



Workshop on LiDAR for Landslide Hazard Mapping and Monitoring The Everly Hotel, Putrajaya, Malaysia

11th - 13th July 2017

ORGANISED BY JMG IN COLLABORATION WITH NEWTON-UNGKU OMAR FUND PROJECT PARTNERS



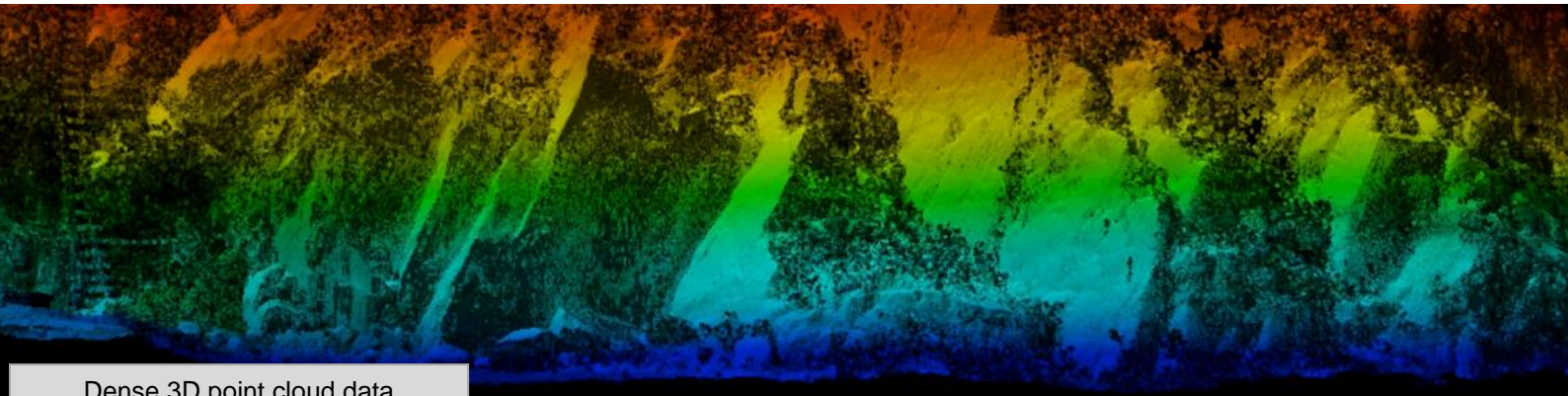
-Bringing Geoscience into Practice-

PROGRAMME

WORKSHOP ON LiDAR FOR LANDSLIDE HAZARD MAPPING AND MONITORING 11 th – 13 th July 2017, The Everly Hotel, Putrajaya, Malaysia	
Day 1: 11 July 2017 (Tuesday)	
0830-0850	Registration
0850-0900	Arrival of Invited Guests
0900-0930	Opening Session <ul style="list-style-type: none"> • Doa Recital • Welcoming Address Director General, Department of Mineral and Geoscience Malaysia • Opening Address Secretary General, Ministry of Natural Resources and Environment Malaysia
0930-1000	Keynote Paper The Role of Geoscience in Disaster Risk Reduction Dr. Helen Reeves, British Geological Survey
1000-1030	Photo Session & Coffee Break
1030-1100	Landslide Hazard and Risk Assessment in [the] Tropics: Malaysia's Experience Dato' Zakaria Mohamad, Southeast Asia Disaster Prevention Research Initiative (SEADPRI-UKM)
1100-1130	BGS's Approaches for Geohazard Mapping and Monitoring Dr. Helen Reeves & Mr. Peter Hobbs, British Geological Survey
1130-1200	LiDAR Application in Landslide Hazards Mapping: JMG's Approaches Zamri Ramli, Department of Mineral and Geoscience Malaysia
1200-1230	Airborne LiDAR Scanning: Data Acquisition Practice in Malaysia Maziana Muhammad, AAM Geospatial Sdn Bhd
1230-1300	Terrestrial LiDAR Scanning: Data Acquisition Practice in Malaysia Lim Chor Sheng, GPS Lands Sdn Bhd
1300-1400	Lunch
1400-14:30	Terrestrial LiDAR & GNSS: Surveying Principal, Data Acquisition & Processing Mr. Peter Hobbs, British Geological Survey
14:30-1500	Case Studies on the Application of Airborne/Terrestrial LiDAR & UAV Photogrammetry: Aldbrough Mr. Peter Hobbs, British Geological Survey
1500-1530	Case Studies on the Application of Airborne/Terrestrial LiDAR & UAV Photogrammetry: Hollin Hill Dr. Helen Reeves & Mr. Peter Hobbs, British Geological Survey
1530-1600	Case Studies on the Application of Airborne/Terrestrial LiDAR & UAV Photogrammetry: Virkisjokull Dr. Helen Reeves & Mr. Peter Hobbs, British Geological Survey
1600-1630	Application of BGS's Digital SIGMA Mobile System for Geohazard Mapping Dr. Helen Reeves & Mr. Peter Hobbs, British Geological Survey
1630-1700	Break
1700	End of Day 1
Day 2: 12 July 2017 (Wednesday)	
0830-1300	Fieldwork on Data Acquisition -Terrestrial Laser Scanning (TLS) at Bukit Permai, Cheras Dr. Ferdaus Ahmad, Qalam Azad Rosle, Wan Salmi Wan Harun, Mohd Farid Abdul Kadir
1300-1430	Lunch
1430-1630	Processing and Analysis of TLS data
1630-1700	Break
1700	End of Day 2
Day 3: 13 July 2017 (Thursday)	
0900-1000	SIGMA Mobile/ Geovisionary Demonstrations
1000-1030	Break
1030-1130	Dialogue - Reflections and Way Forward Moderator: Dato' Yunus bin Abdul Razak
1130-1200	Closing Session Director General, Department of Mineral and Geoscience Malaysia
1200-1300	Lunch

TERRESTRIAL LASER SCANNING (TLS)

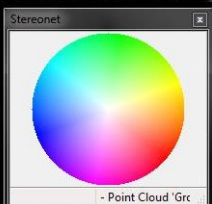
- Transform to a digital data acquisition using modern LiDAR technology
 - JMG's Application in Critical Slope Assessment



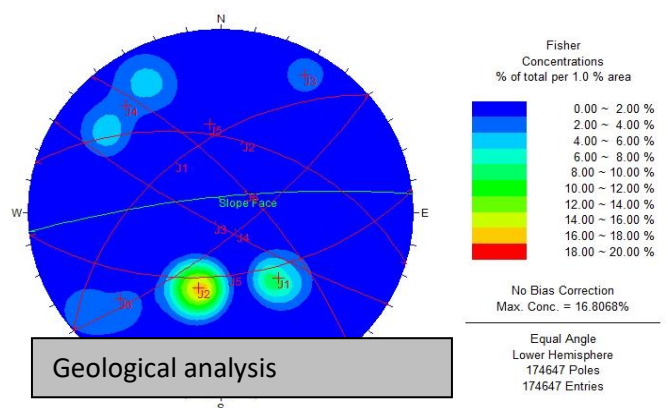
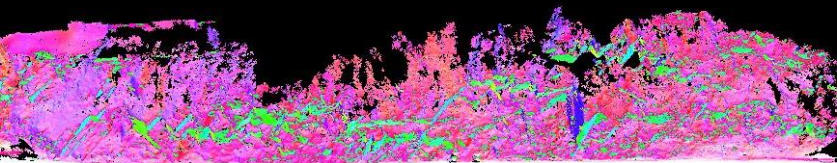
Dense 3D point cloud data



High resolution image analysis



Automatic discontinuity identification



Geological analysis

Disaster Resilient Cities: Forecasting Local Level Climate Extremes and Physical Hazards for Kuala Lumpur

The Project is supported by the Newton-Ungku Omar Fund, administered by Innovate UK and the Malaysian Industry-Government Group for High Technology (MIGHT) as part of the Science to Action (S2A). Many hazards associated with climate change have the greatest impacts in urban areas where most people and property are concentrated. Severe and extreme weather events are projected to increase losses challenging Governments and insurance systems world-wide. Communication, transfer and development of climate-related knowledge is most effective when it is sensitive to context, diversity of decision types, decision processes and the requirements of constituencies. This project will adapt carefully selected meteorological and hazard models for circumstances in Malaysia and Southeast Asia. It will test their viability and integrate them onto a common multi-hazard platform designed for managing and communicating risks and enhancing disaster resilience. Pilot studies will be conducted in Kuala Lumpur and adjacent areas to forecast flash floods, landslides, sinkholes, strong winds, urban heat and air pollution at the city and neighbourhood scales. The proposed development of climate and multi-hazard forecasting capacity will greatly contribute to addressing major problems for future development in cities in Malaysia and the ASEAN region.

UK Project Lead:

Prof. Lord Julian C.R. Hunt
University of Cambridge

UK Project Partners

University College London
British Geological Survey, NERC
Cambridge Environmental Research Consultants Ltd.
JBA Risk Management Limited
Cuesta Consulting Limited

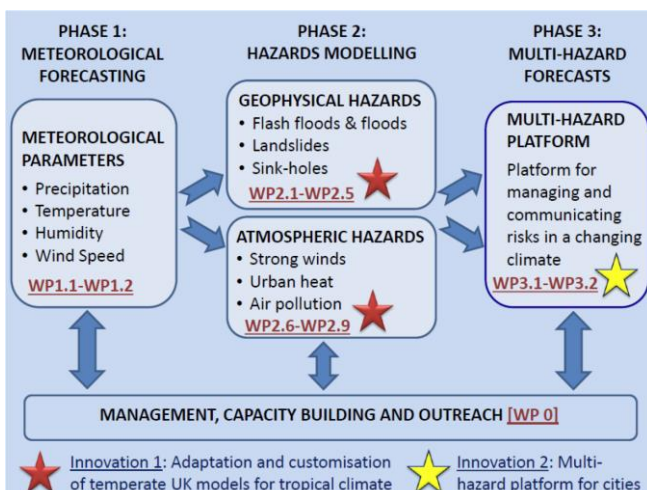
Malaysian Project Lead:

Prof. Joy Jacqueline Pereira
SEADPRI-Universiti Kebangsaan Malaysia

Malaysian Project Partners

University of Malaya
Malaysian Meteorological Department
Department of Mineral and Geoscience Malaysia
Department of Environment Malaysia
UKM Pakarunding Sdn. Bhd
Geomapping Technology Sdn. Bhd.
Param Agricultural Soil Surveys (M) Sdn. Bhd
Geological Society of Malaysia
CoRE Expert Systems Sdn. Bhd.

Project Approach and Innovation Features



Project Management Structure

