# GRANT RAWSON

4301 Rickenbacker Cswy, Miami, FL 33149 | 305-361-4363 | grant.rawson@noaa.gov

## EDUCATION

University of Miami, Rosenstiel School of Marine and Atmospheric Science
**Master's Degree in Professional Science**                           **2020**
"Spatial Analysis of Underwater Glider Data from Puerto Rico
During the 2017 Atlantic Hurricane season"

University of Miami
**Bachelor's Degree in Marine Science**                           **2003**

## PROFESSIONAL EXPERIENCE

**National Oceanic and Atmospheric Administration**                           **2021-present**
Physical Scientist

**University of Miami**                           **2003-2021**
Senior Research Associate, Research Associate 3, Research
Associate 2, Research Associate

## PUBLICATIONS AND PAPERS

- G.Rawson, "Spatial Analysis of Underwater Glider Data from Puerto Rico During the 2017 Atlantic Hurricane Season"
- G.Rawson, U.Rivero, G. Goni, R. Domingues, F. Bringas, J. Dong, H-S. Kim, G. Halliwell, J. Morell, L. Pomales, and P. Chardon, "NOAA/AOML-CARICOOS Underwater Glider Operations in Support of Tropical Cyclone Intensification Studies" 2018 IEEE/OES Autonomous Underwater Vehicle Workshop (AUV)

## RECENT PRESENTATIONS

- NOAA/AOML's 2021 Virtual Open House – Eyes on our Oceans – AOML's Hurricane Underwater Gliders – How underwater gliders collect data before, during, and after tropical cyclones to improve Hurricane Intensity forecasts
- ALAMO Float Program Planning Meeting – September 2020 - Organized and executed interagency planning meeting for the innovative program of deploying ALAMO floats from NOAA's P-3 Hurricane Hunter Aircraft.  Coordinating personnel from NOAA's Office of Marine and Aviation Operations Atlantic Operations Center, NOAA AOML's Hurricane Research Division, NOAA AOML's Physical Oceanography Division, and the manufacturer of ALAMO floats - Marine Robotic Vehicles

- NOAA's AOML and Integrated Ocean Observing Systems (IOOS) Improving Forecasting and Assimilation (IFAA) 2019/2020 Hurricane Glider Workshop. – April 2020 – Presented AOML's component of NOAA's Uncrewed Systems Strategy program during the 2019 Atlantic Hurricane Season.  Detailing work completed during the 2019 in the Caribbean Sea and Tropical North Atlantic, from Puerto Rico, The United States Virgin Islands, The Dominican Republic and South Florida
- NOAA AOML's Physical Oceanography Division's 2019 Underwater Glider Training Program – October 2019 – Conducted multi-day training program on the development, testing, parameters, characteristics, piloting, and maintenance of Underwater Gliders.  Training was attended by national and international partners from NOAA, CARICOOS in the Puerto Rico, OCOVI in the United States Virgin Islands, PacIOOS in Hawaii, and ANAMAR in The Dominican Republic
- University of Miami Underwater Glider Symposium – August 2019 – Spatial Analysis of Underwater Glider Data from Puerto Rico During the 2017 Atlantic Hurricane Season. Presented findings of NOAA's Hurricane Underwater Glider Program to University Students and Professors, NOAA Principal Investigators and Directors, as well as University and NOAA researchers
- Institute of Electrical and Electronics Engineers Oceanic Engineering Society Autonomous Underwater Vehicle Symposium (AUV2018) – November 2018 – Presented NOAA/AOML-CARICOOS Underwater Glider Operations in Support of Tropical Cyclone Intensification Studies

RELATED EXPERIENCE
- Seaglider Pilot
- Seaglider Engineer
- AAUS Certified Research Diver
- U.S. Coast Guard Certified Small Boat Operator
- Diver's Alert Network (DAN) Diving First Aid for Professional Divers
    - First-Aid
    - CPR
    - AED
    - Field Neurological Examination
    - Oxygen Administration

- Hardware
    - Hydroid Seagliders, Autonomous Underwater Vehicles (AUVs), Sea-Bird Electronics sensor suite, Aanderaa Optodes, Teledyne Marine Acoustic Doppler Current Profilers, Expendable Bathythermographs, RM Young Meteorological Sensors, Dropsonde Data

Recorder, 'Omics sensors, Guildline Autosalinometer, Automated Amperometric Oxygen Titration Systems, ALAMO floats, ARGO floats

- Software
  - ArcGIS, Matlab, Seaglider Piloting Tools, WinSCP, Microsoft office suite, Google office suite, Adode Acrobat DC, Sea-Bird Electronics data collection and processing suite, WinADCP, AmverSEAS, iMovie

MEMBERSHIPS
- Marine Technology Society
- Institute of Electrical and Electronics Engineers (IEEE)
- IEEE Oceanic Engineering Society
- NOAA's Diversity and Professional Advancement Working Group
- NOAA/AOML's Diversity and Inclusion Committee
- NOAA/AOML's COVID-19 Reintegration Committee
- NOAA/AOML's Buoy & Gulls Morale club (Treasurer)

AWARDS
- 2021 Federal Employee of the Year nominee as part of the DIY Committee "For working tirelessly to ensure the best possible quality of work/life balance for AOML employees, to promote diversity and inclusion in the STEM fields, and to participate in diversity and inclusion efforts at higher levels of NOAA.
- 2021 Ocean Observing Team Award "For transforming understanding of Atlantic circulation with a breakthrough in observing system design, providing continuous, cost-effective measurements"
- 2021 Bronze Medal Award in Scientific of Engineering Achievement "For the successful coordination and operation of the "picket Fence" of underwater gliders during the 2019 hurricane season for improved forecasting" – CI Member
- 2017 Administrator's Award "For Surveying Cuban waters and establishing a groundbreaking multinational Atlantic bluefin tuna research partnership with Cuban scientists" – CI Member
- 2016 Bronze Medal Award "For the rapid and successful implementation of an array of underwater gliders geared towards Caribbean Sea and Tropical Atlantic hurricane research forecasts" – CI Member

OUTREACH
- Founded a volunteer program for underrepresented groups in Marine Science.  Program matches students from underrepresented groups in Marine Science programs at Universities in the United States and Puerto Rico to Research Cruise volunteer opportunities

on NOAA and UNOLS research ships, providing the students with invaluable experience. Program has involved more than 30 students to date.

- Interviewed for NBC Nightly News, The Today Show, and MSNBC "New Technology Helps Gather Critical Hurricane Intensity Data
- Filmed field journal on our Underwater Glider work during a pandemic for the NOAA Research and NOAA/AOML Instagram accounts and webpages
- Interview for Evening News Orlando "NOAA Using Unmanned Submarines to Track Hurricanes"
- Interview for Evening News Jacksonville Tropical Storm outlook with Alyssa Pejic
- WTSP "Scientists Hope a Small Fleet of Ocean Gliders Will Help Forecast Storm Intensity"
- Orlando Sentinel Interview with Joseph Pedersen
- 2020 AOML Virtual Open House – "AOML's Hurricane Underwater Glider Program"

## RECENT FIELDWORK

- Over 1,000 cumulative days at sea ranging from small boat costal operations to blue water hydrography.
- June 2021 – NOAA/CARICOOS 2020 Hurricane Underwater Glider Cruise
- February 2021 – University of Miami/NOAA – Meridional Overturning Circulation and Heat Array (MOCHA) / Western Boundary Time Series (WBTS) Research Cruise
- December 2020 – Western Boundary Time Series Florida Current Calibration Cruise
- July 2020 – NOAA/CARICOOS 2020 Hurricane Underwater Glider Cruise
- February 2020 – Western Boundary Time Series Florida Current Calibration Cruise
- December 2019 – Western Boundary Time Series Abaco Cruise
- November 2019 – NOAA/CARICOOS 2019 Hurricane Underwater Glider Cruise
- November 2019 – NOAA/CARICOOS/OCOVI 2019 Hurricane Underwater Glider
- September 2019 – Western Boundary Time Series Florida Current Calibration Cruise
- July 2019 – Western Boundary Time Series Florida Current Calibration Cruise
- July 2019 –NOAA/CARICOOS/OCOVI 2019 Hurricane Underwater Glider Cruise
- July 2019 – NOAA/CARICOOS 2019 Hurricane Underwater Glider Cruise