

South Florida/Caribbean Network

National Park Service
Inventory and Monitoring Division



Standard Operating Procedure WT12

Importing Data to Aquarius Database—Version 1.0

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Purpose

This standard operating procedure (SOP) describes how to import water temperature HOBO® data for upload to the NPS Aquarius database. Aquarius Time-Series is a database platform, developed and maintained by Aquarius Informatics, that provides time series analysis and long-term storage of environmental water quality observations. This SOP describes how the CSV files are uploaded into Aquarius.

The water temperature data used to be stored in a Microsoft Access database. In 2018, the program shifted water temperature data storage to Aquarius, an NPS-wide continuous water quality database. This SOP is for users who already have access to Aquatic Informatics' Aquarius Time Series NG v2019.4 on the NRSS server (inp2300fcvgate4.nps.doi.net). The previous system, Aquarius v3.10 on the NRSS server (inp2300fcvgett1) was migrated to the new server on January 14, 2020. If you do not have access, contact Judd Patterson (judd_patterson@nps.gov), the SFCN Data Manager. Dean Tucker (dean_tucker@nps.gov), Natural Resource Specialist in the Water Resource Division (WRD), manages the Aquarius system and will also need to be contacted to set up login/access and download Aquarius Assistant.

Revision Log

Revision Date	Author	Changes Made	Reason for Change	New Version #

Requirements

- Login and access to Aquatic Informatics Aquarius NG v2019.4 (or “Aquarius” for short)
- Aquarius Assistant (AQAssistant.rdp) is downloaded and set up on your computer

Procedures

Preparing for an Aquarius Import

Importing data files into Aquarius can be simplified through the use of Hot Folders and Config files. Within the Springboard interface of Aquarius, Hot Folders are created and managed via the Append Logger File tool and Location Manager. In the process of creating a Hot Folder, an import Config file will need to be referenced. This is what enables Aquarius to parse and process the imported data, allowing it to be appended to an existing time-series dataset. Without Hot Folders, a user would need to manually append the imported data using the Append Logger File tool in Springboard. This is a less efficient process because the user needs to specify the data file, the import Config file, and the append action to take (e.g. create new time series, append to existing dataset, or do not append), all of which require separate input actions from the user. With Hot Folders set up, a user can append imported data utilizing the Drag and Drop Append tool (as shown below) which is a simple and efficient process. More detailed steps for setting up Hot Folders and creating Config files can be found by following the online guide created by WRD at https://nrss.sharepoint.nps.gov/div/wrd/data/Pages/Aquarius_NG_Learning.aspx. You will need to be on the DOI network to access the Sharepoint site.

- All Config files are stored in: <\\INP2300FCVGATE4\\AQUARIUSCfgFiles>
- All Hot Folders are created in: <\\INP2300FCVGATE4\\AQUARIUSHotFolders>

Importing Data to the Aquarius Database

1. Open the Aquarius Assistant (AQAssistant.rdp) remote desktop file. This file must be saved on your local computer.
2. You will be prompted to enter a password (Figure 1). This is user-specific and the same password used for your NPS active directory (AD) account. This is the password that was replaced by the two-factor identification of your PIV card and PIN for NPS computer login.

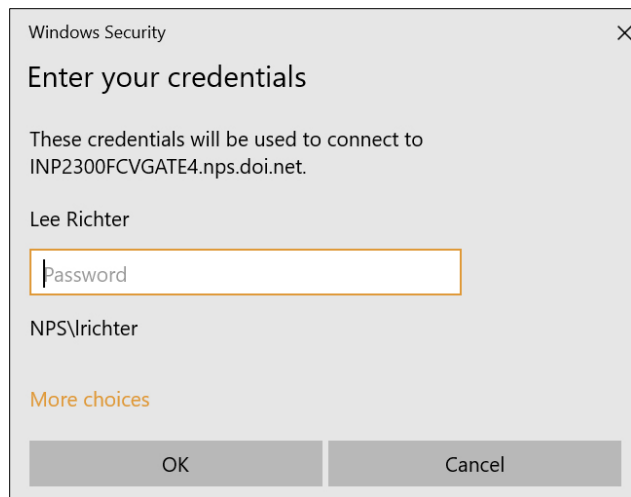


Figure 1. A screenshot of the Windows Security window. The user must type in their NPS active directory (AD) account password.

3. Click OK on the screen that appears (Figure 2).

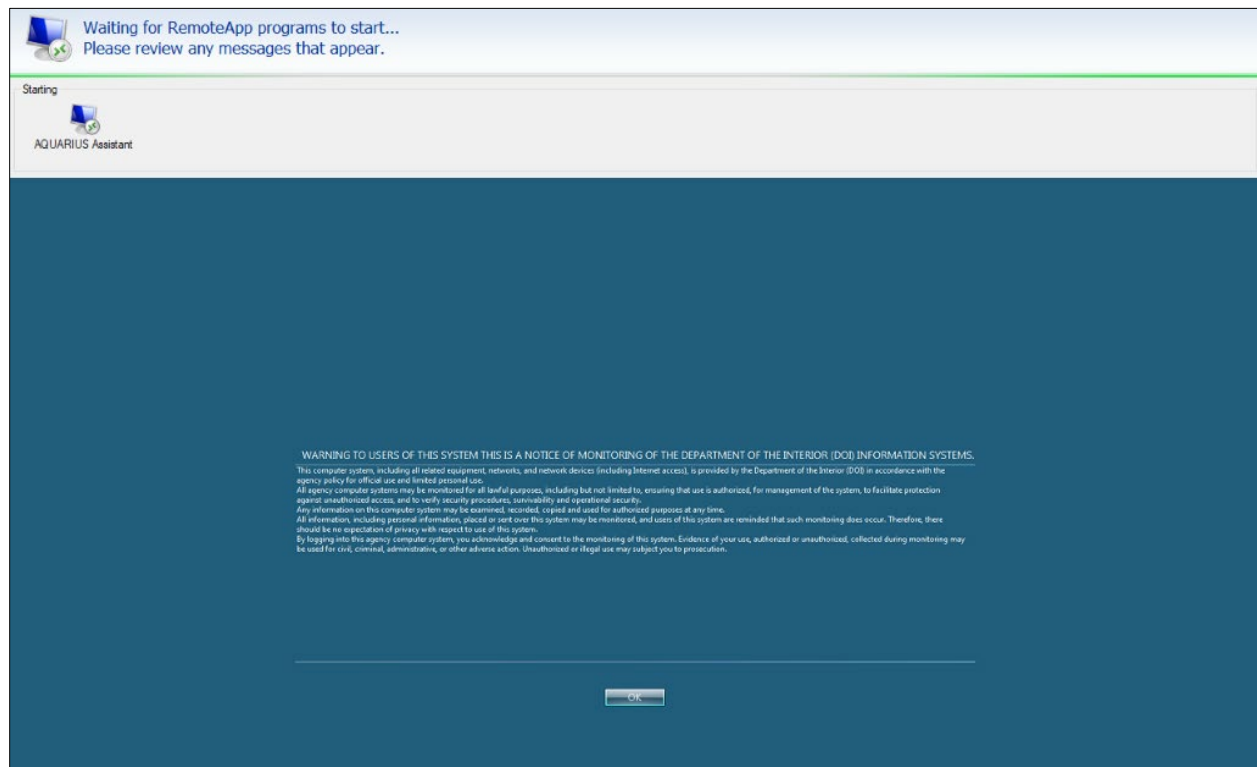


Figure 2. A screenshot of the pre-login screen when remotely accessing the NPS server on which Aquarius operates.

4. Right-click the icon  that shows up at the bottom right corner of your screen and select “Launch Springboard” (Figure 3).

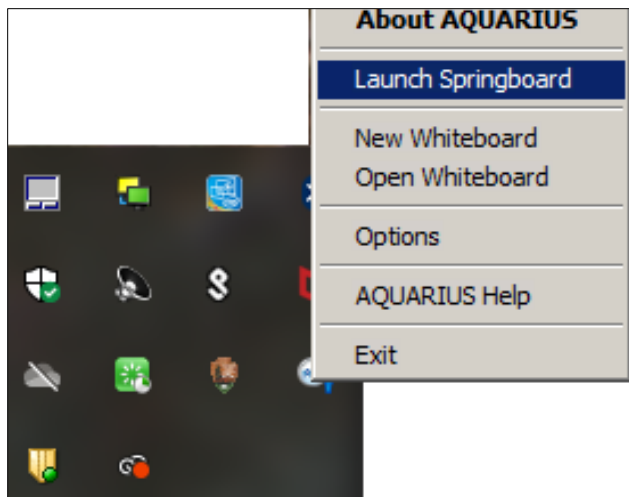


Figure 3. A screenshot of the Aquarius Assistant icon on the Windows taskbar being right-clicked and Launch Springboard selected.

5. Another window will appear. Make sure the text “localhost” (no quotations) appears in the “Server:” section. Click OK (Figure 4).



Figure 4. A screenshot of the Launch Aquarius Springboard window.

6. The next screen will prompt you for a username and password (Figure 5). This is the same username and password used for NPS AD account/computer access that was used in step 2. Username should be first initial followed by last name, all lowercase. Click Login.

Welcome to AQUARIUS Springboard

To enter the AQUARIUS Server, please fill in your username and password. To request a username and password, please contact your system administrator. We hope that you enjoy AQUARIUS!

Username:

Password:

Language:

Figure 5. A screenshot of the Aquarius Springboard sign in window.

7. The Aquarius Springboard window should now be open. On the left-hand side, you should see a list of folders. Scroll down to the “South Florida Caribbean Network” folder and expand it. Select a park (e.g. BISC). In the main window, you should see the names of locations within the park (e.g. BISC_BB) where water temperature data exist (Figure 6). Select the site that you wish to upload the *.csv file to (make sure it appears highlighted in blue).

Locations

Drag a column here to group by that column

Location Identifier	Location Name	Location Type	Folder
BISC_AM	Biscayne National Park Amanda's Reef Water Temperature Loggers	Ocean	BISC
BISC_BB	Biscayne National Park Ball Buoy Water Temperature Loggers	Ocean	BISC
BISC_SET_BISC1	SET site BISC1	Wetland Estuarine-Emergent	BISC

Visits Log

No visits for the selected location

Total locations: 2153

About Logged in: lrichter

Figure 6. A screenshot of the Aquarius Springboard main window displaying locations for Biscayne National Park.

8. Click the  icon to append the data set.
9. In the following window, you may either drag and drop the *.csv files (Figure 7) or browse to them by clicking the “Select Files” button (Figure 8).

Important: When the *.csv files are exported from HOBOWare®, they must not be changed, re-saved, or altered in any way. Doing so will prevent Aquarius from uploading them properly. Erroneous data is corrected/excluded in Aquarius instead of in the *.csv file.



Figure 7. A screenshot of the Drag and Drop tool window found within Aquarius Springboard.

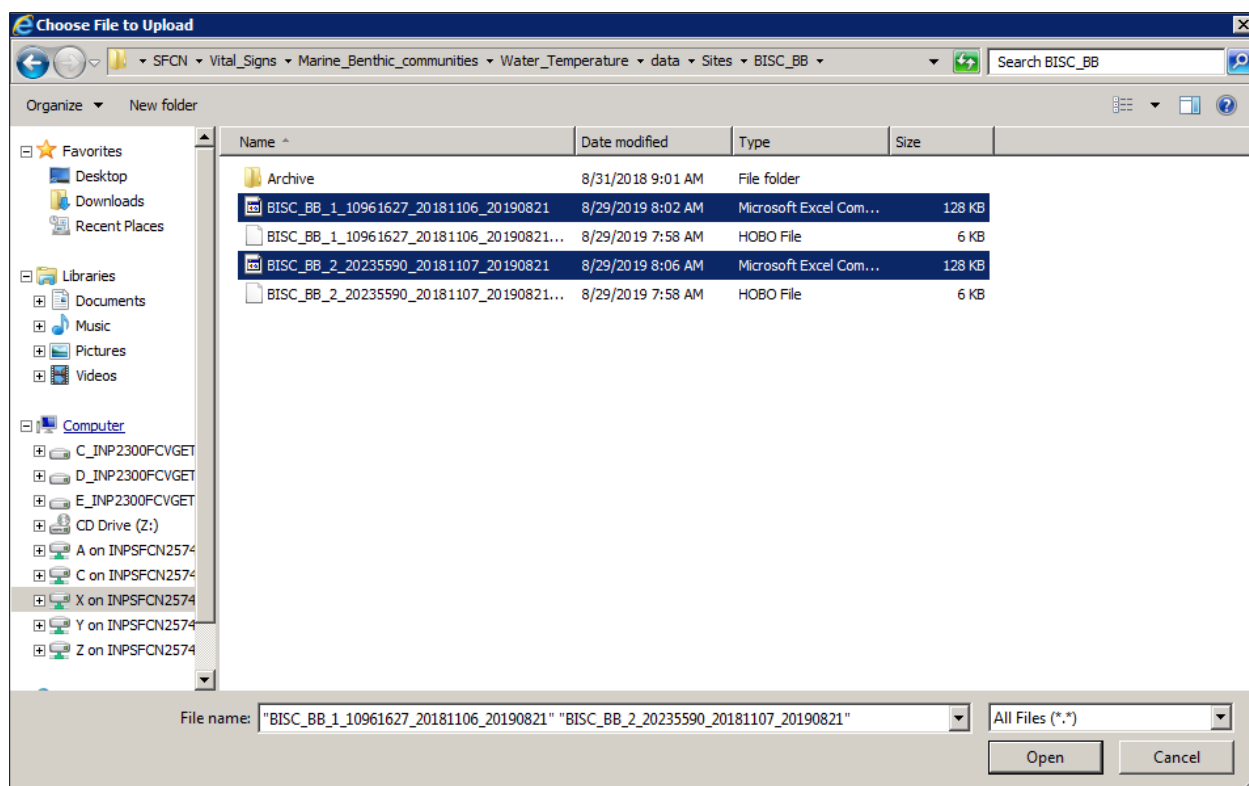


Figure 8. A screenshot of the Choose File to Upload window that appears after clicking the Select Files button in the Drag and Drop tool window found within Aquarius Springboard.

10. Once the files have been added, you will see them appear at the bottom of the window. **Be patient.** You may see the messages “Uploading,” “Parsing,” and finally “##### points appended” with a green checkmark once it is complete.
11. If there are green checkmarks to each of the datasets and the message reads “##### points appended,” the data were uploaded successfully. This is confirmed in SOP WT08 *QA/QC of Newly Imported HOBO® Data Files into Aquarius Database—Version 2.0* (SFCN 2020). It is best to do this immediately after upload to fix any issues that may have occurred.

Literature Cited

South Florida/Caribbean Network. 2020. QA/QC of newly imported HOBO® data files into Aquarius—Version 2.0. South Florida/Caribbean Network Standard Operating Procedure NPS/SFCN/SOP—WT08. South Florida/Caribbean Network, Palmetto Bay, Florida.