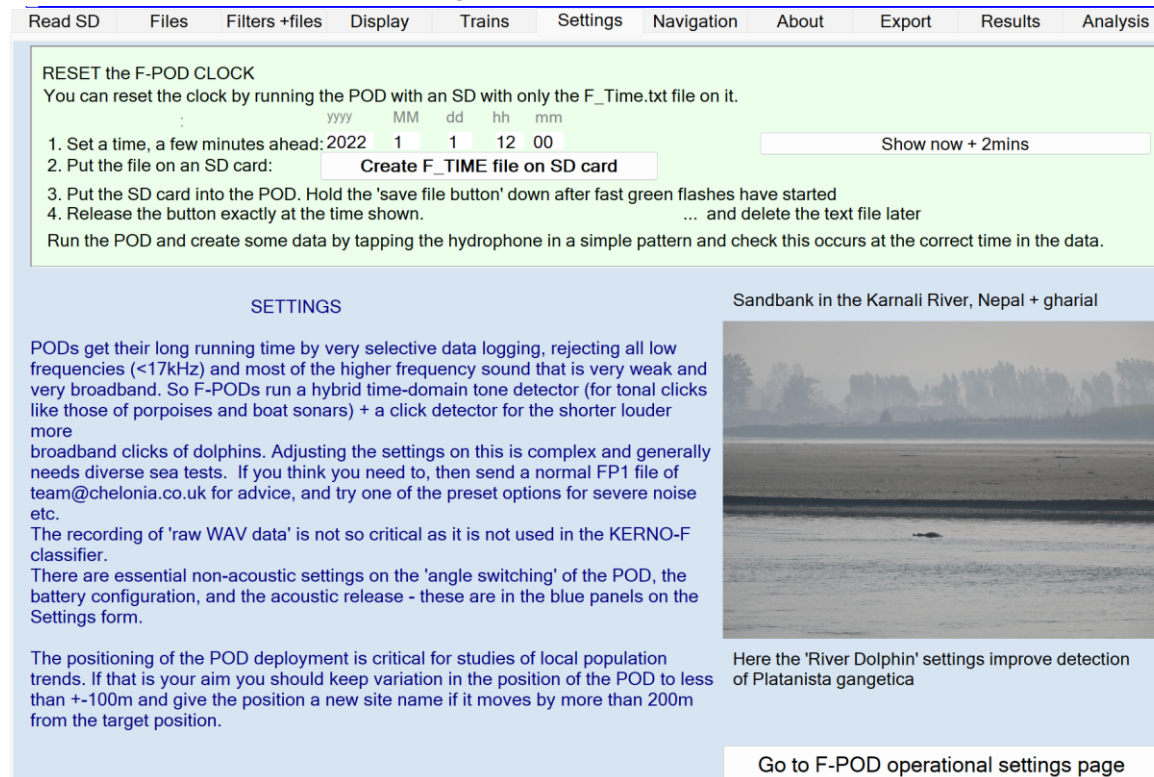


# How to set your F-POD acoustic release

1. Check on the 'About' page of the menu that your version of the FPOD app is recent:



2. Open the Settings page of the menu and click the button bottom right



3. You now see all the possible settings:

CHANGE SELECTED F-POD SETTINGS:

*Settings: Select only the things you want to change - the POD will retain its memory of all the others*

#### 1. New angle switching?

Set ON at all angles  ON at all angles

Set new switch angle

**Switch ANGLE**  
for the settings file:  
to: 255 from: 0  
180deg 0deg

This ON/OFF switching happens at the minute roll-over. If you are unsure test your new settings by running the POD for 20 minutes, placing it at different angles and making noise by stroking the hydrophone housing.

**Set acoustic/timed release controls:**

Do not release before: yy MM dd hh  
20 99 1 1 1

Force release on: 20 99 1 1 1

Release before batteries die

Set tune length 7 7

**Set DELAYED START**  
Start on: 2000 mm 00 dd 01 @ 00:00

#### 2. New Duty cycle?

Set Duty Cycle continuous

Set Months OFF 0

#### 3. New battery type?

Battery configuration:  
 Set battery type 25 Li rechargeable cells

Set User switch voltage User set switch @ 48

Select settings scheme: clicks above 90kHz

minimal noise river dolphins  
normal operation tank tests  
severe noise exclude 50kHz  
Restore defaults De-select all

#### 4. New noise controls?

Change	NEW	default
<input type="checkbox"/> Set noise adaptation	<input checked="" type="checkbox"/> ON	
<input type="checkbox"/> Set 1CycLessAt	17	17
<input type="checkbox"/> Set 2CycLessAt	21	21
<input type="checkbox"/> Set 3CycLessAt	30	30
<input type="checkbox"/> Set 4CycLessAt	50	50
<input type="checkbox"/> Set MinPmax	12	12
<input type="checkbox"/> Set BaseDeadband	5	5

#### 5. New frequency filters?

Change	NEW	default
<input type="checkbox"/> Set Sonar filter	<input type="checkbox"/> filter boat sonars	
sonar filter trigger cycles:	14	14
<input type="checkbox"/> Set Min initial IPI	220	220
<input type="checkbox"/> Set Max initial IPI	18	18
<input type="checkbox"/> Set ExcludedMinIPI	255	255
<input type="checkbox"/> Set ExcludedMaxIPI	0	0
<input type="checkbox"/> Set HighPassFilter	-6dB @40kHz	

#### 6. New data volume controls?

Change	NEW	default
<input type="checkbox"/> Set NoisyMins	3	3
<input type="checkbox"/> Set QuietMins	4	4
<input type="checkbox"/> Set NoisyLevel	20	20
<input type="checkbox"/> Set QuietLevel	3	3
<input type="checkbox"/> Set AmpStep	5	5
<input type="checkbox"/> Set AmpStepSteepness	4	4
<input type="checkbox"/> Set Min Ncyc	5	5
<input type="checkbox"/> Set 4 data blocks	<input type="checkbox"/> 4 blocks	

#### 7. New Waveform capture settings?

Change	NEW	default
<input type="checkbox"/> Set none, some, all	Selected	
<input type="checkbox"/> Set WavMinAmp	10	10
<input type="checkbox"/> Set WavPkAddOn	7	7
<input type="checkbox"/> Set SNR control	15	15
<input type="checkbox"/> Set WavMinICI	62	62
<input type="checkbox"/> Set WavMaxICI	65	65
<input type="checkbox"/> Set WavOKSeqN	3	3
<input type="checkbox"/> Set LimitOnNinOneSeq	15	15
<input type="checkbox"/> Set SDCardWavUsage	4	4
<input type="checkbox"/> Set Max n of Wav records:	512	

#### 8. New noise filters?

Change	NEW	default
<input type="checkbox"/> Set MaxSPLAmpDropTest	120	120
<input type="checkbox"/> Set MaxSPLforBWtest	0	0
<input type="checkbox"/> Set BWaddOn	3	3
<input type="checkbox"/> Set MaxSPLforReversalLim	110	110
<input type="checkbox"/> Set reverb filter	<input checked="" type="checkbox"/> use reverb filter	

Default settings - overwrite any settings in force  
(Create F\_SETS with factory defaults)

name?: Unspecified settings  
**Create your F\_SETS.txt file**

YouTube video on settings

clear

READ SETTINGS FROM ANY OPEN F-POD FILE:

POD number Do not release before: ~~~~~

Date Force release on: ~~~~~

FPGA code version ~~~~ Delay start to: ~~~~~

PIC code version ~~~~ Battery switch voltage: ~~~~~

..... ~~~~~

..... ~~~~~

..... ~~~~~

double-click a value to reset it to default

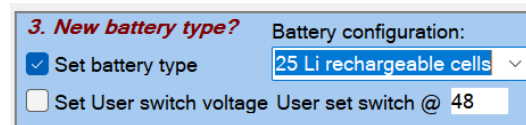
**What you will do now is create a settings file 'F\_SETS.txt' that will change only the acoustic release settings and the battery selection setting.**

4. The battery selection must be set so that the POD knows when to go into a special mode when its batteries are getting low. In this mode it is only awake for 10 seconds each minute. This extends the running period a lot so that it has a chance of hearing the Acoustic Release signal.

This assumes that your normal settings will allow the POD to be ON when you going to try to release it. Those settings are here:

They will not be changed by the F\_SETS.txt we are making now because the  Set check boxes are empty.

5. Set the battery selection:



3. *New battery type?* Battery configuration:  
 Set battery type 25 Li rechargeable cells  
 Set User switch voltage User set switch @ 48

Do not do anything with 'Set User switch voltage' - that's for strange experimental stuff!

6. Now for actual release settings...

The check box  **Set acoustic/timed release controls:** must be ticked or nothing will happen



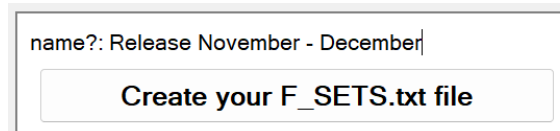
**Set acoustic/timed release controls:**  
Do not release before: 20 26 11 15 8  
Force release on: 20 26 12 14 6  
 Release before batteries die  
 Set tune length 7 7

The POD will not release before the '**Do not release before**' date.

There is usually no risk in setting that in the past so the POD could release any time if it heard its own tune, but there are two circumstances that might very rarely create a false alarm. These in the presence of multiple pingers like the Banana Pinger - it randomises tones to reduce the chance of cetaceans habituating to it, but they are a bit like an automated code cracker! The other is the occurrence of a 'WUTS storm' - these mysterious biological events contain huge numbers of tones in huge numbers of different sequences. So 'do not release before' is generally a good idea and it's usually easy to say, 'we will not be going to sea to get this POD before ....'

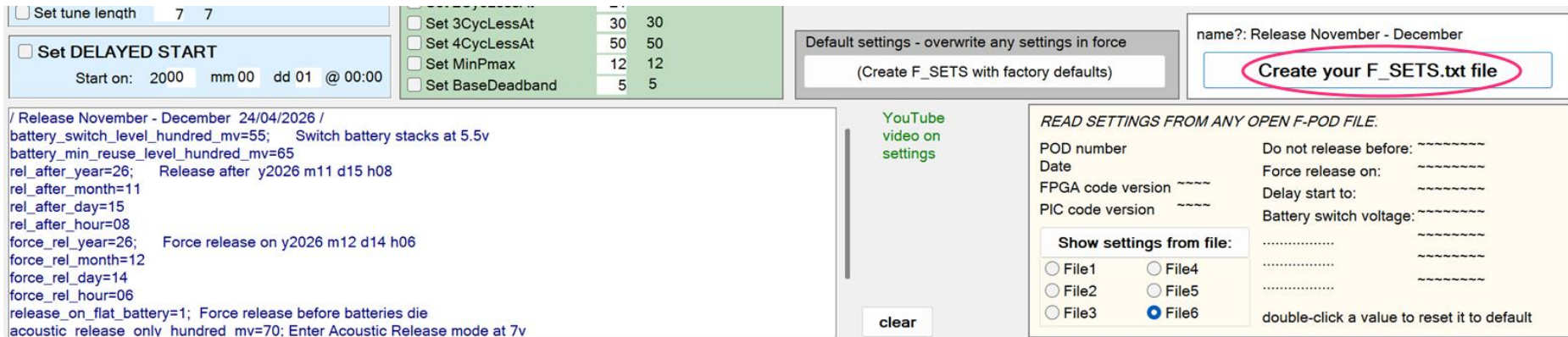
The **Force release on** date does what it says but often the **Release before batteries die** option makes it unnecessary. If, when a POD failed to appear, when the deck unit called to it, you can easily dive on the site you should not set either of these because once the POD is released it is held only on a nylon line of about 100kg breaking strain. While at the surface this may be cut by a boat propeller or break through abrasion, and then your POD is living free and may go on an overseas holiday

7. You can, if you wish, put a note in the first line of F\_SETS.txt saying what it does here:



name?: Release November - December  
**Create your F\_SETS.txt file**

8. Then click Create your F\_SETS.txt file. You will be asked to confirm the important things and then you get:



The box, bottom left, shows the contents of F\_SETS.txt which includes helpful notes on some lines.

There are some lines that the POD needs that you didn't set, such as:

battery\_min\_reuse\_level\_hundred\_mv=65

These are created by the software using the information you did set.

'Set tune length' is set to a default automatically.

- An SD card with this F\_SETS file can be placed in any POD that has batteries and it will start, read the file and adopt these settings which it will then keep indefinitely and use when run with a blank SD card.

If the POD has no acoustic release the only effect of these settings is that the POD will enter the 'acoustic release mode' of logging only a short period in each minute when the batteries get low.

## 10. Testing the Acoustic Release

This needs the 'do not release before' date to be in the past:



After giving these settings to

Then you connect the acoustic release, start the POD with a blank SD card, let it run for a few minutes and then touch the acoustic release deck unit transducer against the POD transducer housing while the AR deck unit is transmitting the POD number. It should release at the end of the first minute or two - the motor in the AR will run and the two parts will separate between the copper bands.

If this does not work send the FP1 file to Chelonia with notes on what you did.