Nova ex coelo #010
frammenti dal mosaico della meteorologia italiana

Probability forecast in TV

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Üveges Zoltán
OMSZ: Országos Meteorológiai Szolgálat

e-mail:uveges.z@met.hu

- forecast
- probability maps
- weather languages

Ever since I can remember, I wanted to be a meteorologist. My dream came true in 2009 when I started to work as an aviation and severe weather forecaster at the Hungarian Meteorological Service (OMSZ). I am a fan of maps, and I have always been interested in displaying and communicating weather related data. In recent years I also gained experience in presenting weather at different television channels.

Here at OMSZ, two years ago with my lead we established a media meteorology group of forecasters, which main goal is presenting the latest weather forecasts, interpreting weather related news and informative articles on various social media platforms like Facebook, Instagram and YouTube. One of our most popular type of forecasts – which was the topic of the award - is the daily weather forecast short video. What makes it quite different from and more authentic than a usual TV forecast is that we are the forecaster, the graphic artist, the editor and the presenter in one person. Besides being the head of the group, I am also responsible for creating and designing the visual content.

We believe that forecasts have to be presented in the most simple language. However, weather related questions rarely can be answered with a simple yes or no. That is when probability forecasts come in handy. Presenting plume diagrams, probability maps help us smoothen the expectations of the public. With probabilities, we can speak of the medium range on state of the art scientific basis, we don't have to tell one single value for the 6th or 7th day maximum temperature and later get the negative comments. I think it is important not to feel shame to say "we don't know exactly" the details of the expected weather. Nowadays, communication of uncertainties is one of the main objective of a forecaster, and this sometimes requires that thankless job, too.

In our experience weather forecasts appearing indirectly in the media or press fail to contain uncertainties, information is usually transformed and mostly the worst case scenario is the only which is presented. In order to avoid it, we try to reach the public directly via social media platforms and try to produce content with eye-catching headlines that is ready to use for the media.

Our forecasts – especially probabilistic ones – are based on ECMWF data. In addition, we modify some model fields (temperature, precipitation and cloudiness) with a grid editor that we use later for example in our forecast videos. We don't modify probabilistic data, we just add useful and detailed explanations to them. We not only use ECMWF EPS, but try to make advantage of a new non-hydrostatical EPS based on AROME model. For example, we can display probabilities of simulated radar echo exceeding a threshold, which can be communicated as "chance of thunderstorms", just to be simple. Communicating probabilities of small scale events like thunderstorms has always been a great challenge, but with this type of charts we can bring the solution closer to the public. What is more, this area has already a lot of opportunities and we try to explore it more!

The European Meteorological Society Media Weather Forecast Award gave me a good feedback that we are on the right way of presenting weather, communicating probabilities in a scientific but understandable form for the public.

https://www.emetsoc.org/awards/award-category/ems-media-awards/

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