



# The *R/V Pelican's* Experiences with the HiSeasNet Small-footprint Ku-band System

Brenda Leroux Babin



# Who are we?



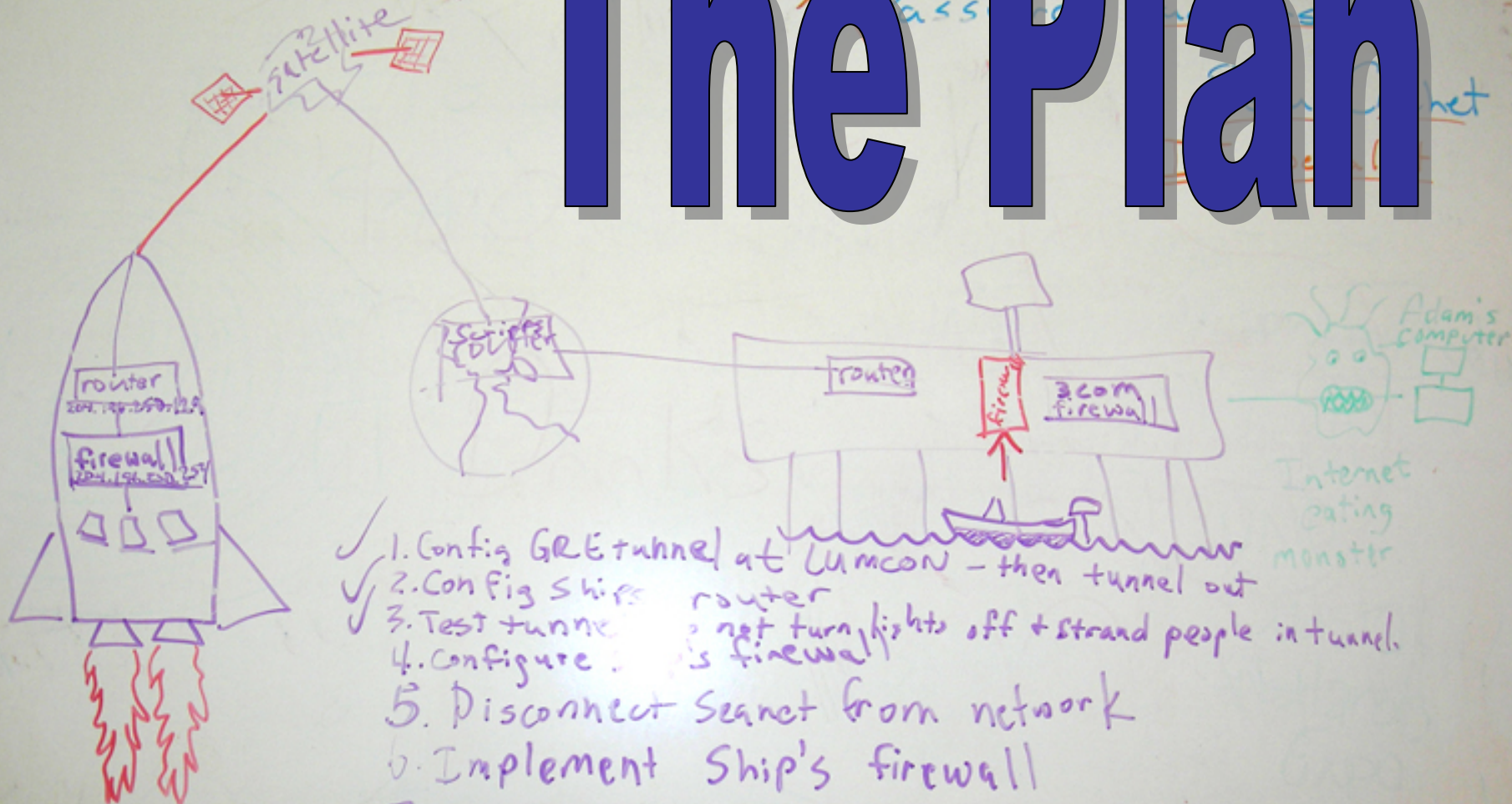
# LUMCON



# *RV Pelican*



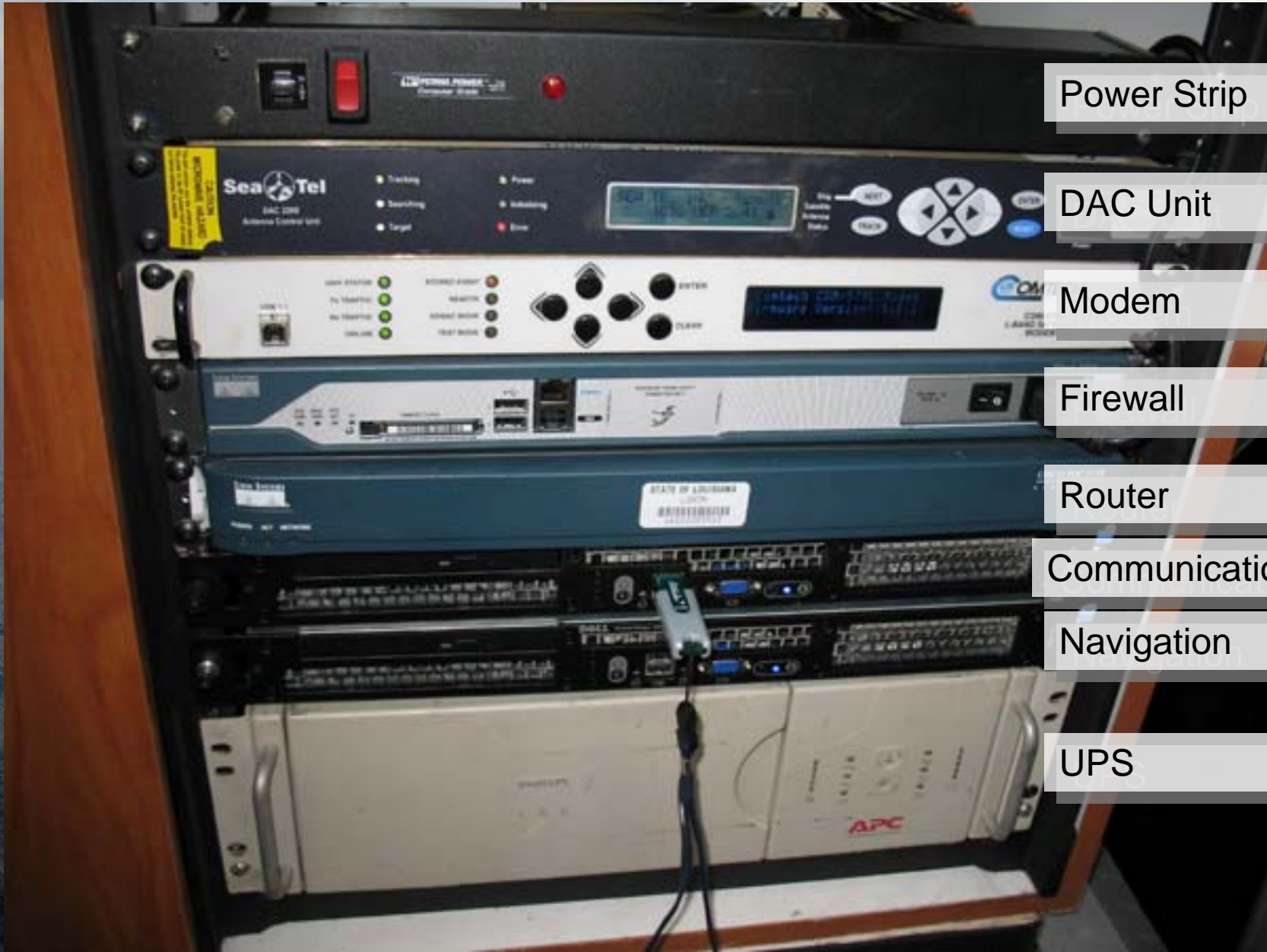
# The Plan



- ✓ 1. Config GRE tunnel at Umcon - then tunnel out
- ✓ 2. Config Ship's router
- ✓ 3. Test tunnel - net turn lights off + strand people in tunnel.
- 4. Configure Ship's firewall
- 5. Disconnect Seanet from network
- 6. Implement Ship's firewall
- 7. Skype



**SeaTel 4006 1, Ku-band Antenna**



Power Strip

DAC Unit

Modem

Firewall

Router

Communications

Navigation

UPS



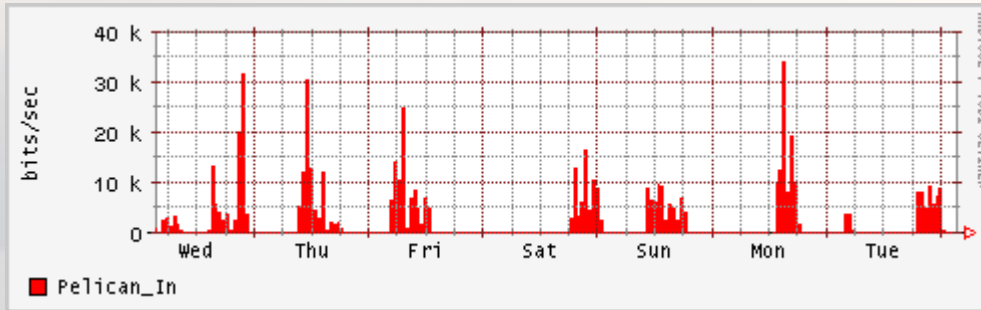
## recent news

17 AUGUST  
2006: R/V  
Pelican,  
operated by  
Louisiana

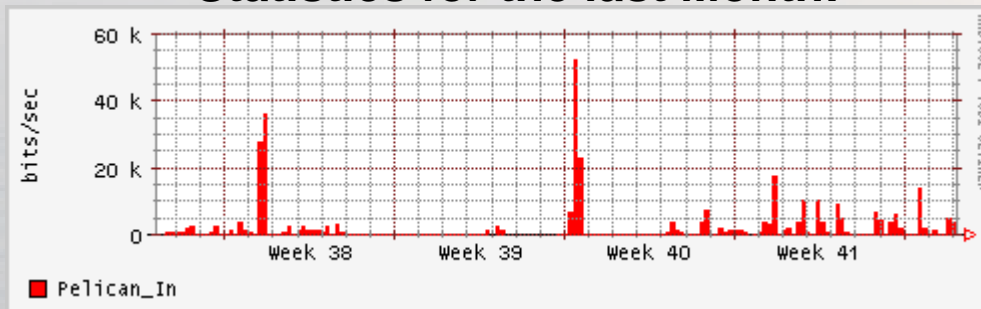


Universities Marine  
Consortium, is now online via  
HiSeasNet. Pelican utilizes a  
SeaTel 4006 1m Ku-band  
antenna. Internet traffic is  
passing through a SatMex 5  
to the HiSeasNet earth  
station that sits on top of the  
San Diego Supercomputer  
Center's primary building.  
Traffic plots are available  
online [here](#).

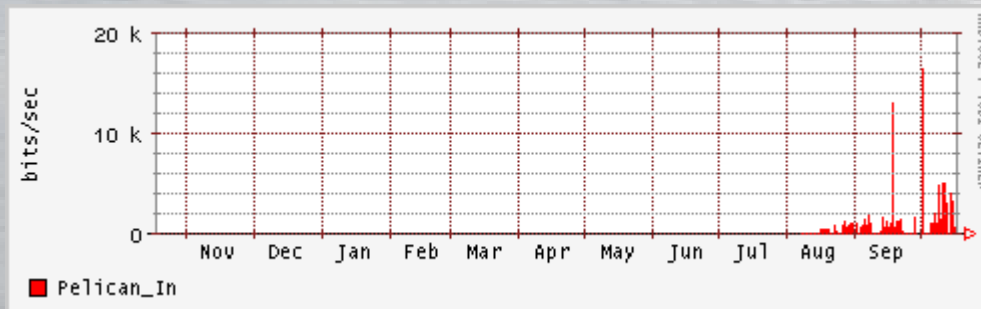
## Statistics for the last week:

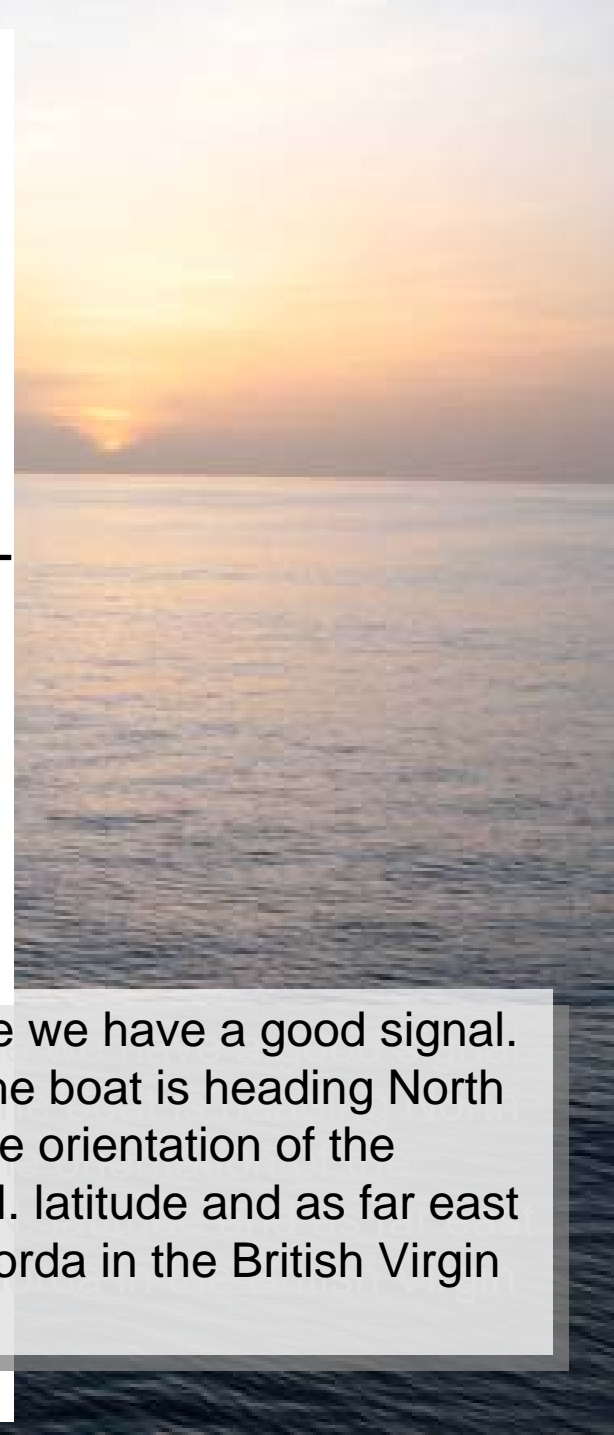
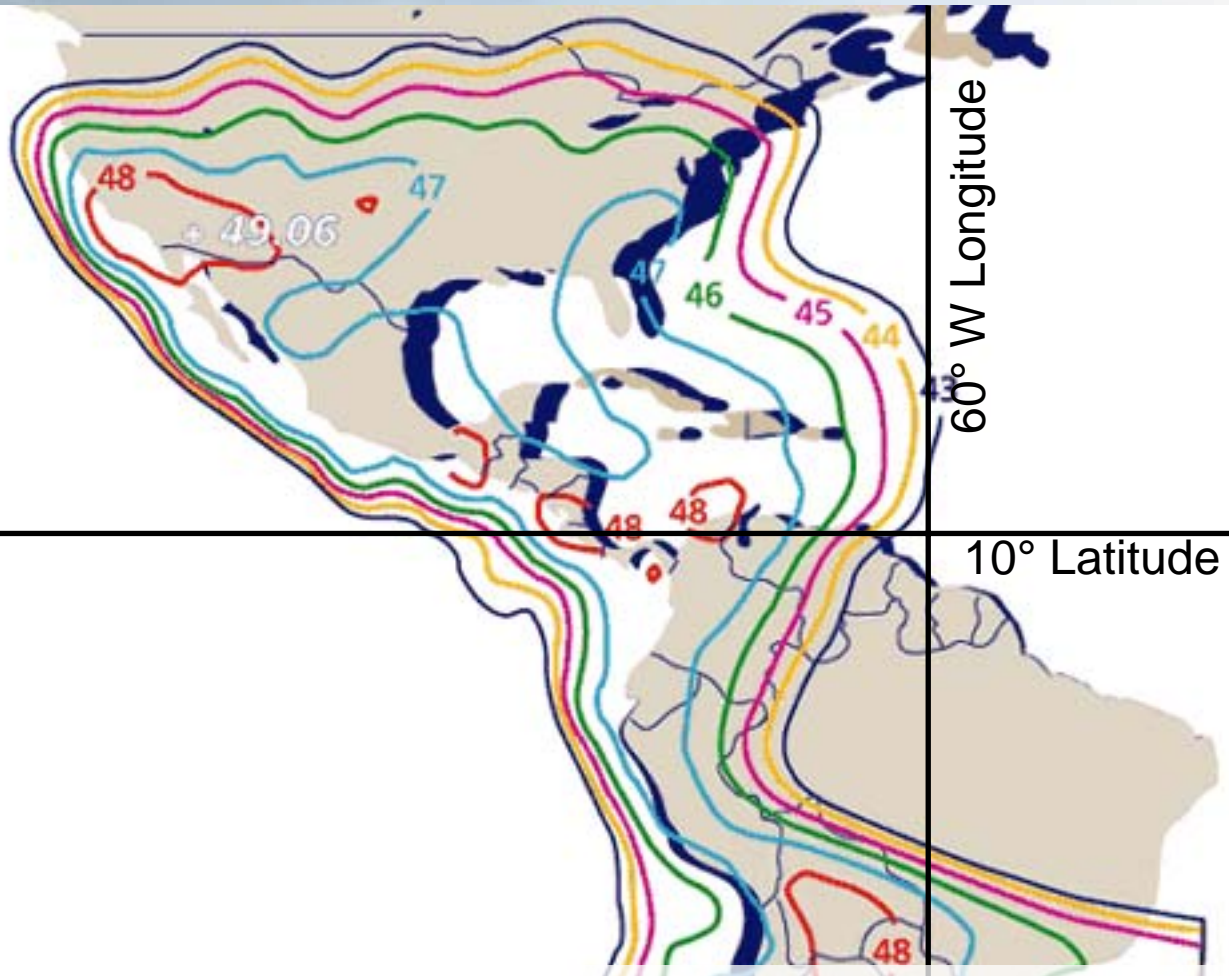


## Statistics for the last Month:



## Statistics for the last Year:





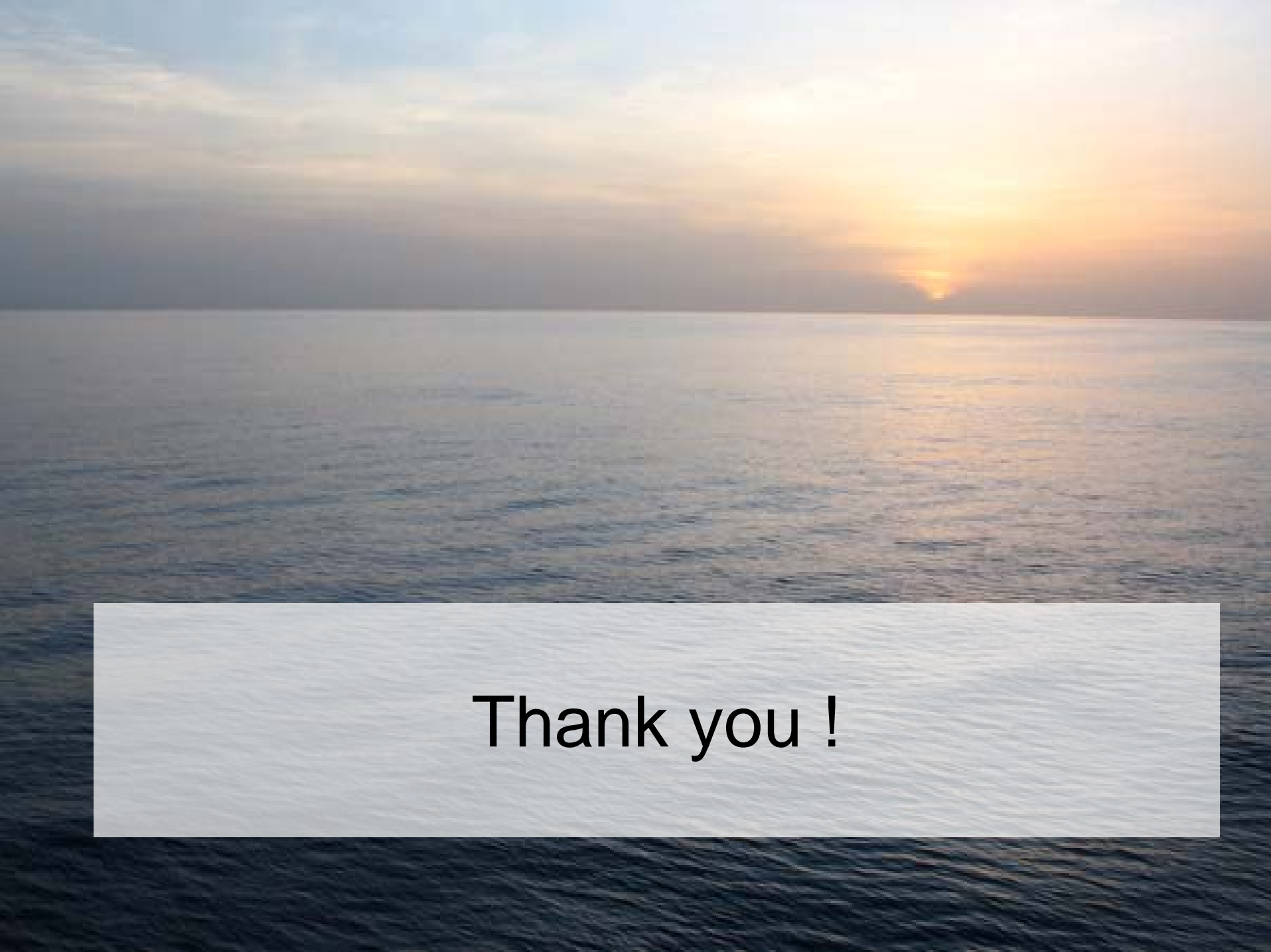
As for as the way it has been working... Most of the time we have a good signal. The boat has problems gaining access primarily when the boat is heading North and North east, and West is a problem. All leading to the orientation of the antenna. We have good reception as far south as  $10^{\circ}$  N. latitude and as far east as  $60^{\circ}$  W. longitude. We are currently south of Virgin Gorda in the British Virgin Isles and signal is good. --Captain Craig Leboeuf





# Future Plans

- Develop HiSeasNet Policy
- Implement the firewall
- Add entire ship to network
- Increase communication opportunities for scientists
- Display MIDAS data at [www.lumcon.edu](http://www.lumcon.edu) in real time



Thank you !