

Marine Science Videos

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More and more research work on marine environment is based on the analysis of imagery. Thanks to technological development, we can now monitor ocean ecosystems using video cameras deployed on different platforms. Video acquisition provides information on organisms' life and on environmental conditions. The sources of video data and the subjects of interest are many and varied: films from submersible dives in deep-sea environment, programmed video sequences of undersea rotary video stations in lagoons, high-frequency video data on deep-sea observatories, video observations recorded by fixed and autonomous camera devices on fishing gears, and others. The information contained in those images is essential to understand species biology and the functioning of these ecosystems, and ultimately inform environmental management policies. Because of the video data specificity (volumes, formats, diffusion...) a dedicated system has to be proposed for displaying and making accessible this huge archive of imagery, still growing every day.

In spring 2015 IFREMER opened a new web portal called "Marine Science Videos" (<http://video.ifremer.fr/>). The first objective of this video library was to give access to recent and historical images produced during the IFREMER submersibles dives (ROV Victor 6000 and Nautile). Users can view and search videos and photos by keywords or dive information (cruise, submersible, dive, year, zone, camera...).

Indeed, one or more submersibles can be deployed during oceanographic cruises in order to perform several dives lasting from some hours to some days. With their cameras catching videos throughout the dive they produce Tera Bytes of footages that are worth to be proposed to all IFREMER'S partners and to the public. The videos are available within three definitions (Low, Medium and High) in the MP4 H264 proxy format. Metadata relative to submersible dives and acquisition conditions are proposed together with this data: submersible position and attitude, temperature and salinity conditions, camera position and configuration. Comments recorded simultaneously with the videos are displayed if existing.

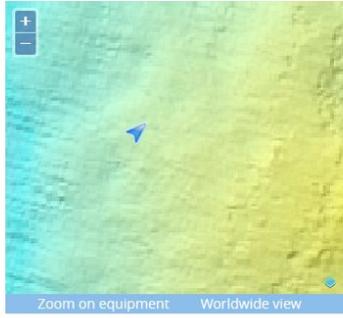
Furthermore, images acquired during corresponding operations are accessible in addition to the videos:

- Thumbnails: also called « mini-films », these images result from an automatic video sampling at a given frequency.
- Images: these are photos from the submersible digital camera and video snapshots.

Thumbnails, Low Definition images and videos are downloadable without restriction. Medium and High Definition versions can be used by authorised persons or on demand.

Liste des résultats / Video 10648

[Thumbnails](#)
[Low definition](#)
[Medium definition](#)
[High definition](#)

Zoom on equipment Worldwide view

00 : 20 : 51
DEBUT MESURE CHEMINI FER ET SULFURE, POINT 1 T=3.7°C

Other events for this video

00 : 32 : 40 DEBUT MESURE CHEMINI Fer et Sulfure, point 1 T=3.7°C

00 : 47 : 01 Fin Mesure CHEMINI Fer et Sulfure. T=6.5 - 7°C

INFORMATIONS	NAVIGATION	SENSOR	CTD / PROBE
Cruise BIOBAZ 2013	Latitude N36° 13' 46.23"	Roll -1.3	Temp -
Ship Pourquoi Pas?	Longitude W33° 54' 10.68"	Pitch -2.1	Salinity -
Equipment VICTOR	Immersion 2284.9 m	Vx 0.0	Temp Probe 3.4 °C
Dive n°520/7 (Video n°10648)	Altitude 9.2 m	Vy 0.0	
Camera Caméra principale HD	Direction 47.3 °	Temp 3.7	
Begin 2013-08-13 00:20:49			

Figure 1: Video and related metadata visualisation interface

At a later stage this portal will be adapted in order to present other video types:

- videos from other IFREMER vehicles or devices (SCAMPI, Pagure, mini ROV, HROV, towed cameras, EROC-VECO) or from divers,
- videos from IFREMER observatories or fixed points (EMSO, STAVIRO-MICADO),
- similar videos acquired by other institutes using their own equipment.

The integration of scientific-orientated indexing of images (observed taxa, geological features ...) and related products and tools (mosaic, picture enhancement...) will be important perspectives for the system as well.