# OpenEPS – An ensemble prediction system emulator for OpenIFS

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The OpenIFS-project was launched by the European Centre for Medium-Range Weather Forecasts in 2011 with the aim to provide European universities and research institutes easier access to the most advanced weather forecasting system in the world, the IFS. Since its launch, OpenIFS has already been adopted by 44 institutes across 17 European countries (and 13 institutes outside of Europe), and is used in teaching as well as in research. We introduce an ensemble system emulator for OpenIFS that is easily adaptable to different computing environments. The emulator consists of an initial condition creator for all ensemble members and a runtime scheduler for concurrent execution of the ensemble members. In the spirit of OpenIFS, the system is built to be readily used in teaching. This will further help universities in introducing the concept of probabilistic forecasting through demonstrative means in their teaching curriculum. We foresee many new opportunities for the research community as well, one of the main ones being unprecedented access to study forecast uncertainties in-depth.