

National Park Service – Water Resources Division

Aquarius Software

Frequently Asked Questions, Tips, and Miscellaneous Information

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Why doesn't the number of points (# Points) displayed in Step 2 of the Append Logger File tool equal the number of records in my import file?

In Step 2 in the Append Logger File tool, Aquarius displays the number of points (# Points) it finds for each incoming time series signal/parameter as shown below.

Step 2: Choose the target data sets and append:

Label	Parameter	Units	# Points	From	To
WTemp	Water Temp	°C	81320	2/28/2006 10:30:32 AM	10/23/2008 9:30:29 AM
SpCond	Sp Cond	µS/cm	81320	2/28/2006 10:30:32 AM	10/23/2008 9:30:29 AM
Depth	DepthFromWater	ft	81316	2/28/2006 10:30:32 AM	10/23/2008 9:30:29 AM
pH	pH	pH Units	81314	2/28/2006 10:30:32 AM	10/23/2008 9:30:29 AM
Turb	Turbidity	NTU	81318	2/28/2006 10:30:32 AM	10/23/2008 9:30:29 AM

Typically this number will not match the number of records in the import file due to one or more of the following: (1) Gap Interval Processing; (2) Duplicate Dates/Times; (3) Dates/Times Out of Chronological Order; (4) Incorrect or Malformed Dates/Times; and (5) Sanity Range Checking.

Gap Interval Processing:

The Append Logger File tool requires a Gap Tolerance in minutes for each parameter (See the 'What is Gap Tolerance and how does it work?' FAQ below for more detailed information). Gap tolerance defines how much time can elapse between consecutive measurements before you consider there to be a gap (or missing data) between those consecutive measurements. If you are collecting data at 15 minute intervals you could enter 15 as the Gap Tolerance. If more than 15 minutes elapse between measurements (for whatever reason), this would be a gap. If you enter a Gap Tolerance (other than 0), when Aquarius imports the time series, it will identify all the gaps in the time series that exceed the Gap Tolerance. Note: If appending into an existing dataset container, that container's Gap Tolerance prevails regardless of what is entered in Step 3 of 4 of the Import from File Wizard.

Time Series - Import from File Wizard

Step 3 of 4 Column Parameters

Column 3

Parameter: Water Temp Int. Type: 1 - Inst. Values

Units: °C Grade: <unspecified>

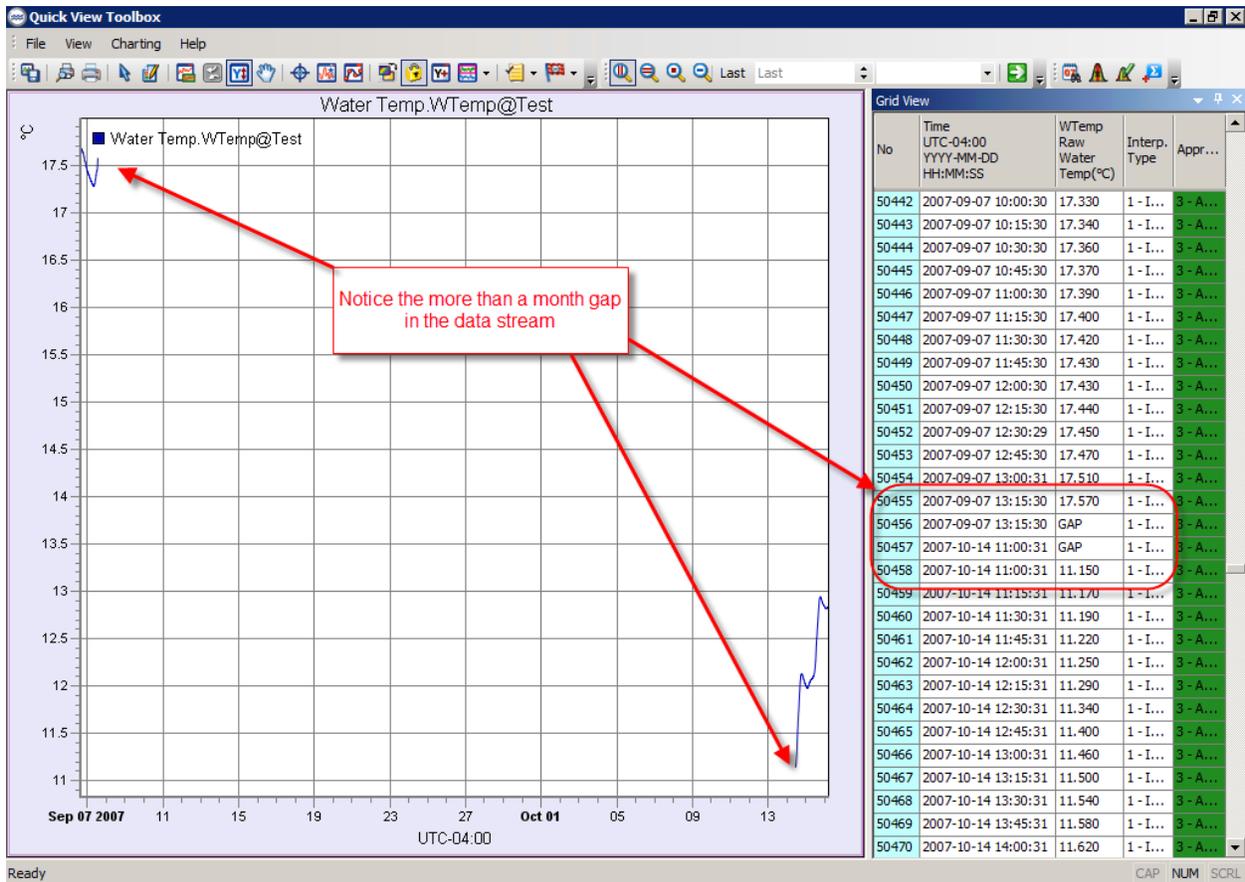
Gap Tolerance: 30 Minutes Approval: 3 - Approved

Label: WTemp

1:Skip	2:mm/dd/yyyy HH:MM:SS	3:Raw/WTemp	4:Raw/SpCond	5:Raw/Depth	6:Raw/pH	7:Raw/Turb
StationID	Date & Time	Temp (°C)	SpCond (µS/cm)	D* (ft)	pH	Turb* (NTU)
GRSM_EPA_MPST	2/28/2006 10:30:32	4.02	11.00	2.97	5.55	0.10
GRSM_EPA_MPST	2/28/2006 10:45:32	4.10	11.00	2.96	5.73	0.20
GRSM_EPA_MPST	2/28/2006 11:00:32	4.16	11.00	2.96	5.78	0.10
GRSM_EPA_MPST	2/28/2006 11:15:32	4.22	11.00	2.97	5.82	0.10
GRSM_EPA_MPST	2/28/2006 11:30:32	4.27	11.00	2.96	5.83	0.10
GRSM_EPA_MPST	2/28/2006 11:45:31	4.32	11.00	2.96	5.85	0.20
GRSM_EPA_MPST	2/28/2006 12:00:31	4.42	11.00	2.96	5.87	0.20
GRSM_EPA_MPST	2/28/2006 12:15:32	4.49	11.00	2.95	5.88	0.10
GRSM_EPA_MPST	2/28/2006 12:30:31	4.56	11.00	2.95	5.89	0.20
GRSM_EPA_MPST	2/28/2006 12:45:31	4.62	11.00	2.93	5.91	0.50
GRSM_EPA_MPST	2/28/2006 13:00:31	4.71	11.00	2.93	5.90	0.10
GRSM_EPA_MPST	2/28/2006 13:15:31	4.80	11.00	2.92	5.91	0.10
GRSM_EPA_MPST	2/28/2006 13:30:31	4.92	11.00	2.91	5.92	0.10
GRSM_EPA_MPST	2/28/2006 13:45:31	5.04	11.00	2.90	5.93	0.10
GRSM_EPA_MPST	2/28/2006 14:00:32	5.11	11.00	2.89	5.94	0.10
GRSM_EPA_MPST	2/28/2006 14:15:31	5.20	11.00	2.88	5.94	0.20

<< Back Next >> Cancel

When Aquarius identifies a gap, it inserts gap markers in the time series to identify the gap. The gap markers duplicate the last date/time before the gap and the first date/time after the gap as shown below.



Consequently, for every identified gap in a time series, two additional points/markers are added to the time series. Aquarius uses these gap markers to know where not to connect points when drawing a time series graph. As a practical matter, you may not want the Gap Tolerance to be equal to your sampling interval because sometimes data logger clocks may be off a second or two which could result in unintended gaps being identified by Aquarius.

Duplicate Dates/Times:

If a time series repeats a date/time, Aquarius will only import the first instance of the date/time even if the data values on the duplicate date/time records are different. In other words, each date/time must be unique. Aquarius may pop up a warning message at the bottom of the screen indicating "Time values are duplicated! Duplicates will be removed from the output." I emphasize 'may' because I've seen the message occur when it should and I've also not seen it occur when it should. In the latter instance, the Warning Message is still logged to the Aquarius Event Viewer but the user never sees it unless they start the Aquarius Event Viewer. If you suspect you may have duplicate dates/times, you can run a Microsoft Access aggregate query (after importing the data) to find the duplicate records. If the duplicate records are valid, consider editing the date/times by a second to make them unique.

Dates/Times Out of Chronological Order

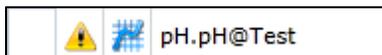
Aquarius expects the import file to be in chronological/ascending order by date/time. While importing, if Aquarius finds a date out of sequence in the file, it will remove the record from the file. It appears to consider the out-of-order date like an end of file marker. Aquarius may pop up a warning message at the bottom of the screen indicating “Time values are not asc sorted! Please check to make sure you have the date/time format correct (e.g. MMDDYYYY rather than DDMMYYYY). Not sorted records will be removed from the output.” I emphasize ‘may’ because I’ve never seen this message appear on the screen although it is still logged to the Aquarius Event Viewer. To see it, you’d have to check the Aquarius Event Viewer after importing/append the data. How does a time series get out-of-order? One common way is the result of exporting from Microsoft Access. Just because a table is in the correct order while viewing it in Access, that doesn’t mean Access will export it to a text file in that same order. You’ll probably want to construct an Access query that sorts the dates/times in ascending order and export that query to text for import into Aquarius.

Incorrect or Malformed Dates/Times

Dates/times are essential in defining/entering a time series. If dates are missing, incorrect, or misinterpreted by the import wizard, you may lose records.

Sanity Range Checking

During import of certain parameters, Aquarius does a ‘Sanity Range Check’. I’ve seen this for pH. The odd thing is that Aquarius doesn’t tell you about the issue in the Append Logger File tool. Instead, you’ll notice an exclamation mark when looking at a location’s list of data sets:



Clicking to select the time series and then looking at the ‘Log’ at the bottom shows:

The screenshot shows a software interface with a 'Log' window open. The window title is 'Visits Log'. It contains a table with the following data:

Location	Time	Event	Data Set	Message	User
Den Gate National Recreation Area	2/7/2013 2:25:48	Append Range	PH.pH@Test	Some values were	dtucker

Below the table, a message reads: "Some values were not appended as they failed sanity range checking. Number of failed values=86; Sanity check range for parameter type: PH; min=-10; max=100".

What caused this? This was caused by using the same import configuration file to import time series for two stations that didn’t actually have time series for the same number of parameters in the same order in the file so what wound up under pH in this particular time series wasn’t really pH.



**The lesson learned is to always verify that Aquarius performed as you expected.
Know your data!**

What is Gap Tolerance and how does it work?

Gap Tolerance is an Aquarius feature that allows the user to automatically identify gaps in a time series while importing or appending data. A gap in a time series occurs when the time elapsed between consecutive measurements exceeds the sampling interval. If you've programmed the data logger to record measurements every 15 minutes and then have consecutive measurements that are more than 15 minutes apart, that would indicate a gap. Gaps can occur for many reasons. A probe can be extracted from the water and then re-inserted more than 15 minutes later. A clock could be off resulting in measurements being made after 15 minutes and one second. Multiple time series from different seasons may have been entered together into one file but they aren't exactly consecutive. Here is an [Aquatic Informatics video](#) that describes gaps and how they differ from empty measurements. In a nutshell, gaps are where dates/times are missing. Empty values are entered where there is no measurement for a date/time.

Gap Tolerance is important when graphically depicting a time series. Do you want to connect the dots (time series measurements) between two consecutive measurements if they exceed the sampling interval? Probably not. For example, if you have two years of continuous sampling between May and September, you probably don't want to have a straight line drawn between the last September measurement in year one and the first May measurement in year two. Allowing Aquarius to identify the gaps in your time series by specifying a Gap Tolerance on each parameter is the way to control this. Note: If your sampling interval is 15 minutes, you may want to make your Gap Tolerance 16 minutes or longer to prevent Aquarius from adding a lot of extraneous gaps if the data logger isn't very good at sampling exactly on that interval. If the clock isn't correct and the measurement gets made 15 minutes and one second after the preceding measurement, Aquarius will identify that as a gap if the Gap Tolerance is set to 15 minutes. Aquarius will enter two records in the time series to identify the gap. These gap markers duplicate the last date/time before the gap and the first date/time after the gap. The measurement value is shown as 'GAP'.

A Gap Tolerance entry is required to define a time series in Aquarius. The Gap Tolerance for a time series can be set in two locations in Aquarius as shown below: (1) Step 3 of 4 of the Import from File Wizard (part of the Append Logger File tool) and (2) in Location Manager on the 'Data Sets' tab. Where you set and how you manage Gap Tolerance is important. If you set the Gap Tolerance to be greater than 0 for a time series dataset on the Location Manager 'Data Sets' tab, that Gap Tolerance takes precedence over the Gap Tolerance set in the Import from File Wizard (Append Logger File tool) when importing/appending into it. If you set the Gap Tolerance to be 0 for a time series dataset on the Location Manager 'Data Sets' tab, the Gap Tolerance specified in the Import from File Wizard (Append Logger File tool) is used when importing/appending into the existing time series dataset/container.

Given the settings in the two figures below, the 30 minute Gap Tolerance for stage set in Step 3 of 4 in the first figure will be processed when appending the existing stage data into the time series dataset with the 0 minute Gap Tolerance shown in Location Manager 'Data Set' tab in the second figure.

Time Series - Import from File Wizard
Step 3 of 4 Column Parameters

Column 5
 Date/Time:
 Data: **Raw**
 Do not import column (skip)

Parameter: **Stage** Int. Type: **1 - Inst. Values**
 Units: **m** Grade: **<unspecified>**
Gap Tolerance: 30 Minutes Approval: **<unspecified>**
 Label: **LEVEL**

1:Skip	2:mm/dd/yyyy	3:HH:MM:SS	4:Skip	5:Raw'LEVEL'	6:Raw'TEMP. ATURE'
Date	Time	100 ms	LEVEL	TEMPERATURE	
1	4/21/2010	8:00:00	0	1.4266	9.7
2	4/21/2010	8:30:00	0	1.4266	9.7
3	4/21/2010	9:00:00	0	1.4266	9.7
4	4/21/2010	9:30:00	0	1.4322	9.7
5	4/21/2010	10:00:00	0	1.4238	9.7
6	4/21/2010	10:30:00	0	1.4266	9.7
7	4/21/2010	11:00:00	0	1.4252	9.7
8	4/21/2010	11:30:00	0	1.4266	9.7
9	4/21/2010	12:00:00	0	1.4308	9.7
10	4/21/2010	12:30:00	0	1.4266	9.7
11	4/21/2010	13:00:00	0	1.4252	9.7
12	4/21/2010	13:30:00	0	1.4266	9.7
13	4/21/2010	14:00:00	0	1.428	9.7
14	4/21/2010	14:30:00	0	1.428	9.7
15	4/21/2010	15:00:00	0	1.4252	9.7
16	4/21/2010	15:30:00	0	1.4238	9.7

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If you are appending this time series into an existing time series with a previously set gap tolerance in Location Manager 'Data Sets', the gap tolerance specified here will be ignored and Aquarius will use the Location Manager 'Data Sets' gap tolerance.

AQUARIUS Springboard - Windows Internet Explorer

http://mp2300fcvgett1.nps.doi.net/AQUARIUS/Springboard/Default.aspx?id=2&token=5ddda0f91d91fd8fc

Location Manager
 Dean Test - Test

General **Data Sets** User Access Notifications Hot Folder Analysis & Remarks

Data Set Details

General
 Type: Time Series - Basic
 Identifier: Stage.Compensated_Logger@Dean Test
 Label: Compensated_Logger
 Description: Barometrically compensated stage data
 Comment:

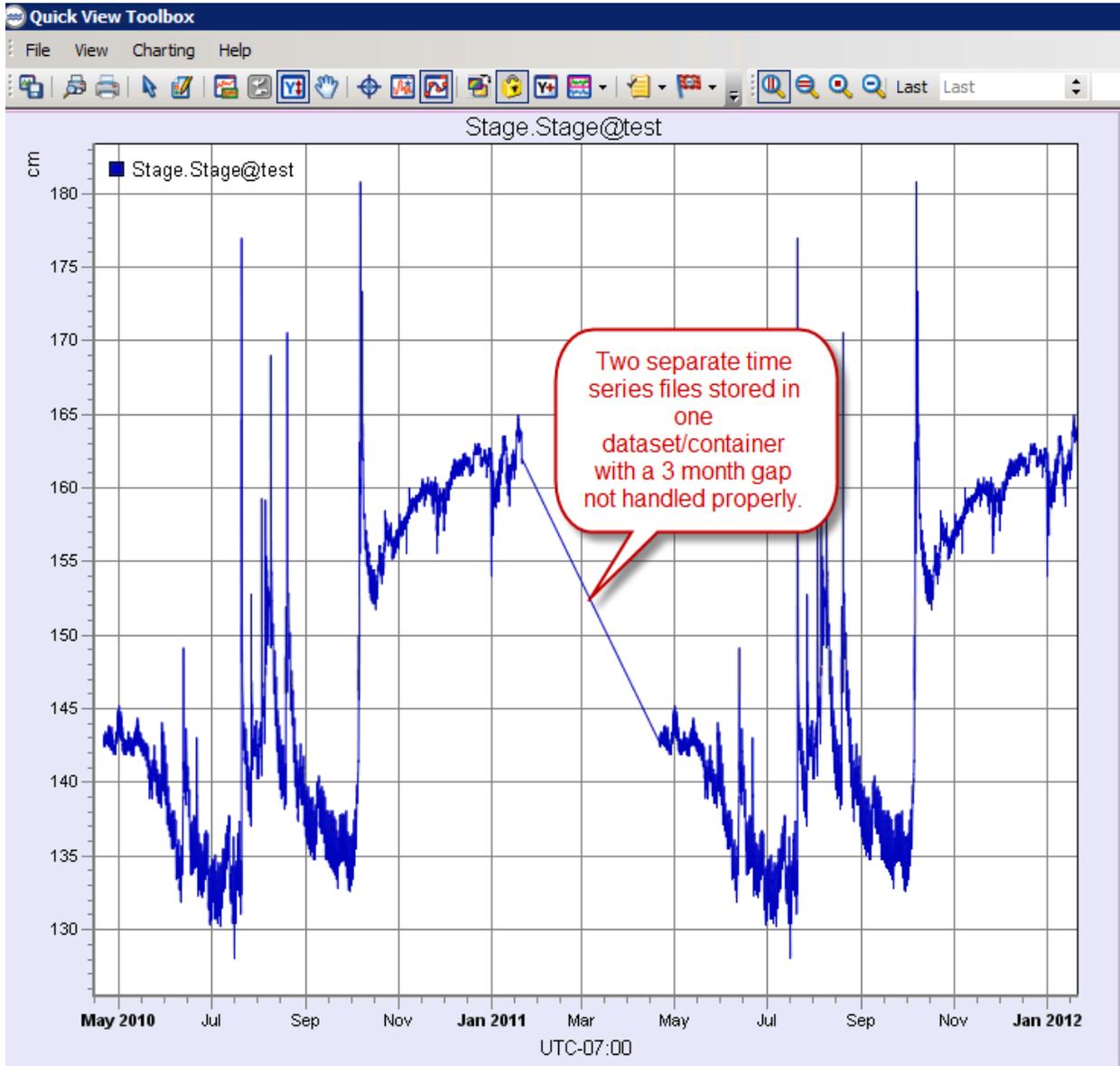
Data
 Parameter: Stage
 Units: cm
 Time Zone: MST (UTC-07:00)

Gaps
 Gap Tolerance (mins): **0**
 Total Gaps: 0

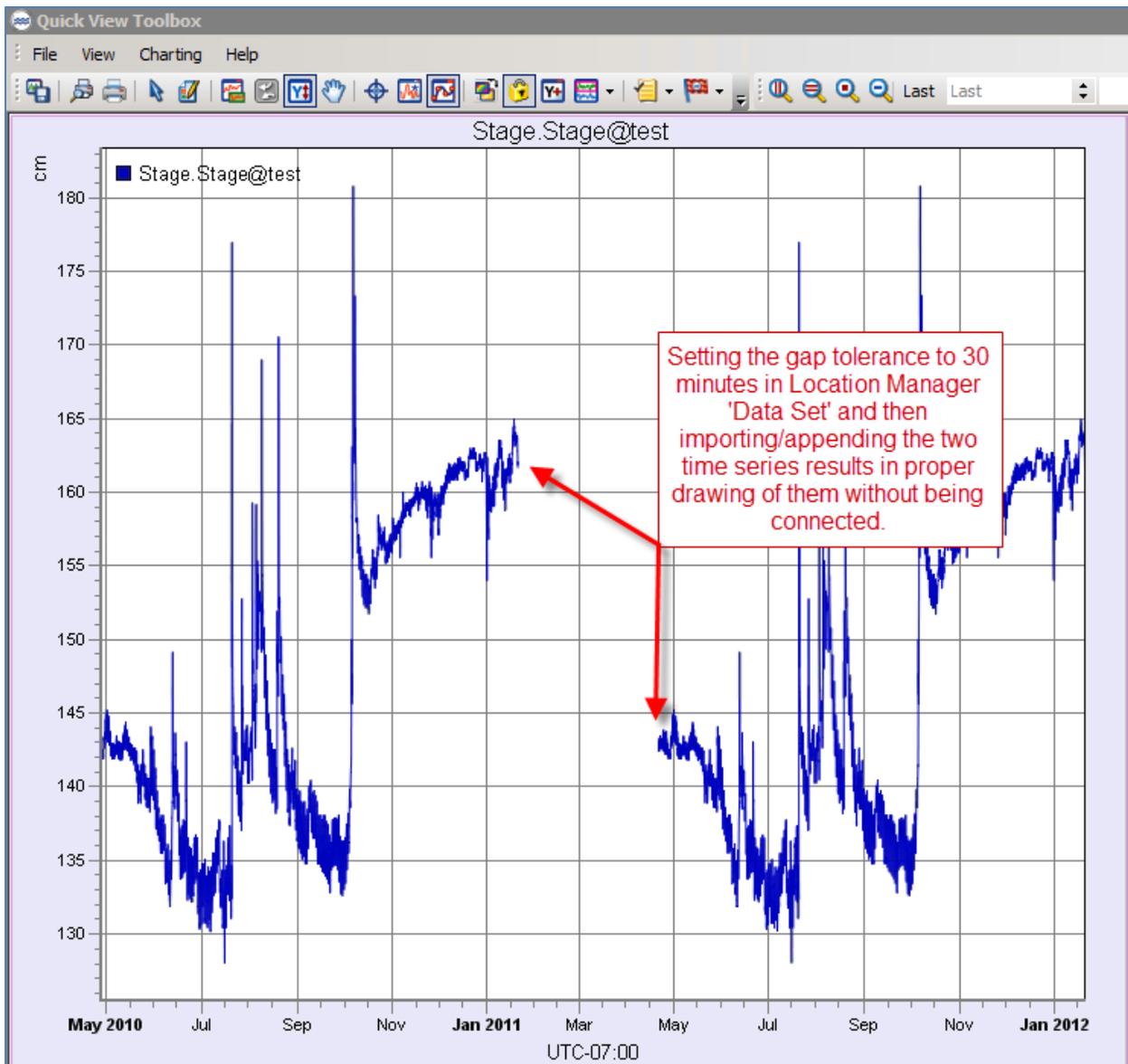
Statistics
 Start Time:

Set this to 0 if you want to specify the gap tolerance in the import/append file. If this is >0 it will be used for any append operations into it regardless of the gap tolerance selected in the Import from File Wizard (Append Logger File tool).

A pitfall with setting the Location Manager 'Data Set' tab Gap Tolerance to 0 is what happens when you import/append two different datasets into that dataset container with the import/append datasets being greater than one sampling interval/Gap Tolerance apart. The example below shows two datasets that were imported/appended as separate datasets with Gap Tolerances of 30 minutes into a time series dataset with a Gap Tolerance set to 0 in the Location Manager 'Data Set' tab. The system doesn't catch that the two datasets are separated by 3 months and connects the last observation of the first dataset with the first observation of the last dataset.



To avoid this situation, set the Gap Tolerance of the time series dataset in Location Manager into which you are importing to the desired interval – say 30 minutes – prior to importing/appending. Note: you can edit the Gap Tolerance at any time. It is only used when data are being imported/appended. Then, import/append each of the individual datasets leaving their Gap Tolerances set to 0 in Step 3 of 4. This will result in the following graph.



Note: It is very handy to use the 'Append Logger File' tool to create a new time series dataset upon import without having to create the dataset container in Location Manager, 'Data Set' first. The Gap Tolerance selected will be used for importing the file and creating the new time series, but the Gap Tolerance doesn't remain as the default Gap Tolerance for the new time series in Location Manager, 'Data Set' – it is set to 0. Aquatic Informatics is currently investigating this as a potential bug.

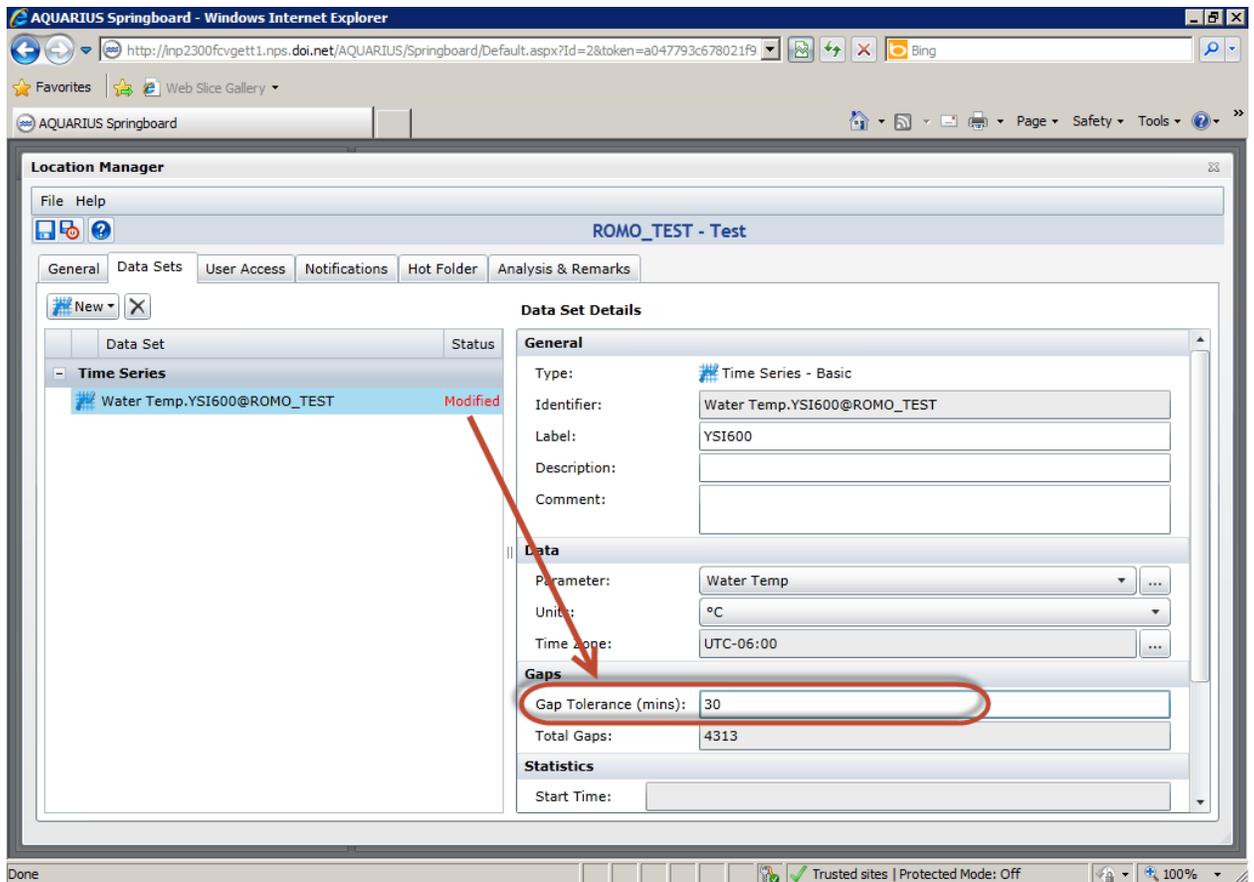


**The lesson learned is to always verify that Aquarius performed as you expected.
Know your data!**

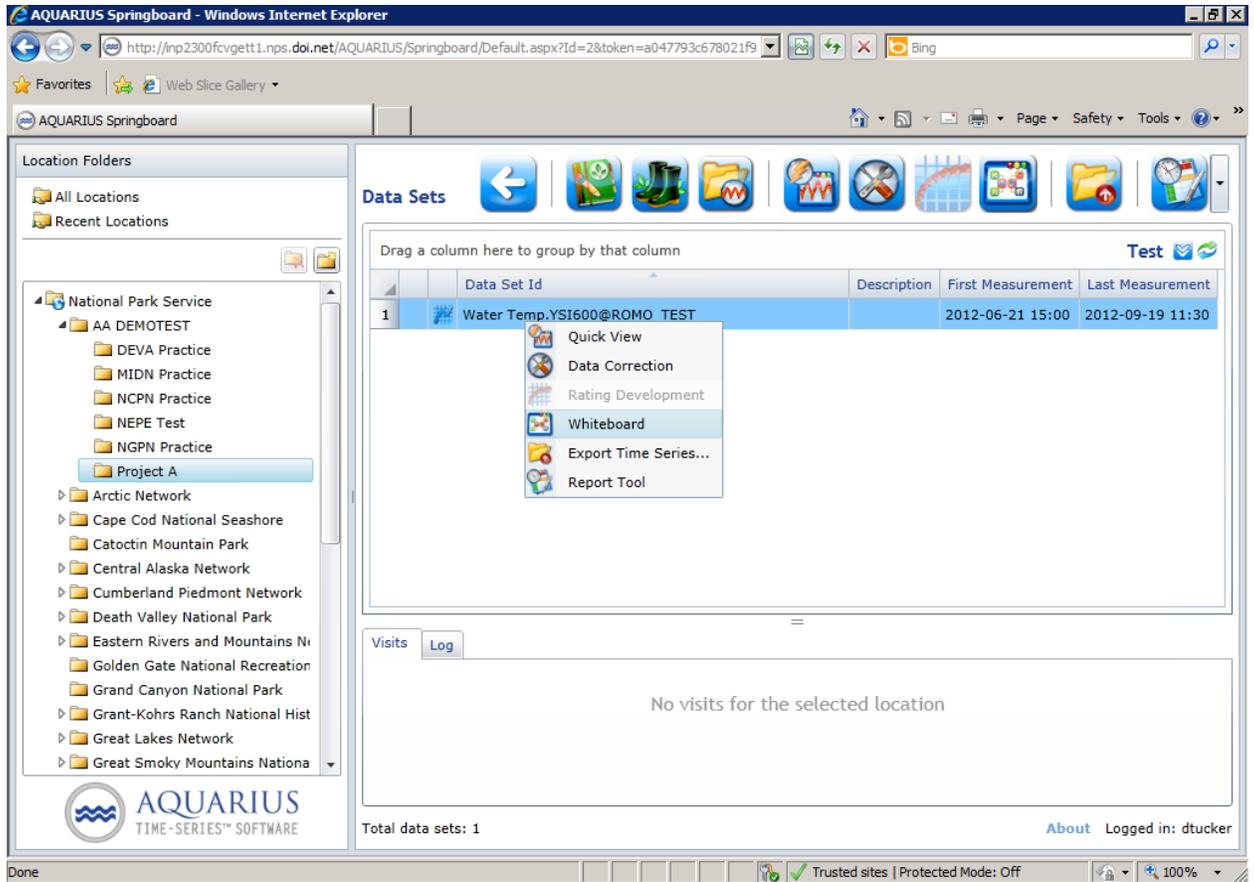
How do you reprocess a data set to remove or change the Gap Tolerance?

You can remove or change the Gap Tolerance on a time series at any time by following these steps:

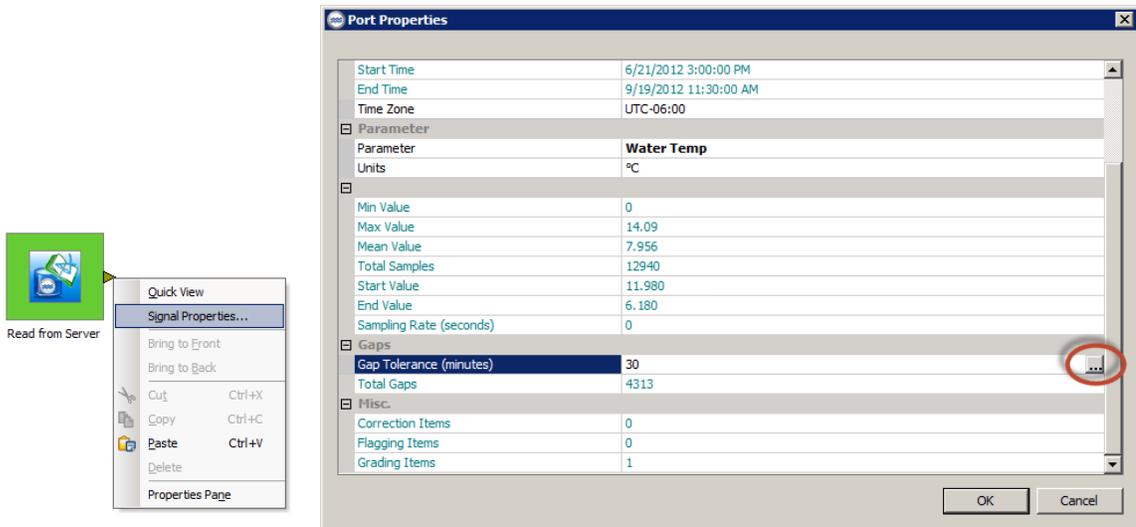
1. Open your location in Springboard's Location Manager, switch to the Data Sets tab, and change the selected data set's Gap Tolerance to the new value. Note: the new value can be 0 if you want to remove all gap markers. Changing the Gap Tolerance here is important but it doesn't alter any existing data. It simply sets the Gap Tolerance value to use for future appends. Save and exit Location Manager.



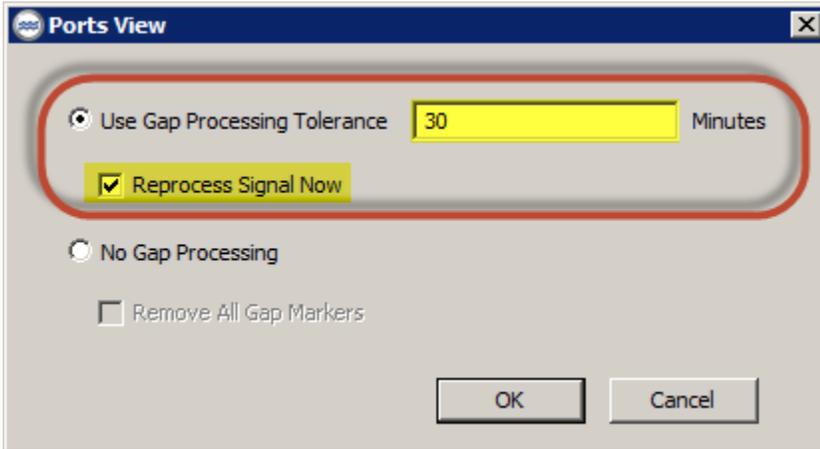
- (2) Select the subject 'Data Set' in Springboard and click the 'Whiteboard' icon or right click on the 'Data Set' and select 'Whiteboard' from the popup menu.



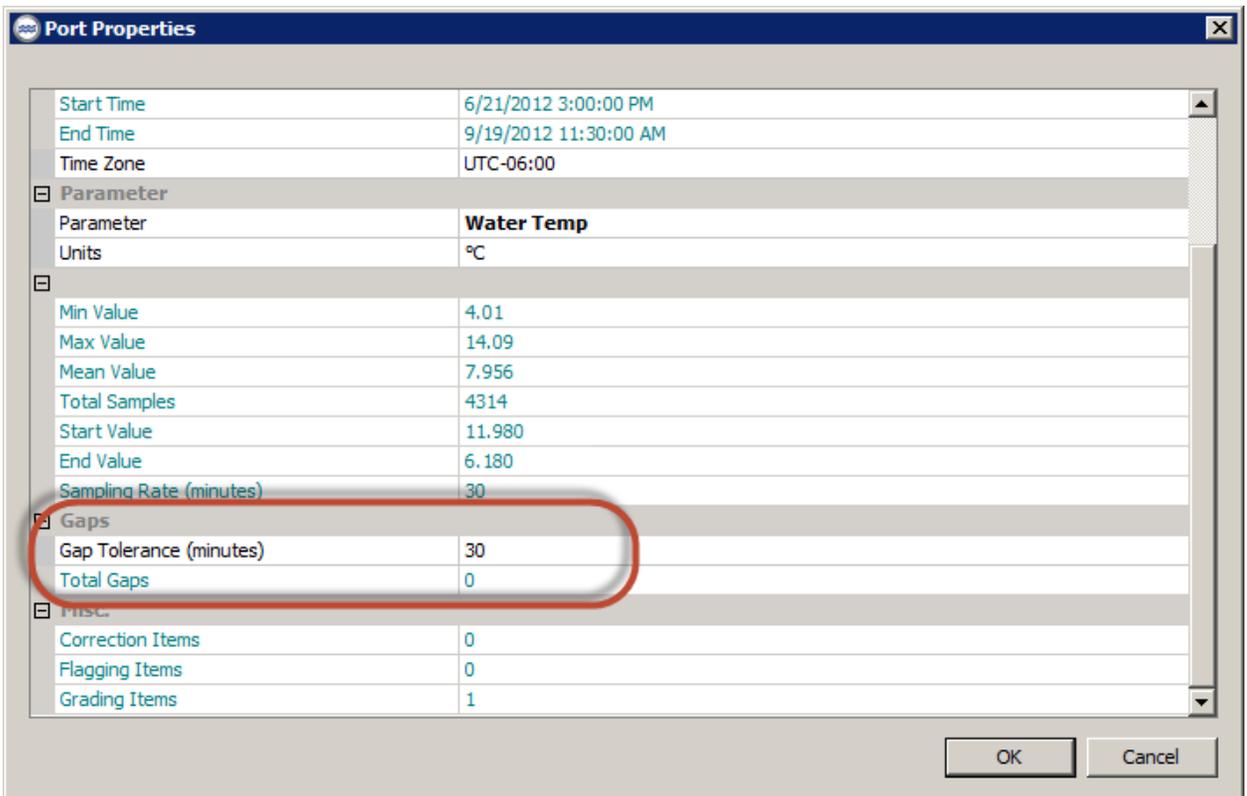
(3) On the Whiteboard, right click the 'Read from Server' output port and choose 'Signal Properties'. Click the '...' next to the Gap Tolerance entry.



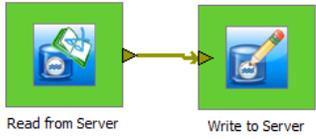
(4) Enter the Gap Processing Tolerance you entered above on Location Manager 'Data Sets' tab. Be sure the 'Reprocess Signal Now' box is checked. Click 'OK'.



Notice the 'Total Gaps' went to zero because the sampling interval for this example time series was 30 minutes. All the gap markers were removed from the time series.



(5) Use the 'Write to Server' tool to save the updated data set back to the Aquarius database.



Write to Server

File Help

Location Folders

- All Locations
- Recent Locations
- National Park Service
 - AA DEMOTEST
 - DEVA Practice
 - MIDN Practice
 - NCPN Practice
 - NEPE Test
 - NGPN Practice
 - Project A
 - Arctic Network
 - Cape Cod National Seashore
 - Catoctin Mountain Park
 - Central Alaska Network
 - Cumberland Piedmont Network
 - Death Valley National Park
 - Eastern Rivers and Mountains N
 - Golden Gate National Recreation
 - Grand Canyon National Park
 - Grant-Kohrs Ranch National Hist
 - Great Lakes Network
 - Great Smoky Mountains Nationa
 - Gulf Coast Network
 - Mid-Atlantic Network
 - National Capital Region Network
 - Northern Colorado Plateau Netw
 - Northern Great Plains Network
 - Redwood National Park and Stat
 - Rocky Mountain National Park

Locations

Drag a column here to group by that column

Location Identifier	Location Name	Location Type	Folder
ABLI_01	Test Data Test Test	Lake	Project A
ROMO_TEST	Test	Borehole	Project A

Select the Location above and the Data Set below and then click the Up Arrow to update the Data Set in the Aquarius Database

Update selected item in database.

Data Set	Status
Water Temp.YSI600@ROMO_TEST	Found

General

Type: Time Series - Basic

Identifier: Water Temp.YSI600@ROMO_TEST

Label: YSI600

Description:

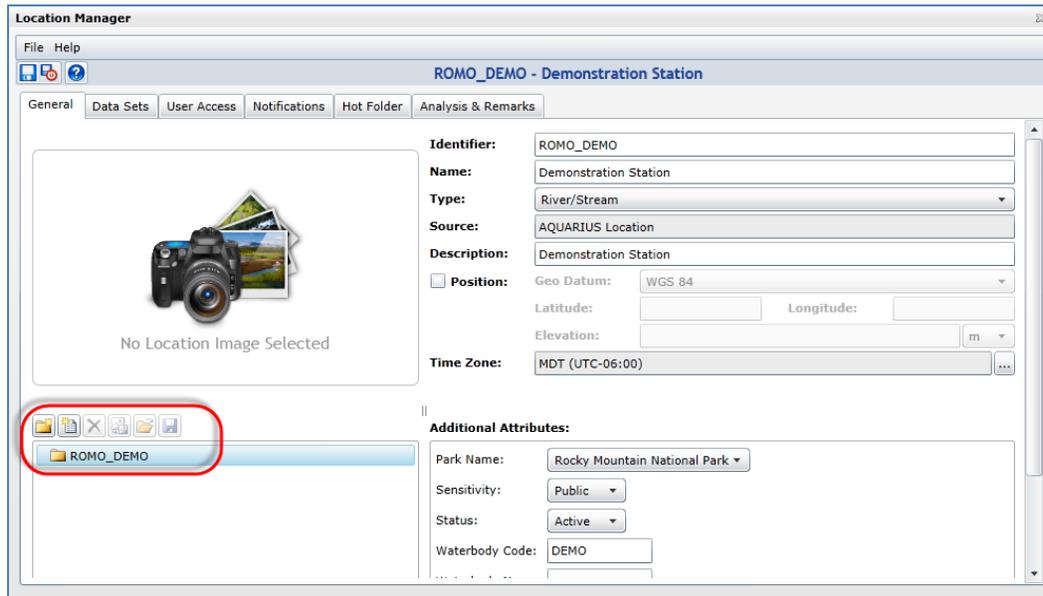
Total locations: 340

About Logged in: dtucker

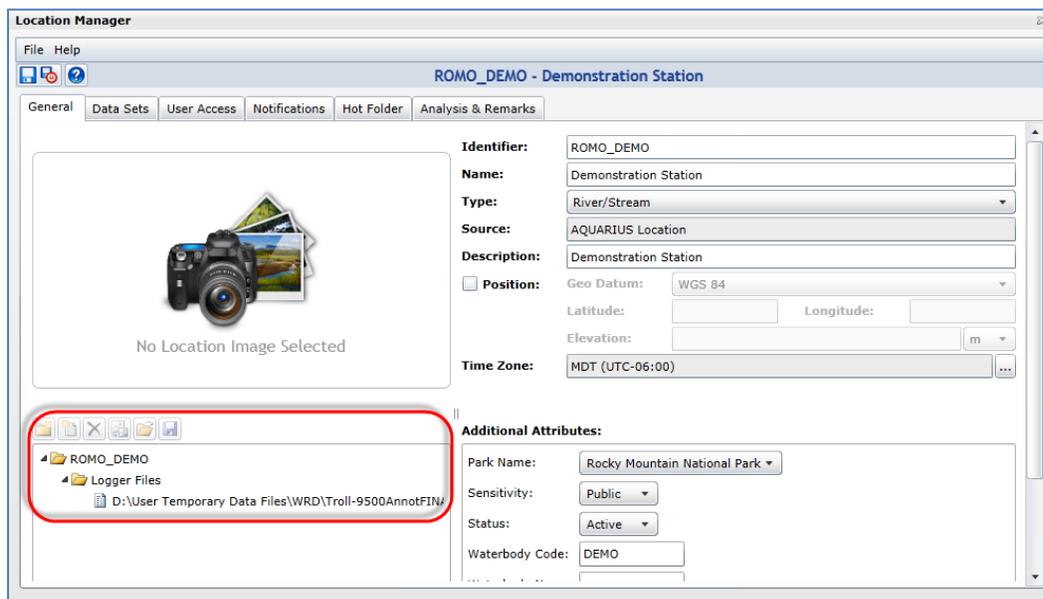
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Managing File Attachment Directories in Aquarius (Location Manager and Field Visit Tools)?

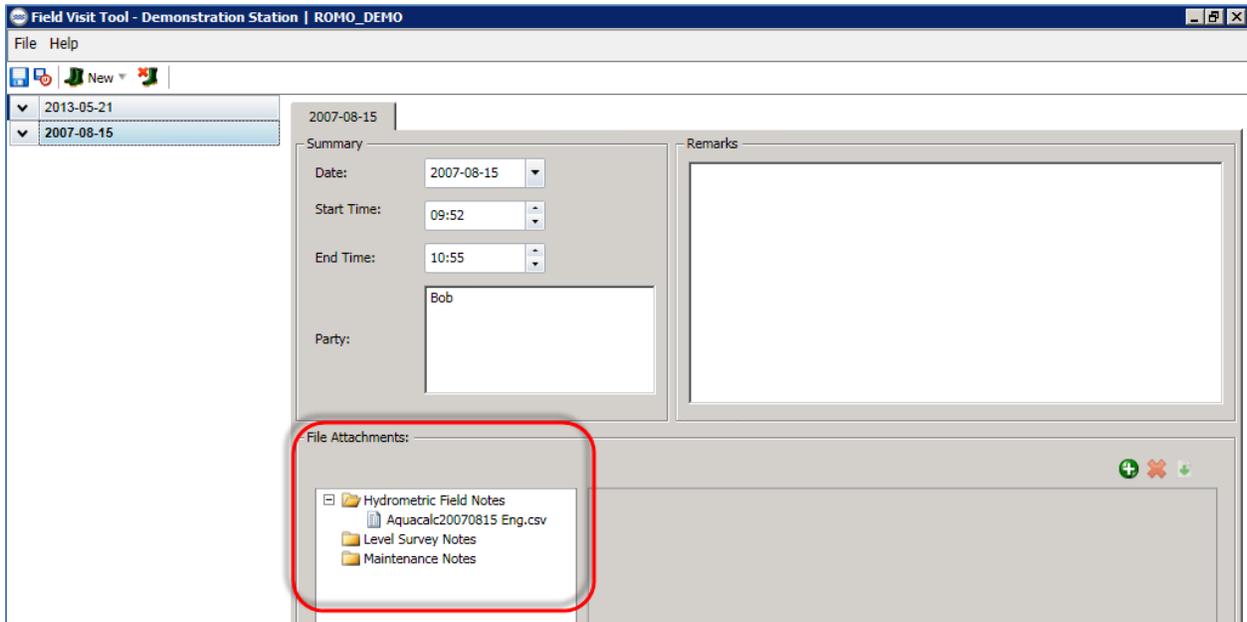
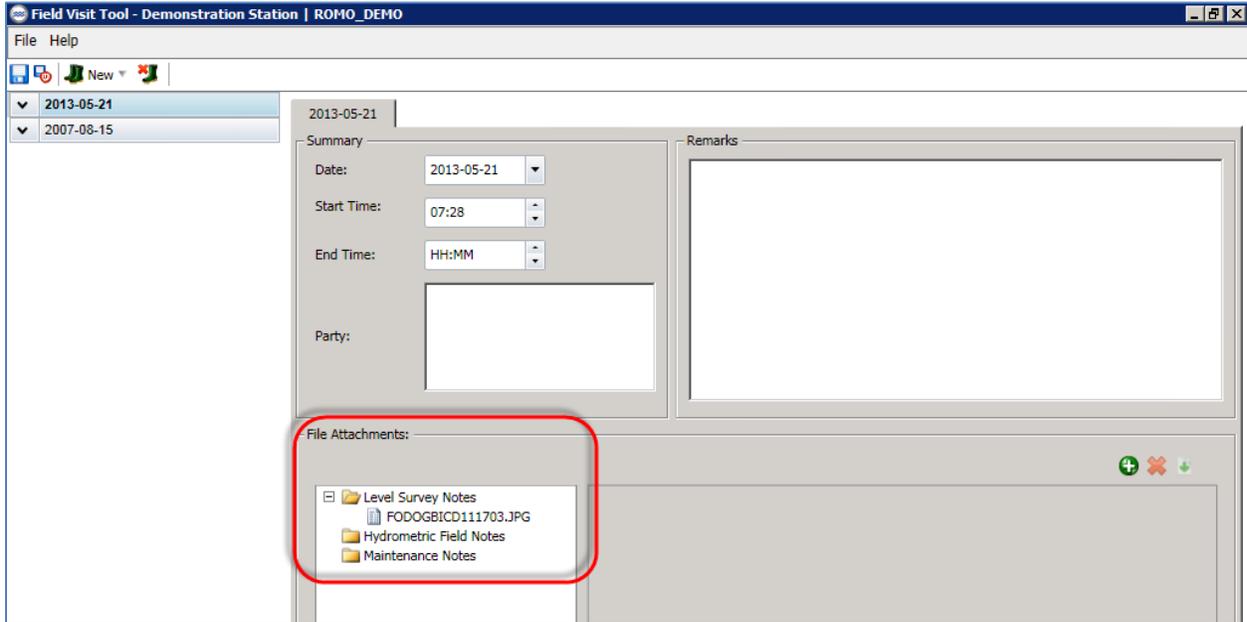
When you create a Location (station) in Location Manager, Aquarius also creates a directory structure for storing files/attachments that pertain to the Location and visits/activities that occur there. When you first create the Location, the top-level name of the tree directory structure is the Location Identifier as shown below.



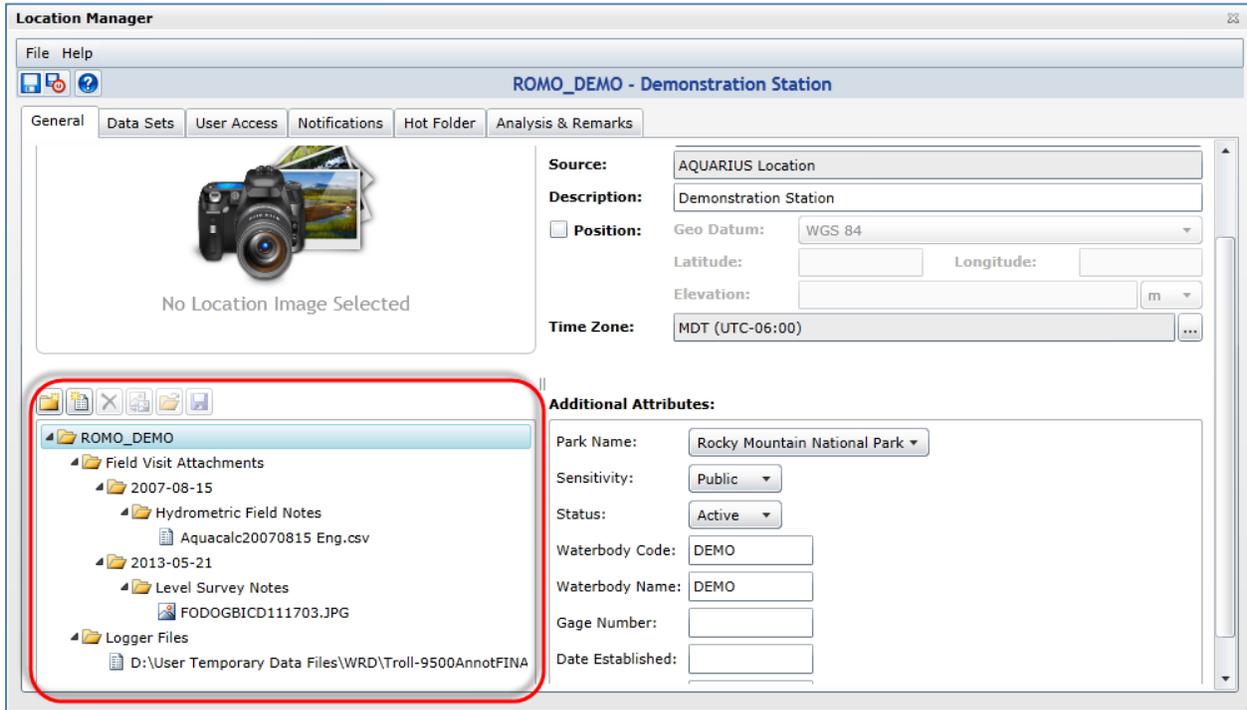
If you then use the Append Logger File tool to append data to the Location's time-series datasets, Aquarius creates a 'Logger Files' subfolder in the location's tree directory and copies the source logger file into it as shown below.



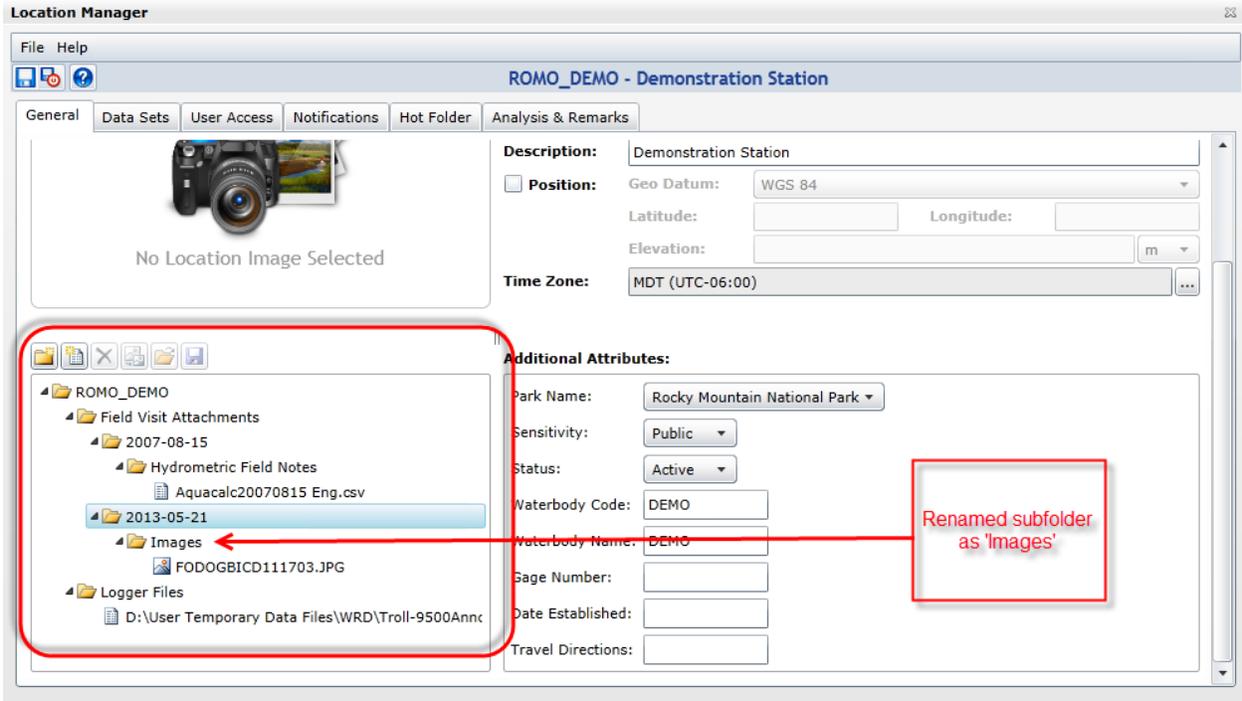
If you add some visits in the Field Visit tool and attach/upload files into one or more of the Field Visit tool's File Attachment folders shown below, they too will appear in the Location's tree directory structure in Location Manager. For the first visit below, '2013-05-21', a JPG file has been attached/uploaded into the 'Level Survey Notes' folder. The second visit below, '2007-08-15', is an imported AquaCalc file. Aquarius imported the AquaCalc visit and automatically stored the source file in the Field Visit 'Hydrometric Field Notes' folder.



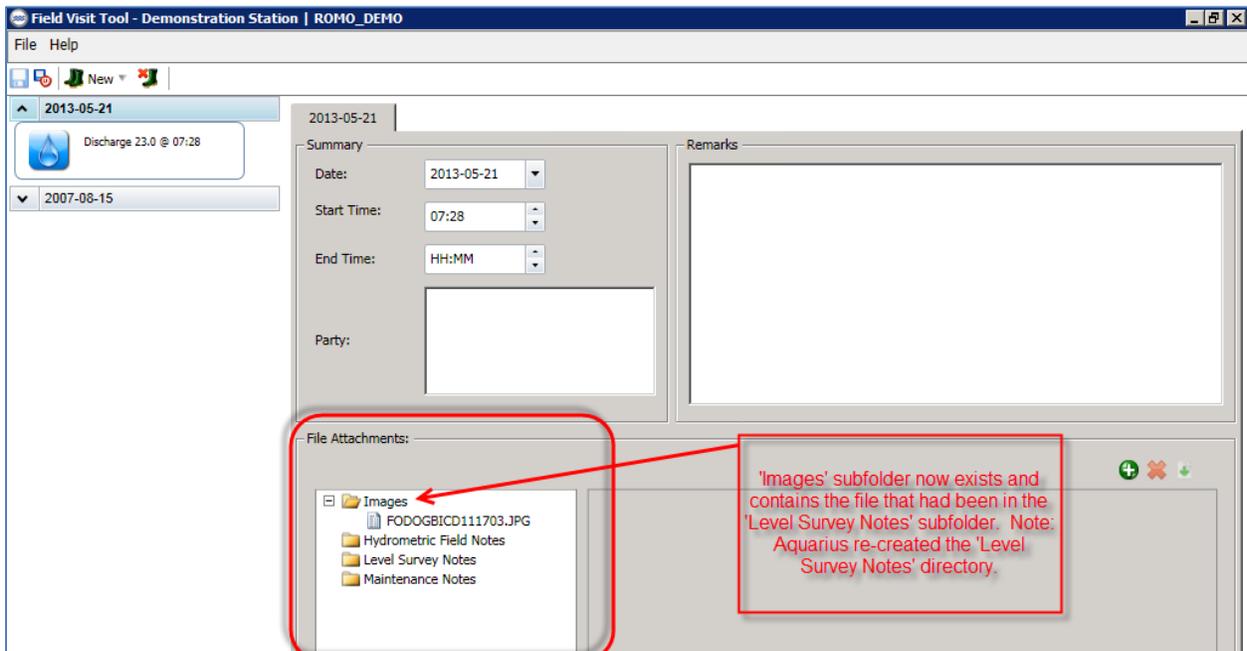
After saving/exiting the Field Visit tool and returning to Springboard, click the refresh icon (🔄) to update/refresh the application with the changes that were made in the Field Visit tool. Then select the Location and return to Location Manager. Notice that Aquarius has added a 'Field Visit Attachments' folder to the Location's tree directory structure. Under 'Field Visit Attachments' are folders for each of the visit dates (2007-08-15 and 2013-05-21) created in the Field Visit tool. In these visit folders are subfolders containing the files that were attached in the Field Visit tool.



You have complete control over the Location's tree directory structure as it appears in Location Manager. You can add folders, rename folders, and delete empty folders. If you add or rename folders within the 'Field Visit Attachments' visit folders, those changes will appear for that Location for that visit. Notice below that I've renamed the 'Level Survey Notes' subfolder under '2013-05-21' to be 'Images' by double-clicking on it and typing in the new name.



Save and exit Location Manager. Start the Field Visit tool and you'll notice that the renamed 'Level Survey Notes' folder 'Images' now appears under this Location and visit. Additionally, Aquarius re-created a new (empty) 'Level Survey Notes' subfolder. You can add or delete files from any of these folders – but you can't add, rename, or delete empty folders here.

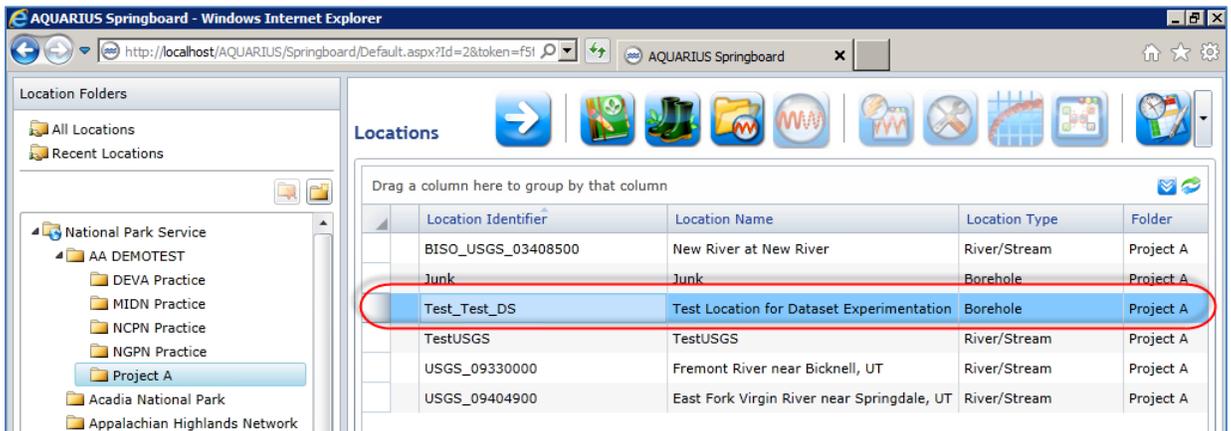


Unfortunately, if you don't like the default Aquarius Field Visit tool folder names (Hydrometric Field Notes, Level Survey Notes, and Maintenance Notes), you're stuck with them for now (we have put in a feature request to allow these to be customizable). For now, you can follow the procedure outlined above (once you've created a location visit and attached/uploaded a file into one of these default 'Notes' folders) of using Location Manager to rename the folder (e.g. 'Images' above). Note, however, that the renaming or adding of a folder within a 'Field Visit Attachments' visit subfolder only stays with that visit. If you want an 'Images' folder for each visit, you'll need to repeat the procedure above for each visit.

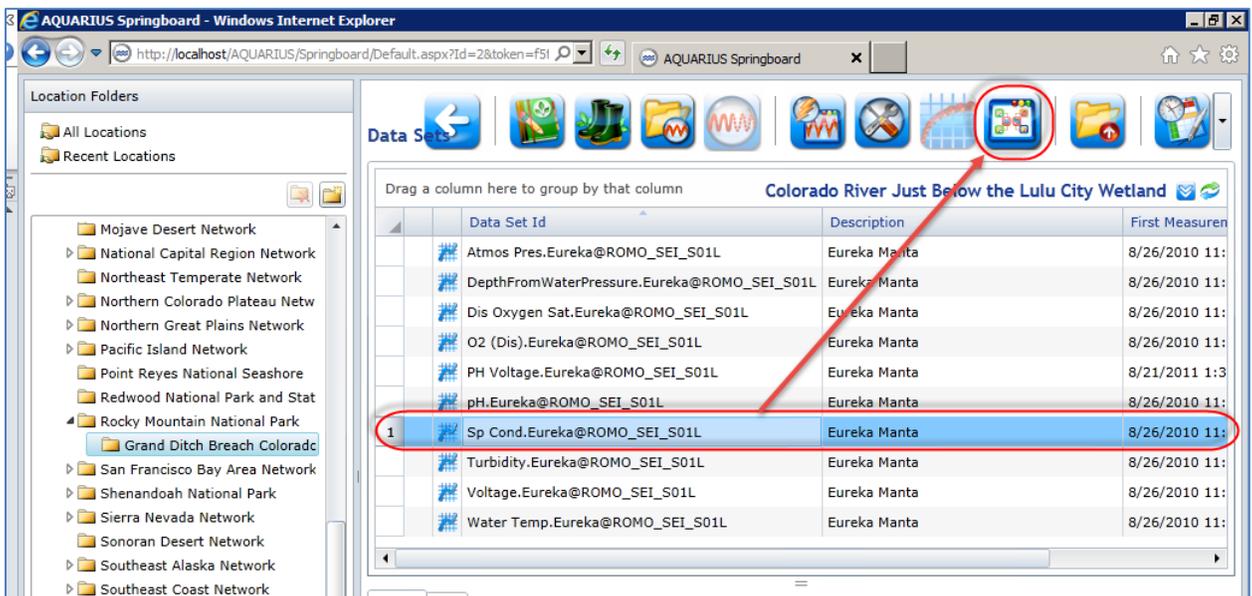
How do you copy existing Aquarius time series datasets into a different location?

If you want to copy time series datasets from one location to another (perhaps they were entered under the wrong location to begin with or you want to experiment with a copy of the dataset in the Data Correction toolbox rather than risk altering the original), the key is to use the Aquarius Workstation/Whiteboard 'Write to Server' tool as outlined below.

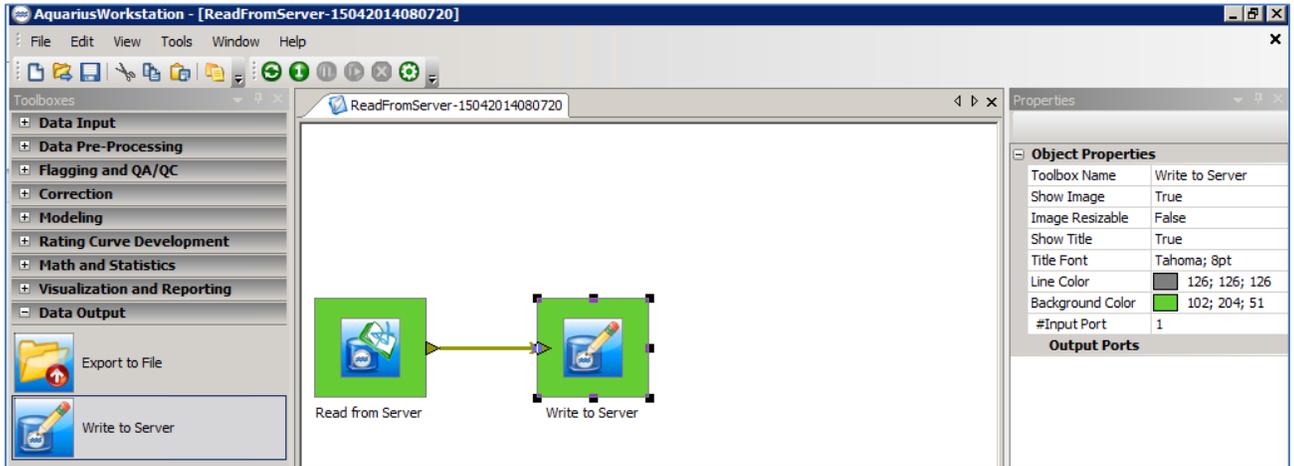
- (1) First, in Springboard, identify an existing location or use Location Manager to create a new/dummy location into which you want to copy the time series dataset. Below, I've created a location named 'Test_Test_DS' in the AA DEMOTEST park, Project A folder.



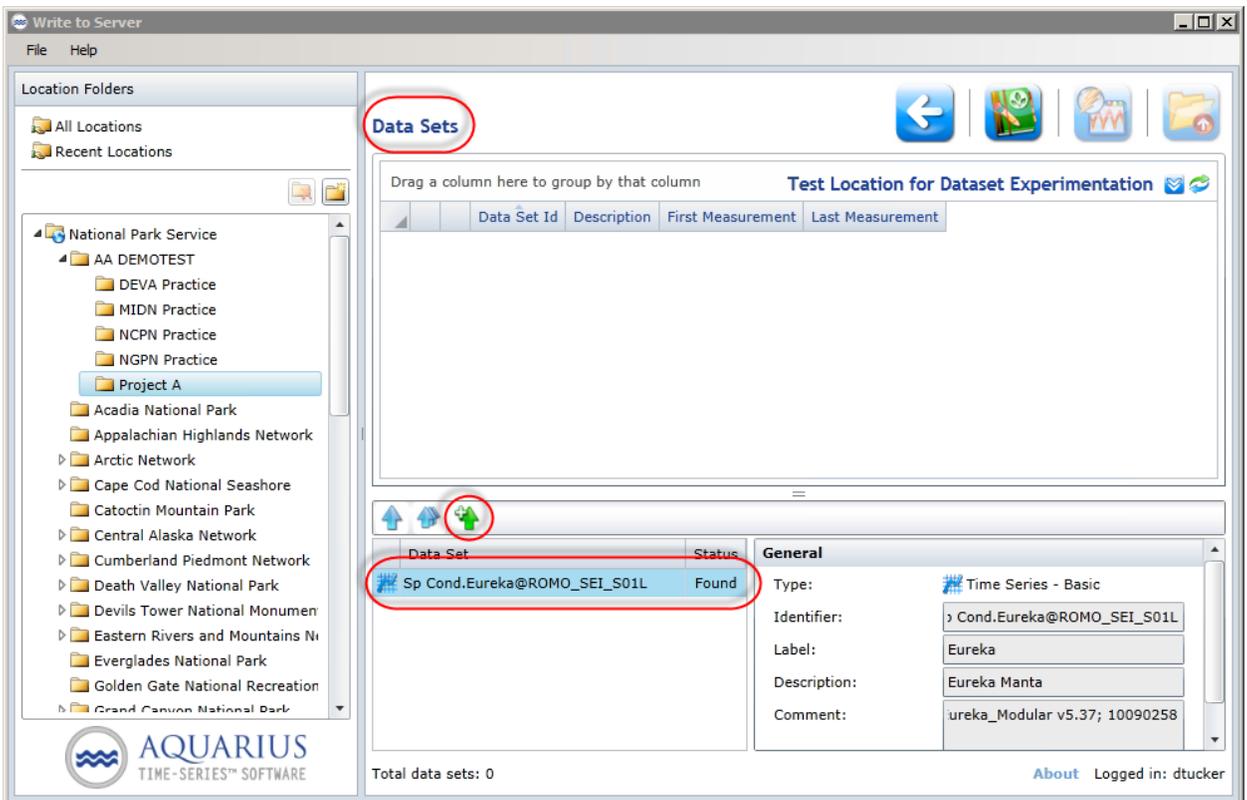
- (2) Navigate in Springboard to the existing time series dataset you want to copy/paste to this test location. Select the dataset and click the Whiteboard icon. In the example below, I've navigated to the Rocky Mountain National Park, Grand Ditch Breach folder, 'Colorado River Just Below the Lulu City Wetland' location, and selected the 'Sp Cond.Eureka @ROMO_SEI_S01L' time series dataset.



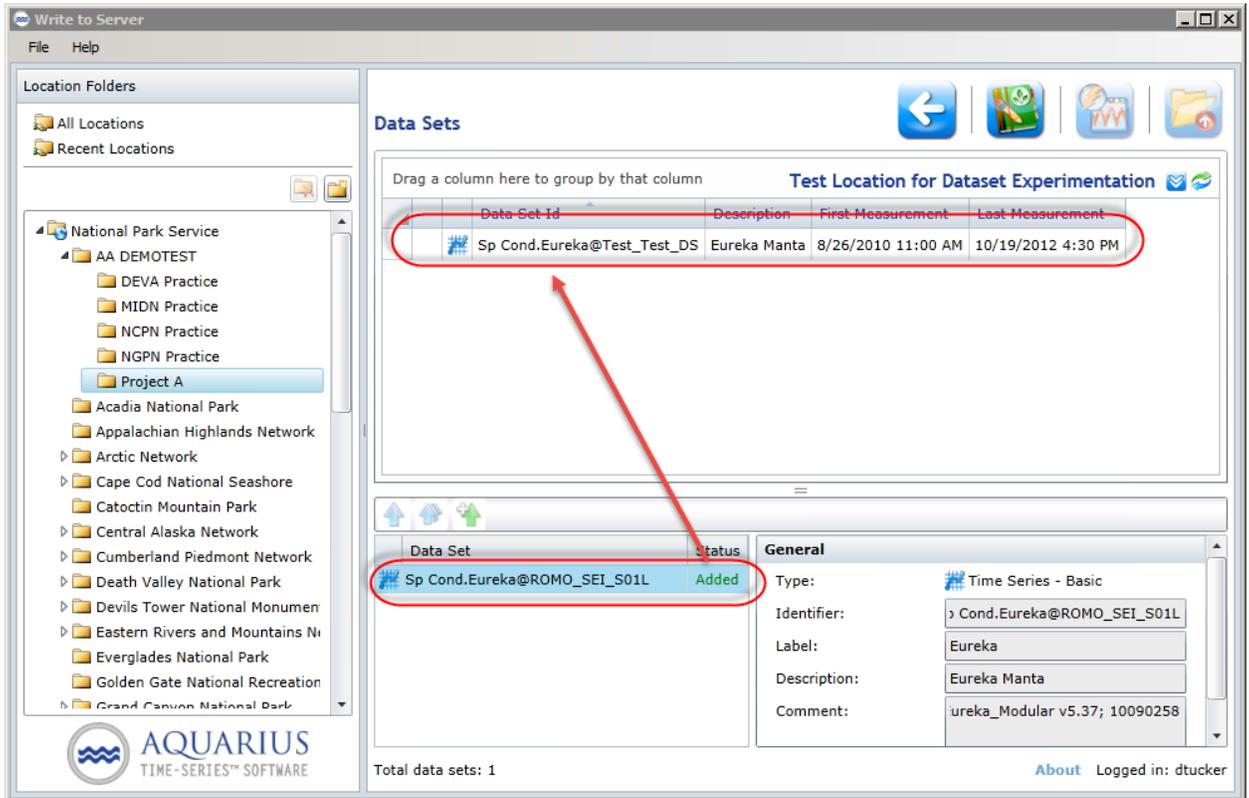
- (3) In Aquarius Workstation/Whiteboard, add the 'Write to Server' tool to the Whiteboard and connect it to the 'Read from Server' tool as shown below.



- (4) Double click the 'Write to Server' tool to open it. Navigate in the directory structure to the test location where you want to copy the dataset. Make sure you are in the 'Data Sets' pane for the location by clicking the big blue right pointing arrow (➡) icon. Select the dataset in the lower 'Data Set' pane and then click the green upward pointing arrow with the plus sign (⬆️) to add the selected item to the current location.



(5) Aquarius will copy (add) the dataset to the new location.

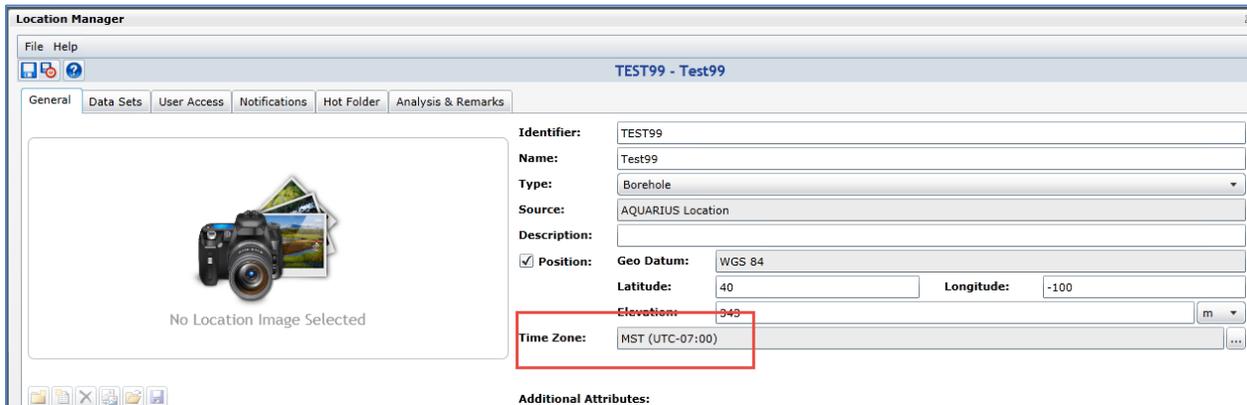


Upon completion of this operation, the 'Sp Cond' dataset will exist as two different datasets in the two locations. Note the name of the dataset in the top 'Data Sets' pane (Sp Cond.Eureka@Test_Test_DS) versus the bottom 'Data Set' pane (Sp Cond.Eureka@ROMO_SEI_S01L).

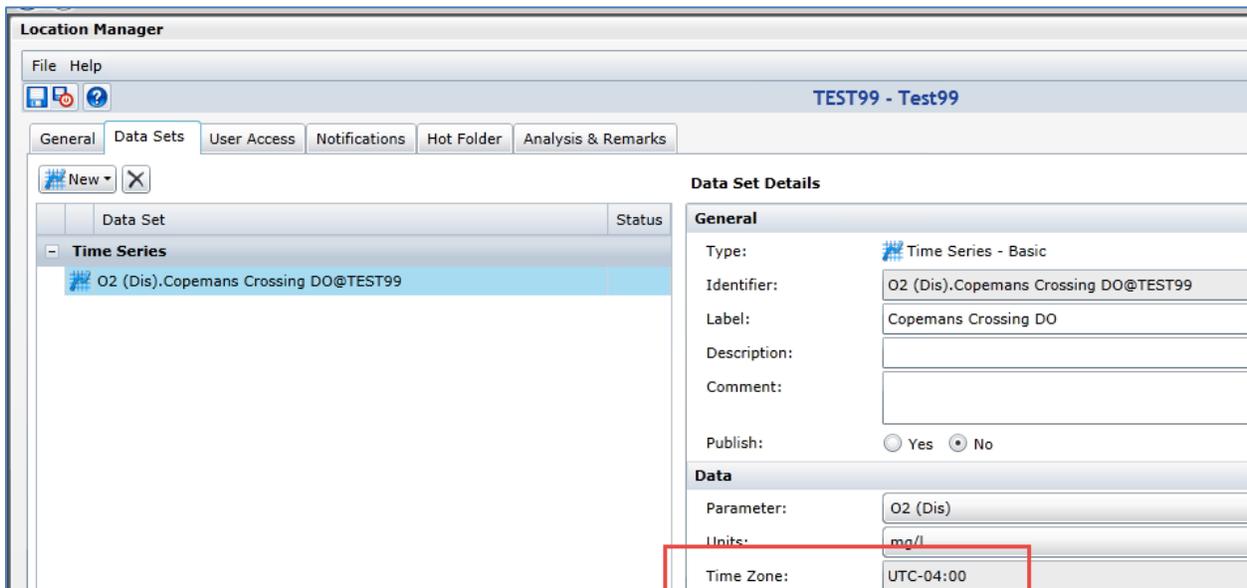
You can close the 'Write to Server' tool and work with the newly copied dataset in Springboard or Whiteboard as desired. Be sure to clean up after your testing by removing the test location or the copied dataset.

How does time zone processing work and how can I convert between time zones?

The time zone on the General tab in Location Manager sets the default time zone for all the time series at a location. By default ... that only means it pre-populates the time zone in the Append Logger tool when you go to import data. The setting of the time zone on the General tab in Location Manager does not change any time stamps ... that is, this will not change the values of any of the dates for the data that you have already imported, but it will change the default time zone for the time series. For example, changing the dataset from PST to MST will result in 10:00AM PST becoming 10:00AM MST.



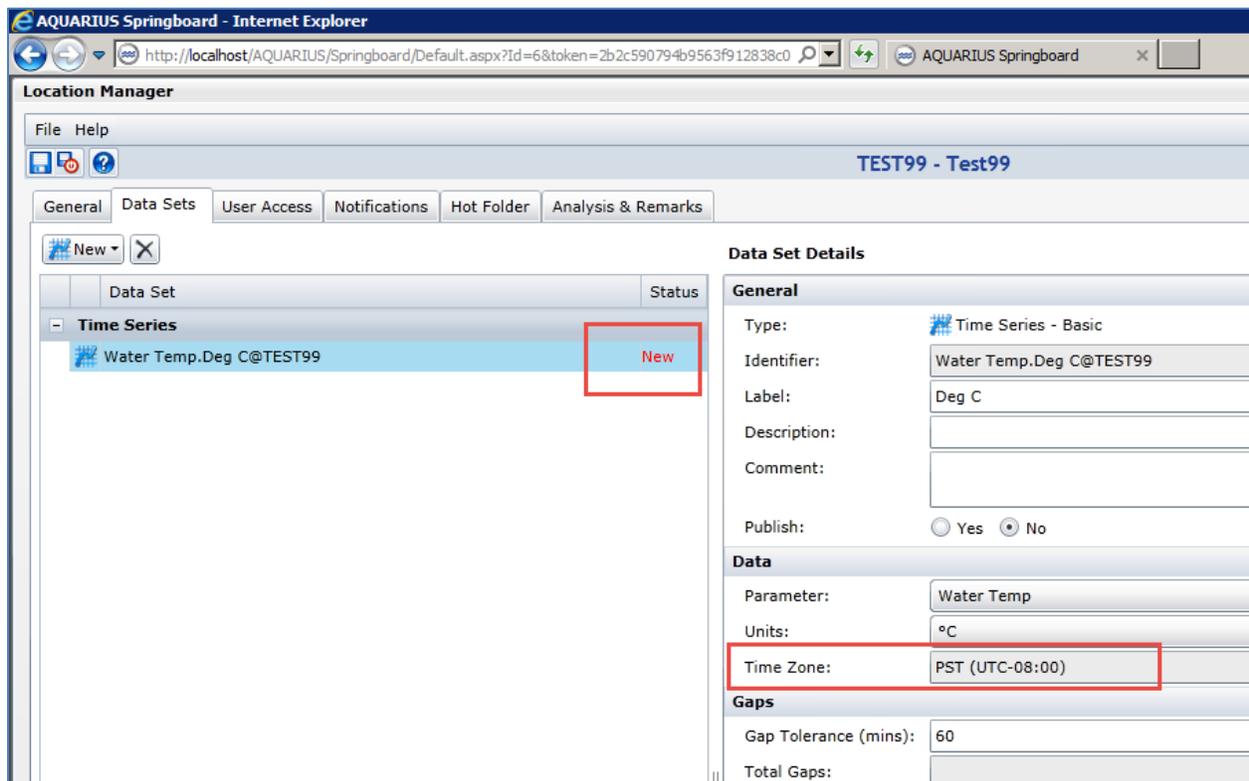
When you use the Append Logger tool to bring in data, it will default to the time zone you picked on the General Tab of Location Manager. You can pick a new (different) time zone when you are importing the file in the Append Logger tool. That selected time zone will override the General Tab Location Manager Time Zone and become the time zone for that dataset.



Once a dataset exists (on the Data Sets Tab in Location Manager), it's time zone becomes the default for subsequent appends into that dataset. That's where you'll need to be careful because it will convert the

incoming time to match the existing dataset's time. So if your first load/dataset creation was PST and your next append into that dataset is PDT, Aquarius will subtract an hour from each time before storing it in the dataset.

One issue I see with how Aquatic Informatics did this ... suppose you want to do everything in PST. You can set the General Tab in Location Manager to be PST, but unless the times in your first appended dataset are actually in PST, it will be a PDT dataset (or whatever you said it was coming off the probe) ... meaning Aquarius won't convert on the first append of data ... unless you create an empty time series for the dataset (as shown below), save it, and then append into it. That will convert all incoming times to PST.



Other Information about Time Zones:

Whether you append manually or through a hot folder, AQUARIUS normally assumes that the whole file has the same timezone offset -- the one you specified in the config file.

However, in newer releases of AQUARIUS you can use "ZZ" in your date mask for each line of the file. AQUARIUS will interpret this as a time offset.

So if you can program your logger or software to emit text data like this:

2012-03-09 01:30 -8

2012-03-09 01:45 -8

2012-03-09 02:00 -7 <--- note the change in time offset at the switch from PDT to PST

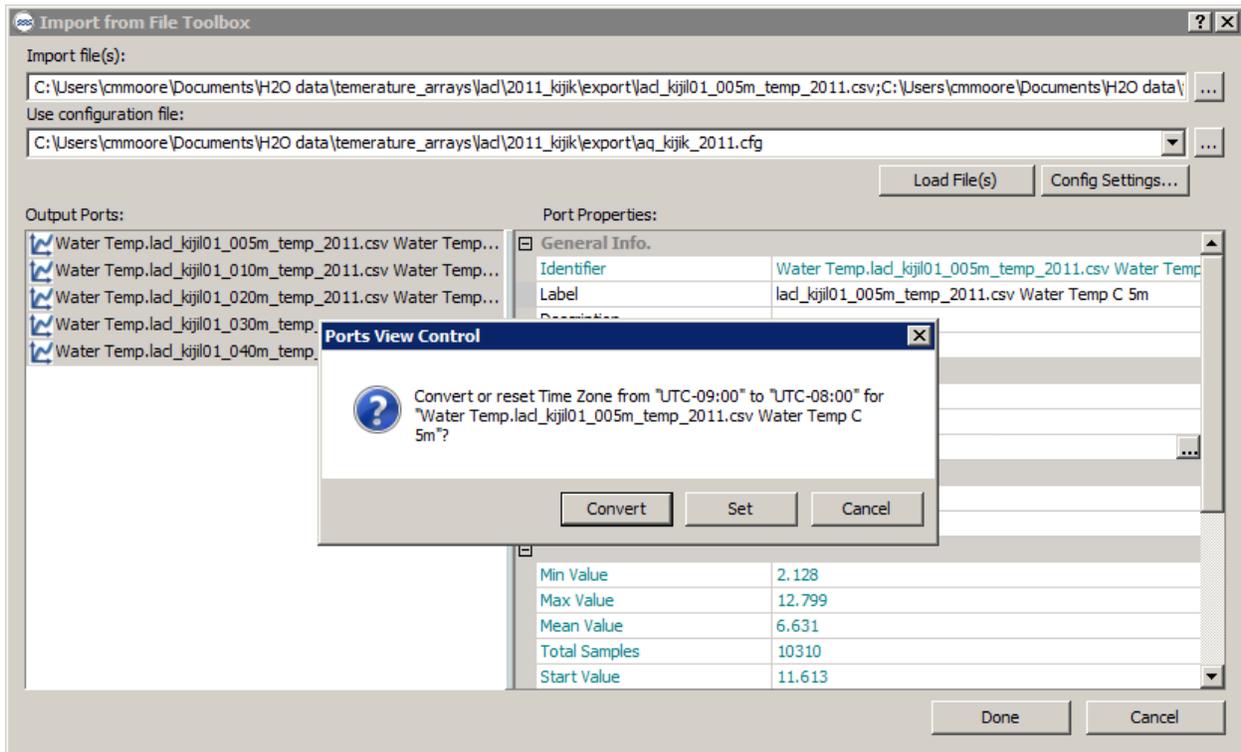
2012-03-09 02:15 -7

.... this could be parsed with a mask like this:

yyyy-mm-dd HH:MM ZZ

... and the data would be adjusted properly when appended to your aquarius dataset.

In Aquarius, you can change a time series time zone using the 'Import from File Toolbox' on the Whiteboard. Select each Output Port and change its Time Zone. Aquarius will pop up a message:



Selecting 'Set' just changes the time zone without changing the time. Selecting 'Convert' would adjust the actual times too if that were needed.

Once the data are in the Aquarius database you can change the time zone for entire 'Data Sets' (Output Ports) - for example - in Location Manager, but not individual portions/sections of the Data Set.

You can also convert existing data in Whiteboard by right-clicking on the 'Read from Server' toolbox's output port, choosing Signal Properties, and changing the time zone in the 'Time' section. Be sure to use Whiteboard 'Write to Server' toolbox to save the converted data back to the database.

