



Report from KMA

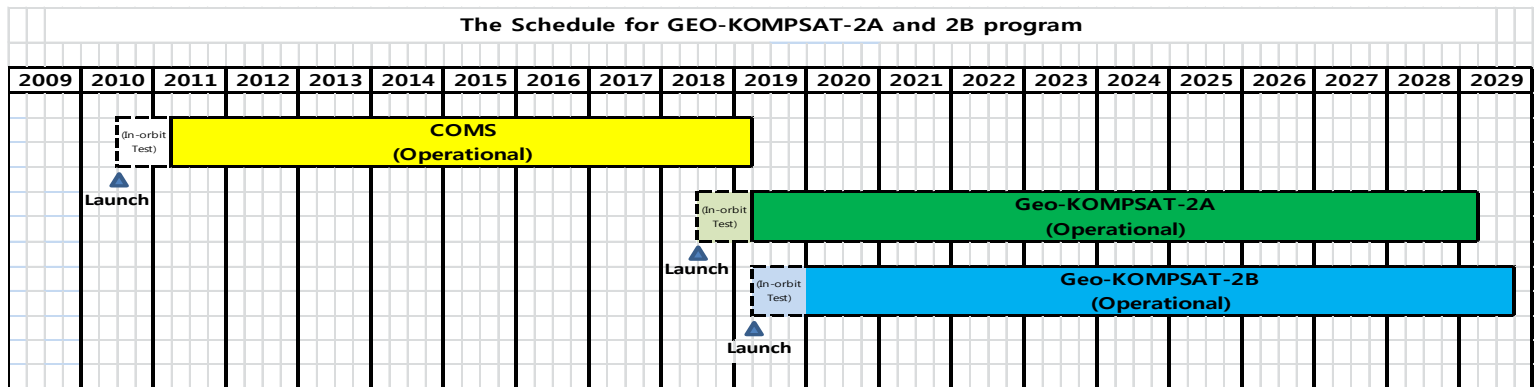
16th GSICS Executive Panel, Boulder, 15-16 May 2015

Dohyeong Kim
(National Meteorological Satellite Center)

Agency update (maximum one slide)



- Overall satellite planning
 - GEO-KOMPSAT-2A is planning to launch in May 2018
 - LEO (MW/IR sounder) : plan (~2022)



- Other major events affecting the agency or its participation in GSICS
 - H8 data release, and GSICS plan of GEO-LEO/VISNIR calibration for preparation of GK2A

Participation in EP, GDWG, GRWG (only for GSICS Members)



- Points of contacts/meeting participants:
 - EP : Dohyeong Kim
 - GRWG: Hyesook Lee/Dohyeong Kim/Taehyoung Oh
 - GDWG: Sung-Chul Jung
- Main contribution to GDWG actions
 - Operation of website (<http://nmsc.kma.go.kr/html/homepage/en/gsics/gsicsMain.do>)
- Main contribution to GRWG actions
 - Join the demonstration mode of GEO-LEO calibration with IASI (AIRS)
 - Visible channel calibration using DCC and Moon
 - Contribution to SCOPE-CM applying GSICS correction to SST/surface insolation
- Comments, feedback
 - Prepare to submit COMS-IASI to GPPA as demonstration product
 - Share COMS lunar data under GLOD policy
 - Assess the impact of MBCC on the data in collaboration with NOAA using COMS data before MBCC

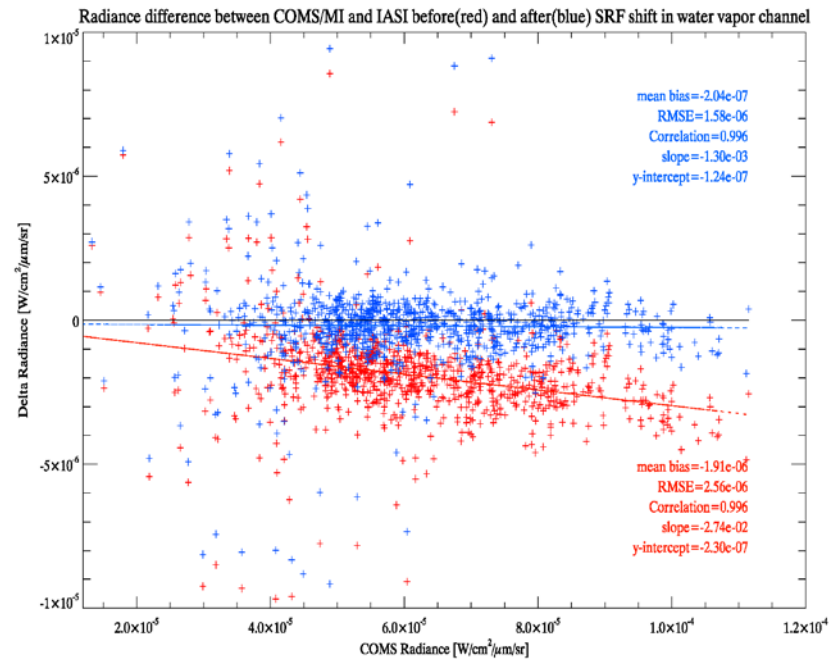
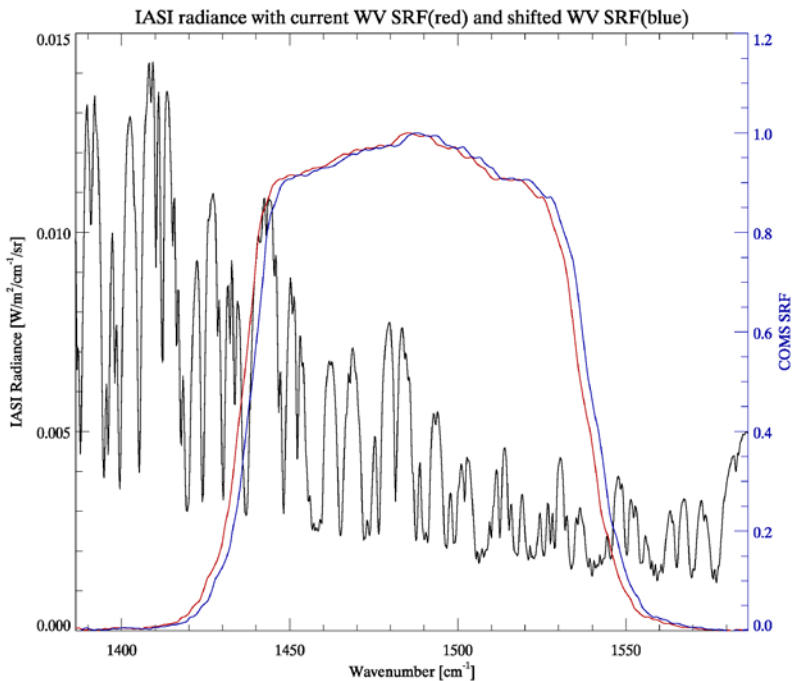
Current and prospective GSICS Products

Product	Status	Comments	
GEO-LEO- IR	Demo	Prepare to submit to GPPA AIRS and IASI-B : almost finished In development using CrIS data	- - 2015
GEO-LEO-VISNIR	In development	Moon : GIRO DCC : SNU and in collaboration with NASA Desert and cloud	- 2015 website

Highlights of KMA calibration activities(1/2)

Cold Bias Correction in Water Vapor Channel

The radiance difference between COMS/MI and IASI as a function of the COMS/MI radiance for the data obtained **before (red)** and **after (blue)** the **SRF shifts**



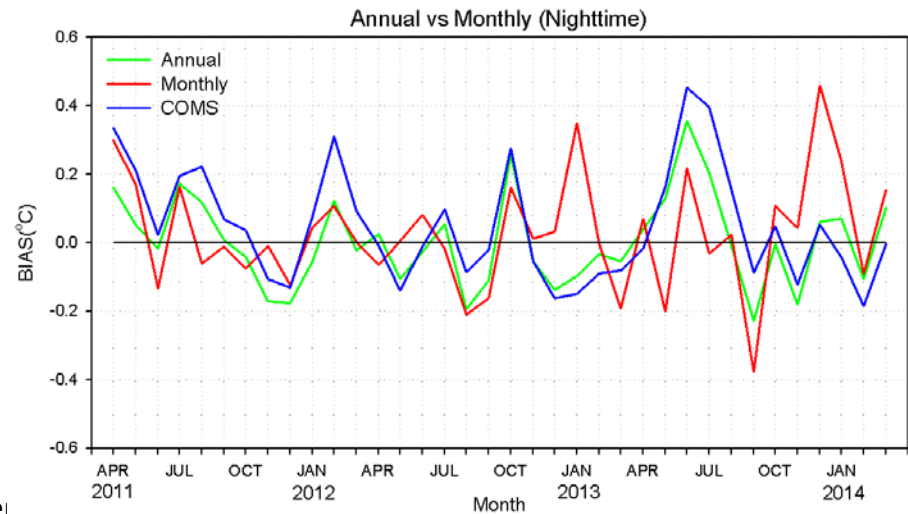
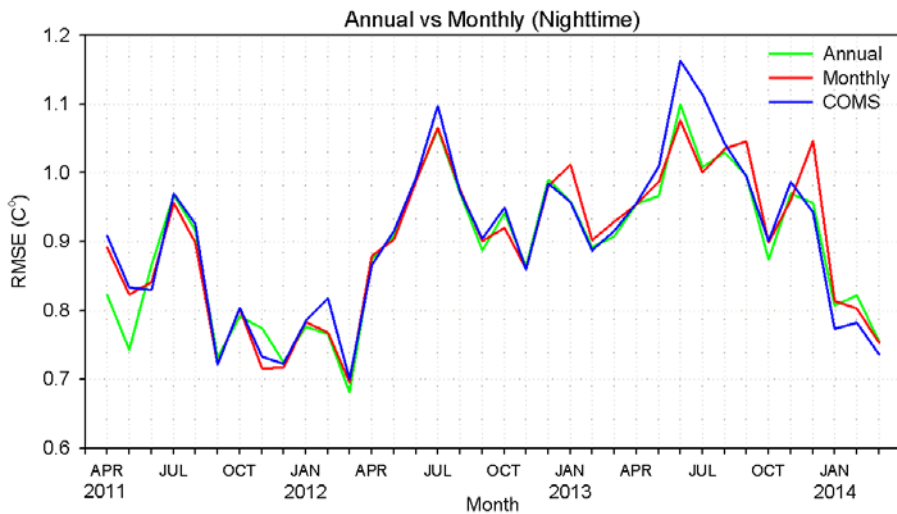
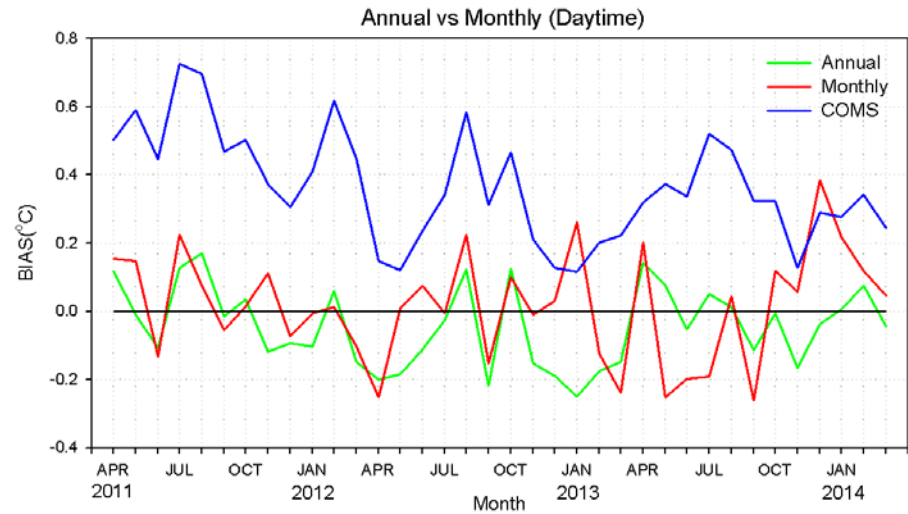
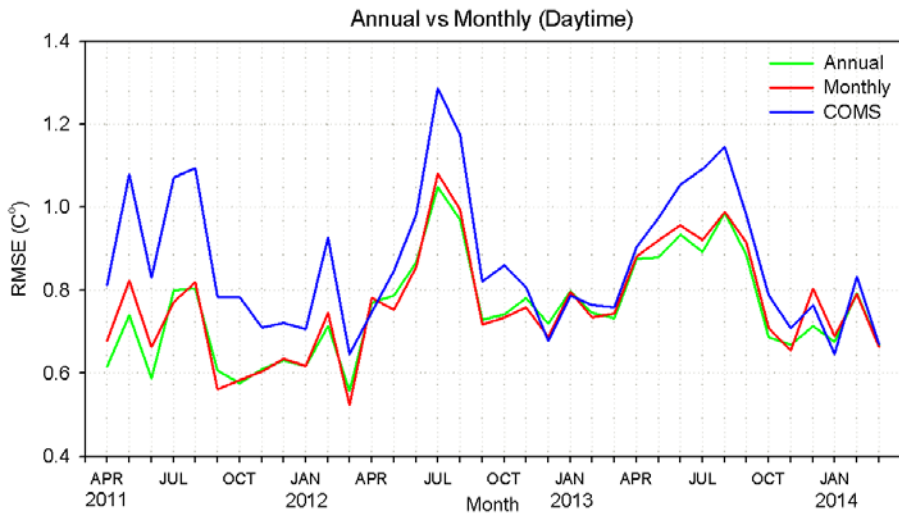
❖ TB bias between MI and IASI reduced by $\sim 0.4K$ ($-0.71K \rightarrow -0.32K$)

Highlights of KMA calibration activities(2/2)



GSICS-based SST vs. original COMS SST (Park et. al., 2015, IJRS)

- Accuracy comparison using Buoy measurement



User Requirements and Feedback about GSICS deliverables (maximum one slide)



- Satellite data users (internal or external)
 - Application: reproduction of SST using GSICS correction
 - Requirement : monthly/annual mean GSICS correction
 - Impact : increase in accuracy of SST
 - Feedback : proper interval of GSICS correction
 - Application: reproduced clear sky radiance to NWP
 - Requirement : monthly/annual mean GSICS correction
 - Impact : under investigation
- As a satellite operator
 - Uncertainty information