AUTO_REVIEW V5.00-3 RELEASE NOTES

Note: The original Auto_Review release for NWIS 5.00 (Version 5.00-2) was basically just a port of the 4.11-4 version of Auto_Review for the NWIS 5.00 Oracle database. No new features or bug fixes were added to that version. Several later bugs related to the port as well as a few older bugs were discovered after that release and were fixed in version 5.00-3. The list of 4.11-4 enhancements is included below for those that will be jumping from Auto_Review 4.11-3 or prior to Auto_Review 5.00-3 as they update to NWIS 5.00. Differences between Auto_Review 5.00-2 and 5.00-3 are indicated below those lists for those that will be updating from Auto_Review 5.00-2 to 5.00-3. For a list of enhancements and bug fixes included in prior versions, please contact GS-W-OSW_Scripts@usgs.gov.

Version 4.11-4 Enhancements:

- 1. Addition of new "gwreview" module which adds substantial enhancements to the initial continuous GW-level support added at version 4.10.
 - a. A "gwreview" program is now included that users can run to pull continuous GWlevel output. Note that swreview code is still actually used to retrieve all output and swreview can still be used to pull GW-level stations (since output is very similar to stage-only output...), but the hope is this separate program will cause less confusion and encourage use of the program by GW users.
 - b. Improved labeling on all plots.
 - c. Axes reverse appropriately for "depth below" parameters on all hydrographs.
 - d. GWSI water level measurements show on all plots.
 - e. A new 10-year (or period of record if <10 years available) DV water level hydrograph (on page 2 of the DV_hydro_out.pdf files...).
 - f. New GWSI water level table included in output.
 - g. Entry or editing of GWSI water levels will trigger an automatic retrieval in WSC's with automated retrievals enabled and continuous GW-level stations included in their swreview.control files.
 - h. Minimum instantaneous water level plotted on annual DV hydrograph.
 - i. GWSI water level information appended to end of the Adaps station analysis.
- 2. Swreview module enhancements:
 - Standard "pretty" rating tables replace the long rdb tables included in previous versions – the get_pdf_rating_table utility included in the package is retired with this change – an autoFF update should be installed related to this change, if used by the WSC.
 - b. Eliminated labeling of 2nd Y-axis when it isn't used on UV hydrographs.
 - c. Minimum instantaneous value added to DV hydrographs for all parameters but discharge.

Version 4.11-4 Bug Fixes:

- 1. Swreview:
 - a. Fixed bug causing data correction and measurement logs to be pulled in wrong timezone, sometimes leading to unnecessary automated updates
- 2. Wqmreview:

- a. Added toggle to QWDATA DB 01 prior to QWDATA record retrieval to avoid program hanging.
- b. Fixed problem with any missing data in bottom reference dataset causing axes to be linear on bottom plot of UV hydrographs.
- c. Fixed problem with QWDATA access detection not toggling the qwdata option off as it should have been.
- d. Fixed problem with DV tabling when more than 3 statistics were stored for the parameter.

Version 5.00-3 Enhancements:

1. Swreview:

- a. Now switching all reference data to 2nd Y-axis on UV hydrographs at nondischarge stations since maintaining the same scaling for other parameters is seldom beneficial. "Ref" text was added to 2nd Y-axis label to differentiate between axes when both base station data and reference station data are the same parameter in those cases.
- b. Swreview should now avoid picking the velocity DD when attempting to process an index-velocity station. The gage height DD should now be selected in all cases and should help make the limited output swreview provides for those stations a little more meaningful and less confusing. Note that swreview has never really been designed to process those types of stations...
- 2. Wqmreview:
 - a. Moved DV's behind all other data on UV hydrographs and made edges of DV cross symbols thinner to try to make them no stand out as much based on user feedback.
 - b. Moved reference water temperature line on DO UV hydrographs behind other data so it shouldn't obscure more important information.

Version 5.00-3 Bug Fixes:

- 1. Swreview/Gwreview:
 - a. Oracle Kerberos credential issues when running associated scripts under a service account or as a cron job when the userid didn't have a valid Kerberos ticket should be resolved.
 - b. Several timezone issues were corrected that caused processor checks on DD's to sometimes fail, stations to be updated too frequently by automatic updates using swreview_bat, and occasional wrong DV stats to be selected for tables and plots.
- 2. Wqmreview:
 - a. Oracle Kerberos credential issues when running associated scripts under a service account or as a cron job when the userid didn't have a valid Kerberos ticket should be resolved.
 - b. Fixed timezone issues with DV stat checks and QWDATA record check that could very rarely cause problems.

- c. Added missing "PD Plot dimensions" option so UV hydrographs can be rescaled from the main wqmreview menu. Option was non-functional in prior releases.
- d. Fixed issue with wqmreview being unable to find stored station-specific settings when a new station was selected from the main wqmreview menu.
- 3. Auto_control_builder:
 - a. Oracle Kerberos issues when running the script under a service account should be fixed.
 - b. Fixed timezone issues with processor checks that were preventing some sites from being added to control files if they'd had recent processor changes.
 - c. Fixed options for manual creation of control files, for manually appending stations to an existing control file, and for creating a control file based on DV's stored in the database for a given water year.