Project: New climate change scenarios for the Carpathian-basin region based on changes of radiation balance

Support: EUR 300 000 Project promoter: Hungarian Meteorological Service Project partner: ELTE Department of Meteorology Project opening: 27 April 2015

People in Europe have first-hand experience in **climate change**. Heat waves, drought and less precipitation are more common in the south. The north is experiencing more rain. We know today that global concentrations of carbon dioxide, methane and nitrous oxide have **increased drastically** due to human activity since 1750. Concentration of Co2 is far above the natural maximum values, compared to the past 800 000 years. High-level research has demonstrated this both nationally and internationally.

In 2013, the **Intergovernmental Panel on Climate Change** released a report stating that global warming since 1950 is "extremely likely" manmade. In the same year, the Norwegian Meteorological Institute contributed to the **EASAC report**, which stated that the trend is not reversible. Several Academies of Science in Europe cooperated on writing the EASAC report. The importance of such independent research is crucial to inform **decision makers** on the sensitive issue of climate change.

Just like with science in general, climate research cannot provide a complete picture of reality in one go. Current knowledge about greenhouse gasses make experts quite certain how higher concentration levels will impact **global temperatures**. What effect all this will have on **precipitation** or **wind** is less certain. How exactly this will play out in different regions is even less certain. That is why more research is needed.

**Our politicians** need detailed, high quality information to create targeted strategies. They need this information at the local level to make sustainable plans.

We have to help each other and plan together. Climate change has shown us more clearly than ever what globalization means. Acting alone is not enough. Norway is committed to the **EUs climate framework** and emission targets. We are also actively contributing to meeting these targets in the EU through the **EEA & Norway Grants**.

By running simulations and **modelling climate change** impact, I am confident that this project will provide much needed input to the policy making around climate change here in Hungary. The consequences of climate change will be significant in the years to come. We must adapt to the changes that are happening, but we must also mitigate the impact. Without detailed information about the possible scenarios, we cannot make the necessary adjustments.

The **Meteorological Institute in Norway** works continually to make data available about what we can expect from climate change in the different regions of Norway. I am happy that we are able to contribute **EUR 300 000** to this important cause in Hungary too. I wish you all the best for your project. Best of luck in using the information you discover to formulate sustainable policies for the mitigation and adaptation to climate change.