

# HYCOM Consortium DataServers

<http://hycom.rsmas.miami.edu/dataservers>

Ashwanth Srinivasan  
RSMAS  
UNIV of Miami

# Overview

- The Miami data server is a scalable setup implemented as a shared data cluster to serve HYCOM consortium data products
- A combination of LAS and OpeNDAP software is used to serve HYCOM Consortium data products which are in NetCDF format
- Current storage capacity is about 2 ½ TB

# Hardware

- An 8 node cluster is used to service requests. The master node is DELL PowerEdge 2500 with 400 GB storage
- Each of the remaining nodes have two processors and 1 GB RAM and 45 GB disk space
- A Network Attached Storage device with capacity of 2 TB is used as the main storage device
- The cluster is networked by 100 Mbps ethernet



# Main Software Packages

- LAS versions (5.2 and 6.1)
- OpeNDAP (3.3) and Aggregation server
- Linux 8.0 Platform
- MySQL database system
- NetCDF
- Apache web server with Tomcat 4.0 for running servlets

# What's Available

- Two North Atlantic datasets are available at <http://hycom.rsmas.miami.edu/las/>
- An in-house OpeNDAP catalog server is available at <http://hycom.rsmas.miami.edu/cgi-bin/catalog.cgi>
- A non-public aggregation server and LAS 6.1 set up is available at <http://hycom.rsmas.miami.edu:8080/las6/servlets/dataset>

# Future Plans (to be implemented by the end of the year)

- Add storage capacity to host 10-15 TB
- Make available reference datasets from the HYCOM Consortium
- Make public the aggregation server and LAS 6 to participate in the GODAE data sharing project
- Develop software to enable diagnostic calculations and make available these programs via remote batch job capability