

Satellite Air Quality Proving Ground

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Summary of Recent Activities

- Presentation at the OCONUS PG meeting in Alaska
 - Demonstrated VIIRS capabilities to capture fires and smoke plumes
- VIIRS OCONUS aerosol imagery from DB data deployed (<http://www.star.nesdis.noaa.gov/smcd/spb/aq/>)
- Porting the WRF-CMAQ model to STAR computers to prepare for the September 2013 experiment
- First draft of GOES-R AQPG manuscript completed and being reviewed by co-authors



IDEA

Infusing satellite
Data into
Environmental
Applications

We value your feedback! Please send any comments, problems and suggestions to the IDEA Team.



MODIS

AIRNOW

WFABRA

MODIS (Terra)

MODIS (Aqua)

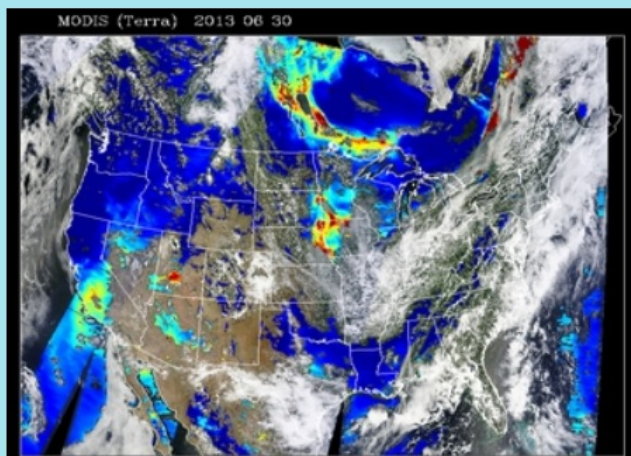
GASP

GASP WEST

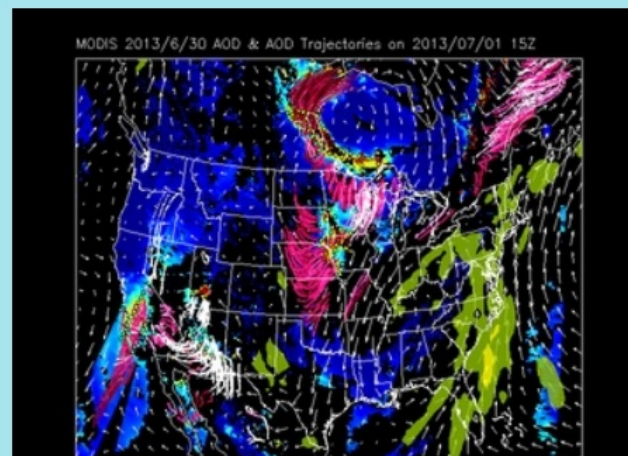
VIIRS CONUS

VIIRS OCONUS

Regional plots of MODIS Terra aerosol optical depth (AOD)



48-hour aerosol trajectory forecast, with model winds and precipitation





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MODIS

AIRNOW

WFABRA

MODIS (Terra) MODIS (Aqua) GASP GASP WEST VIIRS CONUS VIIRS OCONUS

Disclaimer: The version of the VIIRS aerosol algorithm on this site is an enhanced version and is different from the official VIIRS aerosol products available at NOAA CLASS

VIIRS Alaska RGB & AOD plots



javascript:document.ViirsAL_Form.submit();



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MODIS

AIRNOW

WIFI

VIIRS Satellite Natural Color and AOT Images (Alaska)

SELECT PLOT

PREVIOUS
FORECAST
DAY

NEXT
FORECAST
DAY

2013

June

30

Go

Valid date ranges (20080101 to 20130701)

VIIRS 2013-06-30 1947 UTC

labels Map black

Animation Controls



NCI Opacity



AOD Opacity



AOT Quality Select

☒ High Quality

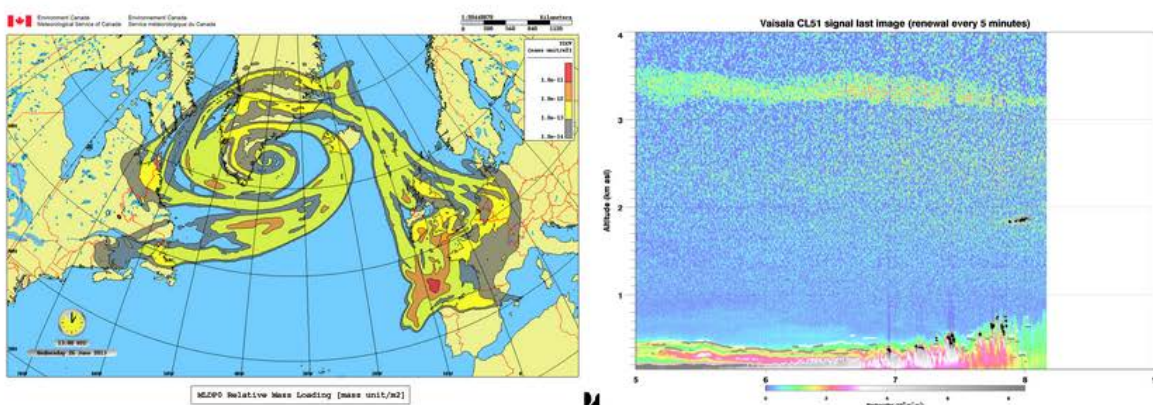
☐ Medium/High Quality

<http://alg.umbc.edu/usaq>

Firefox U.S. Air Quality +

alg.umbc.edu/usaq/ NOAA IDEA

the Atlantic this week.



Environment Canada
Ministère de l'Environnement
Environment Canada
Ministère de l'Environnement

ECMWF Relative Mass Loading [mass unit/m3]

Vaisala CL51 signal last image (renewal every 5 minutes)

Altitude (km a.s.l.)

Longitude (°E)

VIIRS 20130629

Hourly Ozone AQI
Saturday, June 29, 2013 9:00 PM EDT

VIIRS 20130629

Browse
NOAA IDEA
VIIRS/IDEA Alaska Imagery
EPA AirNow
EPA Remote Sensing Information Gateway (RSIG)
NRL NAAPS Aerosol Model
MPLNET
ECMWF Global MACC AOD Forecast
NOAA HMS Fire and Smoke Product / Smoke Text
National Interagency Fire Center
NOAA ASDTA Smoke AOD Product
NOAA Fire Weather Advisory
NOAA Washington Volcanic Ash Advisory Center

Satellite Products

NOAA GASP East / West
USDA MODIS Active Fire Mapping Program
KNMI OMI Tropospheric NO2
NOAA OMI SO2
NASA CALIPSO Expedited Browse Images
College of DuPage GOES Satellite and Radar
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NASA Earth Observatory
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NOAA Environmental Visualization Laboratory

6:47 AM
7/1/2013

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