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The Effect That the Data Assimilation of Qinghai-Tibet Plateau Has on a Precipitation Forecast

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Abstract : Qinghai-Tibet Plateau has an important influence on the precipitation of its lower reaches. Data from remote sensing has itself advantage and numerical prediction model which assimilates RS data will be better than other. We got the assimilation data of MHS and terrestrial and sounding from GSI, and introduced the result into WRF, then got the result of RH and precipitation forecast. We found that assimilating MHS and terrestrial and sounding made the forecast on precipitation, area and the center of the precipitation more accurate by comparing the result of 1h,6h,12h, and 24h. Analyzing the difference of the initial field, we knew that the data assimilating about Qinghai-Tibet Plateau influence its lower reaches forecast by affecting on initial temperature and RH.

Keywords : Qinghai-Tibet Plateau, precipitation, data assimilation, GSI
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