

Groundwater management optimization

Gaur et al. (2011) propose a PSO-based method for well-placement optimization.

Questions

1. Explain the groundwater management problem. What other methods have been used? Describe at least beside PSO and comment on the obtained results.
2. Implement the proposed PSO and verify the results obtained by Gaur et al. (2011) for the problem of optimizing the discharge. Test the results also with another method.

References

Gaur, S., Chahar, B., and Graillet, D. (2011). Analytic elements method and particle swarm optimization based simulation-optimization model for groundwater management. *Journal of Hydrology*, 402:217–227.