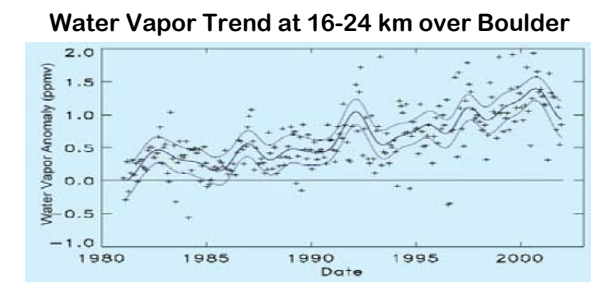
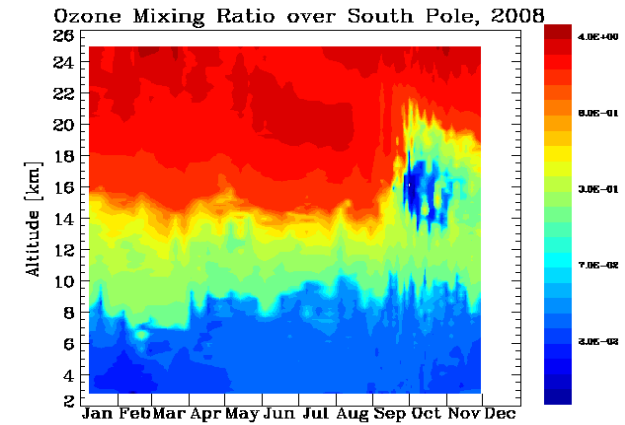
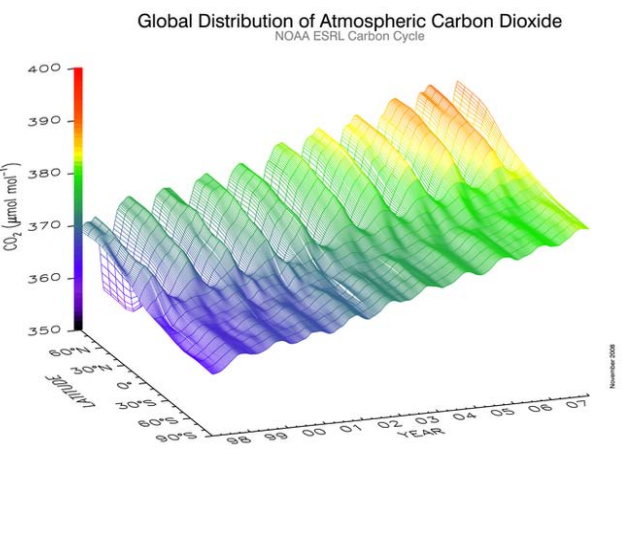
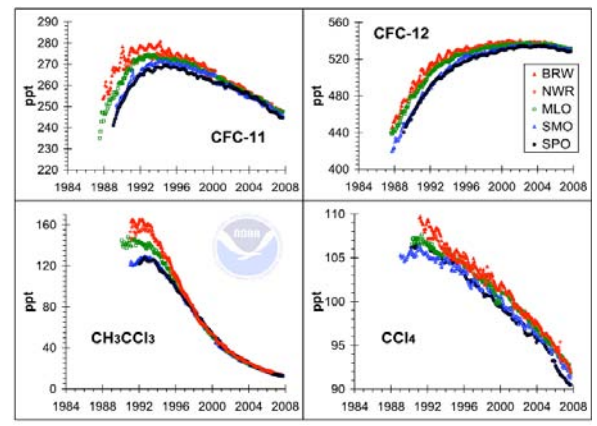
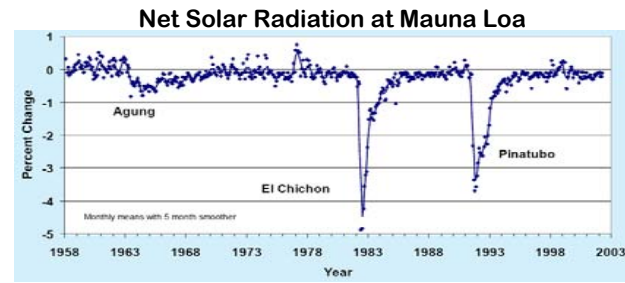
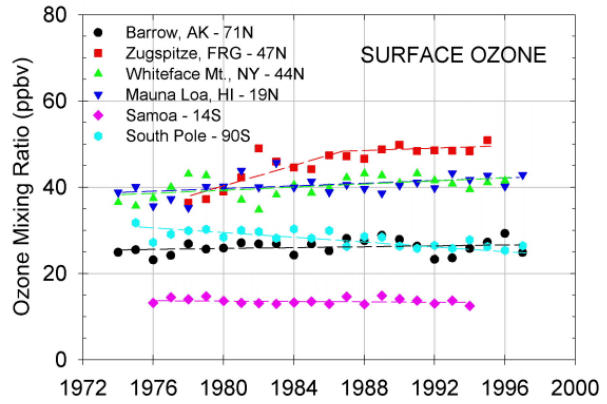
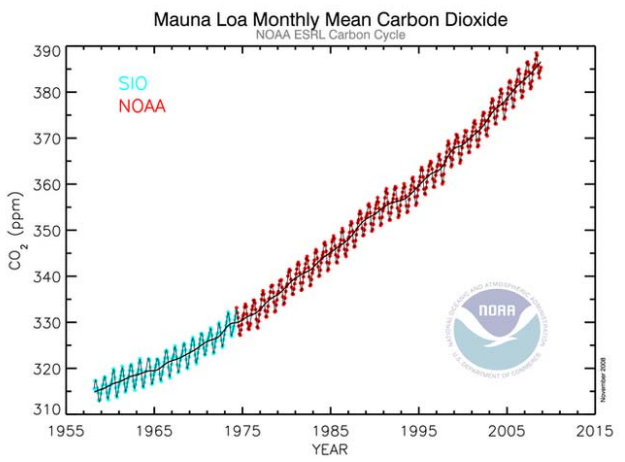


# Giving Researchers What They Want

## The GMD Perspective





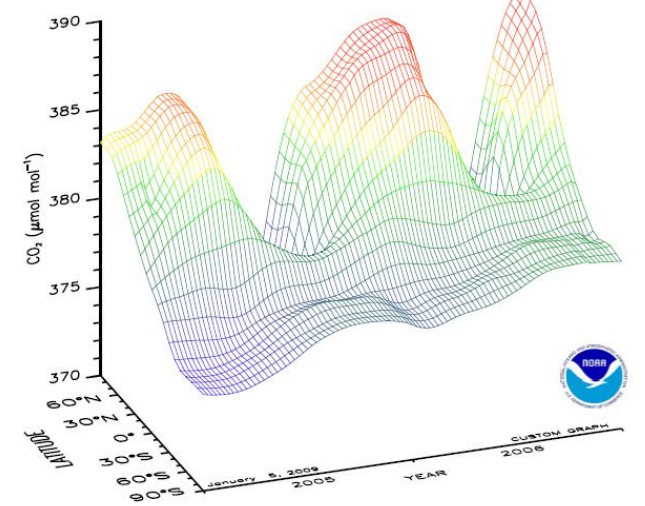
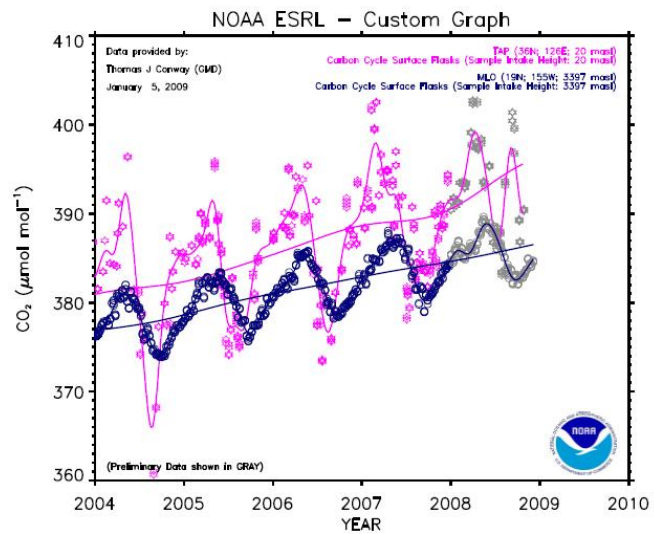
# Interactive Atmospheric Data Visualization

URL: [www.esrl.noaa.gov/gmd/ccgg/iadv/](http://www.esrl.noaa.gov/gmd/ccgg/iadv/)



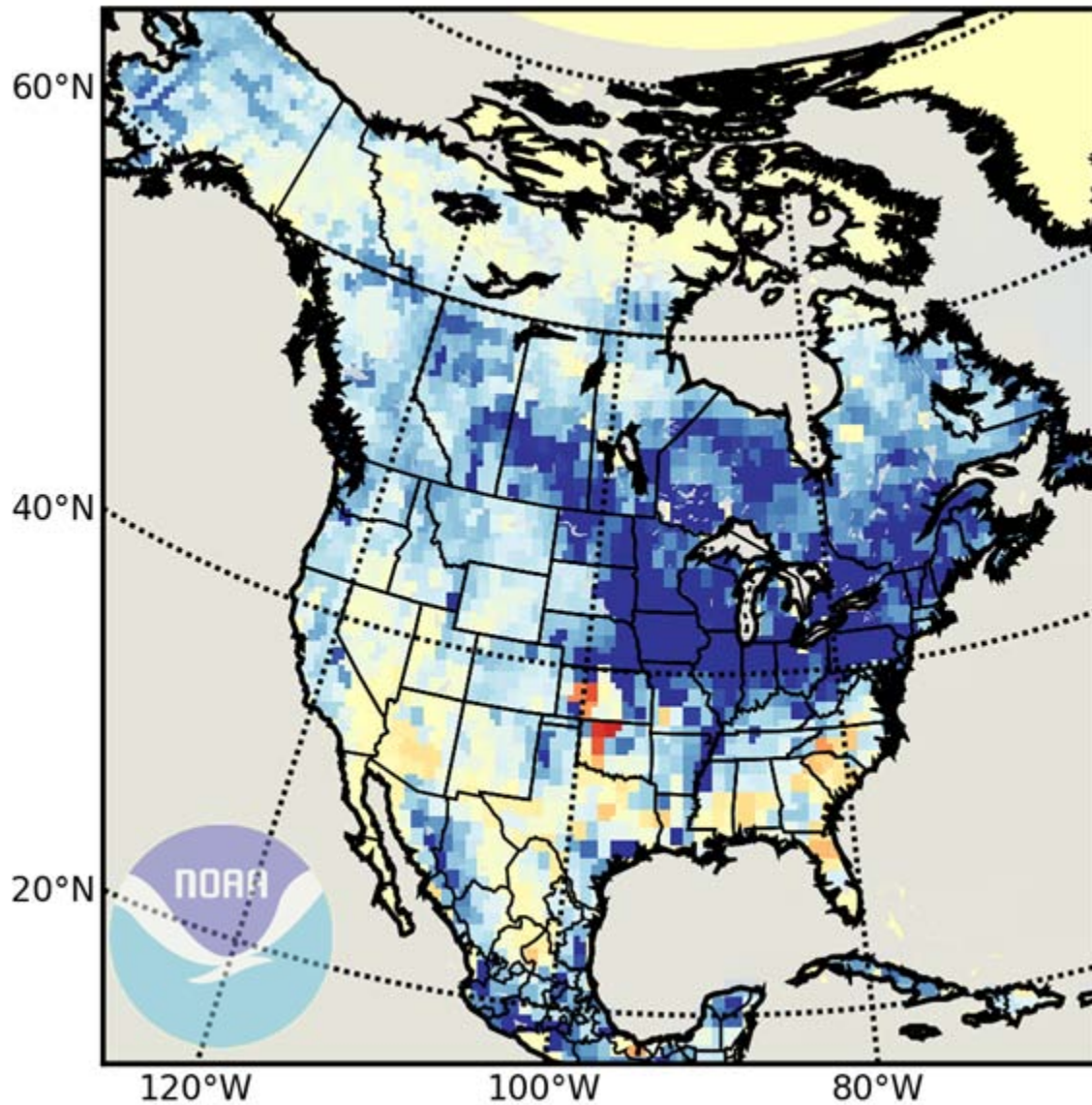
- Proof-of-concept (2003)
- Serves near real-time Carbon Cycle-related observations
- Accesses Replication of our Operational DB
- Users want 24/7 access
- Will be expanded to include other GMD observations

Parameter	Project	First	Last	Status
ch4	c cg_surface	1987-11-14	2008-12-03	Ongoing
co	c cg_surface	1992-03-22	2008-12-03	Ongoing
co2	c cg_surface	1987-11-22	2008-12-03	Ongoing
co2t13	c cg_surface	1992-03-22	2008-11-05	Ongoing
co2o18	c cg_surface	1992-04-05	2008-11-05	Ongoing
h2	c cg_surface	1992-03-22	2008-12-03	Ongoing
n2o	c cg_surface	1997-07-10	2008-12-03	Ongoing
sf6	c cg_surface	1997-07-10	2008-12-03	Ongoing



# CarbonTracker

URL: [www.esrl.noaa.gov/gmd/ccgg/carbontracker/](http://www.esrl.noaa.gov/gmd/ccgg/carbontracker/)

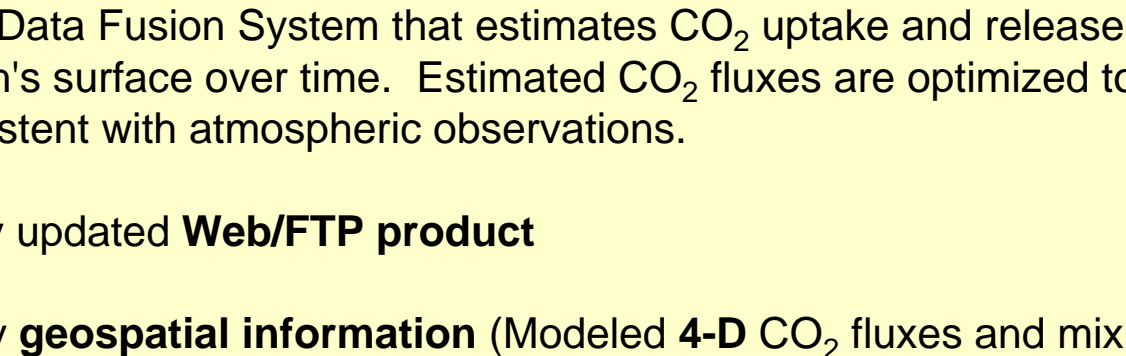


CT2008, Created 28 October 2008

# CarbonTracker

URL: [www.esrl.noaa.gov/gmd/ccgg/carbontracker/](http://www.esrl.noaa.gov/gmd/ccgg/carbontracker/)



- 
- Model - Data Fusion System that estimates CO<sub>2</sub> uptake and release at the Earth's surface over time. Estimated CO<sub>2</sub> fluxes are optimized to be consistent with atmospheric observations.
  - Annually updated **Web/FTP product**
  - Primarily **geospatial information** (Modeled **4-D** CO<sub>2</sub> fluxes and mixing ratios)

## New Challenges:

- Provide ability to **interactively analyze and compare** CarbonTracker output
  - Utilize existing expertise and capabilities within ESRL and NOAA PMEL
- **Effectively communicate** to industry, policy makers and the public
  - ESRL Outreach and University of Colorado (CIRES)

