Effects of Ensemble Size

February 14, 2012

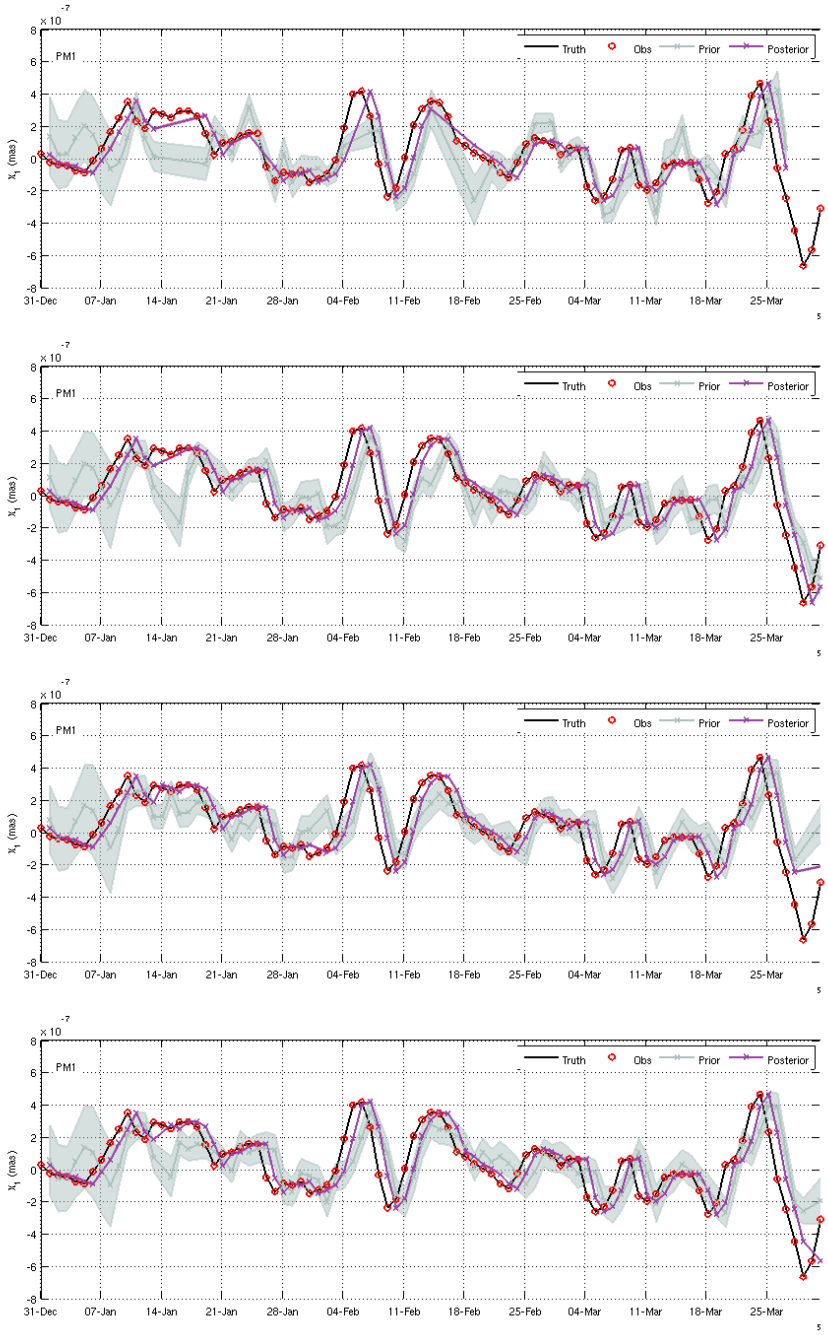

Figure 1: Comparison of true, observed, and assimilated χ_1 for ensemble sizes ranging from $N = 16$ (top) to $N = 96$ (bottom).

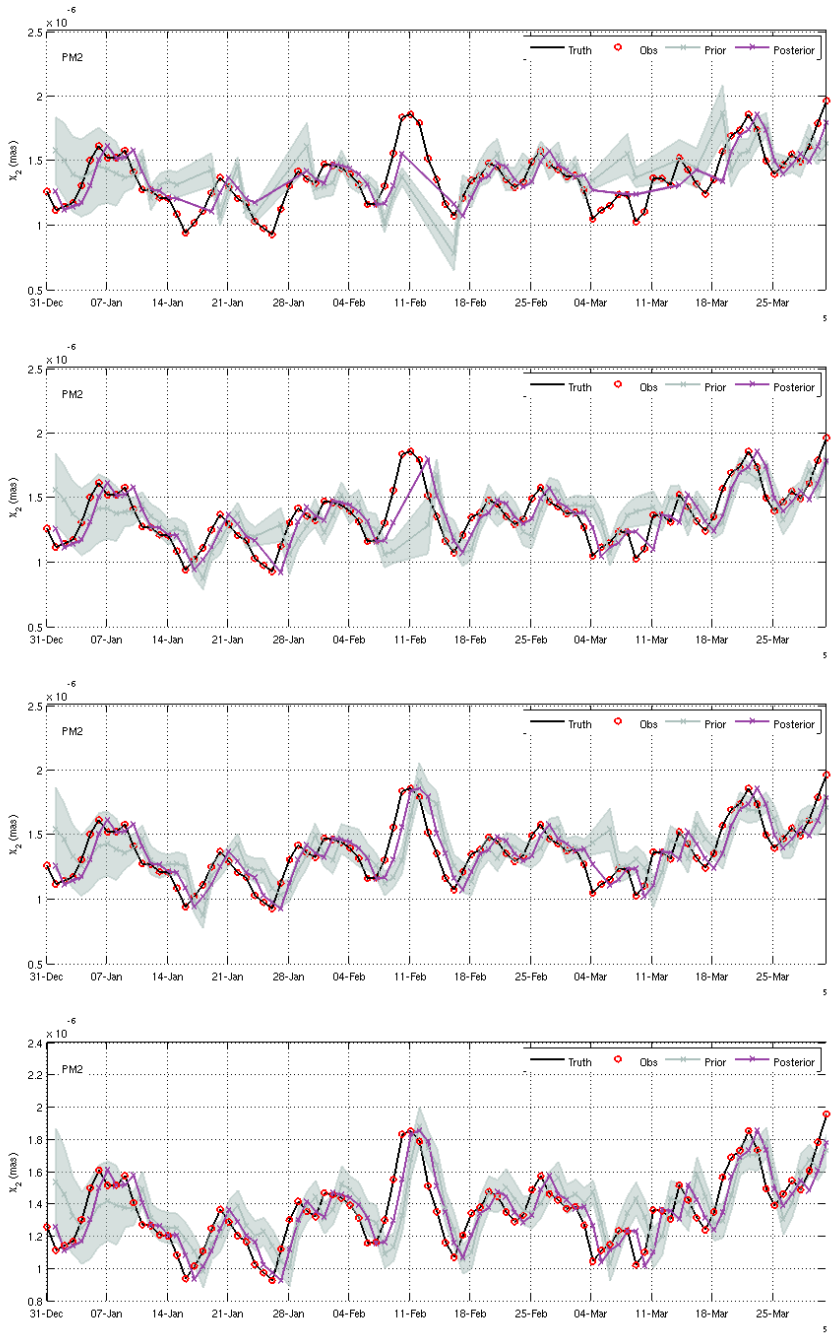

Figure 2: Comparison of true, observed, and assimilated χ_2 for ensemble sizes ranging from $N = 16$ (top) to $N = 96$ (bottom).

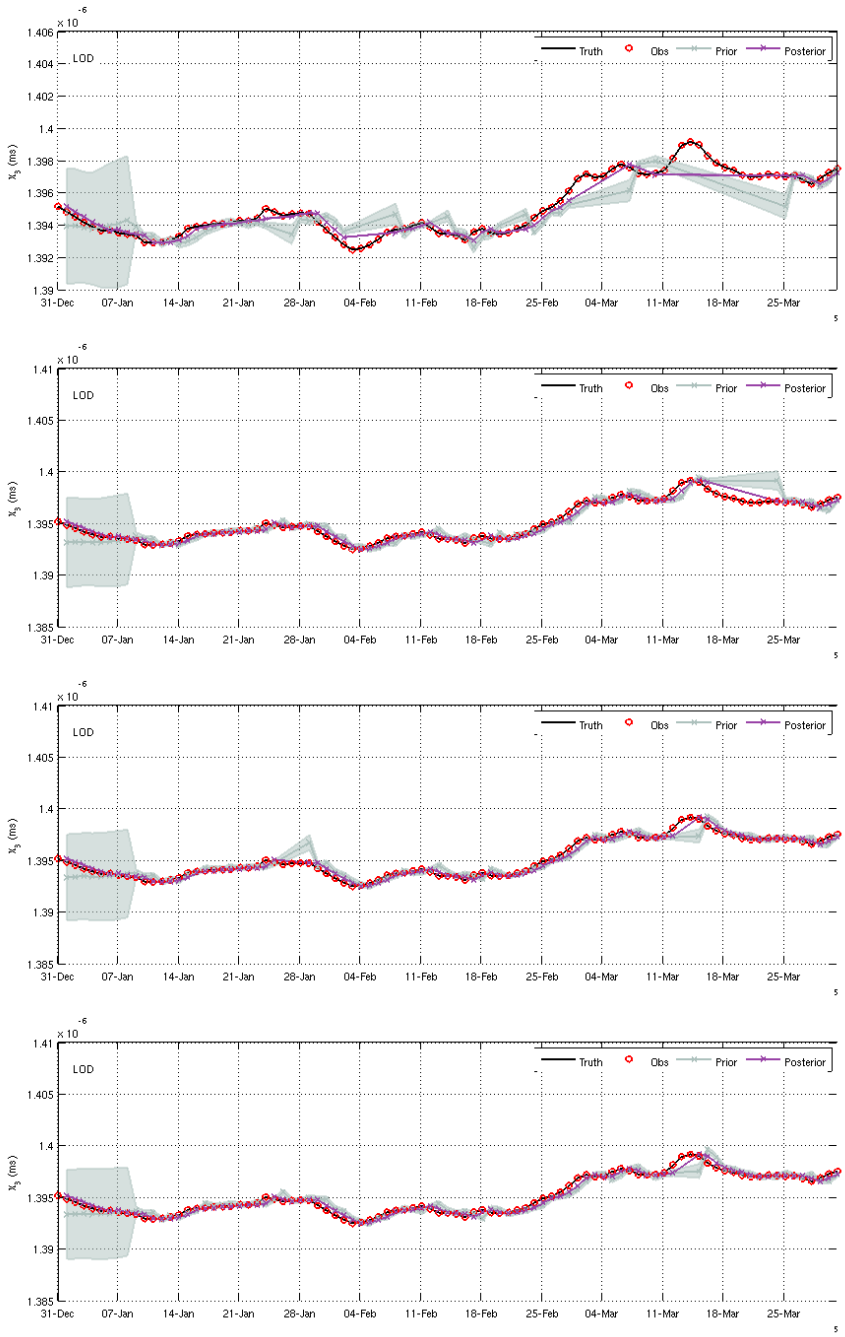

Figure 3: Comparison of true, observed, and assimilated χ_3 for ensemble sizes ranging from $N = 16$ (top) to $N = 96$ (bottom).

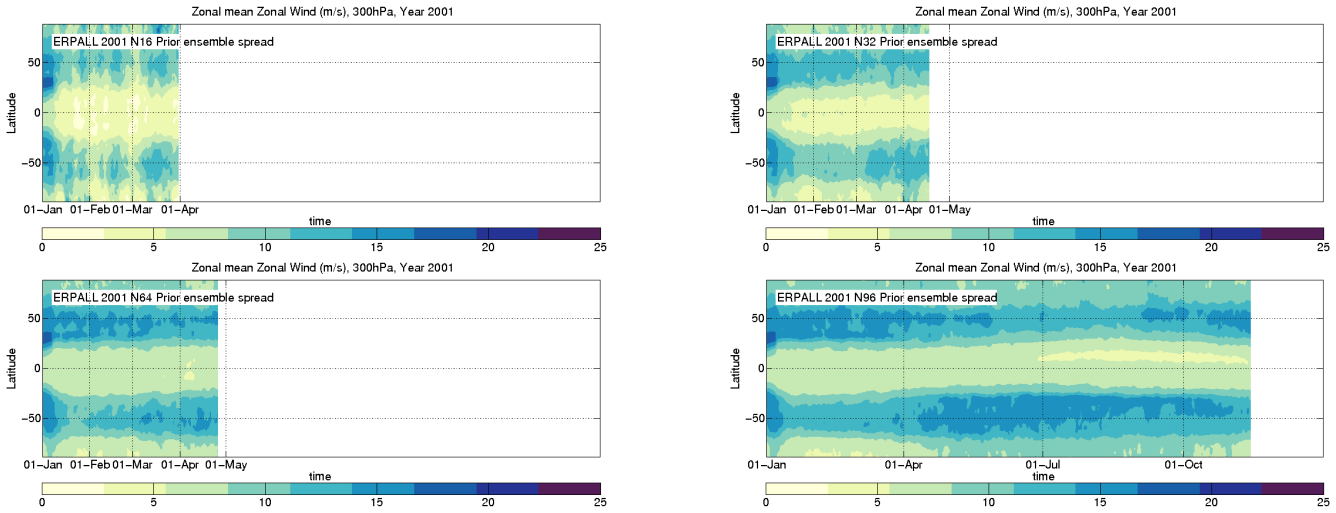

Figure 4: Prior ensemble spread in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

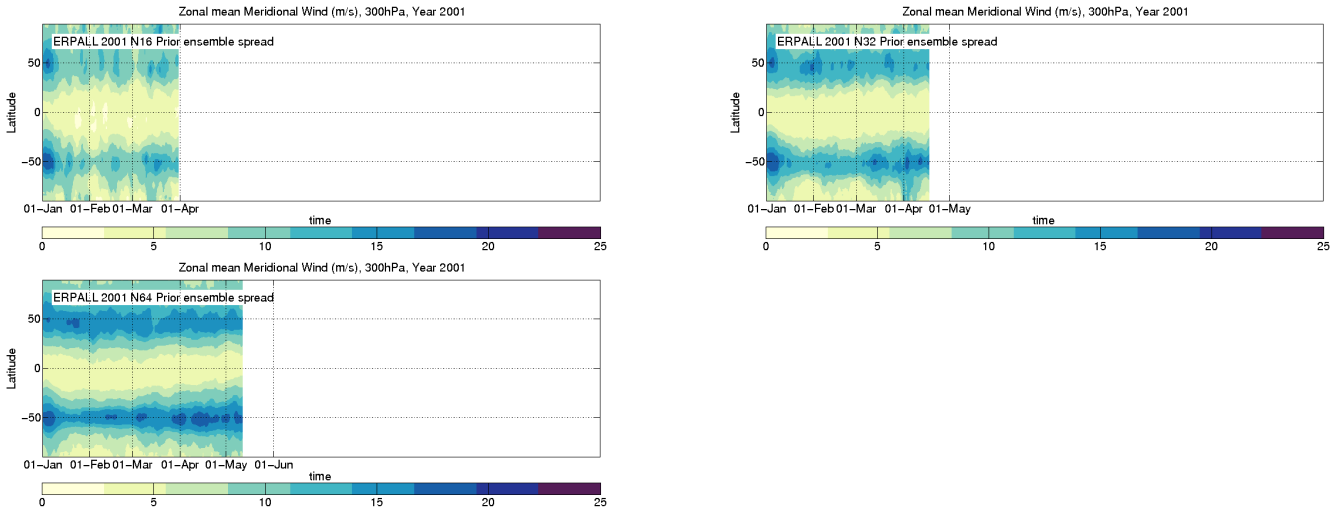

Figure 5: Prior ensemble spread in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

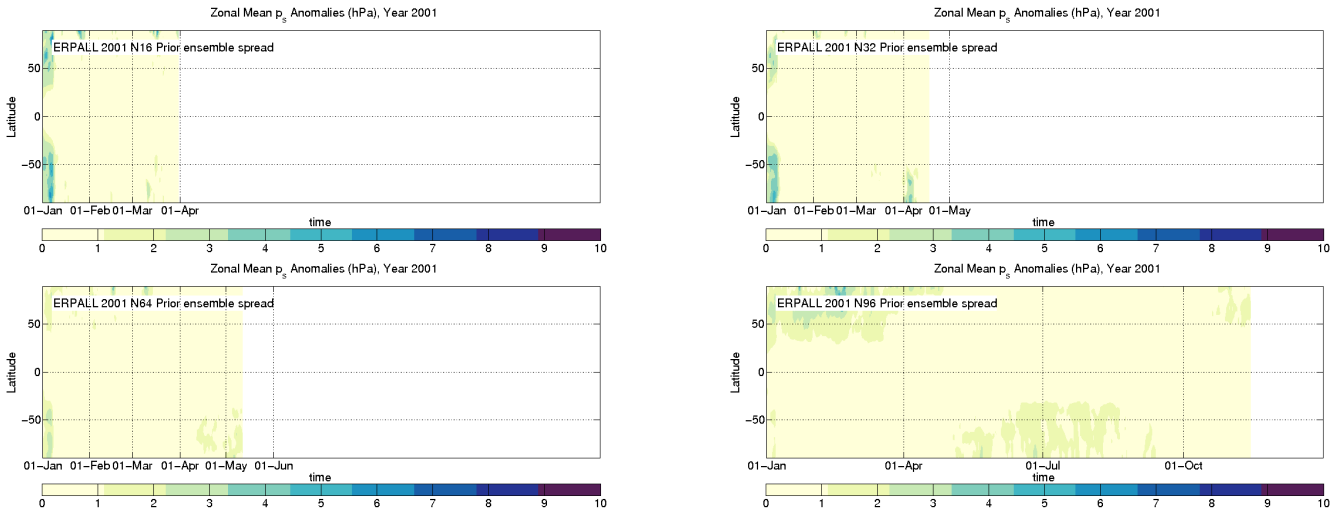

Figure 6: Prior ensemble spread in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

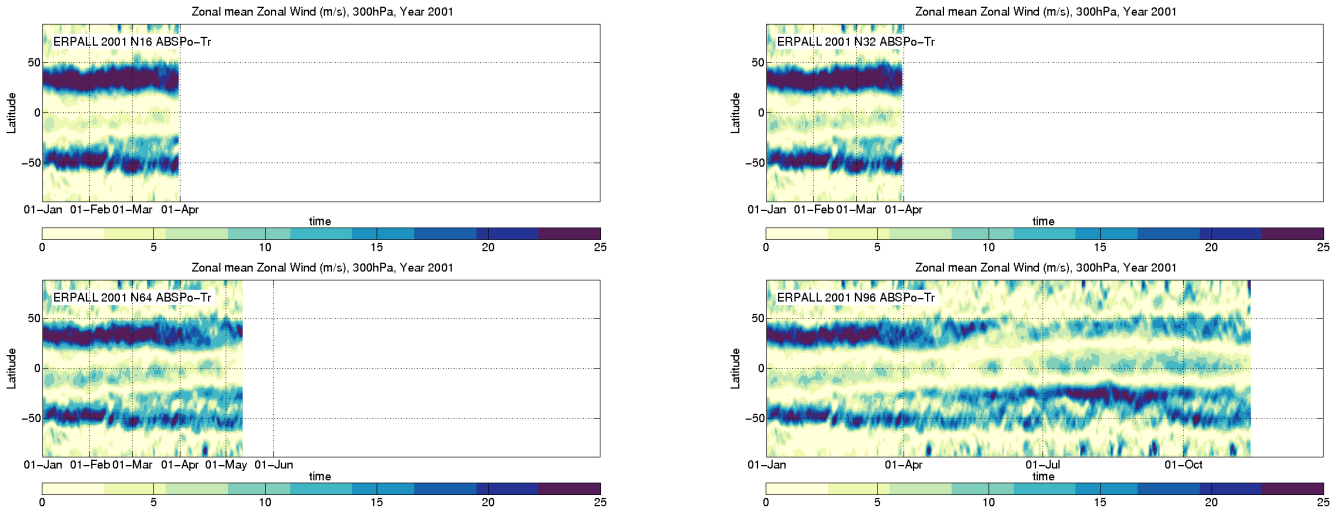

Figure 7: Absolute distance from the analysis to the truth, in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

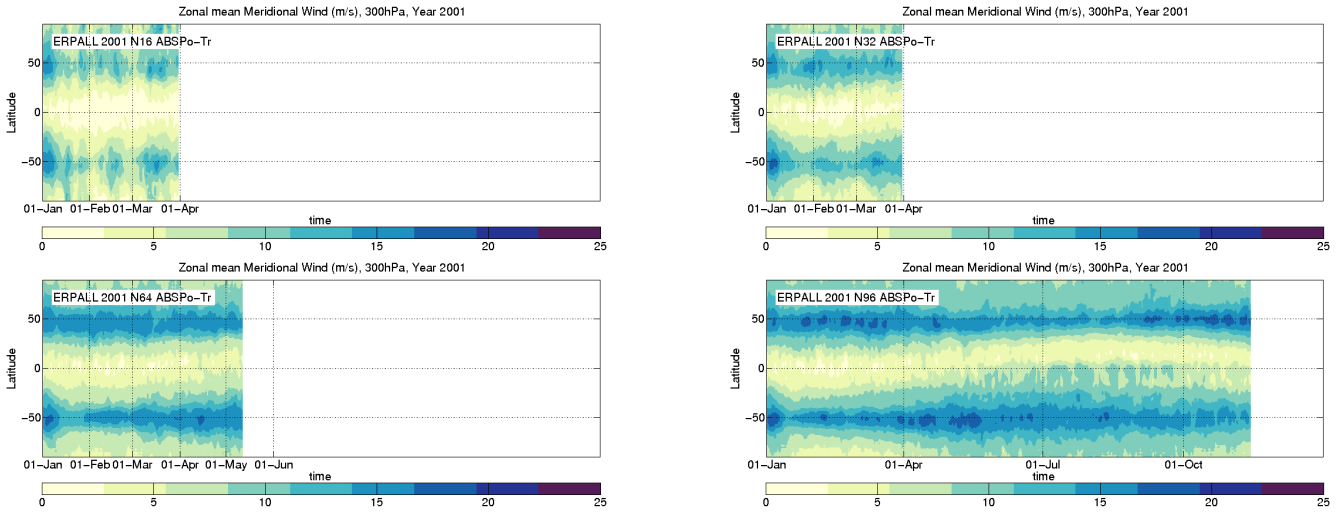

Figure 8: Absolute distance from the analysis to the truth, in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

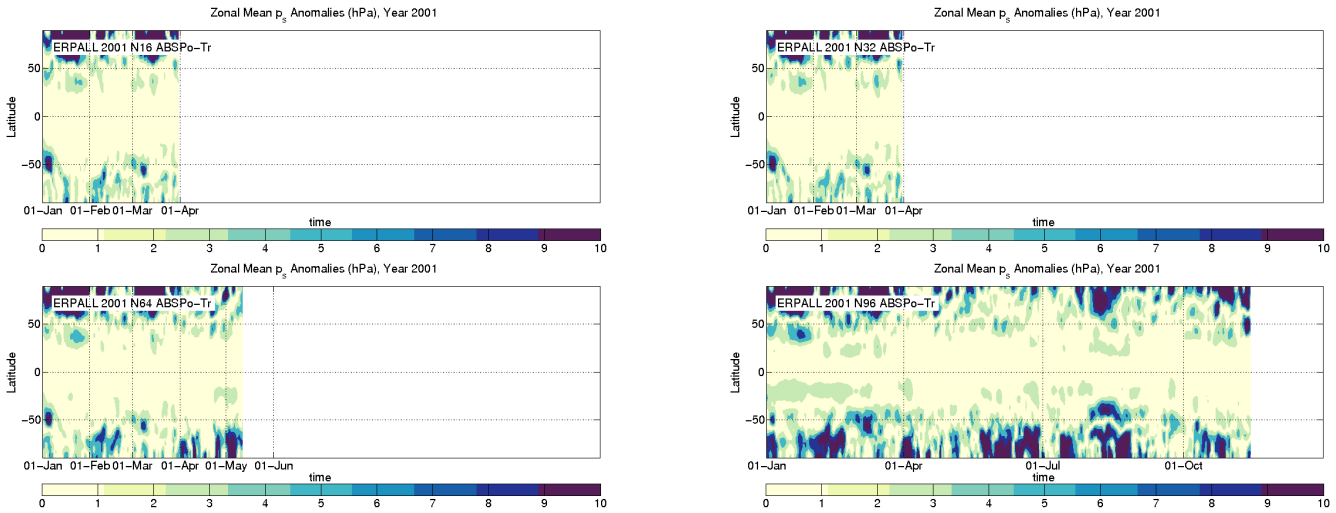

Figure 9: Absolute distance from the analysis to the truth, in 300hPa zonal mean zonal wind, as a function of latitude and time, comparing ensemble sizes, from $N = 16$ (top) to $N = 96$ (bottom).

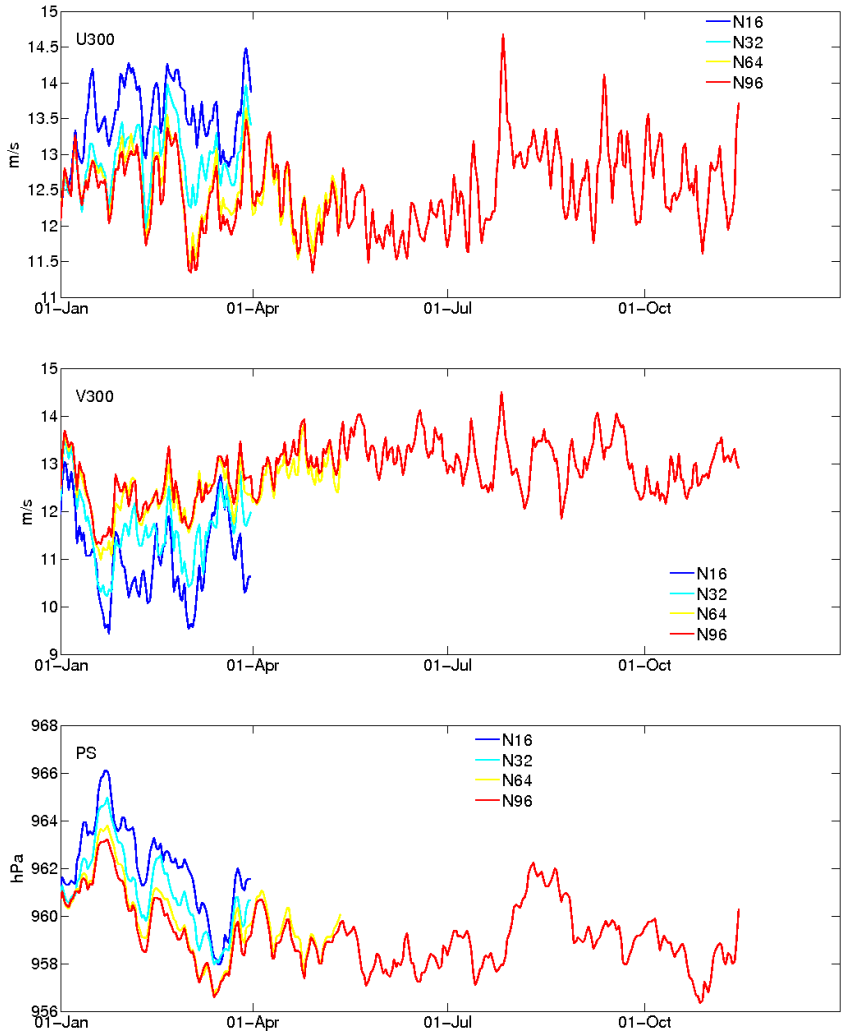

Figure 10: Globally-averaged absolute distance from the analysis to the truth, as a function of time, comparing ensemble sizes.