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STRUCTURAL SAFETY CONTROL OF THE BAIXO SABOR DAM BASED ON AN AUTOMATED DATA ACQUISITION SYSTEM

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1. INTRODUCTION

This paper presents the main characteristics of the automated structural monitoring system of Baixo Sabor dam and addresses a proposal for the definition of triggers for the physical quantities measured through the use of an automated data acquisition system (ADAS).

The defined triggers for the physical quantities will be linked to an Internal Early Warning Control System of the dam, allowing the early identification and notification of potential abnormal situations to the entities responsible for the dam safety.

In operation since August 2016, the ADAS of the Baixo Sabor dam defined by EDP allows the measurement of several quantities used for the safety control, analysis and interpretation of the dam behaviour, such as: horizontal and vertical displacements, movements of joints, strains, uplift pressures, foundation displacements, seepage, concrete and air temperatures, and reservoir water level, among others.