A Big Earth Data Platform for Three Poles

**The simulated meteorology data by using WRF model on the Tibetan Plateau and its surronding area (2004-2013)**

1、Description

This data set is output from WRF model. The data include ‘LU\_INDEX’ (land use category), ‘ZNU’(eta values on half (mass) levels), ‘ZNW’(eta values on full (w) levels)，’ZS’(depths of centers of soil layers), ‘DZS’ (thicknesses of soil layers), ‘VAR\_SSO’ (variance of subgrid-scale orography), ‘U’(x-wind component), ‘V’(y-wind component),’W’(z-wind component),’T’(perturbation potential temperature (theta-t0)), ‘Q2’ ('QV at 2 M), ‘T2’ (TEMP at 2 M), ‘TH2’ ('POT TEMP at 2 M), ‘PSFC’ (SFC pressure), ‘U10’ (U at 10 M), ‘V10’ (V at 10 M), ‘QVAPOR’ (Water vapor mixing ratio), ‘QLOUD’ (Cloud water mixing ratio),’QRAIN’ (Rain water mixing ratio), ‘QICE’ (Ice mixing ratio), ‘QSNOW’ (Snow mixing ratio), ‘SHDMAX’ (annual max veg fraction), ‘SHDMIN’ (annual min veg fraction), ‘SNOALB’ (annual max snow albedo in fraction), ‘TSLB’ (soil temperature), ‘SMOIS’ (soil moisture), ‘GRDFLX’ (ground heat flux), ‘LAI’ (Leaf area index),’ HGT’ (Terrain Height), ‘TSK’ (surface skin temperature), ‘SWDOWN’ (downward short wave flux at ground surface), ‘GLW’ (downward long wave flux at ground surface), ‘HFX’ (upward heat flux at the surface), ‘QFX’ (upward moisture flux at the surface), ‘LH’ (latent heat flux at the surface), ‘SNOWC’ (flag indicating snow coverage (1 for snow cover)), and so on.   
The data is in netCDF format with a spatial resolution of 10 km.

2、Keywords

Theme：Precipitation,Temperature,Atmospheric circulation,Rain,Boundary layer temperature,Humidity/Dryness  
Discipline：Atmosphere  
Places：Tibetan Plateau and its surrounding area  
Time：2004-2013

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3000.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：75.0 | - | east：110.0 |
| - | south：15.0 | - |

5、Time frame:2004-01-09 08:00:00+00:00--2014-01-08 08:00:00+00:00

6、Reference method

References to data:

CHEN Xuelong. The simulated meteorology data by using WRF model on the Tibetan Plateau and its surrounding area (2004-2013). A Big Earth Data Platform for Three Poles, 2020

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）  
Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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