

MADICS: Workshop EBD 2017 - Environmental Big Data  
Université de Toulon,  
campus city centre, room FA110  
30 nov. & 1 dec. 2017

**Free registration (including buffet) is required before November 15th, 2017 at:**  
<http://sabiiod.univ-tln.fr/EADM/EBD>

### **Environmental Big Data from Acquisition to Exploitation - Trends & Innovations**

This workshop aims to demonstrate the needs and realisation of low latency, long-term, big data monitoring of the biodiversity, by leveraging advances in IoT, versatile microcontrollers, and advanced machine learning. Special attention will be given to Deep Learning techniques for environmental data, including inversion, semi-supervised learning and generative models.

Continuous monitoring of ecosystems can be achieved by recording and analysing their acoustic environment, or soundscape, which is the expression of the habitat quality, richness and biodiversity. Managing big acoustic data streams requires specialized tools to classify the scenes and detect/recognise the different components, e.g. biophony, geophony and anthrophony.

Invited speakers are key scientists and decision-makers in this field. The first day will be devoted to terrestrial applications focusing on individual species, birds, frogs, bees, and on soundscape monitoring. The second day will set the spotlight on aquatic biodiversity assessment in rivers, lakes and oceans.

#### **Organizing Committee**

Marxer, Gies, Pavan, Reymond, Barthelemy, Schaffar, Hugel, Precioso, Glotin

#### **For information**

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