#### AEROKATS\* and ROVER\*\* Education Network

#### **AREN**

- Regional Educational Service Agency)
- \*Advancing Earth Research Observations with Kites and Atmospheric/Terrestrial Sensors (AEROKATS)

\*\*Remotely Operated Vehicles for Education and Research (ROVER)

AREN Project Manager at NASA: Geoff Bland
Goddard Space Flight Center, Earth Science Office of Field Support
Wallops Flight Facility, Wallops Island VA 23337





#### CBEC - AREN Team



Alissa Quinton, Hanna Spongberg, Judy Wink, Eileen Friedman (left to right)

## **ROVER Parts**



ROVER X - 4.1



ROVER X - 3.1

## Support Equipment



#### Internal Guts

ROVER X - 3.1



ROVER X - 4.1



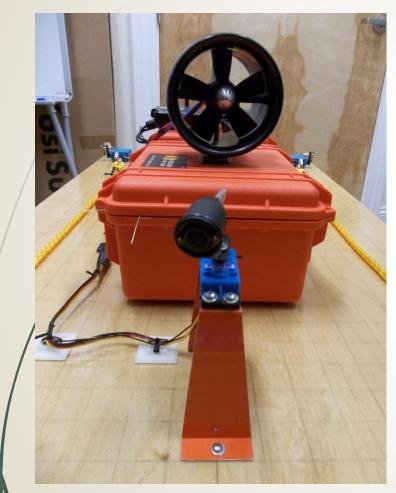
Power Box

Payload Box

## LabQuest2



## **External Parts**





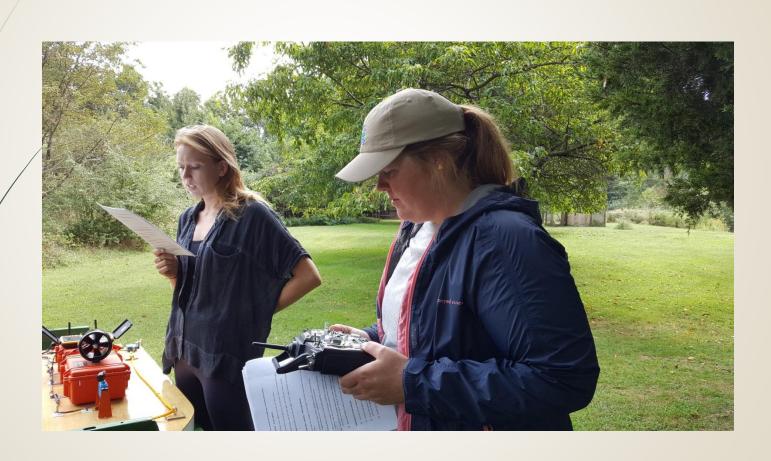
Swimdeck

FWD Camera

## **ROVER Transportation**



# Testing Equipment



## Vehicle Preparation



# Futaba T7C Remote Control Equipment

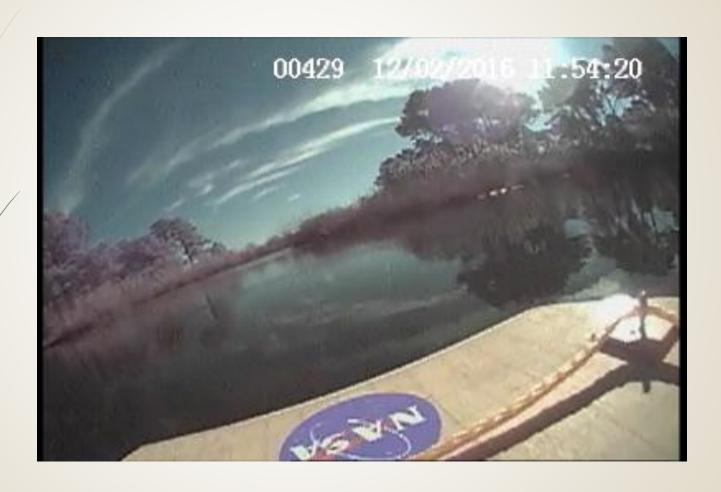


# Ground Station Equipment





## FWD Camera



#### AFT Camera

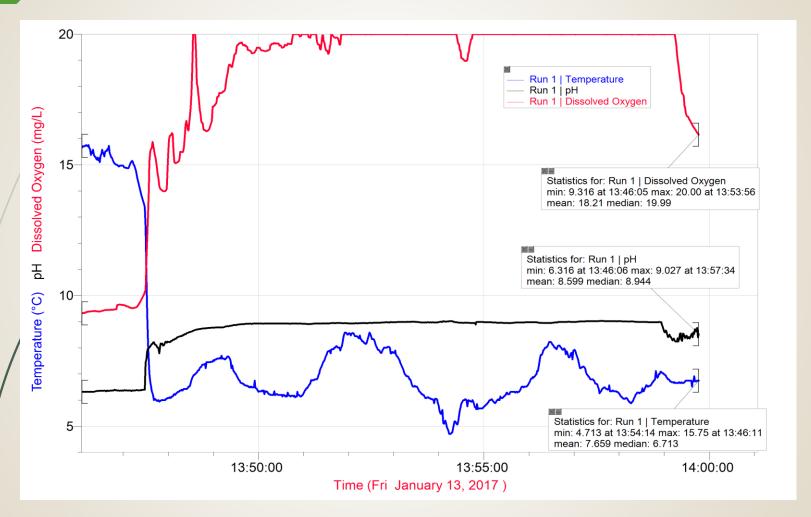


## Data Collection





#### **ROVER Run 1-13-17**



ROVER X- 4.1 data collected – Temperature, pH, Dissolved Oxygen w/ statistics, 1/13/17

#### Hand Held Sensors





# AEROKAT Equipment



#### Profiler's



Anemometer

Kestrel

## Aeropod



#### Cameras



V-Tech



Lumix

# Monopod





## Payload Hookup





#### Data Collection





# Marsh Mapping - Fall



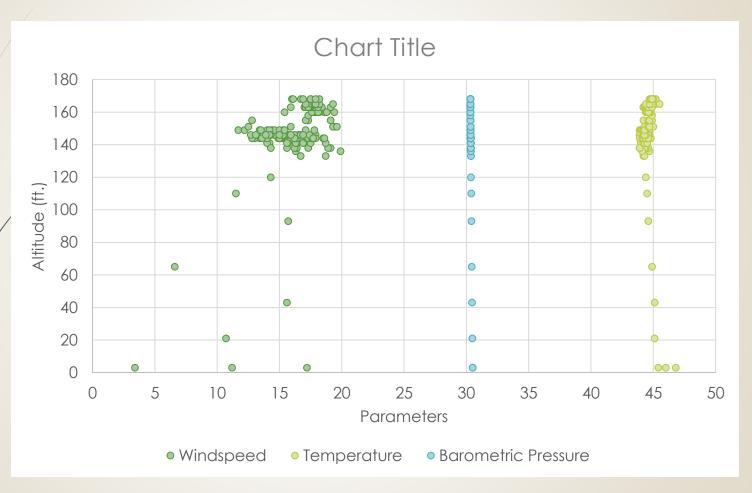
Kayak Dock - 09/06/2016

# Marsh Mapping 2 – Winter



Kent Narrows Beach- 12/27/2016

## Air Quality Data



AEROKAT data collected – Windspeed, Temperature, Barometric Pressure vs. Altitude

# Rain Gauge

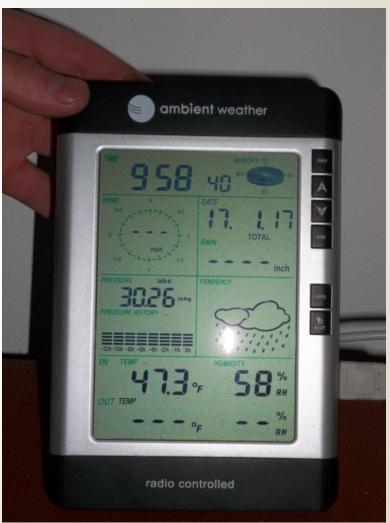


## Weather Station



#### Weather Station 2





# Things are looking up! - CBEC AREN Team

