

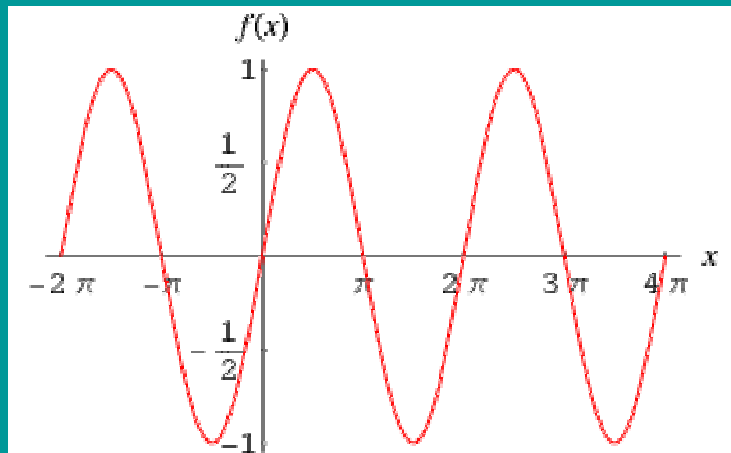
Irregular Bearing and Climate in Olive

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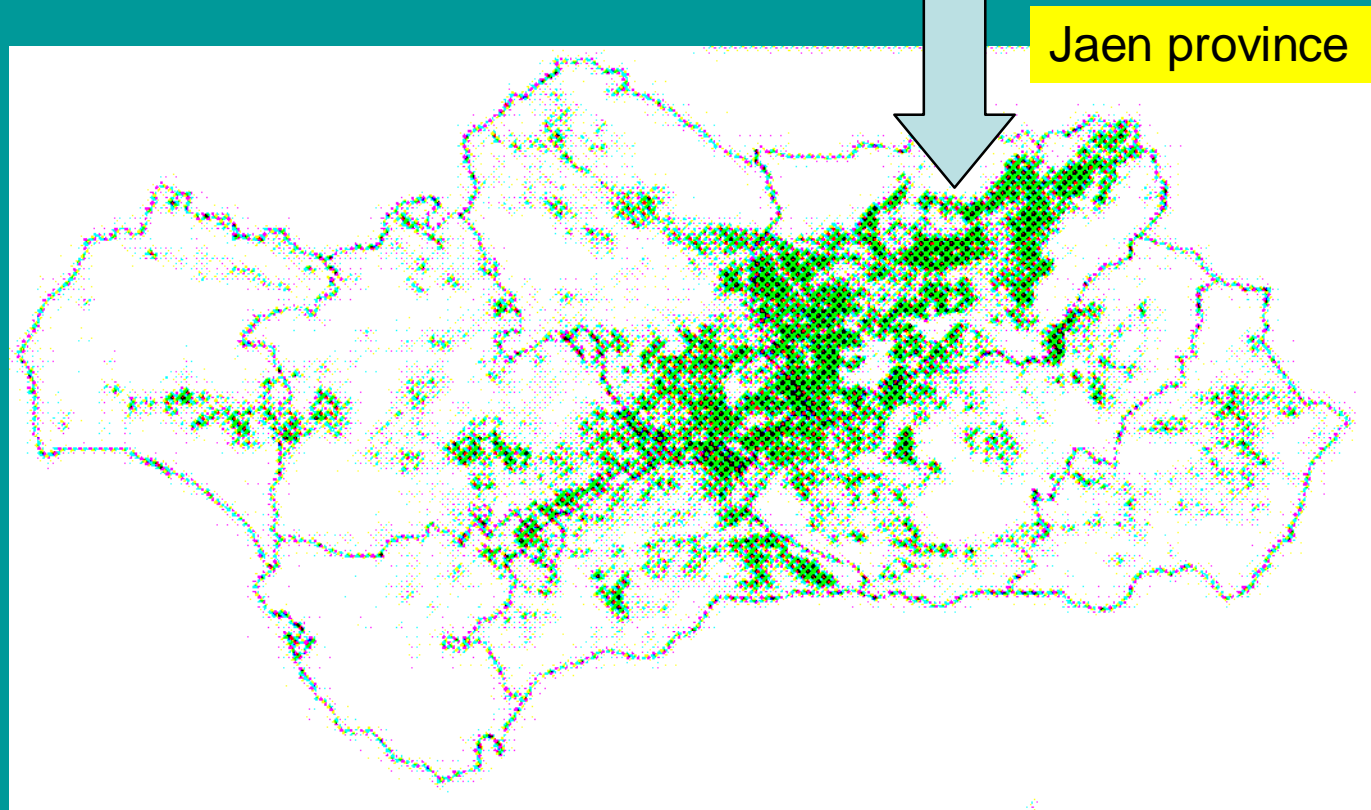
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In olive The major step in optimization is the unstable structure of system output

- Alternate bearing (produzione alternante) is one of the reasons for low significance of mean separation in any contrast experiment but we do not know its real meaning at farm level: Is the common term term adequate to reality? If so two components should be known amplitude and period or in fruit terminology sensitivity to alternance and biennial pace, broken by some unusual mean bearing that is unstable. Autocorrelated time series should be H, L, H, L with some M value and a strict rule that forbids HH. Predator prey models can be adequate.

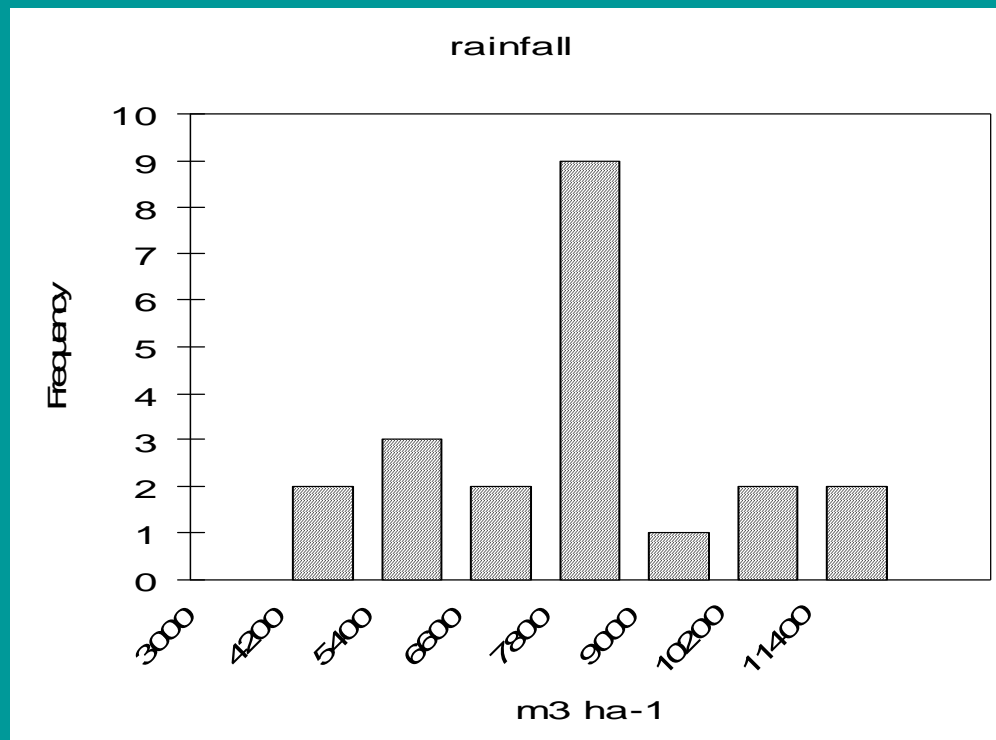


Olive production models require space and time analysis of the most typical olive area in the 50ies



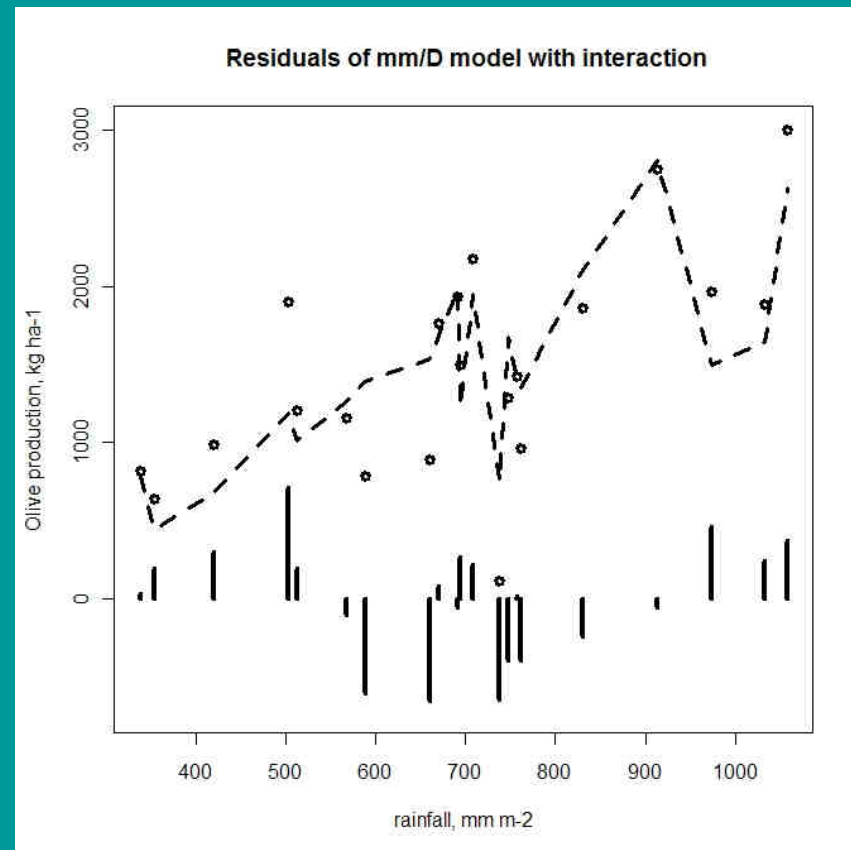
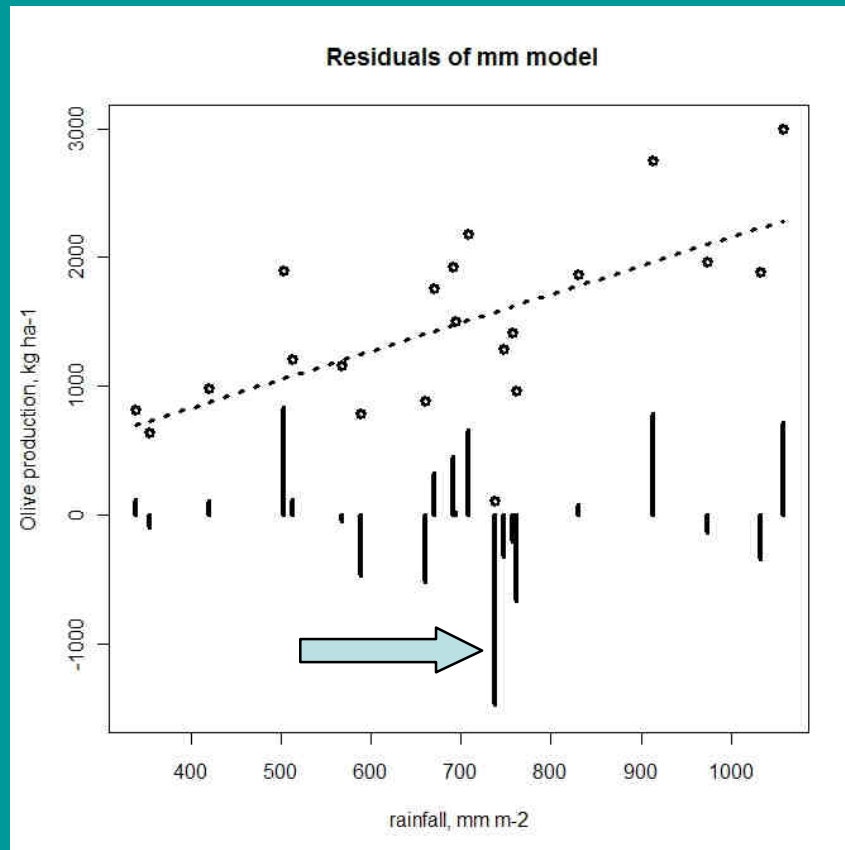
Approximately 250 trees ha⁻¹, monoculture and a single variety, Picual for 21 Y of records in steady condition

- The series of fruit load sequence is H, H, L, L, L, H, M, L, M, L, M, H, M, H, H, M, M, H, L, L, H and is not auto correlated

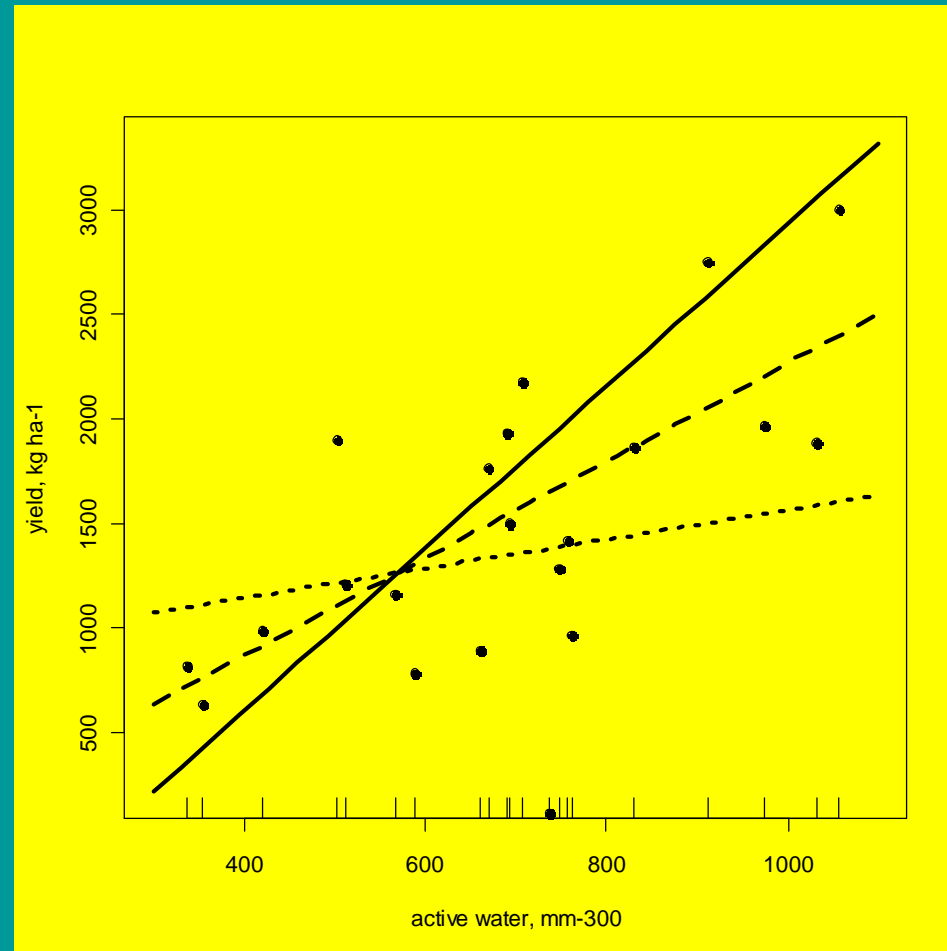


Rainfall is rather stable around 7800 m³ ha⁻¹

Rainfall determines fruit load due to previous year effects (additive and not)



The non additive term is due to a rainfall sensitivity change among different fruit load conditions



it is feasible the possibility of interaction between an aleatory factor that is the annual precipitation and a biological status determined by flower fertilization and

shoot elongation coping with a given rainfall level

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- *Bongi G., Moscariello P., Rosati A., 1995. A quantitative description of olive productivity. Olea n.23: pag. 76.*
- *Camilleri, A., 1984. La Agricultura Española ante la CEE. Ed. Instituto de Estudios Económicos. Madrid, 800 p.*
- *Cantero De Andres, Faustin, 1971, Etude de la relation entre la production oléicole obtenue dans la province de Jaen et la pluviométrie enregistrée durant l'année agricole, période october-mai et f'année civile avant chaque cueillette, congress in conference proceedings of III conferencia internacional de tecnicos oleicolas, Torremolinos, (Spain), 14th 19th june.*

Grazie!

