UCLA EXPERIMENT 2

Model: UCLA AGCM SSIB

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Data Description:

This data set consists of outputs from the UCLA AGCM coupled with the land
surface processes model SSIB-1 for the period 1 April 2006 to 31 October 2006.
Only data from 1 May to 31 October are available here.
All files were written in the direct access "stream" binary format. (*)

File description:

1. monthly_3d_ucla2_<year>_<case>.gra
   Monthly mean 3D variables over global domain
   Vertical level [hPa]: 1000 950 925 900 850 800 700 600 500 400 300 200 100
   Horizontal resolution: 2.5 degree longitude x 2.0 degree latitude

Variable name	Unit	Description
ta	K	temperature
ua	m/s	zonal wind
va	m/s	meridional wind
hus	g/kg	specific humidity
cl	%	cloud fraction
tdh	K/day	total diabatic heating

2. monthly_2d_ucla2_<year>_<case>.gra
   Monthly mean 2D variables over global domain
   Horizontal resolution: 2.5 degree longitude x 2.0 degree latitude

Variable name	Unit	Description
slp	hPa	sea level pressure
pr	mm/day	total precipitation
lspre	mm/day	large scale precipitation
conpre	mm/day	convective precipitation
tas	K	surface air temperature (2m)
huss	g/kg	surface specific humidity (2m)
hfls	W/m**2	surface latent heat flux
evap	W/m**2	vegetation interception loss
etv	W/m**2	transpiration
esoil	W/m**2	soil evaporation
hfss	W/m**2	surface sensible heat flux
hfgs	W/m**2	surface ground heat flux
rlds	W/m**2	surface downwelling LW radiation
rlus	W/m**2	surface upwelling LW radiation
rsds	W/m**2	surface downwelling SW radiation
rsus	W/m**2	surface upwelling SW radiation
rsdt	W/m**2	SW downwelling radiative flux at the TOA
rsut	W/m**2	SW upwelling radiative flux at the TOA

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   rlut                W/m**2     LW upwelling radiative flux at the TOA
   tsw                 mm         total soil water content
   ssw                 0-1        soil wetness at the first soil layer
   srw                 0-1        soil wetness at the rooting zone
   roff                mm/day     runoff
   ttlccv              %          total cloud cover fraction
   geop850             gpm        geopotential height at 850 hPa
   geop500             gpm        geopotential height at 500 hPa


3. 6hrly_sahel_ucla2_<year>_<case>.gra
   6-hourly mean variables over the Sahel area
   Domain: 25W-35E, 14S-34N
   Horizontal resolution: 2.5 degree longitude x 2.0 degree latitude

   Variable name      Unit       Description
  --------------------------------------------------------------------
   u9256hr             m/s        zonal wind at 925 hPa
   v9256hr             m/s        meridional wind at 925 hPa
   t9256hr             K          temperature at 925 hPa
   s9256hr             g/kg       specific humidity at 925 hPa
   s8506hr             g/kg       specific humidity at 850 hPa
   w8506hr             Pa/s       pressure vertical velocity at 850 hPa
   v7006hr             m/s        meridional wind at 700 hPa
   u6006hr             m/s        zonal wind at 600 hPa
   w4006hr             Pa/s       pressure vertical velocity at 400 hPa


4. daily_nafr_ucla2_<year>_<case>.gra
   Daily mean variables over North Africa
   Domain: 25W-35E, 6S-40N
   Horizontal resolution: 2.5 degree longitude x 2.0 degree latitude

   Variable name      Unit       Description
  --------------------------------------------------------------------
   tday                K          Surface air temperature
   lhday               W/m**2     surface latent heat flux
   shday               W/m**2     surface sensible heat flux
   rsdtday             W/m**2     SW downwelling radiative flux at the TOA
   rsutday             W/m**2     SW upwelling radiative flux at the TOA
   rsdsday             W/m**2     SW downwelling radiative flux at the surface
   rsusday             W/m**2     SW upwelling radiative flux at the surface
   rldsday             W/m**2     LW downwelling radiative flux at the surface
   rlusday             W/m**2     LW upwelling radiative flux at the surface
   rlutday             W/m**2     LW upwelling radiative flux at the TOA
   ta850day            K          temperature at 850 hPa
   ua850day            m/s        zonal wind at 850 hPa
   va850day            m/s        meridional wind at 850 hPa
   sa850day            g/kg       specific humidity at 850 hPa
   ta500day            K          temperature at 500 hPa
   za500day            gpm        geopotential height at 500 hPa
   ua200day            m/s        zonal wind at 200 hPa


5. hourly_sahel_ucla2_<year>_<case>.gra
   Hourly variables over the Sahel area
   Domain: 22.5W-35E, 14S-36N
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     Horizontal resolution: 2.5 degree longitude x 2.0 degree latitude

     Variable name      Unit       Description
   --------------------------------------------------------------------
     pdiur              mm/day      precipitation
     tdiur              K           surface air temperature at 2m
     lhdiur             W/m**2      surface latent heat flux
     shdiur             W/m**2      surface sensible heat flux



 (*) a set of GrADS control files is also provided (ucla_exp2_ctl.tar)
     all files are compressed (with gzip) for easier transfer
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