Multi-scale predictions of European weather

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Predicting extreme weather poses different challenges in short- medium- and extended-range predictions, from finding the large-scale setting in early forecasts to pinpoint the final details in very short forecasts. In this talk I will give example of such challenges. From an extended-range perspective, many extremes are a result of large-scale flow patterns that persists for several days or weeks. Such patterns are often referred to as regimes and in the presentation the predictive skill of such patterns will be discussed. I will discuss cases of occasionally poor forecasts in the medium-range and how to trace the origin of the errors.