



- BioLoc Tx -





Please read this instruction manual  
and the safety instructions attached before the first use of the technology.  
Please follow the recommendations for use.

Save the manual for later use or for the next owner.

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General informations



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## Intended use

The device is designed for immediate and outdoor use. It has to be used with the appropriate accessories as described in these operating instructions. Please, before use, follow the safety instructions listed below.

## Environmental protection



The packing materials can be recycled. Please respect your local environmental regulations in terms of recycling. Electrical and electronic appliances contain valuable, recyclable materials and components such as lithium batteries which can pose a potential threat to human health and environment. However, these components are required for the correct operation of the device. Appliances are not allowed to be disposed together with the household rubbish but should be collected separately for recycling. It is much more environmentally friendly to recycle batteries properly and safely. Follow applicable country, state, and local regulations for disposal/recycling of electronic device with lithium battery supplied in.

## Scope of delivery

The scope of delivery for the appliance is shown in the delivery order. Check the contents for completeness when unpacking. If any accessories are missing or in the event of any shipping damage, please notify your contact at Xerius.

## Warranty

This product is sold with a limited guarantee of 1 year. Xerius's responsibility may be further limited in accordance with its sales contract. Xerius is not responsible for product damages caused by natural disasters, fire, static discharge, misuse, abuse, neglect, improper handling or installation, unauthorized repair, alteration or accident. In no event, Xerius shall be liable for loss of data stored on your equipment. Xerius cannot be liable for exceptional damage, even incidental or consequential if it was informed of this possibility in advance. The warranty does not support modified product.

We invite you to read the contract to know all warranty rights, solutions and limitation of liability. The end user undertakes to use this product in accordance with its original purpose, without making any technical changes that can bring expectations to the product itself and Xerius business.

All modifications of the electronic circuits or software must be expressly approved by Xerius, if not, that will cancel all the guarantee. In case of guarantee, please notify your contact at Xerius.

## Safety notice

### CAUTION

Please respect the following instructions<sup>2</sup>. In case of non-compliance, the warranty will be canceled.

- Check battery level regularly (monthly recommendation);
- Do not put the product near and / or in contact with conductive materials (reinforced concrete, car roofs, ...);
- Space each transmitters of 5m when they are ON and/or standby;
- Do not expose the product to extreme temperatures  $<-20^{\circ}\text{C}$  and  $>+60^{\circ}\text{C}$ ;
- Do not hold the device near an open flame or a lit cigarette;
- Avoid shocks;
- Do not plunge the device inside liquid;
- Do not allow children to play with the product, as they may injure themselves or a third party, damaging the product, including the battery;
- In case of storage, the battery level must not exceed 1/2 or even 2/3 of the maximum voltage.

## Quick first start

1. Remove the magnet placed on the transmitter;
2. Leave the beacon closed to the station (100m) during at least 3 days;
3. Download the data from the station and check if they correspond to your program;
4. Check and read the battery voltage;
5. If everything is ok, you can deploy.

Do not hesitate to refer to Xerius if you have any doubt before deployment.

## Installation

Xerius disclaims any responsibility for attaching the device on the animal. We recommend to contact persons who have already equipped the studied species.

Xerius reserves the right not to deliver the harness with the tag.

Please respect the instructions for use before equipment.

## Operation

BioLoc Rx downloads BioLoc Tx data into the study area.  
Data are saved and stored in the internal memory.

If you have more than one BioLoc Rx, all the data will be sent automatically to the main station BioLoc Rx (called the Master).

The data can be downloaded via Bluetooth from the Master or received directly by mail thanks to the GSM network. The other BioLoc Rx relaying to the Master are called Slave. If you have only one station, it will automatically be a Master.

Data can be also downloaded daily by UHF to each beacon, one after the other, by using the USB Performance and the associated software.

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<sup>2</sup> Not hierarchically listed

# Technical data



<b>Weight and dimension</b>	Adjustable			
<b>Network</b>	BioLoc base station in 434MHz	21grs – 45*29*18 mm	BioLoc base station in 434MHz Argos in Geofencing mode	BioLoc Rx
<b>GNSS receiver</b>	GPS/GAL/GLO/BDS/QZSS	26grs – 50*26*15 mm	BioLoc base station in 434MHz	BioLoc Rx
<b>Internal sensors</b>	Temperature Accelerometer 3-axis Battery level	10grs – 30*21*8 mm	GPS/GAL/GLO/BDS/QZSS	BioLoc Rx
<b>Memory</b>	Nonvolatile 1Mbits		Temperature Accelerometer 3-axis Battery level	BioLoc Rx
<b>Autonomy</b>	40 grs - 2100 fixes 50grs - 3000 fixes 80grs - 6000 fixes 120grs - 14000 fixes		GPS/GAL/GLO/BDS/QZSS	Nonvolatile 1Mbits
<b>Compatibility</b>	BioLoc Rx		Temperature Accelerometer 3-axis Battery level	Nonvolatile 1Mbits
			3000 fixes	Nonvolatile 1Mbits
			600 fixes	Nonvolatile 1Mbits
			3000 fixes	Nonvolatile 1Mbits
			Illimited – Solar energy	Nonvolatile 1Mbits
			BioLoc Rx	Nonvolatile 1Mbits
			Argos in Geofencing mode	Nonvolatile 1Mbits



## Care and service

In case of defaults, please refer to your contact at Xerius.

Only Xerius collaborators are authorized to make the repairs on your device.

In the event of non-compliance, the warranty will be cancelled.

## Return policy

All requests for after-sales service must be send by mail to your contact at Xerius for acceptance.

Every device should be returned at the following address :

XERIUS  
4 Rue Jean Monnet  
ZA Le Cassé II  
31240 SAINT JEAN (France)  
+33 (0 5 62 89 09 83

After receiving and testing in-house, Xerius reserves the right to charge the customer, after its consent, for any defaults not covered by the warranty.  
Return delays may vary depending on the failure.

## To go further...

For more information on our product and their use, you can visit our website [www.Xeriustracking.fr](http://www.Xeriustracking.fr) and our Youtube channel @XeriusTracking where you will find described video with some more informations.

Quick start



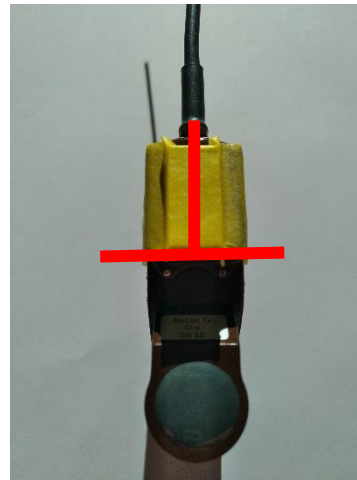
Please remove the magnet before use.

If you do not use the tag, put the magnet and store it in a dry place with a moderate temperature (25°C). Please note, tags are made for an outdoor use and not to be stored.

The magnet is positioned as shown on the following pictures.



BioLoc Tx 21grs solar



BioLoc Tx 50grs collar

For any support, please contact your referent at Xerius.

BioLoc Tx software



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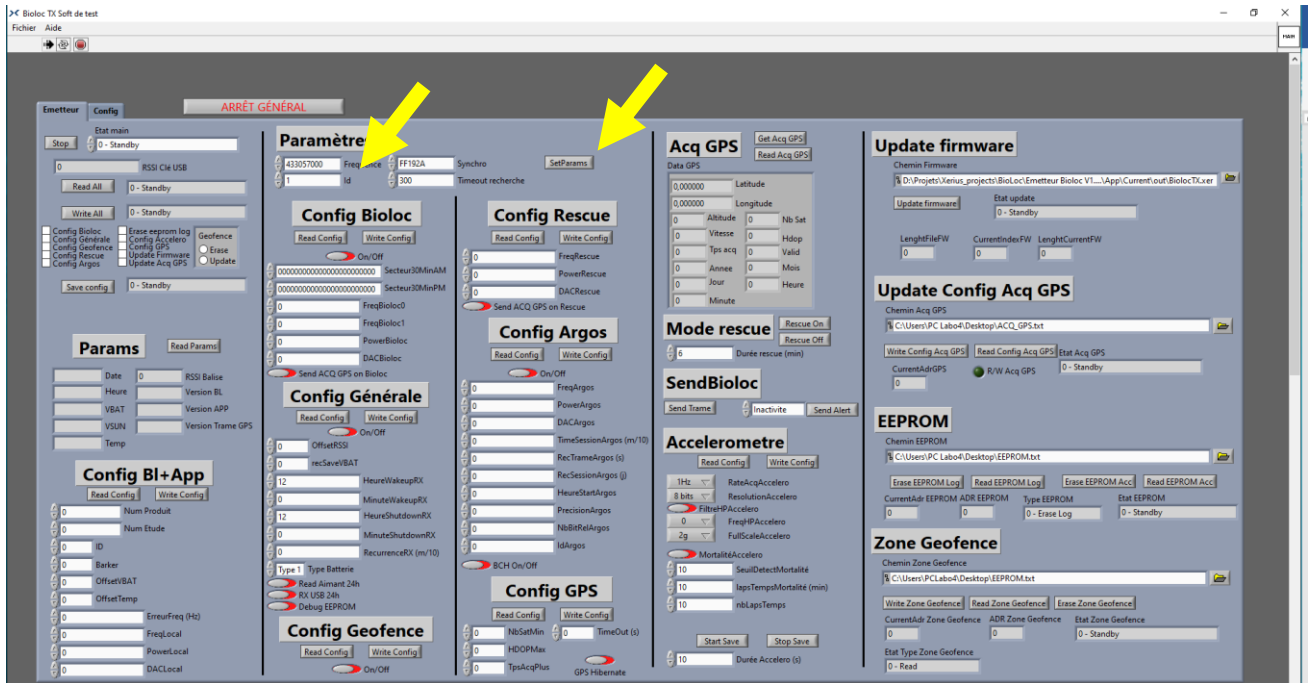
## Software installation

Copy the following link on Google and download the BioLoc Tx software :

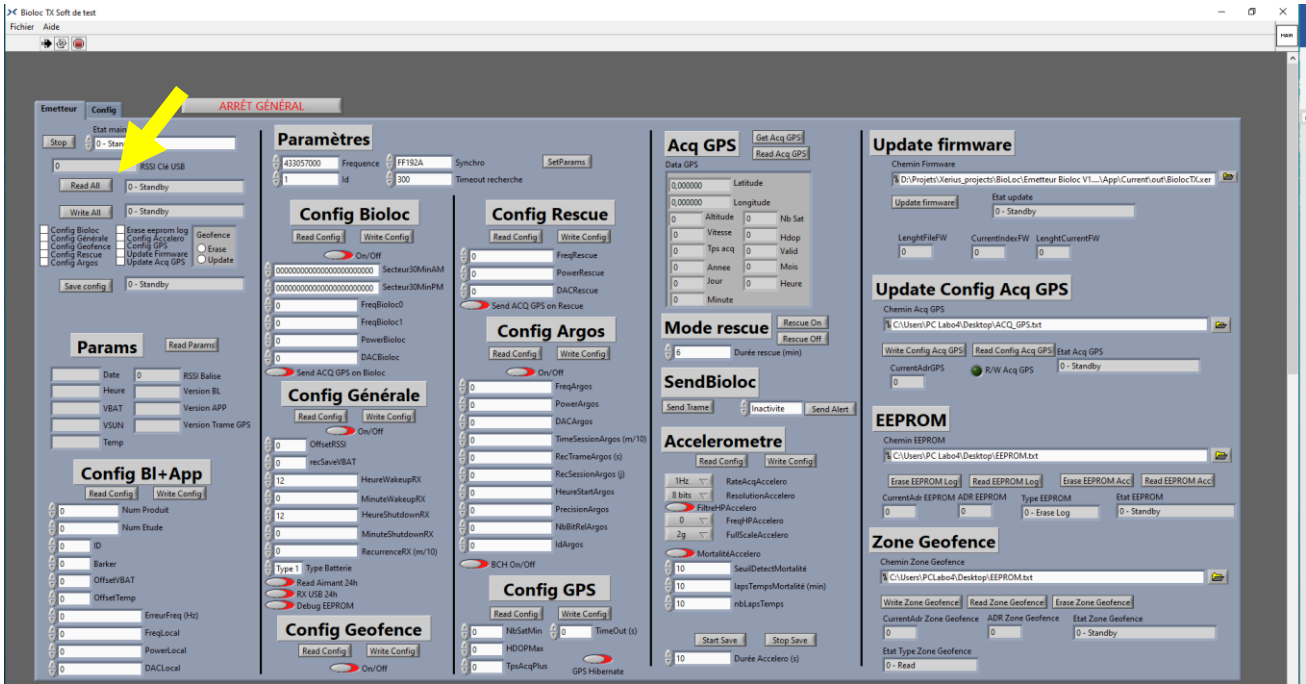
<https://www.dropbox.com/s/vtkv3hgeu7syf3u/Bioloc%20TX%20Soft%20de%20test%20-%20install%20v0.0.24.zip?dl=0>

# USB Performance activation

1. Connect the antenna and the cable to the USB Performance;
2. Connect the USB Performance to your laptop;
3. Open the software BioLoc Tx;
4. Enter the tag ID (on the label) in **Paramètres** then click on « SetParams ».



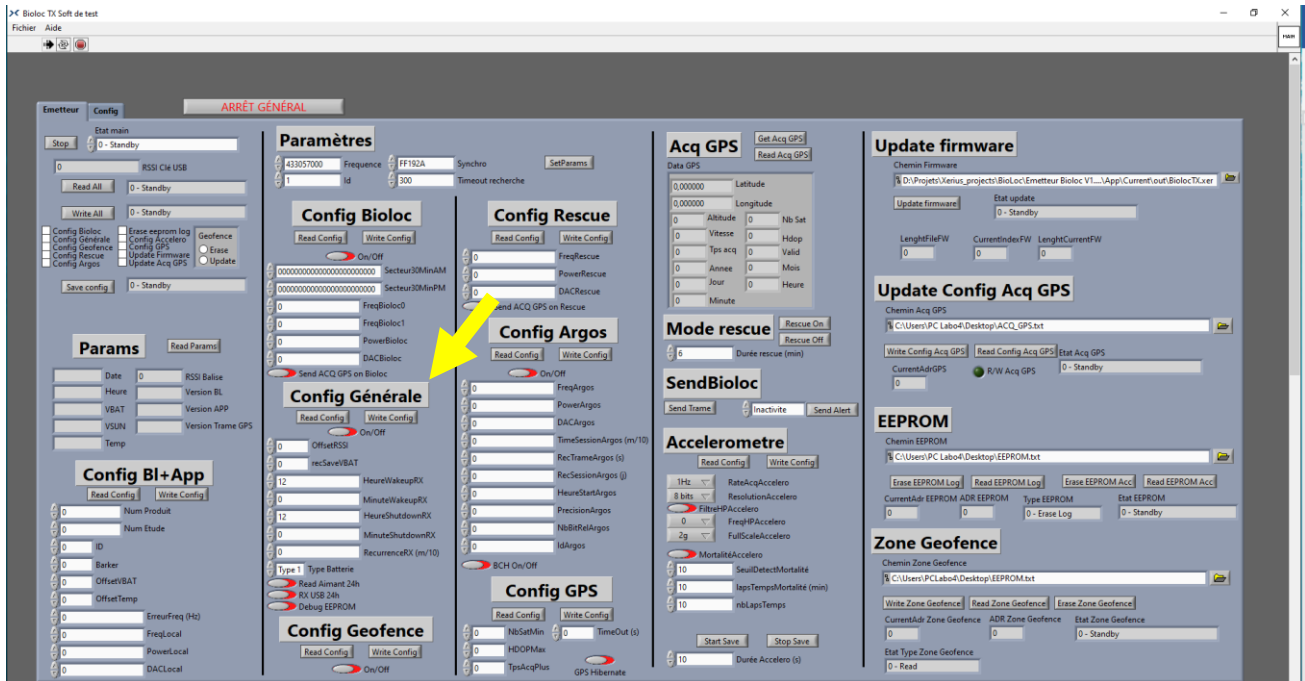
- Click on « Read all » in **Params**. Please note that the USB/transmitter connexion is done at the times and recurrences entered in **Config Générale**. A message will inform you when the « Read all » is finished.





# General parameters

## 1. Go to the tab **Config Générale**



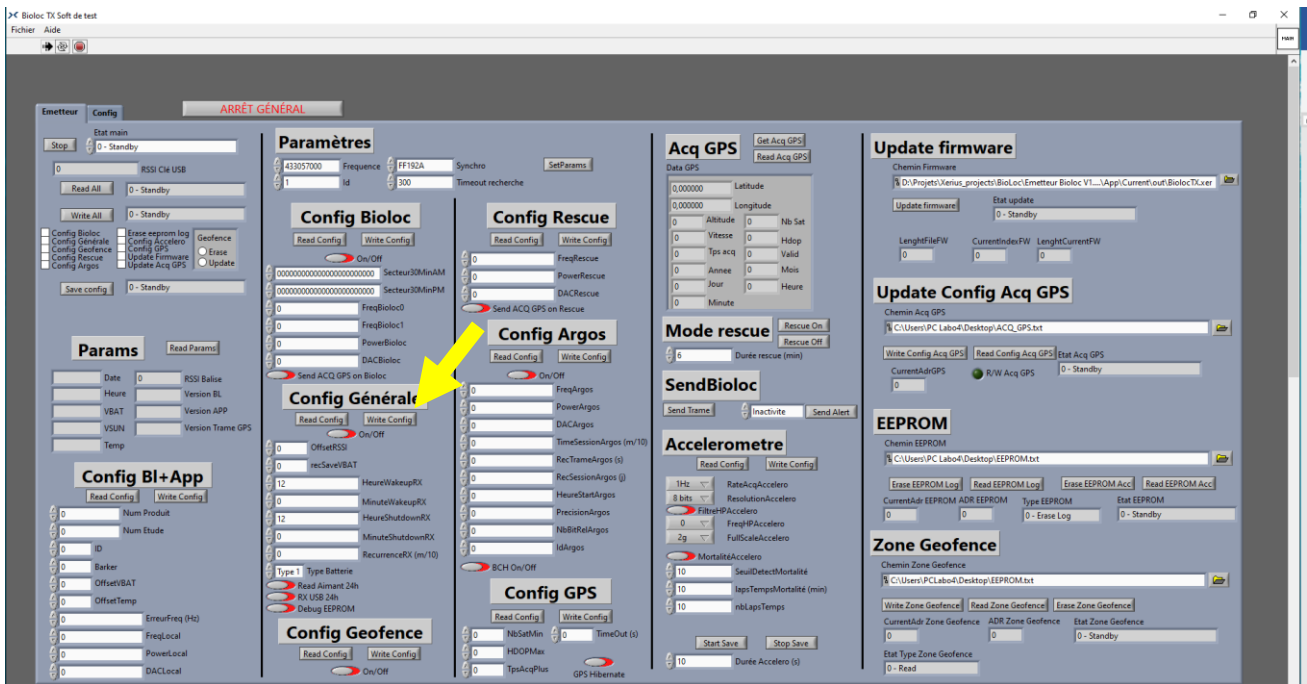
## 2. To modify the communication time slots with the USB Performance, enter :

- « HourWakeupRX » : start time in 0h/23h format;
- « MinuteWakeupRX » : start minute, in ten (00,10,20,30,40,50);
- « HourShutdownRX » : end time in 0h/23h format;
- « MinuteShutdownRX » : end minute, in ten (00,10,20,30,40,50);

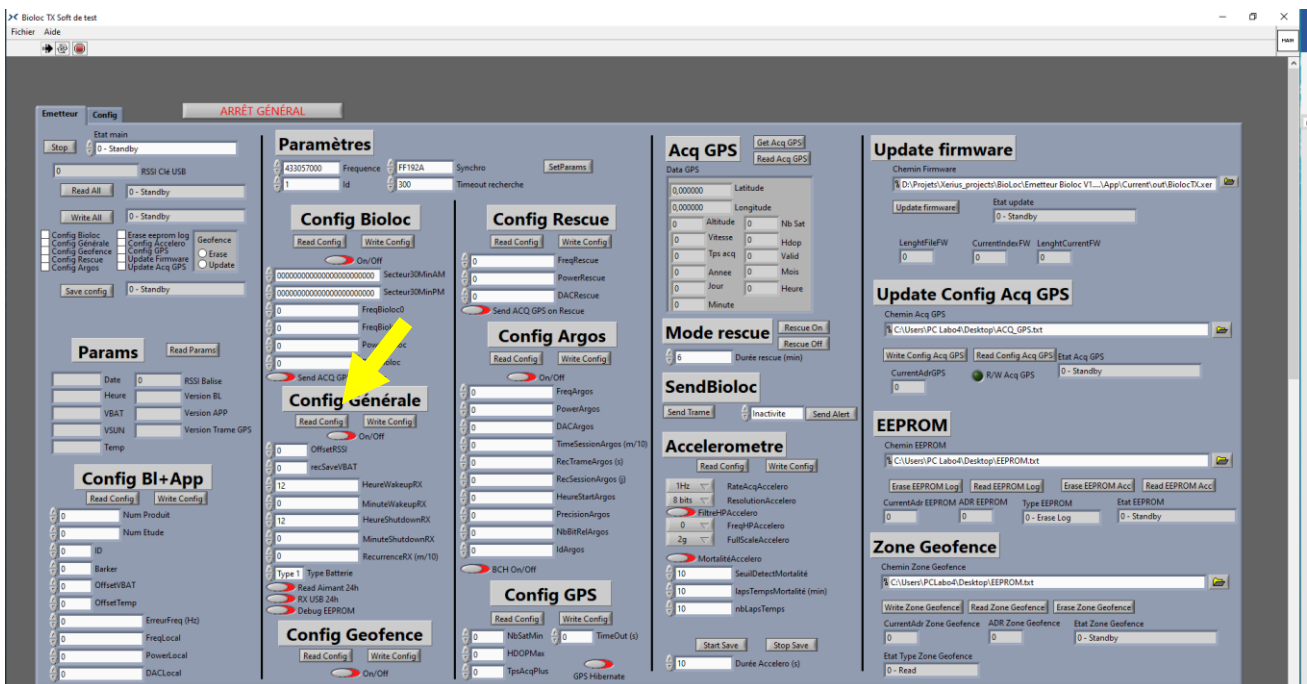
## 3. To modify the recurrence to communicate with the USB Performance, enter:

- « RecurrenceRX » : express in minutes / 10, for example for 60 minutes, you will write « 6 »;

- To validate changes, click on « Write Config », a confirmation message will appear once the action is completed

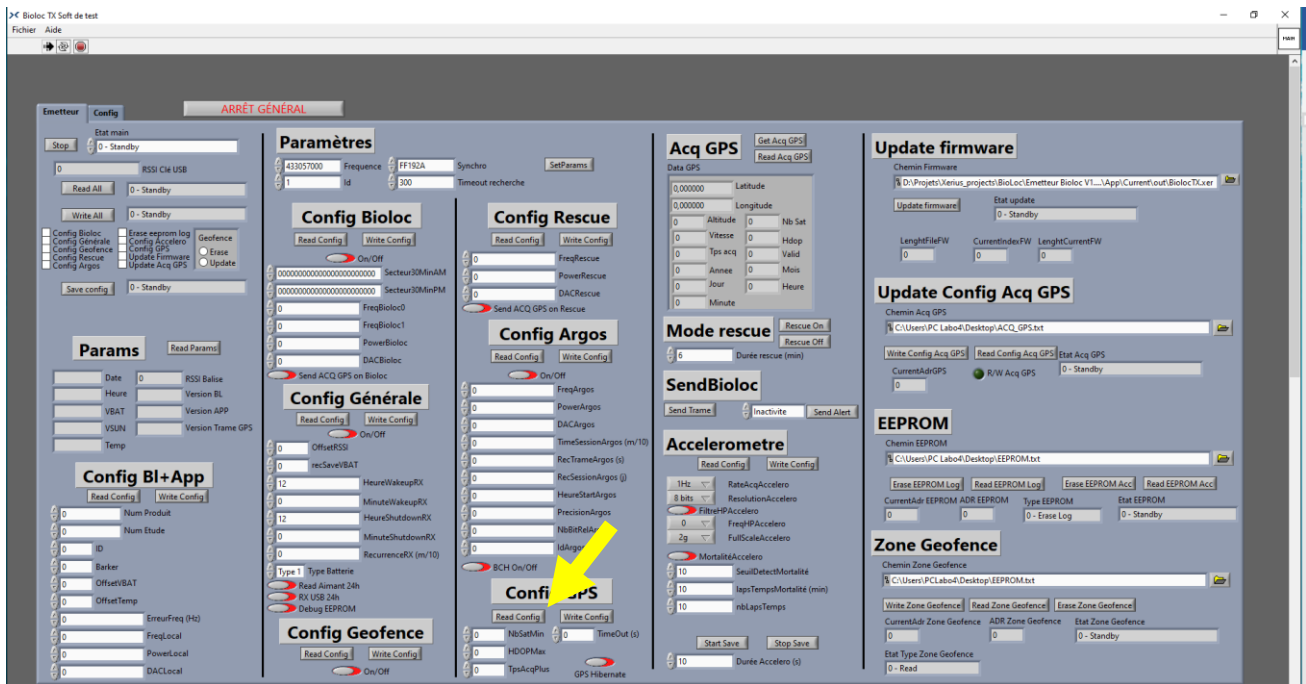


- If you want to check changes, click on « Read Config », a confirmation message will appear once the action is completed

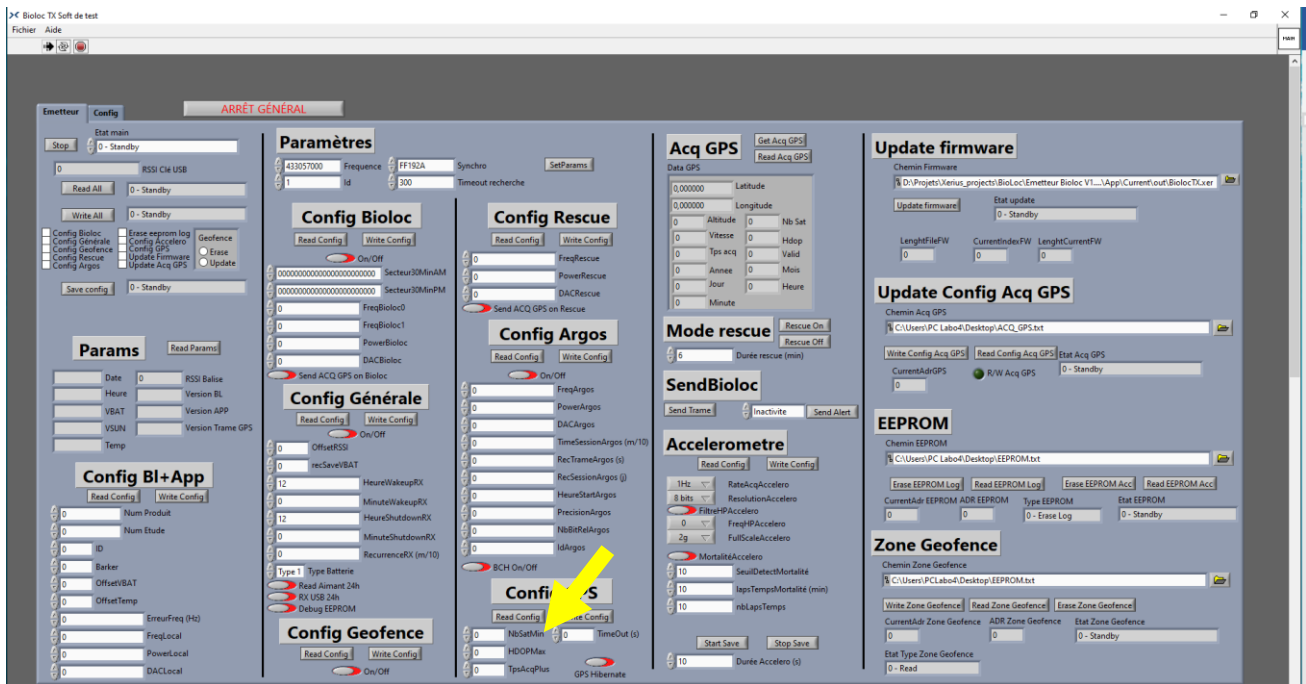


# GPS parameters

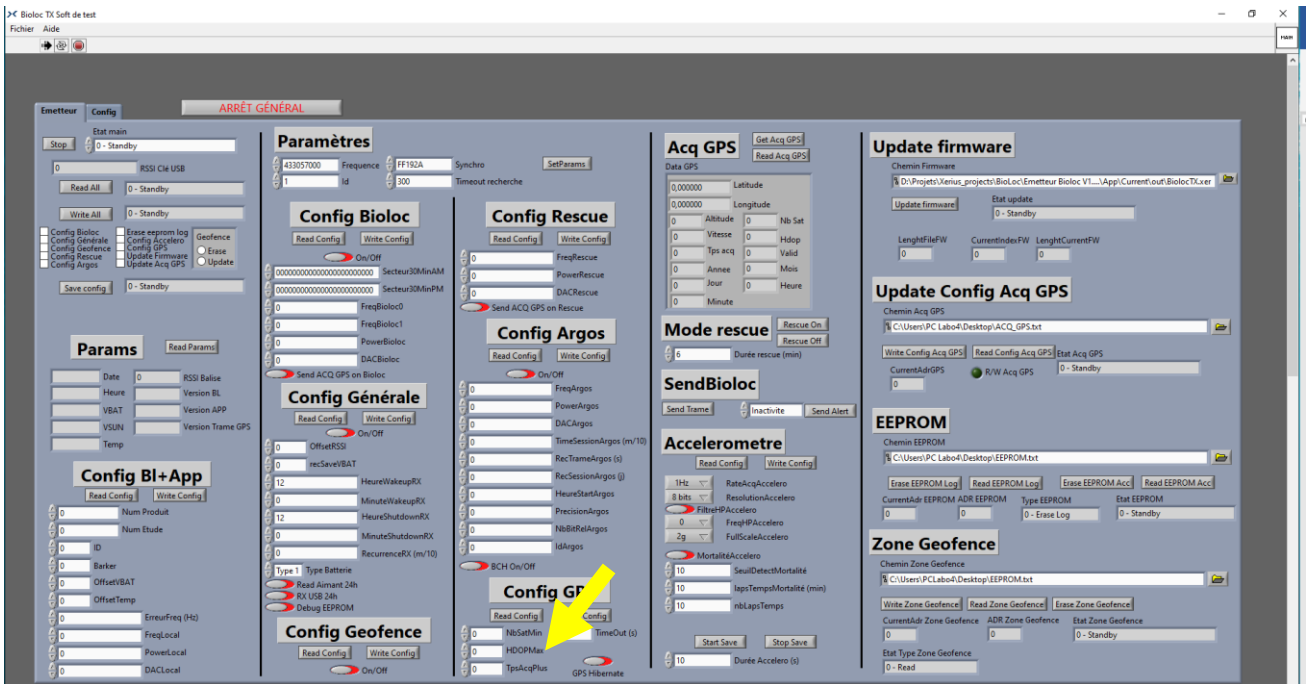
1. Go to **Config GPS** and click on « Read Config »



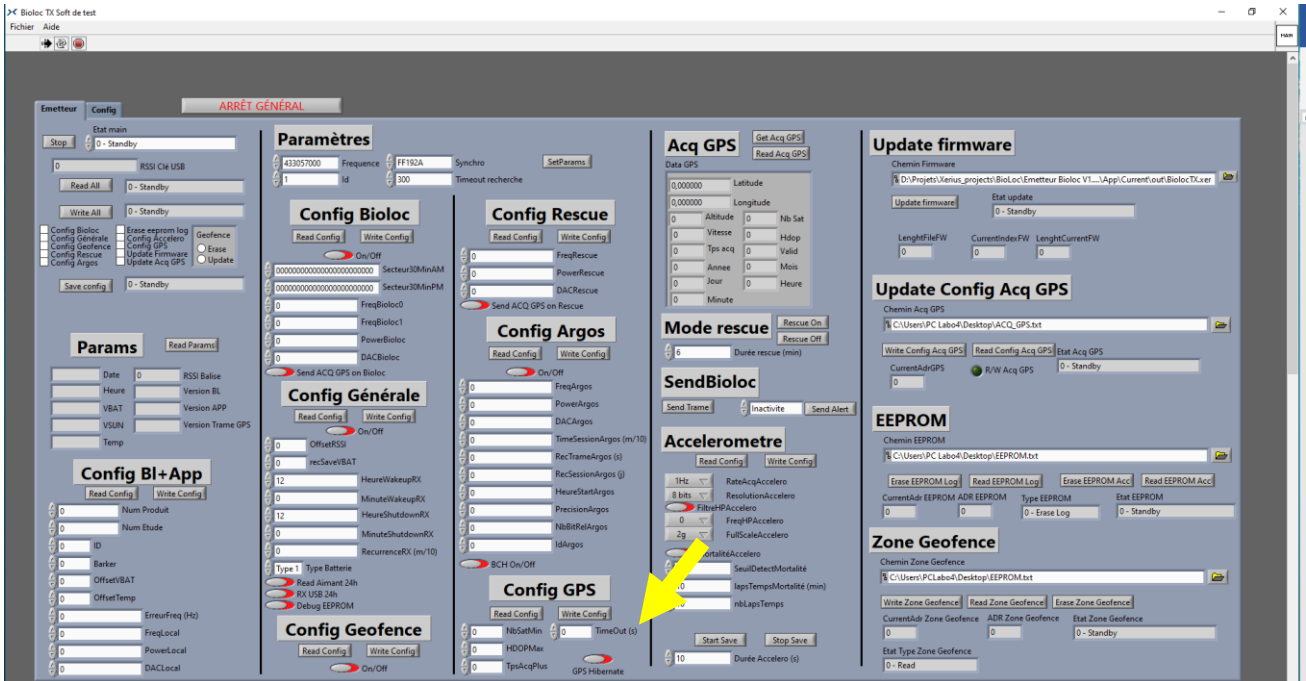
2. To modify the minimum number of satellites received for each GPS acquisition, enter « NbSatMin ». The minimum possible to fill in is 3 satellites and the maximum possible to fill in is 7 satellites



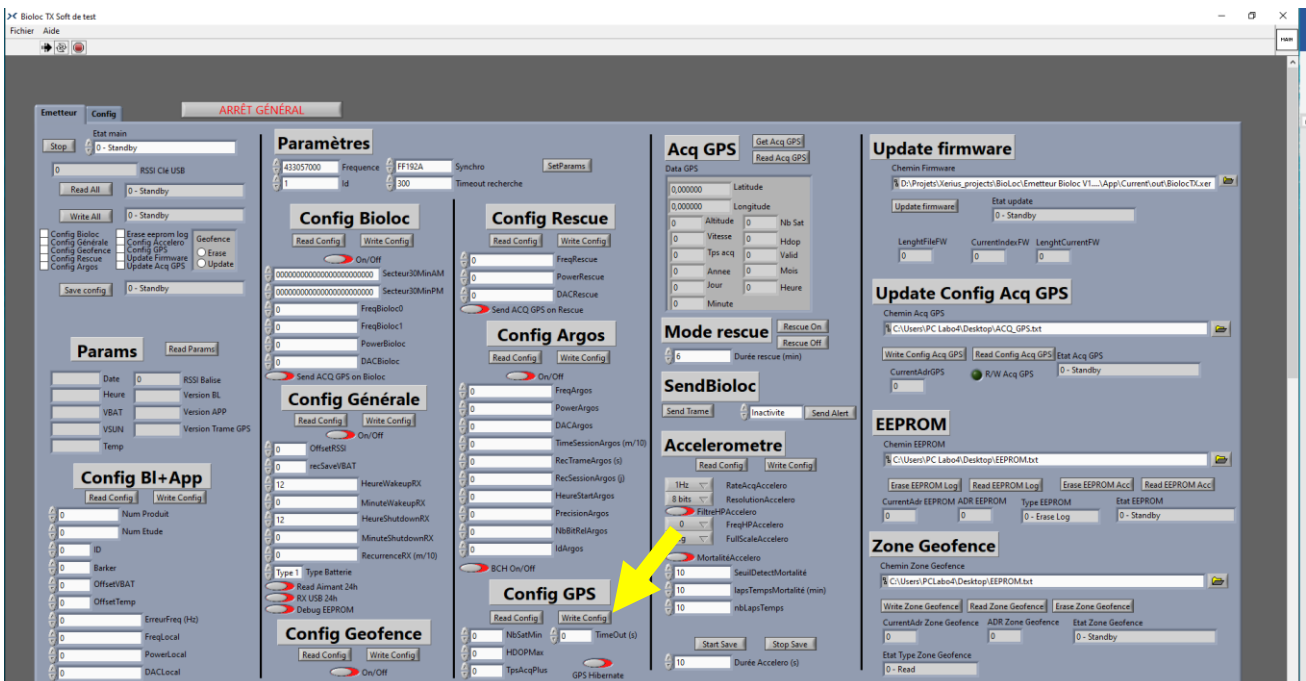
- To modify the minimum HDOP for each GPS acquisition, enter « HDOPMax ». We won't advise to enter a value less than 3 without having done GPS coverage tests first. For security, we recommend to enter a value equal to 3



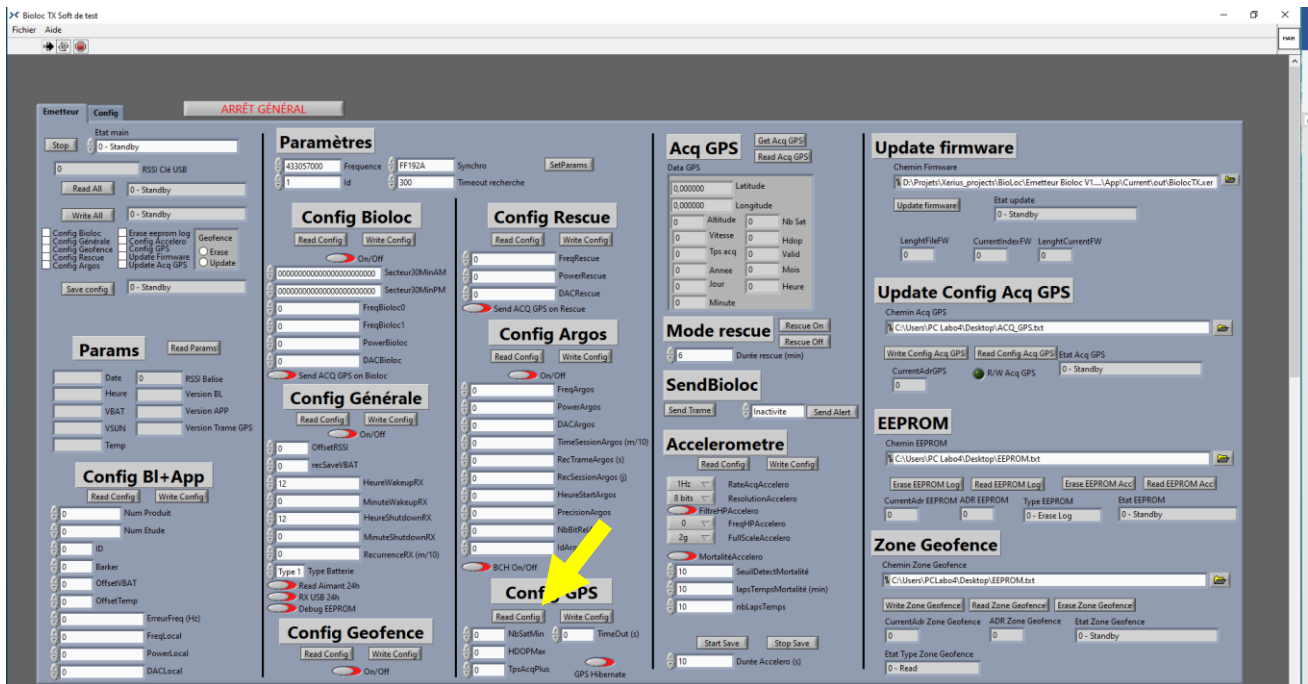
- To modify the maximum time needed for GPS acquisitions before a TimeOut, inform « TimeOut (s) ». We recommend that you do not enter a value lower than 120 seconds without having done GPS coverage tests. For security, we recommend to enter a value equal to 120 ;



- To validate changes, click on « Write Config », a confirmation message will appear once the action is completed ;

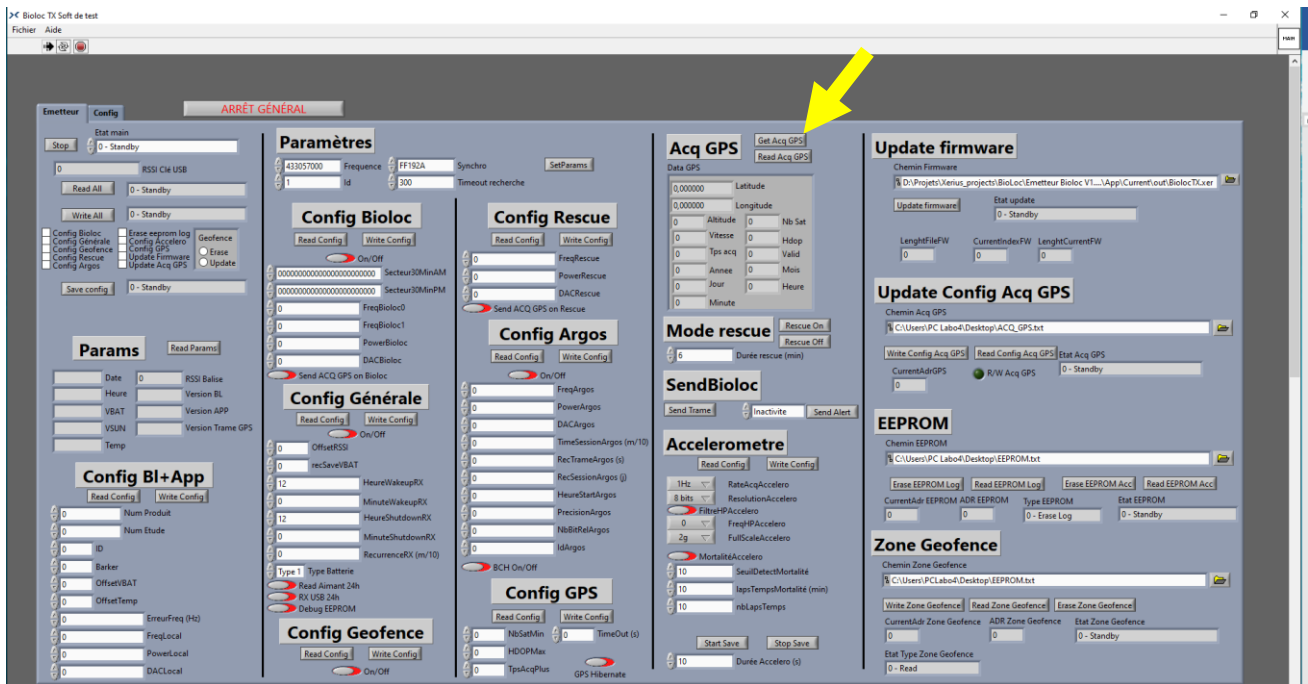


- If you want to check the changes, click on « Read Config », a confirmation message will appear once the action is completed



# Get live GPS acquisitions

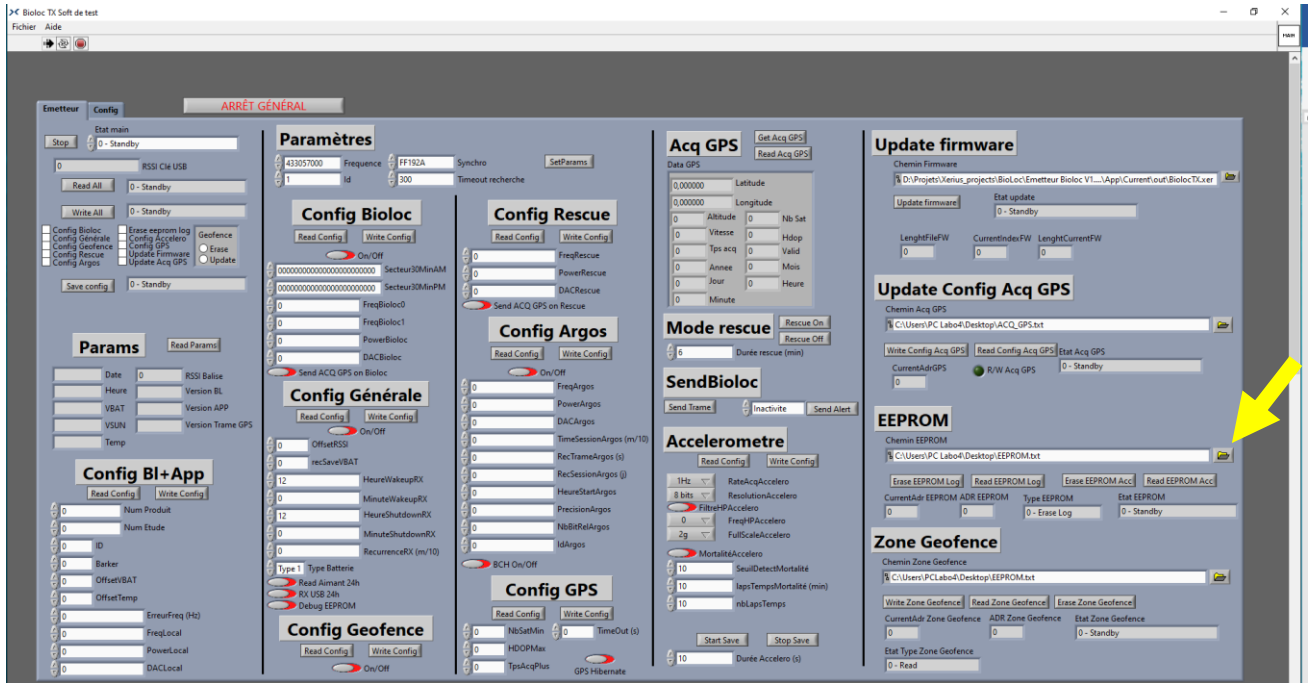
1. Go to **Acq GPS** and click on « Get Acq GPS », a confirmation message will appear once the action is completed



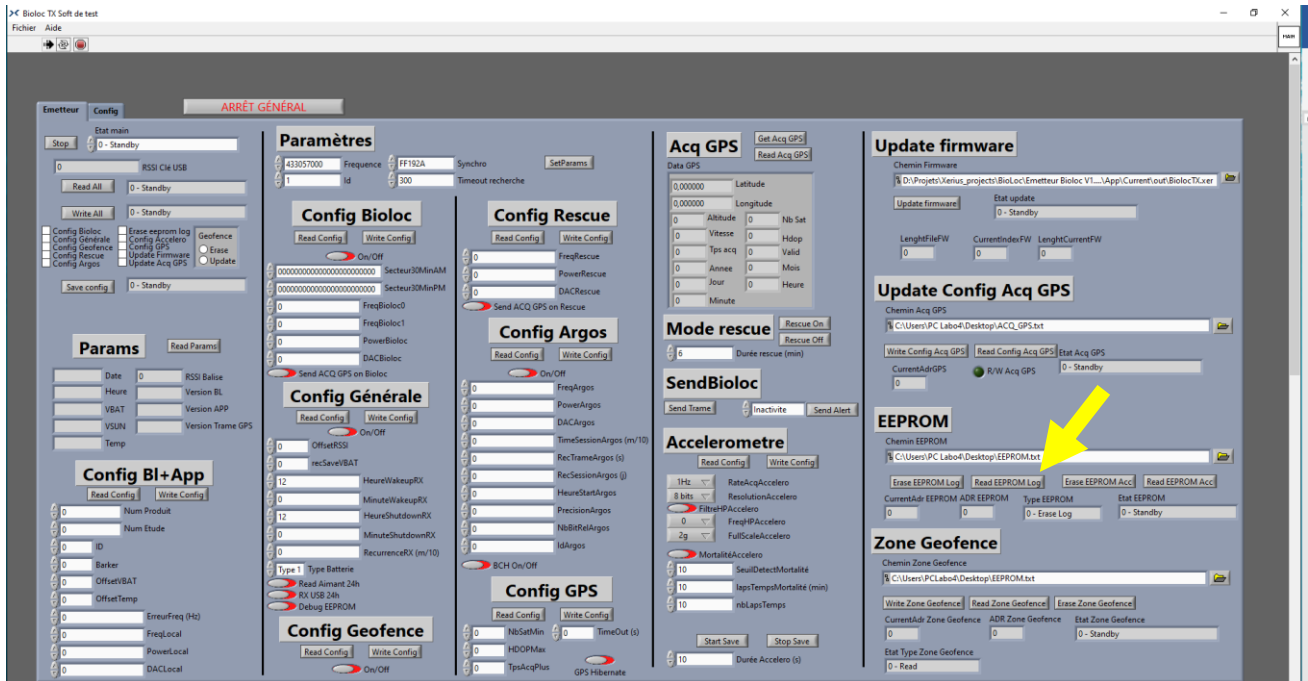


# Download memory

1. Go to **EEPROM** and select the destination path (where downloaded data will be saved) using the tab (folder image) on the right

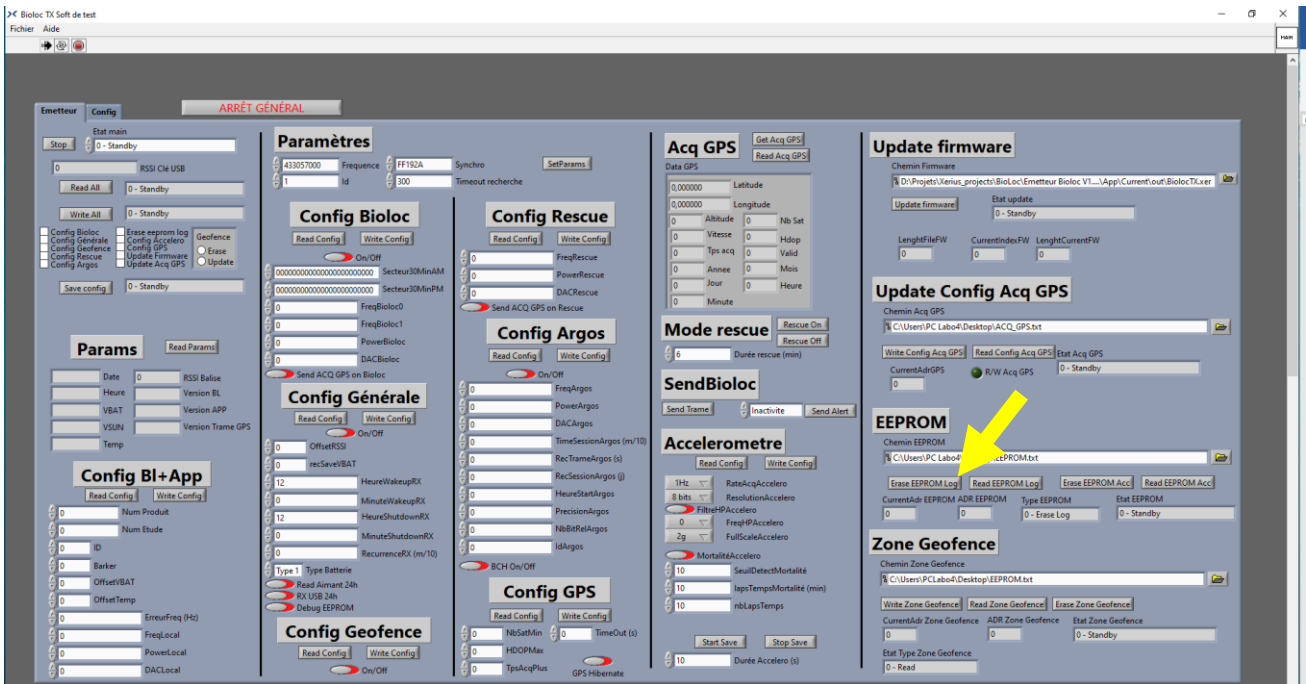


2. Click on «Read EEPROM», a message will inform you when the «Read EEPROM log» is finished. The data has been downloaded successfully



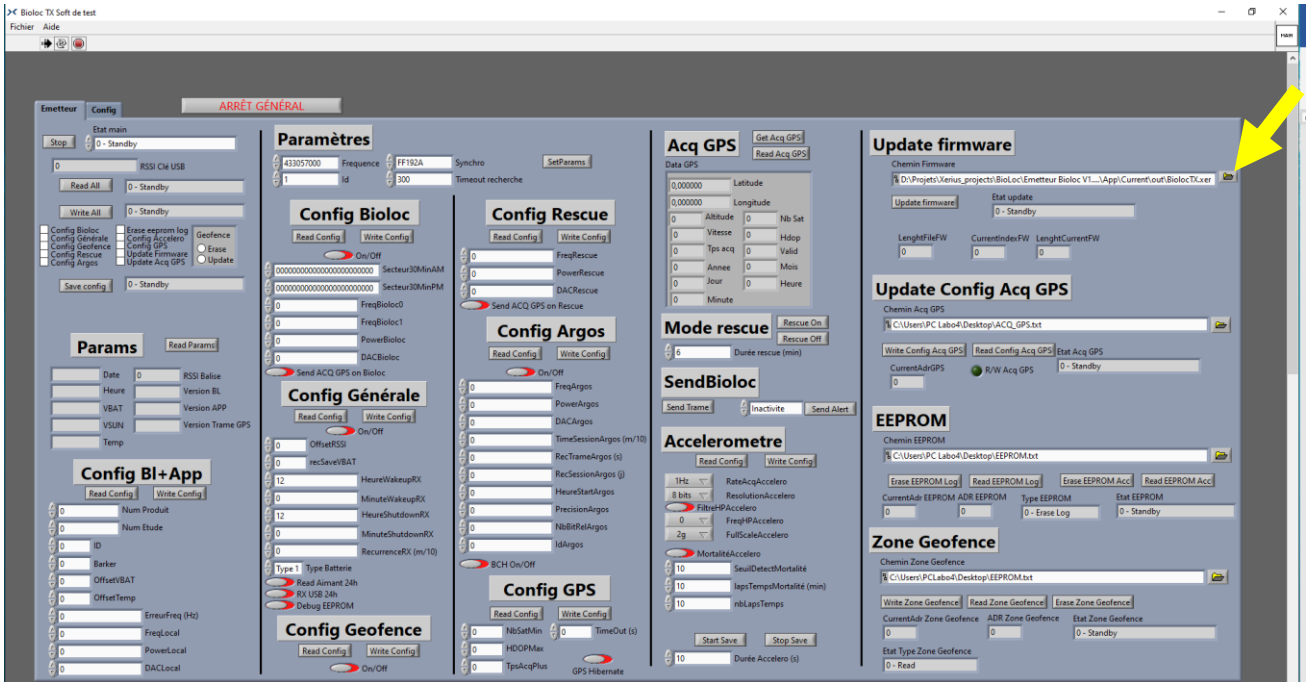


- To delete the data after downloading, click on «Erase EEPROM log», a message will inform you when the « Erase EEPROM » is finished. The data has been erased successfully

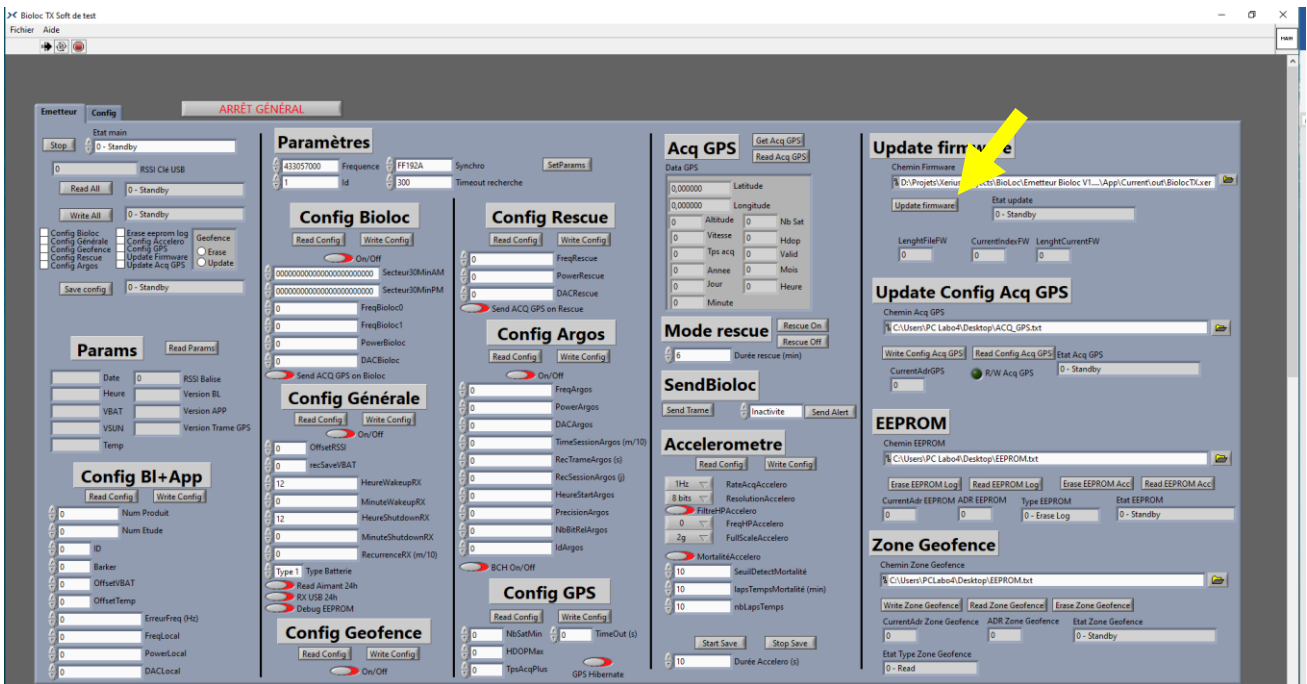


# Tag reprogrammation

1. Go to **Update firmware** and select the file to install in .xer using the tab on the right

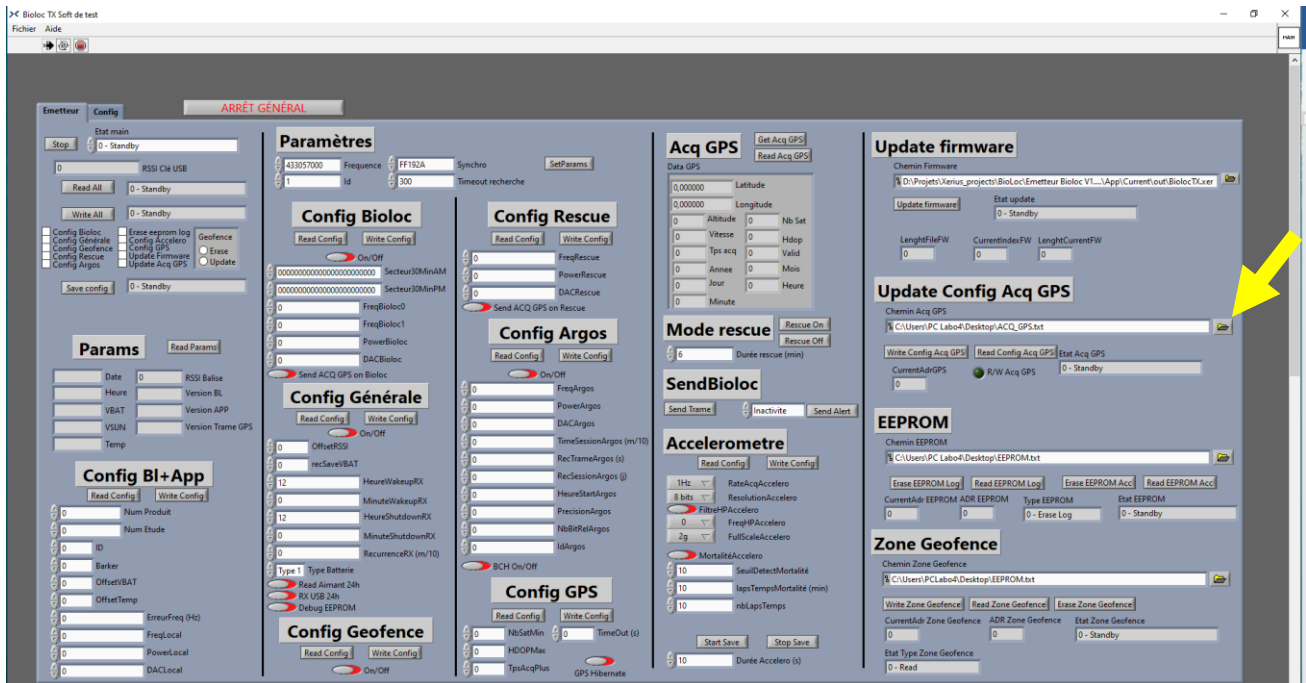


2. Once the software has been selected, click on « Update Firmware », a message will inform you when the update is finished. The firmware is well installed

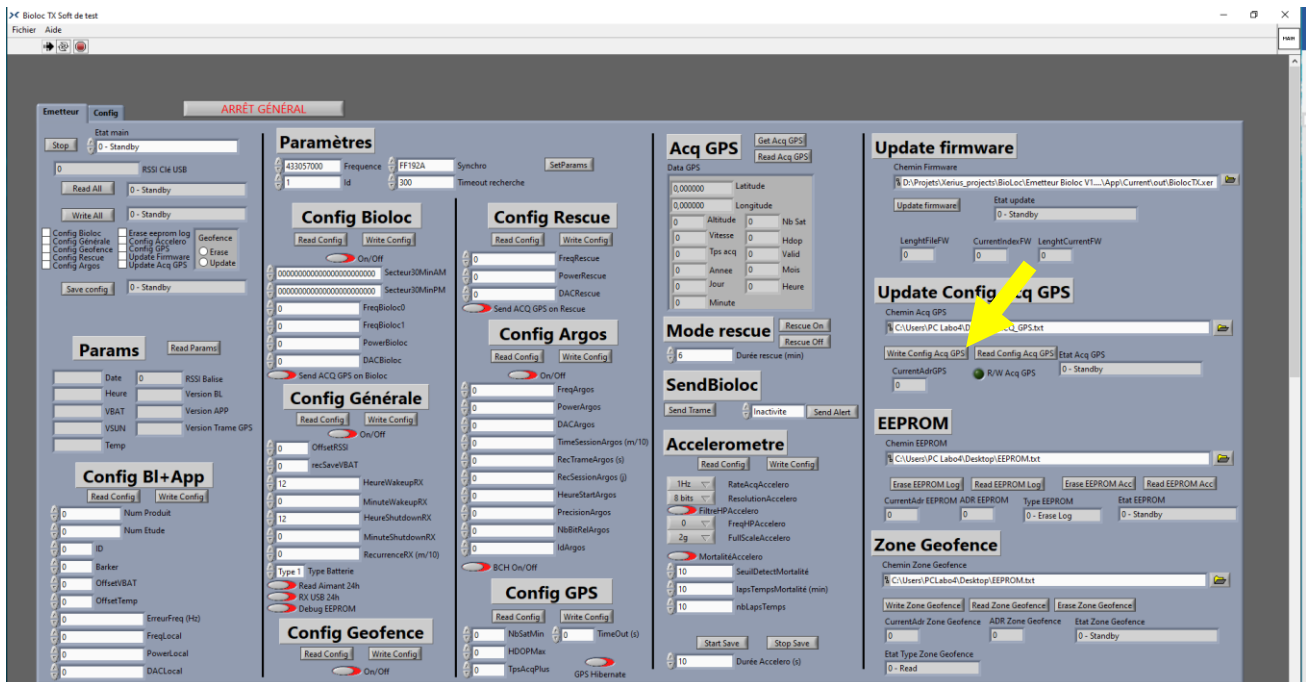


# GPS acquisitions programming

1. Go to **Update Config Acq GPS** and select the software to install in .txt using the tab on the right

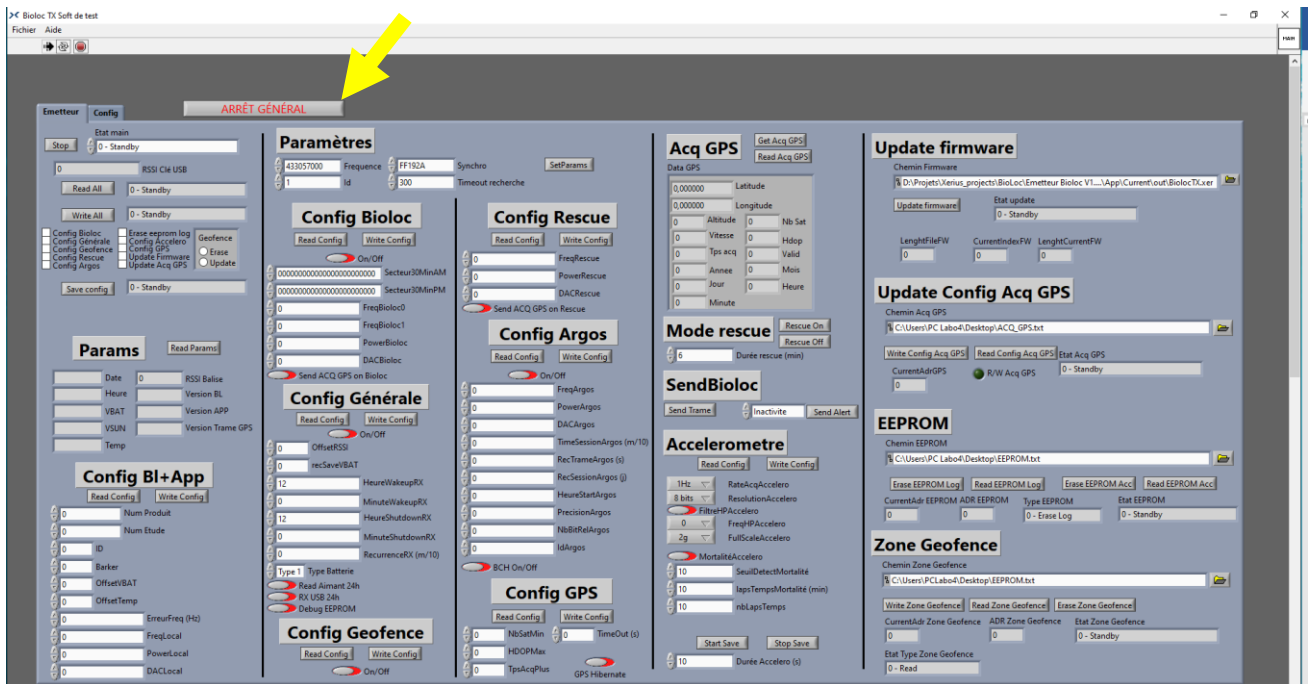


2. Once the software has been selected, click on « Write Config Acq GPS », a message will inform you when the update is finished. The program is well installed

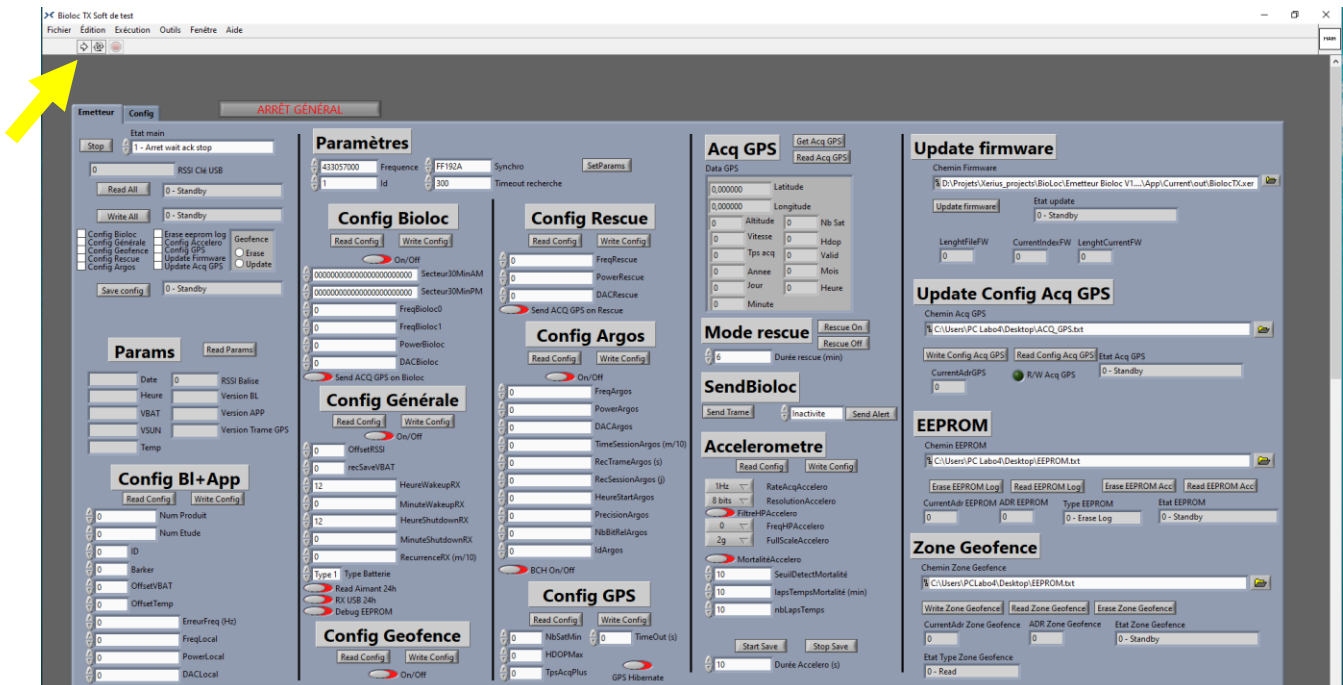


# Close the software

1. Once communication with the beacon is completed, click on **ARRÊT GENERAL**



2. To restart the software, click on the white arrow or restart the software





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