

NICAM near realtime simulation data (Oct 2011-Jan 2012)

Model:

Nonhydrostatic ICosahedral Atmospheric Model (NICAM; Satoh et al. 2008), adopting regionally stretched grid system (Tomita 2008)

Experimental setup:

Horizontal grid spacing: 14~24km (20-140E, 53S-37N), gradually coarser in outer domain

Vertical domain: 0 m ~ 38,000 m, 40-levels (stretching grid)

80.841 248.821 429.882 625.045 835.409 1062.158 1306.565 1570.008 1853.969 2160.047 2489.963 2845.575
3228.883 3642.044 4087.384 4567.409 5084.820 5642.530 6243.676 6891.642 7590.074 8342.904 9154.367
10029.030 10971.815 11988.028 13083.388 14264.058 15536.685 16908.430 18387.011 19980.750 21698.616
23550.278 25546.154 27697.477 30016.355 32515.835 35209.986 38113.969

Integration period: 7 days

Initial conditions: (atmospheric fields, SST, land surface)

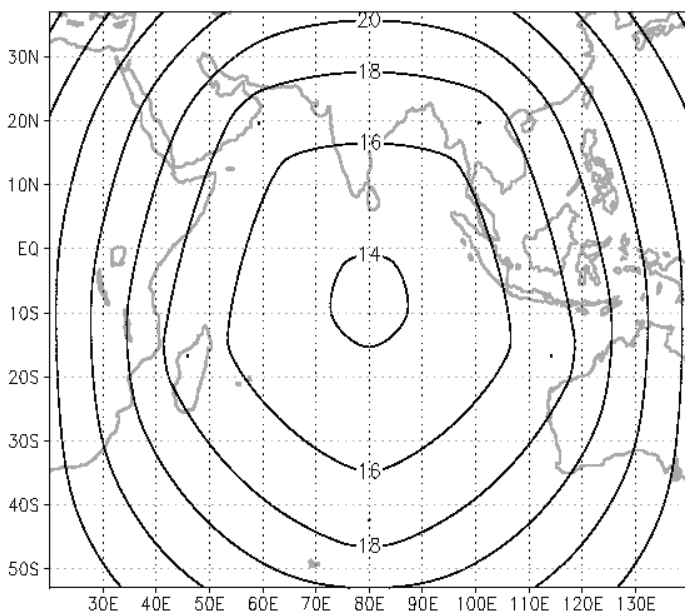
Interpolated from NCEP final analyses (1° x 1°)

<http://dss.ucar.edu/cgi-bin/dataaccess?dsnum=083.2>.

Boundary conditions:

ETOPO-5 topography, Matthews vegetation, and UGAMP ozone climatology (for AMPI2).

Output variables are in 4 byte Grads format. Data size are 120MB and 2.4 GB per variable for 2D and 3D outputs, respectively (24GB per dataset).



Horizontal grid size (km)

- Satoh, M., T. Matsuno, H. Tomita, H. Miura, T. Nasuno and S. Iga, 2008: Nonhydrostatic Icosahedral Atmospheric Model (NICAM) for global cloud-resolving simulations, *J. Comput. Phys.*, 227, 3486-3514, DOI:10.1016/j.jcp.2007.02.006.
- Tomita, H., 2008: A stretched grid on a sphere by new grid transformation, *J. Meteor. Soc. Japan*, 86A, 107-119.