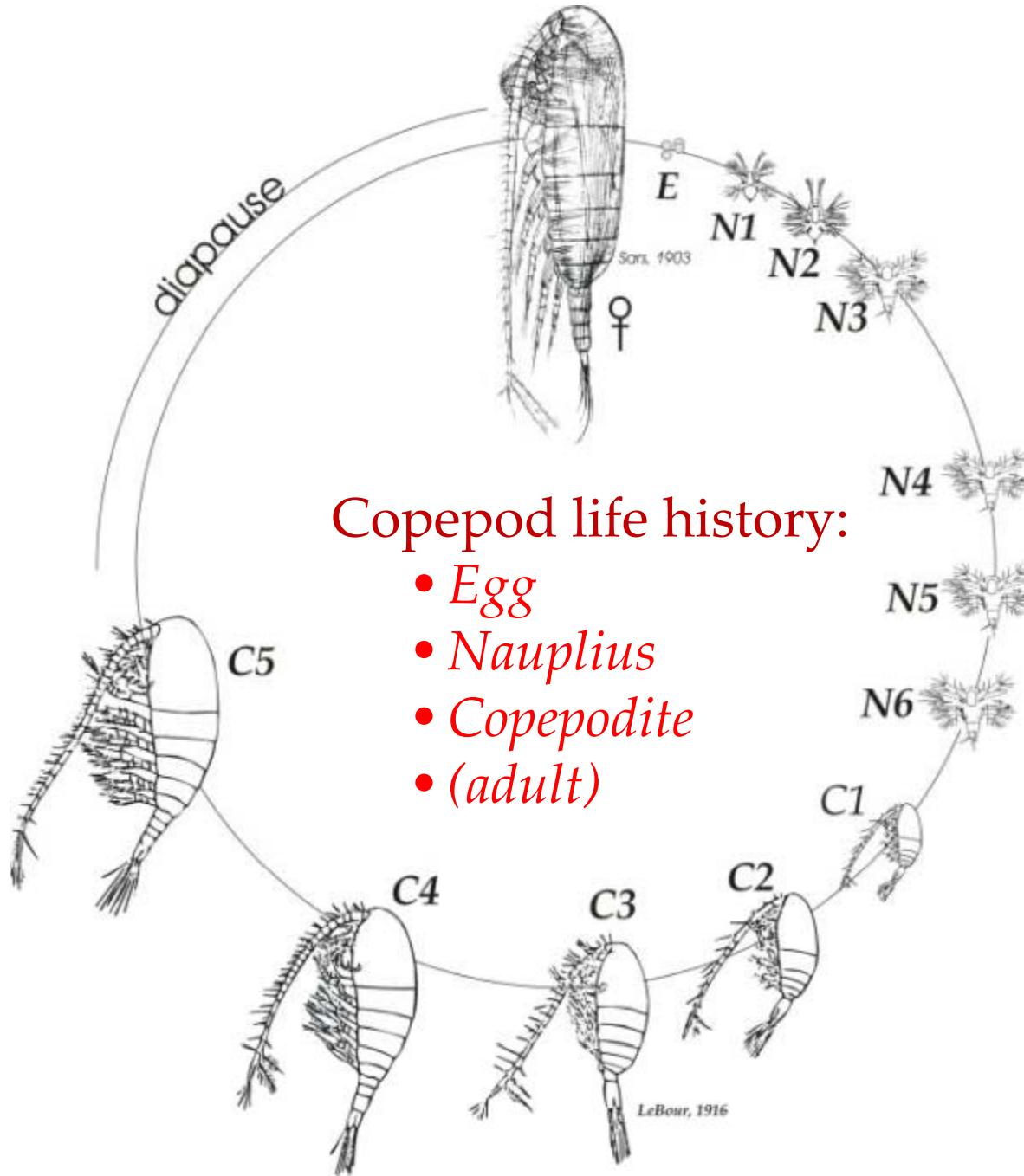


Todd D. O'Brien

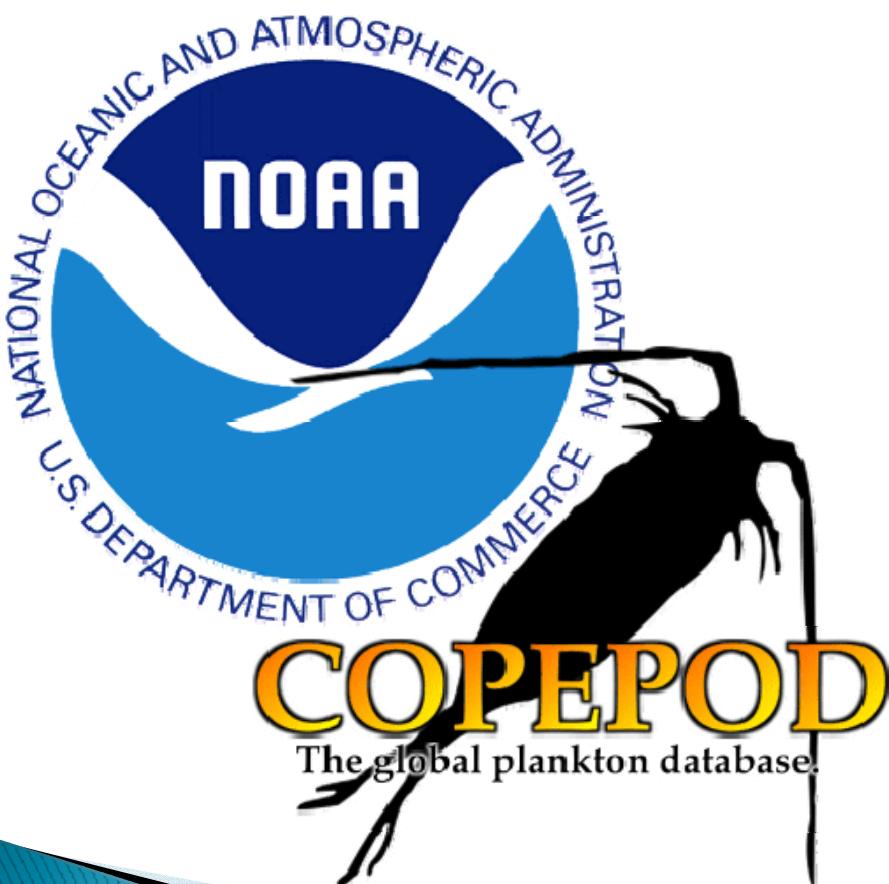
*NOAA / NMFS Office of  
Science & Technology*

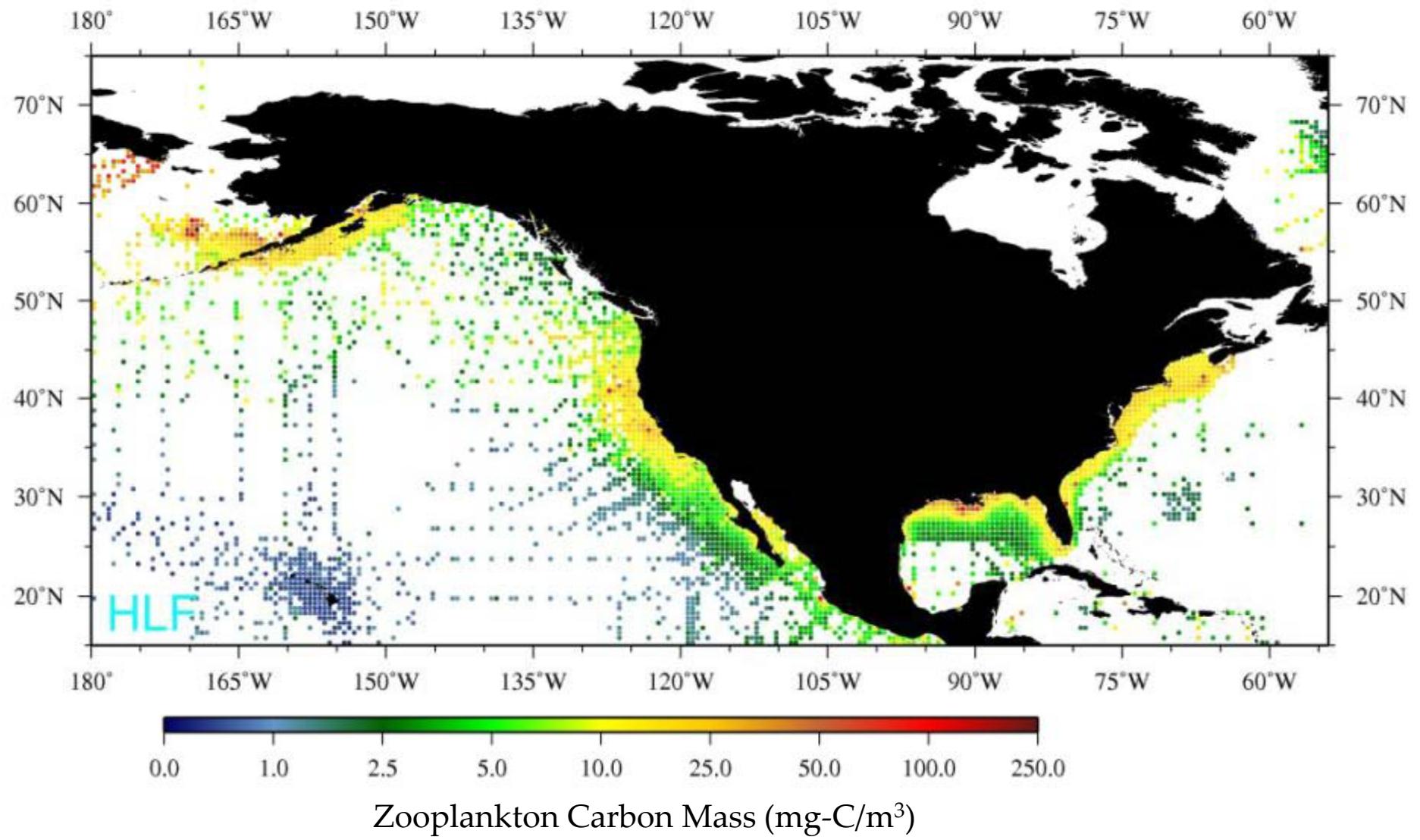
# “Copepods 101”



# COPEPOD

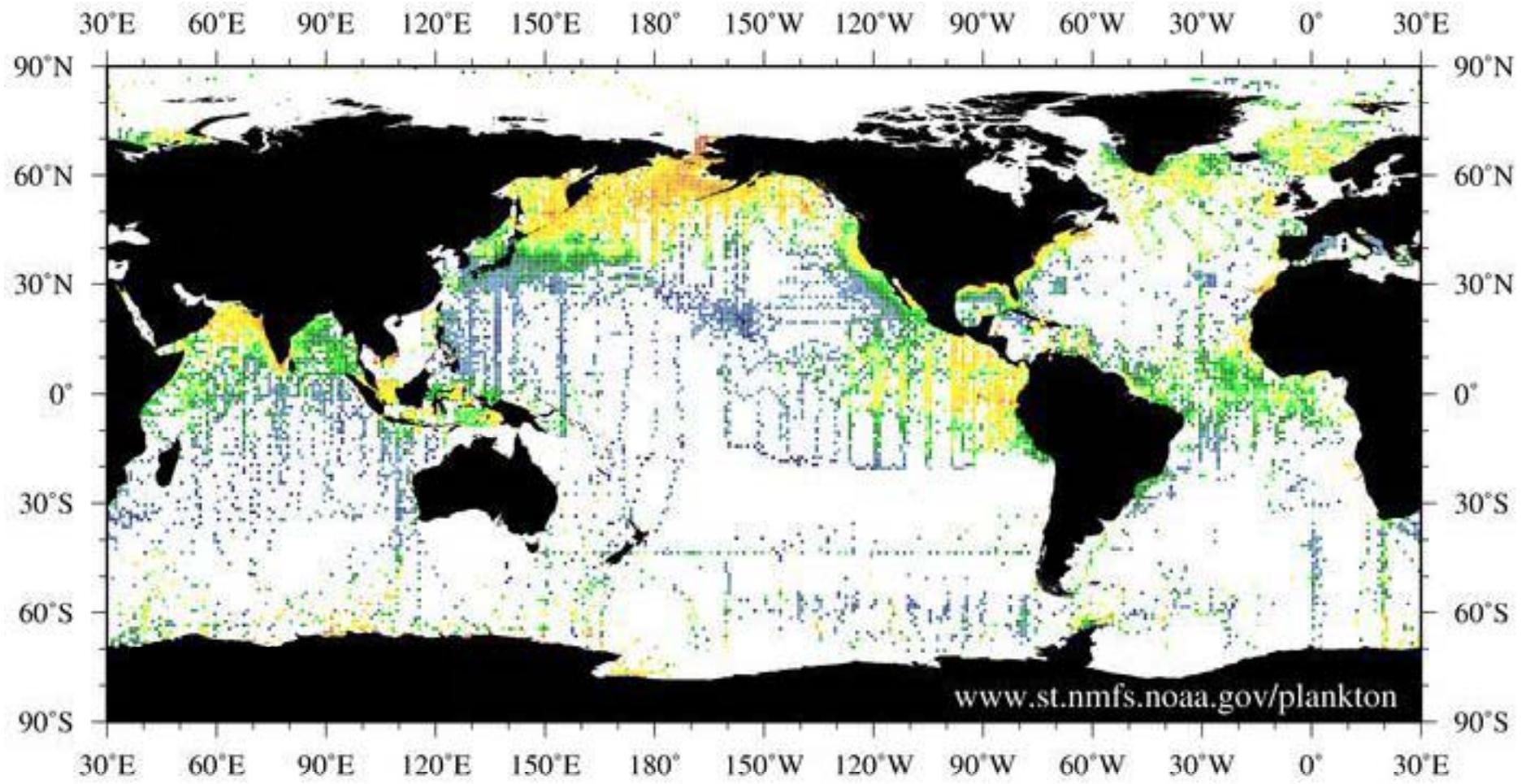
C oastal &  
O ceanic  
P lankton  
E cology,  
P roduction, &  
O bservation  
D atabase





*California Current  
Northeast  
Gulf of Mexico & Alaska*

*1950's  
1970's  
1980's*



0.0 1.0 2.5 5.0 7.5 10.0 25.0 50.0 75.0 100.0

Zooplankton Carbon Mass ( $\text{mg-C/m}^3$ )



# COPEPOD

The **C**oastal & **O**ceanic **P**lankton **E**cology, **P**roduction, & **O**bserveration **D**atabase

- ▶ Within COPEPOD, the source data are stored in individual data collections (i.e., a cruise, a project, an institutional collection).
- ▶ These individual pieces are then assembled to make compilations and spatial data products.
- ▶ Supplemental indexing and calculated values help integrate these otherwise disparate data.

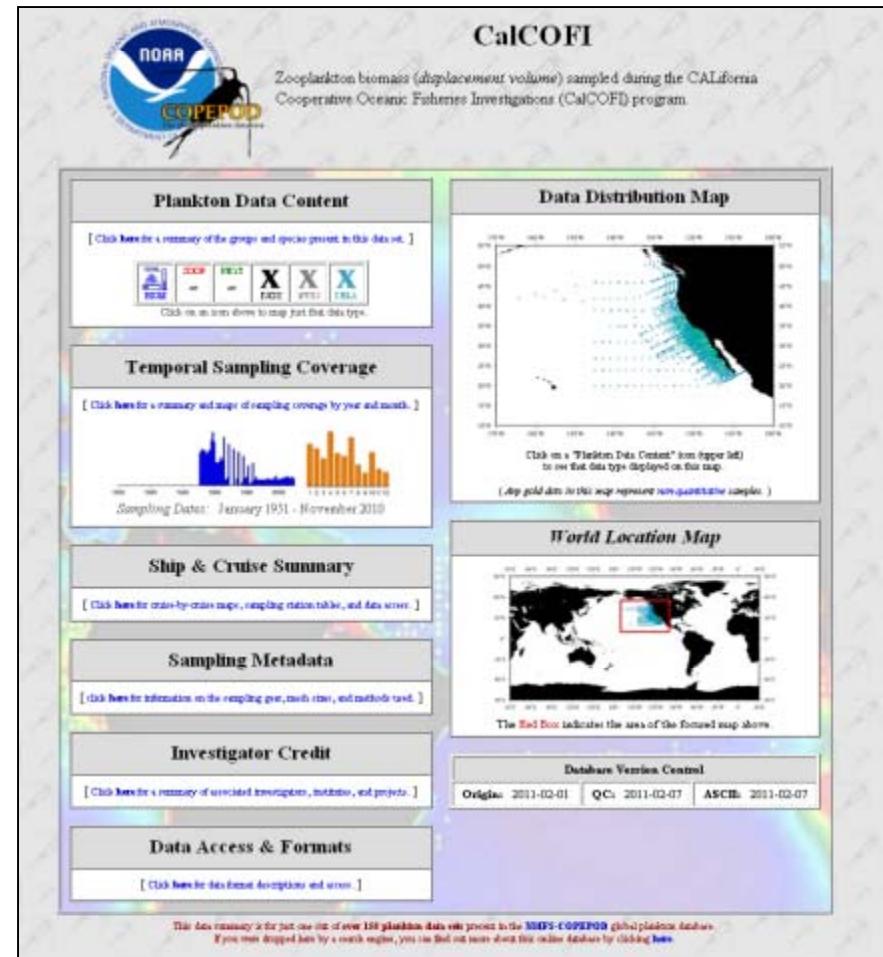


# COPEPOD

The **C**oastal & **O**ceanic **P**lankton **E**cology, **P**roduction, & **O**bserveration **D**atabase

- ▶ Each collection has its own interactive web presence which combines metadata, data, and data statistics into a standardized visual presentation packet.

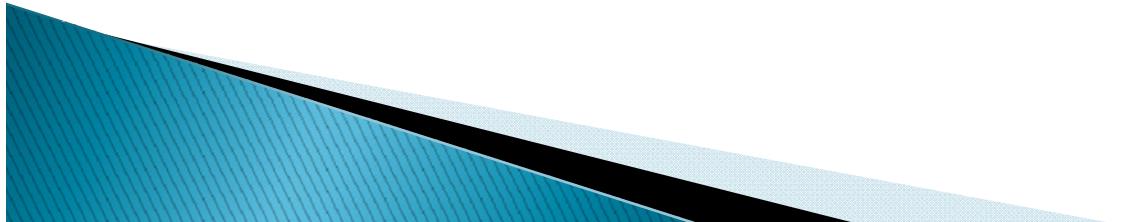
- ▶ Data! Metadata! Stats!



# COPEPOD

The **C**oastal & **O**ceanic **P**lankton **E**cology, **P**roduction, & **O**bserveration **D**atabase

- ▶ This individual web entity has three purposes:
  1. To preserve the original identity of the data pieces (providing citation guidance and/or contact information when available).
  2. To let the user know exactly what they are downloading before they download the data.
  3. To give the data “Google visibility”.

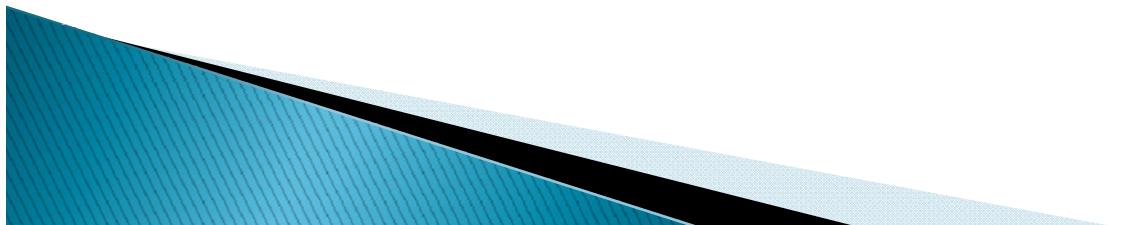


# COPEPOD

The **C**oastal & **O**ceanic **P**lankton **E**cology, **P**roduction, & **O**bserveration **D**atabase

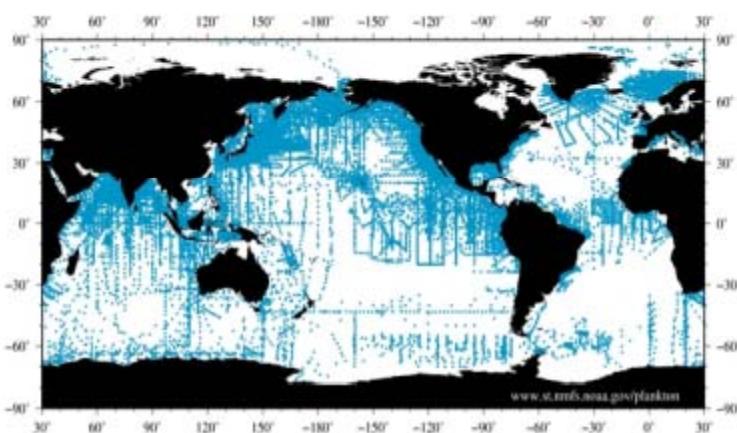
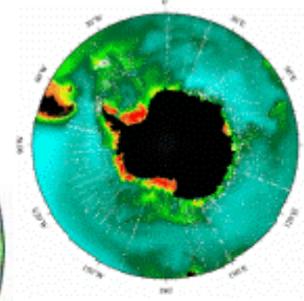
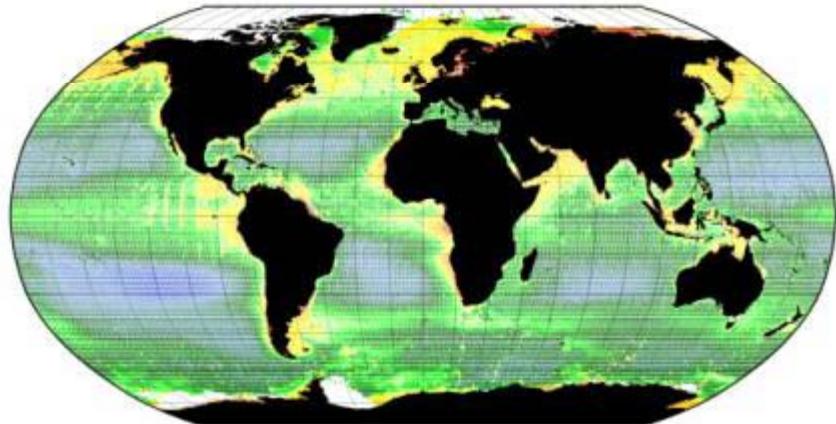
- ▶ Value-added features:

1. Taxonomic indexing and grouping
2. Common Base-unit Values (CBV: /m<sup>2</sup>, /m<sup>3</sup>)
3. Advanced quality control and empirical outlier detection

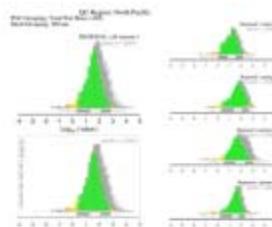


# COPEPOD

The **C**oastal & **O**ceanic **P**lankton **E**cology, **P**roduction, & **O**bserveration **D**atabase



Alaska (JAS)							
Crustacean	No. of Vessels Sampling	Crustacean	Crustacean Project	Data Index			
Species	Antarctic	North Pacific	North Atlantic	Project	Geographic Area	Sampling Period	Notes
Calanus finmarchicus	0	0	0	0	North Pacific	February 2011 - November 2011	
Thysanoessa macrura	0	0	0	0	North Pacific	February 2011 - November 2011	
Thysanoessa raschii	0	0	0	0	North Pacific	February 2011 - November 2011	
Thysanoessa thysanopoda	0	0	0	0	North Pacific	February 2011 - November 2011	



**CalCOFI**  
 zooplankton biomass (displacement volume) sampled during the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program

**Plankton Data Content**  
[Click here for a summary of the geographic species present in the database.]  
       
[Click on a species name to view full data page.]

**Temporal Sampling Coverage**  
[Click here for a summary snapshot of sampling coverage by year and month.]  
  
Sampling Dates: February 2011 - November 2011

**Ship & Cruise Summary**  
[Click here for details by cruise name, sampling cruise table, and location.]

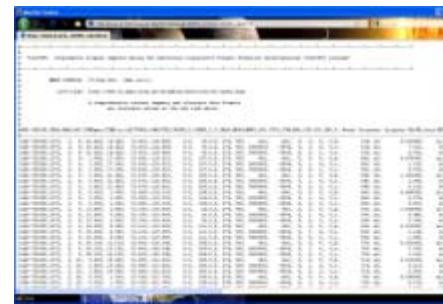
**Sampling Metadata**  
[Click here for information on the sampling project, such as site, acquisition level, etc.]

**Investigator Credit**  
[Click here for a summary of associated investigators, institutions, and programs.]

**Data Access & Formats**  
[Click here for data format descriptions and access.]

Database Version Control  
Origin: 2011-03-01 | QC: 2011-03-07 | ARCD: 2011-03-07

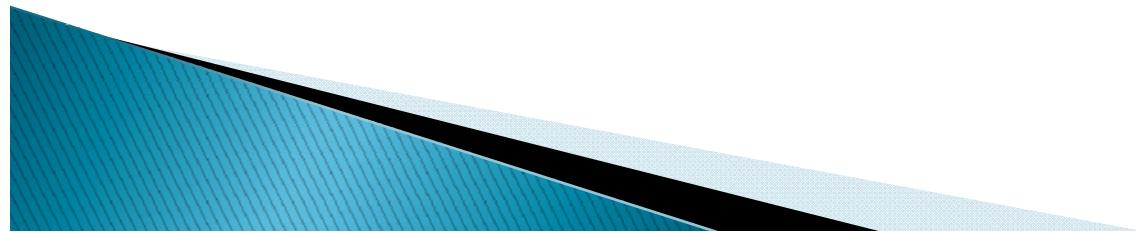
This site displays the first one out of over 100 plankton data sets provided to the COPEPOD global plankton database. If you need detailed data for a specific region, visit each site more about the index section for listing links.



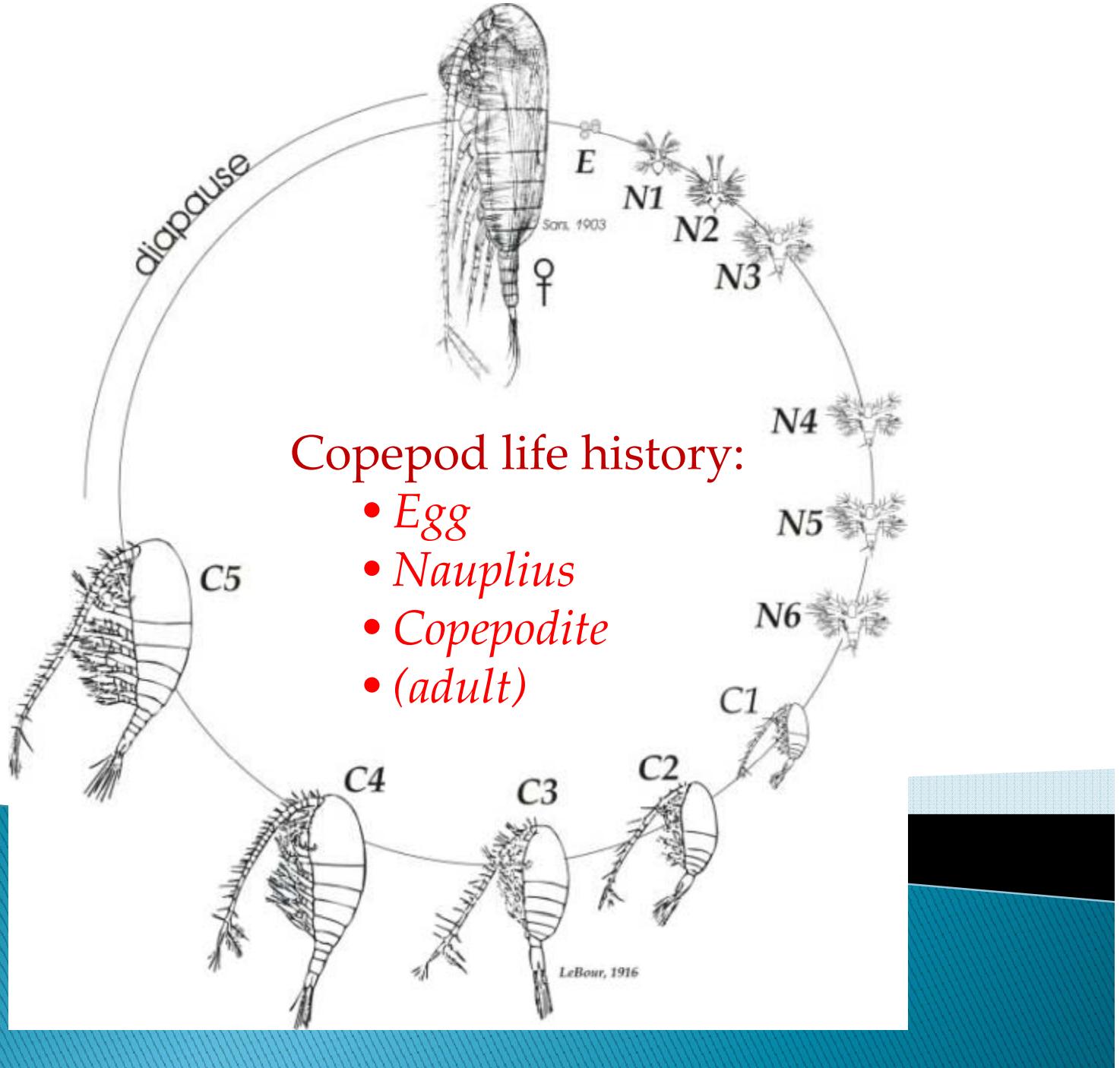
# 15 years in 15 seconds

- ▶ Interacting with and supporting your users is the quickest way to understand the usefulness and application-ease of your data entity.
- ▶ Interacting with and supporting your data providing community is the quickest way to gain trust, acquire new data, and learn what products and tools would be most useful.
- ▶ Act like a library not an empire.
- ▶ Integration should not mean anonymity.



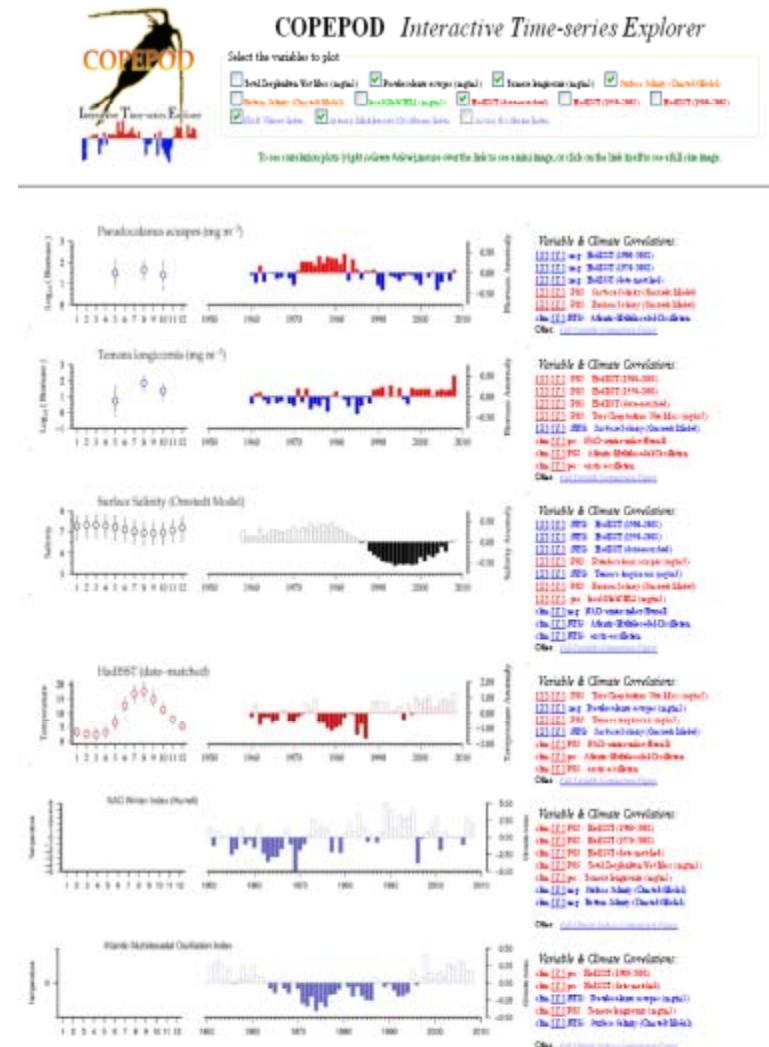
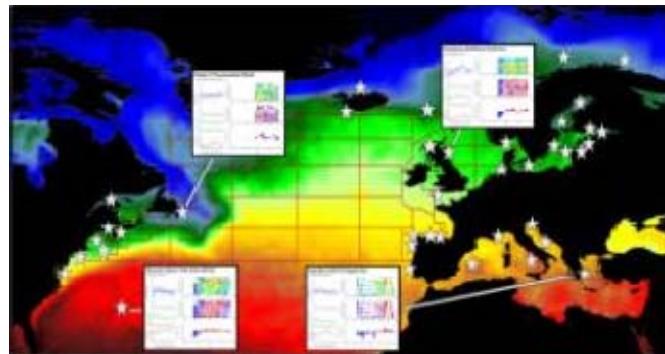


# “Copepods 101”

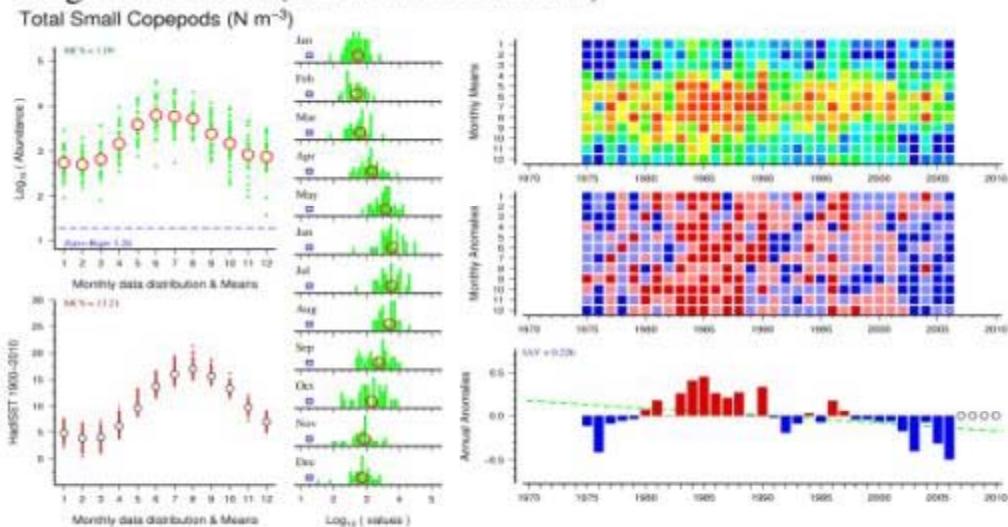


# COPEPODITE

The **COPEPOD** Interactive Time-series Explorer



## Helgoland Roads (Southeast North Sea)



# NAUPLIUS

Advanced Plankton & Ecosystems Data Products & Visualization Tools

