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Mesoscale Structure of the Snow Storm in Zhejiang on 29 January 2008 by Dual-radar

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The freezing rain and snow storm during January and February 2008 affected the South China intensively. Due to the effect of the cold-dry air from north and warm-moist air form south, there is a snow storm over the north of Zhejiang province on 29 January 2008. Dual-Doppler radar 3D wind retrieval technology is used to investigate the 3D dynamic structure of the snowband. In the mature phase of the snow storm, the strong radar echo is distributed on the low level from southwest to northeast. The southwest flow is found at the low level, and west flow at the middle level. The horizontal wind speed increases with height. Some convergence centers are located in the low level of the snowband more than -0.5$\times$10-3/s. The divergence area is distributed on the both side of the snowband. In the vertical cross section, updraft and downdraft are found alternately. The 3D structure evolution is studied in detail. The relationship between the 3D wind field and the snow storm are also discussed.

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