

# FEWS Tools QGIS3 Plugin Release Notes

## v 3.3.0

<b>Date</b>	September 25th, 2025
<b>Issues</b>	33 issues

### Important highlights from this release

1. Update GeoWRSI functionalities
  1. Current period is decided based on the most recent PPT file in dataset
  2. Missing data for PET/PPT can be filled with avg files for each missing period
2. Changes to BASIICS Blending tool
  1. Fixes to extract point stats so the correct pixel is extracted for stats.csv
  2. Masking fixes
  3. Changed to use final BASIICS pixel value in stats.csv and for comparison calculations instead of interpolated station value
  4. Changed Max Effective Distance to BED = Background Equivalent Distance
  5. Various other Bugfixes
  6. Documentation Updates to this tool
3. Bugfixes

### All updates for this release

#### Task

- Updated color files rainfall\_frequency\_count.qml and SPI\_int\_drought-wet\_Classification.qml in DefaultWorkspaceTemplate.zip
- Removed GeoCOF from menu dropdown
- Updated Add/Edit Dataset form and Download Data tools to allow compressed and uncompressed raster datasets
- Updated Blender tool to use pixel sizes from the region definition
- Added region export option to work with the import logic in Add/Edit Region tool
- Added local documentation popup option if the webpage documentation is down or not working in help buttons
- Added functionality to allow missing files in GeoWRSI runs to be filled with avg data, removed the check for .bil and .tifs to match across PPT and PET datasets
- Updated download URL for Global Pentadal and Dekadal PET datasets in fews\_tools\_example.sqlite

- Updated BASIICS Blending tool with changes to now use the final BASIICS value in csv output and stat calculations instead of interpolated station value
- Updated logos for GeoCLIM and GeoWRSI About tools, to use State Department and new FEWS NET logos
- Updated color files for rainfall summaries and composites  
rainfall\_anomaly\_diff\_raster.qml and rainfall\_anomaly\_percent\_raster.qml in  
DefaultWorkspaceTemplate.zip
- Changed Max Effective distance label to BED = Background Equivalent Distance in BASIICS form (GUI change in BASIICS blending second page)
- Added New Datasets to fews\_tools\_example.sqlite file
- Updated documentation and changed help buttons and view manual buttons to new web links

## Bug

- Fix to West Africa region extents in example sqlite file
- Fix to Add and Delete functions of Reclassify Grids table
- Fix for Reclassify Grids tool incorrectly changing NaN/No Data values to 0's
- Fix for BASIICS Validation tool showing duplicate values in csv
- Fix for Rainfall Summaries calculation error due to pixel shift during resampling
- Fix for Extract Stats issue with removing and creating directories
- Fix for BASIICS tool date format issue
- Fix for progress bars not working correctly
- Fix for BASIICS for output directories not existing when writing out files causing an error
- Fix for Extract Stats issue when running Pentadal for 30+ years where columns were not being output for periods at the end of range
- Fix temp folder/file bug where BASIICS isn't able to run if temp folder doesn't exist
- Fix temp folder/file location to use the current output dir that is selected, instead of hardcoded Output/temp location
- Fix for masking in BASIICS blending tool (Oceans should now be masked, only areas/pixels with valid input data will have final blended data)
- Fix for SPI issue if all values were the same at a pixel location causing an error to be thrown
- Fix for Download tool not getting HDR files when it is not a compressed download
- Fix bug in BASIICS Tool extract point stats function and use data type to read in input file so it is not automatically cast to integer
- Fix issue where BASIICS blending new dataset creation is not put things at correct location
- Fix MacOS initial load location that was incorrect for MacOS and would not allow users to setup their area

- Fix Download for Global Dekadal/Pentadal PET not working by adding retry attempts when connection issues happen

## v 3.2.0

<b>Date</b>	July 2nd, 2024
<b>Issues</b>	52 issues

### Important highlights from this release

1. Update GeoWRSI functionalities
  - a. Implement WRSI to current.
  - b. Implement WRSI forecast calculation.
  - c. Implement Extended WRSI average and median.
  - d. Implement multiple years selection for historical data
2. Add improvements for GeoCLIM functionalities.
3. Bugfix

### All updates for this release

#### Task

- Help buttons that direct user to the web manuals.
- Update GeoWRSI functionalities
  - Implement WRSI to current.
  - Implement WRSI forecast calculation.
  - Implement Extended WRSI average and median.
  - Validate FTP settings for selected dataset in data download form

#### Bug

- Data download error
- Blending not working as expected
- Extract stats tool – updating CSV file not working.

# v 3.1.0

<b>Date</b>	May 30, 2023
<b>Issues</b>	3 issues

## Important highlights from this release

1. Add GeoWRSI functionalities.
2. Add improvements for GeoCLIM functionalities based on the review comments from v3.0.19 release.
3. Bugfix – data download error

## All updates for this release

### Task

- Add updated English manual.
- Can define output prefix for all GeoCLIM tools
- Region Form – support GeoWRSI regions
- GeoWRSI
  - Define / add Crops
  - Define GeoWRSI settings
  - Run GeoWRSI
  - Define GeoWRSI output settings
  - GeoWRSI about page.
  - GeoWRSI manual

### Bug

- Fix data download error
- Add missing color files in the default workspace template

# v 3.0.19

<b>Date</b>	Jan 09, 2023
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<b>Issues</b>	3 issues
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## Important highlights from this release

4. New English and Spanish manuals.
5. Bugfix - Download problem

## All updates for this release

### Task

- Add new and updated manual.

### Bug

- Bugfix – Download failures.

## v 3.0.18

<b>Date</b>	Aug 19, 2022
<b>Issues</b>	2 issues

## Important highlights from this release

1. Bugfix - Open map in panel causing Composites error.
2. Add CHIRPS Daily date format YYYY.MM.DD

## All updates for this release

### Task

- Add CHIRPS Daily date format.

### Bug

- Bugfix – Open map in panel causing Composites error.

## v 3.0.17

<b>Date</b>	Jun 17, 2022
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<b>Issues</b>	1 issue
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## Important highlights from this release

1. Bugfix for BASIICS station file creation crashing QGIS.

## All updates for this release

### Task

- N/A

### Bug

- Bugfix – BASIICS station shapefile creation crashing QGIS.

## v 3.0.16

<b>Date</b>	May 31, 2022
<b>Issues</b>	1 issue

## Important highlights from this release

1. Rainfall summaries average sum fixed.
2. Fix SPI file extensions for alpha, beta and ProbofRain files.

## All updates for this release

### Task

- N/A

### Bug

- Bugfix – Rainfall summary average sum fixed, fix SPI file extensions for alpha, beta and ProbORainLT files.

## v 3.0.15

<b>Date</b>	May 24, 2022
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<b>Issues</b>	3 issues
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## Important highlights from this release

1. Rainfall summaries single period allowed.
2. Allow .tif and .tiff rasters as inputs/outputs.
3. Add extract stats by point functionality.

## All updates for this release

### Task

- Allow .tif and .tiff as input/outputs.
- Extract stats – allow a point shapefile as input.

### Bug

- Bugfix – Rainfall summary for a single dekad not working.

## v 3.0.14

<b>Date</b>	Feb 04, 2022
<b>Issues</b>	5 issues

## Important highlights from this release

1. pyqgis RasterCalculator exchanged for numpy arrays and math.
2. Fix for delimiter recognition problem in station csv files.
3. Handle bad station values in station csv files.

## All updates for this release

### Task

- BASIICS - Verify there are no empty station values in period of interest.
- BASIICS - Determine if the station data has garbage in the file.
- Dataset definition - Lock average file missing value and file suffix to the data file values.

### Bug

- Bugfix - BASIICS - Station file delimiter is not recognized correctly.
- Bugfix - pyqgis raster calculator is not handling nodata pixels correctly.

## v 3.0.13

<b>Date</b>	Sep 07, 2021
<b>Issues</b>	5 issues

### Important highlights from this release

1. Changed SPI algorithm.

### All updates for this release

#### Task

- Changed SPI algorithm.
- Add release notes to package, version the plugin file.

#### Bug

- Bugfix - Import archive unhandled exception
- Bugfix - Composites unhandled exception
- Bugfix - BASIICS MMK and MMP date formats

## v 3.0.12

<b>Date</b>	Mar 11, 2021
<b>Issues</b>	1 issue

### Important highlights from this release

1. Fix typo in database example.
2. Bugfix - pull years from basename instead of path.

### All updates for this release

#### Bug

- Handle no input files error

## v 3.0.11

<b>Date</b>	Mar 09, 2021
<b>Issues</b>	1 issue

## Important highlights from this release

1. Fix mismatch between region and mask not stopping process.

## All updates for this release

### Bug

- After getting a region mismatch error, the process completes.

## v 3.0.10

<b>Date</b>	Feb 25, 2021
<b>Issues</b>	1 issue

## Important highlights from this release

1. Output directory initialization.

## All updates for this release

### Bug

- Output directory - does not update on initial install to use the default location.

## v 3.0.9

<b>Date</b>	Feb 17, 2021
<b>Issues</b>	2 issues

## Important highlights from this release

1. New manual.
2. Updated data download addresses.

## All updates for this release

### Task

- Get new manual into the package.
- Update geoclim\_example.sqlite with https versions of dataset remote host and remote directory.

## v 3.0.8

<b>Date</b>	Feb 03, 2021
<b>Issues</b>	7 issues

## Important highlights from this release

1. New manual.
2. GUI tweaks.
3. Hide NetCDF.
4. Update example database with column additions.

## All updates for this release

### Bug

- Download date format problem.
- Climatological Analysis - crashes midway through Average run using cross years.

### Task

- Hide NetCDF functionality for now.
- Fix places where code breaks if data file prefix is the same as average file prefix or if there are potential regex issues.
- Update example sqlite file with new columns and values.
- Combo box form controls that are locked, changed to locked line edits.
- Composites - don't reset years in composite form when analysis is changed.

## v 3.0.7

<b>Date</b>	Jan 08, 2021
<b>Issues</b>	5 issues

## Important highlights from this release

1. PET and Africa RFE downloads fixed.
2. Climatological Analysis seasonal averages fixed for temperature datasets.
3. Ability to change default output directory.

## All updates for this release

### Bug

- Climatological Analysis - PET and Temperature dataset problems.

### Task

- Second map needs to load with a different style.
- Add functionality to change the 'default' output directory.
- PET data download manipulations.
- Update example database with PET entries, should be the same as the default datasets from VB tool.

## v 3.0.6

<b>Date</b>	Dec 17, 2020
<b>Issues</b>	8 issues

## Important highlights from this release

1. Update Composites formulas.
2. Handle file permission errors.
3. Display problems.

## All updates for this release

### Task

- Composites formulas adjusted.
- Climatological Analysis - Trend output loads with SPI color file always.
- BASIICS Form 2 - overlapping controls.
- Climatological Analysis – fix problem where empty layer is produced.
- Figure out how to handle permission errors when user has a file open and it can't remove it.
- Contour - handle Index Error on min data value.
- Climatological Analysis - display issues.

- Climatological analysis - SPI and Frequency analysis are giving unspecified error.

## v 3.0.5

<b>Date</b>	Nov 18, 2020
<b>Issues</b>	3 issues

### Important highlights from this release

1. Stations outside region stop blending process.
2. Update sqlite file with corrected values for default mask.
3. Download data for month and period of month formats fixed.

### All updates for this release

#### Task

- Blending - stations outside of region extents still processed.
- Default database - review region mask and map entries and verify they are in the default workspace.
- Download data - file count breaks for file formats with month and period of month.

## v 3.0.4

<b>Date</b>	Nov 18, 2020
<b>Issues</b>	8 issues

### Important highlights from this release

1. Process inputs checking fix.
2. Update default sqlite with UCSB address changes.
3. Masking and zooming adjustments.

### All updates for this release

#### Bug

- Rainfall summaries zoom is not correct with world files selected for smaller region.
- Composites problem - errors at end of process.
- Process input checking is not working in all cases.
- Fix inconsistent variable names for workspace setup.

## Task

- Investigate/fix Composites differences.
- Remove masking from Blending, only use region info to clip outputs.
- Update example .sqlite file for UCSB ftp structure/url changes.
- If averages are missing for Rainfall summaries, open the Climatological Analysis tool so they can be created.

## v 3.0.3

<b>Date</b>	Oct 13, 2020
<b>Issues</b>	13 issues

## Important highlights from this release

1. BASIICS blending
2. Bug fixes from beta testing

## All updates for this release

### Bug

- Extract stats will run with no raster selected.
- BASIICS issue - missing data 'split' map issue.
- Climate composites issues.
- Fix label when switch between rainfall and temperature datasets.
- Archive creation - incorporate the \_datasets file.
- Region copy issues.

### Task

- Contours - round down to match the VB tool outputs.
- Update color files.
- Instead of zooming to the map layer extents, outputs should zoom to the region extents.
- Climatological Analysis – when updating ds averages, do not load outputs to map panel.
- BASIICS - only load the latest 3 outputs and add two outputs.
- Add dialogs to processes to indicate when they are complete.
- Remove the "Mask" tab from the Settings window and move the "import mask from vector" to the Define Region form.

## v 3.0.2

<b>Date</b>	Jul 24, 2020
<b>Issues</b>	1 issue

## Important highlights from this release

1. Fix but where nodata was not being set for extract stats, so a masked file would give negative averages.

## All updates for this release

### Bug

- Extract stats is giving negative values

## v 3.0.1

<b>Date</b>	Jul 16, 2020
<b>Issues</b>	6 issues

## Important highlights from this release

1. Applies color files.
2. Adds logging and message dialogs when exceptions are hit.
3. Will keep trying remaining downloads if a url error is encountered.

## All updates for this release

### Bug

- Contours - force user to change interval to a non-zero unsigned integer.
- Extract stats – Functionality fixed.
- Download data - if bad file is encountered, it should still try remaining files.

### Task

- View Available data - adjust the default dataset load to match the other tools
- Add dialogs to inform user of critical exceptions and confirm on user cancellations
- Verify color files

## v 3.0.0

<b>Date</b>	Jul 7, 2020
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## **Important highlights from this release**

1. First release of QGIS3 FEWS Tools Plugin GeoCLIM functionality to regional scientist beta testers.