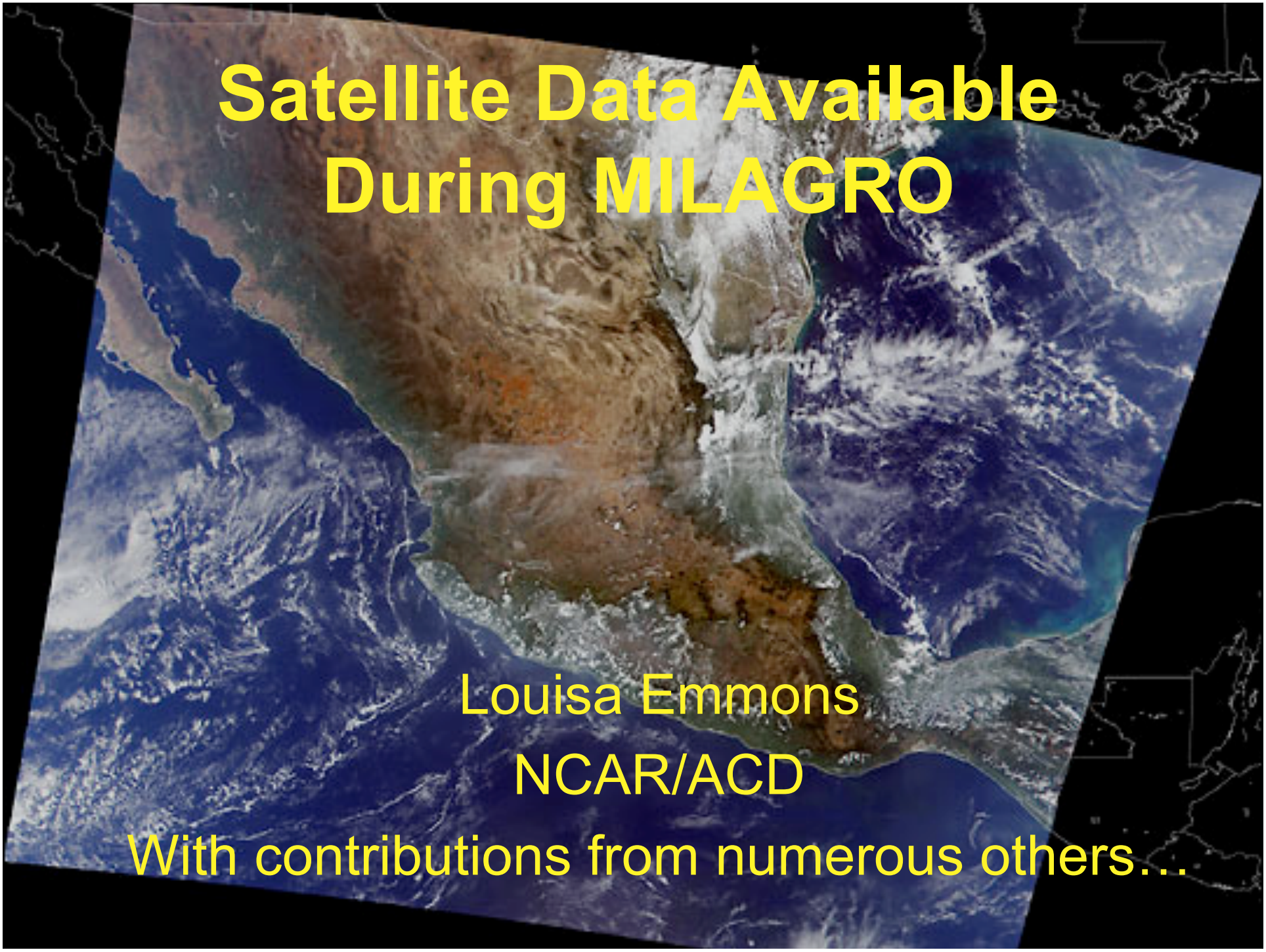


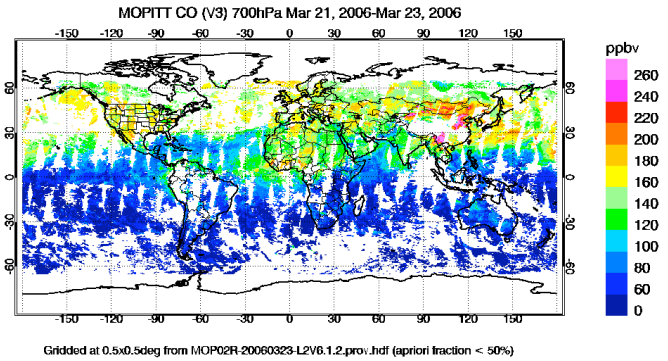
Satellite Data Available During MILAGRO

Louisa Emmons
NCAR/ACD

With contributions from numerous others…

MOPITT CO

Terra: Measurements of Pollution in The Troposphere



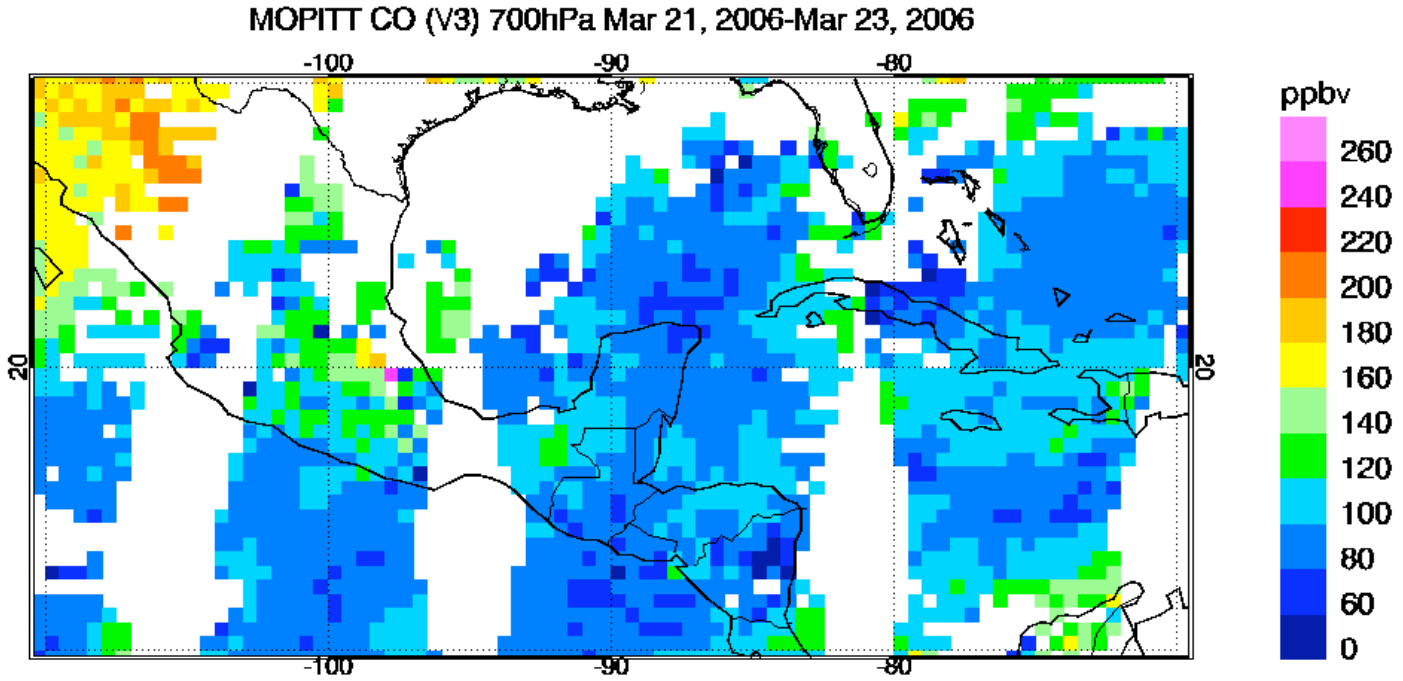
Global coverage in 3 days

MILAGRO/INTEX-B images

http://www.eos.ucar.edu/mopitt

MOPITT data files: NASA Langley DAAC

http://eosweb.larc.nasa.gov/PRODOCS/mopitt/table_mopitt.html



Contacts:

David Edwards

Louisa Emmons

Gabriele Pfister

(NCAR/ACD)

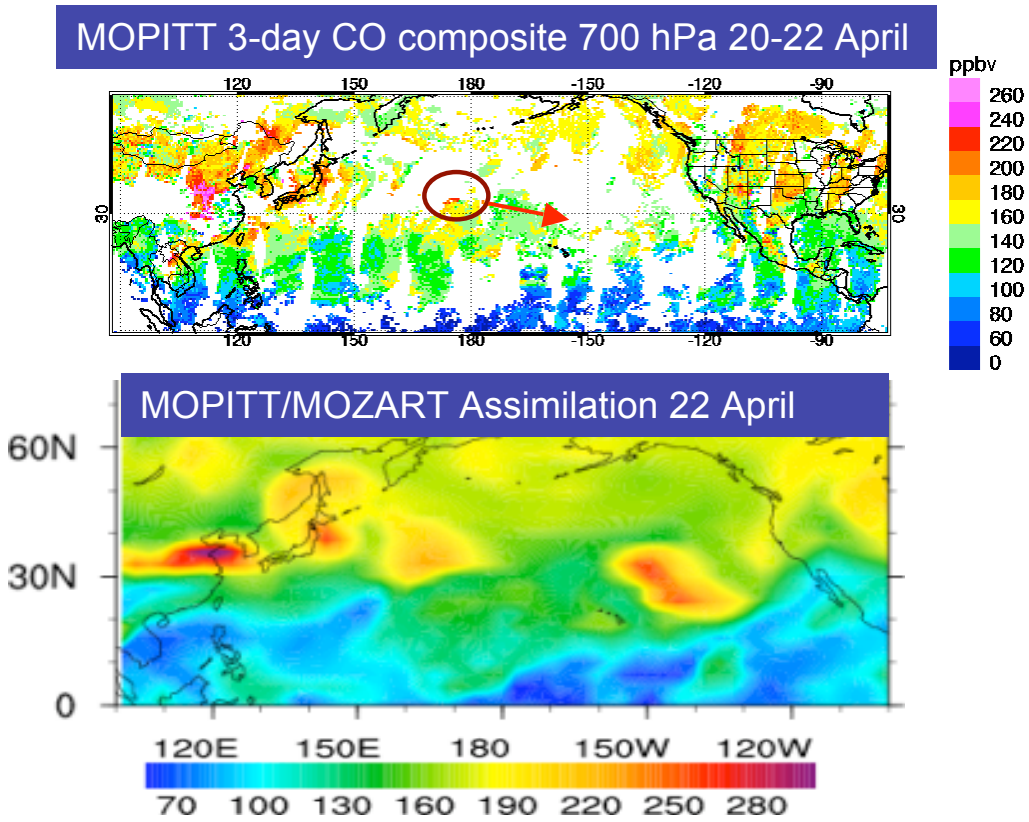
MOPITT CO Assimilated into MOZART

Global CTM: Model for Ozone and Related chemical Tracers

The assimilation of near-real-time MOPITT CO was used to improve the MOZART forecasts for flight planning during MILAGRO and INTEX-B

All web plots are being updated with assimilation of final MOPITT CO

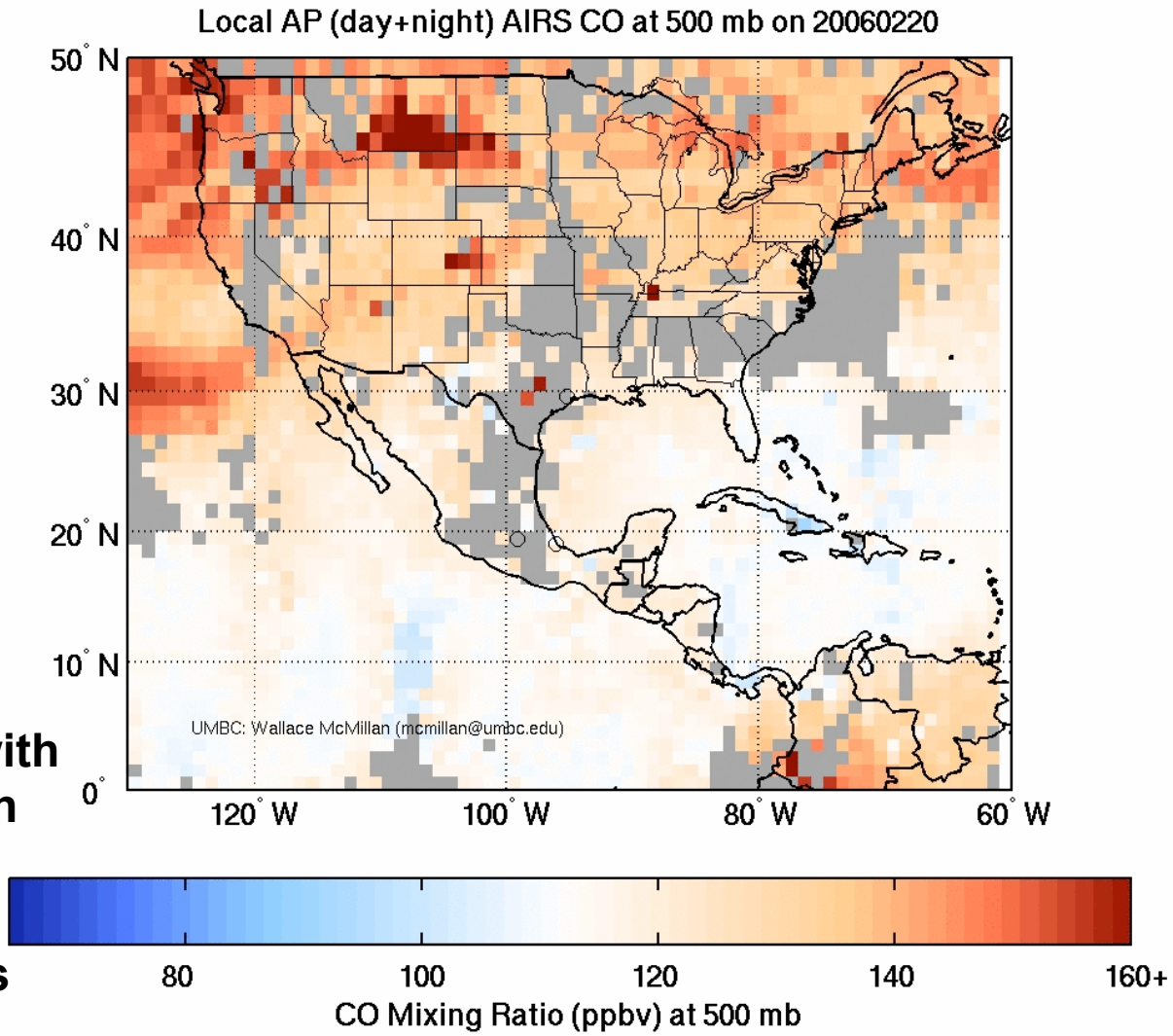
http://gctm.acd.ucar.edu/mozart/index.shtml



AIRS Near-Realtime Tropospheric CO for MILAGRO/INTEX-B

Wallace McMillan (UMBC)
Juying Warner (JCET/UMBC)
Chris Barnet, Walter Wolf (NOAA/NESDIS)
supported by
NASA Tropospheric Chemistry and ACMAP Programs

- **Day and Night coverage**
- **Generally broadly peaked sensitivity to mid-troposphere**
- **Full Northern Hemisphere data available early 2007 with an improved algorithm with better vertical sensitivity**
- **See poster for more details**



- **NRT profiles, averaging kernels and maps online now: http://asl.umbc.edu/pub/mcmillan/www/index_INTEXB.html**

http://physics.umbc.edu/~mcmillan mcmillan@umbc.edu

University of Bremen SCIAMACHY products for MILAGRO

Instrument:

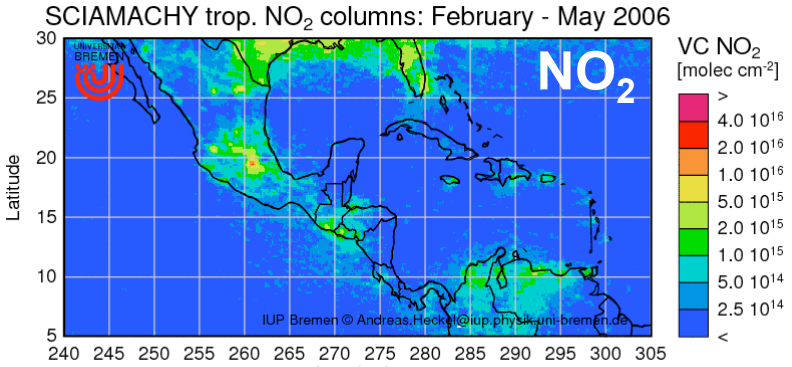
- SCIAMACHY
- 30 x 60 km^2 spatial resolution
- coverage after 6 days

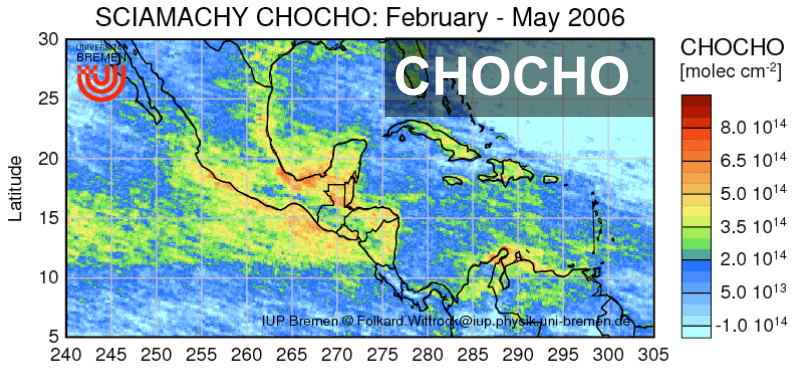
Products:

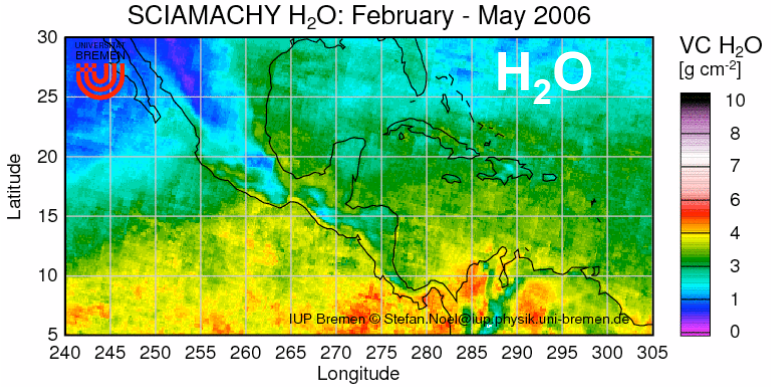
- tropospheric NO_2
- glyoxal (CHOCHO)
- H_2O
- HCHO (work in progress)

Data availability:

- Plots at http://www.iup.uni-bremen.de/doas/scia_data_browser.htm
- NO_2 data at http://www-air.larc.nasa.gov/cgi-bin/arcstat-b
- other data on request





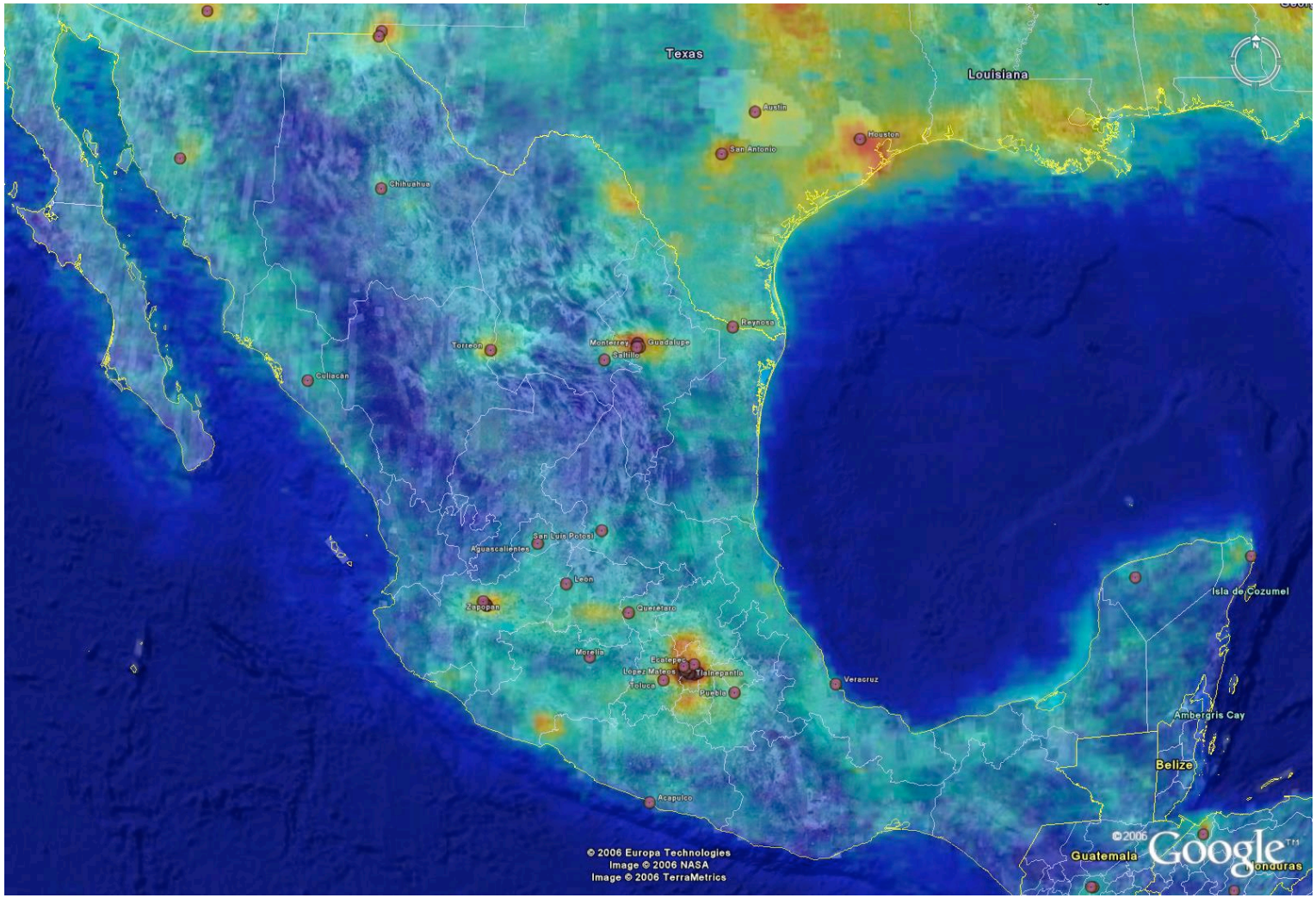


A. Heckel
A. Richter
S. Noel
F. Wittrock
J. P. Burrows

OMI: Ozone Monitoring Instrument on Aura

Jim Gleason, NASA GSFC

NO_2: Available from NASA GSFC DAAC
Level 3 (0.25° gridded, daily) data available soon

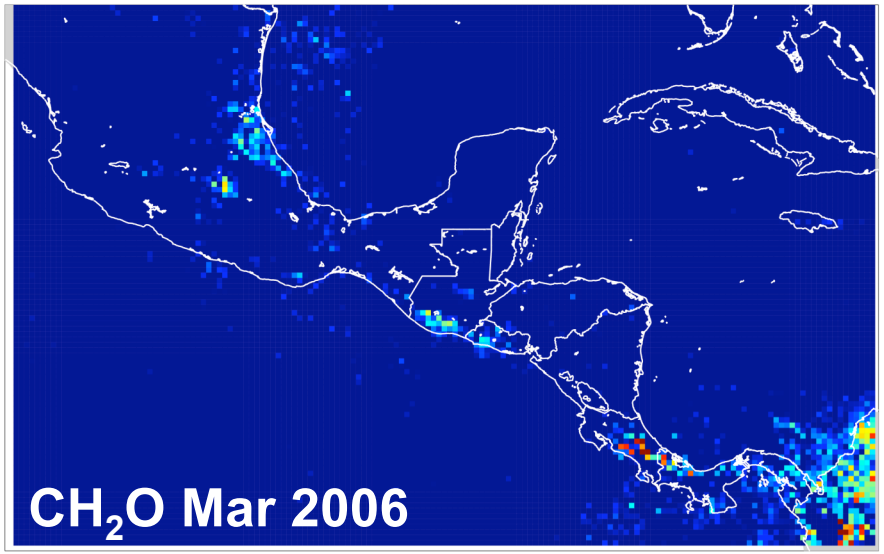


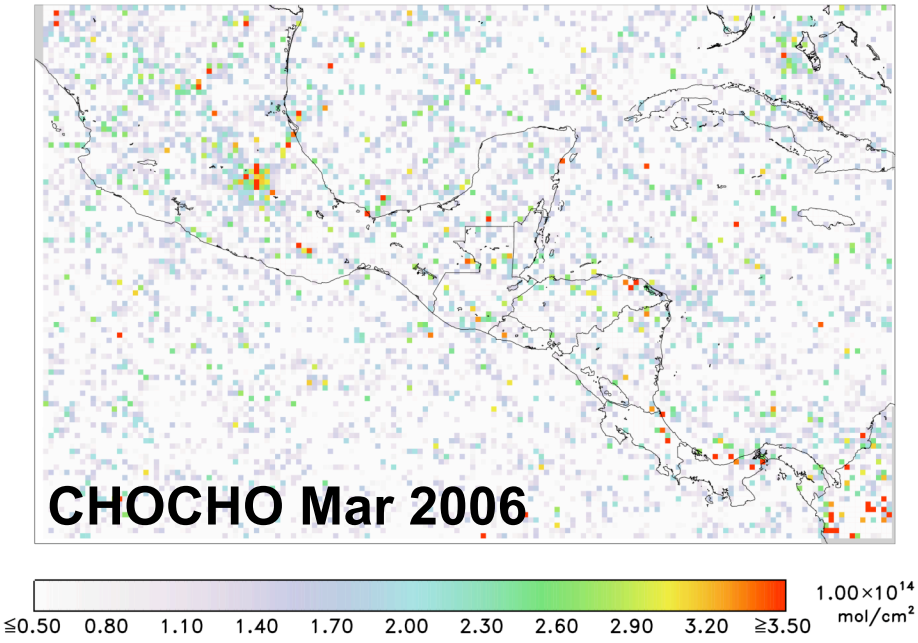
OMI: Ozone Monitoring Instrument on Aura

Kelly Chance and Thomas Kurosu
Harvard-Smithsonian Center for Astrophysics

Formaldehyde (CH_2O): Available from NASA DAAC soon

Glyoxal (CHOCHO): Being finalized

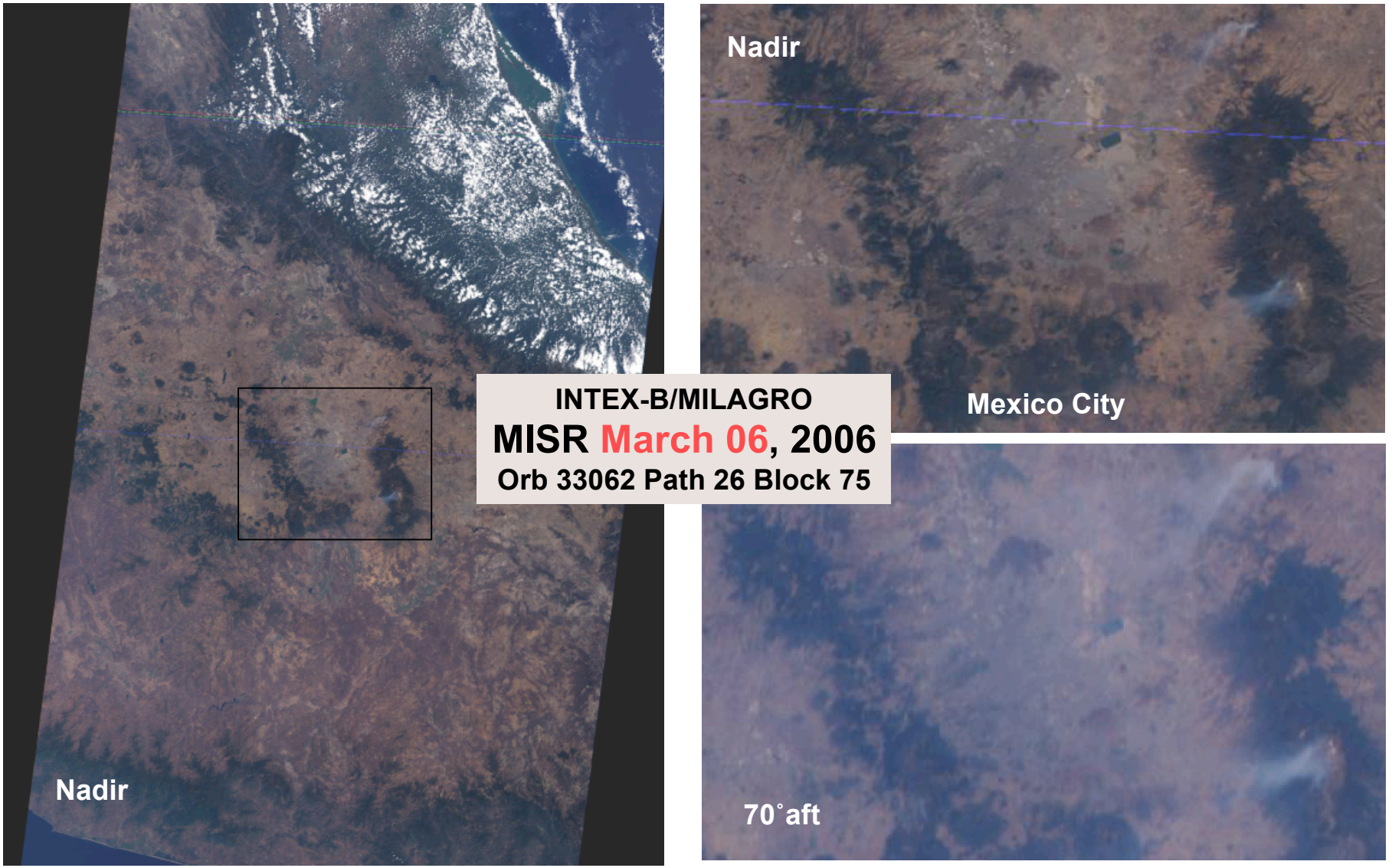




MISR Data for the INTEX-B / MILAGRO Campaign

→ http://eosweb.larc.nasa.gov/PRODOCS/misr/intexb/table_intexb.html

Go to "**Daily Imagery**" for JPG's and HDF downloads



MISR Products Supporting the INTEX-B/MILAGRO Campaign

1. Level 3 Campaign **Products [monthly or less; JPEG + HDF binary; 1 km res.]:**
   Aerosol, Land surface, and Georectified Radiances
2. Level 1&2 Campaign **Products [JPEG + HDF binary]:**
   Aerosol, Land surface, and Georectified Radiances, Stereo Height, Winds
3. Level 1 Local Mode **[Targeted Sites (not full region); full-res. (275 m), JPEG + HDF binary]:**
   Georectified Radiances (L1B2)

- **NASA Langley Atmospheric Sciences Data Center (DAAC):**

  → **http://eosweb.larc.nasa.gov**

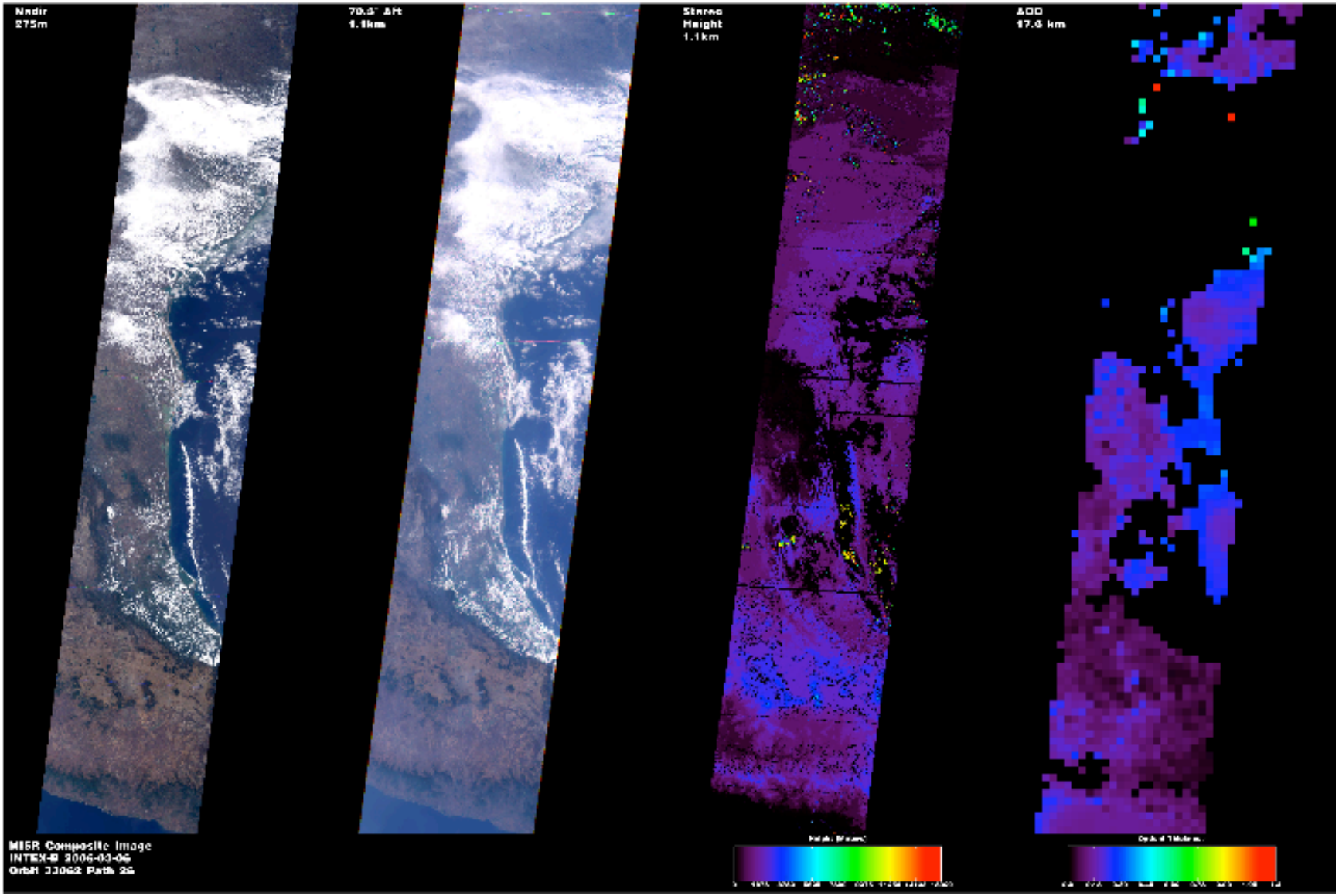
  -- Level 1, 2, & 3 JPEG Campaign Products**:** Public web page
  -- Level 1, 2, & 3 binary HDF Campaign Products**:** Data pool
  -- Level 1 Local Mode Products**:** Data pool

→ Format**: Binary HDF products will be both MISR standard stacked-block and conventional HDF**

- **Questions – DAAC User Services:**

  → **larc@eos.nasa.gov**

MISR 400 km wide Swath Standard Products March 06, 2006



Nadir View
(275 m res)

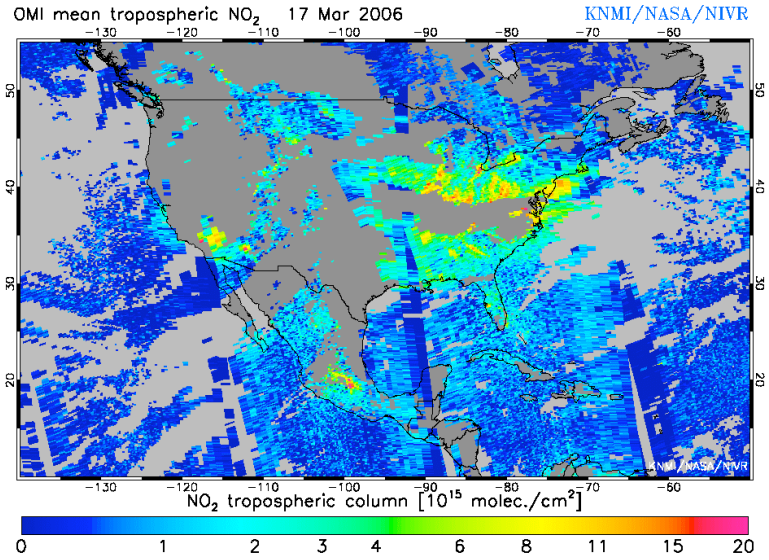
70˚ aft View
(1.1 km res)

Stereo Height
(1.1 km res)

Arsl Opt Depth
(17.6 km res)

Other Chemistry Data

- TES data and documentation is available at the Langley Atmospheric Data Science Center (http://eosweb.larc.nasa.gov)
  Information about TES, documentation and publication lists are available at the TES website (http://tes.jpl.nasa.gov)
- OMI NO_2 - from KNMI
  http://www.temis.nl/airpollution/no2col/ominrtnamerica.php



Other Aerosol Data

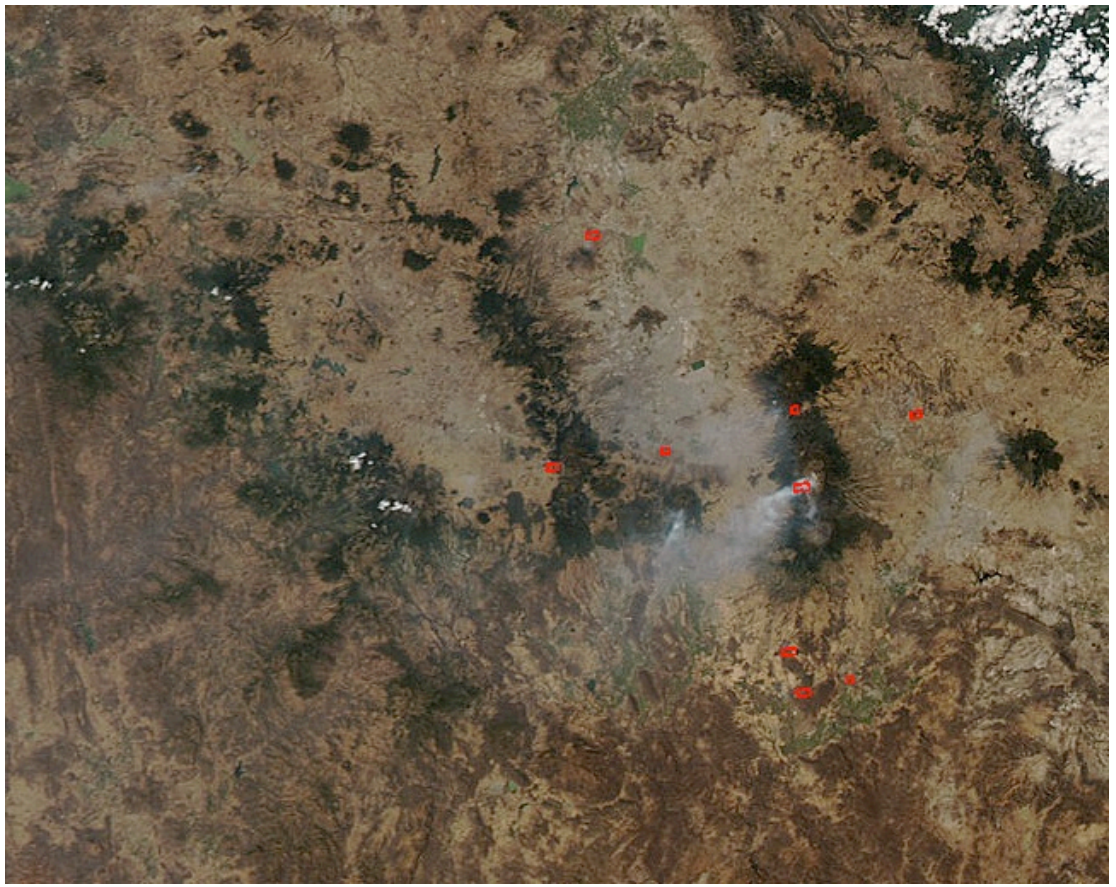
MODIS Images for Mexico

http://rapidfire.sci.gsfc.nasa.gov/subsets/?AERONET_Mexico_City/2006060&altsubsets

http://rapidfire.sci.gsfc.nasa.gov/servir/?Mexico

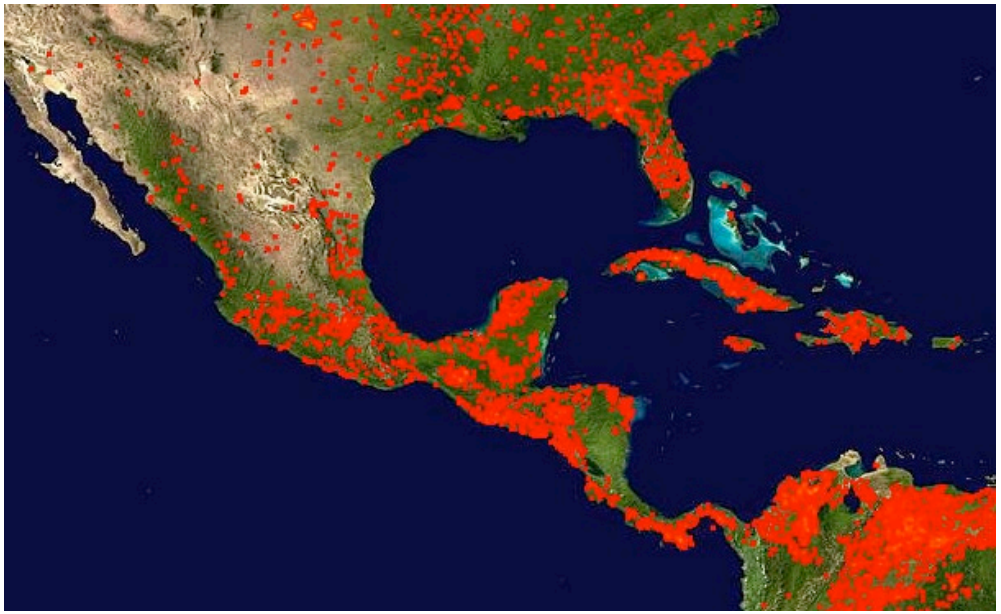
MODIS Aerosol Optical Depths (Allen Chu)

http://modis-atmos.gsfc.nasa.gov/MOD04_L2/index.html



Fire Locations

MODIS Rapid Response
10-Day Fire Maps
http://rapidfire.sci.gsfc.nasa.gov/firemaps/



MODIS Rapid Response Web Fire Mapper
http://maps.geog.umd.edu/
- Available in text and GIS files
- Gridded (0.5°) 8-day and monthly total fire counts also available (Climate Model Grid product)

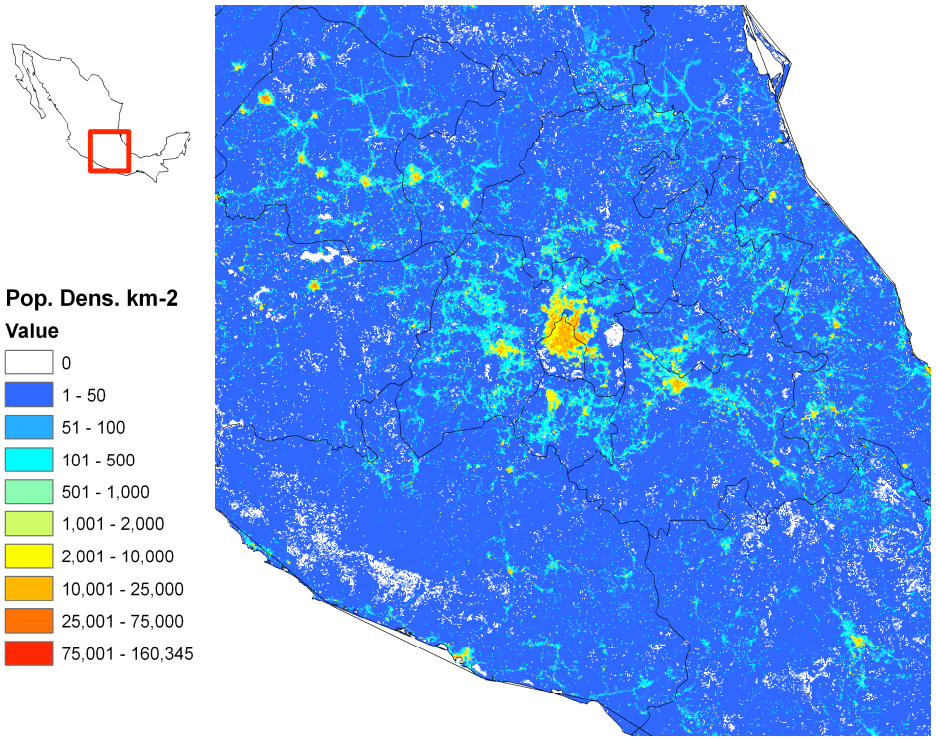
AVHRR WF_ABBA
http://cimss.ssec.wisc.edu/goes/burn/wfabba.html

GOES
http://www.ssd.noaa.gov/PS/FIRE/GASP/gasp.html

GIS Datasets Available for Mexico

Population data (density per km^2) from the LandScan dataset (global)

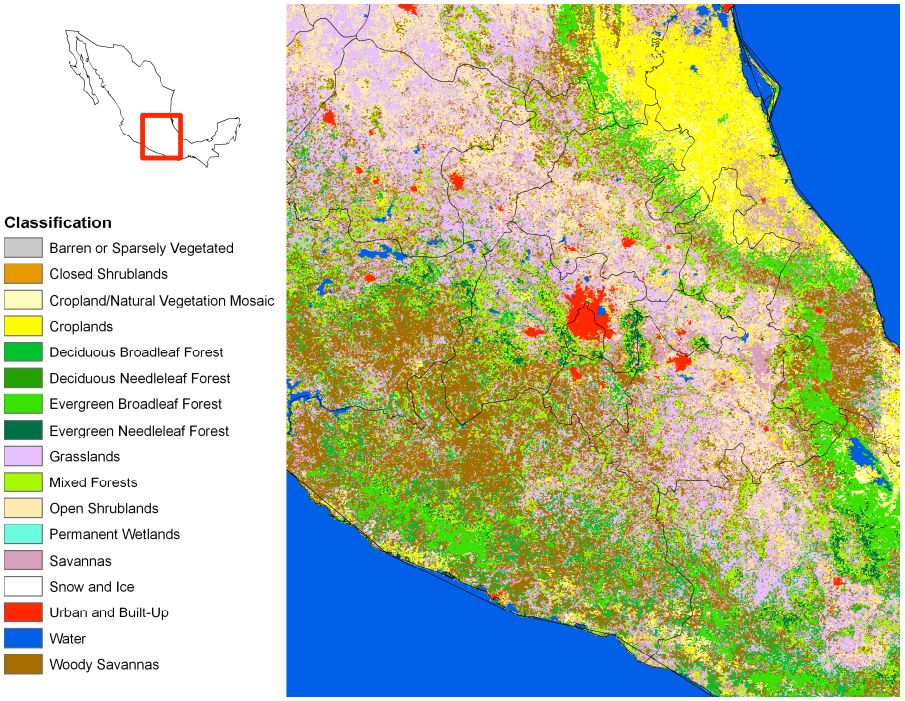
http://www.ornl.gov/sci/landscan/



Also available:

- Political boundaries
- Rivers, lakes, etc.
- Roads
- City locations
- Topography (elevation)

Info from Christine Wiedinmyer, NCAR/ACD



Land Cover Datasets

MODIS Land Cover Type (LCT)
Global, 1 km^2, IGBP land cover classification system for classes
http://edcdaac.usgs.gov/modis/mod12q1v4.asp

Global Land Cover Dataset for 2000
Global, 1 km^2 resolution, based on SPOT
http://www-gvm.jrc.it/glc2000/

MODIS Vegetation Continuous Fields
Global, 500m resolution, information about percent tree, herbaceous, and bare ground cover
http://glcf.umiacs.umd.edu/data/modis/vcf/

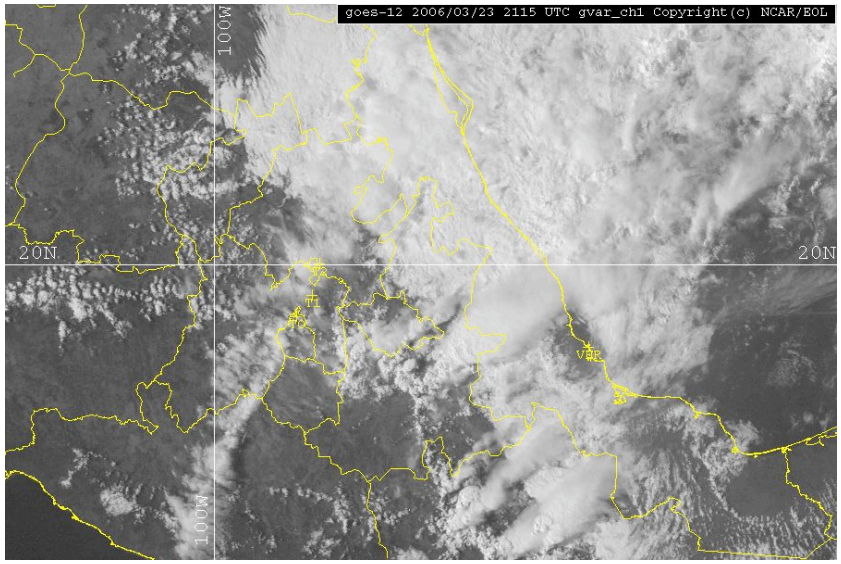
Also available: A land cover/vegetation type dataset specific to Mexico. Provided by colleagues at NOAA, from colleagues in Mexico.

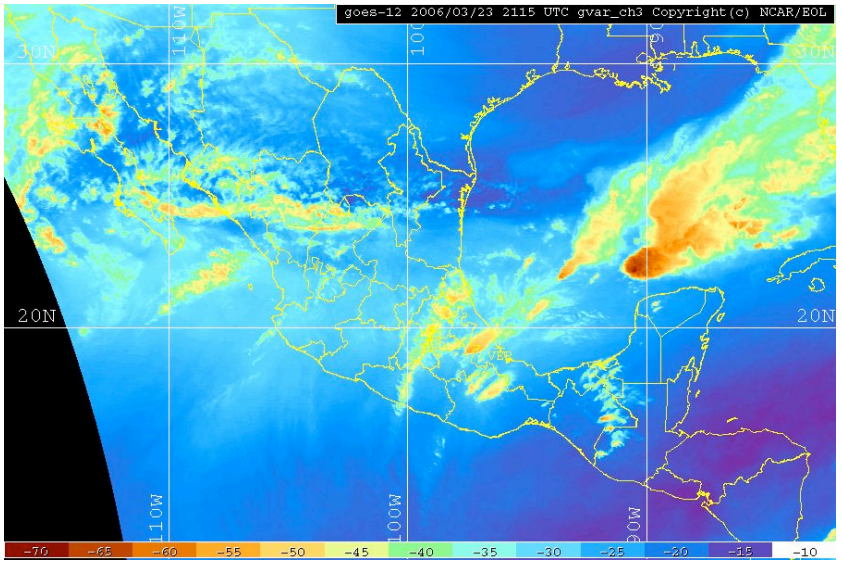
Info from Christine Wiedinmyer, NCAR/ACD

MILAGRO Field Catalog

Operational (GOES) satellite images, etc.

http://catalog.eol.ucar.edu/milagro/index.html





List of links will be posted on MILAGRO website

Send any additions to emmons@ucar.edu