Reference sources

MATLAB HEC-RAS Interface Documentation, IMTLD

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This document gathers every reference source used to make the MATLAB HEC-RAS interface, which are publicly available.

Table of contents

Bibliography

Breaking the HEC-RAS Code

The only one complete documentation of the HEC-RAS API, know as HEC-RAS Controller. But the MATLAB command methodsview helps to complete it.

This documentation is based on a previous version of HEC-RAS and is written for VBA langage. Some objects presented in this documentation are not available when using th HEC-RAS API in MATLAB.

In addition, this documentation contains advanced examples of how to use the HEC-RAS Controller.

Breaking the HEC-RAS Code: A User's Guide to Automating HEC-RAS, Christopher Goodell, h2ls, ISBN: 978-0-9908918-0-2

Available on the website of the RAS solution : https://www.kleinschmidtgroup.com/breaking-the-hec-ras-code-2/

Automation of HEC-RAS using MATLAB

One of the firsts articles, which present in a concrete example, how to control HEC-RAS using MATLAB. This article uses previous versions of HEC-RAS and MATLAB.

Leon, A. S. and Goodell C. (2016). "Controlling HEC-RAS using MATLAB" Journal of Environmental Modelling and Software, 84, 339–348.

Available on the website of the RAS solution : https://www.kleinschmidtgroup.com/ras-post/controlling-hec-ras-using-matlab/?keyword=Order_Conv&sort=

Websites

Code related to the article "Controlling HEC-RAS using MATLAB"

Full code related to the article "Controlling HEC-RAS using MATLAB", contains MATLAB scripts able to automate HEC-RAS for a precise example, presented in the article cited above.

This code works almost as is, except if you encounter versions incompatibilities in MATLAB or HEC-RAS.

Website selling the code : https://arturo6.selz.com/fr/item/5cdee84c701f5d086c0ca89c

MATLAB

Programming software and language used for the MATLAB HEC-RAS interface.

Website: https://fr.mathworks.com/

HEC-RAS

Flow modeling software.

Website : https://www.hec.usace.army.mil/software/hec-ras/

VBA API Documentation for MS Office apps

Gather a lot of detailed information about objects available, when automating an office app, e.g. Excel in MATLAB.

Website : https://docs.microsoft.com/fr-fr/office/vba/api/overview/

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Information given in this document can be wrong, and are only subjective advices, which can be useful for a MATLAB user. And should not be taken as any kind of criticism against any document, software, content, author, or content provider.