

.nc filename in repository	Used for figure # or table #
r1300_8day_transient_aod02_0dz_250th_bigarray	Figures 3 and 5
r1639_15day_aod02_0dz_250th_bigarray	Figure 4
r1391_13day_aod02_0dz_250th_bigarray	Figure 6
r1298_8day_transient_aod02_0dz_50th_bigarray r1299_8day_transient_aod02_0dz_100th_bigarray r1300_8day_transient_aod02_0dz_250th_bigarray r1301_8day_transient_aod02_0dz_500th_bigarray r1300_8day_transient_aod02_0dz_250th_bigarray r1303_8day_transient_aod02_100dz_250th_bigarray r1304_8day_transient_aod02_250dz_250th_bigarray r1305_8day_transient_aod02_500dz_250th_bigarray r1586_8day_transient_aod05_50dz_200th_bigarray r1585_8day_transient_aod04_50dz_200th_bigarray r1584_8day_transient_aod03_50dz_200th_bigarray r1583_8day_transient_aod02_50dz_200th_bigarray r1582_8day_transient_aod01_50dz_200th_bigarray	Figures 7 and 8, and Table 3
r1300_8day_transient_aod02_0dz_250th_bigarray r1303_8day_transient_aod02_100dz_250th_bigarray r1304_8day_transient_aod02_250dz_250th_bigarray r1305_8day_transient_aod02_500dz_250th_bigarray r1298_8day_transient_aod02_0dz_50th_bigarray r1299_8day_transient_aod02_0dz_100th_bigarray r1300_8day_transient_aod02_0dz_250th_bigarray r1301_8day_transient_aod02_0dz_500th_bigarray r1582_8day_transient_aod01_50dz_200th_bigarray r1583_8day_transient_aod02_50dz_200th_bigarray r1584_8day_transient_aod03_50dz_200th_bigarray r1585_8day_transient_aod04_50dz_200th_bigarray r1586_8day_transient_aod05_50dz_200th_bigarray r1494_8day_transient_aod02_0dz_250th_bigarray_coldSST2K r1496_8day_transient_aod02_100dz_250th_bigarray_coldSST2K r1497_8day_transient_aod02_250dz_250th_bigarray_coldSST2K r1498_8day_transient_aod02_500dz_250th_bigarray_coldSST2K r1499_8day_transient_aod02_0dz_50th_bigarray_coldSST2K r1500_8day_transient_aod02_0dz_100th_bigarray_coldSST2K r1494_8day_transient_aod02_0dz_250th_bigarray_coldSST2K r1501_8day_transient_aod02_0dz_500th_bigarray_coldSST2K r1592_8day_transient_aod01_50dz_200th_bigarray_coldSST2K	Table 5

continued...

r1593_8day_transient_aod02_50dz_200th_bigarray_coldSST2K
r1594_8day_transient_aod03_50dz_200th_bigarray_coldSST2K
r1595_8day_transient_aod04_50dz_200th_bigarray_coldSST2K
r1596_8day_transient_aod05_50dz_200th_bigarray_coldSST2K

r1348_8day_transient_aod02_0dz_250th_bigarray_standSST
r1351_8day_transient_aod02_100dz_250th_bigarray_standSST
r1352_8day_transient_aod02_250dz_250th_bigarray_standSST
r1353_8day_transient_aod02_500dz_250th_bigarray_standSST
r1346_8day_transient_aod02_0dz_50th_bigarray_standSST
r1347_8day_transient_aod02_0dz_100th_bigarray_standSST
r1348_8day_transient_aod02_0dz_250th_bigarray_standSST
r1349_8day_transient_aod02_0dz_500th_bigarray_standSST
r1587_8day_transient_aod01_50dz_200th_bigarray_standSST
r1588_8day_transient_aod02_50dz_200th_bigarray_standSST
r1589_8day_transient_aod03_50dz_200th_bigarray_standSST
r1590_8day_transient_aod04_50dz_200th_bigarray_standSST
r1591_8day_transient_aod05_50dz_200th_bigarray_standSST

r1360_8day_transient_aod02_0dz_250th_bigarray_nodrizz
r1363_8day_transient_aod02_100dz_250th_bigarray_nodrizz
r1364_8day_transient_aod02_250dz_250th_bigarray_nodrizz
r1365_8day_transient_aod02_500dz_250th_bigarray_nodrizz
r1358_8day_transient_aod02_0dz_50th_bigarray_nodrizz
r1359_8day_transient_aod02_0dz_100th_bigarray_nodrizz
r1360_8day_transient_aod02_0dz_250th_bigarray_nodrizz
r1361_8day_transient_aod02_0dz_500th_bigarray_nodrizz
r1597_8day_transient_aod01_50dz_200th_bigarray_nodrizz
r1598_8day_transient_aod02_50dz_200th_bigarray_nodrizz
r1599_8day_transient_aod03_50dz_200th_bigarray_nodrizz
r1600_8day_transient_aod04_50dz_200th_bigarray_nodrizz
r1601_8day_transient_aod05_50dz_200th_bigarray_nodrizz

r1336_8day_transient_aod02_0dz_250th_bigarray_05cool
r1339_8day_transient_aod02_100dz_250th_bigarray_05cool
r1340_8day_transient_aod02_250dz_250th_bigarray_05cool
r1341_8day_transient_aod02_500dz_250th_bigarray_05cool
r1334_8day_transient_aod02_0dz_50th_bigarray_05cool
r1335_8day_transient_aod02_0dz_100th_bigarray_05cool
r1336_8day_transient_aod02_0dz_250th_bigarray_05cool
r1337_8day_transient_aod02_0dz_500th_bigarray_05cool
r1602_8day_transient_aod01_50dz_200th_bigarray_05cool
r1603_8day_transient_aod02_50dz_200th_bigarray_05cool
r1604_8day_transient_aod03_50dz_200th_bigarray_05cool
r1605_8day_transient_aod04_50dz_200th_bigarray_05cool
r1606_8day_transient_aod05_50dz_200th_bigarray_05cool

r1438_8day_transient_aod02_0dz_250th_bigarray_wetFT
r1441_8day_transient_aod02_100dz_250th_bigarray_wetFT
r1442_8day_transient_aod02_250dz_250th_bigarray_wetFT

<p>continued...</p> <p>r1443_8day_transient_aod02_500dz_250th_bigarray_wetFT r1436_8day_transient_aod02_0dz_50th_bigarray_wetFT r1437_8day_transient_aod02_0dz_100th_bigarray_wetFT r1438_8day_transient_aod02_0dz_250th_bigarray_wetFT r1439_8day_transient_aod02_0dz_500th_bigarray_wetFT r1607_8day_transient_aod01_50dz_200th_bigarray_wetFT r1608_8day_transient_aod02_50dz_200th_bigarray_wetFT r1609_8day_transient_aod03_50dz_200th_bigarray_wetFT r1610_8day_transient_aod04_50dz_200th_bigarray_wetFT r1611_8day_transient_aod05_50dz_200th_bigarray_wetFT</p> <p>r1521_8day_transient_aod02_0dz_250th_bigarray_800m r1616_8day_transient_aod02_100dz_250th_bigarray_800m r1617_8day_transient_aod02_250dz_250th_bigarray_800m r1618_8day_transient_aod02_500dz_250th_bigarray_800m r1619_8day_transient_aod02_0dz_50th_bigarray_800m r1620_8day_transient_aod02_0dz_100th_bigarray_800m r1521_8day_transient_aod02_0dz_250th_bigarray_800m r1621_8day_transient_aod02_0dz_500th_bigarray_800m r1622_8day_transient_aod01_50dz_200th_bigarray_800m r1623_8day_transient_aod02_50dz_200th_bigarray_800m r1624_8day_transient_aod03_50dz_200th_bigarray_800m r1625_8day_transient_aod04_50dz_200th_bigarray_800m r1626_8day_transient_aod05_50dz_200th_bigarray_800m</p> <p>r1540_8day_transient_aod02_0dz_250th_bigarray_1000m r1627_8day_transient_aod02_100dz_250th_bigarray_1000m r1628_8day_transient_aod02_250dz_250th_bigarray_1000m r1629_8day_transient_aod02_500dz_250th_bigarray_1000m r1630_8day_transient_aod02_0dz_50th_bigarray_1000m r1631_8day_transient_aod02_0dz_100th_bigarray_1000m r1540_8day_transient_aod02_0dz_250th_bigarray_1000m r1632_8day_transient_aod02_0dz_500th_bigarray_1000m r1633_8day_transient_aod01_50dz_200th_bigarray_1000m r1634_8day_transient_aod02_50dz_200th_bigarray_1000m r1635_8day_transient_aod03_50dz_200th_bigarray_1000m r1636_8day_transient_aod04_50dz_200th_bigarray_1000m r1637_8day_transient_aod05_50dz_200th_bigarray_1000m</p>	
<p>r1300_8day_transient_aod02_0dz_250th_bigarray.nc r1521_8day_transient_aod02_0dz_250th_bigarray_800m.nc r1540_8day_transient_aod02_0dz_250th_bigarray_1000m.nc</p>	<p>Figures 9 and 10</p>

- a suffix of *_no* corresponds to the simulation without the aerosol layer (i.e., the control simulation)
- a suffix of *_aero* corresponds to the simulation with the presence of the aerosol layer
- for example: lwp_no is the control LWP timeseries and lwp_aero is the LWP with aerosol present.

variable name in .nc file	description	dimensions	units
time_v1	hours since 2200 on day 6 of simulation	-	hrs
time_v2	hours since 2200 on day 1 of simulation	-	hrs
z	model level altitude	-	m
lwp	cloud liquid water path	time_v2	g m^{-2}
cldtop_z	cloud top height	time_v2	m
cldbase_z	cloud base height	time_v2	m
buoy	buoyancy profile	time_v1, z	$\text{m}^2 \text{s}^{-3}$
ww	vertical velocity variance profile	time_v1, z	$\text{m}^2 \text{s}^{-2}$
th_l	liquid-water potential T profile	time_v1, z	K
alb	cloud albedo	time_v2	-
qt	specific humidity profile	time_v1, z	g kg^{-1}
semidir	semi-direct effect	time_v2	W m^{-2}
dir	direct effect	time_v2	W m^{-2}
w_e	cloud-top entrainment rate	time_v2	mm s^{-1}
mean_RH_BL	mean relative humidity in BL	time_v1	%
lathf	latent heat flux at surface	time_v2	W m^{-2}
tot_qt_bl	total water path of BL	time_v1	kg m^{-2}
mean_th_l_BL	mean liquid-water potential T of the BL	time_v1	K
surf_RH	mean relative humidity between ocean surface and cloud base	time_v1	%
mean_ww	mean vertical velocity variance in the BL	time_v1	$\text{m}^2 \text{s}^{-2}$
thl_jump	change in liquid-water potential T across BL-top inversion	time_v1	K
mean_qt_BL	mean specific humidity in the BL	time_v1	g kg^{-1}