## Sheet1
| Run No. | Parameter Changed | Parameter Description | Units | Default Value | New Value |
| --- | --- | --- | --- | --- | --- |
| 1 | AI | Fallspeed parameters for cloud ice | m^(1/b)/s | 700.000000 | 350.000000 |
| 2 | AI | Fallspeed parameters for cloud ice | m^(1/b)/s | 700.000000 | 525.000000 |
| 3 | AI | Fallspeed parameters for cloud ice | m^(1/b)/s | 700.000000 | 875.000000 |
| 4 | AI | Fallspeed parameters for cloud ice | m^(1/b)/s | 700.000000 | 1050.000000 |
| 5 | AS | Fallspeed parameters for snow | m^(1/b)/s | 11.720000 | 5.860000 |
| 6 | AS | Fallspeed parameters for snow | m^(1/b)/s | 11.720000 | 8.790000 |
| 7 | AS | Fallspeed parameters for snow | m^(1/b)/s | 11.720000 | 14.650000 |
| 8 | AS | Fallspeed parameters for snow | m^(1/b)/s | 11.720000 | 17.580000 |
| 9 | AG | Fallspeed parameters for graupel | m^(1/b)/s | 19.300000 | 9.650000 |
| 10 | AG | Fallspeed parameters for graupel | m^(1/b)/s | 19.300000 | 14.475000 |
| 11 | AG | Fallspeed parameters for graupel | m^(1/b)/s | 19.300000 | 24.125000 |
| 12 | AG | Fallspeed parameters for graupel | m^(1/b)/s | 19.300000 | 28.950000 |
| 13 | RHOI | Bulk density of cloud ice | kg/m3 | 500.000000 | 250.000000 |
| 14 | RHOI | Bulk density of cloud ice | kg/m3 | 500.000000 | 375.000000 |
| 15 | RHOI | Bulk density of cloud ice | kg/m3 | 500.000000 | 625.000000 |
| 16 | RHOI | Bulk density of cloud ice | kg/m3 | 500.000000 | 750.000000 |
| 17 | RHOS | Bulk density of snow | kg/m3 | 100.000000 | 50.000000 |
| 18 | RHOS | Bulk density of snow | kg/m3 | 100.000000 | 75.000000 |
| 19 | RHOS | Bulk density of snow | kg/m3 | 100.000000 | 125.000000 |
| 20 | RHOS | Bulk density of snow | kg/m3 | 100.000000 | 150.000000 |
| 21 | RHOG | Bulk density of graupel | kg/m3 | 400.000000 | 200.000000 |
| 22 | RHOG | Bulk density of graupel | kg/m3 | 400.000000 | 300.000000 |
| 23 | RHOG | Bulk density of graupel | kg/m3 | 400.000000 | 500.000000 |
| 24 | RHOG | Bulk density of graupel | kg/m3 | 400.000000 | 600.000000 |
| 25 | DCS | Threshold size for cloud ice autoconversion | meters | 0.000125 | 0.000050 |
| 26 | DCS | Threshold diameter for cloud ice to snow autoconversion | meters | 0.000125 | 0.000087 |
| 27 | DCS | Threshold size for cloud ice autoconversion | meters | 0.000125 | 0.000162 |
| 28 | DCS | Threshold diameter for cloud ice to snow autoconversion | meters | 0.000125 | 0.000200 |
| 29 | RMI0 | Radius of nucleated ice crystal | meters | 0.000010 | 0.000001 |
| 30 | RMI0 | Radius of nucleated ice crystal | meters | 0.000010 | 0.000005 |
| 31 | RMI0 | Radius of nucleated ice crystal | meters | 0.000010 | 0.000020 |
| 32 | RMI0 | Radius of nucleated ice crystal | meters | 0.000010 | 0.000030 |
| 33 | RMG0 | Radius of embryo graupel | meters | 0.000046 | 0.000035 |
| 34 | RMG0 | Radius of embryo graupel | meters | 0.000046 | 0.000100 |
| 35 | RMG0 | Radius of embryo graupel | meters | 0.000046 | 0.000500 |
| 36 | RMG0 | Radius of embryo graupel | meters | 0.000046 | 0.001000 |
| 37 | EII | Ice-ice (including self-collection and intraspecies collisions) collection efficiency | none | 0.100000 | 0.010000 |
| 38 | EII | Ice-ice (including self-collection and intraspecies collisions) collection efficiency | none | 0.100000 | 0.050000 |
| 39 | EII | Ice-ice (including self-collection and intraspecies collisions) collection efficiency | none | 0.100000 | 0.500000 |
| 40 | EII | Ice-ice (including self-collection and intraspecies collisions) collection efficiency | none | 0.100000 | 1.000000 |
| 41 | ECI | Ice-cloud water collection efficiency | none | 0.700000 | 0.300000 |
| 42 | ECI | Ice-cloud water collection efficiency | none | 0.700000 | 0.500000 |
| 43 | ECI | Ice-cloud water collection efficiency | none | 0.700000 | 0.850000 |
| 44 | ECI | Ice-cloud water collection efficiency | none | 0.700000 | 1.000000 |
| 45 | RMMULT | Radius of splintered ice particle | meters | 0.000005 | 0.000001 |
| 46 | RMMULT | Radius of splintered ice particle | meters | 0.000005 | 0.000010 |
| 47 | RMMULT | Radius of splintered ice particle | meters | 0.000005 | 0.000020 |
| 48 | RMMULT | Radius of splintered ice particle | meters | 0.000005 | 0.000030 |
| 49 | WRA | Multiplicative process factor for accretion of cloud water by rain | none | 1.000000 | 0.500000 |
| 50 | WRA | Multiplicative process factor for accretion of cloud water by rain | none | 1.000000 | 0.750000 |
| 51 | WRA | Multiplicative process factor for accretion of cloud water by rain | none | 1.000000 | 1.500000 |
| 52 | WRA | Multiplicative process factor for accretion of cloud water by rain | none | 1.000000 | 2.000000 |
| 53 | WRC | Multiplicative process factor for autoconversion of cloud water to rain | none | 1.000000 | 0.100000 |
| 54 | WRC | Multiplicative process factor for autoconversion of cloud water to rain | none | 1.000000 | 0.500000 |
| 55 | WRC | Multiplicative process factor for autoconversion of cloud water to rain | none | 1.000000 | 5.000000 |
| 56 | WRC | Multiplicative process factor for autoconversion of cloud water to rain | none | 1.000000 | 10.000000 |
| 57 | SDEP | Multiplicative process factor for snow deposition | none | 1.000000 | 0.500000 |
| 58 | SDEP | Multiplicative process factor for snow deposition | none | 1.000000 | 0.750000 |
| 59 | SDEP | Multiplicative process factor for snow deposition | none | 1.000000 | 1.500000 |
| 60 | SDEP | Multiplicative process factor for snow deposition | none | 1.000000 | 2.000000 |