

## THE STORM WEATHER CENTER (Storm)

Kent Zehetner

Storm was established in Bergen, Norway, in April 1998 in response to a demand from television broadcasters for more sophisticated weather shows. Storm is today the leading commercial weather service provider in Scandinavia, supplying a full range of meteorological information. Our main objective is to provide meteorological information to both commercial customers and the broad public. We deliver products and services to the energy, offshore and media (TV, newspaper, internet and telecom) sectors. Storm has a fully 24/7 operational meteorological forecasting environment with emphasis on high quality, fine scale numerical weather forecast modelling and the production of online and interactive data delivery methodologies. Storm runs weather models and distributes weather forecast data worldwide. Projects include fine scale weather forecasts (1-4 km) as input to air pollution modelling and local precipitation calculations for the hydro energy sector up to general weather forecasting (4-36 km) for continents worldwide for use in e.g. TV presentation software and internet applications. Storm also undertakes research and commercial projects for enhancing or utilizing the finer scale meteorological modelling tools, e.g. in relation to environmental issues in construction planning.

Storm is managing all the aspects of the weather show for Norway's largest commercial TV station, TV 2. Storm is forecasting the weather, producing the scenes and the weather anchors are trained by and working for Storm. Storm is in addition a major supplier to local TV stations in Norway. Our customer list also includes national TV stations in Australia, Slovakia, Italy, Turkey, China and Spain. They use our software viz|weather developed by Storm and Vizrt, the world's leading provider of real-time 2D and true 3D broadcast graphics. Viz|Weather enables the TV stations to create an entire graphics-based weather TV show with up-to-the-minute and accurate information.

### **Production of the weather show and the quality of graphics**

We have a joint venture with Vizrt to ensure that Storm can remain competitive and provide the TV stations with state of the art graphics. Our product Viz|Weather is a complete real-time 3D weather solution with customisable visualization possibilities. It features easily accessible and the most up-to-date weather data. Graphics and animations are driven by the weather data and may be controlled, switched and manipulated. The data is loaded automatically into the system. At Storm the weather anchor on TV 2 then controls and adds other information of interest. The scenes are then transferred to a playout server in the studio from where the weather show is recorded and broadcasted.

## **Quality of the forecast**

We are experiencing an increase in demand for very local quality forecasts both from the international and local TV stations in Norway. To meet those requirements, among others, Storm has increased the research and development department significantly during the last 5 years. There are 11 employees in the R&D department today. Storm runs a globally operational model set-up to cover all scales from ultra fine scale to global. The operational modelling set-up includes among others the PSU/NCAR MM5 for the regional scale and the Canadian MC2 for the local scale. The TV stations are willing to pay more for local scale data but the main part of the modelling operations is financed through projects in our other sectors.

## **Other challenges**

Since the birth of our company the media market and its needs have changed rapidly. The current challenge for many TV stations, and Storm as a supplier, is to effectively develop and execute a multi-platform strategy including new and emerging media types for online and mobile platforms. New media platforms are critical to the long-term success of the media companies since new media are continuously emerging and stealing consumer time from traditional media. In addition the media groups have to segment their content to meet the ever-fragmenting preferences of their viewers.

We are also experiencing that some of the commercial TV stations are cutting down the lengths of the weather shows in order to be able to increase the amount of advertisements. This is in conflict with the viewer's demand for more detailed forecasts. To some extent the media company can satisfy the needs by offering the viewers more detailed forecasts on the other platforms such as Tele-text, internet and mobile. But a more sophisticated solution can be offered to the viewers who can receive digital television broadcast and have a set-up box. TV stations, with the assistance of weather companies, have the possibility to provide services that complement the weather shows. The viewer will for instance get access to detailed forecasts for their area of interest by using digital super Tele-text or request a customized forecast for their area of interest. A challenge in the Norwegian market is that the satellite and cable TV operators use different technologies. A solution to this may be the planned launch of digital terrestrial television, guarantying a standardized platform distributed to all Norwegian households.