

## **On the polarimetric signatures of convective storms**

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MeteoSwiss operates a mobile X-band dual-polarization Doppler radar. During the stormy season a special mode of operation is set whereby if a convective cell, identified by the C-band radar network thanks to the Thunderstorms Radar Tracking (TRT) algorithm, is within the area covered by the system it interrupts regular operations and starts performing RHIs centred at the core of the cell. A total of 320 events (and counting) have been collected over 79 days since the first campaign in 2014. The high spatial and temporal resolution provides a unique insight into the microphysical characteristics of the storm. In this talk we will discuss the characteristics of the vertical structure of the polarimetric moments obtained from the X-band observations as a function of storm severity and relate them to those obtained by the operational C-band dual-polarization Doppler radar network of the same events.