

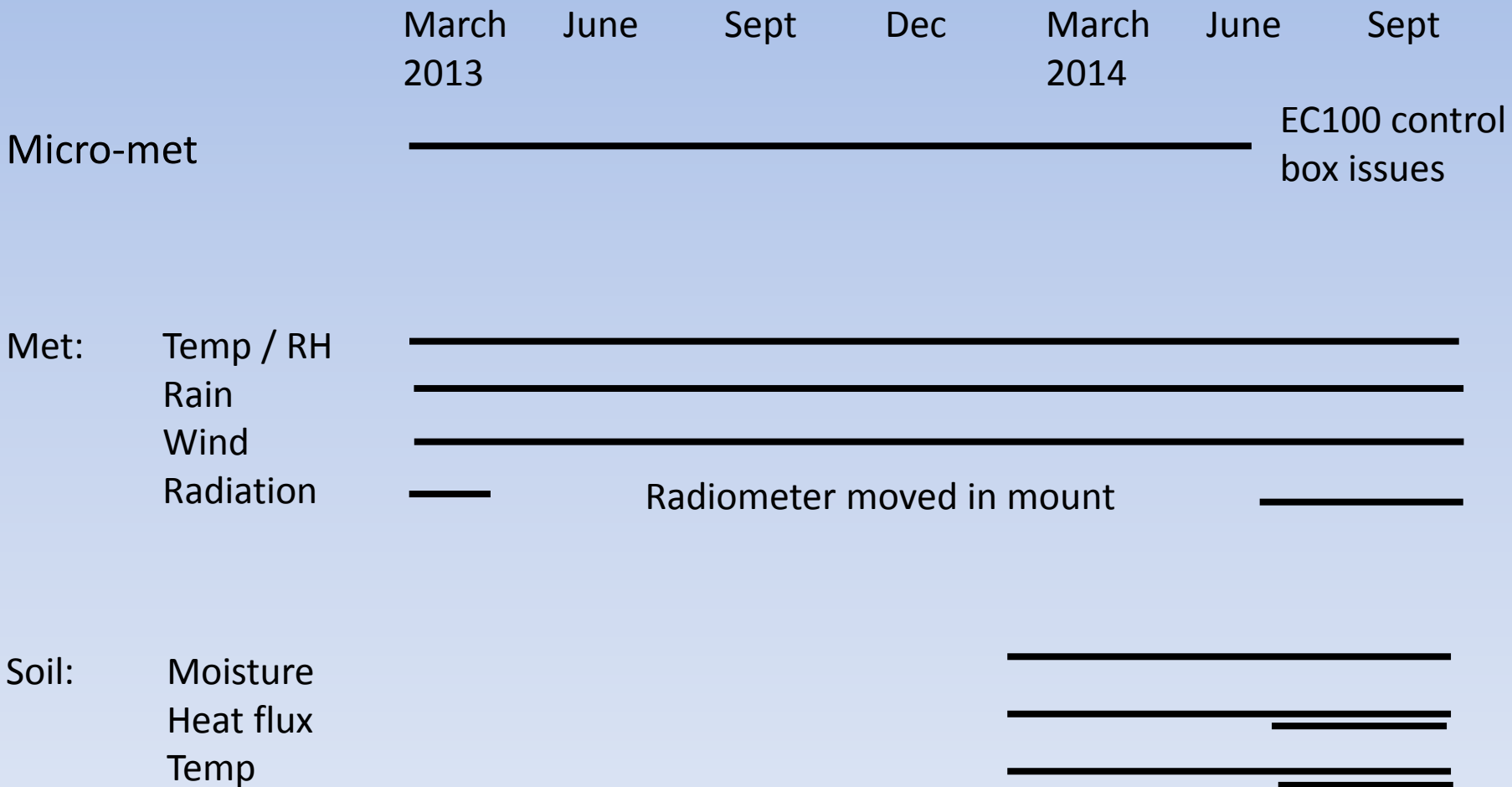
# Warra flux site: 2013-4 report



## LEARNER DRIVERS

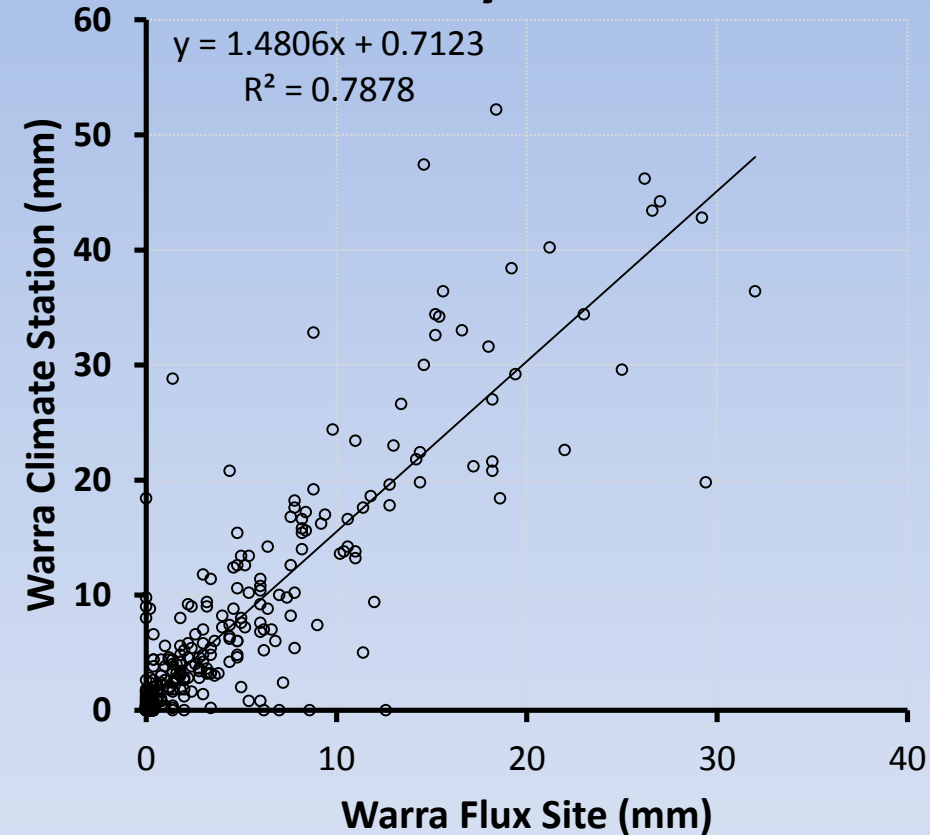
You'd have to be crazy not to be scared.

# Progress with infrastructure

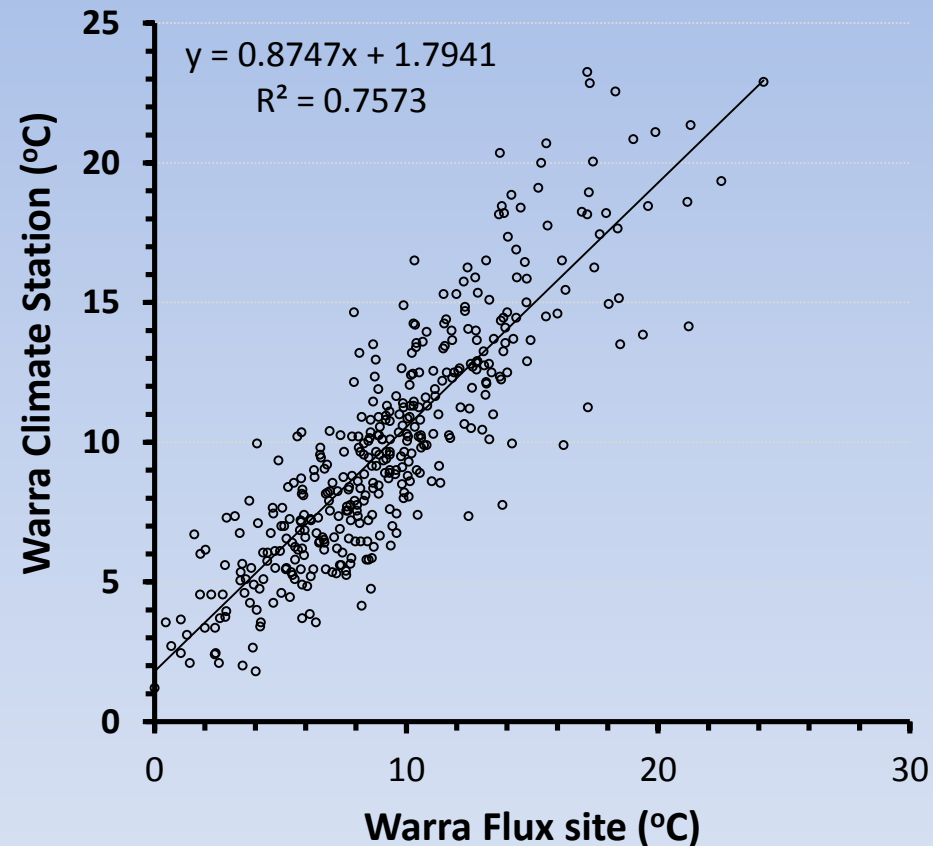


# Climate conditions in 2013-14

## Daily rainfall

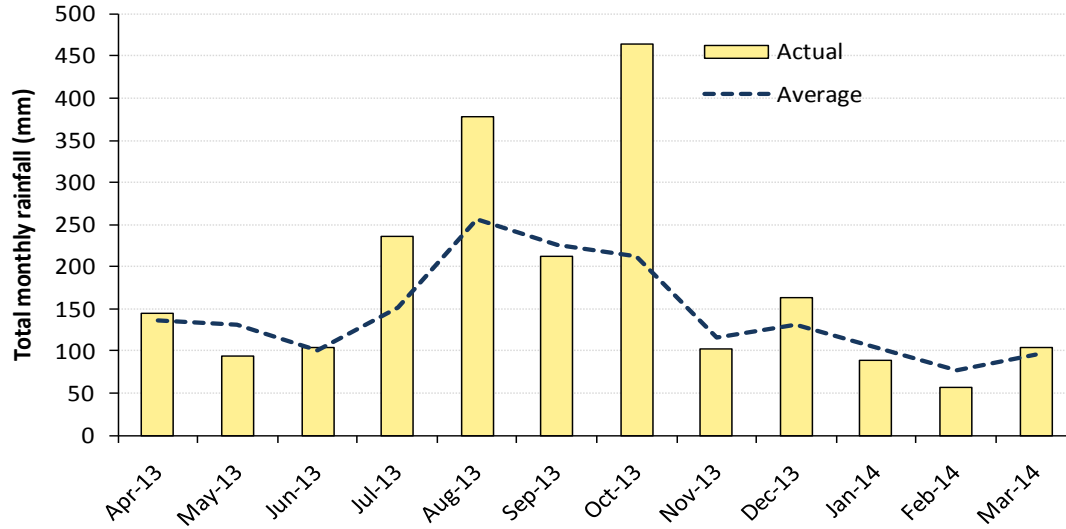


## Mean daily temperature



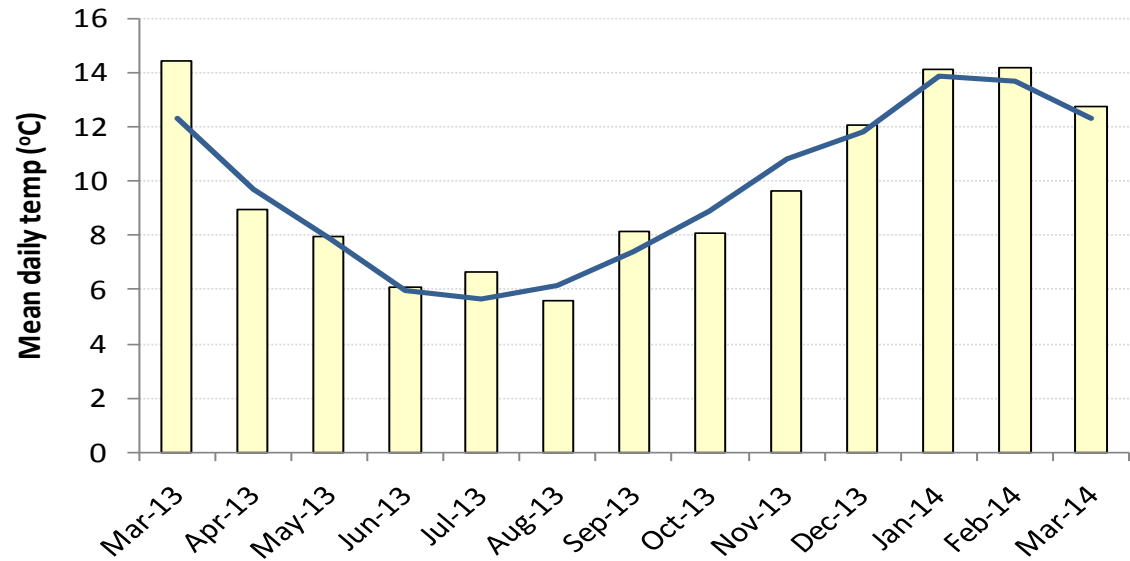
**Warra climate station is a reasonable analogue of the Warra Flux site**

# Climate conditions in 2013-14



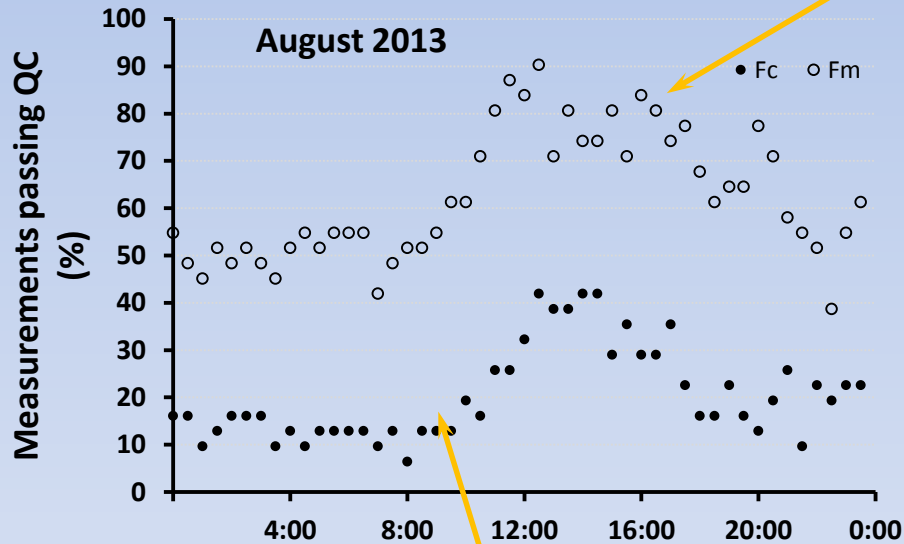
**Wetter than normal  
winter and mid-spring**

**Temperatures close  
to average**

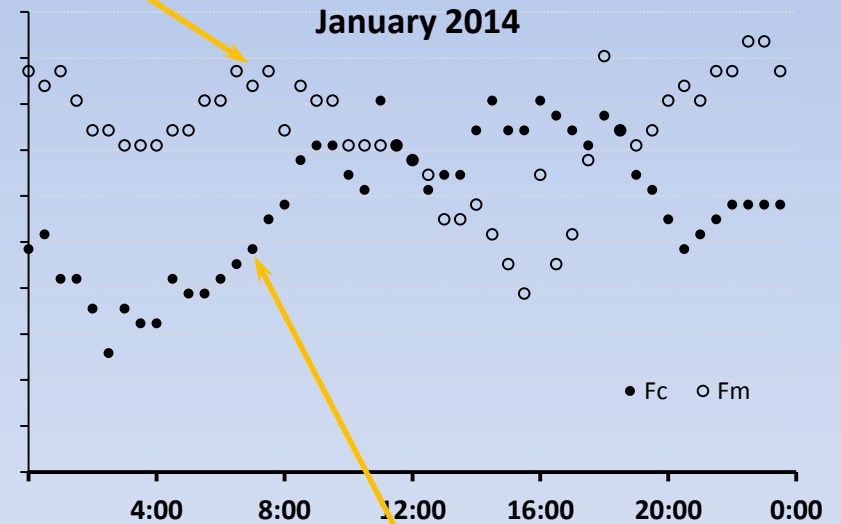


# Open-path IRGA does not like Warra

Sonic much less affected

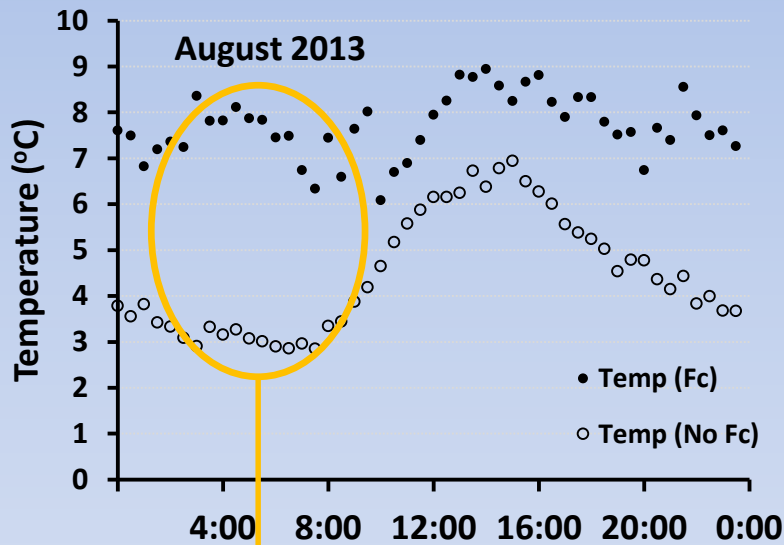


IRGA really struggles in winter

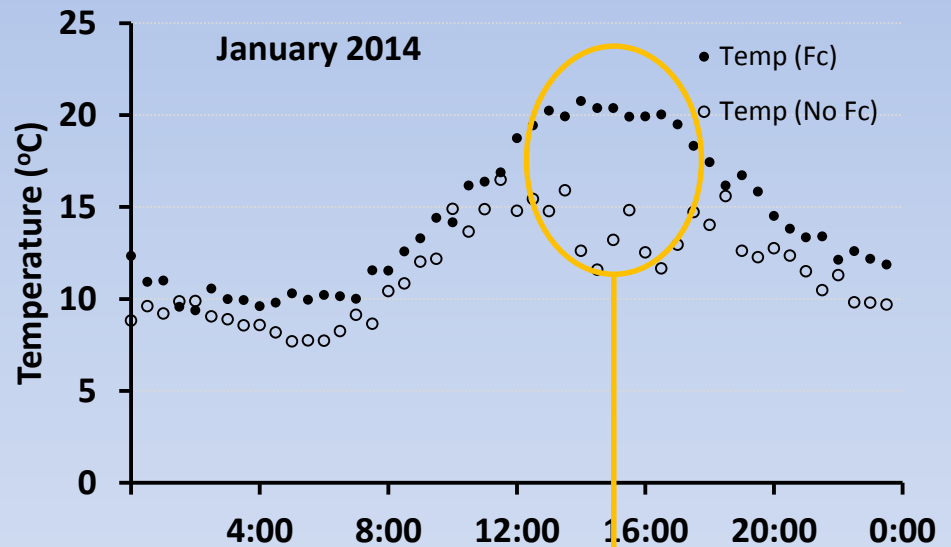


Better in summer

# Temperature bias with $F_c$ measurement



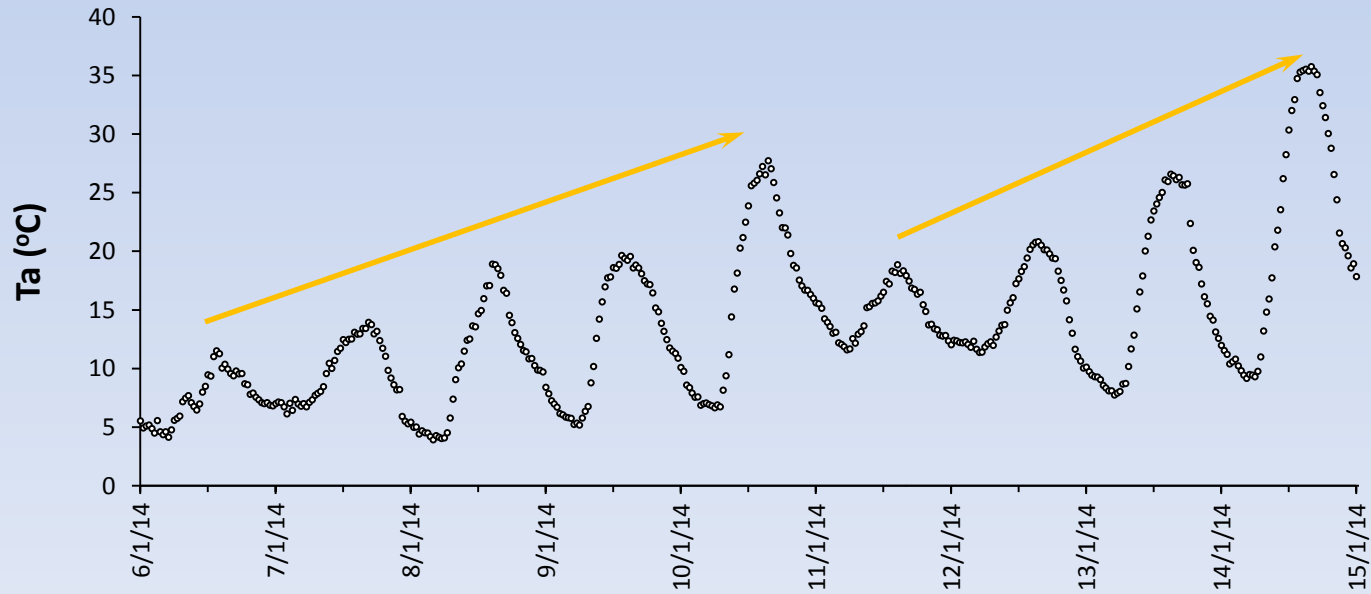
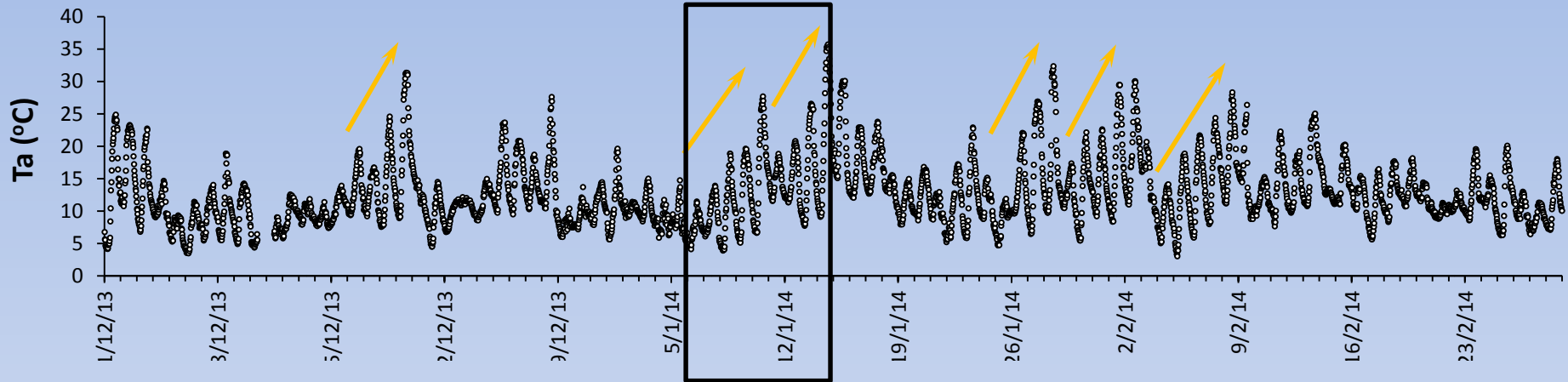
Valley fogs on clear nights

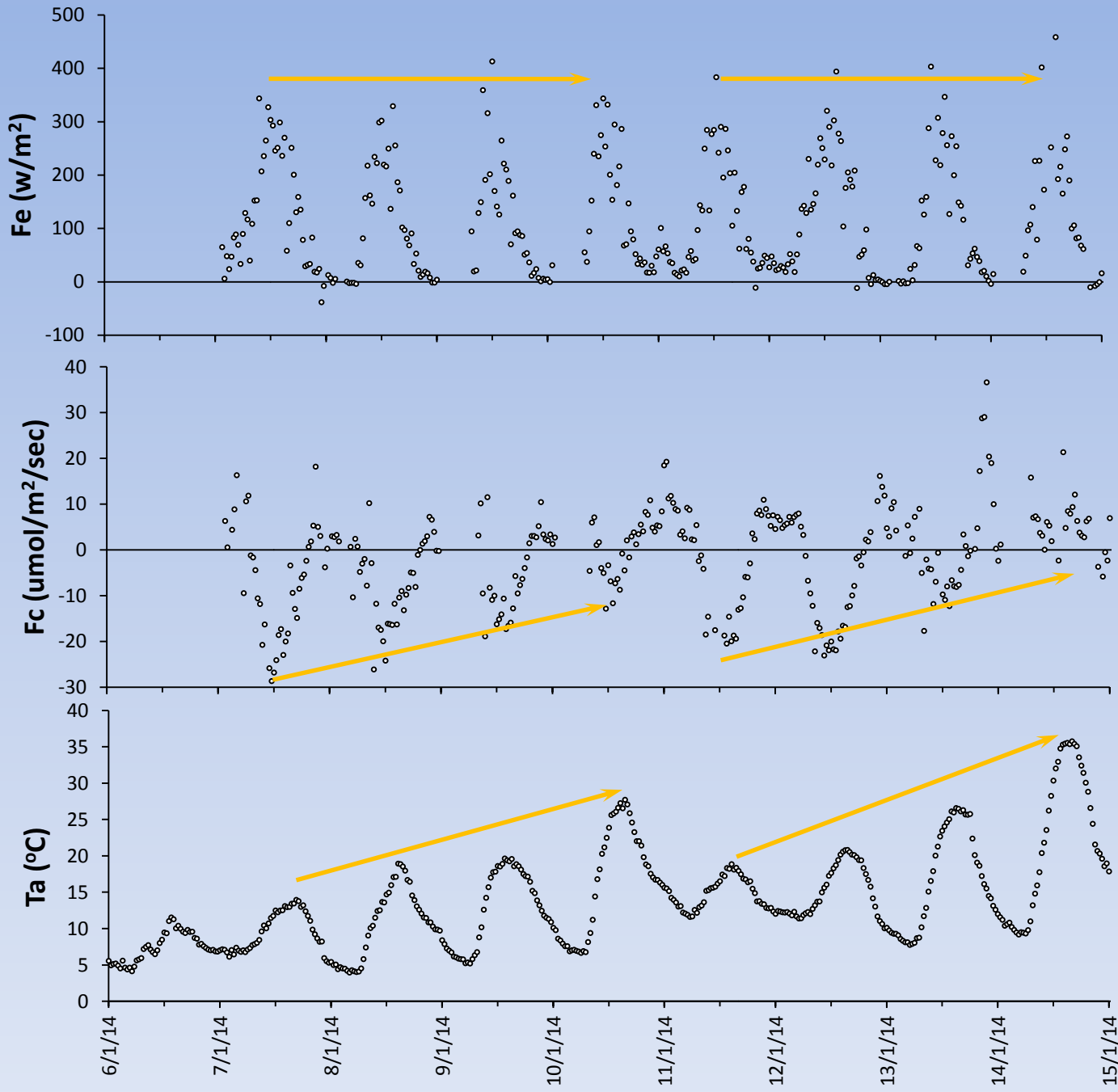


Rain events

**Problematic for gap-filling**

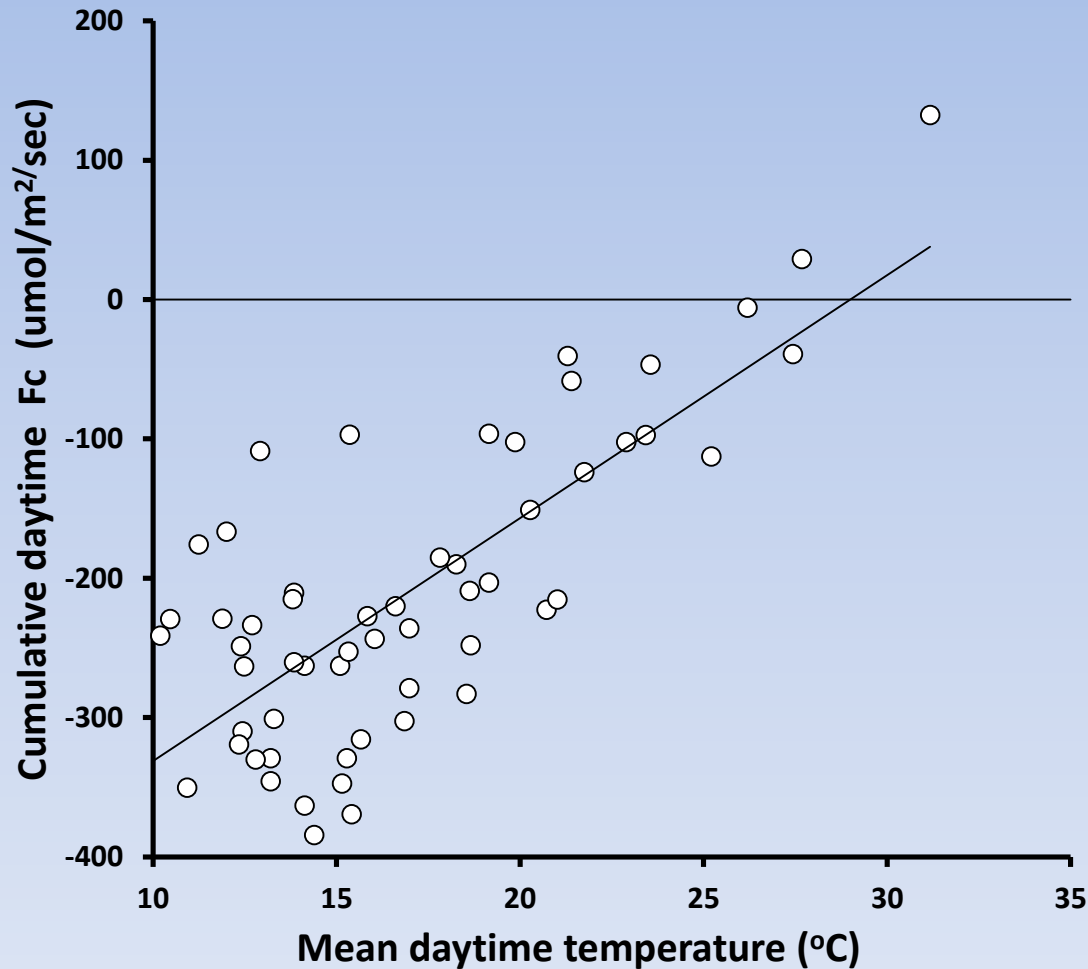
# We still got some interesting results





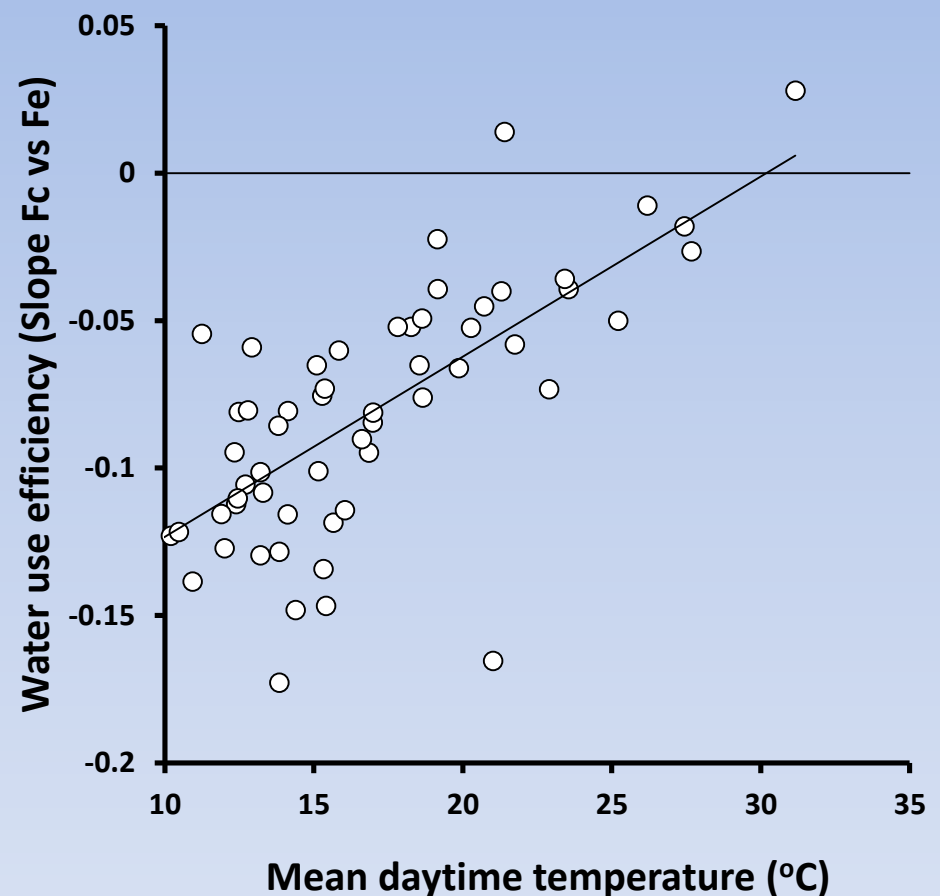
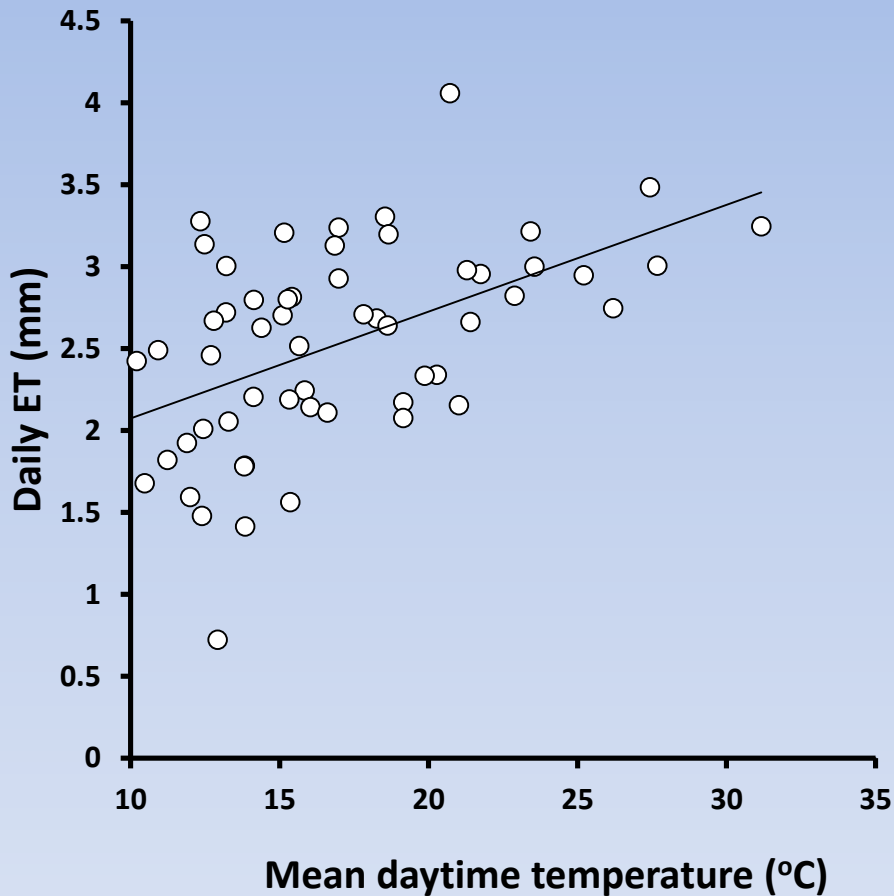


# Sink to source with higher temperatures



- Higher respiration?
- Stomatal control?
- Temperature-limited photosynthesis?

# Increasing ET with temperature



**Transpiration an evolved strategy to limit high leaf temperatures?**

## Warra as a radiation-limited site

- Sister site for Tumberumba? (or Wind River, Washington?)
- Contrast with Wombat (*E. obliqua* at its extremes) and Ozflux more widely
- Vulnerability to climate change – implications for carbon-dense ecosystems
- Need to better understand how high temperatures affect processes / vitality

# The year ahead

1. Get enclosed path IRGA installed
2. Get soil respiration data accessible and used.
3. Get 2013-14 data to level-6 Ozflux QC and Dingo-friendly
4. Progress to P - plates
5. Warra 20<sup>th</sup> anniversary – host Ozflux meeting?