

Field Test of Mobile Solid-State X-band Radar in Central Europe

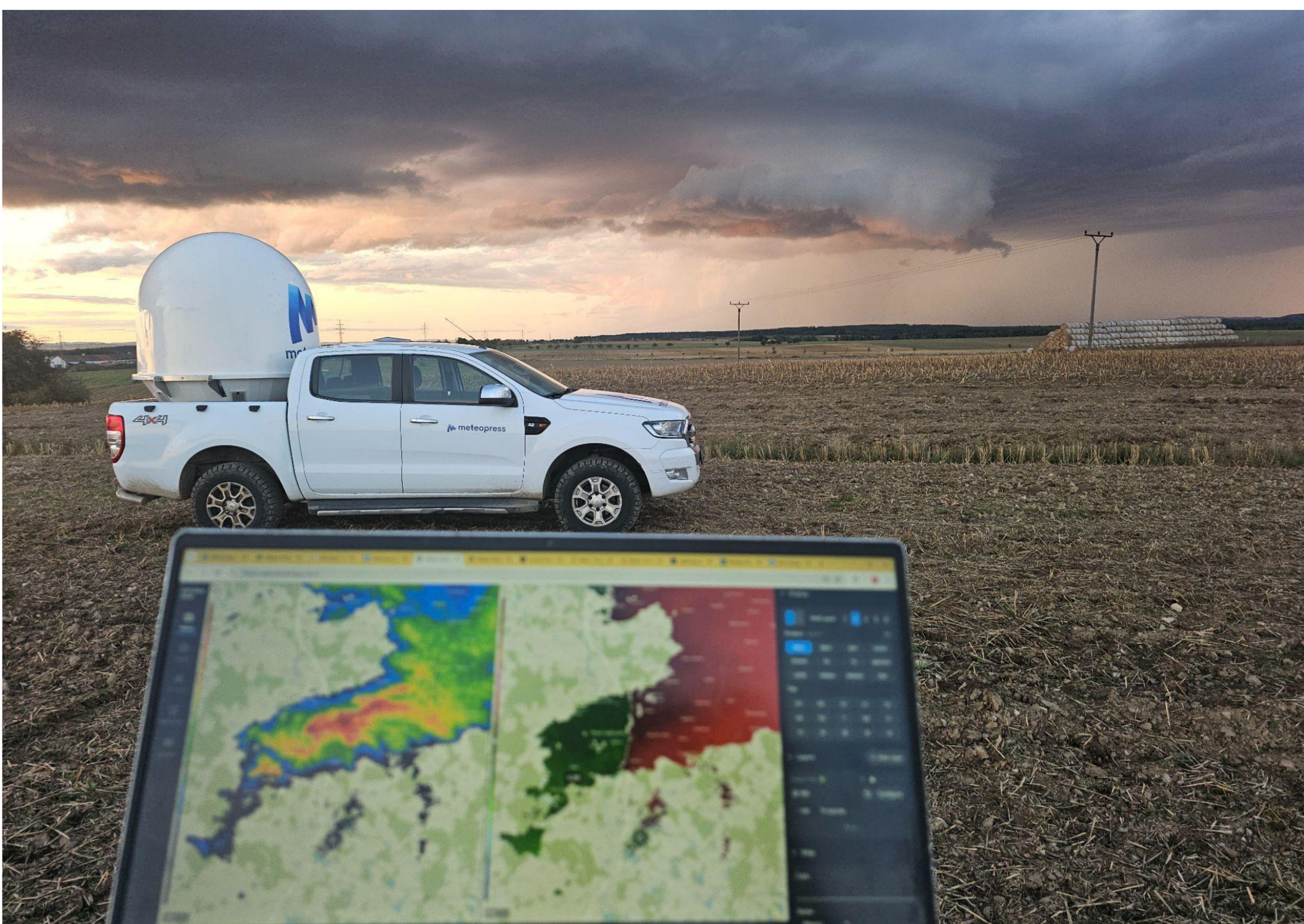
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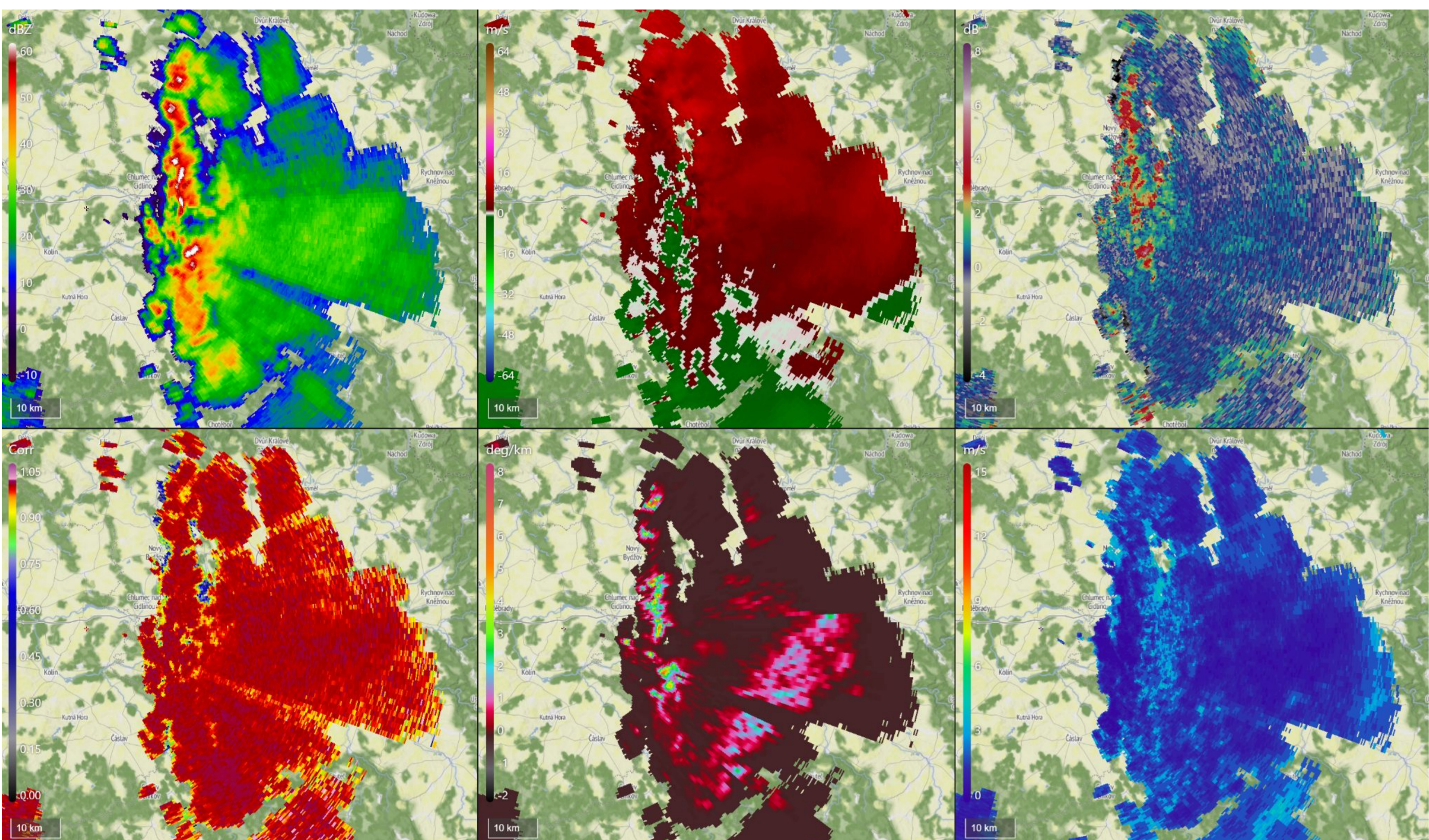


Radar specifications

- Name: MeteoRover X-Class 120
- Radar on the bed of Ford Ranger
- 2x X-SSPA 300 W (H a V polarization)
- Transmitting frequency 9.410 GHz
- 1,2m antenna, beamwidth 1,85°
- Electronics in radome and on the truck bed
- Battery powered – up to 6 hours
- Internet connection via Starlink
- Multiple scanning strategies available

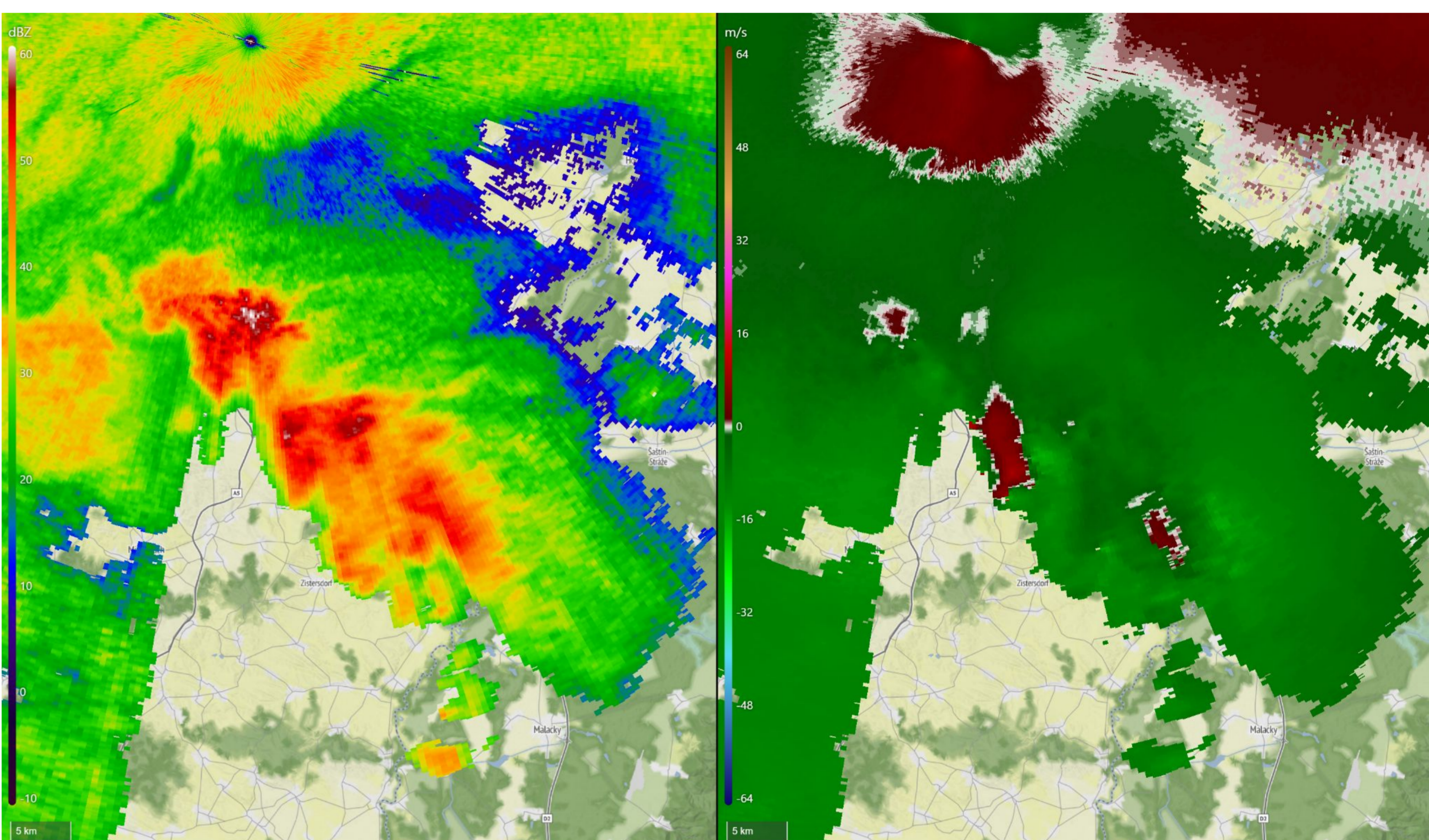


21st July 2025, Central Czechia



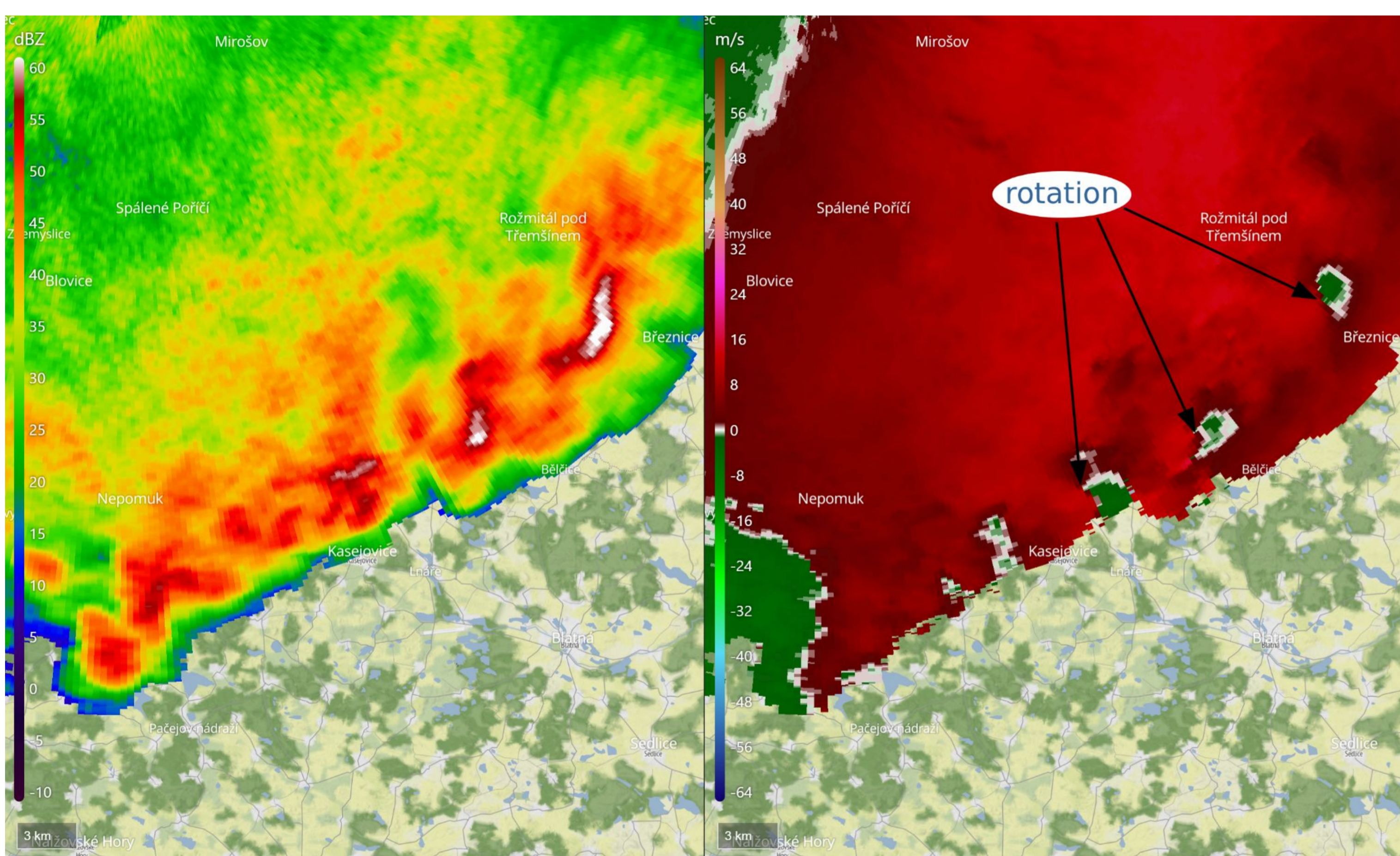
Radar Reflectivity, Doppler Velocity, ZDR, RhoHV, KDP a Doppler Spectrum Width on 21st July. 2025, 16:47 UTC. Elevation 5,5°.

24th July 2025, SE Czechia/N Austria



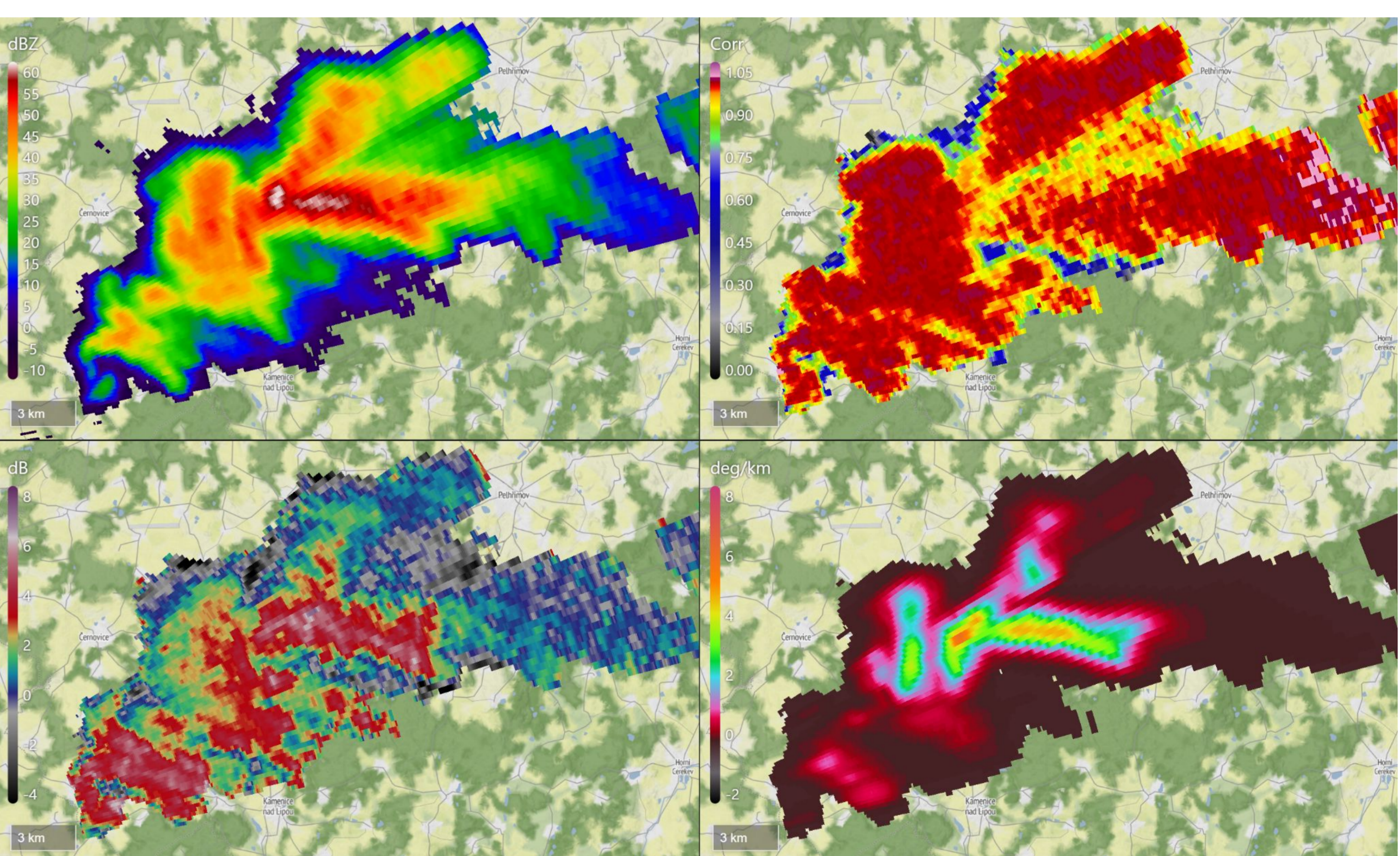
Radar Reflectivity and Doppler Velocity on 24th July 2025, 15:33 UTC. Elevation 3,0°.

5th August 2025, SW Czechia



Radar Reflectivity and Doppler Velocity on 5th August 2025, 16:18 UTC. Elevation 4,4°.

15th September 2025, Central Czechia



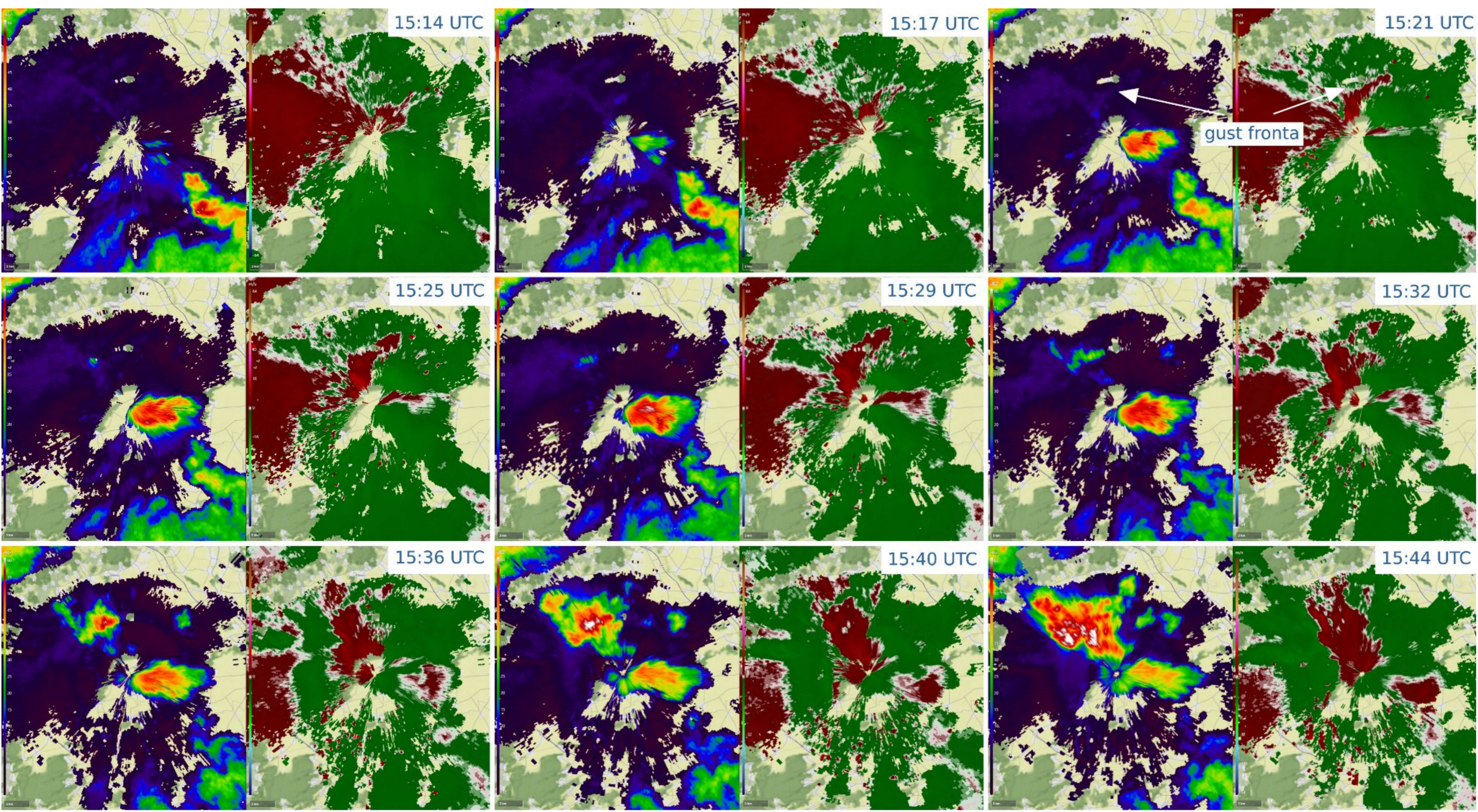
Radar Reflectivity, RhoHV, ZDR a KDP on 15th September 2025, 17:26 UTC. Supercell travelled for 220 km before dissipating. Elevation 3,2°.

25th July 2025, Central Czechia

- Stationary thunderstorms
- Image: Collision of 2 gust fronts and rapid development of new thunderstorms



MeteoRover during measurement.



Development of thunderstorms due to 2 gust fronts colliding. Radar Reflectivity and Doppler Velocity on 5th August 2025. Elevation 2,0°.

More about MeteoRover



Contact

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