

# FIO-AMFR RAMA Buoy/Mooring Observation

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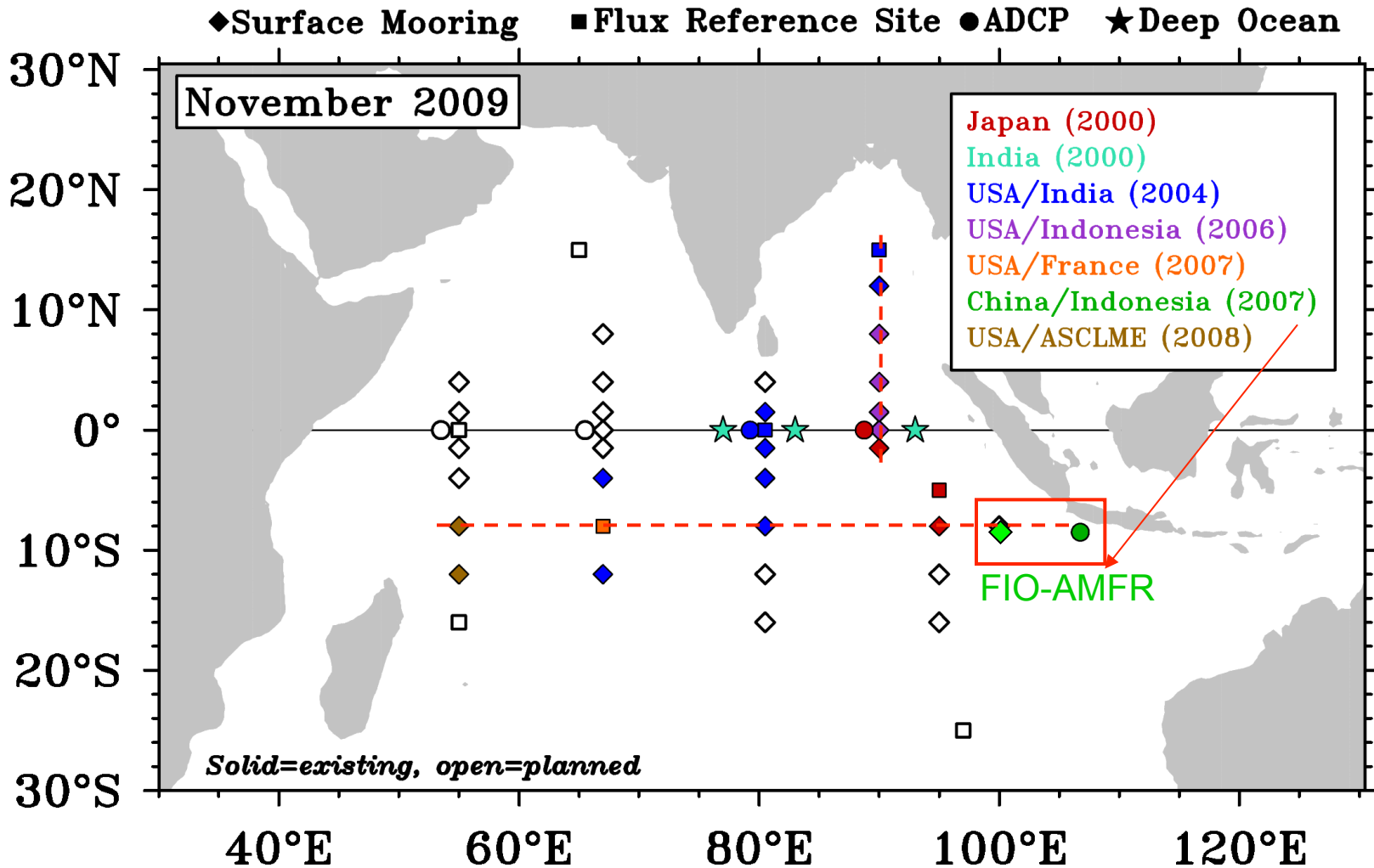
Lab. Ocean-Atmosphere Interaction and Climate  
Change

First Institute of Oceanography, SOA

Significant progress since IOP-6 meeting.

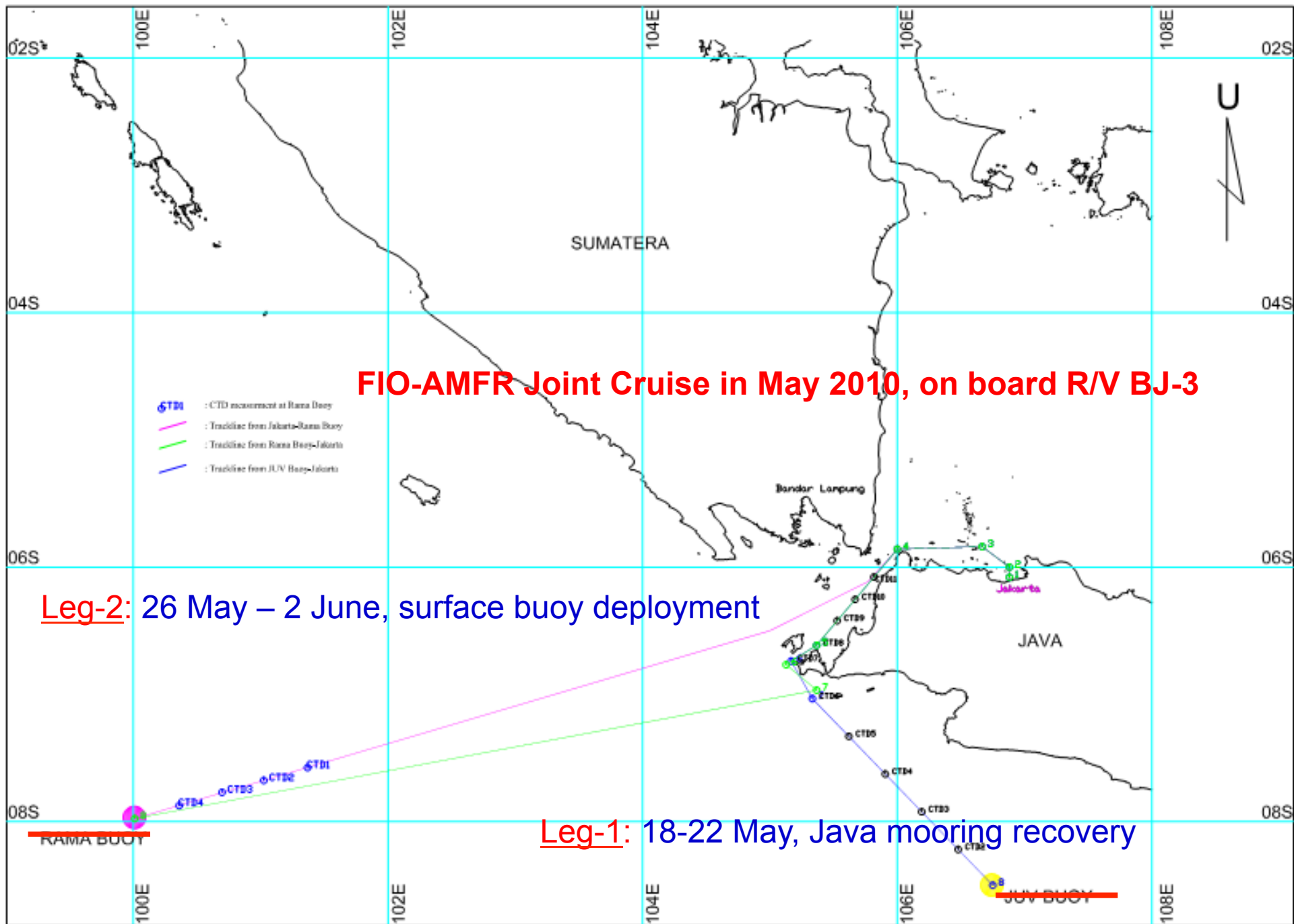
Two RAMA sites are completed.

### Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (*RAMA*)



**FIO-AMFR Joint Cruise Summary**  
**in support of IndOOS Implementation**

<b>No.</b>	<b>Cruise Period</b>	<b>Days</b>	<b>Ship</b>	<b>Description</b>
1	12-19 Nov. 2007	8	BJ-3	Java mooring deployment
2	08-15 Apr. 2008	8	BJ-1	Java mooring recovery (failure and lost)
3	24-29 Dec. 2008	6	BJ-8	Java mooring new deployment
4	06-11 Sep. 2009	6	GEOMARI N III	Java mooring R(ok)/D
5	21 Feb. – 1 Mar. 2010	9	BJ-3	Surface buoy deployment at (100E, 8S) with data transmission problem
6	① 18-22 May 2010	5	BJ-3	Java mooring R (ok)
	② 26 May-2 Jun. 2010	8	BJ-3	New buoy deployment with successful data transmitting.
<b><i>Total</i></b>		<b><i>50</i></b>		



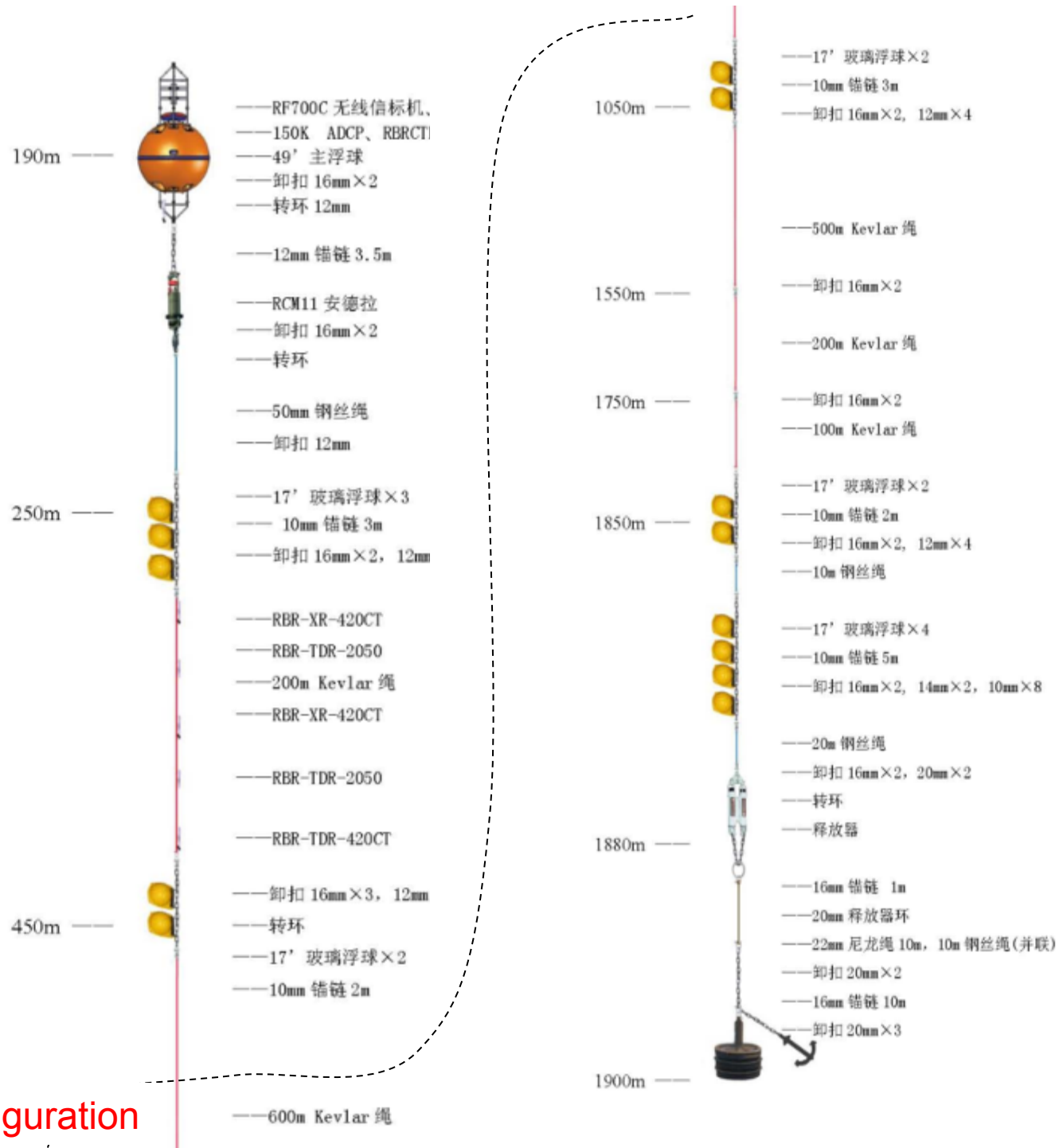
# Detail information of the two Sites

## 1. ADCP buoy at (106E, 8S)

- In place since Nov. 2007 and valid data stream since 26 Dec. 2008
- 18 months data will be posted on FIO website soon
- Data includes: *0-200m current profile and 200-500m T-profile*

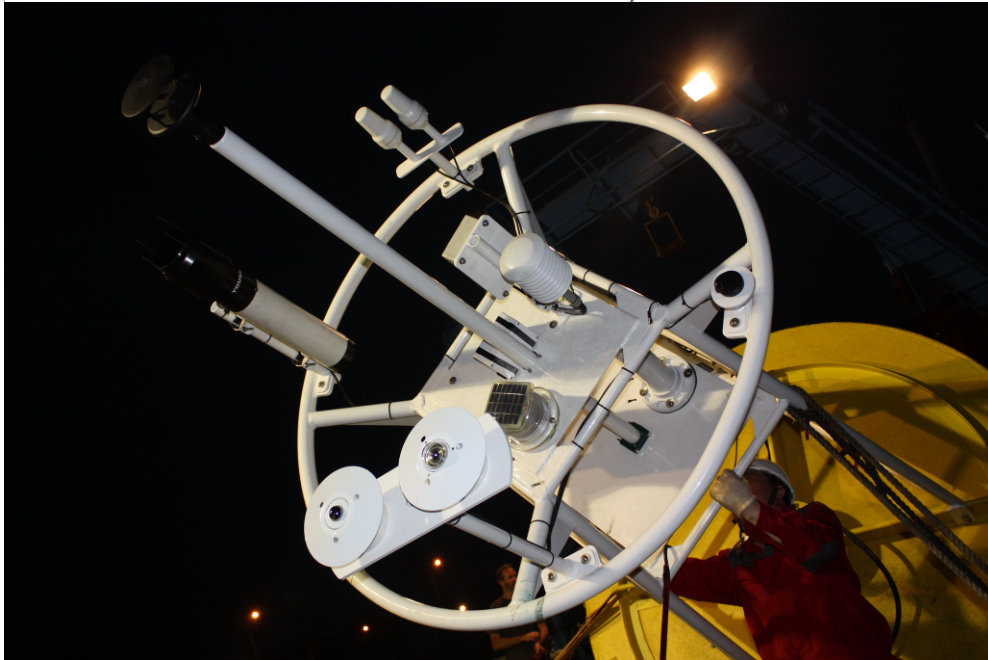
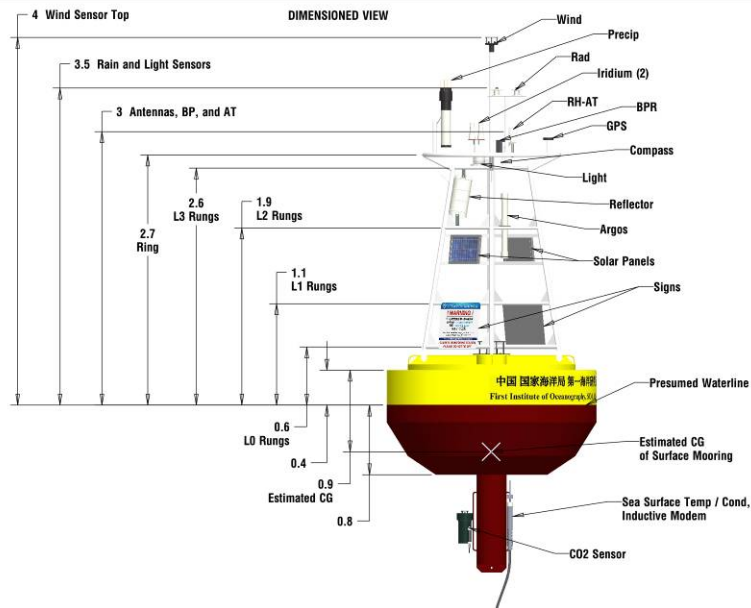
## 2. Surface buoy at (100E, 8S)

- In place since 29 May 2010
- Daily data has been posted on FIO ftp and PMEL website
- Data includes the meteorological parameters: *wind speed and direction, air temperature, relative humidity, air pressure, shortwave radiation, long wave radiation, unfortunately precipitation missed due to damage in the deployment*
- Data includes the *T-profile down to 700m and S-profile down to 100m*

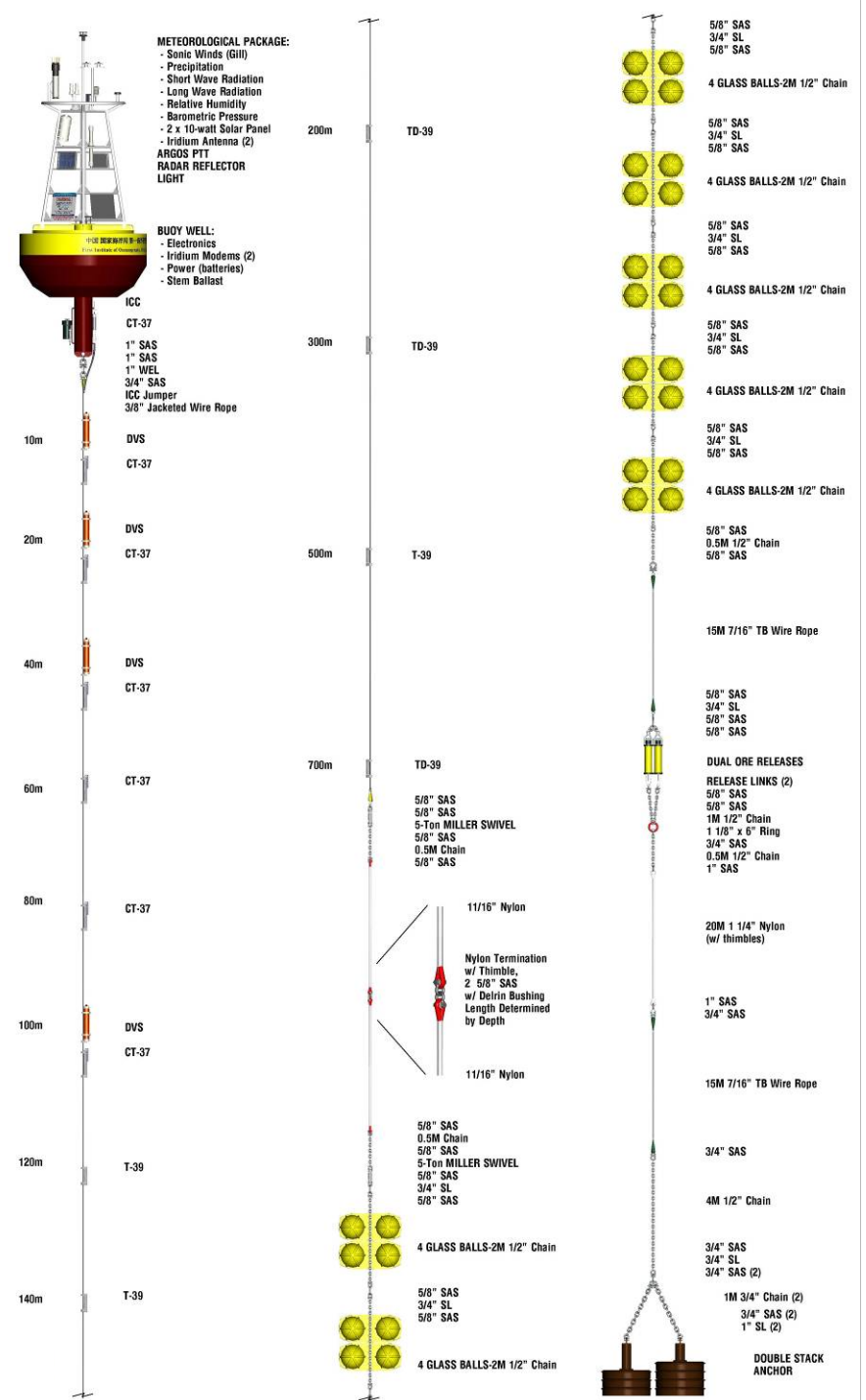


ADCP Buoy Configuration





Surface Buoy Configuration





Iridium  
transmission  
at 3hr interval

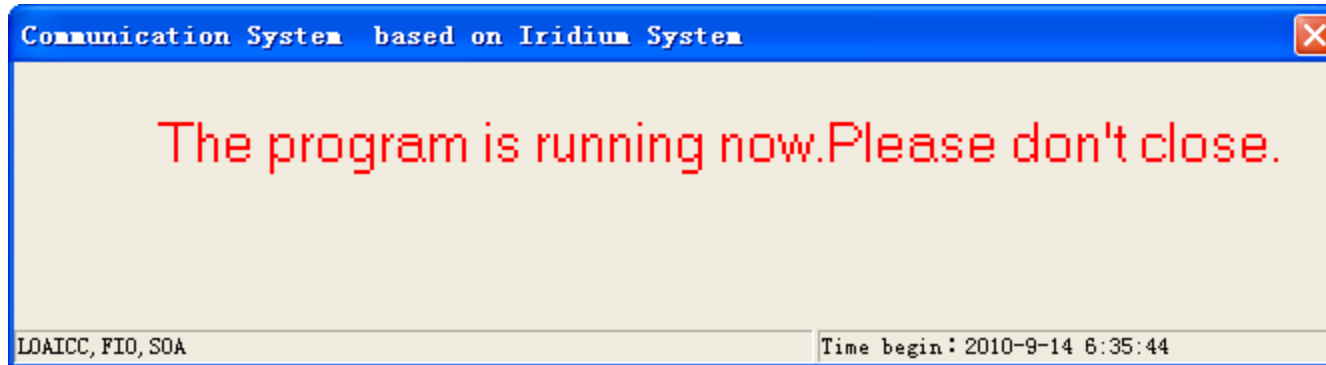
FIO Office



# Hardware of the Communication System in Lab.

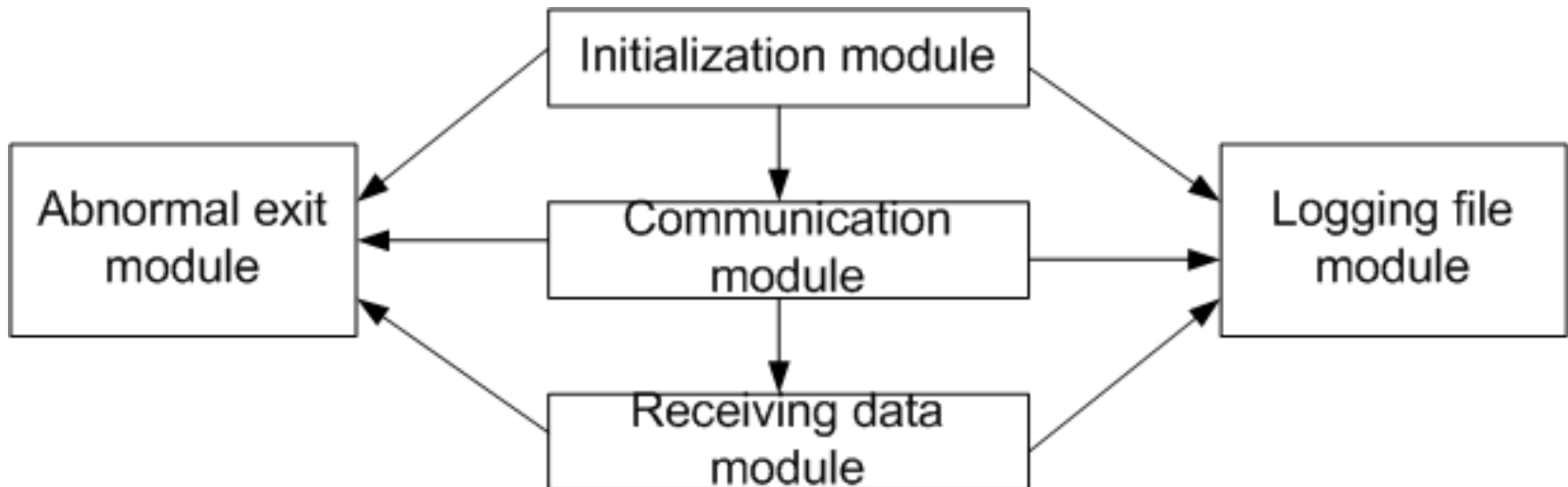


# Software of the Communication System



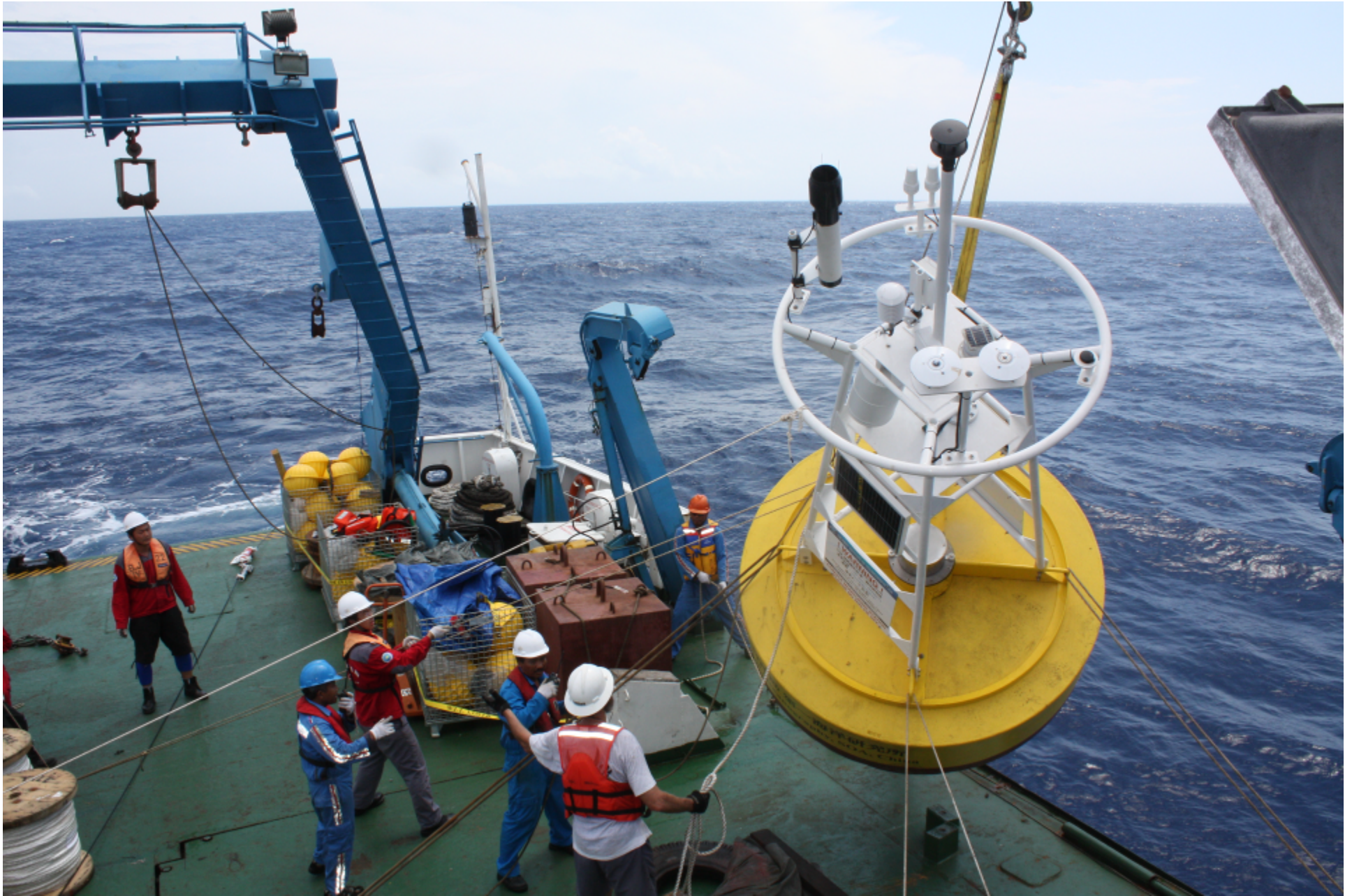
1. Unmanned program
2. Auto create log files and data files

## The software's construction



# Communication Data

1. The data's website is <ftp://ftp.fio.org.cn/>
- 2 . The daily 24hr average data is provided
- 3 . The Data is updated every day.
- 4 . The data is then disseminated to the RAMA data website.

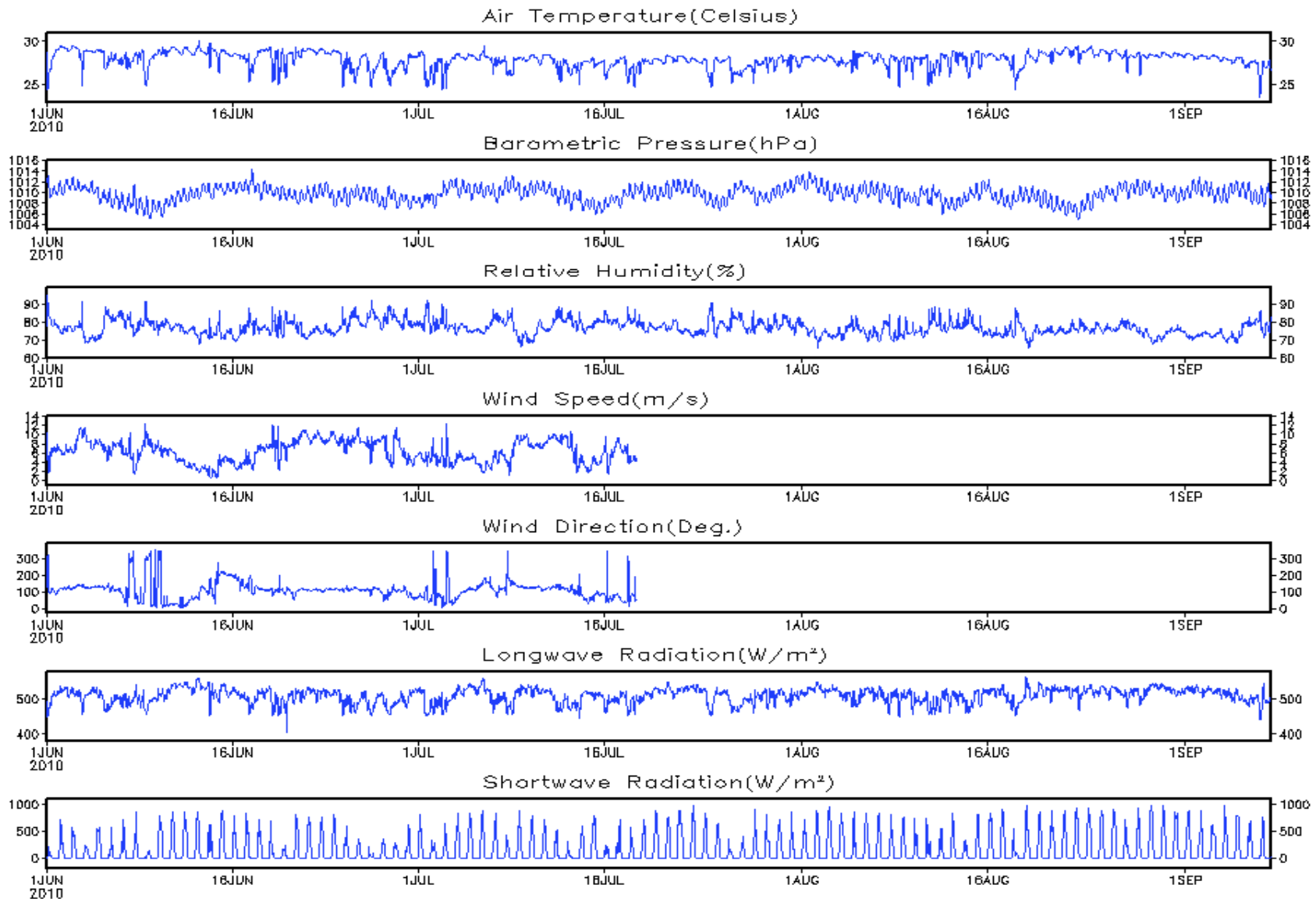


Surface Buoy Deployment on 29 May 2010

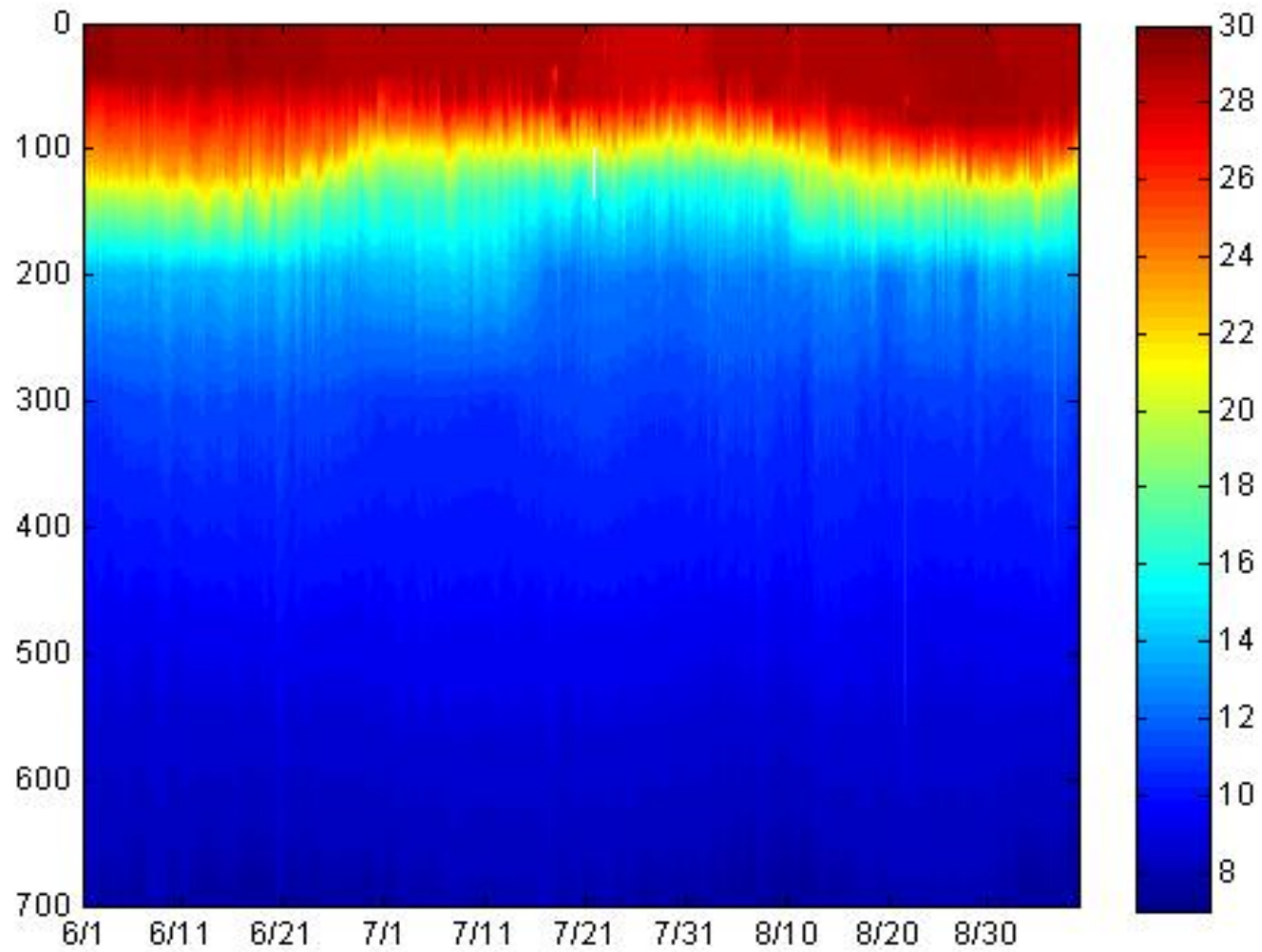


Working in the rain

## Hourly meteorological data plots from June 1<sup>st</sup> to Sep. 7<sup>th</sup> 2010

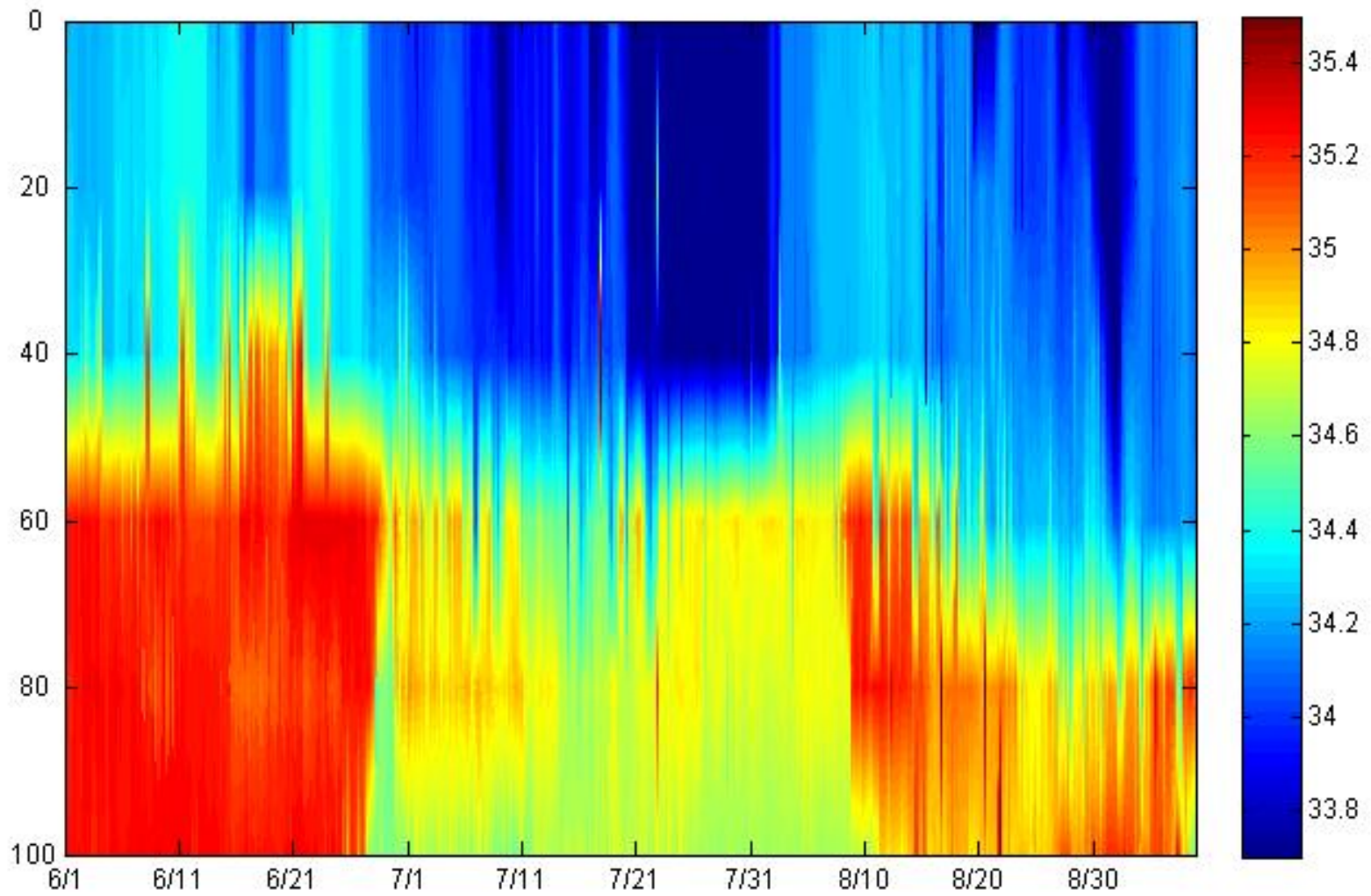


## Hourly T-profile (0-700m) plot from June 1<sup>st</sup> to Sep. 7<sup>th</sup> 2010

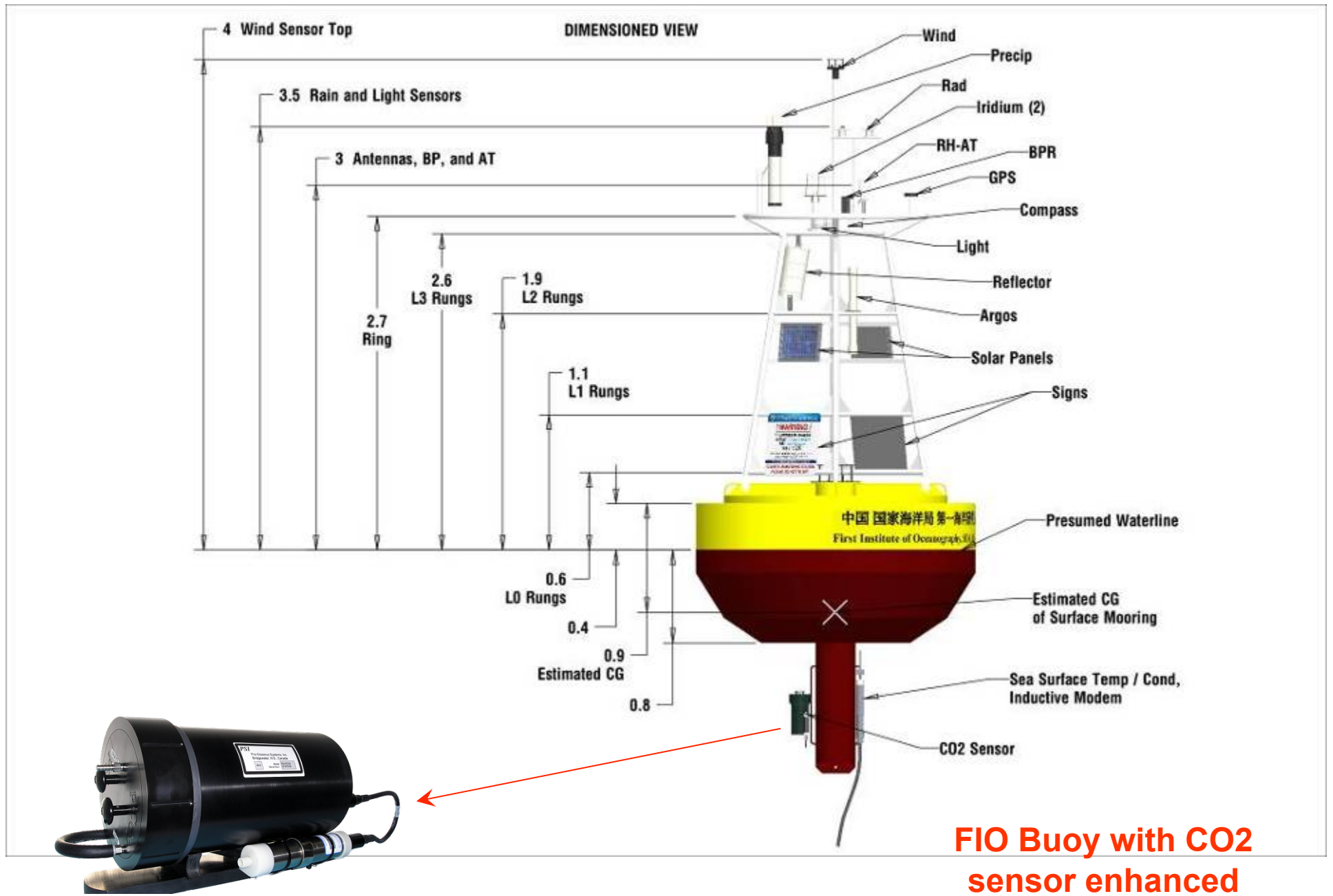




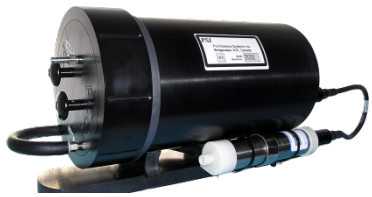
## Hourly S-profile (0-100m) plot from June 1<sup>st</sup> to Sep. 7<sup>th</sup> 2010







PSI CO<sub>2</sub>-Pro™: Pro-Oceanus System Inc., Canada



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*Ocean and Climate*

*You care*

*We try*

*All benefit*

努力探索 拥有未来

**LOAICC**

海气相互作用与气候变化实验室  
Laboratory of ocean-atmosphere interactions and climate change

**Thanks!**

