Data variables for the boreal summer experiment of 2004

- 7-km: 1 June – 31 August
- 14-km : 1 June – 10 November

MULTI LEVEL -- 18 variables:

3-hourly (6-hourly) mean for 7-km (14-km) mesh run

dfq_isccp2 : cloud amount by the ISCCP simulator [frac.]

3-hourly (6-hourly) snapshot for 7-km (14-km) mesh run

40 layers, *: Provided only for the glevel-09 experiment

ml_dh : diabatic heating rate (cloud microphysics) [K/s]
***ml_swhr : diabatic heating rate (shortwave radiation) [K/s]**
***ml_lwhr : diabatic heating rate (longwave radiation) [K/s]**
ml_pres : pressure [Pa]
ml_qc : cloud water mixing ratio (microphysics) [kg/kg]
ml_qi : cloud ice mixing ratio [kg/kg]
ml_qr : rain mixing ratio [kg/kg]
ml_qs : snow mixing ratio [kg/kg]
ml_qv : water vapor mixing ratio [kg/kg]
ml_rh : relative humidity [frac.]
ml_rho : density (all species) [kg/m^3]
ml_tem : temperature [K]
ml_ucos : zonal velocity (multiplied by cos(lat)) [m/s]
ml_vcos : meridional velocity (multiplied by cos(lat)) [m/s]
ml_w : vertical velocity [m/s]
ml_kv_turb : Eddy diffusive coefficient [m^2/s]
ml_nu_turb : Eddy viscosity coefficient [m^2/s]
ml_qke : twice the turbulent kinetic energy [m^2/s^2]

SINGLE LEVEL -- 27 variables

14km-mesh run 1.5-hour mean

7km-mesh run 80-minute (90-minute) mean during 2004/6/1~2004/8/16 (2004/8/17~2004/8/31)

sl_albedo	: albedo [frac.]
sl_cld_frac	: cloud fraction [frac.]
sl_cldi	: column integrated solid water [kg/m^2]
sl_cldw	: column integrated liquid water [kg/m^2]
sl_evap	: evaporation rate [kg/m^2/s]
sl_lw_toa	: outgoing long-wave flux at TOA [W/m^2]
sl_lw_toa_c	: outgoing long-wave flux at TOA (clear sky) [W/m^2]
sl_ps	: surface pressure [Pa]
sl_q2m	: 2 m water vapor mixing ratio [kg/kg]
sl_slh	: surface latent heat flux [W/m^2]
sl_slwd	: surface long-wave radiation (downward) [W/m^2]
sl_slwu	: surface long-wave radiation (upward) [W/m^2]
sl_ssh	: surface sensible heat flux [W/m^2]
sl_sswi	: surface short-wave radiation (downward/incident) [W/m^2]
sl_sswr	: surface short-wave radiation (upward/reflected) [W/m^2]
sl_sw_toai	: downward short-wave radiation at TOA [W/m^2]
sl_sw_toar	: upward short-wave radiation at TOA [W/m^2]
sl_sw_toar_c	: upward short-wave radiation at TOA (clear sky) [W/m^2]
sl_t2m	: 2 m temperature [K]
sl_tauucos	: surface stress by zonal velocity (multiplied by cos(lat)) [N/m^2]
sl_tauvcos	: surface stress by meridional velocity (multiplied by cos(lat)) [N/m^2]
sl_tem_atm	: mass weighted column averaged temperature [K]
sl_tem_sfc	: surface temperature [K]
sl_tppn	: surface precipitation rate [kg/m^2/s]
sl_ucos10m	: 10 m zonal velocity (multiplied by cos(lat)) [m/s]
sl_vap_atm	: precipitable water [kg/m^2]
sl_vcos10m	: 10 m meridional velocity (multiplied by cos(lat)) [m/s]