

NASA Earth Observations, Data, and Tools for Air Quality Applications

A pre-conference event for the 17th IUAPPA World Clean Air Congress and 9th CAA Better Air Quality (BAQ) Conference

Organized by NASA's Applied Remote Sensing Training (ARSET) Program, in partnership with Clean Air Asia (CAA) and the Department of Atmospheric Science, Pusan National University

Sunday, August 28, 2016 to Monday, August 29, 2016
9:00 a.m. – 5:00 p.m. (KST)

Department of Atmospheric Science
Pusan National University, Building #313
Busan, South Korea

Instructors

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Training Agenda

Day 1 (AM) – Sunday			
Session I: Introduction and First Exposure to Satellite Air Quality Measurements			
Document	Time	Topic	Format
P0	09:00 – 09:15	Introduction and Logistics	Informal
P1	09:15 – 10:15	Satellite Capabilities for Air Quality Monitoring: An Overview	Talk/Discussion
	10:15 – 10:20	Break	
P2, P2E	10:20 – 11:30	Satellite Imagery Access, Interpretation, and Tools for Dust, Smoke, and Pollution	Talk/Hands-on
P3	11:30 – 12:30	Aerosol Observations From Satellites: Brief Theory and Existing Products (MODIS, MISR, OMI, VIIRS, CALIPSO)	Talk/Discussion
	12:30 – 01:30	Lunch Break	

Day 1 (PM) – Sunday			
Session II: Exploring MODIS Low and High Resolution Aerosol Data Sets			
Document	Time	Topic	Format
P4E_G, P4E_L	01:30 – 2:30	Exploring and Ordering Satellite Data with the Giovanni and LAADSWeb Tool	Hands-on
P5, P5E	02:30 – 3:30	MODIS High Resolution (3km and 10km) Aerosol Data Products, Evaluation, Applications, and Limitations	Talk/Hands-on
	03:30 – 03:45	Break	
P6E	03:45 – 04:45	Tools for Reading and Visualization of High Resolution MODIS Aerosol Data Products	Hands-on
P7E	04:45 – 05:00	Air Quality Case Study Orientation and Grouping	Discussion

Day 2 (AM) – Monday			
Session III: Estimation of Ground Level PM _{2.5} Concentrations with Satellite Data and Trace Gas Products			
Document	Time	Topic	Format
P8	09:00 – 10:00	Theoretical Basis for Converting Satellite Observations to Ground-Level PM _{2.5} Concentrations	Talk/Discussion
P9, P9E, P9E_C	10:00 – 10:30	Conversion of Satellite Aerosol Measurements to PM _{2.5} Air Quality	Hands-on
	10:30 – 10:45	Break	
P10E	10:45 – 11:00	Satellite Based PM _{2.5} Data Sets and Access	Hands-on
P11, P11E	11:00 – 12:30	Satellite Trace Gas Data Products (NO ₂ , SO ₂ , CO), Applications, and Limitations	Talk/Hands-on
	12:30 – 01:30	Lunch Break	

Day 2 (PM) - Monday

Session IV: Air Quality Case Studies by Participants

Document	Time	Topic	Format
P12E	1:30 – 2:00	Additional Tools and Resources for Case Studies	Talk/Demo
	02:00 – 04:00	Case Study Analysis in Groups	Hands-on
	04:00 – 05:00	Case Study Presentations and Discussion	Talk by Participants
	05:00	Adjourn	