



TERN SCIENCE SYMPOSIUM

5-6 July 2021 ONLINE

Program

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*Please note this program is subject to change.

All times are Australian Eastern Standard Time (AEST)

DAY 1 Monday 5th July

10:00	Welcome by TERN Director (live)
10:05	Opening Address by TERN Advisory Board Chair, Professor Hugh Possingham (live)
10:25	Short break – get a cuppa

Session 1

10:30	Chair (TBA) introduction – Climate Impact on Ecosystems	
	Stefan Arndt	Landscape level assessment of tree drought mortality in forest ecosystems of the Strathbogie Ranges in Australia
	Alison O'Donnell	The role of rainfall amount and intensity in driving tree growth across semi-arid and tropical Australia
	Jamie Cleverly	Stress, recovery and resilience to climate extremes in Australian ecosystems and agricultural landscapes
	Anne Griebel	Tapping into the physiological responses to mistletoe infection during heat and drought stress
	Lucas Cernusak	The water-use efficiency response of eucalypts to rainfall is modulated by soil phosphorus across Australia
	Alfredo Huete	Developing best practice Himawari data products for enhanced sub-daily monitoring and climate impact studies of Australia's ecosystems
	Tamara Potter	Demonstrating post-fire changes in vegetation and soil using TERN Surveillance monitoring: a case study from the Kangaroo Island bushfires
	Thomas Van Niel	Assessment of flux tower energy and water balance variables over Australian climate zones: implications for modelling
11:45	Q&A – moderated by session chair	

Session 2

12:00	Tim Wardlaw (Chair) introduction – Ecosystem Biodiversity	
	Jeff Powell	Biodiversity and biogeography of wood decay fungi within the TERN Australian Field Observatory SuperSites
	Irene Martin-Fores	Applying conservation reserve design strategies to define ecosystem monitoring priorities
	Arko Lucieer	Advances in drone remote sensing for ecosystem monitoring

	Alison Hewitt	Investigating fire responses in endangered ecological communities of the Cumberland Plain in northwest Sydney
	Katie Irvine	Extending biodiversity monitoring across space and time through citizen science
	Emrys Leitch	Celebrating 10 Years of TERN Ecosystem Surveillance across Australia
	Q&A – moderated by session chair	
13:00	Break for lunch	

Session 3

13:15	Ross Wilkinson (Chair) introduction – Good Data and Models for good science and management (part 1)	
	Qiaoyun Xie	Australian land surface phenology product from MODIS
	Juan Guerschman	Developing a multi-decade, operational, Australia-wide, monthly, 30m actual evapotranspiration dataset: Part 1 Calibration of multiple Earth observation sensors
	Jamie Vleeshouwer	Developing a multi-decade, operational, Australia-wide, monthly, 30m actual evapotranspiration dataset
	Matthew Stenson	Building a near real time continental soil moisture prediction using a Data-Model Fusion Approach system for Australia
	Ashley Sommer	Detecting and correcting data errors in time series observations from geographically remote monitoring stations.
	Siddeswara Guru	Towards harmonisation and integration of ecology data
	Greg Guerin	ausplotsR – rapid access to vegetation plot data across environments
14:25	Q&A – moderated by session chair	

Session 4

14:40	Glenda Wardle (Chair) introduction continued – Methods	
	Julia Bignall	Standardising environmental monitoring protocols and data systems for improved decision-making (1st set of modules)
	Mark Laws	Standardising environmental monitoring protocols and data systems for improved decision-making (2nd set of modules)
	Kimberley McCallum	The value of standardised field survey methods for researchers
	Bethany Cox	Using objective, standardised data collection to increase the efficiency of reporting under Federal programs
15:15	Q&A – moderated by session chair	
15:30	Day 1 ends	

DAY 2 Tuesday 6th July

10:00	Welcome to Day 2 by TERN Director (live)
10:05	Keynote Address by Professor Stuart Phinn (recorded)
10:25	Short break – get a cuppa

Session 5

10:30	Mike Grundy (Chair) introduction – Soils and Ecosystem Function	
	Megan Wong	Enabling soil data reuse for ecosystem management and decision making: A standards-based approach
	Lewis Walden	Spatially explicit estimates of brown and blue carbon stocks in Australia's terrestrial and coastal marine biomes
	Brendan Malone	Updating the Australia's digital soil mapping products: Soil texture case study
	Caitlin Moore	Filling the ecosystem monitoring gaps in TERN: making Western Australian SuperSites more super
	Alison Specht	Litterfall dynamics: developing a national dataset of daily fall rates and associated algorithms
	Peter Grace	Reducing Australia's greenhouse gas emissions through soil management
	Rachel Atkins	Soil carbon isotopic proxies for determining the photosynthetic pathway of floral communities: A method intercomparison
	Marcela De Freitas Silva	Carbon and water exchange in a plantation during initial years of growth
11:35	Q&A – moderated by session chair	

Session 6

11:50	Graciela Metternicht (Chair) introduction – The Role of Ecosystem Data in Australia's Society	
	Sally Thompson	An Online Portal for Accessible OzFlux Data
	Ross Searle	The TERN Soil Data Federator
	Alison Specht	The detection of socio-economic impacts of protected area creation
	Melissa Hart	Where citizen science meets the built environment: the schools weather and air quality (SWAQ) network
12:20	Q&A – moderated by session chair	
12:35	Break for lunch	

Session 7

12:50	Chair (TBA) introduction – Good Data and Models for good science and management (part 2)	
	Anu Devaraju	Enabling FAIR Flux Data in TERN
	William Woodgate	TERN observatory synergies for scaling carbon pool and flux observations with remotely sensed data: Current activities and next steps
	Quinn Thomas	The NEON Ecological Forecasting Challenge: Using forecasting challenges to leverage observational networks and advance prediction in ecology
	Samantha Munroe	Plants down under: defining and mapping the photosynthetic pathway of plants across Australia
	Kristen Williams	Using TERN products to predict habitat condition nationally
	Yasuhisa Kondo	An inclusive approach to develop community capability for environmental conservation in Lake Biwa (Japan)
	Andrew Tokmakoff	Paratoo: Next-Generation Field Data Collection Infrastructure
	Adrian Burton/ Sheida Hadavi	Bushfire data commons
	Wilma Karsdorp	Robust scalable data management for Ecolmages
14:15	Q&A – moderated by session chair	

Session 8

14:30	Chair (TBA) introduction – Open Forum	
	Lance Gunderson	Assessing resilience of terrestrial ecosystems in Australia across scales
	Ted Lefroy	Supersites and superorganisms: recurring themes in 85 years of ecosystem science
	Olly Berry	A DNA Barcode Library for all Named Australian Species
14:55	Q&A – moderated by session chair	
15:10	Closing remarks TERN Director (live)	
15:15	Symposium Ends <i>Farewell until July 2023</i>	