

Mooring Deployment Record

Project Name:	SOG-AMP		
Project Area:	Straight of Georgia		
Mooring Name:	SOGS-N	Station Name	SOGS
Latitude:	49° 01.396' N	Longitude:	123° 25.846' W.
Depth:	314 m datum.	Tide:	+3 m Sand Heads.
Mag. Declination:		Time Zone:	UTC
Date:	July 16, 2012	Time:	1634 UTC.
Remarks:			

Recovery

Date:	Oct. 17, 2012	Time:	2328 UTC
Remarks:			

Instruments

Type	Serial #	Depth	Time In:	Time Out	Notes
Baker	718106	54 m			
SBE19+	6026				
600kHz	3720	255 m			upward looking, Plastic Hsg, no external
SBE16+	4197		+001924		
MarkK	0958	304 m			
uCont	5307				

Releases

Release	Serial #	Range:	Release	Freq	Other
AR861	734	16B4	1655	1649	

Pingers

Pinger	Serial #	Voltage	Freq
Helle 1/4 W	9026	19.4	27 kHz
Helle 1/4 W	7495	19.4	27 kHz

Flotation

Type	Serial #	Size	Colour	Type	Serial #	Size	Colour
SS30	3016	30"	yellow				
SS30	3013	"	"				
SS30	3002	"	"				

ADCP Deployment Sheet

INSTRUMENT

Serial Number: 3720

Pressure Sensor:

Model: 600 KHz

Depth Rating: 200 m

Batteries: 1 internal, no compass sensor

PARAMETERS

Number of Pings (WP):

Bin Size (WS): 1 m

Ensemble Interval (TE): 15 mins

Number of Bins (WN): 59

Time between Pings (TP): 6.33

Mode 1 Bandwidth (WB): 0

Profiling Mode (WM):

Pre-deployment tests: ✓

Time Zone: UTC

Compass Calibration: X

Start (TF): July 16, 2012 @ 1800 UTC

DEPLOYMENT

Station: SOAS-N

Cruise Number: 2012-57

Latitude:

Water Depth:

Longitude:

Instrument Depth: 55m

Time and Date in Water: July 16, 2012 @

Comments:

upward looking

Completed by:

Date:

ADCP-dep.xls SFM

PlanADCP (Advanced): Workhorse Sentinel 600 kHz [Dpl2]

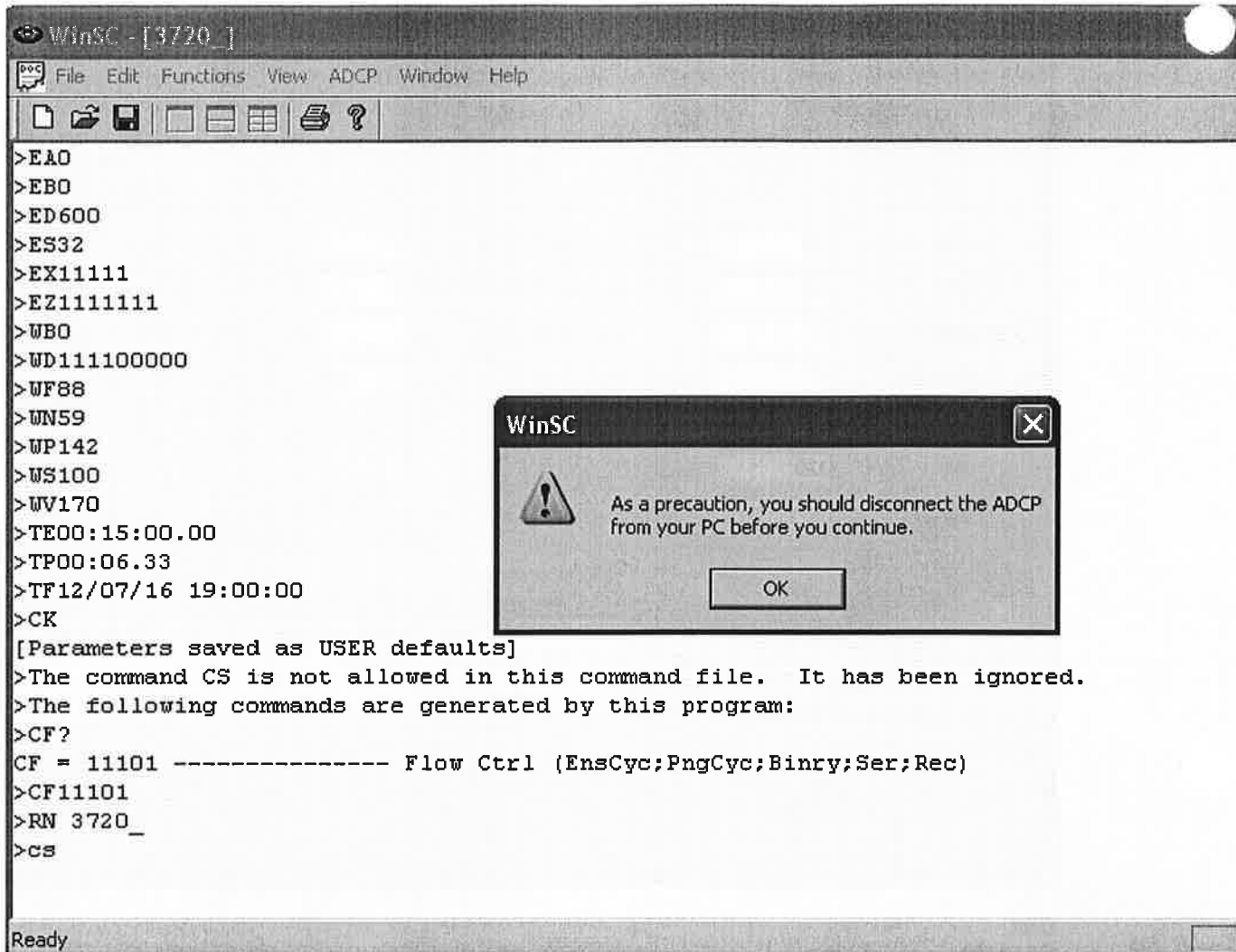
BackToSC Settings View Help

Basic Expert

Environmental Setup: Transducer Depth: 60 m Salinity: 32 ppt Magnetic Variation: 0 ° Temperature: 5 °C	Profiling Setup: Pings Per Ensemble: 142 Number of Depth Cells: 59 Depth Cell Size: 1 m Mode: 1	Deployment Consequences First Cell Range: 1.98 m Last Cell Range: 59.98 m Max Range: 41.63 m Standard Deviation: 0.59 cm/s Ensemble Size: 1328 bytes Storage Required: 15.30 MB Power Usage: 447.83 Wh Battery Pack Usage: 1.0
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Deployment Timing Setup: Duration: 120 days Ensemble Interval: 00:15:00.00 Ping Int. ☒ Auto: 00:00:06.33 ☐ Ping Immediately After Deployment First Ping Date and Time: 16-Jul-2012 07:00:00 PM	Notes 3720-SOGS-N Plastic Housing, with one pack. Bring external pack with custom i Start July 16, 2012 @ 1800 UTC
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CR1
 CF11101
 EA0
 EB0
 ED600
 ES32
 EX1111
 EZ111111
 WB0
 WD111100000
 WF88
 WN59
 WP142
 WS100
 WV170
 TE00:15:00.00
 TP00:06.33
 TF12/07/16 19:00:00
 CK
 CS



>>>>>> Function starting 07/16/12 14:43:39 >>>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 50.40
Teledyne RD Instruments (c) 1996-2010
All Rights Reserved.
>TS120716144342
>CZ

Powering Down

>>>>>> Function starting 07/16/12 14:43:46 >>>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 50.40
Teledyne RD Instruments (c) 1996-2010
All Rights Reserved.
>DEPLOY?
Deployment Commands:
CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)
CK ----- Keep Parameters as USER Defaults

Nortek Deployment Sheet

INSTRUMENT

Serial: 0958
BAT TYPE: Lithium

Interface: 232, Rial ask
Power: High

PARAMETERS

Interval: 600
AVG: 4% Auto
BAT USAGE: 166% of Aik
COORDINATES: ENU

Duration: 120
Power Level: High
mem: 0.8
Vprecision: 1.7 cm/s
Hprecision: 1 cm/s

DEPLOYMENT

Station: SOAS-N
LAT: _____
Long: _____

CRUISE ID: 2012-S7
WATER Depth: _____
Instrument Depth: _____

Start: July 16, 2012 @ 2000 UTC

Untitled:1 - Aquadopp

File Communication Deployment View Configuration On-line Help



Current

	East	North	Up
Velocity (m/s)	0.000	0.000	0.000
Amplitude (counts)	0	0	0
Speed (m/s)	0.000		
Direction (deg)	0.0		

Status

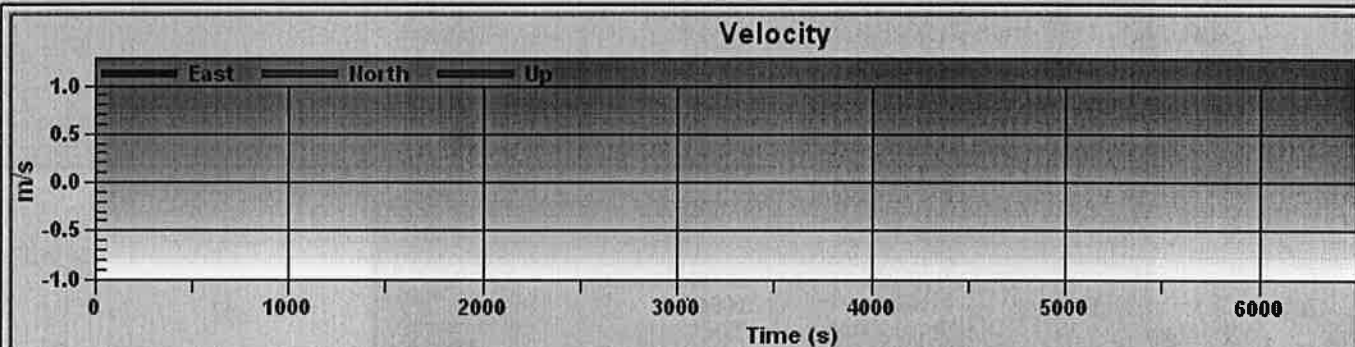
Time	00/00/00 00:00:00
Status	00000000
Error	00000000
Disk file (kB)	0

System

Serial no	AQC
Probe no	AQC
Firmware	
Recorder (MB)	

Sensors

Temp. (deg C)	0.00	Pitch (deg)	
Pressure (dBar)	0.000	Roll (deg)	
Battery (V)	0.0	Heading (deg)	
Sound Speed (m/s)	0.0	Ain1, Ain2	N/



Velocity Amplitude Vel/Dir Sound speed Temperature Pressure Battery Pitch Roll Heading Analog inputs Profile

For Help, press F1

Disconnected CC

Deployment Planning [X]

Standard | **Advanced** | Inductive Modem

Setup

Measurement interval (s):

Average interval (s):

Measurement load (%): ☒ Auto

Blanking dist. (m):

Compass upd. rate (s):

Power level

High

Low

☐ File wrapping

Deployment planning

Assumed duration (days):

Battery utilization (% of 50 Wh):

Memory required (MB):

Vertical vel. prec. (cm/s):

Horizont. vel. prec. (cm/s):

Speed of sound

☒ Measured

Salinity (ppt):

☐ Fixed (m/s):

Diagnostics

☒ Enable

Interval (min):

Number of samples:

Coordinate system

☒ ENU ☐ XYZ ☐ Beam

External inputs

Input 1:

Input 2:

☐ Output power

Deployment [?] [X]

☒ Start At:

☐ Start Now!

☐ Enable serial output / TellTale

Name: (max 6 char's)

Comments: (max 120 char's)

0958-SOGS-N
Start July 16, 2012 @ 2000 UTC
Lithium, RS232, Right angle

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=====
Deployment : 0958_N
Current time : 7/15/2012 21:01:08
Start at : 7/16/2012 20:00:00
Comment:
0958-SOGS-N
Start July 16, 2012 @ 2000 UTC
Lithium, RS232, Right angle
=====

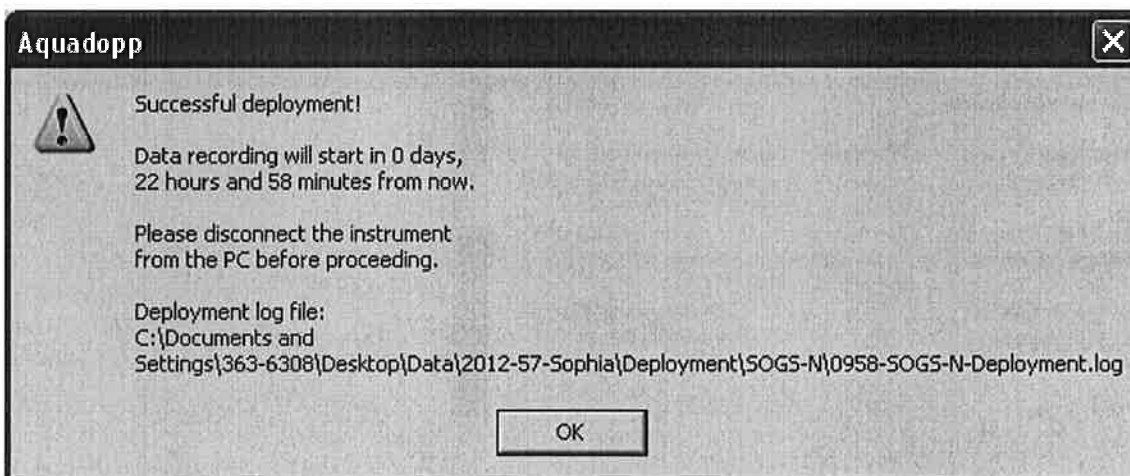
```

Measurement interval (s) : 600
Average interval (s) : 120
Blanking distance (m) : 0.35
Measurement load (%) : 4
Power level : HIGH
Diagnostics interval(min) : 1440
Diagnostics samples : 20
Compass upd. rate (s) : 2
Coordinate System : ENU
Speed of sound (m/s) : MEASURED
Salinity (ppt) : 32
Analog input 1 : NONE
Analog input 2 : NONE
Analog input power out : DISABLED
File wrapping : OFF
Serial output/TellTale : OFF

Assumed duration (days) : 120.0
Battery utilization (%) : 166.0
Battery level (V) : 11.4
Recorder size (MB) : 25
Recorder free space (MB) : 24.973
Memory required (MB) : 0.8
Vertical vel. prec (cm/s) : 1.7
Horizon. vel. prec (cm/s) : 1.0

Instrument ID : AQD 0958
Head ID : AQD 0624
Firmware version : 1.13

Aquadop Version 1.31
Copyright (C) Nortek AS



MicroCat SBE 37 Deployment Sheet

INSTRUMENT

Serial Number: 5307

Sensors (C,T,P):

Firmware Version: 2.6b

Depth Rating: 5000 m

PARAMETERS

SampleNum: 0

Storetime: Y

Interval: 600

Syncmode: N

Navg/Ncycles: 4

Txrealtime: N

Reference pressure*:

OutputSV: 4

Time Zone: UTC

OutputSal: Y

Start: July 16, 2012 @ 2000 UTC

*only needed if there is no pressure sensor for the salinity calculation

DEPLOYMENT

Station: 5065-N

Cruise Number: 2012-57

Latitude:

Water Depth:

Longitude:

Instrument Depth:

Time and Date in Water:

Comments:

Completed by:

Date:

uCat-dep.xls SFM

Mooring: SOGS-N
UCats X 1
Serial 5307 - new cal, pump/Attached to RBR/Nortek

Battery Calculations:

Sampling Time:
 $3.33s + (2.27 * (NAV G - 1))$
 $3.33s + (2.27 * (4 - 1)) = 10.14s$

Example 1: A standard MicroCAT (no external power option) with pressure sensor is set up to sample autonomously every 10 minutes (6 samples/hour), taking 4 measurement per sample (**NAV G=4**). How long can it be deployed?

Sampling time = 3.33 seconds + 2.27 seconds * (**NAV G** - 1) = 10.14 seconds

Sampling current consumption = 0.020 amps * 10.14 seconds = 0.2 amp-seconds/sample

In 1 hour, sampling current consumption = 6 * 0.2 amp-seconds/sample = 1.2 amp-seconds/hour

Pump current consumption = 0.13 amp-seconds/pulse

In 1 hour, pump current consumption = 6 * 0.13 amp-seconds/pulse = 0.78 amp-seconds/hour

Quiescent current 10 microamps = 0.01 mA

In 1 hour, quiescent current consumption = 0.01 mA * 3600 seconds/hour = 0.036 amp-seconds/hour

Total current consumption / hour = 1.2 + 0.78 + 0.036 = 2.02 amp-seconds/hour

Capacity = (5 amp-hours * 3600 seconds/hr) / (2.02 amp-seconds/hour) = 8910 hours = 371 days = 1.02 years

Number of samples = 8910 hours * 6 samples/hour = 53460 samples

Command Summary:

DDMMYY=150712

HHMMSS=20000 //(UTC)

OUTPUTSAL=Y

OUTPUTSV=Y

FORMAT=1

NAV G=4

PUMPINSTALLED=Y

SAMPLENUM=0

INTERVAL=600

//REFPRESS= 325 (x = pressure at which the instrument is at...only used if there is no pressure sensor installed)