Data quality of the new Austrian dual-polarized weather radars

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The renewal of the Austrian weather radar network in recent years was completed in 2013 and the network now consists of five dual-polarized weather radars. Due to the newly available data, a wide range of novel possibilities for the use of radar data in the weather analysis, nowcasting, and forecasting is expected.

The complexity of the new polarized data and the topography of Austria (two weather radars on the plains, three radars above 2000 meters above sea level) require a comprehensive analysis of the data to obtain experience concerning quality and quality control mechanisms, the best possible usage, and its application. This is the intention of the FFG-project TUNDRA (TUNing Dual-pol Radars in the Alps), which is a cooperation between the Central Institute for Meteorology and Geodynamics (ZAMG), and Austro Control GmbH (ACG).

This presentation will show the first results of this project in detail: Statistical analyses of the data provide an insight into the quality of the data, and case studies give an overview on the performance of the new polarized data.