



Food and Agriculture  
Organization of the  
United Nations



## **FishStatJ Manual**

*Version 4.00.0  
December 2019*



# **FishStatJ Manual**

Version 4.00.0 – December 2019

Required citation:

**FAO.** 2019. *FishStatJ Manual. Version 4.00.0, December 2019.* Rome.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-131993-2

© FAO, 2019



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode>).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/rules> and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

**Third-party materials.** Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**Sales, rights and licensing.** FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org). Requests for commercial use should be submitted via: [www.fao.org/contact-us/licence-request](http://www.fao.org/contact-us/licence-request). Queries regarding rights and licensing should be submitted to: [copyright@fao.org](mailto:copyright@fao.org).

## CONTENTS

<b>1. About FishStatJ</b>	<b>1</b>
<b>2. Installation</b>	<b>2</b>
2.1. Installing on Windows	2
2.2. Windows troubleshooting	7
2.3. Installing on macOS	10
2.4. macOS troubleshooting	12
2.5. Workspaces (statistical data)	14
<b>3. File menu</b>	<b>16</b>
3.1. Manage workspaces	16
3.2. Open dataset	27
3.3. Close workspace	30
3.4. Export selection (CSV file)	31
3.5. Exit	32
<b>4. Edit menu</b>	<b>33</b>
4.1. Select all	33
4.2. Select none	34
4.3. Copy selection	35
4.4. Preferences	36
<b>5. Data menu</b>	<b>44</b>
5.1. Filter	44
5.2. Aggregate	49
5.3. Columns	52
5.4. Sort	56
5.5. Top/Other	58
5.6. Custom groups	61
5.8. Calculated columns	64
<b>6. Format menu</b>	<b>69</b>
6.1. Column width	69
6.2. Number formatting	69
6.3. Symbols and colors	69
<b>7. View menu</b>	<b>70</b>
7.1. Show details	70
7.2. Grand totals	73
<b>8. Metadata menu</b>	<b>75</b>
8.1. Show metadata	75
8.2. Show notes	77
8.3. Show citation	79
8.4. Show map	81
<b>9. Help menu</b>	<b>83</b>
9.1. Getting started	83
9.2. User manual	83
9.3. About FishStatJ	84
<b>10. Frequently asked questions (FAQ)</b>	<b>85</b>
10.1. How to export data?	85
10.2. What does that symbol mean?	85
10.3. Why am I getting different numbers than those from the FAO Yearbook of Fishery and Aquaculture Statistics/SOFIA?	85

10.4. Some historical data figures have changed. Why? .....	87
10.5. Where to find detailed notes for each dataset? .....	87
10.6. Can I use FishStatJ offline? .....	88
10.7. How often is the data/application updated? .....	89
10.8. FishStatJ is being flagged as a virus threat .....	89
10.9. How does FAO assign nationality to catches? .....	90
<b>11. More on FishStatJ .....</b>	<b>90</b>
11.1. FishStatJ legal specifications .....	90
11.2. Bibliographic citation .....	90
11.3. Data versioning and Data revisions .....	90
11.4. FishStatJ workspace folder .....	91
11.5. Un-installing FishStatJ .....	92
11.6. FishStatJ update notification .....	92

# 1. About FishStatJ

FishStatJ is a desktop application designed to disseminate FAO fishery statistical data to the world. FishStatJ's primary aim is to display, refine and export data. However, unlike a spreadsheet software it cannot modify the data, create graphs or perform advanced data analysis. One of FishStatJ's greatest strength is that it can display species according to several authoritative classifications, such as the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) or the UN's Central Product Classification (CPC); and show the scientific name.

At the 23rd CWP meeting (2010), the prototype of FishStatJ was endorsed for full development and the first release of FishStatJ was delivered in 2011. FishStatJ is built using the Eclipse Rich Client Platform (Eclipse-RCP) tools. As such, it is a Java application, and requires that Java is installed on the computer. RCP allows to develop general purpose applications, which run on Windows and macOS.

FishStatJ build and improves on the features of FishStatPlus (its predecessor):

- all Fishery reference data is available (all FAO code lists with all attributes);
- all hierarchies are available (for view, and for filtering/aggregation);
- calculated columns of FishStatPlus are included;
- the software is cross-platform (Windows, Macintosh, LINUX);
- data (workspaces) of dimensions can be defined as needed (flexible); and
- any data with fixed dimensions and yearly resolution can be loaded.

For the creation of workspace files (database files), a separate software called "FishStatJ Console" was developed.

In order to use the statistical data, the user has **to download and install the FishStatJ application** on his computer (more details follow).

## 2. Installation

### 2.1. Installing on Windows

To download FishStatJ for Windows, go to [fao.org/fishery/statistics/software/fishstatj/en](http://fao.org/fishery/statistics/software/fishstatj/en).

### FishStatJ - software for fishery statistical time series

FishStatJ is a Java-based desktop application which provides users with access to a variety of fishery statistical datasets. It consists of a main application and several workspaces that include the datasets.

#### FishStatJ key features

- statistical datasets browsing, data mining, charting and reporting
- filtering, grouping and aggregation through hierarchical dimensions

#### How to install FishStatJ version 3.04.12 (January 2019)

1. Java8 64-bit is required. Please [download](#) and install Java8 if needed. Currently, it does not work with Java10 or Java11.
2. Download FishStatJ
  - for [Windows64-bit \(7,8,10\) auto-extract or ZIP](#)
  - for [MacOS](#)



#### Related topics

[Statistics - Introduction](#)

#### 2.1.1. Windows requirements

Please note that FishStatJ requires Java 8 to be installed on the computer. If you need to install Java 8, go to [oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html](http://oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html). The 64-bit Java installer is called “Windows x64 Offline”.

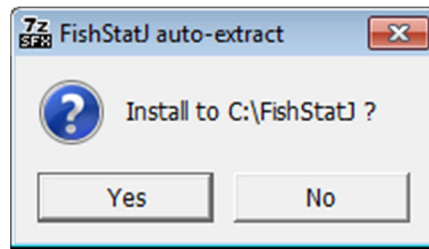
**Important: FishStatJ is currently not compatible with Java10 or Java11.**

The application runs on Windows 7, 8 and 10 (64-bit only) and requires at least 4GB of RAM. If you cannot run 64-bit applications, please contact FAO's [fish-statistics-inquiries](#) (refer to section 11.7); we will send you the download link to the 32-bit version.

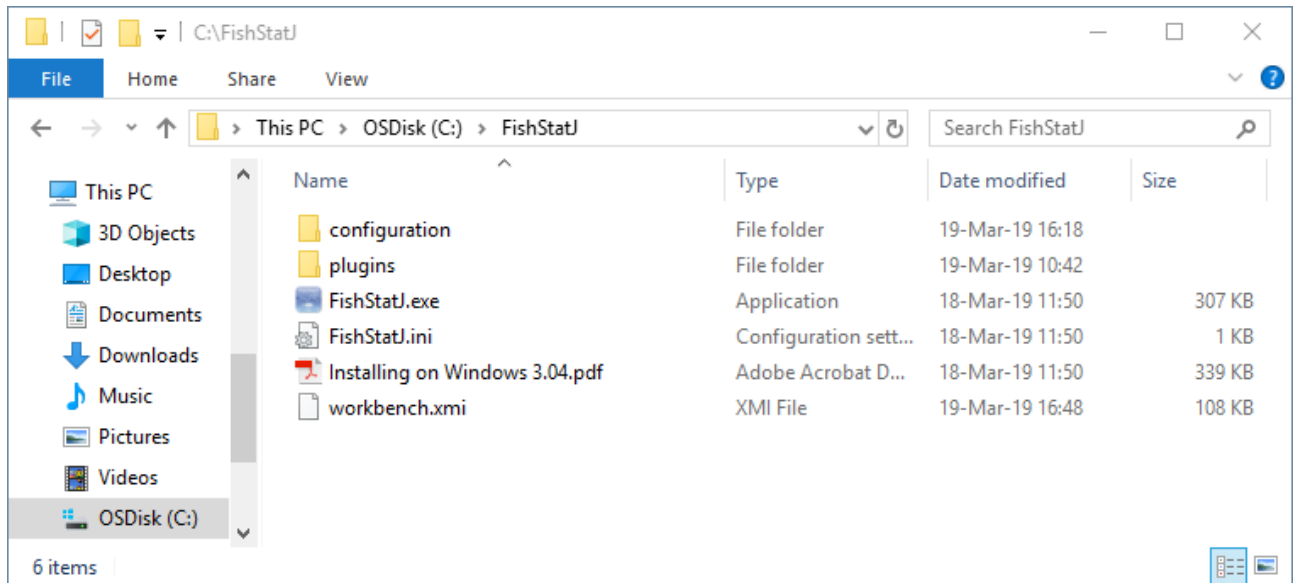
#### 2.1.2. Using Windows installer

When running the installer (**FishStatJ\_Installer.exe**), it will ask for the following permission:





After clicking on the **Yes** button, the installer will extract the application to C:\FishStatJ, and immediately launch FishStatJ after the extraction is complete.



No further action is required.

Please refer to section 2.1.4 if you want to create a shortcut on the Desktop.

**Note:** The **FishStatJ\_Installer.exe** file is not a real installer but a 7-Zip auto extract archive. As such, it does not require administrative permissions. It requires permissions to create the FishStatJ folder on the C:\ disk; this permission is usually available using accounts that lack Administrative rights.

In case you wish to install to another location, or you cannot run the auto-extract; then you can download the ZIP archive and extract the application manually. That process is described in the next pages.

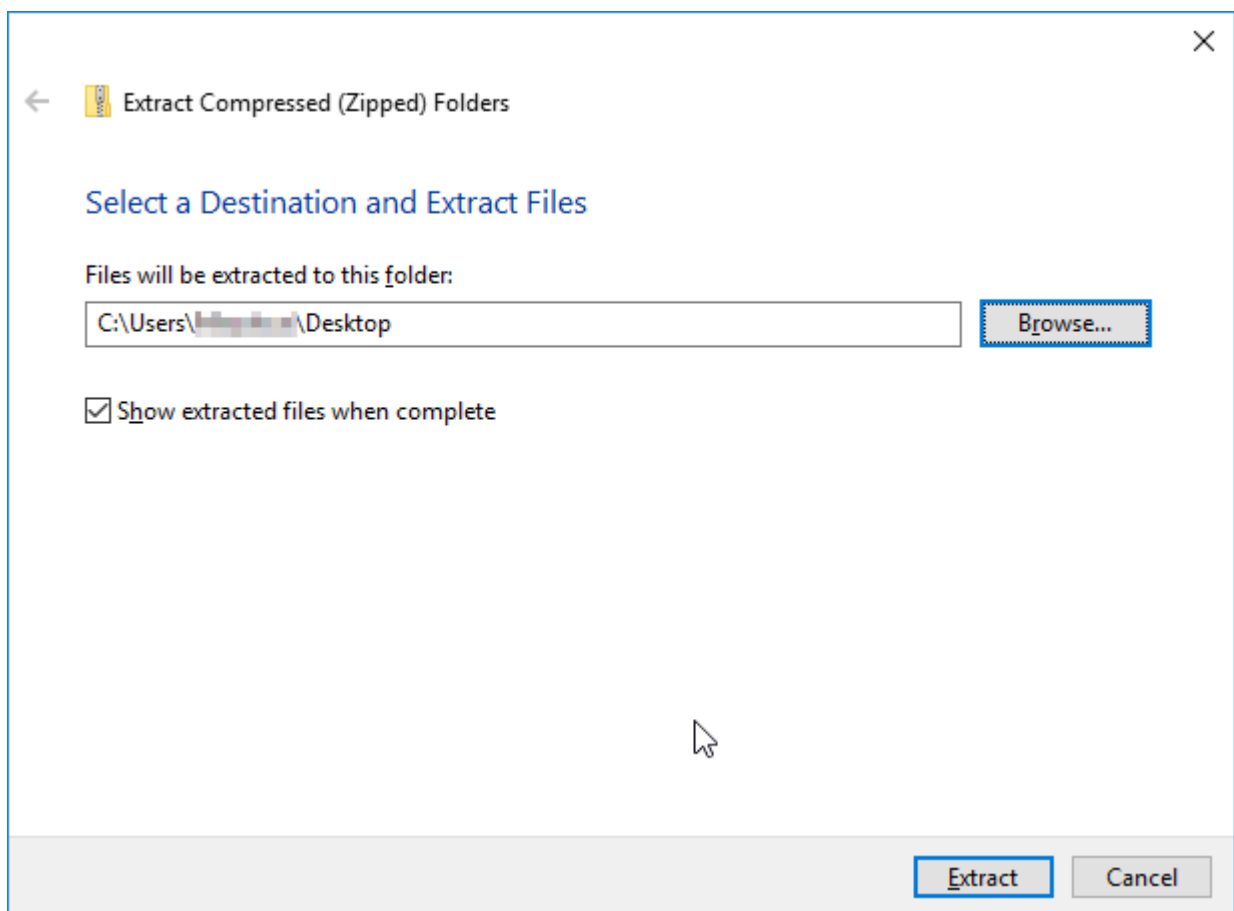
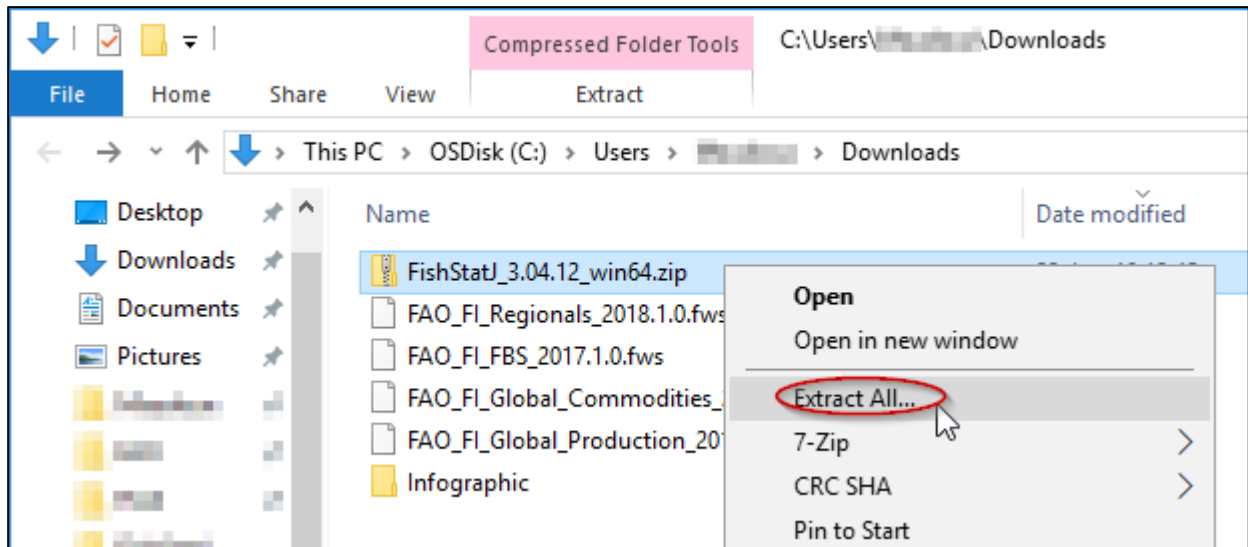
### 2.1.3. Using Windows ZIP archive

If you are using the auto-extract (EXE); you can skip this section – the installation is complete.

To install on Windows, extract the ZIP-download into a directory where the user has update permissions. Such locations usually include C:\FishStatJ or the Desktop.

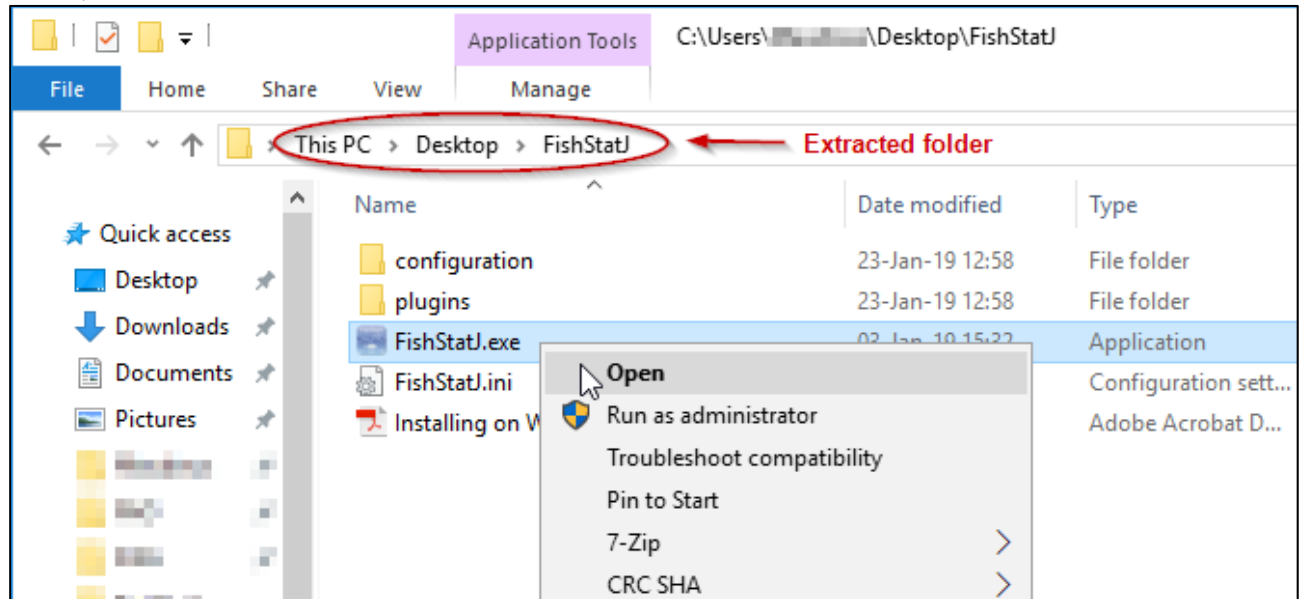
Please note that it is very important when extracting to maintain the zipped file structure with all the required FishStatJ subdirectories!

The first step is to extract the content of ZIP file into the root folder of the C: disk, or onto the Desktop:



**Note:** Extracting files into C:\Program Files\ usually requires Administrator permissions.

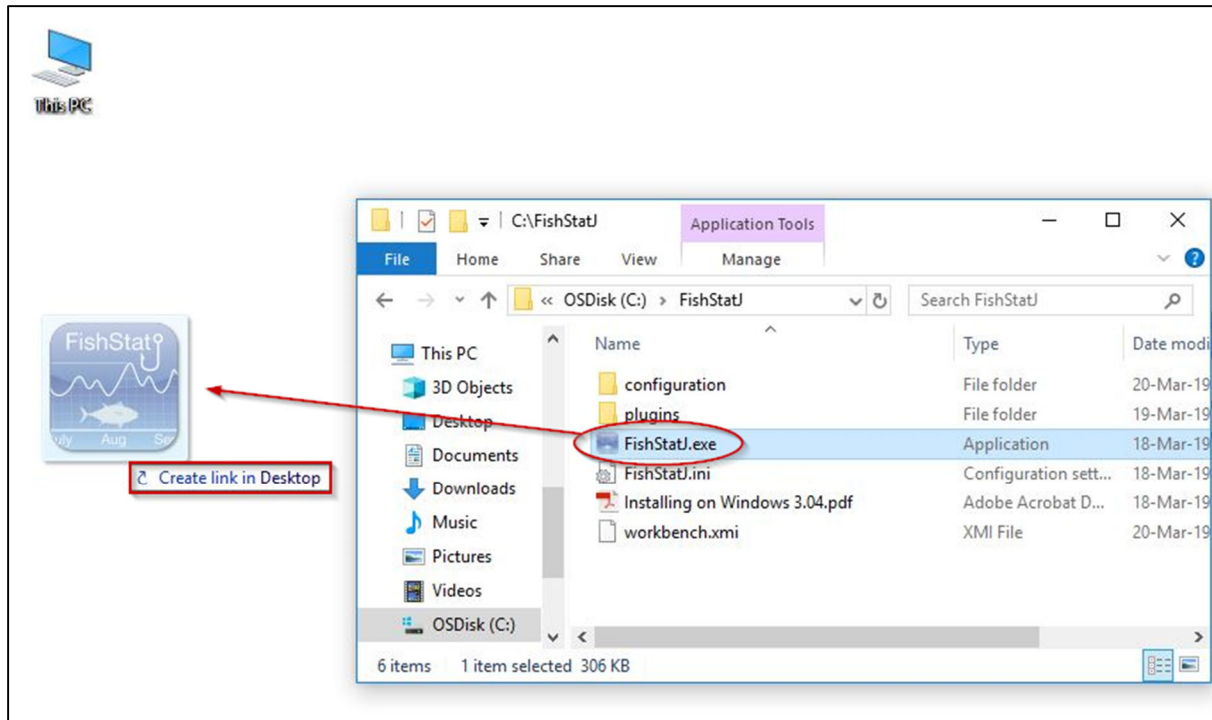
Then, run FishStatJ from the **extracted folder**:



The next step after expanding the application ZIP file is to download workspaces; please refer to section 3.1.

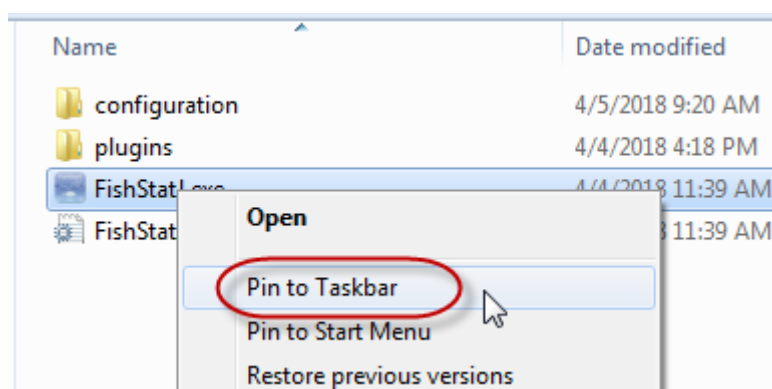
### 2.1.4. Create a shortcut on the Desktop

To create a shortcut on the Desktop, select the **FishStatJ.exe** file and drag it onto the Desktop while holding the **CTRL** and **SHIFT** keys (when simultaneously holding down both keys the mouse pointer changes into shortcut arrow):

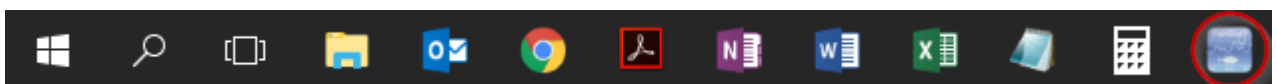


### 2.1.5. Adding FishStatJ to the Taskbar

Applications can be added to the Taskbar (usually on the bottom of the screen) by right-clicking on the **FishStatJ.exe** file and select the **Pin to Taskbar** option.



A FishStatJ shortcut has now been added to the Taskbar:



## 2.2. Windows troubleshooting

### 2.2.1. Installation issues

- Before launching the EXE Auto-Extract to install a new version, exit any open instance of FishStatJ (**File** → **Exit**) so that the files of the new version can be copied.
- If you encounter problems while using FishStatJ, a clean install can be performed easily:
  - Make sure that FishStatJ is not running (**File** → **Exit**).
  - Open the Windows File Browser and delete the C:/FishStatJ folder and all its content.
  - Run the FishStatJ\_Install.exe program to extract a new copy to C:/FishStatJ.

### 2.2.2. Issues with Java

**The majority of issues are related to the Java installation requirement. FishStatJ is a Java-based application, and cannot not run if Java8 64-bit is not installed and active.**

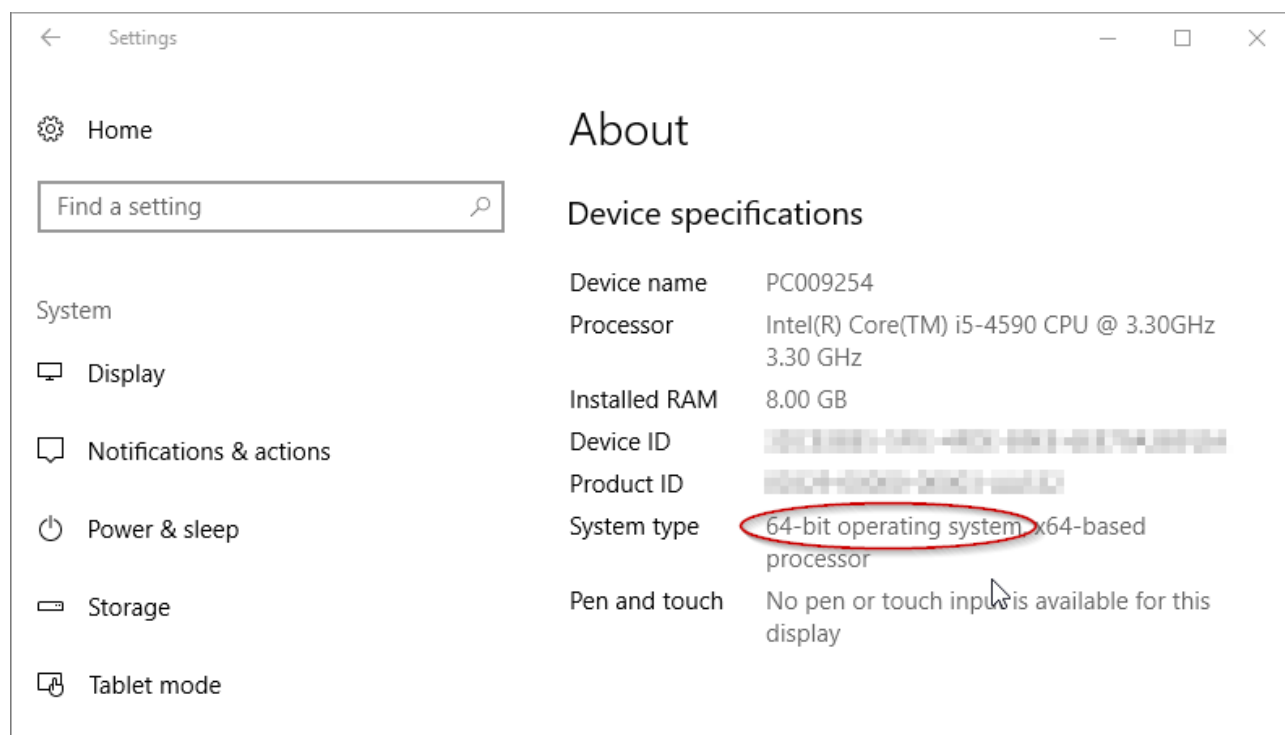
- FishStatJ is a 64-bit application, and therefore requires Java8 64-bit: Java8 32-bit will not work. You can download the Version 1.8 JRE 64-bit from: [oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html](https://oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html)  
The 64-bit version is called “jre-8u201-windows-x64.exe”.
- To check the java version active on your computer; use this tool: [github.com/bergertom/JavaVersion/releases/tag/v1.00](https://github.com/bergertom/JavaVersion/releases/tag/v1.00).
- To un-install a previous version of Java, follow these instructions: [java.com/en/download/help/uninstall\\_java.xml](https://java.com/en/download/help/uninstall_java.xml).
- To verify the currently active Java version:
  - Use the Windows+R shortcut to open the Run window.
  - Type “cmd” and then click “OK” to open the Command Prompt.
  - Type “java -version” in the Command Prompt and press Enter.

**Troubleshooting Tip:** The java version used by FishStatJ is visible in the log file. The log file location is described in section 11.4.2.

### 2.2.3. How to check if your computer supports 64-bit

FishStatJ is a 64-bit software, and therefore requires Java8 64-bit. While it is possible to install Java8 32-bit and run FishStatJ 32bit on a 64-bit computer, we do not recommend or support this. The reason for this 64-bit requirement relates to the limitation of the memory handling for data: the *Fisheries Commodities Production and Trade* and *Food balance sheets of fish and fishery products* datasets will run out of memory on Windows 32-bit.

To check if your computer is running Windows 64-bit, please refer to the following Microsoft Support webpage: [support.microsoft.com/en-us/help/13443/windows-which-operating-system](https://support.microsoft.com/en-us/help/13443/windows-which-operating-system)



**System type** shows whether your computer is running a 32- or 64-bit version of Windows.

## 2.2.4. Removing Java 9, 10 or 11

It is possible to have several Java versions installed on any given PC, with only one Java version being active. The easiest way to activate Java8 is to un-install all Java versions from the PC – and then to re-install Java8 64-bit. This ensures that Java8 is the active Java version.

To un-install Java, open the Control Panel, open “Programs and Features” select the Java Program; and right-click->Uninstall. Once all Java versions are removed, install Java8; you can use the installer from your Downloads folder.

## 2.2.5. Launching issues

- When launching FishStatJ.exe on Windows 10, a dialog may appear, informing the user that the software is from an unknown publisher. Please click on the **Yes** button to continue launching the application.
- When launching FishStatJ, the Windows firewall may ask permission to allow FishStatJ to connect to FAO. Please allow this connection. Section 10.6 covers the issue of internet connectivity.
- If you receive the message: **“The FishStatJ executable launcher was unable to locate its companion shared library”**, this probably indicates that

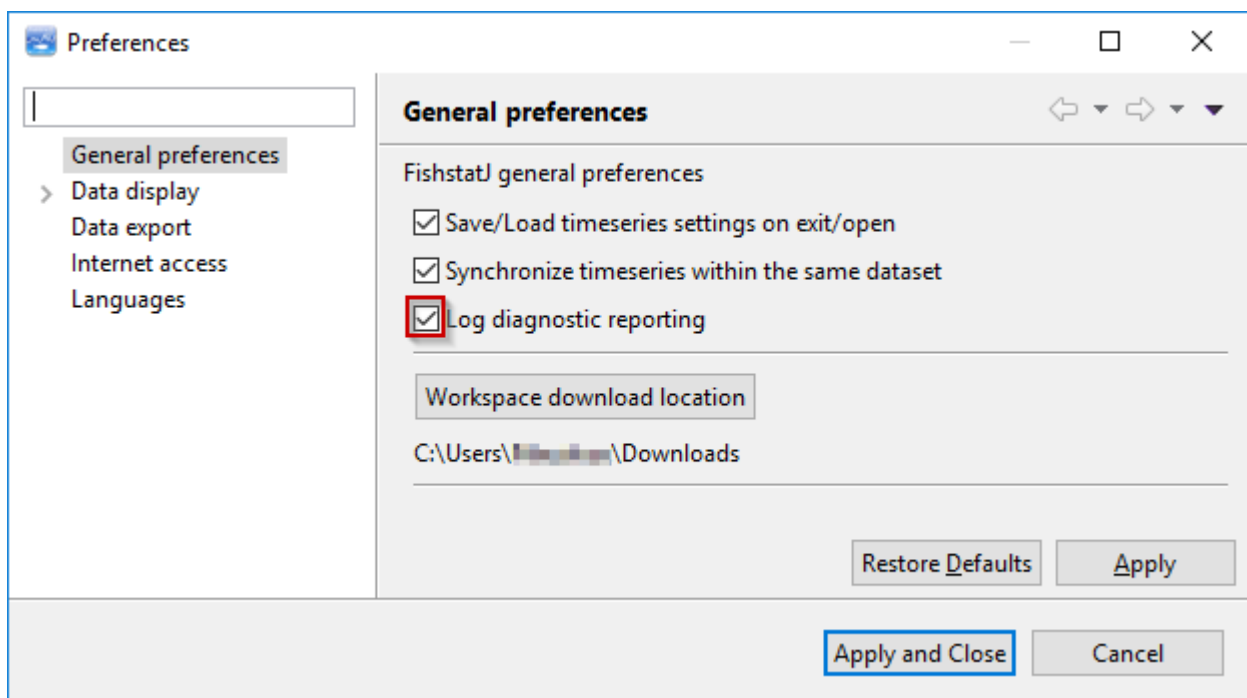
FishStatJ was run from inside the compressed (ZIP) file. The solution is to extract the ZIP file content as described in section 2.1.3 above.

- FishStatJ gives error -1 on start-up; this happens when Java 6 or 7 is active.
- FishStatJ will start to launch, and then stop; this happens with Java 11 for example (the Java version is shown in the log-file).

## 2.2.6. Diagnostic reporting

In case you encounter an issue with the application, please turn on **Log diagnostic reporting**, which you can find in the **Edit** → **Preferences** menu and then exit and re-launch FishStatJ.

When you turn on **Log diagnostic reporting** in the **Preferences**, FishStatJ will check and create a log report if the program encountered an error. Please do share this report with us – it helps us to diagnose problems. Section 4.4.1 explains the diagnostic function.



We are working constantly to update our data; publishing workspaces with the latest fisheries and aquaculture data. We are grateful for any type of feedback, since it allows us to improve the application.

## 2.3. Installing on macOS

To download the FishStatJ for macOS, please go to [fao.org/fishery/statistics/software/fishstatj/en](http://fao.org/fishery/statistics/software/fishstatj/en).

### FishStatJ - software for fishery statistical time series

FishStatJ is a Java-based desktop application which provides users with access to a variety of fishery statistical datasets. It consists of a main application and several workspaces that include the datasets.

#### FishStatJ key features

- statistical datasets browsing, data mining, charting and reporting
- filtering, grouping and aggregation through hierarchical dimensions

#### How to install FishStatJ version 3.04.12 (January 2019)

1. Java8 64-bit is required. Please [download](#) and install Java8 if needed. Currently, it does not work with Java10 or Java11.
2. Download FishStatJ
  - for Windows64-bit (7,8,10) [auto-extract](#) or ZIP
  - for [MacOS](#)



#### Related topics

[Statistics - Introduction](#)

### 2.3.1. macOS requirements

The FishStatJ application requires Java 8 to be installed on the computer. If you need to install Java 8 JRE, go to [oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html](http://oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html).

**Important: FishStatJ is currently not compatible with Java10 or Java11.**

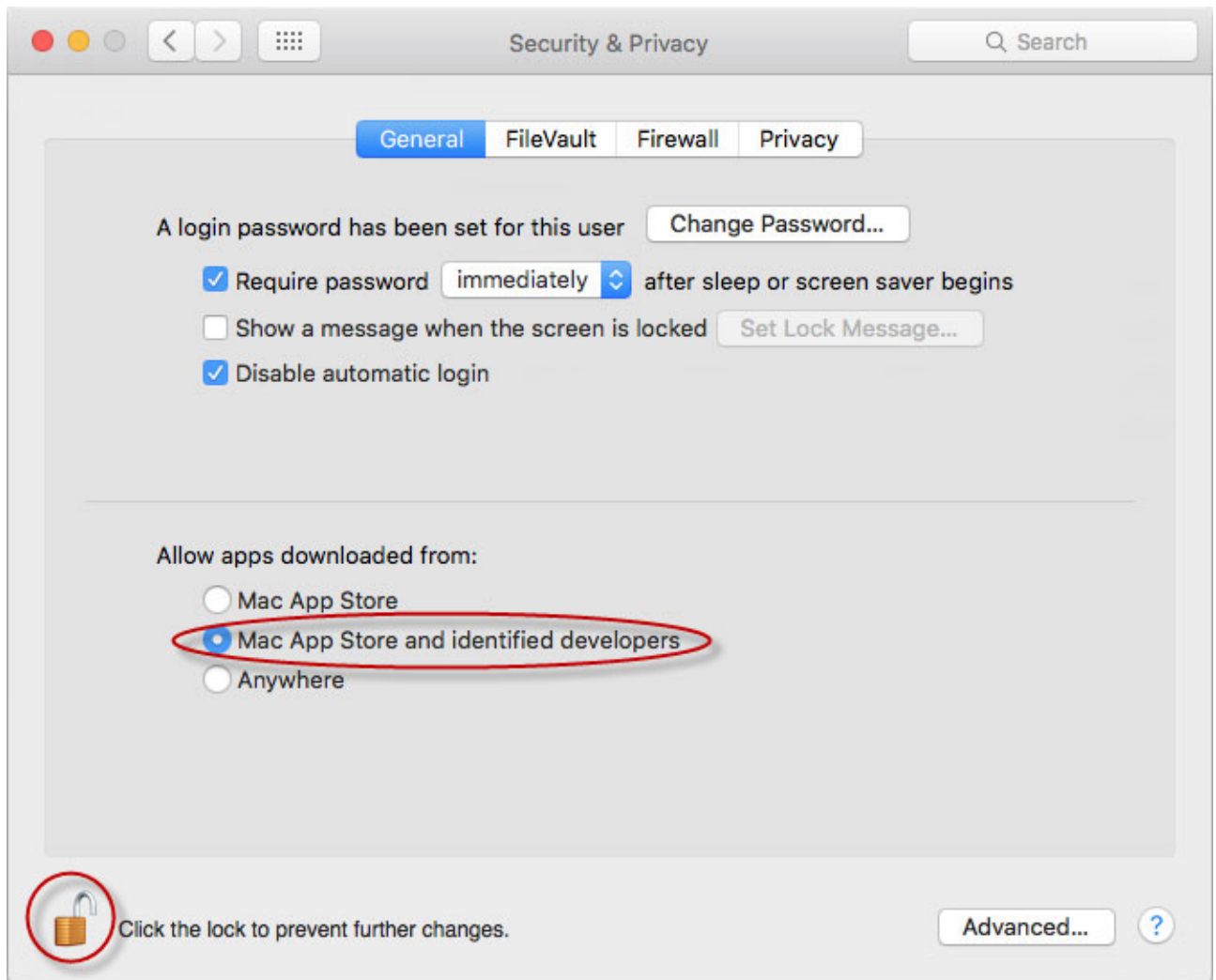
FishStatJ runs on macOS 10.9 or later, and requires at least 4GB of RAM.

### 2.3.2. Installation

After the FishStatJ application is extracted from the ZIP file, it can be launched directly run from the Desktop, or moved to the Applications folder.

Since FishStatJ is an application that is downloaded from the FAO website, macOS security settings need to be adjusted in **System Preferences** → **Security & Privacy** in order to allow applications from identified developers; to change settings the Preferences Panel must be unlocked.





The next step is to download workspaces, for this please refer to section 3.1.1.

## 2.4. macOS troubleshooting

### 2.4.1. Error launching FishStatJ

If you receive a Java error message when launching FishStatJ, the most likely explanation is that the computer does not have Java8 installed and activated. We found that computers having Java 1.6 installed previously will not activate the Java8 correctly; and as a result, FishStatJ fails to start

Check your java version: In the top-right corner of your screen, search for “Terminal.app” and run it; then type “`/usr/libexec/java_home -V`” and press Return. The command in terminal will show the java version active, the result should be similar to the following:

```
$ /usr/libexec/java_home -V

Matching Java Virtual Machines (1):

  1.8.0_201, x86_64:  "Java SE 8"
    /Library/Java/JavaVirtualMachines/jdk1.8.0_201.jre/Contents/Home
```

### 2.4.2. Deactivating Java11 on macOS

In case there is a Java 9, 10 or Java 11 (11.0.2) installed; you need to disable these Java versions, as FishStatJ can only work with Java8. Open the Go menu “Go to Folder...” and enter “`/Library/Java/JavaVirtualMachines`”

In the JavaVirtualMachines folder, select the Java version to disable (java jre-11.0.2) and open the folder called “Contents” and proceed to rename “Info.plist” to “Info.plist.disabled” in Finder. As the folder is protected by the system, you need to enter the Admin password for the rename operation. This will disable the selected folder’s Java; you can confirm this by re-running the “`/usr/libexec/java_home -V`” command.

### 2.4.3. Forcing activating Java8

In some cases we have seen that after installing Java8, Java6 remains activated.

In order to force activation of Java8 on computers that had previously installed Java6 (i.e. were upgraded using the Apple Migration Assistant) or had Java11 removed; these users need to install the JDK 1.8:

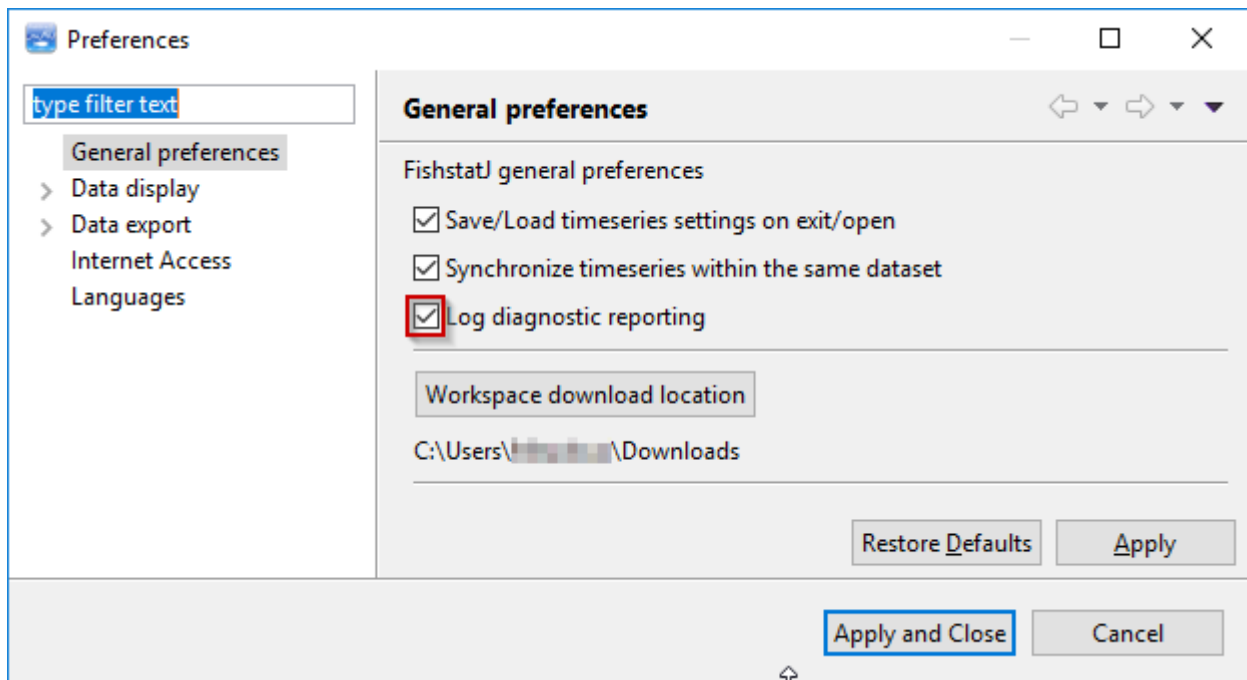
[oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html](https://oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html)

Note: installing the JDK will only activate if higher Java versions (9, 10 or 11) have been already removed.

## 2.4.4. Diagnostic reporting

In case you encounter an issue with the application, please turn on **Log diagnostic reporting**, which you can find in the **Edit** → **Preferences** menu and then exit and re-launch FishStatJ.

When you turn on **Log diagnostic reporting** in the **Preferences**, FishStatJ will check and create a log report if the program encountered an error. Please do share this report with us – it helps us to diagnose problems. Section 4.4.1 explains the diagnostic function.



We are working constantly to update our data; publishing workspaces with the latest fisheries and aquaculture data. We are grateful for any type of feedback, since it allows us to improve the application.

## **2.5. Workspaces (statistical data)**

Workspace files carry the statistical data. You can install an unlimited number of workspaces on a computer. However, FishStatJ can only work with one workspace at a time.

A workspace can contain one or more datasets. For the dissemination of data, workspaces are compressed into workspace files (.wks extension). FishStatJ downloads and extracts/installs workspaces automatically.

We currently offers several different workspaces files, which contain the following datasets:

- the **Global Production** workspace which contains:
  - Global Production
  - Capture Production
  - Aquaculture Production
- the **Regional workspace** with contains:
  - CECAF (Eastern Central Atlantic)
  - GFCM (Mediterranean and Black Sea)
  - RECOFI capture production
  - SEATL Southeast Atlantic Capture Production
- the **Food Balance** workspace which contains:
  - Food Balance Sheet
  - Population data
- the **Commodities** workspace which contains:
  - Fisheries Commodities Production and Trade

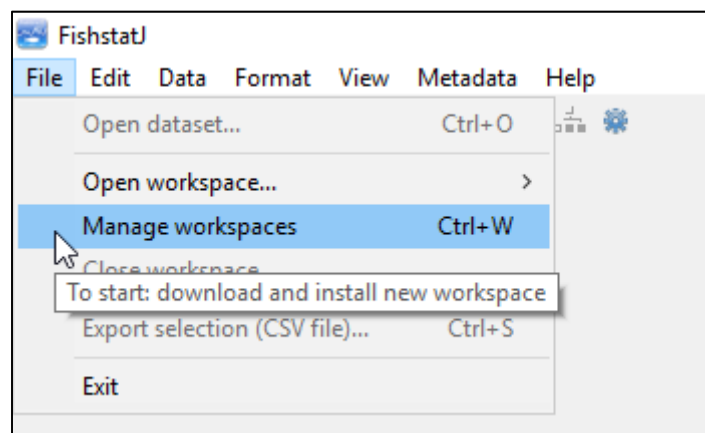
Please refer to section 3.1 for importing workspaces into FishStatJ.

## 3. File menu

### 3.1. Manage workspaces

The **Manage workspaces** menu allows the user to manage the workspaces:

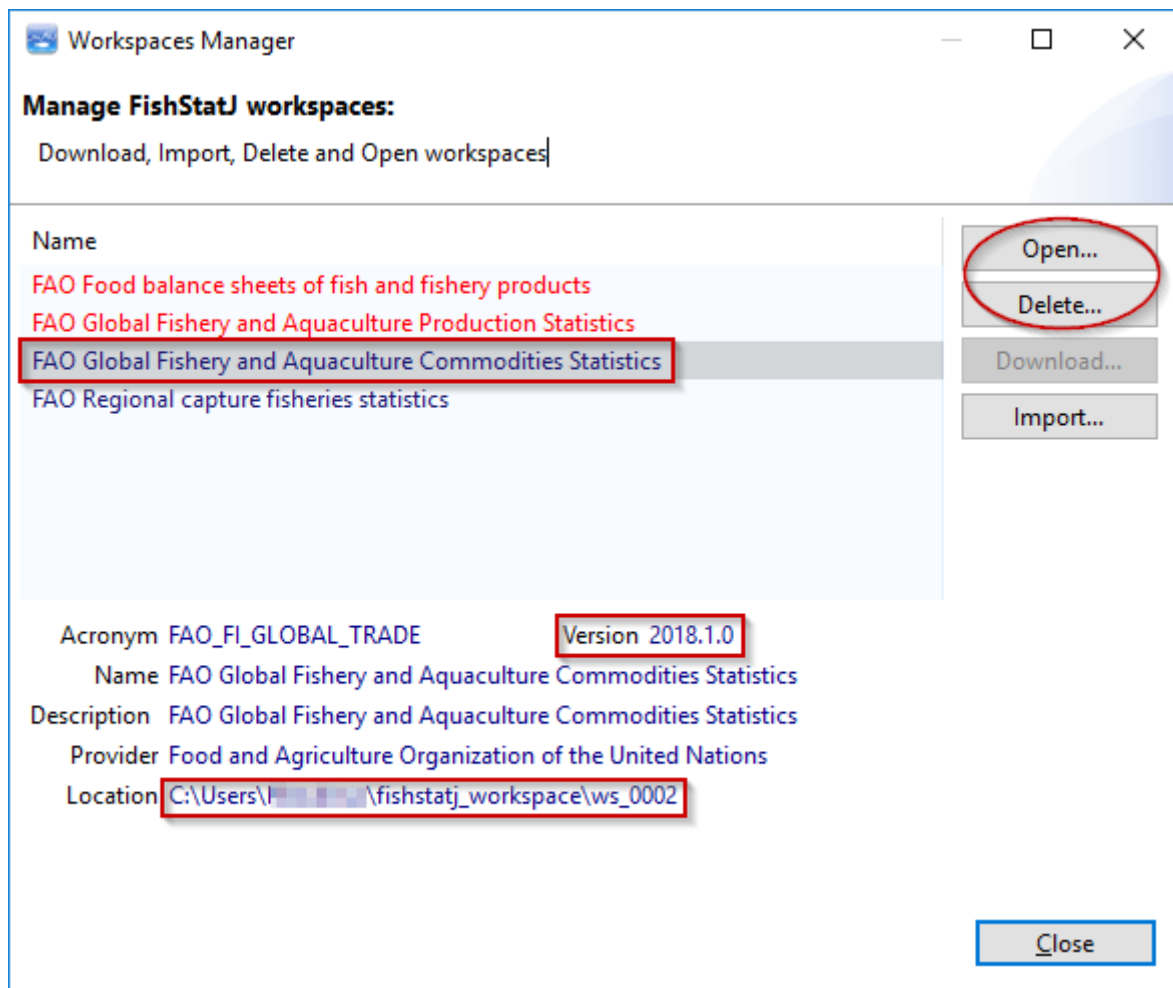
- Open workspaces already installed.
- Download and install workspaces (from the FAO website).
- Delete workspaces installed on the computer.



When you click on **Manage workspaces**, the **Workspaces Manager** window appears on the screen. There, two kind of workspaces are displayed:

- Workspaces in **red color**, are *not installed* on the computer (also if there is a new version available).
- Workspaces in **blue color** are *installed* on the computer.

The screenshot below shows that version 2018.1.0 of the “FAO Global Fishery and Aquaculture Commodities Statistics” workspace is installed on the computer:



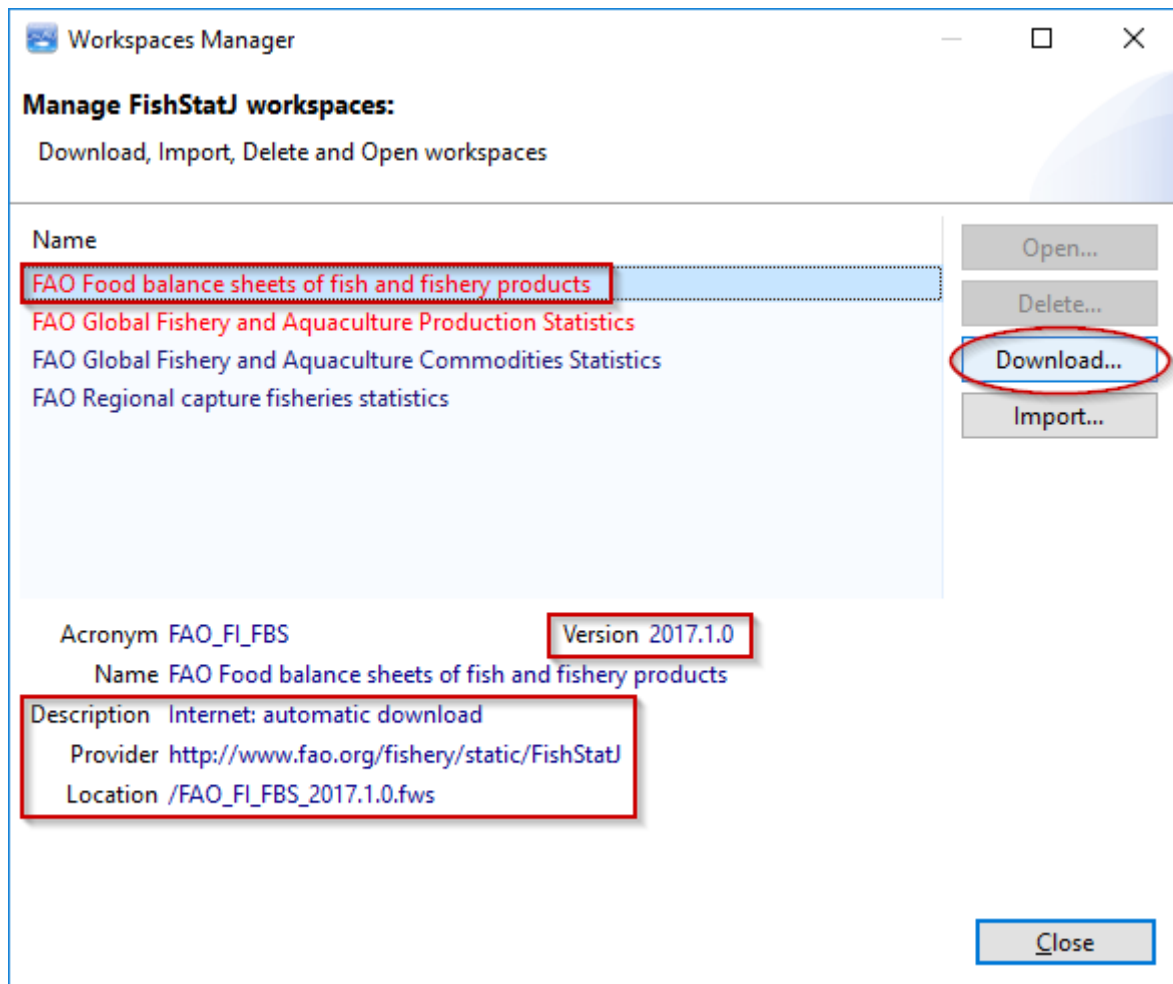
Workspaces already installed on the local disk can be **Opened** for viewing the data, or **Deleted** from the computer.

Manually downloaded workspaces can be imported using the **Import** button.

Workspaces that are already installed are not shown as available for download.

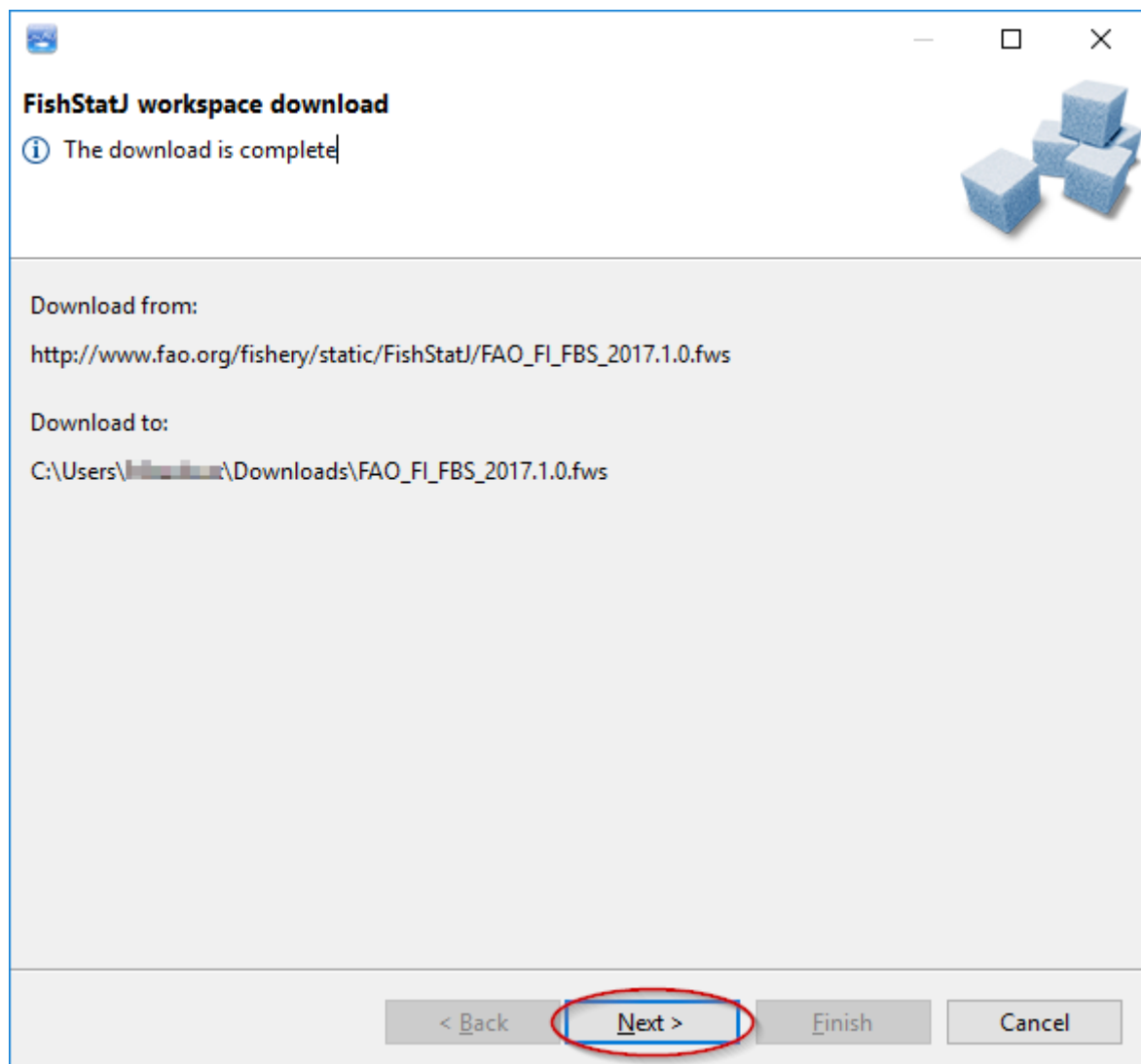
### 3.1.1. Installing a new workspace (download)

To install a new workspace, select an uninstalled (in red) workspace and click on the **Download...** button.

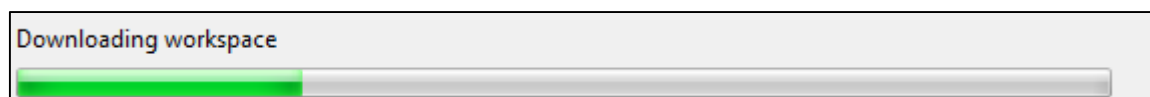




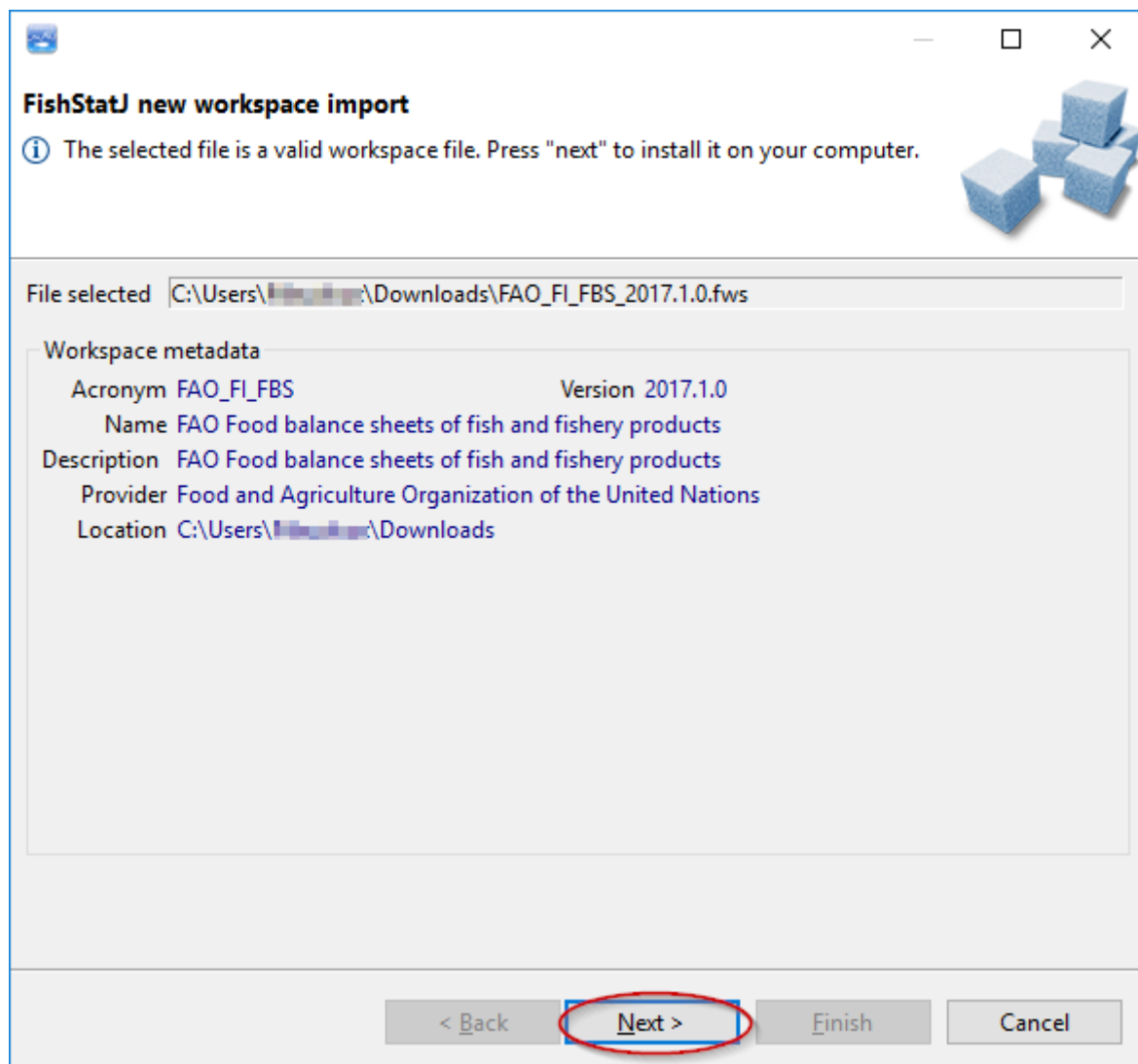
Clicking on the **Download** button will open a new window, the workspace import wizard:



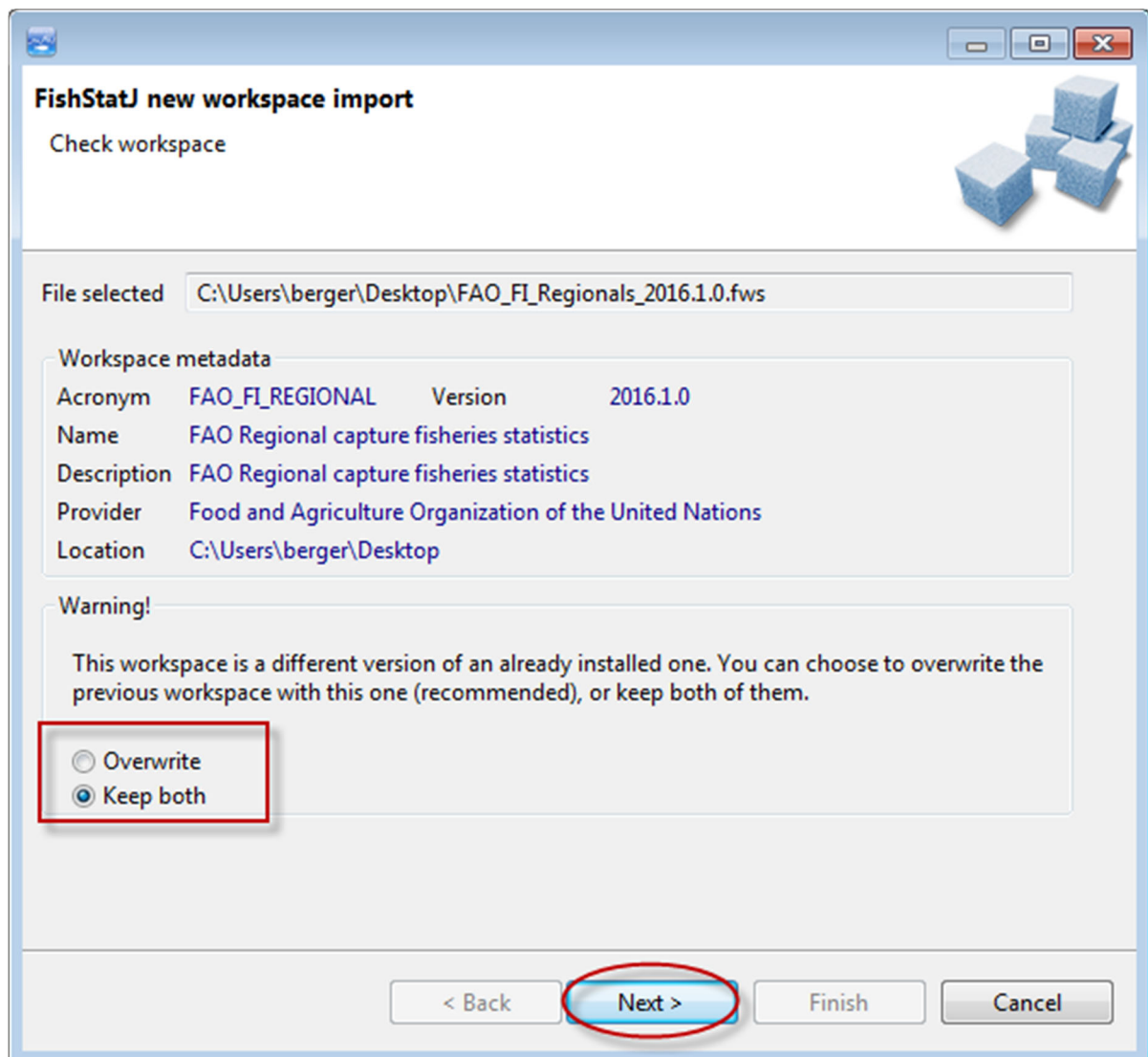
A progress bar appears during the download:



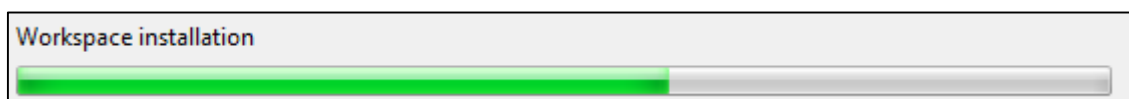
Once the file has finished downloading, press the **Next** button to install it on your computer.



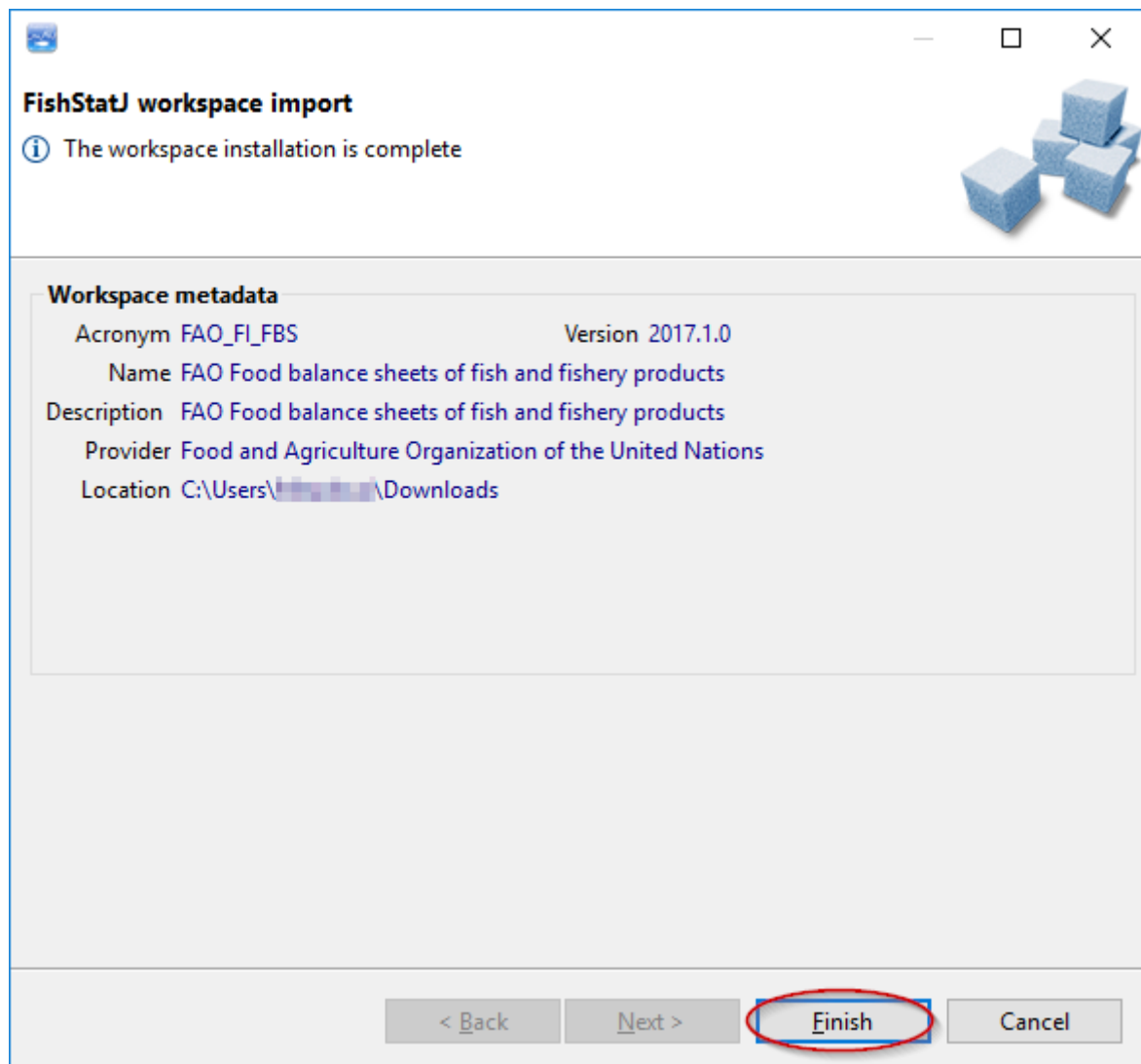
If an older version of the data is present (this typically happens after the yearly release of updated workspaces from FAO), FishStatJ will ask if the new version should overwrite the old version – or keep both (resulting in two versions of the same data installed). Select the option most appropriate for you, and click **Next**.



Please wait while the workspace is installing.

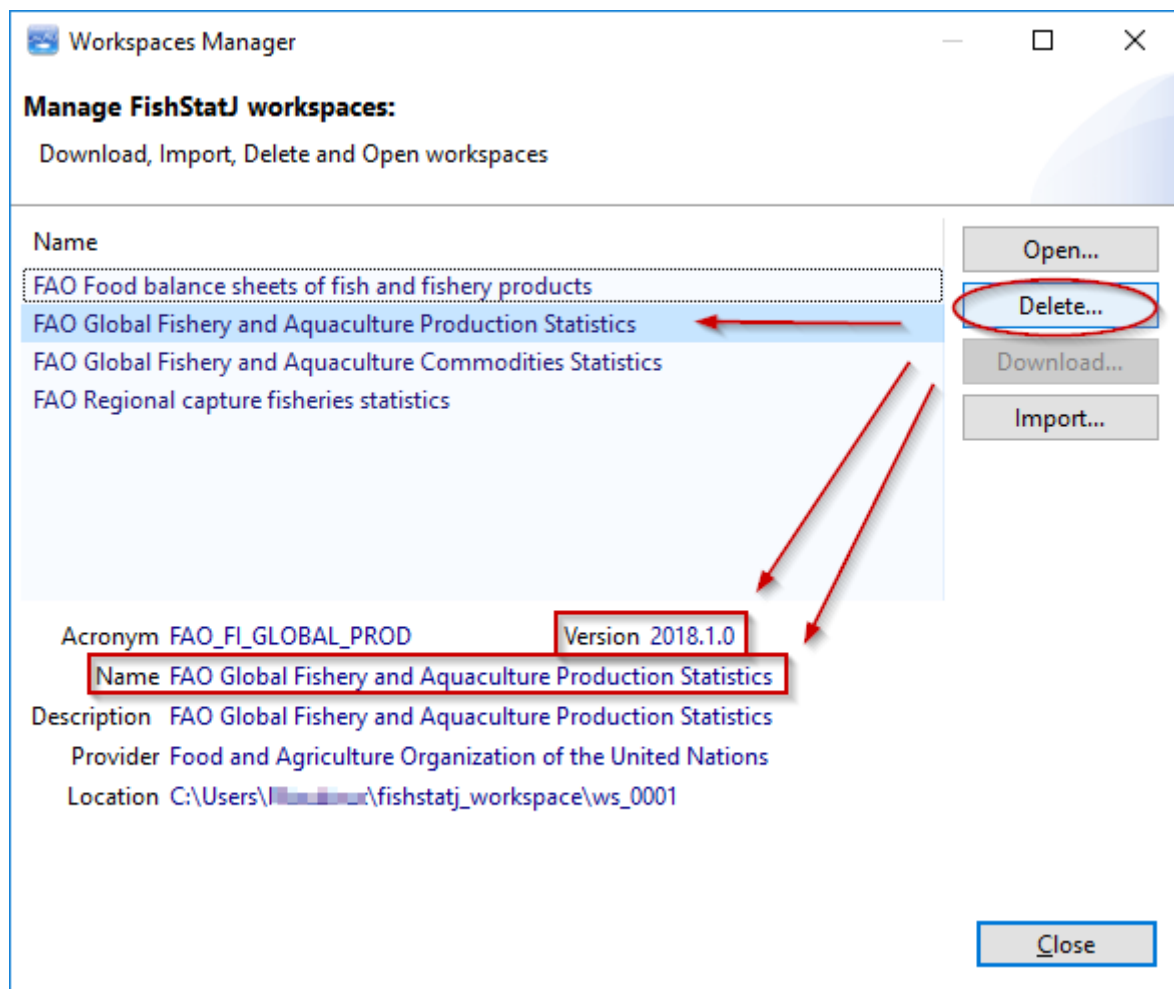


When the installation is complete, click the **Finish** button.



After clicking on **Finish**, the **Dataset browser** window appears. To start using your newly installed workspace, please refer to section 3.2 below.

### 3.1.2. Deleting a workspace

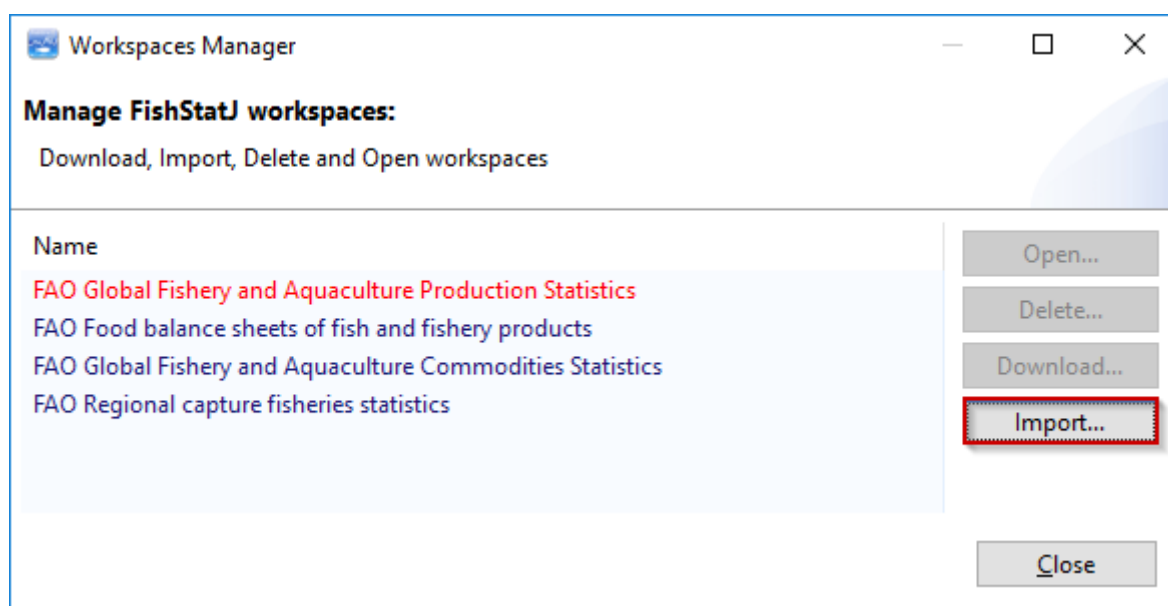


In the **Workspaces manager**, selecting a workspace will show metadata for this particular workspace (Acronym, Version, Name, Description, Provider, and Location on disk). The selected workspace is permanently removed from your computer when you click on the **Delete** button.

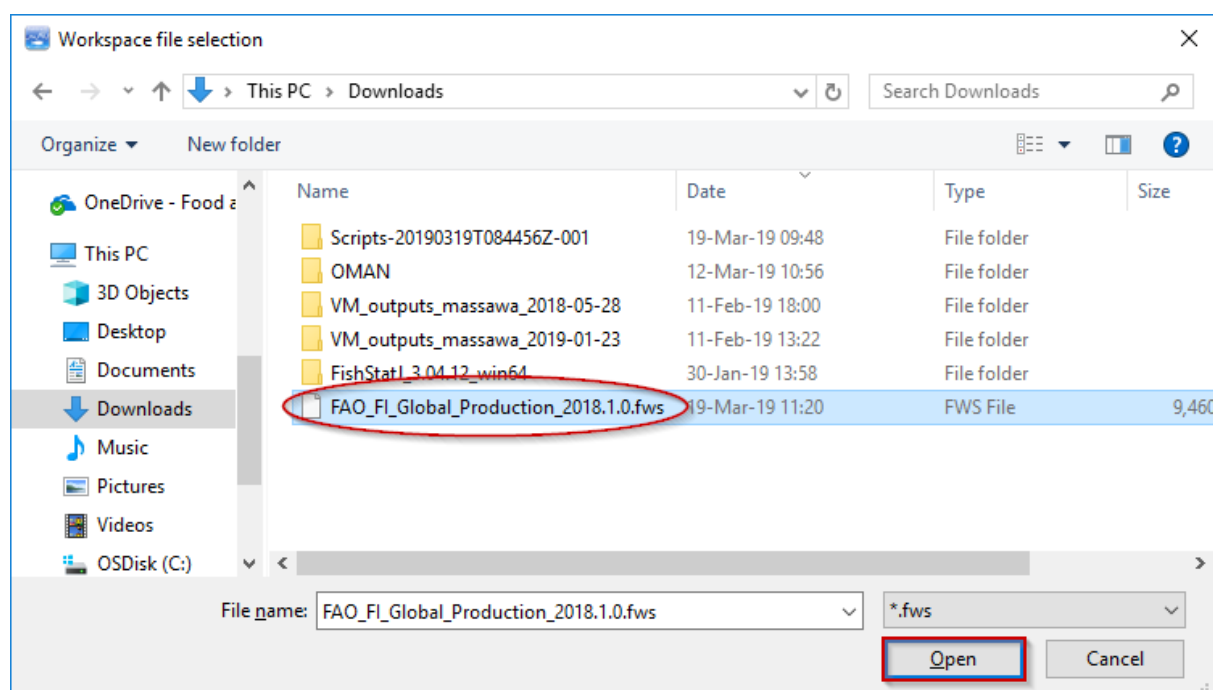
### 3.1.3. Importing a workspace

The **Import...** button allows the user to import manually downloaded workspaces into FishStatJ. However, since FishStatJ is able to download workspaces files, most users do not need to download and import workspaces manually.

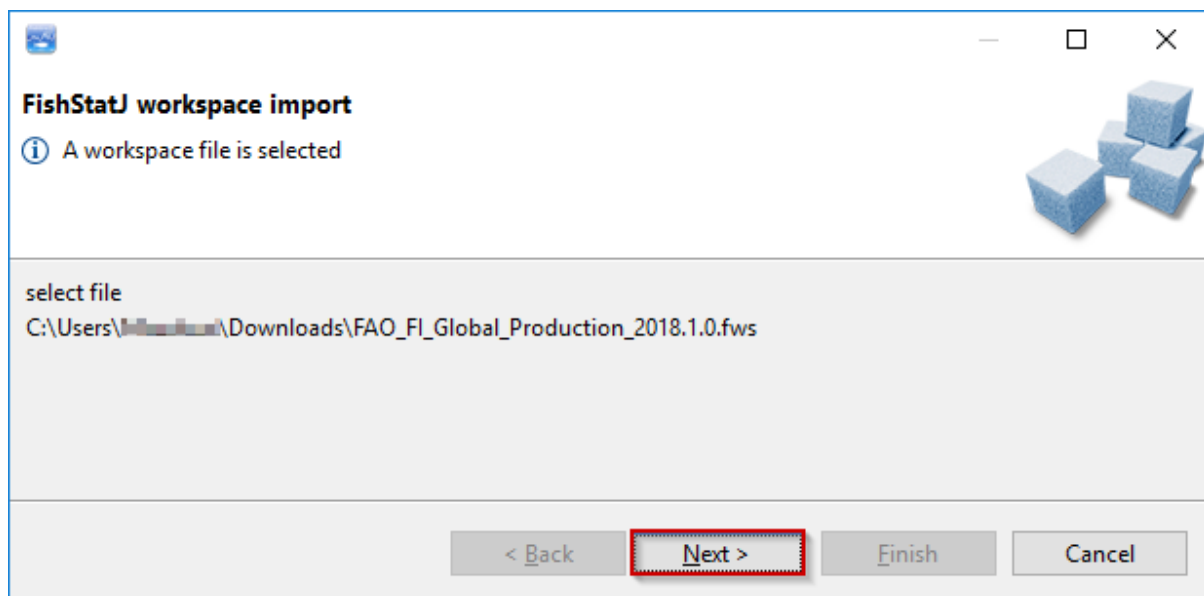
If you need to import a workspace manually, click on the **Import...** button of the **Workspaces Manager**.



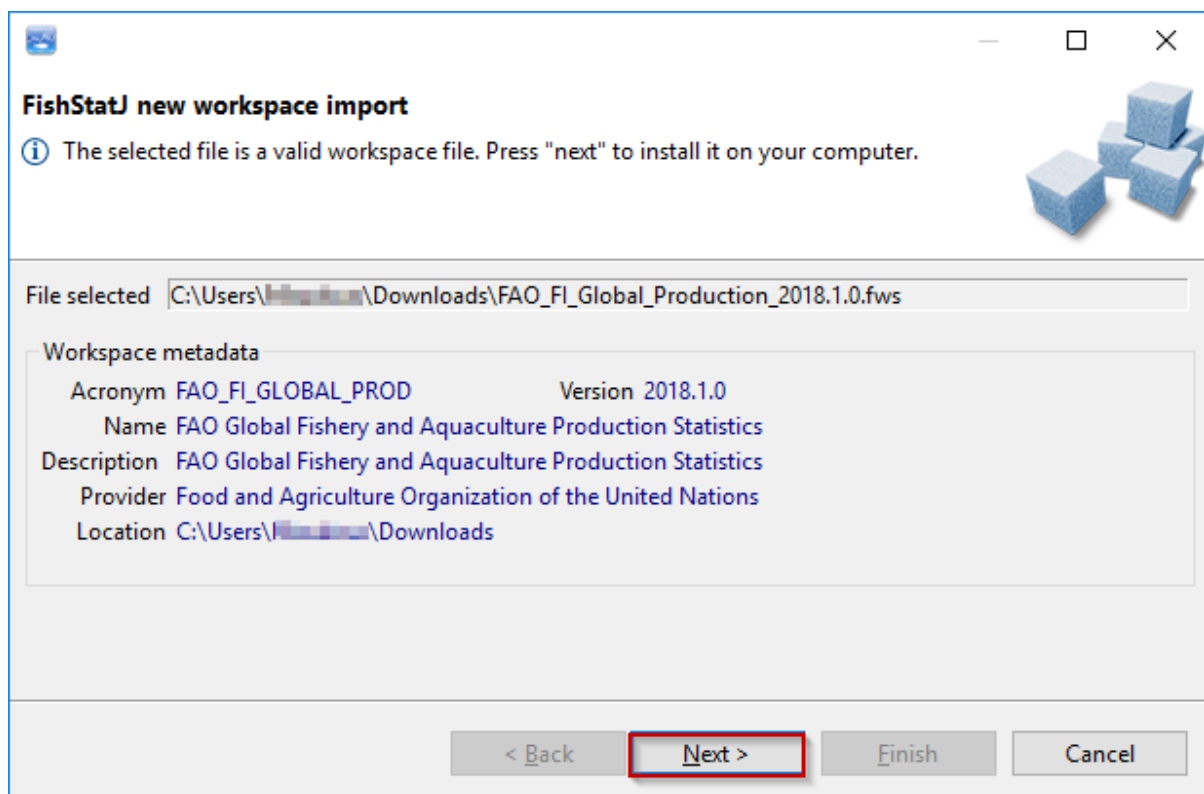
A file explorer window will appear, inviting you to select the .fws file corresponding to the workspace you wish to import. Select the .fws file and click on the **Open** button.



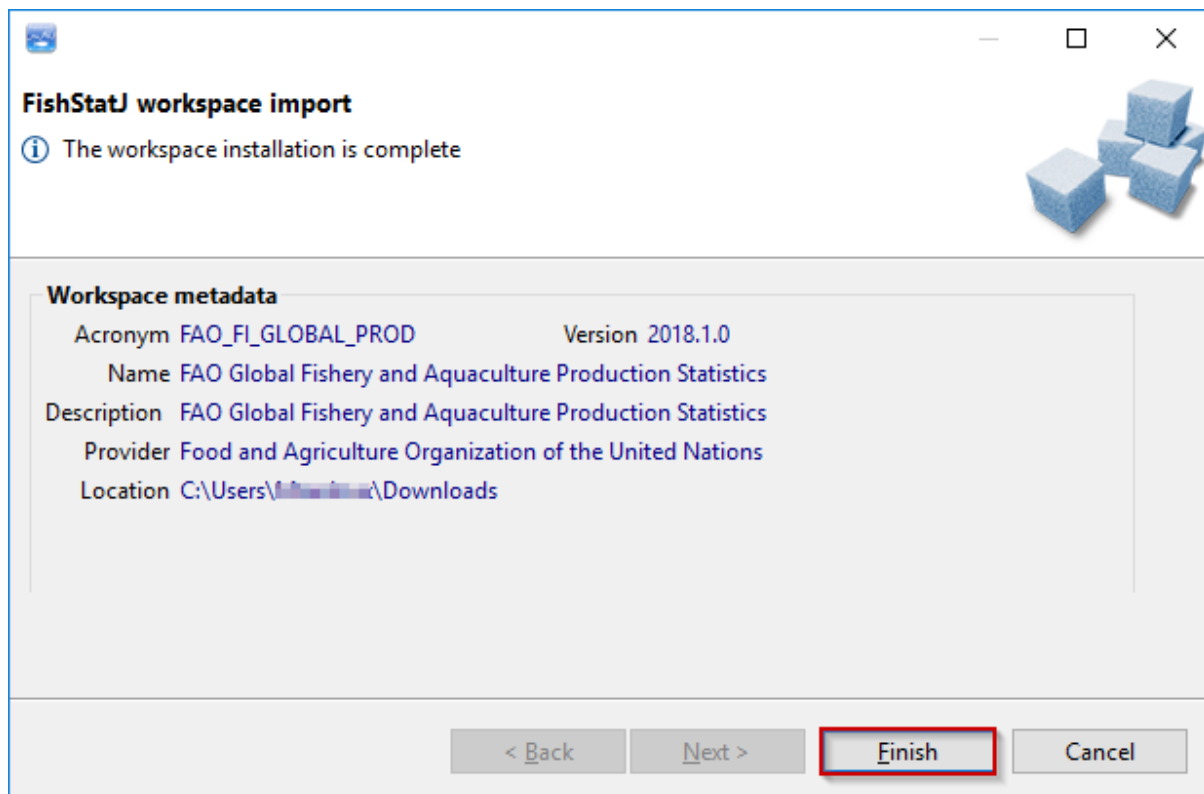
In the window that appears, click on the **Next >** button.



The following window is displayed, confirming that you have selected a valid workspace file and inviting you to install it on your computer. To do so, click on the **Next >** button.



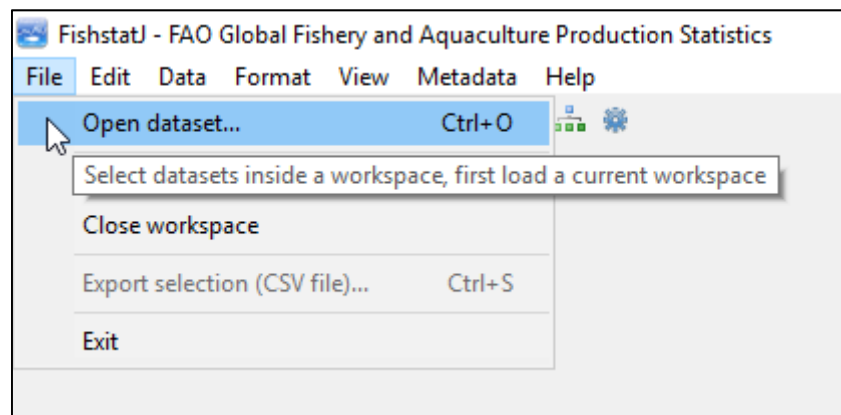
Once FishStatJ confirms that the workspace installation is complete, click on the **Finish** button to go back to the interface and open the workspace.





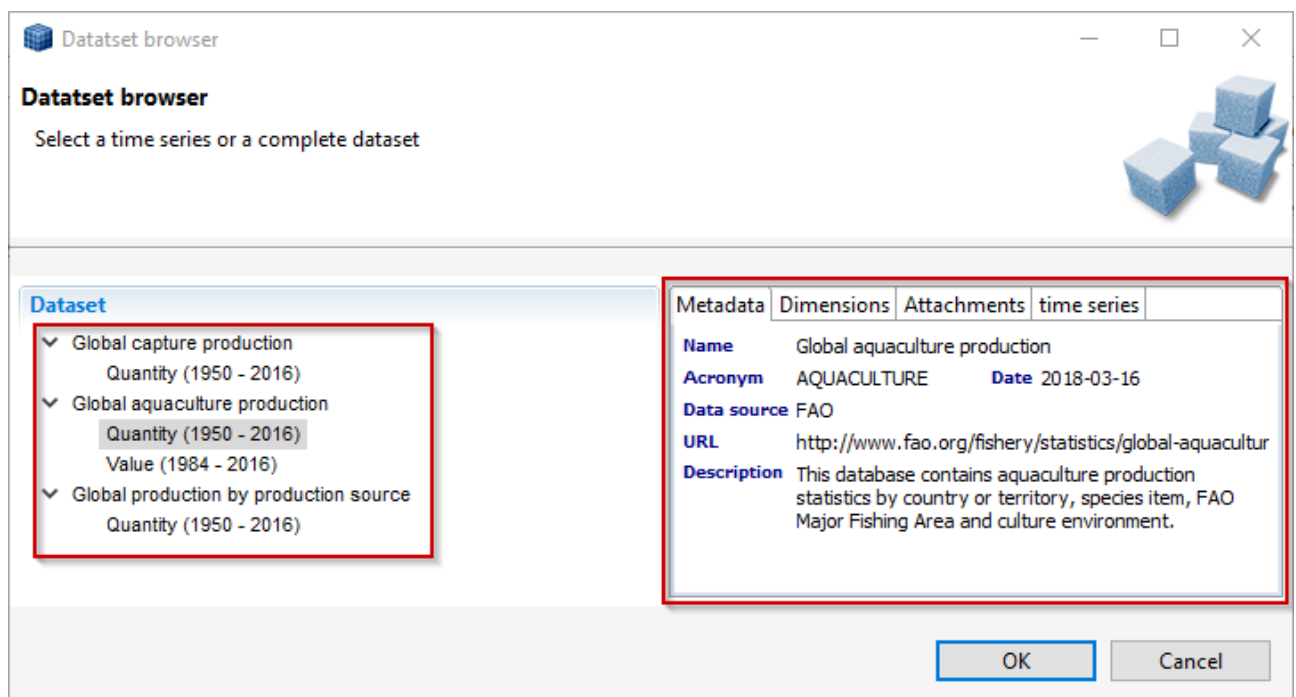
## 3.2. Open dataset...

**Note:** This option is only available when a workspace is currently open in FishStatJ.



Selecting this option will present the **Dataset browser** window, where datasets may be opened and brought into FishStatJ for viewing.

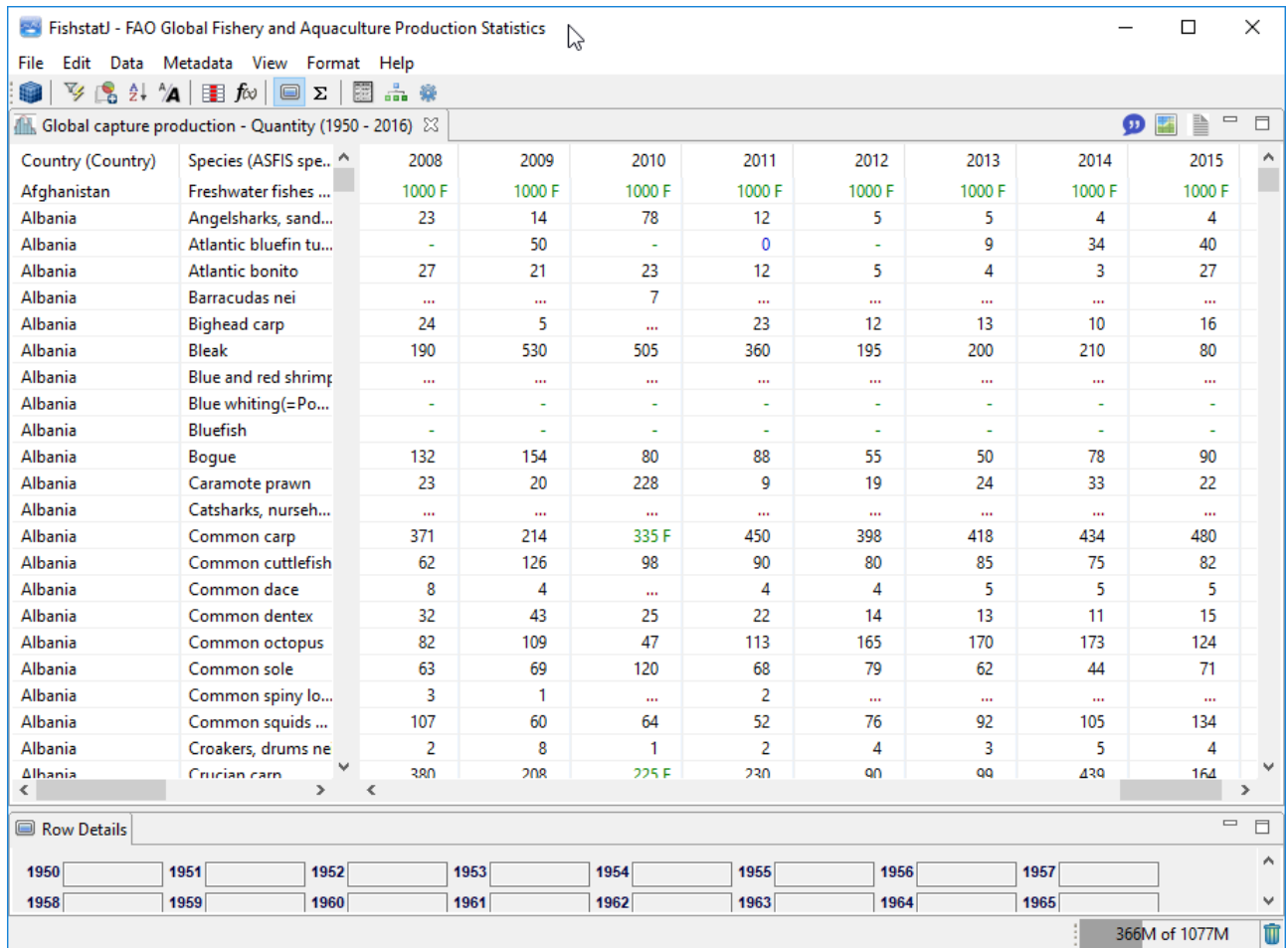
Once you have opened a dataset, the **Manage workspaces** item under the **File** menu is disabled (or dimmed); until you close the active workspace by clicking on the **Close workspace** item.



Selecting a dataset by clicking on the items listed on the left-side of the window will present the associated metadata on the right-side of the window. Select a dataset and click on the **OK** button to open the dataset content.

### 3.2.1. Displaying a dataset

When a dataset is open, the main window of FishStatJ looks like this:



Country (Country)	Species (ASFIS spe..	2008	2009	2010	2011	2012	2013	2014	2015
Afghanistan	Freshwater fishes ...	1000 F	1000 F	1000 F	1000 F	1000 F	1000 F	1000 F	1000 F
Albania	Angelsharks, sand...	23	14	78	12	5	5	4	4
Albania	Atlantic bluefin tu...	-	50	-	0	-	9	34	40
Albania	Atlantic bonito	27	21	23	12	5	4	3	27
Albania	Barracudas nei	...	...	7	...	...	...	...	...
Albania	Bighead carp	24	5	...	23	12	13	10	16
Albania	Bleak	190	530	505	360	195	200	210	80
Albania	Blue and red shrimp	...	...	...	...	...	...	...	...
Albania	Blue whiting(=Po...	-	-	-	-	-	-	-	-
Albania	Bluefish	-	-	-	-	-	-	-	-
Albania	Bogue	132	154	80	88	55	50	78	90
Albania	Caramote prawn	23	20	228	9	19	24	33	22
Albania	Catsharks, nurseh...	...	...	...	...	...	...	...	...
Albania	Common carp	371	214	335 F	450	398	418	434	480
Albania	Common cuttlefish	62	126	98	90	80	85	75	82
Albania	Common dace	8	4	...	4	4	5	5	5
Albania	Common dentex	32	43	25	22	14	13	11	15
Albania	Common octopus	82	109	47	113	165	170	173	124
Albania	Common sole	63	69	120	68	79	62	44	71
Albania	Common spiny lo...	3	1	...	2	...	...	...	...
Albania	Common squids ...	107	60	64	52	76	92	105	134
Albania	Croakers, drums ne	2	8	1	2	4	3	5	4
Albania	Crucian carp	380	208	225 F	230	90	99	439	164

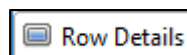
Row Details

1950	1951	1952	1953	1954	1955	1956	1957
1958	1959	1960	1961	1962	1963	1964	1965

366M of 1077M

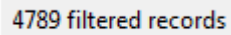
### 3.2.2. Row details

Selecting/highlighting a row (as shown above) will present the yearly data values on the lower part of the window (as shown under the **Row Details** tab).



### 3.2.3. Number of rows

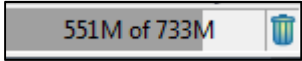
The number of rows on display is shown in the lower-right part of the window. This number depends on the filtering criteria chosen by the user; Filtering is explained in section 5.1.



4789 filtered records

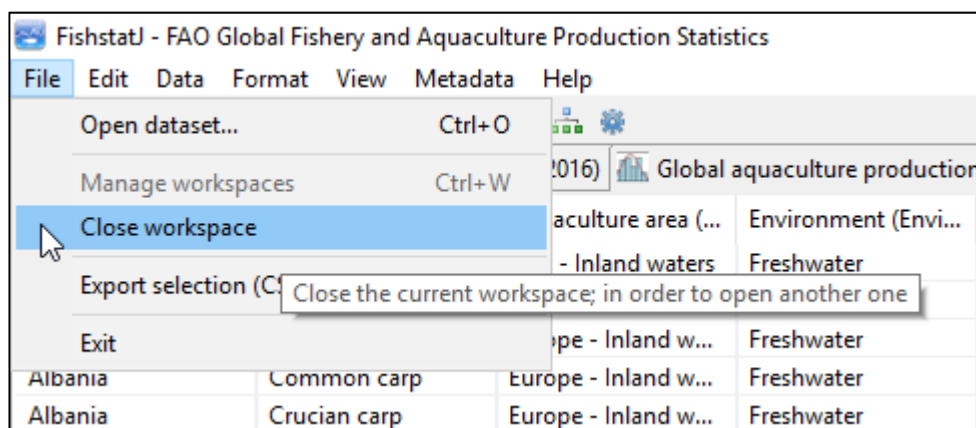
### 3.2.4. Memory status

The memory bar shows the state of the Java heap memory, which is a feature of RCP applications. This feature is useful for troubleshooting only.



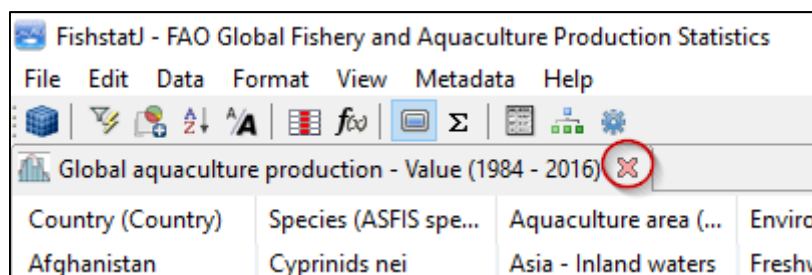
551M of 733M

### 3.3. Close workspace



Selecting this item will close the current workspace and all datasets and that are active within this workspace.

**Note:** The **Close workspace** option saves settings for all active datasets. Next time you launch FishStatJ, saved settings are applied. If you do not want a dataset to open automatically next time you open FishStatJ, just close it using the **Close icon** on the dataset panel:

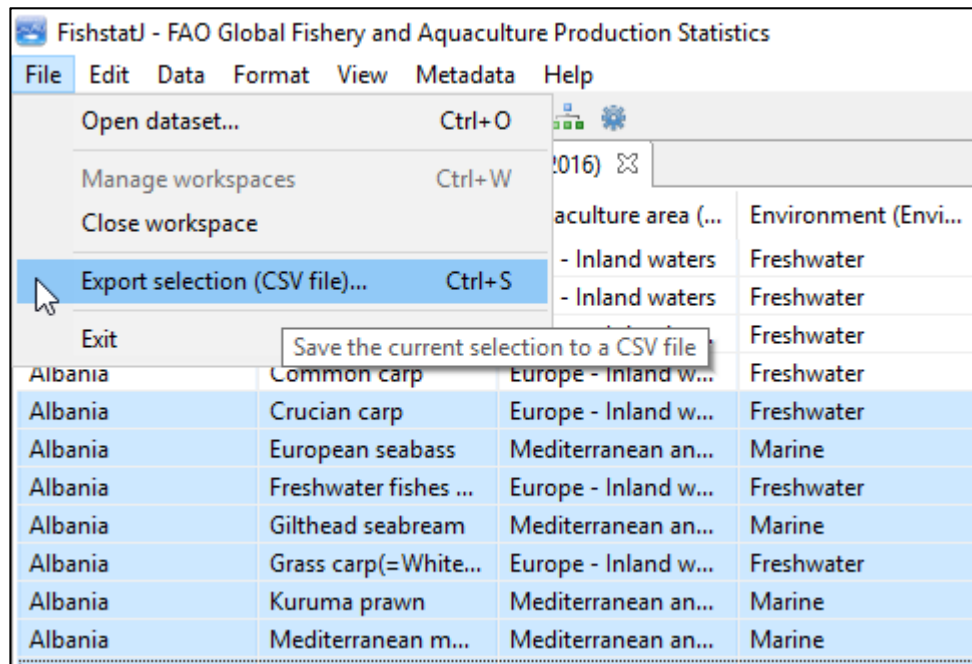


**Note:** Filtering and aggregation settings are also recorded for each dataset; and automatically re-applied when you launch FishStatJ next time.

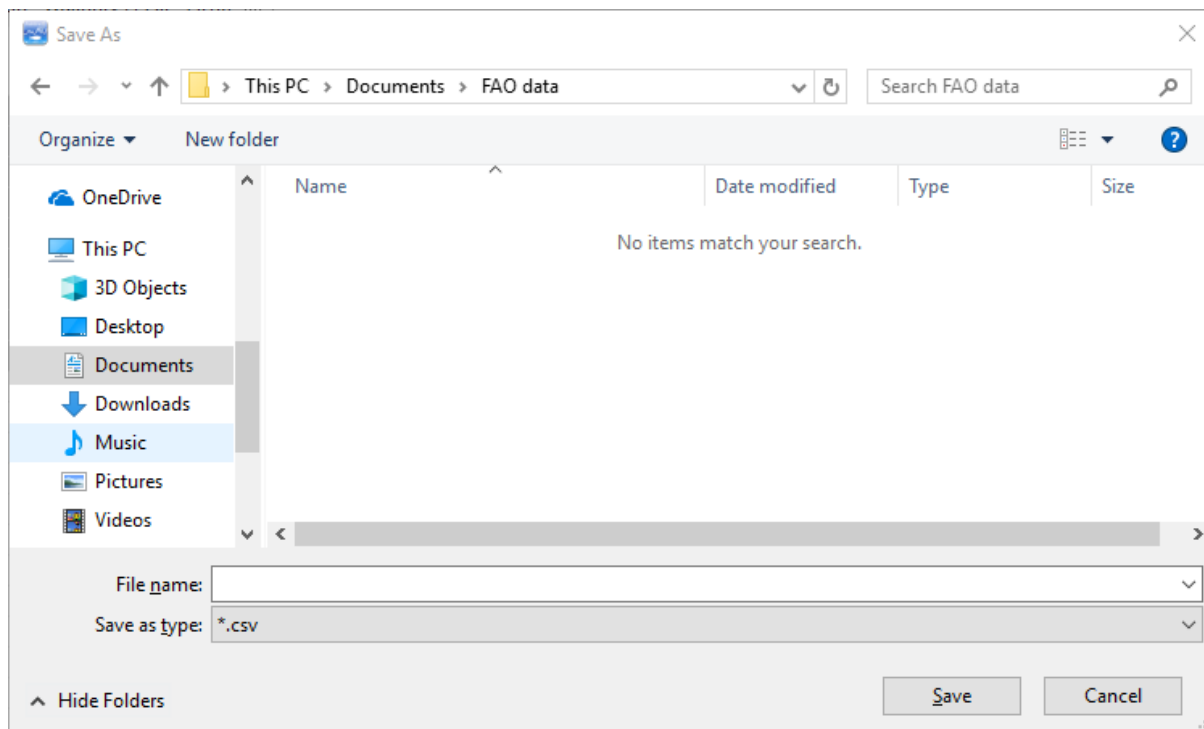
If the **Save working session on exit** option (located in **Edit** → **Preferences**) is active, when FishStatJ restarts the datasets that were open when the user exited the application will automatically reopen.

### 3.4. Export selection (CSV file)...

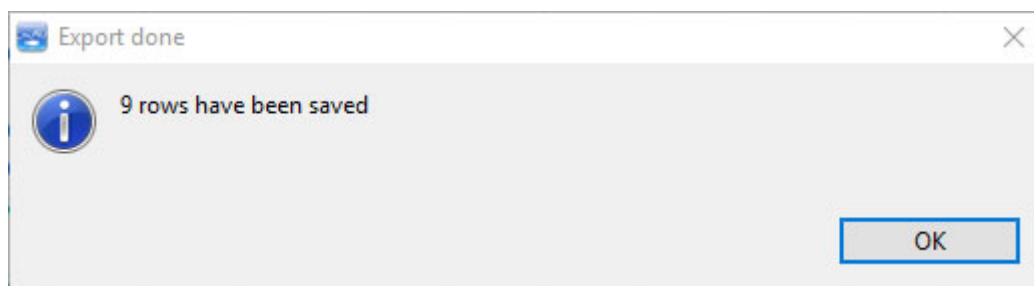
Selecting this option will save all selected rows into a comma-separated values (CSV) file:



A **Save As** pop-up window will appear so that all selected rows may be saved into a .csv file on a given location of the hard drive.

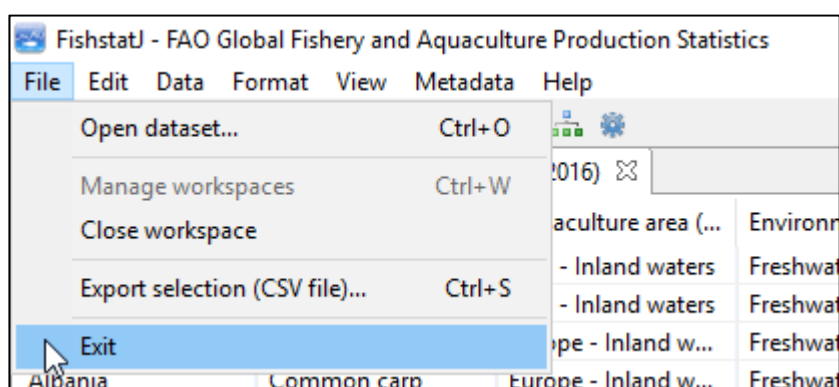


When the save of the selected records into a .csv file is complete, a confirmation message will appear:



Settings for export of CSV files are managed in **Edit** → **Preferences** → **Data Export**. See section 4.4.5 for more information.

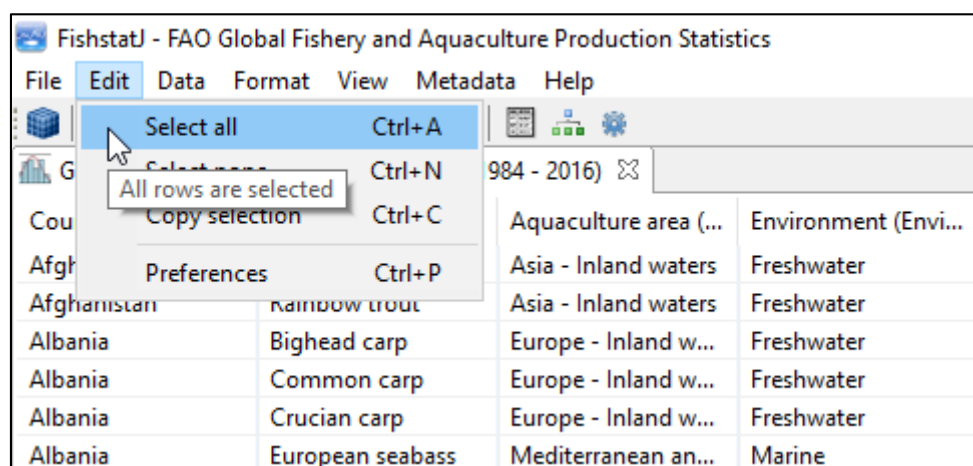
### 3.5. Exit



Selecting this option will close the FishStatJ program.

## 4. Edit menu

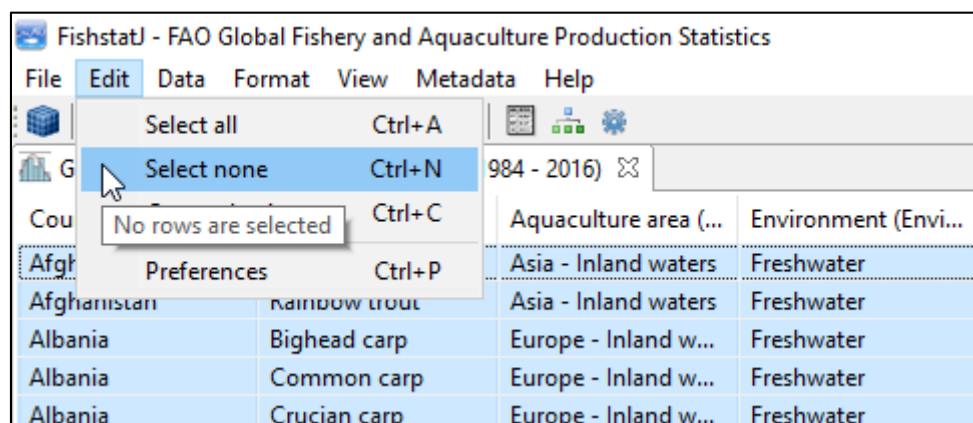
### 4.1. Select all



Clicking on this option will select all the rows in the currently open dataset:

FishstatJ - FAO Global Fishery and Aquaculture Production Statistics						
File Edit Data Format View Metadata Help						
Global aquaculture production - Value (1984 - 2016)						
Country (Country)	Species (ASFIS spe...	Aquaculture area (...)	Environment (Envi...		1984	1985
Afghanistan	Cyprinids nei	Asia - Inland waters	Freshwater		225	225
Afghanistan	Rainbow trout	Asia - Inland waters	Freshwater		60	60
Albania	Bighead carp	Europe - Inland w...	Freshwater		...	0
Albania	Common carp	Europe - Inland w...	Freshwater		25	50
Albania	Crucian carp	Europe - Inland w...	Freshwater		25	25
Albania	European seabass	Mediterranean an...	Marine		...	...
Albania	Freshwater fishes ...	Europe - Inland w...	Freshwater		2.5	15
Albania	Gilthead seabream	Mediterranean an...	Marine		0	0
Albania	Grass carp(=White...	Europe - Inland w...	Freshwater		...	...
Albania	Kuruma prawn	Mediterranean an...	Marine		0	0
Albania	Mediterranean m...	Mediterranean an...	Marine		588.9	586.3

## 4.2. Select none

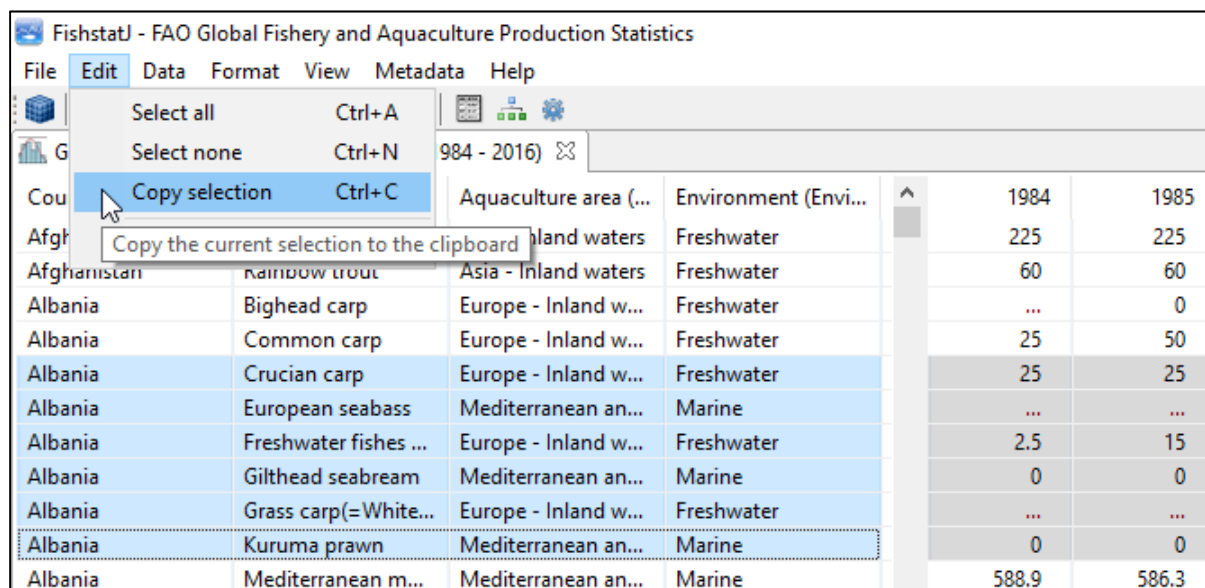


Clicking on this option will deselect any selected row in the currently open dataset:

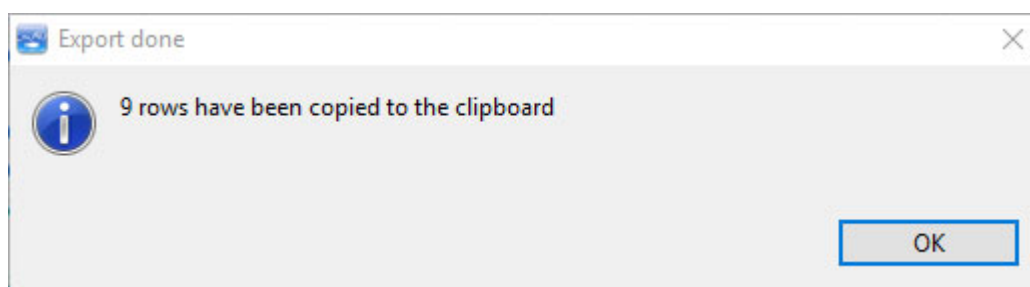
FishstatJ - FAO Global Fishery and Aquaculture Production Statistics					
File Edit Data Format View Metadata Help					
Global aquaculture production - Value (1984 - 2016)					
Country (Country)	Species (ASFIS spe...	Aquaculture area (...)	Environment (Envi...		
Afghanistan	Cyprinids nei	Asia - Inland waters	Freshwater	1984	1985
Afghanistan	Rainbow trout	Asia - Inland waters	Freshwater	225	225
Albania	Bighead carp	Europe - Inland w...	Freshwater	60	60
Albania	Common carp	Europe - Inland w...	Freshwater	...	0
Albania	Crucian carp	Europe - Inland w...	Freshwater	25	50
Albania	European seabass	Mediterranean an...	Marine	25	25
Albania	Freshwater fishes ...	Europe - Inland w...	Freshwater	...	...
				2.5	15



## 4.3. Copy selection



Selecting this option will copy all selected rows into the clipboard. When the copy of the selected records into the clipboard is complete, a confirmation message will appear:

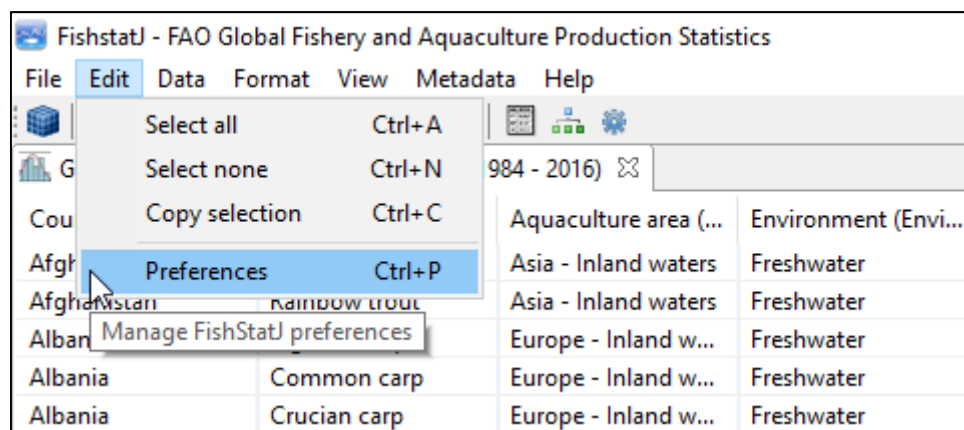


This option is useful if you intend to copy the selected rows directly into an opened spreadsheet.

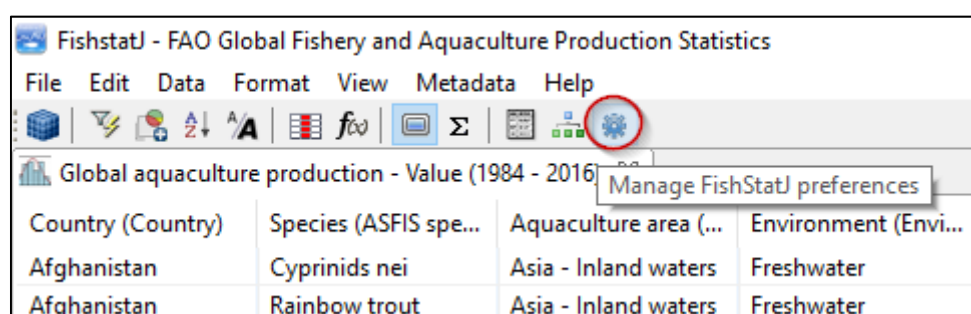
The settings related to how data is copied to the clipboard are managed in **Edit** → **Preferences** → **Data Export**. See section 4.4.5 for more information.

## 4.4. Preferences

FishStatJ's **Preferences** include a range of settings that can be modified by the user. They can be accessed (i) from the **Edit** menu...

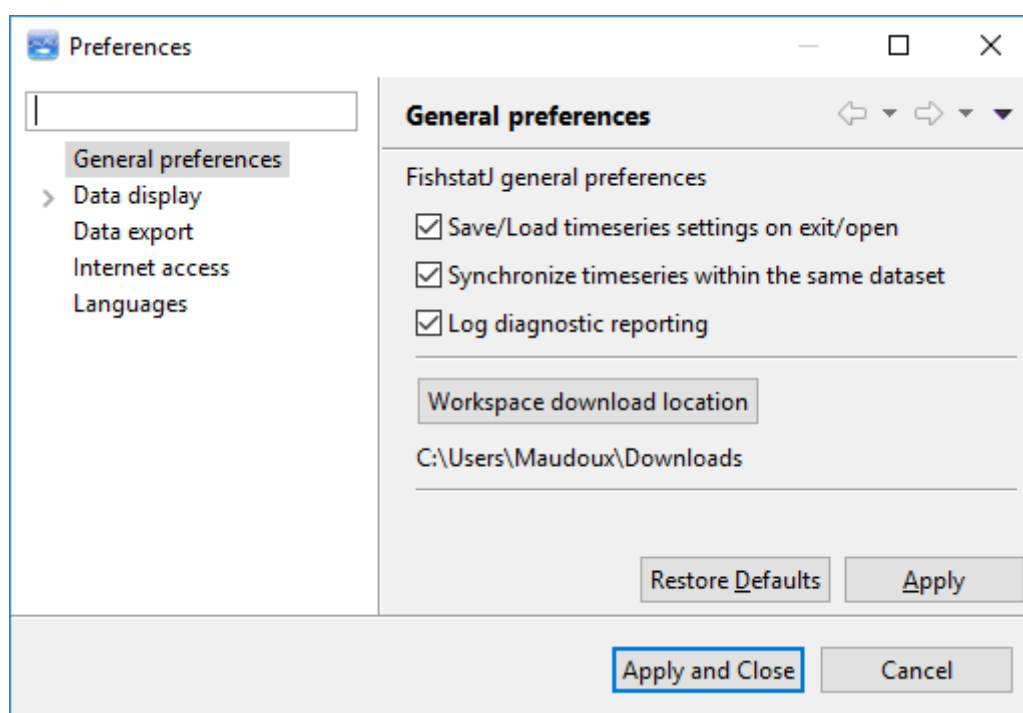


... and (ii) from the toolbar by clicking on the **Preferences icon**.



The **Preferences window** is presented below. Preferences are grouped in five categories, which are listed on the left side of the window. Specific options for each Preferences category are listed on the right side of the window.

### 4.4.1. General preferences



The **General preferences** options are the following:

- **Save/Load timeseries settings on exit/open** controls if the time series settings (like filtering, aggregation, column settings) are automatically saved (when exiting FishStatJ) and loaded (when launching the application).
- **Synchronize timeseries within the same dataset**: This is useful for Aquaculture data, to keep the time series of Quantity and Value in sync. Any filtering/aggregation settings will be applied to both time series.
- If **Log diagnostic reporting** is enabled, FishStatJ will read the log-file and check for any errors every time the application starts. In case the logs contain any program errors, it copies the last two months of logs into a file called mail.txt and ask the user to send this file to us for analysis. If the Outlook software on Windows is installed, FishStatJ automatically prepares the e-mail message. This option is disabled by default.

**Note:** FishStatJ does not automatically submit any log information. You can check the content of the text file before sending, and you have to (manually) send the file to FAO (refer to section 11.7).

In case of problems, the log analysis is useful to understand the cause of the problem. This helps us to fix the problem for the user reporting the problem—and to improve the quality for all users.

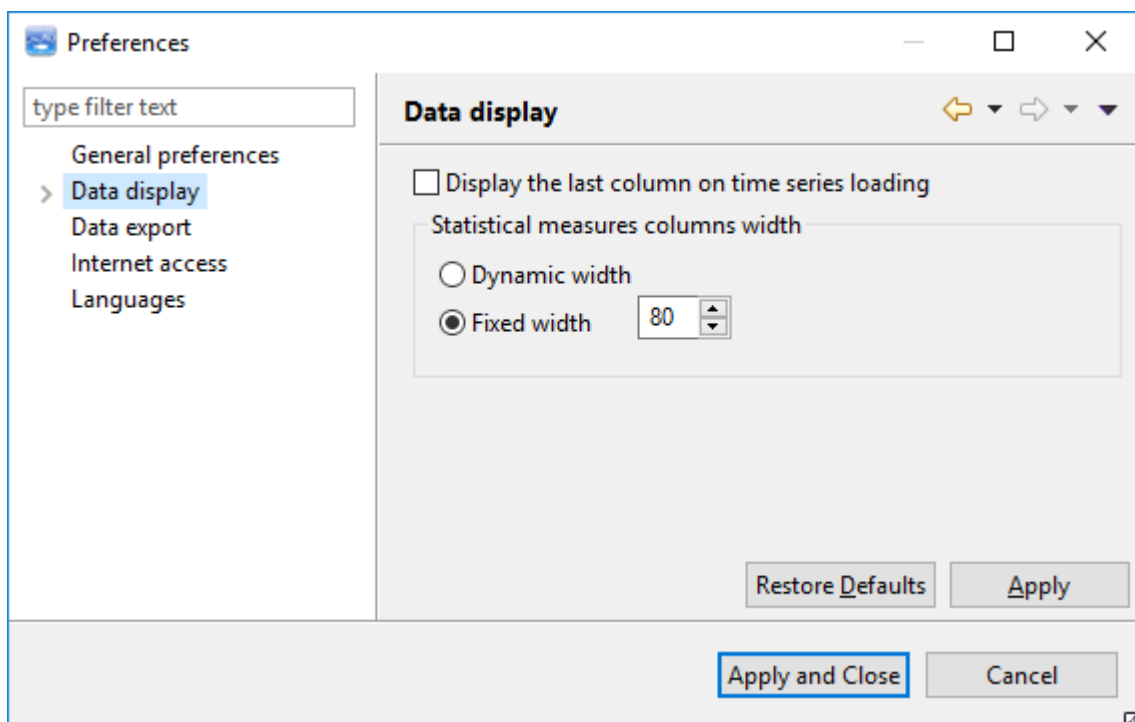
- **Workspace download location** allows to set the location where FishStatJ downloads workspaces before they are installed. We added this setting because some users reported that the Downloads folder does not exist on their PC.

Refer to section 11.4 for details on the log location, and FishStatJ workspaces.

#### 4.4.2. Data display

The **Data display** preferences allows the user to specify:

- Whether the dataset panel automatically centers on the last column of the data each time it a dataset is loaded.
- Whether the width of the columns that contain values is automatically adjusted, or if fixed (and determined by the user).



**Note:** If the column width display is set too small so that the observations are not readable, an easy solution is to set a column width of 60.

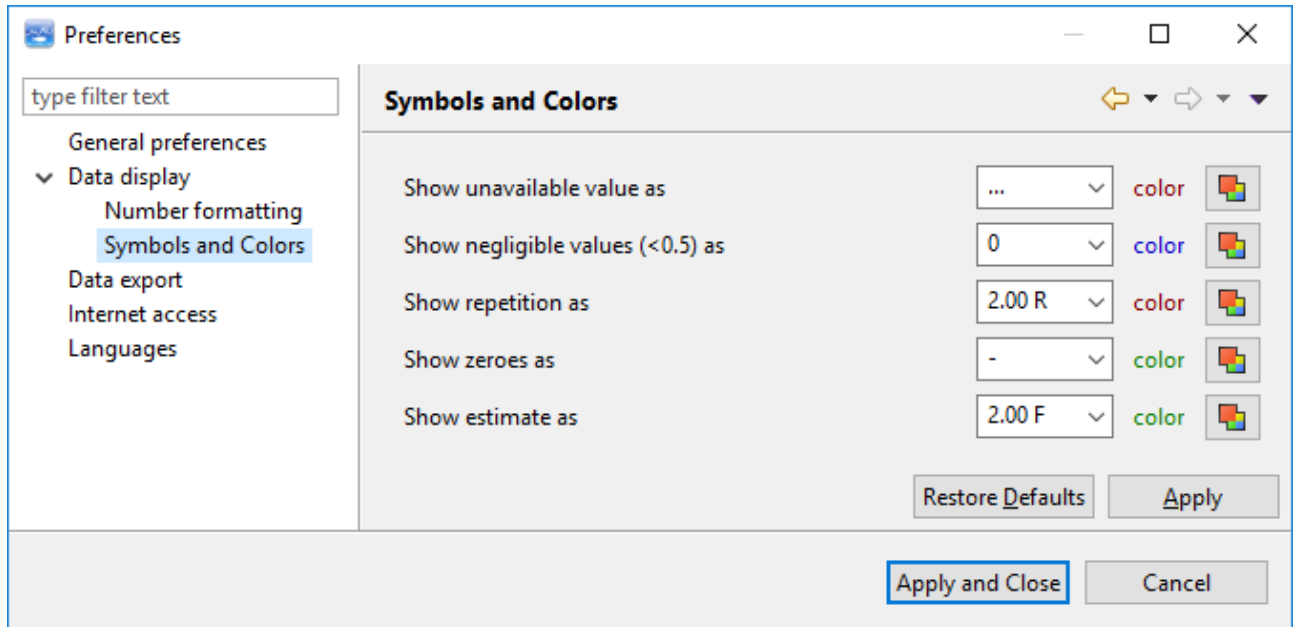
### 4.4.3. Data display – Number formatting

**Number formatting** options control how values are shown (i.e. set the number of digits before and after decimals; use point or comma as decimal separator; use decimal or scientific notation). It is important to note that these formatting preferences are used for display and when exporting data.

The screenshot shows the 'Number formatting' preferences window. On the left is a sidebar with a search bar 'type filter text' and a list of categories: 'General preferences', 'Data display' (expanded), 'Number formatting' (selected), 'Symbols and Colors', 'Data export', 'Internet access', and 'Languages'. The main panel is titled 'Number formatting' and contains two sections: 'Statistical measure' and 'Calculated measures'. Each section has settings for 'Digits before decimals' and 'Digits after decimals', each with a dropdown menu (set to 'At least') and a numeric input field (set to 1 and 2 respectively). Below these are three text boxes showing the formatted output: '12345.3333' becomes '12345.33', '0.3333333' becomes '0.33', and '12345678' remains '12345678'. At the bottom, there are two groups of radio buttons: 'Decimal separator' with 'use point ( 12.3 )' selected and 'use comma ( 12,3 )', and 'Notation' with 'decimal notation ( 1000 )' selected and 'scientific notation ( 1E03 )'. At the bottom right are buttons for 'Restore Defaults', 'Apply', 'Apply and Close', and 'Cancel'.

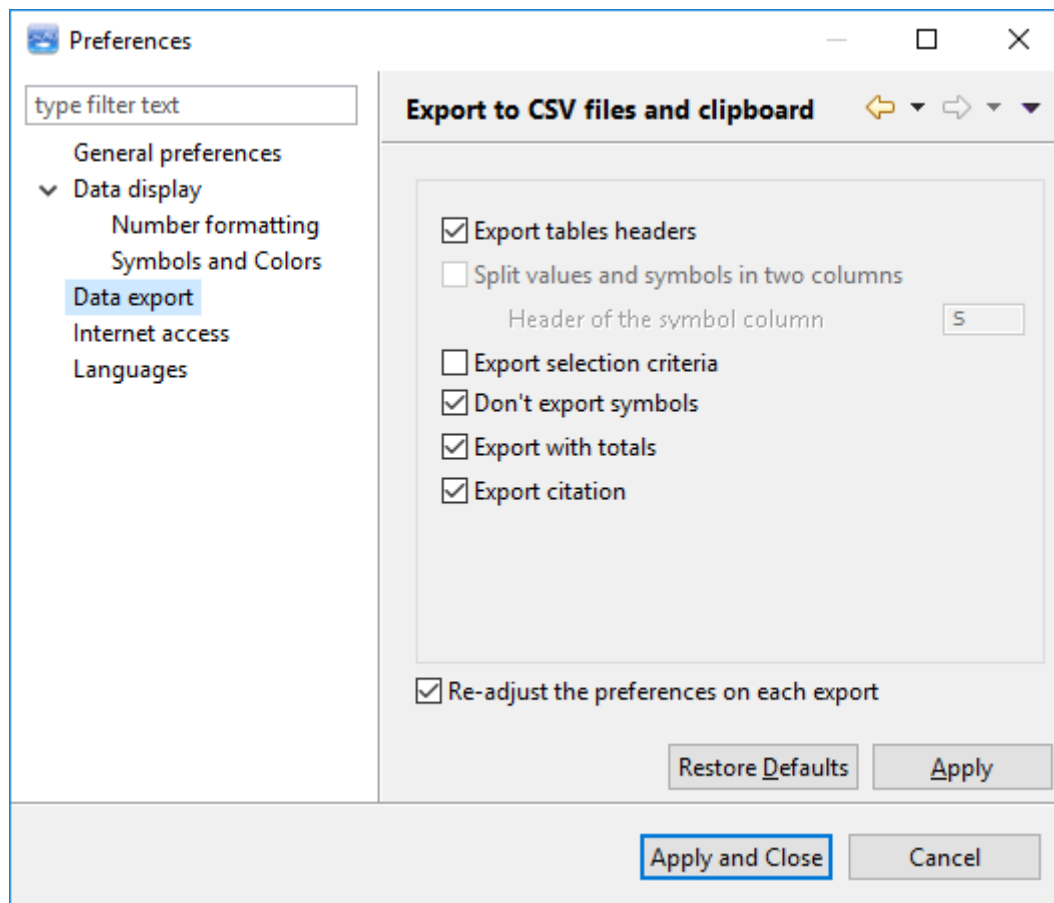
#### 4.4.4. Data display – Symbols and colors

**Symbols and Colors** options control how data symbols are shown (set color and symbol display). It is important to note that these formatting preferences are used for display and when exporting data.



### 4.4.5. Data export

This menu includes several options that set the modalities of data exports.



- **Export tables headers:** when selected, headers are exported.
- **Split values and symbols in two columns.** This is to avoid issues when analyzing the data after exporting it. Indeed, mixing symbols and figures within the same cells in a spreadsheet can make data analysis impossible, notably because the spreadsheet software will not recognize cells as numbers if these contain non-numerical characters.
- **Export selection criteria:** will add the filtering/aggregation settings to the export.
- **Don't export symbols.** This is to avoid issues when analyzing the data after exporting it. Indeed, mixing symbols and figures within the same cells in a spreadsheet can make data analysis impossible, notably because the spreadsheet software will not recognize cells as numbers if these contain non-numerical characters.
- **Export with totals on selected rows.**
- **Export citation.** See section 8.3.
- **Re-adjust the preferences on each export:** selecting this will show a dialog window before each export operation, to make sure that the proper export settings are selected before each data export.

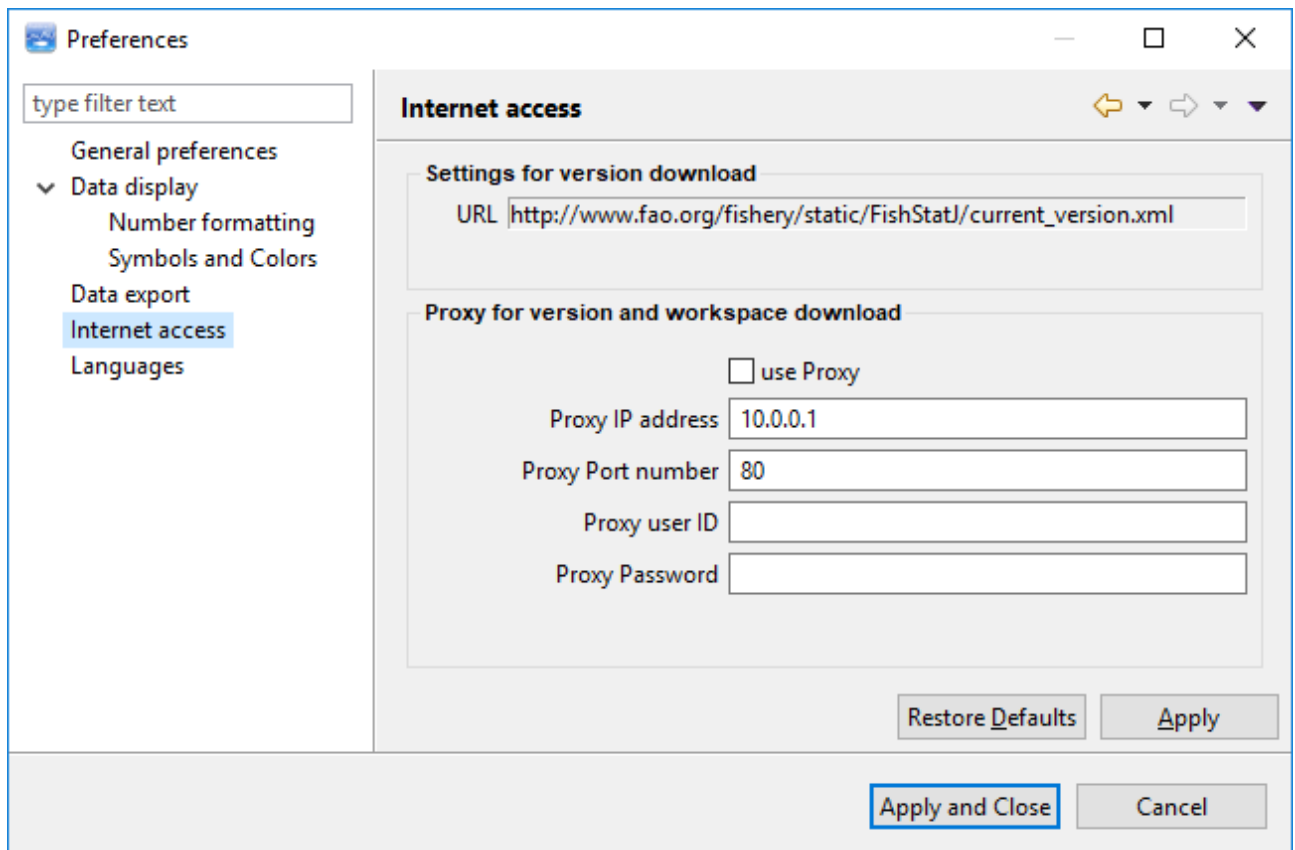
#### 4.4.6. Internet access

The preferences regulating Internet access by FishStatJ are listed below:

- The **Settings for version download** are described in detail in section 11.6 (update notification).
- **Use Proxy** is provided in case the network is protected with a proxy server. It allows FishStatJ to download the current information (program version and workspaces versions) and download workspaces (data) using a proxy server. We added proxy settings as requested by some users.

The use of proxy is controlled with the **use Proxy** checkbox. Proxy server IP address and port number fields are required (must be filled) if proxy is activated.

The Proxy user ID and Proxy Password fields can be left empty.



The screenshot shows the 'Preferences' dialog box with the 'Internet access' tab selected. The left sidebar contains a search bar and a list of categories: General preferences, Data display (expanded), Number formatting, Symbols and Colors, Data export, Internet access (highlighted), and Languages. The main panel is titled 'Internet access' and contains two sections. The first section, 'Settings for version download', has a 'URL' field with the text 'http://www.fao.org/fishery/static/FishStatJ/current\_version.xml'. The second section, 'Proxy for version and workspace download', features a 'use Proxy' checkbox (unchecked), a 'Proxy IP address' field (10.0.0.1), a 'Proxy Port number' field (80), a 'Proxy user ID' field (empty), and a 'Proxy Password' field (empty). At the bottom right of the main panel are 'Restore Defaults' and 'Apply' buttons. At the bottom of the dialog box are 'Apply and Close' and 'Cancel' buttons.

Preferences

type filter text

- General preferences
- ▼ Data display
  - Number formatting
  - Symbols and Colors
- Data export
- Internet access**
- Languages

**Internet access**

Settings for version download

URL

Proxy for version and workspace download

☐ use Proxy

Proxy IP address

Proxy Port number

Proxy user ID

Proxy Password

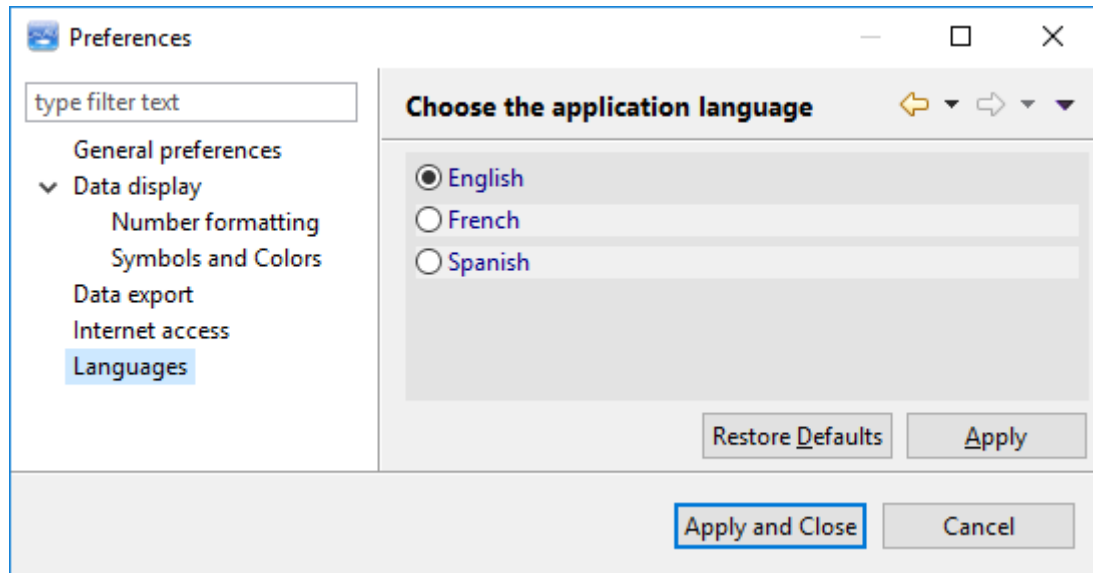
Restore Defaults Apply

Apply and Close Cancel

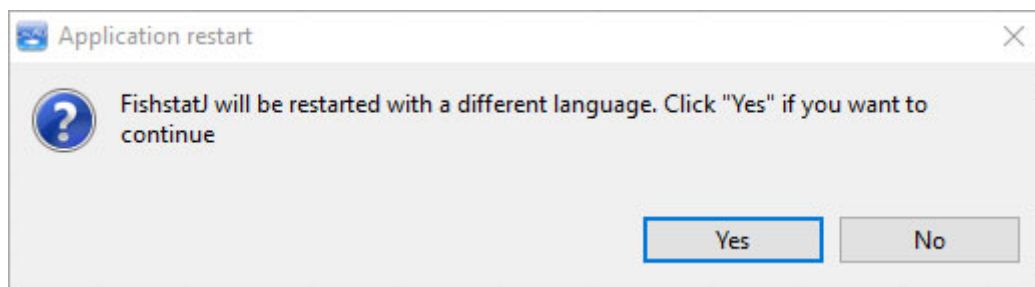


#### 4.4.7. Languages

The language menu allows the user to change the language in which FishStatJ is displayed.



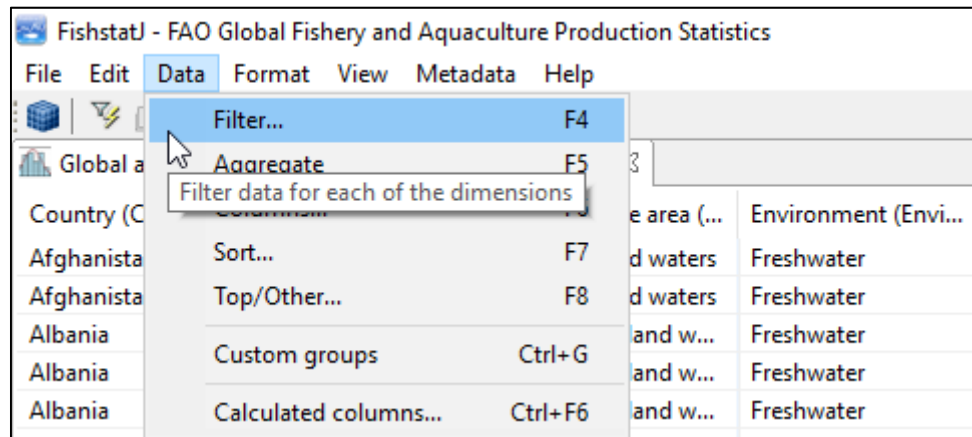
A familiar popup window will appear if the user tries to change the language. Click on the **Yes** button to restart the application.



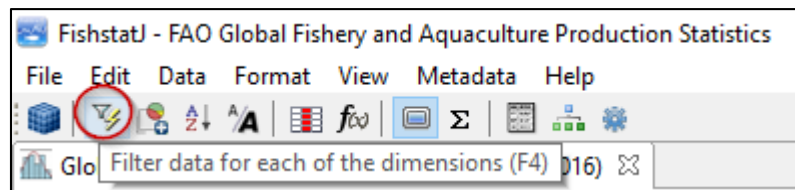
## 5. Data menu

### 5.1. Filter...

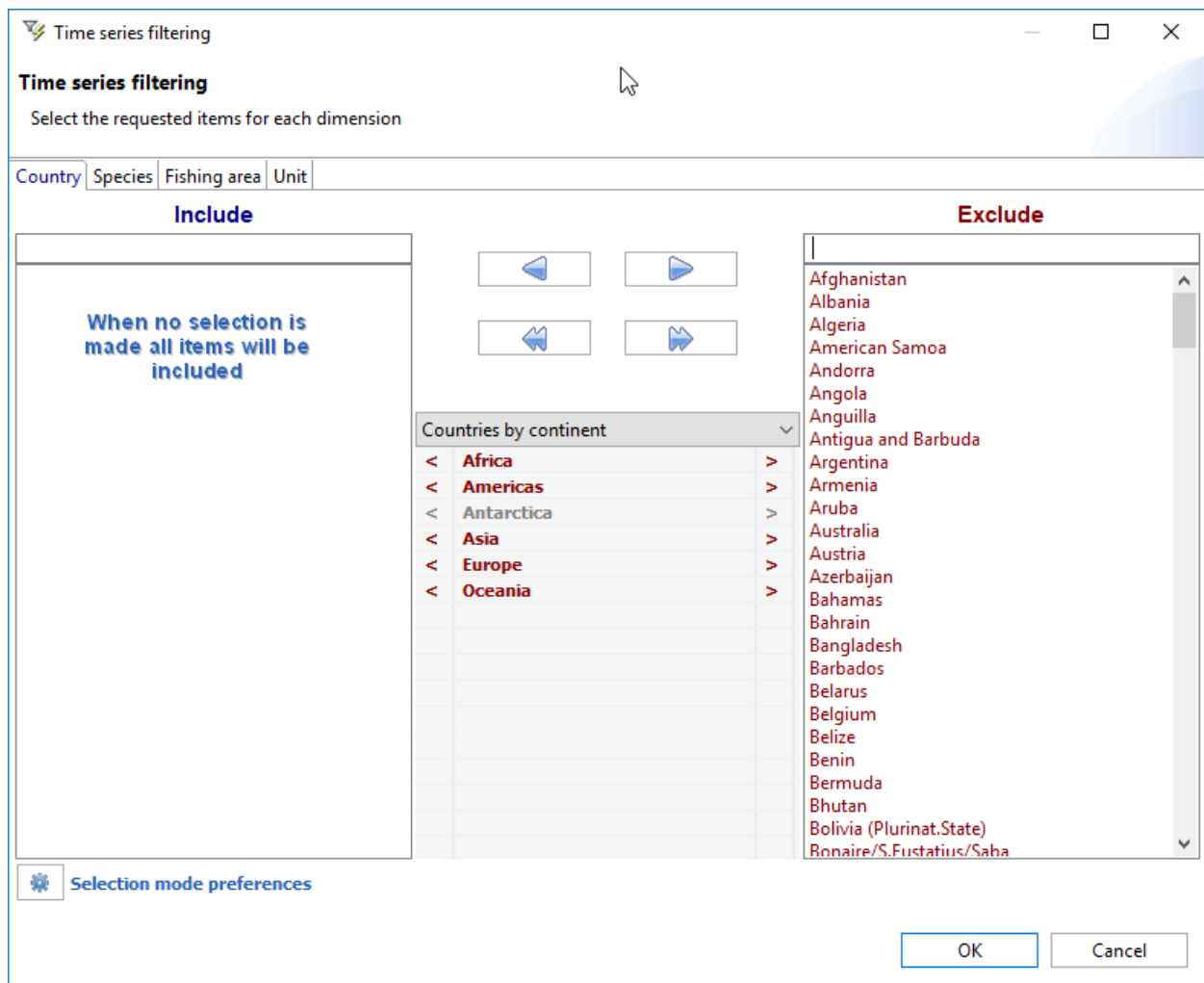
The timeseries filter becomes enabled once a dataset is open. **Filter** can be accessed (i) from the **Data** menu...



... and (ii) from the toolbar by clicking on the **Filter icon**.



Selecting **Filter** will open the **Time series filtering** window:



On the left side the items are *included* on the dataset panel, on the right side the items are *excluded* from the dataset panel. The **Include** side is empty by default, meaning that all items are shown.

Items available for filtering depend on the dimensions of the dataset loaded. In the example above, available filters are Country, Species and Fishing area. Australia is the only country selected in this example.

The arrow buttons copy the selected items from left-to-right or from right-to-left, according to the direction of the buttons:



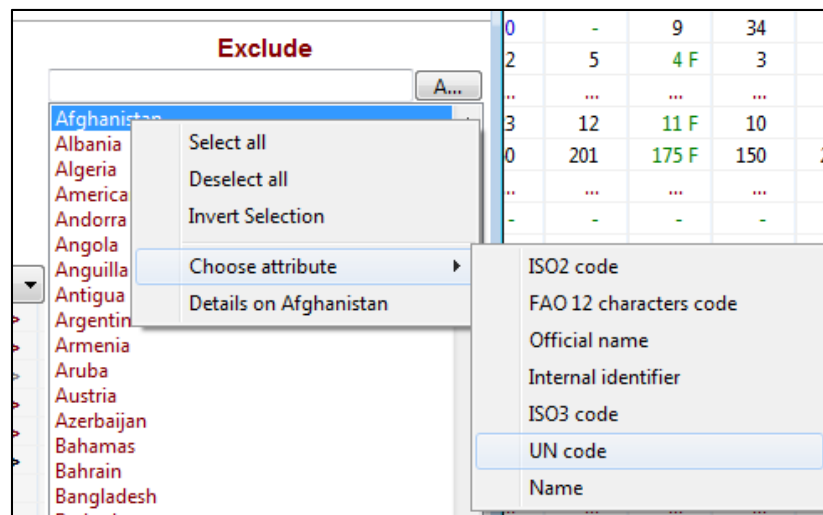
The double-arrows copy all items in the direction indicated:



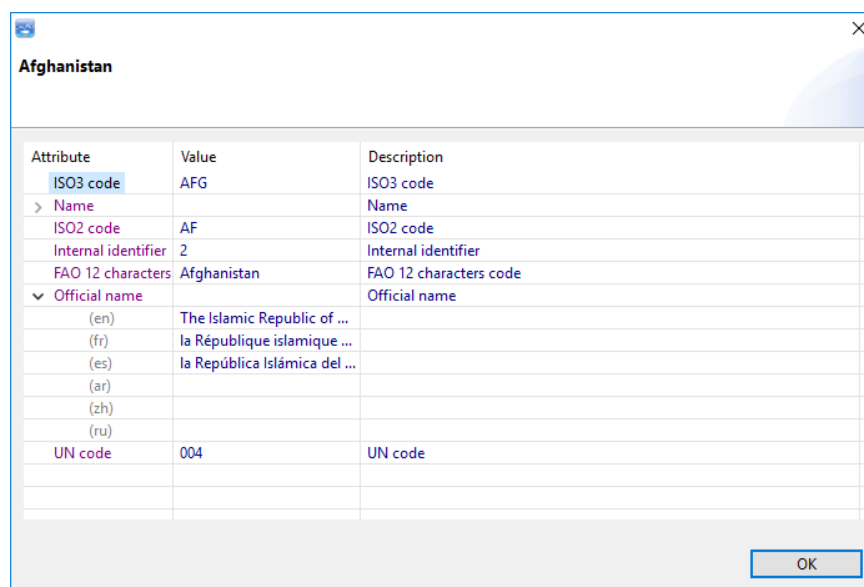
Clicking **OK** will activate the filter and refresh the data display in the main window.

Right-clicking on an item will display a quick selections menu:

- **Select all**
- **Deselect all**
- **Invert selection**
- **Choose attribute** allows to select the attribute used for the Filter dialog. This setting is remembered by FishStatJ:

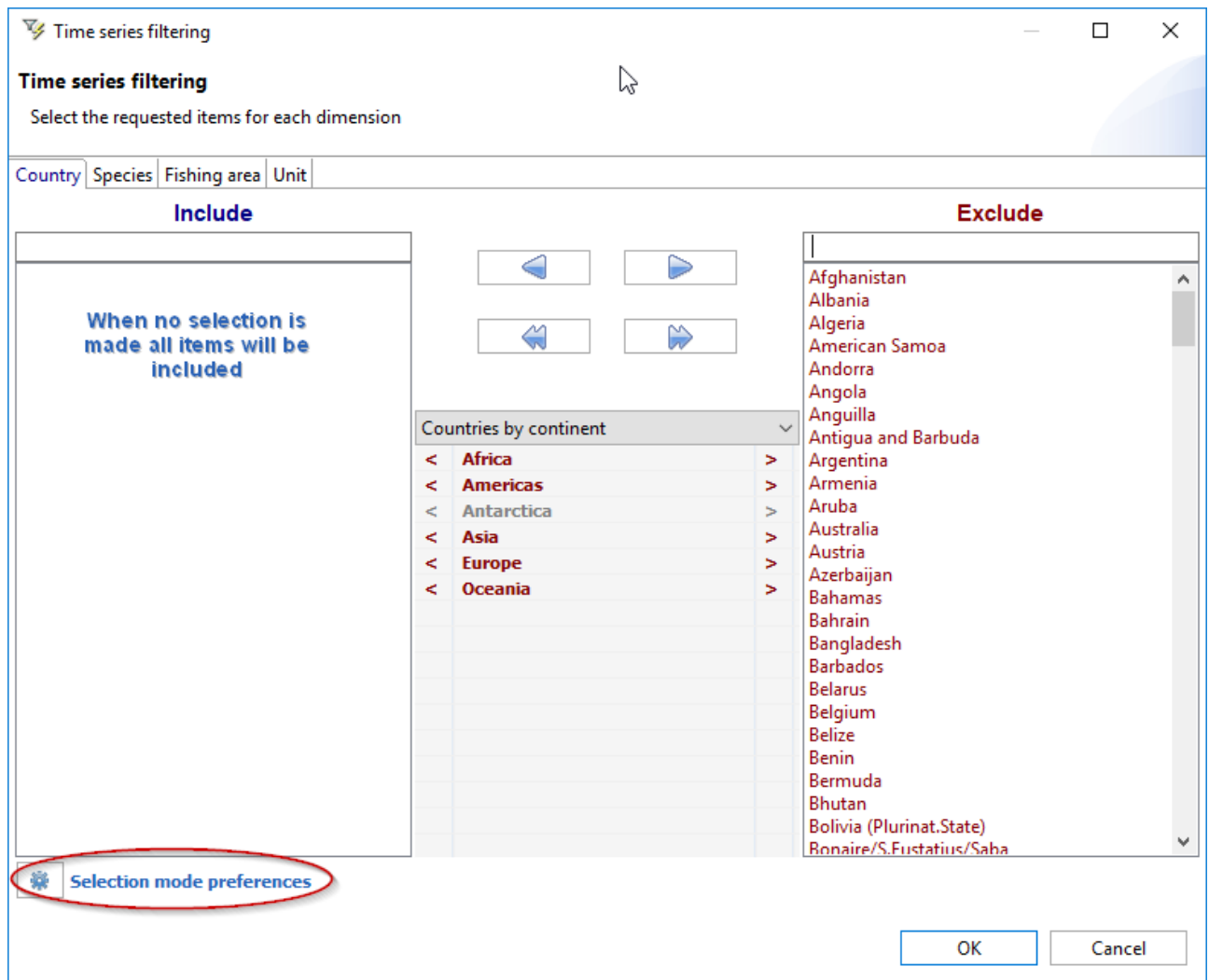


- **Details on [name of item]** shows details on the selected item:

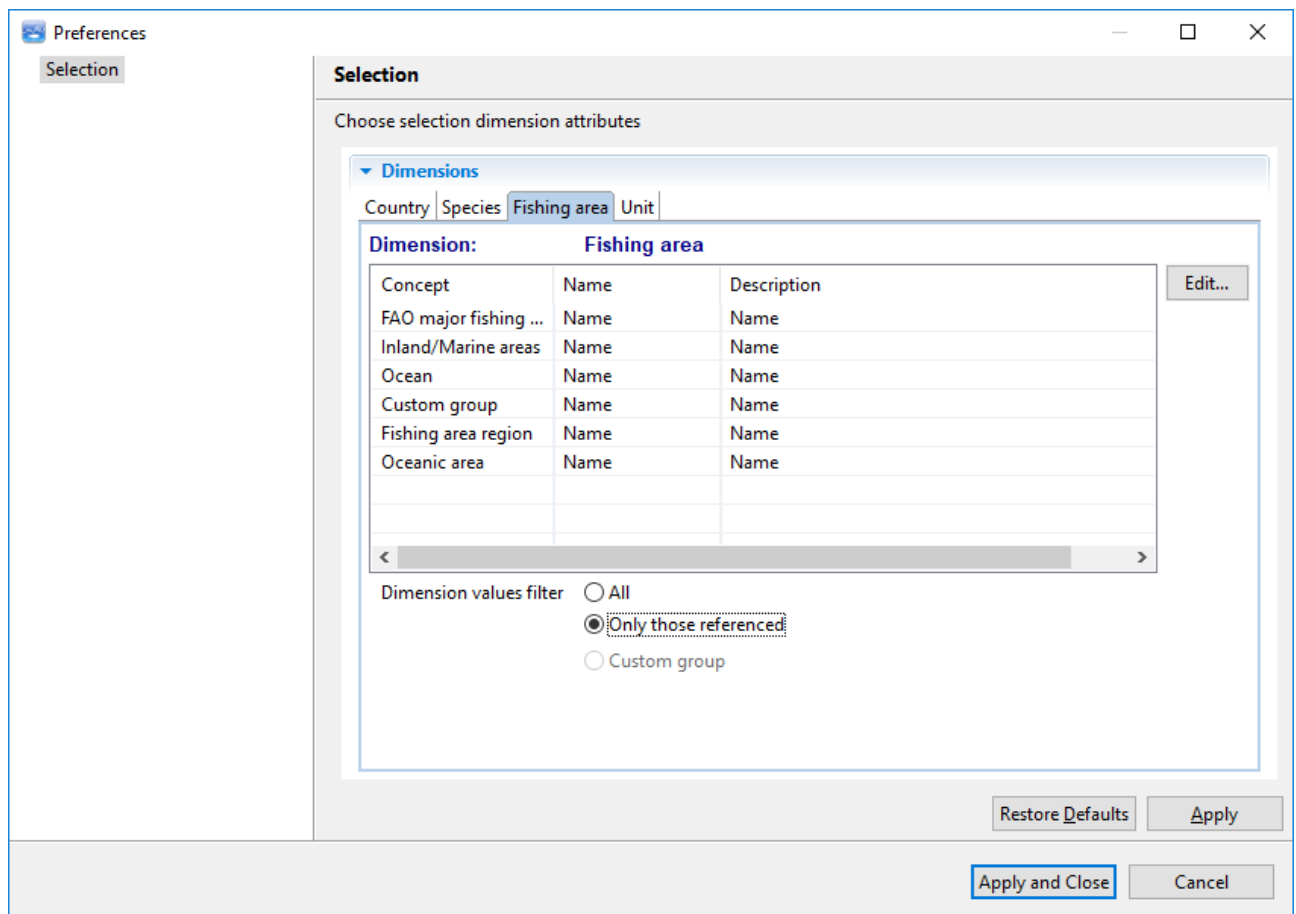


### 5.1.1. Selection mode preferences

The **Time series filtering** window includes a button to open the **Selection mode preferences**:



It will bring up the **Selection Preferences** window:



A **Dimension value filter** can be defined for each of the **Dimensions**. The filter controls the list of items shown in the **Time series filtering** window.

Dimension values filter

☐ All

☒ Only those referenced

☐ Custom group

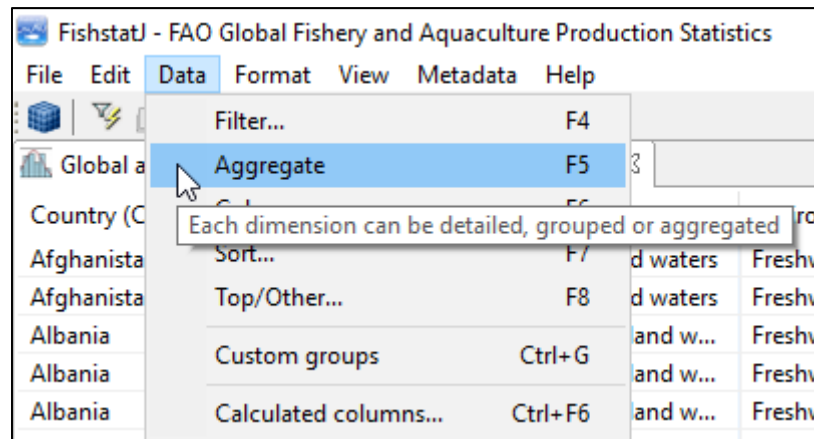
**All** will show all items included in that particular workspace.

**Only those referenced** will show only reference objects which appear in the timeseries.

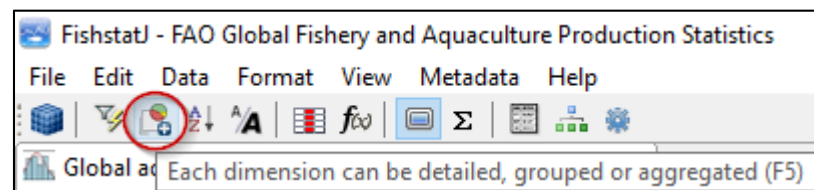
**Note:** to apply new settings, a restart of FishStatJ is required.

## 5.2. Aggregate

The **Aggregate** function is available once a dataset is open. It can be accessed (i) from the **Data** menu...



...and (ii) from the **Aggregate icon** in the dataset toolbar:



**Time series aggregation**

Select the level of aggregation for each dimension

**Country**

☒ Detailed ☐ Handpicked

☐ Grouped

☐ Aggregated Continent

**Species**

☒ Detailed ☐ Handpicked

☐ Grouped

☐ Aggregated CPC class

**Production area**

☒ Detailed ☐ Handpicked

☐ Grouped

☐ Aggregated Fishing area region

**Production source**

☒ Detailed ☐ Handpicked

☐ Grouped

☐ Aggregated Production source

OK Cancel

FishStatJ memorizes aggregation settings for each dataset.

On the **Time series aggregation** popup window, three modes of aggregation are available for each data dimension.

- When **Detailed** is selected, the dimension is effectively not aggregated.
- When the user selects **Grouped**, the aggregation can be made on the basis of each individual group associated with the dimension. Groups can also be **Handpicked**.

**Country**

☐ Detailed ☐ Handpicked

☒ Grouped

☐ Aggregated Continent

**Species**

☒ Detailed

☐ Grouped

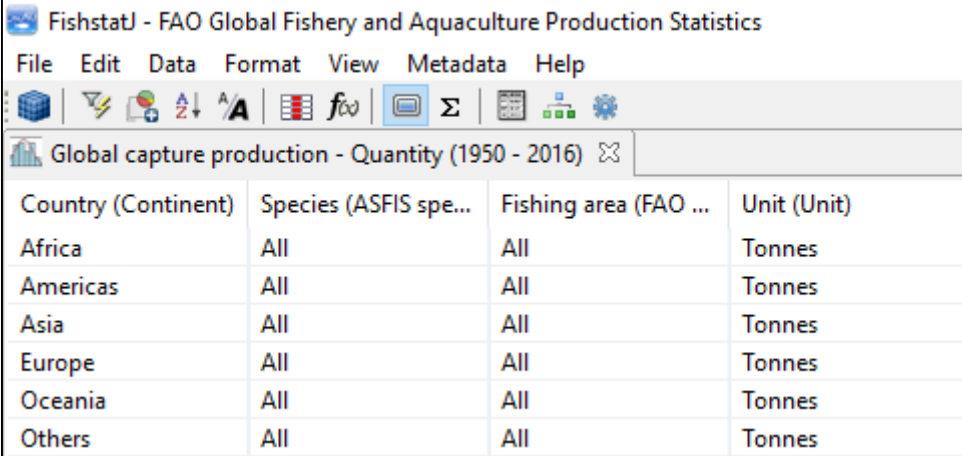
☐ Aggregated

Continent  
Economic class  
Economic group  
Fishery commission  
Geographical region  
Custom group



- When **Aggregated** is selected, all the data associated to a given dimension is aggregated.

As an example, grouping the Country dimension by Continent while aggregating Species and Fishing area, produces the following result:



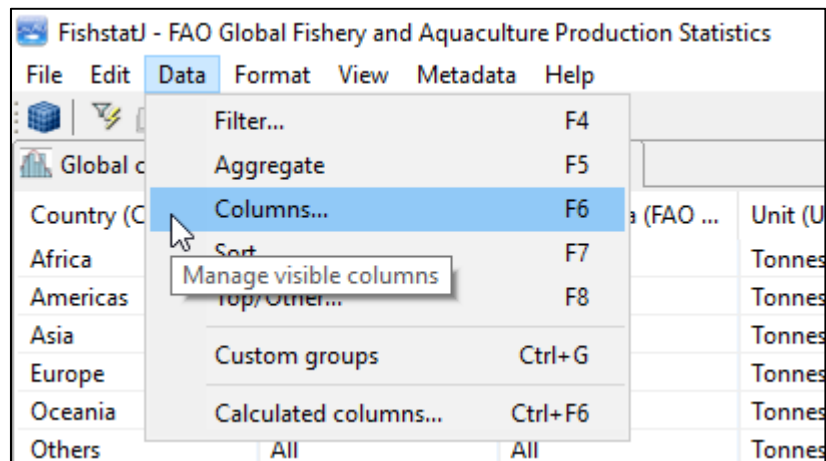
The screenshot shows the FishstatJ application window titled "FishstatJ - FAO Global Fishery and Aquaculture Production Statistics". The menu bar includes File, Edit, Data, Format, View, Metadata, and Help. The toolbar contains various icons for data manipulation. The main window displays a table titled "Global capture production - Quantity (1950 - 2016)". The table has four columns: Country (Continent), Species (ASFIS spe...), Fishing area (FAO ...), and Unit (Unit). The data is aggregated by continent, with all species and fishing areas set to "All", and the unit is "Tonnes".

Country (Continent)	Species (ASFIS spe...)	Fishing area (FAO ...)	Unit (Unit)
Africa	All	All	Tonnes
Americas	All	All	Tonnes
Asia	All	All	Tonnes
Europe	All	All	Tonnes
Oceania	All	All	Tonnes
Others	All	All	Tonnes

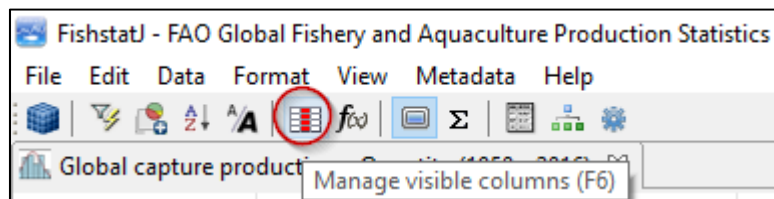
## 5.3. Columns...

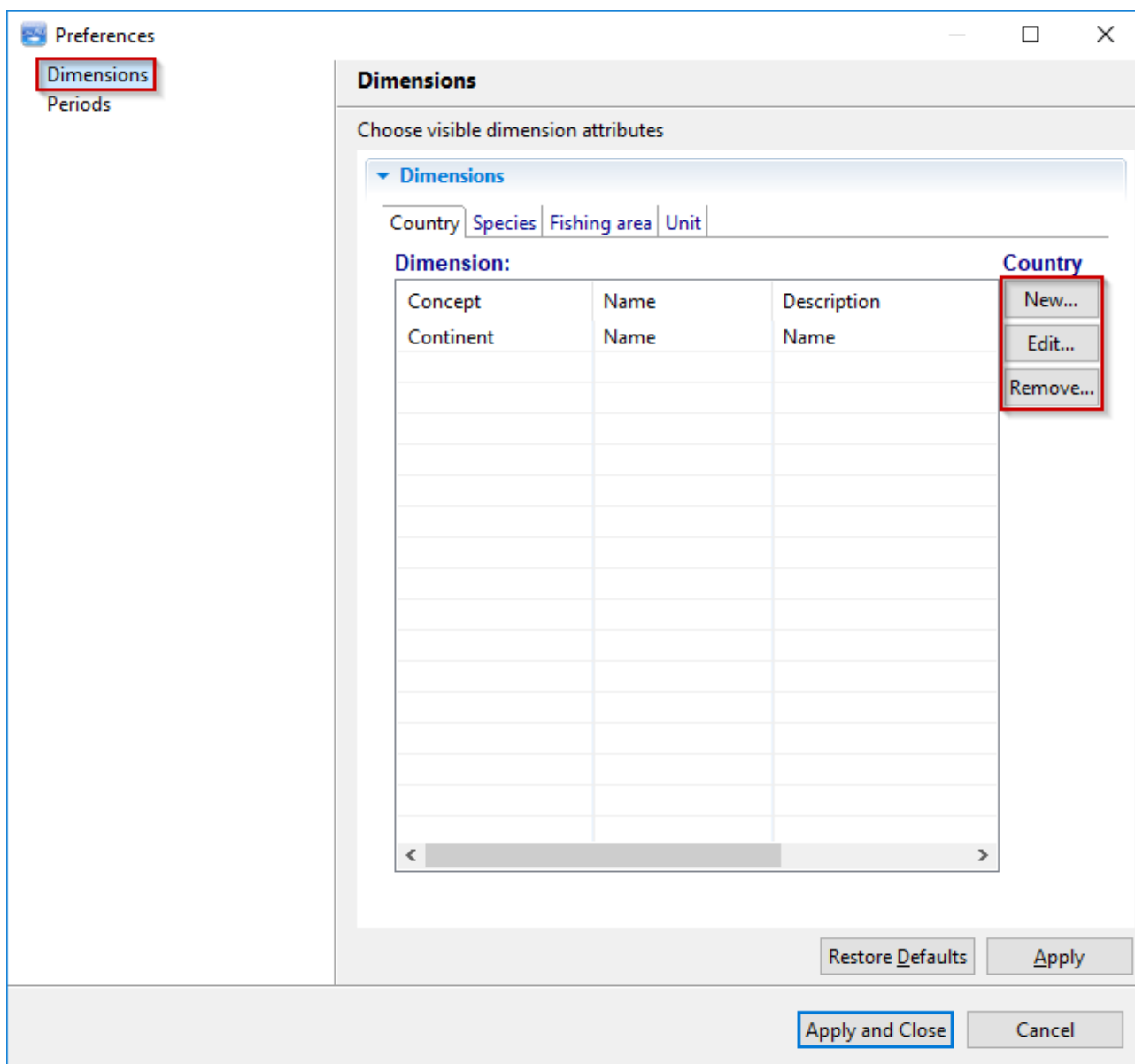
This function allows the user to change the columns (attributes) that are used to view the dataset. A **Preferences** panel is used, because the settings are remembered.

The **Columns** function can be accessed (i) from the **Data** menu...



... and (ii) from the toolbar by clicking on the **Columns** icon.

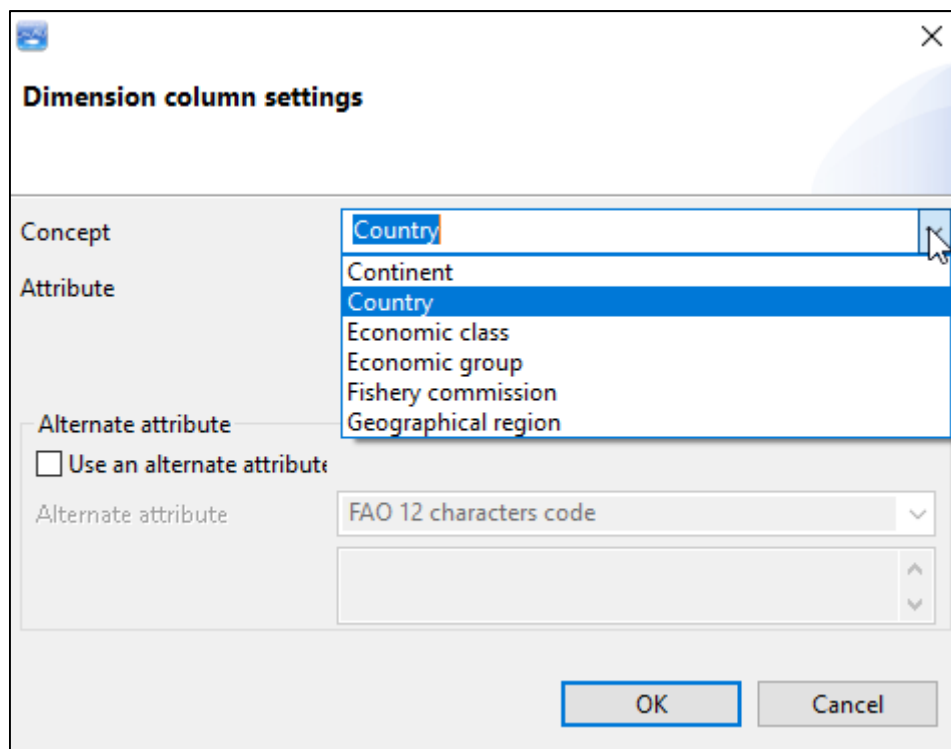




For each dimension, columns can be added, modified and removed by clicking on the **New...**, **Edit...** and **Remove...** buttons, respectively.

**Note:** For species, when the common name is not available, the scientific name will be shown instead.

When creating a new column or modifying an existing one, the Concept used to display a given Dimension can be changed by selecting **Concept**:



**Dimension column settings**

Concept: Country

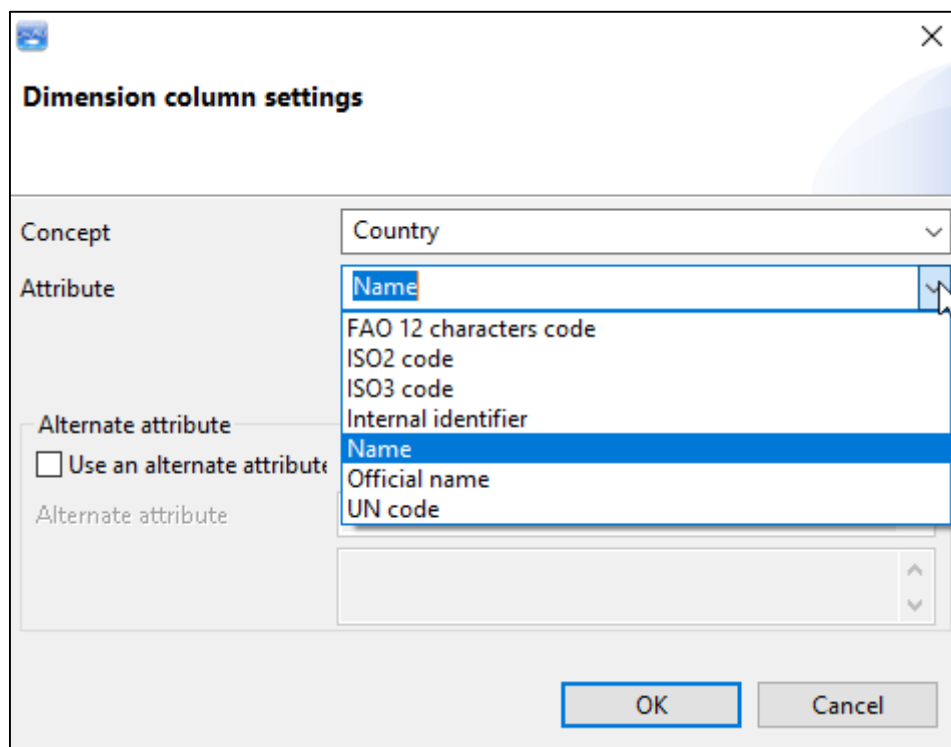
Attribute:

Alternate attribute: ☐ Use an alternate attribute

Alternate attribute: FAO 12 characters code

OK Cancel

For each Concept, the **Attribute** can be selected:



**Dimension column settings**

Concept: Country

Attribute: Name

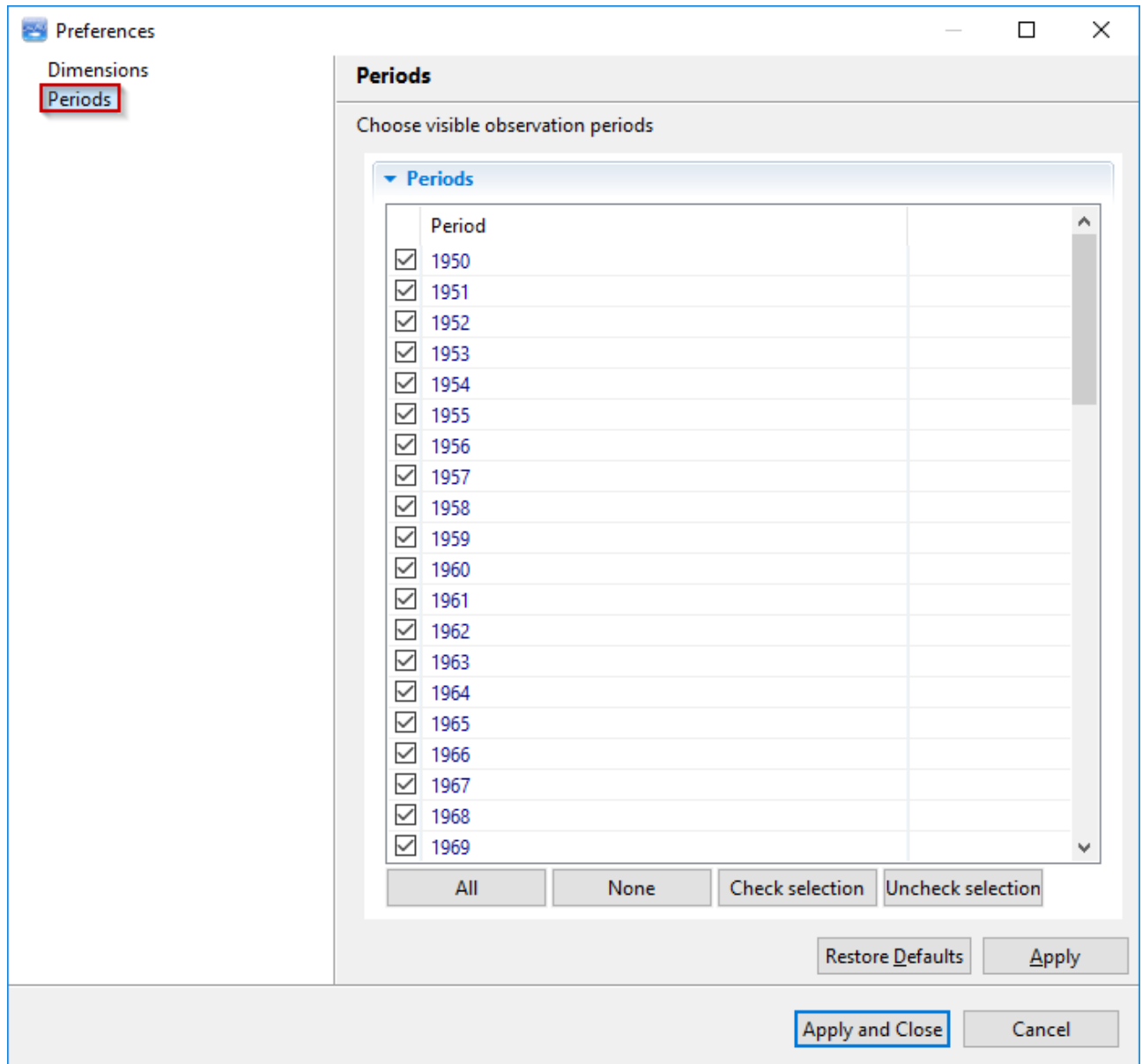
Alternate attribute: ☐ Use an alternate attribute

Alternate attribute:

OK Cancel

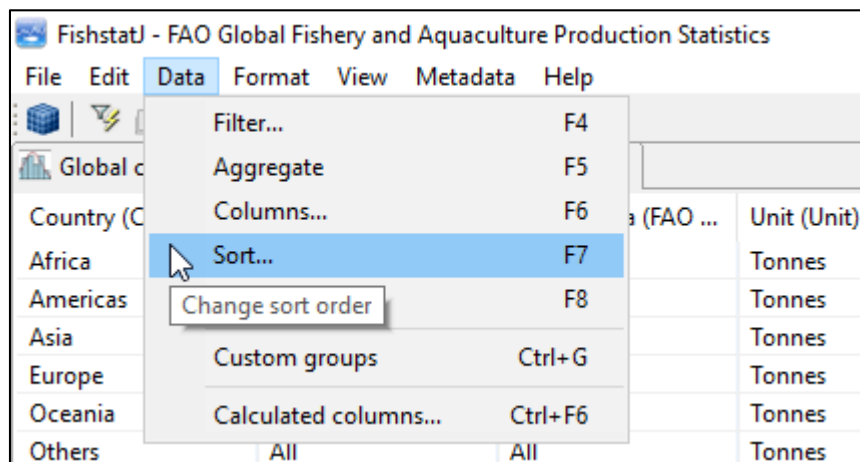
Example: for the **Species** dimension, the common names used to display species can be replaced with the corresponding scientific names by selecting the **Scientific name** attribute.

**Periods** are the years on display, which may be changed, as shown below:

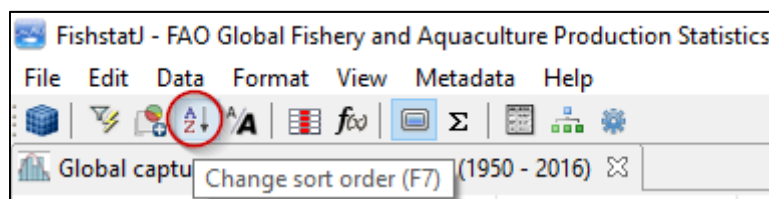


## 5.4. Sort...

The **Sort** function can be accessed (i) from the **Data** menu...



... and (ii) from the toolbar by clicking on the **Sort icon**.



The **Sort** window allows to choose how to sort the data. Sorting can be different from the columns shown on the display: for example it is possible to display the Species dimension by ISSCAP group, but sort it by Commodity. The sort ordering (i.e. ascending or descending) is selected using the **Direction** options on the right end of the window.

**Sort**  
Choose the data sorting criteria.

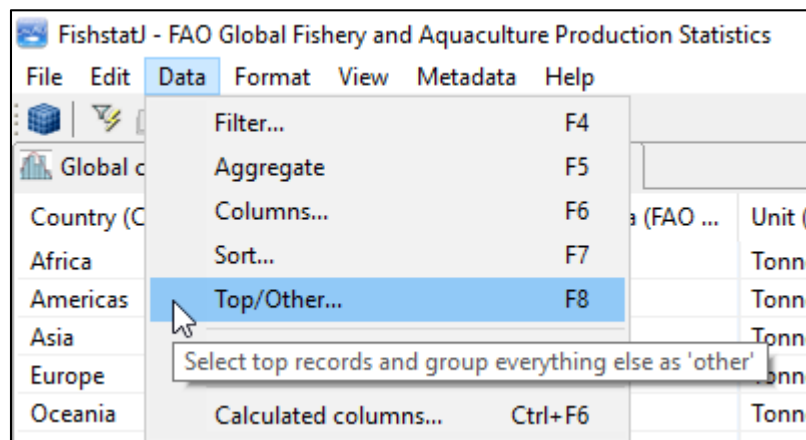
	Dimension/Year	Concept	Attribute	Direction
<input checked="" type="checkbox"/> Active	Country	Country	Name	<input checked="" type="radio"/> A↓ <input type="radio"/> Z↓
<input checked="" type="checkbox"/> Active	Species	ASFIS species	Name	<input checked="" type="radio"/> A↓ <input type="radio"/> Z↓
<input checked="" type="checkbox"/> Active	Production area	major fishing area	Name	<input checked="" type="radio"/> A↓ <input type="radio"/> Z↓
<input checked="" type="checkbox"/> Active	Production source	production source	Name	<input checked="" type="radio"/> A↓ <input type="radio"/> Z↓
<input checked="" type="checkbox"/> Active	Unit	Unit	Name	<input checked="" type="radio"/> A↓ <input type="radio"/> Z↓

OK Restore defaults Cancel

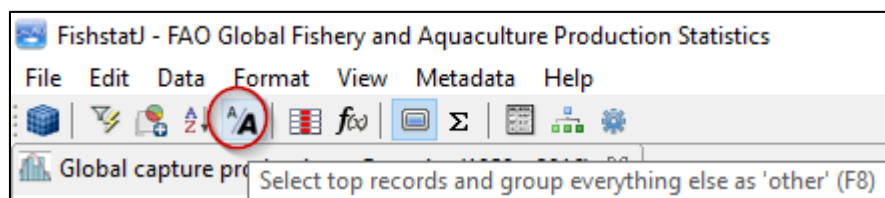
When using multiple sorting criteria, higher priority will be given to the criteria that are positioned higher in the list order.

## 5.5. Top/Other...

The **Top/Other** function can be accessed (i) from the **Data** menu...



... and (ii) from the toolbar by clicking on the **Top/Other** icon.





The **Top/Other** menu allows selecting records by the following criteria:

- **Top** [number] of records;
- **Top** [percentage] of records; or
- **records greater than** [cut-off value].

**Top/Other selection**  
Select top records and groups everything else as "Other"

Dataset: Global production by production source

by field: 1950

by measure: Number

☒ All records

☐ Top records

☐ Records comprising percent of total and greater

☐ Values and greater

OK Cancel

You can enter selection value (number of records/percent of records/value greater). All records that do not meet the criteria are aggregated into others, this is why the function is called Top/Other.

Global production by production source - Quantity (1950 - 2016)						
Country (Country)	Species (ASFIS spe...	Production area (F...	Production source...	Unit (Unit)	2009	2010
Indonesia	Euclidean seawee...	Pacific, Western C...	Aquaculture prod...	Tonnes	91688	3399436
Others	Others	Others	Others	Others	73925....	163522898....

As an example, selecting the top 10 records for the year 1975 is shown below.

**Top/Other selection**  
Select top records and groups everything else as "Other"

**Dataset: Global production by production source**

by field: 1975

by measure: Tonnes

☐ All records

☒ Top: 10 records

☐ Records comprising: percent of total

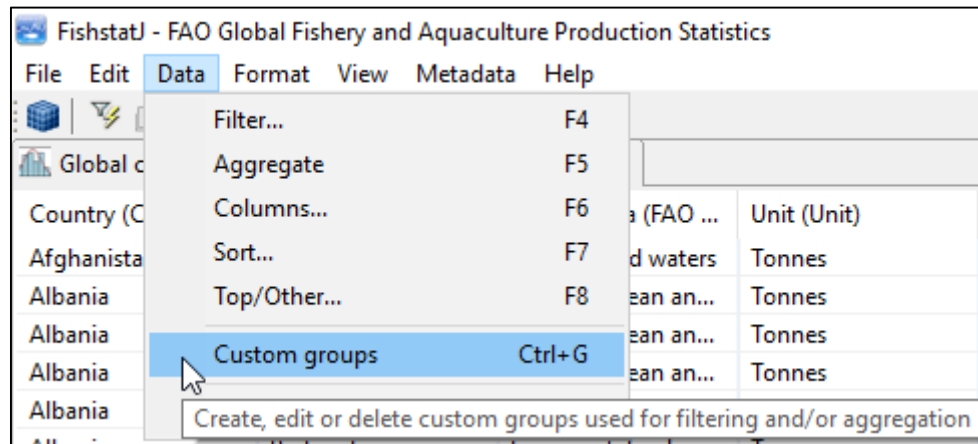
☐ Values: and greater

OK Cancel

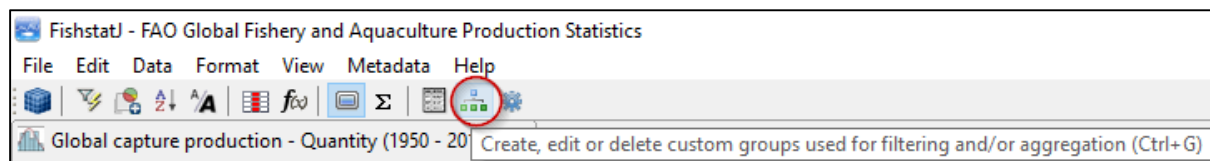
## 5.6. Custom groups

The **Custom groups** function allows the user to define specific groups of countries, species, fishing areas, and measures. Typically, such groups are created by users to avoid repeated filtering for groups that are part of common workflows.

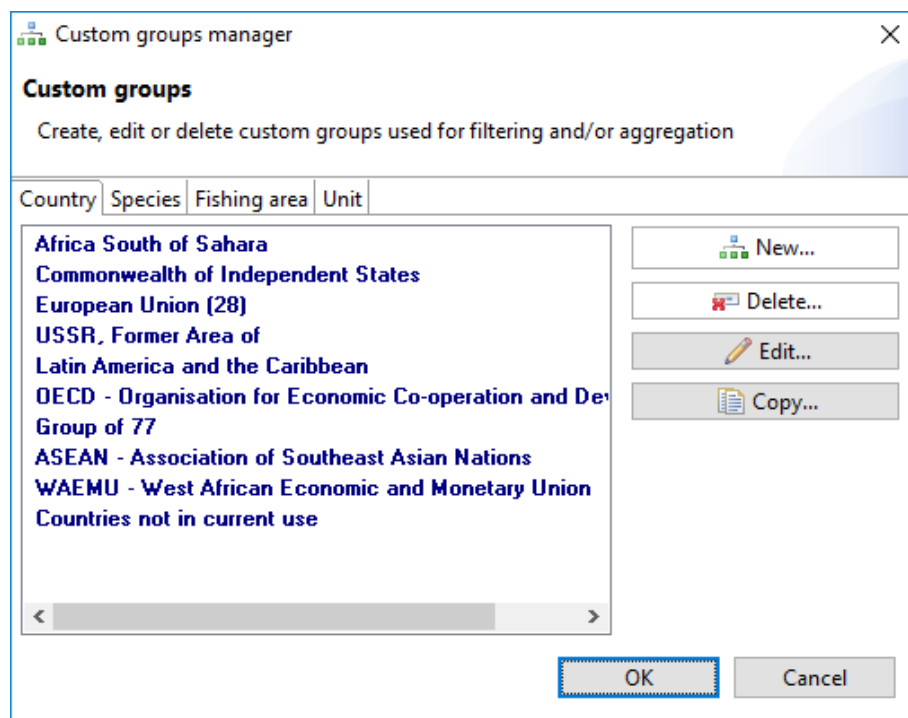
**Custom groups** can be accessed (i) from the **Data** menu...



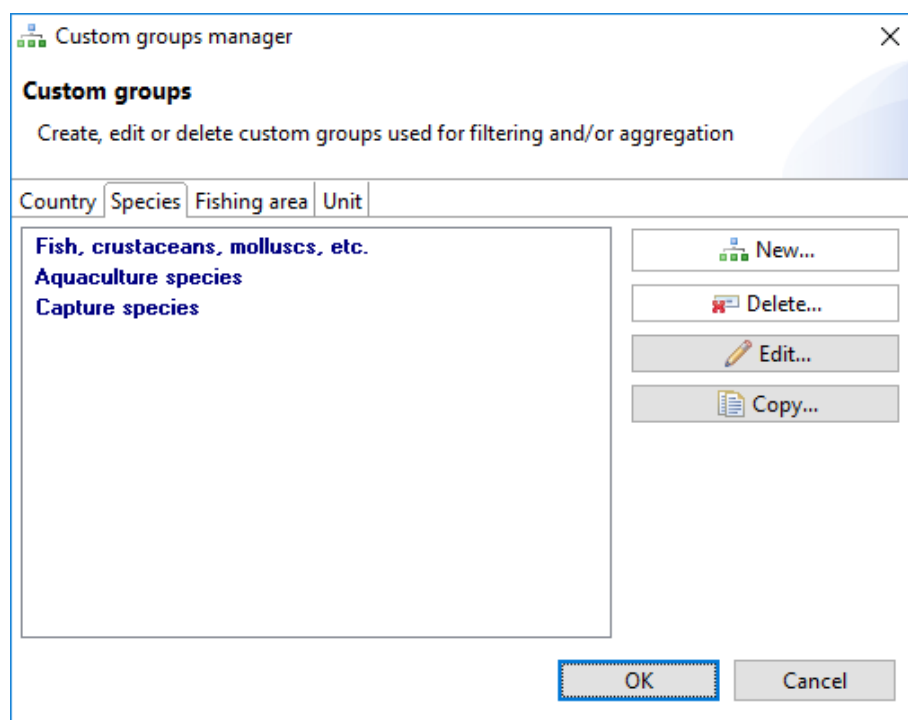
... and (ii) from the toolbar by clicking on the **Custom groups** icon.



**Note:** The **Custom groups** menu item is only available when a dataset is open.



A number of custom groups are predefined for some time series elements. The above screen shows the custom groups for the **Country** dimension, while the image below shows custom groups that already defined for the **Species** dimension.



When a new custom group is to be created with the **New...** button, the **New custom group definition** window appears on the screen.

New custom group definition

**Include**

When no selection is made all items will be included

Countries by continent

<	Africa	>
<	Americas	>
<	Antarctica	>
<	Asia	>
<	Europe	>
<	Oceania	>

**Exclude**

- Afghanistan
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica others
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belgium-Luxembourg
- Belize

Selection mode preferences

**Custom group name**

English French Spanish Arabic Chinese Russian

**Custom group description**

English French Spanish Arabic Chinese Russian

OK Cancel

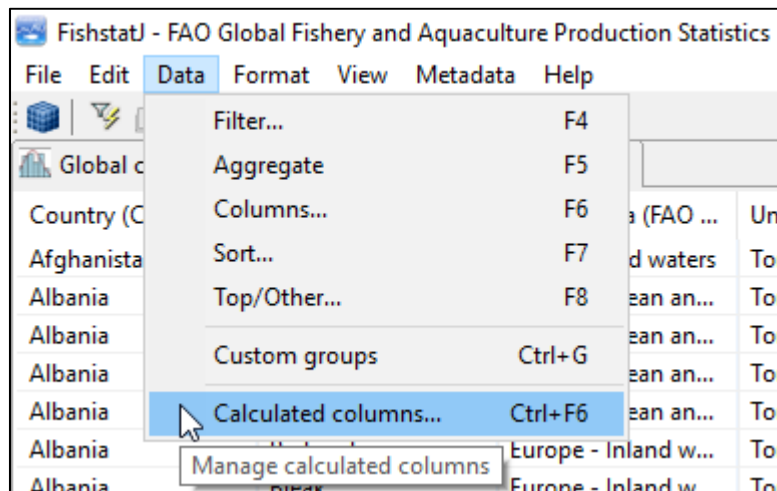
When an existing custom group requires editing with the **Edit...** button, the **New custom group definition** popup is presented with the existing group members listed in the **Include** field.

A **Custom group name** and **Custom group description** can be entered in the lower part of the window. As a minimum the English field should be filled.

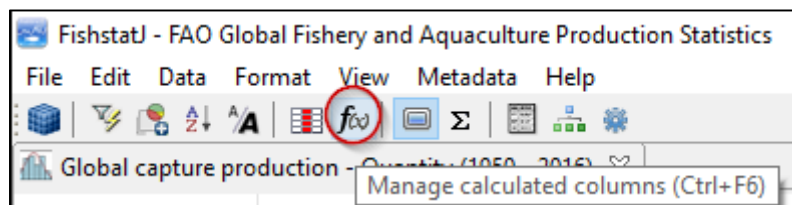
## 5.8. Calculated columns...

The **Calculated columns** function allows the user to create additional columns that are built from the original dataset columns.

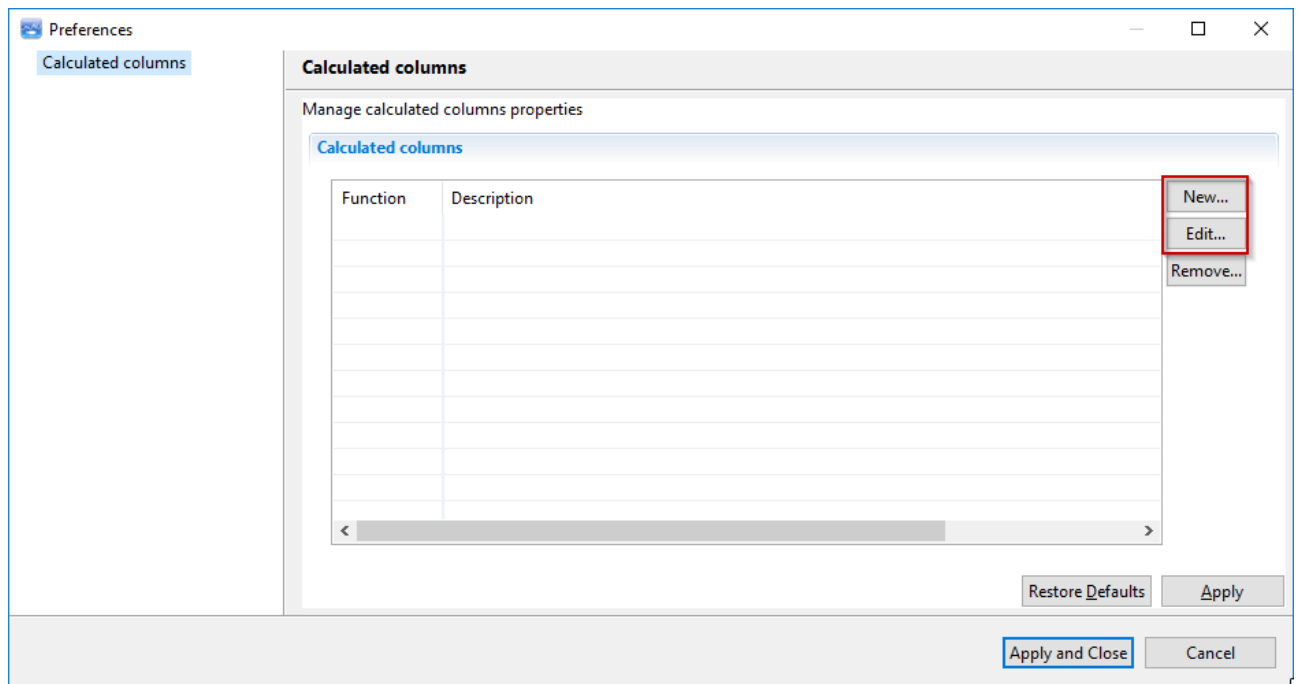
**Calculated columns** can be accessed (i) from the **Data** menu...



... and (ii) from the toolbar by clicking on the **Calculated columns icon**.



When this function is accessed, a **Calculated columns Preferences** window appears, where the user can create or edit calculated columns is displayed as shown below:



Calculated columns may be created (**New...**) or edited (**Edit...**) by clicking on the corresponding buttons. This opens the **Calculated columns definition** popup window.

**Calculated columns definition**  
Define a new calculated column

**Column name**

**Function** Arithmetic mean ▼

Computes the arithmetic mean of the set of values. Uses the definitional formula:  
 $\text{mean} = \frac{\sum(x_i)}{n}$  where  $n$  is the number of observations.

**Parameters**

**Skipping parameters**

Skip unknown values ☐ Yes ☒ No

Skip estimated values ☐ Yes ☒ No

Skip negligible values ☐ Yes ☒ No

Skip zero values ☐ Yes ☒ No

**Function parameters**



Many statistical functions are available for calculated columns, as shown below:

**Calculated columns definition**  
Define a new calculated column

**Column name**

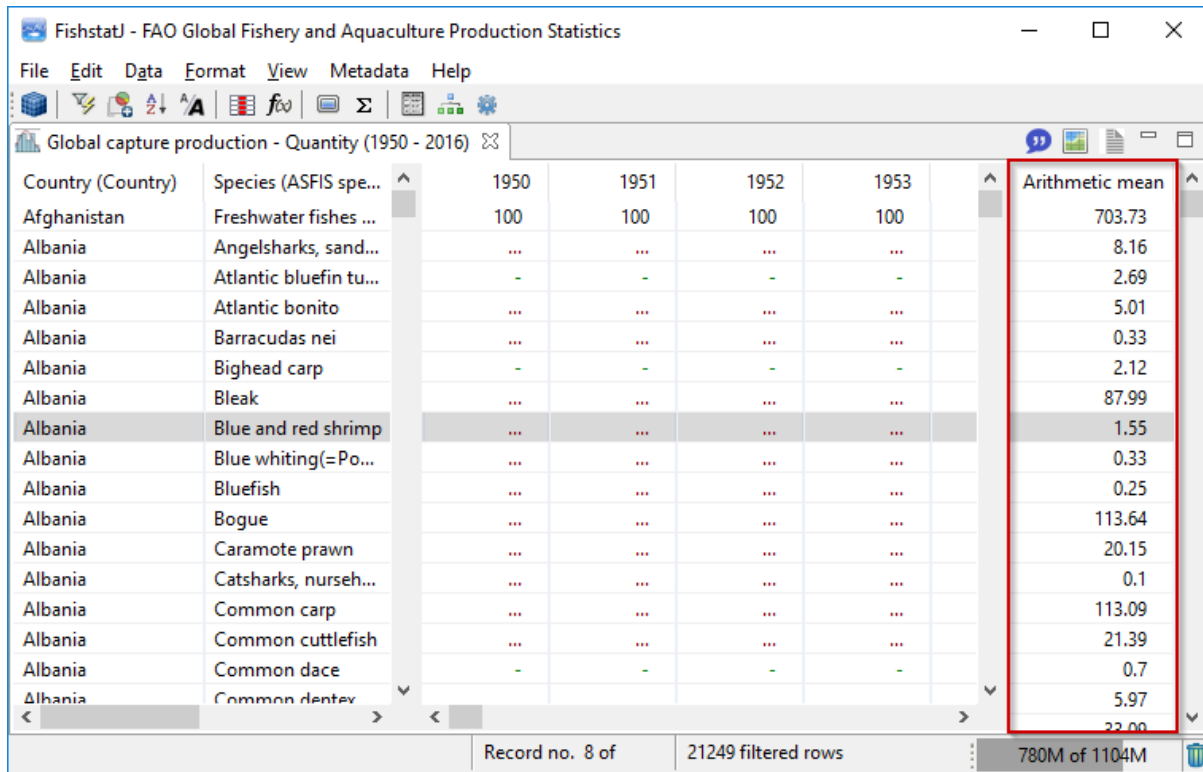
**Function**

- Arithmetic mean
- Arithmetic mean
- Geometric mean
- Harmonic mean
- Max
- Median
- Min
- Percentile
- Regression Pearson's product moment correlation coefficient
- Regression coefficient of determination
- Regression intercept
- Regression intercept standard error estimate
- Regression mean square error
- Regression prediction
- Regression slope
- Regression slope confidence interval
- Regression slope correlation significance
- Regression slope standard error
- Root mean square
- Second central moment
- Skewness
- Standard deviation
- Sum
- Third central moment
- Variance

**Parameters**

- ☐ Skipping parameters
- ☐ Skip unknown values
- ☐ Skip estimated values
- ☐ Skip negligible values
- ☐ Skip zero values

When a calculated column is created, it is shown on the right side of the dataset panel:



FishstatJ - FAO Global Fishery and Aquaculture Production Statistics

File Edit Data Format View Metadata Help

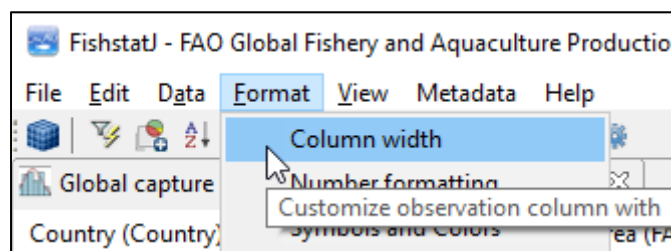
Global capture production - Quantity (1950 - 2016)

Country (Country)	Species (ASFIS spe...	1950	1951	1952	1953	Arithmetic mean
Afghanistan	Freshwater fishes ...	100	100	100	100	703.73
Albania	Angelsharks, sand...	...	...	...	...	8.16
Albania	Atlantic bluefin tu...	-	-	-	-	2.69
Albania	Atlantic bonito	...	...	...	...	5.01
Albania	Barracudas nei	...	...	...	...	0.33
Albania	Bighead carp	-	-	-	-	2.12
Albania	Bleak	...	...	...	...	87.99
Albania	Blue and red shrimp	...	...	...	...	1.55
Albania	Blue whiting(=Po...	...	...	...	...	0.33
Albania	Bluefish	...	...	...	...	0.25
Albania	Bogue	...	...	...	...	113.64
Albania	Caramote prawn	...	...	...	...	20.15
Albania	Catsharks, nurseh...	...	...	...	...	0.1
Albania	Common carp	...	...	...	...	113.09
Albania	Common cuttlefish	...	...	...	...	21.39
Albania	Common dace	-	-	-	-	0.7
Albania	Common dentex	...	...	...	...	5.97
						22.00

Record no. 8 of 21249 filtered rows 780M of 1104M

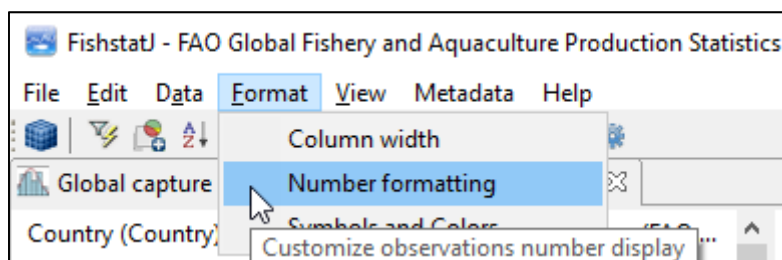
## 6. Format menu

### 6.1. Column width



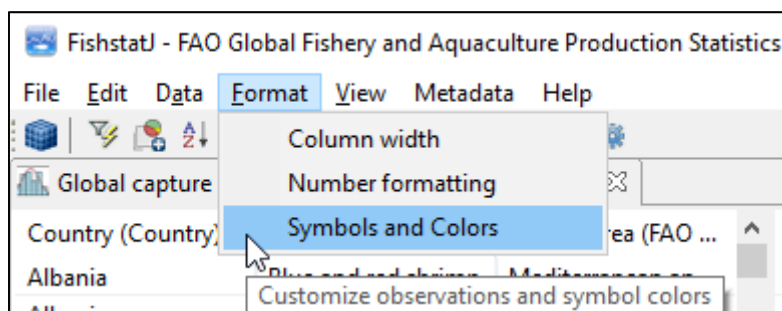
Selecting **Column width** will take the user to the **Data display** tab of the **Preferences** window. See section 4.4.2 for more information.

### 6.2. Number formatting



Selecting **Number formatting** will take the user to the **Data display** tab of the **Preferences** window. See section 4.4.3 for more information.

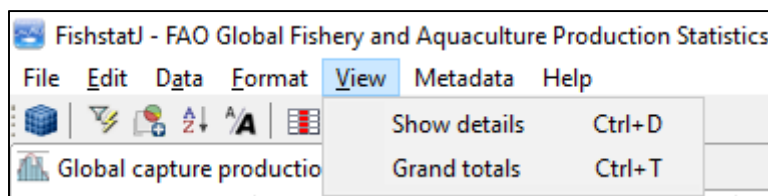
### 6.3. Symbols and colors



Selecting **Symbols and Colors** will take the user to the **Data display** tab of the **Preferences** window. See section 4.4.4 for more information.

## 7. View menu

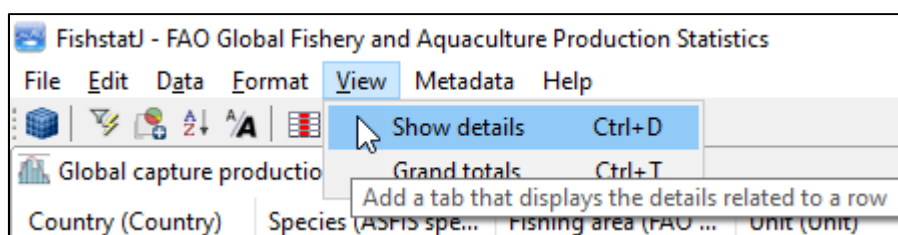
The **View** menu is only enabled when a dataset is open, otherwise it is dimmed (not available).



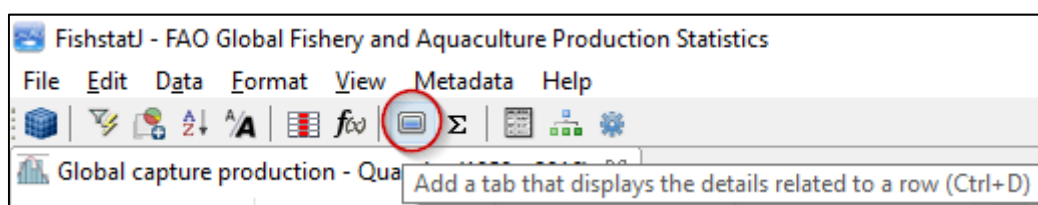
### 7.1. Show details

Selecting or deselecting this option will turn on or off the detailed information that is displayed at the bottom of the FishStatJ main display.

The **Show details** option can be toggled on and off (i) from the **View** menu...



... and (ii) from the toolbar by clicking on the **Show details icon**.



Turning on this option will reduce the number of time series records on display. On the image below, the **Row Details** tab is turned on.

The screenshot shows the FishstatJ application window. The main table displays global capture production data for Albania from 1950 to 2016. The 'Row Details' tab is selected, showing a grid of input fields for each year from 1950 to 1970. The status bar at the bottom indicates '21249 filtered rows' and '386M of 1005M' data.

Country (Country)	Species (ASFIS spe...)	Fishing area (FAO ...)	1950	1951	1952	1953
Albania	Blue and red shrimp	Mediterranean an...	...	...	...	...
Albania	Blue whiting(=Po...	Mediterranean an...	...	...	...	...
Albania	Bluefish	Mediterranean an...	...	...	...	...
Albania	Bogue	Mediterranean an...	...	...	...	...
Albania	Caramote prawn	Mediterranean an...	...	...	...	...
Albania	Catsharks, nurseh...	Mediterranean an...	...	...	...	...
Albania	Common carp	Europe - Inland w...	...	...	...	...
Albania	Common cuttlefish	Mediterranean an...	...	...	...	...
Albania	Common dace	Europe - Inland w...	-	-	-	-
Albania	Common dentex	Mediterranean an...	...	...	...	...
Albania	Common octopus	Mediterranean an...	...	...	...	...

1950	1951	1952	1953	1954	1955	1956

21249 filtered rows      386M of 1005M

Deselecting this option will remove the 'details' shown at the bottom of the FishStatJ main display. In the image below, the details are not displayed:

FishstatJ - FAO Global Fishery and Aquaculture Production Statistics

File Edit Data Format View Metadata Help

Global capture production - Quantity (1950 - 2016)

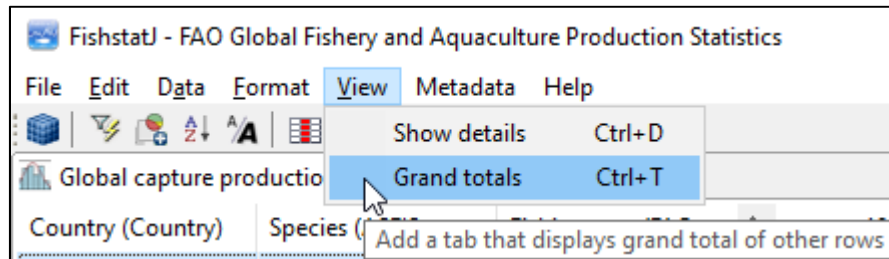
Country (Country)	Species (ASFIS spe...	Fishing area (FAO ...	1950	1951	1952	1953
Albania	Blue and red shrimp	Mediterranean an...	...	...	...	...
Albania	Blue whiting(=Po...	Mediterranean an...	...	...	...	...
Albania	Bluefish	Mediterranean an...	...	...	...	...
Albania	Bogue	Mediterranean an...	...	...	...	...
Albania	Caramote prawn	Mediterranean an...	...	...	...	...
Albania	Catsharks, nurseh...	Mediterranean an...	...	...	...	...
Albania	Common carp	Europe - Inland w...	...	...	...	...
Albania	Common cuttlefish	Mediterranean an...	...	...	...	...
Albania	Common dace	Europe - Inland w...	-	-	-	-
Albania	Common dentex	Mediterranean an...	...	...	...	...
Albania	Common octopus	Mediterranean an...	...	...	...	...
Albania	Common sole	Mediterranean an...	...	...	...	...
Albania	Common spiny lo...	Mediterranean an...	...	...	...	...
Albania	Common squids ...	Mediterranean an...	...	...	...	...
Albania	Croakers, drums nei	Mediterranean an...	...	...	...	...
Albania	Crucian carp	Europe - Inland w...	...	...	...	...
Albania	Deep-water rose s	Mediterranean an...	...	...	...	...

21249 filtered rows 379M of 1005M

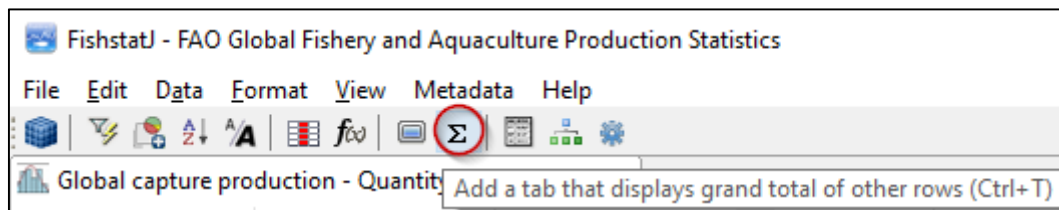
## 7.2. Grand totals

Activating **Grand totals** will create one or two (depending on the dataset) additional tabs in the FishStatJ display that show grand totals for the time-series.

The **Grand totals** option can be toggled on and off (i) from the **View** menu...



... and (ii) from the toolbar by clicking on the **Grand totals icon**.



The new tab(s) will be opened at the bottom of the window, as shown on the image below:

FishstatJ - FAO Global Fishery and Aquaculture Production Statistics

File

Edit

Data

Format

View

Metadata

Help

For example, the **Global production by production source - Quantity** dataset (shows above) has two Grand total tabs (**Number** and **Tonnes**) because two types of units can be used to display the data.

**Note:** When selecting a grouped aggregation (refer to section 5.2) which has overlapping group members the total shown is not the sum of the data on display, but the sum of the underlying raw data. Overlapping means, that a dimension (for example country) of a statistical observation is present in more than one group. In this case, the observations (for example catch) of this country are counted for each of the groups of which the country is a member; but are only counted once for the total.

Examples of overlapping groups are economic groups or RFB (ac country can be member of several regional fishery bodies).



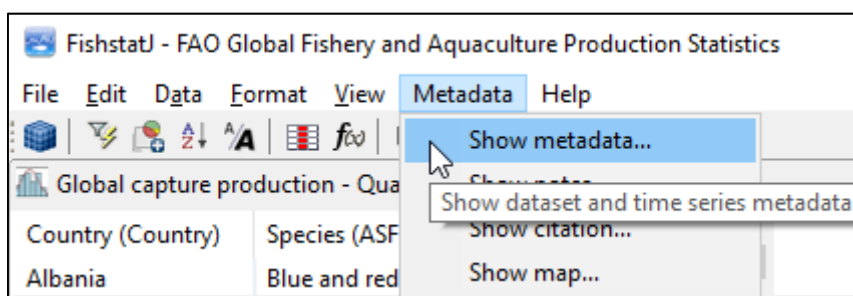
## 8. Metadata menu

The **Show notes...**, **Show citation...** and **Show map...** items are enabled depending on the attachments that are available for the current dataset.

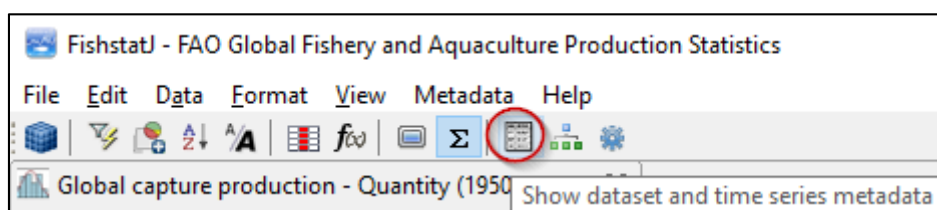
### 8.1. Show metadata...

Selecting this option will display the metadata about the time-series that is selected within FishStatJ.


Metadata can be accessed (i) from the **Metadata** menu...




... and (ii) from the toolbar by clicking on the **Metadata icon**.



An example of the window showing metadata is shown below:

 Metadata

**Metadata**  
 Global capture production - Quantity (1950 - 2016)
 

Metadata Dimensions Attachments time series

**Global capture production**  
 Country Species Fishing area Unit

**Dimension** Country **Acronym** COUNTRY  
**Description** Country or territory

**Concept** Country **Acronym** COUNTRY  
**Description** Country or territory

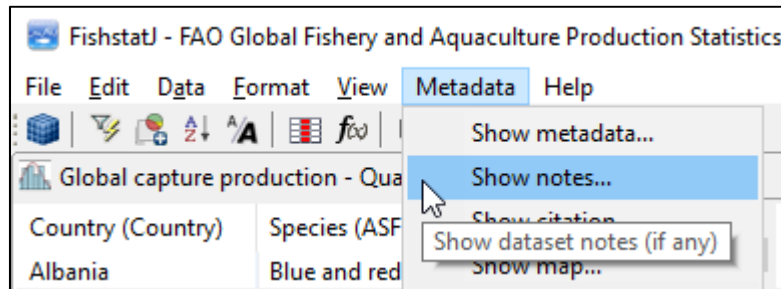
UN_CODE	ISO_3_CODE	NAME.EN	NAME.FR	NAME.ES	ISO_2_CODE	ALPHA12_C
0	EUR	European Union	Union Europé...	Unión Europea	EU	EU
004	AFG	Afghanistan	Afghanistan	Afganistán	AF	Afghanistar
008	ALB	Albania	Albanie	Albania	AL	Albania
010	ATA	Antarctica oth...	Antarctique a...	Antartida otros	AQ	Antarctica
012	DZA	Algeria	Algérie	Argelia	DZ	Algeria
016	ASM	American Sam...	Samoa améric...	Samoa Americ...	AS	Amer Samo
020	AND	Andorra	Andorre	Andorra	AD	Andorra
024	AGO	Angola	Angola	Angola	AO	Angola
028	ATG	Antigua and B...	Antigua-et-Ba...	Antigua y Bar...	AG	Antigua Bar
031	AZE	Azerbaijan	Azerbaïdjan	Azerbaiyán	AZ	Azerbaijan
032	ARG	Argentina	Argentine	Argentina	AR	Argentina

Copy to Clipboard
 OK

## 8.2. Show notes...

Selecting this option will display the notes attached to a dataset. Notes contain descriptions about the time-series that is selected within FishStatJ.

Notes can be accessed (i) from the **Metadata** menu...

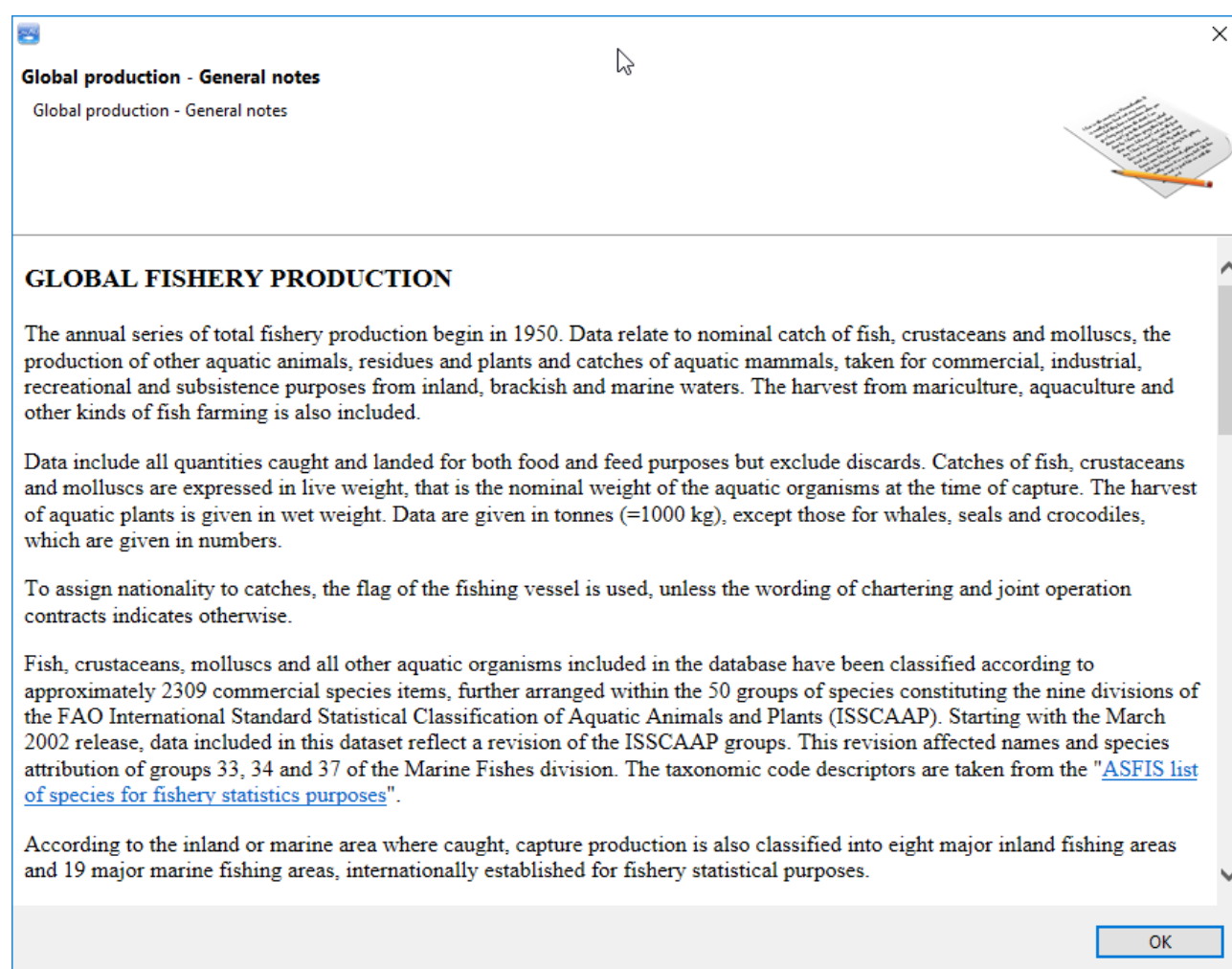


... and (ii) from the toolbar by clicking on the **Notes icon**.



**Note:** The **Show notes** menu item is enabled and the **Notes icon** is shown when the current dataset has notes embedded.

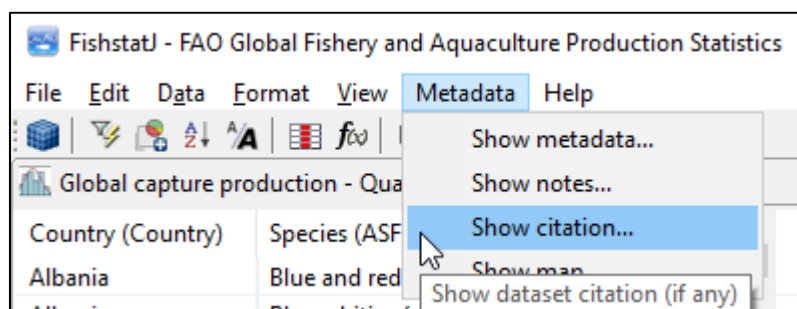
An example of the **Notes window** is displayed below:



## 8.3. Show citation...

Selecting this option will display the dataset citation, allowing to copy/paste it for easy reference.

The dataset citation can be accessed (i) from the **Metadata** menu...

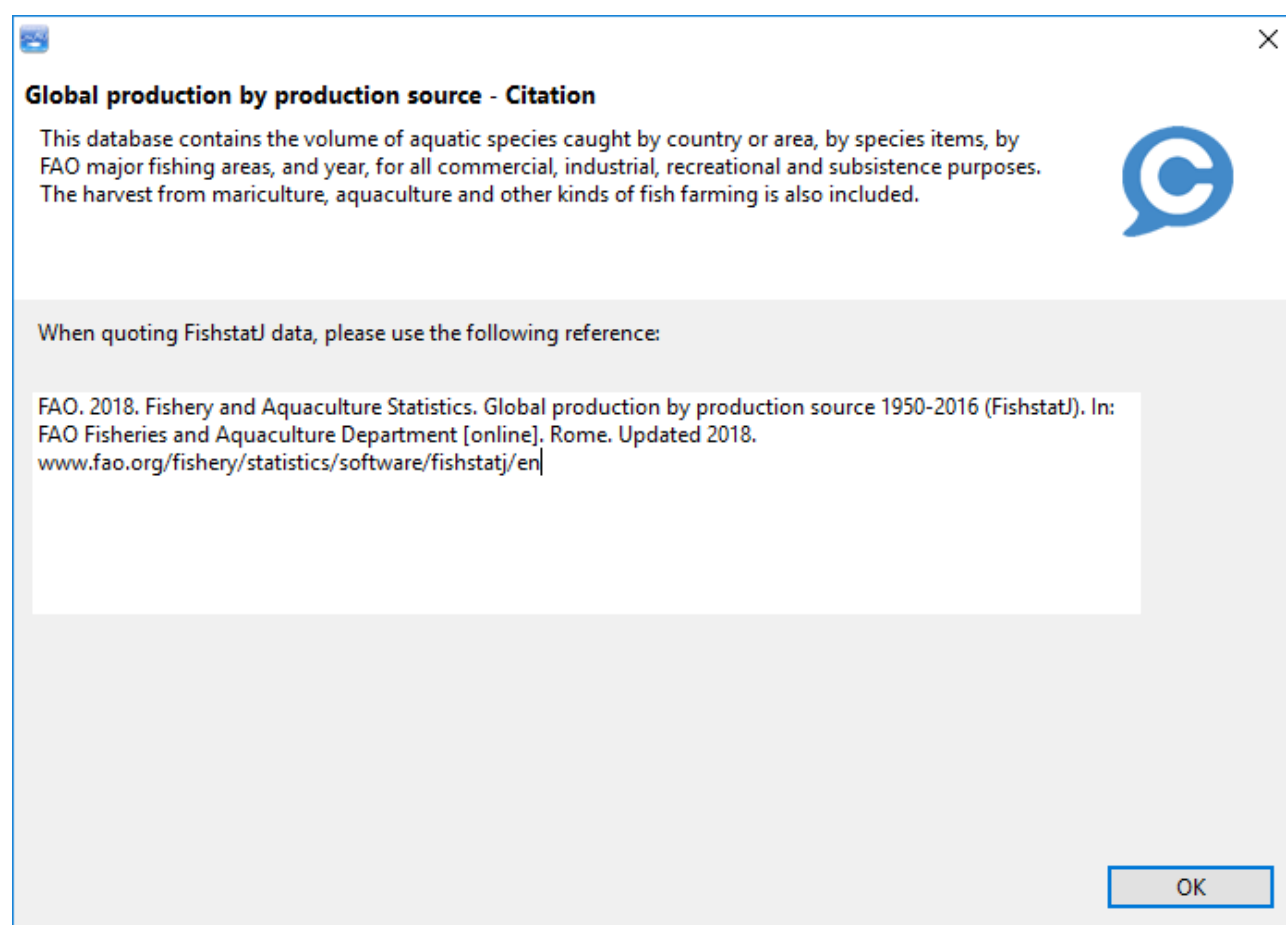


... and (ii) from the toolbar by clicking on the **Citation icon**.



**Note:** The **Show citation** menu item is enabled and the **Citation icon** is shown when the current dataset has a citation embedded.

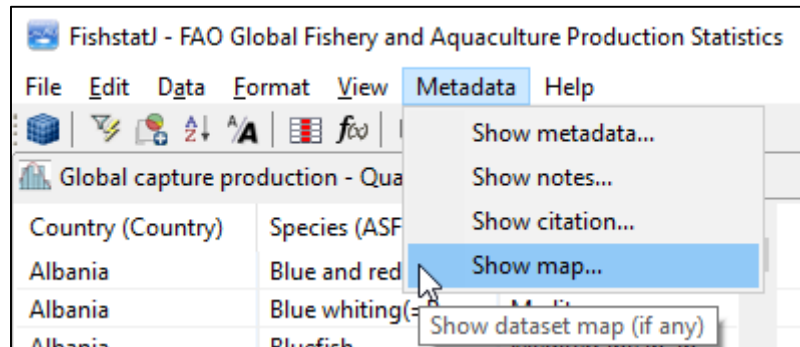
An example of the **Citation window** is displayed below:



## 8.4. Show map...

Selecting this option will display the map attached to a dataset. Those maps usually represent FAO's fishing areas.

The Map can be accessed (i) from the **Metadata** menu...

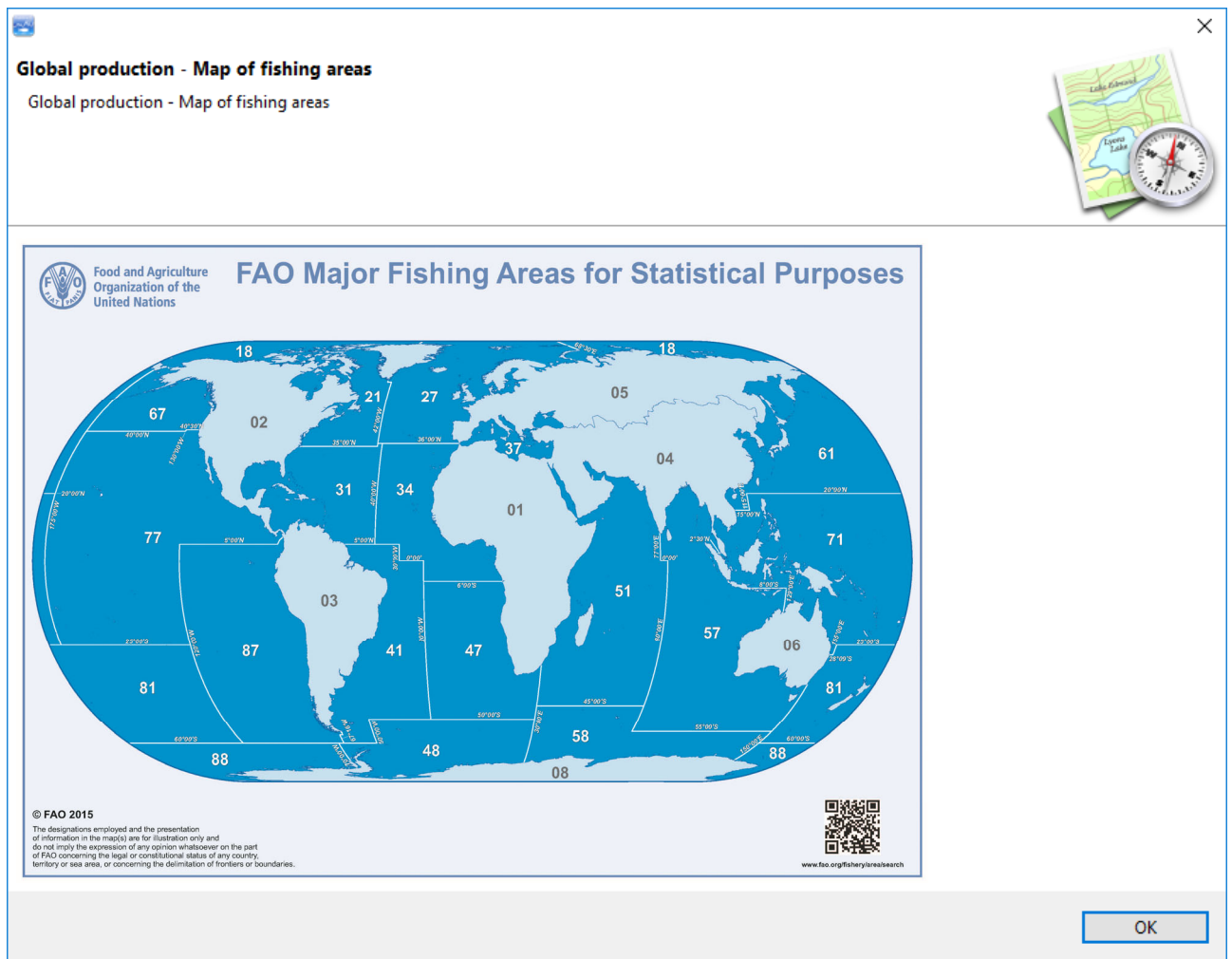


... and (ii) from the toolbar by clicking on the **Map icon**.



**Note:** The **Show map** menu item is enabled and the **Map icon** is shown when the current dataset has a map embedded.

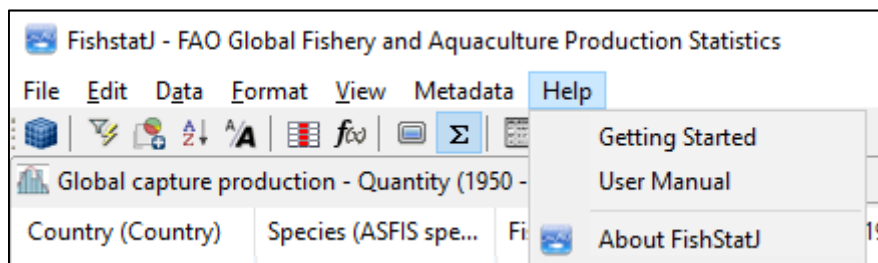
An example of the **Map window** is displayed below:



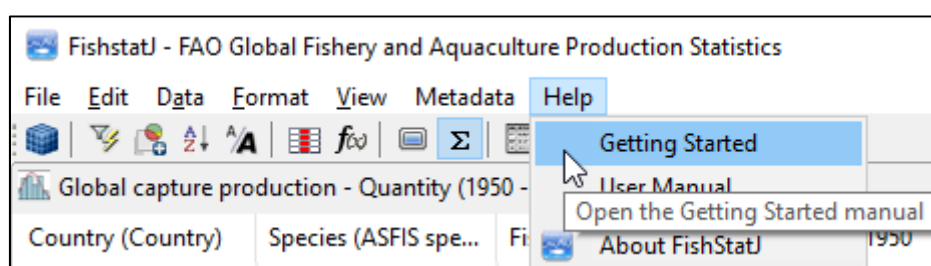


## 9. Help menu

The **Help** menu is shown below. It gives access to additional tools, preferences and help related to the FishStatJ software.



### 9.1. Getting started

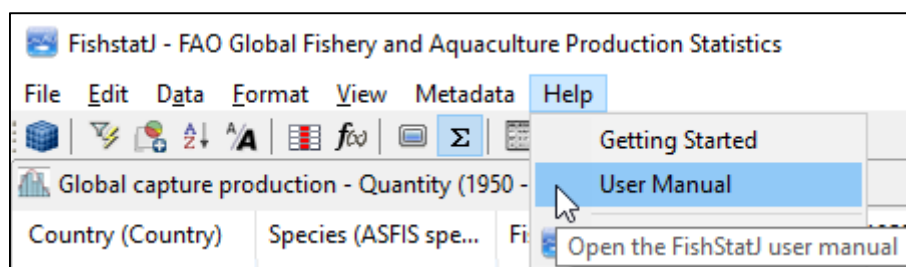


The **Getting Started** item from the **Help** menu automatically downloads the Getting Started with FishStatJ manual and opens it. The manual is a portable document format (PDF) file.

- Windows requires Acrobat Reader to open PDF documents
- macOS can open PDF documents using the Preview application

**Note:** When working with unreliable internet access, we suggest to open the manual when an internet connection is available, as this will make it available in case of future connection interruptions.

### 9.2. User manual

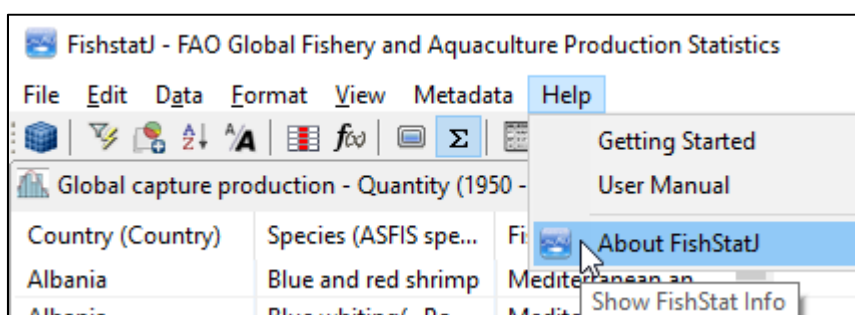


The **User Manual** item from the **Help** menu automatically downloads the FishStatJ manual and opens it. The manual is a portable document format (PDF) file.

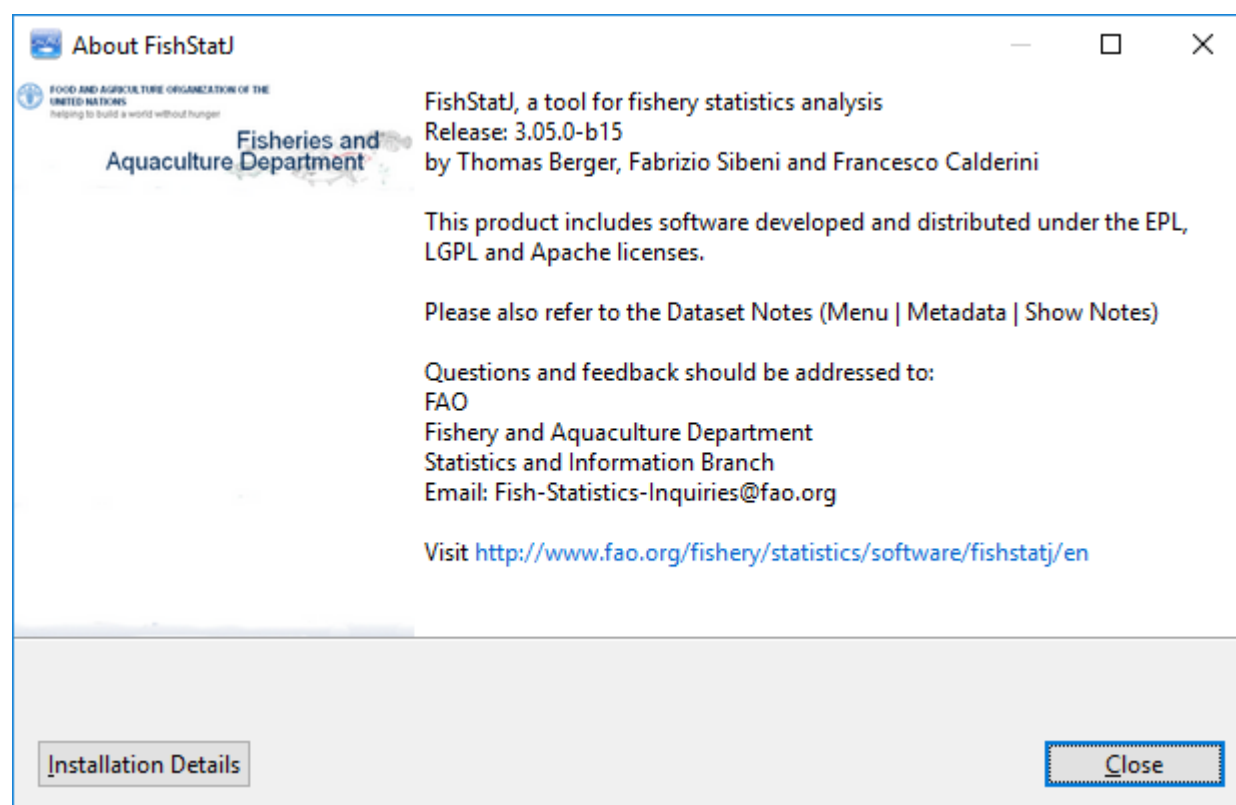
- Windows requires Acrobat Reader to open PDF documents
- macOS can open PDF documents using the Preview application

**Note:** When working with unreliable internet access, we suggest to open the manual when an internet connection is available, as this will make it available in case of future connection interruptions.

## 9.3. About FishStatJ



This item presents FishStatJ information about the program version, legal use, and contacts for assistance. The **About FishStatJ** window is shown below:



# 10. Frequently asked questions (FAQ)

## 10.1. How to export data?

You can export data from FishStatJ in two different ways (for more information, refer to section 4):

- You can simply copy a selection of rows and paste it on an Excel file (with the right button menu or with the **CTRL + C** shortcut).
- Or you can go to **File** → **Export selection (CSV file)**...

You can configure how data and symbols are exported (or not exported) in **Edit** → **Preferences** → **Data export** (refer to section 4.4.5)

## 10.2. What does that symbol mean?

FishStatJ uses the following symbols for statistical data:

- ... Data not available; unobtainable; Data not separately available but included in another category
- Nil or zero
- 0 More than zero but less than half the unit used
- F FAO estimate from available sources of information
- nei Not elsewhere included

In FishStatJ, you can configure the color of the symbols in the panel:

**Edit** → **Preferences** → **Data Display** → **Symbols and Colors** (refer to section 4.4.4).

As for data and symbol export to Excel, please be informed that you can configure how data and symbols are exported (or not exported) in:

**Edit** → **Preferences** → **Data export**.

**Don't export symbols** is one of the options you can select (refer to section 4.4.5).

## 10.3. Why am I getting different numbers than those from the FAO Yearbook of Fishery and Aquaculture Statistics/SOFIA?

Trying to cover all products derived from fisheries activities, in both inland and marine waters, the FAO Fishery production datasets (capture and aquaculture), include some products which are not (or not directly) destined to food consumption, such as marine mammals, crocodiles, corals, pearls, mother-of-pearl, sponges and aquatic plants. Those products are excluded from the all country, regional and world totals presented in FAO Yearbooks of Fishery Statistics as well as other FAO publications.

When viewing time-series data in FishStatJ, in order to obtain the same aggregates you must first filter the dataset using a Custom Group:

1. Open the **Time series filtering** window (**Data** → **Filter** or **F4**)
2. Click the **Species** tab
3. Click the Groups combo box and select **Custom Group**
4. Click **Fish, crustaceans, molluscs, etc.**
5. Click the single left arrow in order to move all selected species belonging to Fish, crustaceans, molluscs, etc. under the Include panel on the left.
6. Click on the **OK** button. The program will return you to FishStatJ's main window.

The aggregation grouping for capture and aquaculture datasets is mentioned in the dataset notes where applicable. Access to dataset notes is explained in section 8.2.

## 10.4. Some historical data figures have changed. Why?

Refer to section 11.3 for a discussion on data revisions.

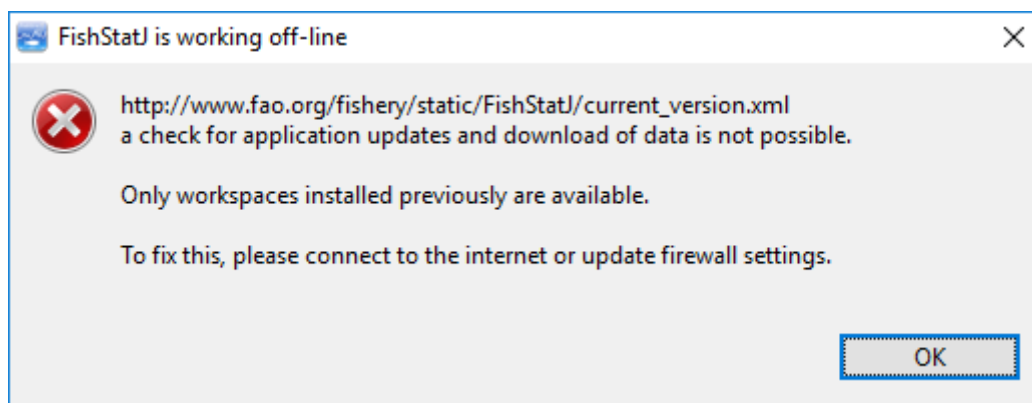
## 10.5. Where to find detailed notes for each dataset?

Additional information about the statistics presented in each dataset collection are available in the General notes, accessible in **Metadata** → **Show metadata** → **Attachments** (or by clicking on top right button of data panel).

Refer to section 8.2 and 8.3 for viewing dataset notes and data citation.

## 10.6. Can I use FishStatJ offline?

When the download of the auto-update information fails, FishStatJ produces the following warning:



If there is no internet connection possible, FishStatJ will run but the following functions will not be available:

- The notification of a new program version is not available (Refer to section 11.6 for a detailed description of the auto-update notification, and a description of data download from the internet).
- No workspaces are shown for automatic download: the **Manage workspaces** dialog only shows workspaces already downloaded/installed (refer to section 3.1)
- Download of the user manual is not possible (refer to section 9.29.1)

Section 4.4.6 explains Internet access proxy configuration.

## 10.7. How often is the data/application updated?

We publish new data as soon as we receive the complete set from member countries and have completed our verification. Usually, datasets are updated once per year. The release time for Global Capture and Aquaculture Production is in the second quarter every year.

New or updated datasets will automatically show in the **Manage workspaces** menu; refer to section 3.1 for a detailed explanation.

When the FishStatJ application is launched, it will also check for updates – and inform you if there is a new version available for download; refer to section 11.6 for the auto-update notification.

Data update/revisions are explained in section 11.3; internet access is discussed in section 4.4.6.

## 10.8. FishStatJ is being flagged as a virus threat

We have received various reports indicating that the FishStatJ software has been falsely identified as being a virus threat. Indeed, we work hard for FishStatJ to be the best product possible, and we would not knowingly distribute an infected version.

Wikipedia defines a false-positive as a false alarm:  
[wikipedia.org/wiki/False\\_positives\\_and\\_false\\_negatives](https://en.wikipedia.org/wiki/False_positives_and_false_negatives).

If you receive such alert from your antivirus software, we suggest the following actions, in the following order:

- Please send us an e-mail ([Fish-Statistics-Inquiries@fao.org](mailto:Fish-Statistics-Inquiries@fao.org)), describing the antivirus software used, and the alert message received (this way we can double-check your download, and also warn other users).
- Please inform your virus software vendor and notify them of the ‘false positive’ indication. The vendor can then quickly investigate (check our download) and release an update to their virus definitions (definitions are patterns to detect infected software).
- If you think FishStatJ is corrupted, the best is to re-download and expand a fresh copy.

**NEVER consider deactivating your virus protection - that would be irresponsible in this digital age!**

## 10.9. How does FAO assign nationality to catches?

As established by the United Nations Statistical Commission in 1954, catches are assigned to the country of the flag flown by the fishing vessel. The flag State is also responsible for the provision of the relevant data to FAO and other organizations such as Regional Fishery Bodies (RFBs).

## 11. More on FishStatJ

### 11.1. FishStatJ legal specifications

The FishStatJ software is provided free of charge to member countries of the Food and Agriculture Organization (FAO). It may be installed on personal or company computers without restriction or license. The statistics contained in this package may be used and published freely provided that the source is cited as FAO.

### 11.2. Bibliographic citation

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via [fao.org/contact-us/licence-request](https://fao.org/contact-us/licence-request) or addressed to [copyright@fao.org](mailto:copyright@fao.org).

When quoting FishStatJ data, please use the reference that you can find in the General Notes attached to each dataset (**Metadata** → **Show metadata** → **Attachments**).

The citation for each dataset is available in the **Metadata** → **Show citation** menu.

The bibliographic citation for FishStatJ is as following:

*FAO Fisheries and Aquaculture Department, Statistics and Information Service. FishStatJ: Universal software for fishery statistical time series. Copyright 2019.*

### 11.3. Data versioning and Data revisions

Where necessary, the data published in the previous releases of the dataset(s) of fishery and aquaculture statistics are revised.

Where figures in this release differ from those previously published, the amended data represent the most recent version. Some statistics provided to FAO by national



offices, in particular those for most recent year, are provisional and may be amended in future editions.

The version and revision of the data installed, and version/revision of data available for download are visible in the **Manage workspaces** menu; refer to section 3.1.

An example of the version of FishStatJ is “2017.1.0”

Major version: is the year when the data was released (2017)

Minor version: is the release (1) and revision number (0)

Occasionally, we find errors, or we receive data from member countries after the release of the FishStatJ workspace. In these rare cases, we release a new revision of the data by increasing the revision number. This way, the new version is automatically visible in the **Workspaces Manager** as a new download. In this case, we would also include an explanation in the dataset notes. Refer to section 8.2 how to view dataset notes.

## 11.4. FishStatJ workspace folder

FishStatJ stores imported workspaces (and application files) in the user home directory:

- For Windows, use the **Windows + R** shortcut to open the Run command, enter **%USERPROFILE%\fishstatj\_workspace** and click **OK**
- For macOS Finder enter **~/fishstatj\_workspace** in **Go → Go to Folder** menu

The information inside workspace folder is described in detail below.

Refer to section 11.5 how to remove (un-install) FishStatJ.

### 11.4.1. FishStatJ workspaces

Workspaces are stored in the FishStatJ workspace folder. They contain the time-series data, including the reference data (dimensions), and attachments (maps, dataset notes). There is one folder for each workspace installed.

Workspaces can be deleted permanently from disk, by opening the **Manage workspaces** menu and by using the **Delete** button.

### 11.4.2. Workspace metadata folder

The FishStatJ application’s log and preferences are stored in the workspace folder, in a sub-folder called “.metadata”.

The FishStatJ application log is called “.log”.

FishStatJ application preferences are saved in this location:  
.

**Note:** on macOS files and folders starting with a dot are invisible. To open the folder enter ~/fishstatj\_workspace/.metadata in **Go** → **Go to Folder** menu.

### 11.4.3. Workspace manual folder

The FishStatJ manual is downloaded and opened from the manual folder inside the fishstat\_workspace. Refer to section 9.2 for more details on the manual.

## 11.5. Un-installing FishStatJ

FishStatJ can be un-installed by deleting the FishStatJ application folder (macOS: the application icon). The Windows application is usually located at: C:\FishStatJ.

FishStatJ stores imported workspaces (data) in the user home directory; these can be deleted as well:

- For Windows enter %USERPROFILE%\fishstatj\_workspace in the Run menu
- For macOS Finder enter ~/fishstatj\_workspace in **Go** → **Go to Folder** menu

FishStatJ is a cross-platform application and therefore does not use the Windows-registry, it stores all data and settings in the application and user home directory, as described above.

## 11.6. FishStatJ update notification

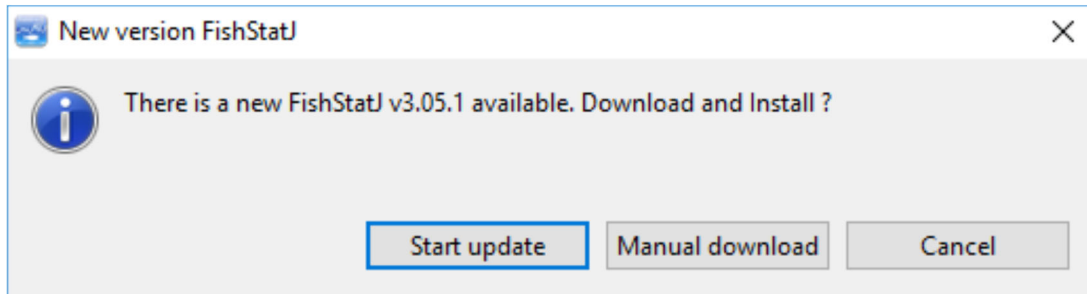
Starting with version 3.01 FishStatJ has automatic update capability built in. At program launch a very small XML file (~1KB) is downloaded from the FAO web-site. If the download of this file fails, FishStatJ will show a warning message (refer to section 10.6– No internet connection) and will continue to work with the data downloaded locally.

The URL download location of the XML file is shown in preferences, refer to section 4.4.6 - Internet Access.

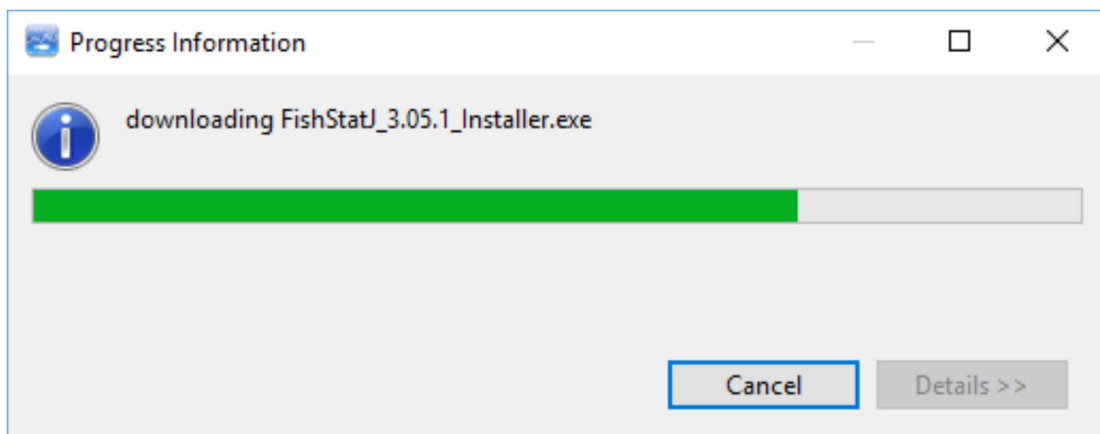
The XML file enables the following 3 functions in FishStatJ, which are described below.

### 11.6.1. Automatic update notification

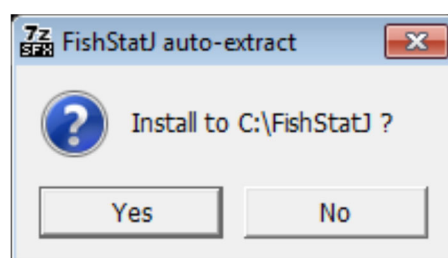
When we release a new version of FishStatJ, Windows users will see the following message at program startup; macOS users receive the program update notification shown in 11.6.2:



Clicking the **Start update** button will start the download of the auto-extract file:



Once the download is complete, FishStatJ quits, and the extraction dialog appears:

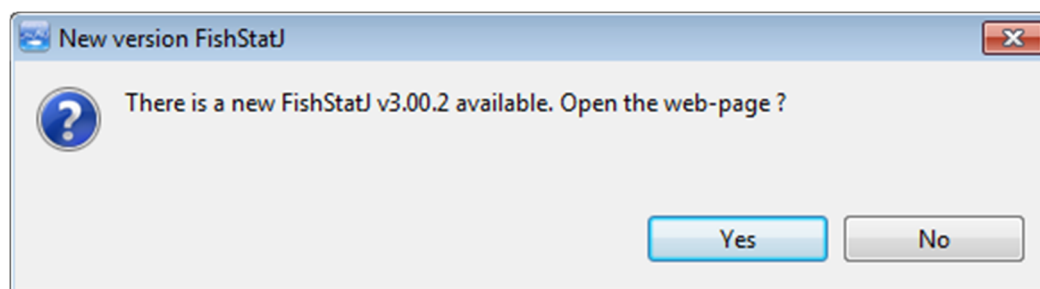


Clicking the **Yes** button will expand the software, and launch the new version of FishStatJ.

If no internet connection is available at start-up, a message appears (section 10.6–No internet connection).

### 11.6.2. Update notification

When we release a new version of FishStatJ, you will see the following message at program startup:



Clicking the **Yes** button will open the FAO FishStatJ web-page in a web browser. On this page, you find the latest FishStatJ application for download.

**Note:** The user has to perform the download of the application program, and install it on the PC. There is no auto-download or auto-update of the application.

If no internet connection is available at start-up, a message appears (section 10.6–No internet connection).

### 11.6.3. Workspace download

FishStatJ will show new or updated workspaces in the **Manage workspaces** dialog. Using this dialog, the user can choose which workspace to download and install on the PC.

For a description of the workspace management; please refer to section 3.1-Manage workspaces.

Refer to section 11.3 for an explanation of workspace/data versioning.

Available workspaces, their version and download location are contained in the XML file; if no internet connection is available then only workspaces downloaded and installed previously are shown.

### 11.6.4. FishStatJ manual download

The first time the manual is opened, or when a new version is available, the PDF manual is downloaded. The version of the manual and download location of the manual is contained in the XML file.

Refer to section 9.2 (**User Manual**) for how to open the FishStatJ manual.

The FishStatJ manuals are downloaded to the workspace folder. Refer to section 11.4.3 (FishStatJ manual folder).

When running offline, the manual can only be opened if it was previously downloaded.

## Assistance and contact

On the FishStatJ web-page ([fao.org/fishery/statistics/software/fishstatj/en](http://fao.org/fishery/statistics/software/fishstatj/en)) you can find:

- New program versions for download
- A quick-start guide for installing the program
- The download link to this manual
- The e-mail contact for support ([fish-statistics-inquiries@fao.org](mailto:fish-statistics-inquiries@fao.org))

ISBN 978-92-5-131993-2



9 789251 319932

CA7131EN/1/12.19