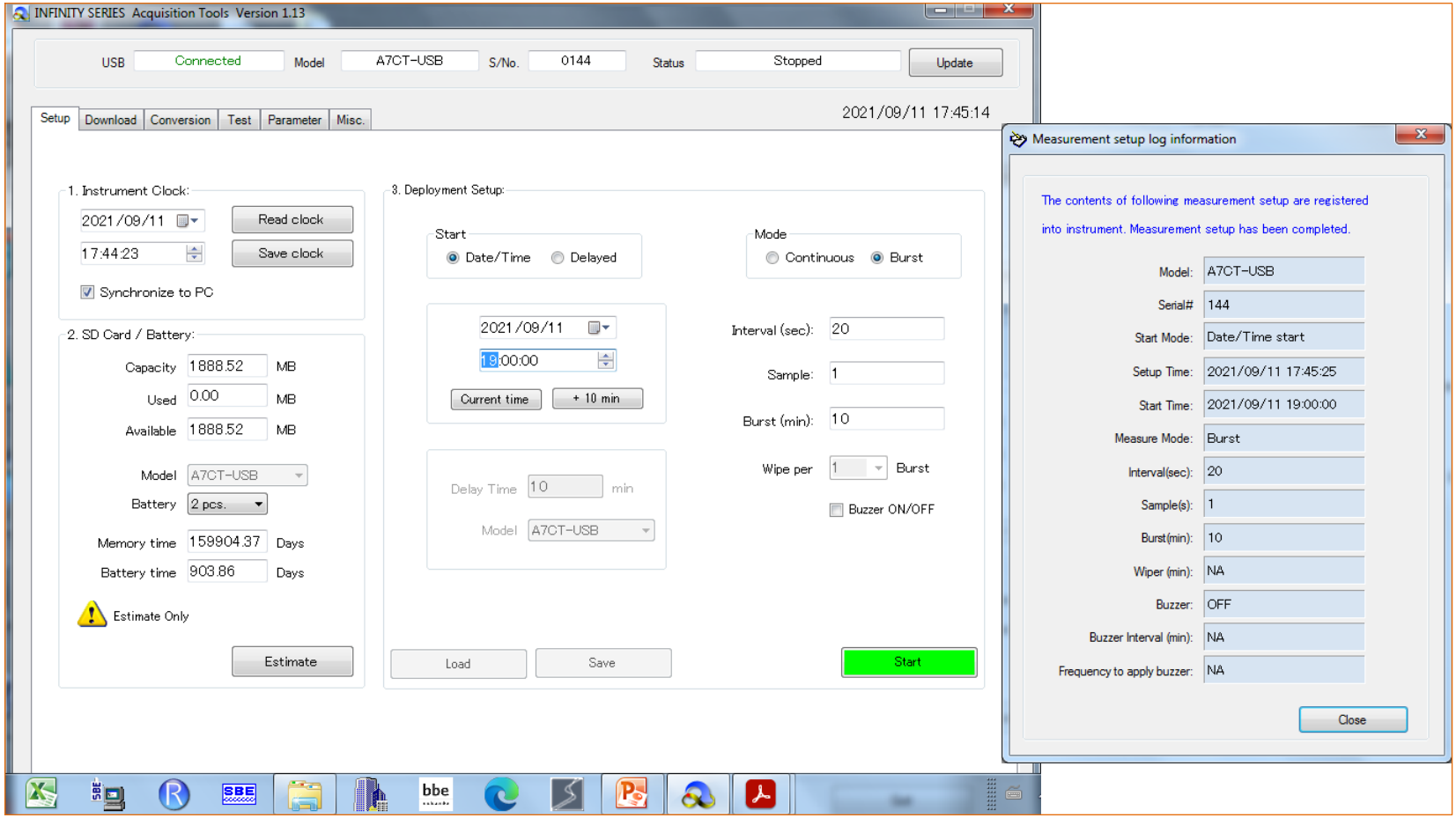
Setup of instruments for MBGL LWO and LWH over-winter moorings Fall 2021 – Spring 2022

Instruments sent to Waterhen September 2021

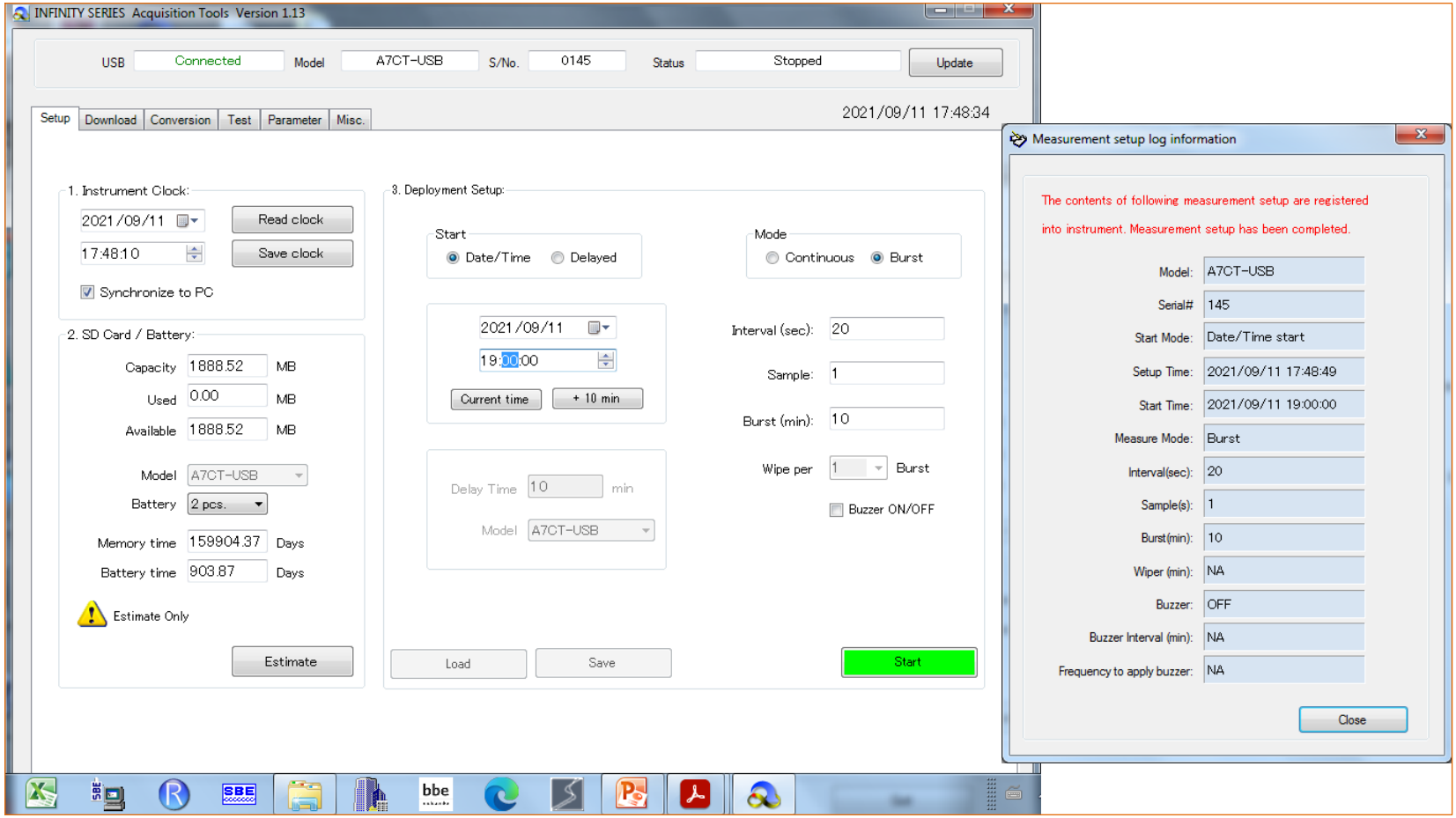
- 2 Alec A7CTs 145 (LWH), 247 (LWO)
- 1 Ecotriplet 1442 (LWO)
- 2 Onset DO loggers 20775991 (LWO), 20719126 (LWH)
- 2 Alec PARs 201010, 201089

CT instrument intercomparison
A7CT 145 and 247
(144 failed to record)

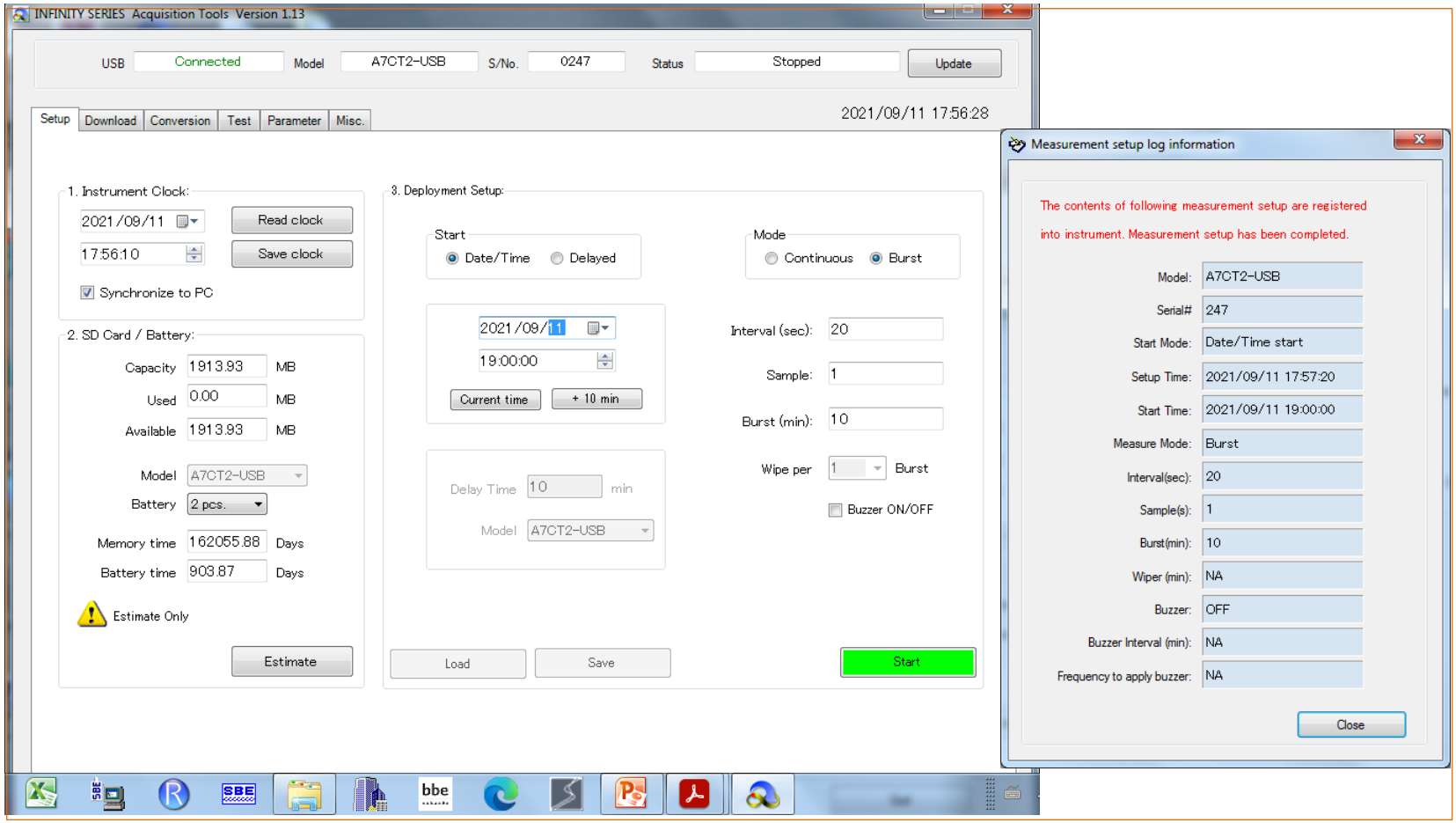


Setup for inter-comparison of A7CTs 144, 145 and 247 after refurbishing in 2021

144 FAILED TO RECORD DATA

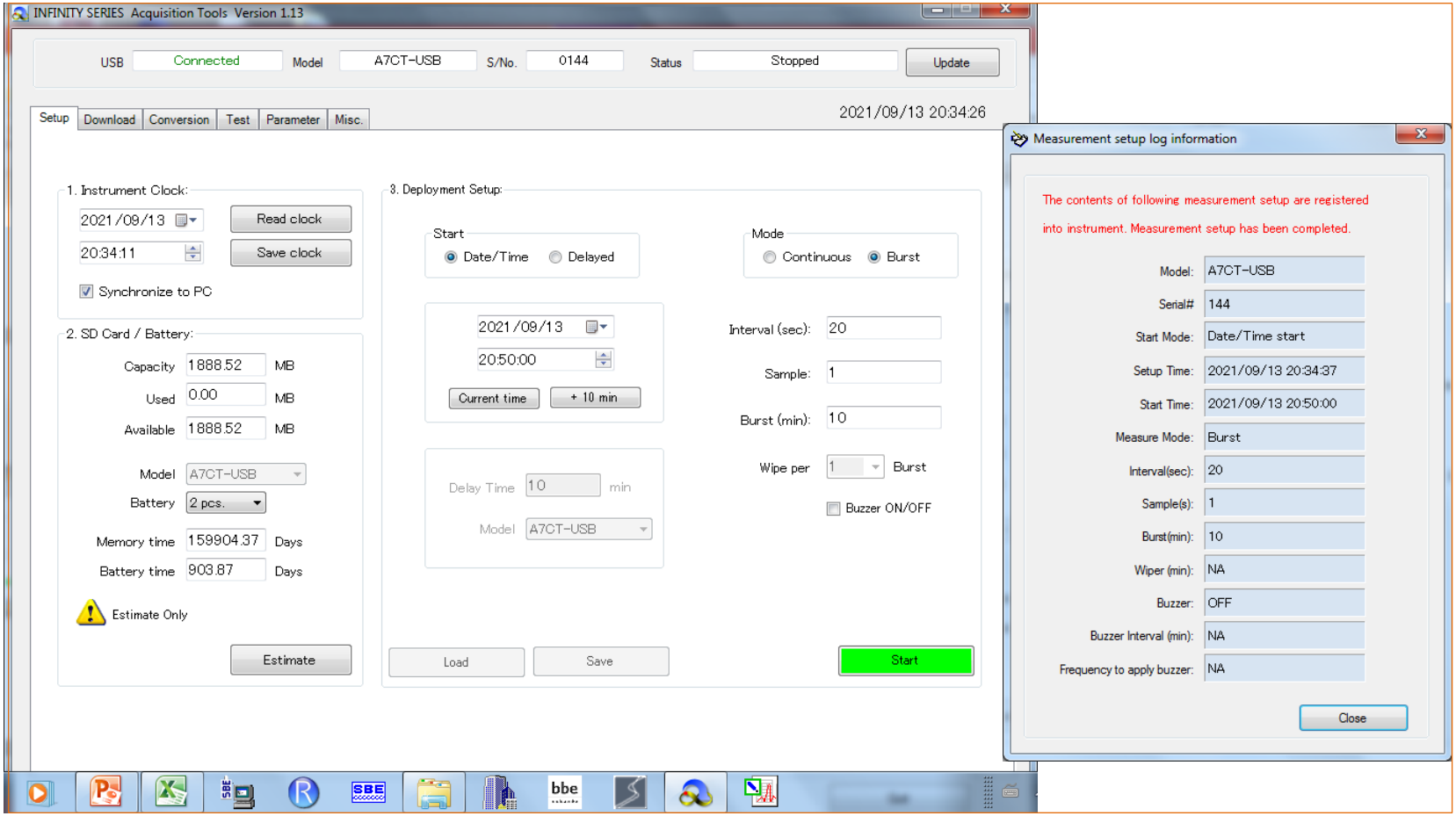


Setup for inter-comparison of A7CTs 144, 145 and 247 after refurbishing in 2021



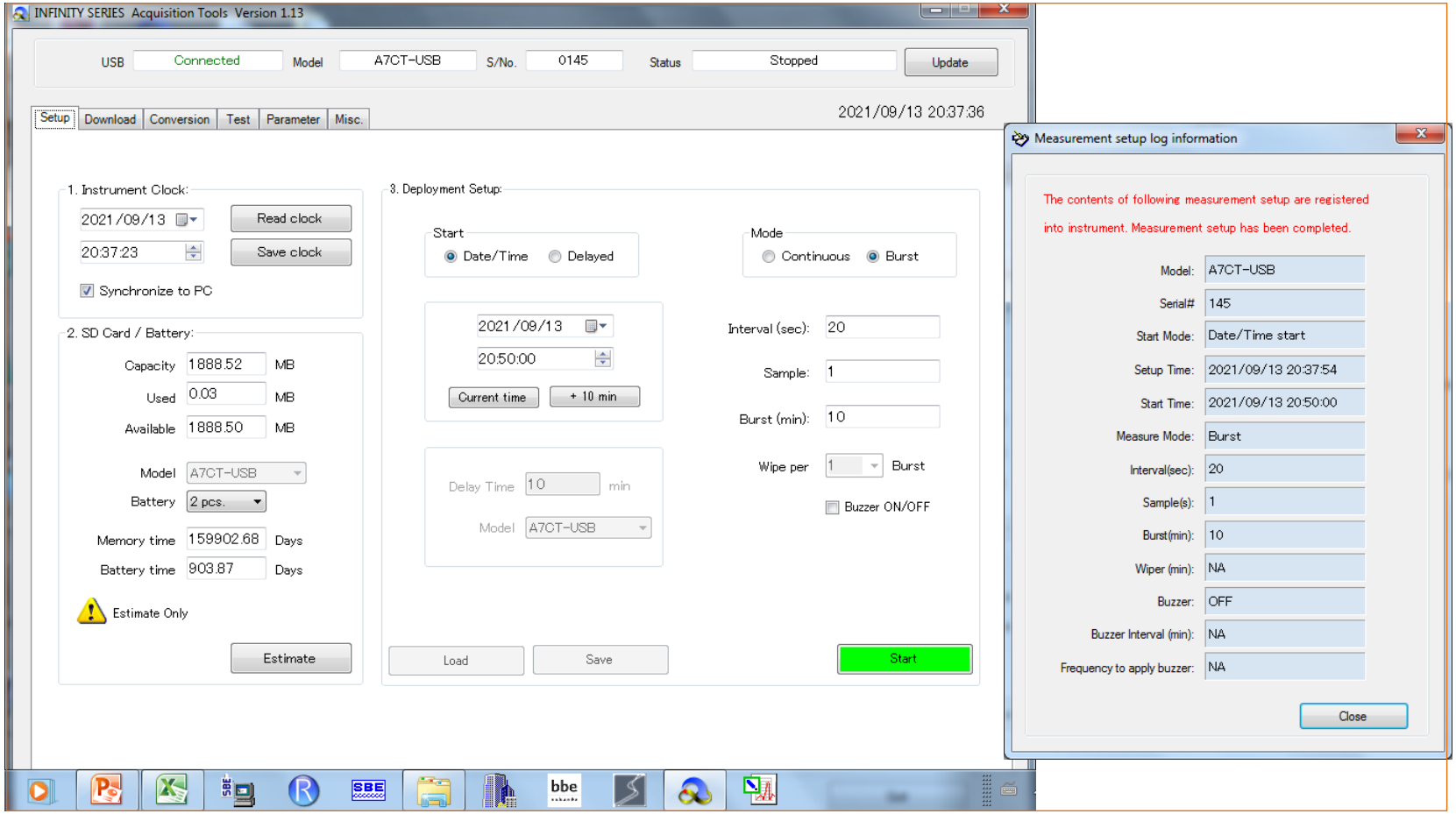
Setup for inter-comparison of A7CTs 144, 145 and 247 after refurbishing in 2021

2nd instrument intercomparison A7CTs and ACTs



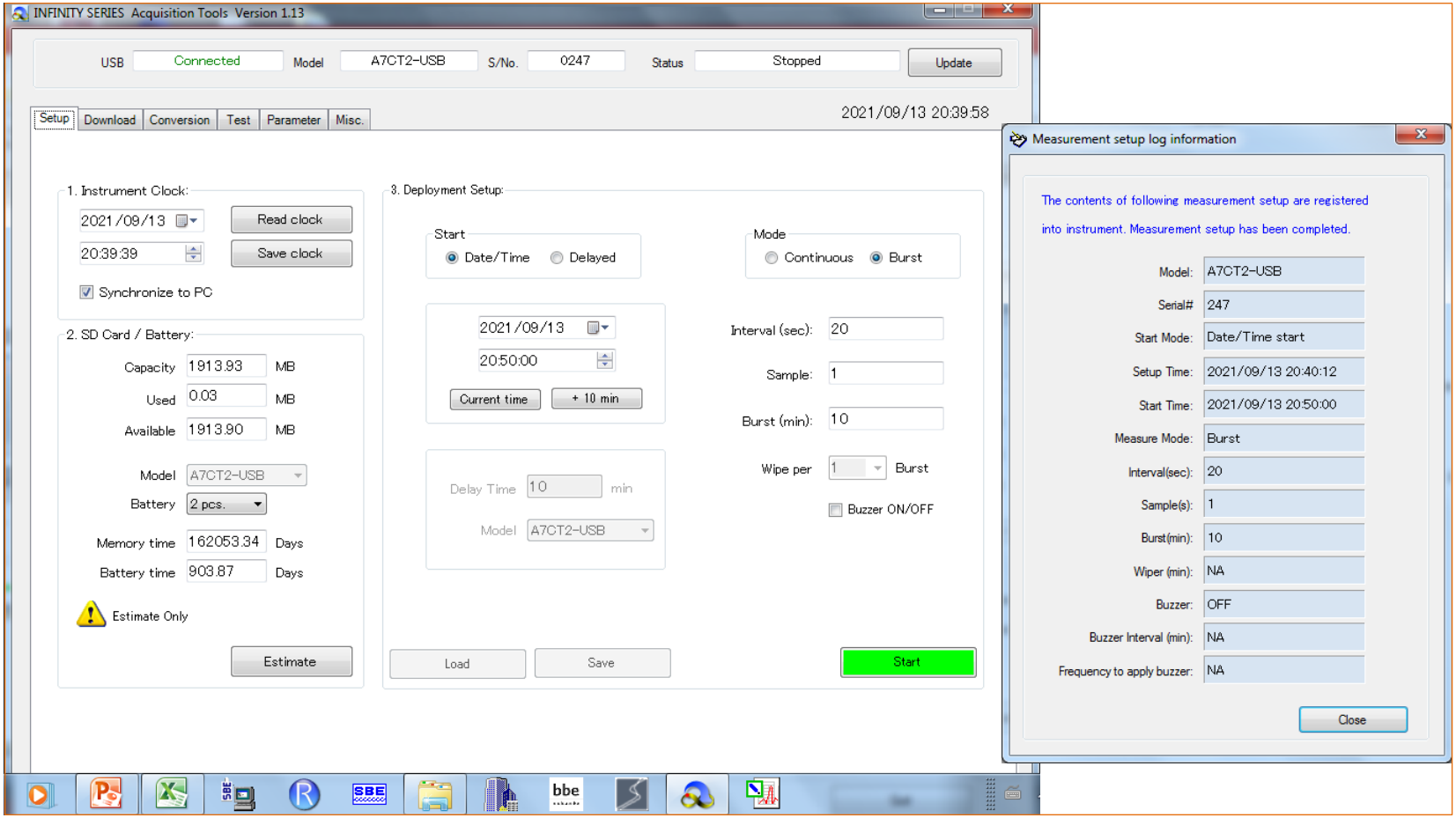
Setup for inter-comparison of A7CTs 144, 145 and 247 and ACTs 1301, 1589

144 downloaded successfully; then reset (see below) to continue intercomparison



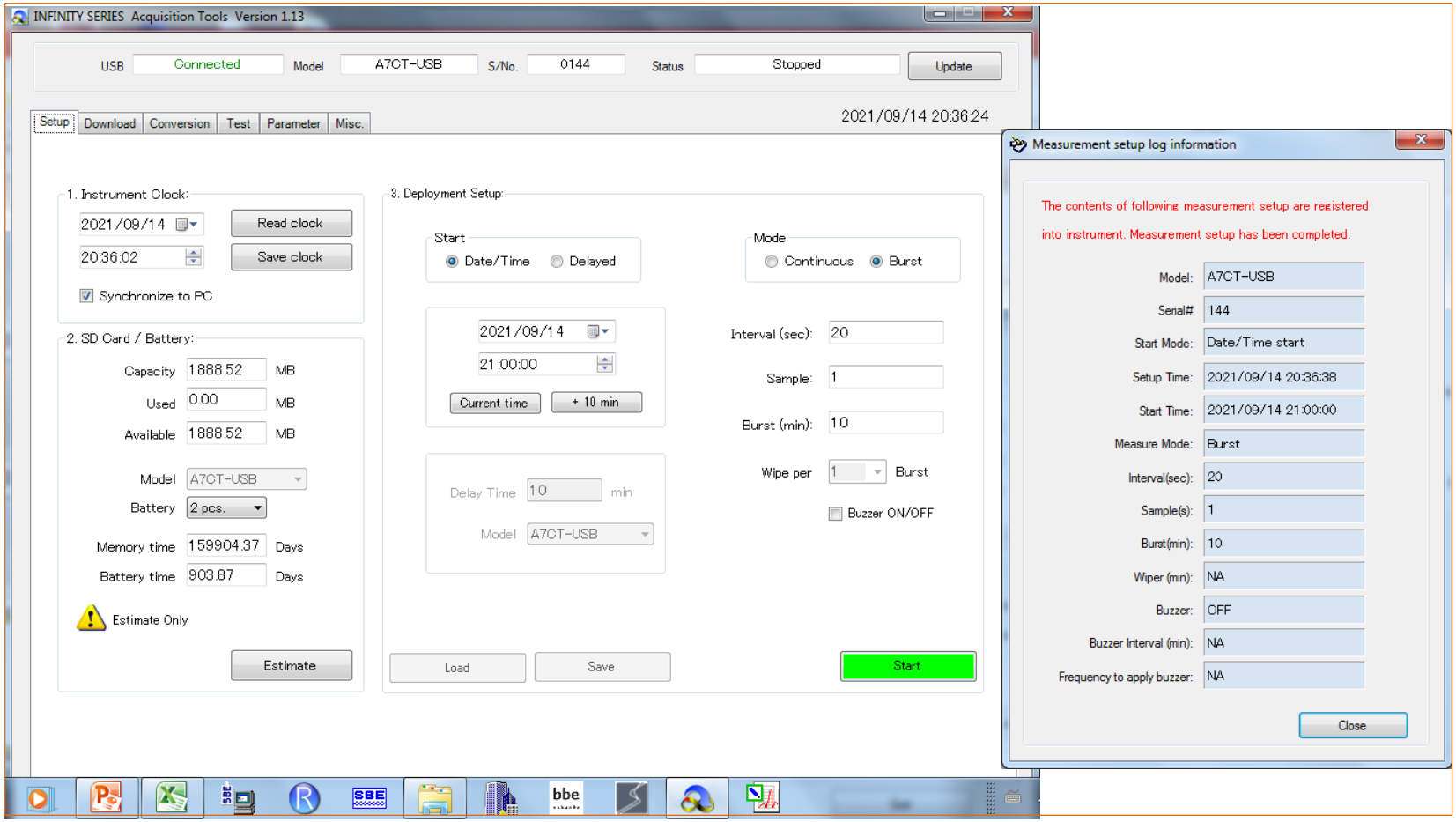
Setup for inter-comparison of A7CTs 144, 145 and 247 and ACTs 1301, 1589

145 not downloaded; sent for deployment using this setup



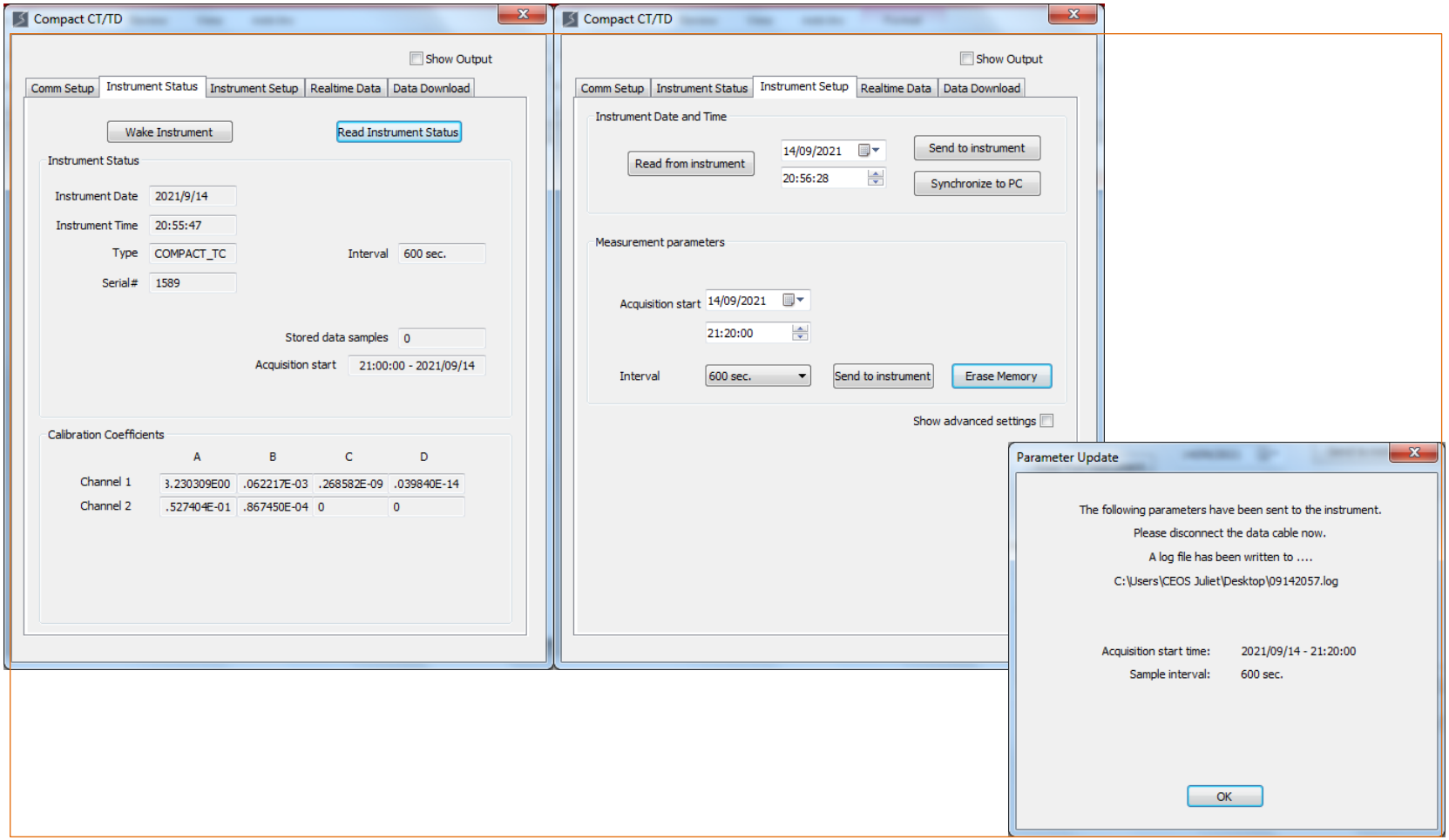
Setup for inter-comparison of A7CTs 144, 145 and 247 and ACTs 1301, 1589

247 not downloaded; sent for deployment using this setup



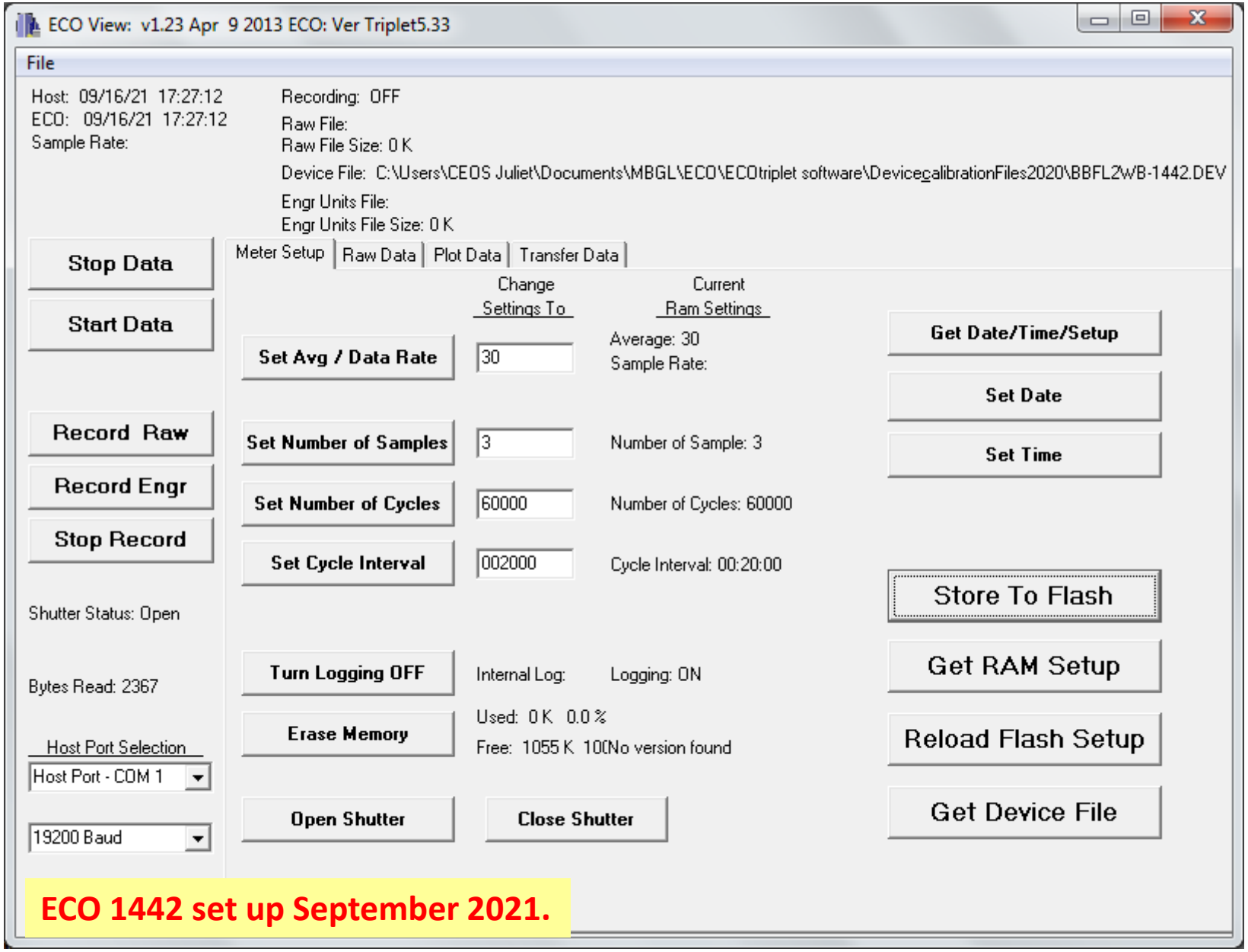
Setup for inter-comparison of A7CTs 144, 145 and 247 and ACTs 1301, 1589

144 reset after successful download, to continue intercomparison

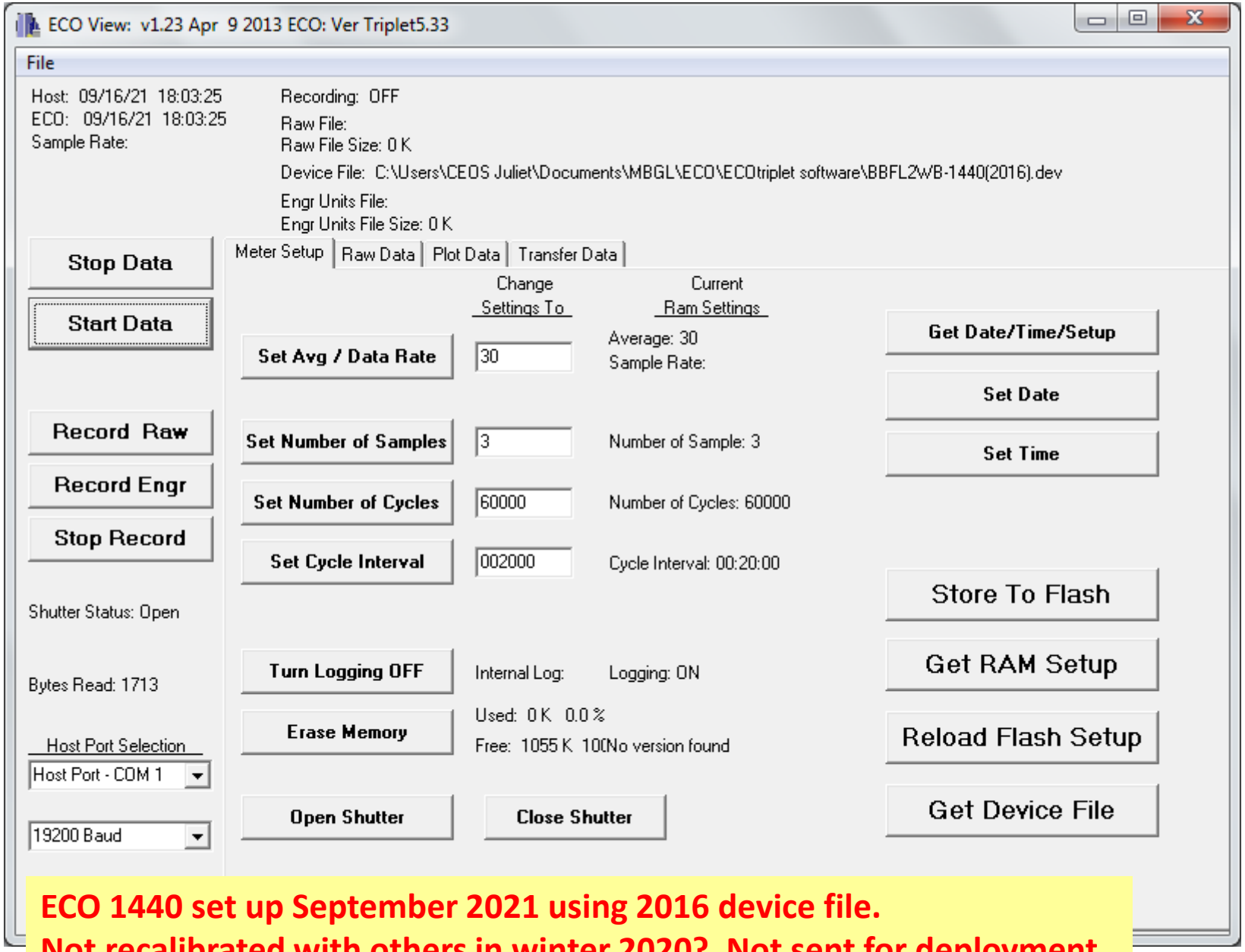


Setup for inter-comparison of A7CTs 144, 145 and 247 and ACTs 1301, 1589
1589 successfully started; 1301 did not respond.

Ecotriplet set up
September 2021



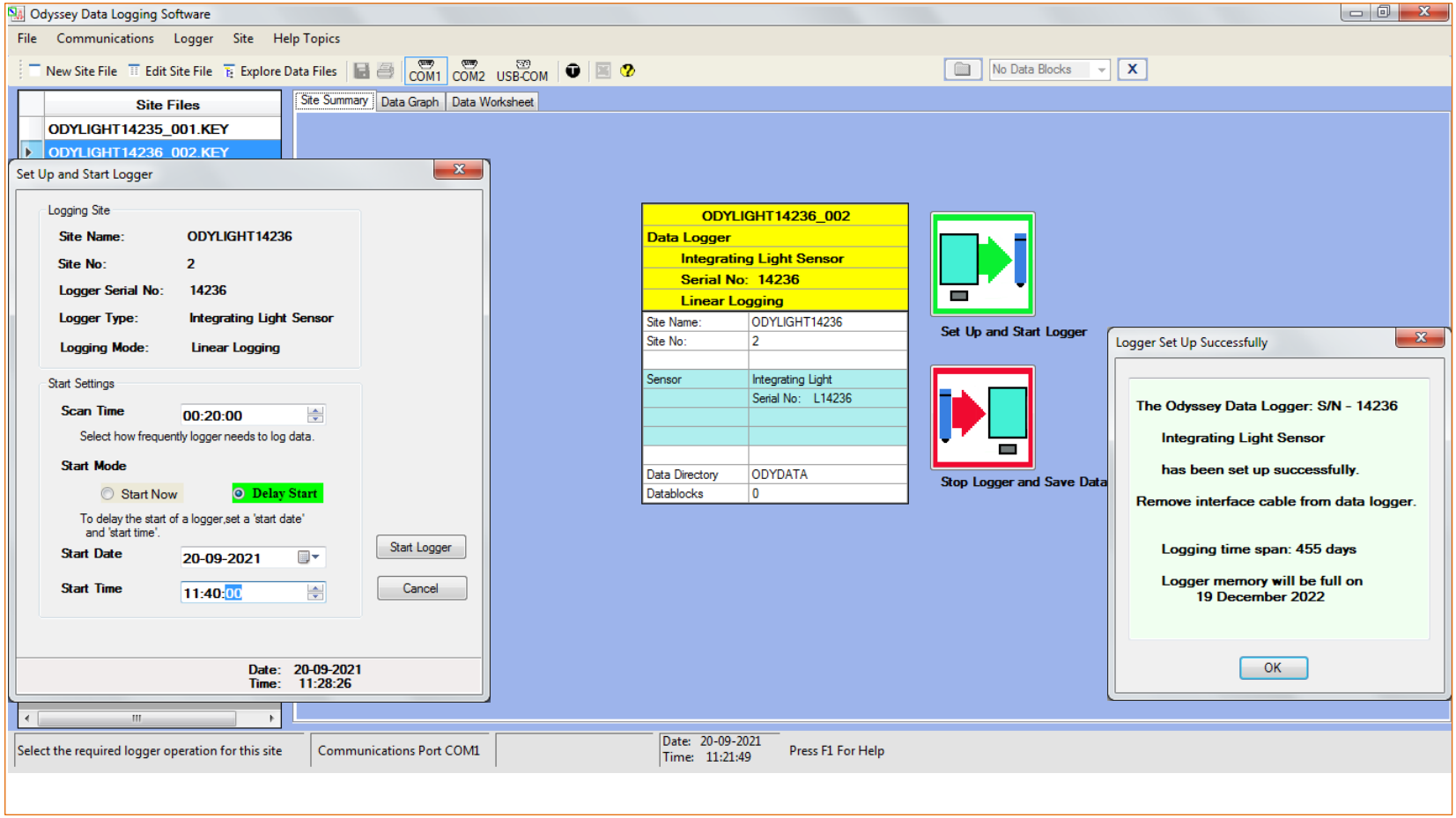
ECO 1442 set up September 2021.



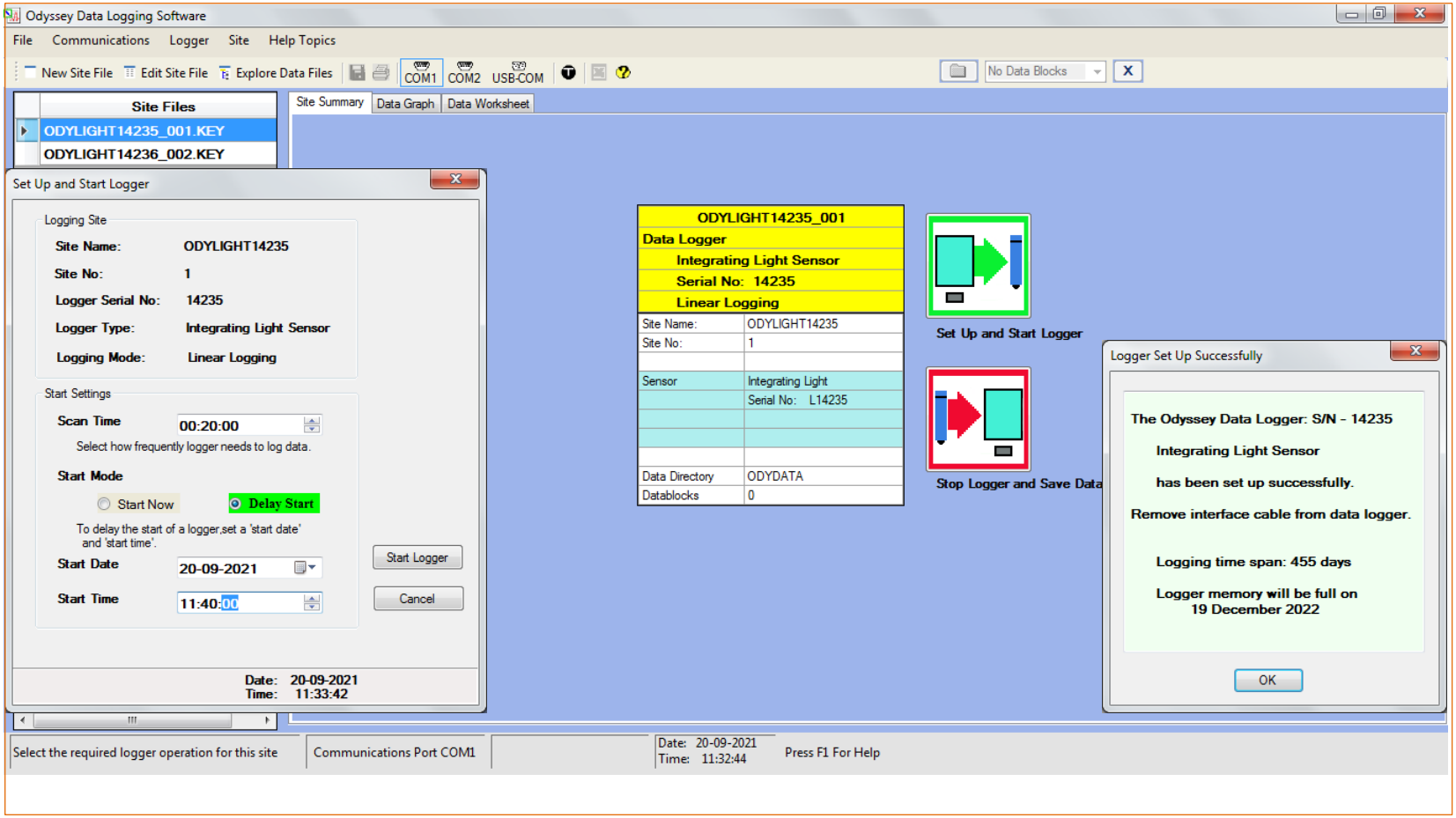
ECO 1440 set up September 2021 using 2016 device file.
Not recalibrated with others in winter 2020? Not sent for deployment.

Odyssey PAR set up September 2021

- PAR sensor set up and deployed beside MMF weather station at SERF, from ~16:00 20 to 27 Sept 2021
- Did not set up Odyssey Extreem wipers



Odyssey PAR 14235 & 14236 setup for deployment beside MBGL/MMF weather station at SERF. Not deployed at MBGL lakes.

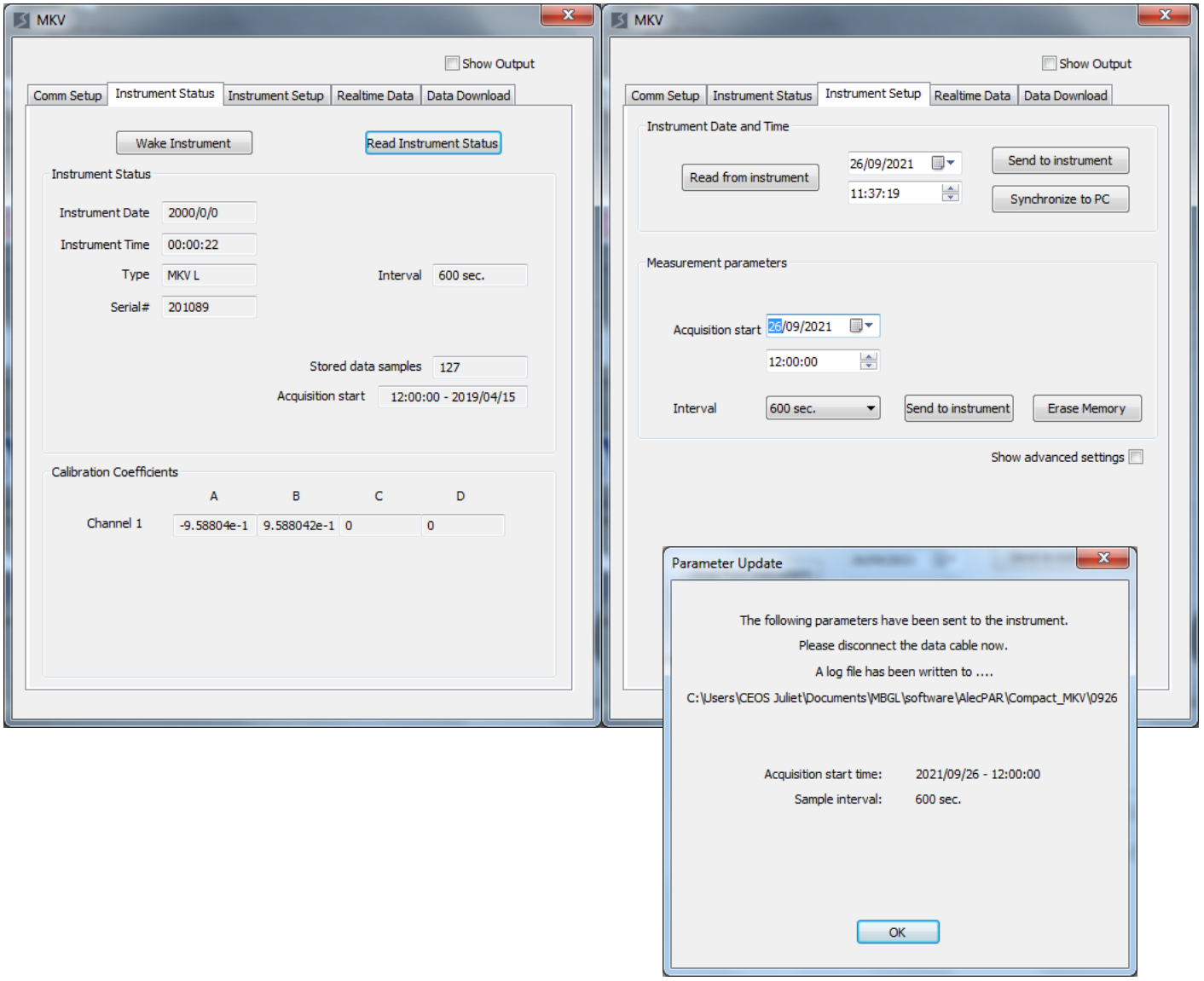


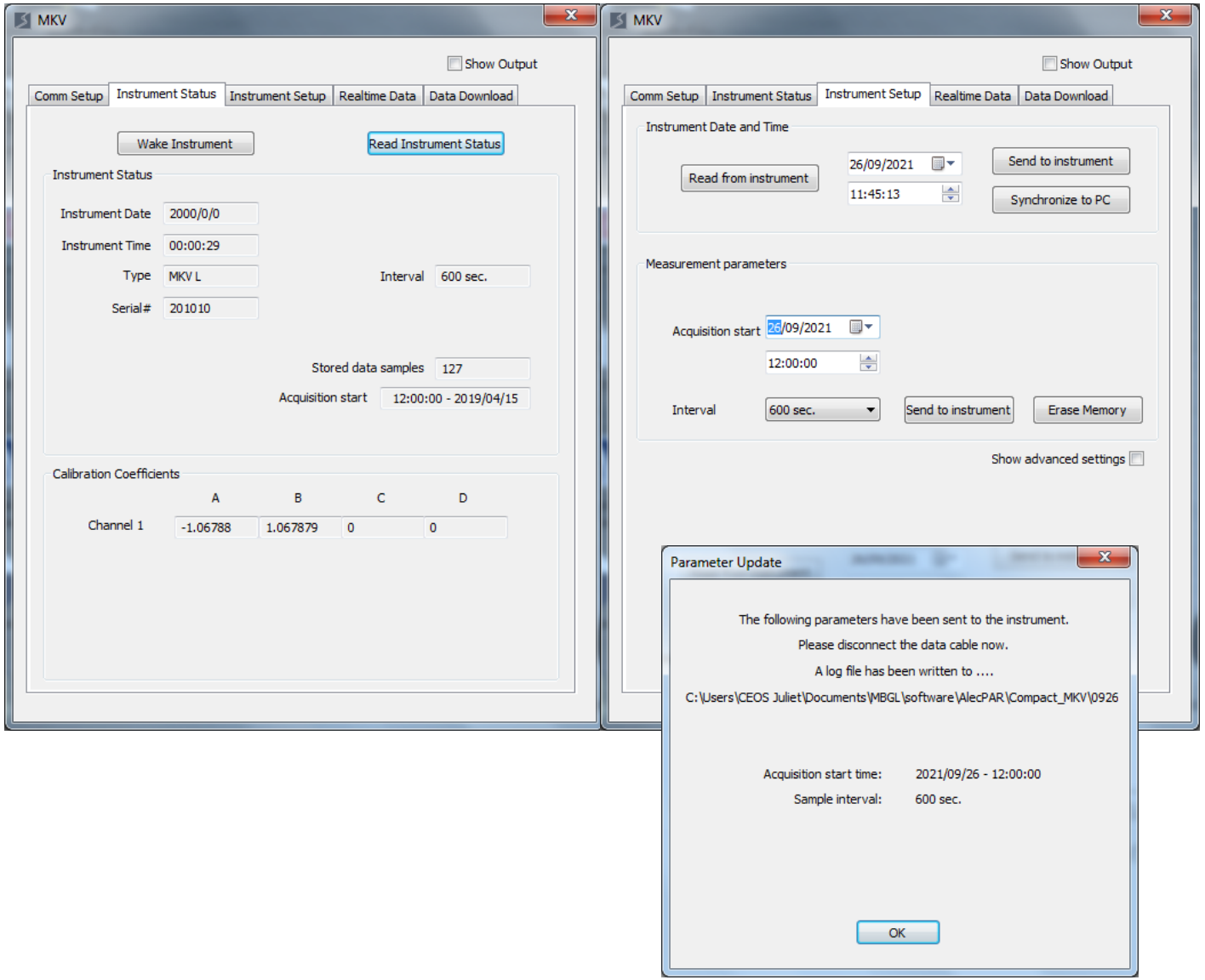
Odyssey PAR 14235 & 14236 setup for deployment beside MBGL/MMF weather station at SERF. Not deployed at MBGL lakes.

Onset dissolved oxygen
loggers 20775991, 20719126
Set up by Claire
September 2021

Alec PAR sensors
September 2021

- PAR sensor #s 201010, 201089 set up for deployment in LWH and at Waterhen cabin
- Deployed side-by-side for inter-comparison above balcony from 12:00 26 to 12:00 27 Sept 2021 (clear sky); turned 180 deg at 14:00, 15:04, 15:57, 16:57 on 26th and 10:09 (when direct sun had recently first struck sensors), 11:00 (actually 90 deg at 11:00 and another 90 deg at 11:16) on 27th, then packed for deployment at Waterhen


MKV
Show Output
Comm Setup
Instrument Status
Instrument Setup
Realtime Data
Data Download
Wake Instrument
Read Instrument Status
Instrument Status
Instrument Date
2000/0/0
Instrument Time
00:00:22
Type
MKV L
Interval
600 sec.
Serial#
201089
Stored data samples
127
Acquisition start
12:00:00 - 2019/04/15
Calibration Coefficients
A
B
C
D
Channel 1
-9.58804e-1
9.588042e-1
0
0
MKV
Show Output
Comm Setup
Instrument Status
Instrument Setup
Realtime Data
Data Download
Instrument Date and Time
Read from instrument
26/09/2021
11:37:19
Send to instrument
Synchronize to PC
Measurement parameters
Acquisition start
26/09/2021
12:00:00
Interval
600 sec.
Send to instrument
Erase Memory
Show advanced settings
Parameter Update
The following parameters have been sent to the instrument.
Please disconnect the data cable now.
A log file has been written to ....
C:\Users\CEOS Juliet\Documents\MBGL\software\AlecPAR\Compact_MKV\0926
Acquisition start time:
2021/09/26 - 12:00:00
Sample interval:
600 sec.
OK


MKV
Show Output
Comm Setup
Instrument Status
Instrument Setup
Realtime Data
Data Download
Wake Instrument
Read Instrument Status
Instrument Status
Instrument Date
2000/0/0
Instrument Time
00:00:29
Type
MKV L
Interval
600 sec.
Serial#
201010
Stored data samples
127
Acquisition start
12:00:00 - 2019/04/15
Calibration Coefficients
A
B
C
D
Channel 1
-1.06788
1.067879
0
0
MKV
Show Output
Comm Setup
Instrument Status
Instrument Setup
Realtime Data
Data Download
Instrument Date and Time
Read from instrument
26/09/2021
11:45:13
Send to instrument
Synchronize to PC
Measurement parameters
Acquisition start
26/09/2021
12:00:00
Interval
600 sec.
Send to instrument
Erase Memory
Show advanced settings
Parameter Update
The following parameters have been sent to the instrument.
Please disconnect the data cable now.
A log file has been written to ....
C:\Users\CEOS Juliet\Documents\MBGL\software\AlecPAR\Compact_MKV\0926
Acquisition start time:
2021/09/26 - 12:00:00
Sample interval:
600 sec.
OK

From: David Barber <David.Barber@umanitoba.ca>
Sent: Thursday, October 14, 2021 9:39 AM
To: Greg McCullough <Greg.McCullough@umanitoba.ca>
Cc: Claire Herbert <Claire.Herbert@umanitoba.ca>; Agoston Fischer <fischer5@myumanitoba.ca>
Subject: Winnipegosis mooring

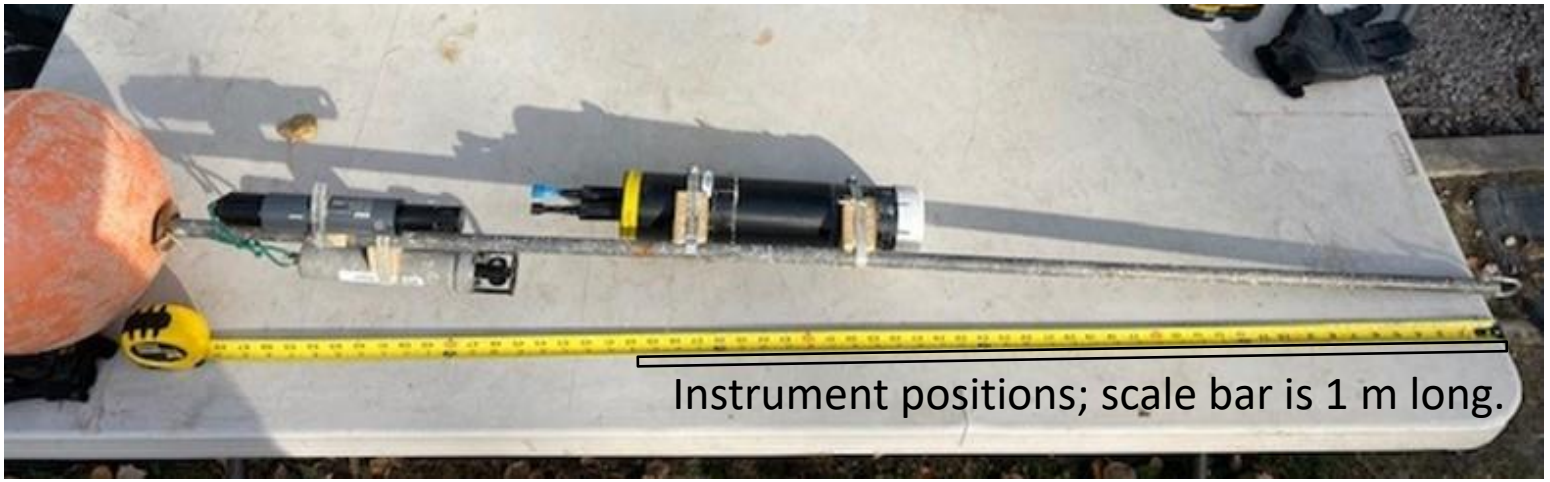
Folks. I successfully installed the lake Winnipegosis overwintering mooring yesterday. Photographs are attached here. Measurements and sensor ID numbers can be taken directly from the photographs. The sensor mooring pole Base sits about 20 cm above the anchor. The mooring was installed in 4.9 m of water. I have the Lat and long for the location and will forward.

Mooring is oriented north south - north anchor has the sensors; south anchor has the float.

I came up with a two anchor line system that has a float that lifts the line off the bottom. I intend to drag for the morning next spring as soon as the ice comes off. I also collected one water sample - no lugol sample as I don't have the correct sample bottles.

I hope to install a smaller overwintering morning in Lake waterhen once the storm passes likely this weekend.

LWO deployment



LWO deployment

From: David Barber
Sent: October 19, 2021 1:14 PM
To: Claire Herbert
Cc: Greg McCullough
Subject: Waterhen overwintering mooring

Hi folks.
I installed the overwintering mooring in Lake Wateren; photos attached with serial numbers of sensors
and depths and it has the following particulars:

installed Saturday October 16, 1600 hrs.
Salinity, Temperature and conductivity.
installed in 3M of water just north of where the summer mooring usually goes.
WAT2021a for NW end of line, WAT2021b for NE end of the line.
52.06903N, 99.56618W

I will look to recover immediately upon ice off next spring for both Waterhen and Winnipegosis.

Best..DB

LWH deployment

Instrument positions; scale bar is 1 m long.

LWH deployment