

Isla Naos Water Quality Monitoring

(Last rev. 14/11/2024)

Water quality is monitored at Isla Naos (location of STRI's Naos marine station) using a YSI Professional Plus multiparameter logger with the following sensors

YSI model Pro1001A pH sensor

YSI model 2003 Polarographic DO sensor

YSI model 5560 Conductivity/Temperature sensor

YSI internal pressure sensor

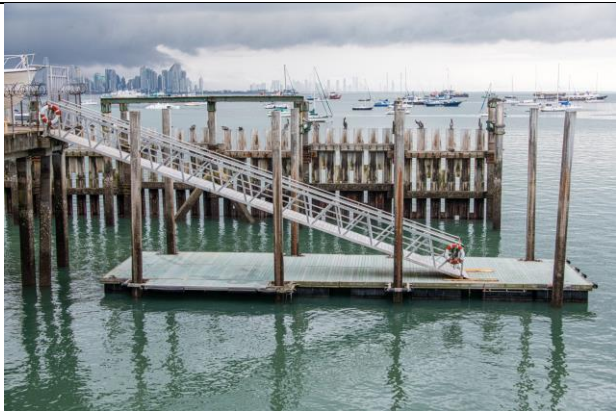


Sampling is carried out 3-5 times per week (weekdays only) between 8 and 9am.

Measurements are made at approximately 2m depth intervals.

All sensors are calibrated after each sampling trip according to YSI standard recommendations.

Locations

Naos Aquarium	8.867458°N, 79.532586°W	
Naos Dock	8.916331°N, 79.532489°W	
ACP Dock	8.918119°N, 79.535122°W	



Parameters

bgarfu	Blue-Green Algae (RFU)
bgaug	Blue-Green Algae ($\mu\text{g/l}$)
chlrfu	Chlorophyll (RFU)
chlrug	Chlorophyll ($\mu\text{g/l}$)
cond	Conductivity (mS/cm)
condnlf	Non-linear temperature compensation (mS/cm)
condsp	Specific Conductance (mS/cm)
fdomqsu	Fluorescent dissolved organic matter (QSU)
fdomrfu	Fluorescent dissolved organic matter (RFU)
odo	Optical Dissolved Solids (mg/l)
odopsat	Optical Dissolved Solids (% saturation)
ph	pH
sal	Salinity (ppt)
tds	Total Dissolved Solids (g/l)
tss	Total Suspended Solids (mg/l)
turb	Turbidity (FNU)
wt	Water Temperature (C)

Data Selection

At the beginning of each sampling day, the sensor is activated and is left running until it is returned to the laboratory. Raw are visually examined and the following data are removed:

- All records the depth parameter indicates that the sensor was out of the water
- All records during the initial seconds after emersion at each sampling location where water quality parameters indicate that the sensors have not yet equilibrated – FDOM and Turbidity usually take the longest
- All records where a rapid decrease in depth indicate that the sonde is being pulled out of the water