

Table 1. Measured variables and sensors deploying in Yuan-Yang Lake.

	Measured variables	Sensor
1.	Water temperature at surface level ^a	Greenspan (<i>broken now</i>) 2004~2006 Hydrolab DS 5X (<i>in Using</i>) 2006~2007
2.	Water temperature at different depths ^a	Apprise Technologies Templine Thermistor Chain"
3.	Wind speed ^a	RM Young model 03001(Campbell Sci.)
4.	Wind direction ^a	RM Young model 03001(Campbell Sci.)
5.	Dissolved oxygen at surface level ^a	Greenspan DO 100 700-0702 (<i>broken now</i>) 2004~2006 Greenspan DOROA CDR-140(<i>broken now</i>) Greenspan 3M cable 704-3502(<i>broken now</i>) Hydrolab DS 5X (<i>in Using</i>) 2006~2007
6.	Water level ^c	submersible pressure transmitter PS 9800(1) (INW: Instrumentation Northwest)
7.	Air temperature ^b	Hydro-thermometer HMP 35A(Vaisala)
8.	Light intensity ^b	
	a. Solar radiation	precision spectral pyranometer Model PSP (Eppley Laboratory)
	b. Photosynthetical photon flux density(PPFD)	Quantum sensor LI-190A (LI-COR Co.)
9.	Rain fall ^b	Rain gauge (Takeda Co.)
10.	Relative humidity ^b	Hydro-thermometer HMP 35A(Vaisala)
11.	Soil temperature ^b	
12.	Data logger ^a	Campbell CR10X

^adata from the buoy

^bdata from the meteorological station

^cdata from the lake shore

Analysis instrument for water quality

parameter	Instruments	
Total Nitrogen		
Total Phosphorus		
Ion		
DIC/DOC	Model 1010 TOC <input type="checkbox"/>	
Chlorophyll a		
Water Color		
Visibility/Depth	Secchi Disk	