Figure S1: Scatter plot of GEM and TGM measurements from intercontinental CARIBIC flights. On the outward flight TGM and on the return flight GEM was measured.

Figure S2: Relative inter-hemispheric transects for 19 flights from Munich to Cape Town. TM (left side) was measured on the outward and GEM (right side) on return flights (Slemr et al., 2014). Error bars indicate the 66% quantile range of all observations for a given latitude. Plot in the left column are for TGM and in the right side for GEM.

Figure S3: Average inter-hemispheric transects for 19 flights from Munich to Cape Town. TM (left side) was measured on the outward and GEM (right side) on return flights (Slemr et al., 2014). Error bars indicate the 66% quantile range of all observations for a given latitude.