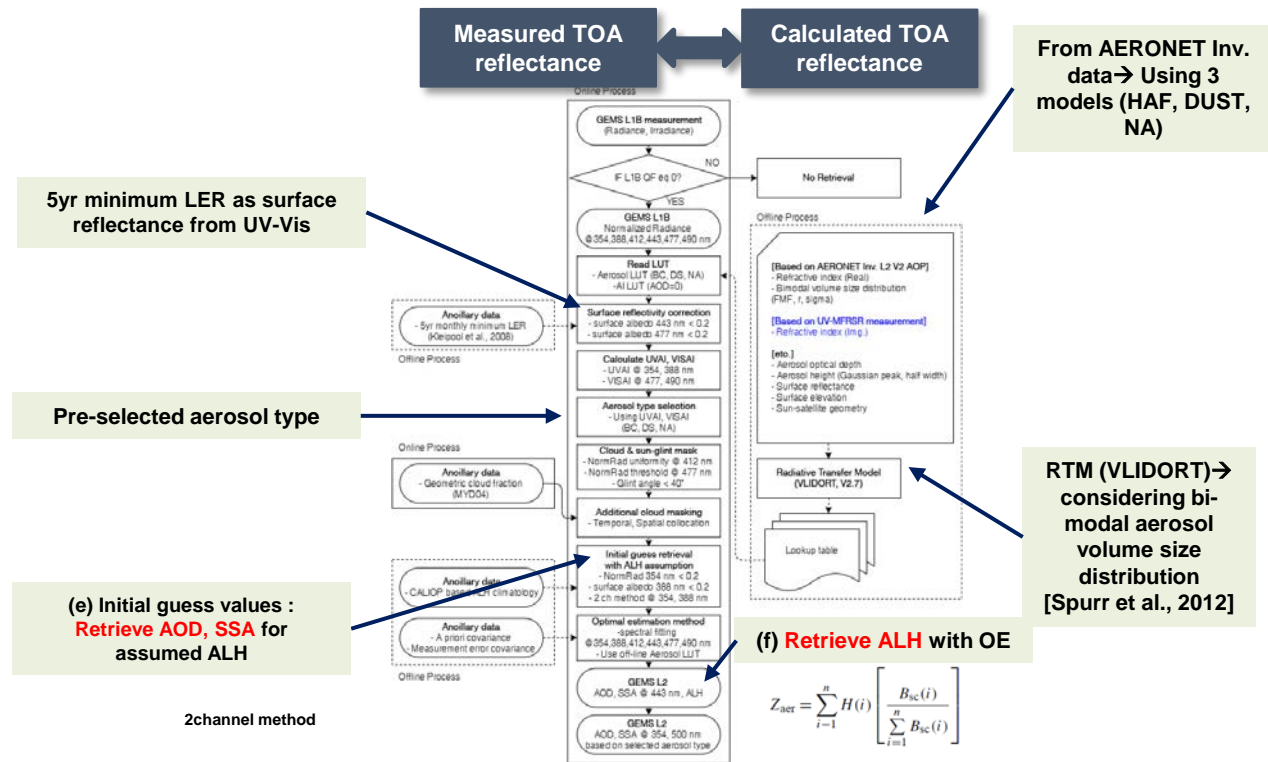
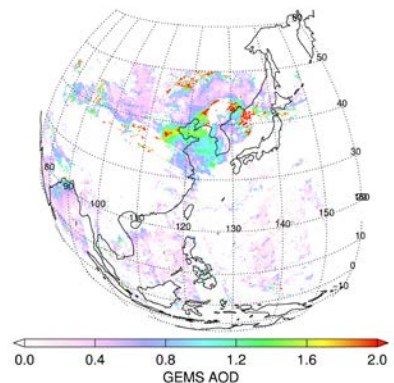


GEMS Aerosol Retrieval Algorithm

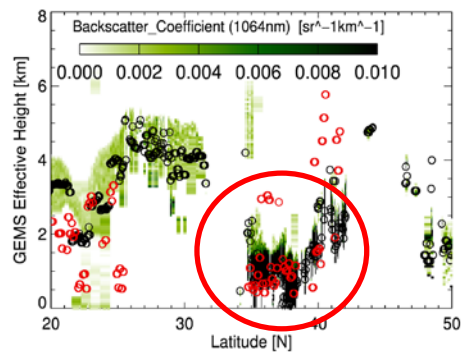


Test w/TROPOMI L1

2019.03.4



GEMS AEH (Red Circle)
CALIP Height (Black Circle)



- GEMS Final Aerosol Products**
- AOD and SSA at 354nm, 443nm, 500nm
 - UV aerosol index (354/388nm)
 - Aerosol Loading Height

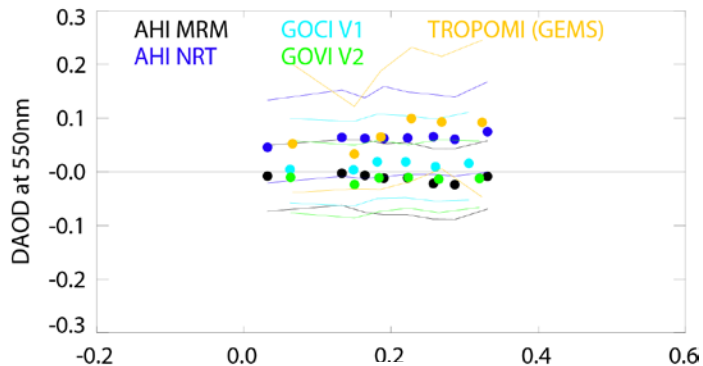
Go et al.,
(RSE, 2020)



Data Fusion: GEMS, AMI & GOCI2

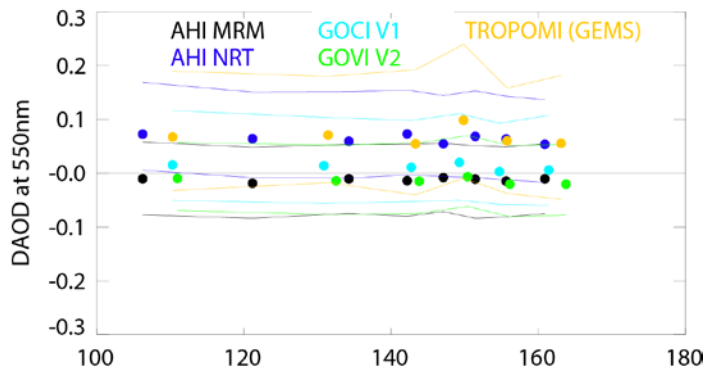
2018.04 – 2019.03

BIAS

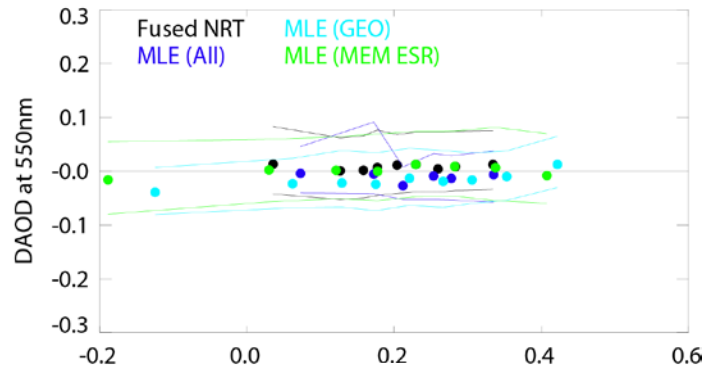


NDVI

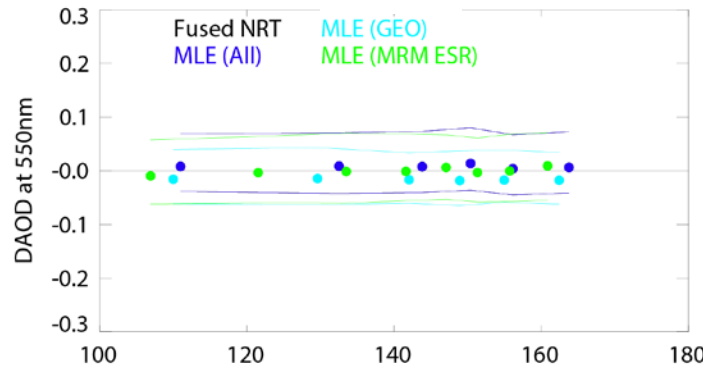
BIAS



Scattering Angle



NDVI

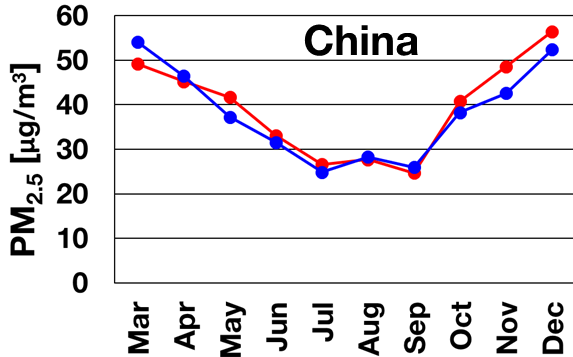


Scattering Angle

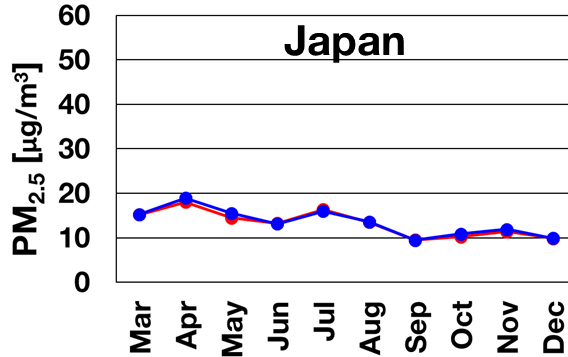
Lim et al.(RS, 2018),
Go et al.(in preparation)

Machine Learning: From Column to Surface

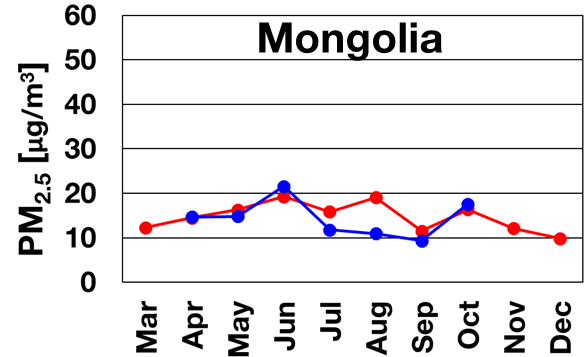
Satellite AOD + MET. data + GIS information



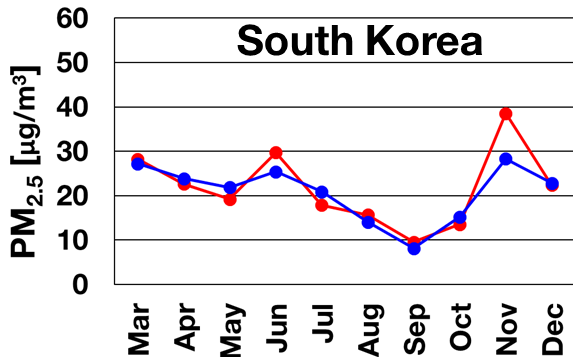
Estimated PM_{2.5} Measured PM_{2.5}



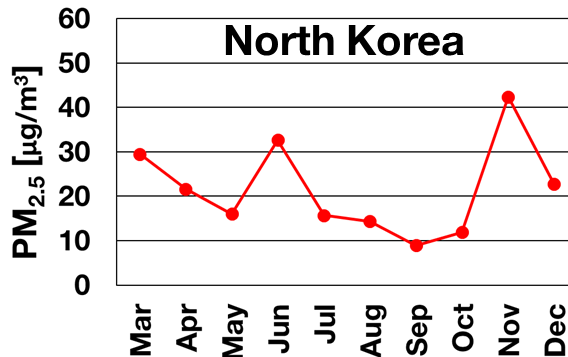
Estimated PM_{2.5} Measured PM_{2.5}



Estimated PM_{2.5} Measured PM_{2.5}



Estimated PM_{2.5} Measured PM_{2.5}



Estimated PM_{2.5} Measured PM_{2.5}

