

# Ozone and Carbon Monoxide over India during the Summer Monsoon: Regional Emissions and Transport

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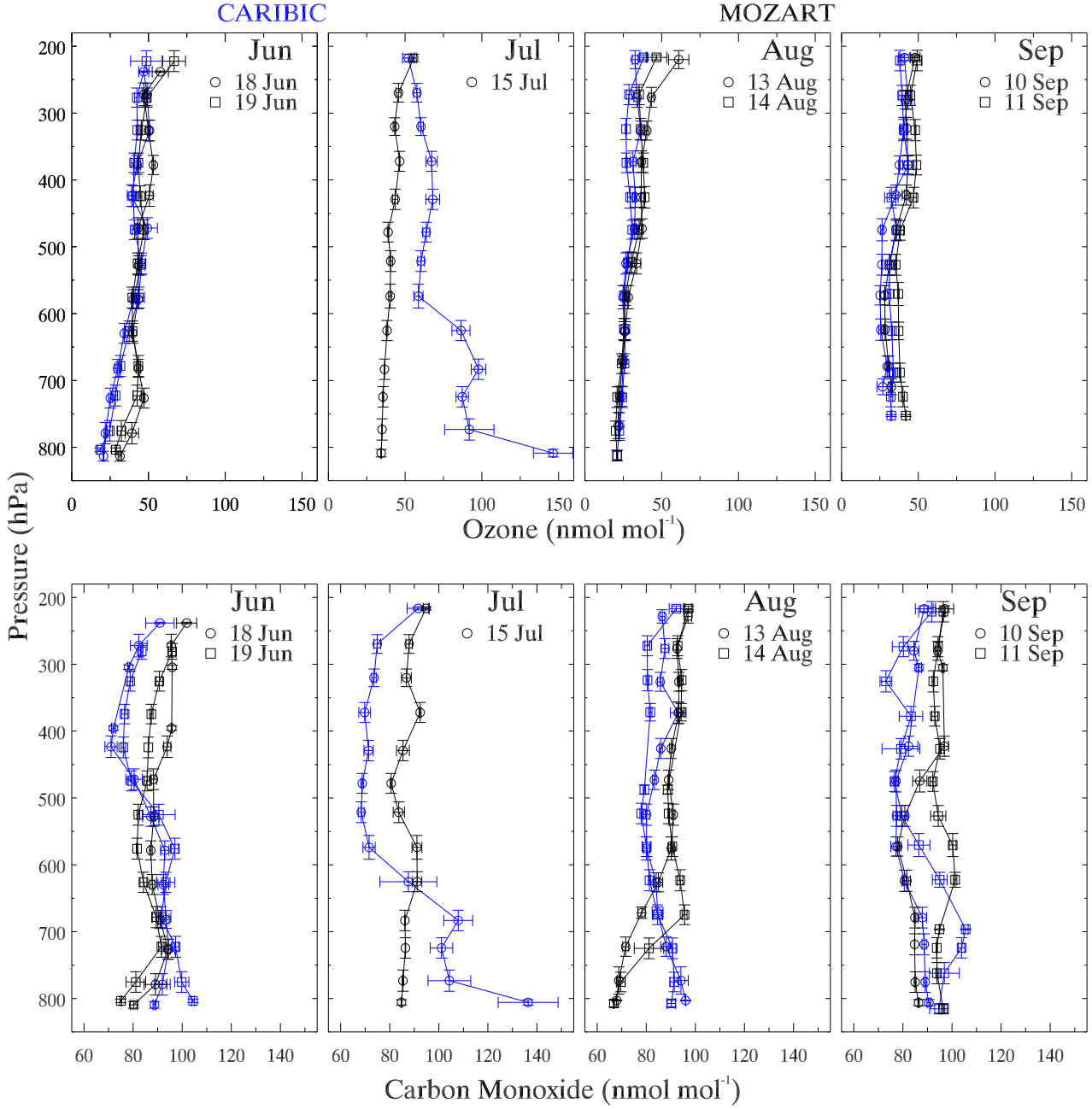


Figure 1: Comparison of ozone and carbon monoxide profiles from CARIBIC observations with MOZART/GEOS5 data during June, July, August and September 2008. MOZART data has been interpolated along the CARIBIC flight tracks. Only data collected during the aircraft descent is shown here.

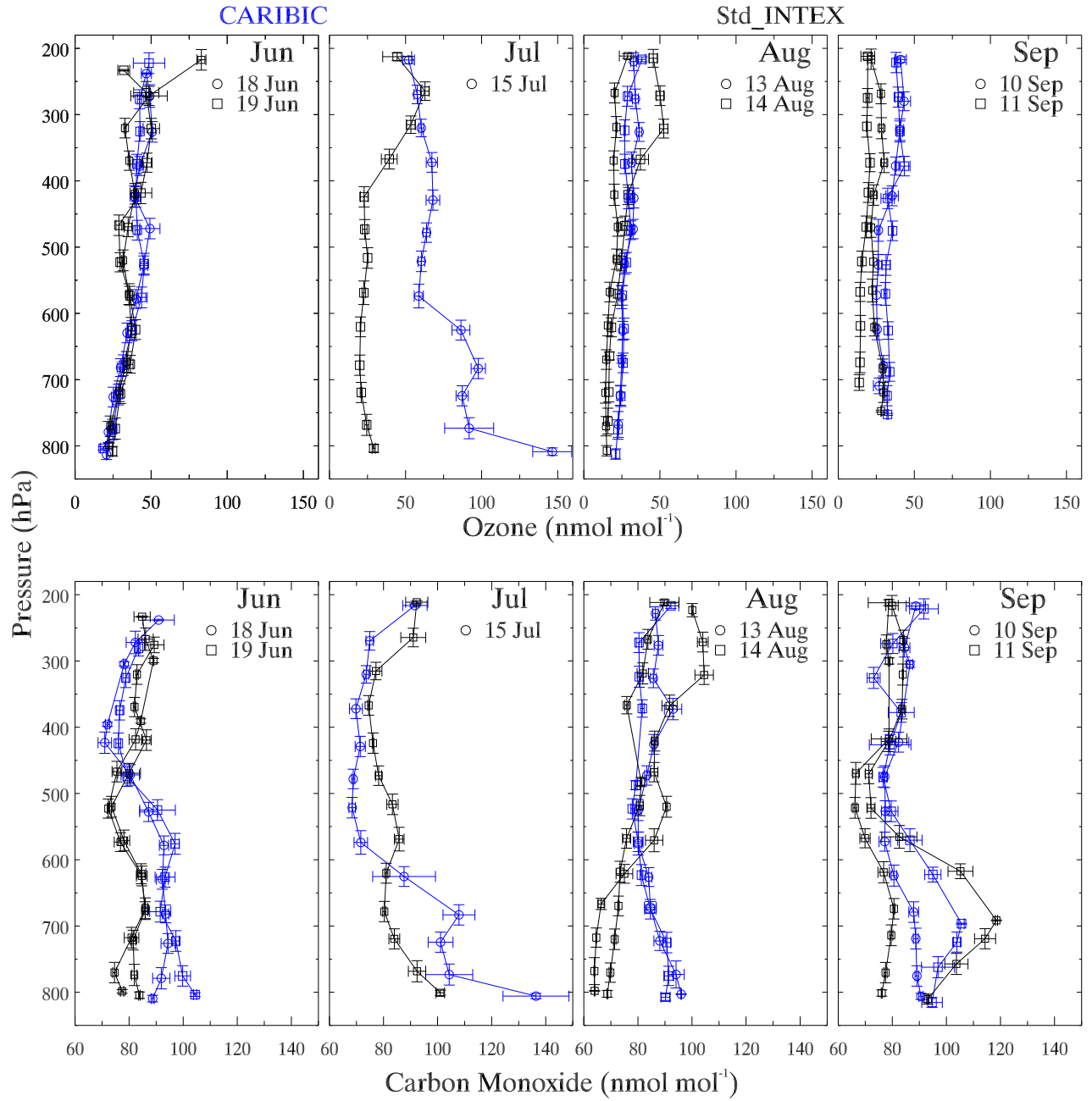


Figure 2: Comparison of ozone and carbon monoxide profiles from CARIBIC observations with WRF-Chem simulations driven by INTEX-B emission inventory.

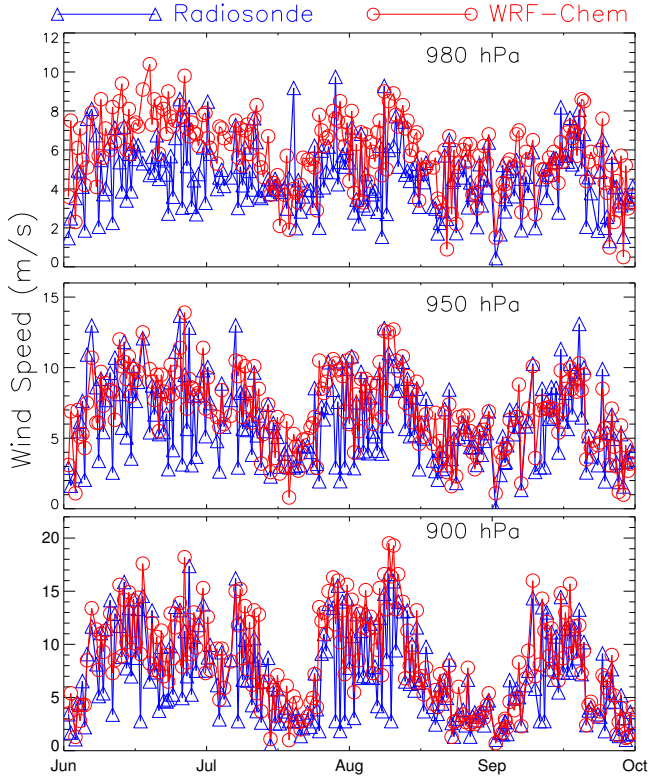


Figure 3: Comparison of WRF-Chem (std) simulated wind speed with radiosonde observations over Chennai.

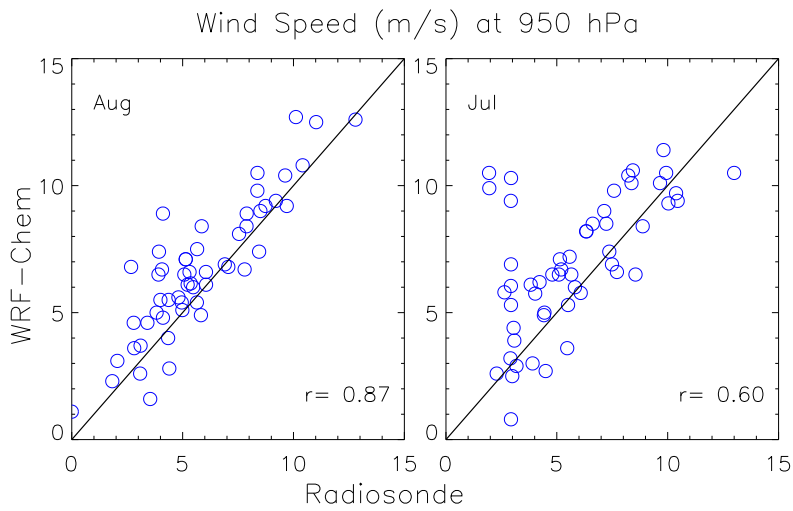


Figure 4: Scatter plot of wind speed (m/s) between WRF-Chem (std) simulations and radiosonde observations over Chennai.

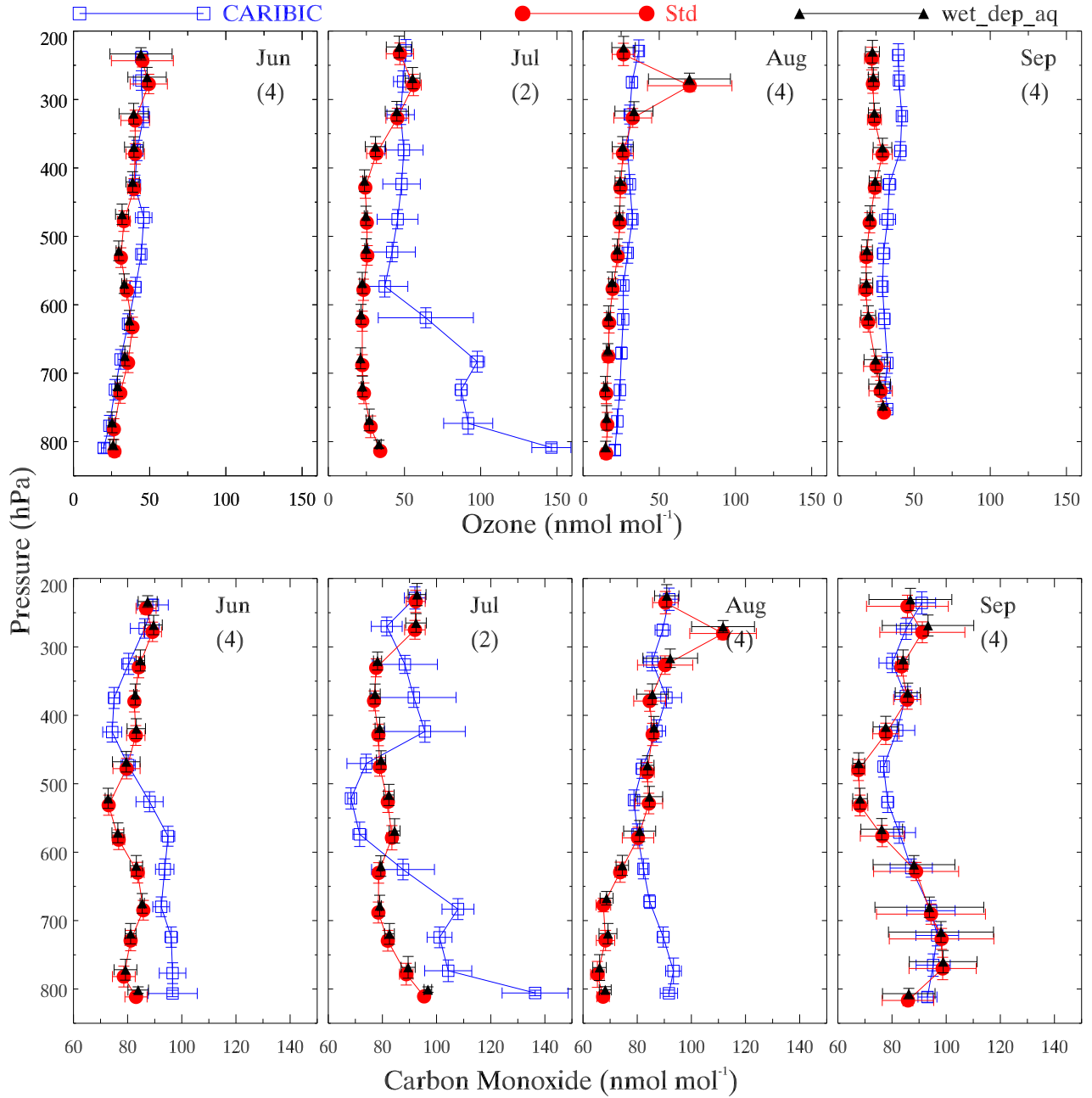


Figure 5: Comparison of monthly average ozone and carbon monoxide profiles from WRF-Chem simulations with the CARIBIC observations during June, July, August and September 2008. Numbers in brackets denote the number of observational profiles in the respective month. Model output has been spatially and temporally interpolated along the CARIBIC flight tracks. wet\_dep\_aq simulation includes effect of wet scavenging with aqueous phase reactions available with Lin et al. microphysics.