



Tectonics from Above: Recent Advances in the Use of High-resolution Topography and Imagery



RAS Specialist Discussion Meeting

***Royal Astronomical Society, Burlington House, Piccadilly, London
13th March 2015***

Programme can be downloaded from: comet.nerc.ac.uk



COMET
*Centre for Observation and
Modelling of Earthquakes,
Volcanoes and Tectonics*



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Friday 13th March 2015

09.30 Registration & Coffee

10.30 Introduction – Richard Walker

Session 1: Chaired by Richard Walker

10.35 Sebastien Leprince (Caltech)
Tracking 3D ground changes using multi-temporal stereo satellite imagery

11.05 Dimitri Lague (University of Rennes)
Benefits of working directly with raw 3D point clouds in the context of tectonic geomorphology

11.35 Ed Nissen (Colorado School of Mines)
Long-term and single-event earthquake behaviour mapped with individual and repeat lidar datasets

12.05 Thomas Fritz (German Aerospace Centre)
High resolution global DEM data from the TanDEM-X radar mission

12.35 Lunch and Posters

Session 2: Chaired by James Hollingsworth

13.35 Yann Klinger (Institut de Physique du Globe de Paris)
Optical image correlation: topography and deformation at high resolution using the Mic-Mac open-source package

14.05 Jean-Philippe Avouac (University of Cambridge)
Fault dynamics and earthquake physics: learning from space observations

14.35 Austin Elliott (University of Oxford)
Rapid modification of fresh scarps along the 2010 M_w 7.2 El Mayor-Cucapah surface rupture measured by repeated terrestrial lidar scans

14.55 Yu Zhou (University of Oxford)
Measuring co-seismic vertical displacements with Pleiades stereo imagery

15.15 David Mackenzie (University of Oxford)
Using Structure from Motion to map fault structure and geomorphology at all scales: a low cost alternative to terrestrial lidar

15.35 Break

16.00 Further discussion for those not attending the RAS A&G meeting

17.00 Conclusion