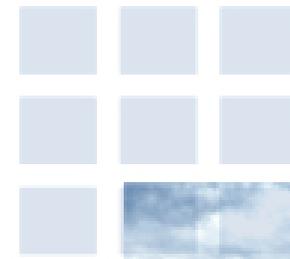




NCAR



Meta Data Harvesting

Sylvia Murphy

Co-Chair

Web Advisory Group

National Center for Atmospheric Research



Outline

- Background
- XML
- Data bases
- Key issue survey

Background

- NCAR has 5 laboratories and 12 divisions
- An annual scientific report is published yearly
- The above organizations have to provide key information
 - publications
 - awards
 - community service
- We have no centralized mechanism for saving and storing this info



XML: Extensible Markup Language

- XML allows one document but many different products:
 - HTML
 - print
 - data base
- Display is through XSL transformations
 - problem with opera

Seminars using XML



ACD Seminars

[2005](#) | [2004](#)

All seminars take place in the NCAR Mesa Lab Main Seminar Room unless otherwise noted. Seminars are usually on Monday afternoon at 3:30 pm, and are preceded by a 30 minutes social time with cookies and coffee. Seminars are organized by Louisa Emmons and Thomas Karl.

Warning

This page does not work with safari. It will show no seminars.

Notification

- ◆ Snail Mail: contact [Marlena Stone](#)
- ◆ [Email List](#)

Date	Time	Speaker	Title	Abstract
2005-11-17	1530	Ming Cai	Dynamical Amplification of Polar Warming	abstract
2005-11-07	1530	Steve Montzka	On the Atmospheric Distribution of Carbonyl Sulfide: Can COS Help Constrain Gross Fluxes of CO2?	abstract

Dynamical Amplification of Polar Warming

Title	Dynamical Amplification of Polar Warming
Speaker	Ming Cai
Institution	Department of Meteorology, Florida State University
Date	2005-11-17
Day	Thursday
Time	1530
Location	Mesa Laboratory, Main Seminar Room
Abstract	In this paper, we use a radiative-transportive climate model to illustrate that the atmospheric poleward heat transport plays an important role in amplifying the polar surface warming due to anthropogenic greenhouse gases. Because of a much warmer surface in tropics, the anthropogenic radiative forcing is larger in tropics than in extratropics for same amount of anthropogenic greenhouse gases. A direct response to the anthropogenic radiative forcing is an increase in the atmosphere equator-to-pole temperature contrast, leading to a strengthening of the atmospheric poleward heat transport. As a result, part of the extra amount of energy intercepted by the low-latitude atmosphere due to an increase in its opacity is transported to high latitudes. This implies a "greenhouse-plus" ("greenhouse-minus") feedback to the high (low) latitude surface temperature, which acts to amplify (reduce) the initial surface warming in high (low) latitude, causing a larger warming in high

CD/CGD SEMINAR: Earth System Modelling at the MPI-M and the of the QBO in MAECHAM5	abstract
Effects of Dehydration in the Tropical Tropopause Layer of a Cloud-Resolving	abstract
glacial changes in the isotopes of nitrate from the GISP2 ice core	abstract
ASP SEMINAR: Understanding and Quantifying Biosphere-Atmosphere s: Trace Gas and Aerosol Exchanges	abstract
netic Isotope Effects in the Gas-Phase Reactions of Nonmethane ons with OH Radicals and Cl Atoms	abstract
ce of Transient Deep Convection on the Asian Summer Monsoon	abstract
pheric response to solar and anthropogenic forcing: Simulations with a climate model for the entire atmosphere	abstract

Actual Source



```
<?xml version="1.0"?> <?xml-stylesheet type="text/xsl"
href="/Science/Seminars/seminar_list.xsl"?>
```

```
<science>
```

```
<title>ACD Seminars</title>
```

```
<seminar filename="/Science/Seminars/2005/11-17.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/11-07.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/10-24.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/10-20.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/10-13.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/10-10.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/10-03.xml"/>
```

```
<seminar filename="/Science/Seminars/2005/09-12.xml"/>
```

```
</science>
```



How do we harvest XML

- Choose an appropriate schema (e.g dublin core)
- Use Open Archive Initiative (OAI) client software to search for and download XML files
 - <http://www.openarchives.org/>
 - <http://www.dlese.org/oai/index.js>
- Used by NCAR's Community Data Portal
 - <http://cdp.ucar.edu>



Data Base Driven

- Centralized web application to input data
- VAVOOM: JSP custom tags
 - organizations can use these tags to query the centralized data base



Survey

- Who publishes an annual scientific report
- Do you have input issues?
- Are you using either method? A different method?

Summary

Meta data is data about data

- At the lab level this is vital statistics useful to bean counters
- Gathering this data is costly
- Developing methods is equally costly and problematic
- XML is simpler and quicker to implement
- Data base solutions are long lasting but resource intensive.



NCAR

Author Contact

Sylvia Murphy

Web Application Programmer

Atmospheric Chemistry Division

murphys@ucar.edu

303-497-1882