

Station	Station Name	Latitude and Longitude	Altitude m	Activation	Trans miller	Transmitter ID	Antenna Az./Elev	Transmit Time	WMO code
0	ETH 10 m	69°33'24"N, 49°21'34"W	1176	1990.4	GOES	8030A1E0	207/14	00:43:40	
01	Swiss Camp	69°33'24"N, 49°21'34"W	1176	1990.30	GOES	80300118	207/14	00:41:00	04458
02	Crawford Point1	69°52'28"N, 47°01'28"W	2022	1995.39	GOES	8030126E	210/13	00:41:10	04456
03	NASA-U	73°50'27"N, 49°31'23"W	2420	1995.41	GOES	80300770	206/10	00:18:00	04443
04	GNS	77°03'14"N, 61°02'04"W	1659	1995.43	Argos	107282			04435
05	Humboldt	76°31'14"N, 56°50'30"W	1995	1995.47	Argos	107283			04432
06	Summit	72°34'48"N, 38°30'20"W	3215	1996.37	GOES	803027F4	208/10	00:41:20	04418
07	Tutu-N	78°01'02"N, 33°50'10"W	2052	1996.38	Argos	107284			04425
08	DYE-2	66°28'54"N, 48°17'22"W	2099	1996.40	GOES	803064FE	210/16	00:41:30	04464
09	JAR 1	69°29'37"N, 49°42'41"W	897	1996.47	GOES	80303482	206/14	00:41:40	04452
10	Saddle	65°50'60"N, 44°30'09"W	2467	1997.30	GOES	80307788	213/16	00:41:50	04485
11	South Dome	63°08'58"N, 44°42'18"W	2901	1997.31	GOES	80305164	213/18	00:42:00	04492
12	NASA-E	75°00'11"N, 29°59'13"W	2614	1997.34	GOES	8030E2EA	226/7	00:18:10	04420
15	NASA-SE	66°28'42"N, 42°28'44"W	2373	1998.30	GOES	8030870C	214/15	00:42:20	04488
22	Pekerman ELA	80°05'45"N, 58°08'18"W	924	2003.40	Argos	107284			
23	NEEM	77°26'28"N, 51°04'57"W	2461	2006	GOES	8030C405	204/8	00:40:50	04436
24	EGRIP	75°35'38"N, 35°59'19"W	2800	2014	GOES	8030947A	219/8	00:42:10	
30	LAR1	68°08'28"S, 63°57'07"W	53 m	2008	GOES	80304212	350/12	00:43:30	

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5-5 Bianca + Koui + says to SC lucky

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# Swiss Camp snow

Datum / Date: 29.4.2017

END 2017.35 (JD 119 = 29 Apr. 17)

H<sub>1</sub> = 125 cm

H<sub>2</sub> = 115 cm

JD 45: 169 cm

161 cm

JD 130 72

73

JD 150 74

78

JD 157

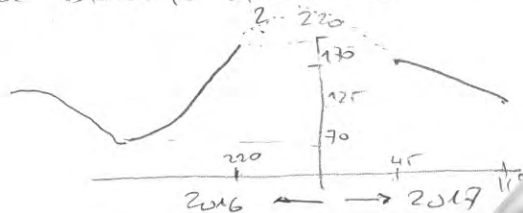
73

JD 220 (~Aug)

220

- 147

There was a 120 cm snow  $\Rightarrow$  at least 30 cm ice ablation in summer 2016<sup>p</sup>



Datum / Date:

ARS Transmission Datum / Date: 29. 4. 2018

ARGOS Stations:

GITS

stopped JP 19

Battery at 11.9V - low?

Probably needs new Batteries in 2018

Wind 1 is out

Sound 1 jumping all over

Sound 2 is out

Hury

37 - to today transmitting  
all fine and working

PET

X-mit ok

TC air are both 999

Rant ok,

Tunny

X-mit ok

Wind 2 out (dir only)

Rant ok

Datum / Date:

NEEM needs another visit?

GOES AWS transmits. Datum / Date: 29.4.2017

JAR1 transmission ok Extension needed  
Wind 1 speed out  
Snow H1 out  
Battery ok

NASA-E transmission ok  
the two wind speed quite different  
Battery ok

NASA-SE transmission ok  
TC and HWP Temp 10°C difference!  
Battery ok

NASA-W1 DS 72 to present, X-unit ok  
needs new battery box  
Snow H1 out  
Extension needed

NEEM: Stopped working?  
Battery?

Saddle: x-mit ok, all ok

Swiss Camp x-mit ok  
no battery on transmitter!  
change program!

Sum: x-mit ok, all ok

DYC-II x-mit ok, Battery rather low!  
Henz out show height 1 out?  
new battery box!

EGR10 x-mit ok, all channels ok

NASA-4 x-mit, ok, all working

Datum / Date: 5.5.2017

Need to find the serial number  
to Switzerland as soon as possible.

Packing list Datum / Date: 5.5.17  
serial # of equipment

(15) TX 32 SN 2312, 1987, TX 320 SN 49338

ARGUS ST-21 SN 1081, 1080,

SR 1000 SN 7658, 76588, SN 20408

CHF 120 SN 4966, 13080, 13078

SR 50A SN 7283, 7276

PTB 110 SN 23760002

(16) LiCore PY 28087, C5300-L SN 46812

Li 200X PY 77538

107 SN 60836603

AC2-S3 20052770

20052603

20052728, 20052648

(17) Argus antenna SN 12022, 12023

Net Rad trip 2 SN 134888

Solar panel SP20, SN ID 315110071169260

D2141, 2011106770

(18) GPS antenna 60142055

60189837

GPS R7: 022373598, 0220400468

5700: SN 00220283732 / 10-20390334

Datum / Date: 6.5.2017

Simon and Derek made to steps  
in front of the platform and  
drilled - 3.5m poles into the ice.  
This will hold the station or  
we might even put it straight  
again.

Made several films about AWS  
and during by took a lot  
of pictures, also from Bianca  
and me together.

It was warm with Temp above  
freezing, we had just made  
wind.

This is a test for the universe.  
We are going to JARA to exchange  
the money come and  
need to make some new  
advises - the station

Datum / Date: 6.5.2017

AWS Swiss Camp download  
- all working, download data

10 m tower : upper wind (w) speed  
looks funny

The entire year! - short wave refl. last  
since 10 May 2016! When I downloaded last!

Snow radar: Stopped working 18 Sep 2016  
was it the power?

GPS Swiss Camp : recorded 512  
hourly files until  
1.06.2016, then  
stopped.

When I downloaded the files, and  
deleted the 512 from memory, it  
started again recording.



Datum / Date: 7.5.2017 Swiss Camp

Will go to JARI today to  
download and look for extension.

We made an other interview today,  
but I did not like the questions.  
He wanted me to say things that  
did not agree with my views.

We need to go to forest plots  
after Swiss Camp.

Where are we going next?  
When is this going to stop, the  
military. This is going to be paid,  
but ...

Day 10, JARI

Datum / Date: 7.5.2017

DN 10  $69^{\circ}30'02''N$ ,  $49^{\circ}33'41''W$   
1002 m

GSP downloaded, worked until March 17

JARI:  $69^{\circ}29'37''N$ ,  $49^{\circ}42'46''W$   
903 m

added to google sheet

Wind and, shut out not ok.  
Extension will share next to this

GPS seems to have wrong date, but  
it worked, 5900 J4J18

Need for JARI .. wind, SR-50

- rope for battery

- GPS triangle (date?)

- not radiation sensor

Shovel, in pic, tripod,

DN 10: need extension

Datum / Date: . 9.5.2017

## Things to do at Swiss Camp

- AWS needs? ok ✓
- program GPS for SC, d410, Jan 1  
up 50, up 18
- ① ✓ done
- bit up 18 GPS ✓  $69^{\circ} 39' 53'' \text{N}$   
 $48^{\circ} 59' 51'' \text{W}$
- visit up 50 GPS ①
- CP1 extension, and resetting  
transmission! plane
- Probe flight ①
- GPR profiles ①
- SHP profile ①
- snow measurements ①

Zent plan

Datum / Date: 9.5.2017

- 10.5 - Jason + Kild Burg
- 10.5 - Oliver arriving 8:30 am
- 11.5 16:00 leaving

Total visit is 30h

Datum / Date:

GPS Program

Datum / Date: 12.5.17

Scheduled Survey:

15s logging rate

1 min Position logging rate

5° elevation mask

☐ Repeat any hour, not activated

☒ Sleep at survey end

DM10 : GPS R7 #0471

208 files

5/14/16 - 11/12/16 daily 17 files

3/7/17 - 3/15/17 daily

Programming for 2017

Old prog 2016 ; new program + 1 year

4/01/16 16:50 5424h 10/1/16

12/01/16 240h 12/10/16

2/01/17 240h 2/10/17

4/01/17 5424h 10/1/17

SC : new program #0169

Last year only worked hourly instead of daily files, and it made 521 files and stopped.

GPS

12.5.17

JAR1: # 40182016 start at 9/29/1996 instead  
(of May 1996)to 5/29/1997  $\Rightarrow$  7 months!

it seems just date was wrong!

Worked through the programming period

new GPSR7  $\rightarrow$  3598 for Jan 1  
2017

Datum / Date:

GPS date problem Datum / Date: 12.4.17

Timezone / GMT

5700 0220283932 1.20 1.22

5700 0220284018 1.20 1.22

R7 0220400468 2.30 2.30

R7 0220390334 2.30 2.30

R7-JAN1 0220373598 2.27 2.30

R7 DU10 0220400471 2.30 2.30

Hardware version 2.0

Send email to Marc @ UNAVCO  
for password & upload for the  
receiver.

Datum / Date:

12.5.2017

Begin error

Error processing

AT + CGACT = 1,2

Service not available!

On small toyboat CF-13

Swiss Air

Datum / Date:

12.5.17

+41 848 700 700 LMICY9

Diastaf gleiche Zeit

OPQL89 Oliver Wiese  
Bundschuh Str.

10:15 <sup>15</sup> leaving	10:45 arriving
8:30 wx	

Milano Sat. 13.5.2017

Datum / Date:

13.5.2017

DN 12: Start GPS measurements <sup>1</sup>

Oliver and Sami left at 10:45 am  
with the helicopter to Illulissat, finally,  
They should have left on Thursday  
and left on Saturday.

JHR 1

Datum / Date: 13.5.17

Redrilled exactly 3 m into the ice  
(one extension) with the sleeve  
at the snow - ice mixed face.

There is about 1.2 m snow.

Put GPS online for next year  
recording.

Repaired the SN 1, the power  
cable was loose

Repaired the lower wind sensor.

Start GPS measurements JHR 1

What was the snow record from the AW  
and the melt record? <sup>2</sup>

Datum / Date:

Snow survey 2017

Snow Survey

Datum / Date: 14. 5. 2017

10m Towers

Box underside 1 165 cm  
 lower an 239 cm  
 Radar Box Radar 116 cm  
 Radar Box lower an 147 cm

from 115 to 114 then 118 130  
~~130~~, 128, 142, ~~160~~, 125

Snow depth  $\bar{x} = 120$  cm

118 (under the Radar)

123 (under source 1), 113

AUS

Aus Box 146 cm lower an  
 lower an 152 cm  
 around the pole:

131, 134 cm (below source 1)  
 122, 147, 144, 133, 150,  
 157

$\bar{x} = 140.5$  cm snow depth at Aus

43'677

35'916



Datum / Date:

UP 18 GPS

15.4.2017

# 022030334 R7, has a date problem  
 local time is 8/22/99  
 01.11.30  
 → True time 15 May 17  
 12:01 UTC

04/1/17 5424 h  
 12/1/17 740 h  
 2/1/18 246 h  
 4/1/18 5424 h

# 4018 start 8/22/99 for  
 6500 h, only one time  
 period.  
 Trimble 5700

UP 50 GPS

Datum / Date:

15.4.2017

# 0220400468 R7, date wrong  
 08/22/99 01:03  
 instead: 5/15/17 12:16 UTC

# 3732

start 8/22/99  
 for 6500 h, only  
 one time period

Trimble 5700

Datum / Date: 15.5.2017 JARE GPS

188 days = 4512 h + 1080 L ~ 5424 h

3/29/1996 - 4/3/1997 → ~ 5424 h when  
adding time from 4/11 to start

---

Test programming with wrong date:

8/22/99 wrong date  
- 45 days

7/7/99 5424

2/1/00 240

4/1/00 240

6/1/00 5424

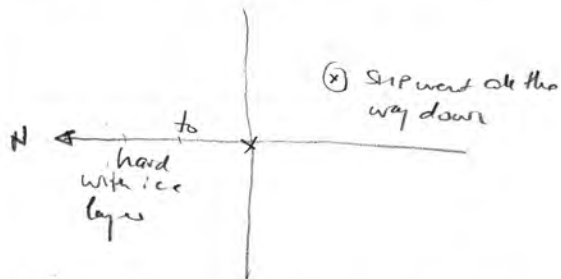
Up 18 + Up 50 Datum / Date: 15.5.2017

Simon and Derek went to  
ap 18 and up 50 team to set the  
GPS instruments with the new program.  
The units were 5000 instruments, with  
a date error, instead of today it  
reads 8/22/1999

SMP 37

Datum / Date: 15. 5. 2018

First SMP measurements at Swiss  
Camp at the 10 m tower



All SMP's stopped at the most  
recent ice layers, some 10-20 cm  
below the surface. Only one SMP  
went all the way to the bottom  
→ we have no density meas. for  
the 10 m tower, snow pit was  
done at the SC AWS

Datum / Date:

GPS up from SC

Datum / Date: 16.5.2017

GPS data up 18 and up 50

# 5194 R7 one file 16,975,093

(up 18?) time stamp 12/17/1996

↑

This is about 20 days old time  
recording, assuming a daily data  
rate of 0.84 M Bytes!

~ 9 July 2016  
put in

---

# 5196 R7 (up 50?)

start date: 10.2.1996, but should have  
been 5.17.2016 ~ 14ute

Datum / Date: 16.5.2017

Still need upgrade PW for:

R7 0220375194 (used up 50)

R7 0220375196 (used up 18)

requested PW on 16.5.2017

### GPS upgrades

Datum / Date: 16.5.2017

Win flash for R7 receivers

V5.0 loaded, use modular receiver  
or legacy password option

# 0468 R7 updated, working, spare

# 0334 R7 updated, working, spare

Loaded win flash WFC-Rx-5x-V500

• Use Trimble Survey Modular Receiver

• Update receiver options

Format → Legacy password x  
\* received from UNAVCO

It worked!

Still need to update the

# 4018 Trimble 5700 up 18 } in 2018!  
# 3932 " " up 50 }

Datum / Date:

17.5.2017

C-130 Flight Period 2

17 May Summit

18 May Egrip

19 May Summit

21 May Base

22 May Summit, EGRP

24 May Summit

\* Send email to J.P. fl@egrip.camp  
+ cc. Tracy

Flights to Seput-in Datum / Date: 17.5.2017

1 Flight shared Santiago, Booby camp  
Tent, batteries, dome tent  $\frac{1}{2}$

2 Flight Shiloo + wood  $\frac{1}{2}$

3 Flight 4 pax + gear 1

4 Flight B+k + colli gear 1?

also split  
fuel depot

This means we had only  $2\frac{1}{2}$   
flights to Swiss Camp. But we  
had an extra day of Twin Otter  
charter which was ~ 10k \$.

new flight plan

Datum / Date: 17.5.2017

after I received confirmation that the  
two AWS extension poles arrived from  
EGRIIP

SJF - SC

SC - CP1

CP1 - SC

SC - SJF

20 May 2017

SJF - S-Dome

S-Dome - Dy. 2

Dy. 2 - SJF

22 May

SJF - Summit

23 May

Summit - SJF

25 May

Not visiting NASA-U

Adding CP1 and one flight to SC

Datum / Date:

17.5. 2017

Time window	Samp. Freq.	Time Res.
11058	2006 samp.	181 Hz · 63682
13487	3524	262
13191	4444	336
13841	5036	428
13628	3570	262 8 stacks
9740	3534	362

Ethernet connection between ProEx

and large Toughbook.

If it does not connect → Tools, hardware,  
Realtek Ethernet Driver (rather than the  
generic hub driver).

13487	3534	262 Hz
-------	------	--------

25 MHz GPR

Datum / Date:

17.5. 2017

Depth (m)

952

1150 (-35)

1152 (-35)

1211 (-35)

1171 (-5)

← Let try a few runs with  
this set-up and  
look at the underground

1180 (-7)



Datum / Date:

18.5.2017, SC

## Things to do before leaving

- Shelves on the platform
- pack all the science bags
- \* - prepare the air boxes for fruit
- prepare the bags for CP1
  - extension + sleeve
  - tripod with extensions
  - toolbox and spare parts
  - battery?
  - SIM4

\* 2 poles + extension

Cross arm with mount

compass for wind, snow, wind

Campbell box for date logs + radar

Swiss Camp

Datum / Date: 19.5.2017

Raining! most of the day.  
We are packing our instruments,  
but weather does not look good  
for a pull-out tomorrow, including  
the CP1 extension, and a visit to  
Santiago's station.

We will need no flugas this season,  
but bring three propane auto bottles.

CD 1 63° 52' 27" N, 47° 01' 27" W

Datum / Date: 19.5.2017

Reflex GPR

Energy delay - gain filter  
Amplitude scale

1) 2D Filter

a) subtract mean (drawn)

2) processing static correlation / plotting

3) Processing + gain / static correlation /  
mean delay.

→ click on two points start/end  
when the profile starts (take time  
delay out)

4) Processing / 2D Filter  
background removed

GPS Swiss Corp

Datum / Date: 20.5.2017

changed receiver from

0465 to 0468 R7

When I remove power, the 0468  
R7 receiver did not start from  
it's own.

Put R7 0468 on kinematic  
mode (is that correct?)

old SC 1 CPSO

Current File: 5 \* elevation mask / 13

PDOP mask 95 7

Meas. rate (1Hz) / 1012

Logging meas rate 175 / 15

Position log rate 60 sec / 60

Static mode → static / kinematic

Time activation 4/1/17 / no

Repeat should

Datum / Date: 22. 5. 2017

### S-Dome

All channels working, antenna was about  $15^\circ$  off azimuth and  $30^\circ$  off horizon (into the sky).

Put new extension in, still enough power cable for next extension.

Reset GOES transmitter, GPS loop was on, and before we left data for transmitting loop was on. GPS sync was not completed by the time we left.

Simon and Ditch did the snow pit.

### S-Dome

Datum / Date: 22. 5. 2017

Coordinates: Same than last time

Precip ~  $1.2 \text{ m/y}$  -  $1.5 \text{ m/y}$   
Does it need an extension?

Why is it not transmitting?

Last year data (18 May 2016)

37.4 dBm forward power

14.2 dBm Reflected power

Last year re-directed the antenna from  $310^\circ$  to  $213^\circ$  (correct) Reconnect the antenna directly and reset the GOES transmitter

Datum / Date:

22.5.2017

[Dyc-II  
S-Power?]

It took us a while to finish the job, all seems to be working again.

Had to replace the memory chip as it gave a parity signal.

One SD show not working and one humidity is out, already from last year.

Dyc-II

Datum / Date:

22.5.17

Tower needs to be redrilled with a new pole, it was quite "solid".

We did not redrill the pole, as it would have been at the same height.

The power cable was shortened in the box, someone must have moved the cables and that shortened the large battery. The power cable + jack plug



It took me 2 hours the trouble to make connections and to connect the new battery box.


Decided to change the RS232 cable to GORE transmitter as well, because I could not talk at the date with the display.

Datum / Date: 23.5.2017

Flight to Summit.

Bianca reconnected the power at Mike's snow collection station, it was out.

Soft snow at CP1, hard time to get airborne. Very warm at CP1 ( $-3^{\circ}\text{C}$ ) and low wind.

CP1 we had no skis, but were able to cut a piece from the new Summit tower (from solar panel lower than Swiss Camp), and it worked! Drilled a pin and one  to hold the new skis.

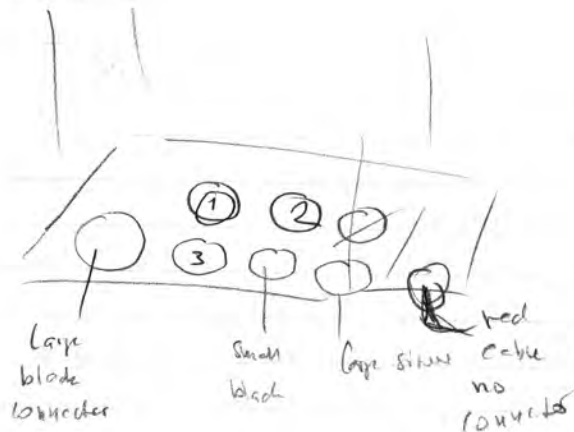
Summit Camp

Datum / Date: 23.5.2017

'Things to do at Summit'

- this download, check instruments
- 50 m tower, what can be dismantled?
- new towers for Radar + snow temp. need to 50 m tower
- take down all pyrometers and pyrothermometers for calibration.
- Redo cargo from tower ed.

Datum / Date:



Radiometer dismount

Datum / Date: 24.5.17

### Solar Trades

① CM 21 Pyranometer on the left

Serial # 960308

Sensitivity  $12.68 \cdot 10^{-6} \text{ V/Wm}^2$

gray cable

② CG 4 Pygeometer on the right

Serial # 030683

Sensitivity  $11.27 \cdot 10^{-6} \text{ V/Wm}^2$

black cable

③ Pyrheliometer CH1

Serial CH1240063

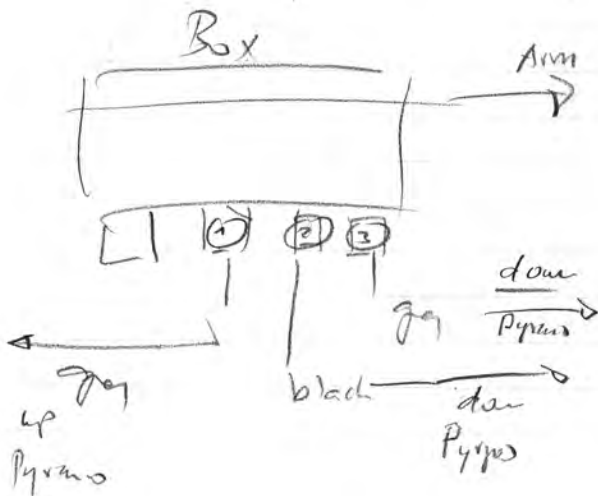
Sensitivity  $2.79 \mu\text{V/Wm}^2$

gray cable

→ Pyranometer fan not working!

Datum / Date: //

Radiometer dismounting



Radiometer dismount

Datum / Date: 24.5.17

Radiation arm, 2 Pyran, 1 Pyranometer

① Pyranometer CN21 grey cable  
# 010797

S:  $10.99 \cdot 10^{-6} \text{ V/Wm}^2$  up

② Pyranometer CN21

# 030684

S:  $13.85 \cdot 10^{-6} \text{ V/Wm}^2$

black cable

down

③ Pyranometer CN21

# 010798

S:  $11.67 \cdot 10^{-6} \text{ V/Wm}^2$  down





Datum / Date:

Solar Tracker Tower

25.5.17

Datum / Date:

The solar tracker tower could not be oriented because the cables are too short.

- Found a power cable extension.
- NEED a data cable extension.

Datum / Date:

Summit data

Datum / Date: 26.6.17

Tower data from Summit  
was not downloaded until  
June 17, 2017!

We were at Summit @ 25 Aug, 17  
and reset the data loggers.

Swiss Camp snow radar

The Swiss Camp data was down-  
loaded from Norway side  
160507 to 160501 (17.6 By 100)

booster until 1 Sep 2016.

Where is this data now on  
my computer?

I have data up to 160711 only

Swiss Camp snow heights

Date analysis:

Today  $sh = 2.07m$ in May 1.20m

$$\Delta = 87cm$$

Snow survey in May at AWS  
was 140 cm!

$\Rightarrow$  There is still 30cm  
snow on the surface!  
 $\rightarrow$  there might be slush!

Air temp was close to zero  
and below zero

Datum / Date:

Datum / Date:

Note Verb: COHANDCO.COM

Expenses on Greenland trip

7 Aug	meal	305 Dkr
	drinks	<u>565 Dkr</u>
	133 CHF	874 Dkr

8 Aug	dinner in hotel	4135 Dkr
	CHF 630.-	

8 Aug	lunch Alvia Telt	1856 Dkr
	CHF 233	

Total food so far 1056 CHF

Albedo Swiss Camp  
coefficients

SW incoming

$$200 = \text{factor} (x)$$

SW reflected

$$77 = \text{factor} (x)$$

↳ reverse channel since May, 12, 2012

Datum / Date:

75' 600. —

CHF 889.93

Telephone OPEN Datum / Date: 27.9.17

85 days

change over in 8 weeks

Louise Gyr

Thule

Karlsruhe

etc Nov leaving OPEN

Nov 9. 10 visit the OPEN CH

Oct. 18

Datum / Date: 9.11.2017 ODEU

- ⑦ Land-based Helicopter could  
refuel on the ODEU
- ⑧ NG, north of Greenland
- ⑨ Max pay 50 pers. but  
only 40 Scientist by setting  
to an + Doctor, Medical,  
Project coordinator, 1  
technical operator
- ⑩ HC Airways, Kanger (2x)  
is rented for the trip
- ⑪ Helibeam on ODEU is working  
at the time, and data is  
transmitted to the ocean mapping  
office.

ODEU, Sweden Datum / Date: 9.11.2017

- Summer 2015 cruise
- ① Possibility to go clockwise  
around Greenland; the Atanor  
could break through from the  
opposite side.
  - ② Convey of two vessels
  - ③ Not good for open water  
, so from Thule to Denmarkshavn  
is that with the circumnavigation
  - ④ Helicopter, not leave alone be  
more than 20 nautical miles
  - ⑤ Drifting at 200m depth, possible  
but goes 4-5 nautical miles (1)
  - ⑥ Open water is a no go!



Datum / Date: ODEW 9.11.2017

(12) IT is organized, connect  
the server with time center  
net data, raw data

(13) 400t winders are duplicated  
for CTD, and others.  
They have a route,  
Piston coring is possible

(14) April 1, 2018 they are moving  
north.

6 cabin with 4 beds (2 rooms)  
usually 2 beds in one room

(15) 20 feet containers can be  
connected.

ODEW

Datum / Date: 9.11.2017

CP RS 123

(16) bring your own UPS

(17) Transit : 10.5 knots  
35-40 tons fuel / day  
low sulfur diesel ~6000 \$/ton  
4000 tons fuel load

(18) Containers  
12 waste lab  
laboratory containers  
10 of-ded possible

(19) Science for the northern part

[ 2 knots northern part  
10 knots southern part ] (b) General

Unclear ice boundaries to cross first

Datum / Date:

Amrue

Max Holz

---

Ur doof Brütsher

Stehadmit 47

Ur doof # 260 259  
12 Volt

---

Seit, Eisprodukt, festelti,  
GPS, ed

Datum / Date:

4.1.2018

Seal lead batteries

UB 1280

Brack

Duraall ultra

12V 8Ah

Power Surge

PS -1270 F1

Martin Jentner

Holz mit

Ur doof  
Zuchale

"  
Max, Suddi<sup>p</sup>

Zuchale

084 730 21 1

Albert

Brack

HP

Buchwalter

- Elmi Lohar -  
Peter

Stephan

Datum / Date: 6.1.2018

## Lake pressure measurements

Signal Controller

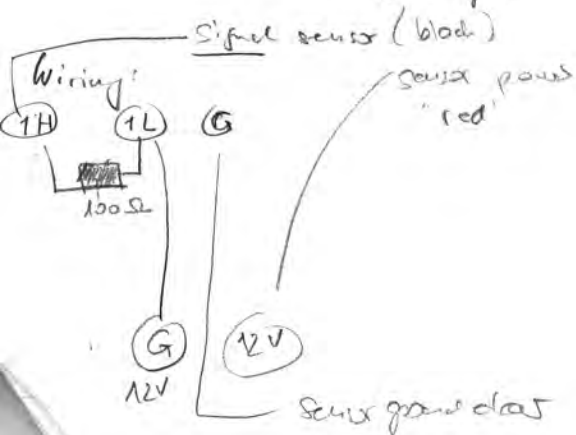
Model 8000 MP - 300 - 1-PS-SB-  
150 m

SN: 703258

Calibration: C - 150.0 MPa

Output: 4 - 20 mA

Excitation is at 12 Volts from  
Dekalys



Datum / Date: 6.1.18

Signal in the air 4 mA  
Signal at 150 m 20 mA

cell is 17 m long

1-5 VDC is the same than 2000 mV

Signal is in the air 398.4 mV  
with  $\pm 2.5V$

Air = 398.45 mV  $\rightarrow 0 \text{ m} \rightarrow 4 \text{ mA}$   
2000. mV  $\rightarrow 2$  150 m  $\rightarrow 20 \text{ mA}$

5 m Tiefe  $\rightarrow$

16 mA = 150 m

1.06 mA = 10 m

1600 mV  $\sim$  150 m

106 mV  $\sim$  10 m

+ 398.4

505.4

Datum / Date: 6.1.2018

Voltage range

$$V = 100 \text{ I}$$

max voltage at 20 mA

$$V = 100 \text{ ohm} \times 0.02 \text{ A} = \underline{2 \text{ V}}$$

Model: 8000 MP - 300 - 1 - DS - SB - 12m

↓                      ↓  
0/300 PSI = 0-600 ft

↓  
4/20 mA = 4 mA

DS = silicon 200 ft. pressure

SB = support bracket

12m = cable length

0-600 ft = 0-182 m depth

PSI = pounds per inch

the pressure at sea level = 14.7 psi

Datum / Date: 6.1.2018

14.7 psi = at sea level

1 bar = 14.503 psi

1000 hPa = 14.503 psi

$$\begin{aligned} 911.3 \text{ kPa} &= 13.217 \text{ psi} \\ &= 398.45 \text{ mV} \end{aligned}$$

observed height

Datum / Date: 6.1.2018

SLF Lake: 46° 49' 38.33" N  
2452m 90° 48' 46.61" W

Kunstliche See 46° 50' 15.46" N  
Totalhöhe 90° 48' 39.85" W  
2499

Datum / Date:

33 2018

Datum / Date:

Ants Preparation 2018

Swiss Camp: transmitting, ok

Snow height 1 ant, rest ok

SC 10m tower seems to work,  
not every x-unit works, is this  
the processing program?  
⇒ rewrite processing program GOES A to be

JAR1 not x-uniting, worked  
on 23 Aug. 2017 fine  
not sure what happened.

EGRIP working, not extension needed  
• Radiometer needed ST & all were  
ok working!

Summit x-unit works, no extension  
2nd T/H broken  
all the rest working

Datum / Date:

Pre-2 not x-uniting!  
was extended in 2017 ✓  
put new battery box as well ✓  
What happened? needs to re-wire  
just need to put on live again

South-Dome not x-uniting!  
new extension in 2017  
newer transmitter - needs new x-unit  
and antenna and cable!  
one SD ant from last year

NASA-SE x-unit ok  
extended in 2016 needs extension  
7" snow sculpt out  
Tana T/H, one about 10'c apart?

80307788  
Saddle no x-unit, needs extension  
blower arm with be gone,  
was 0.5 m above in spring 2  
worked at last 7 Sept  
0.4m, 1.6 m above snow

Datum / Date:

NASA-U

no x-unit, not vial 2017

lowes snow 1.5m in Aug 2017

needs extension, lowest air in snow

Battery lower low' maybe ok

NASA-E

x-unit ok

both snow sensors out

Could the extension 2016 run?

NEEM

x-unit stopped in spring

First T/4 out

2nd wind out

Pressure out

1 SD out

2 SD maybe out

Battery ok

Extended in 2016, should be ok

Datum / Date:

Extensions

JAR 1, NASA-SE, Saddle

NASA-U, NASA-E,

Turn-U, GITS

Battery

NASA-U ? Pct

Turn-U

x-unit

wind-dir 1 out v-dir 2 out

both SD noisy or ant replace

Battery ok

maybe extension

Pct

107204

x-unit not really

only 8 hours in 2015?

needs battery

ham + GITS

not x-uniting?

needs extension

Datum / Date:

16. 3. 2018

All orders and shipment

- 7 Coag extensives
- 5 Stoves
- 14 U-pots to attach stove

19 Apr North  
24 Apr North  
14 May North

Packing

Datum / Date:

Mar. 2018

Large EDAC

Box 1 ✓ Koni cloth

2 ✓ Sima cloth

3 ✓ Sleeping bags

4 ✓ Camping tents + sleeping bags

5 ✓ Computers, Baggage / Koni Pot.

6 ✓ Bianca clothing



Datum / Date:

Podung 2018

Medium Edele

7, 8, 2 for boxes ✓

Podung 2018

Datum / Date:

Small Edele

10 Tools AWS

11 Tools AWS

12 Campbell park  
3 celoux, 2 Argus, 3 Gores ✓  
4 multiplex

13 Campbell park  
4 li-core pyranometer

6 Sonotone hawks, bands, screws

14 ~~Campbell~~ meter.  
5 GPS, 1 GPS G-X-X unit, other

15 Rera cloth Flat Edele

16 Shis in covered  
box

Datum / Date: 30. 3. 2018

## Boxes antenna for feeder

- 1) Kovacs drill space parts ✓
- 2) Nuclear for Bianca ✓
- 3) Battery for dish
- 4) Cooking stove

Robin:

make and medium box so for

NASA-4

Datum / Date: 30. 3. 18

## Remove Mike MacFerrin Station

- 1) T-cross arm with T-109 screw
- 2) Solar panel + mount
- 3) Iridium antenna
- 4) datalogger box with content
- 5) Co-axial cable of antenna
- 6) Battery if not too deep  
→ cut all wires to buried instruments

Datum / Date:

Kathy order Haus 2018

Kari + Bianca Arch Over 10x6  
Simon, Peter, Heide, Maria 4 x 4.5 sq ft

Datum / Date:

16.3.2018

Order from Border

7 extension

5 stones

14 u-Batts to cement stones + ext.

North house C-130

2018

19, 24 April, 14 May

Ordered Koutinues 45.40

Stone for Swiss Camp  
of 250 -> Ted probably ordered  
for me

26.5.2011

Red container storage

- 2 red drills, Hilti red drills + saws
- 2 ice drills (red, blue) + extensions
- 2 shoot guns (no ammunition)
- GPR 25 MHz antenna, 1 GHz
- GPR electronics
- 1 SHIP instruments
- 2 AWS extension sleeves
- 4 cooling gas stoves
- 1 battery box with batteries (2)
- 6 100 A/H batteries
- 2 variac + reds wind for GPR
- 2 temp/hum tubes " "
- 1 small hot box black AWS
- 1 red hot box cables run lines

- 1 large cooling box white
- 2 blue boxes with 24V batteries with diodes

Datum / Date:

✓

4 Milwaukee M28 Lithon ion Xc  
Cat. No. 48-11-2830 28V

✓

4 Makita 18V 3Ah Li-ion  
BL 1830

✓

\* Kovach Mark II 9 am drill  
Mark V 14cm

✓

Makita DCL501

✱ Makita BL 18 60B 18/6 AMP  
BL 18 50B 18/5 AMP

Parts for 2018

\*

Datum / Date:

✓ SW, 14W, 14S

\* Kovacs drill blades: small + large  
• new stone for kitchen <sup>to</sup> ~~about~~ <sup>to</sup> ~~tell to Diana~~  
a double lot - ask Trans. ✓ ok

- snow depth pole (3x)

- Bolt for tripod, wing-nuts

- Bolts + nuts to count 2x4"

- small vacuum, but strong one: <sup>→ Canada</sup> Shop-vac ✓

- umbrella-like wine glasses ✓

- cargo straps, Stone

- 15 cm torque screws, lots

- Metal saw blades for electric saw ✓

- bread maker, more efficient ~~to~~ <sup>to</sup> ~~Black~~

Datum / Date: May 2017

Tyrol cork Swiss Camp 2017

Hopos: 2 new drums (need 1-2 more  
year)

Propan: 2 left and 3 new one camp  
from pull-out flight.

Empty: 3 Hopos + 3 Propan to  
(X) be flown out in spring 2018

Plywood: ~ 10-12 left.

Need for 2018 field season

2 new drums  
3 new over

Datum / Date:

Began autumn @ Swiss Camp

87° elevation (3° above horizon)  
from 39° (NE) direction from satellite  
232 compass direction

Datum / Date:

Swiss Camp: 69° 33' 27" N, 49° 21' 27" W  
 SC Geo XT 69° 33' 22.5" N, 49° 21' 43.6" W  
 DN 10 69° 30' 02" N, 49° 33' 41" N  
 JAR 1 69° 29' 37" N, 49° 42' 46" W

added to google sheet

Swiss Camp  
 69.55 49.38

Datum / Date:

1  
 1161 m HAE WGS 1984  
 1002 m  
 903 m

New GPS Programs 2017/2018 (used dd  
 GPS Swiss Camp # 0463 / <sup>set up</sup> ~~# 0468~~  
 GPS DN 10 # 0471  
 GPS JAR 1 # 3538

Data

SWIS	SWIS Camp 1	88	163	144	8976
SC	SWIS Camp 2	88	163	144	7727
DW	SWIS Camp 3	88	165	144	2428
JAE					

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[illegible]

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Des-mul looks beacov.

2DCE7-219C\* - FF3FF



