Aquifer cross-level solar container

What is a solarcontainer?
The Solarcontainer is a photovoltaic power plantthat was specially developed as a mobile power generator with collapsible PV modules as a mobile solar system,a grid-independent solution represents. Solar panels lay flat on the ground. This position ensures maximum energy harvest Panels lays flat on the ground.

Does aquifer thermal energy storage exist in Germany?
You have full access to this open access article This paper reviews the current research on aquifer thermal energy storage (ATES) and mine thermal energy storage (MTES) in Germany providing descriptions of 3 low-temperature ATES (LT-ATES), 8 high-temperature ATES (HT-ATES), and 2 MTES research sites.

Do seasonal aquifer thermal energy storage systems affect chlorinated solvent contaminated groundwater?
The impact of low-temperature seasonal aquifer thermal energy storage (SATES) systems on chlorinated solvent contaminated groundwater: modeling of spreading and degradation. J. Contam.

What is the thermal load of the aquifer?
With reference to the local ambient groundwater temperature of around 13°C,the thermal loading of the aquifer therefore can only vary between 10 and 16°C.The plant went into operation in June 2024.

Does a GCW aquifer have seasonal heat storage?
The potential for seasonal heat storage in the aquifer was investigatedwith preliminary modeling results indicating possible thermal short circuits in the GCW configuration.

What aquifer is used for HT-Ates experiments?
In the ATES test field,a confined aquiferat a depth of about 6-15m below ground consisting of sandy glacial deposits of the Saale and Weichsel glacial stages served as the storage formation for a series of HT-ATES experiments. The experiments were conducted on one injection well and one production well with an inter-well distance of 40m.

Description of the technology In an aquifer thermal energy storage (ATES), excess heat is stored in subsurface aquifers in order to recover the heat at a later stage. The thermal energy is stored as ...

Keywords: Transboundary aquifer Cross-border impact Transboundary impact Zoning Transboundary groundwater management Management zone A B S T R A C T Attention on the use of transboundary ...

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Research papers Groundwater flow characterization of an ophiolitic hard-rock aquifer from cross-borehole multi-level hydraulic experiments Gérard Lods a, Delphine Roubinet a, Jürg M. ...

Water quality tests were performed on two long-screened alluvial aquifer wells (15-30 m of screen) that had been completed in a heterogeneous aquifer that exhibits extreme temporal ...

We constructed a sand-based aquifer model to experiment with the well-known method of aquifer storage and recovery (ASR) as a model to ameliorate the water crisis in regions that have ...

Here a novel scheme of storing solar thermal energy and concomitantly sequestrating CO 2 in DOGR for renewable energy heating is proposed, which uses CO 2 as thermal energy storage working fluid.

Cross-well multilevel configurations were used to characterize the baseline hydraulic properties of the aquifer prior to gas injection, and for repeated surveys after the injection of methane ...

A field-scale demonstration was carried out in the Riyadh-Qassim corridor to test whether solar-powered reverse-osmosis (PV-RO) desalination, hydraulically coupled to managed-aquifer-recharge ...

Usually, the ATES is operated seasonally. In summer, the excess heat from gas or coal fired power plants, from solar plants or from cogeneration plants is transferred via heat exchangers to the cold ...