The NASA Applied Remote Sensing Training Program conducts professional trainings in the application of Earth Science data for air quality, water resources and disaster management. The goal of the program is to build the skills to integrate NASA Earth Science into agencies’ decision-making activities. The program works directly with agencies and policy makers to develop hands-on and online courses that teach end-users how to access, visualize and apply NASA Earth Science Data in their professional area.

**NASA’s Applied Remote Sensing Training Program (ARSET)**

**GOAL**
Increase utilization of NASA observational and model data for decision-support.

**Water Resources and Flooding**
- April 2011 – present
- 8 Trainings
- 300 end-users
- Flood/Drought monitoring
- Severe weather and precipitation
- Watershed management
- Climate impacts on water resources
- Snow/ice monitoring
- Evapotranspiration (ET), ground water, soil moisture, and runoff.

**Health (Air Quality)**
- 2008 – present
- 26 Trainings
- +700 end-users
- Analysis of dust, fires and urban air pollution.
- Long range transport of pollutants
- Satellite and regional air quality model inter-comparisons.
- Support for air quality forecasting and exceptional event analysis.

**Land Use/Change and Ecology**
- Beginning in 2014
- 6 Trainings
- +100 end-users
- Analysis of land use change and vegetation indices
- Fire products

**ARSET: Increasing the Use of NASA Remote Sensing Data: Webinars and in-person Hands-on workshops**

**Program Partners: 1000+ end-users and 350+ organizations**
- **Public Sector:** U.S. EPA, USDA, BLM, NOAA, regional, state, county agencies, Tribal Nations, water resources managers, watershed and reservoir managers.
- **Private Sector:** Industry, agricultural sector, NGOs

**Workshop Development Approach**
- Get to know the audience: area of application interest and level of technical expertise
- Work closely with host institution
- Adapt or develop training modules and Case Studies to suit participants needs

**Project Outcomes**
NASA ARSET training activities have reached many decision-makers world wide and are helping to increase the value of NASA data for environmental applications
- Positive reviews from post-training surveys
- Dramatic increase in demand for trainings since program inception
- Increase in number of end-users trained per year since 2008
- Students Becoming Teachers as trainers
- Program Evaluation underway: ongoing end-user feedback for needs and impact assessment has been critical to program success

**End-user feedback**
- NASA web-tools for water resources management taught in the course were rated as moderately to very useful by all participants, and about a third were interested in more live demonstrations, including GIS.
- Most participants indicated a strong interest in additional ARSET webinars or in-person instruction.

**Improving Decision Support: Remote sensing Webinars for Water Resources Management**
5-week webinar, 1 hour per week
October 17th – November 14th, 2013
Over 197 individuals from 120 organizations and 25 countries

**Public Access to ARSET Training Modules and Other Information**
**http://water.gsfc.nasa.gov**
**http://airquality.gsfc.nasa.gov**

Publicly available Workshop Modules in English and Spanish
Regular updates on upcoming workshops
Data Product Tables
Links to most popular NASA web tools for decision support

For updates and notification of upcoming workshops sign up for the project listserv: Water Resources/Disasters
https://lists.nasa.gov/mailman/listinfo/nasa-water-training
Air Quality
https://lists.nasa.gov/mailman/listinfo/airquality