# A Bibliometric Analysis of NOAA's National Undersea Research Program (NURP)

By Christopher W Belter (chris.belter@noaa.gov), LAC Group on assignment at the NOAA Central Library

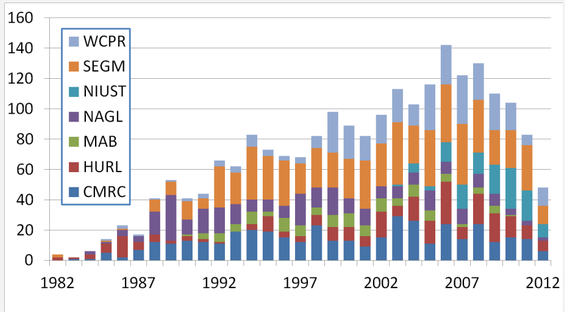
## Introduction

NURP is an extramural grant-funding agency at NOAA focused on regional ocean science that distributes research funding through seven regional centers. This analysis attempts to summarize the peer-reviewed publications supported by NURP centers from the program's inception in 1979 until 2012.

Using data from Web of Science, Science Citation Index Expanded, I plot the number of articles published per center per year, calculate basic bibliometric indicators for each center and for the entire program, and create word co-occurrence networks from words used in the titles of center-supported publications to identify the major topics of research sponsored by each center.

All data used in this analysis were accurate as of 16 July 2012.

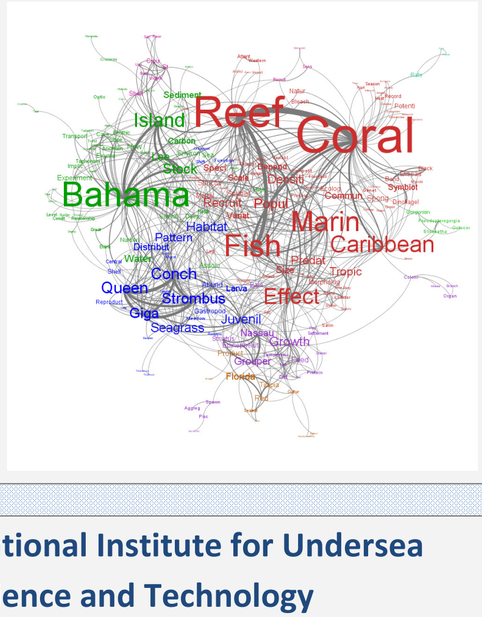
## Publications per Year



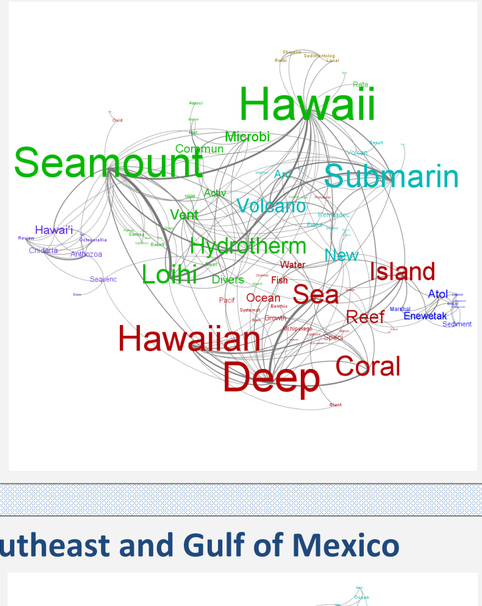

## Bibliometric Indicators

| Center | Pubs | Cites | CPP | H-Index |
|---|---|---|---|---|
| CMRC | 372 | 12,800 | 34.41 | 56 |
| HURL | 187 | 3,885 | 20.78 | 33 |
| MAB | 87 | 2,578 | 29.63 | 31 |
| NAGL | 240 | 7,287 | 30.36 | 44 |
| NIUST | 92 | 861 | 9.36 | 16 |
| SEGM | 597 | 20,336 | 34.06 | 68 |
| WCPR | 276 | 7,804 | 28.28 | 48 |
| **All** | **1,851** | **55,551** | **30.01** | **100** |

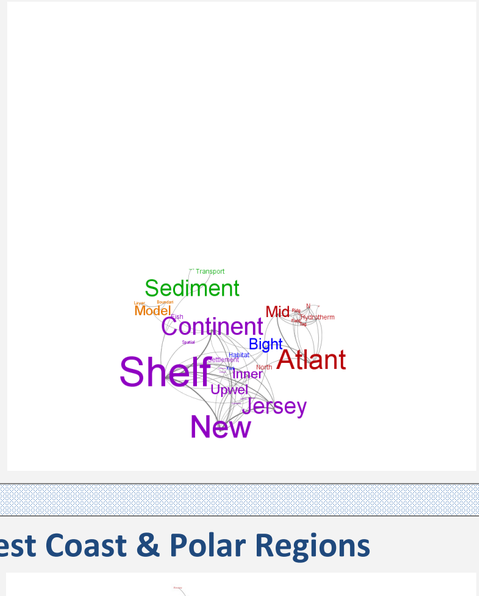
## Caribbean Marine Research Center



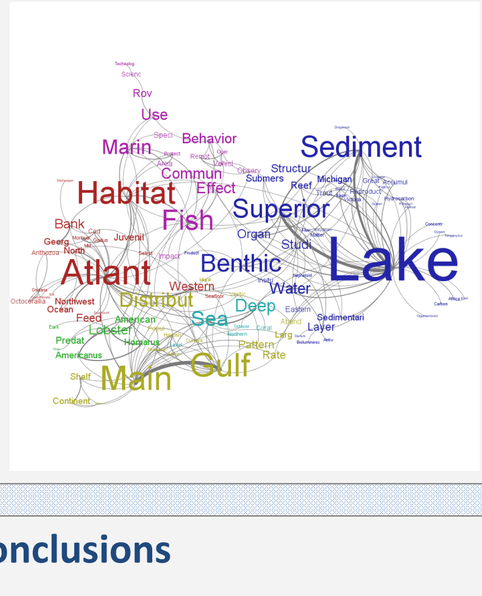

## Hawai'i Undersea Research Lab




## Mid-Atlantic Bight



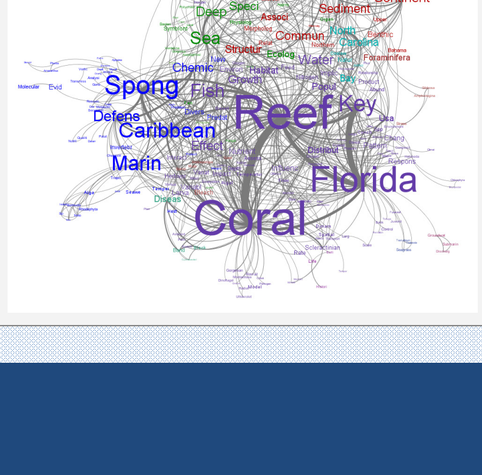

## North Atlantic and Great Lakes



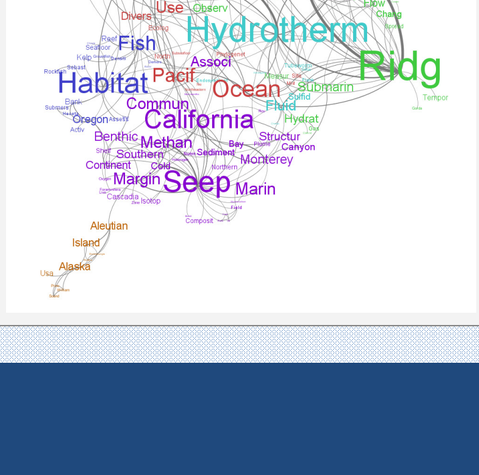

## National Institute for Undersea Science and Technology




## Southeast and Gulf of Mexico




## West Coast & Polar Regions




## Conclusions

Bibliometric analysis revealed substantial differences in article productivity and citation impact between centers, although all centers produced highly cited articles.

Topic analysis revealed that although each center produced publications on unique topics, several themes – such as coral reefs, habitats, marine geophysics, and sediments – emerged in multiple centers.

These results help identify the contributions of NURP centers to undersea research.