Assimilation of multinational radar data using HARMONIE

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The model domains of high resolution limited area numerical weather prediction models (NWP) are getting larger as the computer power increases. Today many model domains cover large parts of countries surrounding the country in which the weather service is located. It is therefore of more and more interest to use radar observations from surrounding countries in models in order to get a good coverage inside the domain. Until very recently the use of multinational radar data has been a problem due to data policy reasons as well as format and data content reasons. By using data in the ODIM_H5 format the latter problem is solved even though some fields still may differ. Here we present a data distribution solution together with the challenges of using multinational radar observations for assimilation in an NWP model. The impact of radar data assimilation on the analysis and forecasts will also be presented.