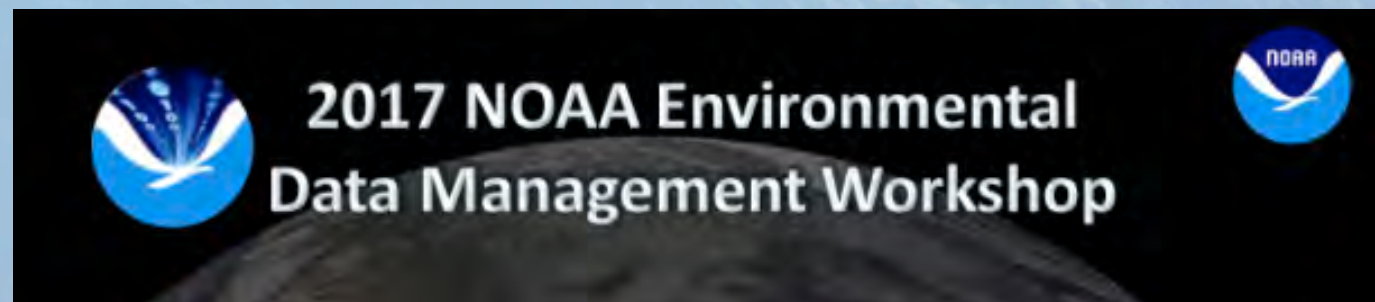
- Materials & Report on GitHub

<https://goo.gl/M51KPF>



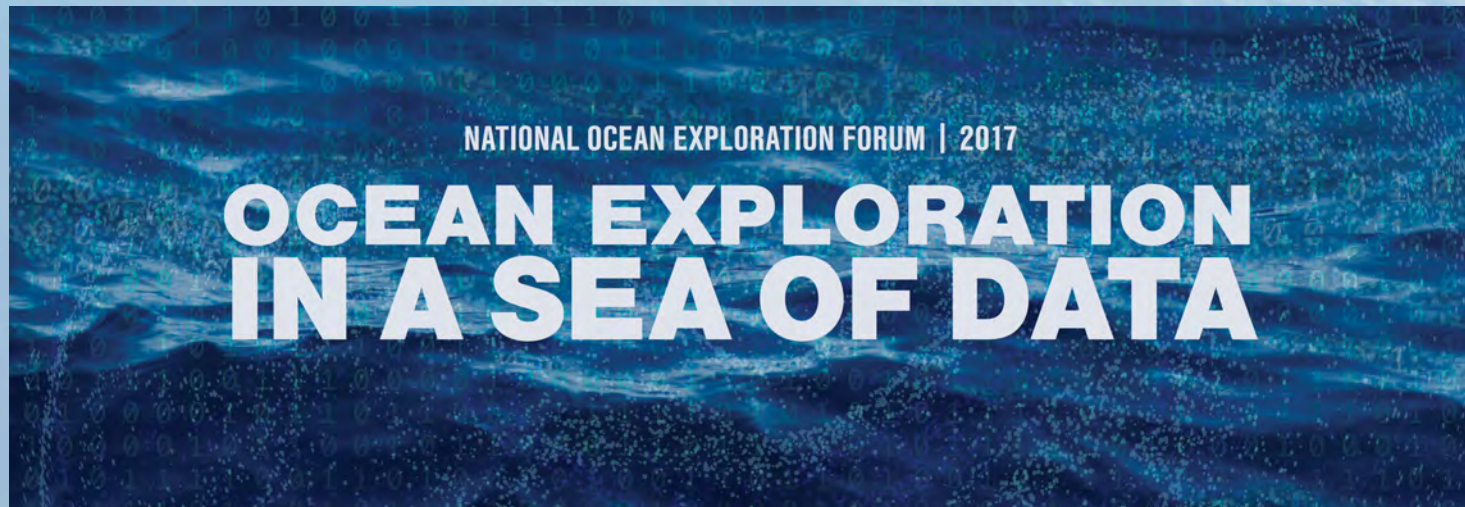
Related Video Data Management Community Activities

- ESIP Drone Cluster – connection made at 2016 SciDataCon
- NOAA Environmental Data Meeting 2017 – focus on video data management

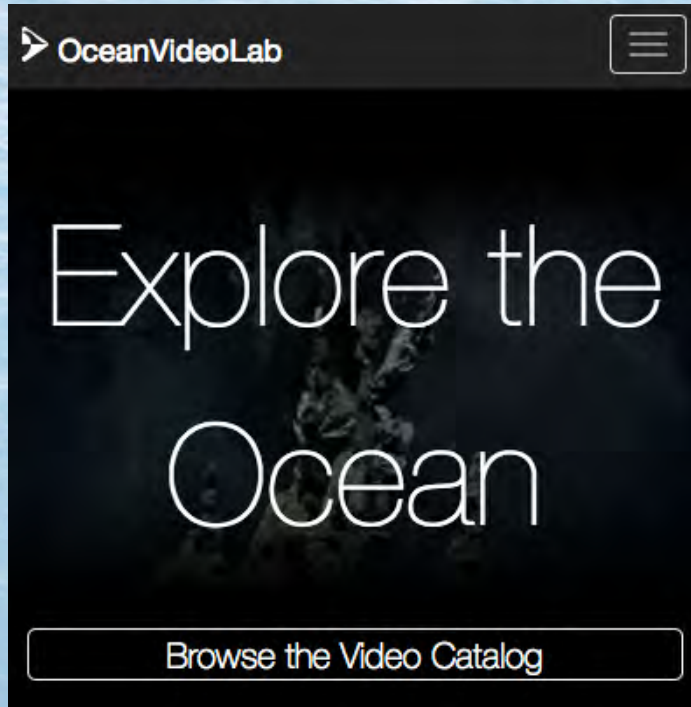


2017 Ocean Exploration Forum

- Video data management identified as an important ocean exploration data challenge
- Ongoing Capstone Research Project with UCSD Data Science School focused on machine learning with bottom photos
 - Advisors include: V. Ferrini (LDEO), J. Block (UCSD)



Ocean Video Lab



2014-11-20 18:11:09

Alvin 4774 PORT S001 S001 T001

60 5 5 60

Annotate

Bathymetry ©2017 Google

500 m Terms of Use

9.889657° N 104.259032° W
roll: -1.86 depth: 2634.04
pitch: -4.74 heading: 293.98
altitude: 1.58

Cruise: AT26-05 Dive: 4774 Platform: Alvin

Search: Narrow Results
Show only my annotations


| Time | Elapsed | Note |
|---------------------|----------|----------------------------|
| 2014-11-20 18:06:13 | 02:04:43 | Animalia- Arthropoda |
| 2014-11-20 18:09:42 | 02:08:12 | Animalia- Echinodermata |
| 2014-11-20 18:10:59 | 02:09:29 | Volcanic- Sheet flow- flat |
| 2014-11-20 18:11:45 | 02:10:15 | Animalia- Echinodermata |
| 2014-11-20 18:11:59 | 02:10:29 | Animalia- Arthropoda (3) |
| 2014-11-20 18:15:56 | 02:14:26 | Animalia- Arthropoda (2) |
| 2014-11-20 18:16:04 | 02:14:34 | Animalia- Arthropoda |
| 2014-11-20 18:16:18 | 02:14:48 | Animalia- Chordata |
| 2014-11-20 18:16:20 | 02:15:02 | Animalia- Nematoda |

Download as: CSV

- Video annotation interface integrated with map and global bathymetry (released 2015)
- Search and annotation download (released 2017)

Ocean Video Lab: Citizen Science


Points: 315
Dive Hours Logged: 10:27



EX1703 VID 20170321T201000Z ROVHD Low

60 5 5 60

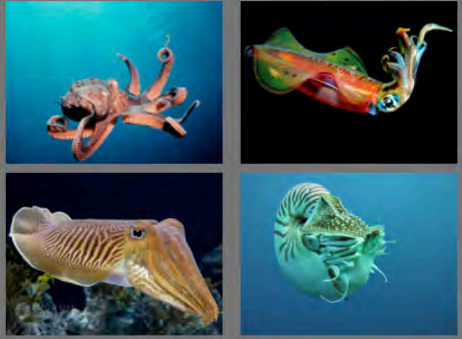
Biology Geology



Cephalopod

A cephalopod (pronounced /ˈsɛfələˌpɒd/ or /ˈkɛf-/~) is any member of the molluscan class Cephalopoda (Greek plural κεφαλόποδα, *kephalópoda*; "head-feet") such as a squid, octopus or nautilus. These exclusively marine animals are characterized by bilateral body symmetry, a prominent head, and a set of arms or tentacles (muscular hydrostats) modified from the primitive molluscan foot. Fishermen sometimes call them inkfish, referring to their common ability to squirt ink. The study of cephalopods is a branch of malacology known as teuthology.

Cephalopods became dominant during the Ordovician period, represented by primitive nautiloids. The class now contains two, only distantly related, extant subclasses: Coleoidea, which includes octopuses, squid, and cuttlefish; and Nautiloidea, represented by Nautilus and Allonautilus. In the Coleoidea, the molluscan shell has been internalized or is absent, whereas in the Nautiloidea, the external shell remains. About 800 living species of cephalopods have been identified. Two important extinct taxa are the Ammonoidea (ammonites) and Belemnioidea (belemnites).



- Explore video
- Bookmark observations
- Game features
- Beta testing underway

2018 Video Workshop

- Spring 2018
- Follow up on outcomes of 2016 Workshop
- Understand the status, successes, challenges of implementing 2016 workshop recommendations
- Refine/revisit roadmap, goals and next steps

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