GreenEdge 2014

Current measurements during Ice camp 2014
Report about ADCP300 kHz deployment

Installation by E.Brossier (Vagabond) with the support of **C.Marec (Takuvik)** (preparation of equipment, script and protocole)

We deployed an ADCP300 (RDI –Teledyne 300kHz Sentinel) in order to measure current (speed and direction) in the ice-camp area. This instrument was installed, looking downward, at the end of a structure (tubing shape) with the beams located under the ice floe. 2 floats were attached at the top of the structure for security in case of ice-floe break. The ADCP (sn 3045) was borrowed from Arcticnet and was deployed by E. Brossier on March, 17h 2014 till June, 20th 2014.

Acquisition started on 17/03/2014 at 9h23TU
Equipment recovered on 20/06/2016 but stopped on 23/6/2014

The ADCP was programmed as per the following script:

```
CR1
CF11101
EA0
EB0
ED0
ES33
EX11111
EZ1111101
WA50
WB0
WD111100000
WF176
WN54
WP60
WS200
WV175
TE00:30:00.00
TP00:30.00
CK
CS
;
;Instrument         = Workhorse Sentinel
;Frequency          = 307200
;Water Profile      = YES
;Bottom Track       = NO
;High Res. Modes    = NO
;High Rate Pinging  = NO
```

;Shallow Bottom Mode= NO
;Wave Gauge = NO
;Lowered ADCP = NO
;Ice Track = NO
;Surface Track = NO
;Beam angle = 20
;Temperature = -2.00
;Deployment hours = 2400.00
;Battery packs = 1
;Automatic TP = YES
;Memory size [MB] = 256
;Saved Screen = 2
;
;Consequences generated by PlanADCP version 2.06:
;First cell range = 4.20 m
;Last cell range = 110.20 m
;Max range = 91.85 m
;Standard deviation = 0.90 cm/s
;Ensemble size = 1234 bytes
;Storage required = 5.65 MB (5923200 bytes)
;Power usage = 119.22 Wh
;Battery usage = 0.3
;
; WARNINGS AND CAUTIONS:
; Advanced settings have been changed.

This script means that the ADCP was programmed for 54 cells of 2meters, with a ping every 30sec and a record every 30minutes.

The equipment was recovered by E.Brossier.
NOTA : on the 16/6/2014 E. Brossier mentions in its logbook that because of the ice melting, the ADCP structure is no longer attached to the floe and moves with current. So care should be taken about the ADCP data after mid-June.