

## WEDNESDAY 10 MAY 2023

0800	Registration opens: Hall M Foyer				
<b>OPTIONAL WORKSHOPS:</b> Please confirm your attendance when registering. Limited places are available for most workshops. There are no fees to attend unless advertised otherwise.					
0900	<p style="text-align: center;">0900 - 1330 <b>Riverside Rooms 2- 3</b></p> <p style="text-align: center;"><a href="#">Space and Geospatial Workshop</a></p> <p style="text-align: center;">Registration fee: \$95</p>	<p style="text-align: center;">1000 – 1300 <b>City Room 1</b></p> <p style="text-align: center;"><a href="#">Young Professional, Student and Early Career Researcher Professional Development Workshop</a></p>	<p style="text-align: center;">1000 – 1100 <b>City Room 2</b></p> <p style="text-align: center;"><a href="#">Geospatial Data Validation and Correction Hub – GDV Hub</a></p> <p style="text-align: center;"><i>Andrej Mocicka, 1 Spatial</i></p>	<p style="text-align: center;">1000 – 1130 <b>City Room 3</b></p> <p style="text-align: center;"><a href="#">Victoria's Digital Cadastre Modernisation Project - The Lessons Learnt So Far</a></p> <p style="text-align: center;"><i>Mark Grant, Department of Transport &amp; Planning</i></p>	<p style="text-align: center;">1000 – 1300 <b>City Room 4</b></p> <p style="text-align: center;"><a href="#">Economic Value of Data - "How do you value data?"</a></p> <p style="text-align: center;"><i>Christopher Blackstock - FrontierSI, Dr Zaffar Mohamed-Ghousse - Woolpert, Alan Smart - ACIL Allen Consulting</i></p>
1000					
1130			<p style="text-align: center;">1130 – 1300 <b>City Room 2</b></p> <p style="text-align: center;"><a href="#">FME Accelerator: Learn the basics of FME in 90mins</a></p> <p style="text-align: center;"><i>Darren Fergus, Locus</i></p>	<p style="text-align: center;">1200 – 1330 <b>City Room 3</b></p> <p style="text-align: center;"><a href="#">Application of Digital Twin for Urban Planning and Land Administration</a></p> <p style="text-align: center;"><i>Dr Soheil Sabri, Dr Benny Chen, Dr Davood Shojaei &amp; Prof Abbas Rajabifard, University of Melbourne</i></p>	
1200					
1300	Locate exhibition opens & lunch				
<b>OPTIONAL WORKSHOPS:</b> Please confirm your attendance when registering. Limited places are available for most workshops. There are no fees to attend unless advertised otherwise.					
1400	<p style="text-align: center;">1400 – 1700 <b>Exhibition Theatre</b></p> <p style="text-align: center;"><a href="#">New architecture approaches for Geospatial information/data furthering access and use to an ever-increasing number of industry sectors</a></p> <p style="text-align: center;"><i>Chris Body &amp; Rob Atkinson – Open Geospatial Consortium, Kate Williams - FrontierSI, Dr Ivana Ivanova – Curtin University</i></p>	<p style="text-align: center;">1400 – 1700 <b>City Room 1</b></p> <p style="text-align: center;"><a href="#">Locate Symposium</a></p>	<p style="text-align: center;">1400 - 1700 <b>City Room 2</b></p> <p style="text-align: center;"><a href="#">Digital Transformation Workshop - A review of factors to consider for deployment and facilitated discussion of challenges and best practices</a></p> <p style="text-align: center;"><i>Colin Hobson, Andrew Dunlop, Zane Tronson, Open Spatial</i></p>	<p style="text-align: center;">1400 – 1700 <b>City Room 3</b></p> <p style="text-align: center;"><a href="#">Collaboration to build the workforce of tomorrow</a></p> <p style="text-align: center;"><i>Danika Bakalich, Connection Point Consulting</i></p>	<p style="text-align: center;">1400 – 1500 <b>City Room 4</b></p> <p style="text-align: center;"><a href="#">Unlock the Potential of API: A Hands-On Workshop</a></p> <p style="text-align: center;"><i>Darryl Gibson, Geoscape</i></p>
1530					<p style="text-align: center;">1530 – 1700 <b>City Room 4</b></p> <p style="text-align: center;"><a href="#">Geospatial AI: Unleashing the Power of 3D Land Cover across Australia</a></p> <p style="text-align: center;"><i>Daniel Kruiemel, Woolpert</i></p>
1700	Welcome reception & Geospatial Council of Australia Launch				

<b>Room Key</b>	<b>Hall L</b>	<b>Exhibition Theatre</b>	<b>City Room 1</b>	<b>City Room 2</b>	<b>City Room 3</b>	<b>City Room 4</b>
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THURSDAY 11 MAY 2023

OPENING CEREMONY & PLENARY SESSION: HALL L

0730 Registration opens: Hall M Foyer

0850 Welcome to Country and Opening Ceremony

0930 **INDUSTRY INTERSECTIONS**

0930 Where in Space?  
*Enrico Palermo, Head of the Australian Space Agency*

0950 What is the connection and how do we improve it?  
  
Moderator:  
*Alan Duffy, Astronomer at Swinburne & Lead Scientist of the Royal Institution of Australia*  
  
Panellists:  
Land: *Bradley Slape, Surveyor General of SA*  
Sea: *Jennifer Brindle, Hydrographic Surveyor, Precision Hydrographic Services*  
Stars: *Enrico Palermo, Head of the Australian Space Agency*  
Industry Intersections: *Melissa Harris, Chair of ANZLIC*

1030 **MORNING TEA: HALLS MNO**

**TECH TALKS & CASE STUDIES: EXHIBITION THEATRETTE, HALLS MNO**

1040 – 1050 The evolution of survey data capture management for surveyors  
*Graham Wirth, 12d Solutions Pty Ltd*

1050 – 1100 12d field survey capture and manipulation  
*Michael Connor, Fulton Hogan*

1100 - 1110 Application of the Australian geometric quasi-geoid to propagate mean sea level throughout a survey control network  
*William Payze, Northern Territory Government*

CONCURRENT SESSIONS

	Room: C1	Room: C2	Room: C3	Room: C4	Room: Hall L
	<b>Hydrographics, progress &amp; partnerships</b>	<b>Climate change and resources</b>	<b>Cadastre Futures</b>	<b>Data as an asset</b>	<b>Spatial Digital Twins</b>
1115	The Hydroscheme Industry Partnership Program (HIPP) <i>Andrew Coulls, Australian Hydrographic Office</i>	Fairy circles and where to find them: how earth observation data can support 'new energy' exploration in Australia <i>Dr Claire Fisk, FrontierSI</i>	ICSM standard for the accuracy of spatial cadastres in Australia and New Zealand <i>Bradley Slape, Intergovernmental Committee on Surveying &amp; Mapping</i>	Knowledge graphs & spatial - they're here, they're awesome <i>Nicholas Car, Kurrawongai</i>	OGC with ISO/TC 211 strengthen their standards development with other organisations <i>Chris Body, Open Geospatial Consortium (OGC)</i>

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1135	HydroScheme Industry Partnership Program - from the contractors perspective <i>Dylan Colson, Precision Hydrographic services</i>	Agrilytics - AI assisted agricultural crop detection & estimation through remote sensing <i>Nasru Minallah, University of Engineering and Technology Peshawar</i>	Spatial improvement of a digital cadastre based on concepts from finite element methods <i>David Pullar, University of Queensland</i>	Land iQ: a whole of government digital spatial strategic tool <i>James Strutt, Department of Planning and Environment</i>	Realizing the potential for reality digital twins in rail operations <i>Paul Digney, Jacobs</i>
1155	Partnerships and capacity building in the Pacific <i>Scott Miller, Fugro</i>	The Water Authority of Fiji's GIS water asset inventory for climate change readiness and organisational resilience <i>Ferlisa Valentine, Water Authority of Fiji</i>	Cadastral definition - How far across the land do I survey? To the sea, stars or the moon? <i>John Linsell, Office of the Surveyor General - Department for Trade &amp; Investment</i>	Replacement and uplift of NSW online Base Maps and Map Series. Delivering innovative map base products for NSW <i>Shaun Bunyan, DCS Spatial Services &amp; Amanda Tyrer, Spatial Vision</i>	Democratising Digital Twins <i>Stafford Smith, Data61</i>
1215	Comparison of data extraction parameters in full-waveform green laser bathymetry <i>Eleanor Chandler-Temple, Riegl Australia</i>	Building an evidence base with remote sensing technology to support community capacity to create a greener, more climate resilient Adelaide <i>Sarah White, Green Adelaide</i>	Next steps towards fully digital cadastral survey datasets across Australia and New Zealand <i>Adrian White, Intergovernmental Committee on Surveying &amp; Mapping</i>	Building trust in foundation data <i>Andrej Mocicka, 1spatial Australia Pty Ltd</i>	Art of the possible - digital twins and real world spatial simulations on AWS <i>Andra Christie &amp; Cheryl Abundo, AWS</i>
1235	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers
1245	<b>LUNCH: HALLS MNO - sponsored by The Surveyor's Trust</b>				
	<b>TECH TALKS &amp; CASE STUDIES: EXHIBITION THEATRETTE, HALLS MNO</b>				
	1255 - 1305	Year-on-year modelling: Resilient 3D modelling of the power distribution network through regular LiDAR survey <i>Chris Williams, Citipower &amp; Powercor</i>			
	1305 - 1315	Satellite imagery assists flood emergency response and recovery <i>Baizura Alidin, Planet Labs</i>			
	1315 - 1325	Leveraging full waveform Airborne LiDAR Bathymetry to analyse geomorphological change, flood modelling and resource extraction in New Zealand braided rivers <i>Andy Burrell, LandPro</i>			
	1325 - 1335	BlackSky: disrupting new space with real-time dynamic monitoring   Emergency Response Imaging <i>Maurice Borer, BlackSky</i>			

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CONCURRENT SESSIONS					
	Room: C1	Room: C2	Room: C3	Room: C4	Room: Hall L
	Disaster management and resilience	Operational technologies	Positioning and tools	Automation and machine learning	Diversity in business
1345	Enhancing spatial data to support emergency management response and recovery <i>Prof Allison Kealy, Department of Transport and Planning</i>	The environmental challenges to conducting airborne lidar bathymetric survey in along south Australia coastline <i>Mick Hawkins, Fugro Australia</i>	Developing open-source Precise Point Positioning (PPP) with Ginan v2 <i>Christopher Marshall, FrontierSI</i>	Automating spatial data: building the future with infrastructure projects <i>Andrew Limpyer &amp; James Embury, Fulton Hogan</i>	You can't ask that: women in geospatial <i>Space, Spatial &amp; Surveying Diversity Leadership Network in association with Women in Geospatial SA</i>
1405	Improving the detection of bush fire burn severity from Earth observation with Synthetic Aperture Radar, LiDAR and optical imagery <i>A/Prof David Bruce, Flinders University</i>	How a GIS survey app helped saves lives and livelihoods during South Australia's 2022/3 River Murray Floods <i>Sara Pulford, South Australian State Emergency Service</i>	Australian vertical working surface to support GNSS heighting <i>Alex Woods, Department of Transport and Planning</i>	Maps, Digital Twins, Metaverse and Chatbots - lessons from the past, powering the future <i>Ana Belgun, Csiro's Data61</i>	The importance of neuro-divergent geospatial professionals for developing and scaling innovative GIS AgTech products <i>Melissa Neville, Australian Spatial Analytics &amp; Lyndsey Jackson, Platfarm</i>
1425	Extracting additional value from a digital model: Bushfire risk mitigation & asset inspection (LiDAR survey of the power distribution network) <i>Chris Williams, Citipower &amp; Powercor</i>	Exploring the past of the Buckland Valley and the power of 3D spatial analysis <i>Darren Green, Department of Transport and Planning</i>	The need for collaborative systems and technology to improve positioning accuracy in Urban canyons <i>Jenni Tomkinson, Position Partners</i>	Documenting a machine learning training dataset <i>Dr Caitlin Adams, FrontierSI</i>	Organisational change as a driver for geospatial strategies <i>Prajakakta Patil, Spatial Vision</i>
1445	River Murray flooding – how the mapping functional support group supported the South Australia SES response effort <i>Nick Severin, Department for Environment and Water</i>	3D monitoring of the robe coastline <i>Nicholas Davies, Veris</i>	Survey data, BIM and IFC <i>Dr Lee Gregory, 12d</i>	Using big data and automation for managing renewables in the South Australia electrical distribution network <i>Simon Laird &amp; Fraser Hampton, FrontierSI</i>	Finding a way – geospatial through a marketing lens <i>Steven Henderson, Woolpert</i>
1505	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers
1515	AFTERNOON TEA: HALLS MNO				

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PLENARY SESSION: HALL L	
1545	<b>DIVERSITY FOR AN EMPOWERED INDUSTRY</b>
1545	The Rockstars in Neurodiversity <i>Geoff Smith, Chief Executive Officer, Australian Spatial Analytics</i>
1615	Advancing gender equality in the Pacific <i>Hilary Thompson, Acting Executive Director, Australian Hydrographic Office, Australian Geospatial- Intelligence Organisation</i>
1645	From words to action: what's getting in the way? Panellists: <ul style="list-style-type: none"> <li>○ <i>Geoff Smith, Chief Executive Officer, Australian Spatial Analytics</i></li> <li>○ <i>Hilary Thompson, Acting Executive Director, Australian Hydrographic Office, Australian Geospatial- Intelligence Organisation</i></li> <li>○ <i>Maurits van der Vlugt, Chair, Space, Spatial and Surveying Diversity Leadership Network (SSL-DLN)</i></li> </ul>
1715	Session's end
1830	<b>Pre-dinner drinks: Halls MNO Foyer</b>
1900	<b>Asia-Pacific Spatial Excellence Awards (APSEA): Panorama Ballroom</b>

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FRIDAY 12 MAY 2023

PLENARY SESSION: HALL L

0830	Registration opens: Hall M Foyer	
0930	<b>RESEARCH AND INNOVATION</b>	
	0930	Mapping vines to wines - GeoTech in the wine industry <i>Dave Gerner, Program Manager – Regional Innovation, Wine Australia</i>
	1000	Spatial Research and Skilling - an Academic Perspective <i>Prof Monica Wachowicz, Associate Dean, Royal Melbourne Institute of Technology (RMIT)</i>
	1030	What's the role of government in responding and enabling emerging trends? <i>Panellists to be announced.</i>
1100	<b>MORNING TEA: HALLS MNO</b>	
	<b>TECH TALKS &amp; CASE STUDIES: EXHIBITION THEATRETTE, HALLS MNO</b>	
	1110 – 1120	The 5 critical but common challenges identified when deploying Digital Transformation and automation of data validation for infrastructure asset information <i>Johan Nel, Open Spatial</i>
	1120 – 1130	Creating a digital twin with UAV-collected data <i>Mackenzie Mills, Blue Marble Geographics</i>
	1130 - 1140	Title TBC, <i>Jonah Williams, Onneer</i>

CONCURRENT SESSIONS

	Room: C1	Room: C2	Room: C3	Room: C4	Room: Hall L
	Protecting the planet	Community at the centre	Data collaboration	New technologies	Building value in data
1145	Reefcloud - how AI supercharged collaboration protects the world's coral reefs <i>Shaun Falconer, Accenture</i>	Integrating Indigenous priorities into Geographic Information Systems: Case Studies from the Groote Archipelago <i>Jonah Lafferty, Anindilyakwa Land Council</i>	From pipe dream to reality: overcoming data challenges with collaboration <i>Multiple speakers: Australian Bureau of Statistics, Department of Infrastructure, Transport, Regional Development, Communications, and the Arts on the Regional Data Hub Geoscience Australia Bureau of Meteorology</i>	Australian-made Automated Monitoring IoT Sensor (AAMIS) – Kurloo Development Story <i>Dr Charles Wang, Kurloo Technology Pty Ltd</i>	The power of place: understanding the economic impact of location on business and government <i>Michael Dixon, Geoscape Australia</i>

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1205	Ozius Biome™: providing continental-scale 3D vegetation products by combining space-borne remote sensing technologies and artificial intelligence <i>Alisa Starkey, Ozius</i>	Enhancing our diverse communities through place naming <i>Kerry Wilson, Gender Equity Victoria &amp; Rafe Benli, Department of Transport and Planning</i>	Remotely possible - thinking outside the polygon: the challenges, lessons and benefits in distributed work patterns from the Covid pandemic <i>Daniel McIlroy &amp; Brett Madsen, Geoscience Australia</i>	What does the journey to smart road networks look like? Insights from TMR Spatial Labs 2022 <i>Justin White, Transport and Main Roads &amp; Roshni Sharma, FrontierSI</i>	Cloud-native data in practice <i>Alex Mckeown, Integrated Marine Observing System</i>
1225	Unlocking the power of South Australia's biodiversity data: a spatial approach <i>Matthew Miles, Department for Environment and Water</i>	Mapping community – establishing a vocabulary in relation to 'community' to assist in climate resilience and disaster recovery <i>Harmen Romeijn, Spatial Vision</i>	#It's complicated. Inter-jurisdictional data sharing is difficult, but the benefits are worth it <i>Kristen Jennings, Nova Systems</i>	Finding the missing middle: a big data and AI approach <i>Bradley Rasmussen, Sizztech</i>	Calculating distance to work – behind the scenes of enhancing Census data without increasing community burden <i>Kathryn Hooton, Australian Bureau of Statistics</i>
1245	Drone sensing to monitor dispersal of the biocontrol in invasive cactus in the semi-arid New South Wales <i>Dr Rajendra Shilpakar, Department of Regional NSW, Local Land Services Agency  Greater Sydney</i>	Embracing our differences to build our team <i>Kellie Dean, Veris &amp; Dylan Frank, Wumara Group</i>	Mobile crowdsourcing for high-quality base maps <i>Dr Davood Shojaei, Melbourne University</i>	Virtual eyes-in-the-sky: damage assessment with drones <i>Gordon Sumerling, Esri Australia</i>	Victorian Department of Transport and Planning adoption of Open Street Map (OSM) <i>Robert Potter, Department of Transport and Planning</i>
1305	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers	Panel discussion with session speakers
1315	<b>LUNCH: HALLS MNO</b>				
	<b>TECH TALKS &amp; CASE STUDIES: EXHIBITION THEATRETTE, HALLS MNO</b>				
	1325 – 1335	Geospatial evolutions - data assurance for the environment – a UK experience <i>Robert Chell, 1Spatial</i>			
	1335 – 1345	The art of creating engaging GIS experiences <i>Ellen Carter, Esri Australia</i>			
	1345 – 1355	Catalysing the use of AI for smarter and safer road corridors <i>Peter Jamieson, Anditi</i>			
	1355 - 1405	A modern geospatial data lake for South Australia Government <i>Greg van Gaans, Department for trade and Investment</i>			

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PLENARY SESSION: HALL L	
1415	<b>INTO THE FUTURE</b>
1415	Australia's future market combining space and spatial – a dialogue. <i>Alan Smart, Senior Associate, ACIL Allen Consulting</i> Interviewed by <i>Dr Zaffar Sadiq Mohamed-Ghouse, Chair, Locate Conferences Australia</i>
1445	Geospatial evolutions – geospatial best practice from a global perspective <i>Joseph Seppi, Geospatial Sector Lead and Senior Vice President, Woolpert</i>
1515	Speaker to be announced.
1545	Closing ceremony
1600	Conference close

### ADDITIONAL INFORMATION FOR WORKSHOPS & SYMPOSIUM

<b>YOUNG PROFESSIONAL, STUDENT AND EARLY CAREER RESEARCHER PROFESSIONAL DEVELOPMENT WORKSHOP</b> <b>Date:</b> Wednesday 10 May <b>Time:</b> 100 - 1300 <b>Room:</b> City Room 1  There is no cost to attend, however please secure your place when completing the online registration form.  <i>Open to anyone aged 36 or under, as well as full time students and early career researchers. Attendees will make new connections, learn how to make the most of their time at Locate and gain valuable insights to take back to the office or classroom.</i>	
1000	Icebreaker and introduction
1010	Complex Case Study Presentation- Problem-solving and Communicating with Diverse Stakeholders Workshop <i>Presentations from project team</i>
1110	Break
1140	Breakout groups
1230	Workshop presentations
1300	Lunch

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## ADDITIONAL INFORMATION FOR WORKSHOPS & SYMPOSIUM

### LOCATE SYMPOSIUM

**Date:** Wednesday 10 May

**Time:** 1400 - 1700

**Room:** City Room 1

Pre-registration is not required; the Symposium is open for everyone to attend.

*The Symposium will exclusively showcase ideas and projects by the industry's high achieving young professionals, students, and early career researchers. Young Professionals and students are the future of our industry. The contribution that younger professionals make to the development of new technologies, innovative ideas and complex projects should not be underestimated. This session is open to everyone and anyone with an interest in the future of the industry. We invite all senior leaders to bring their younger professionals along and see what is happening across the industry, followed by networking leading into the Welcome Reception. Prizes will be awarded for the best presentations!*

1400	Symposium opening
1405	Speaker TBC
1420	Convolutional Neural Network (CNN)-Based Deep Learning Approach for Automatic Flood Mapping Using NovaSAR-1 and Sentinel-1 Data <i>Andrew Ogbaeje, University of Southern Queensland</i>
1430	Weather Modelling and Monitoring Using Australian-made Low-cost IoT GNSS Sensor <i>Dr Jun Wang, Kurloo Technology Pty Ltd</i>
1440	Rising Tides: What tide data can tell us about future coastal flooding in Port Phillip Bay, Victoria <i>David Pepin, Spatial Vision</i>
1450	Deep learning U-Net classification of Sentinel-1 and 2 fusions effectively demarcates tropical montane forest's deforestation <i>Richard Dein Alarez, University of Southern Queensland</i>
1500	Spatial and Temporal Assessment of Land Suitability for Beekeeping in Queensland, Australia using GIS Based Fuzzy AHP and Fuzzy Overlay <i>Sarasie Tennakoon, University of Southern Queensland</i>
1510	Drone-based images and machine learning to detect invasive Siam weed in northern Australia <i>Deepak Gautam, RMIT University, Geospatial Sciences</i>
1520	Spatial growth patterns of informal settlements in disaster environments: The case of Mocoa, Colombia <i>Ricardo Camacho, University of Melbourne</i>
<b>1530</b>	<b>Break</b>
1540	3D Spatial Data <i>Bailey O'Brien, Aerometrex</i>
1550	Low Code GIS Workflow Automation in Transport Planning <i>Aurora Bao, Arup Australia Services Pty Ltd</i>
1600	Optimising satellite-derived bathymetry utilising high-resolution multispectral datasets along the Adelaide Metro Coast, South Australia <i>Joram Downes, Flinders University</i>
1610	SAR-SXXC: what can we see from SAR S, X, X, C bands? Multi-polarisation, multi-platform, multi-date SAR with multi-platform-LIDAR over Plantation-Forestry

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	<i>Marcia DaSilva, Flinders University</i>
1620	Applying Blockchain Technology for Land Administration <i>Huon Wilson, Water NSW</i>
1630	Digital community engagement through ArcGIS Online powered custom application - Parramatta Light Rail Stage 2 EIS Portal <i>David Schmidt, GHD Digital</i>
1640	Encouraging spatial biologists and ecologists to use a proper GIS, not just R <i>Dr Claire Moore, Flinders University</i>
1650	Improving client's and professional surveyors' relationship, a case of irregular shapes with acute angles <i>Noble Ifeanyi Washington Okezie, Surveyor</i>
1700	Closing, YP Grant presentations and awards <i>Bradley Slape, Program Chair</i>
1710	Welcome reception/YP networking drinks – Halls MNO

## ADDITIONAL INFORMATION FOR WORKSHOPS & SYMPOSIUM

### OPTIONAL WORKSHOPS

**Date:** Wednesday 10 May

**Time & Room:** See below workshop descriptions.

*Please confirm your attendance when registering. Limited places are available for most workshops. There are no fees to attend unless advertised otherwise.*

### SPACE AND GEOSPATIAL WORKSHOP

**Time:** 0900 – 1300

**Room:** Riverside 2&3

**Cost:** \$95 per person

The Space & Geospatial Collaborative Workshop is being jointly hosted by the Andy Thomas Space Foundation and SSSI on Wednesday 10 May 2023, in between the first 2023 Australian Space Forum and the Locate23 Conference. This inter-disciplinary workshop will provide a unique opportunity for professionals from both space and spatial sectors to connect and discuss the increasing synergy and collaborative opportunities that have resulted from Australia's renewed commitment to space technology development and the requirements and capabilities of the modern spatial information industry. The spatial professional has been an enduring end-user of space applications such as PNT (positioning, navigation, and timing), EO (Earth Observation) and telecommunications. Everyone is invited to attend to hear from experts in the field and to connect with like-minded professionals.

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## NEW ARCHITECTURE APPROACHES FOR GEOSPATIAL INFORMATION/DATA FURTHERING ACCESS AND USE TO AN EVER-INCREASING NUMBER OF INDUSTRY SECTORS

**Presenters:** Chris Body - Open Geospatial Consortium, Rob Atkinson - Open Geospatial Consortium, Kate Williams – FrontierSI & Dr Ivana Ivanova - Curtin University & FrontierSI

**Time:** 1400 – 1700

**Room:** Exhibition Theatrette, Halls MNO

With an ever-increasing demand for geospatial information and data from non-geospatial industries and communities, the Open Geospatial Consortium (OGC) has been investigating more efficient ways of accessing geospatial data.

We will look at the current architecture starting with topics such as Metaverse, Digital Twins and reusable analytics, exploring the nature of OGC API building blocks and the relationship to semantics of domain models, and then into the work on CI/CT for testing and documenting specifications and establishing permanent best practice examples in managed OGC infrastructure.

To help to achieve this, Testbed 18 looked at three threads:

- Advanced Models and Data
- Catalogs, filtering, and Moving Features
- Future of Open science and Building energy interoperability

One of the topics within the Advanced Models and Data Thread was to look at “Machine Learning Training Datasets” with FrontierSI and Pixalytics leading this work. One of the key areas was to develop the foundation for future standardisation of Training Datasets for Earth Observation applications.

The workshop will also look at other initiatives like the Disaster Pilot 2023 and Testbed 19.

## GEOSPATIAL DATA VALIDATION AND CORRECTION HUB – GDV HUB

**Presenter:** Andrej Mocicka, 1 Spatial

**Time:** 1000 – 1100

**Room:** City Room 2

The GDV Hub is a web-based solution providing certainty for data integrity and data governance. The Geospatial Data Validation Hub (GDV Hub) allows developers, councils and utilities to validate data utilising the 1Data Gateway portal with its 1Spatial patented Business Rules Engine. Data submitted in Industry Standard Data formats is validated to standards and can automatically apply logical corrections.

This session will provide an overview of the GDV Hub, highlighting its unique features and benefits. It will also provide an opportunity to experience hands on submissions to validate and logically correct data to the ASPEC standards.

Representatives from GISSA and Digital Hive will attend the sessions and will be available for questions and answers throughout the session.

Who should attend? Developers, councils and utilities involved in property development.

Why attend?

As a developer - How much time do you spend correcting data submitted that does not comply with standards?

How much time do you spend learning the requirements and setting up checking procedures for different authorities?

How much time do you spend converting your data to other formats to comply with lodging data?

As a council/referral authority - How much time do you spend chasing data providers to rectify data provided that is not compliant?

How much time do you spend validating data supplied to find that it is not compliant?

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## FME ACCELERATOR: LEARN THE BASICS OF FME IN 90MINS

**Presenter:** Darren Fergus, Locus

**Time:** 1130 – 1300

**Room:** City Room 2

FME is the data integration solution with the best support for spatial data worldwide. The FME platform connects data across more than 450 systems to help you integrate and transform data exactly for your needs, no matter where that data is stored.

Hosted by Locus, FME Accelerator is a 90 minute workshop for data professionals interested in acquiring a foundational understanding of the FME platform and particularly helpful if you are a Data, BI, GIS or IT professional. No prior FME, GIS or coding experience is required and this workshop is suitable for both the technical and non-technical attendee.

What you will learn in this workshop:

- The principles of data integration
- An understanding of the fundamentals of FME and how to build an FME workflow applying the three step process of connect, transform and automate
- Experience hands-on practical FME exercises via a pre-built FME workspace – this is the bit where you get to use FME to perform functions typical of data connection and transformation tasks
- Participate in live, interactive training, where you will have the opportunity to ask any questions of our trainer

Please bring a laptop capable of connecting to the Internet. The workshop will take place on Strigo, a virtual training platform. You do not need to pre-install FME or Strigo. On the day, we will provide FME and a link to use Strigo in your browser. All workshop attendees will come away from this workshop with an introductory understanding of the FME Data Integration Platform equipped with the know-how and tools to apply to your own data challenges!

## DIGITAL TRANSFORMATION WORKSHOP - A REVIEW OF FACTORS TO CONSIDER FOR DEPLOYMENT AND FACILITATED DISCUSSION OF CHALLENGES AND BEST PRACTICES

**Presenters:** Colin Hobson, Andrew Dunlop, Zane Tronson, Open Spatial

**Time:** 1400 - 1700

**Room:** City Room 2

The workshop will include presentations from Bendigo, South Australia Water, and Open Spatial regarding experiences of deploying and engaging in digital transformation of data derived from new projects. The workshop will be interactive, include presentations and a set of facilitated discussions relating to the presentations. While the primary focus of the workshop will be on techniques, capabilities, challenges, and related workflows in the context of utilities data and related asset information, the lessons learned will be more widely applicable.

The following topics will be considered:

- Digital Workflows
- Digital Transformation
- Data Standards
- Data Integrity and validation
- Data Governance
- Data Sovereignty
- Using existing data and publishing from 2D to 3D
- Integrating with VDAS and Digital Twin Platforms
- What measures determine success?

In addition, a set of facilitated discussions will be conducted around the approaches different organisations are using, challenges encountered, best practices and benefits derived.

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## VICTORIA'S DIGITAL CADASTRE MODERNISATION PROJECT - THE LESSONS LEARNT SO FAR

**Presenter:** Mark Grant, Department of Transport & Planning

**Time:** 1000 – 1130

**Room:** City Room 3

This workshop will present the lessons learnt and the major technical challenges overcome since the project's inception. The session will focus on the need for strong international collaboration, technological innovation and creating an environment of innovation and trust between the Department and all project partners.

In particular the workshop will focus on:

- The challenges in digitising Victoria's land parcels and resolving the 50,000 technical queries which have arisen in the digitisation process
- The technical approach to adjusting the parcel fabric in metropolitan and rural settings
- The interface between maintaining the map base and integrating the upgraded parcel fabric into Vicmap
- The process of automating updates to the cadastre

The workshop will be facilitated by the Department and its project partners, DSM Soft (India), Spatial Vision (Australia), and Jacobs (Australia & Malaysia)

## APPLICATION OF DIGITAL TWIN FOR URBAN PLANNING AND LAND ADMINISTRATION

**Presenters:** Dr Soheil Sabri, Dr Benny Chen, Dr Davood Shojaei & Prof Abbas, Rajabifard, University of Melbourne

**Time:** 1200 – 1330

**Room:** City Room 3

This workshop will provide hands-on training for operating and leveraging a spatial digital twin for urban planning, asset management, and land administration. The CDILA-Digital Twin was developed at the Centre for Spatial Data Infrastructure and Land Administration (CSDILA), The University of Melbourne.

The CSDILA-Digital Twin platform is designed in response to requirements for finding, accessing, aggregating, and visualising different datasets (2D, 3D, 4D) maintained and hosted in disparate databases across state and local governments and other data custodians. To facilitate seamless integration of data and technology components, open standards are adopted.

This session will train the audience to use the Digital Twin and customise it for their day-to-day activities and services:

- Introduction: Prof. Abbas Rajabifard
- Workshop Activities Description: Dr. Soheil Sabri
- Data registration, filtering, Visualisation: Dr. Benny Chen
- Hosting analytical tools using development plugin services; Dr. Benny Chen
- Creating interactive story maps to engage with stakeholders and the community in the process of design, planning, and decision-making; Dr. Soheil Sabri
- Generating an optimised building envelop based on planning controls; Dr. Soheil Sabri
- 3D Cadastre visualisation, search, and query; Dr. Davood Shojaei
- 3D data capturing and integration with Digital Twin for asset management; Dr. Davood Shojaei
- Future industry and academic collaborations; Prof. Abbas Rajabifard

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## COLLABORATION TO BUILD THE WORKFORCE OF TOMORROW

**Presenter:** Danika Bakalich, Executive Manager, Workforce and Strategy, Geospatial Council of Australia

**Time:** 1400 – 1700

**Room:** City Room 3

In 2022 The Surveyors' Trust released a paper evaluating reasons why the Geospatial industry continues to face workforce shortages despite efforts to address the problem. The paper presents a Workforce Roadmap to systemically address the challenges but requires a synchronised whole-of-industry work program to succeed.

Workforce shortages for Surveying and Spatial related occupations have been looming for over a decade. Unless action is taken by the industry, the growing shortfall will continue unabated. While in the recent past various recommendations have been developed through workforce gap analysis reports, little coordinated and sustained action has been undertaken.

It is plausible that had a coordinated, structured plan been implemented at the time of the earlier workforce analysis, the current situation may have been avoided.

In addition, several initiatives have commenced over the recent past to tackle this challenge including Project Sirius, led by the then Surveying and Spatial Science Institute (SSSI) Land Surveying Commission. This project aims to boost public understanding of the Surveying profession and to better navigate change that recognises new skills and opportunity in a new frontier for Surveying. Further efforts by the industry aim to address the lack of diversity across the workforce led by the Space, Spatial and Surveying Diversity Leadership Network.

**Purpose of the workshop:**

This workshop is to be an ideation session with participants to build on the roadmap and aligned initiatives to further develop the approach to addressing talent attraction and retention needs across the industry.

Participants will be asked to consider stakeholder groups and shape transitional program design concepts to attract people to the sector and support talent throughout their career progression.

**The goal of the workshop:**

To change the approach from a "One size fits all" to a purpose-led design program model that leads to systemic change by drawing on the expertise and influence of key actors across the ecosystem, identifying their needs and role in addressing the workforce shortage, and draw on their strengths. The overarching goal of this workshop is to develop a unified approach across the Geospatial ecosystem to address workforce challenges and form the foundation for deeper collaboration to achieve long-lasting results.

**Intended outputs of the workshop:**

The output of the workshop is shape the basis of 3 to 4 program design concepts to be adopted by Industry, developed and delivered throughout the year and reported against at the 2024 Locate Conference

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## ECONOMIC VALUE OF DATA - “HOW DO YOU VALUE DATA?”

**Presenters:** Christopher Blackstock - FrontierSI, Dr Zaffar Mohamed-Ghouse - Woolpert, Alan Smart - ACIL Allen Consulting

**Time:** 1000 – 1300

**Room:** City Room 4

This workshop addresses the question of “How well do you understand the economic value of your data?” Industry and government spend considerable sums on geospatial data and data infrastructure. For some businesses there is an understood return on investment through product or service sales, but the real impact of the data is not as easily measured. It is even less clear for government agencies with open data mandates and sector expectations.

The goal of this workshop is to consider the assessment of the economic value of geospatial data, from being a public good, to underpinning sectors and services, driving innovation and modernization, and ultimately stimulating and driving economic activity. It will look at formal methodologies and practices across jurisdictions and industries and investigate the potential to standardize and create widely accepted and reusable evaluation frameworks, guidelines, and best practices.

The workshop will include short context-setting presentations from thought-leaders, followed by an interactive facilitated forum discussion where participants can provide perspectives and experiences and pose questions and challenges. By participating in this workshop, you will help contribute to an industry white paper and an initiative to develop a suitable industry wide framework to evaluate the economic value of data.

## UNLOCK THE POTENTIAL OF API: A HANDS-ON WORKSHOP

**Presenter:** Darryl Gibson, Geoscape

**Time:** 1400 – 1500

**Room:** City Room 4

Explore the power of location data in this 60-minute interactive workshop led by Geoscape experts. You'll learn how to harness the full potential of location services through a practical demonstration. Using Geoscape APIs, you'll discover how to identify and model the insights of an address. From locating the address, to identifying existing buildings and attributes, to modelling using BoM data, you'll gain the skills and knowledge to turn your location-based ideas into action.

Our spatial experts will share the code of the fully working app through an open-source repo on GitHub and attendees will have the opportunity to clone the demo application and develop their own version. The workshop concludes with a Q&A session where Geoscape will provide feedback and recognition to participants on their projects. Join us and unlock the potential of API and take your location-based ideas to the next level.

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## GEOSPATIAL AI: UNLEASHING THE POWER OF 3D LAND COVER ACROSS AUSTRALIA

**Presenter:** Daniel Kruimel, Woolpert

**Time:** 1530 – 1700

**Room:** City Room 4

Gone are the days of having to compromise quality for speed, and speed for quality, when acquiring planimetric maps. Woolpert, in conjunction with an industry partner are creating a first of its kind 3D Land Cover Vector Map across the major cities of Australia.

Leveraging sub 15cm imagery, proprietary artificial intelligence systems have created a 14-feature Land Cover of the manmade and natural environment. Layers include 3D buildings, roads, bridge, railway, driveway, sidewalk, parking lot, swimming pool, sports field, water body, forest, grassland, bareland, and paved area.

The use of cutting-edge technology and advanced algorithms enables the vectors to be routinely updated, providing users with the most current information available. Despite its speed, the data still adheres to rigorous quality standards, achieving the quality of a GIS Professional, to ensure precision, accuracy, and reliability. This combination of speed and quality makes the data a valuable resource for a wide range of industries and applications.

The workshop will cover the underlying technology and methodologies used in the creation of the database, as well as its potential applications in various fields such as rapid change detection, parcel level stormwater fee calculations, environmental management, and urban planning.

Attendees will have the opportunity to interact with the vectors and explore its capabilities through hands-on demonstrations and an interactive session (BYO laptop / device required).

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