

Naming Convention for Reference Configurations (as of WRFv3.3)

WRF_version Dynamic_core[ARW/NMM]

Physics_Suite(PS):[microphysics].[lw_rad].[sw_rad].[sfc_layer].[lsm].[pbl].[convection]

Microphysics options:

- 0. no microphysics
- 1. Kessler scheme
- 2. Lin et al. scheme
- 3. WSM 3-class simple ice scheme
- 4. WSM 5-class scheme
- 5. Ferrier (new Eta) scheme
- 6. WSM 6-class graupel scheme
- 7. Goddard GCE scheme
- 8. Thompson graupel scheme
- 9. Milbrandt-Yau scheme
- 10. Morrison 2-moment scheme
- 13. SBU, 5-class scheme
- 14. Double moment, 5-class scheme
- 16. Double moment, 6-class scheme
- 85. Etamp_hwrf scheme. Similar to Ferrier, modified for HWRF.
- 98. Thompson (v3.0) scheme

Long-wave Radiation options:

- 0. No longwave radiation
- 1. RRTM scheme
- 3. CAM scheme
- 4. RRTMG scheme
- 5. Goddard scheme
- 99. GFDL scheme
- 98. modified GFDL scheme

Short-wave Radiation options:

- 0. No shortwave radiation
- 1. Dudhia scheme
- 2. Goddard short wave scheme
- 3. CAM scheme
- 4. RRTMG scheme
- 5. Goddard scheme
- 99. GFDL scheme
- 98. modified GFDL scheme

Surface-layer options:

- 0. No surface-layer scheme
- 1. Monin-Obukhov scheme
- 2. Janjic scheme
- 3. NCEP Global Forecast System scheme
- 4. QNSE
- 5. MYNN
- 7. Pleim-Xiu surface layer
- 10. TEMF
- 88. GFDL surface layer scheme

Land-surface options:

- 0. No surface temperature prediction
- 1. Thermal diffusion scheme
- 2. Noah Land-Surface Model
- 3. RUC Land-Surface Model
- 7. Pleim-Xiu Land Surface Model
- 88. GFDL slab land surface model

Boundary-layer options:

- 0. No boundary-layer
- 1. YSU scheme
- 2. Mellor-Yamada-Janjic TKE scheme
- 3. NCEP Global Forecast System scheme
- 4. QNSE
- 5. MYNN 2.5 level TKE
- 6. MYNN 3rd level TKE
- 7. ACM scheme
- 8. BouLac TKE
- 9. UW scheme
- 10. TEMF
- 99. MRF scheme

Cumulus scheme options:

- 0. No cumulus scheme
- 1. Kain-Fritsch scheme
- 2. Betts-Miller-Janjic scheme
- 3. Grell-Devenyi ensemble scheme
- 4. Simplified Arakawa-Schubert scheme
- 5. Grell 3d ensemble scheme
- 6. Tiedtke scheme
- 7. Zhang-McFarlane scheme
- 14. New SAS
- 99. Previous Kain-Fritsch scheme