tern
Ecosystem Research Infrastructure

SCIENCE IMPACT

2020 NATIONAL SCIENCE WEEK

TERN delivers quality, model-ready data on critical Australian ecosystem parameters. Researchers here and across the world are using TERN's data, tools and expertise to better understand the environment and how it is changing.

To celebrate National Science Week, we showcase some of the impact TERN's infrastructure has enabled.

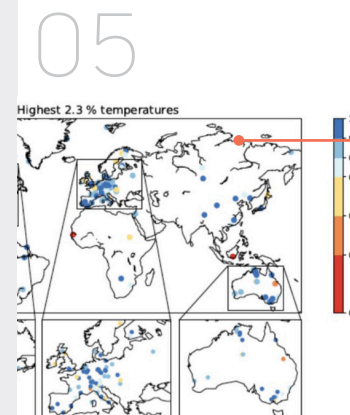**For more TERN research impact stories visit tern.org.au/researchimpact**
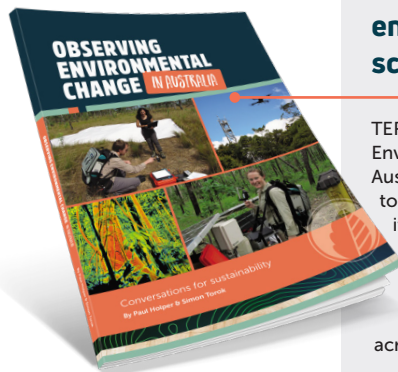
01
Australia's environmental science heroes

TERN's 2019 book 'Observing Environmental Change in Australia' is an accessible guide to ecosystem science and its underpinning research infrastructure. It presents stories of many scientists who are measuring changes in Australia's environment across time and space.

02
Helping us understand carbon cycles

New science from researchers using TERN data and infrastructure improves our understanding of the amount of rain our arid ecosystems need before they switch from being carbon absorbers to emitters.

03
Discoveries of weeds in fragile landscapes

TERN's detailed environmental surveys are helping identify biosecurity threats from new weed species, helping researchers investigating how best to manage the risks to native ecosystems from weed invasions.

04
Soil erosion research improves bushfire recovery

Scientists using TERN-delivered remote sensing data and digital soil maps have produced an innovative new approach for monitoring and predicting hillslope erosion. It can significantly improve land management practices and bushfire recovery activities nation-wide.

05
Predicting future droughts and heatwaves

Long-term quality data on land-atmosphere exchanges of energy, carbon and water collected by TERN and its partners have been recognised by scientists as perhaps the world's most valuable observations for building and evaluating models for projecting future droughts and heatwaves.

06
Forecasting honey harvests

Western Australian scientists and industry partners taste sweet success as a new model, using 115 vegetation and climate datasets, predicts good marri honey harvest years with 90% accuracy. It also presents opportunities for other regions, species, and in the assessment of ecosystem services.