*Supplement of*

# A modeling study - Partitioning of Rain and Snow and Below-Cloud Scavenging of Size-Resolved Particles by Rain and Snow

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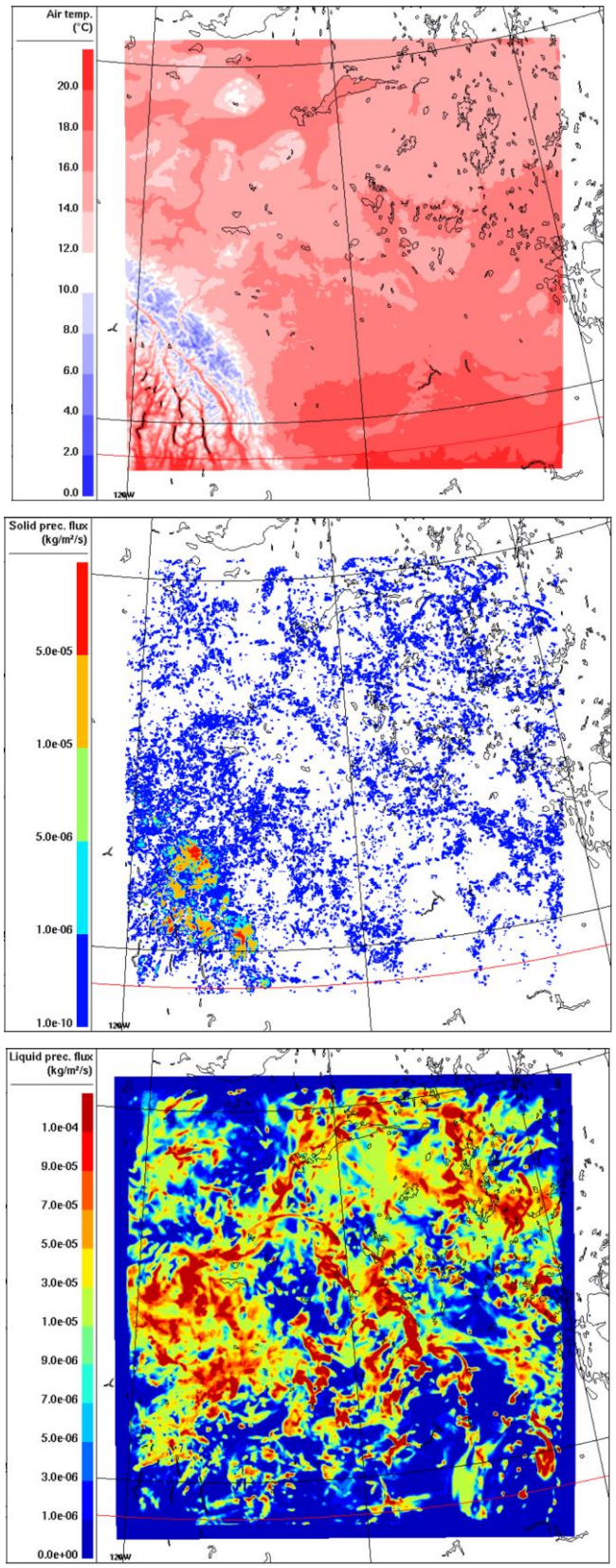


**Figure S1: July average temperature, and total snow and rain fluxs.**

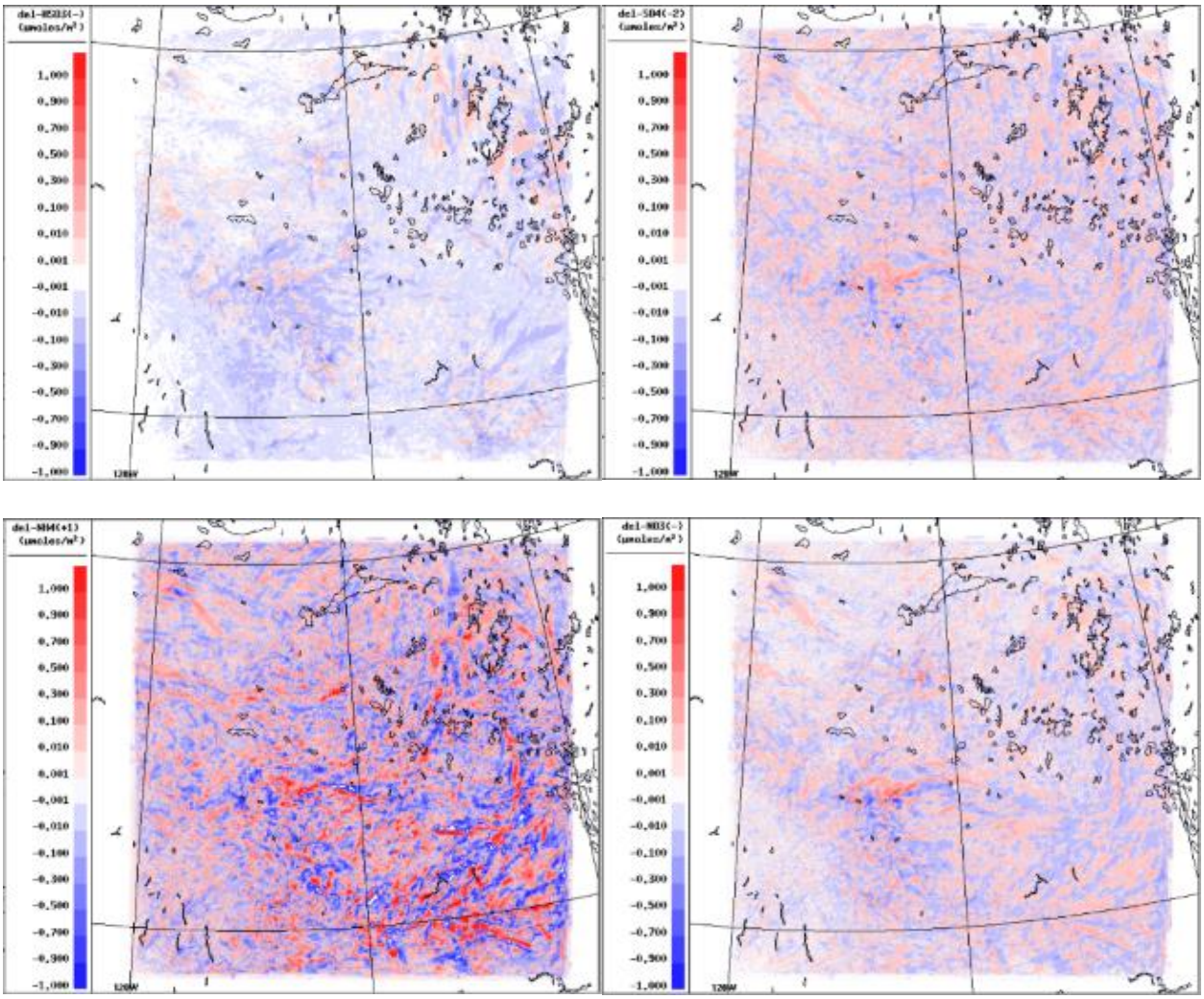

**Figure S2: The net differences of mean $SO_3^{1-}$, $SO_4^{=}$, $NH_4^{+}$ and $NO_3^{-}$ for the partitioned and base experiments (e.g. rain/snow – base) for July 2018.**

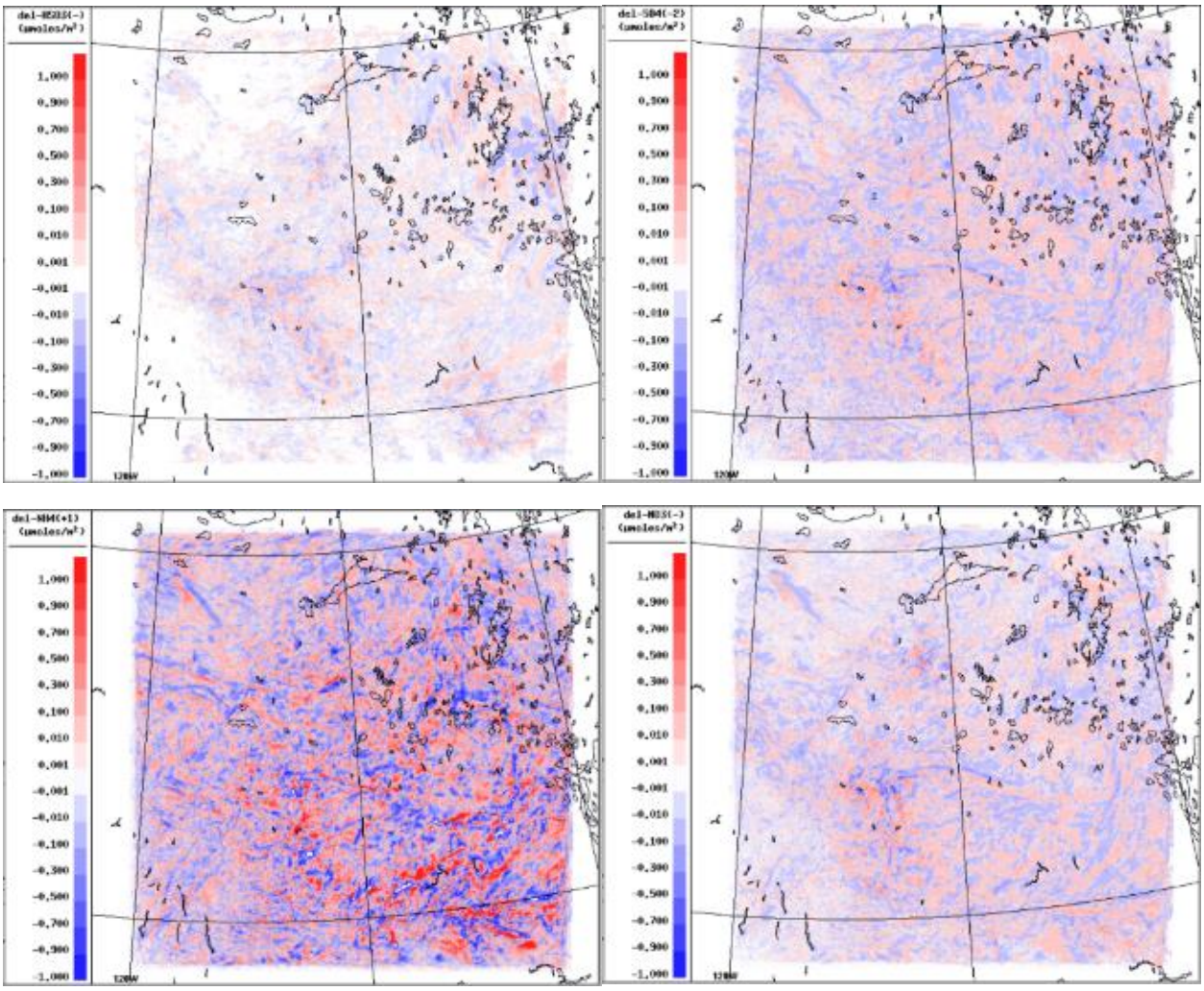

**Figure S3: The net differences of mean $SO_3^{1-}$, $SO_4^{=}$, $NH_4^{+}$ and $NO_3^{-}$ for the Wang2014 and partitioned experiments (e.g. Wang2014 - rain/snow) for July 2018.**

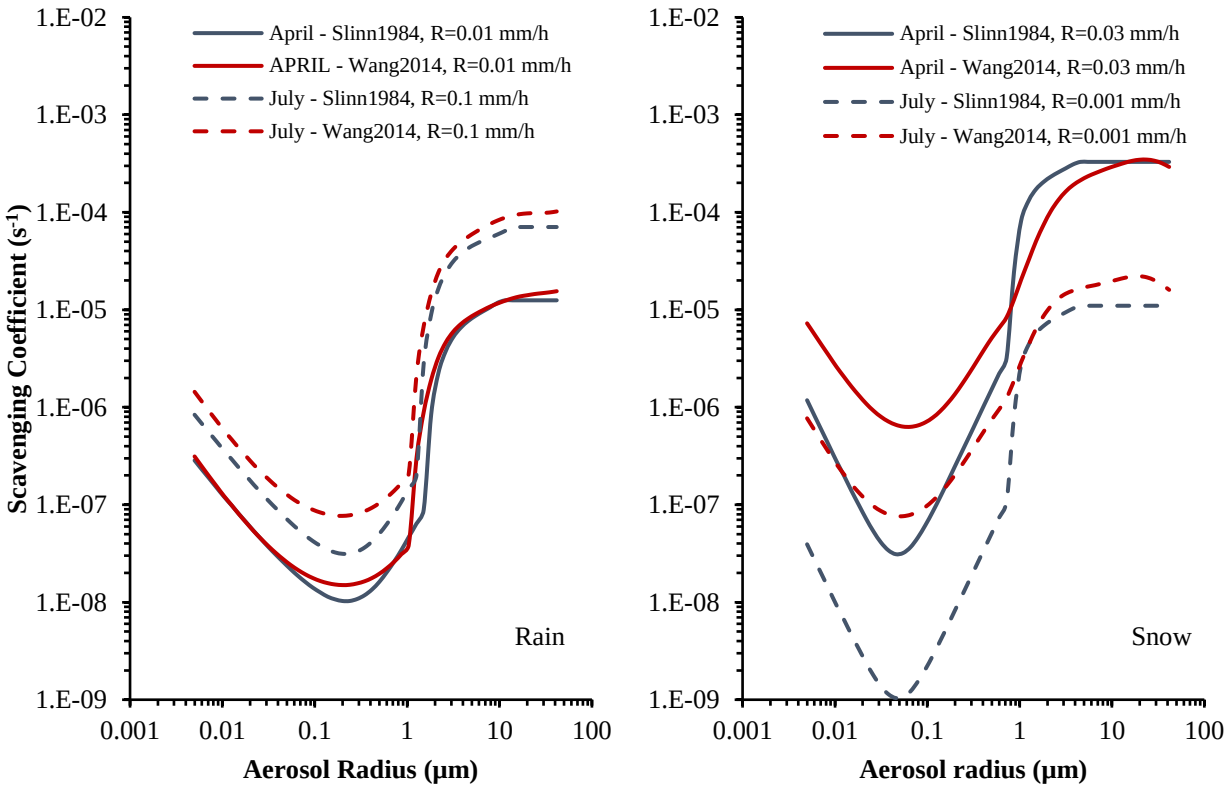


**Figure S4: Rain and snow scavenging coefficients versus the particles sizes for July and April 2018.**