Moisture perturbation @412 200 400 Pressure [hPa] 600 800 Resolution 100 m 1000 1.0 **–**5 0.5 0.0 500 5 0 250 m Temperature Cloud water RHWater vapour 500 m [%] [K] mixing ratio mixing ratio 1 km $[10^{-3} \, g \, kg^{-1}]$ $[10^{-3} \text{ g kg}^{-1}]$ 4 km 200 Model MONC Pressure [hPa] 400 WRF 600 800 1000 0.0 20 _ __2 -0.5 -1**-4** 0 0

Rain

mixing

ratio

 $[10^{-3} \text{ g kg}^{-1}]$

Graupel

mixing

ratio

 $[10^{-3} \text{ g kg}^{-1}]$

Snow

mixing

ratio

 $[10^{-3} \text{ g kg}^{-1}]$

Ice

mixing

ratio

 $[10^{-3} \text{ g kg}^{-1}]$