

1 **Supplementary Figures for**  
2 **“Carbon balance of South Asia constrained by**  
3 **passenger aircraft CO<sub>2</sub> measurements”**

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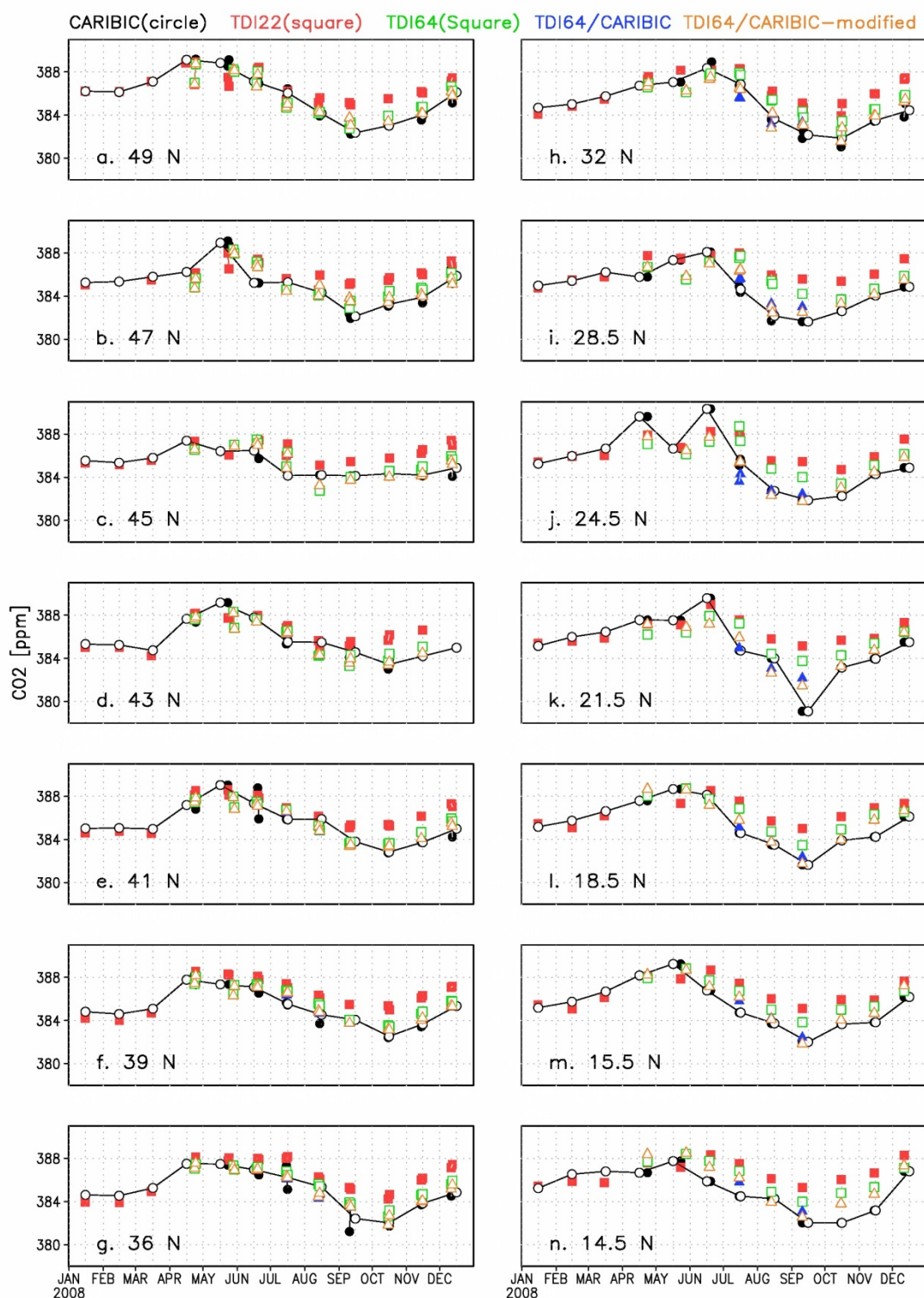
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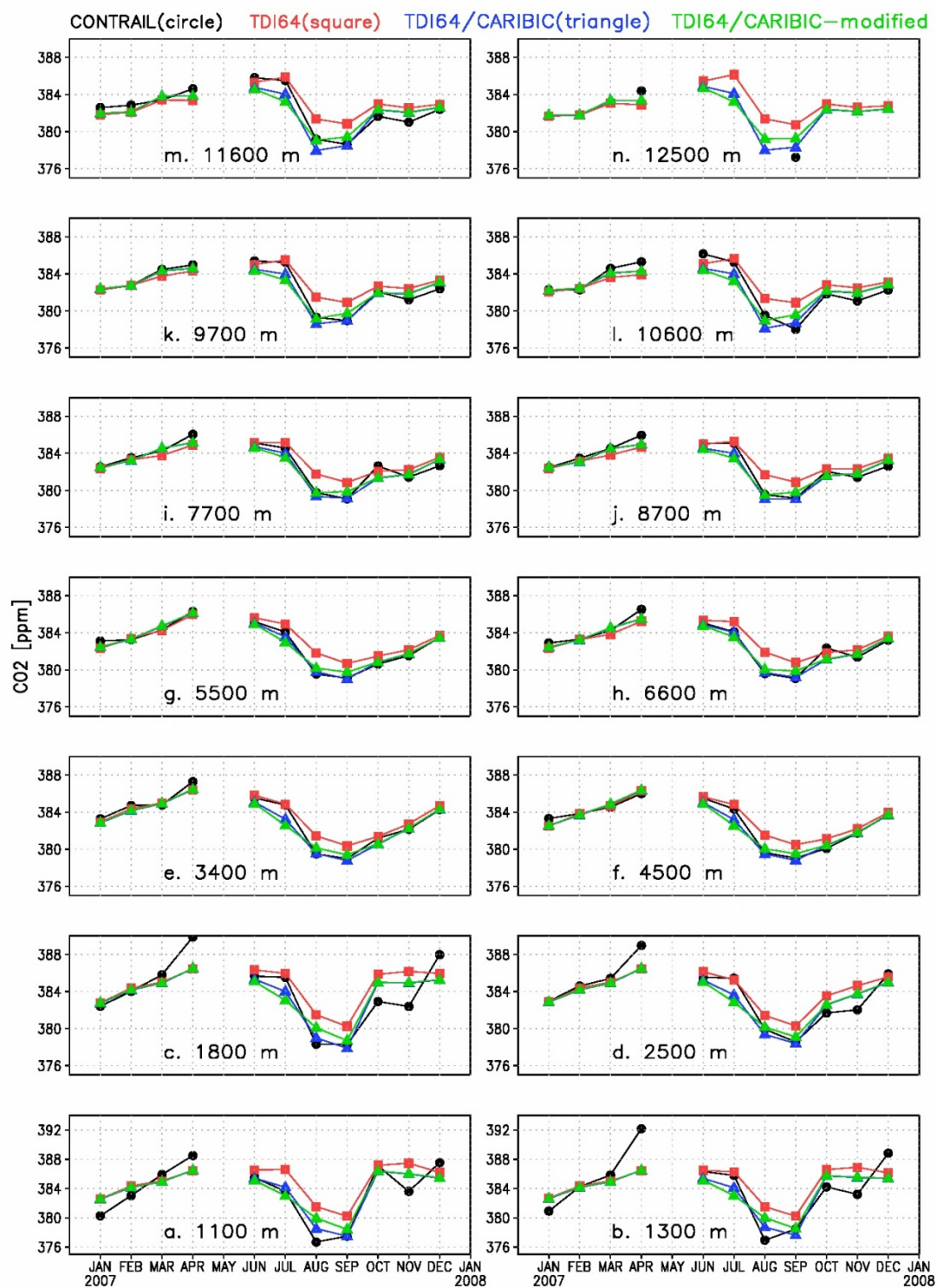
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3 **Supplementary Figure 1:** CO<sub>2</sub> seasonal cycles as seen from CARIBIC (solid circles)  
 4 and comparison with ACTM simulations for TDI22 and 3 cases of TDI64 fluxes. The  
 5 whole year seasonal cycles are prepared by combining CARIBIC data with TDI22  
 6 results and linear interpolation are shown as solid line/open circles, which is required  
 7 for ingesting the CARIBIC data into the inverse model. The differences between  
 8 forward simulations using TDI64/CARIBIC and TDI64/CARIBIC-modified are  
 9 minimal, except for July in the latitude range of 21.5–32° N.



**Supplemental figure 2:** Comparisons of CO<sub>2</sub> seasonal cycles measured by CONTRAIL and ACTM model simulations at different altitudes over Delhi. These plots are consistent with the CONTRAIL vertical profile figures (Figs. 4a & 4b) and associated text.