OzFlux newsletter - #3 spring 2024

Welcome to the spring 2024 issue of the OzFlux newsletter

Read the latest information and news from the Australian and New Zealand flux community below!

Message from the OzFlux Director (Stefan Arndt)

OzFlux This was an exciting year for flux researchers with many new initiatives kicking off. The number of registered flux towers is increasing every year. E.g. the Ameriflux network has now 677 registered flux sites in the Americas - a tripling of flux sites in the last 10 years. The increase in Australia is probably not as dramatic, but then not all flux sites are currently listed on the OzFlux website, something the steering committee wishes to address in 2025.

An important initiative is the FLUXNET 2025 Data System Initiative (https://fluxnet.org/fluxnet-data-system/) that will be launched next year. The data initiative is a continually updated, open-access resource maintained by the coalition of regional and global flux tower networks that brought you the FLUXNET2015 dataset. Please check the link above or visit the FAQ page on FLUXNET to learn how you can participate.

Many thanks to the organisers of the 2024 OzFlux data workshop and the OzFlux conference in Perth. Special thanks to Peter Isaac who updated most of the learning materials of the data workshop to great effect. We had many very positive comments by participants that they learned so much in that week. Thanks, Peter, for inspiring the next generation of fluxies. We may not all agree with 'know thy site', but we can certainly learn a lot from it ③. Many thanks to Caitlin Moore who put an excellent program together for the conference. It was very heartening to see so many interesting and innovative talks from early career flux researchers. And finally, a big thanks to Liena Fordham, the logistical mastermind behind both workshop and conference, thanks for such a seamless organisation. We'd love to come back to Perth!

Finally, we shall see you all in Brisbane from 8-11 July 2025, where we will have a combined FLUXNET-OzFlux conference that is hosted and sponsored by TERN.

OzFlux steering committee

The OzFlux steering committee meets every month, with community meetings announced twice per year. Feel free to reach out to find out how you can get more involved.

Director – Stefan Arndt
Chair – Elise Pendall
Associate Director – Nina Hinko-Najera
Deputy Chair – Samantha Grover
Secretary – Mark Hovenden
Communications – Caitlin Moore
Industry engagement – Lindsay Hutley
Early Career Representative – Charuni Jayasekara
Data Manager and TERN representative – Peter Isaac
Aotearoa NZ Representative – Johannes Laubach

OzFlux & TERN Data Workshop 2024

This year the annual OzFlux and TERN supported flux data workshop headed west, to Perth, WA and was run across 5 days from 11th to 15th November.

The 5-day workshop covered lectures on the theory and practice of eddy covariance and included demonstrations of instrumentation from industry partners LICOR Biosciences and Campbell Scientific. Participants also received hands-on training in the processing of raw eddy covariance data to a gap filled and partitioned dataset using the PyFluxPro tool.

Participants travel from near and far to join the workshop, including from other universities, as well as government, industry and international institutions.

A hybrid in-person and online session was run on the Thursday to provide an overview of the requirements to submit flux tower data to the upcoming FLUXNET2025 global data collation effort – an initiative led by the global FLUXNET Community Council. The TERN Ecosystem Processes team can provide regional support for the Asia-Pacific region in getting their site data and important metadata ready for submission. Please email the TERN-EP lead Dr. Peter Isaac (pisaac.ozflux@gmail.com) or OzFlux director Prof. Stefan Arndt (sarndt@unimelb.edu.au) for more information. This session was recorded and will be made available soon.

The workshop was hosted by the Centre for Water and Spatial Science (CWSS) at the University of Western Australia Crawley Campus, with support from TERN. The team extends a special thanks to Liena Fordham, the CWSS manager, for her support in running a successful event.











Participants enjoying the data workshop, image credit: Emma Gill.

OzFlux Conference 2024

This year the annual OzFlux conference took place from 18th to 20th November at the University of Western Australia Crawley Campus.

The conference ran in both in-person and online modes, and included two days of talks across the themes of;

- 1. Agroecosystem measurement and modelling
- 2. Ecological applications of flux science
- 3. Advances in flux science and integration of novel measurement techniques
- 4. Scaling flux science with remote sensing and modelling

Participants joined both in-person and online, including from local government and industry, as well as international participants from Japan, China, Indonesia and Europe. A social sundowner event was run on the first evening of the conference, giving participants the opportunity to catch up and strengthen ties in the flux community.

An ECR event was hosted in the evening of day two, where early career scientists were able to ask career advice from a panel of diverse researchers including the TERN director Dr. Beryl Morris, the OzFlux director Prof. Stefan Arndt, deputy OzFlux chair Dr. Sam Grover and OzFlux communication officer Dr. Caitlin Moore.



Participants on day two of the OzFlux conference, image credit: Liena Fordham.

The third day comprised a field trip to two of WA's local flux tower sites – the TERN Boyagin Wandoo Woodland and its nearby paired agricultural site UWA Farm Ridgefield. Despite some soaking rain, participants were able to see a demonstration of the Critical Zone Observatory facility at Ridgefield, as well as the 36 m tall tower at Boyagin.





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Upcoming meetings

International Conference on Research Infrastructure (ICRI) 2024

Brisbane, QLD 3rd - 5th December 2024

Ecological Society of Australia annual meeting

Melbourne, Australia 9-13 December 2024 Abstracts open on 11 April 2024 https://esa2024.org.au/

AGU Fall Meeting 2024

Washington DC, USA, 9-13 December 2024 AGU24 Annual Meeting | AGU

EGU 2025

Vienna, Austria, 27 Apr – 2 May 2025 Abstract Deadline: 15th January https://www.egu25.eu/

AMOS 2025

Cairns, QLD 23rd – 27th June 2025 https://www.amos.org.au/amos-2025-call-for-abstracts/

FLUXNET Meeting 2025

Brisbane, QLD 8th – 10th July 2025 https://fluxnet.org/community/fluxnet-annual-meeting-2025/

IEEE International Geoscience and Remote Sensing Symposium 2025

Brisbane, QLD 3rd - 8th August 2025

https://www.grss-ieee.org/event/2025-ieee-international-geoscience-and-remote-sensing-symposium-igarss-2025/