



Formation GBIF sur la qualité, la publication et l'utilisation des données sur la biodiversité - Antananarivo, 04 - 05 avril 2016

GBIF : Global Biodiversity Information Facility

Fabien Caviere (caviere@gbif.fr ou gbif@gbif.fr)

Twitter : @gbiffrance

Sommaire

1. Démonstration
2. Travaux pratiques





Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

571,462,454
OCCURRENCES

1,611,321
SPECIES

15,130
DATASETS

763
DATA PUBLISHERS

Sharing biodiversity data for re-use

- [Learn about GBIF](#)
- [Publish your data through GBIF](#)
- [Technical infrastructure](#)

Providing evidence for research and decisions

- [Using data through GBIF](#)
- [Enabling biodiversity science](#)
- [Supporting global targets](#)

Collaborating as a global community

- [Current Participants](#)
- [How GBIF is funded](#)
- [Enhancing capacity](#)

FEATURED STORY

Experts offer recommendations for improving GBIF-mediated data for agrobiodiversity research



Experts have completed a report providing more than 50 recommendations for enhancing the coverage, completeness and usefulness of GBIF-mobilized data for research in agrobiodiversity.

[Read more](#)

LATEST NEWS

March 4th, 2016
[Experts offer recommendations for improving GBIF-mediated data for agrobiodiversity research](#)

February 26th, 2016
[Agreement targets improved data exchange on Arctic species](#)

February 22nd, 2016
[Capacity Enhancement Support Programme opens 2016 call for proposals](#)

December 24th, 2015
[BID Africa 2015 call brings in initial proposals from 34 African countries](#)

[More](#)

UPCOMING EVENTS

MAR 31 [Data publishing workshop 1](#)
Mahajanga or Tamatave, Madagascar

APR 04 [Data publishing workshop 2](#)
Mahajanga or Tamatave, Madagascar

APR 19 [8th European Nodes Meeting](#)
Lisbon, Portugal

APR 25 [SBSTTA 20](#)
Montreal, Canada

[More](#)

GBIF Newsroom

News and events from around the GBIF community

Summary

News

Uses of data

Opportunities

Events

Newsletter

Consultations

FEATURED



BID Africa 2015 call brings in initial proposals from 34 African countries

The deadline for submitting initial concept notes from sub-Saharan Africa was 20 November 2015. GBIF and its evaluation panel have invited a selected number of applicants to prepare full proposals, which are due on 26 Feb 2016.

[Read more](#)



Featured GBIF data use

See all [GBIF data use stories](#)



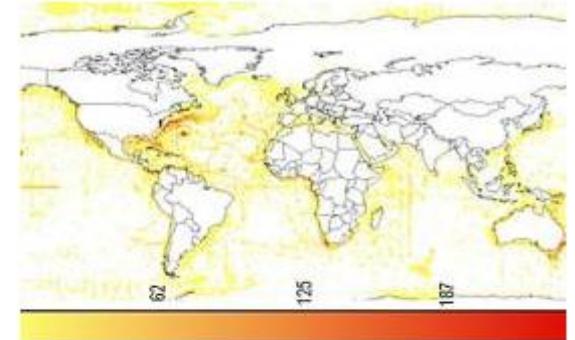
Serpents' tales: assessing invasion risk of introduced snakes in the Balearic Islands

Relying primarily on GBIF-mediated data, researchers use the native distribution of four snakes recently introduced to the Balearic Islands in order to estimate current and future habitat suitability and understand the invasion risk they present.



Refining a niche model for Asiatic black bear with nighttime lighting imagery

A unique team of researchers from the United States, Pakistan and China refined an ecological niche model with artificial nighttime lighting imagery to identify long-term areas for conservation planning and protection of the Asiatic black bear.



Clean global data may matter more than complex models

This study suggests that simple data cleaning and correction may improve modeled distribution predictions more than developing sophisticated mathematical models.

GBIF Newsroom

News and events from around the GBIF community

Summary

News

Uses of data

Opportunities

Events

Newsletter

Consultations

Featured uses of data accessed through GBIF

These are selected examples from the growing body of peer-reviewed research making use of GBIF-mediated data, including descriptions of what types of data were used and how they contributed to the study. Click on 'Related GBIF resources' at the bottom of each example page to see the types of filters available to access data through this portal.

You can find out more about using data through GBIF [here](#), and you can also access a [full list of papers citing use of GBIF](#), extracted from the [Mendeley GBIF Public Library](#).

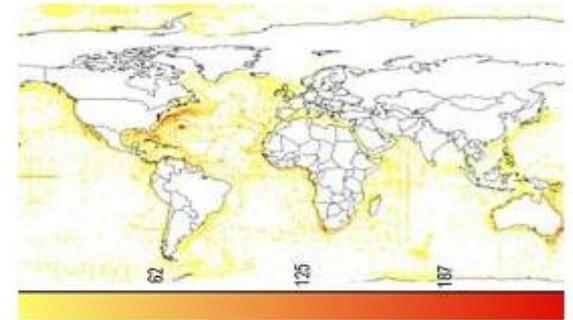


Serpents' tales: assessing invasion risk of introduced snakes in the Balearic Islands



Refining a niche model for Asiatic black bear with nighttime lighting imagery

A unique team of researchers from the



Clean global data may matter more than complex models

This study suggests that simple data cleaning and correction



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

652,694,325

OCURRENCES

1,634,951

SPECIES

15,743

DATASETS

803

DATA PUBLISHERS

Data ▾ News ▾ Community ▾ About ▾

[Explore occurrences](#)

[Explore species](#)

[Explore dataset](#)

[Explore by country](#)

[Explore data trends](#)

[Publishing data](#)

[Using Data](#)

[Infrastructure](#)

Sharing biodiversity data for re-use

[Learn about GBIF](#)

[Publish your data through GBIF](#)

[Technical infrastructure](#)

Providing evidence for research and decisions

[Using data through GBIF](#)

[Enabling biodiversity science](#)

[Supporting global targets](#)

Collaborating as a global community

[Current Participants](#)

[How GBIF is funded](#)

[Enhancing capacity](#)

Search news items and information pages...

Search

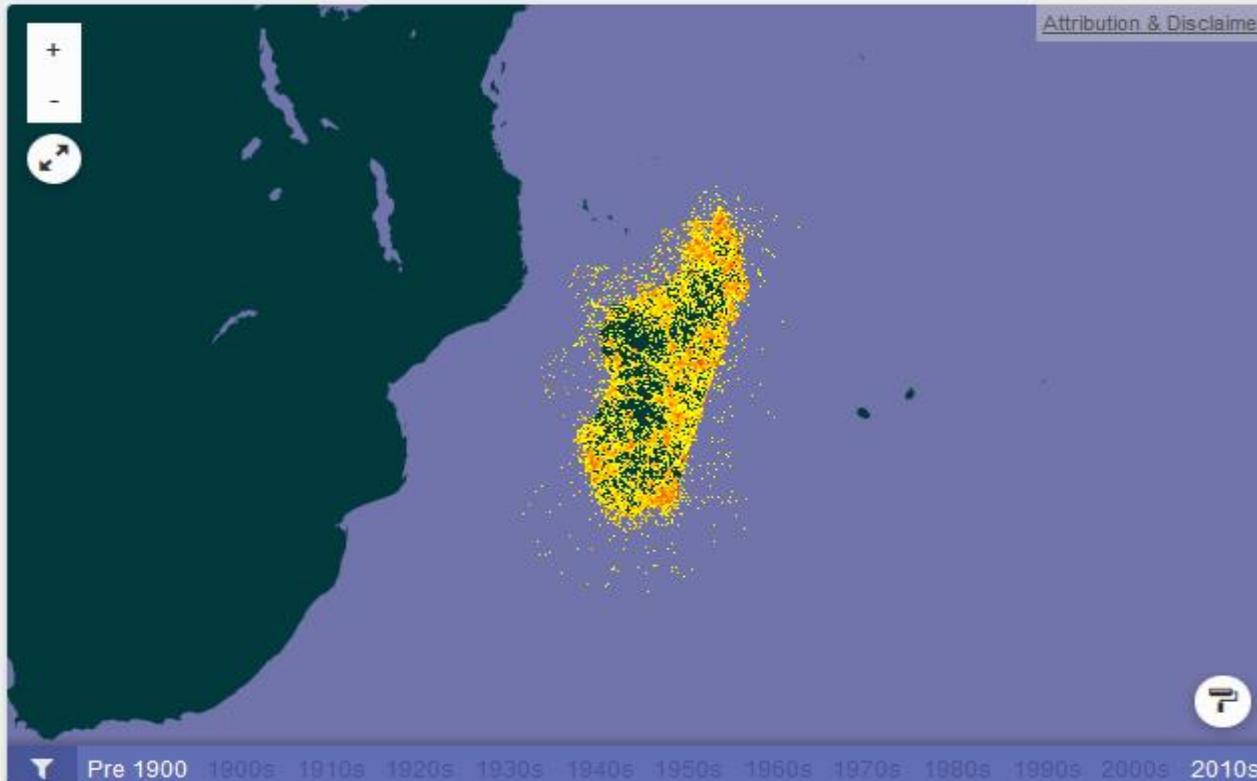
Madagascar

A GBIF Voting participant from Africa

Names of countries, territories and islands are based on the ISO 3166-1 standard.

Country Report

1/1/15 - 31/12/15

[Download](#)[Summary](#)[Data About](#)[Data Publishing](#)[Participation](#)[News and Events](#)[Publications](#)

Data about Madagascar

- [614 occurrence datasets](#) with [1,450,592 records](#).
- No checklist datasets.
- No metadata-only datasets relevant to Madagascar.
- [36 countries](#) contribute data about Madagascar.

[View records shown on the map](#)



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

652,694,325
OCCURRENCES

1,634,951
SPECIES

15,743
DATASETS

803
DATA PUBLISHERS

- Data ▾
- News ▾
- Community ▾
- About ▾
- Explore occurrences
- Explore species
- Explore dataset
- Explore by country
- Explore data trends
- Publishing data
- Using Data
- Infrastructure

Sharing biodiversity data for re-use

- Learn about GBIF
- Publish your data through GBIF
- Technical infrastructure

Providing evidence for research and decisions

- Using data through GBIF
- Enabling biodiversity science
- Supporting global targets

Collaborating as a global community

- Current Participants
- How GBIF is funded
- Enhancing capacity

Explore 652,694,325 occurrences

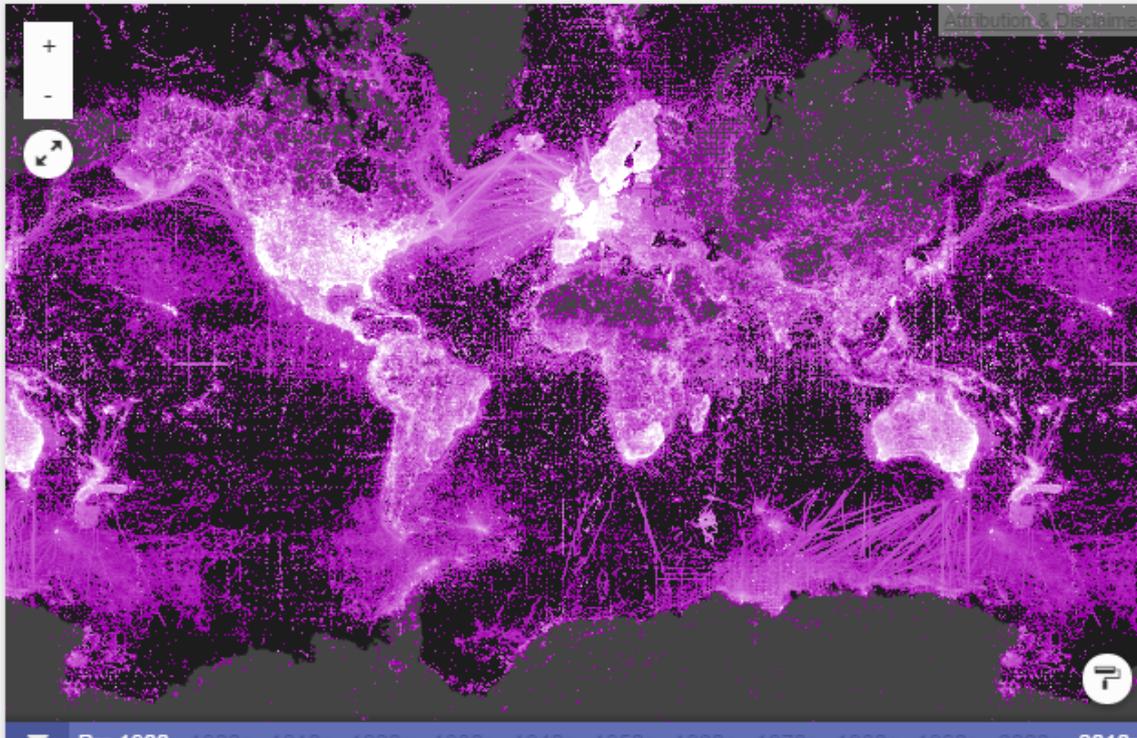
Occurrence records document evidence of a named organism in nature. Through this portal, you can [search](#), [view](#) and [download](#) records that are published through the GBIF network.

652,694,325

occurrences records

572,979,928

georeferenced records



Georeferenced data

[VIEW RECORDS](#)

[All records](#) | [In viewable area](#)

ABOUT

This map shows the density of all 572,979,928 georeferenced occurrence records published through the GBIF network.

To explore the records, zoom into the map or click on the links above and add further filters to customize search results.

Taxonomic characteristics

The following provides a summary of number of records per kingdom. Further filters, such as a location or temporal filter, may be applied when [exploring the data](#).

451,357,769

(69.153%)

Animalia records

175,831,261

(26.9393%)

Plantae records

10,528,385

(1.6131%)

Fungi records

5,120,344

(0.7845%)

Protozoa records

2,466,831

(0.3779%)

Chromista records

1,235,442

(0.1893%)

Other records

1,157,135

(0.1773%)

Bacteria records

18,467

(0.0028%)

Archaea records

9,401

(0.0014%)

Viruses records

Record type characteristics

Records may originate from a variety of means, such as a scientist collecting a specimen or an individual recording the sighting of an organism. This is classified by the [Darwin Core basisOfRecord](#) standard.

394,947,194

(60.51%)

Human Observation records

124,179,641

(19.026%)

Specimen records

87,729,452

(13.441%)

Observation records

35,007,321

(5.364%)

Unknown evidence records

6,376,970

(0.977%)

Fossil records

2,901,517

(0.445%)

Machine Observation records

851,219

(0.13%)

Living Specimen records

455,165

(0.07%)

Literature Occurrence records

221,360

(0.034%)

Material sample records



Search occurrences

Use the filters to customize search results

652,718,200

Occurrences

Download

652,718,200 results

Configure Add a filter

	LOCATION	BASIS OF RECORD
1227769253 · Cat. 2544088 Columbella fuscata G.B. Sowerby I, 1832 Published in iNaturalist Research-grade Observations	Mexico 24.32N, 110.33W	Human Observation
1227769304 · Cat. 2544141 Thalassoma lucasanum (Gill, 1862) Published in iNaturalist Research-grade Observations	Mexico 24.33N, 110.33W	Human Observation
1227769516 · Cat. 2546716 Sturnia malabarica Published in iNaturalist Research-grade Observations	India 24.60N, 92.38E	Human Observation
1227769630 · Cat. 2549131 Falco sparverius Linnaeus, 1758 Published in iNaturalist Research-grade Observations	United States 33.07N, 96.80W	Human Observation

- Scientific name
- Country
- Location
- Establishment Means
- Basis of record
- Type status
- Multimedia types
- Collector
- Record number
- OccurrenceID
- Collection date
- Year
- Month
- Last modified in GBIF

Search occurrences

Use the filters to customize search results

5 results

Occurrence download

DOWNLOAD FORMAT

Simple CSV

Darwin Core Archive

The simple CSV format provides a tabular view of the data with the most commonly used columns. The table includes only the data after it has gone through interpretation and quality control. Tools such as Microsoft Excel can be used to read this format.

The Darwin Core Archive format is a TDWG Standard and contains rich information. It is a zip file containing the original data as shared by the publisher, and the interpreted view after data has gone through quality control procedures. Additional files provide supplementary information such as images. This is a richer format than simple CSV but provides the most complete view of data.

NOTIFICATIONS

Notify others of results?
Press 'Enter' to add an email address

Download

5 Occurrences

Download

▼ Add a filter

OCCURRENCE YEAR

Is 2000 ✕

COUNTRY

Madagascar ✕

SCIENTIFIC NAME

Testudinidae Batsch, 1788 ✕

	LOCATION	BASIS OF RECORD	DATE
858296286 · Cat. 227769 Pyxis planicauda Grandidier, 1867 Published in UMMZ Herpetology Collection	Madagascar N/A	Specimen	10 / 2000
858296738 · Cat. 227771 Pyxis planicauda Grandidier, 1867 Published in UMMZ Herpetology Collection	Madagascar N/A	Specimen	10 / 2000

Occurrence download

doi:10.15468/dl.nmsxlj 25th March 2016

DOWNLOAD RUNNING

The download has been started and is currently being processed.

Please expect 10 to 15 minutes for the download to complete.

A notification email with a link to download the results will be sent to the following addresses once ready:

- caviere@gbif.fr



Download details

IDENTIFIER	DOI doi:10.15468/dl.nmsxlj
CITE AS	GBIF.org (25th March 2016) GBIF Occurrence Download http://doi.org/10.15468/dl.nmsxlj
QUERY	TAXON <i>Testudinidae Batsch, 1788</i> COUNTRY <i>Madagascar</i> YEAR <i>2000</i>
FORMAT	CSV
STATUS	Preparing query latest data

urn:catalog:UMMZ:Herps:227768

Specimen of *Pyxis arachnoides* Bell, 1827

from UMMZ Herpetology Collection dataset

Information

Verbatim

INTERPRETATION ISSUES

GBIF found issues interpreting the [verbatim content](#) of this record:

- Modified date unlikely



Location

WATER BODY

Indian Ocean

GEOGRAPHIC CLASSIFICATION

Africa > Madagascar

Identification details According to [GBIF Backbone Taxonomy](#)

IDENTIFIED AS SPECIES

[Pyxis arachnoides Bell, 1827](#)

TAXONOMIC CLASSIFICATION



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

652,694,325

OCURRENCES

1,634,951

SPECIES

15,743

DATASETS

803

DATA PUBLISHERS

Data ▾

News ▾

Community ▾

About ▾

Explore occurrences

Explore species

Explore dataset

Explore by country

Explore data trends

Publishing data

Using Data

Infrastructure

Sharing biodiversity data for re-use

[Learn about GBIF](#)

[Publish your data through GBIF](#)

[Technical infrastructure](#)

Providing evidence for research and decisions

[Using data through GBIF](#)

[Enabling biodiversity science](#)

[Supporting global targets](#)

Collaborating as a global community

[Current Participants](#)

[How GBIF is funded](#)

[Enhancing capacity](#)

Search news items and information pages...

Search 

Search 1 634 951 species

of the [GBIF Backbone Taxonomy](#)

Search 

[Mammals](#) · [Birds](#) · [Insects](#) · [Reptiles](#) · [Fishes](#) · [Butterflies](#) · [Fungi](#) · [Flowering Plants](#)

1 634 951

Confirmed species in the
Catalogue of Life

862 163

Names under review 

Search species

Testudines



3 449 results for "Testudines"

ACCEPTED ORDER

[Testudines Linnaeus, 1758](#)

Animalia > Chordata > Reptilia

ACCEPTED GENUS

[Testudo Linnaeus, 1758](#)

Animalia > Chordata > Reptilia > [Testudines](#) > Testudinidae

...en Europas. Schildkröten ([Testudines](#)) I.- Aula Verlag, Wiebelsheim, ISBN 3-89104-004-0 ode...

ACCEPTED SPECIES

[Testudo marginata Schoepff,](#)

Animalia > Chordata > Reptilia > [Testudines](#)

...as. Band 3: Schildkröten ([Testudines](#)) 1

ACCEPTED SPECIES

[Testudo graeca Linnaeus, 1758](#)

Animalia > Chordata > Reptilia > [Testudines](#)

... ([Testudo graeca](#) complex; [Testudines](#)...

ACCEPTED GENUS

[Mauremys Gray, 1869](#)

Animalia > Chordata > Reptilia > [Testudines](#)

Refine your search

reset

DATASET

- [GBIF Backbone Taxonomy](#) (3 449)
- [English Wikipedia - Sp...](#) (4 508)
- [Catalogue of Life](#) (2 649)
- [NCBI Taxonomy](#) (1 447)
- [Interim Register of Mari...](#) (928)
- [Paleobiology Database](#) (819)

[more >](#)

HIGHER TAXON

- [Animalia](#) (3 449)
- [Chordata](#) (3 449)
- [Reptilia](#) (3 449)
- [Testudines](#) (3 447)
- [Testudinidae](#) (544)
- [Emyridae](#) (535)

[more >](#)

RANK

- [species](#) (2 120)

Filter by Dataset

- [English Wikipedia - Sp...](#) (4 508)
- [GBIF Backbone Taxonomy](#) (3 449)
- [Catalogue of Life](#) (2 649)
- [NCBI Taxonomy](#) (1 447)
- [Interim Register of Mari...](#) (928)
- [Paleobiology Database](#) (819)
- [Integrated Taxonomic Inf...](#) (567)
- [TAXREF](#) (186)
- [IRMNG Homonym List](#) (97)

Testudo Linnaeus, 1758

Genus in GBIF Backbone Taxonomy

[Animalia](#) ▾ [Chordata](#) ▾ [Reptilia](#) ▾ [Testudines](#) ▾ [Testudinidae](#)

4 852 | 16
Occurrences | Species

[View occurrences](#)

Information

Overview

FULL NAME

Testudo Linnaeus, 1758

COMMON NAMES

• Palearctic Tortoises eng

[more](#) >

SYNONYMS

• [Testuod](#)

• [Tistudo](#)

TAXONOMIC STATUS

Accepted genus

ACCORDING TO

The Catalogue of Life, 3rd January 2011

PUBLISHED IN

Syst. Nat. , ed. 10, 197.

HABITAT

Not marine



GBIF ID [2441658](#)

SEARCH LINKS

• [Encyclopedia of Life](#)

• [Catalogue of Life](#)

• [Biodiversity Heritage Library](#)



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

652,694,325

OCURRENCES

1,634,951

SPECIES

15,743

DATASETS

803

DATA PUBLISHERS

Data ▾

News ▾

Community ▾

About ▾

[Explore occurrences](#)

[Explore species](#)

[Explore dataset](#)

[Explore by country](#)

[Explore data trends](#)

[Publishing data](#)

[Using Data](#)

[Infrastructure](#)

Sharing biodiversity data for re-use

[Learn about GBIF](#)

[Publish your data through GBIF](#)

[Technical infrastructure](#)

Providing evidence for research and decisions

[Using data through GBIF](#)

[Enabling biodiversity science](#)

[Supporting global targets](#)

Collaborating as a global community

[Current Participants](#)

[How GBIF is funded](#)

[Enhancing capacity](#)

Search news items and information pages...

Search 

Search 15 728 datasets

or view the [publishing institutions](#)

Search for datasets by title, description, publisher...

Search 

12 857

occurrences datasets

2 843

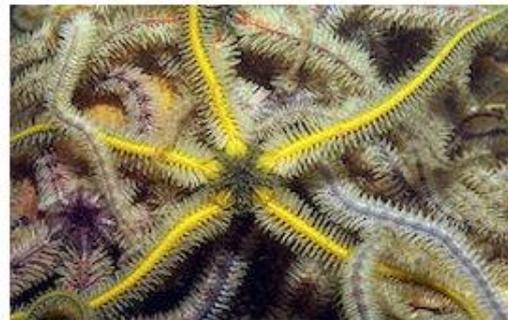
checklists

Featured datasets



Characterization of wild capybara habitat

5,298 records relating to the characterization of wild capybara habitat



Brittle star collection of the Russian Academy of Sciences

8,401 records representing specimens



Flora of mainland Portugal

140,687 citizen plant observations uploaded to Flora-On and validated by experts.

Inventaire floristique de Beza Mahaf...

Occurrence dataset published by Ecole doctorale de biodiversité et Environnements Tropicaux de l'uni...

527

Occurrences

[View occurrences](#)

Information

Stats

Activity

Summary

FULL TITLE

Inventaire floristique de Beza Mahafaly

DESCRIPTION

Inventaire floristique réalisé à Beza Mahafaly ([Madagascar](#))

LANGUAGE OF METADATA

FRENCH

LANGUAGE OF DATA

FRENCH

ADMINISTRATIVE CONTACT

[Solange Andrianjohany](#)

METADATA AUTHOR

[Solange Andrianjohany](#)

ORIGINATOR

[Salomon Fidiarisoa](#)

DOI [doi:10.15468/kaguu7](https://doi.org/10.15468/kaguu7)

PUBLISHED BY

[Ecole doctorale de biodiversité et Environnements Tropicaux de l'université de Toliara](#)

PUBLICATION DATE

6 oct. 2015

REGISTRATION DATE

17 juin 2015

HOSTED BY

[Madagascar Biodiversity Information Facility \(MadBIF\)](#)

SERVED BY

[Madbif IPT](#)

ALTERNATIVE IDENTIFIERS

- [Source webpage](#)
http://www.madbif.mg/ipt_mada...
- [UUID](#)
3d0fc1a4-9102-4a7d-98f6-563e5...

Ecole doctorale de biodiversité et Environnements Tropicaux de l'uni...

Data publisher

Information

Data publisher information

FULL TITLE

Ecole doctorale de biodiversité et Environnements Tropicaux de l'université de Toliara

DESCRIPTION

Enseignement et recherche sur la biodiversité et environnement tropicaux

TECHNICAL CONTACT

[FIDIARISOAVONINARIVO](#)
[Andriamananjara Salomon](#)

ADMINISTRATIVE CONTACT

[REJO-FIENENA Félicitée](#)

POINT OF CONTACT

[REJO-FIENENA Félicitée](#)

ADDRESS

Ecole doctorale de biodiversité et
Environnements Tropicaux de
l'université de Toliara
Batiemnt de CEDRATOM BP.185
601 Toliara I
Toliara
Madagascar

ENDORSED BY

[GBIF Madagascar](#)



Georeferenced data

ABOUT

The map shows georeferenced data for all datasets published. 80% of all data is georeferenced.



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

652,694,325

OCURRENCES

1,634,951

SPECIES

15,743

DATASETS

803

DATA PUBLISHERS

Data ▾

News ▾

Community ▾

About ▾

[Explore occurrences](#)

[Explore species](#)

[Explore dataset](#)

[Explore by country](#)

[Explore data trends](#)

[Publishing data](#)

[Using Data](#)

[Infrastructure](#)

Sharing biodiversity data for re-use

[Learn about GBIF](#)

[Publish your data through GBIF](#)

[Technical infrastructure](#)

Providing evidence for research and decisions

[Using data through GBIF](#)

[Enabling biodiversity science](#)

[Supporting global targets](#)

Collaborating as a global community

[Current Participants](#)

[How GBIF is funded](#)

[Enhancing capacity](#)

Search news items and information pages...

Search

Global data trends

Trends in data availability on the GBIF network, 2008 to 2016

Global

Trends About

Publishing Trends

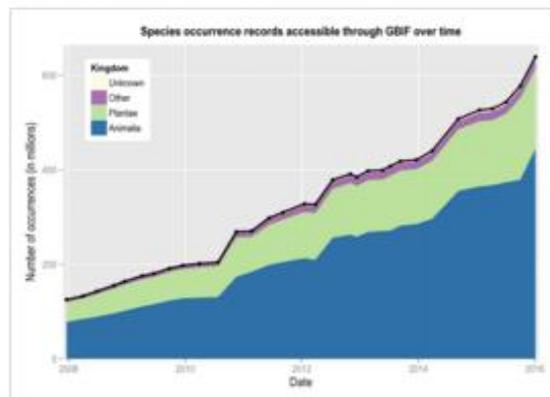
FAQ

Number of occurrence records

These charts illustrate the change in availability of the species occurrence records over time.

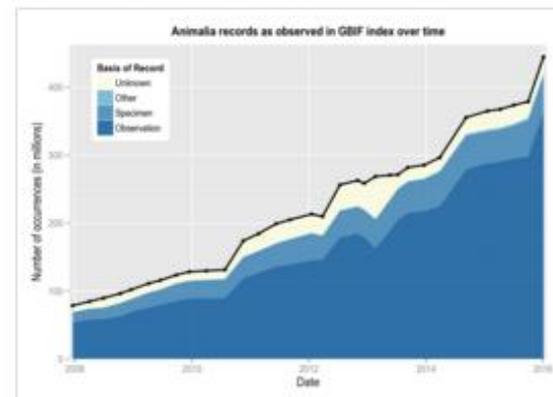
Records by kingdom

The number of available records categorized by kingdom. "Unknown" includes records with taxonomic information that cannot be linked to available taxonomic checklists.



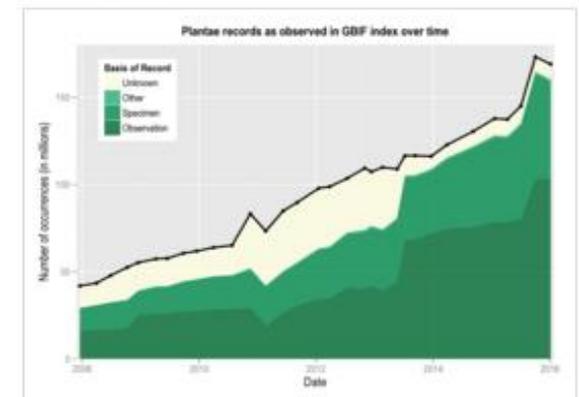
Records for Animalia

The number of animal records categorized by the basis of record. "Unknown" includes records without defined basis of record or with an unrecognised value for basis of record.



Records for Plantae

The number of plant records categorized by the basis of record. "Unknown" includes records without defined basis of record or with an unrecognised value for basis of record.



Portail national

Accès

www.gbif.fr

puis onglet « consulter »

Remarques ou questions

gbif@gbif.fr ou dev@gbif.fr



Sommaire

1. Démonstration
2. Travaux pratiques



TP1 : Exemple de Diveboard (1)

www.diveboard.com



© Photo de Doug Anderson

Diveboard est une **plate-forme de science participative sur la plongée**, où les plongeurs peuvent numériser ou enregistrer leurs plongées.

Cette base de données contient toutes les observations faites par les Diveboarders à travers le monde (principalement des poissons)

Les données sont connectées au portail **GBIF : 26 946 occurrences** actuellement et reliées à Encyclopedia of Life

TP1 : Exemple de Diveboard (2)

Ces données permettent de visualiser l'expansion d'espèces invasives comme le poisson Pterois spp. :

1. Faire une recherche par espèce pour le taxon « Pterois »
2. Cliquer sur le premier résultat (« Accepted Genus, *Pterois* Oken 1817 »)
3. Jouer avec le curseur temporel sous la carte pour voir quand apparaît le « Pterois » dans la région des Caraïbes
4. Zoomer sur la carte au niveau des Caraïbes, cliquez sur le lien à droite « View records in viewable area » -> beaucoup d'enregistrements individuels ont été fournis par des membres de Diveboards
5. Cliquer sur n'importe quel enregistrement individuel et vous verrez la localisation exacte de l'observation, l'heure, la profondeur et le nom du plongeur



TP2 : recherche d'occurrences

Combien y a t-il de spécimen de "*Scotoplanes globosa*" récoltés avant 1970 aux Etats-Unis ?



TP3 : recherche d'occurrences

Combien d'occurrences récoltées par Grandidier à Madagascar sont connectées au GBIF ?



©« Alfred Grandidier 1888 » par Alphonse J. Liébert (1827–1914) – <http://gallica.bnf.fr/ark:/12148/btv1b8453423r/f1.item>.
Sous licence Domaine public via Wikimedia Commons –
https://commons.wikimedia.org/wiki/File:Alfred_Grandidier_1888.jpg#/media/File:Alfred_Grandidier_1888.jpg



TP4 : recherche d'occurrence

1. Combien y a t-il de données géo-référencées issue de l'Afrique du Sud ?
2. Combien y a t-il de données géo-référencées sur la France issue de l'Afrique du sud?



Contacts

Equipe GBIF France

gbif@gbif.fr

Site web

<http://www.gbif.fr>

Twitter

@gbiffrance

