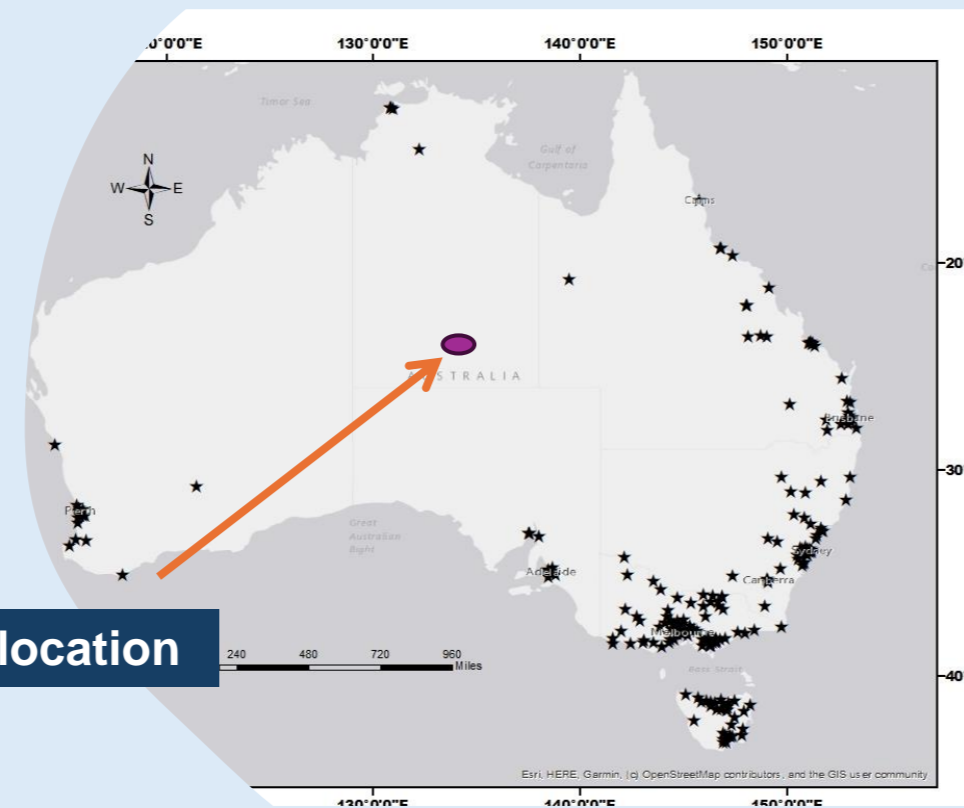


Aim: Crowdsourced air quality and temperature data in Alice Springs using citizen science and low-cost sensor monitoring and collate the lived experiences of residents to inform effective climate health responses

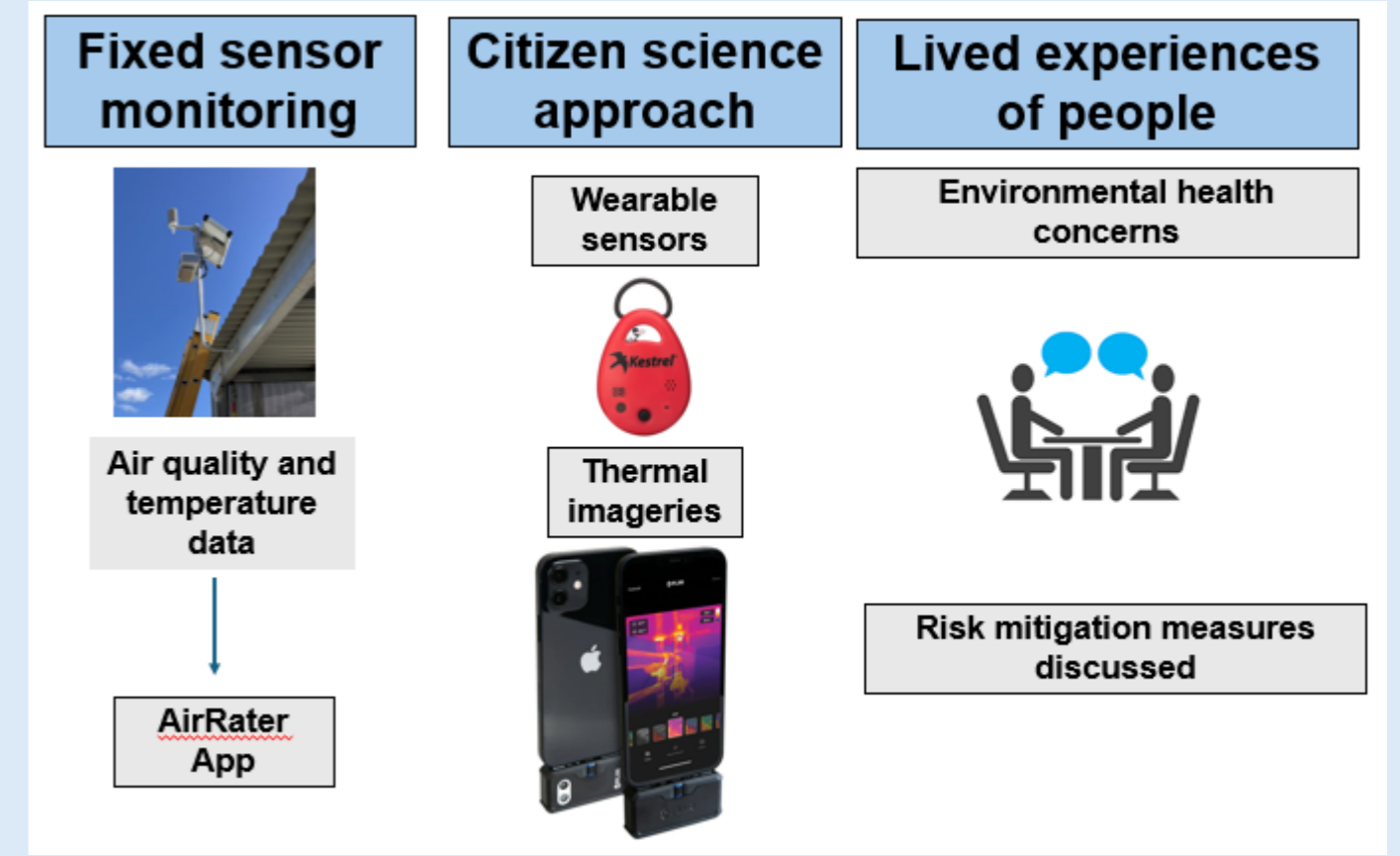
Why Air in Alice?

- Remote Australia has
- Limited air quality monitoring
 - Scarcer ambient temperature monitoring
 - Priority populations with a high chronic disease burden

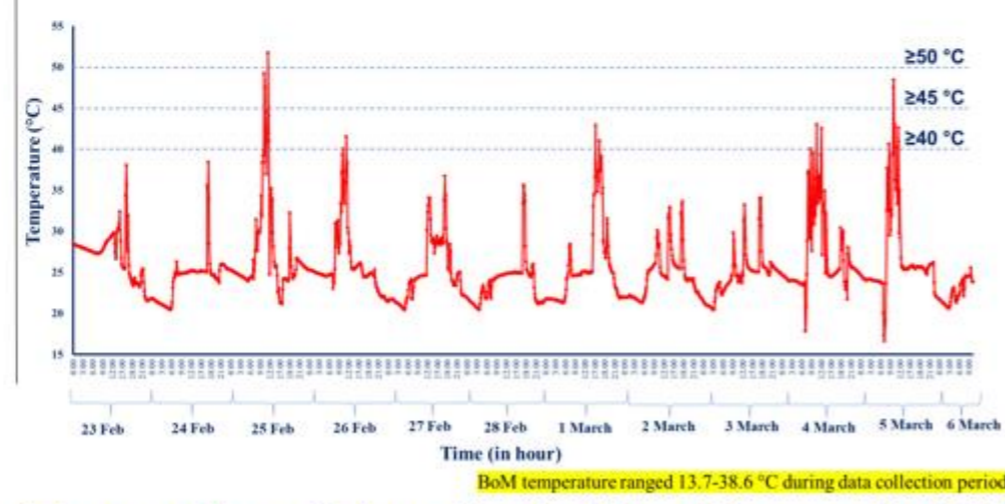
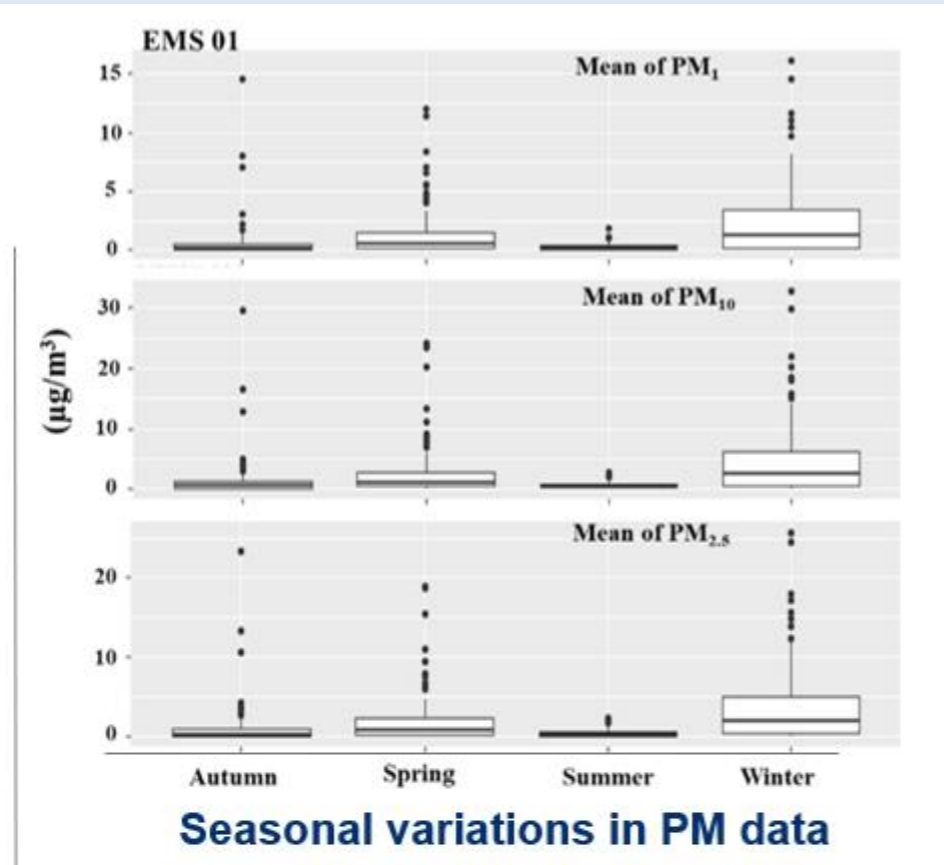
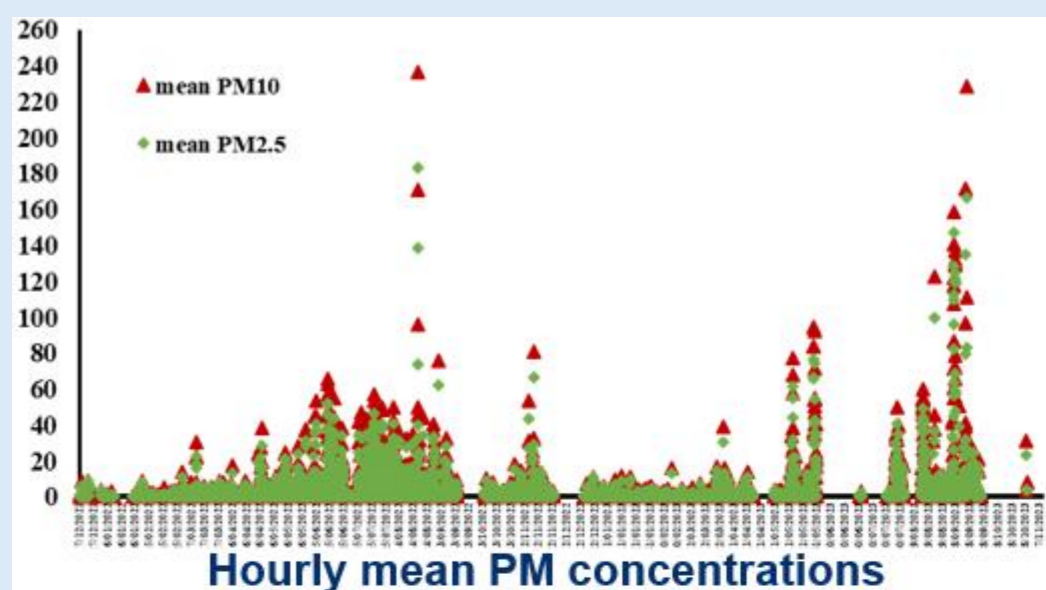


Network of Environment Protection Agency led air quality monitoring stations in Australia

How did we collect data?



What did we find?



What did the residents say?

Unshaded car parks: "My car is a giant sauna at the moment....like a sauna if it had no water, like I guess that would just be an oven".
Climate migration: "I have wanted to, for many, many years now to leave Alice Springs and move somewhere cold".
Housing: "Compared to the rest of the first world, we have essentially glorified tents for houses".
PM health effects: "Got sore eyes. We got too much smoke into our lungs, going through our nostrils. We can see the fogginess, but we can't see it going into us".
Temperature health effects: "it's extremely easy to get really dehydrated in Alice Springs...You are losing so much moisture".

Conclusion

- The study provided first-of-its-kind data on PM concentrations in central Australia that is publicly available via an app.
- Low-cost sensor monitoring could be used to gather baseline environmental data to better link air quality to health outcomes
- Citizen science-led data collection is feasible in remote settings and can assist with real-time adaptation decision-making
- Findings highlight the need for more investments in adaptation infrastructure for remote Australian towns.