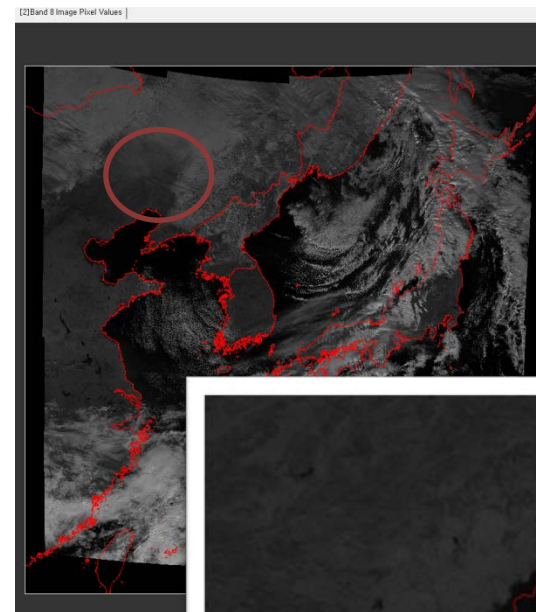
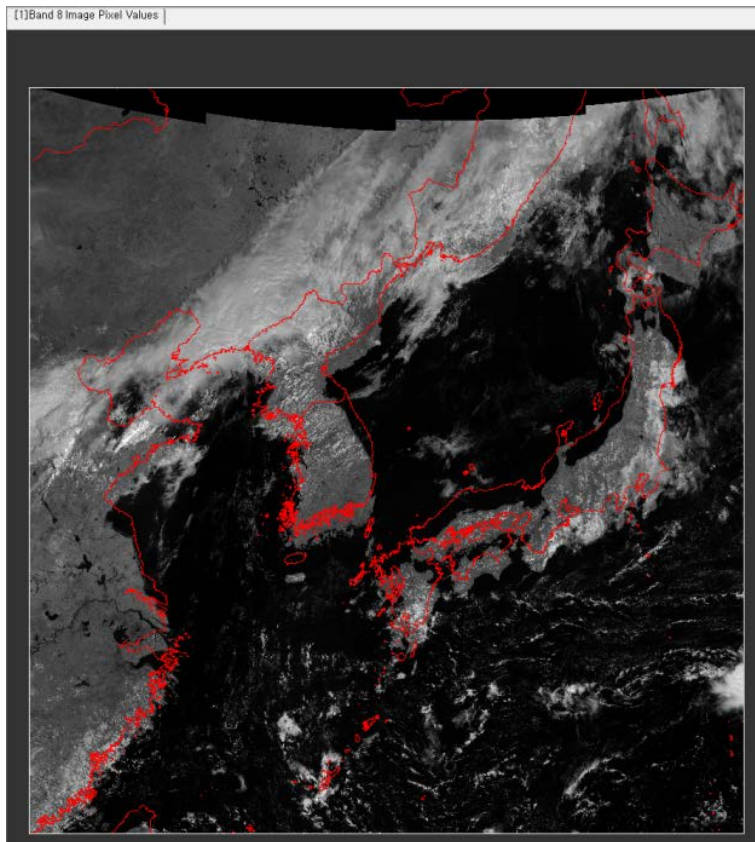


# Challenges in GOCI acquisition and data processing

KIOST

# Geometric accuracy

- Issue with INRSM (image navigation and registration software module), which was fixed after the IOT
- IOT (in-orbit test) period (2010.6 ~ 2011.2)



# Radiometric integrity

- Stray-light driven Inter-Slot Radiometric Discrepancy (ISRD)

Up to 20% inflation in TOA radiance, particularly for Band 6 & 8

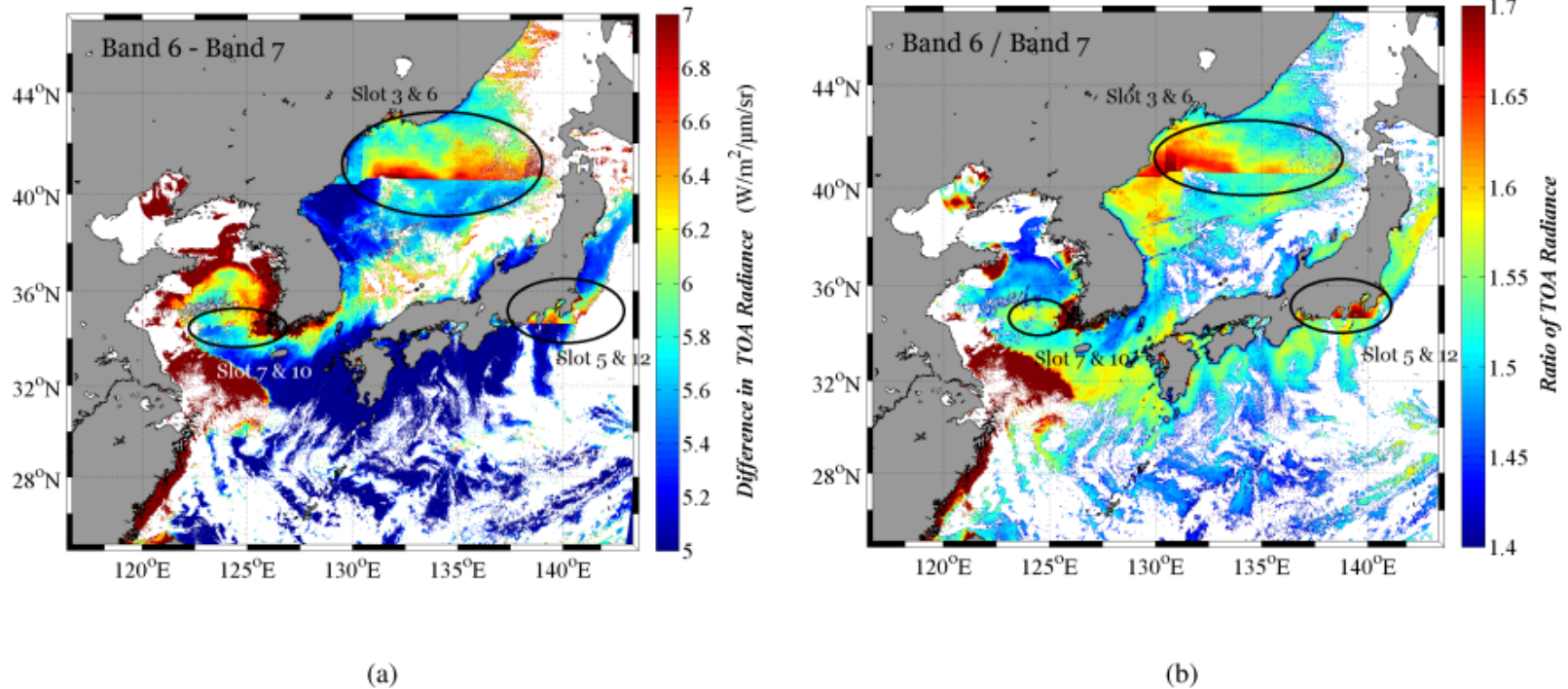


Fig. 2. GOCI images of TOA radiance : (a) band difference and (b) band ratio between Bands 6 (680 nm) and 7 (745 nm).

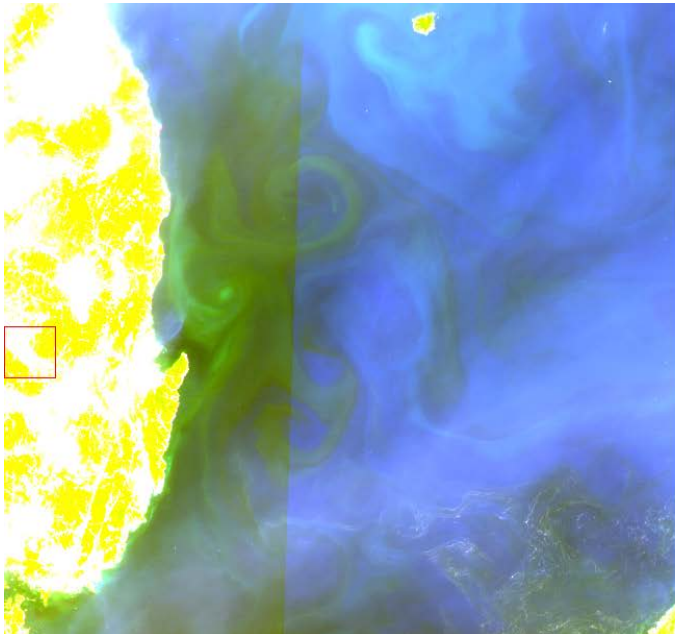


# Non-uniform detector response

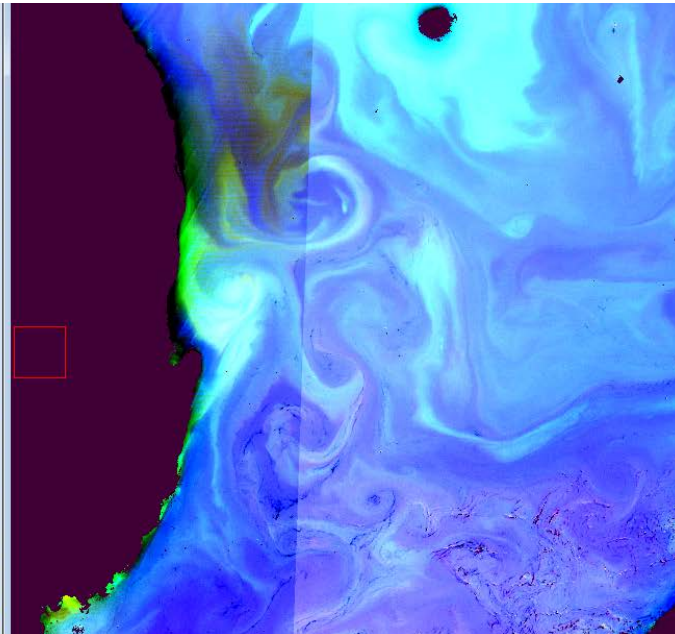
2015 5. 1. UTC03

Band 6(680nm) – Band 4 (555nm) – Band 1 (412nm)

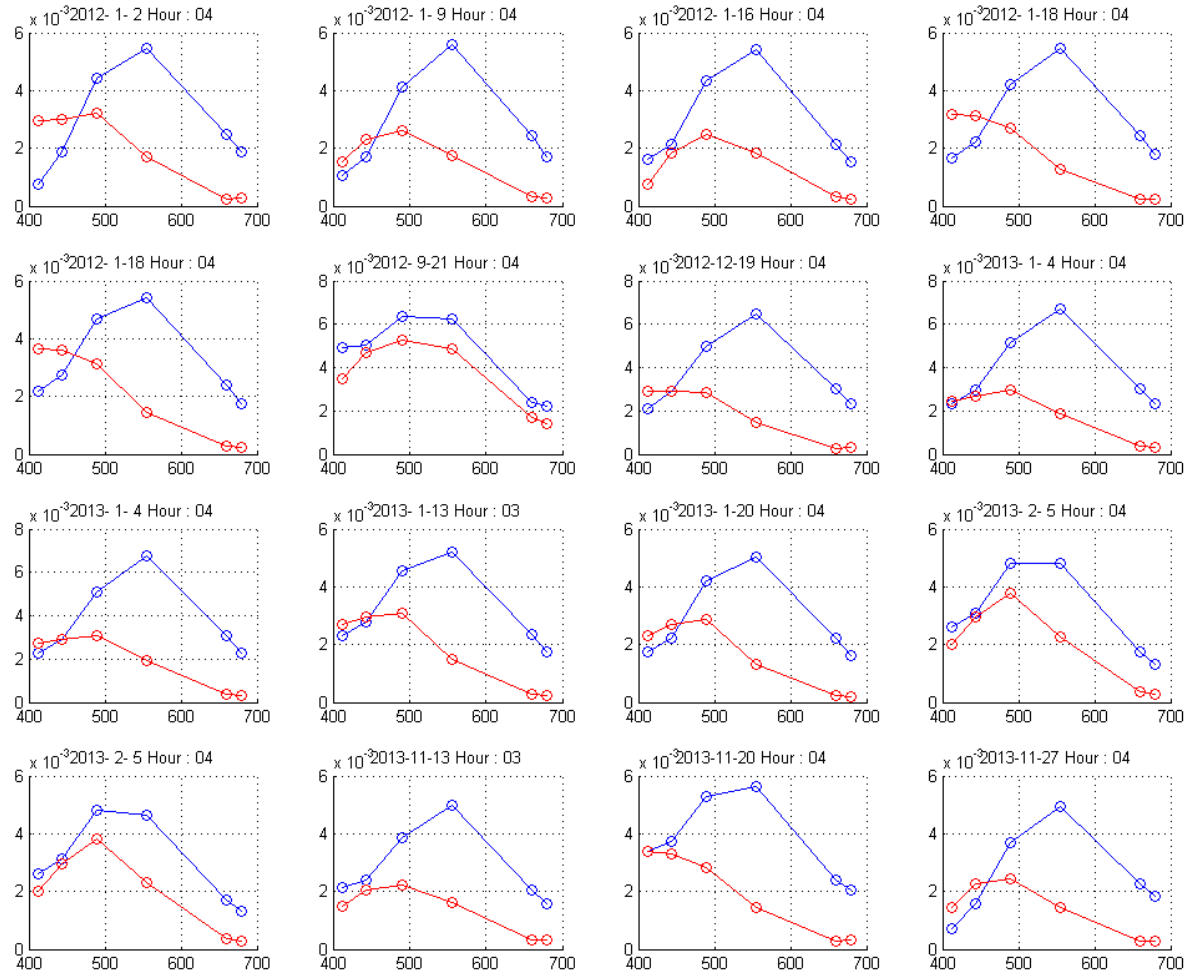
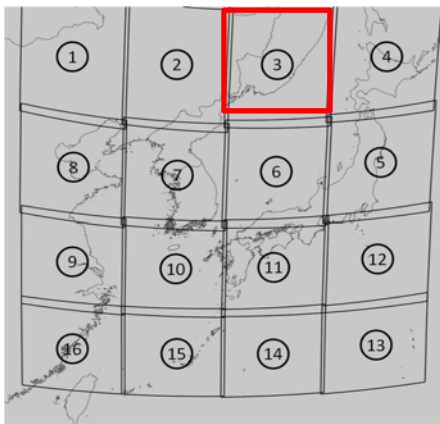
L1B (TOA radiance)



L2 (Rrs)

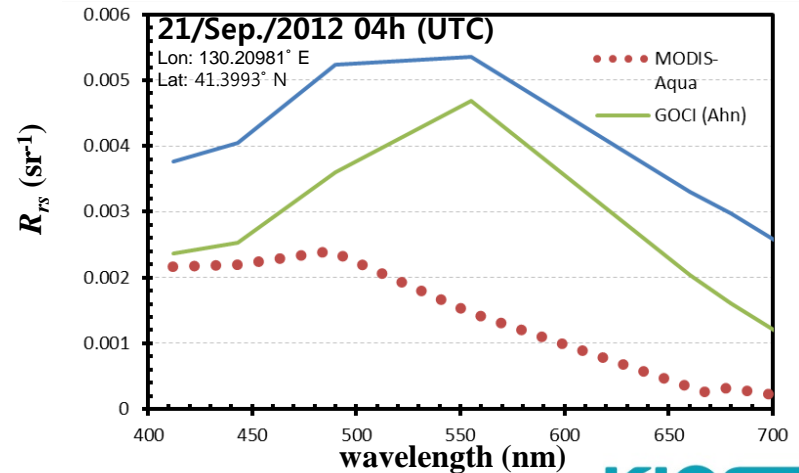
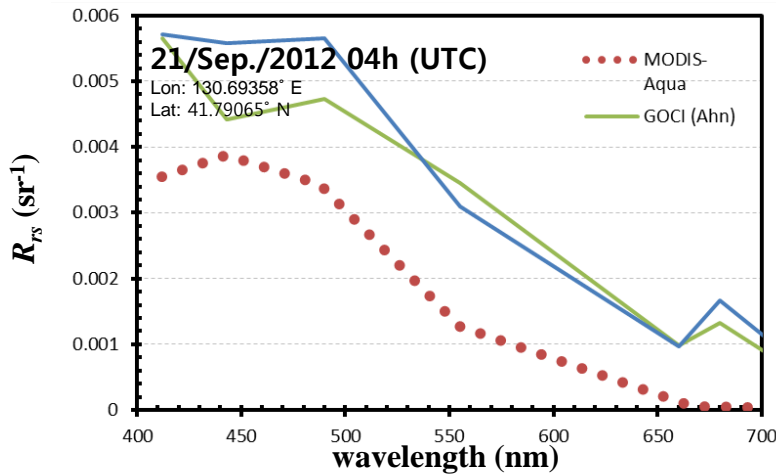
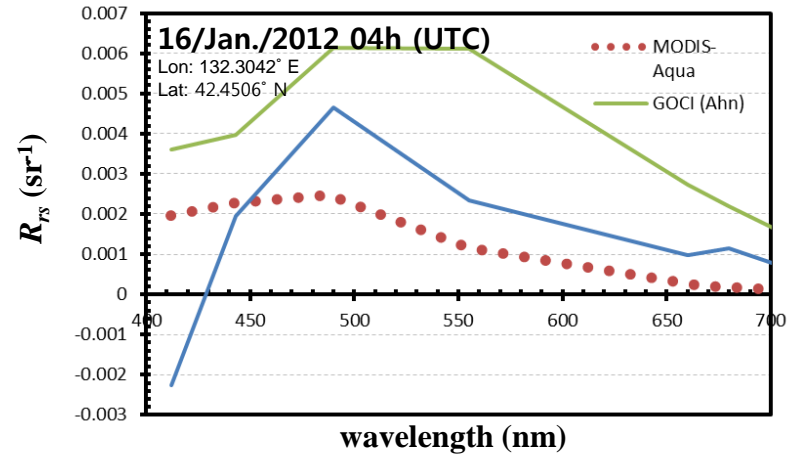
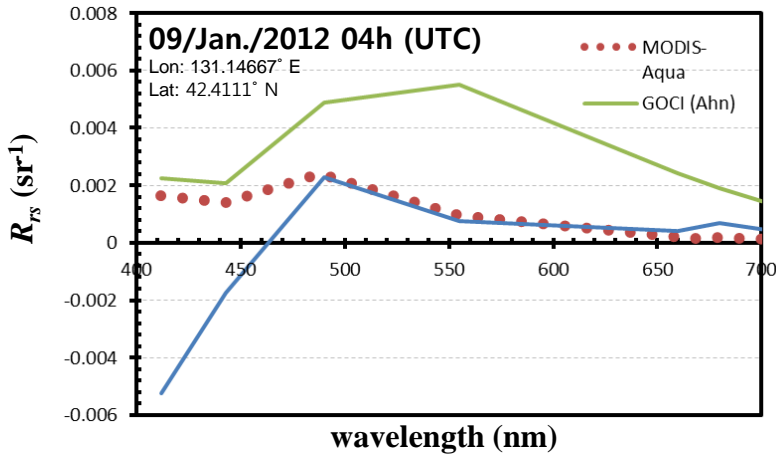


# Stability for high solar zenith angle

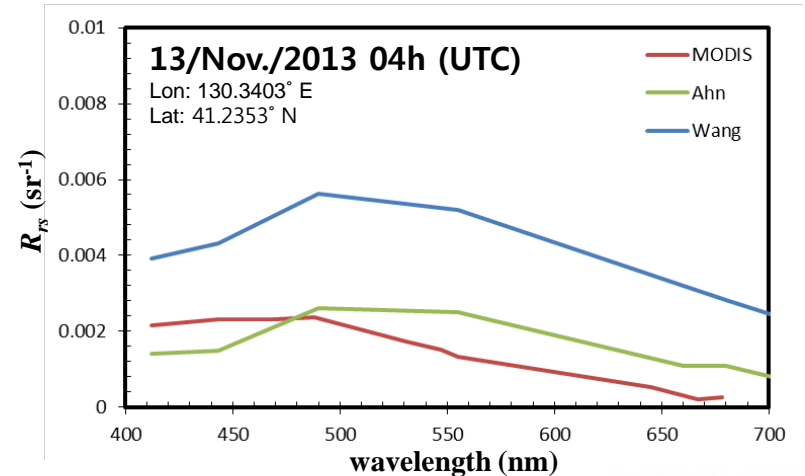
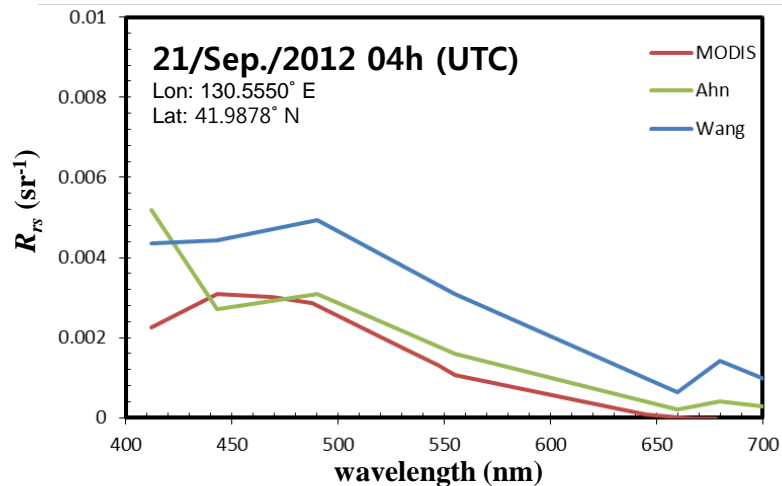
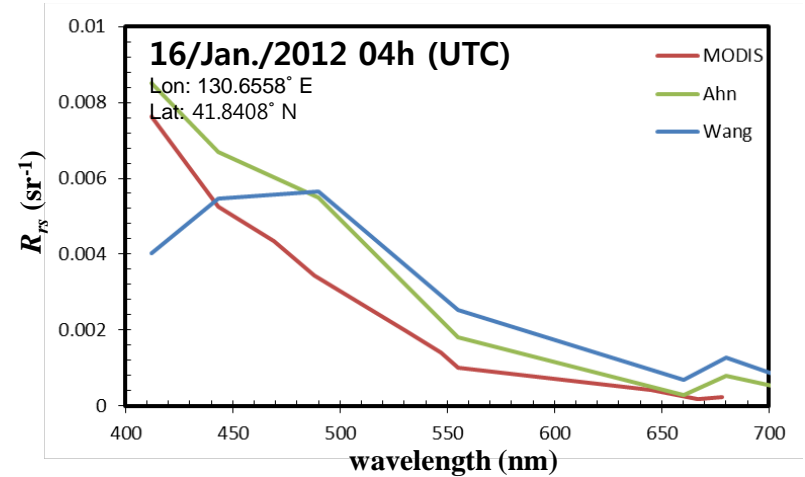
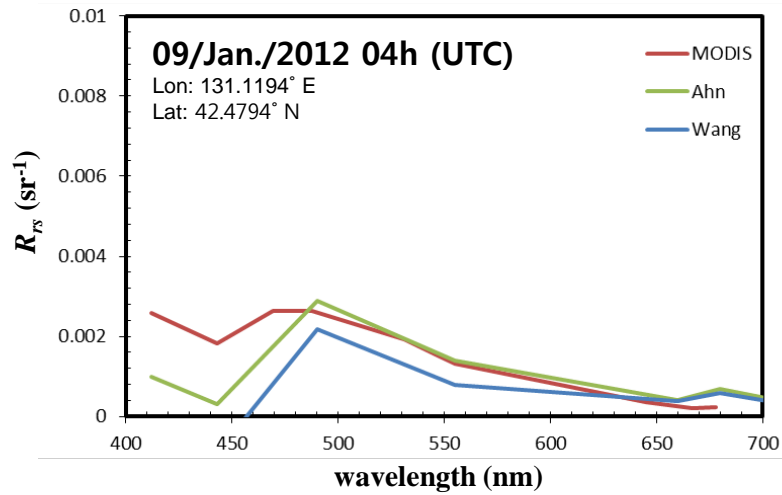


— GOCI  
— Aqua

# $R_{rs}$ : GOCI(Ahn-GDPS v.1.3) vs. GOCI(Wang) vs. MODIS Aqua

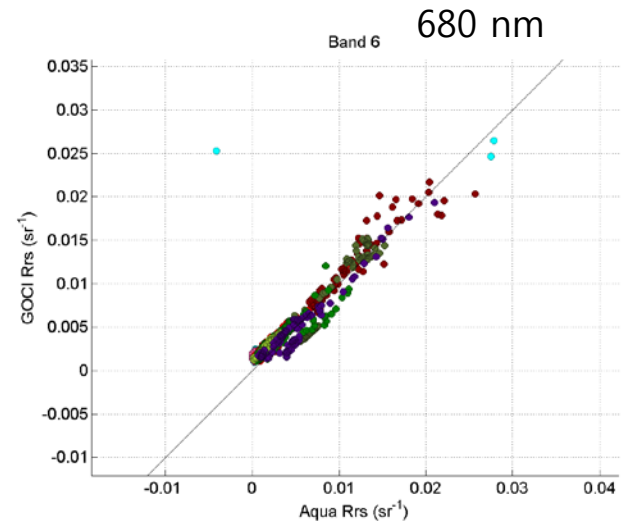
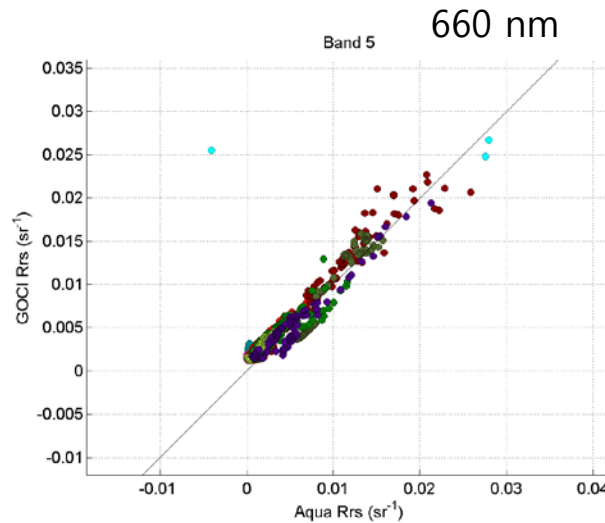
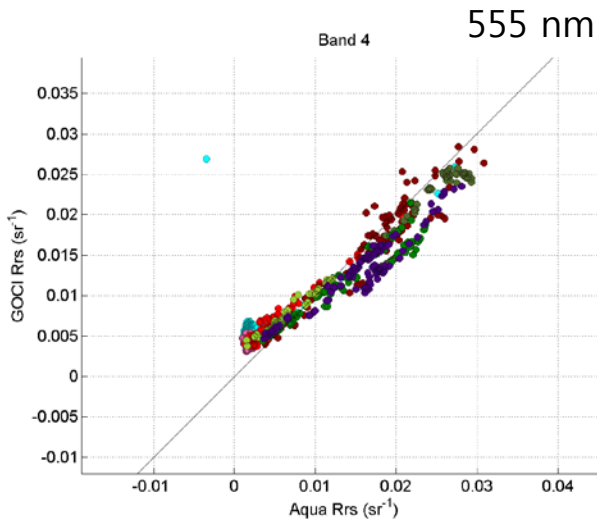
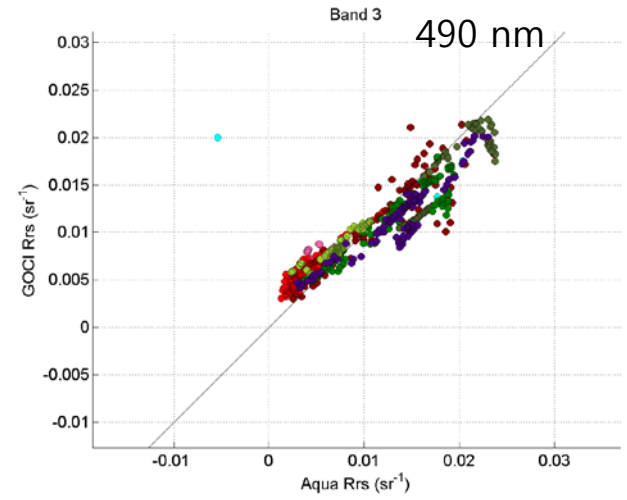
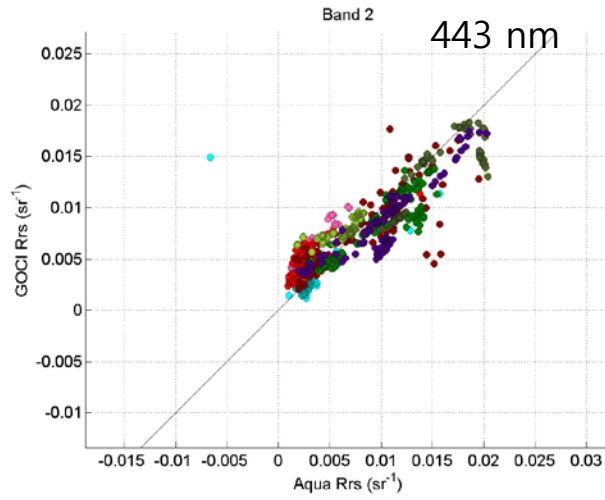
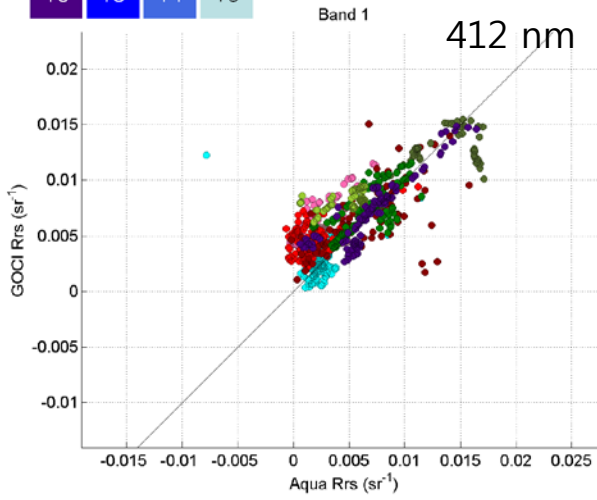


# $R_{rs}$ : GOCI(Ahn) vs. GOCI(Wang) vs. MODIS Aqua



1	2	3	4
8	7	6	5
9	10	11	12
16	15	14	13

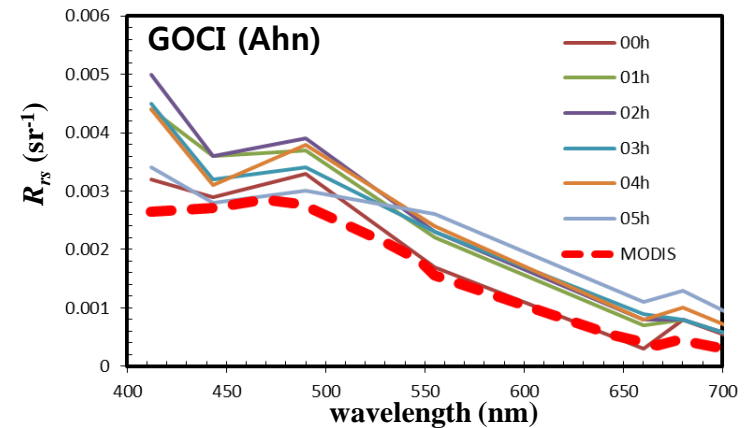
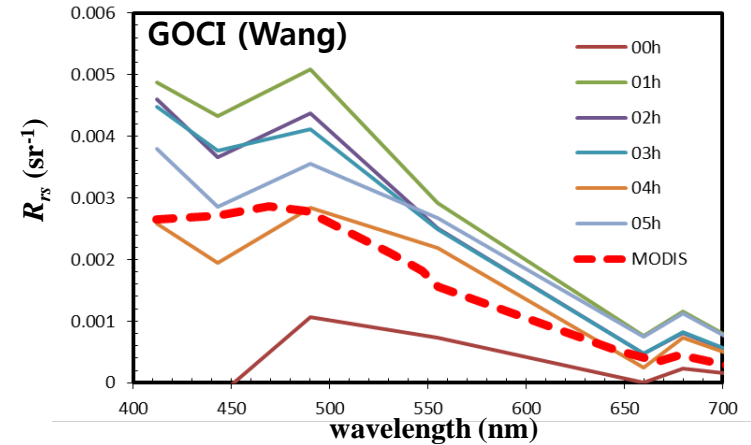
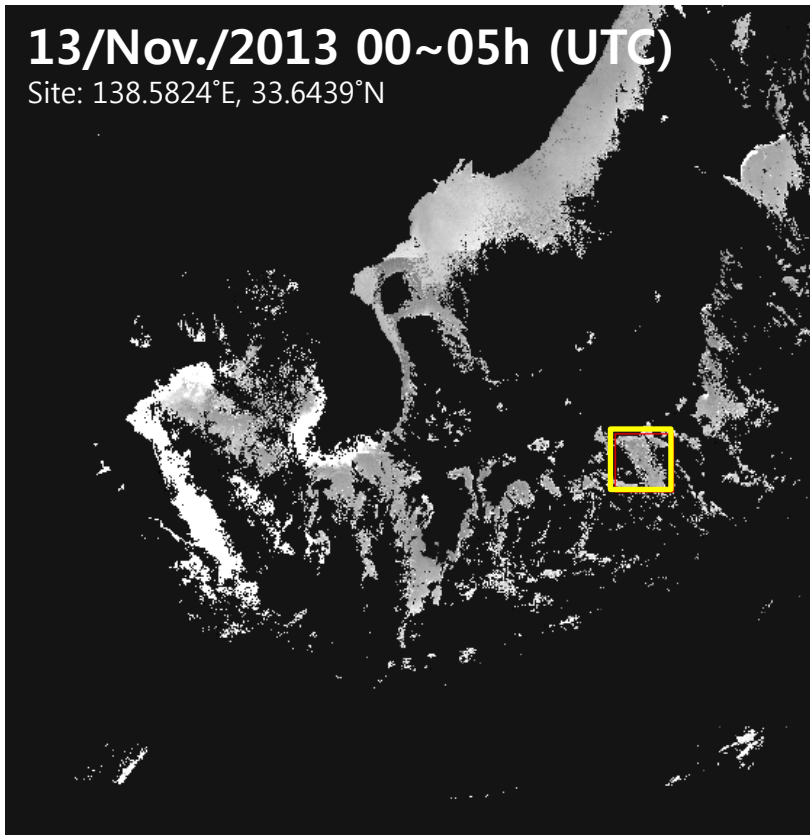
# GOCI vs. Aqua





# Discussion

# Diurnal $R_{rs}$ Comparison (2) : GOCI(Ahn) vs. GOCI(Wang)



# Diurnal $R_{rs}$ Comparison (1) : GOCI(Ahn) vs. GOCI(Wang)

