

DEPLOYMENT RECORD

Project Name: Aquaculture Start Date: Sep 2007 End Date: Mid May 2008
 Mooring Name: TCS-05 Station Name: TCS

Geog. Desc.: Tribune Channel South Tide: +3m Kelsey Bay
 Latitude: 50°43.700' Longitude: 126°10.479'
 Water Depth: 219m datum Ice Thickness: —
 Magnetic decl: — Time Zone: PDT Anchor Type: 3wheels 2245lbs
 Date: Sep 13, 2007 Time Anchor Dropped: 1316 PDT Date: —
 Remarks: NB: - start times were not recorded for the RCMys
* - fortunately we have good times in water recorded

RECOVERY RECORD — accurate turn off times should be recorded.

Date: Mar. 27, 2008 Time Anchor Released: 0736 PDT
 Remarks: Top Float Apparently hit ~ 300m off station.

INSTRUMENTS (Start at TOP)

Type	Serial #	Depth	Time in PDT	Time Out	Notes
<u>WH300</u>	<u>5588</u>	<u>37m</u>	<u>1254</u>		<u>Plastic Hsing x2</u>
<u>RCM4</u>	<u>8839</u>	<u>57m</u>	<u>1256</u>		
<u>RCM4</u>	<u>8830</u>	<u>92m</u>	<u>1257</u>		
<u>RCM4</u>	<u>7847</u>	<u>137m</u>	<u>1301</u>		
<u>RCM4</u>	<u>7498</u>	<u>182m</u>	<u>1303</u>		

Argos 2928 WB Rel Win FR1+2 301 #81 FR2

Release	Serial	R Code	Arm Code	Freq	On/Off	B0	B1	Aux Codes
<u>RT661</u>	<u>150</u>	<u>6484</u>	<u>6421</u>	<u>8000</u>	<u>6422/6423</u>			
Pinger 1	Type	Serial	Pinger 2	Type	Serial	Battery Volt		
<u>Helle</u>	<u>1/4x27</u>	<u>7423</u>	<u>Helle</u>	<u>1/4x27</u>	<u>9398</u>	<u>18.9</u>	<u>18.1</u>	

FLOTATION

Type	Serial #	Size	Colour
<u>SS30</u>	<u>2591</u>	<u>30"</u>	<u>Yellow</u>
<u>4 Vinyl</u>	<u>ADCP Frame</u>		<u>orange</u>
<u>SS28</u>	<u>487</u>	<u>28"</u>	<u>Yellow</u>
<u>SS28</u>	<u>207</u>	<u>"</u>	<u>"</u>
<u>SS28</u>	<u>486</u>	<u>"</u>	<u>"</u>
<u>SS28</u>	<u>488</u>	<u>"</u>	<u>"</u>
<u>SG17</u>	<u>32999</u>	<u>22"</u>	<u>Yellow</u>
<u>SG17</u>	<u>33026</u>	<u>"</u>	<u>"</u>
<u>SG17</u>	<u>43119</u>	<u>"</u>	<u>"</u>

Type	Serial #	Size	Colour

Data Entry by:

RDI 75/150/300/600kHz Long Ranger/Workhorse Deployment

Project: Aquaculture

Serial Number: 5588

Cruise: 2007-62

Platform: Tully

Station: TCS-05

Deployment Date: Sep. 13, 2007 1316 PDT

Position: 50° 43.700' 126° 10.479'

Depth on Sounder: 219m datum

Recovery Date: _____

Parameters

Ensemble Interval	10 min.
Bin Size	0.5 m.
Number of Pings	85
Number of Bins	90
Observations	
Ambiguity Velocity	
Water Profiling Mode	
Time	07/09/13 15:36:29
Start Time	
Power	

PlanADCP (Basic) : [TCS05]

BackToSC Settings View Help

ADVANCED settings changed. CAUTION: Not enough battery packs for the deployment

Advanced

Proposed Setup:

Deployment Duration: 5.5 days

Ensemble Interval: 00:10:00.00

Salinity: 31 ppt

Temperature: 8 °C

Water Pings: 85

Number of Depth Cells: 106

Depth Cell Size: 0.5 m

Deployment Consequences:

First Cell Range: 1.59 m

Last Cell Range: 54.09 m

Max Range: 54.80 m

Standard Deviation: 3.10 cm/s

Ensemble Size: 2274 bytes

Storage Required: 71.83 MB

Power Usage: 908.38 Wh

Battery Pack Usage: 2.0

Notes:

TCS05, 600kHz S/N 1820
Long Range Mode
TULLY cruise 2007-62

Cell Size 0.50 m

Last 54.09 m

Max Range 54.80 m

First 1.59 m

Workhorse Sentinel: 600 kHz/ Long Range/ 2 Battery Packs/ Memory: 144 MB

NUM

Old 600Khz Configuration

PlanADCP (Advanced) : [Dpl1]

BackToSC Settings View Help

CAUTION: Not enough battery packs for the deployment

Basic Advanced Expert

Environmental Setup:

Transducer Depth: 0 m

Salinity: 31 ppt

Magnetic Variation: 0 °

Temperature: 8 °C

Deployment Timing Setup:

Duration: 230 days

Ensemble Interval: 00:10:00.00

Ping Int(☒ Auto): 00:00:07.05

Min TP

☒ Ping Immediately After Deployment

Profiling Setup:

Pings Per Ensemble: 85

Number of Depth Cells: 90

Depth Cell Size: 0.5 m

Mode: 1

Deployment Consequences:

First Cell Range: 2.72 m

Last Cell Range: 47.22 m

Max Range: 76.64 m

Standard Deviation: 3.02 cm/s

Ensemble Size: 1954 bytes

Storage Required: 61.72 MB

Power Usage: 931.49 Wh

Battery Pack Usage: 2.1

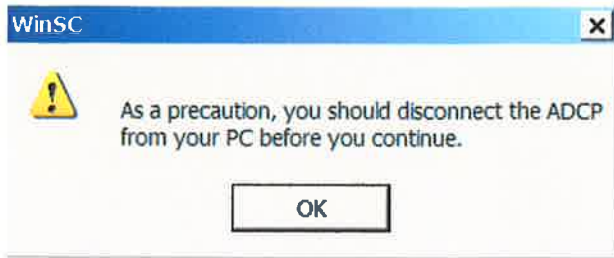
Notes:

TCS-05 Revised
300Khz-5588
external plastic battery housing and adcp
2007-62 LF

Workhorse Sentinel: 300 kHz/ High Res./ 2 Battery Packs/ Memory: 100 MB

NUM

New 300Khz Config with 5588



NOTE: NEW DEPLOYMENT IS TCS5A

>>>>> Function starting 09/13/07 15:35:11 >>>>>

>>>>> Function starting 09/13/07 15:36:14 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>TS070913153615
>CZ

Powering Down

>>>>> Function starting 09/13/07 15:36:24 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>DEPLOY?
Deployment Commands:
RE ----- Recorder ErAsE
RN ----- Set Deployment Name

WD = 111 100 000 ----- Data Out (Vel,Cor,Amp; PG,St,P0; P1,P2,P3)
WF = 0176 ----- Blank After Transmit (cm)
WN = 105 ----- Number of depth cells (1-128)
WP = 00155 ----- Pings per Ensemble (0-16384)
WS = 0050 ----- Depth Cell Size (cm)
WV = 175 ----- Mode 1 Ambiguity Vel (cm/s radial)

TE = 00:10:00.00 ----- Time per Ensemble (hrs:min:sec.sec/100)
TF = **/**/**, **: **: ** --- Time of First Ping (yr/mon/day, hour:min:sec)
TP = 00:03.87 ----- Time per Ping (min:sec.sec/100)
TS = 07/09/13,15:36:25 --- Time Set (yr/mon/day, hour:min:sec)

EA = +00000 ----- Heading Alignment (1/100 deg)
EB = +00000 ----- Heading Bias (1/100 deg)
ED = 00000 ----- Transducer Depth (0 - 65535 dm)
ES = 30 ----- Salinity (0-40 pp thousand)
EX = 11111 ----- Coord Transform (Xform: Type,Tilts,3 Bm,Map)
EZ = 1111111 ----- Sensor Source (C,D,H,P,R,S,T)

Press any key to continue

CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)
CK ----- Keep Parameters as USER Defaults
CR # ----- Retrieve Parameters (0 = USER, 1 = FACTORY)
CS ----- Start Deployment

>SYSTEM?

System Control, Data Recovery and Testing Commands:
AC ----- Output Active Fluxgate & Tilt Calibration data
AF ----- Field calibrate to remove hard/soft iron error
AR ----- Restore factory fluxgate calibration data

```

AX ----- Examine compass performance
AZ ----- Zero pressure reading

CB = 811 ----- Serial Port Control (Baud; Par; Stop)
CP # ----- Polled Mode (0 = NORMAL, 1 = POLLED)
CZ ----- Power Down Instrument

FC ----- Clear Fault Log
FD ----- Display Fault Log

OL ----- Display Features List

PA ----- Pre-Deployment Tests
PC1 ----- Beam Continuity
PC2 ----- Sensor Data
PS0 ----- System Configuration
PS3 ----- Transformation Matrices

RR ----- Recorder Directory
Press any key to continue

RF ----- Recorder Space used/free (bytes)
RY ----- Upload Recorder Files to Host

```

```

>TS?
TS = 07/09/13,15:36:29 --- Time Set (yr/mon/day,hour:min:sec)
>PS0

```

```

Instrument S/N: 5588
Frequency: 307200 HZ
Configuration: 4 BEAM, JANUS
Match Layer: 10
Beam Angle: 20 DEGREES
Beam Pattern: CONVEX
Orientation: UP
Sensor(s): HEADING TILT 1 TILT 2 TEMPERATURE
Temp Sens Offset: -0.30 degrees C

```

```

CPU Firmware: 16.21 [0]
Boot Code Ver: Required: 1.13 Actual: 1.13
DEM0D #1 Ver: ad48, Type: 1f
DEM0D #2 Ver: ad48, Type: 1f
PWRTIMG Ver: 85d3, Type: 4

```

```

Board Serial Number Data:
2A 00 00 03 AC E5 90 09 DSP727-2001-04G
F8 00 00 03 A4 82 4D 09 REC727-1000-04E
EB 00 00 03 A4 9D 4D 09 CPU727-2000-00J
80 00 00 03 A4 50 63 09 PIO727-3000-04C
>PA

```

PRE-DEPLOYMENT TESTS

CPU TESTS:

```

RTC.....PASS
RAM.....PASS
ROM.....PASS

```

RECORDER TESTS:

```

PC Card #0.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS
PC Card #1.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS

```

DSP TESTS:

```

Timing RAM.....PASS
Demod RAM.....PASS
Demod REG.....PASS

```

```

FIFOs.....PASS
SYSTEM TESTS:
  XILINX Interrupts... IRQ3  IRQ3  IRQ3 ...PASS
  Receive Loop-Back.....PASS
  Wide Bandwidth.....PASS
  Narrow Bandwidth.....PASS
  RSSI Filter.....PASS
  Transmit.....PASS
SENSOR TESTS:
  H/W Operation.....PASS
>PC2

```

Press any key to quit sensor display ...

Heading	Pitch	Roll	Up/Down	Attitude Temp	Ambient Temp	PRESSURE
71.83ø	0.36ø	-0.17ø	Up	19.99øC	19.60øC	0.0 kPa
72.15ø	0.35ø	-0.19ø	Up	19.99øC	19.59øC	0.0 kPa
71.87ø	0.38ø	-0.19ø	Up	19.99øC	19.59øC	0.0 kPa
71.96ø	0.42ø	-0.16ø	Up	20.00øC	19.59øC	0.0 kPa
72.21ø	0.44ø	-0.20ø	Up	20.00øC	19.60øC	0.0 kPa
71.86ø	0.11ø	-0.51ø	Up	20.00øC	19.59øC	0.0 kPa
52.45ø	0.08ø	0.33ø	Up	19.98øC	19.61øC	0.0 kPa
24.74ø	-0.70ø	-0.17ø	Up	19.88øC	19.60øC	0.0 kPa
71.92ø	1.26ø	-0.21ø	Up	19.96øC	19.60øC	0.0 kPa
92.37ø	19.81ø	18.96ø	Up	19.87øC	19.59øC	0.0 kPa
101.29ø	19.82ø	19.47ø	Up	19.93øC	19.59øC	0.0 kPa
87.53ø	19.81ø	17.82ø	Up	19.93øC	19.57øC	0.0 kPa
63.67ø	6.61ø	0.11ø	Up	19.96øC	19.59øC	0.0 kPa
55.68ø	0.27ø	-16.06ø	Up	19.97øC	19.59øC	0.0 kPa
71.68ø	0.73ø	-23.32ø	Up	20.00øC	19.62øC	0.0 kPa
52.30ø	0.03ø	-11.43ø	Up	20.00øC	19.58øC	0.0 kPa
56.02ø	0.55ø	-0.48ø	Up	19.96øC	19.60øC	0.0 kPa
56.29ø	0.38ø	-0.61ø	Up	19.97øC	19.60øC	0.0 kPa

```

>RS
RS = 037,064 ----- REC SPACE USED (MB), FREE (MB)

```

```

>PC1

```

BEAM CONTINUITY TEST

When prompted to do so, vigorously rub the selected beam's face.

If a beam does not PASS the test, send any character to the ADCP to automatically select the next beam.

Collecting Statistical Data...

```

35 39 41 38
35 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
36 39 39 38
35 39 39 38
35 39 39 38
35 39 39 38
35 39 39 37
35 39 39 37
35 39 39 37
35 39 39 37
35 39 39 38
35 39 39 38
35 39 39 38

```

Rub Beam 1 = PASS
Rub Beam 2 = PASS
Rub Beam 3 = PASS
Rub Beam 4 = PASS

Powering Down

```
[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>AZERR: No pressure sensor detected.
```

Powering Down

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.

>RE ErAsE erasing...
Recorder erased.

>CZ

Powering Down

>>>>> Function starting 09/13/07 15:39:12 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>RR
Recorder Directory:
Volume serial number for device #0 is 193e-1400

No files found.

Bytes used on device #0 = 0
Volume serial number for device #1 is 1809-0b21

No files found.

Bytes used on device #1 = 0
Total capacity = 105695232 bytes
Total bytes used = 0 bytes in 0 files
Total bytes free = 105695232 bytes

>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.21
RD Instruments (c) 1996-2002
All Rights Reserved.
>CR1
[Parameters set to FACTORY defaults]
>CF11101
>EA0
>EB0
>ED0
>ES31
>EX11111
>EZ1111111
>WA50
>WB0
>WD111100000
>WF176
>WN90
>WP85
>WS50
>WV175
>TE00:10:00.00
>TP00:07.05
>CK
[Parameters saved as USER defaults]
>The command CS is not allowed in this command file. It has been ignored.
>The following commands are generated by this program:
>CF?
CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)
>CF11101
>RN TCS5A
>cs

IOS OCEAN PHYSICS

AANDERA CURRENT METER DEPLOYMENT AND RECOVERY RECORD

INSTRUMENT: RCM4 SERIAL #: 8839 PST: UTC OTHER: _____
 TAPE SIZE: 3/4" PROJECT: Aquaculture I(mA) _____

Channel #	Reading 1	Reading 2	Last Cal
1. Reference	532		
2. Temperature	1021		
3. Conductivity	258		
4. Extemp/pressure	51		
5. Direction	321		
6. Speed	6		
Date: <u>Sept 12/07</u> Time:			

Rotor Counter Information:

Rev/Count: 4
 F.S. = 0.9-9.5 Cm/S
 Rotor Switch: 4
 Rotor Type: pw

Rotor Type

USE IN WATER TIME

Sampling Interval: 30 MIN Depth: 57 m. TAPE ID: 8839/10
 Pressure Sensor Range: 200 PSI Serial #: 52783-10
 Depth Max: 138 MAX Compass Serial #: 13660
 Conductivity Range: 24-44 MMHO Cell Serial #: 4789
 HI Res Temperature Range: _____

Channel #	Reading 1	Reading 2
1. Reference	1282	25
2. Temperature	952	940
3. Conductivity	256	262
4. Extemp/pressure	55	54
5. Direction	20	18
6. Speed	4	9
Date: <u>March 29/08</u> Time:	<u>2032 UTC</u>	<u>2033 UTC</u>

TIME IN WATER: 1236 PDT DATE: SEP. 13, 2007
 BAT VOLTAGE: 9.92 ON DEPLOYMENT
 CRUISE ID: 2007-62 DEPLOYED
 TECHNICIAN: _____

TIME OUT WATER: 1536 UTC DATE: MAR. 27, 2008
 BAT VOLTAGE: 8.39 ON RECOVERY
 CRUISE ID: 2008-07 RECOVERED
 TECHNICIAN: LP

NOTES:

3x Lithium

IOS OCEAN PHYSICS

AANDERA CURRENT METER DEPLOYMENT AND RECOVERY RECORD

INSTRUMENT: RCM4 SERIAL #: 8830 PST/UTC/OTHER: UTC
 TAPE SIZE: 3 1/4" PROJECT: Aquaculture I(mA)

Channel #	Reading 1	Reading 2	Last Cal
1. Reference	<u>124</u>		
2. Temperature	<u>1013</u>		
3. Conductivity	<u>325</u>		
4. Extemp/pressure	<u>54</u>		
5. Direction	<u>683</u>		
6. Speed	<u>9</u>		
Date: <u>Sept 12/07</u> Time: <u> </u>			

OK PIMS

Rotor Counter Information:

Rev/Count:
 F.S.= Cm/S
 Rotor Switch: 4
 Rotor Type: PW

? start time

Sampling Interval: 30 MIN Depth: 92m TAPE ID: 8830/21
 Pressure Sensor Range: 500 PSI Serial #: 53046-6
 Depth Max: 368 MAX Compass Serial #: 15826
 Conductivity Range: 24-44 MMHO Cell Serial #: 4789
 HI Res Temperature Range:

1759

IN PIMS
2002

Channel #	Reading 1	Reading 2
1. Reference	<u>123</u>	
2. Temperature	<u>932</u>	
3. Conductivity	<u>256</u>	
4. Extemp/pressure	<u>55</u>	
5. Direction	<u>20</u>	
6. Speed	<u>9</u>	
Date: <u>March 29/08</u> Time: <u>2033 UTC</u>		

TIME IN WATER: 1259 PDT DATE: Sept. 13, 2007
 BAT VOLTAGE: 9.87 ON DEPLOYMENT
 CRUISE ID: 2007-62 DEPLOYED
 TECHNICIAN: LP

TIME OUT WATER: 1536 UTC DATE: Mar. 27, 2008
 BAT VOLTAGE: 8.41 ON RECOVERY
 CRUISE ID: 2008-07 RECOVERED
 TECHNICIAN: LP

NOTES:

3x Lithium
powered by Love

IOS OCEAN PHYSICS

AANDERA CURRENT METER DEPLOYMENT AND RECOVERY RECORD

INSTRUMENT: RCM4 SERIAL #: 7897 PST, UTC, OTHER: UTC
 TAPE SIZE: 3/4" PROJECT: Aquaculture I(mA)

Channel #	Reading1	Reading 2	Last Cal
1. Reference	<u>365</u>		
2. Temperature	<u>1023</u>		
3. Conductivity	<u>259</u>		
4. Extemp/pressure	<u>1023</u>		
5. Direction	<u>372</u>		
6. Speed	<u>11</u>		
Date: <u>Sept 12/07</u> Time: <u> </u>			

OKP

Rotor Counter Information:

Rev/Count:
 F.S.= 0.04-95 Cm/S
 Rotor Switch: 4
 Rotor Type: 5

Sampling Interval: <u>30</u> MIN	Depth: <u>137 m</u>	TAPE ID: <u>7897/21</u>
Pressure Sensor Range: <u> </u> PSI	Serial #: <u> </u>	
Depth Max: <u> </u> MAX	Compass Serial #: <u>12790</u>	
Conductivity Range: <u>24-44</u> MMHO	Cell Serial #: <u>7875</u>	
HI Res Temperature Range: <u>4-12</u>		

Channel #	Reading1	Reading 2
1. Reference	<u>366</u>	
2. Temperature	<u>881</u>	
3. Conductivity	<u>260</u>	
4. Extemp/pressure	<u>1023</u>	
5. Direction	<u>26</u>	
6. Speed	<u>7</u>	
Date: <u>March 29/08</u> Time: <u>2031 UTC</u>		

TIME IN WATER: 1301 PDT DATE: SEP. 13, 2007
 BAT VOLTAGE: 9.95 ON DEPLOYMENT
 CRUISE ID: 2007-62 DEPLOYED
 TECHNICIAN: LP

TIME OUT WATER: 1536 UTC DATE: MAR. 27, 2008
 BAT VOLTAGE: 8.51 ON RECOVERY
 CRUISE ID: 2008-7 RECOVERED
 TECHNICIAN: LP

NOTES: 3x Lithium
powered by 104e

IOS OCEAN PHYSICS

AANDERA CURRENT METER DEPLOYMENT AND RECOVERY RECORD

INSTRUMENT: RCM4 SERIAL #: 7498 PST, UTC, OTHER: UTC
 TAPE SIZE: 3 1/4" PROJECT: Aguacu Hure I(mA)

Channel #	Reading1	Reading 2	Last Cal
1. Reference			
2. Temperature			
3. Conductivity			
4. Extemp/pressure			
5. Direction			
6. Speed			
Date: <u>Sept 12/07</u> Time: <u> </u>			

also no record.

Rotor Counter Information:

Rev/Count:
 F.S.= 0.09 - 95 Cm/S
 Rotor Switch: 9
 Rotor Type: 3

Sampling Interval: 30 MIN Depth: 182 m TAPE ID: 7498/01
 Pressure Sensore Range: PSI Serial #:
 Depth Max: 2000 MAX Compass Serial #: 8210
 Conductivity Range: 24-44 MMHO Cell Serial #: 6448
 HI Res Temperature Range: 4-12

Channel #	Reading1	Reading 2
1. Reference	<u>546</u>	
2. Temperature	<u>920</u>	
3. Conductivity	<u>254</u>	
4. Extemp/pressure	<u>1023</u>	
5. Direction	<u>42</u>	
6. Speed	<u>10</u>	
Date: <u>March 29/08</u> Time: <u>2032 UTC</u>		

TIME IN WATER: 1303 PDT DATE: SEP 13, 2007 TIME OUT WATER: 1536 UTC DATE: MAR. 27, 2008
 BAT VOLTAGE: 9.60 ON DEPLOYMENT BAT VOLTAGE: 8.71 ON RECOVERY
 CRUISE ID: 2007-62 DEPLOYED CRUISE ID: 2008-07 RECOVERED
 TECHNICIAN: TECHNICIAN: CP

NOTES:

3x Lithium