iDigBio
Integrated Digitized Biocollections

iDigBio Search Portal and API (Application Programming Interface)

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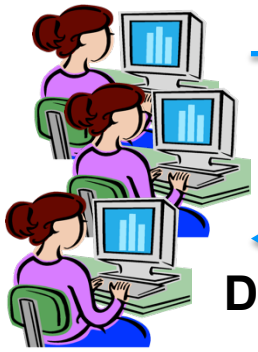
iDigBio is funded by a grant from the National Science Foundation's Advancing Digitization of Biodiversity Collections Program (Cooperative Agreement EF-1115210). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

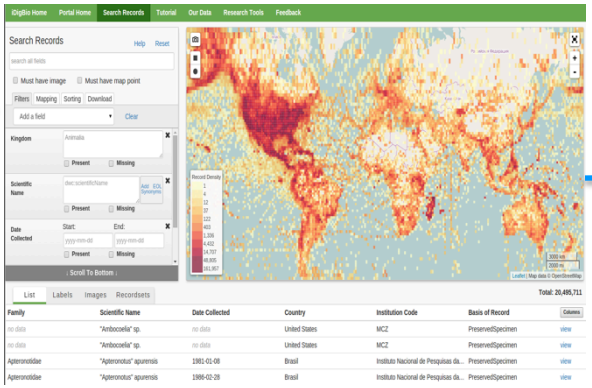
iDigBio IT resources available for use of digitized data



Search, browse

Download

Users

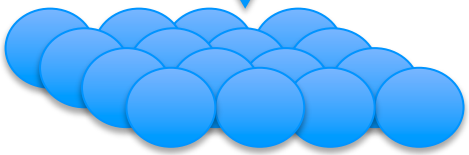


iDigBio Portal

HTTP, R, Python

Research tools

Search/mapping API



Storage cloud
Records
Media (images+)

Providers

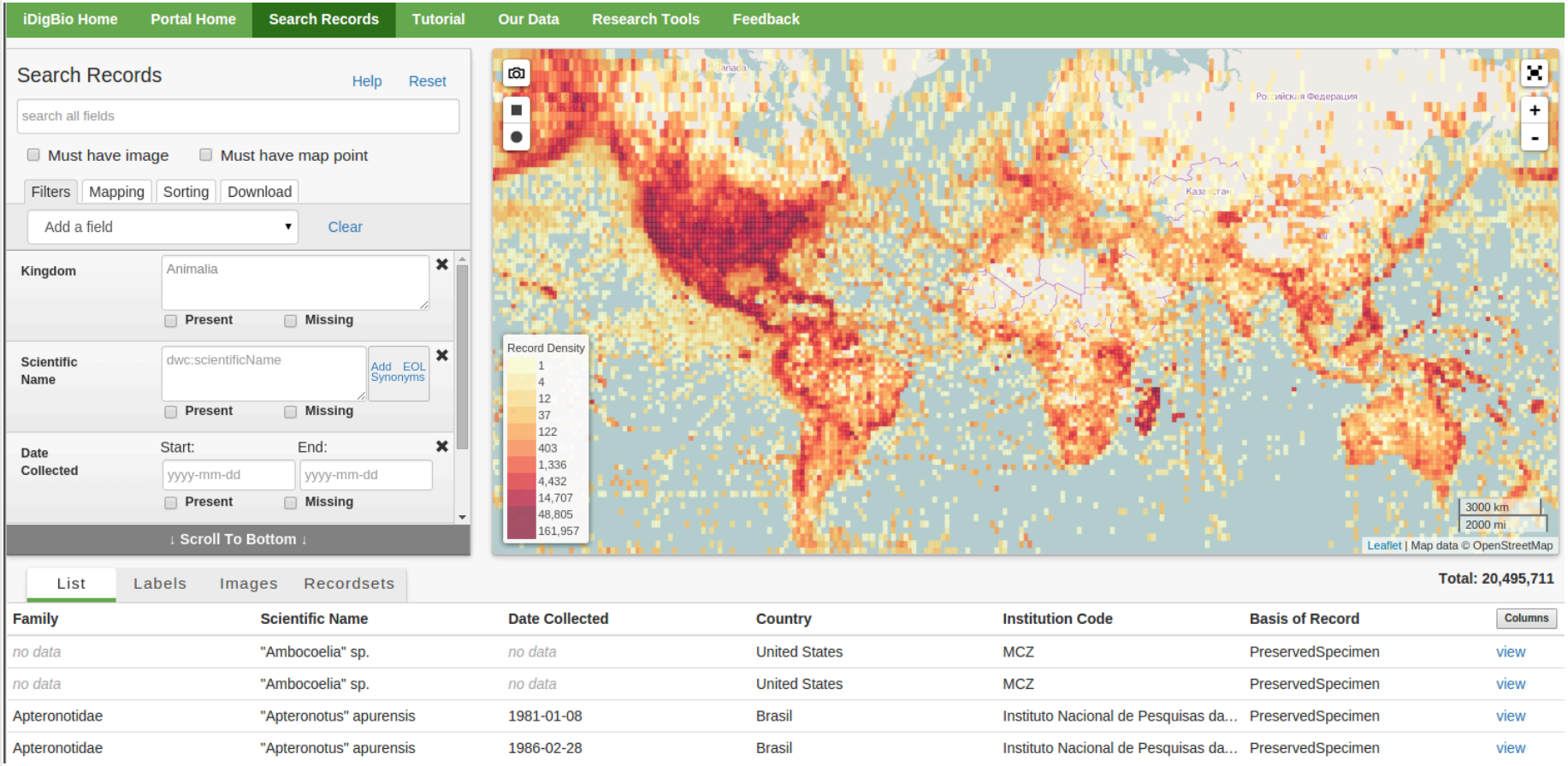
Ingestion

Developers

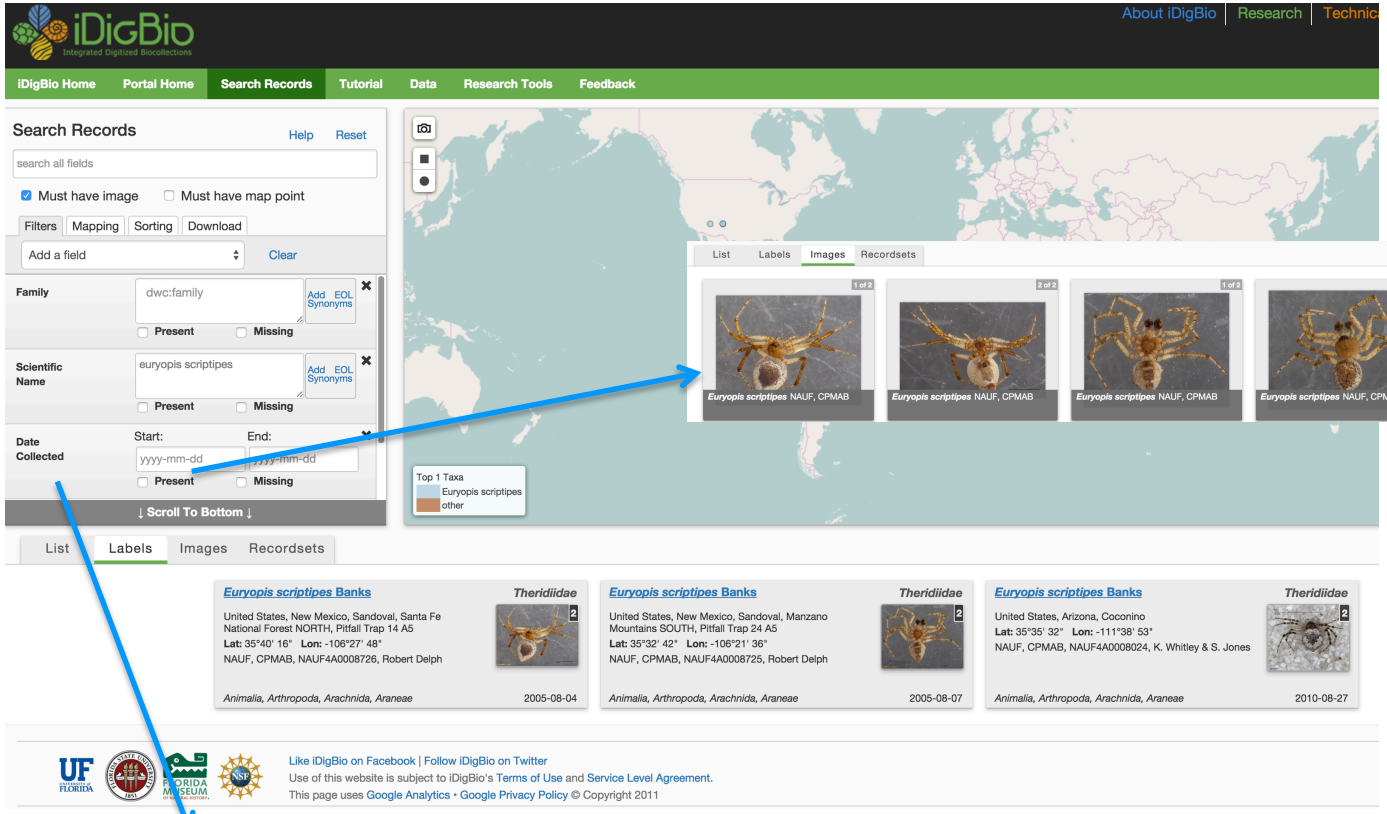
iDigBio Website - www.idigbio.org

Portal

Search across all data, all/individual fields, customize, use autocompletion, synonyms,…



View search results as table, labels, images…



List | Labels | Images | Recordsets

Total: 3

Family	Scientific Name	Date Collected	Country	Institution Code	Basis of Record	Columns
Theridiidae	Euryopis scriptipes	2005-08-04	United States	NAUF	PreservedSpecimen	view
Theridiidae	Euryopis scriptipes	2005-08-07	United States	NAUF	PreservedSpecimen	view
Theridiidae	Euryopis scriptipes	2010-08-27	United States	NAUF	PreservedSpecimen	view

Specimen record page with summary, details, flags, associated media, georeference and provider

Specimen Record

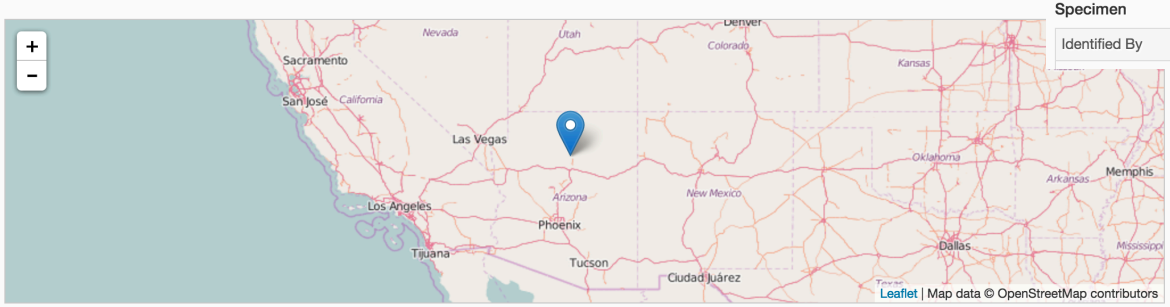
Animalia > Arthropoda > Arachnida > Araneae > Theridiidae

Euryopis scriptipes Banks

From Colorado Plateau Museum of Arthropod Biodiversity

Continent	North America
Country	United States
State/Province	Arizona
County/Parish	Coconino
Latitude	35.59239
Longitude	-111.64826

Institution Code	NAUF
Collection Code	CPMAB
Catalog Number	NAUF 4 A 0008024
Collected By	K Whitley S Jones
Date Collected	2010-08-27



Data Flags Raw

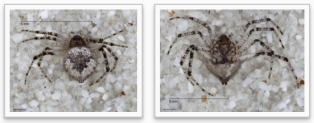
Taxonomy

Scientific Name	Euryopis scriptipes
Kingdom	Animalia
Phylum	Arthropoda
Class	Arachnida
Order	Araneae
Family	Theridiidae
Genus	Euryopis
Specific Epithet	scriptipes
Scientific Name Authors	Banks

Specimen

Identified By	SL Brantley

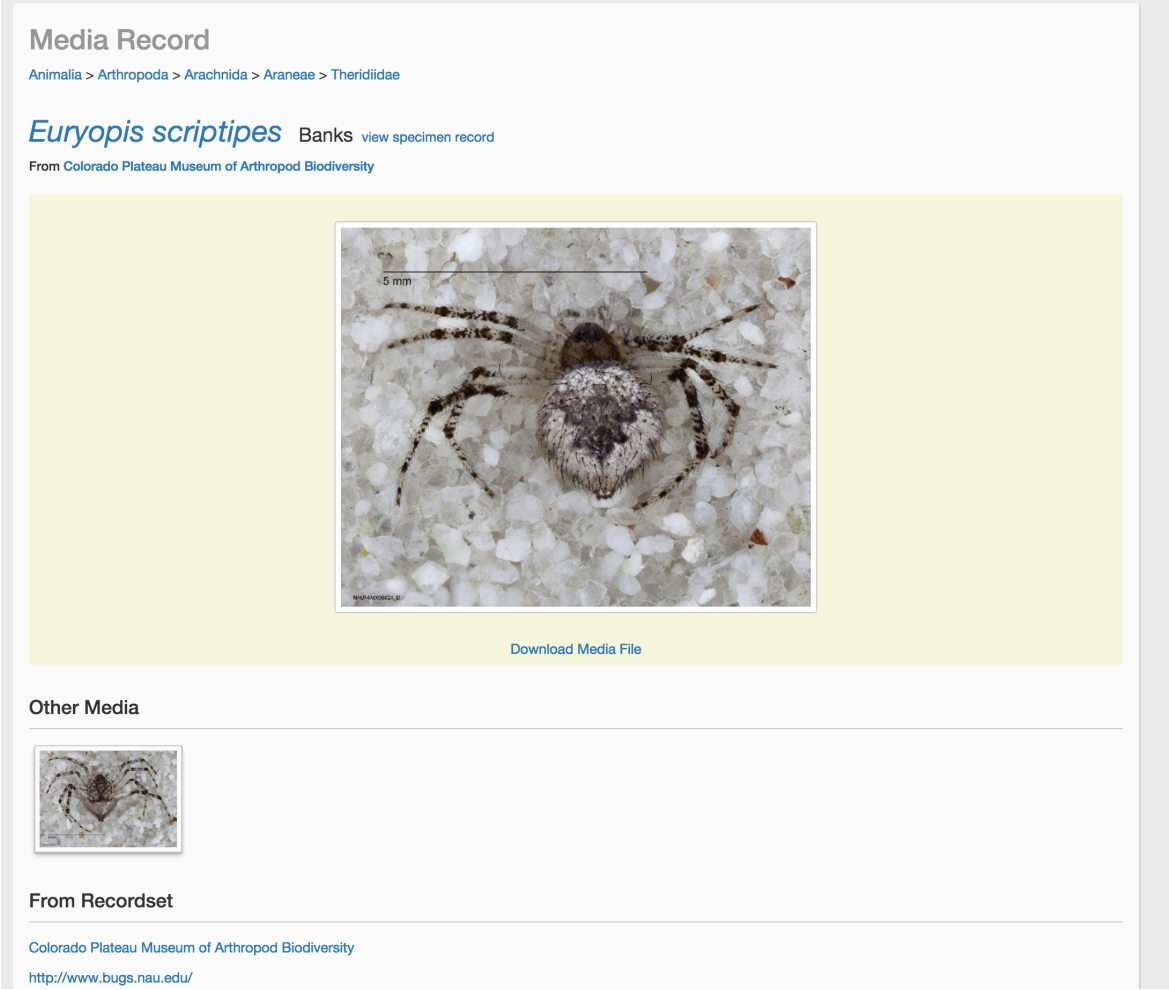
Media



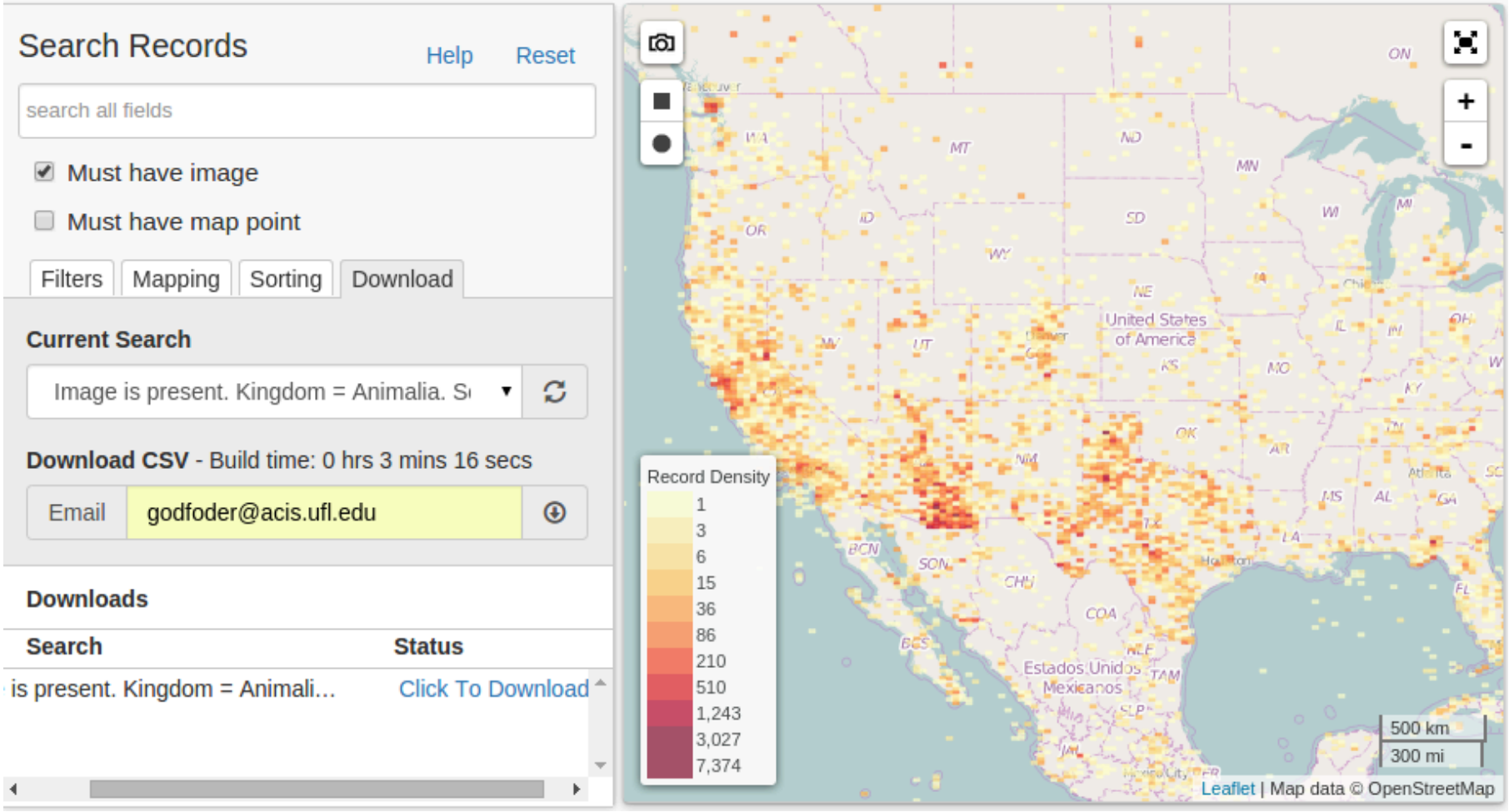
Data Flags Raw

Type	Description
geopoint_datum_missing	Geographic Coordinate Missing Geodetic Datum (Assumed to be WGS84).
idigbio_isocountrycode_added	iDigBio ISO 3166-1 alpha-3 Country Code Added.
dwc_continent_added	Darwin Core Continent Added.

Media records with metadata, other media, provider, links to specimen record, data set …



Results mapped/rendered and downloadable



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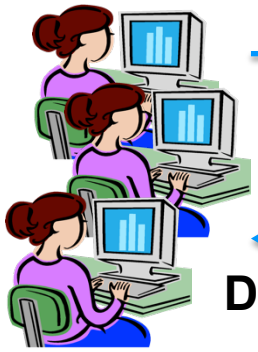

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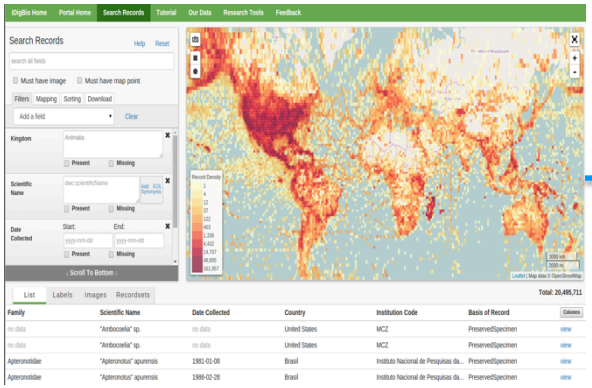

iDigBio Portal

HTTP, R, Python

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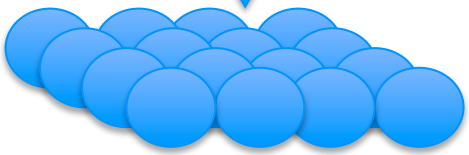
Search/mapping API



Storage cloud
Records
Media (images+)

Providers

Ingestion

Search API

- Supports:
  - Record and media queries
    - Same search queries as in portal
  - Summary endpoints - top-N, count, lastModified
    - Top-N: “Top 10 scientific names for this query”; can be nested
  - Date histograms
  - Dataset statistics
  - Mapping
- Documentation: https://github.com/idigbio/idigbio-search-api/wiki
- Client libraries:
  - R, Python

Download System

- No size limitation (can download all of iDigBio)
- Uses the same query format as the search API
- Builds a Darwin core archive for consumers
- Easiest way to get bulk data out of iDigBio

Example search API Query and JSON output

https://search.idigbio.org/v2/search/records/?rq=%7B"scientificname"%3A+"euryopis+scriptipes"%2C+"hasImage"%3A+true%7D&limit=5

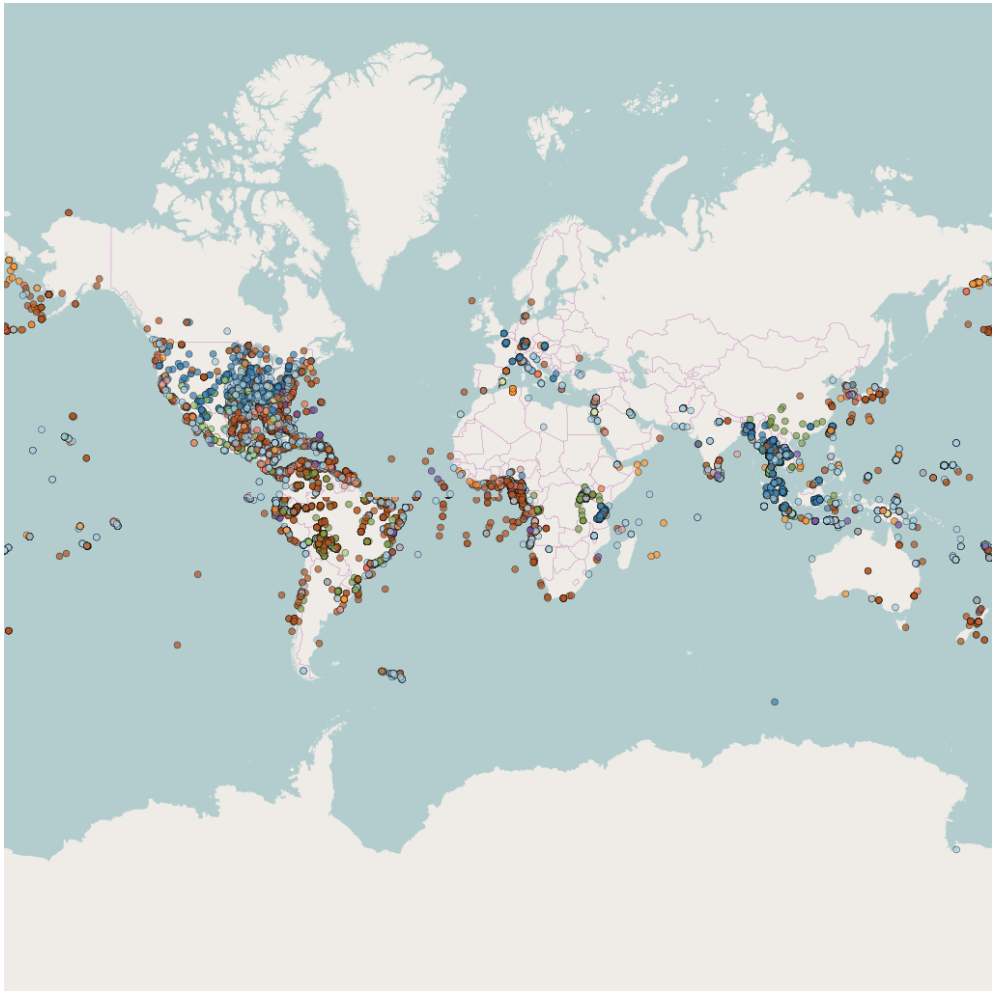

```
{
    itemCount: 3,
    lastModified: "2015-08-27T17:33:45.257Z",
  - items: [
    - {
          uuid: "b798368d-7b20-4d6b-8326-8c5e3b689c20",
          type: "records",
          etag: "26ad448b83a610719c8c9ff68408c9b97c07def3",
        - data: {
              dwc:startDayOfYear: "216",
              dwc:specificEpithet: "scriptipes",
              dwc:county: "Sandoval",
              dwc:recordedBy: "Robert Delph",
              dwc:order: "Araneae",
              dwc:habitat: "Juniperus monosperma",
              dwc:scientificNameAuthorship: "Banks",
              dwc:occurrenceID: "NAUF4A0008726",
              id: "13104433",
              dwc:stateProvince: "New Mexico",
              dwc:eventDate: "2005-08-04",
              dwc:collectionID: "c87a0756-fdd7-4cb6-9921-ca5774f8330e",
              dwc:country: "United States",
              idigbio:recordId: "urn:uuid:69db467a-3a1d-45bd-a633-42317a09edf6",
              dwc:collectionCode: "CPMAB",
              symbiota:recordEnteredBy: "jackiemettler",
              dwc:kingdom: "Animalia",
              dwc:decimalLatitude: "35.6713",
              dwc:occurrenceRemarks: "NMS Low Mortality",
              dwc:basisOfRecord: "PreservedSpecimen",
              dwc:genus: "Euryopis",
              dwc:preparations: "Ethanol",
              dc:rights: "http://creativecommons.org/publicdomain/zero/1.0/",
              dwc:identifiedBy: "CPMAB",
              dwc:phylum: "Arthropoda",
              dcterms:references: "http://symbiota4.acis.ufl.edu/scan/portal/collections/individual/index.php?occid=13104433",
              dwc:locality: "Santa Fe National Forest NORTH, Pitfall Trap 14 A5",
              dwc:institutionCode: "NAUF",
              dwc:class: "Arachnida",
              dwc:catalogNumber: "NAUF4A0008726",
              dwc:month: "8",
              dwc:decimalLongitude: "-106.4635",
              dwc:family: "Theridiidae",
              dcterms:modified: "2015-08-11 12:51:11",
```

Advanced Mapping API

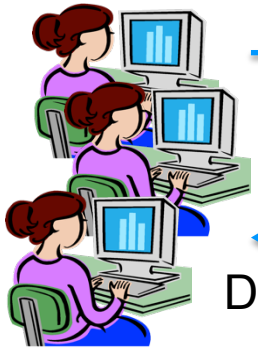
Example:

FLMNH Ichthyology
Point map colored by Order

https://search.idigbio.org/v2/mapping?rq={"recordset":"c38b867b-05f3-4733-802e-d8d2d3324f84","order":{"type":"exists"}}&style={"styleOn":"order"}&type=points



Looking forward: future capabilities



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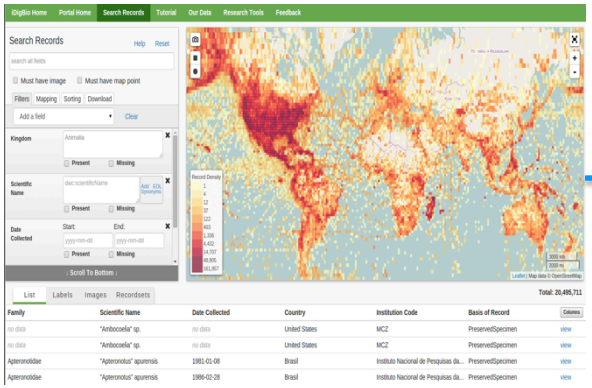


iDigBio Portal

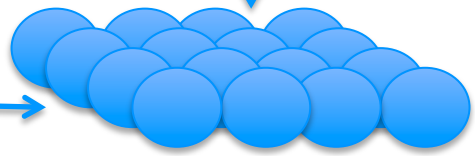
Hue

Search/mapping API

Spark/ R

Developers

Cloudera/Spark Batch data processing



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Thank you!

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idigbio.org/rss-feed.xml

webcal://www.idigbio.org/events-calendar/export.ics

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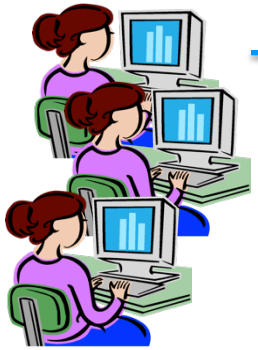

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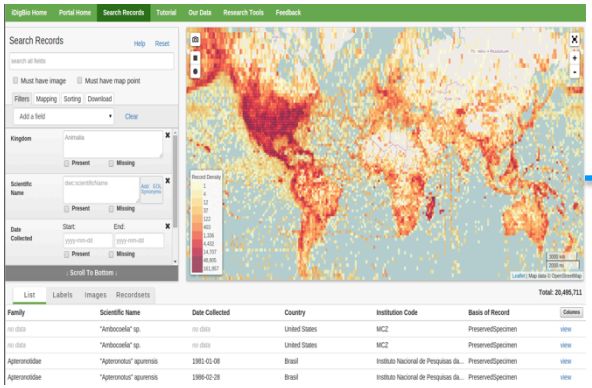

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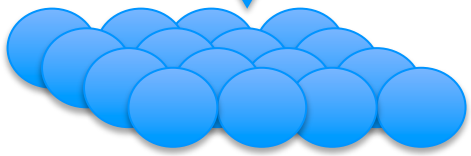

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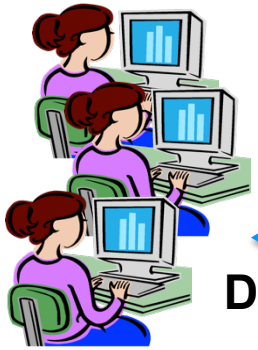

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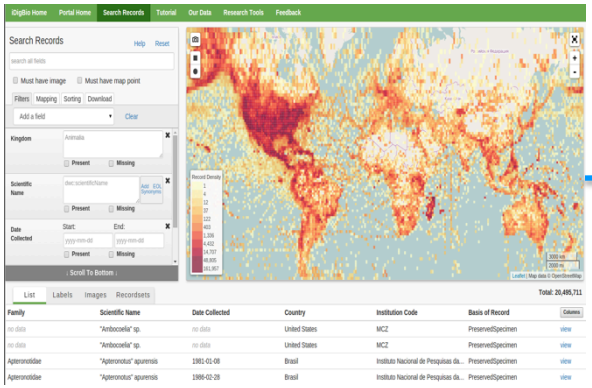

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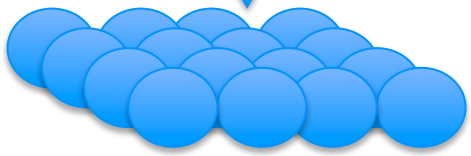

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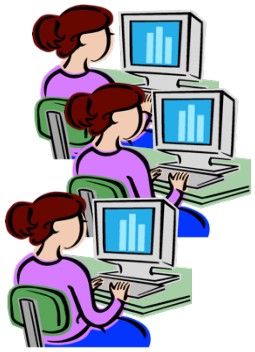

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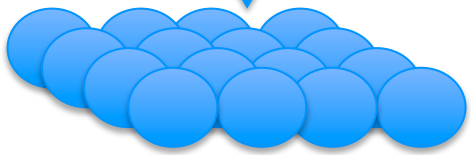

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