

Flower Garden Banks National Marine Sanctuary

Research and Management of Remote Offshore Resources Marissa F. Nuttall

Research Specialist

CPC, NOAA's Flower Garden Banks NMS









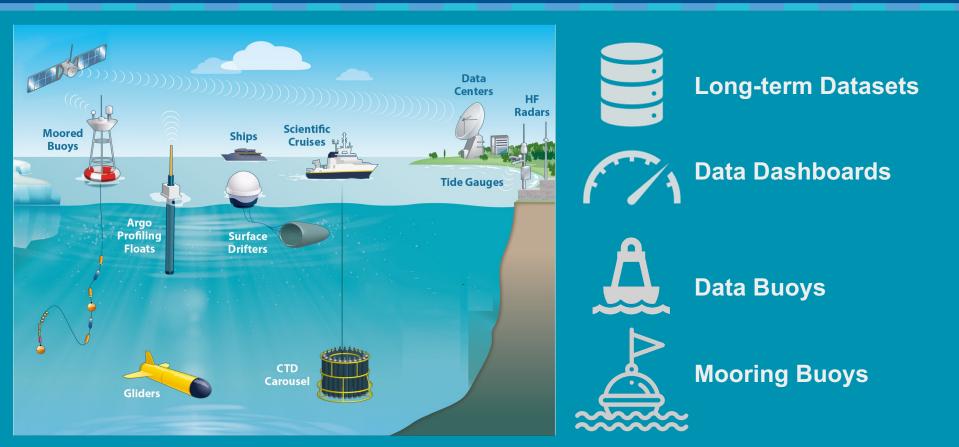
















Long-term Datasets



20yrs

NATIONAL CENTERS FOR /IRONMENTAL INFORMATIO



ERDDAP Easier access to scientific data

Benthic Cover

Water Quality

Water Column Profiles

10yrs

20

15yrs

Fish Community

Urchin Surveys

Nutrient Profiles

Carbonate

(a) Mean Percent Benthic Cover at East Flower Garden Bank from 1989-2022 100 -----Coral ----Macroalgae 90 80 ---CCA ----Sponge 70 ----Sand Mean Percent Cover 60 50 30 20 10 Year



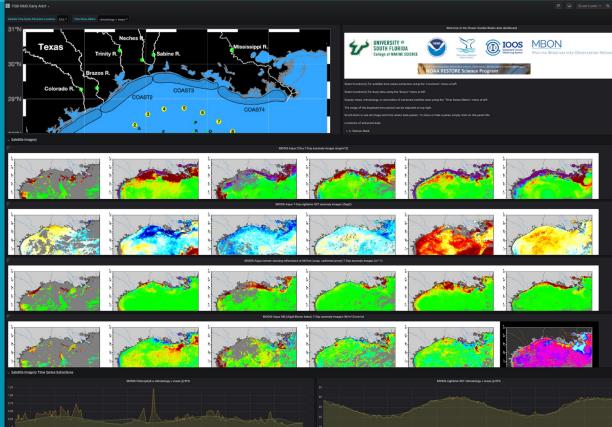


Early Alert System:

Monitoring a ring of sites around the Flower Garden Banks National Marine Sanctuary where anomalously high values of chlorophyll-a concentration, for example, can be detected from satellite imagery before reaching the reefs.



Dr. Daniel Otis http://fgbnms-dashboard.marine.usf.edu:3000





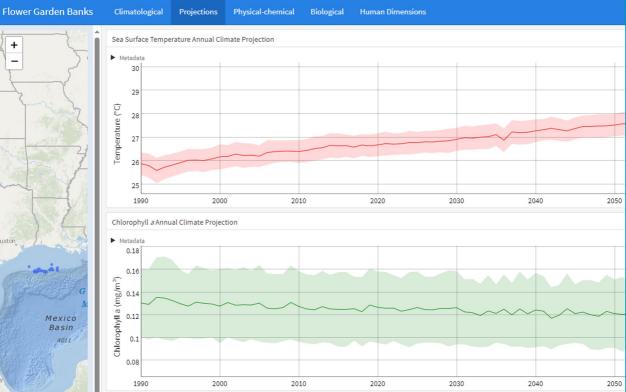


Climate Projections:

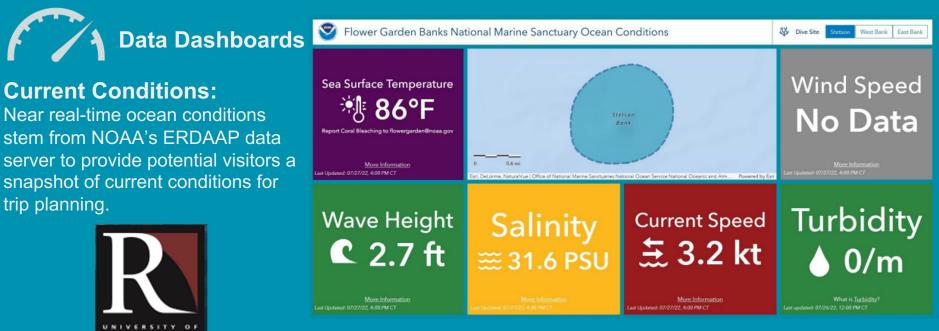
Climatology and projections of key oceanographic parameters across FGBNMS. This dashboard is underdeveloped to include biological and human dimensions.



Gretchen Luchauer https://noaa-onms.github.io/climatedashboard/FGBNMS.html#climatological

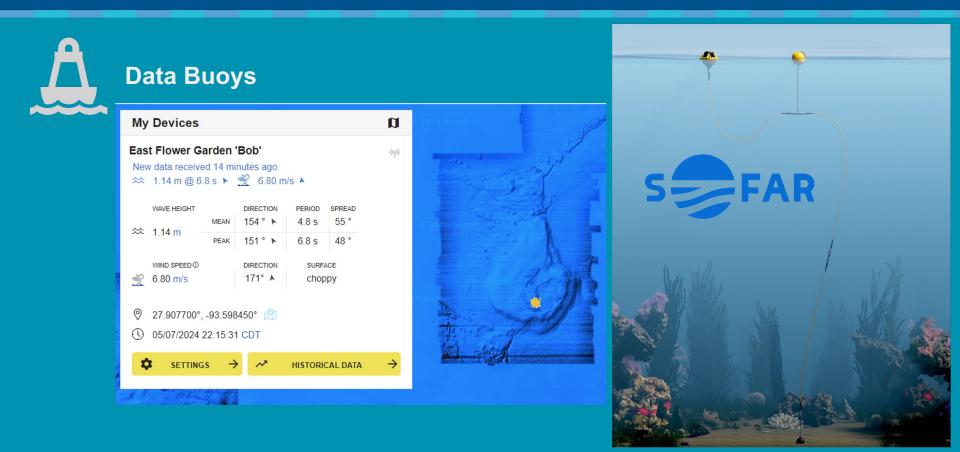






J. Keaton Thompson





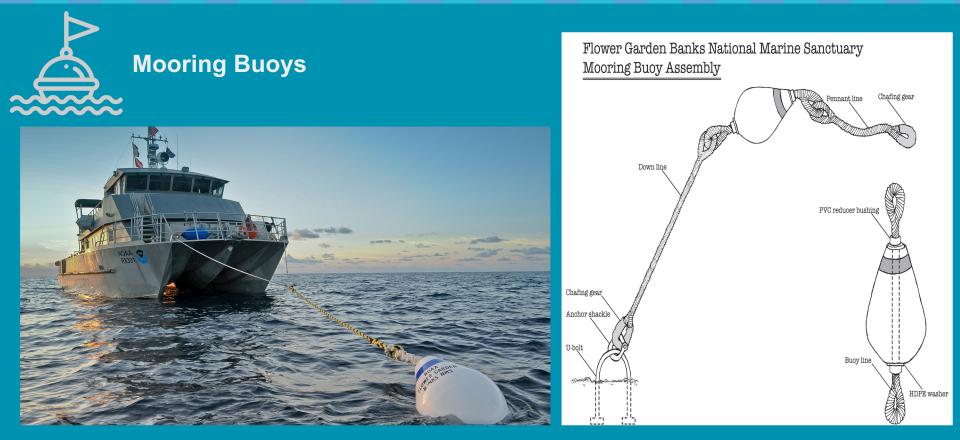




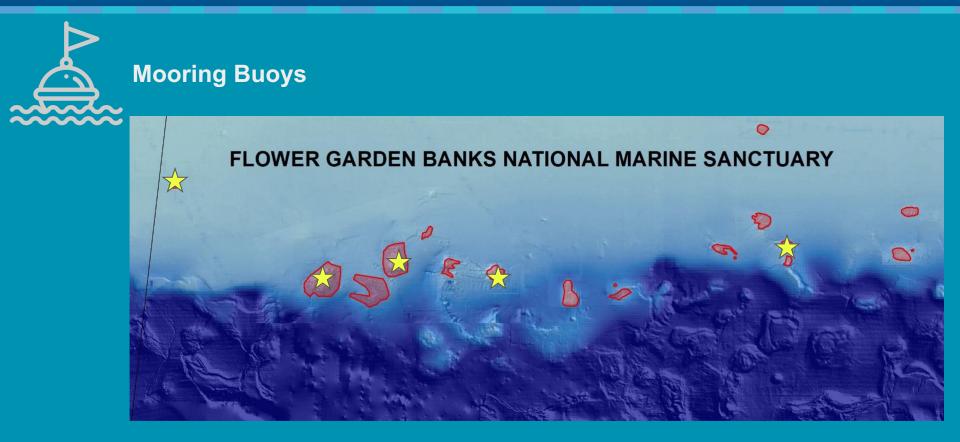
GCOOS Data buoys for expanded sanctuary

TAMU-CC Bristlemouth technology dissolved oxygen sensor













SANCTUARISE