

11 – 13 DECEMBER 2012, THE GEOLOGICAL SOCIETY, LONDON

## **GRSG** Geological Remote Sensing Group

Day 1 - Tuesday, 11 December 2012				
08:30-09:30	Registration & Coffee			
09:30	Welcome	Welcome + Introduction to the GRSG, Chair: Jason Manning (GRSG / Arup)		
AM1	Advances & New Technology	Session Chair: Robin Coackley (GRSG / Exelisvis, UK)		
09:40	Jérôme Soubirane	Pleiades/SPOT6-7 constellation		
	(Astrium Services, France)			
10:00	Oliver Zimmerman	The Hexagon Advantage: The Dynamic GIS – Introducing the ERDAS		
	(Intergraph/ERDAS)	IMAGINE Spatial Modeler		
10:20	Subhasis Kesh (University of Petroleum	Application of SAR Images to Develop the Calculation of Sea-Truth of		
	& Energy Studies, India)	Methane Flux to the Atmosphere mainly due to Gas Hydrate		
10:40	Francois Ayoub	Measuring Mars sand flux seasonality from a time series of images		
	(Imagin' Labs & Caltech, USA)			
	Coffee Break 1			
AM2	Mapping Terrain & Bathymetry	Session Chair: Dietmar Backes (GRSG / UCL, UK)		
11:30	David Critchley	Validation results of Satellite Derived Bathymetry (SDB) projects using		
	(Proteus)	WorldView-2 imagery – case studies		
11:50	Pieter Vermeesch	Measuring dune velocity and sand flux with COSI-Corr		
	(UCL, UK)			
12:10	Mike King	The use of Satellite Remote Sensing for Offshore Environmental		
	(FNPA, UK)	Benchmarking		
	Lunch			
PM1	Oil & Gas 1	Session Chair: Peter Hausknecht (OGEO / Woodside Energy, Australia)		
13:30	lan MacInnes	Creating value from satellite imagery in the oil and gas industry		
20.00	(Digital Globe International)	Security value from security in the siliana gas massary		
13:50	Andrew Hart	The use of remote sensing for mapping and assessing Terrain-related Geo-		
	(Atkins, UK)	engineering issues		
14:10	Anton Filatov (Immanuel Kant Baltic	Using of SAR data and InSAR techniques for long term monitoring of oil and		
	Federal University, Russia)	gas fields and power engineering infrastructure in Western Siberia		
14:30	Marco Basilico	Advanced Satellite Interferometry for Reservoir Management: Onshore		
	(Treuropa, Italy)	Applications and Offshore Perspectives.		
14:50	Sanaz Salati	Spectral and chemical characterization of onshore hydrocarbon seeps-		
	(ITC, Netherlands)	induced alterations in evaporite and marly limestone formations: a		
		laboratory experiment		
	Coffee Break 2			
PM2	Oil & Gas 2	Session Chair: Peter Hausknecht (OGEO / Woodside Energy, Australia)		
15:45	María Julia Yagüe Ballester (GMV)	EO Environmental Sensitivity Index for Oil Industries		
16:05	Peter Hausknecht (OGEO & Woodside	Oil and Gas Earth Observation (OGEO) update		
	Energy Ltd, Australia)			
16.05	10 100 100 500 0			
16:25	Conrad Wright (SpecTIR) &	GRSG North America update		
	Lori Wickert (Newmont Mining)			
16.25	GRSG AGM	The Goalegical Remote Consing Group Annual Constal Meeting		
16:35	GRSG AGM	The Geological Remote Sensing Group Annual General Meeting		
17:30	Wine Reception	The Geological Society		
	The Hoophion	Sponsored by Spatial Energy		
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### MONITORING AND MANAGING THE EARTH'S RESOURCES

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		esday, 12 December 2012	
		Group & GRSG	
08:30	Registration & Coffee	Welsons Ustraduction to Engineering Course 9 CDCC	
09:00	Welcome	Welcome + Introduction to Engineering Group & GRSG	
00.05	Devid Februick / Foreign and a Consum / DCC)	Jason Manning (GRSG / Arup, UK)	
09:05	David Entwisle (Engineering Group / BGS)	Introduction by the Engineering Group	
09:10	Marcel Van Loon (EAGE)	European Association of Geoscientists and Engineers (EAGE)	
AM1	Overview of Remote Sensing for Engineering Applications	Session Chair: David Entwisle (Engineering Group / BGS, UK)	
09:15	Jason Manning	Risk reduction by use of remote sensing tools - the example of seismic	
09.13	(Arup, UK)	hazard assessment	
09:35	Speaker: Clive Farquhar	The LiveLand Project: using EO and space technology to assess and monitor	
00.00	(Logica, UK)	landslide and subsidence hazard	
09:55	David Boon	The application of remote sensed data for landslide hazard assessment for	
	(BGS, UK)	engineering and planning purposes: a UK perspective	
10:15	Alessandro Novellino	Landslides monitoring integrating spectroscopy and radar remote sensors	
	(University of Naples, Italy)	Landshides monitoring integrating spectroscopy and radar remote sensors	
	Coffee Break 1		
AM2	Engineering Applications & Geohazards 1	Session Chair: Charlotte Bishop (GRSG / BGS, UK)	
11:10	Marco Basilico	Satellite radar interferometry for engineering applications	
	(Treuropa, Italy)	, 5 11	
11:30	Sébastien Leprince	The COSI-Corr tools: Emerging techniques to monitor and quantify ground	
	(Imagin' Labs & Caltech, USA)	deformation using high resolution optical imagery and multi-temporal	
		LiDAR	
11:50	Maria de Farago	Advantages of using InSAR technology to monitor civil engineering	
	(Altamira, Spain)	infrastructures	
12:10	Peter Hobbs (BGS)	Some engineering geological applications for terrestrial LIDAR	
	Lunch		
PM1	Engineering Applications & Geohazards 2	Session Chair: Luke Bateson (GRSG / BGS, UK)	
13:30	Moh Syafiudin	Multi Frequency Satellite SAR Interferometry Applied to Land Subsidence	
	(University of Nottingham, UK)	Monitoring in Bandung Basin, Indonesia	
13:50	Andy Sowter	Land Motion Observed by DInSAR in the South Derbyshire and	
	(University of Nottingham, UK)	Leicestershire Coalfield	
14:10	Andrew Singleton	Monitoring landslides in the Three Gorges region, China, using multiple SAR	
	(University of Glasgow, UK)	images	
14:30	Speaker tbc	Geohazards in Greater London identified from geological and Persistent	
	(BGS, UK)	Scatterers data	
14:50	Francesca Cigna	Towards nationwide monitoring of geohazards with InSAR technologies:	
	(BGS, UK)	feasibility mapping over the landmass of Great Britain	
	Coffee Break 2		
PM2	Environmental Applications	Session Chair: Cornelia Glaesser (University of Halle, Germany)	
15:45	Mathias Leidig	Low-cost geoinformatic approaches to assess coastal hazards	
	(Portsmouth University, UK)		
16:05	Marc Goossens	Environmental impact monitoring using spectral characteristics of	
	(Geosense, Netherlands)	vegetation & soils in the Karabash Smelter area, Mednogorsk, Central Urals.	
16:25	Christian Fischer (DLR, Germany)	EO based product development for mining environments – Progress results	
16.4-	& Stephane Chevrel (BRGM, France)	from the EO-MINERS project	
16:45	Cornelia Glaesser (University of Halle-	Detection of ph values in sediments in abandoned open cast lignite mine	
	Wittenberg, Germany)	sites using hyperspectral remote sensing data	
40.00		D. 10 (DCC)	
18:30	Reception & Conference Dinner	Royal Over-Seas League (ROSL)	
	(by reservation, payment required)	Sponsored by ERDAS	



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## **GRSG** Geological Remote Sensing Group

	Day 3 - Thursday, 13 December 2012				
08:30-09:00	Registration & Coffee				
09:00	Welcome	Welcome + Introduction to the GRSG			
05.00	Welcome	Welcome i introduction to the Grod			
AM1	Geological Mapping	Session Chair: Friedrich Kuehn (BGR)			
09:10	Jason Howse	ITRES hyperspectral & thermal mapping systems and their applications to			
<del></del>	(Itres, Canada)	mapping surface geology and monitoring resource extraction infrastructure			
09:30	Fitriani Agustin (ITC, Netherlands /	Kalimantan geological features interpreted on remote sensing data			
	Geological Survey of Indonesia)				
09:50	Andrea Friese	Geothermal Exploration using Airborne Thermal Survey over the Silali			
	(BGR, Germany)	Geothermal Prospect, Kenya			
10:10	Malcolm Whitworth	Landslide susceptibility assessment for the Toktogul region of Kyrgyzstan,			
	(University of Portsmouth, UK)	Central Asia			
	Coffee Break 1				
AM2	Mineral Exploration	Session Chair: Eric Peters (GRSG / Independent Consultant, UK)			
11:05	Dean Riley	Initial comparison of mineral mapping simultaneously collected			
	(SpecTIR, USA)	hyperspectral short-wave infrared (SWIR) and long-wave infrared (LWIR)			
		data over Cuprite, Nevada.			
11:25	Lori Wickert	Ground Truthing & Spectral Geology Validation in Mineral Exploration -			
	(Newmont Mining, Canada)	Challenges & Opportunities			
11:45	Frank VanRuitenbeek (ITC / University	Mapping the Metamorphic Grade of Volcanic Rocks of an Archean Granite-			
	of Twente, Netherlands)	Greenstone Belt with Near-Infrared Spectroscopy			
12:05	Dietmar Backes	Future directions (trends) of remote sensing data			
	(UCL, UK)				
	Lunch				
PM1	Hyperspectral	Session Chair: Conrad Wright (SpecTIR, USA)			
13:30	Alex Fortescue	Airborne Hyperspectral Applications in Southern Africa			
12.50	(Southern Mapping, South Africa)	Illustration of the Circumstation Action Management			
13:50	David Coulter	Hyperspectral mapping of the Sirwa region, Anti-Atlas Mountains, Morocco			
14.10	(Consulting Geologist, USA)	Dulle siliente Manning of Courthour Mostic Lohurinthus Mars using CDICM			
14:10	James Anderson, (University of Utah, USA)	Pyllosilicate Mapping of Southern Noctis Labyrinthus, Mars using CRISM Mulitspectral & Hyperspectral Data			
14:30	Petri Nygrén	Full-spectrum VNIR and SWIR hyperspectral imager in a single instrument			
14.30	(Specim, Finland)	i dii-specti diii vivin diid Svvin nyperspecti di iiidgei iii d single fiisti diffetit			
	Coffee Break 2				
PM2	UAV / Thermal	Session Chair: Marc Goossens (Geosense, Netherlands)			
15:30	Marc Goossens	Integrated analysis of WV2, Hyperspectral and UAV imagery for			
_5.50	(Geosense, Netherlands)	environmental monitoring in Rosia Montana, Romania			
15:50	Stefania Amici	Volcanic environments monitoring by drones: mount Etna and mud volcano			
y - <del>-</del> -	(INGV, Italy)	case studies			
16:10	Jason Howse	Using the TABI1800 thermal system for the monitoring and remote			
	(Itres, Canada)	detection of underground coal fires in a variety of environments			
16:30	Speaker tbc	Trials of a compact UAV AP and DEM survey with matching scale ground			
	(Land Surveys, Australia)	control			
17:00	Conference Close				
	After-glow	The Captain's Cabin			

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Posters				
El Abri Amani	The application of ASTER remote sensing data to chromite bearing mineralized zones of			
(Sultan Qaboos University, Oman)	Wadi Fizah ophiolite in Northern Oman			
Nasos Argyriou	Application of SRTM-based geomorphometrics to characterize neotectonic deformation			
(Portsmouth University, UK)				
Lee Jones & Peter Hobbs	Mobile Dynamic Applications for Ground-Based Geomatics			
(BGS, UK)				
Elspeth Robertson	Volcanic unrest in Kenya: A satellite perspective			
(Bristol University, UK)				
Sadhvi Selvaraj and Michael Hall	Hydrocarbon Exploration and Development in Kurdistan; Insights from Remote Sensing			
(Astrium Geo-Information Services, UK)	Data			
Thomas Web	Effective atmospheric modelling for space geodesy			
(University of Reading, UK)				

Exhibitors – Lower Library & Council Room					
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