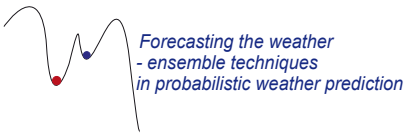
EMS Annual Meeting Abstracts
Vol. 8, EMS2011-639, 2011
11th EMS / 10th ECAM



Climate Services and Renewable Energy: Providing Climate Information for the Next 1-30 Years

F. J. Doblas-Reyes (1) and M. Davis (2)

(1) ICREA & Institut Català de Ciències del Clima (IC3), Barcelona, Spain (f.doblas-reyes@ic3.cat), (2) Institut Català de Ciències del Clima (IC3), Barcelona, Spain

The variability of climatic conditions, understood as the change of average weather from one year or a decade to the next, represents one of the greatest uncertainties for a renewable energy plant's predicted performance and management costs. Short-term weather forecast information is commonly used by renewable energy stakeholders in their decision making processes, however little is known about how climatic conditions may vary throughout the system's life. The current development of climate forecast systems intends to further understand how climate will change over the next 1-30 years and the subsequent effects on a renewable energy system's yield and management. This contribution will introduce the EU-funded CLIMRUN. CLIMRUN aims to develop relevant climate forecast information in periods ranging from one season to decades (changing conditions of solar radiation, cloud cover, precipitation, wind profiles, etc.) for the Mediterranean region. The final objective is to find ways to support key stakeholder decisions in aspects such as the location and management of new and existing renewable energy plants or the load balance in energy grids.