Earth Surf. Dynam. Discuss.,
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Earth Surface Dynamics Discussions

Interactive comment on "State of the Art Study of Influence of Bed Roughness and Alluvial Cover on Bedrock Channels and Comparisons of Existing Models with Laboratory Scale Experiments" *by* Jagriti Mishra and Takuya Inoue

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Figure attached

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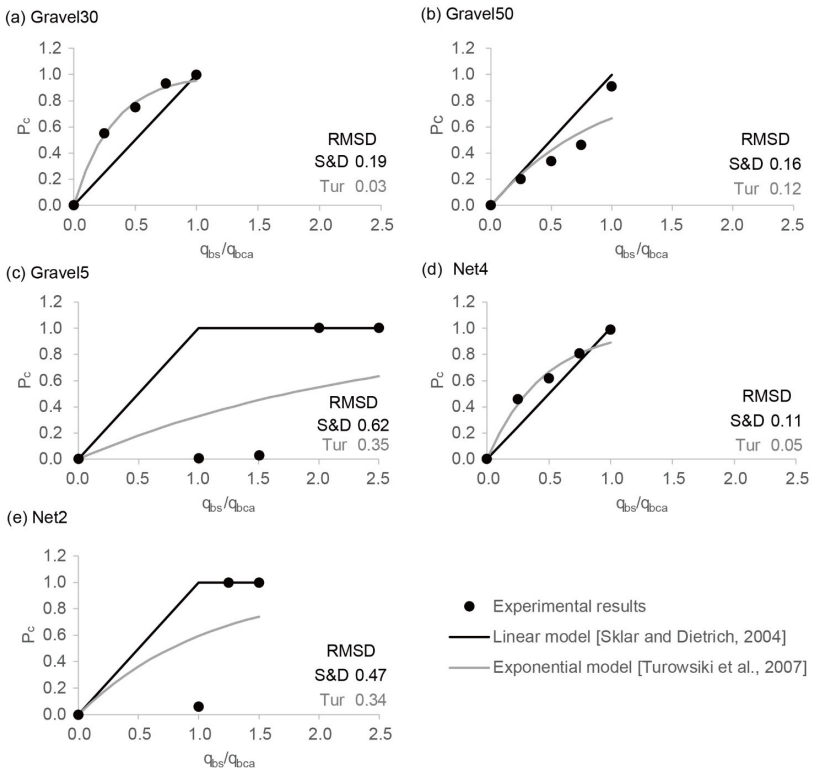

Fig. 1.

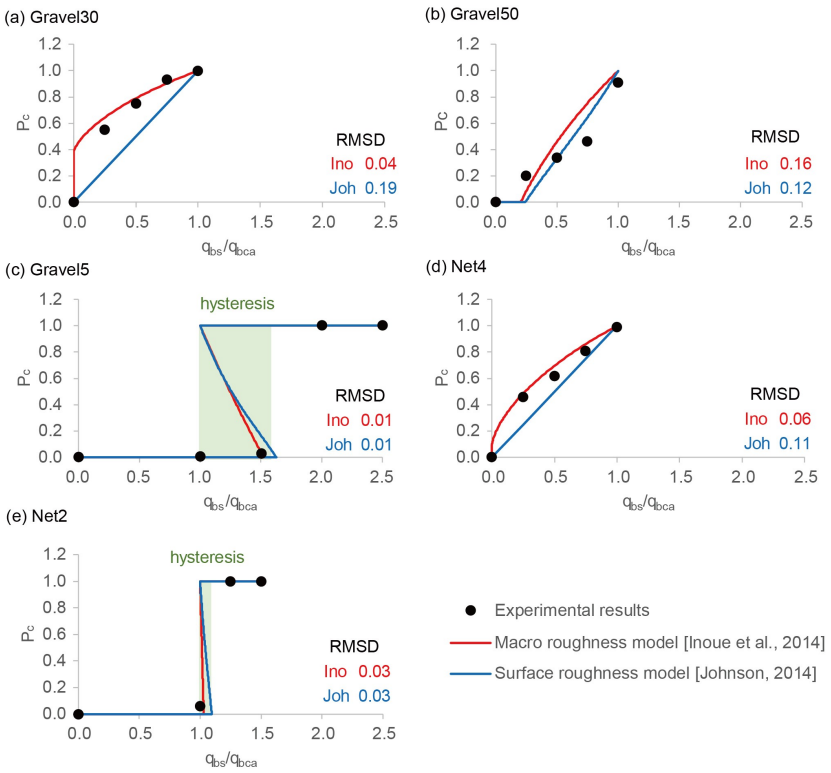
(a) Gravel30
RMSD
Ino 0.04
Joh 0.19
(b) Gravel50
RMSD
Ino 0.16
Joh 0.12
(c) Gravel5
hysteresis
RMSD
Ino 0.01
Joh 0.01
(d) Net4
RMSD
Ino 0.06
Joh 0.11
(e) Net2
hysteresis
RMSD
Ino 0.03
Joh 0.03
Pc
qbs/qbca
Experimental results
Macro roughness model [Inoue et al., 2014]
Surface roughness model [Johnson, 2014]

Fig. 2.

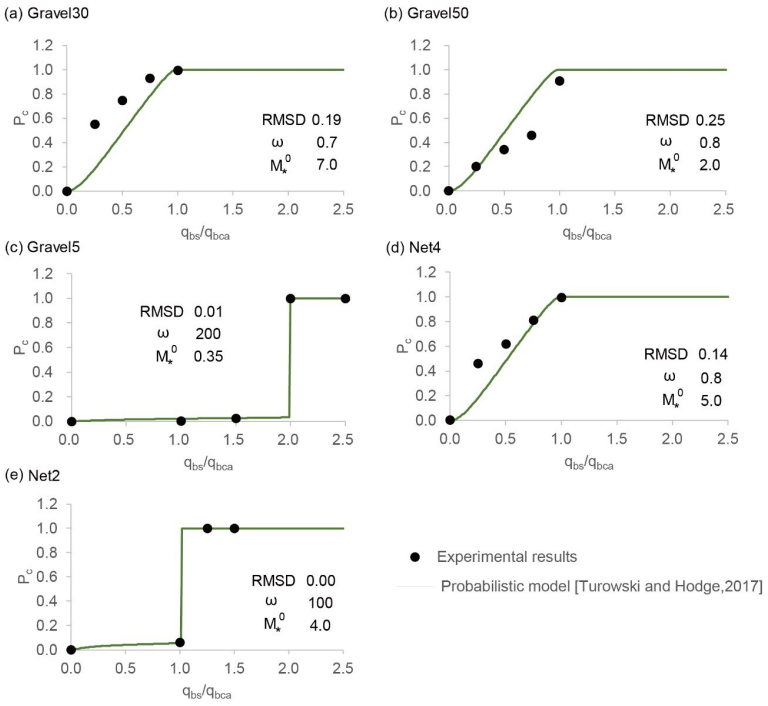
(a) Gravel30
RMSD 0.19
ω 0.7
M*0 7.0
(b) Gravel50
RMSD 0.25
ω 0.8
M*0 2.0
(c) Gravel5
RMSD 0.01
ω 200
M*0 0.35
(d) Net4
RMSD 0.14
ω 0.8
M*0 5.0
(e) Net2
RMSD 0.00
ω 100
M*0 4.0
Pc
qbs/qbca
Experimental results
Probabilistic model [Turowski and Hodge,2017]

Fig. 3.