Table S2 Physics parameters

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| --- | --- | --- |
| Parameter | Scheme | Reference |
| Shortwave Radiation | Dudhia | Dudhia (1989) |
| Longwave Radiation | RRTMG | Iacono et al. (2008) |
| Cumulus Scheme | Kaine-Fritsch | Kain and Fritsch (1993) |
| Land Surface Model | Noah | Kain (2004) |
| Planetary Boundary Layer | Yonsei University | Hong and Pan (1996) |
| Microphysics Scheme | Thompson graupel | Thompson and Eidhammer (2014) |

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