

ARVOR – PROVOR Deployment

Simple Quickstart & Checklist procedure handed out to deployment teams :

- 2 pages with pictures
- 5 points checklist
- Warnings
- Deployment sheet

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Ref : ISEA/COA/PROC_004
Date : November 2019

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Float deployment Quickstart & Checklist

Arvor & CTS3 Iridium version > 5900A00

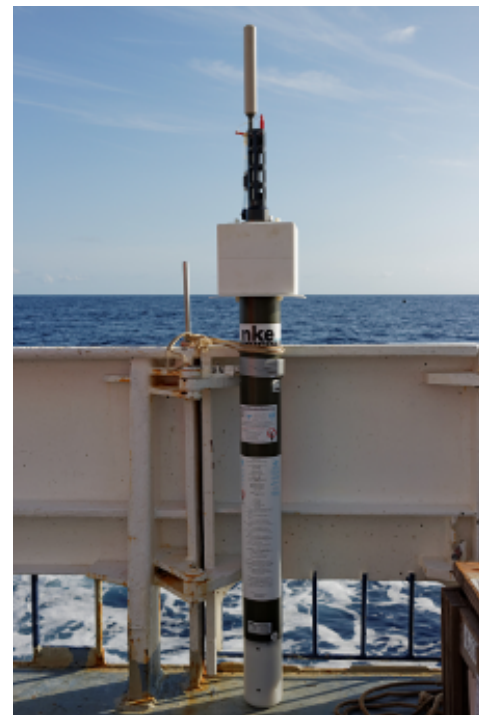


CHECK LIST 1 : Get the float out of the box and put it safely in vertical position on an outside open deck (necessity for the float to perform a GPS / Iridium satellite fix when activated)

-Check visually that float is in good condition after transportation: no scratch, antenna, CTD sensor and hull looking neat.

-Check that magnet is in place on ON/OFF Position with its adhesive tape.

-Check that the external bottom bladder is not flat (contains oil) and doesn't have any oil leak (dry).



CHECK LIST 2 : Remove the 3 red protective plugs from the float's CTD head (otherwise float won't work as these are the water intakes for temperature and salinity measurements). For float with optodes, remove black optodes's cap.

If not under frozen condition, introduce some distilled or fresh water inside the transparent CTD intake pipe with a syringe or any adapted small container (bottle) through the top middle hole.

DO NOT INTRODUCE FRESH WATER IF THERE IS A RISK OF FROST.



CHECK LIST 3 : Check navigation instruction with the bridge

During deployment operation, the ship should sail at slow speed (around 1 or 2 knots) and move against the current so that the float goes away from the ship as it is put at sea.

CHECK LIST 4 : Take off the adhesive tape and the magnet (this will activate the float's mission) and listen to the float self-test sequence (you might need to put you ear to the float's hull):

Before 15 seconds : 5 slow clicks (hydraulic valve activation) followed by 5 hydraulic pump actions.

After 1 minute: Autotests including CTD pump activation showing water level changes in CTD water circuit.

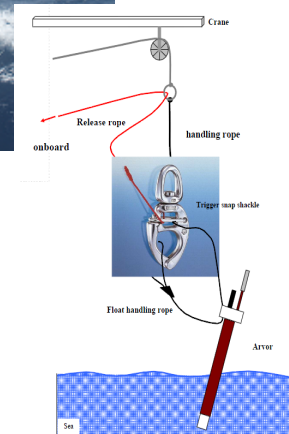
About 3-5 min after magnet removal: Buzzer activates for 30 minutes = Ready to deploy signal. Note that this may take longer due to local satellite visibility, however no longer than 15 minutes, if so, put back the magnet on and try again.



CHECK LIST 5 : The float may be dropped manually or using a quick-release hook. During deployment be careful not to hurt the float against the ship's hull to prevent damage (especially to the antennae and the CTD sensor).

1-By hand: If the ship has a lower access to sea, the float can be dropped by hand from the stern for instance. In this case, hold it vertically under its buoyancy foam (never use antenna or CTD head as a holder) and drop it as close to the water and as far away from the ship as possible.

2-Using a quick-release: Pass the rope through the hole in the float's damping disk, and release it (without leaving any rope on the float). Be careful to activate the release when the float is as close to the water and as far away from the ship as possible.



WARNINGS

Float should be deployed during buzzer activation

In case of unforeseen event and inability to deploy, put magnet back in place and wait for next attempt

Do not deploy the ARVOR if you don't hear those tests!

Replace magnet on ON/OFF position and try again.

Do not deploy after 3 failed attempts.

DO NOT LEAVE ANYTHING ON THE FLOAT (Rope, shackle...)

Simple Deployment sheet with only Float ID and Deployment fields

We fill this info into the full .xlsx sheet that we send to the DAC

Description	AI2600-19FR005
Type of float	ARVOR
Float WMO number	6901952
Float IMEI	300234053605750
Comment after visual inspection of the float	OK
Comment after visual inspection of the ballast	OK
Deployment mission name (cruise name)	PIRATA FR26
Deployment ship name	Thalassa
Name of the operator in charge of the deployment	Fabrice Roubaud
CTD or XBT profile done during deployment (yes/no)	yes
Magnet removal time (dd/mm/yyyy hh:mm)	22/03/2016 15:50:00
Comment on float internal checks (valve and pump actions)	OK
Deployment time (dd/mm/yyyy hh:mm)	22/03/2016 15:56:00
Deployment latitude (dd°mm,mm N/S or dd°mm'ss" N/S)	2° 59.230 N
Deployment longitude (ddd°mm,mm E/W or ddd°mm'ss" E/W)	12° 29.310 W
Buoyancy description	OK
Deployment method (release box, manual, expendable cardboard, etc...)	Manual
Deployment height (m)	3
Ship speed (kts)	2
Wind speed (Beaufort)	2
Sea state (calm, smooth, slight, moderate, rough, very rough, high, very high, phenomenal)	Slight (0.5 to 1.25 m)
Bathymetry at deployment position (m)	4556
Number of days until the first ascending profile (copy of the PM2 parameter value)	2
Miscellaneous comment on the deployment	

Test #	Name	Result	
Checks prior to deployment			
1)	Checks out of the box	Float OK.	<input type="checkbox"/> OK
2)	Plugs removal	3 protective plugs (+ optode cap) removed	<input type="checkbox"/> OK
3)	Navigation instruction	Bridge informed and operation cleared	<input type="checkbox"/> OK
4)	Magnet removal - Autotests	Correct autotest signals heard	<input type="checkbox"/> OK
Deployment within <u>30 minutes</u> after completion of the autotests (while buzzer buzzing)			
5)	Deployment	Float deployed OK and seen floating correctly (antenna and CTD clearly out of the water)	<input type="checkbox"/> OK
6)	Excel deployment sheet	Sent to codep@ifremer.fr	<input type="checkbox"/> OK