



## ABSTRACT

The study had three main goals : (a) to appraise the needs for a Space Weather Programme in Europe, (b) to review all necessary features to constitute a European Space Weather Forecasting Service (Space & Ground measurements; Infrastructures; Data Networks), (c) to identify possible System scenarios to initiate such a Space Weather programme in Europe .

The main outcomes are : (a) a clear inventory & characterization of User's Needs, (b) straightforward synthetic tables assessing the state-of-the-art in all areas (parameters; instrumentation; models; forecasting capabilities), (c) a software prototype illustrating the performance of real forecasting services, (d) a set of three scenarios (Full Scale, Medium Scale , Low Scale) that show different economical & programmatic approaches to initializing a Space weather programme in Europe, (e) a clear list of priorities concerning key space & ground elements, European structures and R&D actions for models and services .

The conclusion is that a European Space Weather Programme could benefit from many existing assets, strong (and sometimes unique) skills and a very large background in space & ground instrumentations and platforms . Europe can afford such an ambitious and user oriented programme providing decisive actions are undertaken. Proposed steps are (a) through a Low Scale scenario representing low investment costs, (b) through the federation of the User's community to provide clear priorities and definition of the services, (c) through the identification of a Leading entity to federate at European level the initiatives and projects in this field : harmonisation of the developments; monitoring of the technical decisions; management of priorities .