

<b>Eventlabel</b>	CAR2013_sel_a_m_08
<b>Campaign</b>	King George Island 2013
<b>Species</b>	Southern elephant seal ( <i>Mirounga leonina</i> )
<b>Age</b>	Adult; >7 years
<b>Sex</b>	Male
<b>Number</b>	
<b>Length (total)</b>	4670 mm
<b>Length (standard)</b>	4180 mm
<b>Length (curvatur)</b>	4750 mm
<b>Girth (pectoral)</b>	3830 mm
<b>Weight [estimated]</b>	>3000
<b>Weight [calculated]</b>	
<b>Weight [measured]</b>	
<b>ARGOS PTT ID</b>	130073
<b>Transmitter type</b>	SMRU/Series 9000 SRDL/CTD
<b>Manufacturer</b>	SMRU
<b>PTT Serial Number</b>	12799
<b>PTT Software</b>	Software specification for CTD_GEN_13A deployment (Standard CTD) Valid for dates in years 2013 to 2016
<b>Setting protocol</b>	Software specification for CTD_GEN_13A deployment (Standard CTD)  Valid for dates in years 2013 to 2016  Transmitting via ARGOS Argos page transmission sequences:  Until day 1464: 0 0 1 0 0 2 3 0 0 4 5 An additional diagnostics page (6) is sent every 60 transmissions  Argos airtest for first 7 hours: Transmission interval is chosen randomly between 48 and 72 seconds  Satellite availability (UTC): 00: -- on -- 01: -- on -- 02: -- on -- 03: -- on -- 04: -- on -- 05: -- on -- 06: -- on --

07: -- on --  
08: -- on --  
09: -- on --  
10: -- on --  
11: -- on --  
12: -- on --  
13: -- on --  
14: -- on --  
15: -- on --  
16: -- on --  
17: -- on --  
18: -- on --  
19: -- on --  
20: -- on --  
21: -- on --  
22: -- on --  
23: -- on --

Transmission targets:

56000 transmissions after 365 days

Normal interval between Argos transmissions: 40  
secs

In Haulouts: ON (one tx every 1 min 20 secs) for  
first 5 hours  
then cycling OFF for 3 hours, ON for 2 hours

Check sensors every 4 secs

When near surface (shallower than 10m), check  
wet/dry every 1 sec

Consider wet/dry sensor failed if wet for 7 days or  
dry for 99 days

Dives start when wet and below 6m for 8 secs  
and end when dry, or above 6m

Do not separate 'Deep' dives

A cruise begins if there has been no dive for 9 mins

A haulout begins when dry for 10 mins  
and ends when wet for 40 secs

Dive shape (normal dives):

4 points per dive using broken-stick  
algorithm

Dive shape (deep dives):

none

CTD profiles: max 2000 dbar up to 4 dbar in 2 dbar  
bins.

Note: these values should now be given in cbar.

They have been auto-converted from dbar because  
CTD\_HI\_RES\_PRESSURE is not specified

Temperature: Collected, Stored. Valid range:  
-2.5 to 30.2 degC

Conductivity: Collected, Not stored.

Salinity: Calculated, Stored. Valid range:  
28.9 to 37.1

Fluorescence: Not collected.

Oxygen: Not collected.  
Light level: Not collected.

Send the deepest upcast in each 6-hour period.

An upcast is collected if the depth exceeds:  
1000m in hour 1  
400m in hour 2  
200m in hour 3  
100m in hour 4  
50m in hour 5  
30m in hour 6

In addition, a replacement upcast is collected if the depth exceeds the depth of the current upcast by 20%.

During profile, sample CTD sensor every 2 seconds when deeper than 500 m, every 1 seconds when shallower than 500 m.

Each profile contains 16 cut points consisting of 8 fixed points, maximum depth, minimum depth, 6 broken-stick points

A set of fixed point is selected according to depth:

10,12,14,16,18,20,24,30  
10,14,20,26,30,36,40,50  
10,20,30,40,50,60,70,75  
10,20,30,40,50,60,75,100  
10,20,30,50,75,100,125,150  
10,20,30,50,75,100,150,200  
10,20,30,50,100,150,200,300  
10,20,50,100,150,200,300,400  
10,20,50,100,200,300,400,500  
10,20,50,100,200,300,500,700  
20,50,100,200,300,500,700,1000  
50,100,200,300,500,700,1000,1500

No GPS data

TRANSMISSION BUFFERS (in RAM):

Dives in groups of 3 (10.4167 days @ 10mins/dive):  
500 = 2000 bytes

No 'deep' dives

Haulouts: 50 = 200 bytes

6-hour Summaries in groups of 3 (7.5 days): 10 = 40 bytes

No Timelines

Cruises: 50 = 200 bytes

No Diving periods

No Spot depths

No Emergence records

No Dive duration histograms

No Max depth histograms

No Depth & Temperature histograms

CTD casts (7.5 days): 30 = 120 bytes

No GPS fixes

No Spot CTD's

No Vemco VMT's

TOTAL 2560 bytes (of about 21000 available)

MAIN BUFFERS (in 8 or 24 Mb Flash):  
Dive in groups of 3 (10.4167 days @ 10mins/dive):  
500 x 104 bytes = 52000 bytes  
No 'deep' dives  
Haulout: 50 x 32 bytes = 1600 bytes  
6-hour summaries in groups of 3 (7.5 days): 10 x 88  
bytes = 880 bytes  
No Depth & Temperature histograms  
No timelines  
Cruise: 50 x 32 bytes = 1600 bytes  
No diving periods  
No spot depths  
No emergence records  
No Duration histograms  
No Max depth histograms  
CTD casts (7.5 days): 30 x 160 bytes = 4800 bytes  
No GPS fixes  
No spot CTD's  
No Vemco VMT's

TOTAL 59 kb (from 8192 kb available)

PAGE CONTENTS:

PAGE 0 (Argos, 247 bits):  
PTT NUMBER OVERHEAD (28-bit code)  
-----[8 bits: 0 - 7]

PAGE NUMBER  
-----[3 bits: 8 - 10]

DIAGNOSTICS in format 0:

Max depth ever: Lookup with 128 bins:  
<2.5,2.5-5,5-7.5,7.5-10,10-12.5,12.5-15,15-  
17.5,17.5-20,20-22.5,22.5-25,25-27.5,27.5-30,30-  
32.5,32.5-35,35-40,40-45,45-50,50-55,55-60,60-65,65-  
70,70-75,75-80,80-85,85-90,90-95,95-100,100-105,105-  
110,110-115,115-120,120-125,125-130,130-135,135-  
140,140-145,145-150,150-155,155-160,160-165,165-  
170,170-175,175-180,180-185,185-190,190-195,195-  
200,200-205,205-210,210-215,215-220,220-225,225-  
230,230-240,240-250,250-260,260-270,270-280,280-  
290,290-300,300-310,310-320,320-330,330-340,340-  
350,350-360,360-370,370-380,380-390,390-400,400-  
425,425-450,450-475,475-500,500-525,525-550,550-  
575,575-600,600-625,625-650,650-675,675-700,700-  
725,725-750,750-775,775-800,800-825,825-850,850-  
875,875-900,900-925,925-950,950-975,975-1000,1000-  
1025,1025-1050,1050-1075,1075-1100,1100-1125,1125-  
1150,1150-1175,1175-1200,1200-1225,1225-1250,1250-  
1275,1275-1300,1300-1325,1325-1350,1350-1375,1375-  
1400,1400-1425,1425-1450,1450-1475,1475-1500,1500-  
1550,1550-1600,1600-1650,1650-1700,1700-1750,1750-  
1800,1800-1850,1850-1900,1900-1950,1950-2000,2000-

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2050,2050-2100,2100-2150, >2150 in units of 0.1 m
(range: 0 to 2150 m)
-----[7 bits: 11 - 17]

DIVE group in format 0:
Normal dives transmitted in groups of 3
Time of start of last dive: max 5 days 12
hours @ 30 secs= 15840
tx as raw 14 bits in units of 1
(range: 0 to 16383 ) OK
(recommended sell-by 5 days 11 hours,
actual: 5 days is OK)
Number of records: raw 2 bits in units of 1
(range: 0 to 3 )
Reason for end: -- not transmitted --
Group number: -- not transmitted --
Max depth: -- not transmitted --
Dive duration: odlog 2/5 in units of 16 s
(range: 0 to 7608 s)
Mean speed: -- not transmitted --
Profile data (4 depths/times, 0 speeds):
Depth profile: Lookup with 128
bins: <2.5,2.5-5,5-7.5,7.5-10,10-12.5,12.5-15,15-
17.5,17.5-20,20-22.5,22.5-25,25-27.5,27.5-30,30-
32.5,32.5-35,35-40,40-45,45-50,50-55,55-60,60-65,65-
70,70-75,75-80,80-85,85-90,90-95,95-100,100-105,105-
110,110-115,115-120,120-125,125-130,130-135,135-
140,140-145,145-150,150-155,155-160,160-165,165-
170,170-175,175-180,180-185,185-190,190-195,195-
200,200-205,205-210,210-215,215-220,220-225,225-
230,230-240,240-250,250-260,260-270,270-280,280-
290,290-300,300-310,310-320,320-330,330-340,340-
350,350-360,360-370,370-380,380-390,390-400,400-
425,425-450,450-475,475-500,500-525,525-550,550-
575,575-600,600-625,625-650,650-675,675-700,700-
725,725-750,750-775,775-800,800-825,825-850,850-
875,875-900,900-925,925-950,950-975,975-1000,1000-
1025,1025-1050,1050-1075,1075-1100,1100-1125,1125-
1150,1150-1175,1175-1200,1200-1225,1225-1250,1250-
1275,1275-1300,1300-1325,1325-1350,1350-1375,1375-
1400,1400-1425,1425-1450,1450-1475,1475-1500,1500-
1550,1550-1600,1600-1650,1650-1700,1700-1750,1750-
1800,1800-1850,1850-1900,1900-1950,1950-2000,2000-
2050,2050-2100,2100-2150, >2150 in units of 0.1 m
(range: 0 to 2150 m)
Profile times: raw 6 bits in units
of 15.873 permille (range: 0 to 1000 permille)
Speed profile: -- not transmitted
--
Residual: -- not transmitted --
Calculation time: -- not
transmitted --
Surface duration: odlog 2/4 in units of 2.5
s (range: 0 to 588.75 s)
cf. cruise starts after 9 mins (540
secs)
Dive area: raw 6 bits in units of 15.873
permille (range: 0 to 1000 permille)
-----[229 bits: 18 - 246]

Available bits used exactly

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=== End of page 0 ===

PAGE 1 (Argos, 247 bits):

PTT NUMBER OVERHEAD (28-bit code)  
-----[8 bits: 0 - 7]

PAGE NUMBER  
-----[3 bits: 8 - 10]

DIAGNOSTICS in format 1:

TX number: wraparound 11 bits in units of  
32 (range: 0 to 65504 )  
-----[11 bits: 11 - 21]

CRUISE group in format 0:  
Number of records: raw 1 bits in units of 1  
(range: 0 to 1 )  
Cruise number: wraparound 4 bits in units  
of 1 (range: 0 to 15 )  
Start time: -- not transmitted --  
End time: max 5 days 12 hours @ 2 mins=  
3960

tx as raw 12 bits in units of 1  
(range: 0 to 4095 ) OK  
(recommended sell-by 5 days 11 hours,  
actual: 5 days 4 hours is OK)  
Duration: raw 9 bits in units of 120 s  
(range: 0 to 61320 s)  
cf. Max duration is 16 hours  
Speed: -- not transmitted --  
Reason for end: -- not transmitted --  
-----[26 bits: 22 - 47]

HAULOUT in format 0:  
Number of records: raw 1 bits in units of 1  
(range: 0 to 1 )  
Haulout number: wraparound 3 bits in units  
of 1 (range: 0 to 7 )  
Start time: -- not transmitted --  
End time: max 5 days 12 hours @ 2 mins=  
3960

tx as raw 12 bits in units of 1  
(range: 0 to 4095 ) OK  
(recommended sell-by 5 days 11 hours,  
actual: 5 days 4 hours is OK)  
Duration: raw 9 bits in units of 120 s  
(range: 0 to 61320 s)  
cf. Max duration is 16 hours  
Reason for end: -- not transmitted --  
Contiguous: -- not transmitted --  
-----[25 bits: 48 - 72]

SUMMARY group in format 0:  
Transmitted in groups of 3  
Record could be in buffer for 7 days 12 hours  
End time: max 7 days 12 hours @ 6 hours= 30  
tx as raw 5 bits in units of 1  
(range: 0 to 31 ) OK  
(recommended sell-by 7 days 11 hours,

actual: 7 days is OK)  
Number of records: raw 1 bits in units of 1  
(range: 0 to 1 )  
Cruising time: -- not transmitted --  
Haulout time: raw 6 bits in units of 15.873  
permille (range: 0 to 1000 permille)  
Dive time: raw 6 bits in units of 15.873  
permille (range: 0 to 1000 permille)  
Deep Dive time: -- not transmitted --  
Normal dives:  
Avg max dive depth: Lookup with 128  
bins: <2.5,2.5-5,5-7.5,7.5-10,10-12.5,12.5-15,15-  
17.5,17.5-20,20-22.5,22.5-25,25-27.5,27.5-30,30-  
32.5,32.5-35,35-40,40-45,45-50,50-55,55-60,60-65,65-  
70,70-75,75-80,80-85,85-90,90-95,95-100,100-105,105-  
110,110-115,115-120,120-125,125-130,130-135,135-  
140,140-145,145-150,150-155,155-160,160-165,165-  
170,170-175,175-180,180-185,185-190,190-195,195-  
200,200-205,205-210,210-215,215-220,220-225,225-  
230,230-240,240-250,250-260,260-270,270-280,280-  
290,290-300,300-310,310-320,320-330,330-340,340-  
350,350-360,360-370,370-380,380-390,390-400,400-  
425,425-450,450-475,475-500,500-525,525-550,550-  
575,575-600,600-625,625-650,650-675,675-700,700-  
725,725-750,750-775,775-800,800-825,825-850,850-  
875,875-900,900-925,925-950,950-975,975-1000,1000-  
1025,1025-1050,1050-1075,1075-1100,1100-1125,1125-  
1150,1150-1175,1175-1200,1200-1225,1225-1250,1250-  
1275,1275-1300,1300-1325,1325-1350,1350-1375,1375-  
1400,1400-1425,1425-1450,1450-1475,1475-1500,1500-  
1550,1550-1600,1600-1650,1650-1700,1700-1750,1750-  
1800,1800-1850,1850-1900,1900-1950,1950-2000,2000-  
2050,2050-2100,2100-2150, >2150 in units of 0.1 m  
(range: 0 to 2150 m)  
SD max dive depth: odlog 2/4 in  
units of 5 m (range: 0 to 1177.5 m)  
Max max dive depth: Lookup with 128  
bins: <2.5,2.5-5,5-7.5,7.5-10,10-12.5,12.5-15,15-  
17.5,17.5-20,20-22.5,22.5-25,25-27.5,27.5-30,30-  
32.5,32.5-35,35-40,40-45,45-50,50-55,55-60,60-65,65-  
70,70-75,75-80,80-85,85-90,90-95,95-100,100-105,105-  
110,110-115,115-120,120-125,125-130,130-135,135-  
140,140-145,145-150,150-155,155-160,160-165,165-  
170,170-175,175-180,180-185,185-190,190-195,195-  
200,200-205,205-210,210-215,215-220,220-225,225-  
230,230-240,240-250,250-260,260-270,270-280,280-  
290,290-300,300-310,310-320,320-330,330-340,340-  
350,350-360,360-370,370-380,380-390,390-400,400-  
425,425-450,450-475,475-500,500-525,525-550,550-  
575,575-600,600-625,625-650,650-675,675-700,700-  
725,725-750,750-775,775-800,800-825,825-850,850-  
875,875-900,900-925,925-950,950-975,975-1000,1000-  
1025,1025-1050,1050-1075,1075-1100,1100-1125,1125-  
1150,1150-1175,1175-1200,1200-1225,1225-1250,1250-  
1275,1275-1300,1300-1325,1325-1350,1350-1375,1375-  
1400,1400-1425,1425-1450,1450-1475,1475-1500,1500-  
1550,1550-1600,1600-1650,1650-1700,1700-1750,1750-  
1800,1800-1850,1850-1900,1900-1950,1950-2000,2000-  
2050,2050-2100,2100-2150, >2150 in units of 0.1 m  
(range: 0 to 2150 m)  
Avg dive duration: odlog 2/5 in

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units of 16 s (range: 0 to 7608 s)
      SD dive duration:  odlog 1/4 in
units of 60 s (range: 0 to 2790 s)
      Max dive duration:  odlog 2/5 in
units of 16 s (range: 0 to 7608 s)
      Avg surface duration:  -- not
transmitted --
      SD surface duration:  -- not
transmitted --
      Max surface duration:  -- not
transmitted --
      Avg speed in dive:  -- not
transmitted --
      Number of dives:  odlog 1/4 in units
of 2  (range: 0 to 93 )
      Deep dives:
      Avg max dive depth:  -- not
transmitted --
      SD max dive depth:  -- not
transmitted --
      Max max dive depth:  -- not
transmitted --
      Avg dive duration:  -- not
transmitted --
      SD dive duration:  -- not
transmitted --
      Max dive duration:  -- not
transmitted --
      Avg surface duration:  -- not
transmitted --
      SD surface duration:  -- not
transmitted --
      Max surface duration:  -- not
transmitted --
      Avg speed in dive:  -- not
transmitted --
      Number of dives:  -- not transmitted
--
      Avg SST:  -- not transmitted --
      -----[174 bits: 73 - 246]

      Available bits used exactly
=== End of page 1 ===

PAGE 2 (Argos, 247 bits):
PTT NUMBER OVERHEAD (28-bit code)
-----[8 bits: 0 - 7]

PAGE NUMBER
-----[3 bits: 8 - 10]

CTD PROFILE in format 0:

      End time:  max 7 days @ 10 mins= 1008
      tx as raw 10 bits in units of 1
(range: 0 to 1023 ) OK
      (recommended sell-by 6 days 23 hours,
actual:  6 days 18 hours is OK)
      CTD cast number:  -- not transmitted --
Note: these old-style dbar pressures are internally

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converted to cbar
  Min pressure:  -- not transmitted --
  Max pressure:  raw 10 bits in units of 2
dbar (range: 4 to 2050 dbar)
  Min temperature:  raw 15 bits in units of
0.001 (range: 2.5 to 35.267 = -2.5 to 30.267 °C in
steps of 0.001 °C)
  Max temperature:  raw 15 bits in units of
0.001 (range: 2.5 to 35.267 = -2.5 to 30.267 °C in
steps of 0.001 °C)
                cf. Valid temperatures: -2.5 to 30.2
degC
  Min salinity:  raw 13 bits in units of 1
mPSU (range: 28900 to 37091 mPSU)
  Max salinity:  raw 13 bits in units of 1
mPSU (range: 28900 to 37091 mPSU)
                cf. Valid salinity: 28.9 to 37.1
  Number of samples:  -- not transmitted --
  8 profile points 0 to 7 (from total of 16
cut points):
                Temperature:
                    Points 0 to 7 are at fixed
pressure
                    8 x Temperature:  raw 10 bits
in units of 0.977517 permille (range: 0 to 1000
permille)
                    Temperature residual:  -- not
transmitted --
                Salinity:
                    Points 0 to 7 are at fixed
pressure
                    8 x Salinity:  raw 10 bits in
units of 0.977517 permille (range: 0 to 1000
permille)
                    Salinity residual:  -- not
transmitted --
                Temperature bounds :  -- not transmitted --
                Conductivity bounds :  -- not transmitted --
                Salinity bounds :  -- not transmitted --
                Min fluoro:  -- not transmitted --
                Max fluoro:  -- not transmitted --
                Min DOxy:  -- not transmitted --
                Max DOxy:  -- not transmitted --
                Min Light:  -- not transmitted --
                Max Light:  -- not transmitted --
                -----[236 bits: 11 - 246]

                Available bits used exactly
                === End of page 2 ===

PAGE 3 (Argos, 247 bits):
  PTT NUMBER OVERHEAD (28-bit code)
  -----[8 bits: 0 - 7]

  PAGE NUMBER
  -----[3 bits: 8 - 10]

  DIAGNOSTICS in format 2:

  Number of resets:  wraparound 2 bits in

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units of 1 (range: 0 to 3 )
-----[2 bits: 11 - 12]

CTD PROFILE in format 1:

End time: max 7 days @ 10 mins= 1008
tx as raw 10 bits in units of 1
(range: 0 to 1023 ) OK
(recommended sell-by 6 days 23 hours,
actual: 6 days 18 hours is OK)
CTD cast number: -- not transmitted --
Note: these old-style dbar pressures are internally
converted to cbar
Min pressure: -- not transmitted --
Max pressure: -- not transmitted --
Min temperature: -- not transmitted --
Max temperature: -- not transmitted --
Min salinity: -- not transmitted --
Max salinity: -- not transmitted --
Number of samples: -- not transmitted --
8 profile points 8 to 15 (from total of 16
cut points):
Temperature:
Min pressure is sent
separately
Max pressure is sent
separately
6 broken stick pressure bins:
raw 10 bits in units of 1 bin (range: 0 to 1023 bin)
8 x Temperature: raw 10 bits
in units of 0.977517 permille (range: 0 to 1000
permille)
Temperature residual: -- not
transmitted --
Salinity:
Pressure already transmitted
8 x Salinity: raw 10 bits in
units of 0.977517 permille (range: 0 to 1000
permille)
Salinity residual: -- not
transmitted --
Temperature bounds : raw 2 bits in units of
1 lo/hi (range: 0 to 3 lo/hi)
Conductivity bounds : -- not transmitted --
Salinity bounds : raw 2 bits in units of 1
lo/hi (range: 0 to 3 lo/hi)
Min fluoro: -- not transmitted --
Max fluoro: -- not transmitted --
Min DOxy: -- not transmitted --
Max DOxy: -- not transmitted --
Min Light: -- not transmitted --
Max Light: -- not transmitted --
-----[234 bits: 13 - 246]

Available bits used exactly
=== End of page 3 ===

PAGE 4 (Argos, 247 bits):
PTT NUMBER OVERHEAD (28-bit code)
-----[8 bits: 0 - 7]

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PAGE NUMBER

-----[3 bits: 8 - 10]

CTD PROFILE in format 2:

End time: max 3 days 6 hours @ 10 mins= 468  
tx as raw 9 bits in units of 1  
(range: 0 to 511 ) OK  
(recommended sell-by 3 days 5 hours,  
actual: 3 days is OK)

CTD cast number: -- not transmitted --  
Note: these old-style dbar pressures are internally  
converted to cbar

Min pressure: -- not transmitted --  
Max pressure: raw 10 bits in units of 2  
dbar (range: 4 to 2050 dbar)  
Min temperature: raw 15 bits in units of  
0.001 (range: 2.5 to 35.267 = -2.5 to 30.267 °C in  
steps of 0.001 °C)

Max temperature: raw 15 bits in units of  
0.001 (range: 2.5 to 35.267 = -2.5 to 30.267 °C in  
steps of 0.001 °C)  
cf. Valid temperatures: -2.5 to 30.2  
degC

Min salinity: raw 13 bits in units of 1  
mPSU (range: 28900 to 37091 mPSU)

Max salinity: raw 13 bits in units of 1  
mPSU (range: 28900 to 37091 mPSU)

cf. Valid salinity: 28.9 to 37.1

Number of samples: -- not transmitted --  
8 profile points 0 to 7 (from total of 16  
cut points):

Temperature:

Points 0 to 7 are at fixed  
pressure

8 x Temperature: raw 10 bits  
in units of 0.977517 permille (range: 0 to 1000  
permille)

Temperature residual: -- not  
transmitted --

Salinity:

Points 0 to 7 are at fixed  
pressure

8 x Salinity: raw 10 bits in  
units of 0.977517 permille (range: 0 to 1000  
permille)

Salinity residual: -- not  
transmitted --

Temperature bounds : -- not transmitted --

Conductivity bounds : -- not transmitted --

Salinity bounds : -- not transmitted --

Min fluoro: -- not transmitted --

Max fluoro: -- not transmitted --

Min DOxy: -- not transmitted --

Max DOxy: -- not transmitted --

Min Light: -- not transmitted --

Max Light: -- not transmitted --

-----[235 bits: 11 - 245]

UNUSED

-----[1 bits: 246 - 246]

=== End of page 4 ===

PAGE 5 (Argos, 247 bits):

PTT NUMBER OVERHEAD (28-bit code)

-----[8 bits: 0 - 7]

PAGE NUMBER

-----[3 bits: 8 - 10]

DIAGNOSTICS in format 2:

Number of resets: wraparound 2 bits in  
units of 1 (range: 0 to 3 )

-----[2 bits: 11 - 12]

CTD PROFILE in format 3:

End time: max 3 days 6 hours @ 10 mins= 468  
tx as raw 9 bits in units of 1  
(range: 0 to 511 ) OK

(recommended sell-by 3 days 5 hours,  
actual: 3 days is OK)

CTD cast number: -- not transmitted --

Note: these old-style dbar pressures are internally  
converted to cbar

Min pressure: -- not transmitted --

Max pressure: -- not transmitted --

Min temperature: -- not transmitted --

Max temperature: -- not transmitted --

Min salinity: -- not transmitted --

Max salinity: -- not transmitted --

Number of samples: -- not transmitted --

8 profile points 8 to 15 (from total of 16  
cut points):

Temperature:

Min pressure is sent  
separately

Max pressure is sent  
separately

6 broken stick pressure bins:  
raw 10 bits in units of 1 bin (range: 0 to 1023 bin)

8 x Temperature: raw 10 bits  
in units of 0.977517 permille (range: 0 to 1000  
permille)

Temperature residual: -- not  
transmitted --

Salinity:

Pressure already transmitted  
8 x Salinity: raw 10 bits in  
units of 0.977517 permille (range: 0 to 1000  
permille)

Salinity residual: -- not  
transmitted --

Temperature bounds : raw 2 bits in units of  
1 lo/hi (range: 0 to 3 lo/hi)

Conductivity bounds : -- not transmitted --

Salinity bounds : raw 2 bits in units of 1  
lo/hi (range: 0 to 3 lo/hi)

Min fluoro: -- not transmitted --  
Max fluoro: -- not transmitted --  
Min DOxy: -- not transmitted --  
Max DOxy: -- not transmitted --  
Min Light: -- not transmitted --  
Max Light: -- not transmitted --  
-----[233 bits: 13 - 245]

UNUSED

-----[1 bits: 246 - 246]

=== End of page 5 ===

PAGE 6 (special diagnostics page sent every 60 transmissions)

PTT NUMBER OVERHEAD (28-bit code)

-----[8 bits: 0 - 7]

PAGE NUMBER

-----[3 bits: 8 - 10]

TX number: wraparound 18 bits in units of 1  
(range: 0 to 262143 )

Current state: raw 3 bits in units of 1  
(range: 0 to 7 )

Tag time (mm:ss): raw 12 bits in units of 1  
secs (range: 0 to 4095 secs)

ADC offset: raw 12 bits in units of 1 A/D  
units (range: 0 to 4095 A/D units)

Tag hours: wraparound 16 bits in units of 1  
hours (range: 0 to 65535 hours)

Aborted tx: wraparound 18 bits in units of  
1 (range: 0 to 262143 )

Wet/dry status: raw 2 bits in units of 1  
(range: 0 to 3 )

Wet/dry fail count: wraparound 8 bits in  
units of 1 (range: 0 to 255 )

Body number: raw 16 bits in units of 1  
(range: 0 to 65535 )

Max depth ever: raw 15 bits in units of 0.1  
m (range: 0 to 3276.7 m)

Latest reset hour: raw 16 bits in units of  
1 hours (range: 0 to 65535 hours)

Number of resets: wraparound 8 bits in  
units of 1 (range: 0 to 255 )

Wettest (min wet/dry): raw 8 bits in units  
of 1 (range: 0 to 255 )

Driest (max wet/dry): raw 8 bits in units  
of 1 (range: 0 to 255 )


Number of depth spikes: wraparound 16 bits  
in units of 1 (range: 0 to 65535 )

Number of CTD samples: wraparound 22 bits  
in units of 1 (range: 0 to 4.1943e+06 )

-----[198 bits: 11 - 208]

UNUSED

-----[38 bits: 209 - 246]

	=== End of page 6 ===
<b>Deployment</b>	
<b>Immobilisation</b>	<a href="http://doi.pangaea.de/10.1594/PANGAEA.833216">http://doi.pangaea.de/10.1594/PANGAEA.833216</a>
<b>Comment</b>	Seal tag: ST 73 ST; C024 C025 Deployment site: P5 - Refugio Elephante Prev. Deployment: none
<b>Tag deployed</b>	2013-11-09T22:28 -62.256 -58.636
<b>Tag retrieved</b>	-- //
<b>First transmission</b>	2013-11-09T23:11:12 -62.256 -58.636
<b>Last transmission</b>	2014-05-10T18:07:35 --62.261 -58.647