

# What's happening to our weather

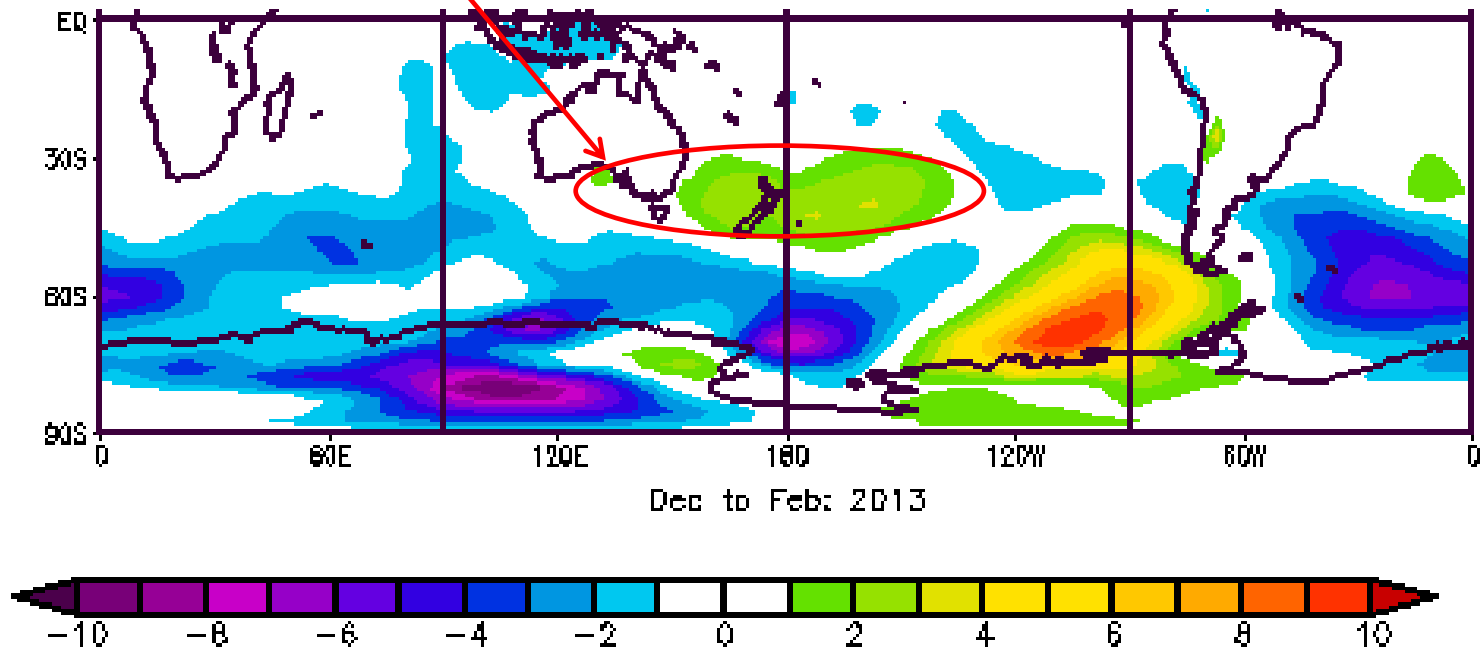
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## We will briefly touch on:

- Summer 2013 – why was it so dry for New Zealand? Hot for Australia? Wet for NSW/Queensland?
- Recent patterns in our neck of the woods
- What’s around the corner for spring?
- And lastly, a “take home” message

# Summer (Dec-Feb) 2012/2013 – (NZ take 1)

- Highs were much more frequent than usual over NZ
- Unusually dry, sunny, with hot afternoons most regions
- By summer's end, soils were extremely dry over entire North Is. (drought declared) and north/east South Is.



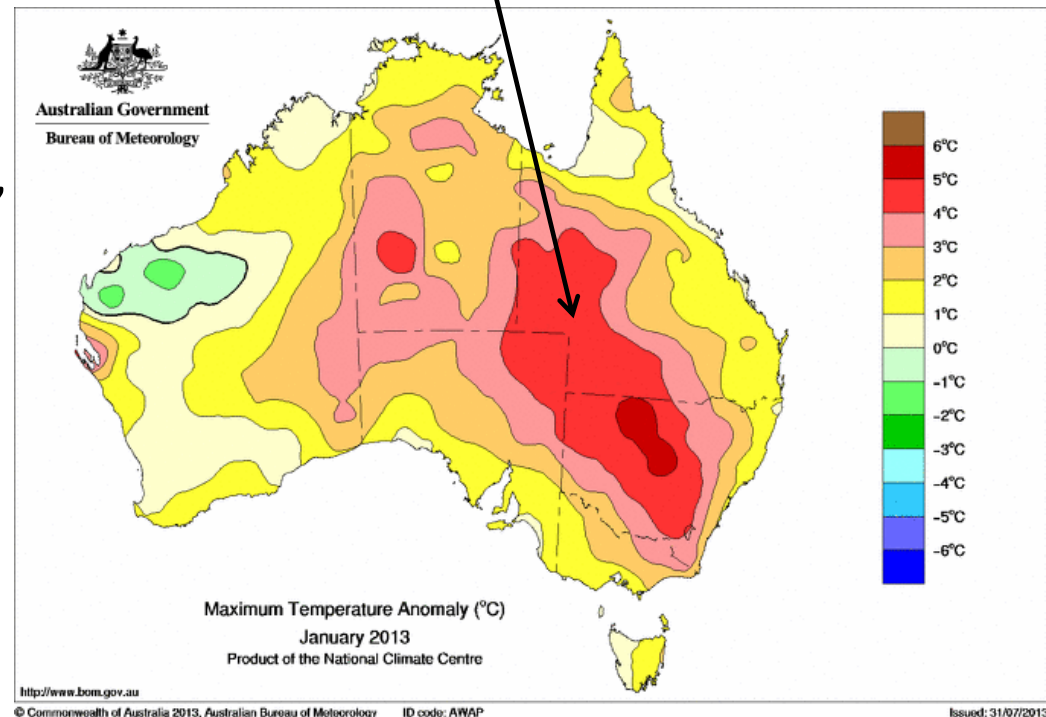
## Summer (Dec-Feb) 2012/2013 – (NZ take 2)

- But the summer was not without extremes
- The period 1-9 January was exceptionally wet along the West Coast of the South Island
- ~350mm recorded at Mt Cook in just one day!
- **Highlights the difference between “weather” and “climate”**



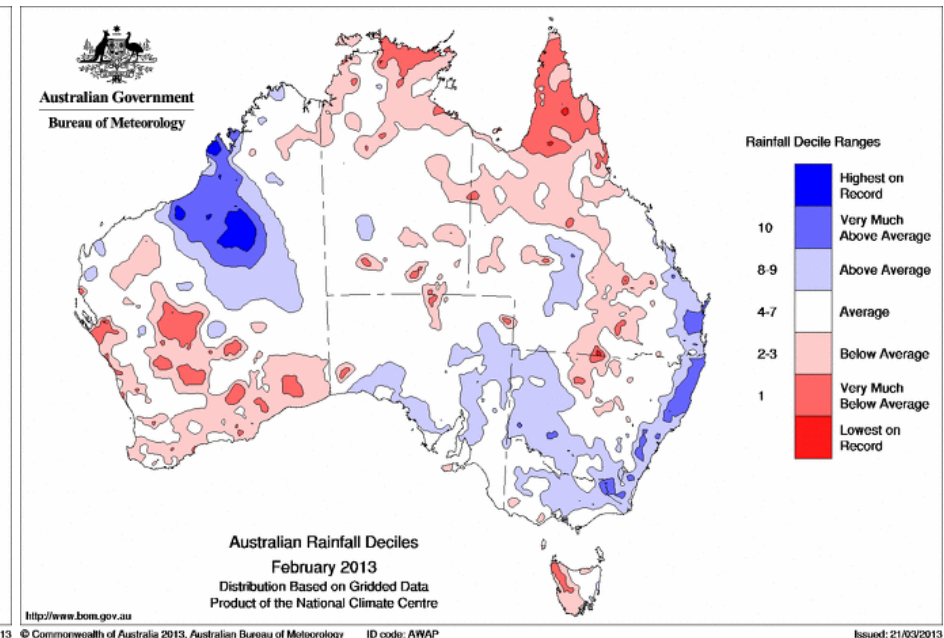
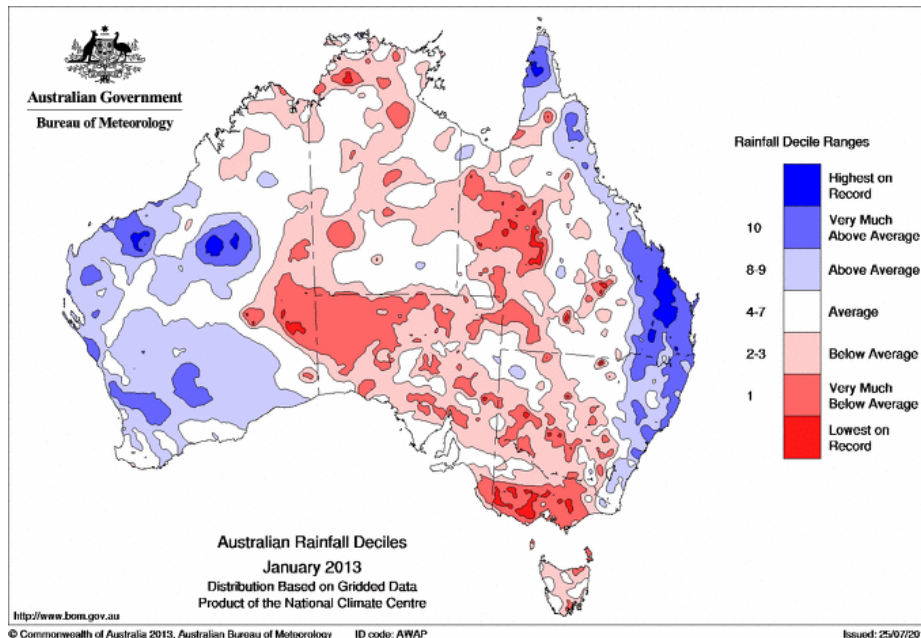
# January 2013 – Aussie heat

- January 2013 was Australia's hottest month on record
- Primarily caused by the late onset of north Australian monsoon (no cloud/moisture to moderate inland temps)
- Last 4 months of 2012 unusually hot (so soil temps were already up)
- “hot easterlies”
- “hot northwesterlies”



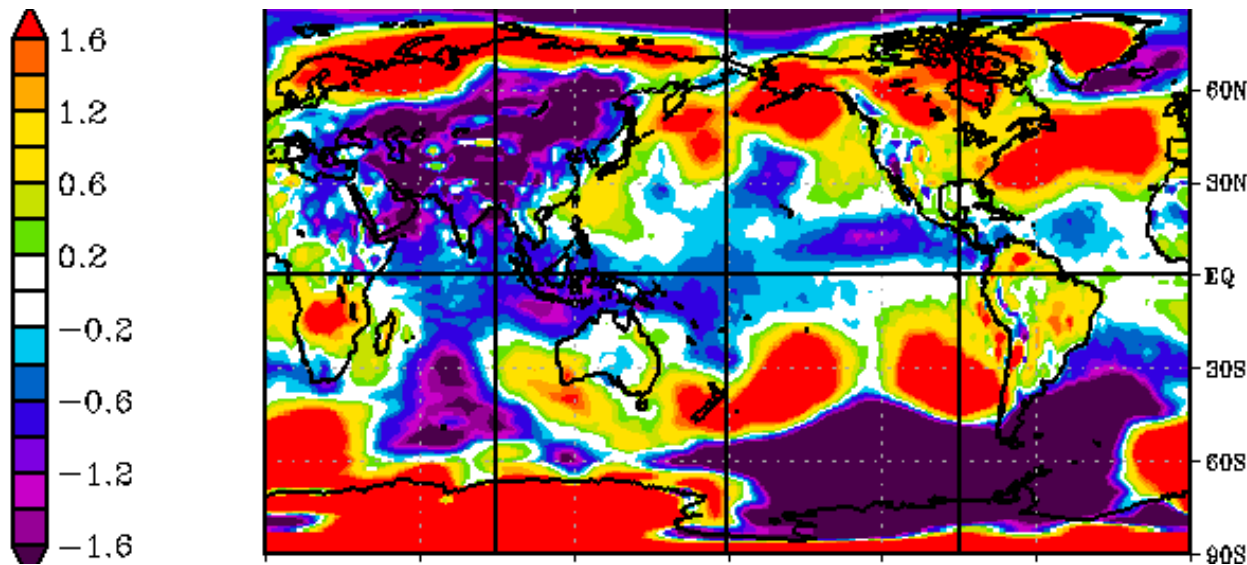
# January & February 2013 – wet for eastern Australia

- January and February very wet for eastern Australia
- Ex-tropical cyclone Oswald brought torrential rain end of January from the Illawarra (NSW) northwards. Daily totals 400 mm or more were commonplace 25 -28 January
- Another very wet low at the end of February affected south QLD/north NSW, with extensive flooding/damage



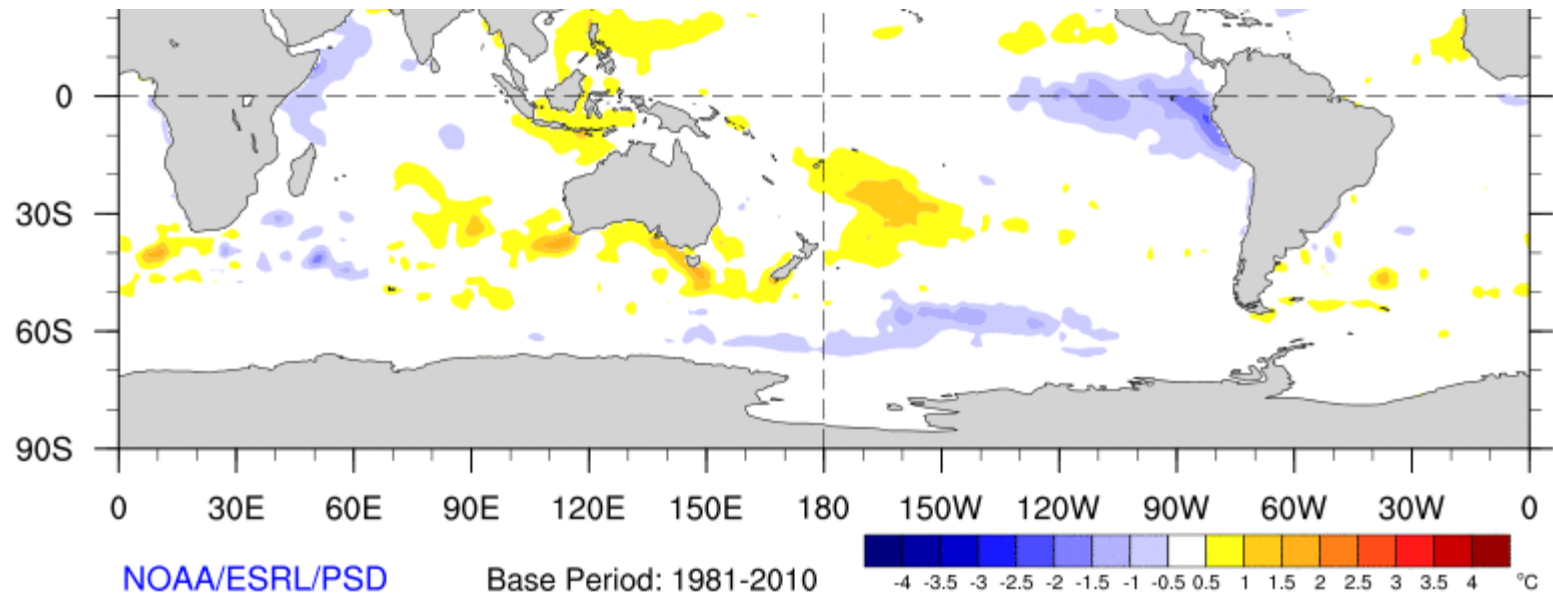
## Recent patterns – June, July, August so far

- Much higher than normal pressures *overall* across NZ, and in band 20S-50S, from WA to South America
- Similar to summer pattern in some ways (i.e. positive SAM)
- But....NZ still managed 2 snowfalls & some heavy rain, too
- Lower pressures to north of NZ – lots of “northern” lows lately



# Recent sea temperatures (compared to normal)

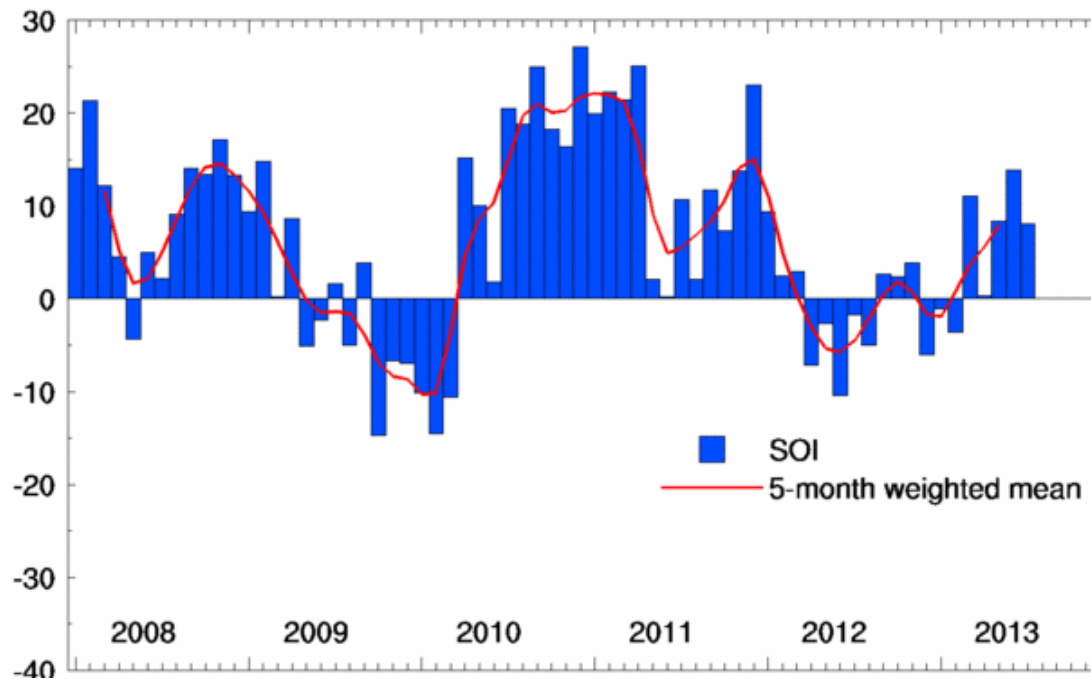
- Warmer than normal seas for time of year northeast of NZ, and in a band around southern Australia/NZ
- Cooler about the eastern equator *at surface* (not below)





# El Nino or La Nina or neutral?

- The SOI is currently in neutral territory (just)
- Oceanic signal also remains in neutral range
- Global climate models predict a 'neutral' spring ahead
- So, “local players” become important to Australia/NZ



# What's around the corner for spring?

- Likely to see NZ return to more “normal” spring patterns:
- That means the prevalence of high pressures reduce
- More mobile, 'westerly' features start to affect the country
- The storm track moves up from southern ocean, onto NZ
- Relatively warm conditions forecast to continue in the north and east, but closer to normal temps in western areas
- Rainfall across New Zealand should return to “near normal” for most areas (but don't rule out extremes/northern lows!)
- For Australia, the Indian Ocean becomes important

# My take home message

- “Climate” is all very interesting....
- But day-to-day life is actually ruled by “weather”
- Road markers have site-specific, task-relevant forecasts made just for you.....so make the most of them!

**Thank you**