



Cologne Geosciences Colloquium

Fortnightly on Mondays at 5:00 pm

Geo-/Bio-Hörsaal

for members and staff of the Department of Geosciences,
doctoral students, Masters' students and other interested people



Monday 8th December 2014

Dr Arko Lucieer

University of Tasmania,
Australia



"Rise of the Drones:

*How Unmanned Aircraft Systems (UAS) create
new opportunities for environmental remote
sensing and geosciences"*

Abstract:

This presentation will show that 'drones' [...] fill a novel and exciting niche when it comes to observing, mapping, and monitoring the environment at unprecedented levels of detail. The *TerraLuma* research project in the School of Land and Food at the University of Tasmania, Australia has developed novel tools and algorithms for environmental remote sensing applications and aerial surveys using Unmanned Aircraft Systems (UAS). [...]

The primary advantage of UAS-based remote sensing is the ability to bridge the scale gap between field-based observations and full-scale airborne or satellite observations. The key advantages of UAS for environmental remote sensing are their capacity to: 1) collect ultra-high spatial resolution imagery (1 – 20 cm), 2) acquire data on-demand at critical times, and 3) carry multiple sensors that can collect imagery outside of the human visible range [...]

This presentation will provide an overview of state-of-the-art UAS technology and will identify future potential for a range of environmental, agriculture, and geoscience applications.

Upcoming event in winter semester 2014/2015:

19 Jan: Prof **Berndt Feuerbacher**, Deutsches Zentrum für Luft- und Raumfahrt: *Rosetta, Philae and the Comet*

For questions or suggestions contact Dr Karin Boessenkool (kboessen@uni-koeln.de; phone: 470 5925)

For the latest schedule check: www.geosciences.uni-koeln.de/colloquium.html