

Settings in SeasaveV7 and ManageCTD

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This document gives additional information to the CTD_Training.pdf document. Here we describe how you change the settings, configurations and calibration coefficients in Seasave and in ManageCTD. The software is used for recording and processing of CTD-profile-data. You need to change settings whenever you change sensors. Comments and feedback for improving this document are very welcome.

Seasave – Software for communication with CTD and recording of data

Seasave is the software for data recording. To run Seasave you need two configuration files. One with the ending .xmlcon and one with the ending .psa. The xmlcon file contains all sensor and instrument specific numbers and settings as serial numbers, calibration coefficients of sensors, which sensor is attached where and so on.

The psa file contains the settings of the program seasave. It contains information about the last profile, where to save it, which xmlcon file is used, how is the data displayed on the screen, and so on.

If you change on, it might affect the other.

Change or add a sensor or NMEA-input in Seasave

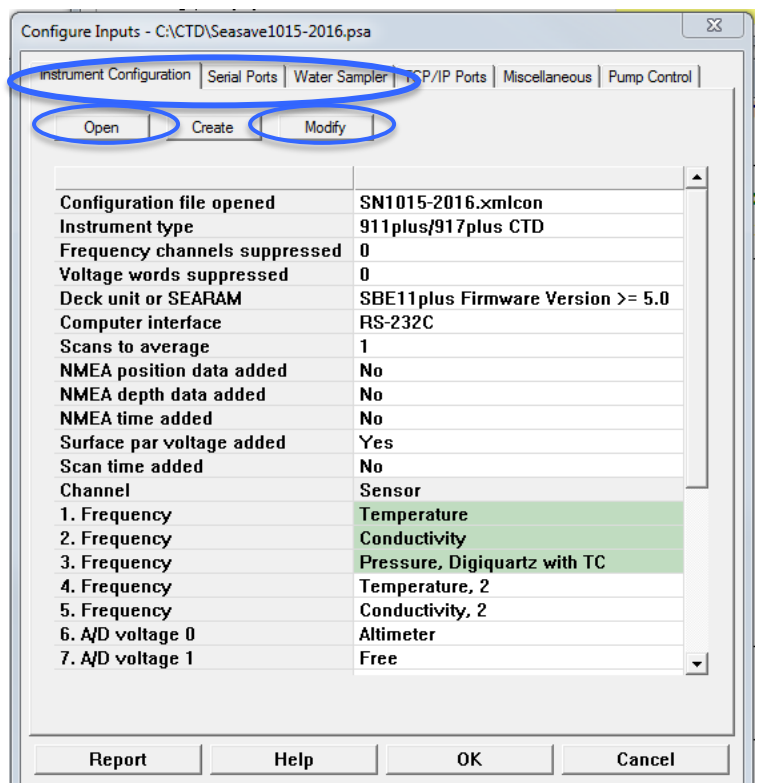
Open seasave and go to **Configure Inputs**. There you find *Instrument Configuration*, *Serial Ports*, *Water Sampler*, and more but those are the most important ones.

Under *Serial Ports* you can set the serial port of the CTD, water sampler and GPS (NMEA) input. You can find the respective number of the serial port in the Device Manager (Geräte Manager) of the computer.

Under *Water Sampler* you can type in how many bottles you use. Select the water sampler type *SBE Carousel* and the firing sequence *Sequential*.

Under *Instrument Configuration* you can change type and number of sensors, calibration coefficients, NMEA input, and you can export the settings for documentation.

Click *open* to open a previously prepared file or click *modify* to change the current settings.



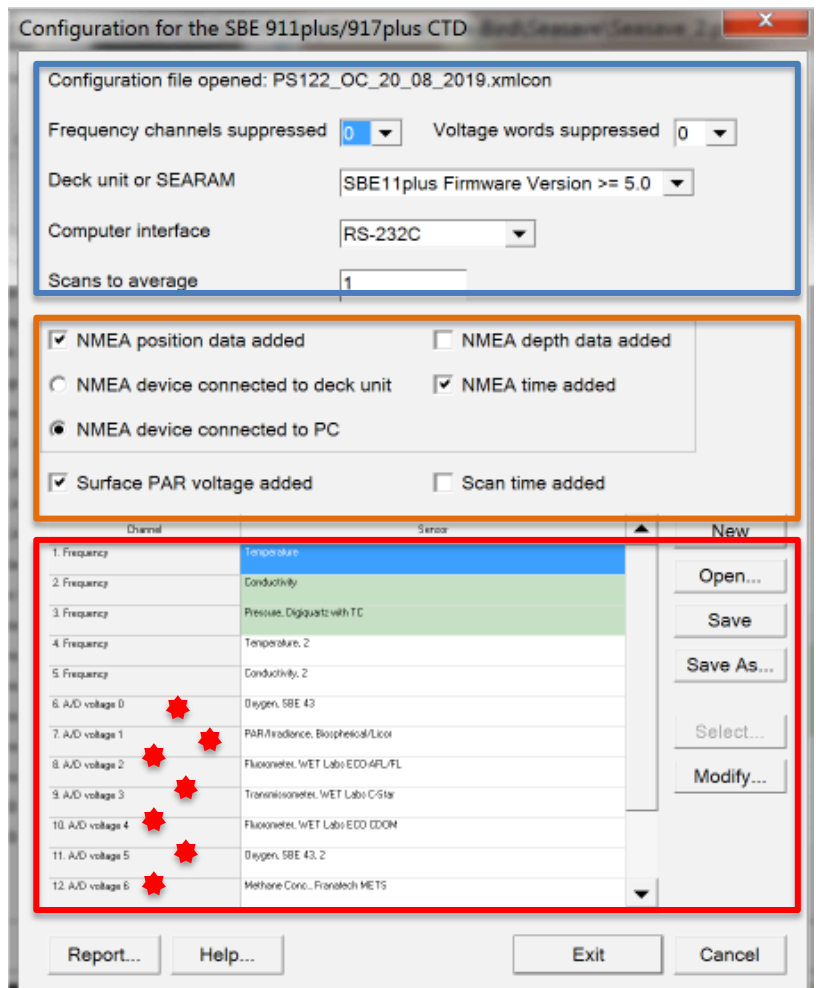
After loading an xmlcon file or clicking *modify*, you should see a widow as

shown in the picture. The upper part (blue box) should look as in the picture. If not, change it to look as in the picture.

The middle part (orange box) needs to be edited depending on whether you use NMEA/GPS input and a PAR surface sensor.

Apparently it can happen that you need to indicate, that you use a PAR sensor although you don't. If you experience an error message stating an *error with the record length*, you might want to try to set/remove the hook for the PAR sensor.

The lower part (red box) deals with the sensors. If you want to change the serial number or calibration coefficient of a sensor, click *Modify*. If you want to change the sensor type on one of the channels click *Select* (e.g. you have the Fluorometer at a different channel then before). A list of possible sensors will open. Find the right sensor and unit and click *ok*. If the right sensor is not in the list, choose *User Polynomial*. You can type the sensor name, serial number, and calibration coefficients manually.



If you removed a sensor, choose the option *free*.

You might realize, that the names of the channels, from *channel 6* onwards, are counting up, starting from *voltage 0* (red stars). This is confusing, as *voltage 0* and *1* are corresponding to the *Auxiliary Sensor Connector 1*. *Voltage 2* and *3* correspond to the *Auxiliary Sensor Connector 2*. So be careful which sensor you enter where.

After selecting the right sensor you can type serial number, and calibration coefficients manually, or you can import an .xml file containing the respective information. Go to *Import* and find your file, click open and check the imported values.

When you entered all the settings you want, go to *save as..* and save your new configuration with a new name! Also click *Report* and save the report to the respective cruise and configuration folder. Print it and store it with the station protocols. Do this also after changing a sensor!

Next, you need to modify the settings of ManageCTD, which includes changing the settings of SBE Data processing. If you changed a sensor, you need to create a new configuration folder with ManageCTD (see next page). Save the new profiles recorded with the new sensor configuration, within this new folder.

You can edit the header of each profile under **Configure Outputs**. You can type in all information that you find useful. You should have the basic information as *Ship*, *cruise* and *operator*.

ManageCTD installation

ManageCTD should be already installed. If you need to install ManageCTD you need the *ManageCTD-Install-W64.exe* and everything else in the folder `\...\MOSAiC_backup\backup_CTD\Software\ManageCTD\`. Make sure to install all programs. Also seasave and SBEDataProcessing. Check whether these programs are installed already. If they are already install, uninstall them! ManageCTD does only work with the versions provided in this folder! The installation will create a shortcut on the desktop. Unfortunately this is also for an old version. Use the *MCTD2013.exe* instead. It is provided in the folder `\...\MOSAiC_backup\backup_CTD\Software\ManageCTD\`. You can create a shortcut on the desktop to the *MCTD2013.exe*. This will execute the correct version of ManageCTD. Do NOT pay to much attention to the stuff in the folder *Manuals*. It might be out-dated!

ManageCTD

Start ManageCTD and check whether you cruise already exists and is shown in the cruise list on the left. If not, go to *file* and click *New Cruise*. Type in the Cruise Name in exactly the way it is used in the station book (most likely something as PS122-1_xxx) ! Creating a new cruise will create a bunch of folders in the directory `C:\CTD\...`. Put your xmlcon and psa file into the directory `C:\CTD\cruise`. Edit the ManageCTD-INI-file as described. You find it in `C:\ManageCTD\ManageCTD.ini`. Now record your first CTD profile. Only after the first profile, you can set ManageCTD. Strictly follow the steps described in *Setup_SBEDataProcessing.pdf*. Mark each step in the protocol. Check *Setup_SBEDataProcessing_ScreenShots.pdf* for additional guidelines for each of the steps. If you have questions contact Gerd.Rohardt@awi.de or Sandra.Tippenhauer@awi.de

If you had to **change a sensor**, you need to create a new configuration. To do so, go to ManageCTD, make a right-click in the field *configuration*, and click *add configuration*. This creates a new subfolder in you cruise directory `C:\CTD\cruise\conf.`. In the new conf-folder, you save all the profiles recorded with the new configuration. This means that you have to change the path in Seasave when you record a profile (see picture).

Remember to create, save and print the report of the new configuration. Store it with the station protocols.

If you only changed a sensor but still have the same sensor type (i.e. a temperature sensor with another serial number) you are **done**. If you changed a sensor type, or the connector channel, you have to do the procedure of **configuring ManageCTD again!** To do that, record a profile with the new configuration. Then Strictly follow the steps described in *Setup_SBEDataProcessing.pdf*. Mark each step in the protocol. Check *Setup_SBEDataProcessing_ScreenShots.pdf* for additional guidelines for each of the steps.

