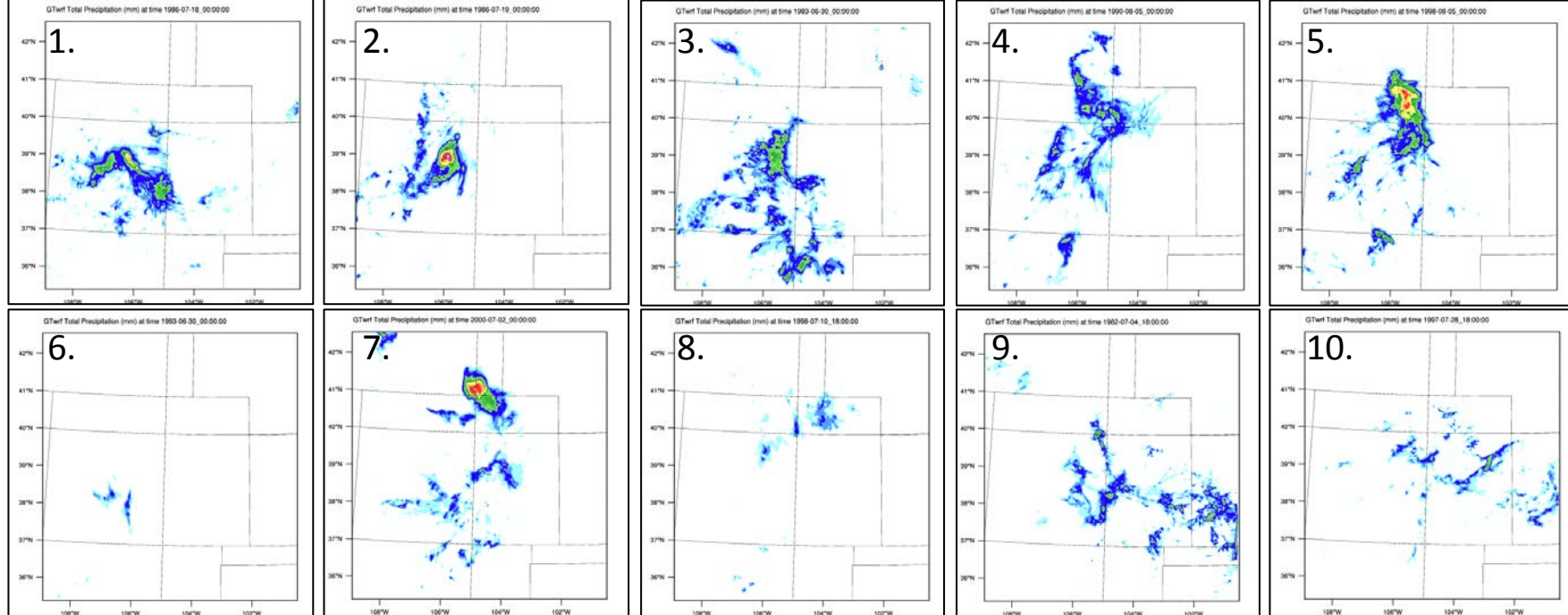
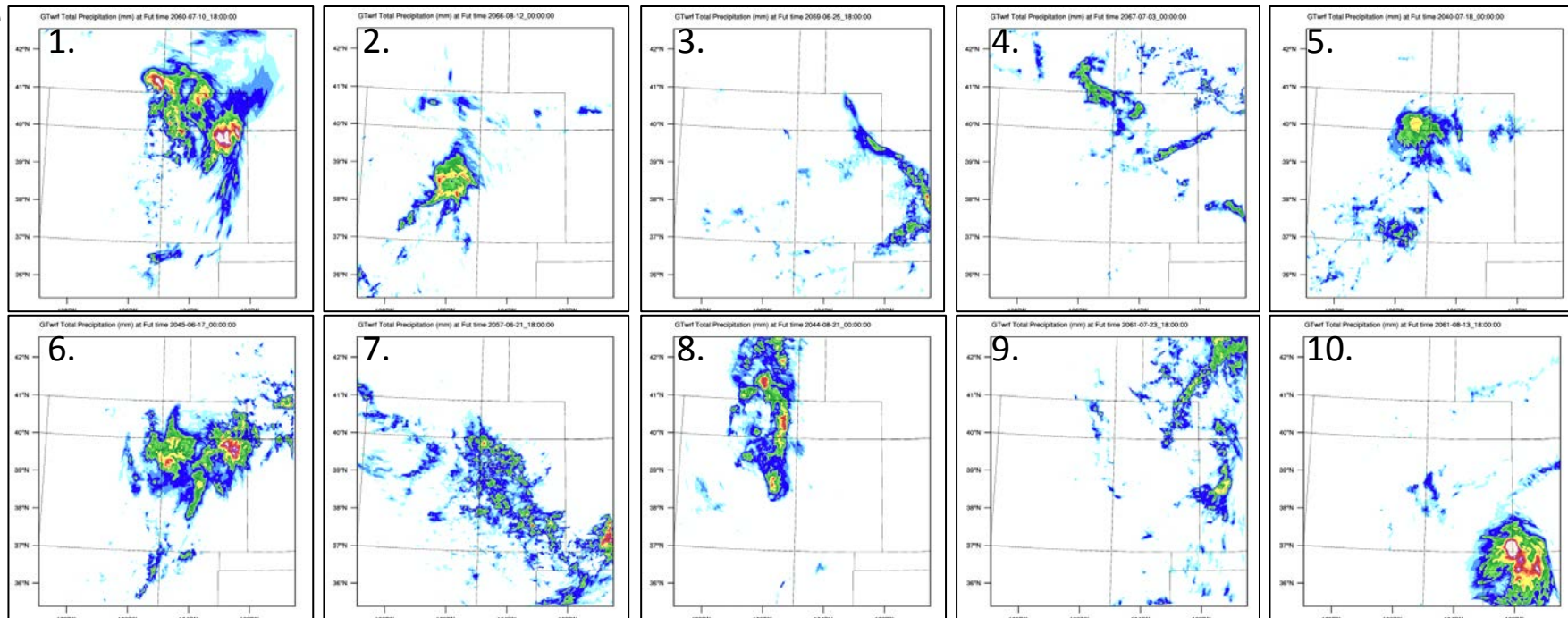


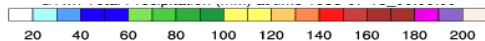
Past



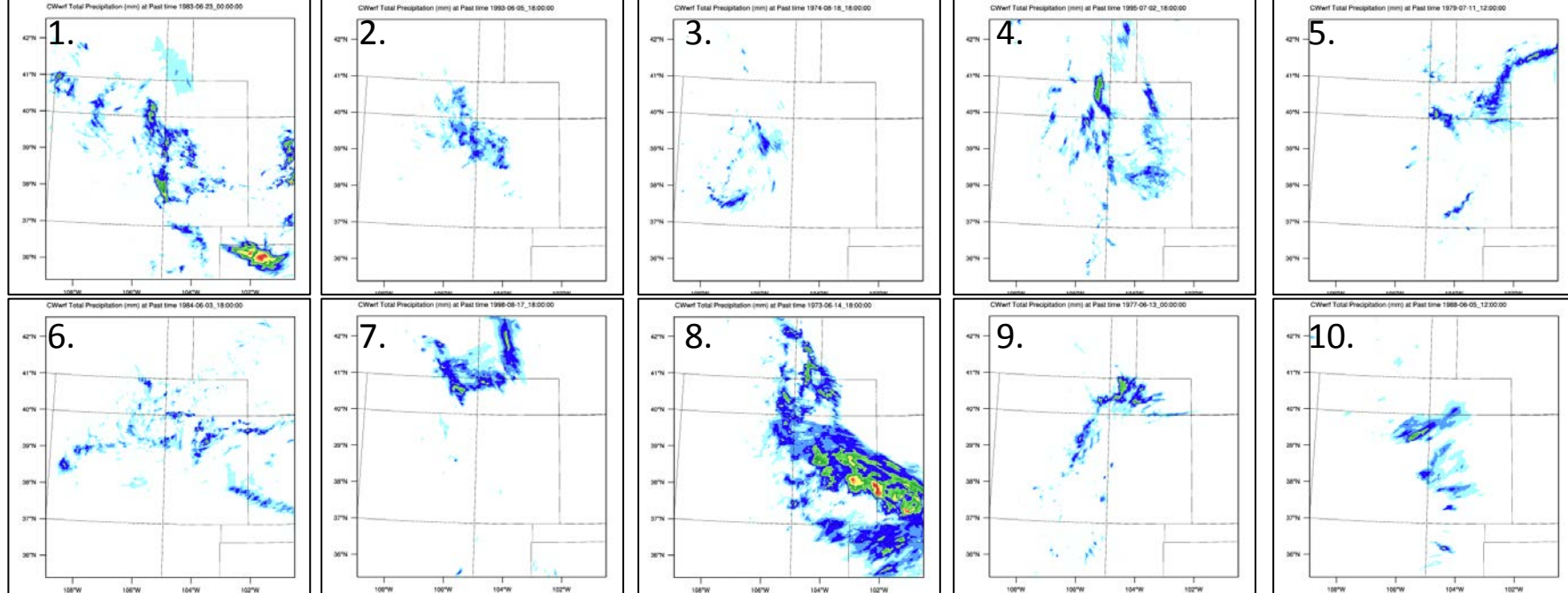
Future



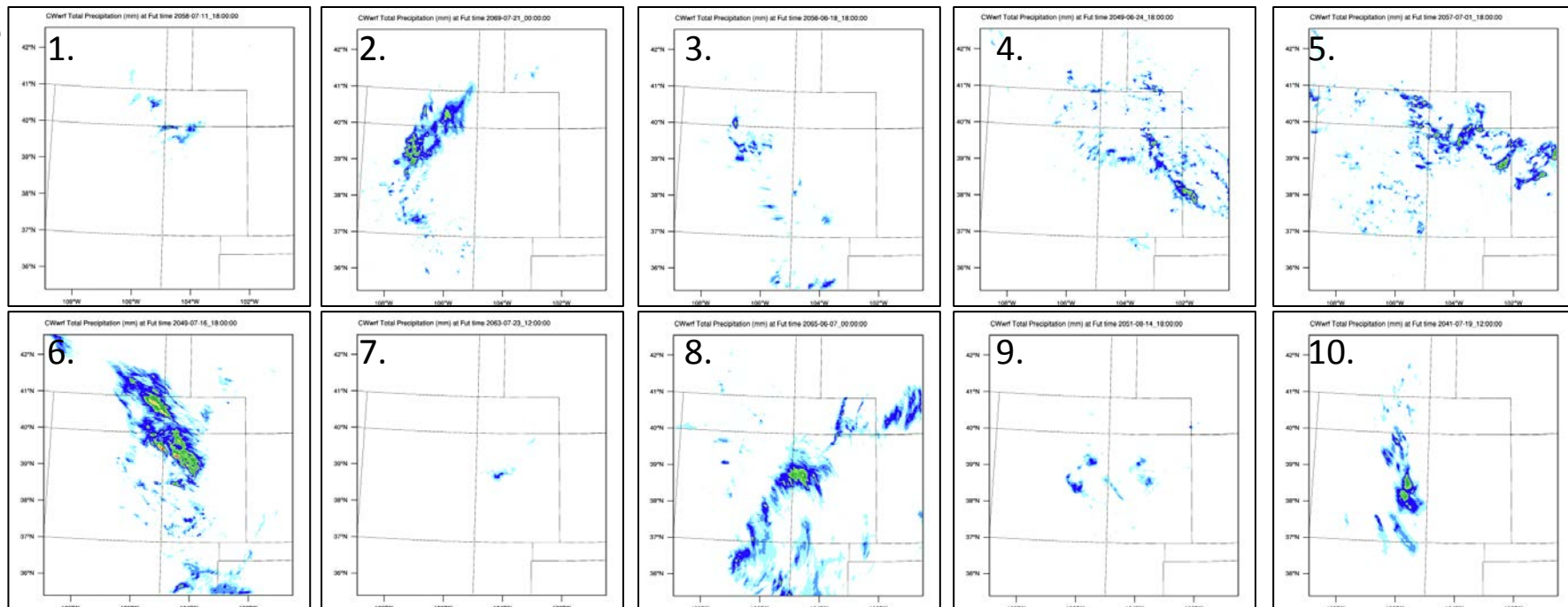
S1. Total (24h) precipitation (mm) for each individual GT-wrf simulation (ranking in Top 10 as numbered)



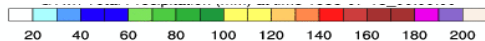
Past



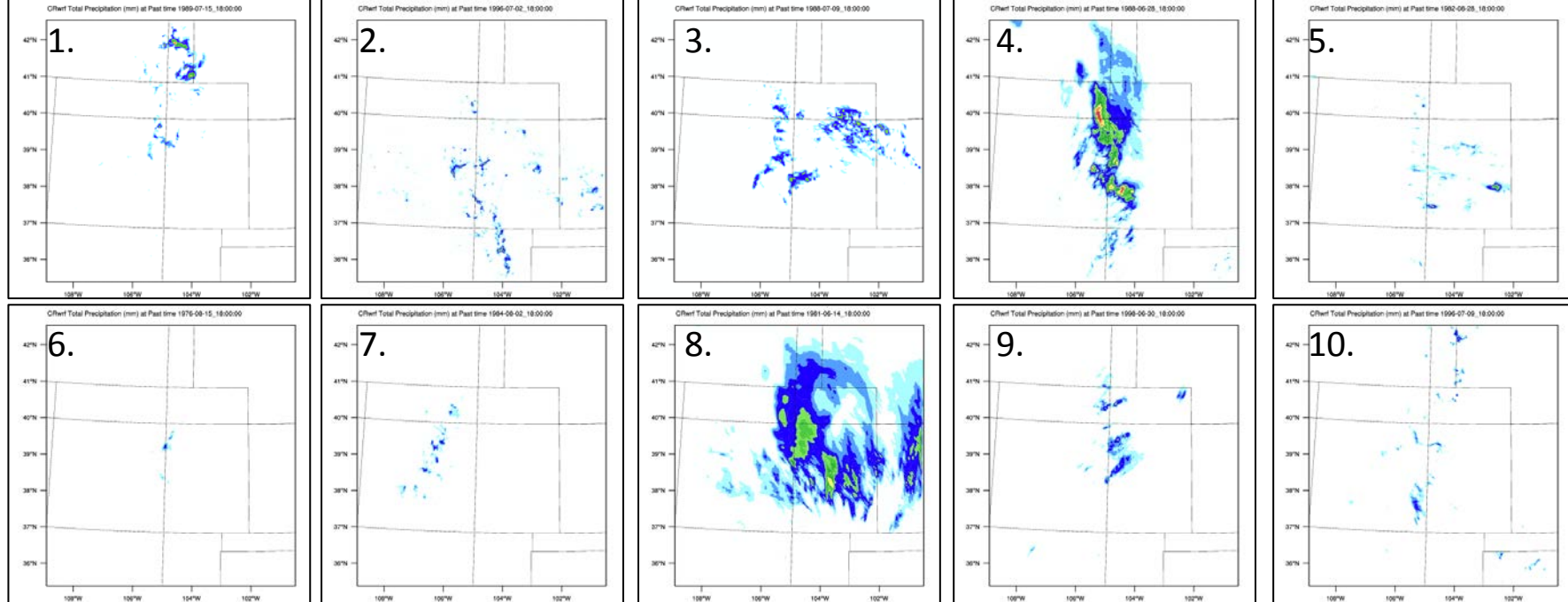
Future



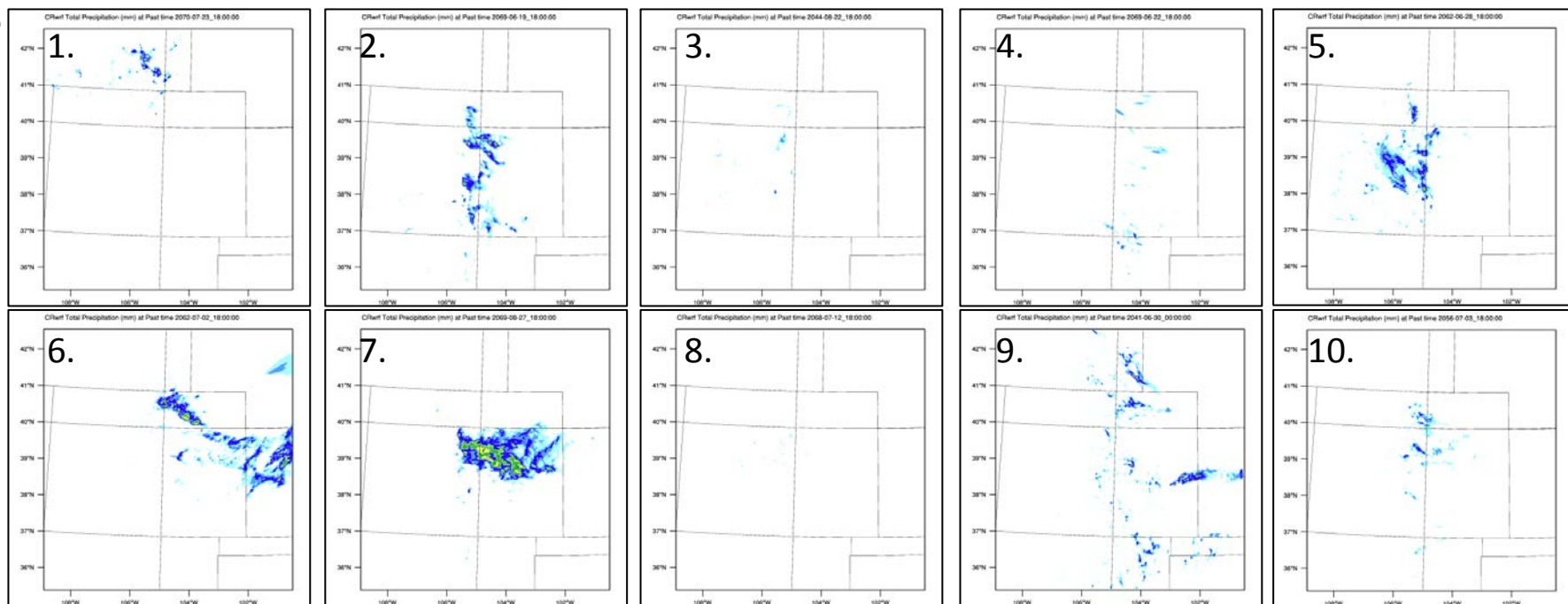
S2. Total (24h) precipitation (mm) for each individual CW-wrf simulation (ranking in Top 10 as numbered)



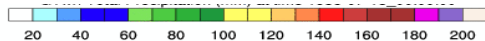
Past



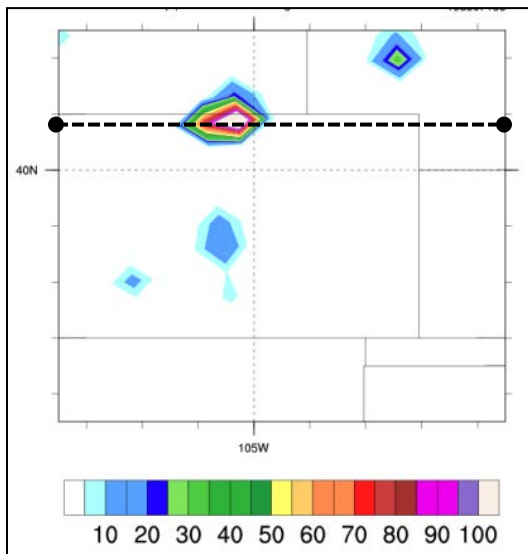
Future



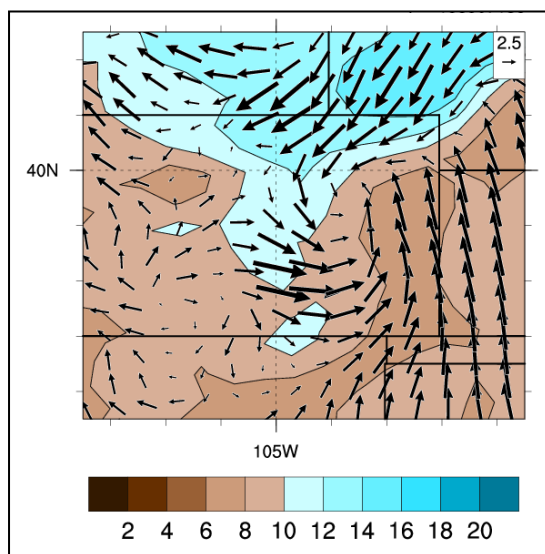
S3. Total (24h) precipitation (mm) for each individual CR-wrf simulation (ranking in Top 10 as numbered)



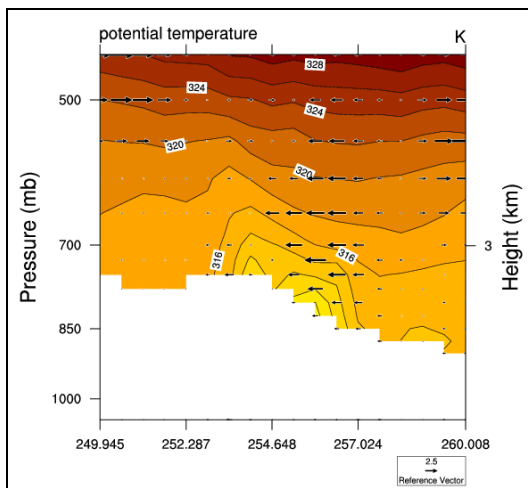
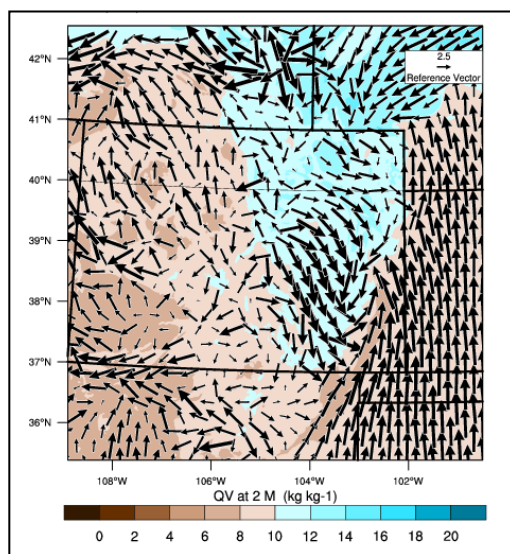
RCM3 max 3h precip (ending 06Z 15 Jul)



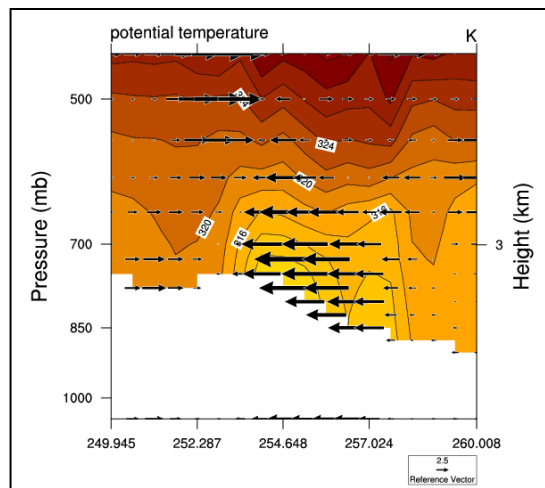
RCM3 2-m humidity and 10-m winds (6Z 7/15)



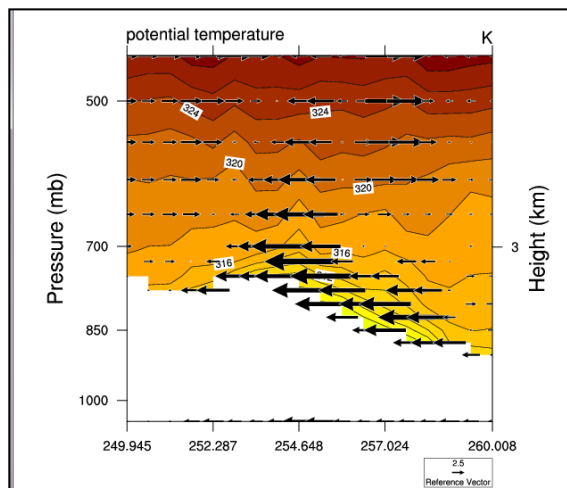
WRF 2-m humidity and 10-m winds (6Z 7/15)



RCM3 potential temperature (K), u-wind (vectors) along line indicated in a), valid 18Z 14 Jul)



RCM3 potential temperature (K), u-wind (vectors) along line indicated in a), valid 00Z 15 Jul)



RCM3 potential temperature (K), u-wind (vectors) along line indicated in a), valid 06Z 15 Jul)

Figure S4. Depiction of RCM3 spurious gridscale precipitation: a) 3-hour precipitation accumulation (mm) ending 06UTC 15 Jul; b) RCM3 2-m specific humidity (g/kg, shaded) and 10-m winds (vectors) valid 06UTC 15 Jul; c) as in b) but for CR-wrf simulation; d) RCM3 potential temperature (K, shaded), u-wind (vectors) along line indicated in a), valid 18UTC 14 Jul; e) as in d) except valid 00UTC 15 Jul, f) as in d) except valid 06UTC 15 Jul.