



SURVEY software

SURVEY, statistical software for the analysis of dams and levees monitoring data

Technical description

The safety of hydraulic structures must be ensured in the long term, particularly for dams and dikes that are of public safety concern.

The SURVEY software is a calculation code for the analysis of dam monitoring data.

To study the behaviour of a structure in the face of various stresses and its evolution over time, the statistical processing of SURVEY adjusts the raw monitoring measurements to an explanatory model. In order to obtain comparable values, the raw measurements are brought back to a reference situation, i.e. to identical loads conditions. In this way, the irreversible temporal changes in the structure can be quantified.

The explanatory model included in SURVEY is an HST and HST-P model, taking into account the Hydrostatic, Seasonal, Rain (P) and Time effects. The fitting method is a multiple linear regression. The physical variables to be explained corresponding to the in situ measurements are displacements, deformations, piezometric levels, pressures and leakage flows. In the case of dams, the physical variables explaining these measurements are the water level (Hydrostatic effect), the date in the year (Seasonal effect), the Rainfall, the Time (or the age of the structure).

- Operating systems: Windows all versions
- Languages: Java version 1.8 or later

Advantages

- Hotline
- Customised training possible (quotation on request)
- User club (annual seminar)

Potential applications

- Hydraulics > Hydraulic structures > Dams/Dykes > Risks; Safety
- Statistical methods

Stage of development

Stable version, regular updates

Intellectual property

Proprietary software
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