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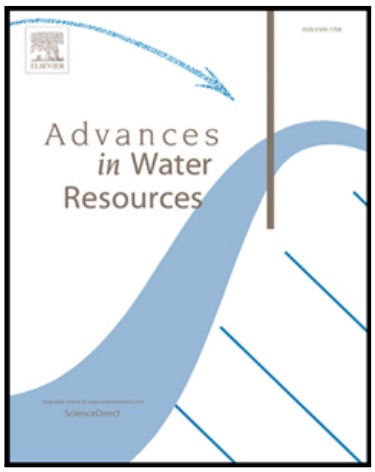

Efficient Geostatistical Inversion of Transient Groundwater Flow using Preconditioned Nonlinear Conjugate Gradients

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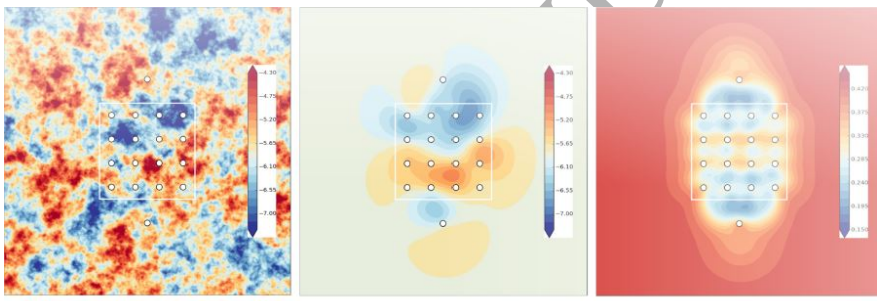
Highlights

- We present a preconditioned conjugate gradient method for geostatistical inversion
- The prior covariance matrix is used as preconditioner at negative computational cost
- The approach incorporates linearized uncertainty quantification
- The method is particularly efficient for the inversion of transient data
- Transient inversion may speed up experiments and improve quality of inversion results



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