# International networking VLIZ data center - FUST

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VLIZ Flanders Marine Institute





### Flanders Marine Institute (VLIZ)



- Ostend, Belgium
- Since 1999
- Funded by Flanders government and province of West Flanders
- Mission: Support and facilitate marine sciences
- www.vliz.be





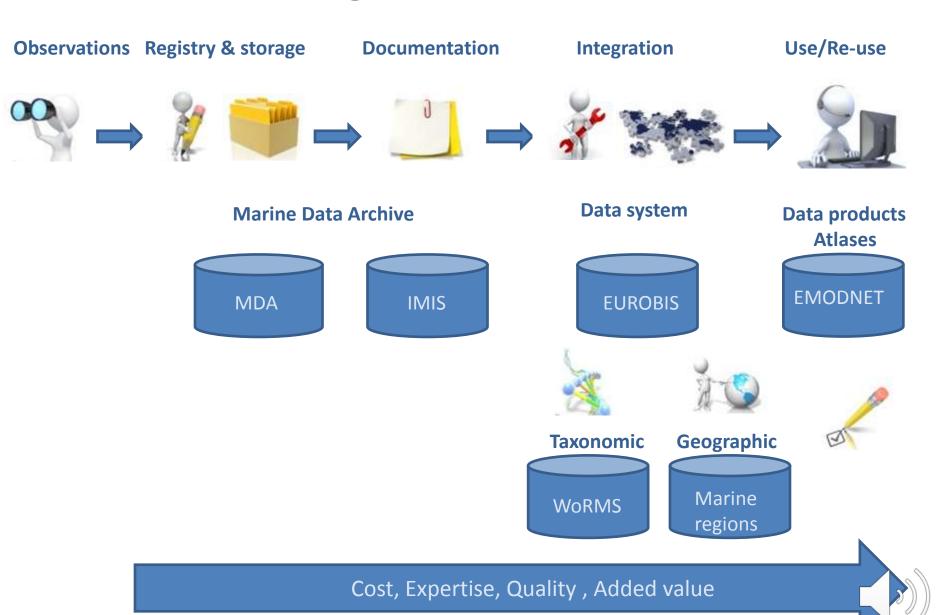
The VLIZ Data Centre provides assistance, technologies and tools to scientists and policymakers to support marine data management. Within international networks VLIZ participates in the development of data infrastructures and promotes the flow of marine data from Belgium.



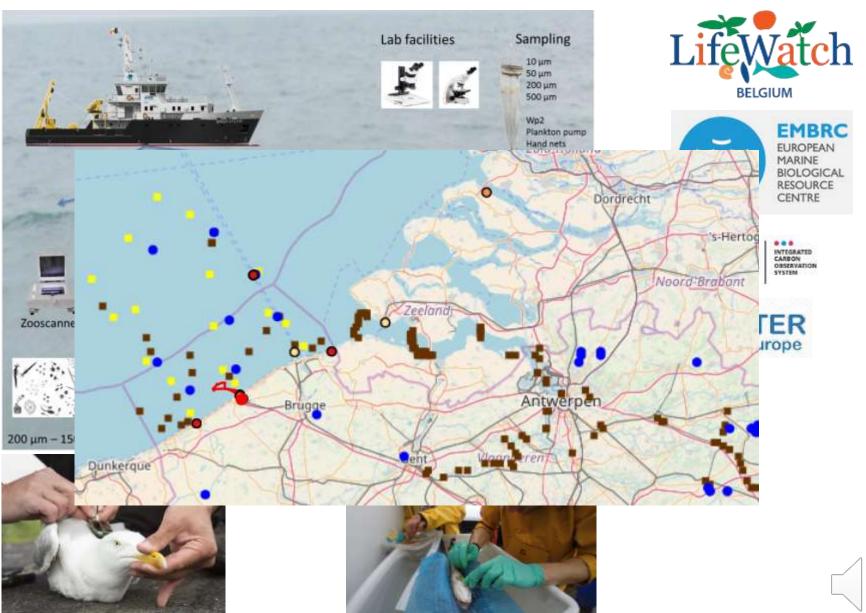
Staff of the Datacentre division - anno August 2017 VLIZ



## Manage FAIR and OPEN data



## **Automate marine observations**





#### **Build Virtual Research Environments**



3.265

USER CITATIONS

OPEN DATA SERVICES

1.285

REGISTERED USERS



16.7m

TAGGED SPECIES **OBSERVATIONS** 

276

DATASETS RESCUED

242.347 + 66.437

ACCEPTED SPECIES IN TAXONOMIC BACKBONE

142

OPERATIONAL SENSOR STATIONS

951

SAMPLES COLLECTED

1.231

DATASETS PUBLISHED



marine.lifewatch.eu

www.lifewatch.be/data-services/

www.lifewatch.be/en/e-lab

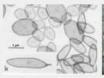








The World Register of Marine Species aims to provide the most authoritative list of names of all marine species globally, ever published











Global effort to register all marine species names 370 taxonomic editors, 185 institutions, 38 countries

554,084 species names Standard for OBIS, IODE, ICES, BODC, SeaDataNet.. > 40 global or regional lists

http://www.marinespecies.org







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Quick search 0 -Q Taxa E Literature M Distribution Specimen Editors Statistics Tools -☐ Manual △ Log in

Home

About

Subregisters

#### WoRMS taxon details

#### Aphrodita aculeata Linnaeus, 1758

AphialD 129840 (urn:lsid:marinespecies.org:taxname:129840) Classification Biota - Animalia (Kingdom) - Animalia (Kingdom) - Phyllodocida (Order) - Phyllodocida (Order) \Rightarrow 🌟 Aphroditiformia (Suborder) 🤝 🌟 Aphroditidae (Family) 🚿 🌟 Aphrodita (Genus) 🚿 🐈 Aphrodita aculeata (Species)

Status accepted Rank Species

Typetaxon of Aphrodita Linnaeus, 1758

> Parent \* Aphrodita Linnaeus, 1758

Orig. name \* Aphrodita aculeata Linnaeus, 1758

Synonymised names Aphrodita borealis Johnston, 1840 (subjective synonym)

 Aphrodita nitens Johnston, 1865 (subjective synonym). \* Aphrodite aculeata (Linnaeus, 1761) (lapsus calami)

Aphroditella pallida Roule, 1898 (subjective synonym)

Eruca echinata Barrelier, 1714 (pre-Linnaean, not a binominal, subjective synonym)

Eruca marina Ruysch, 1721 (pre-Linnaean name, subjective synonym)

Halithea aurata Risso, 1826 (subjective synonym)

Halithea sericea Lamarck, 1818 (subjective synonym)

\* Hystrix marina Redi in Claparède, 1868 (subjective synonym)

Milnesia nuda Quatrefages, 1866 (subjective synonym)

Mus marinus [Linnaeus, informal 1756] (unavailable pre-Linnaean name, subjective synonym)

Vermis aureus Claparêde, 1868 (subjective synonym)

Environment marine, brackish, fresh, terrestrial

Fossil range recent only

Original description Linnaeus, C. (1758). Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima, reformata. Laurentius Salvius:

Holmiae: ii, 824 pp., available online at http://www.biodiversitylibrary.org/item/10277#page/3/mode/1up

page(s): 655 [details]

Type data Note Unknown ("in oceano"-Linneaus, 1758: 655)., No... 0

Taxonomic citation Read, G.; Fauchald, K. (Ed.) (2018). World Polychaeta database. Aphrodita aculeata Linnaeus, 1758. Accessed through: World Register of Marine Species at: http://www.marinespecies.org

/aphia.php?p=taxdetails&id=129840 on 2018-05-11

Sources (39)

Documented distribution (40)

Notes (2)

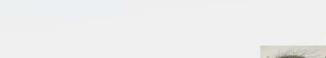
Attributes (9)

Vernaculars (18)

Links (16)

Images (10)





Users

Photogallery

colour figure from

Documents

LifeWatch

Contribute



## The World Register of Marine Species aims to provide the most authoritative list of names of all marine species globally, ever published













## African Register of Marine Species AfReMaS

About | Search taxa | Taxon tree | Search literature | Checklist | Stats | Log in

#### AfReMaS taxon tree

Click

Biota

Kingdom Animalia

Kingdom Bacteria

E Kingdom Fungi

H Kingdom Plantae

★ Kingdom Protozoa

National and determined developed and hosted by VLIZ - Page last modified 2008-15:123 - cornect: Acti var Sour

Kingdom Chromista

to expand the taxonomic tree with the child taxa for that taxon

To collapse branch

Taxon name to go to taxon details

The plus sign is only visible when child taxa are recorded in the database. Expanding one branch will make other branches collapse. Click on any name to see the details recorded in the database for that taxon.

We believe the list to be 95% completions, a cur obvious short terre graduatross an onescon or a fastake or management, please let us have your-list, so your correstions will be incorp.

The World List of Extant

As a result of long term accumulation can now for the first time present a silet is a logical follow up and addition:

The left is intended to promote stable

eventually as a catalogue of the worl

Rob van Soest, peneral list edit
 Nicole Boury-Eensuit, editor for

· Dorte lanussen, editor for Herr

· John Hooper, editor for Detroop

#### mation

By downloading or consulting data fro

If data are extracted from this website tolows:

 Rob van Soest, Nicole Boury-Ear unline at 1980. Process Planteness.

If any data constitutes a substantial

Website and databases developed and hosted by VLIZ - Page generated 2013-05-28 GMT - contact: Mike Odido

data are derived from this source, or b authors, reamagers of the database sh additional data that, may attengthen the analysis or open are resources to a may not have been apparent from the metadata.

Also probably valid
 Also probably not valid

C Sort on valid names, list synonyma

bably not valid Only valid names

Scheidt Species Register

The Arctic Register of Marine Species (ARMS) compiled by the Arctic Ocean Diversity (ArcOD)

The New Zealand Inventory of Biodiversity



and with seven pairs of legs that range in size from 300 micrometries sentimetries. [distriputation]. Their trains, which means "like froot" is amiliar (sai) from the early poologists' familiarity with the common terrestrial "listness" or thus, possibility explicition, prohyputation, sendough. The simpled are diverse, with all ecosystems from the deepest oceans to the mantane terrestrial habitatis or agarders. I people are thought of as demonstrated, that have due to head many species fit this incophological stereotype. (Sopods from the deep seal presents taken may depart occurredentally from this typical body plain.

known crustacean group. The Malaosstraca, which includes familiar crustaceans institution for these malacostractors with an obveus carapace, the isopodistick Supercoder Personnia, which includes a diverse array of shring-like state that between their legs, isopodis are unique acrony these crustaceans for many largace, the gills, which are deversed by the carapace in other geoges, are psecialized large like pleopods ("newmoning limbe") on the posterior section laspods, the pleopods but inspiratory structures similar to lungs, Intervally, steeror section of the thorax to provide increased circulation for the gills, United a shed that cuttle (a process called occlosive) in the object. "Optimized

the world's isopod species

pad namenclature

taumonic revisions and regional monographs
other ordine databases that use isopod nomenclature

sliedge for maintaining the list, we have fooned an addonicl committee to whom looks be addressed.

If the US National Massaum of Natural History, Sentitionnum Statistics, specific and Maryly Schotts. It grees who a valigable resource say for providing nonenculature on the Boppeds: Schotte, Mr., B.F. Keneley, and ley let of Maryle, Freshwester and Terrestrial Crustaces Boppeds. National sonian historication: Washington D.C., USA. This let is now reconstructed at with more detailed information on pyronymies and distributions, and son, such as images, original therature, and apacimen data. This list will be pack to the Smitzpoinian visit.

the visitor agrees to the following:
 in a publication, should be cited as follows:

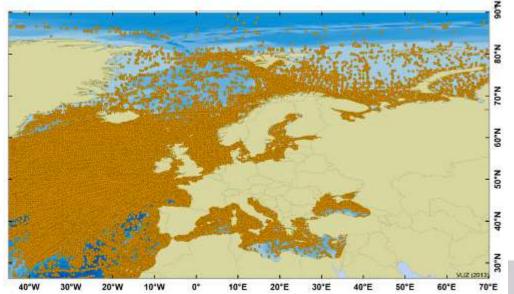
Inice N. L., Merkham J., Poore G.C.B., Terti S., Wilson G.D.F. (Eds.) (2008) stree Freshwater and Terrestrial Isopod Chartaceans. Available prints at





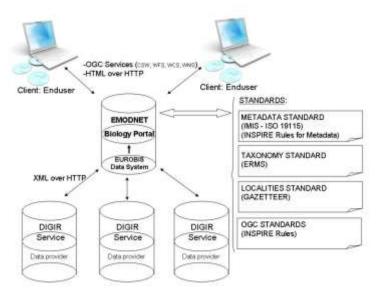






- Species observations and specimen collections
- 875 datasets
- 77,733 species linked to WoRMS
- 24 million records (87% QC)

http://www.eurobis.org/
http://www.emodnet.eu/







## Marineregions.org

towards a standard for georeferenced marine names

About Gazetteer

**Maritime Boundaries** 

Sources

**Statistics** 

Downloads

#### **About Marine Regions**

Marine Regions is a standard list of marine georeferenced place names and areas. It integrates and serves geographic information from the VLIMAR Gazetteer and the MARBOUND database and proposes a standard of marine georeferenced locations, boundaries and regions.

Read more...

#### **Statistics**

48,910 marine georeferenced places 62,731 marine place names 27,972 polygons of geographic places 12 marine geographic regional/global classifications Maritime Boundaries (EEZ) of the world

#### News 6

New release: version 10 of the Maritime Boundaries

Added on: 2018-02-21 18:03:56 by Oset Garcia, Paula

MarineRegions.org is proud to launch version 10 of the Maritime Boundaries Geodatabase....

Tweets by @marineregions

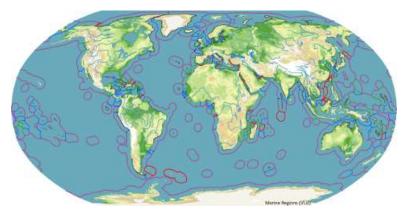
Marine Regions Retweeted

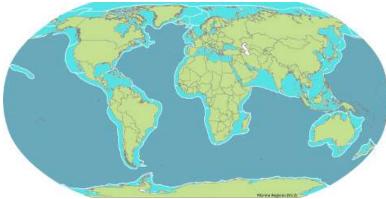
EuropeanAtlasOfSeas @EuropeAtlasSeas



## Marineregions.org

towards a standard for georeferenced marine names





- Important for data analysis & data archeology
- Used by OBIS, WoRMS, EMODNET..
- Where is the Canarian current LME, and what species do we find there?
- In what sea or ocean is Inhaca Island?
- Where do we find seagrass fields, mangroves, coral reefs?
- Where are the marine world heritage sites?
- Marine protected area's..

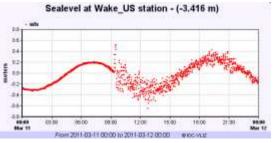






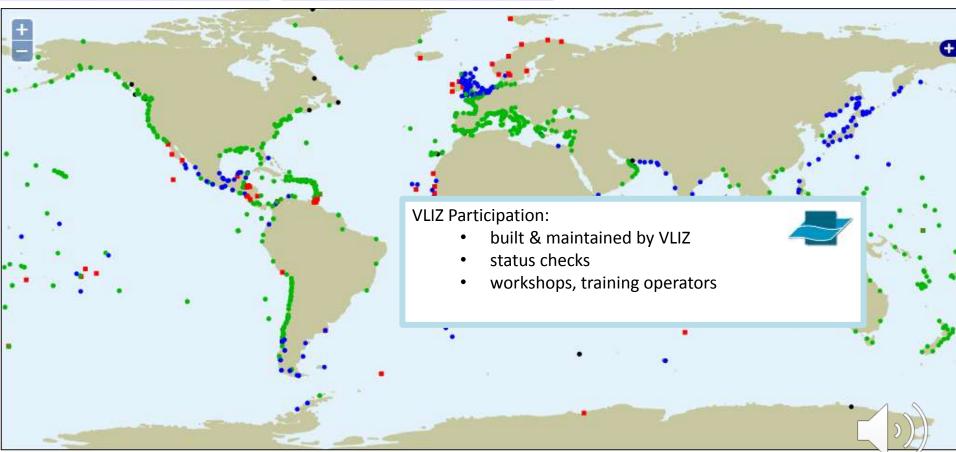


#### SEA LEVEL STATION MONITORING FACILITY





- Tsunami disaster 2004
- 991 stations, 158 operators
- realtime sealevel data
- tsunami & storm surge mitigation
- 58 realtime data users

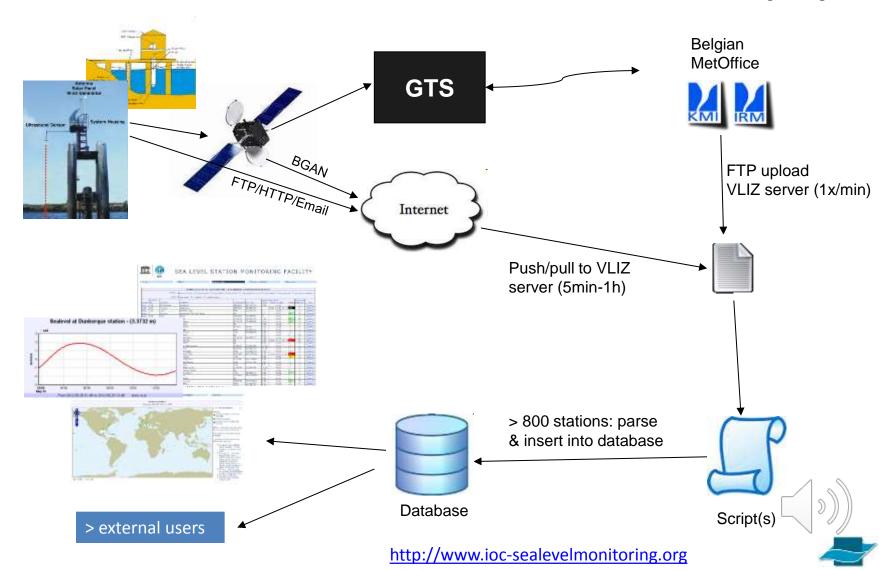






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- 991 stations
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Intergovernmental Oceanographic Commission of UNESCO International Oceanographic Data and Information Exchange

- 144 member states
- share data & expertise
- guidelines & standards
- global and regional projects



ASFA Data Publishing GODAR SPP GOSUD JCOMM OBIS OceanDocs OceanExpert WIGOS ICAN Ocean Rata Portal OceanTeacher OpenScienceDirectory SeaDataNet Data Standards
ODINAFRICA ODINCARSA ODINCINDIO ODINECET ODINWESTPAC ODINBLACKSEA African Sea Level Data Regional Atlases ODIN-PIMRIS









Marine species distributions
Census of marine life

http://www.iobis.org



#### **VLIZ Participation:**

- European node EuroBIS
- taxonomic quality control
- hosting servers in Ostend
- training node managers

50 million records 2450 datasets 118,000 marine species 24 regional OBIS nodes

## VLIZ + ODINAFRICA

- Same age: °1999
- MASDEA: Marine species directory of East Africa
  - RECOSCIX-WIO project, KMFRI VLIZ
  - ODINAfrica AfreMAS : African Marine Species list (WoRMS)
  - EurOBIS MedOBIS AfrOBIS workshops
  - Historical Kenyan-Belgian research datasets [1873-1999]
- Odinafrica Sealevel stations Monitoring website
  - -> GLOSS Sealevel Station Monitoring Facility



## VLIZ + FUST

- Biodiversity databases
  - Regional lists: Europe, Africa, Mexico, Canada, Antarctic, Black Sea, China, Belgium
  - Common biogeography regions: Mediterranean, West Africa, Atlantic
  - Images, distributions, common names, literature references, MPA checklists
- Sea levels
  - More stations, better coverage & faster telecommunication
  - Data products
- Technology
  - Training workshops (OTGA)
  - Shared IT systems : marine data archive, marine VRE (FAIR, BIG)
  - Automating observations (IoT, AI, fish tracking)

