

[JGR: Atmospheres]

Supporting Information for

[The Remote Role of North-American Mesoscale Convective Systems on the Forecast of a Rossby Wave Packet: A Multi-Model Ensemble Case-study]

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Introduction

[The supporting information includes an image file that is referenced in the main manuscript text (Figure S1):

Delete all unused file types below. Copy/paste for multiples of each file type as needed.

Text S1.

The figure is used to support the results from Figure 7 in the manuscript. The relative vorticity error is plotted for each forecasting model. The results do not change significantly between each forecasting model aside from minor differences in the magnitude of the relative vorticity. One key difference that is noted but not engaged with further is that maxima in the relative vorticity difference between the best and worst performing members (defined as the ensemble members that produced the lowest versus highest 20th percentile of wave amplitude error) partially develop poleward of the 2 PVU line in the JMA and KMA models. In contrast, the NCEP and ECMWF differences exclusively develop equatorward of the 2 PVU line. These spatial relative vorticity differences may have contributed to the differences observed in the ensemble sensitivity analysis at later times. However, these results do not significantly change any of the interpretations of the other results. Hence, we have decided to include this figure as a supplement.

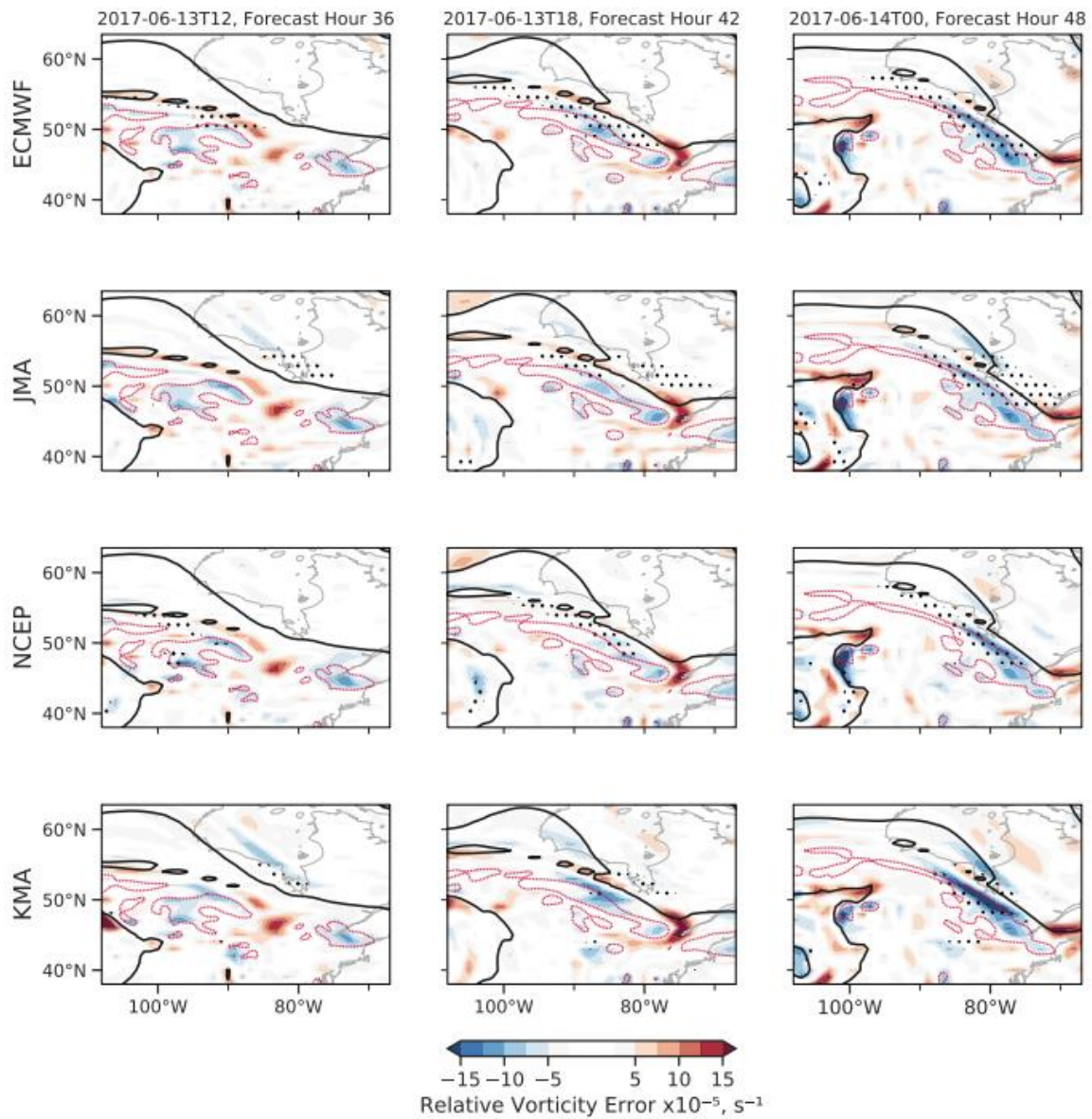


Figure S1. As with Figure 7 but the relative vorticity error and difference is plotted for each individual forecasting model.