Temperature perturbation @850 200 400 Pressure [hPa] 600 800 Resolution 100 m 1000 -2.5**–**2 -5000.0 0.0 0.5 500 250 m RHCloud water Temperature Water vapour 500 m [%] [K] mixing ratio mixing ratio 1 km $[10^{-3} \text{ g kg}^{-1}]$ $[10^{-3} \text{ g kg}^{-1}]$ 4 km 200 Model MONC Pressure [hPa] 400 WRF Kuang (2010) 600 800 1000 -10-0.2 0.0 0 **Snow** Rain Graupel Ice mixing mixing mixing mixing ratio ratio ratio ratio $[10^{-3} \text{ g kg}^{-1}]$

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

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

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