## SOLUTION MINING RESEARCH INSTITUTE

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## KARISDAT - A PC-based

MEETING

PAPER

## **Information System for Cavern Fields**

by

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## ABSTRACT:

SOCON applies its extensive practical experience as well as the most modern technical equipment to the ultrasonic surveying of sub-surface caverns and cavities. With the echo-log BSE, a new tool generation has been developed which has now also been proven commercially. To evaluate a cavity survey the software ECHODAT is used, with which all necessary interpretations and

plots can be done.

Two years ago SOCON started to expand into the field of mine surveying. Now SOCON's services include all kinds of surveying work involved in the monitoring and documentation of the surface situation over cavity fields, such as precise levelling and mapping. The PC-based information system KARISDAT was developed to do this work in a progressive way. On the basis of the evaluation using ECHODAT, a spatial correlation between the caverns and the surface situation is created. Combining both surface and sub-surface survey work optimizes surveying jobs and yields continuous quality assurance. With the current version of KARISDAT all the survey maps for a cavern field required by German mining law can be created. A lot of other useful interpretations and analyses for cavern operators can be done as well.

This paper presents the concept of KARISDAT, which is based on the relational database ORACLE and the CAD-software AutoCAD, as well as various other features. As an example some calculations and evaluations abtained using KARISDAT are shown.

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