Sol Data

DAM

Cyclops

KOUDIAT ACERDOUNE DAM

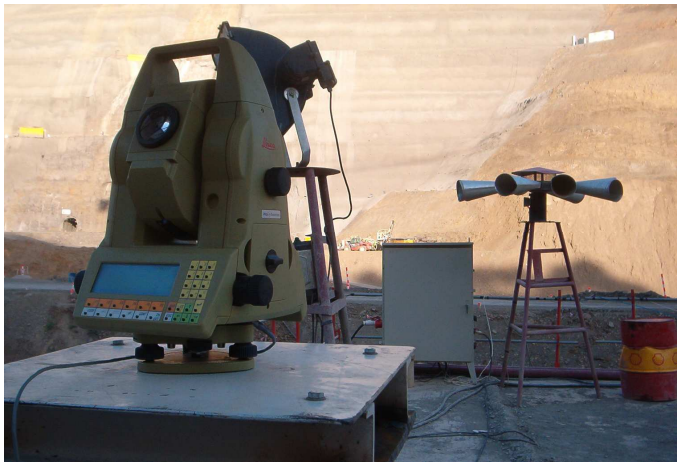
ALGERIA

Monitoring of sensitive movements during the construction of a gravity dam

The construction of the Koudiat Acerdoune dam, with a capacity of 450 million m^3, has been allotted by the National Dam Agency to Razel Algeria.
Made out of compacted concrete, the dam is supported by marly-shale soils.

Works started in September 2002, however, important ground movements (15 cm in total) and partial landslides threatened the worker trams as well as the durability of the dam.

Movements and landslides threaten the workers ad the stability of the dam



The Cyclops monitors 24h/24, and activates alarms in case of suspect movements.

The monitoring stake and the isolation of the worksite led Razel to choose a very efficient and sturdy solution, the maintenance of which is performed by mixed teams SolData / Razel.

A monitoring system was rapidly installed by SolData: 2 Cyclops and 125 targets scanned the sensitive zone 24h/24 in real time. The speeds measured by this system exceeded 1cm/month, varying according to the weather conditions and the works.

Real-time alarms restored satisfactory safety conditions, enabling the works to continue.

The fine understanding of the movements (millimetric precision, 24h/24) enabled the engineering department Coyne & Bellier to adapt the project in order to guarantee the stability of the dam in the long term.

CLIENT :	RAZEL
DATE OF WORKS :	2004 - 2005

WORKS CARRIED OUT:

- 125 targets followed by 2 Cyclops
- Real-time monitoring with alarm system