Supplementary Material

Optimizing Laboratory Investigations of Saline Intrusion by Incorporating Machine Learning Techniques

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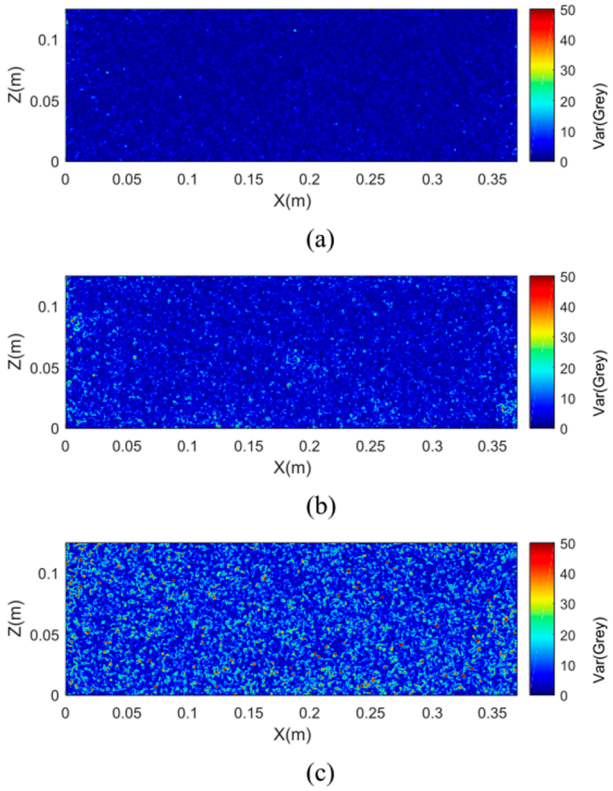

Figure S1. Grayscale light intensity variance of 15-by-15 pixel neighborhood in the (**a**) 780 μm, (**b**) 1090 μm, and (**c**) 1325 μm homogeneous aquifers.

Table S1. Training time of the investigated machine learning techniques.

Model	Training Time (min)
ANN	30
LDA	2
QDA	2
Medium KNN	20
Fine KNN	10
Boosted Tree Ensemble	180
Random Forests	390

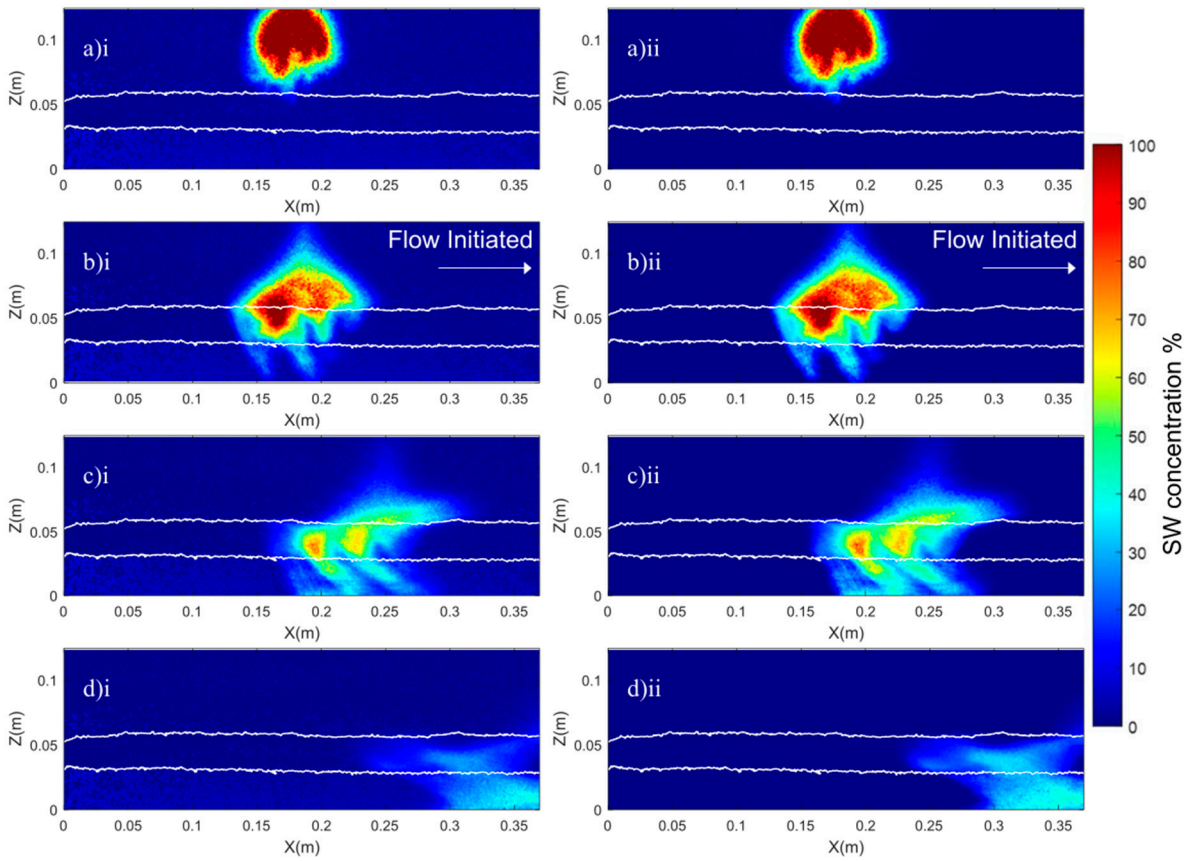

Figure S2. Saltwater concentration fields generated by (i) pixel wise regression (left) and (ii) the proposed ML technique (right), (a) two (b) five (c) nine and (d) fifteen minutes after the injection of saltwater in Layered3 heterogeneous aquifer.