

Eventlabel	CAR2013_sel_a_m_12
Campaign	King George Island 2013
Species	Southern elephant seal (<i>Mirounga leonina</i>)
Age	Adult; 10 years
Sex	Male
Number	
Length (total)	4660 mm
Length (standard)	4060 mm
Length (curvatur)	4570 mm
Girth (pectoral)	3340 mm
Weight [estimated]	>3000
Weight [calculated]	
Weight [measured]	
ARGOS PTT ID	130071
Transmitter type	SMRU/Series 9000 SRDL/CTD
Manufacturer	SMRU
PTT Serial Number	12797
PTT Software	Software specification for CTD_GEN_13A deployment (Standard CTD) Valid for dates in years 2013 to 2016
Setting protocol	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 ===
Deployment	
Immobilisation	http://doi.pangaea.de/10.1594/PANGAEA.833216
Comment	Seal tag: 498 ST C321 C322 Deployment site: Refugio Elephante - P5 Prev. Deployment: none
Tag deployed	2013-11-09T17:23 -62.258 -58.659
Tag retrieved	-- //
First transmission	2013-11-09T17:38:52 -62.258 -58.659
Last transmission	2014-05-29T06:24:58 -60.695 -45.606