

CORRESPONDENCE**Reply**

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In reply to the comments of Professor Miller on our paper, we offer the following:

1. The isobars were drawn for the 10,000 ft pressures since any assumption of a relationship between the field of motion and the pressure field is also an assumption regarding the accelerational field. It is believed that the present network of radiosonde stations makes it possible to depict the pressure field within reasonable limits of error. The pressure reports were checked in accordance with standard practice. It is conceded that the mean value of the geostrophic deviations obtained from a limited amount of data may not be representative. However, this result in combination with the data on the horizontal divergence, vertical velocities, and non-geostrophic temperature changes presented in our paper, confirm our general conclusion that accelerational fields, significantly larger than the acceleration of the gradient wind, occur regularly in the atmosphere.

2. It is believed that the role played by the latent heat of condensation is substantially the same in the two models under discussion. In both cases the warm core favors a slightly lower surface pressure than would otherwise exist. The numerical values of the maximum possible pressure change resulting from the warm core, as presented in our paper, are applicable to both models.