Decadal perceptions must be considered modulated by obvious larger climate cycles and trends.

**Introduction: Improving Flood Estimation**

Why/how improving F. F. estimation

Statistical analysis

The question of stationarity

Hydrology, climate and the "thermal machine"

Risk (resilience) management targets

Deeper knowledge: More field work & model contrast

Longer series and wider spatial scales of data

**Conclusions**

- Coastal and inland floods may obey to different genesis with different sources, paths and boundary conditions. The last usually related to the basin levels.
- Most of flood events are deeply characterized by maritime climate conditions, hence the hydrologic phenomena in a basaltic way. Statistical approach requires previous accurate sampling based on identification and separation of populations of the events.

Immediate response: Gorgos Basin.

Storm sea level restriction on pluvial + fluvial floods.

J. J. Diez.

EGU 2013.

Monday, April, 8th

**Ebro River Basin**

- Oceanic climates: Cantabrian and Mediterranean
  - Sources: Direct Rains (Autumn) and Thaw (Spring)
  - Rain: Cantabrian and Bizcay & Lion cold drops
  - Thaw: Cantabrian and Pyrenees snow heights
- Paths: Cantabrian and Pyrenees Ridges

Cost Action E0901 Flood freq.

Conference: Advanced methods for flood estimation in a variable and changing environment

The Cold Drop Phenomenon

Valencia 1883

Valencia y Grao. 1930

Cape

- Caps: Cantabrian and Bizcay & Lion cold drops
- Tras: Cantabrian and Pyrenees snow heights

Group Knowledge: More field work & model contrast

Larger series and water samples scales of data

Coastal subsidence - Manhattan/Venice

Cape

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