



University of Dundee

Using Internet of Things (IoT) technology to study environmental processes

Martinez, Kirk; Hart, Jane; Black, Andrew; Bragg, Olivia

Publication date:
2016

Licence:
CC BY

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
Martinez, K., Hart, J., Black, A., & Bragg, O. (2016). *Using Internet of Things (IoT) technology to study environmental processes*. Abstract from EGU General Assembly 2016, Vienna, Austria.

General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



Using Internet of Things (IoT) technology to study environmental processes

Kirk Martinez (1), Jane Hart (2), Andrew Black (3), and Olivia Blagg (3)

(1) University of Southampton, Electronics and Computer Science, Southampton, United Kingdom (km@ecs.soton.ac.uk), (2) University of Southampton, Geography and Environment, Southampton, United Kingdom, (3) University of Dundee, Geography, Dundee, United Kingdom

The Internet of Things is a term which has emerged to describe the increase of Internet connectivity of everyday objects. While wireless sensor networks have developed highly energy efficient designs they need a step-change in their interoperability and usability to become essential tools in the study of our environment. We discuss the design, deployment and results from an IoT system installed on the Cairngorm Plateau, Scotland. This is a fragile remote environment, which provides an ideal location to test IoT techniques. We have investigated cryospheric, hydrologic and ecological processes, and we report our preliminary findings.