California-Spain discussion on Drought - Issues related to agriculture

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BETTER PLANNING FOR THE FUTURE

Research on seasonal predictions vs. research on climate change?
MITIGATING THE IMPACTS OF DROUGHTS

An extreme example of instability in production

![Graph showing olive oil production in Andalucia from 1995 to 2015 with a trend line indicating an increasing trend.](image-url)
Annual Rainfall, Sacramento, California, 1850-1934

Rainfall (mm) vs. Year

Sacramento

$y = -5.8831x + 11655$
$R^2 = 0.3035$

SIGNIFICANT DECLINING TREND > 0.2”/yr

CLIMATE CHANGE??
What were the causes for this decline of precipitation over more than 30 years?
RAINFALL IS CLEARLY DECLINING IN SOME PARTS OF THE WORLD

(Evolution Annual of precipitation in Puerto Montt)

(South Chile)

(J.J. Sanz, 2012)
The water productivity gap

HOW ARE WE DOING OUT THERE? .... PRECISION IRRIGATION

Agriworld, Madera Co., two pistachio blocks, 300 acre each, individual tree measurements

Maps of the Crop Water Stress Index (CWSI) with 35 cm resolution

ADOPTION OF NEW TECHNOLOGY STILL SLOW

Gonzalez-Dugo et al., Irrig.Sci. 2014