



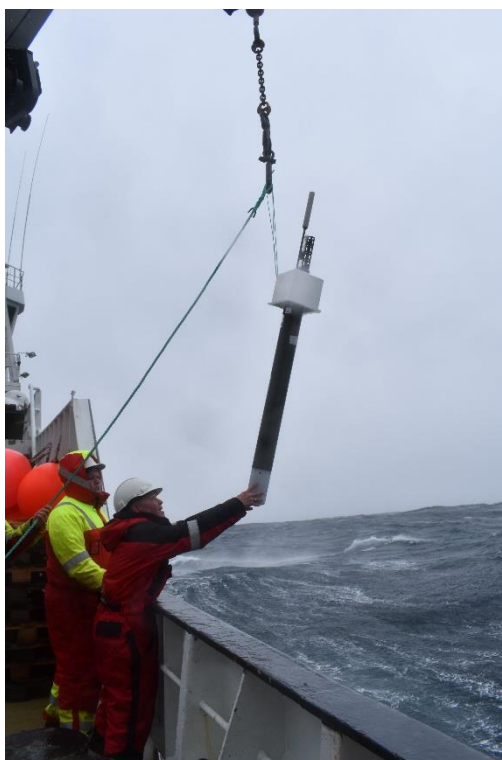
Euro-Argo ERIC
European Research Infrastructure

FLOAT DEPLOYMENT

QUICKSTART & CHECKLIST

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Arvor Iridium version SBE41 CTD



© Kjell Arne Mork (IMR)

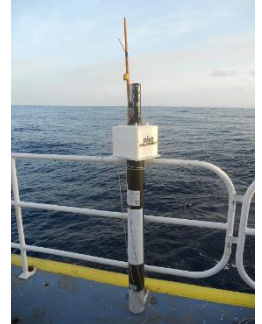
1. Quickstart

From out of the box to deployment, the whole operation should take about 20 minutes.

If possible, take the float box on the deck only a few minutes before opening it. Indeed, float initialisation could last longer or fail if exposed to high temperatures or full sun.

1- Get the float out of the box and put it safely in vertical position (be careful not to let it fall!). Choose a position on an outside open deck on the ship where sky view is at its best (e.g. afterdeck) to optimise GPS and Iridium satellite coverage.

Before deployment, check visually that float is in good condition after transportation: no scratch, antenna, CTD sensor and hull looking neat, and magnet in place on ON/OFF position with its adhesive tape.



CHECK LIST 1

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 floats equipped with an optode, remove the rubber cover.



Check that there is water inside the transparent intake pipe. If not, fill the cell again at the intake duct (top red plug) with a syringe or bottle.

CHECK LIST 2

3- Navigation instruction

During deployment operations, 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 3

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 your ear to the float's hull):

- Before 15 seconds: **5 slow clicks** (hydraulic valve activation)
- Before 1 minute: Listen to the **CTD pump activation** (rrrr...), you should also see a water fluctuation into the top intake pipe. Then float starts full **auto-tests** (several minutes)
- About 3-5 minutes after magnet removal: **Buzzer activates** for 30-minute period. **Once you hear the buzzer, you can launch the float.**

In case of unforeseen deployment circumstances or impossibility to launch the float, replace the magnet on ON/OFF position and restart step 4 later on.



CHECK LIST 4

5- The float is ready to be deployed following the passing of those auto-tests

**Do not deploy ARVOR if you don't hear those tests!
Replace magnet on ON/OFF position and try again.
Do not deploy after 3 failed attempts.**

2. Deployment

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 Iridium antennae and the CTD sensor).**

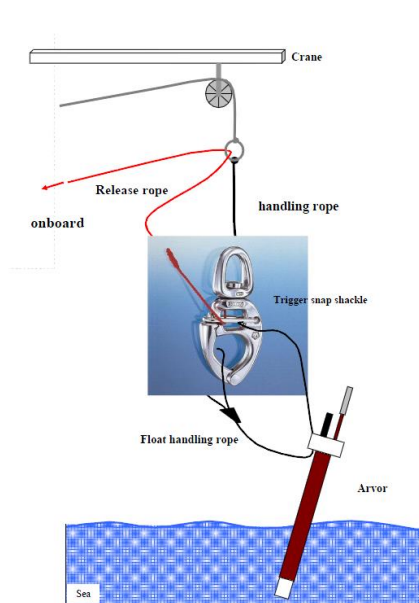
You can drop the float by hand or use a rope looped under the float's white buoyancy foam. The holed plastic plate under the float's head may be used for that purpose (holding / rope). **In any case, do not leave anything on the float when launching it (shackle, rope, etc.).**

CHECK LIST 5

1- By hand: If the ship has a lower access to the sea (no more than 2 m high) 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 **holes 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.



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



The float should then stay afloat with its antenna and sensor above the water (it will perform transmission tests for 30 minutes before starting its first descent).

3. Deployment sheet

Complete the following deployment sheet and send it by mail to contact@euro-argo.eu and romain.cancouet@euro-argo.eu within 6 hours after each float's deployment.

<i>Float serial number</i>	AR2600-16FR001
<i>Float WMO number</i>	3901838
<i>Float IMEI</i>	300234063603090
<i>Comment after visual inspection of the float</i>	OK
<i>Deployment mission name (cruise name)</i>	PIRATA FR26
<i>Deployment ship name</i>	Thalassa
<i>Name of the operator in charge of the deployment</i>	Fabrice Roubaud
<i>CTD or XBT profile done during deployment (yes/no)</i>	yes
<i>Magnet removal time (dd/mm/yyyy hh:mm) in UTC</i>	22/03/2016 15:50:00
<i>Comment on float internal checks (valve and pump actions)</i>	OK
<i>Deployment time (dd/mm/yyyy hh:mm) in UTC</i>	22/03/2016 15:56:00
<i>Deployment latitude (dd°mm,mm N/S or dd°mm'ss" N/S)</i>	2° 59,230 N
<i>Deployment longitude (ddd°mm,mm E/W or ddd°mm'ss" E/W)</i>	12° 29,310 W
<i>Deployment method (release box, by hand, expendable cardboard, etc.)</i>	By hand
<i>Deployment height (m)</i>	1.5
<i>Ship speed (kts)</i>	2
<i>Wind speed (Beaufort)</i>	2
<i>Sea state (calm, smooth, slight, moderate, rough, very rough, high, very high, phenomenal)</i>	Slight (0.5 to 1.25 m)
<i>Bathymetry at deployment position (m)</i>	4556
<i>Miscellaneous comment on the deployment</i>	With CTD cast #82

Deployment sheet example (fields filled in blue)

Alternatively, send us a brief email with the needed information:

Hello, deployment of float WMO no 6902698, position 31°15.52'N / 61°11.28'W today 07 July 2016 at 12h55 UTC
Magnet removed at 12h45 UTC, internal checks OK, calm sea, wind 12 kts from North, SOG 1.5 kts.

CHECK LIST 6

For any question / assistance:

romain.cancouet@euro-argo.eu Tel.: (+33) 2 29 00 85 48 Mob.: (+33) 6 76 15 83 78

contact@euro-argo.eu Tel.: (+33) 2 98 22 44 83

4. Check-List

Date:	Operator name:
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Test #	Name	Result	
Checks prior to deployment			
1)	Checks out of the box	Float OK - Clear sky view	☐ OK
2)	Plugs removal	3 CTD head protective plugs (and optode cover) removed	☐ OK
3)	Navigation instruction	Bridge informed and operations cleared	☐ OK
4)	Magnet removal - Autotests	Correct autotest signals + Buzzer heard	☐ OK
Deployment within 30 minutes after completion of the autotests			
5)	Deployment	NOTHING left attached to the float + Float deployed OK and seen correctly floating	☐ OK
6)	Excel/Mail deployment sheet	Sent to contact@euro-argo.eu and romain.cancouet@euro-argo.eu	☐ OK