

ROCKFILL DAM

CYPRUS

Real-time monitoring of dam deformation during grouting process

The Rockfill earth dam is located on the Cyprus Island, 20 miles west from the city of Limassol.

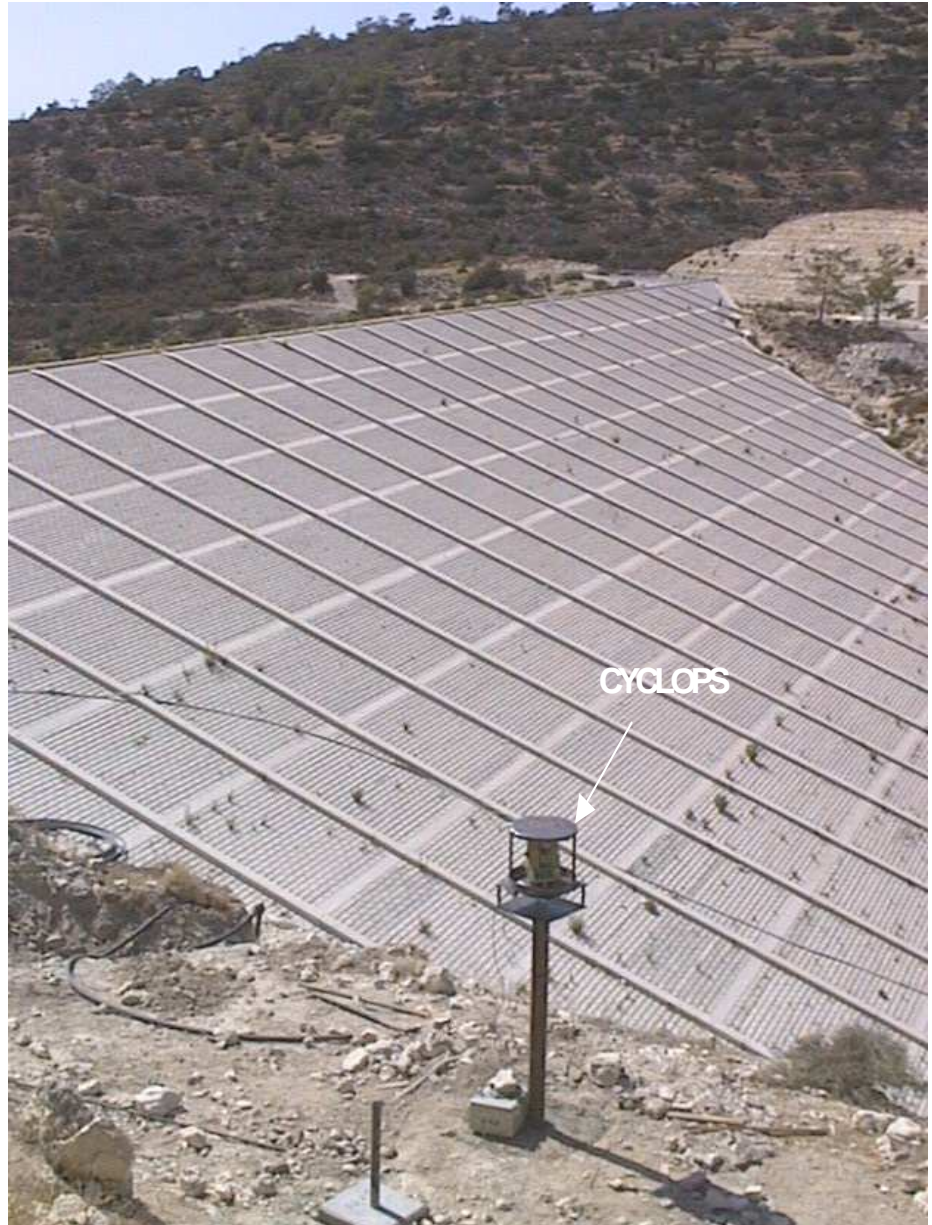
Built in 1980, the impounding of the dam was stopped because of increasingly large water seepage and the appearance of springs downstream.

Following extensive investigations it was decided to enlarge the watertight upstream blanket, create a new grout curtain section, and deepen the existing grout curtain.

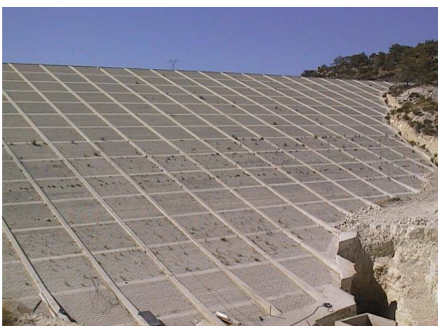
To prevent detrimental movements of the dam during the grouting process, SolData installed a real-time monitoring system, using a CYCLOPS.

The CYCLOPS was placed on the left bank abutment and was operational during the 3-month grouting period.

The upstream face of the dam was monitored by 54 prismatic targets. The results were displayed in real time in the grouting plant, with two set of alarms preset trigger values were reached.



CYCLOPS monitoring upstream face



The dam

DATE OF WORKS :	1998
WORKS CARRIED OUT:	
<ul style="list-style-type: none"> • Installation of CYCLOPS on the bank and 54 prisms on the upstream face. • Real-time monitoring and alarms during 3 months. 	