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Study of NWP parameterizations on extreme precipitation events over Basque Country.

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In the last years, some events of heavy precipitation over the Basque Country have generated different flood events, particularly in Eastern basins. The complex orography and rivers characteristics, among other factors, favour the occurrence of these episodes.

In order to understand the occurrence and dangerousness of these [U+FB02] ood events and improve the forecast tasks, a full study was made including synoptic, mesoscale information and other local meteorological characteristics. In this paper, is showed the application of Numerical Weather Prediction techniques, studying the behaviour of the different microphysics and cumulus parameterizations in the forecast of XXI century extreme precipitation events.

Different validation approaches (punctual and areal) are used based on datasets coming from the Basque Country Automatic Weather Station Mesonetwork and radar data when available.