USER MANUAL

Measurement and Modeling of Ecosystem Risk and Recovery for In Situ Treatment of Contaminated Sediments

SERDP Project ER-1552

MONTH YEAR

Dr. Richard Luthy
Stanford University

Dr. YeoMyoung Cho
Stanford University

Distribution Statement A
This document has been cleared for public release

SERDP
DOD ▪ EPA ▪ DOE

User Manual for the Standalone HOC Sediment Desorption Model

last updated Jan 8 2015

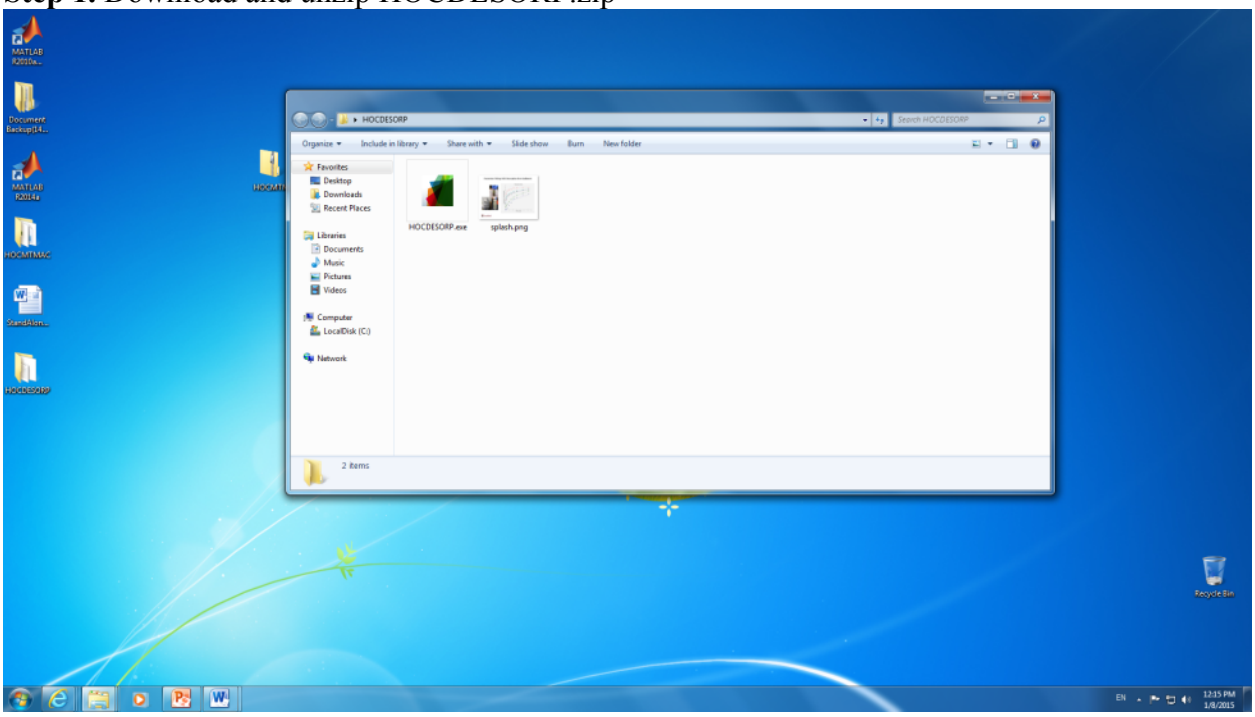
Contacts: YeoMyoung Cho (daybreak@stanford.edu) / Richard G. Luthy (luthy@stanford.edu)

1. System Requirements

- Windows machine (64-bit processor)
- MS Excel
- MATLAB Compiler Runtime (MCR, R2014a (8.3)) available on http://www.mathworks.com/products/compiler/mcr/index.html

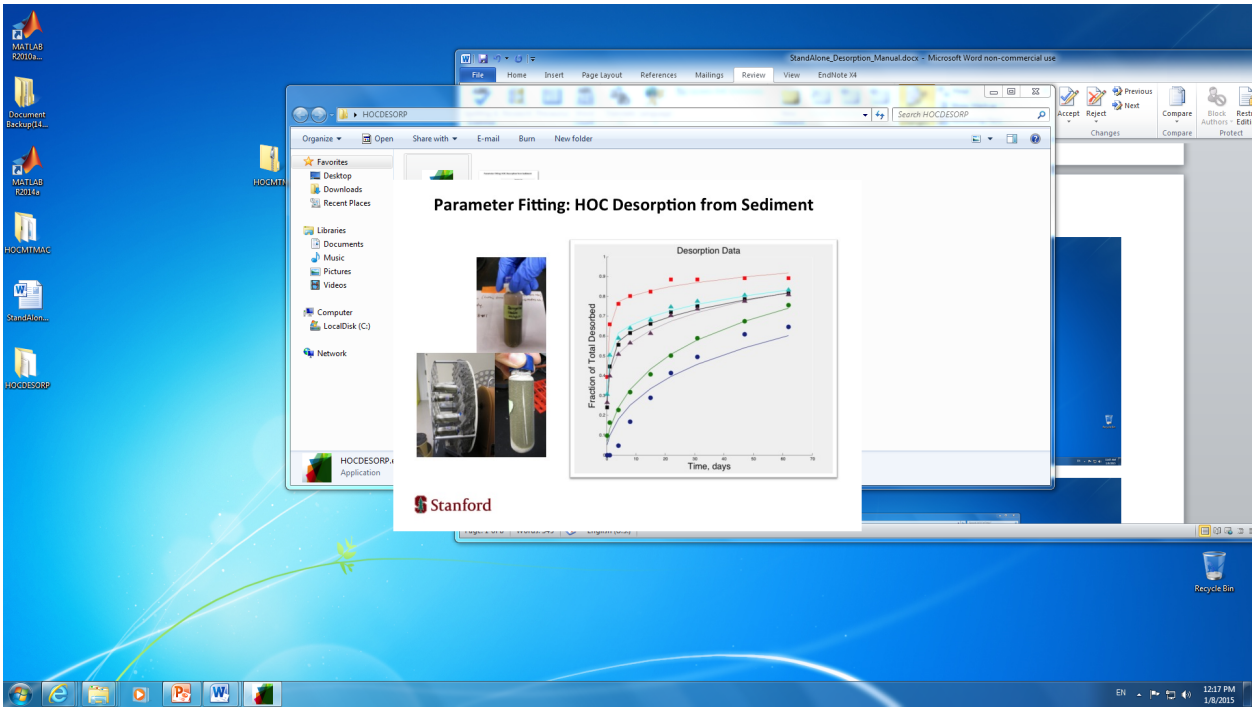
2. Operation

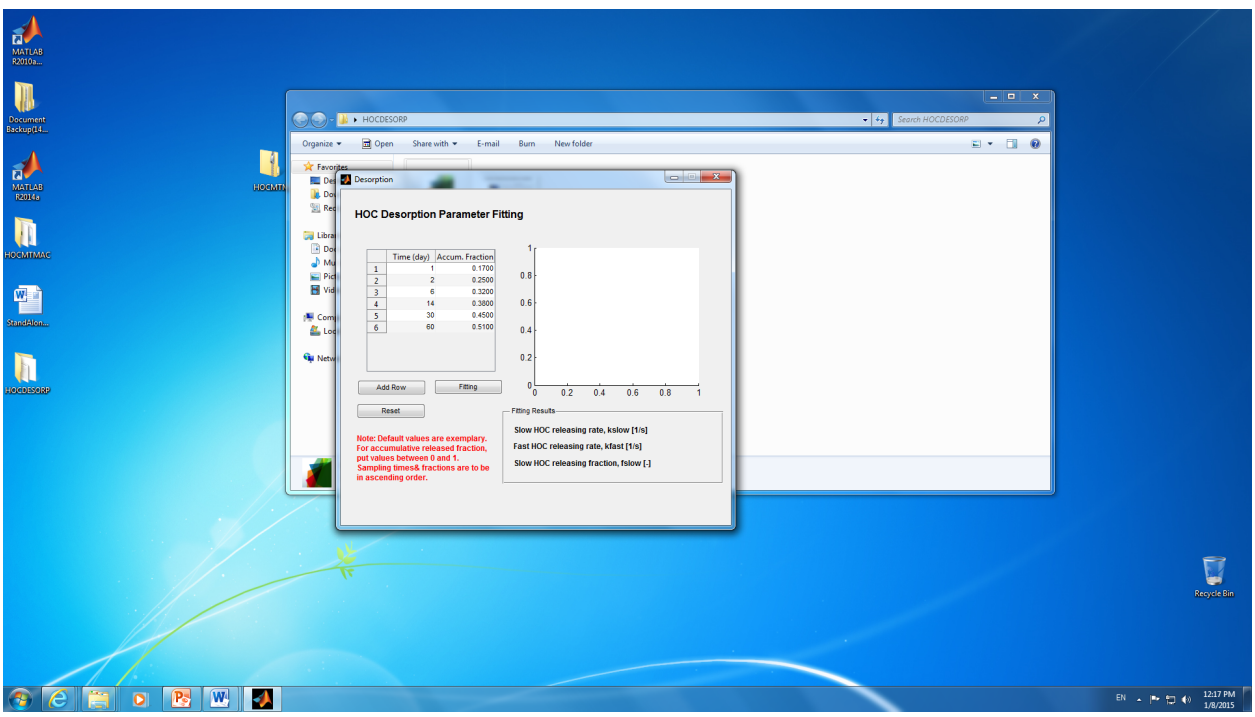
Step 1. Download and unzip HOCDESORP.zip



Two files are included. HOCDESORP.exe (MATLAB standalone executable file), and splash.png.

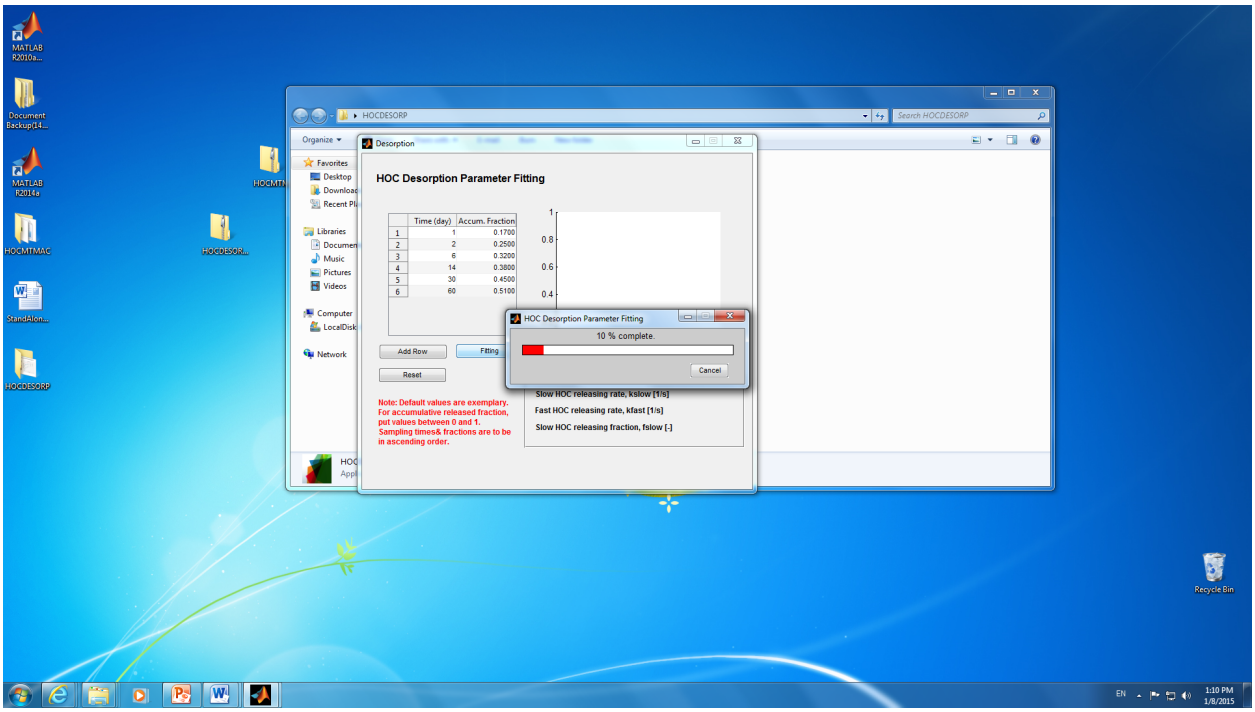
Step 2. Double click HOCDESORP.exe. After a splash screen, a GUI (graphic user interphase) will pop up.



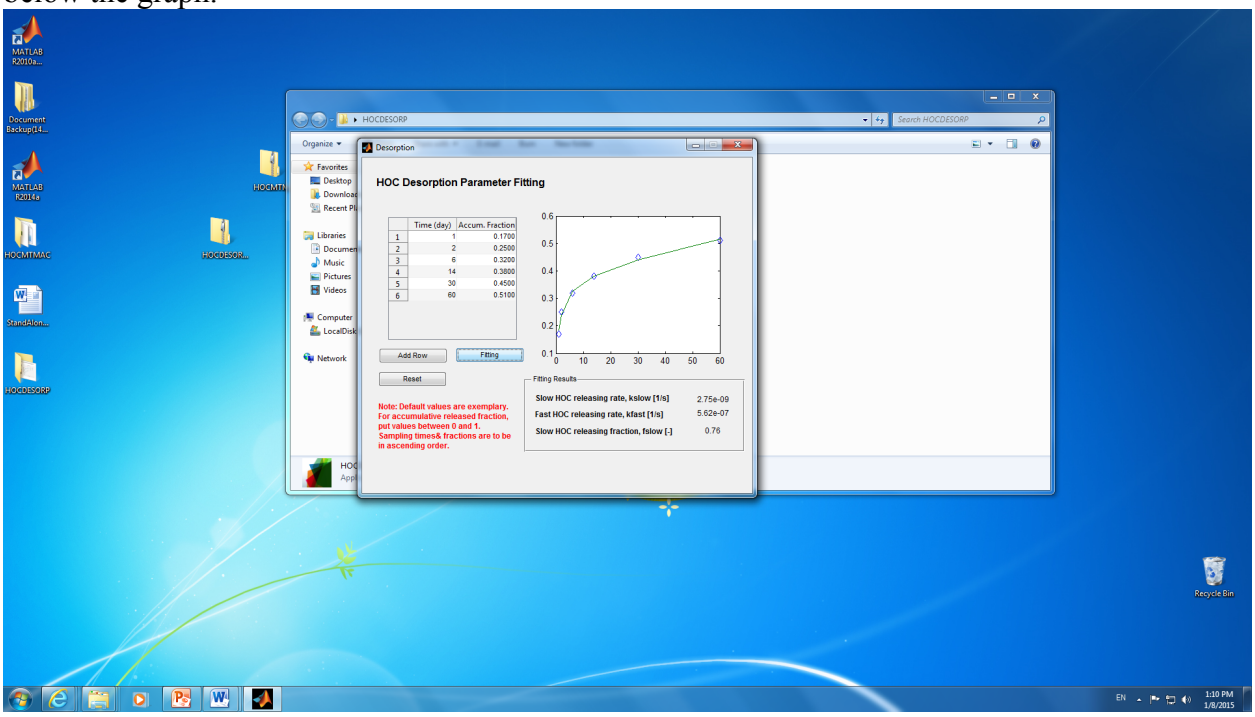


Step 3. On the left, there is a data entry form. The minimum number of data points is six. The data should be in ascending order for proper fitting. More rows can be added by clicking "Add Row" button.

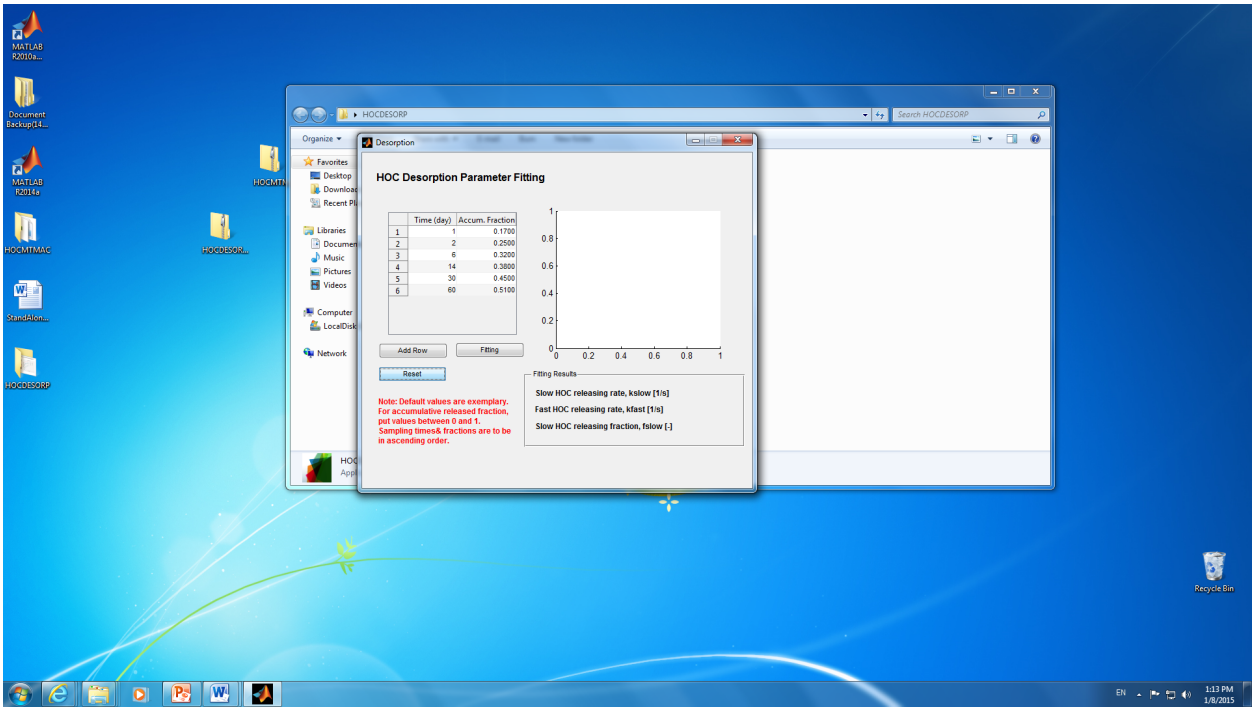
Step 4. Press 'Fitting' for desorption parameter fitting. A status bar showing the progress will pop up.



Step 5. Fitting results will be shown in a graph on the right, and three parameters are shown below the graph.



Step 6. Press "Reset" button to reset all fields for next fitting operations. To exit the program, simply press the close button at the right top corner.



3. References

Werner D, Ghosh U, Luthy RG. *Environ. Sci. Technol.*, **2006**, *40* (13), pp 4211–4218

Cho Y-M, Werner D, Choi Y, and Luthy RG. *J. Cont. Hydrol.*, **2011**, 129, pp 25-37

Choi Y, Cho Y-M, Werner D, and Luthy RG. *Environ. Sci. Technol.*, **2014**, *48* (3), pp 1843–1850