



Corrigendum to

"Comparison between MODIS and AIRS/AMSU satellite-derived surface skin temperatures" published in Atmos. Meas. Tech., 6, 445–455, 2013

Y.-R. Lee^{1,2}, J.-M. Yoo¹, M.-J. Jeong³, Y.-I. Won⁴, T. Hearty⁴, and D.-B. Shin²

¹Dept. of Science Education, Ewha Womans University, Seoul, Republic of Korea

²Dept. of Atmospheric Sciences, Yonsei University, Seoul, Republic of Korea

³Dept. of Atmospheric and Environmental Sciences, Gangneung-Wonju National University, Gangneung, Republic of Korea ⁴Wyle ST&E, NASA/GSFC, Maryland, USA

Correspondence to: J.-M. Yoo (yjm@ewha.ac.kr)

The authors have found several discrepancies in their paper. In the text some numbers need to be corrected, as well as data from Appendix Table A1 and the two Appendix Figures A2 and A3.

In the Abstract the sentence "Meanwhile, the MODIS ice surface temperature product (MYD29E1D) over the ocean is in better agreement with AIRS/AMSU temperatures, showing a root mean square error of 3.7–3.9 K." should read "Meanwhile, the MODIS ice surface temperature product (MYD29E1D) over the ocean is in better agreement with AIRS/AMSU temperatures, showing a root mean square error of 2.1–2.6 K."

On page 452, in the first column several numbers are incorrect. In the third paragraph please find the following corrections: the sentence "The comparison shows a bias by 0.180 K (MODIS minus AIRS/AMSU) over the region northward of 35° N, and by 0.027 K over the region southward of 35° S (Table A1)." should read "The comparison shows a bias by 0.147 K (MODIS minus AIRS/AMSU) over the region northward of 35° N, and by 0.533 K over the region southward of 35° S (Table A1)." Also the sentence "The RMSE is in the range of 3.7–3.9 K (Table A1)." should read "The RMSE is in the range of 2.1–2.6 K (Table A1)."

In the fourth paragraph please find the following corrections: the sentence "The correlations over these regions are 0.94–0.95 (see also Table A1)." should read "The correlations over these regions are 0.98–0.99 (see also Table A1)." And the sentence "Overall, although the difference between MODIS IST and AIRS/AMSU surface skin temperature is smaller than the difference between MODIS SST and AIRS/AMSU surface skin temperature, discrepancies still occur at 60–65° N and 75–80° S of high latitude regions (Fig. A2c–d)." should read "Overall, although the difference between MODIS IST and AIRS/AMSU surface skin temperature is smaller than the difference between MODIS SST and AIRS/AMSU surface skin temperature is smaller than the difference between MODIS SST and AIRS/AMSU surface skin temperature is smaller than the difference between MODIS SST and AIRS/AMSU surface skin temperature is smaller than the difference between MODIS SST and AIRS/AMSU surface skin temperature, discrepancies still occur at 60–65° N and 55–60° S of high latitude regions (Fig. A2c–d)."

Please find the new updated version for the Appendix Table A1 and for the Appendix Figs. A2 and A3 on the next page.

 Table A1. Comparison of 9-day composite T_{skin} (MODIS_ICE)
and T_{skin} (AIRS/AMSU). Bias: MODIS minus AIRS/AMSU, r: correlation coefficient, RMSE: root mean square error.

MODIS vs. AIRS/AMSU	Bias (K)	r	RMSE (K)
Northern Hemisphere (northward of 35° N) Southern Hemisphere	0.147	0.990	2.085
(southward of 35° S)	0.533	0.976	2.596

a) AIRS/AMSU (1°×1°) b) AIRS/AMSU (1°×1°) c) T_{skin}(MODIS_ICE) minus T_{skin}(AIRS/AMSU)





d) T_{skin}(MODIS_ICE) minus T_{skin}(AIRS/AMSU)



Fig. A2. 9-day composite surface skin temperature (K) of AIRS/AMSU over the (a) Northern Hemisphere during the days 106-114, 2003, and (b) Southern Hemisphere during the days 258–266, 2003, (c) and (d) the difference between T_{skin} (MODIS_ICE) and T_{skin} (AIRS/AMSU).



Fig. A3. Scatter diagrams for the 9-day composite of T_{skin} (MODIS_ICE) versus T_{skin} (AIRS/AMSU) over the (a) Northern Hemisphere during the days 106-114, 2003, and (b) Southern Hemisphere during the days 258-266, 2003. The values of AIRS/AMSU and MODIS have been compared to each other in a $1^{\circ} \times 1^{\circ}$ grid box.