NASA Applied Remote Sensing Training (ARSET)

Program Overview

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NASA’s Applied Remote Sensing Training Program (ARSET)

http://arset.gsfc.nasa.gov/

• Empowering the global community through remote sensing training
• Part of NASA’s Applied Sciences Capacity Building Program
• Goal: increase the use of Earth Science in decision-making through training for:
  – policy makers
  – environmental managers
  – other professionals in the public and private sector
• Trainings offered focusing on applications in:

  - Disasters: 9 Trainings
  - Eco: 12 Trainings
  - Health & Air Quality: 52 Trainings
  - Water Resources: 20 Trainings
ARSET Training Impacts: Health & Air Quality (2008-2016)

Total ARSET Participants (2009-2016): 12,846

Health & Air Quality Participants: 2,978

US Health & Air Quality Participants

Global Health & Air Quality Participants

- 16 online trainings
- 37 in-person trainings
- 75 countries
- 836 organizations

Total ARSET Participants: 12,846

Health & Air Quality Participants: 2,978

US Health & Air Quality Participants

Global Health & Air Quality Participants

NASA’s Applied Remote Sensing Training Program
ARSET Training Levels

**Advanced Training, Level 2**
- Online and in-person
- Requires Level 1 training or equivalent knowledge
- More in-depth or focused topics

**Beginning Training, Level 1**
- Online and in-person
- Requires Level 0 training or equivalent knowledge
- Specific applications

**Fundamentals Training, Level 0**
- Online only
- Assumes no prior knowledge of remote sensing
ARSET Air Quality Trainings

- Remote Sensing
- Satellites
- Imagery
- Algorithms
- Data & Tools
- Column to Surface
- Dust & Smoke
- Plume Transport
- Satellite & Model Comparison
- Air Quality Trends
- Vertical Profiles
Recent Air Quality Trainings

• Satellite Derived Annual PM$_{2.5}$ Data Sets in Support of United Nations Sustainable Development Goals
  – 3 week webinar series, March 15-29, 2017
  – 391 attendees from 61 countries

• Satellite Remote Sensing of Air Quality: Data, Tools and Applications
  – IITM, Pune, India, May 23-26, 2017
  – 55 attendees from 30 organizations

• NASA ARSET Air Quality Remote Sensing Training
  – South Coast Air Quality Management District
  – September 19-21, 2017
  – 32 attendees from 21 organizations
Tentative Trainings for 2018

• High Resolution Data and Tools for Air Quality Applications
  – Advanced Webinar Series – January 17, 19, 22

• Satellite Remote Sensing of Air Quality in Southeast Asia
  – In-Person Training, Jakarta – March 20-23

• High Temporal Resolution Data from Geostationary Platforms for Air Quality Applications
  – Introductory Webinar Series (Summer 2018)

• Smoke and Dust Monitoring in the Northwestern U.S.
  – In-Person Training (Fall 2018)
Learn More About ARSET

http://arset.gsfc.nasa.gov/