Mediterranean weather and climate; the focus of the Meteorology Group of the UIB

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The Mediterranean basin is frequently subject to heavy rainfalls episodes, sometimes with fatal consequences. Based on the Medex project list of severe weather cases, they usually take place in spring and at the end of the summer, specially, during the months of September to November although can happen in other seasons as well. The spatial distribution of the flood cases in the Mediterranean basin shows that orography plays an important role since the most intense precipitation events (more than 400 mm/24hours) are located in the southern side of the highest mountain ranges (Pyrenees, Iberian System, Mountains of Sardinia and Alps). Many of these areas are highly populated and human fatalities, substantial property losses and impacts on the communication systems and landscape cannot be easily avoided. Therefore the research made by the Meteorology Group of the UIB to improve the knowledge and the forecast of such cases is very important. In this talk the different research lines of the Meteorology Group are commented but the lasts results in remote sensing are explained in greater detail within a brief description of Medicanes from the satellite point of view.