## **Updated Figure 5:**

The  $T_{MSIS}$  temperatures have been updated with altitude sampling as a function of both OZA and SZA instead of just SZA like initially performed. This updated sampling results in cooler  $T_{MSIS}$  temperatures such that there is now the best agreement between  $T_{ci}^{G}$  and  $T_{DISK}$ . The interpretation of Figure 5 is updated in the manuscript. This update does not affect the major conclusions in the manuscript.

