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# Exploring Global Change at the University of New Hampshire

*“EOS Brings You the World”*

Annette L. Schloss

Institute for the Study of Earth, Oceans and Space

Director: Berrien Moore, III





# EOS-WEBSTER

UNIVERSITY OF NEW HAMPSHIRE



Your Digital Library of Free Earth Science Data



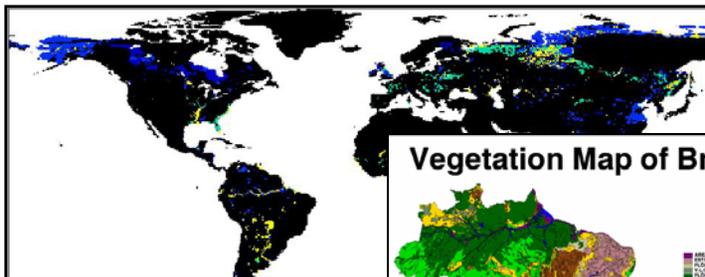
:: HOME

:: NEWCOMER'S PAGE

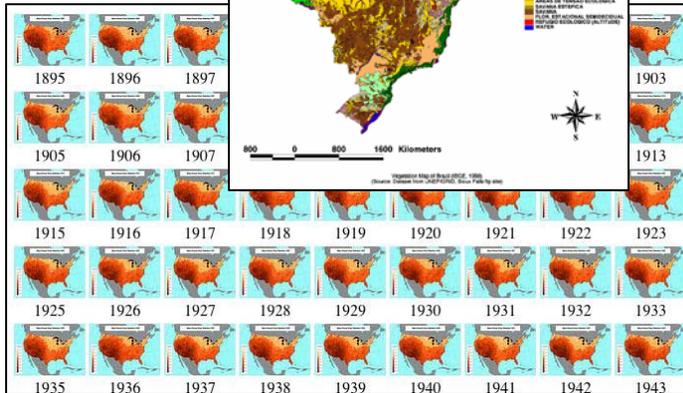
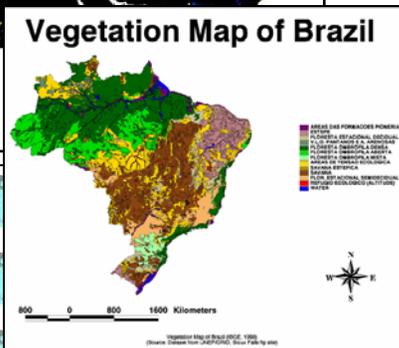
:: DATA

:: USER SERVICES

:: INFORMATION



Base Maps



Time-series Modeling Products



Multi-scale Satellite Imagery

- Data Search
- Subsetting
- Repackaging



Local, regional, and global climate change issues



[Search](#) >> [View Matching Holdings](#) >> [Place Order](#)

**Matching Holding Count: 96662**

[Collection](#) [Spatial](#) [Temporal](#) [Keyword](#) [Freetext](#) [Your Search Criteria](#) [View Matching Holdings](#) [Help](#)



**Using the Search and Retrieve Tool**

Use the tabs above to select and order holdings from the database. Click on one or more tabs and follow the instructions for each. (For example, use the **Spatial** filter tab to search for data in a specific location.)

As you use the filter tabs, note the **Matching Holding Count** box at the right. How many holdings meet your search criteria? Continue to refine your search until you get a reasonable holding count.

If you have used the **Temporal** or **Spatial** filters, data will be subset to the selected time period or region. To prevent subsetting, clear those filters before selecting holdings to order.

You can review the holdings list at any time by clicking on the **View Matching Holdings** tab.

You can view and revise your current selections by clicking on the **Your Search Criteria** tab.

You can place an order from the **View Matching Holdings** page by selecting holdings from the holdings list and then clicking the **Place Order** button.

If you are uncertain how to locate the data you want, use the **Freetext Filter**.

We hope you find our **Search and Retrieve Tool** easy to use. If you have any questions or problems, please review our [Newcomers](#) page or contact [User Support](#).



[Search](#) >> [View Matching Holdings](#) >> [Place Order](#)

**Matching Holding Count: 96662**

[Collection](#) | [Spatial](#) | [Temporal](#) | [Keyword](#) | [Freetext](#) | [Your Search Criteria](#) | [View Matching Holdings](#) | [Help](#)



Use this filter to select and cookie-cut geographic locations out of our holdings. Select a category. To narrow your selection, choose one or more locations.

[Update Holding Count](#) [Clear](#)

Select Category and View Map	Select and View Location(s)	
<ul style="list-style-type: none"><li>Europe Countries</li><li>LBA Ecology Regions</li><li>NAST mega-regions</li><li>NAST regions</li><li>NAST watersheds</li><li>New Hampshire Basins</li><li>New Hampshire Counties</li><li>New Hampshire Towns</li><li>New Hampshire Watersheds</li><li>North America Countries</li></ul>	<ul style="list-style-type: none"><li>Romania</li><li>Russia</li><li>San_Marino</li><li>Spain</li><li>Svalbard</li><li>Sweden</li><li>Switzerland</li><li>Ukraine</li><li>United_Kingdom</li><li>Yugoslavia</li></ul>	

Data selection tools - spatial filter



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[Search](#) >> [View Matching Holdings](#) >> [Place Order](#)

Matching Holding Count: 96662

[Collection](#)

[Spatial](#)

[Temporal](#)

[Keyword](#)

[Freetext](#)

[Your Search Criteria](#)

[View Matching Holdings](#)

[Help](#)



**Tip**

Use this filter to select one or more keywords from the list below.

[Update Holding Count](#)

[Clear](#)

- Agricultural Data
- Atmospheric Deposition & Air Quality Data
- Climate & Climatological Data
- Demographic Data
- Forest Ecosystem & Carbon Dynamics Model Data
- Geographic Reference Data
- Hydrologic Data & Water Demand
- LBA Project
- Land Cover & Land Use Products
- Satellite Data Products

Data selection tools - theme/keyword filter



[Search](#) >> [View Matching Holdings](#) >> [Place Order](#)

Matching Holding Count: 96662

[Collection](#) [Spatial](#) [Temporal](#) [Keyword](#) [Freetext](#) [Your Search Criteria](#) [View Matching Holdings](#) [Help](#)



Use this filter to select specific time-periods from our holdings. Enter your date(s) of interest. Reference data or climatologies do not have dates. To view those holdings, do not enter dates.

[Update Holding Count](#) [Clear](#)

	yyyy	mm	dd
Begin:	<input type="text"/>	<input type="text" value="Jan"/>	<input type="text" value="1"/>
End:	<input type="text"/>	<input type="text" value="Dec"/>	<input type="text" value="31"/>

(Either date is optional)

### Table of Date Ranges for our Collections

Click [here](#) to close the collection date range table.

Collection	Date Range	Collection	Date Range
 <b>Carbon Cycle Model Linkage Project (CCMLP)</b> <a href="#">Detailed Info &amp; Data Policy</a>	1859-01-01 - 1995-12-31	 <b>China County Data</b> <a href="#">Detailed Info &amp; Data Policy</a>	1990-01-01 - 1990-12-31
 <b>Ecosystem Demography Model Data</b>	N/A	 <b>Educational Image Subsets</b>	1989-05-01 - 1999-10-11

Data selection tools - temporal filter



Search >> **View Matching Holdings** >> Place Order

Matching Holding Count: 30

Collection **Spatial** Temporal Keyword Freetext Your Search Criteria View Matching Holdings Help

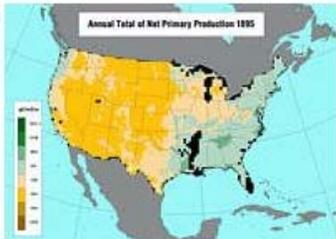


To order holdings from the list below, check the appropriate boxes. Holdings available in more than one output format are displayed in a pull-down select list. Output formats are described on the [Output Formats](#) page. After you've selected your holdings, click the "Place Order" button.

Place Order

Page: 1 2 >>

Holdings: 1 - 20 of 30

Select an Output Format	Description of Our Holdings that Match Your Search Criteria
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> BSQ: Generic</li> <li><input type="checkbox"/> ASCII Tabular</li> <li><input type="checkbox"/> Arc ASCII Grid</li> <li><input type="checkbox"/> BSQ: ArcInfo</li> <li><input type="checkbox"/> BSQ: GrADS</li> <li><input type="checkbox"/> GeoTIFF</li> <li><input type="checkbox"/> HDF-EOS</li> <li><input type="checkbox"/> NetCDF</li> </ul>	<p><b>NPP -- Annual:</b> Biome-BGC; CCC-CGCM1 scenario; annual total of net primary production; increasing CO2 (IS92a global yearly dataset).</p> <p><b>Date Class:</b> time series</p> <p><b>Time Step Units:</b> Years</p> <p><b>Date(s):</b> 1895-01-01 - 2100-12-31</p> <p><b>Data Guide:</b> <a href="#">US National Assessment</a></p> <p><b>Browse:</b> </p>

Data selection tools - browse and select output format



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U.S. National Assessment



US Global Change Research Program  
www.usgcrp.gov



VEMAP

The National Vegetation Monitoring and Assessment Program

Collection Spatial Temporal Keyword Freetext Your Search Criteria View Matching Holdings Help

**Tip** Use this filter to select and cookie-cut geographic locations out of our holdings. Select a category. To narrow your selection, choose one or more locations.

Update Holding Count Clear

Select Category and View Map	Select and View Location(s)	
LBA Ecology Regions	Appalachians	
NAST mega-regions	California	
NAST regions	Central Great Plains	
NAST watersheds	Eastern Midwest	
New Hampshire Basins	Great Lakes	
New Hampshire Counties	Gulf Coast	
New Hampshire Towns	Metro East Coast	
New Hampshire Watersheds	Mid-Atlantic	
North America Countries	New England	
Northeast USA	Northern Great Plains	

Special Projects – US National Assessment 2000

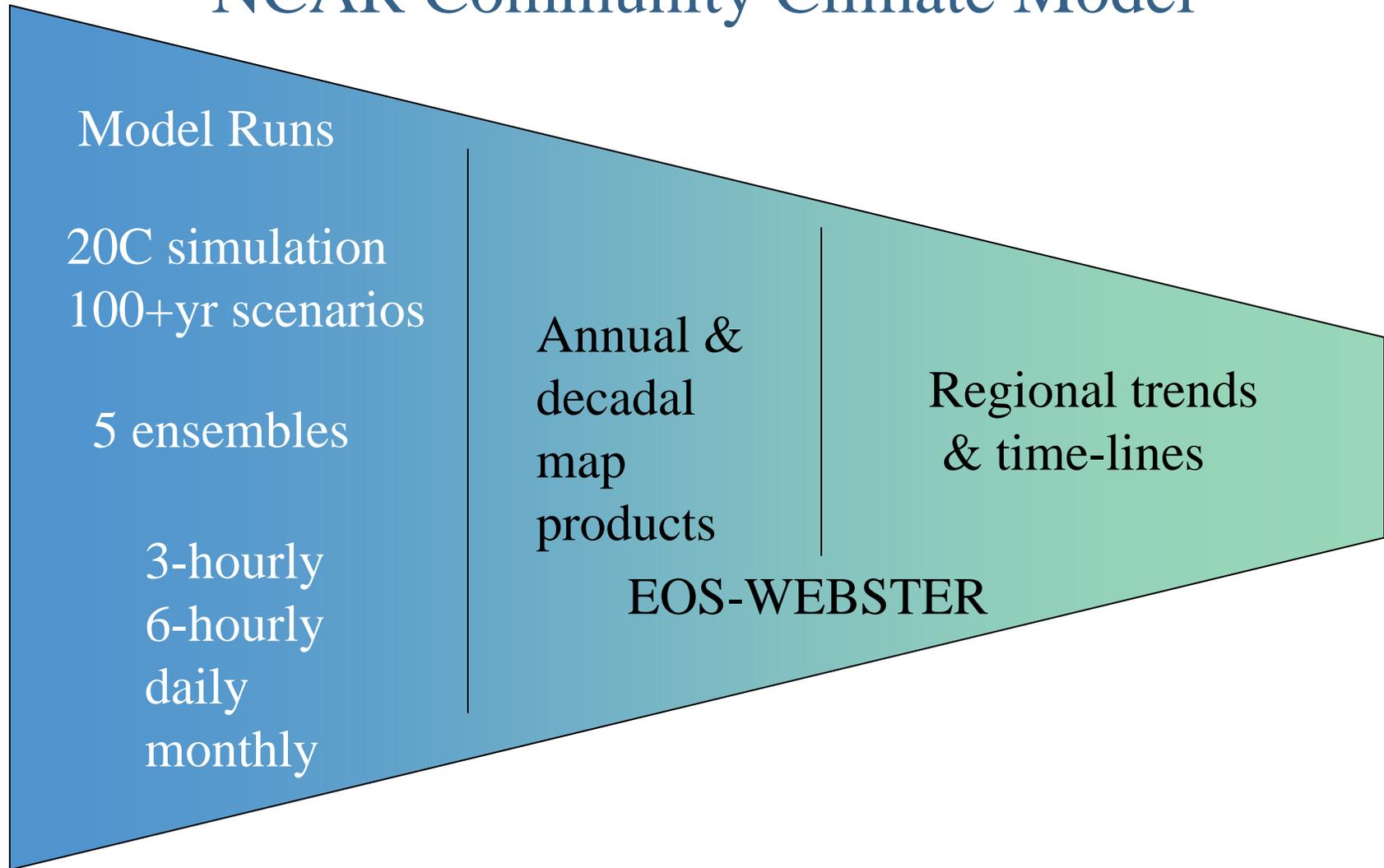
# Climate Impacts from the NCAR Community Climate Model

Goal: broad accessibility of IPCC model data

Target audiences:

- Other impact modelers
- Educators
- Public interested in regional impacts
- Ecologists/hydrologists
- Economists (bridge gap between science and policy)

# Climate Impacts from the NCAR Community Climate Model

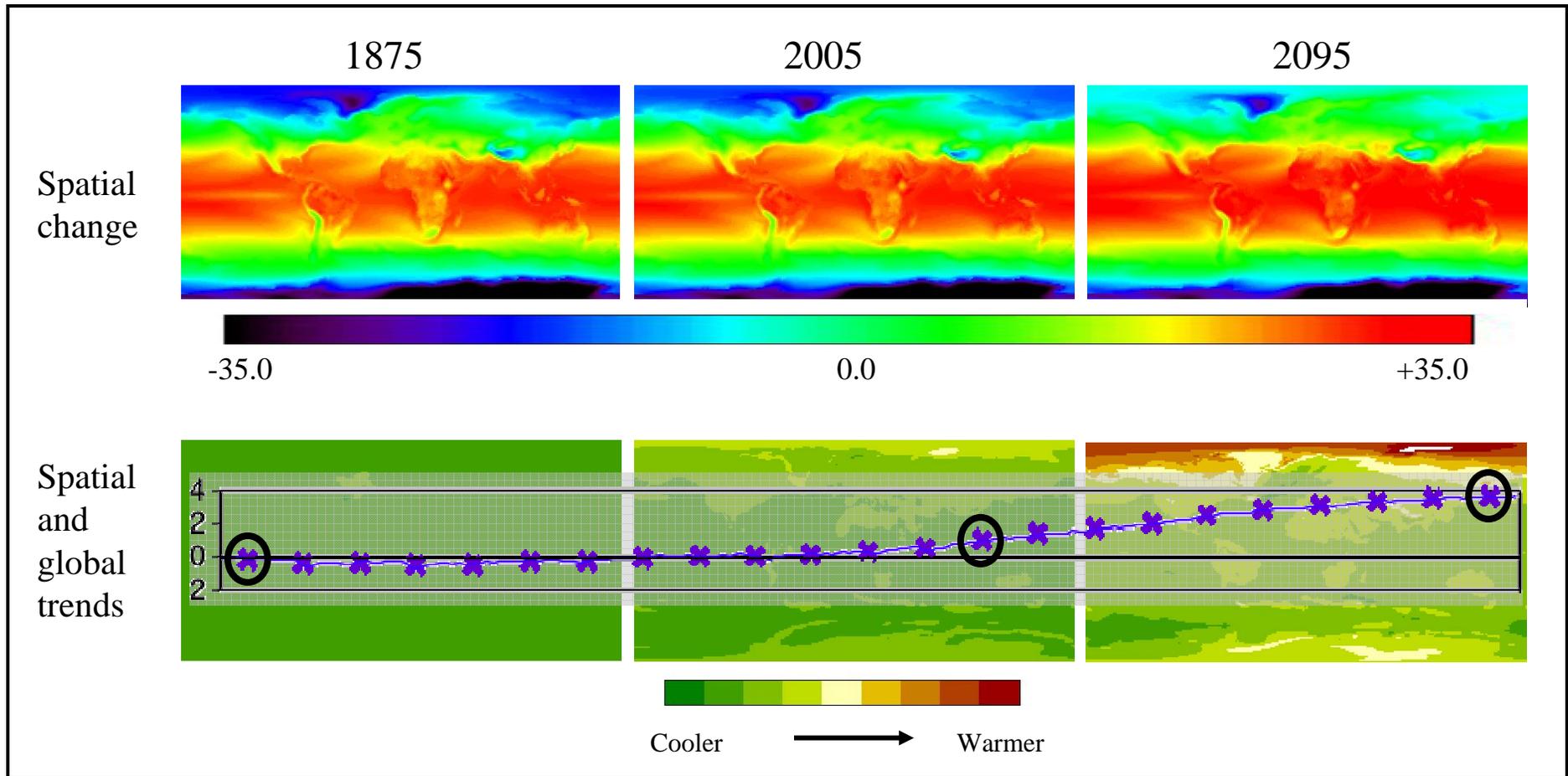


Special Projects, Special Audiences

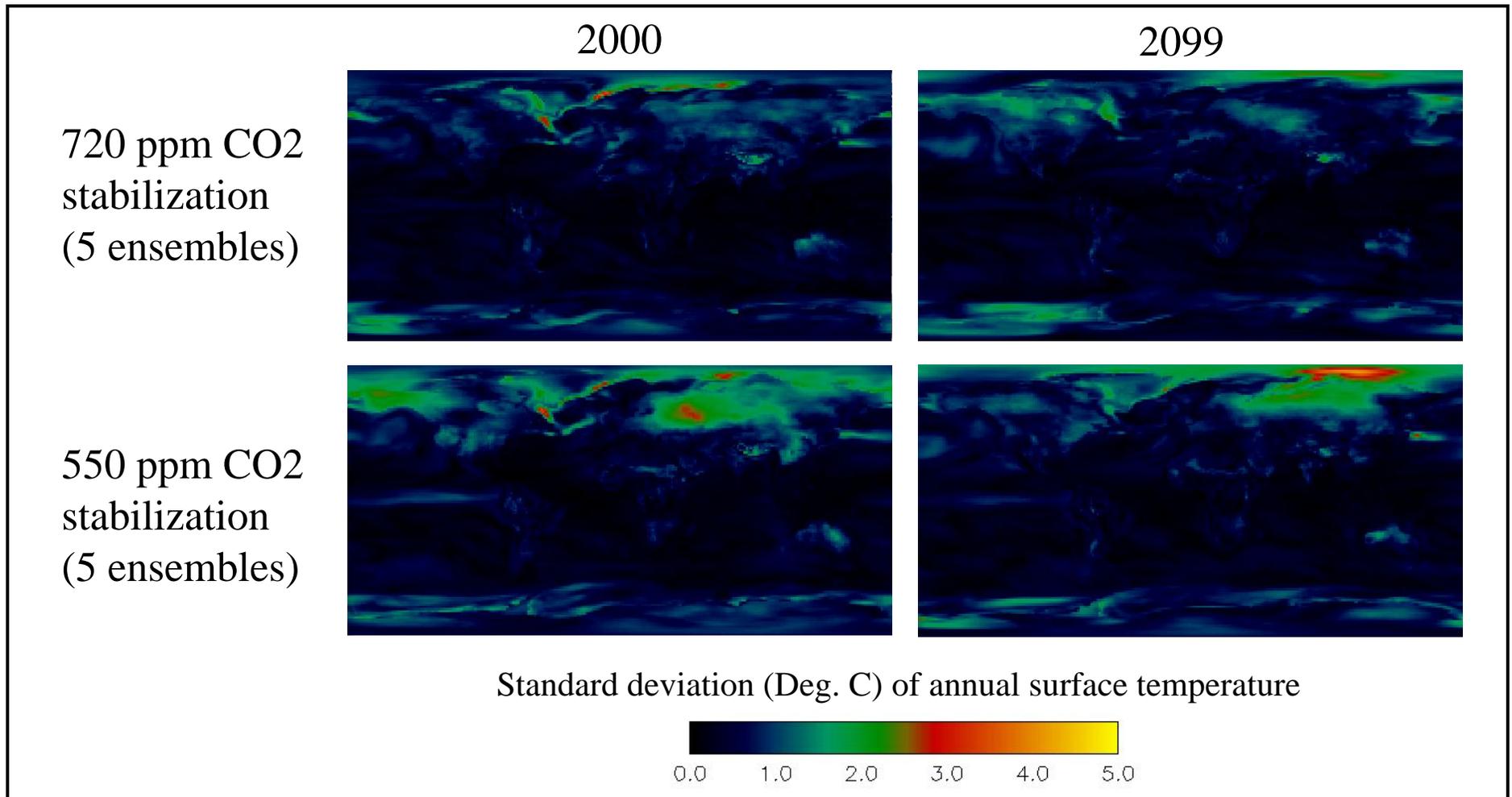
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# Global temperature anomalies from 1930-1960 (decadal)

What could happen? scenario: 720 ppm CO<sub>2</sub> stabilization



# Comparison of Ensembles



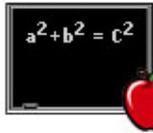


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Resources for  
Teachers

- Serving educators through partnerships.
- Utilizing digital libraries as distribution portals.



*Lawrence Hall of Science*  
University of California, Berkeley



DL|ESE



Science Education  
Resource Center @ Carleton  
College



Special Projects, Special Audiences

# Earth Exploration Toolbook

Step-by-Step Guides for Investigating Earth System Data

Home »



Exploring Regional Differences in Climate Change

Teaching Notes

Case Study

Step-by-Step Instructions

About the Tool and Data

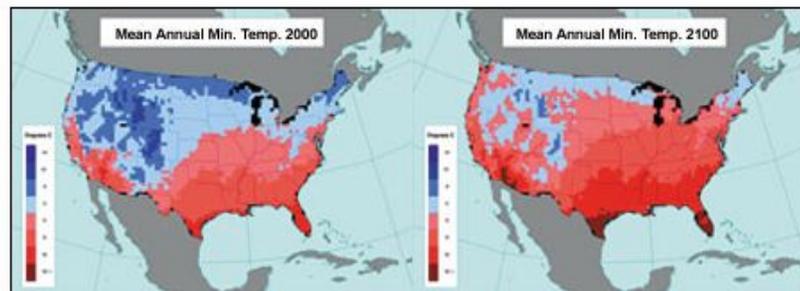
Going Further

## Exploring Regional Differences in Climate Change

Denise Blaha, denise.blaha@unh.edu  
Rita Freuder, rita.freuder@unh.edu

Complex Systems Research Center  
Institute for the Study of Earth, Oceans, and Space  
University of New Hampshire  
Last Major Revision: November 29, 2004

### Description



Source: Canadian Climate Center (Model CCCma-CGCM1)

Most people understand that significant climate changes are predicted in the next century, but they may not be aware that these changes will likely vary regionally. Using climatological data from the University of New Hampshire's **EOS-WEBSTER**, users will obtain annual predictions for minimum temperature, maximum temperature, precipitation, and solar radiation for Minnesota and California to explore this regional variability. Data will span the years 2000 through 2100. Users import the data into a spreadsheet application and analyze it to interpret regional differences. Finally,

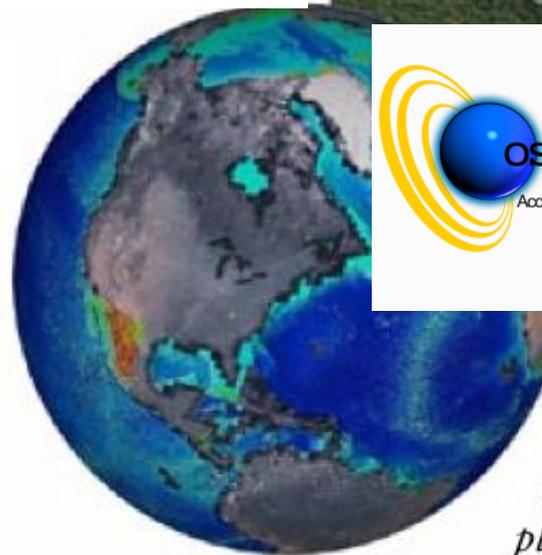
users download data for their state and compare them with the other two states to answer a series of questions about regional differences in climate change.

Special Projects, Special Audiences

# *“EOS Brings You the World”*



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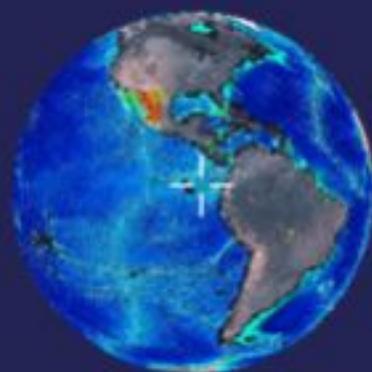


*Using a web browser, the UNH community will soon be able to surf planet Earth with the greatest of ease.*

Products and Visual Tools for Exploring Climate Change

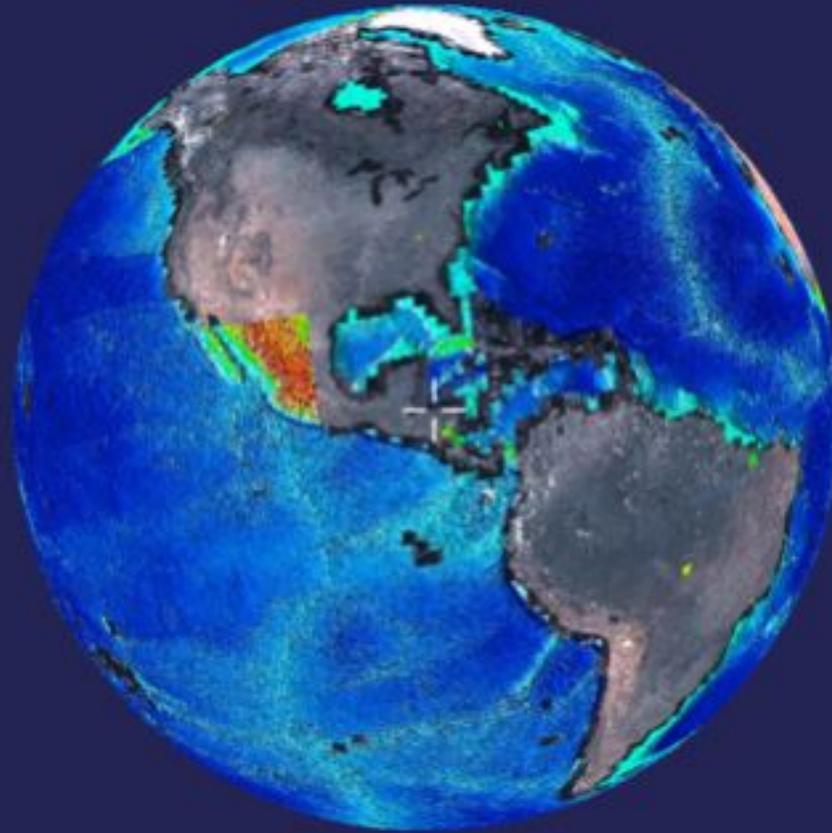
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Screen



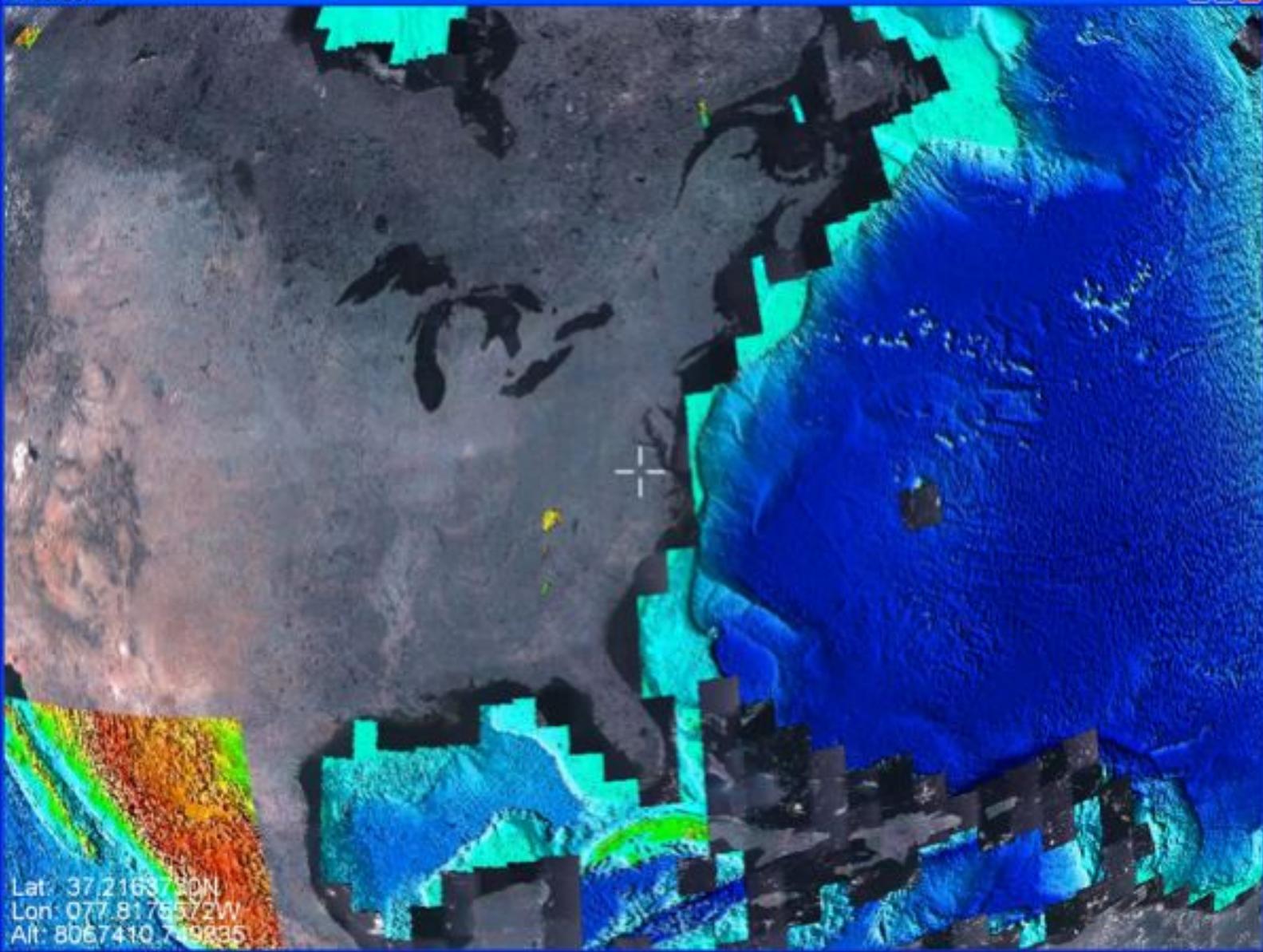
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Alt: 73631946.198307

Screen

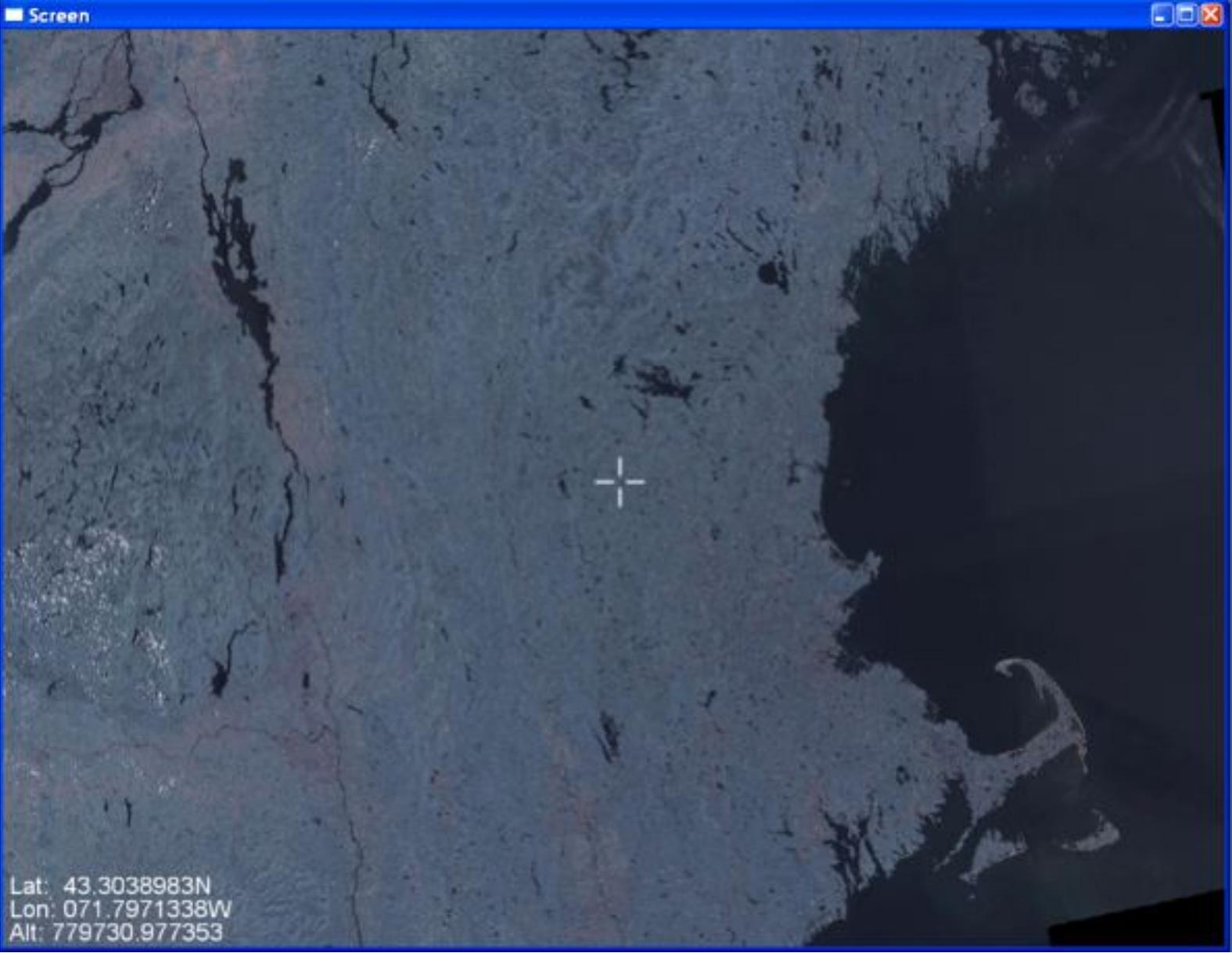


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Screen

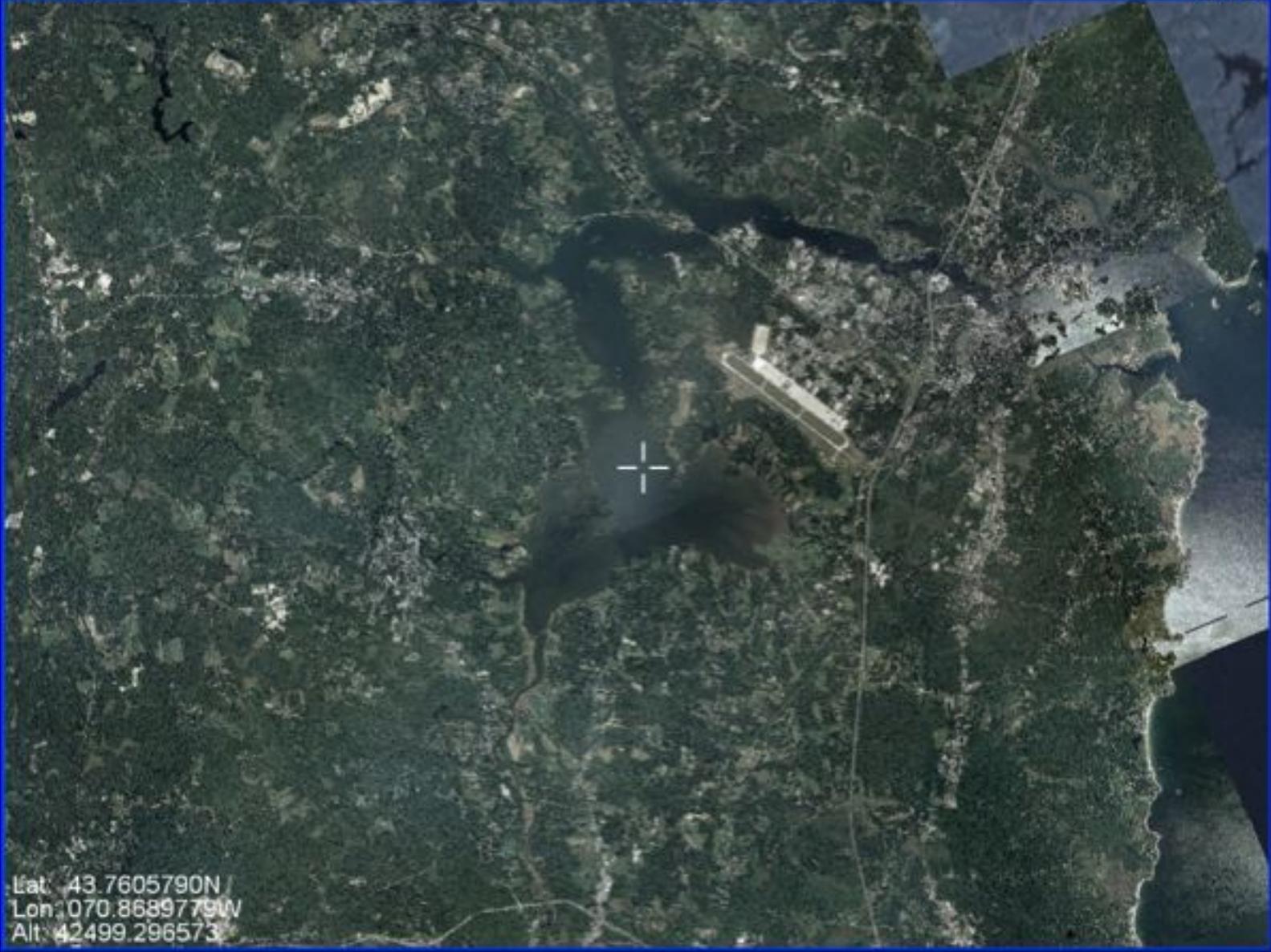


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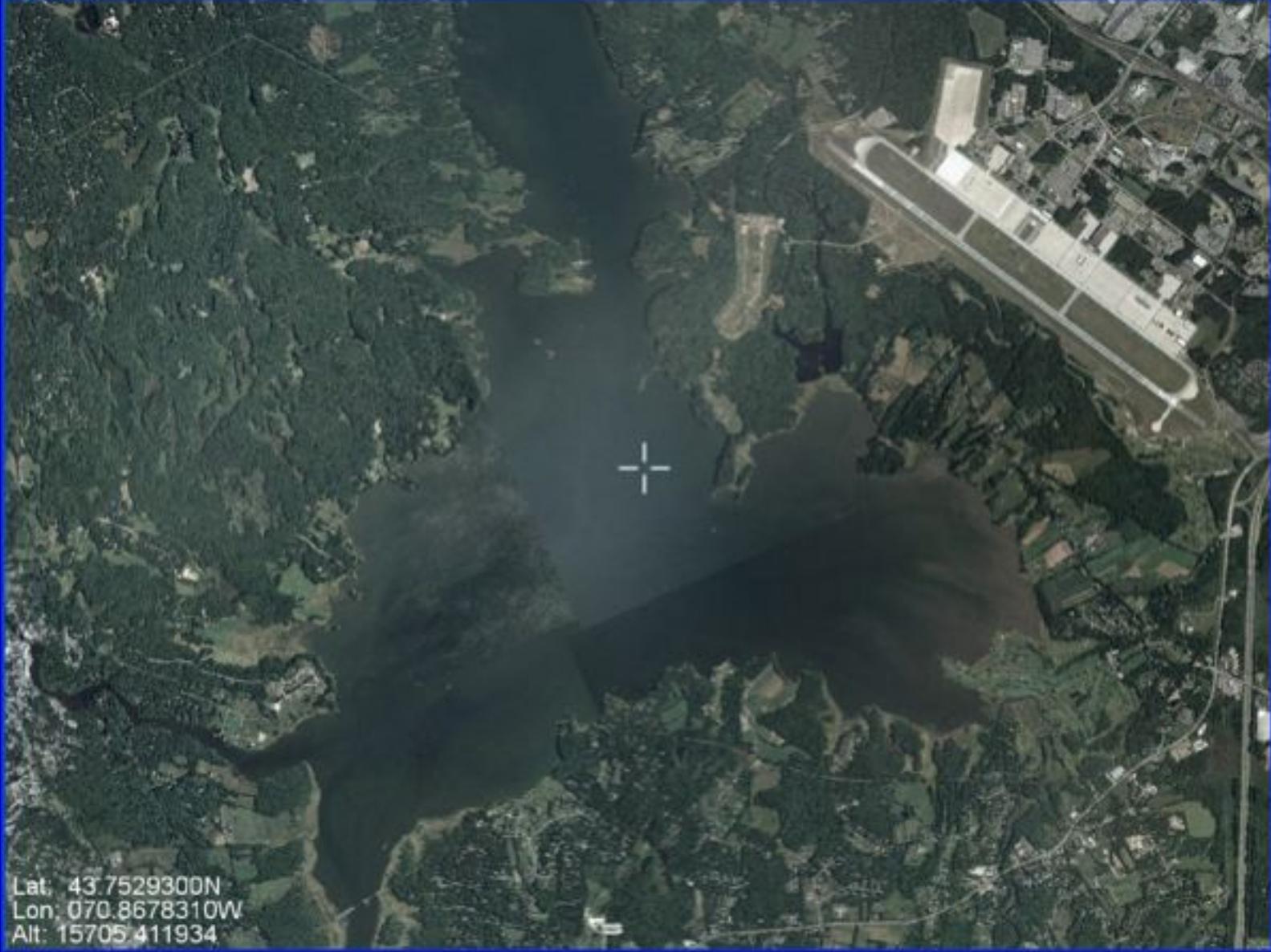
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Lon: 071.7971338W  
Alt: 779730.977353

Screen



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Lon: 1070.8689779W  
Alt: 42499.296573

Screen



Lat: 43.7529300N  
Lon: 070.8678310W  
Alt: 15705.411934