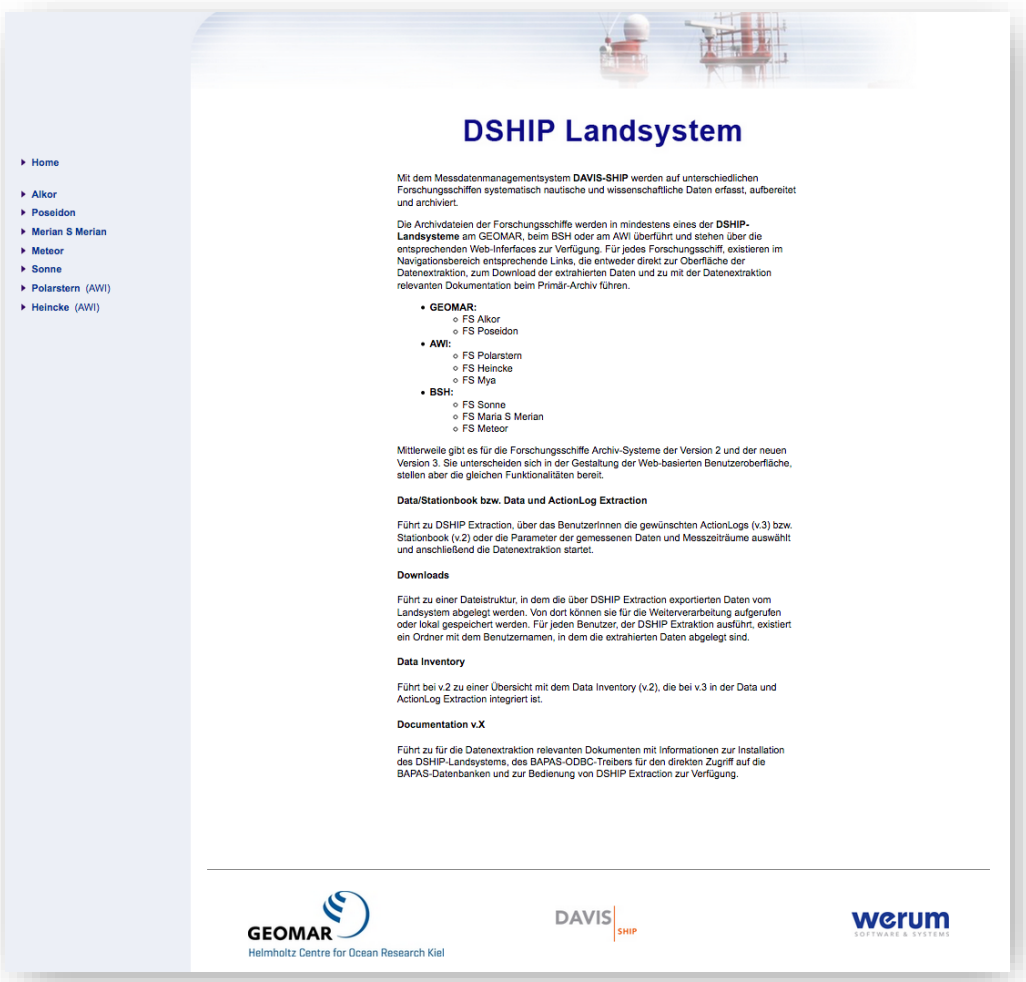
GEOMAR
Helmholtz-Zentrum für Ozeanforschung Kiel

Tutorial

DSHIP land system (v.3)



Contact

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CONTENT

Introduction

Nautical and scientific data on various research vessels are systematically collected, processed and archived with the data management system DAVIS-SHIP (DSHIP).
The archives files of the research vessels are transferred to the DSHIP land system and these data are accessable through a web inferface. DSHIP contains tracks, stations and underway measurements from cruises of German research vessels.
For each research vessel there is a corresponding link that leads to the data extraction, to extracted data and to documentation.

1. Access to the DSHIP land system

Go to the **GEOMAR DSHIP land system** http://dship.geomar.de/ to get underway data from RV ALKOR and RV POSEIDON. The data is accessible from the GEOMAR intranet, for external use please contact the GEOMAR data management team datamanagement@geomar.de. The GEOMAR DSHIP land system is linked to the **BSH DSHIP land system** http://dship.bsh.de/ (Bundesamt für Seeschifffahrt und Hydrographie) where underway data from all German research vessels is archived. To get access to the BSH DSHIP land system please contact dod@bsh.de.
For the RV SONNE data is available at GEOMAR from the year 2005 to 2014 only. Data from 2015 on is available from the BSH DSHIP land system.

2. Research Vessels

RV ALKOR: The RV ALKOR is a medium sized research vessel. She operates in the North and Baltic Sea as well as in the Kattegat and the Skagerrak.

RV POSEIDON: The RV POSEIDON is a medium-sized research vessel that operates primarily in the North Atlantic Ocean and the Mediterranean Sea. The research vessel is available for research cruises in the fields of oceanography, marine biology, and geology.

RV SONNE: The RV SONNE serves as a research platform for almost all german marine research disciplines. She operates primarily in the Pacific and Indian Oceans.

RV Maria S. MERIAN: The RV Maria S. MERIAN operates in the Atlantic, in the North and Baltic Sea. Apart from the RV POLARSTERN it is the only European research vessel that is ready for use in ice.

RV METEOR: The RV METEOR sails several seas, from the Atlantic, the eastern Pacific, and the western Indian Oceans to the Mediterranean and the Baltic Seas. The METEOR provides an interdisciplinary research platform for scientists from numerous research fields, such as maritime meteorology and aerology, physical oceanography, applied physics, marine chemistry, marine botany, zoology, bacteriology and mycology, marine geology, sedimentology, and marine geophysics.

3. How to use DSHIP

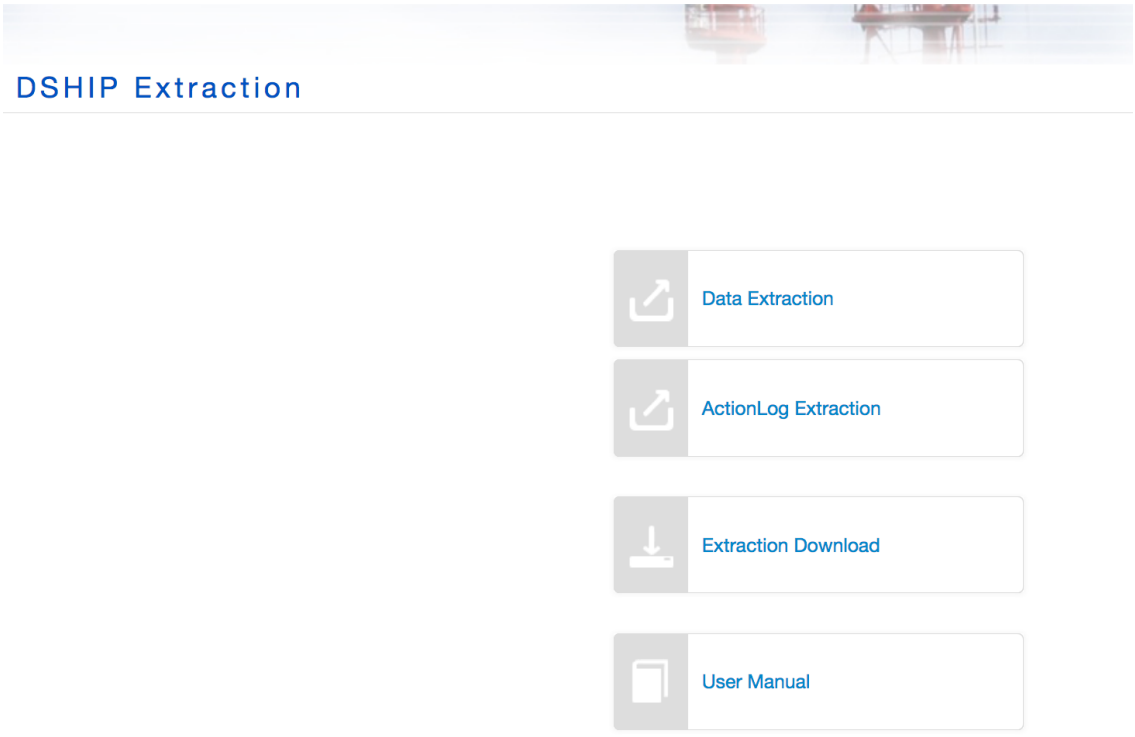
In this chapter you will find informations about how to extract data from the DSHIP land system. There are archive systems for version 2 and version 3 for the research vessels. They differ in the design of the web-based user interface but provide the same functionalities. **This tutorial describes the user interface of Dship land system version 3.**

3.1 Data and ActionLog Extraction

At the **start page** of the DSHIP land system user can decide between two different extraction options:

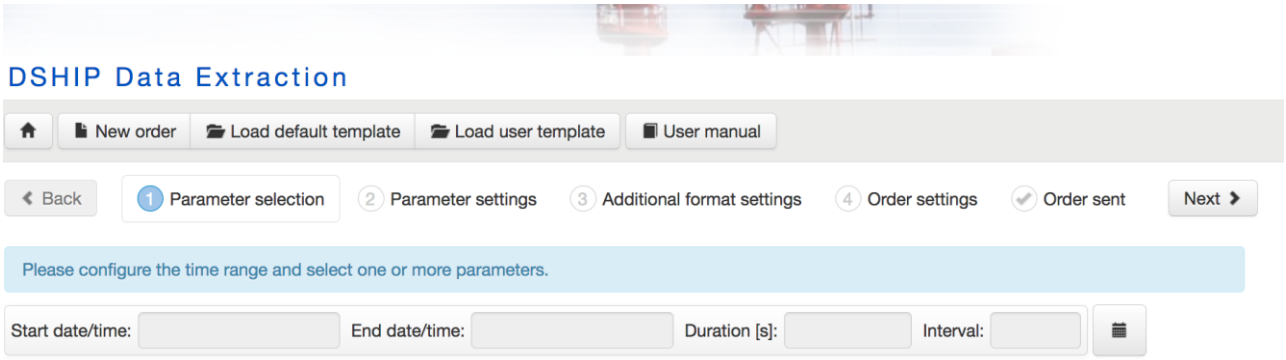
- **Data Extraction:** Leads to the Data Extraction page where the user can order a data extraction.
- **ActionLog Extraction:** Leads to the ActionLog Extraction page where the user can order an ActionLog extraction.

Extraction Download leads to the page where the user can download extraction files (the "output" of the ordered extraction)

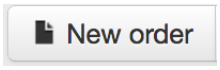


3.1.1 Data Extraction

On the **Data Extraction** page, the user can order a data extraction.

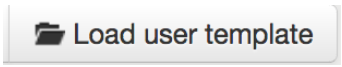


Leads to the Extraction start page.

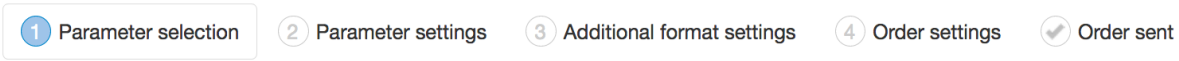


Discards any entries that have been made and starts with the first Step for a new order (This function is useful when you first have a look at an existing user template but the parameter of interest has not been considered in the template).

Loads a default template if existent.



Opens a dialog from which a template can be selected that has been saved as user template (by the user in step 4 "Order settings").

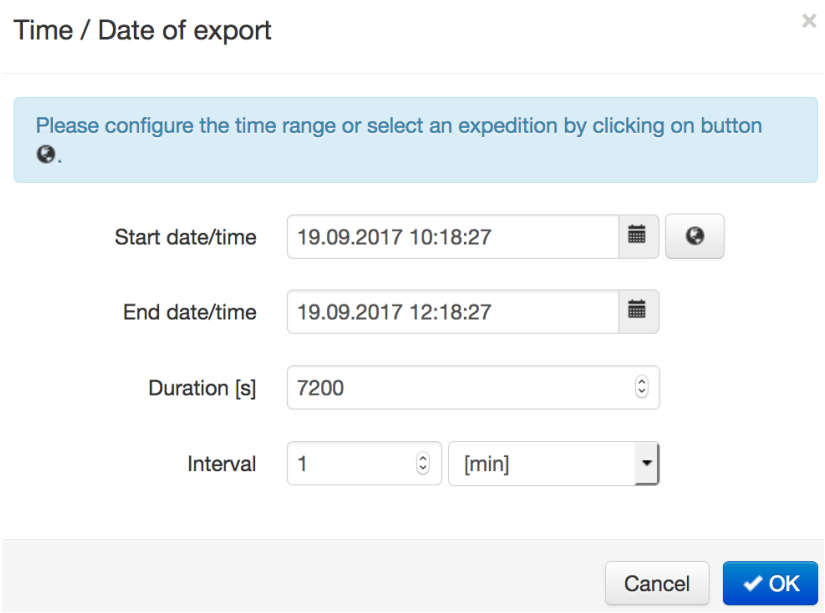


Shows the number of steps and the current step of the order.

Setting date and time

For a new extraction order, you need to configure the time range and the interval, before you select the parameters of interest.

1. Click on the time picker icon to open the **Date/Time** dialog. 



Start date/time, End date/time

Shows the Start date/time and End date/time, and by this, the time period for which the extraction shall be executed.

Opens a dialog to enter date and time.

Opens a list to select a certain expedition with its Start date/time and End date/time.

Duration

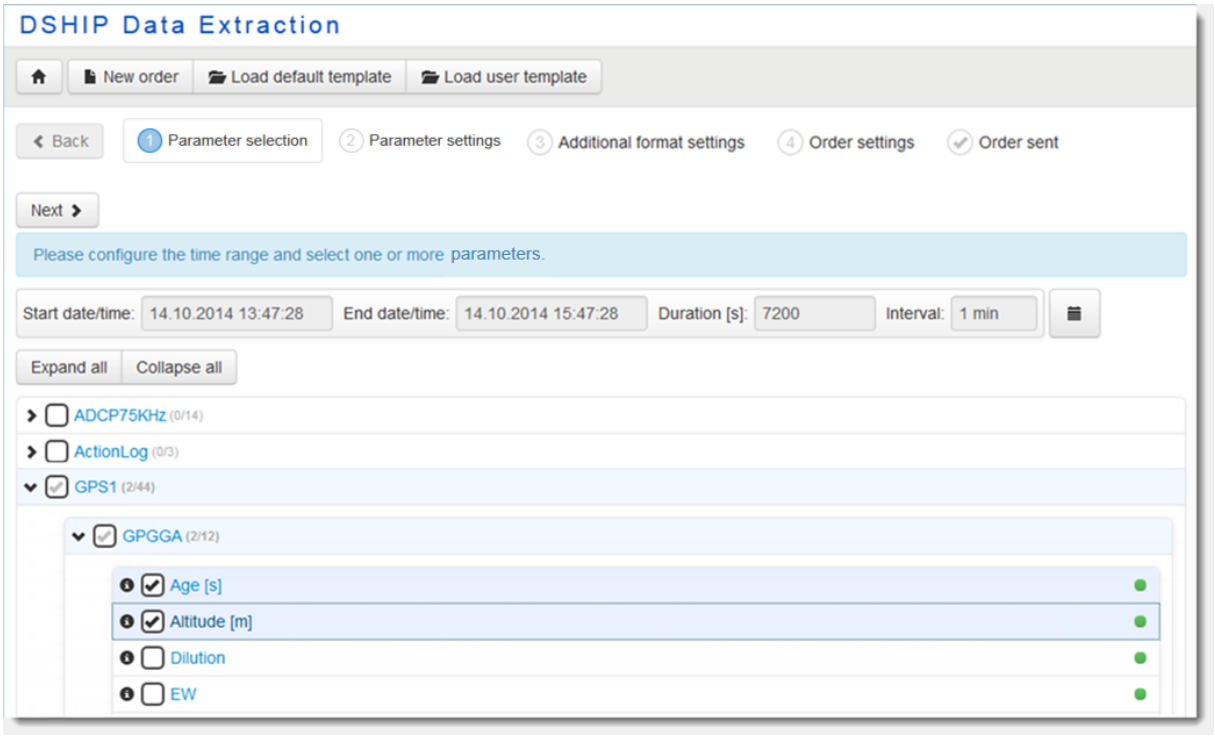
The duration is indicated in seconds. The choice whether you specify End date or duration (time slot) is optional. The respective other value is ad-justed automatically.

Interval

The content in this box specifies the period for which the data are com-pressed (e.g. averaging, Min/Max). One data line is written to the output file for each interval step. The interval may be stated in hours, minutes, seconds or milliseconds. When choosing the unit milliseconds, only the input values 50, 100 and 200 as well as all values divisible by 1000 are allowed.

Selecting Parameters

In the parameter selection list, the parameters appear grouped below the parameter (or pro-cess) they have been assigned to.



Opens a dialog to enter the time range for the extraction (as well as dura-tion and interval).

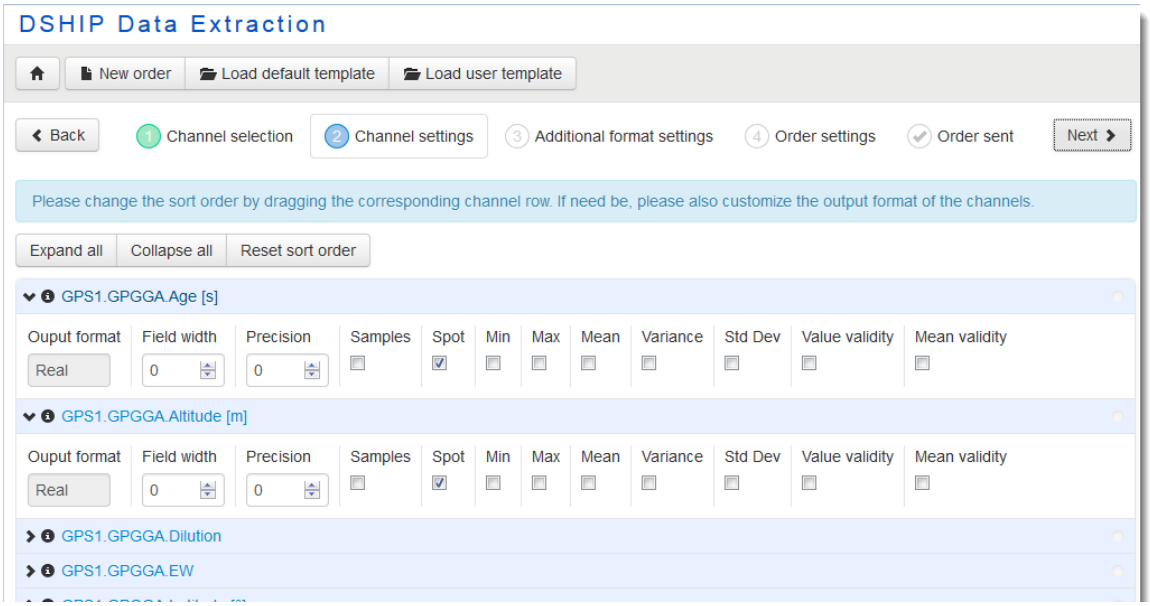
An active ("not dimmed") info icon indicates that additional information is available for this parameter.

Check boxes to select the parameters of interest.

Indicates whether data is available (green) for this parameter or not.

The parameter list shows all parameters that can be selected.
1. Expand the parameter tree to navigate to the actual parameters, select the pa-rameters of interest, and then click **Next**.

The view for the parameter settings is displayed:



2. Expand the view for the selected parameters to see the parameter-specific set-tings. Each parameter offers a parameter-specific set of setting values. The pre-selected values for each parameter either result from the chosen template (if they have been edited by the user) or are default values from the parameter description in the database (if they have not been edited by the user).

The selections made in this dialog determine the content and the format of the output file.

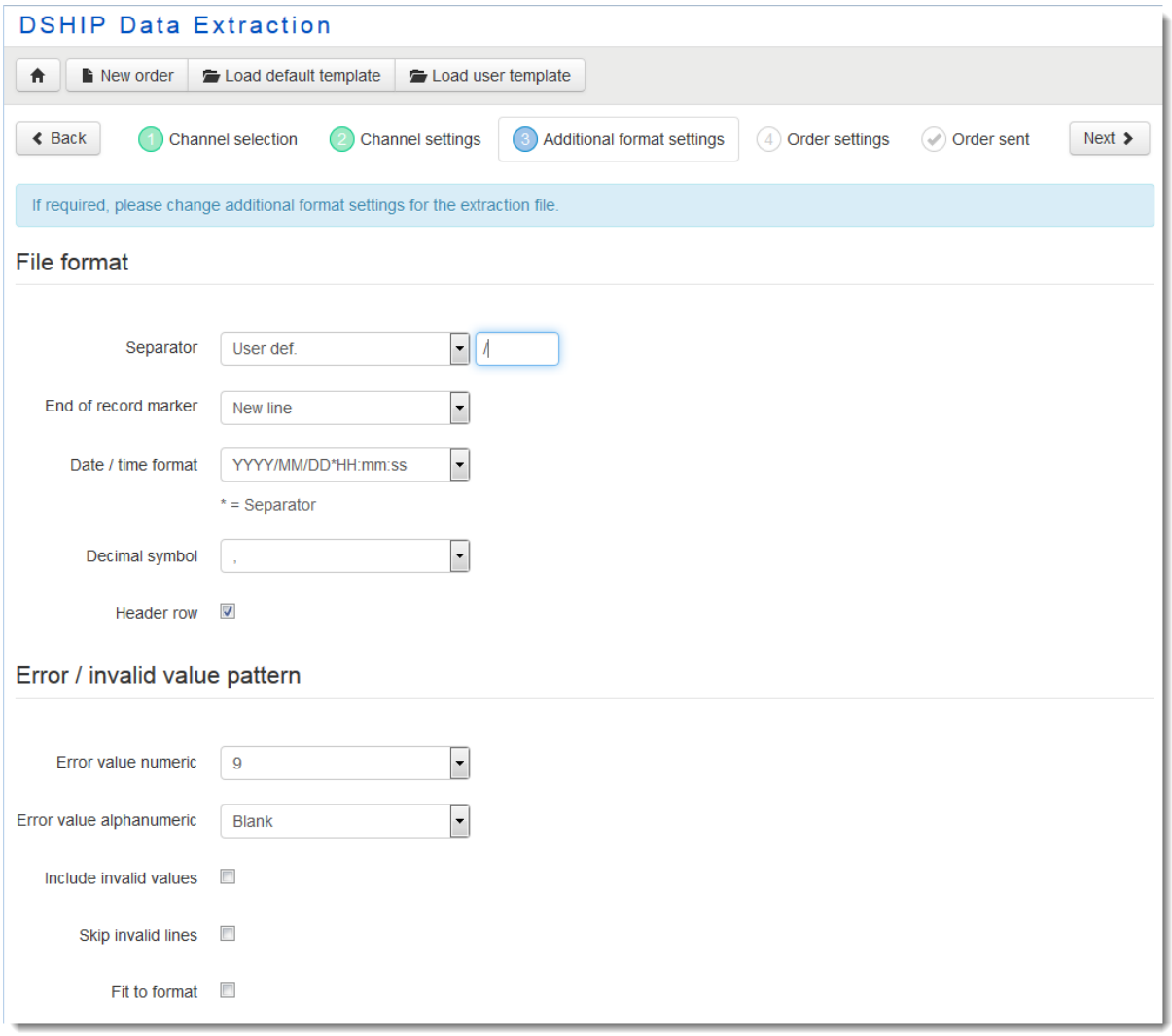
Field width	Number of possible output characters, including algebraic sign and decimal separator, if any.
Precision	Precision for output of floating point numbers (number of significant numbers).
Samples	Output of number of measurement data compressed in each interval
Spot	Output of first value of an interval.
Min	Minimum value of an interval
Max	Maximum value of an interval
Mean	Average value for the interval.
Variance	Variance for the interval.
Std dev	Standard deviation for the interval.
Value validity	Validity flag for Spot, Min, Max (I=invalid / V=valid).
Mean validity	Validity flag for Mean, Variance, Std dev (I=invalid / V=valid).

3. Edit the output settings as required.

4. If you
   - want to change the order, drag-and-drop a parameter (row) to the desired position.
   - want to return to the initial sort order, click **Reset sort order**.

5. Click **Next**.

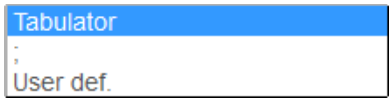
In the next step, you will define the file format and the handling of erroneous or in-valid values.



File format

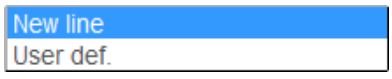
Separator

Separates the columns from each other. It can be selected from a given set of separators. Additionally, it is possible to set a user-defined separator as entry in the field at the bottom of the list.



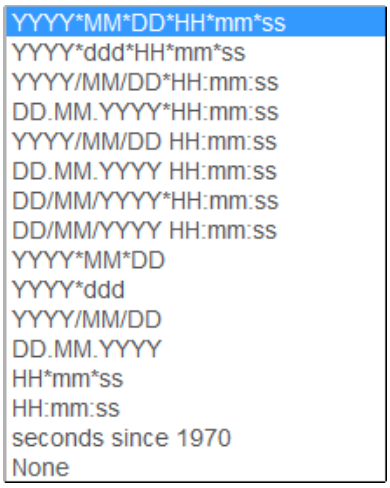
End of record marker

A marker indicating the end of a record can be chosen here.



Date / time format

Each line of the table starts with an indication of the respective time. The selection for Date / time format determines the contents and the form of this entry. Possible variants are stated in the drop-down list box. The option None deactivates the output.

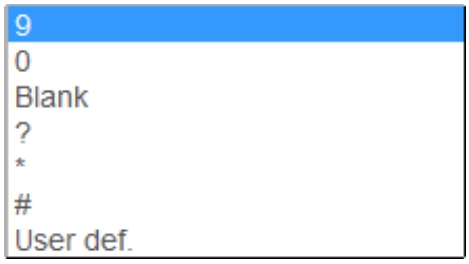


Decimal symbol — Drop-down list box to choose between comma and point as decimal separator for floating point numbers.

Header row — Option to select whether column headers are to be displayed at the beginning of the file containing the values.

Error / invalid value pattern

Error value numeric/ Error value alphanumeric — These substitute values are set up according to the selections for the output format. The characters to be set for the substitute values depend on the data type (numeric, alphanumeric). They can be selected from drop-down list box. Additionally, you may also state a user defined character "User def." () as entry in the field at the bottom of the selection list.



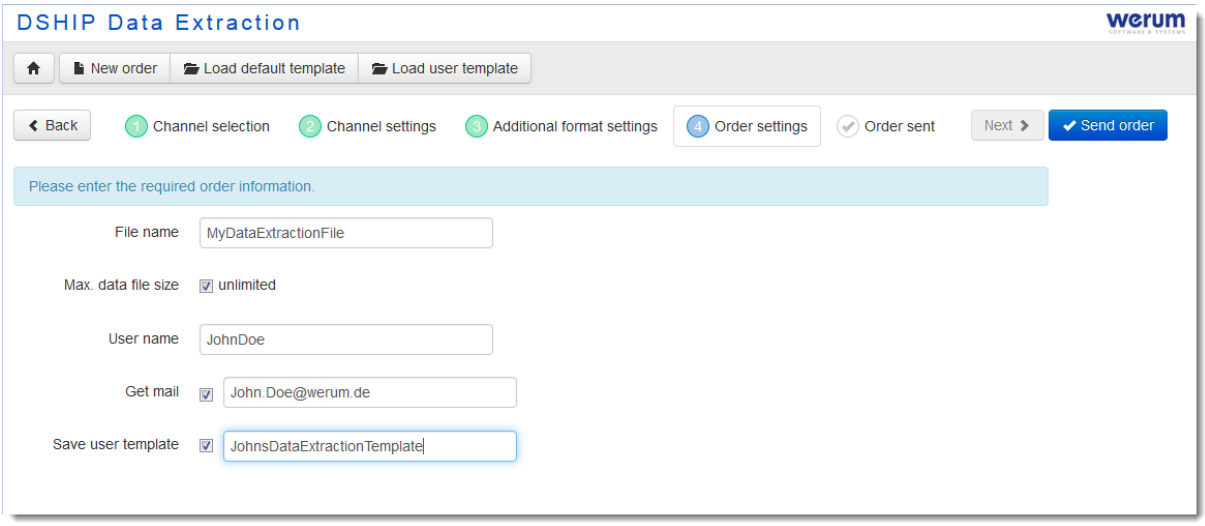
Include invalid values — Check box to select whether to include invalid data. Invalid values will then be treated as if they were valid.

Skip invalid lines — Check box to select whether to omit invalid data.

Fit to format — Check box to select whether a constant line length in the output file shall be used. For values that do not fill the field width stated for the parameter selection, leading blanks will be inserted.

Adding order information and placing the order

In this step, you will add information to identify the order, and finally you place the order.



File name

Text box for the name that is used as file name for the supplied results. (Spaces are not allowed.)

Max. data file size

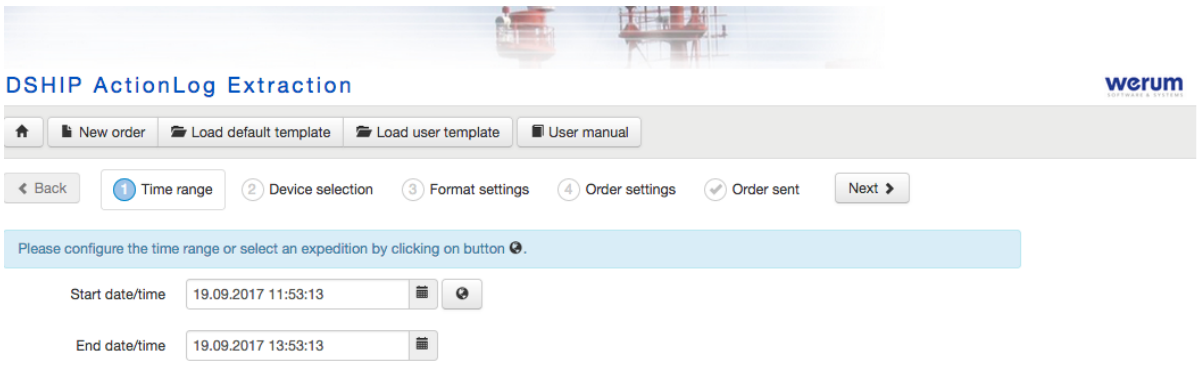
With the entry field Max. data file size, you may state a maximum file size in meg-abyte, if required. If the data volume exceeds this value, an according number of files are generated automatically to cope with the entire data.

User name

Field for the user name. Under this name, the file(s) do be downloaded can be found.

3.1.2 ActionLog Extraction

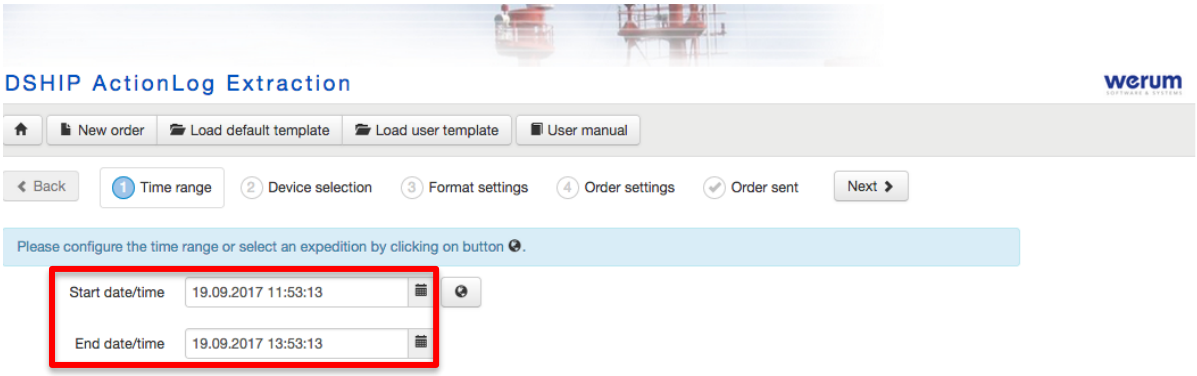
On the **ActionLog Extractio**n page, the user can order an ActionLog extraction.



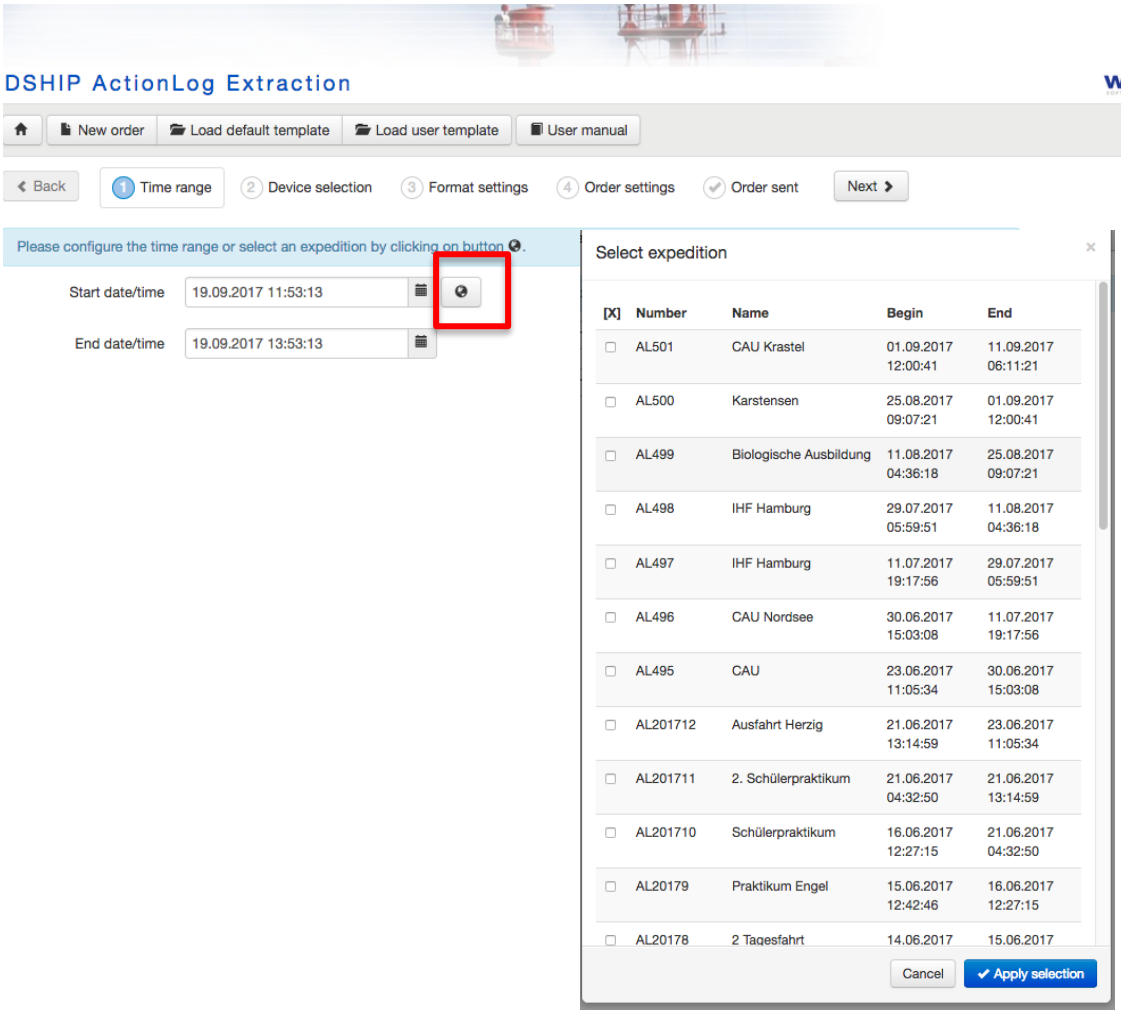
The ActionLog extraction differs in some points from data extraction, as for an ActionLog extraction, no parameters have to be selected and different formats can be chosen for export. The differences are described in the following chapter.

Ordering an ActionLog extraction

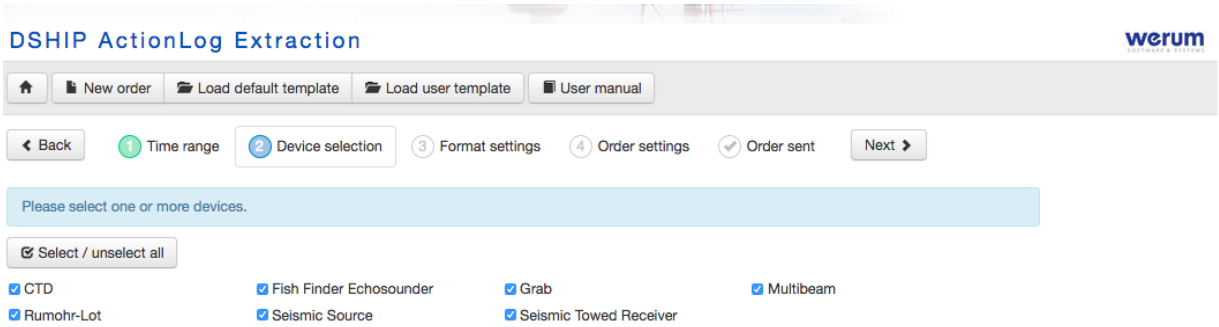
1. Enter the needed period of time using the fields **Start date/time** and **End date/time** or select a certain expediton by clicking on the world button.



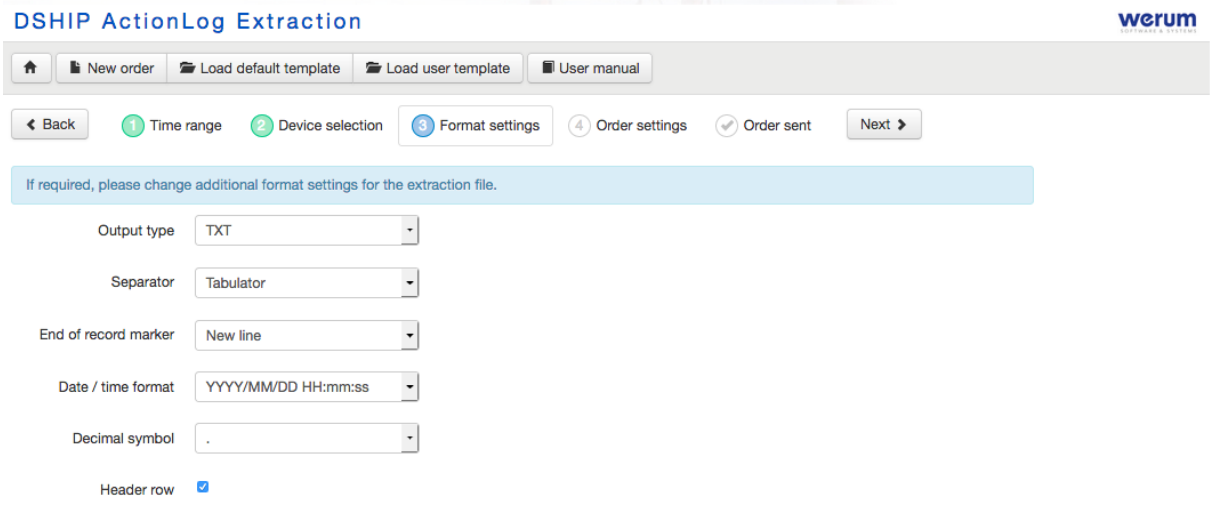
or select **a certain expedition** with its **Start date/time** and **End date/time** from the list by clicking on the world icon.



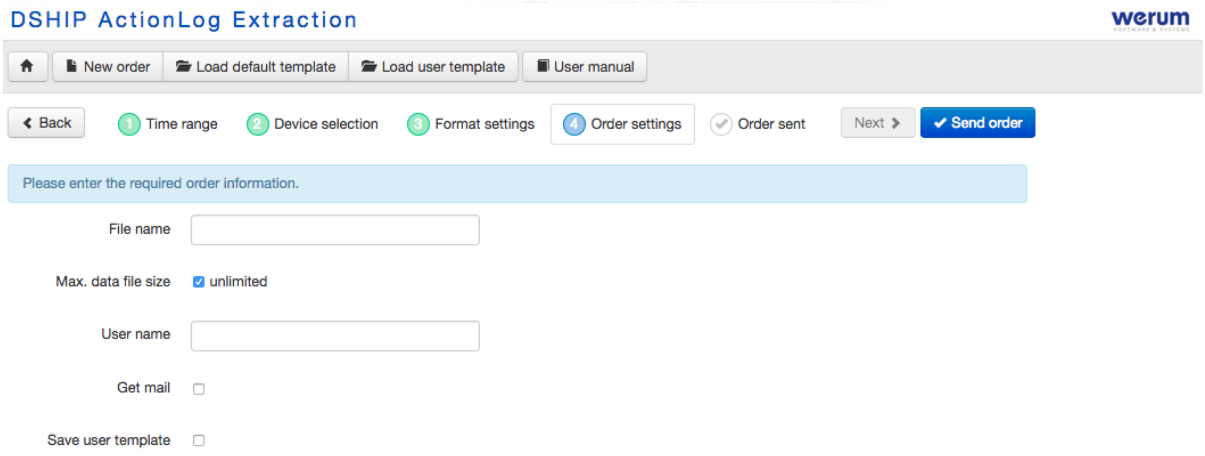
2. Click **Next**
3. In the next step you have the opportunity to **select and unselect devices** of the expedition for you extraction. All devices of the expedition are selected by default. After your selection click **Next.**



4. Choose the format settings of your extraction and click **Next**.



5. Adding order information and placing the order



File name Text box for the name that is used as file name for the supplied results. (Spaces are not allowed.)

Max. data file size

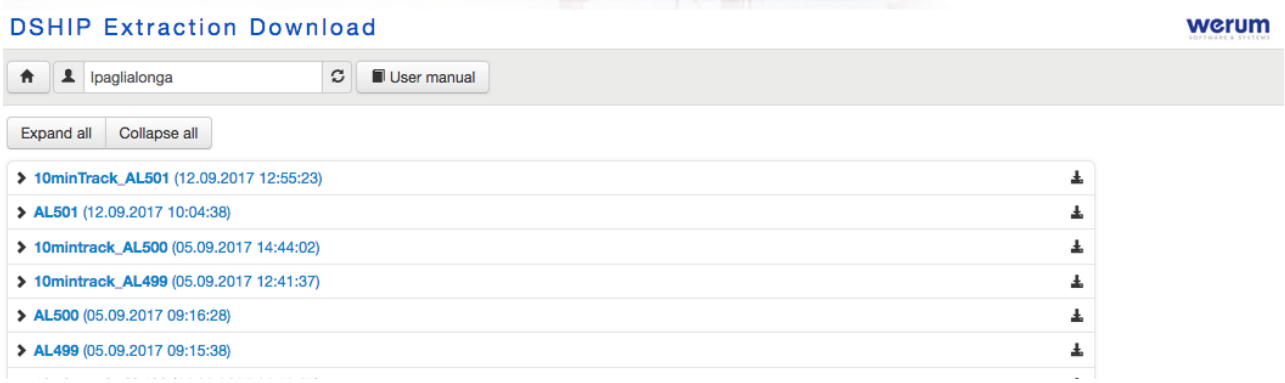
With the entry field Max. data file size, you may state a maximum file size in meg-abyte, if required. If the data volume exceeds this value, an according number of files are generated automatically to cope with the entire data.

User name

Field for the user name. Under this name, the file(s) do be downloaded can be found.

3.2 Downloading Extraction Data

1. On the DSHIP Extraction start page, click **Extraction Download**.
2. On the **DSHIP Extraction Download** page, enter your name.
   This should be the name that has been entered as user name when creating the extraction order in step "Order settings"
3. Click **Load user extraction results.** The extraction files for the user are displayed.



4. If you want to see all files of the extraction, click **Expand.**

5. If you
   - want to download all file(s) of an extraction, click **Download** next to the extraction order.
   - want to download a single file of an extraction, expand the shown entry, and then click on the desired file.
6. In the appearing dialog, select **save file**, and then click **OK**.

✓ The file is downloaded into the browser's default directory for downloads.

N.B.

There is no warranty for the correctness of the data extracted. There is no quality control applied to the data.

This Tutorial is adopted from ***Werum Software & Systems CIS AG (2016): DSHIP V3. User Manual. Version 1.4*** *URL: http://dship-alkor.geomar.de/dship-usermanual/dship-user-manual_en.pdf*

If you have other questions or comments please contact the data management team:

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