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Zenodo DOI: https://doi.org/10.5281/zenodo.10276429

List of contents in the digital repository:

1) WRFDAV4.4.1_GRADIENT_OPERATOR.tar

The Weather Research and Forecasting model codes in plain text format which can be opened in any text readers. The model version is 4.4.1 and includes the tropospheric gradient operator added as an upgrade to the exsiting ZTD operator in WRF.

2) namelist_files_3dvar.tar.gz

These are the namelist files used for the 3DVAR data assimilation cycles and will give an understanding of the namelist additions incorporated in the upgraded version of WRF.

3) ob.ascii_data_4_assimilation.tar.gz

These are the observation files in the ascii format used for data assimilation. The data consists of the conventional data including the radiosondes and surface observations, and the GNSS ZTD and tropospheric gradient observations.

4) CONTROL_data_June_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month June 2021. Control run is conventional data assimilated run.

5) CONTROL_data_July_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month July 2021.

6) ZTD_data_June_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month June 2021. ZTD run is conventional data + ZTD data assimilated run.

7) ZTD_data_July_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month July 2021.

8) ZTDGRA_data_June_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month June 2021. ZTDGRA run is conventional data + ZTD + gradient data assimilated run.

9) ZTDGRA_data_July_2021.tar.gz

The DA simulation 6-hourly wrfouts for the month July 2021.