

# AgSystems

## Climate Change Modelling Group

### University of Castilla – La Mancha

#### People involved:

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# Research related to CC

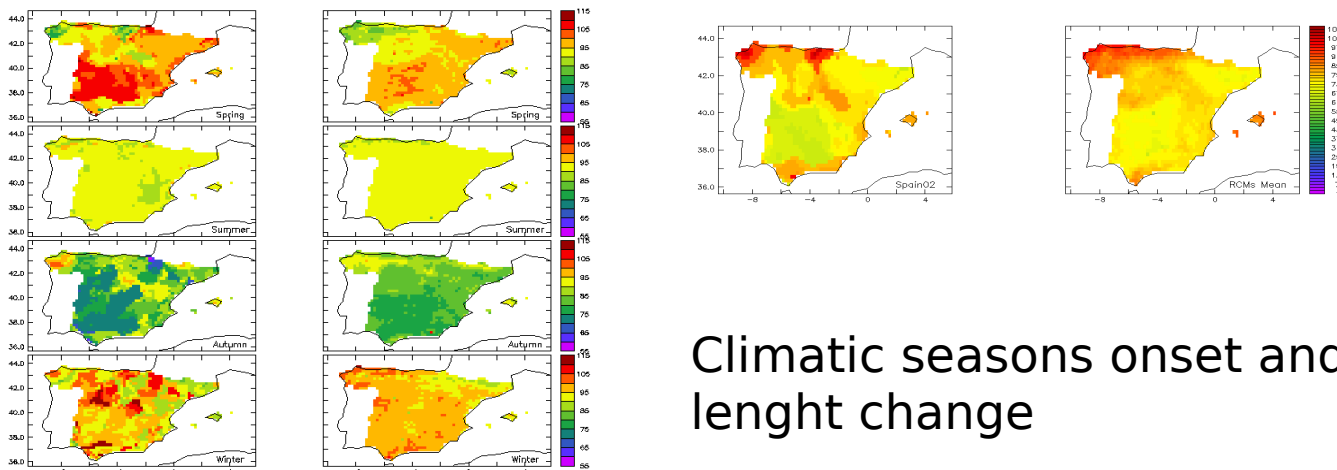
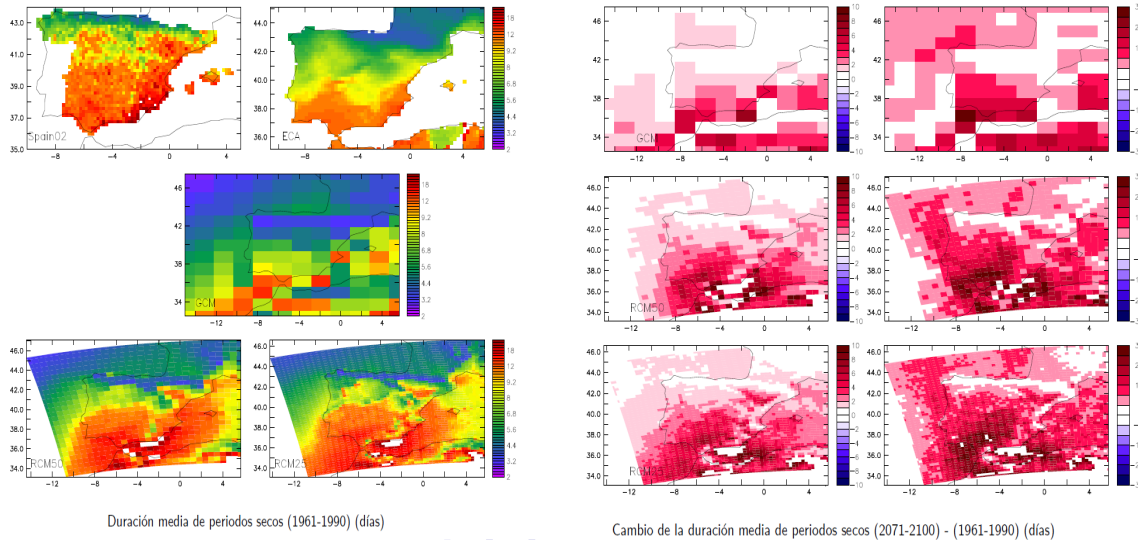
- **Generation of regional climate model projections** for different emissions scenarios (PROMES model) and analysis of regional climate models ensemble results from several projects (table on slide).
- **Analysis issues:** Mean fields, Extremes, Trends, Climate events like dry periods, intense precipitation or heat/cold waves.
- **Advising** about the correct use of the climate change data to the impacts groups.

# Modelling tools

	 <b>(2001 -2004)</b>	 <b>(2004 -2009)</b>	 <b>(2008 -2011)</b>
<b>N° simulations</b>	72	30	20
<b>Emission scenarios</b>	A2 and B2	A1B	A1B, B1 and B2
<b>Time period</b>	2071 - 2100	1950 - 2100	1991 - 2050
<b>Spatial resolution</b>	50 km <sup>2</sup>	25 km <sup>2</sup>	25 km <sup>2</sup>
<b>Frecuency</b>	Daily	Sub-daily	Sub-daily
<b>Available variables</b>	18	Up to 100	Up to 50
	Precipitation, 2-m temperature (max, min, mean), radiation, 10-m wind speed, humidity, dew point, humidity, surface pressure, ...		

# Analysis Examples

Climate extremes dry spells change  
(Sanchez et al., 2011)



Climatic seasons onset and length change

# Objectives within FACCE-JPI

- **Knowledge feedback with impact groups to the aim of provide them data and give them support of regional model usage for impact studies.**
- **Analyze climatic processes and features than can be relevant to impact studies, such as dry periods, heat waves, hidrological and energy budgets...**

Current collaborations with others impacts groups related with:

- Agriculture impacts. (Technical University of Madrid)
- Endangered plant and animal species distribution over Iberian Peninsula. (University of Castilla - La Mancha)