

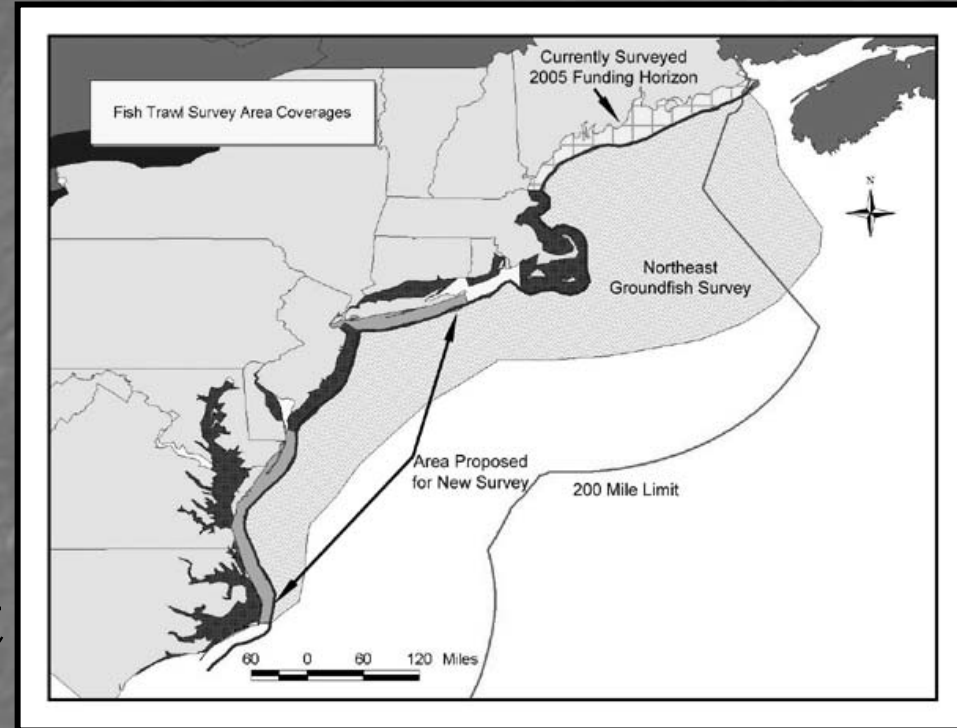


**NEAMAP Inshore Trawl Survey  
2006 Pilot Cruises  
Gear Performance**

**James Gartland  
Virginia Institute of Marine Science  
February 2007**

# Background – NEAMAP Trawl Survey

- Responded to lack of adequate survey coverage of coastal Middle Atlantic Bight
- Addressed replacement of NEFSC groundfish survey sampling platform with a new, larger vessel (much deeper draft)

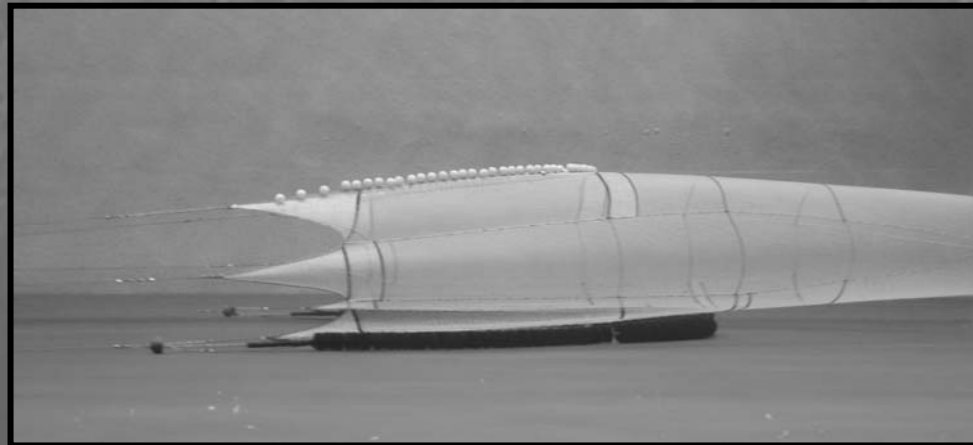


# Background - NEAMAP Pilot Trawl Survey

- Early 2005 – ASMFC makes \$250,000 available for NEAMAP Inshore Trawl Survey pilot work
- ASMFC receives one proposal (Virginia Institute of Marine Science - VIMS) – awards funding to VIMS in August 2005

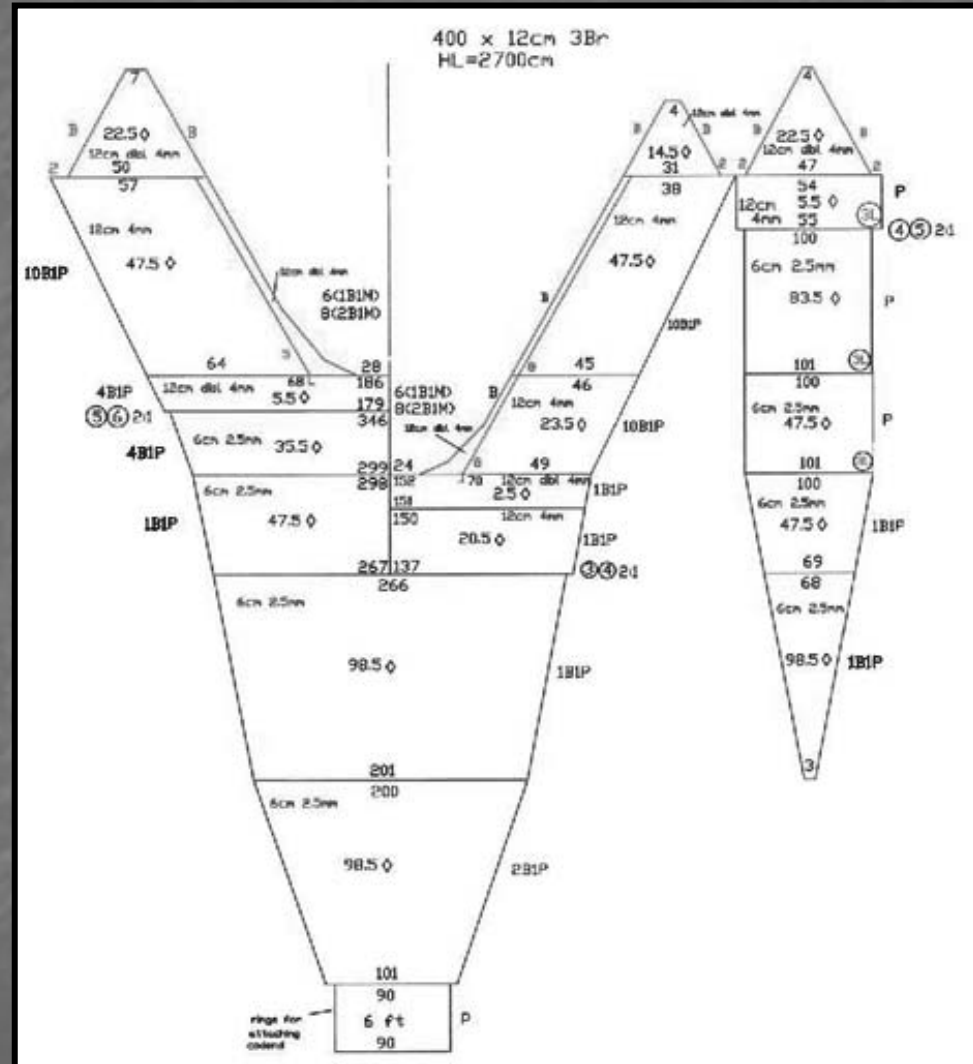
# NEAMAP Pilot Trawl Survey

## Trawl Gear - Net



# Trawl Gear - Net

- Four-seam, three-bridle
- 23.36 m (76.6') headrope length
- 12 cm (4.7") and 6 cm (2.4") mesh
- 2.4 cm (1") knotless liner
- 60, 20.3 cm (8") hard plastic floats
- 7.5 cm (3") cookies for footrope
- Footrope attached to 7.5 cm (3") cookie sweep by traveler
- 36.6 m (120') bridles



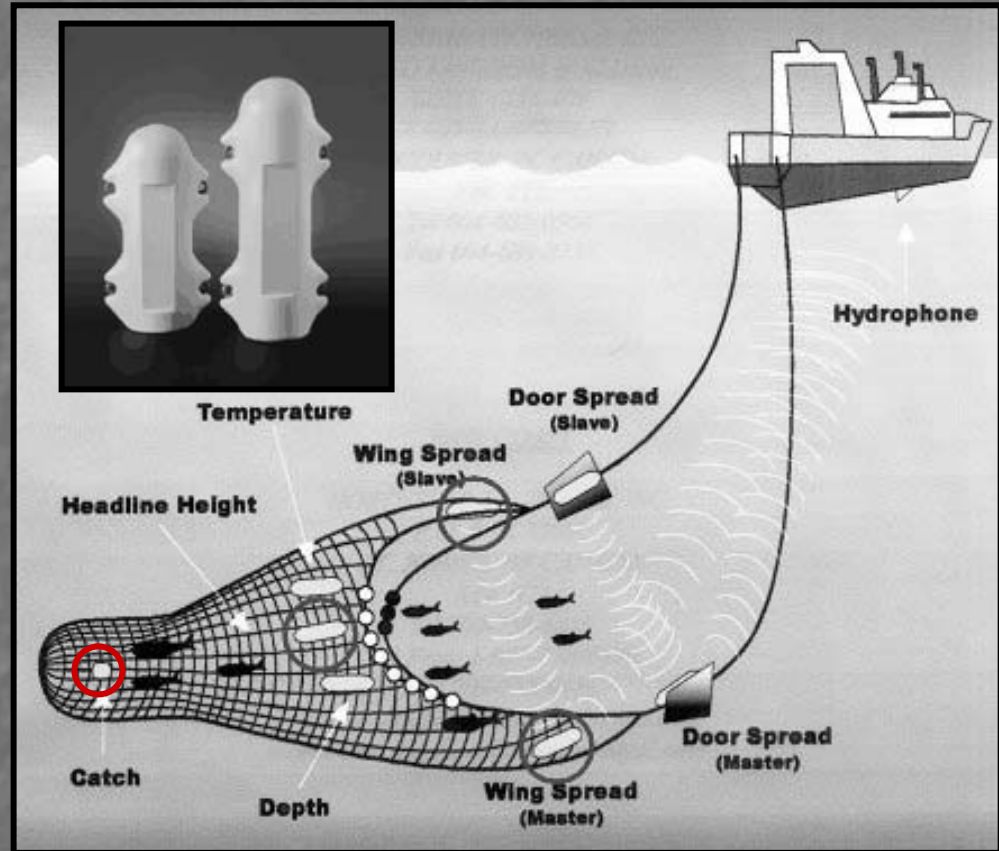
# Trawl Gear - Doors

- Thyboron, Type IV
- 66 inches in length
- 360 kg each
- First trial of this net/door combination in survey work



# Net Monitoring Gear

- Used NETMIND™ Trawl Monitoring System
- Measured wingspread and headline height every 10-20 seconds
- Enabled investigation of the relationship between net geometry and fishing conditions



# 2006 Field Activities

- **May 9 & 10 – Initial field trials to test gear performance and protocol adequacy**
- **June 29 & 30 – NEFSC representatives invited to evaluate the net/door combination first-hand; more gear trials**
- **September 25 to October 15 – NEAMAP Inshore Pilot Trawl Survey Cruise**

# **RESULTS**

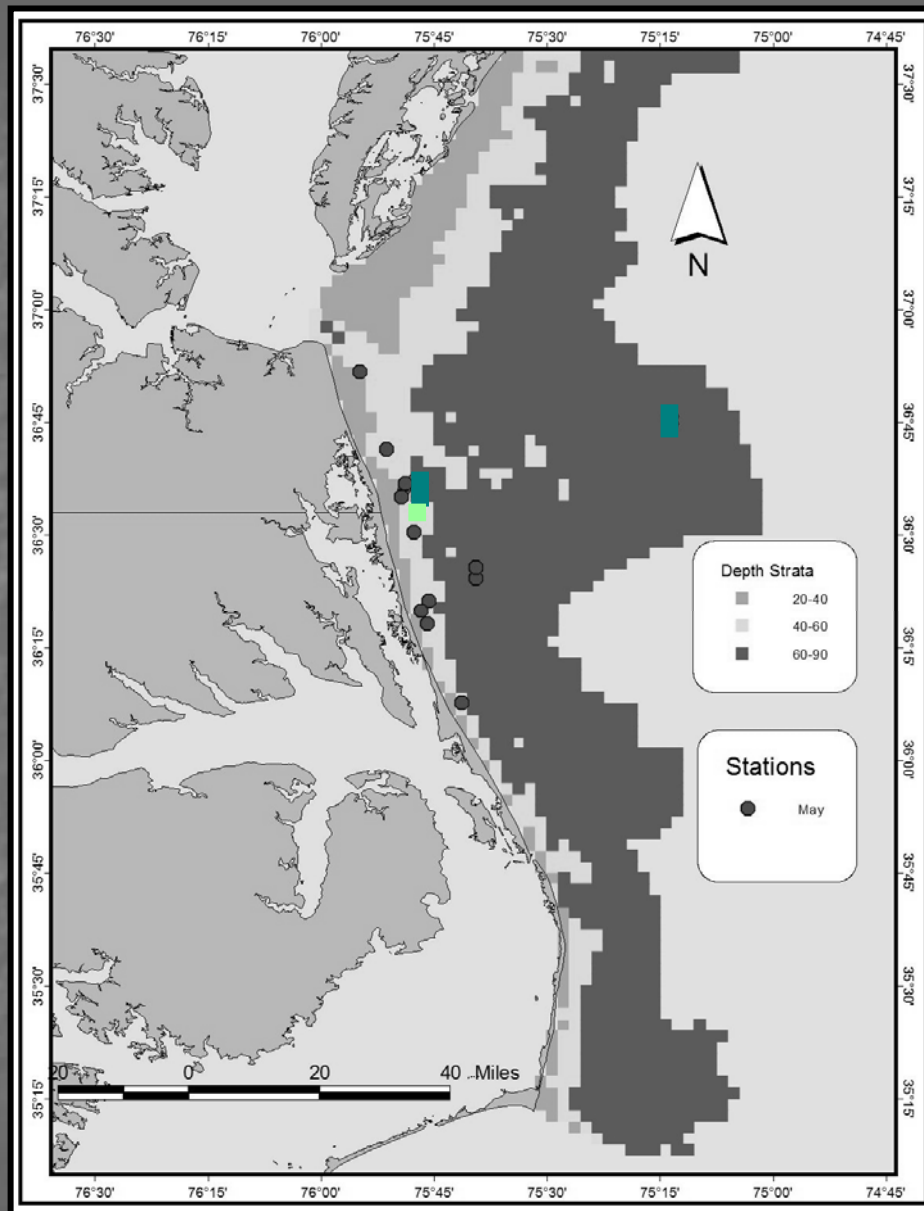
## **Net Performance**

# NEAMAP

## Initial Gear Trials

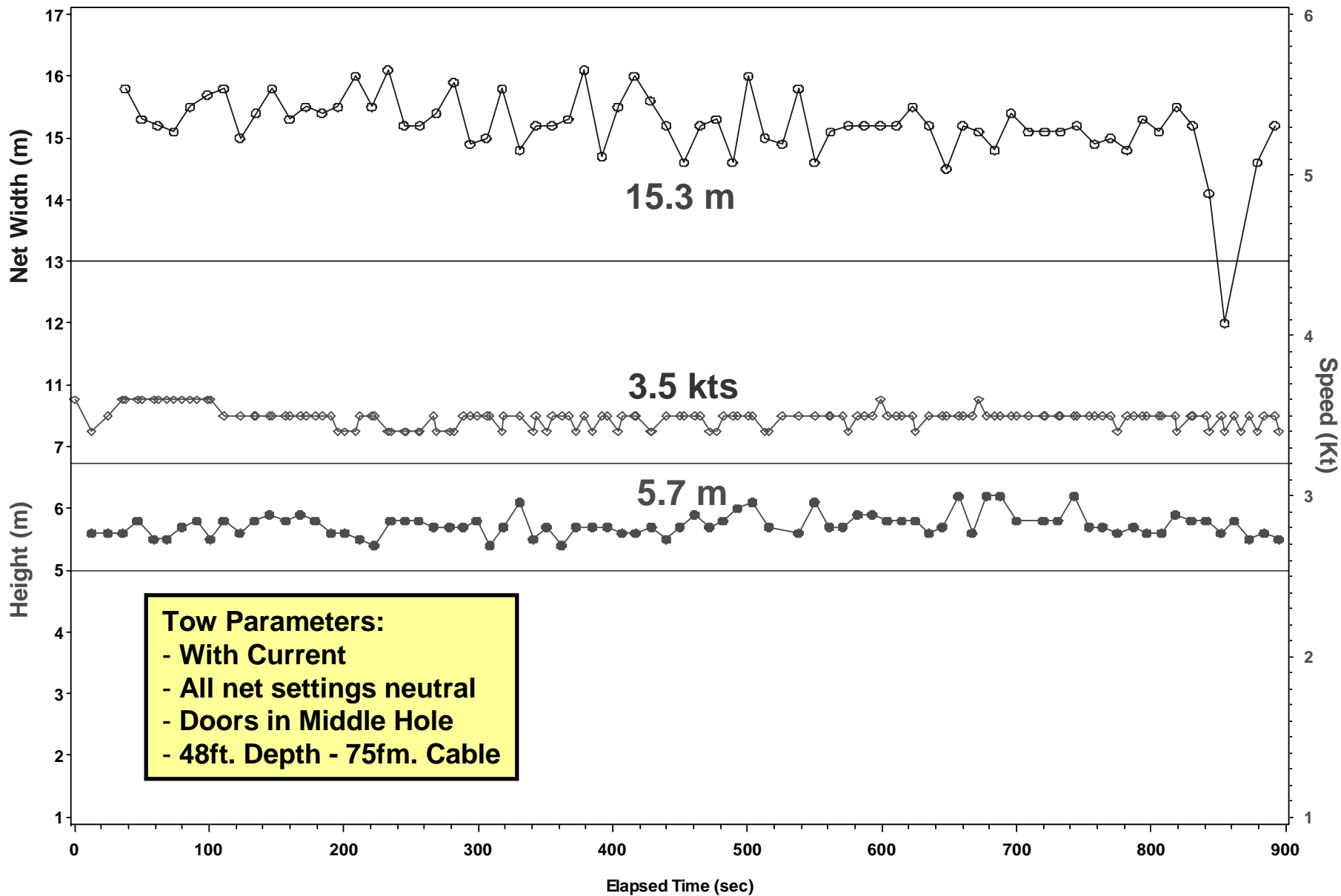
May 9 & 10

Stations Selected



# VIMS-NEAMAP Pilot Cruise - Netmind Test Results

Station=000001

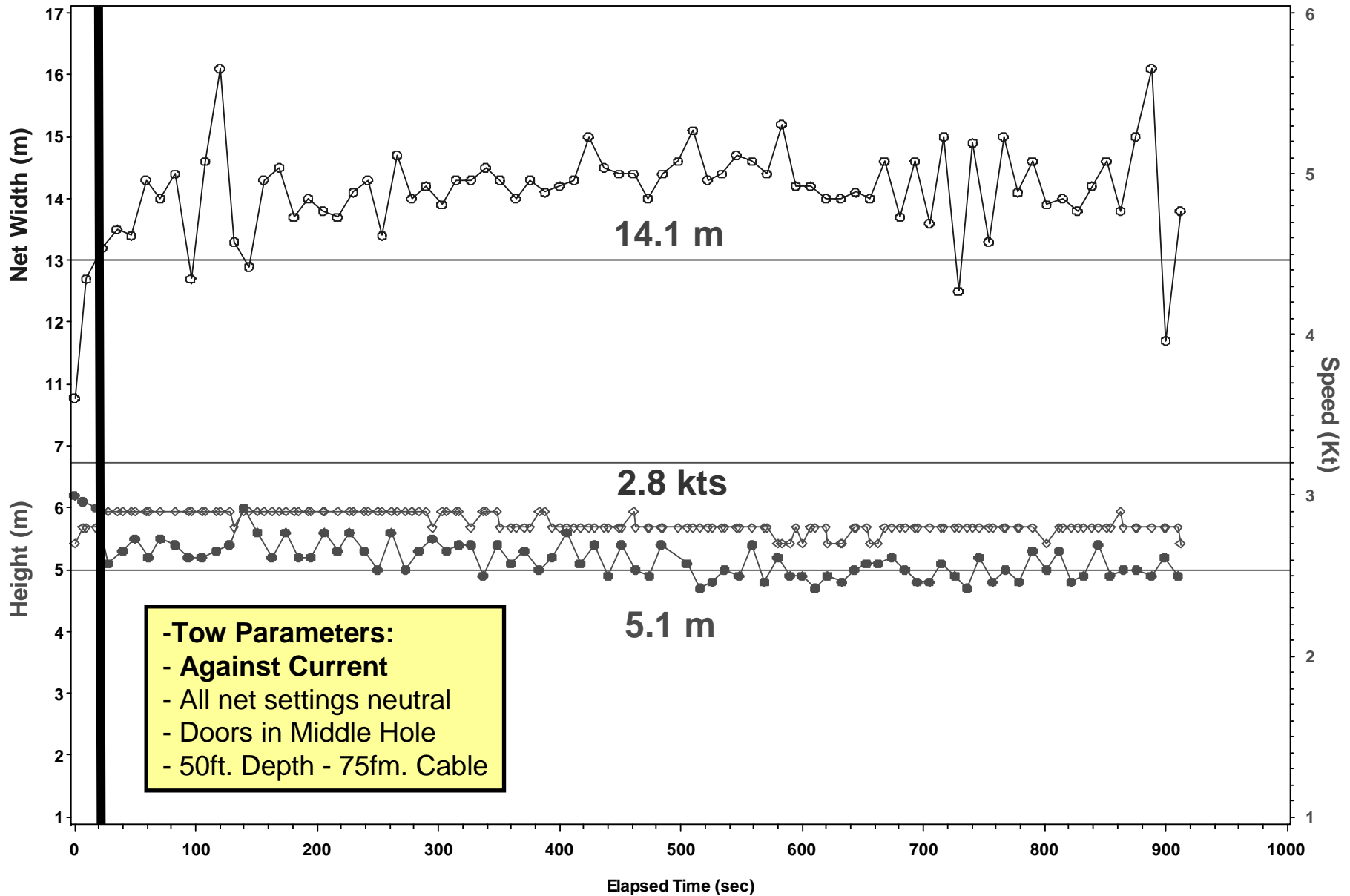


## Tow Parameters:

- With Current
- All net settings neutral
- Doors in Middle Hole
- 48ft. Depth - 75fm. Cable

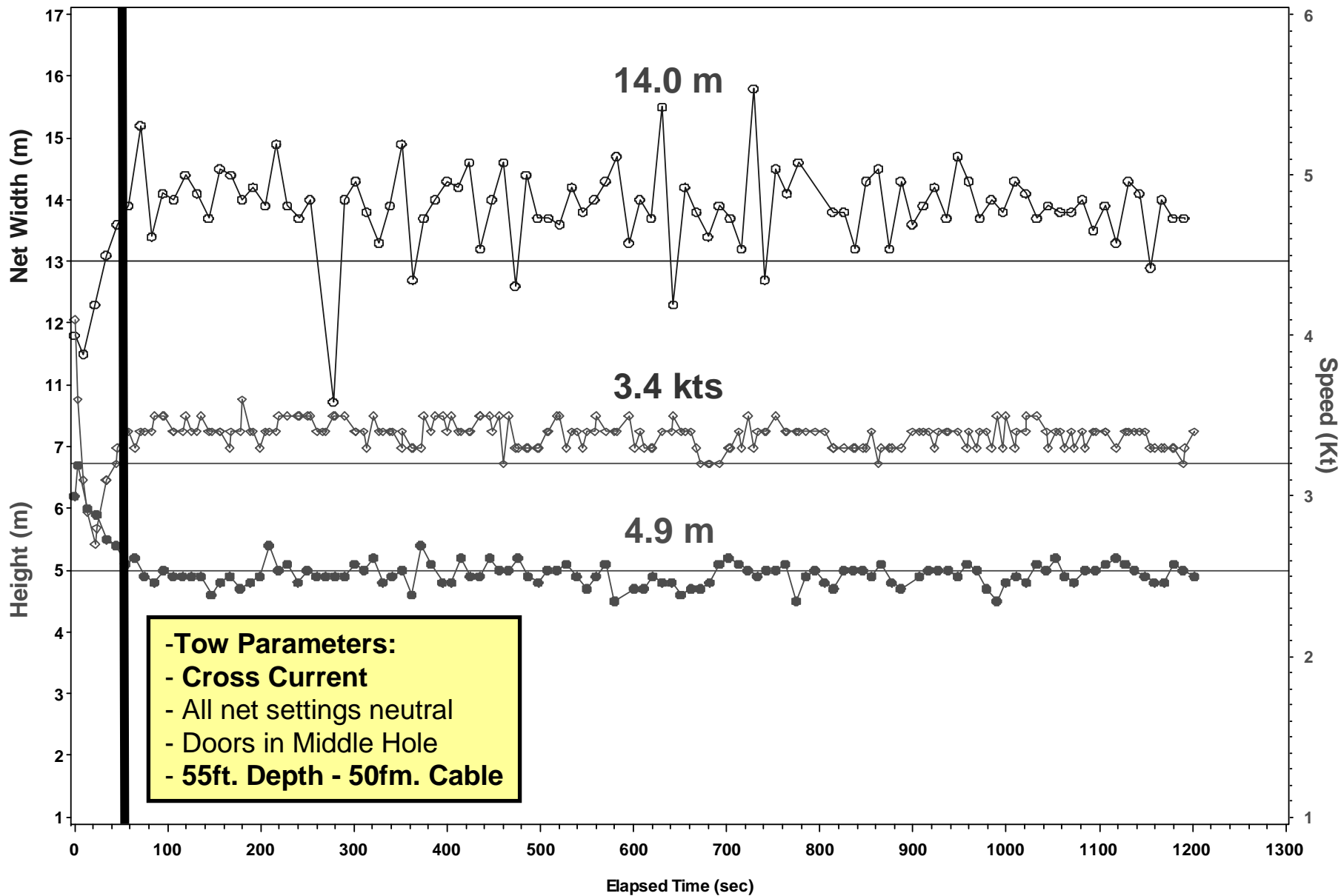
# VIMS-NEAMAP Pilot Cruise - Netmind Test Results

Station=000002



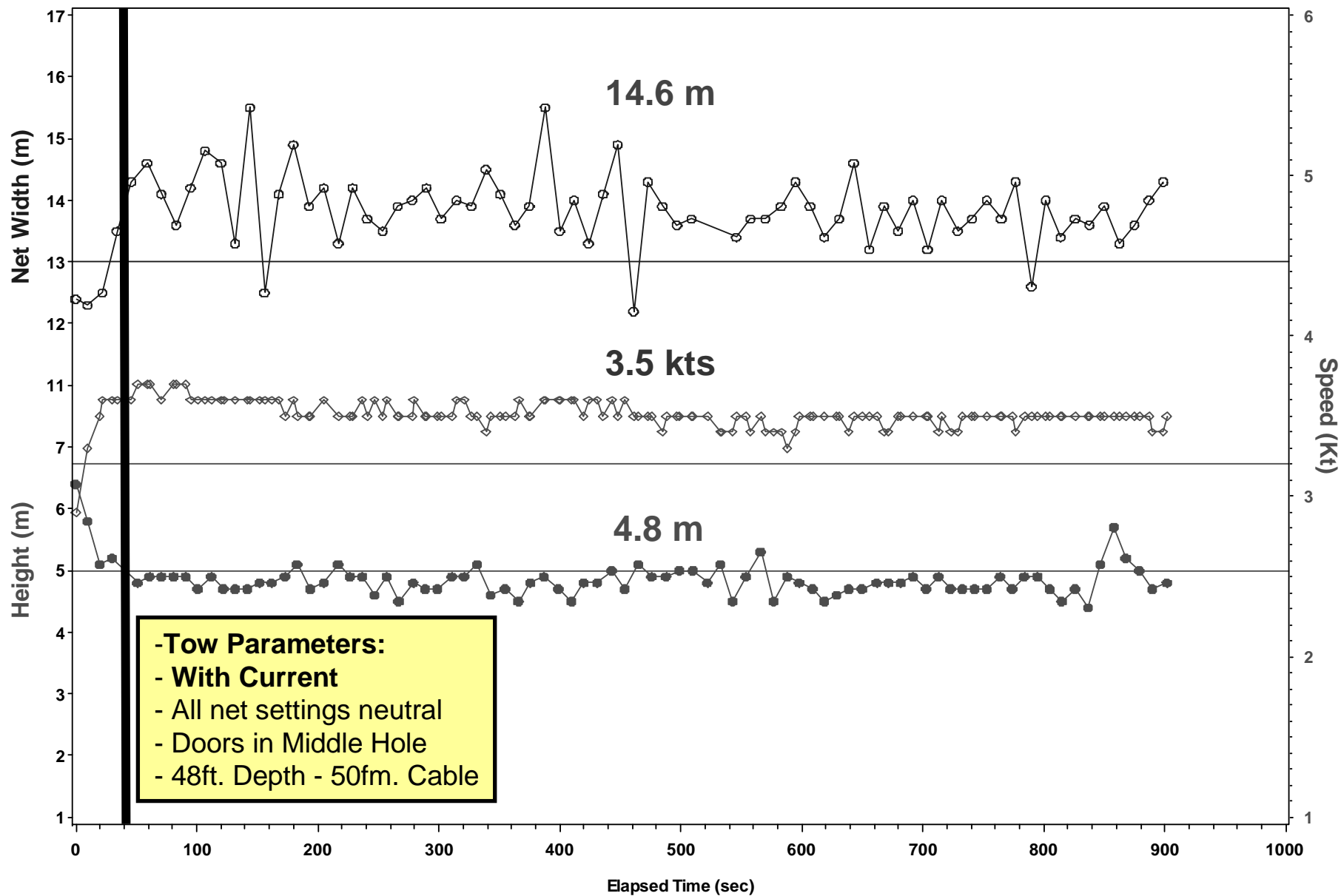
# VIMS-NEAMAP Pilot Cruise - Netmind Test Results

Station=000003



# VIMS-NEAMAP Pilot Cruise - Netmind Test Results

Station=000004



# Tow 5

## Not Recorded Due to a Computer Glitch

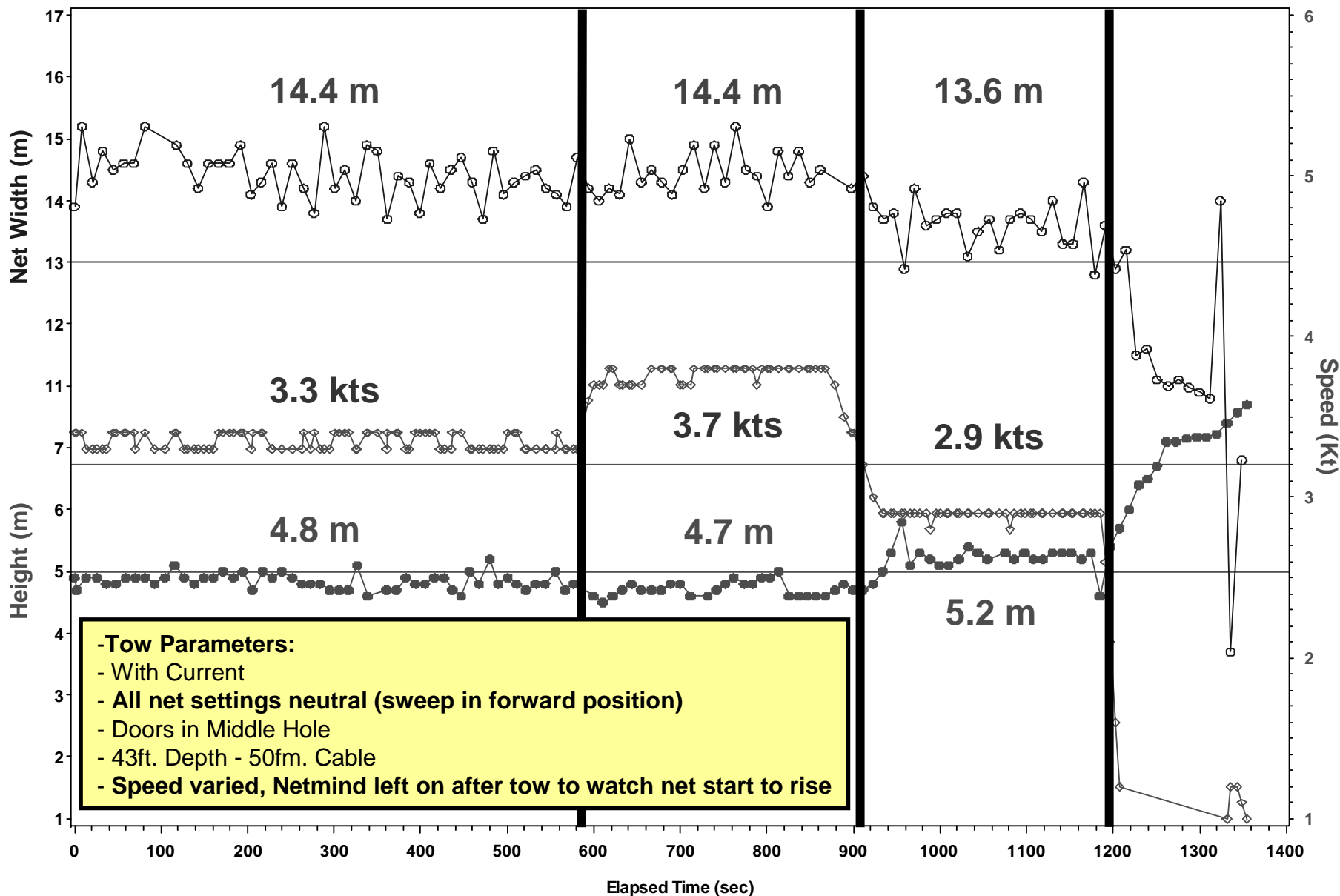
### **Tow Parameters:**

- With Current
- **Top bridle in 50cm.**
- Doors in Middle Hole
- 44ft. Depth - 50fm. Cable
- 3.6 knots

**Results: Headline down 0.5m to 1.0m;  
Wingspread unchanged**

# VIMS-NEAMAP Pilot Cruise - Netmind Test Results

Station=000010

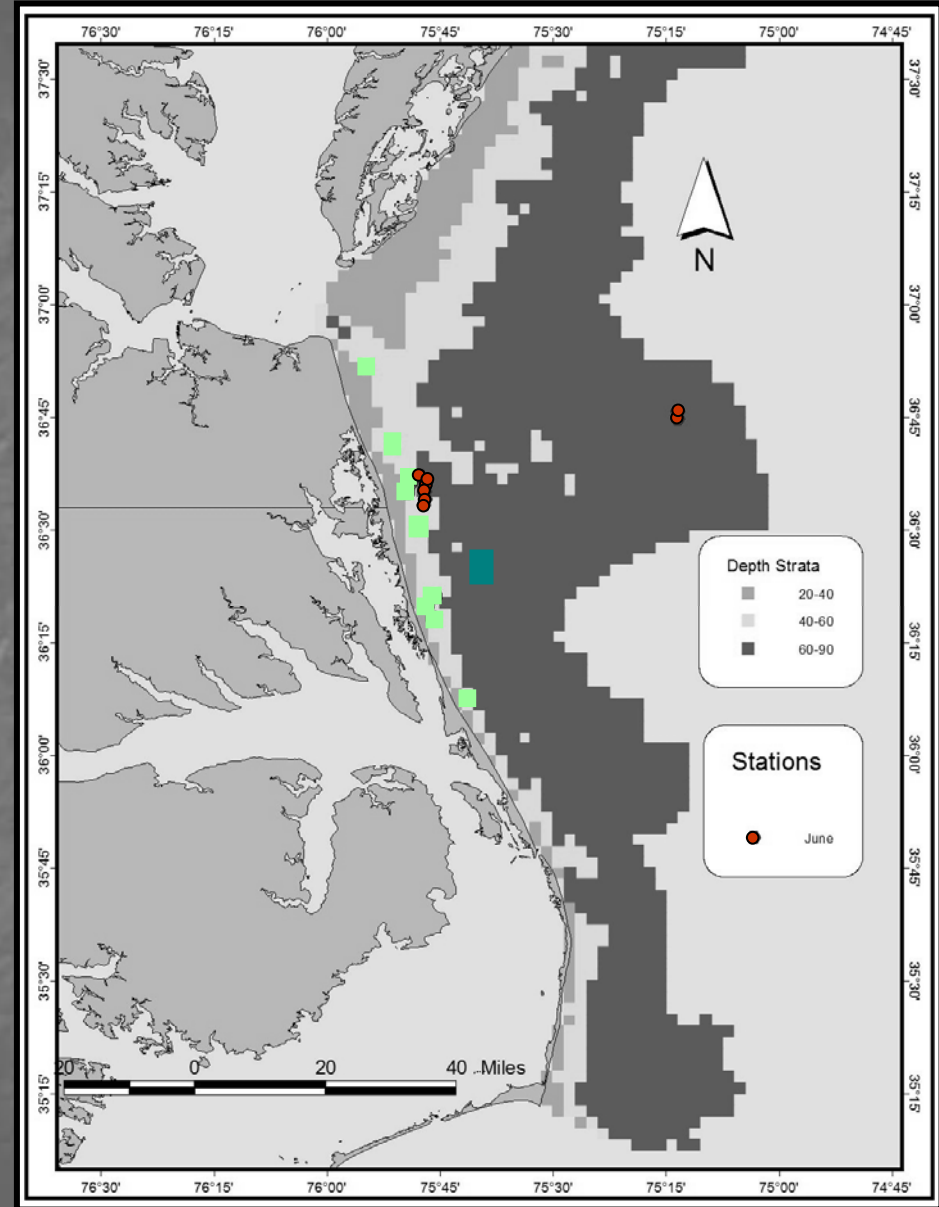


# NEAMAP / NEFSC

## Gear Trials

### June 29 & 30

### Stations Selected

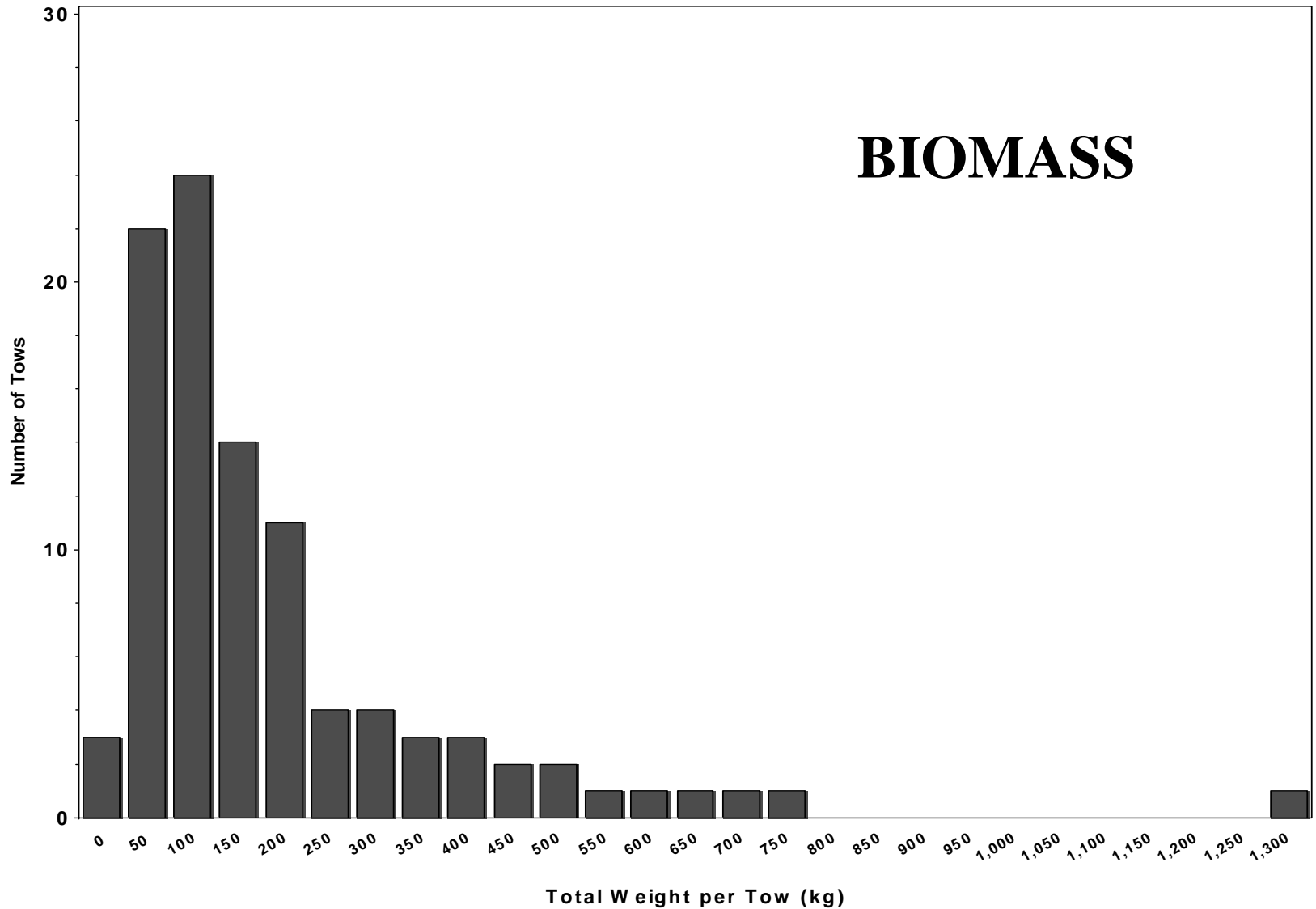




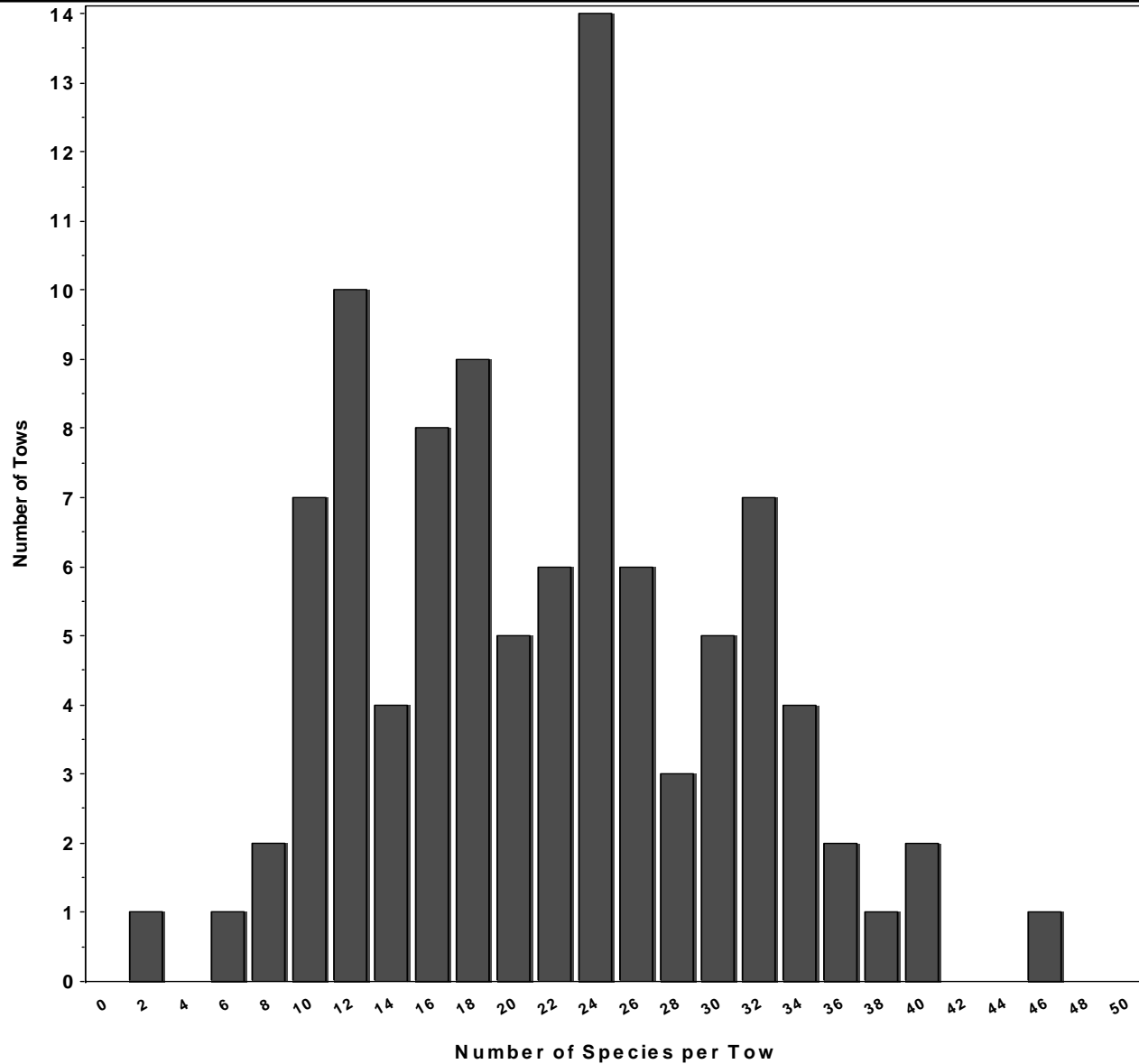
# RESULTS

## Catch Summaries

# Catch Per Station



# Species Diversity



# Summary

- May work was first trial for this net/door combination - net performed as expected (13-14 m wingspread, 5-5.5 m headrope) in inshore waters
- June work allowed for NEFSC to observe gear and for additional performance tests
- Fall pilot cruise showed that this net/door combination is an effective gear for use in our fishery-independent coastal trawl survey