

Monitoring and control of a reptile terrarium

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[P. Santos](#) ; [J. Alves](#) ; [P. Carneiro](#)[View All Authors](#)[Abstract](#)[Authors](#)[Figures](#)[References](#)[Citations](#)[Keywords](#)[Metrics](#)[Media](#)

Abstract:

Temperature control is essential to establish the proper conditions of a natural behavior and development of reptiles in any zoo. The present paper presents the work developed in ISEP in partnership with Maia Zoo, regarding the monitoring and control of a reptile terrarium's temperature. A NTC thermistor is used as the sensor element and the acquisition and control is implemented with a microcontroller Arduino. The prototype was encapsulated in a waterproof case, guaranteeing operation under harsh conditions. A web database and interface was created with MySQL, allowing the remote acquisition and management of the data.

Published in: [Remote Engineering and Virtual Instrumentation \(REV\), 2014 11th International Conference on](#)

Date of Conference: 26-28 Feb. 2014

INSPEC Accession Number: 14222340

Date Added to IEEE Xplore: 10 April 2014

DOI: [10.1109/REV.2014.6784268](#)

Electronic ISBN: 978-1-4799-2024-2

Publisher: IEEE

Conference Location: Porto, Portugal