



## **Seasonal and decadal predictions toward climate services.**

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While societies have flourished or collapsed depending on their ability to adapt to changes in climate, it is only recently that science and technology have been able to provide useful insights into future climate. Seasonal to decadal (S2D) forecasts hold the potential to be of great value to a wide range of decision-making, where outcomes are heavily influenced by climate variability. Recent advances in our understanding and ability to forecast climate variability and climate change have brought us to the point where skilful predictions are beginning to be routinely made. Access to credible forecast data, supported by informed guidance from the science community, could lead to significant advances in society's ability to effectively prepare for and manage climate-related risks.

This new ability will effectively represent the core of climate service offers in the coming years. A number of initiatives such as Global Framework for Climate Service or the International Conference on Climate Service have recently been launched to coordinate climate services activities internationally. The European Union acknowledged this new development in the research agenda and last summer opened a call on seasonal and decadal predictions toward climate services. While it is not yet known which projects will be funded they will all have to improve the underpinning capability of the models and at the same time develop an effective mechanisms to make the prediction relevant and usable by decision makers.

We will discuss the GloSea4 seasonal forecasting system, giving a brief description of the system and some of the products we supply to end-users as part of our climate services and our seamless approach to forecasting across varying timescales. The basic approach of a recently submitted proposal to the EC to exploit these emerging prediction capabilities and, more importantly, to engage with potential users of such predictions will also be presented.