C2SM NEWS

TEXT: CHRISTINA SCHNADT POBERAJ, KUNO STRASSMANN, CAROLIN ARNDT FOPPA UND JAKOB ZSCHEISCHLER

Will tropical nights become a normality in Thun? Is Hinterrhein facing a surge in heat days? How much snow will Saas-Fee be getting in a few decades?

To tackle questions like these, we need information at a national and regional scale, as stated in the Federal Council's Action Plan for adaptation to climate change. Under the umbrella of the National Centre for Climate Services NCCS project «CH2018», scientists from C2SM partner institutions are analyzing the latest high-resolution international climate modeling projections to derive new scenarios of climate change in Switzerland. These efforts have been compiled into a Technical Report that is currently being reviewed by international experts. Additionally, a brochure about the key results and a website will serve to disseminate the scenarios in a user-oriented form. All products will be presented in a public launch event in late 2018 (to be announced). ■

MORE INFORMATION
www.climate-scenarios.ch

NEWS FROM SPARC, THE INTERNATIONAL PROJECT ON STRATOSPHERE-TROPOSPHERE PROCESSES AND THEIR ROLE IN CLIMATE

This year, SPARC celebrates its 25th anniversary, and, after six years of operation at ETH Zurich, its International Project Office moves to the German Aerospace Center (DLR) in Oberpfaffenhofen – its 4th destination after Paris, Toronto, and Zurich. To mark this event, SPARC organised a half-day symposium at ETH Zurich on 1 December 2017. Representatives of the SPARC Office sponsors including ETH Zurich gave addresses. In addition, key scientists from the regional SPARC community held presentations on milestones and the role of SPARC science over the past 25 years. 2017 marks the 30th anniversary of the Montreal Protocol, the international agreement that has led to the phase-out of most ozone-depleting chemicals. Dr Neil Harris, Co-Chair of the SPARC Scientific Steering Group, and his co-workers played a leading role in demonstrating the effect of man-made gases on the ozone layer, and the consequences for human health. ■

Watch their video on «30 years of healing the ozone layer – how it all happened»
www.youtube.com/watch?v=6ipV4GDrGYM

SCIENCE HIGHLIGHTS

PAPER: MORE FREQUENT COMPOUND HOT AND DRY SUMMER EXTREMES UNDER INCREASING CO_2 CONCENTRATIONS

In the past, climate scientists have tended to underestimate the risk of co-occurring heatwaves and drought. ETH researchers Jakob Zscheischler and Sonia Seneviratne have now calculated the probability of compound hot and dry summers [1]. An extremely hot and dry summer is up to five times more likely than if these two extremes are studied in isolation. Compound extremes such as the event 2010 in Russia or the extremely dry and hot 2015 summer in central Europe [2] may thus occur much more frequently than previously expected. ■

REFERENCES

[1] Zscheischler J, Seneviratne SI (2017) Science Advances.
[2] Orth R, Zscheischler J, Seneviratne SI (2016) Sci. Rep.

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