

# Con el estanque vacío y cuesta arriba

---

René D. Garreaud

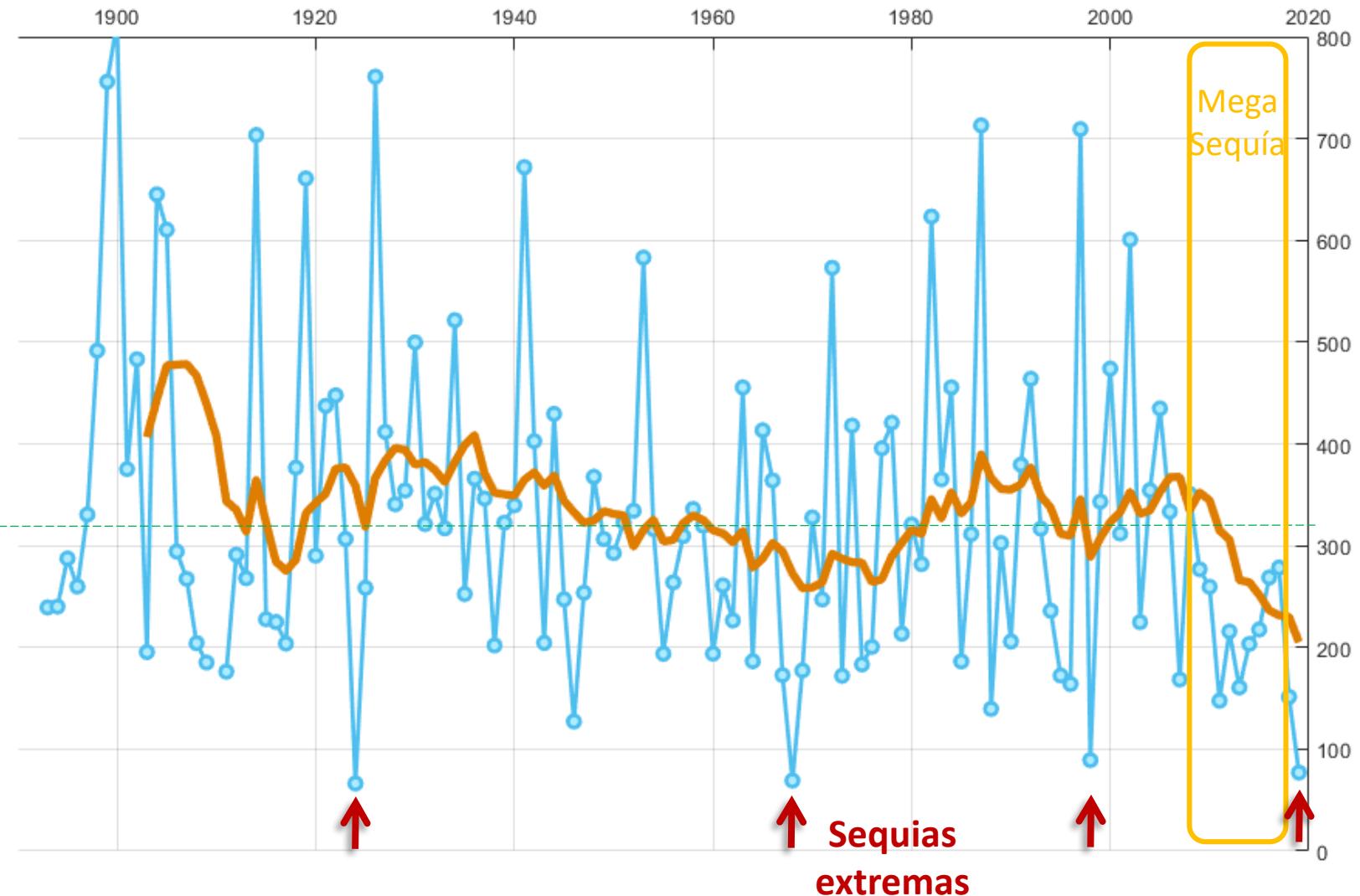
Departamento de Geofísica, Universidad de Chile

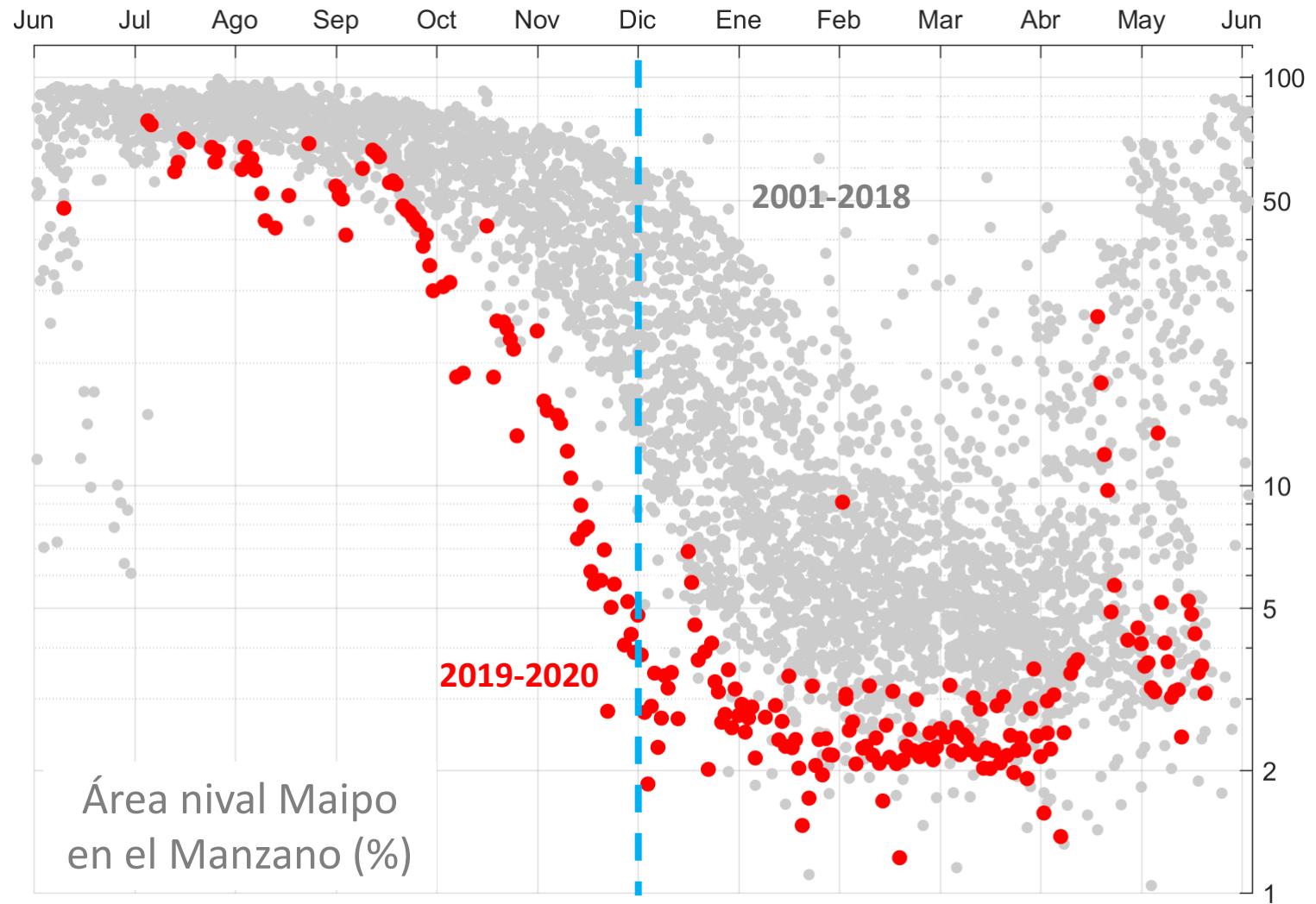
Center for Climate and Resilience Research, CR2

- Condición actual
- Predicción 2020
- Proyección de mas largo plazo

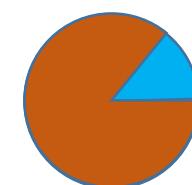
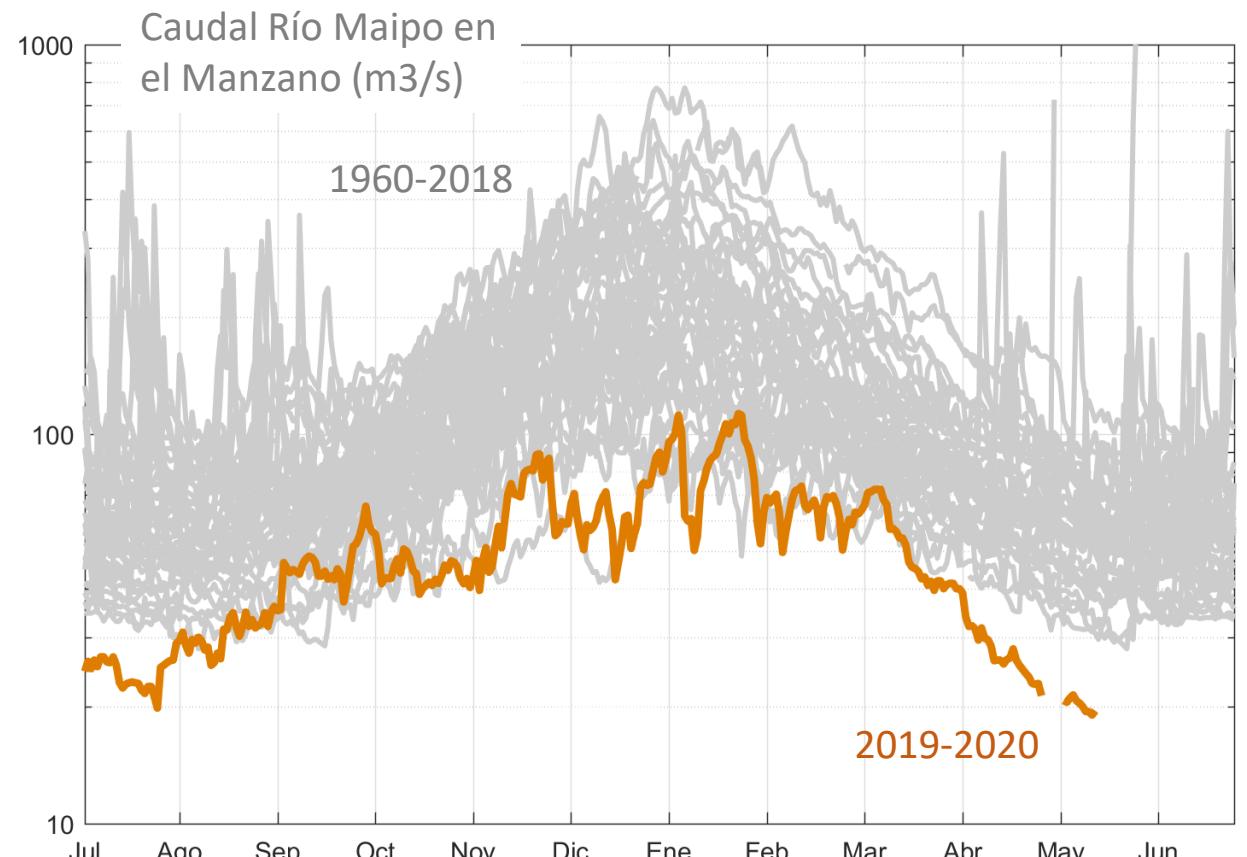
# Nuestro (bipolar) régimen de precipitaciones y sus determinantes

## Precipitación Anual Quinta Normal - Santiago





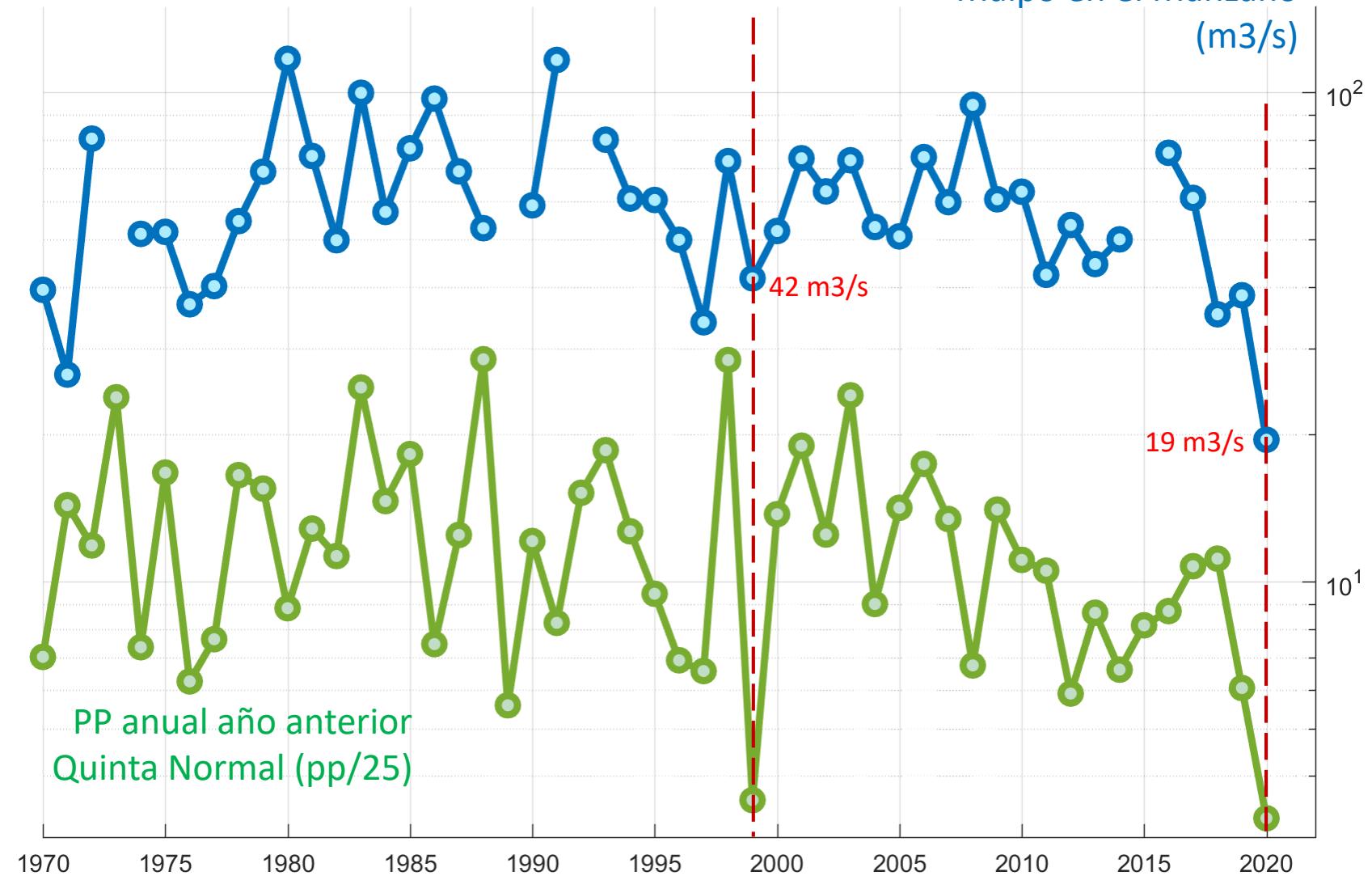
# Con el estanque (casi) vacío....



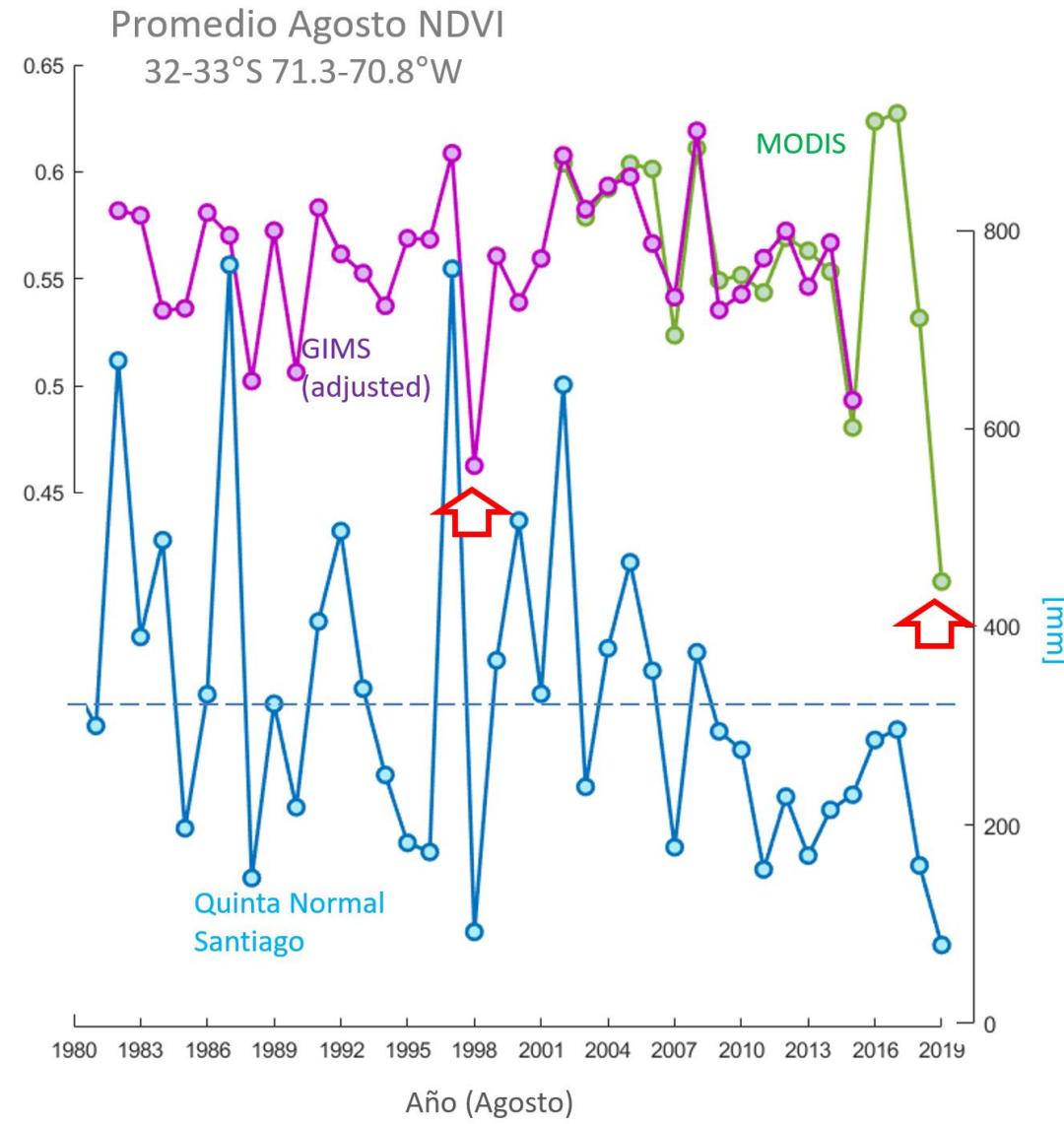
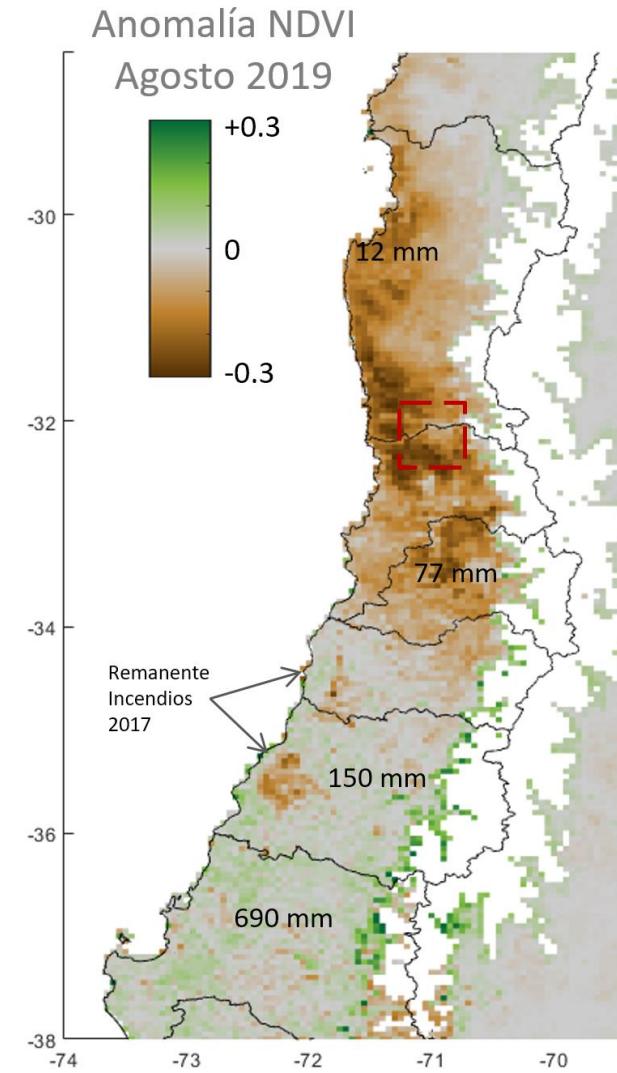
Deficit de  
precipitación  
2019: 75%

Efecto memoria muy alto  
(x2) en caudales

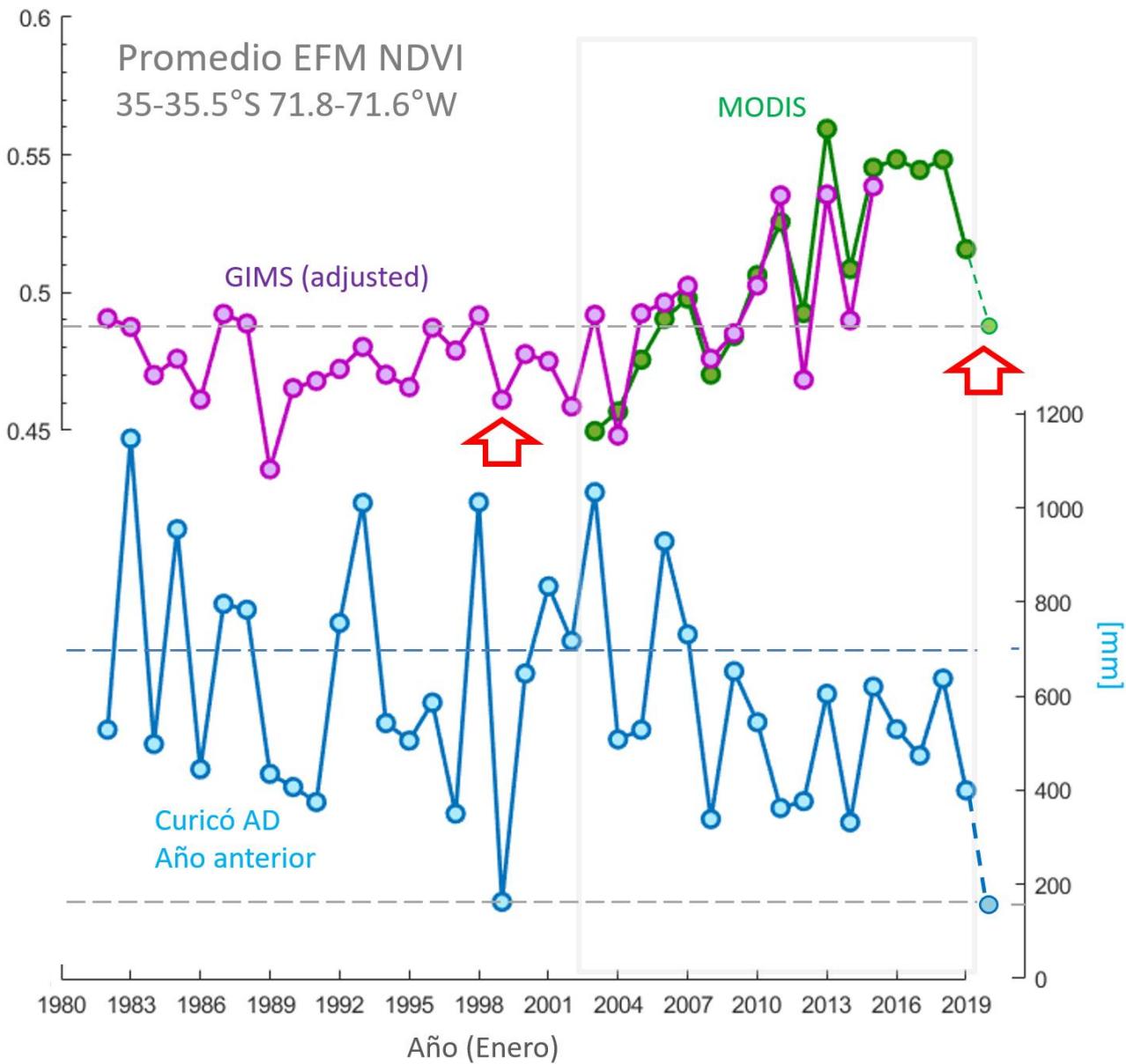
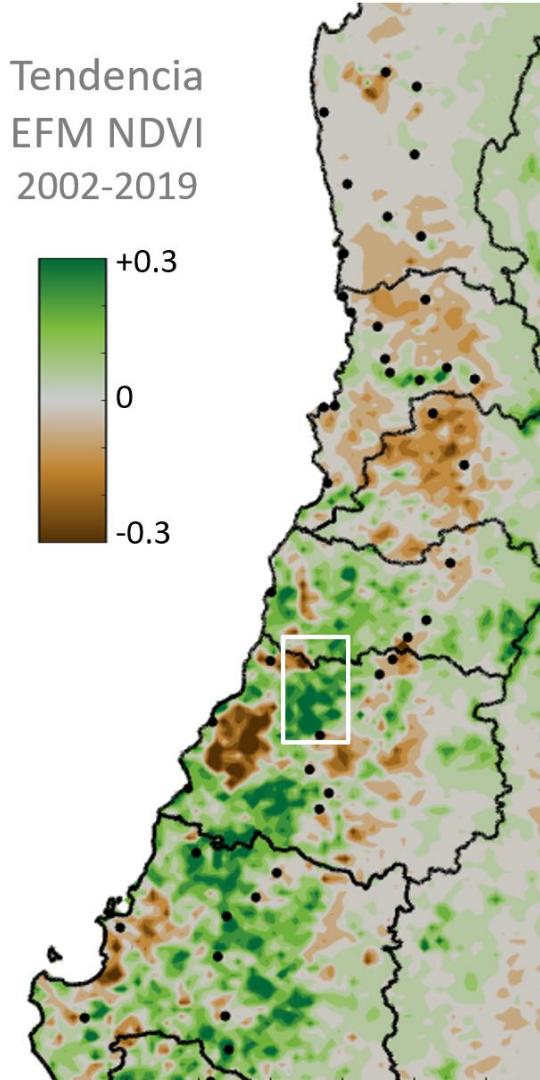
Caudal medio Mayo  
Maipo en el Manzano  
(m<sup>3</sup>/s)



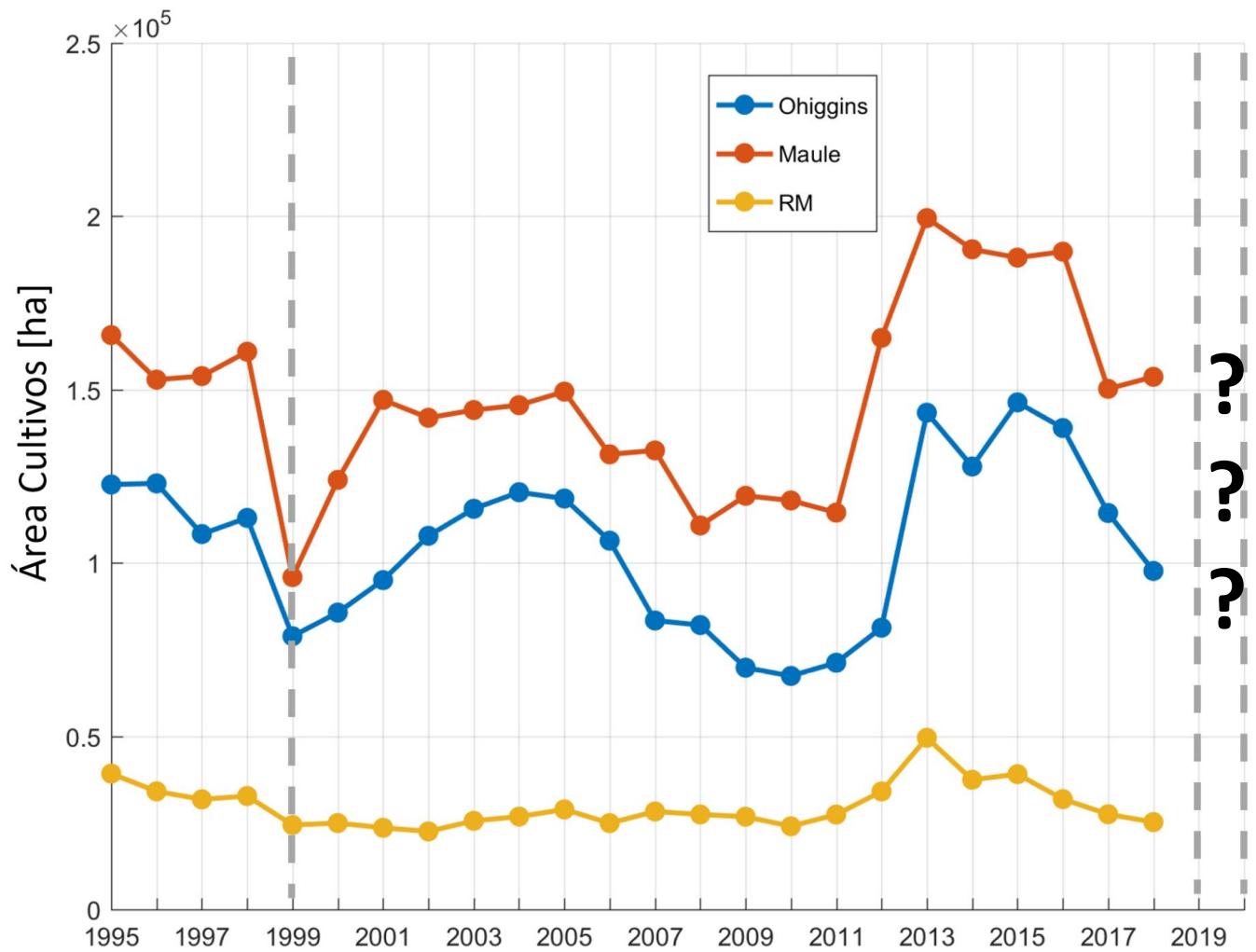
# Efecto memoria moderado (x1,5) en vegetación secano



Efecto memoria nulo  
(x1,5) en vegetación bajo  
riego



# Propagación a la agricultura

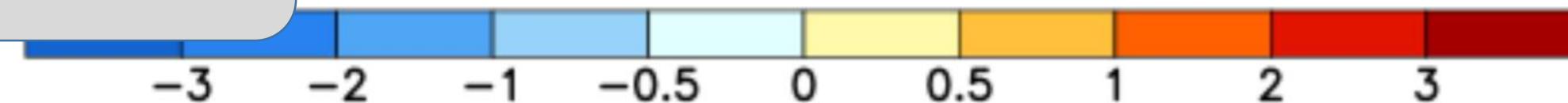
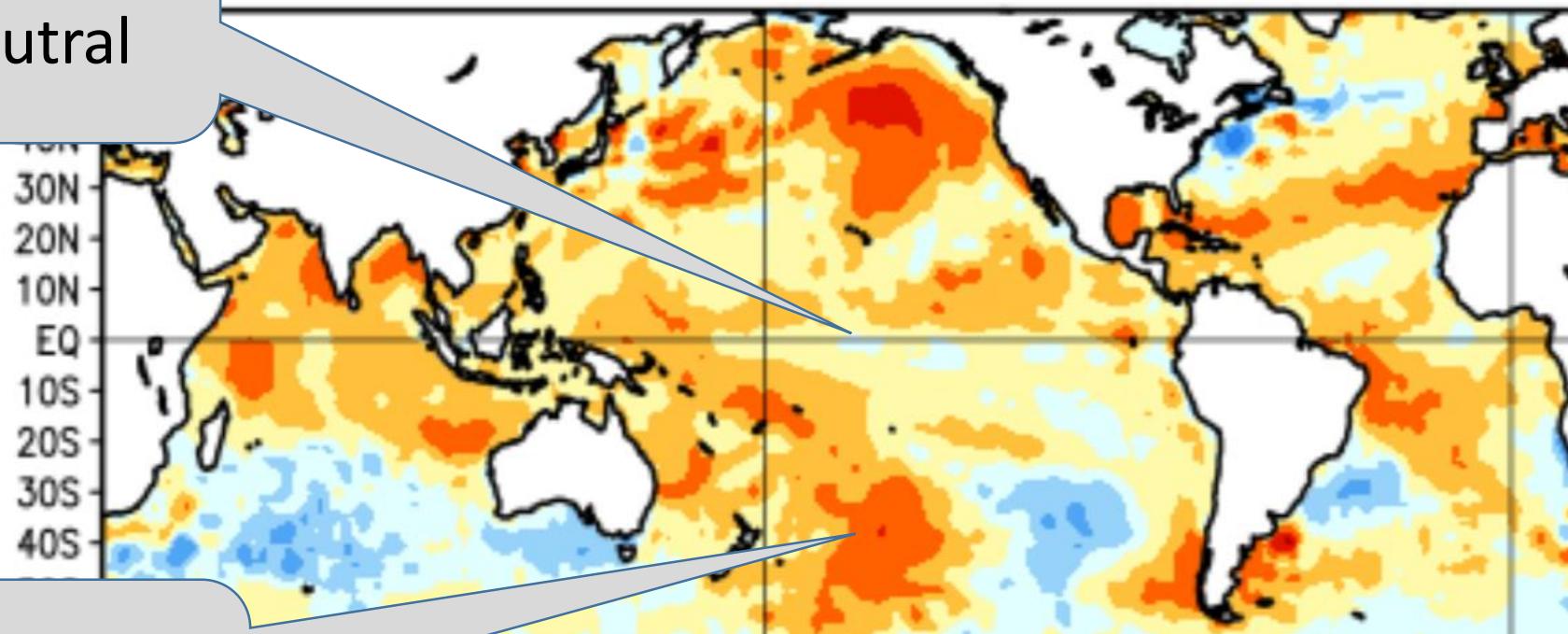


## Condición actual

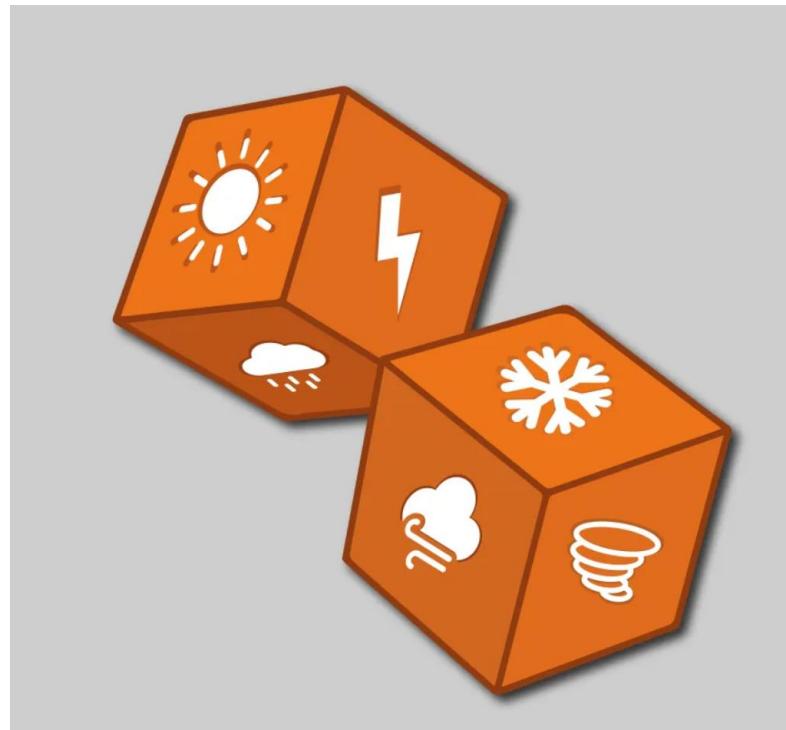
ENSO  
Neutral

Average SST Anomalies  
19 APR 2020 – 16 MAY 2020

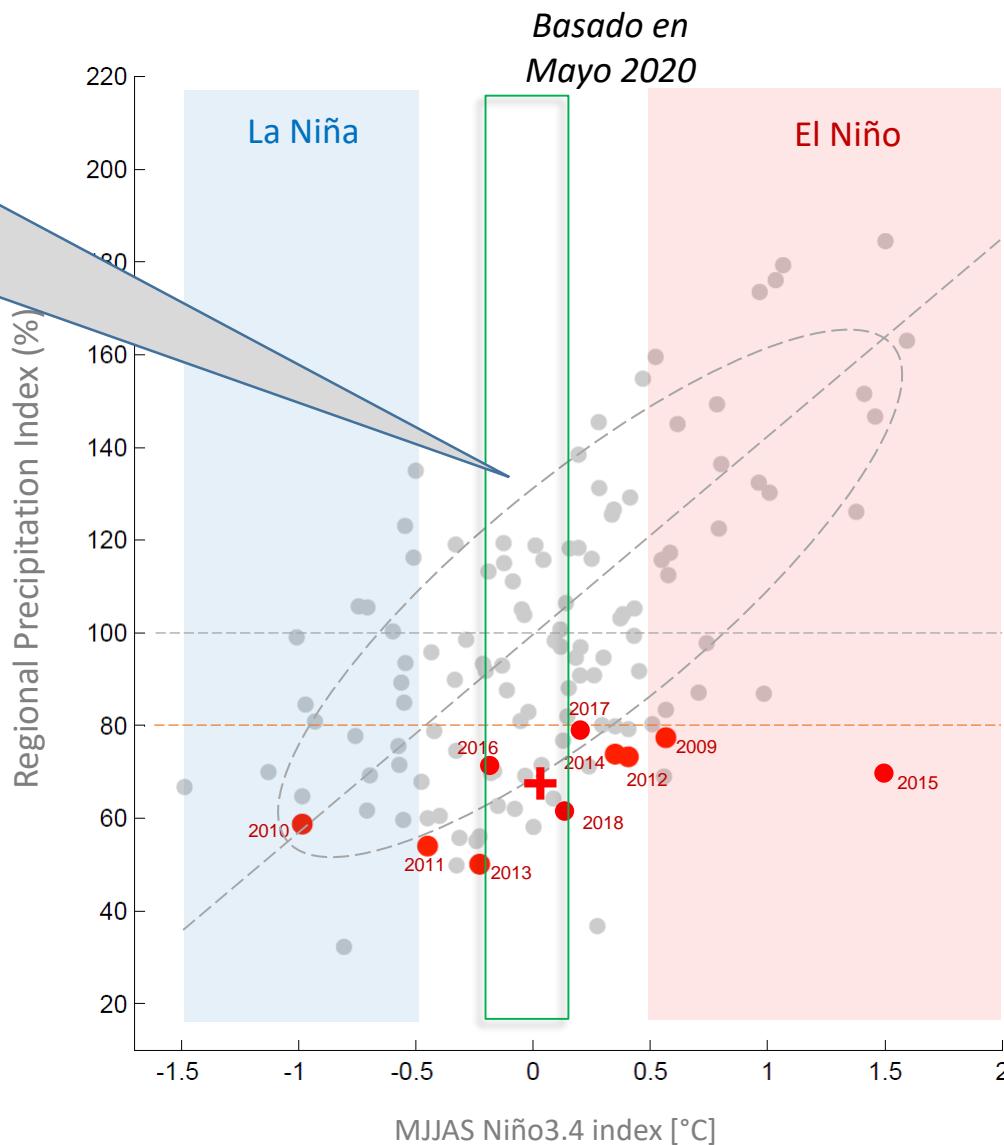
Mancha  
Cálida



Considerando ENSO y  
la Mancha Cálida...el  
dato esta marcado  
para invierno seco

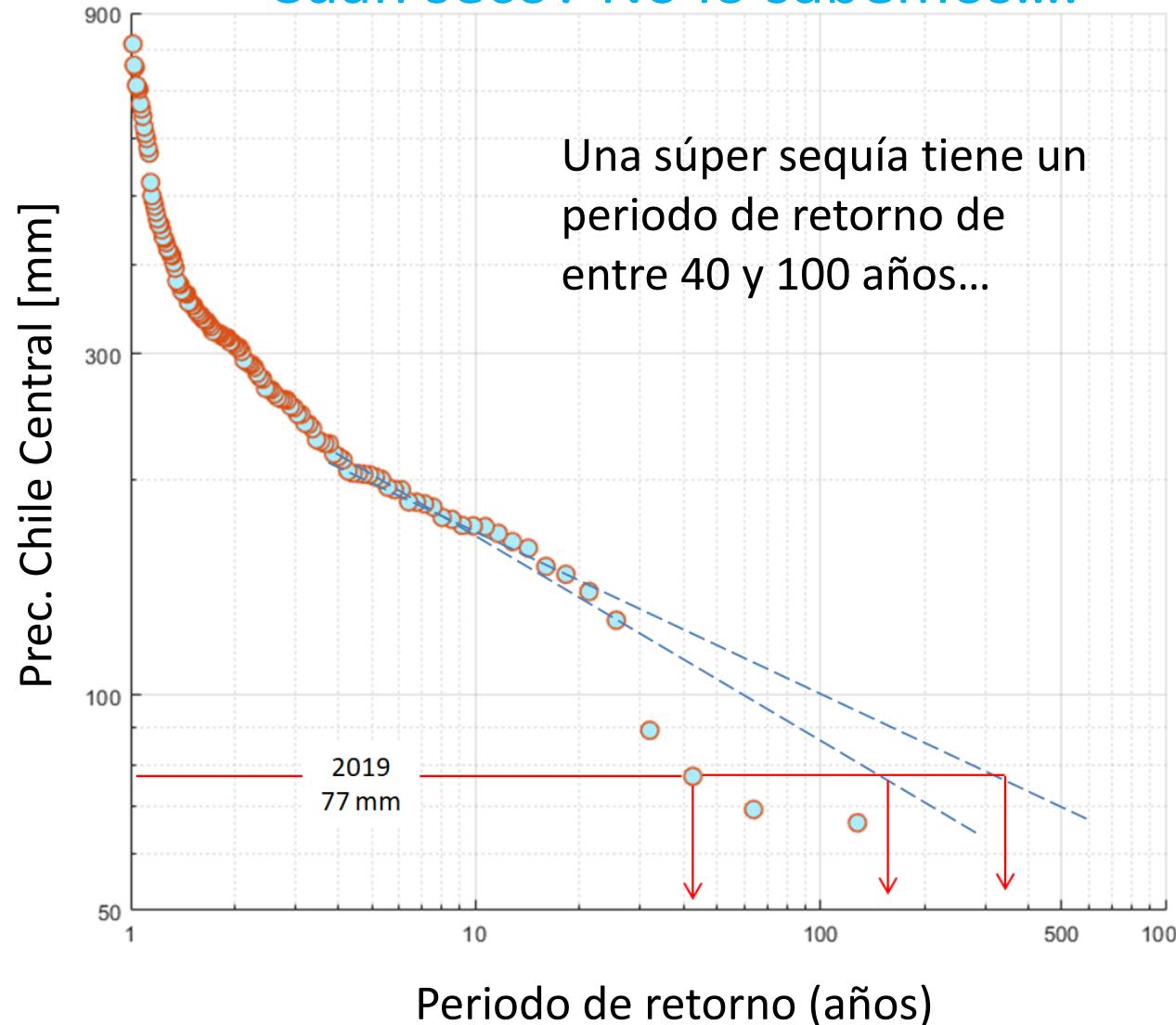


## Condición actual

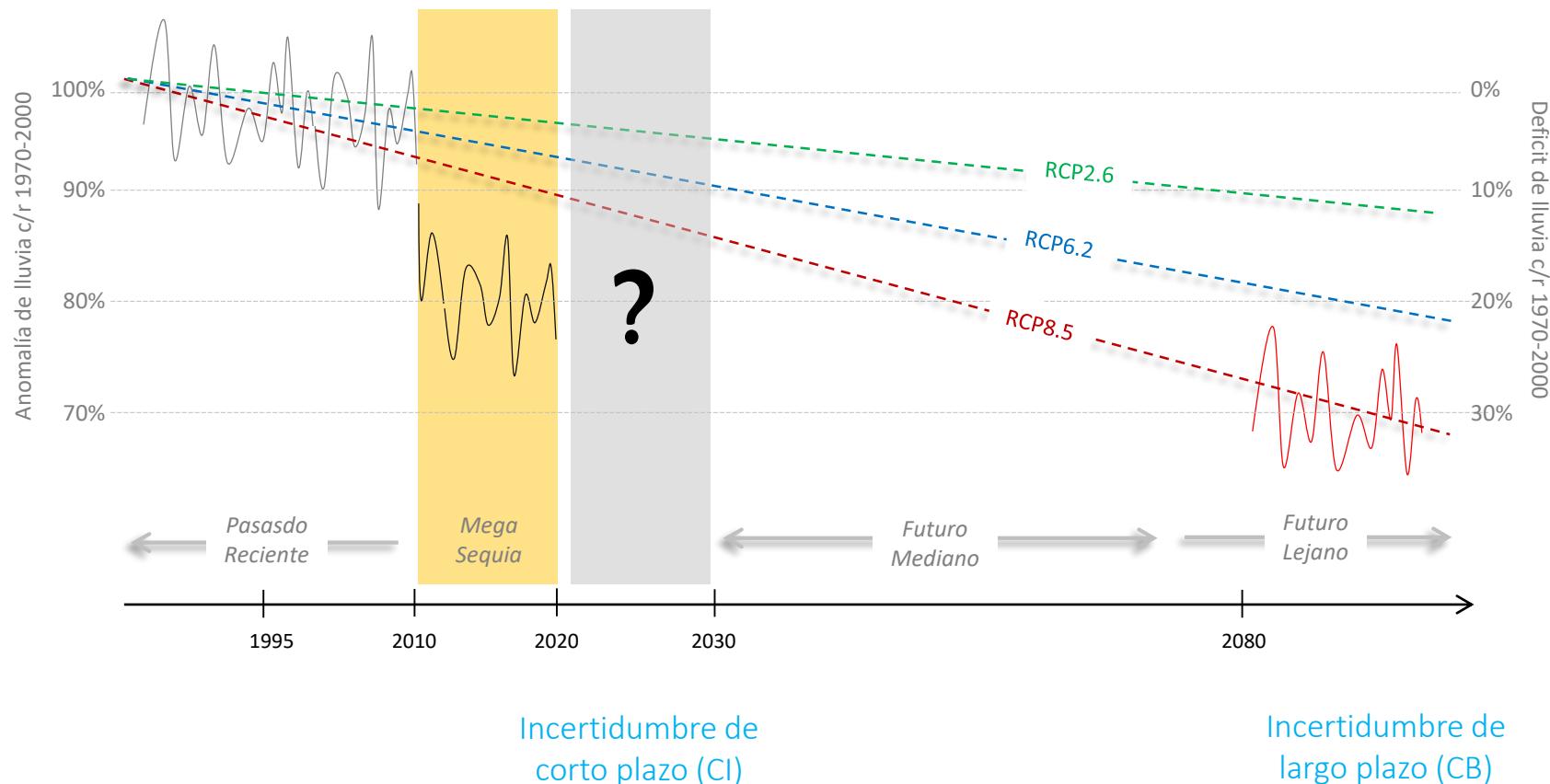


En resumen....predicciones climáticas (cualitativa, IRI, DMC) indican un invierno seco (tercio inferior) como la condición mas probable para el 2020.

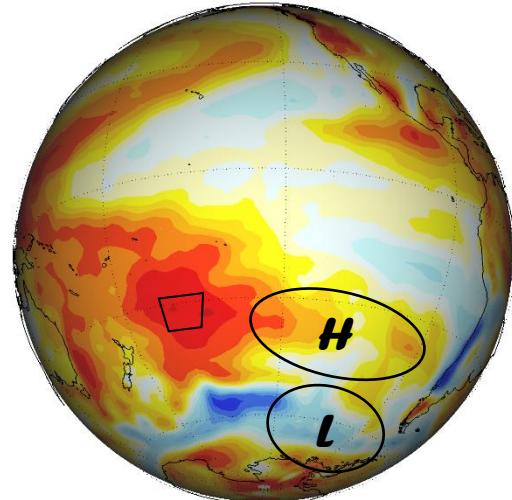
Cuan seco? No lo sabemos....



# La Mega Sequía en Chile central Llego el futuro?



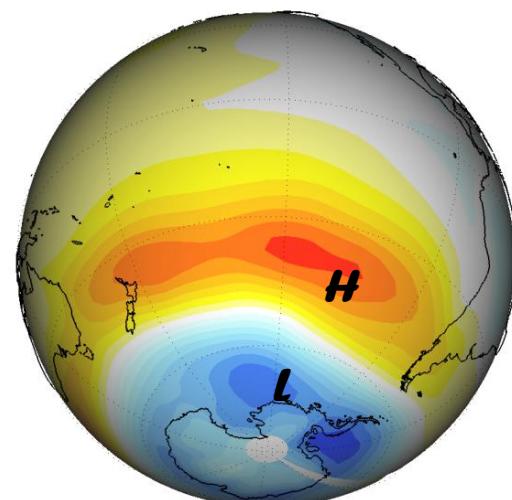
Observed SAT Anomalies ( $^{\circ}\text{C}$ )  
Natural (+ Trend?)



2/3



SLP Anomalies (hPa)  
Antropogenic



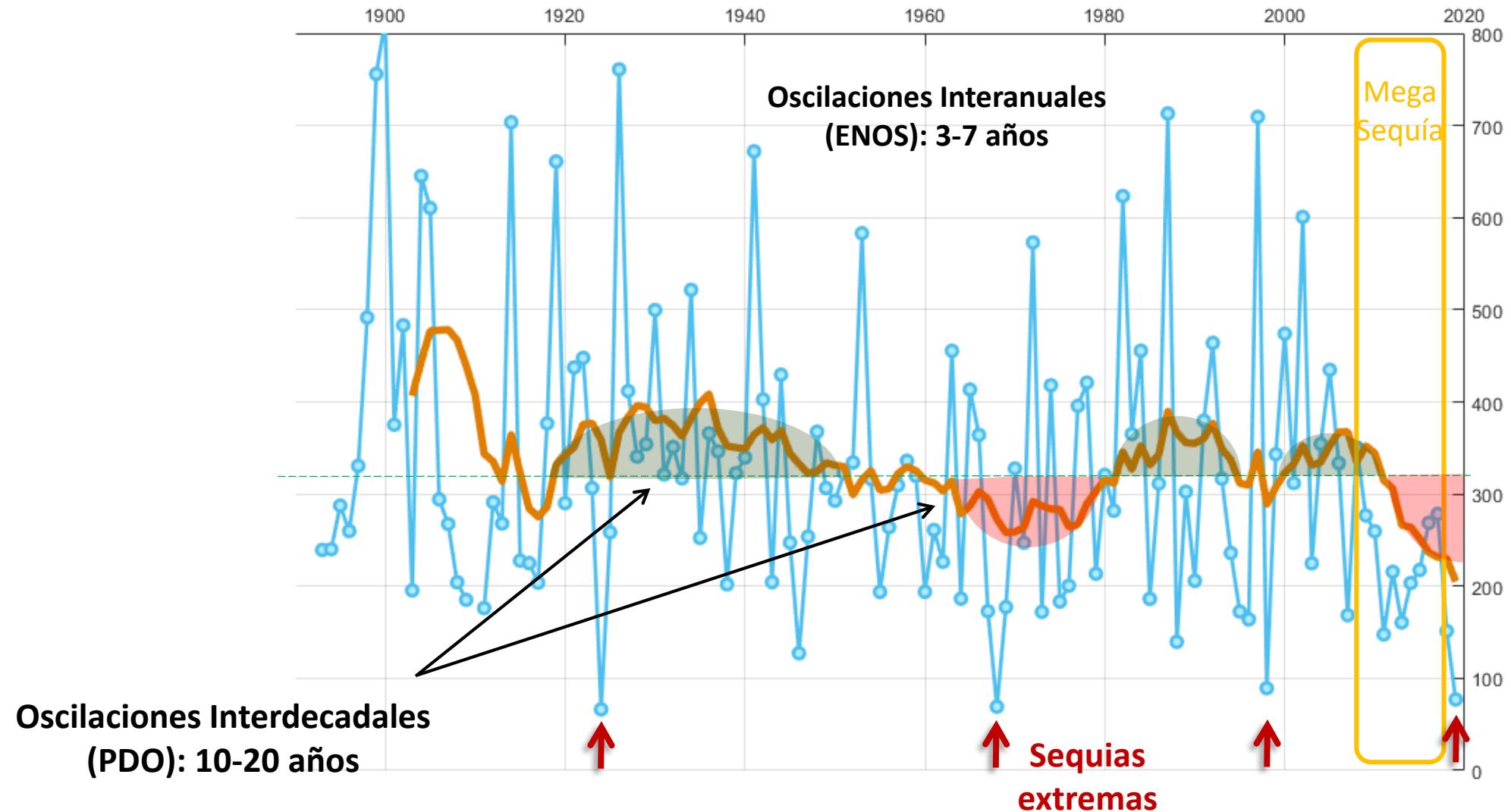
1/4



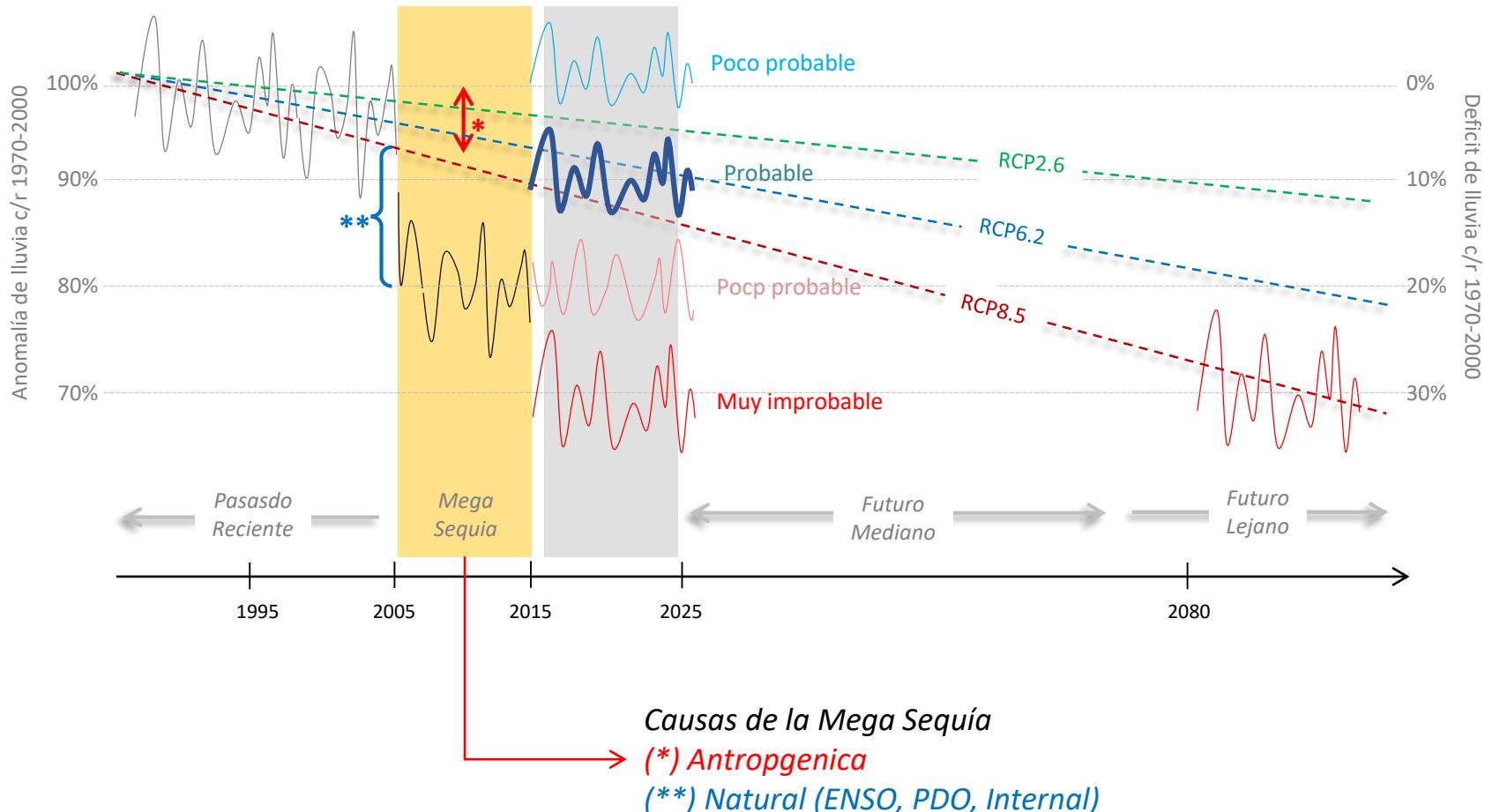
2010-2018 Central Chile MD

# Nuestro (bipolar) régimen de precipitaciones y sus determinantes

Precipitación Anual Quinta Normal - Santiago



# La Mega Sequía en Chile central Llego el futuro? Aun no....



# Precipitación ultimas 24 hrs DMC+DGA+AgroMet VISMET

Gracias Baja Segregada!  
10-30 mm en la zona costera  
Ojala algo de nieve en cordillera

