



**GBIF**

Global Biodiversity  
Information Facility



**BID**



Giraffe weevil (*Trachelophorus giraffa* Voss),  
Madagascar, Photo by linnettse, CC BY-NC 4.0



Common monkey lizard (*Polychrus marmoratus*),  
Trinidad and Tobago, Photo by Chuck Sexton, CC BY-NC 4.0.



Spotted porcelain crab (*Neopetrolisthes maculatus*),  
Solomon Island, Photo by Mark Rosenstein, CC BY-NC-SA 4.0.

# Impact Study Biodiversity Information for Development programme

*David Bloom, VertNet*

13 NOV 2019

## 63 funded projects:

- **Africa**

**50**  
projects

**27**  
countries

2016  
2017

- **Caribbean**

**8**  
projects

**7**  
countries

2017

- **Pacific**

**5**  
projects

**7**  
countries

2017

# BID Programme

## Evaluation:

- **Data Mobilization**

Data publishers

Biodiversity data records

Geographic and taxonomic coverage

- **Data Use**

Data users

Data downloads

Publications

- **Capacity Enhancement**

Self-assessment scores

Attainments / replications of workshops

GBIF Volunteer Mentors

- **Sustainability**

Co-funding

New GBIF Participants

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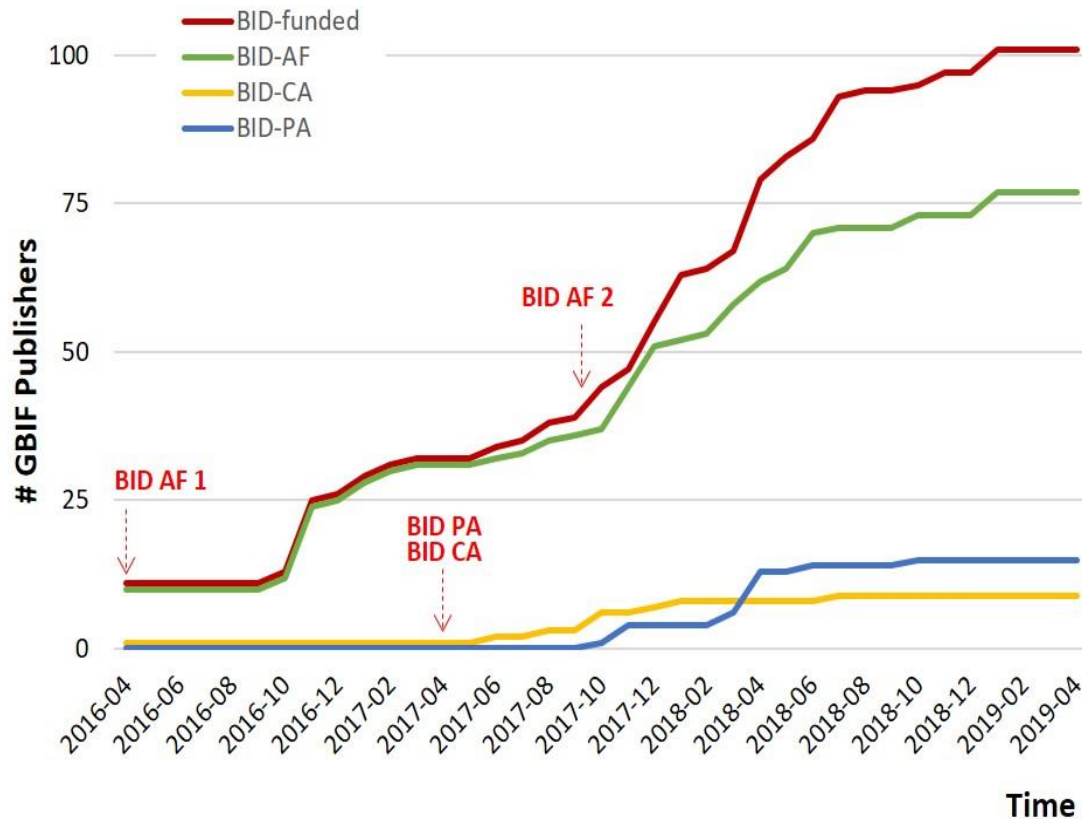
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New GBIF Participants

# **BID - DATA MOBILIZATION:**

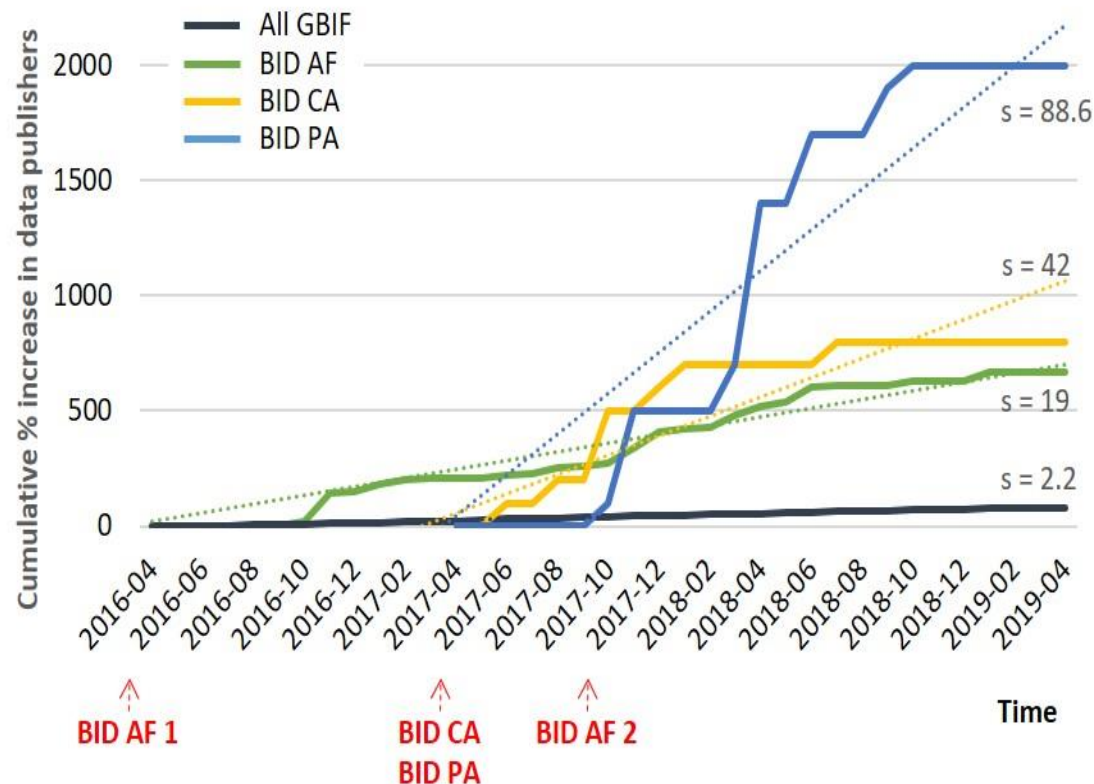
## **DATA PUBLISHERS**

# BID - DATA MOBILIZATION: publishers



- Significant growth in the number of data publishers *after BID*.
- Most new publishers were located in **BID-funded countries**.
- Increase was apparent 5 to 12 months after the start of the programme.

# BID - DATA MOBILIZATION: publishers



- Significant growth in the number of data publishers after BID.
- Most new publishers were located in **BID-funded countries**.
- Increase was apparent 5 to 12 months after the start of the programme.
- Increase was faster than global growth as a whole.

# **BID - DATA MOBILIZATION:**

## **DATA SETS and DATA RECORDS**



# BID - DATA MOBILIZATION: data sets



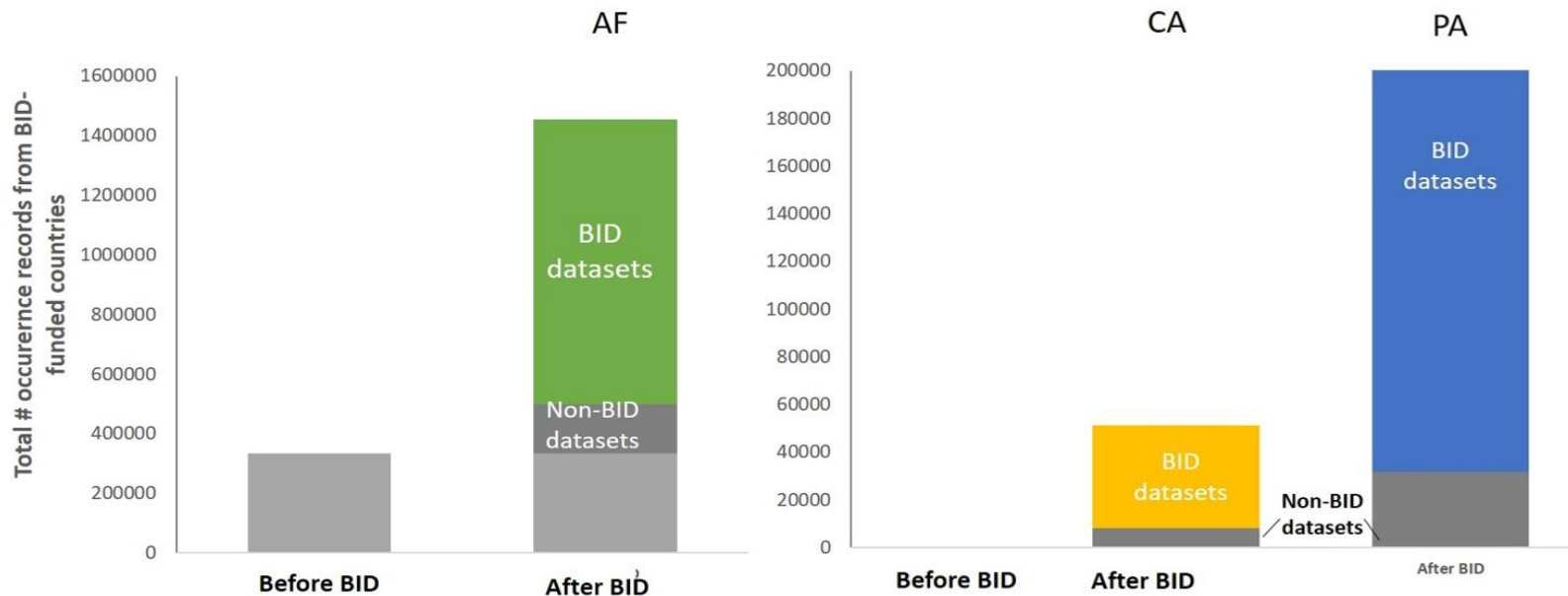
- **535\* BID datasets:**

- 354 Africa
- 81 Caribbean
- 100 Pacific

- **74% "OCCURRENCE"**  
(specimens and observations)

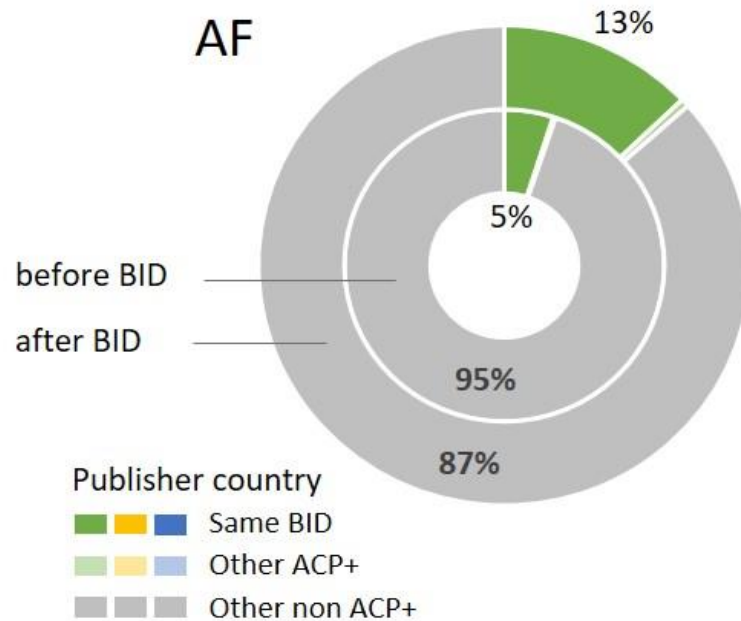
\* + 1 BID dataset from South Africa, +3 datasets from New Zealand

# BID - DATA MOBILIZATION: data records



- **> 1.2 million new occurrence records from BID.**
- Caribbean and Pacific:
  - ALL records from BID-funded countries shared *after* BID.
  - >78% in BID datasets.

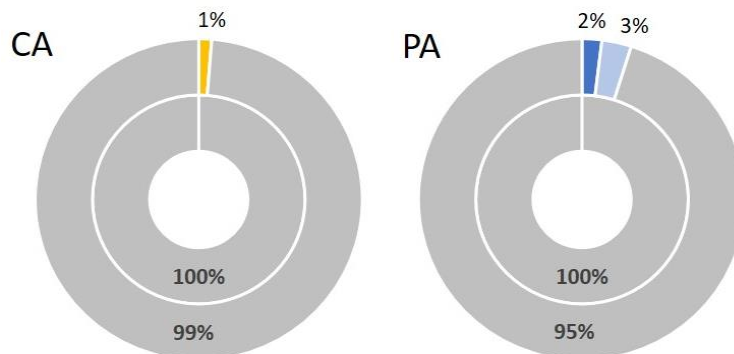
# BID - DATA MOBILIZATION: data records



- **After BID more records were published in country.**

E.g.: records with dwc:country=Mozambique:  
from Mozambique publishers:

- Before BID = 0%
- After BID = 40.2%



- **For many BID-funded countries all records ever published by that country were published in BID datasets.**

E.g.: Mozambique, Barbados, Vanuatu

# BID - DATA MOBILIZATION: data records

## Data Quality

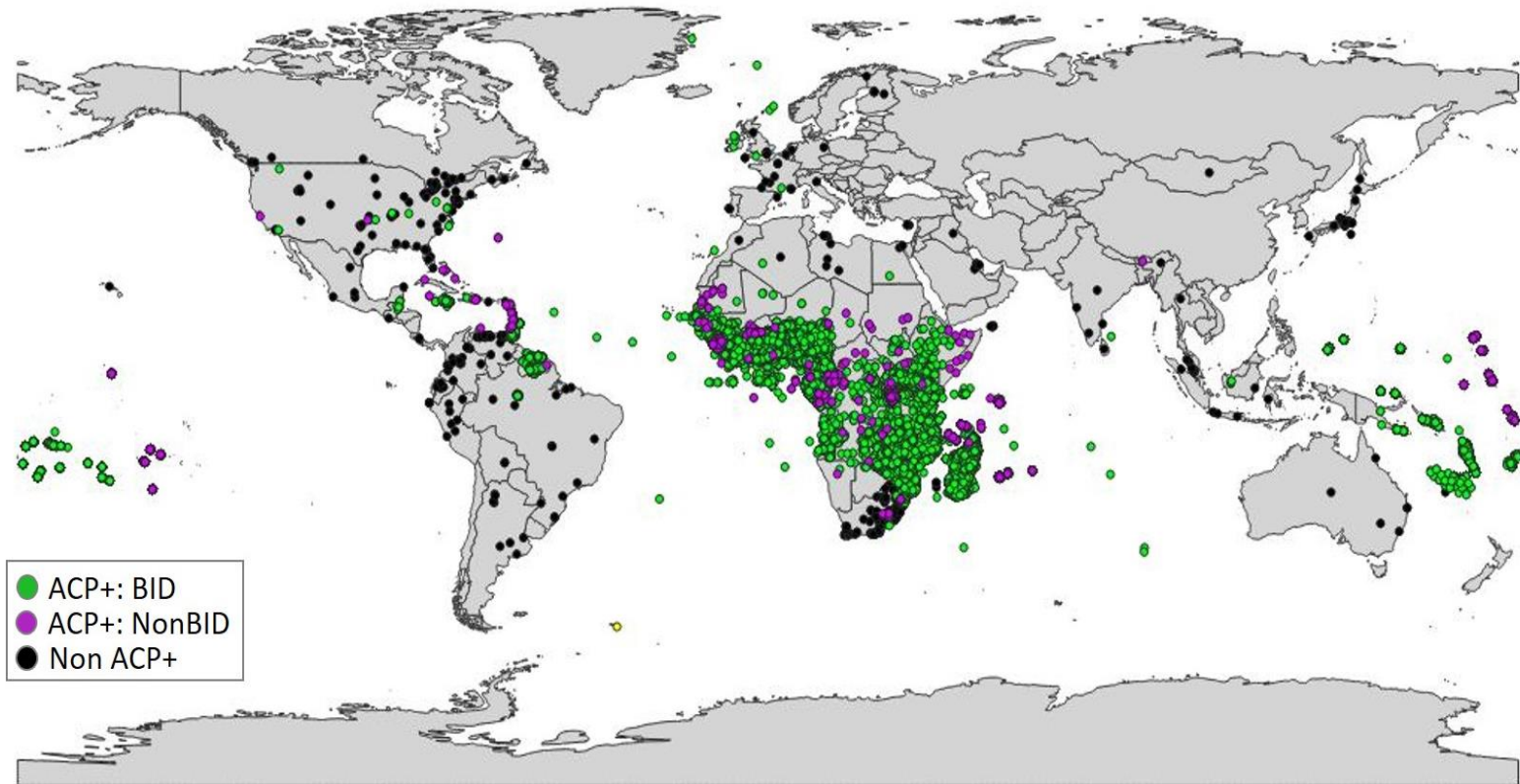
Origin of dataset	# datasets		
	with Geographic issues	with Taxonomic issues	with Temporal issues
BID datasets	62.50%	88.80%	34.70%
ACP+ countries	68.30%	88.60%	38.30%
All GBIF	59.50%	77.20%	24.40%

- BID data quality:
  - Slightly lower than GBIF-mediated data as a whole.
  - Slightly better than other, non-BID datasets in the target regions.
    - Capacity enhancement resulting from BID in the target regions

# **BID - DATA MOBILIZATION:**

## **GEOGRAPHIC COVERAGE**

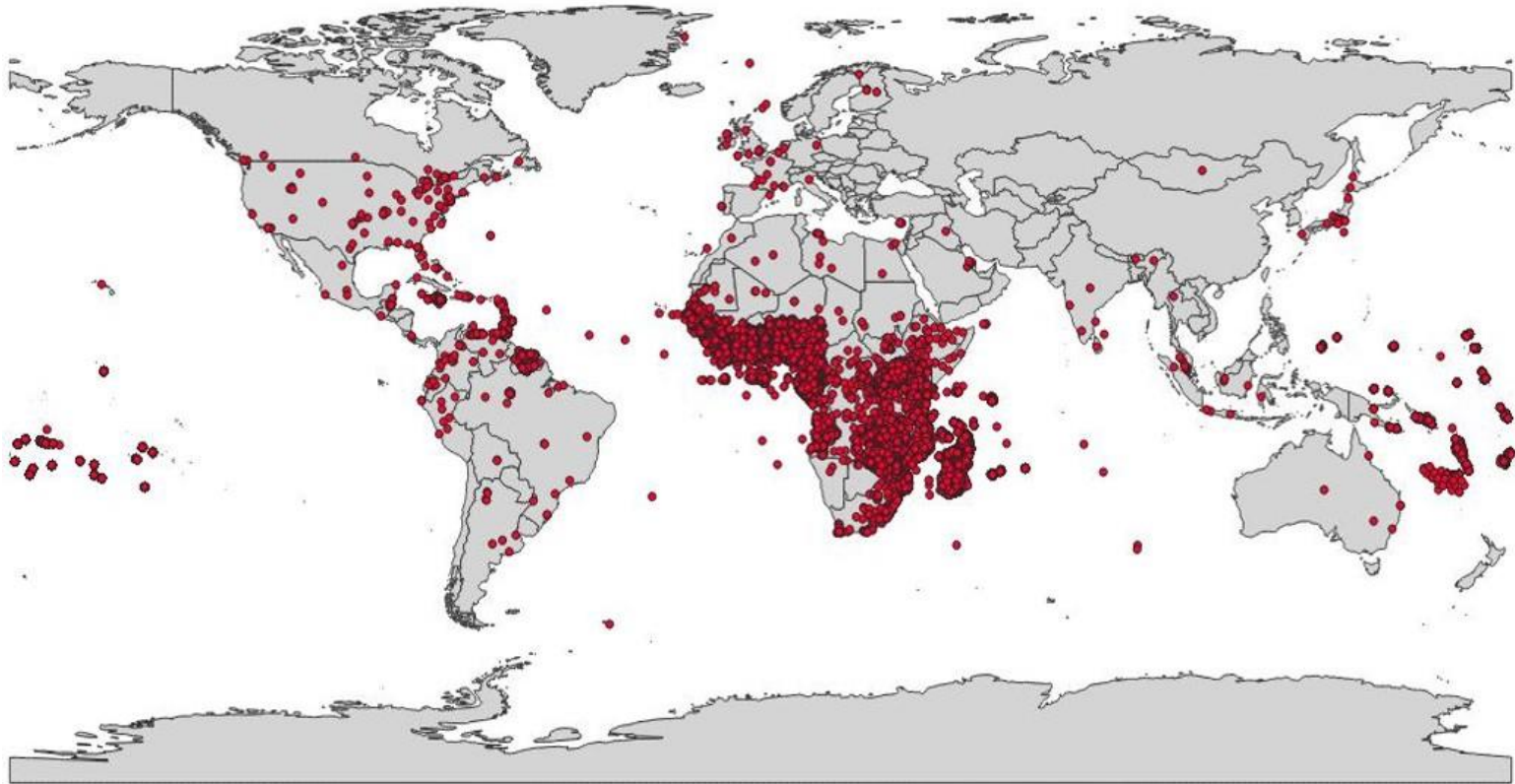
# BID - DATA MOBILIZATION: geographic coverage



- 1,058,757 BID records (86.3%) had coordinates.
- 148,982 distinct locations.
- Most locations in BID-funded countries ●

Locations determined by combinations of latitude and longitude.

# BID - DATA MOBILIZATION: geographic coverage

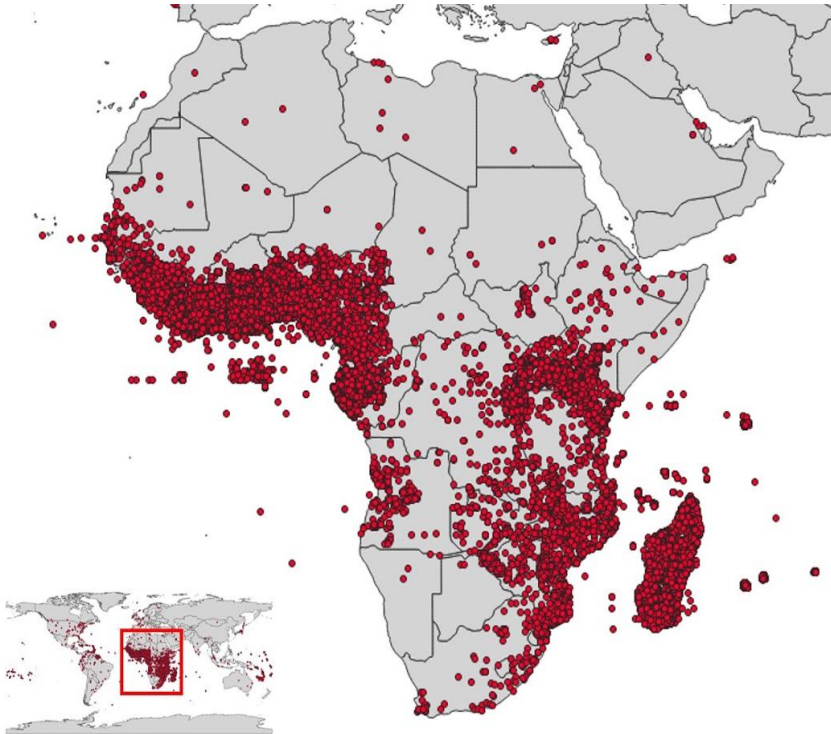


- **132,359 distinct locations**  
(affecting 887,423 occurrence records)  
**first included in GBIF *after* BID.**

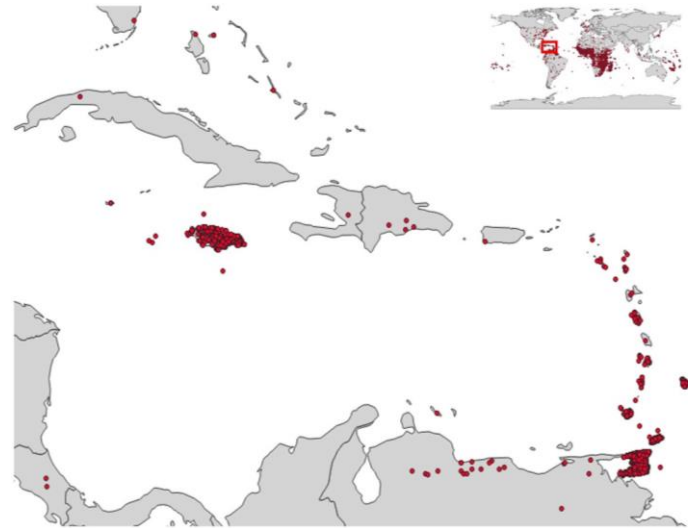


# BID - DATA MOBILIZATION: geographic coverage

**Africa**



**Caribbean**



**Pacific**



Locations determined by combinations of latitude and longitude.

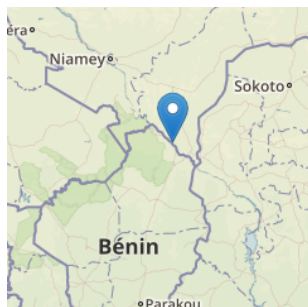


**BID - DATA MOBILIZATION:**

**TAXONOMIC COVERAGE**

# BID - DATA MOBILIZATION: taxonomic coverage

E.g., mongoose *Ichneumia albicauda*, from Benin.



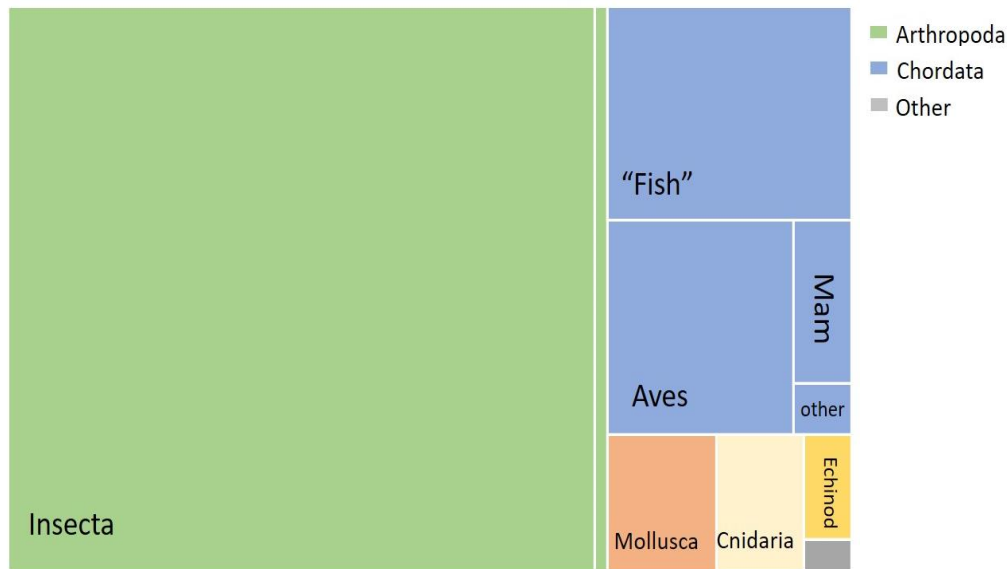
## Location

Continent	AFRICA
Country or area	Benin
Country code	BJ
Decimal latitude	12.076329
Decimal longitude	3.191864
Geodetic datum	WGS84
Locality	Parc National W
State province	Karimama

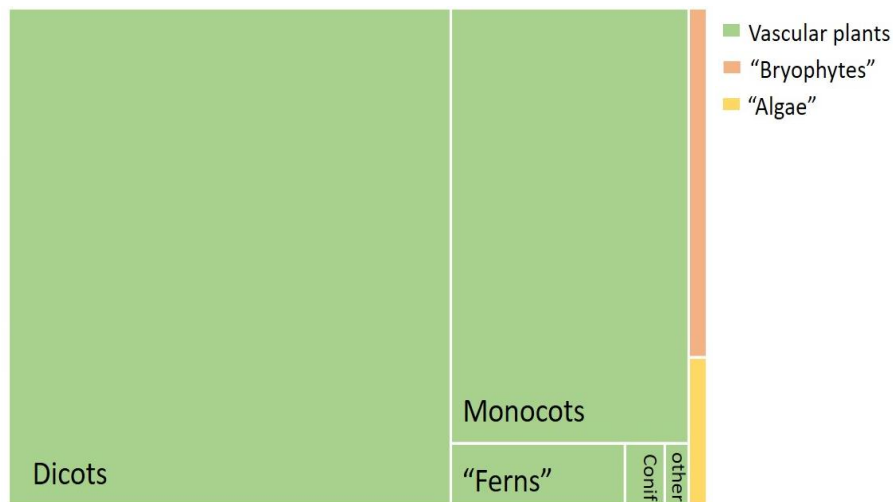
- 2,392 distinct scientific names for which occurrence records were reported to GBIF for the first time

81% Animalia  
(95.7% insects),  
18.3% Plantae

# BID - DATA MOBILIZATION: taxonomic coverage




- 80,680 distinct combinations of scientific name and country of occurrence.
- **21,688 (26.9%) names reported in GBIF in the given countries for the first time.**



65.5% Animalia  
(69.5% insects),  
33.4% Plantae  
(63.4% vascular, dicot).

# BID - DATA MOBILIZATION: taxonomic coverage

## THREATENED SPECIES



IUCN threat category	Kingdom	# species	# species new to GBIF
CR	Animalia	94	2
	Plantae	44	0
EN	Animalia	153	2
	Plantae	188	8
VU	Animalia	300	4
	Plantae	410	6

- **> 1,100 species** with **IUCN threat categories** of vulnerable (VU), endangered (EN), or critically endangered (CR)

22 new to GBIF

# BID Programme

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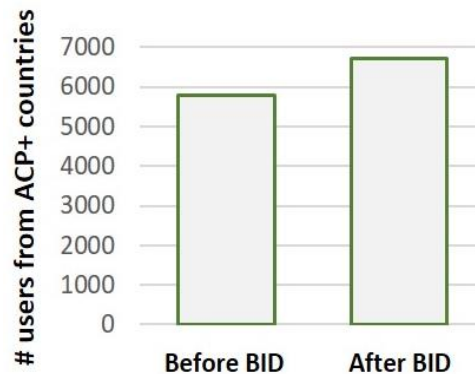
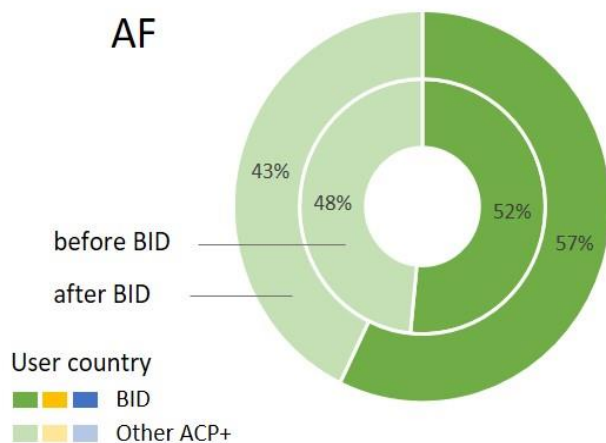
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New GBIF Participants

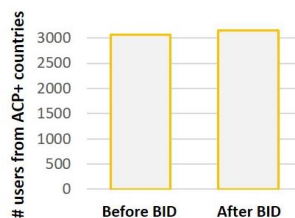
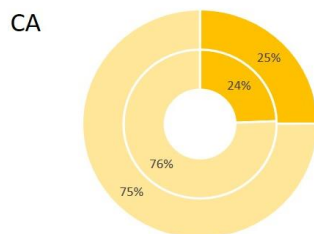
# **BID - DATA USE:**

## **DATA USERS**

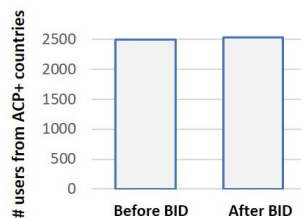
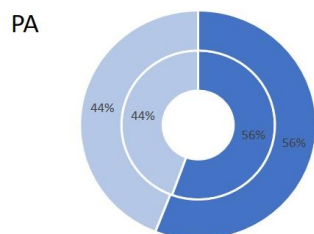
# BID - DATA USE: data users



- **Small to moderate growth in number of data users *after* BID.**



- Growth in number of users slower than global growth.



**BID - DATA USE:**

**DATA DOWNLOADS**



# BID - DATA USE: data downloads

- **DATA DOWNLOADED:**

- **Downloads of datasets from BID-funded countries increased.**
- All downloads with country = Caribbean / Pacific BID-funded country occurred during the BID period, almost all from BID-funded datasets.
- **Download growth rates in target regions much higher than in GBIF as a whole.**
- Data from **BID-funded datasets downloaded most by users from BID-funded countries.**

- **USERS:**

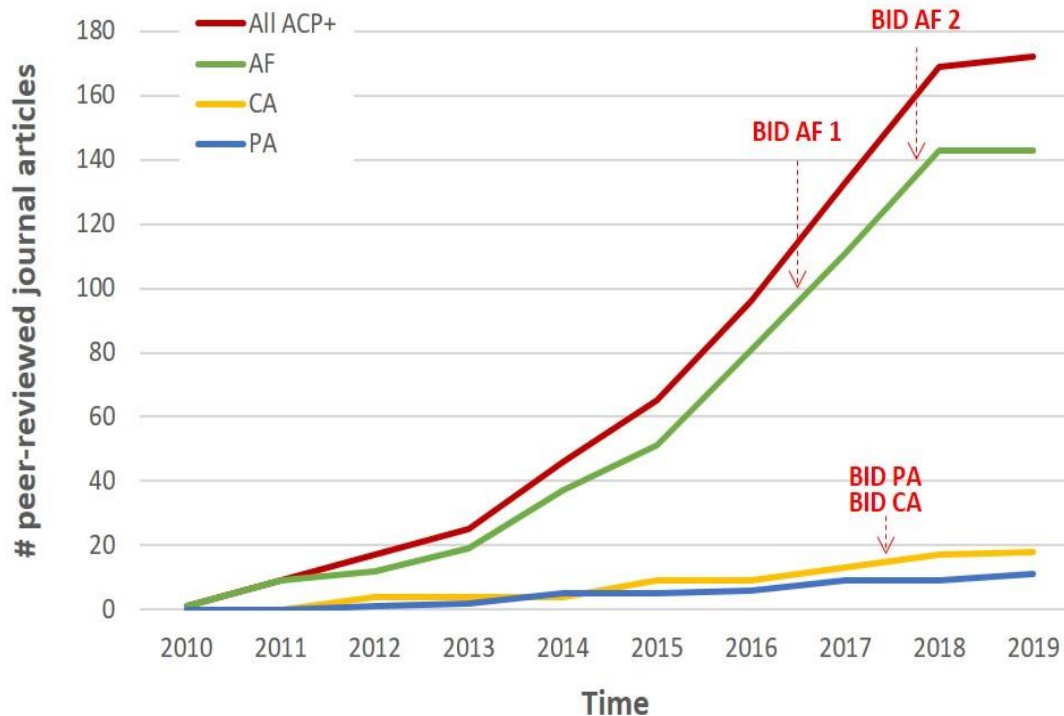
- **Downloads from users from target regions increased.**
- **Users from BID-funded countries downloaded in-country data.**

**BID - DATA USE:**

**PUBLICATIONS**

# BID - DATA MOBILIZATION: publications

## PEER-REVIEWED



- Most are journal articles.
- Half specifically use GBIF-mediated data.
- **Authors:**
  - 21.2% only BID
  - 62.3% collaborations** (e.g., US, UK, FR, DE).
- **841 citations using BID datasets** (most from Africa).

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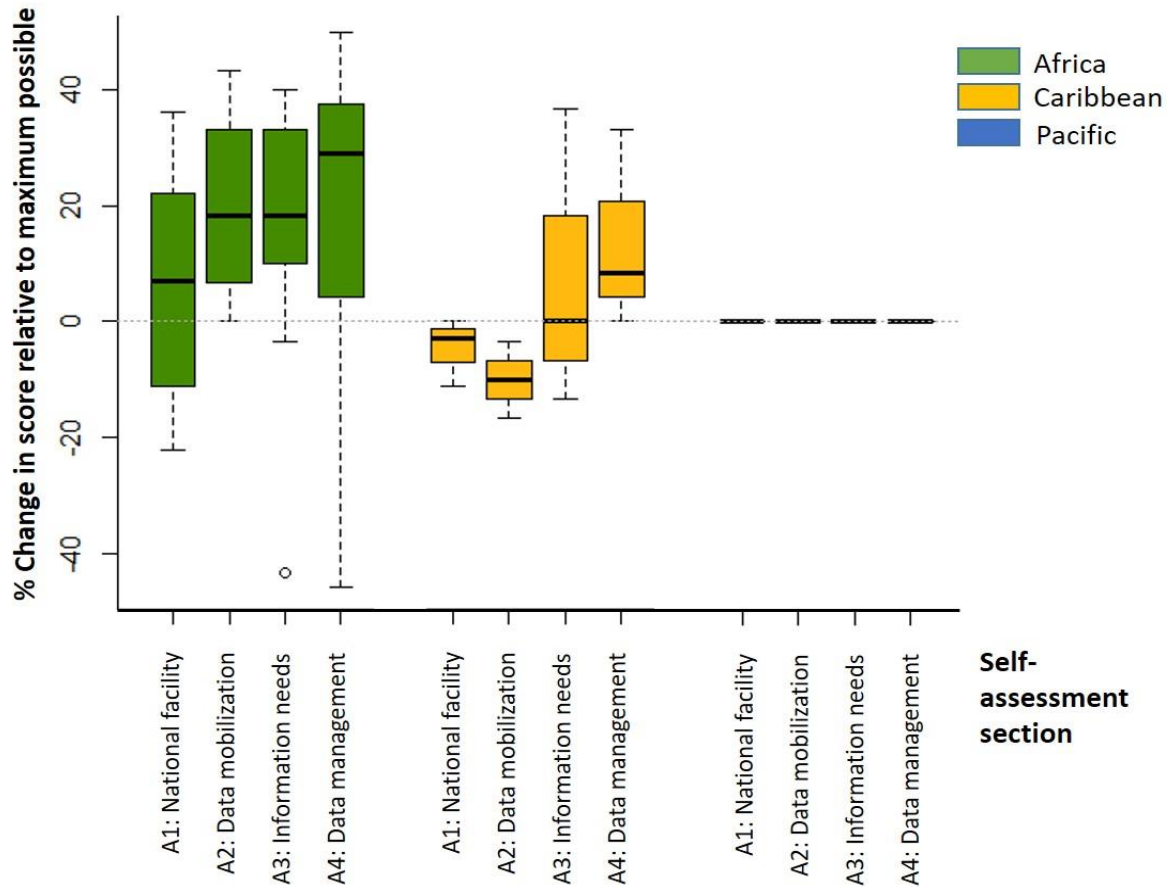
New GBIF Participants

**BID - CAPACITY ENHANCEMENT:**

**SELF-ASSESSMENTS**

# BID - CAPACITY ENHANCEMENT: self-assessments

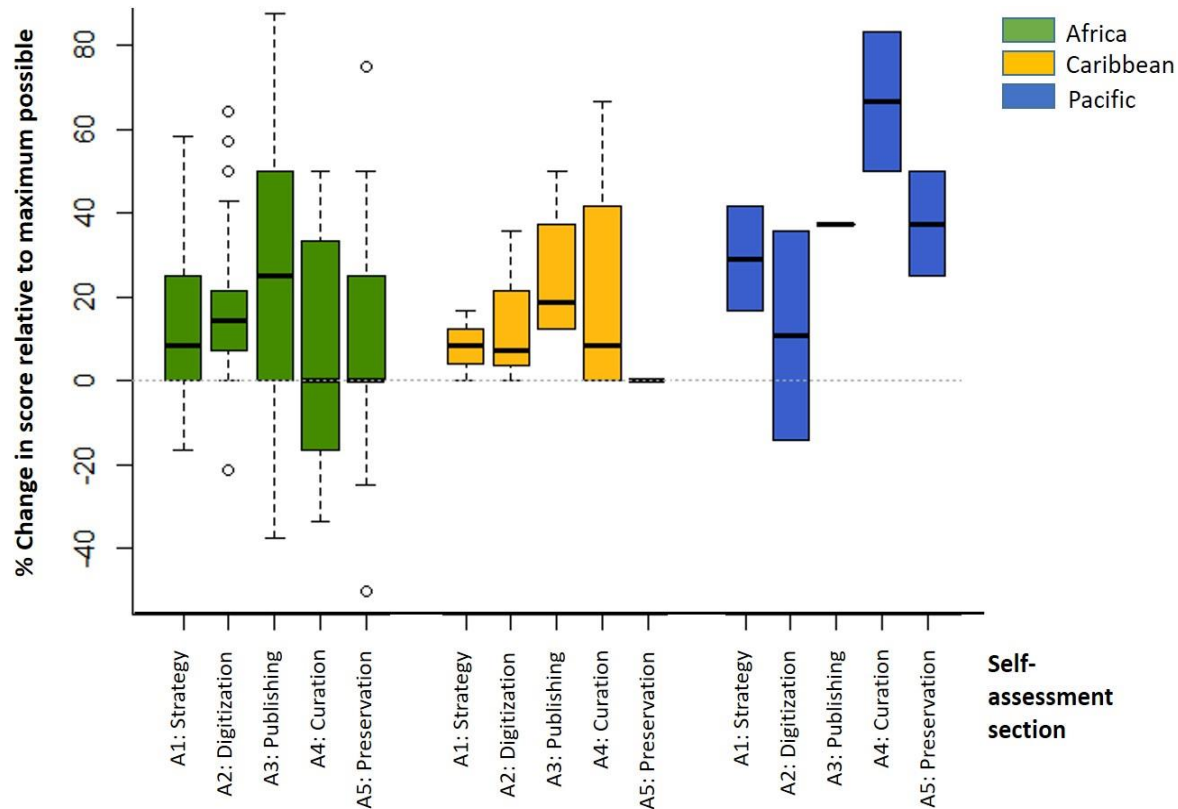
## NATIONAL NETWORKS



- **National networks demonstrated an increase in capacity.**

# BID - CAPACITY ENHANCEMENT: self-assessments

## DATA HOLDERS



- **National networks** demonstrated an **increase in capacity.**
- **Data holders** demonstrated an **increase in capacity.**

# **BID - CAPACITY ENHANCEMENT:**

## **WORKSHOPS**



# BID - CAPACITY ENHANCEMENT: workshops

## GBIF-hosted WORKSHOPS

- **120 students** in onsite workshops.
- **DATA MOBILIZATION:**
  - **53%** Data mobilization students **got badges**, region dependent.
  - 40% of BID participants did not attempt to get badges, although mandatory.
- **DATA USE:**
  - <25% participants attempted and were awarded Data Use badges.
- On-site workshops show higher level of accomplishment than online ones.

# BID - CAPACITY ENHANCEMENT: workshops

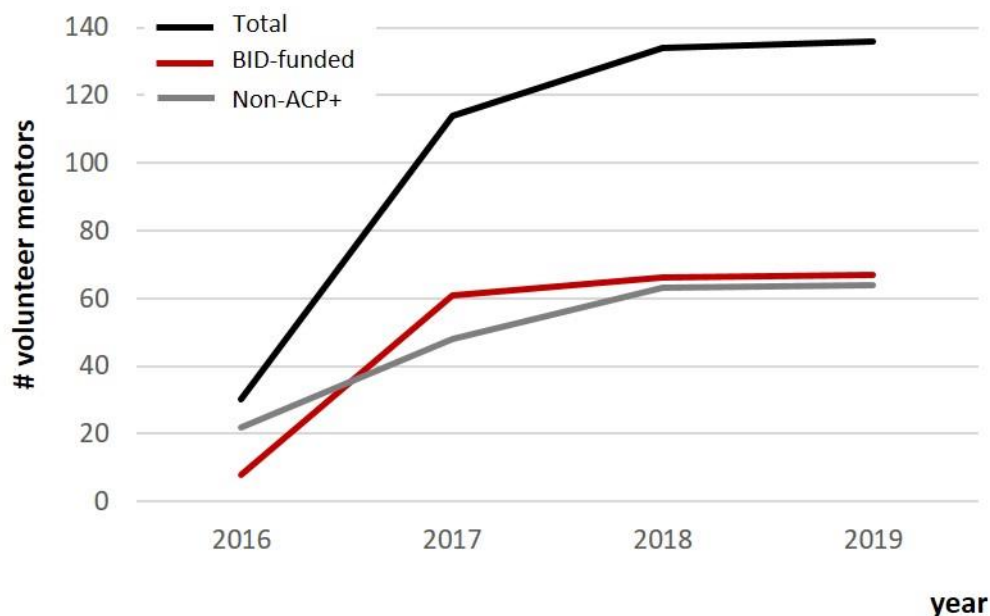
## REPLICATIONS of WORKSHOPS

- 66 workshop replications.
- 1497 students.
- Main subjects:
  - Data mobilization (~43%)
  - Data use (~32%)
  - Data quality (~21%)
- More workshops planned for 2019.

# **BID - CAPACITY ENHANCEMENT:**

## **GBIF MENTORS**

# BID - CAPACITY ENHANCEMENT: GBIF mentors



- **67 Mentors** from BID-funded countries (of total 136 in GBIF, 49.3%)
  - 60 Africa
  - 4 Caribbean
  - 3 Pacific
- Expertise:
  - support disciplines
  - data management
  - data capture
  - data analysisBut all areas represented

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Peer- / non-peer reviewed publications

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**BID - SUSTAINABILITY:**

**CO-FUNDING**

# BID - SUSTAINABILITY: co-funding

- Some BID projects successful in acquiring co-funding, varying amounts.
- The majority of the **co-funding** comes from **sources outside the ACP regions**.
- **Data networks strengthening through collaborations** with other members of the GBIF community.
- A new regionally-focused data portal in the Caribbean.

**BID - SUSTAINABILITY:**

**NEW GBIF PARTICIPANTS**



# BID - SUSTAINABILITY: co-funding

- **Africa: 10 new country nodes** since 2015.
- **Caribbean: regional node** in progress.
- **Pacific: 1 new voting participant and 1 new associate participant**, functionally a regional node.





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