

## **All new updates and enhancements on VO 5.0.**

2017-06-05

*Fixed the bug where the total precipitation of MASS storm is not copied when added to the project.*

2017-04-24

- 1. Fixed the bug where the customized property editor doesn't work.*
- 2. Added the function to create Chicago design storm based on IDF group.*

2017-03-31

- 1. Beta version integrated all bug fixes from VO4.*
- 2. Fixed the bug where the read design storm data can't be saved to Climate Library*
- 3. Enabled the paste function for duration-rainfall intensity for IDF*
- 4. Renamed VO3.exe to VO.exe and make necessary changes to use the assembly.*
- 5. Updated the help system*

### **v5.0.2006**

2017-07-06

- 1. Added second length for RouteChannel*
- 2. Improved the cross-section editor for RouteChannel*
- 3. Added multiple storm files*

### **v5.0.2007**

2017-07-17

- 1. Fixed the time step of ChannelRouting when the time step is larger than 60 mins.*
- 2. Unified the software name as Visual OTTHYMO instead of VH Suite.*
- 3. Restored the original NasHyd. Do not change the time step.*

**v5.0.2008**

2017-08-15

*1. New cloud-based licensing system.*

**v5.0.2011**

2017-11-14

*Fixed two bugs reported by Engage Engineering.*

*1. The read storm description is not showing in detail output.*

*2. The simulation number is all 0 in detail output. The simulation run name was added.*

**v5.0.2012**

2017-11-21

*Fixed the bug in License Manager message. When all licenses are checked out, the message was shown as expired. It is now All in use. This was reported by City of Barrie (James).*

**v5.0.2013**

2017-11-30

*1. Improved Climate Library to avoid freezing the system. It was caused by the storm library created by the previous version. In this version, it will delete all the database files and create the default database.*

*2. Fixed the bug in A, B, C fitting.*

*3. Maintained Chicago storm parameters when it's added to the model. These parameters will be shown in detail output.*

**v5.0.2014**

2018-01-11

*Added customized NTP server for Parsons.*

### **v5.0.2015**

2018-02-09

- 1. Fixed the bug which would cause issues in time step in the single-event engine. The SDT in single-event engine may be overridden by readhyd and custom rainfall data. So the rainfall data must be read for each hydrograph before running the command to reset the SDT. This bug was reported by Steffen Pentelow from Stantec.*
- 2. Fixed the non-working file path for readhyd and readstorm when importing a VO2 project. It will search in the project folder where the VO2 project is located. If the same file name is found, it will be assigned to readhyd and read storm.*

### **v5.0.2016**

2018-02-13

- 1. Added the customer time step to Mass Storm and enable edition in Climate Library and Storm Viewer.*
- 2. Enabled the Modify Storm in Storm Viewer.*
- 3. Assigned the customer time step to Mass Storm when importing from VO2 project.*

### **v5.0.2017**

2018-02-14

- 1. Added the Mass Curve of City of Sault Ste. Marie to DesignStrom AES as requested by a specific client.*
- 2. Changed the new AES storm window to add Mass Curve preview.*

### **v5.0.2018**

2018-02-26

- 1. Added support to IDF equation of  $i = A*t^B$  where  $t$  is in hour.*
- 2. Updated the single-event engine to fix the bug in RoutePipe. The two length change for RouteChannel impacted the result of RoutePipe. This is fixed by adding a parameter to function CMPTT. This is identified by CCTatham.*

### **v5.0.2019**

2018-03-06

- 1. Changed how the RouteReservoir rating curve is ordered to avoid misleading. This is as requested by a client.*

*2. Added one more check to the rating curve to make sure the discharge is correct.*

**v5.0.2020**

2018-03-14

*Changed the floating point compilation settings of single-event engine to avoid NaN in detailed output file.*

**v5.0.2021**

2018-04-09

*Updated the continuous model engine dll to propertyl run models covering long time period (51 years hourly run). The dll is based on the latest wetland branch but still using the old APIs.*

**v5.0.2022**

2018-04-18

*Fixed the bug where some of the parameters are not carried over from single-event model to continuous model. This was reported by Jin Chen from CVC.*

**v5.0.2023**

2018-04-30

*1. Changed the engine for RouteChannel to avoid throw not converge warning for very small outflow. This is as per request from a client.*

*2. Added natural sort to add to model window in Climate Library. This is as per request from a client.*

**v5.0.2024**

2018-05-04

*1. Removed the two length check for continuous route channel*

*2. Revised how continuous route channel parameters are transferred to engine to exclude the second length.*

**v5.0.2025**

2018-05-15

*Added version number to output file so the review agency knows that they are using the latest version.  
This is as requested by a client.*

**v5.0.2026**

2018-05-23

*When calling paste command on parameter table, a new condition to check StandHyd Parameter LgiType has been added that does not accept other values other than the one defined in Enum.*

**v5.0.2027**

2018-05-24

*Added code to handle NodeLocked License.*

**v5.0.2028**

2018-07-18

*Deleted DataMember for availableproperties and coordinateunit fields.*