



Disaster Management Workshop

6th December 2011

*Allens Arthur Robinson Theatre (G23)
Law Building
The University of New South Wales*



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

www.acser.unsw.edu.au

Disaster Management Workshop Program

Tuesday 6th December 2011

8.30 am

COFFEE / REGISTRATION

9.00 am

Andrew Dempster

Welcome & Introduction

ACSER

9.15 am

Joe Andrews

Use of Satellite Imagery for Disaster Response

Space Policy Unit

9.40 am

Anthony Rea

Use of Real Time Remotely Sensed Data in Extreme Weather Events

Bureau of
Meteorology

10.05 am

Norman Mueller

Geoscience Australia's Capability in Emergency Response from Satellite Imagery

Geoscience
Australia

10.30 am

MORNING TEA

Satellite Communications

10.55 am

Paul Sheridan

Answering the Call

Optus Satellite

11.20 am

David Ball

Satellites to the Rescue

NewSat

11.45 am

Paul Krzystoszek

Satellite Communication Solutions Overview

Australian Satellite
Communication P/L

12.10 pm

LUNCH

Remote Sensing

1.10 pm

Anthony Milne

Earth Observation and Deriving Spatial Information for Disasters and Hazards

UNSW

1.35 pm

David Hall

International Charter - Space and Major Disasters

Astrium

2.00 pm

Steven Tsitas

Flood Monitoring Design Process

ACSER

2.25 pm

AFTERNOON TEA

Satellites Users

2.50 pm

Andrew Edwards

Creating and Using Satellite Derived Spatial Datasets to Monitor, Manage and Assess the Effect of Fire in Northern Australia

Bushfire Council
NT

3.15 pm

Andrew Matthews

Fire Monitoring from the Ground Up

DSE Victoria

3.40 pm

Discussion

5.00 pm

WORKSHOP CLOSE

Speakers



Andrew Dempster is Director of the Australian Centre for Space Engineering Research (ACSER) at the University of New South Wales (UNSW). Andrew is leading the Garada project, which supports the development of Australia's capability in the rapidly expanding field of satellite earth observation. Garada will also focus on the important national and transferable benefits for environmental monitoring and disaster mitigation, climate change science, national security and policy development.



Joe Andrews is the Assistant Manager of the Space Policy Unit, Department of Innovation, Industry, Science and Research. The Space Policy Unit co-ordinates Australia's national and international space activities, delivers the Australian Space Research program and is developing a national space policy for Australia. Joe will talk about a joint project undertaken by the Space Policy Unit, Geoscience Australia and the CRC for Spatial Information to gain greater understanding of the use of satellite imagery, and spatial information more generally, in responding to disaster situations.



Anthony Rea is the Head of the Bureau of Meteorology's Planning and Strategy Section, within the Observations and Engineering Branch. The Section manages the strategic planning of the Bureau's national observations network, including staffed stations, automatic weather stations, radars, satellite reception facilities and marine networks, across Australia and the surrounding region. Anthony also leads satellite-related activities within the Branch. After graduating as a surveyor, Anthony worked in a number of different fields, including oil exploration, road construction and hydrography, before joining the Bureau of Meteorology in 2000. In 2005 he obtained his PhD from RMIT University in the use of meteorological satellites for tracking cloud motion.



Norman Mueller is a Remote Sensing Applications Scientist and the Emergency Response Coordinator of the National Earth Observation group at Geoscience Australia. Norman has a background in physics and IT and entered the remote sensing and GIS field in 2002. Since 2007 he has specialised in the detection and feature extraction of water in the landscape from optical satellite imagery and more recently radar imagery.



Paul Sheridan has been with Optus since 1994 and has over 25 years experience in the Satellite industry. Since November 2005 he has held the role of Director, Optus Satellite. Paul leads a team responsible for all facets of Optus' satellite business across Australia and New Zealand. Under Paul's leadership the Optus Satellite business has undergone a transformation, investing over \$600M in a growth strategy which has added an additional satellite, Optus-D3 to the Optus fleet effectively increasing the on-orbit capacity by 30%. Paul is proud to represent the only satellite operator invited to participate in the development of Australia's critical space policy, as part of the Space Industry Innovation Council.



David Ball, the Chief Technology Officer at NewSat, has 25 years of experience in the telecommunications, media and technology sectors with a significant portion of his career specialising in satellite communications. David has held senior positions encompassing sales team management, product development, engineering and space systems development. Prior to joining NewSat, David was the Regional Vice President Asia-Pacific for Intelsat and also held that position for PanAmSat prior to the merger between PanAmSat and Intelsat in 2006. More recently, David was the Managing Director for Intelsat Broadband Pty Ltd, a subsidiary of Intelsat Corporation.



Paul Krzystoszek originates from Poland and arrived in Australia in 1983. He graduated from University of South Australia with a Bachelor Degree in Mechanical Engineering and later on completed Advanced MBA at Adelaide University. He has held senior positions with Minelab Electronics as Manufacturing Manager and since 1999 as Operations Manager and more recently Operations and Marketing Manager with Australian Satellite Communications.



Anthony Milne is a Professor of Geography and Remote Sensing in the School of Biological, Earth and Environmental Sciences at the University of New South Wales, Sydney, Australia and Remote Sensing Science Manager of the Australian Government sponsored Cooperative Research Centre for Spatial Information (2003-2010). He is also a Co-Director of a private company, Horizon Geoscience Consulting Pty Ltd, founded in 2002.



David Hall has worked at EADS Astrium for the last 29 years. Having started in the ultra-high vacuum field working with mass spectrometers, he moved to work with thermal imaging systems and thence to Marconi, now Astrium, where his field encompasses radar, synthetic and real aperture, very low to very high frequencies as well as microwave and optical radiometers.



Steven Tsitas completed his PhD in Planetary Science with a Minor in Astronomy from the California Institute of Technology. He completed a MSc in Astronautics and Space Engineering at Cranfield University. His most recent papers detail the system design and commercial applications for an 8 kg, 6U CubeSat that can carry out the Earth Observation mission of a 150 kg micro-satellite. Steven is a Senior Research Associate at ACSER, UNSW where he works on the Garada project.



Andrew Edwards developed techniques for the mapping of fires using satellite imagery at various scales appropriate to fire management in the NT's extensive conservation estate, as a Spatial Scientist for Parks and Wildlife in the Northern Territory. Andrew was then seconded to Bushfires NT (the NT's rural fire service), employed specifically in research that underpins the west Arnhem Land Fire Abatement project. Andrew continues to be involved in the research to improve the parameters for calculating greenhouse gas emissions across potential Carbon Farming Initiative areas, and recently completed a PhD.



Andrew Matthews received his PhD (Geophysics - remote sensing of fire) from Monash University. He has 20 years experience working for the Victorian Department of Sustainability and Environment and its predecessors, specialising in remote sensing of fire, fire information and systems, aircraft management and more.

Kensington Campus Map



Buildings		Mathews		F23		UNSW Fare (Mathews Arcade)		E24a		Theatres		Science Theatre		F13		IT Service Desk		F21		Student Recruitment Office		F20	
223 Anzac Parade	L5	Mechanical Engineering	J17	AGSM	D7	Student Accommodation		Barker Apartments	N13	AGSM Theatres	G27	Services		Kensington Legal Centre	C18	Learning & Teaching Unit @ UNSW	F23	Squash Courts	F8				
Australian School of Business	E12	Metallurgy Process	C20	AGSM	J12			Basser College	A25	Allens Arthur Robinson	F8	Accommodation Services		Library	C22			Swimming Pool	B7				
Biological Sciences	D26	Morven Brown	D10	AGSM	D2			Creston College	C18	Biomedical Theatres	E27	Admissions and Enrolments		Lifestyle Clinic	C22			The Learning Centre	C22				
Blockhouse	G6	NIDA	K15	AGSM	D10			Goldstein College	B16 C16 D16	Central Lecture Block	F10	Alumni Association		Marketing Development	G6			University Health Services	E15				
Building D10	D10	Old Main	E24	AGSM	D10			International House	C6	Chemical Sciences Theatre	H20	Arc @ UNSW		New South Innovations	E15			UNSW Bookshop	E15				
Chancellery	C22	Pavilions	D12	AGSM	D10			Kensington Colleges Office	C18	Civil Engineering (G1)	C24	Careers Employment Office		Nura Gill Resource Centre	C22			UNSW Sports & Recreation	B5				
Chemical Sciences	F10	Petroleum Engineering	D12	AGSM	D10			New College	L6	Clancy Auditorium	B14d	Cashier		Nura Gill Student Centre	F21			UNSW International Student Centre	H13				
Civil Engineering	H20	Quadrangle	E15	AGSM	D10			New College Postgrad. Village	H3	Gonski Levy Theatre	D9	CONTACT		47 Botany Street	A29			UNSW Scholarships	F21				
Computer Science	K17	Red Centre	H13	AGSM	D10			Philippa Baxter College	D14	IO Myers Studio	F8	Coop program & Scholarship		Optometry Clinic	F21			UNSW Student Central	C22				
Dalton	F12	Robert Webster	G14	AGSM	D10			Shalom College	N9	Law Theatre	J14	Counselling Service		Parking permits etc.	E15			Venues and Events	F23				
Electrical Engineering	G17	Roundhouse	E6	AGSM	D10			Warrane College	M7	Macaulay Theatre	E15	Equity and Disability Unit		Physiotherapy Clinic	F20								
Golf House 38 Botany Street	A27	Rupert Myers	M15	AGSM	D10			UNSW Village	B10	Mathews Theatres	D23	Facilities Management		Planning and Development	F23								
John Goodsell	F20	Sam Cracknell Pavilion	F25	AGSM	D10					New South Global Theatre	G14	FM Assist ID Cards		Post Office	F23								
John Niland Scientia	G19	SIRF	G23	AGSM	D10					Old Main Building (112)	E2	Foundation Studies		Print Post Plus (P3)	L5								
Law	F8	Squarehouse	E4	AGSM	D10					Parade Theatres	K14	Freehills Law Library		Publishing Printing Services	F8								
Library	F21	Valentine Annexe	H22	AGSM	D10					Physics Theatre	H13	Graduate Research School		Religious Centre	M15								
Library Stage 2	F21	Wallace Wurth	C27	AGSM	D10					Red Centre Theatre	F17	Human Resources		Research Services	C22								
Lowy Cancer Research Centre	C25	Willis Annexe	J18	AGSM	D10					Rex Vowels Theatre	G19	Institute of Languages		Security	L5								
Materials Science	E8	University Regiment	H1	AGSM	D10					Rupert Myers Theatre	M15			Sports Association	L5								
										Webster Theatres	G15												