

Background on seasonal forecasts for the Pacific

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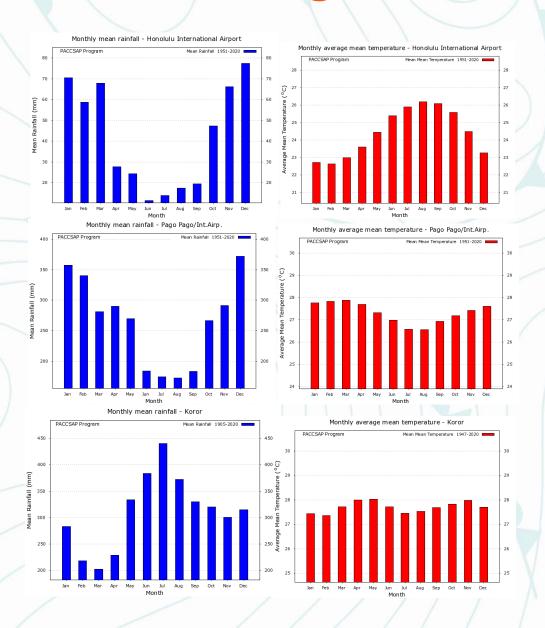








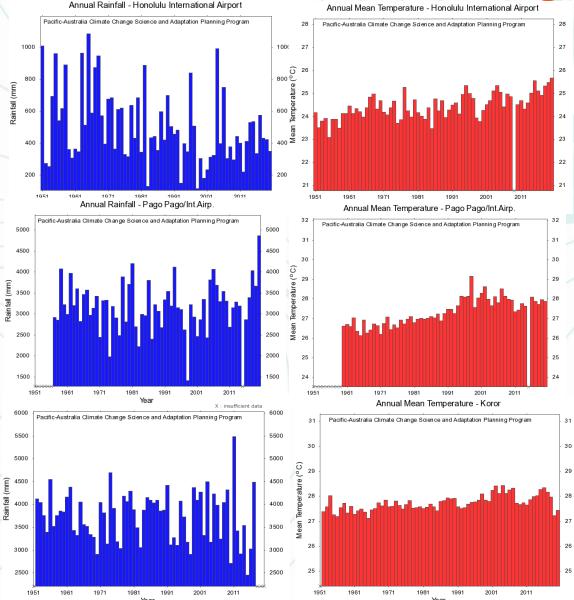
Average Pacific climate



- Assume energy companies would appreciate a near constant climate with only seasonal variation
- This way they'd know exactly what rainfall, temperature, wind pattern and number of tropical cyclones to expect
- Highly beneficial for planning purposes

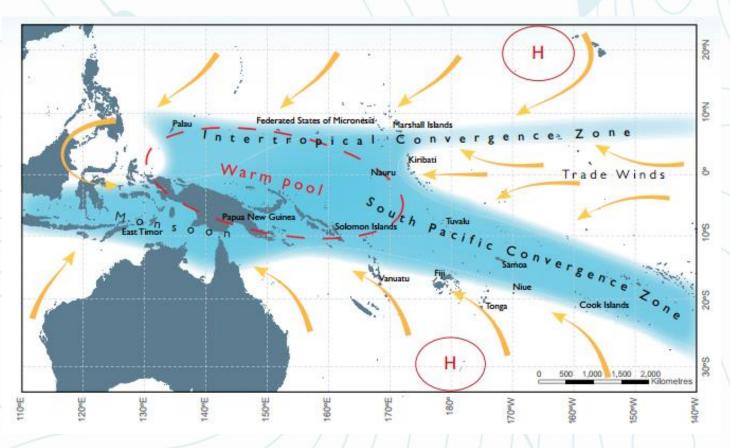
Significant year-to-year, decade-to-

decade change



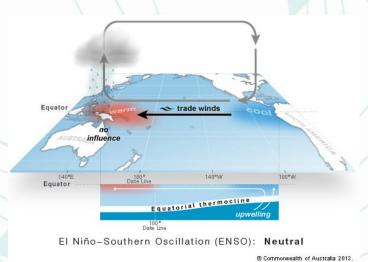
- What we experience is a lot more chaotic.
- Significant year to year variability
- Decade to decade variability
- Climate change makes the situation even more complicated

Drivers of Pacific climate



- Trade winds
- Western Pacific Warm Pool (WPWP)
- Intertropical Convergence Zone (ITCZ)
- South Pacific Convergence Zone
- Monsoon

El Niño-Southern Oscillation (ENSO)



Equator

choler
than
trade winds normal

reduced
chance
of rain

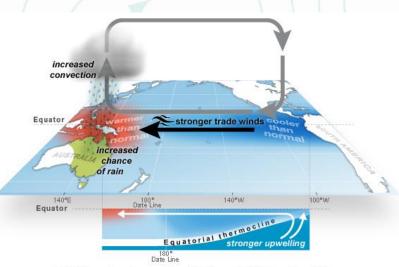
Equator

Equatorial thermocline
supressed upwelling

El Niño-Southern Oscillation (ENSO): El Niño

180° Date Line

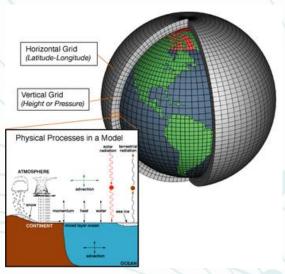
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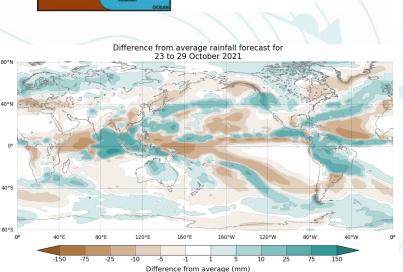


El Niño-Southern Oscillation (ENSO): La Niña

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We can predict future climate months ahead with reasonable accuracy



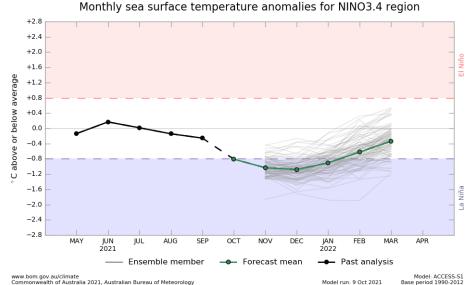


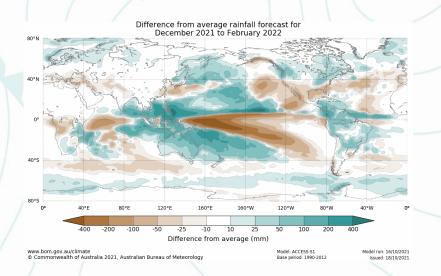
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