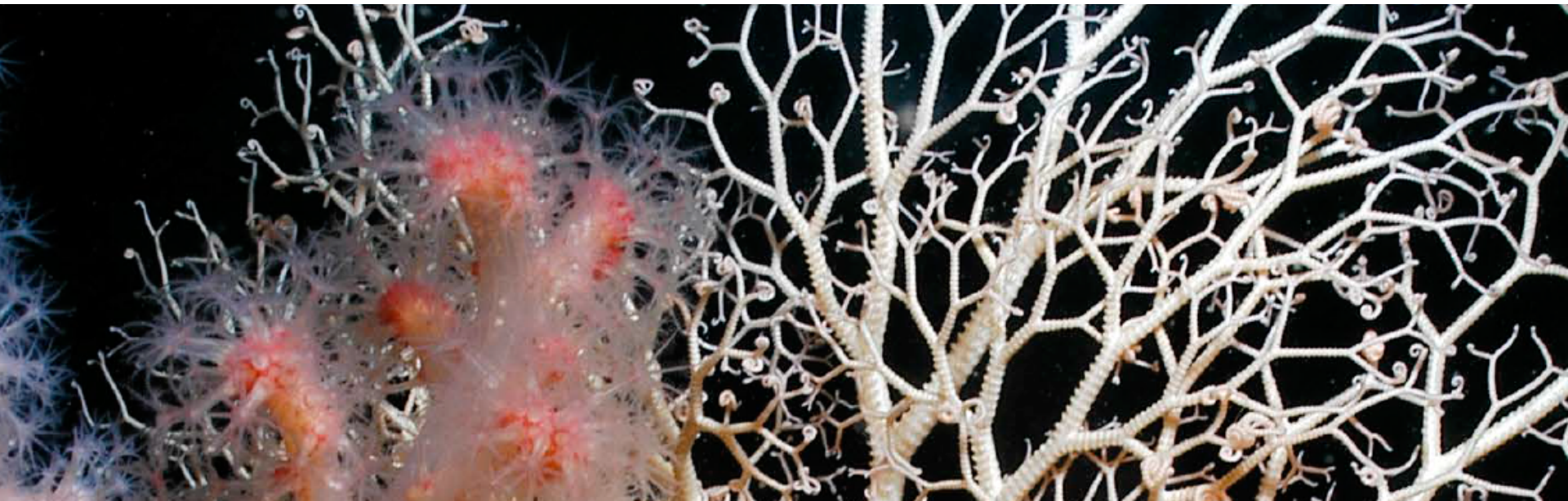




# A Panarctic Biodiversity Data Warehouse for benthic biodiversity data

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# Problems addressed

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- Messy data and extractability
- Preserve investments in data tidying
- Get biodiversity data right (which is hard)



# Critter Data Warehousing

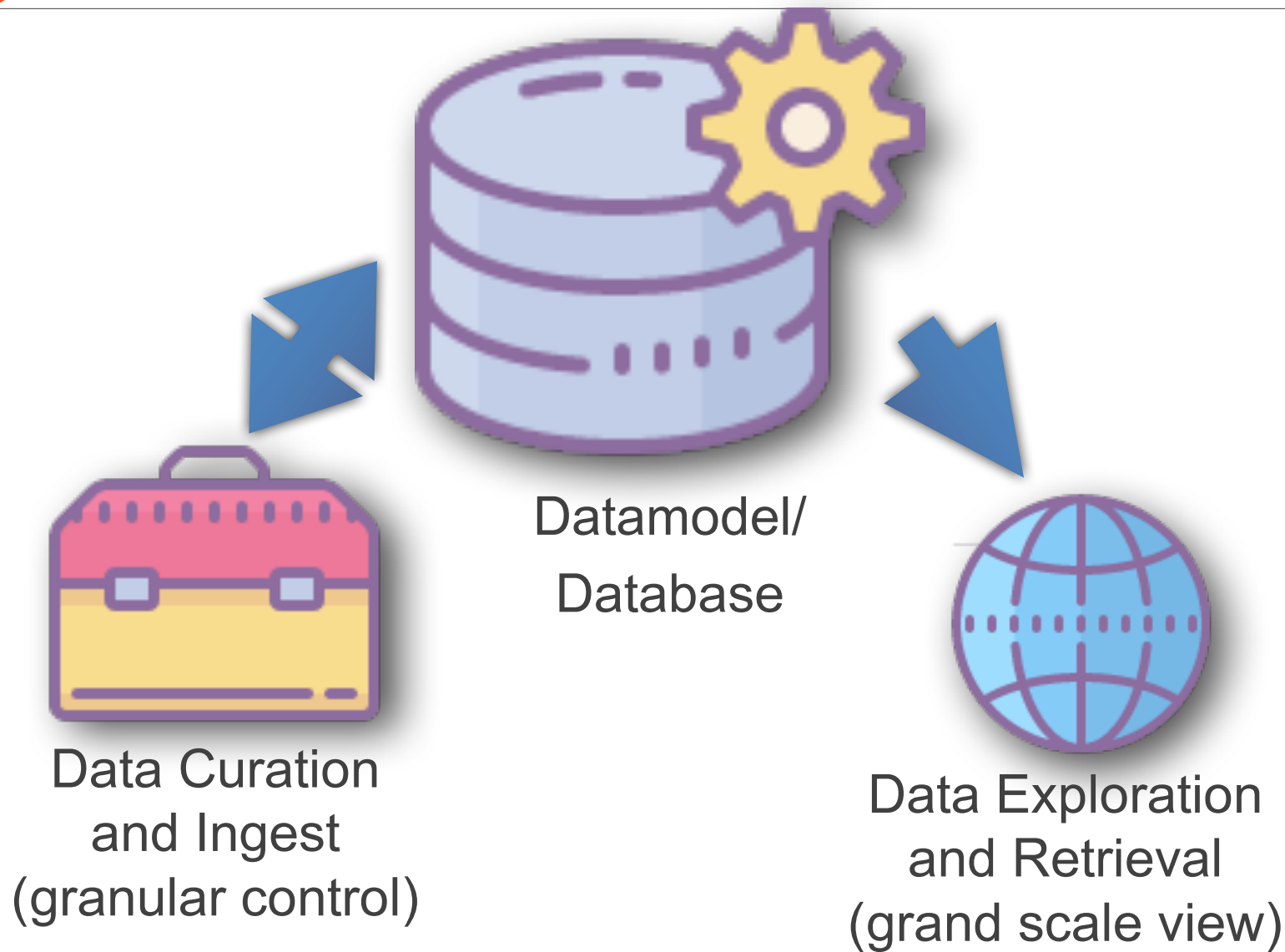


- Core of data management
- Internal to ingest, explore and curate data
- backbone for AI-tools, story telling and stakeholder services



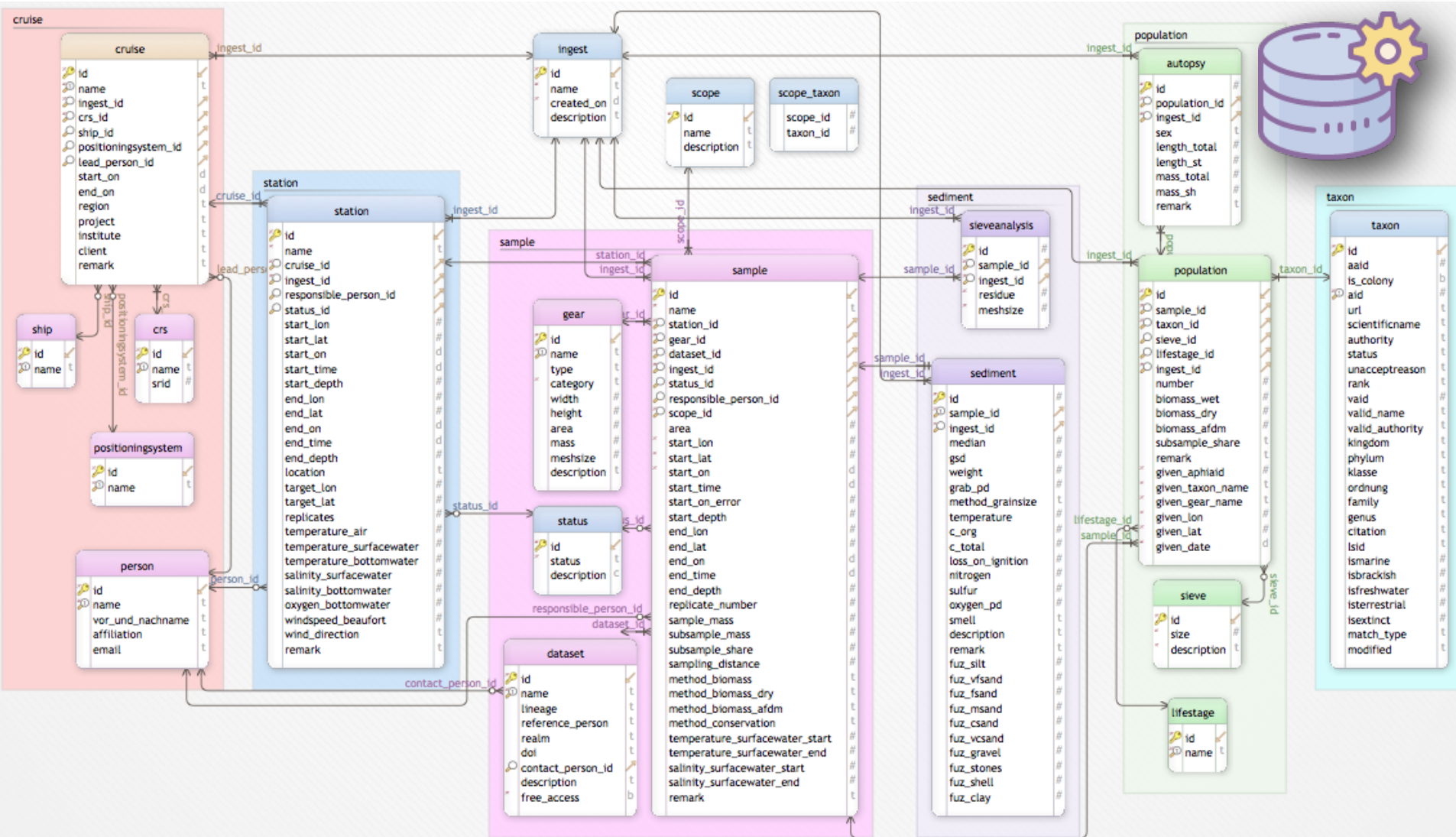


# Critter in a Nutshell





# Data Model





# Ingest Tool



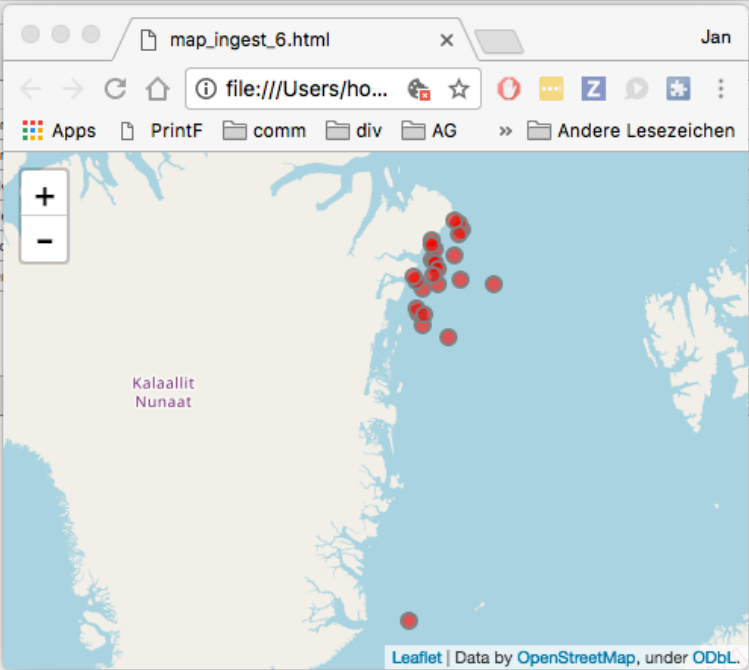
addict v.3.0.1-45 (fiona)



Server		DB-Tabellen															
Status	(*) verbunden	Sample	tab	csv	253	Dataset	tab	csv	6	Cruise	tab	csv	7	Crst	tab	csv	1
Host	postgres5.awi.de:5432	Ship	tab	csv	3	Person	tab	csv	40	Positioningsystem	tab	csv	4	Station	tab	csv	253
Datenbank	critterjack	Scope	tab	csv	4	Gear	tab	csv	98	Population	tab	csv	4185	Taxon	tab	csv	542
Benutzer	critterboss	Ingest	tab	csv	6												

SQL-Kommando

Ingestions			
ID	Benutzer	Datum	
1	pkloss	2017-09-08 15:49...	Zeilen:651, Datei:1_Petroliere_2009_dirty.csv, OS:Linux 4.4.0-93-ge...
2	pkloss	2017-09-08 15:49...	Zeilen:770, Datei:2_Petroliere_2010_dirty.csv, OS:Linux 4.4.0-93-ge...
3	pkloss	2017-09-08 15:50...	Zeilen:363, Datei:3_Nahidik_dirty.csv, OS:Linux 4.4.0-93-generic, H...
4	pkloss	2017-09-08 15:50...	Zeilen:1324, Datei:4_ArcOD_dirty.csv, OS:Linux 4.4.0-93-generic, H...
5	pkloss	2017-09-08 15:50...	Zeilen:861, Datei:6_Piepenburg_dirty.csv, OS:Linux 4.4.0-93-generic...
6	pkloss	2017-09-08 15:50...	Zeilen:222, Datei:5_ArcOD2008-B6_dirty.csv, OS:Linux 4.4.0-93-ge...



Konsole

- \* Wende Einstellungen an
- \* Speichere Einstellungen

Konfiguration wurde gespeichert in Datei: /Users/holstein/addict.conf  
Serververbindung steht



# Visualization



data exploration and retrieval v0.1.05



## Data filter

### Date range

1800-07-15



to

2012-07-27

### Dataset

(26/26) ▼

### Region

(48/48) ▼

### Gear

(3/3) ▼

### Scope

(7/7) ▼

### Taxon

All ▼

### Samples with richness greater than

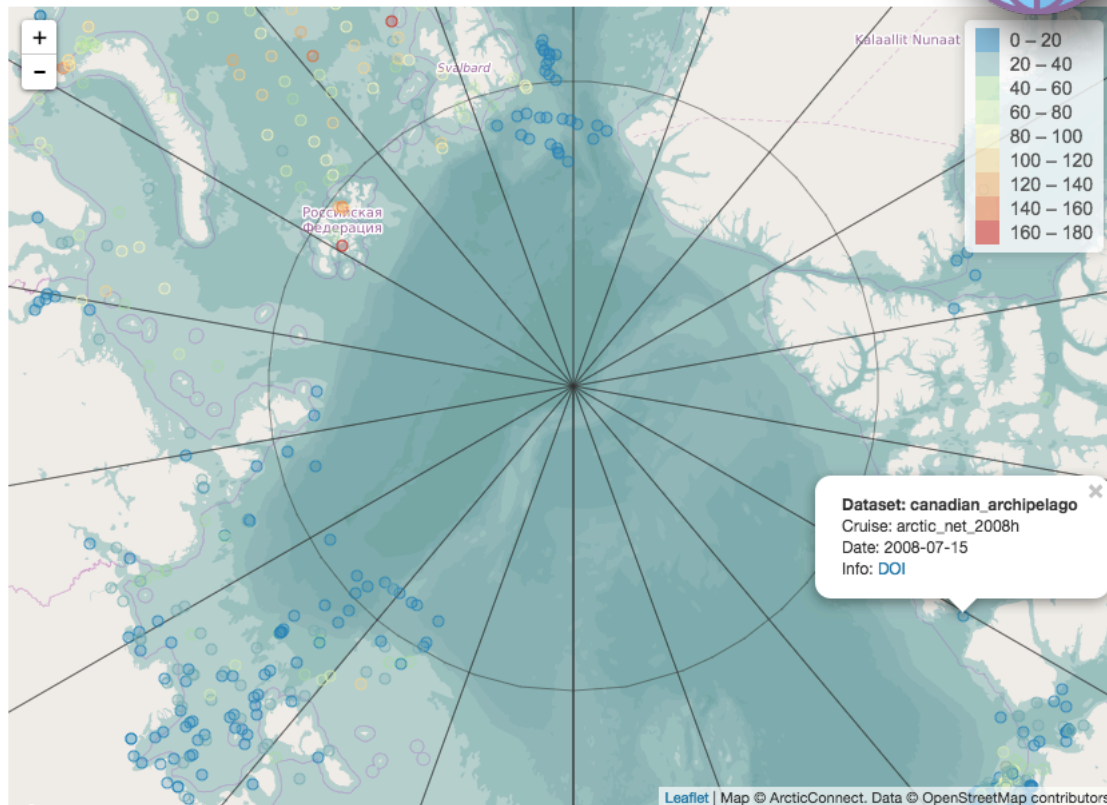
0

### Aggregation

- All
- Species
- Genus
- Family
- Order
- Class
- Phylum
- Kingdom

### Color

- Default
- Richness
- Shannon-Wiener
- Abundance
- Biomass



No. of entries in database 67665

Click points for information on respective sample



# Drill through

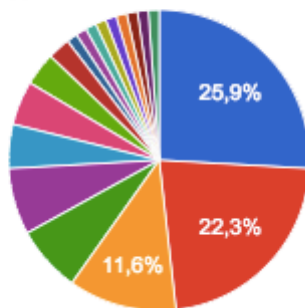


## Critter

data exploration and retrieval v0.1.05

### Information on clicked sample

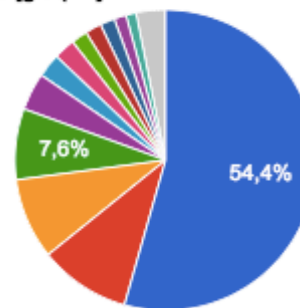
Abundance



- Ophiopleura borealis
- Astarte
- Diastylis spinulosa
- Cuspidaria
- Siphonodentalium lob...
- Diastylis rathkei
- Calathura brachiata

▲ 1/3 ▼

Biomass [g/sqrm]



- Jasmineira
- Lebbeus polaris
- Siphonodentalium lob...
- Gersemia
- Diastylis spinulosa
- Calathura brachiata
- Sclerocrangon ferox

▲ 1/2 ▼

Dataset	canadian_archipelago
Date	2007-07-15
Lineage	Université du Québec à Rimouski- ISMER, Canada
Cruise	arctic_net_2007d
Ship	CCGS Amundsen
Sample	1
Lon	-127.77

Taxon	Rank	Info
Aglaophamus malmgreni	Species	<a href="#">WORMS</a>
Apherusa	Genus	<a href="#">WORMS</a>
Arrhis	Genus	<a href="#">WORMS</a>
Astarte	Genus	<a href="#">WORMS</a>
Calathura brachiata	Species	<a href="#">WORMS</a>
Cuspidaria	Genus	<a href="#">WORMS</a>



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<https://janhoo.shinyapps.io/arcticcritter/>



<https://github.com/janhoo/critter>