TRACKING AND SIMULATION OF GROSS SOLIDS TRANSPORT IN

SEWERS

Roni PENN^{a*}, Manfred SCHÜTZE^b, Jens ALEX^b, Eran FRIEDLER^a

^a Faculty of Civ. and Env. Eng., Technion - Israel Inst. of Technology, Haifa 32000, Israel

bifak Magdeburg, Department Water and Energy, 39106 Magdeburg, Germany

*Corresponding author:

Email: ronipenn1@gmail.com

Present Address: Eawag, The Swiss Federal Institute of Aquatic Science & Technology, Urban

Water Management, Ueberlandstrasse 133, CH-8600 Dübendorf

Supplementary Information

GS transport simulator – example on a test case

Figure 1 illustrates how the GS transport module works on a simple (hypothetical) test case.

As shown in the figure, GSs are entering into two parallel pipes (1 and 2), which then merge

into pipe 3. The dots in the pipe blocks indicate number and position of solids in the pipe, a

table provides exact details of number, position and statistics of each solid during its "life time"

within the sewer system. Figure 1 (b) shows how the GS moving conditions have been defined

for this example, whilst Figure 1 (c) provides the number of solids contained in each of the

three pipes of the hypothetical test case.

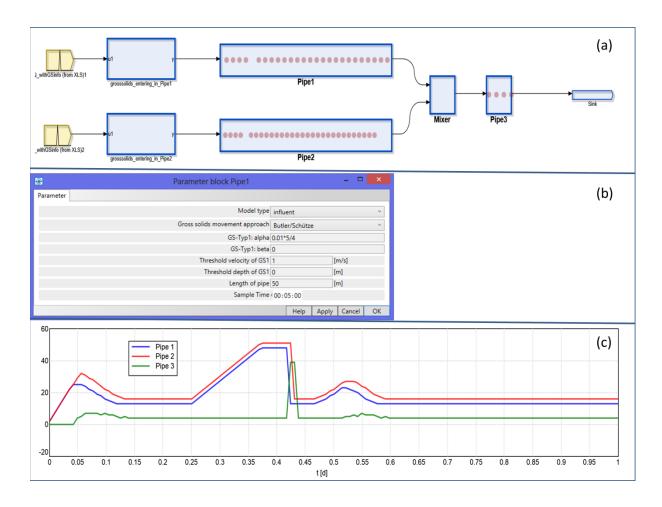


Figure 1. (a) GS simulation of hypothetical test case with 3 pipes; (b) Parameter dialogue defining GS characteristics (c) Simulation results: Number of GS in each pipe of the test case (taken from Schütze et al., (2014)).