A Public Release of WRF Portal

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WRF Portal is Released on April 11, 2008

- WRF Portal is the graphical user interface (GUI) front end for configuring and running both WRF cores: ARW and NMM, as well as configuring and running your own programs/scripts (like post).
- Simplifies the selection/localization of your domain, as well as configuring namelist.wps and namelist.input
- Employs workflow editor to create workflows and run them
- Monitors progress of workflow runs, reports any errors
- Works on either local computer or remote computers using SSH-2
- Works with either internal workflow manager or external one that supports SGE and LSF

WRF Portal Convenience Features

- Can run portal on one computer (e.g. Windows, Linux, or Mac) and execute workflows on another computer
- Can cancel (halt) runs in progress
- Eliminates need to create and maintain complicated directory trees and configuration files
- Easily search past workflows based on multiple criteria
- Remembers your preferences (e.g. automatically fills in default information for new workflows/runs)
- Portal (initial) setup is simple with the Portal Wizard
- Includes Diff tool for comparing workflows and files

Includes WRF Domain Wizard (WDW)

- WDW configures and runs WRF Preprocessing System (WPS)
  - select region of Earth for domain and map projection parameters
  - Edit nests
  - Run WPS programs (ungrib, geogrid, and metgrid)
  - Visualize NetCDF output with Panoply or Google Earth
  - namelist.input editor (automatically fills in many parameters for you)
  - Graphical vertical (ETA level) editor
  - Supports latest WRF/WPS 3 lat-lon regional and global domains

WRF Portal

- Zero installation!
  - Just click a web link and the Java webstart application just launches from your web browser
  - Portal Wizard guides you through the steps to set up the portal
  - Requires Java 1.5 or later
  - Can also download and run from command line
  - Runs on virtually all platforms

http://wrfportal.org

WRF Portal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://wrfportal.org/index.html

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WRF Portal

Home | Contact Us

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- Home
- WRF Portal
- Domain Wizard
- Tutorials (HTML)
- Tutorials (Video)
- F.A.Q.
- About

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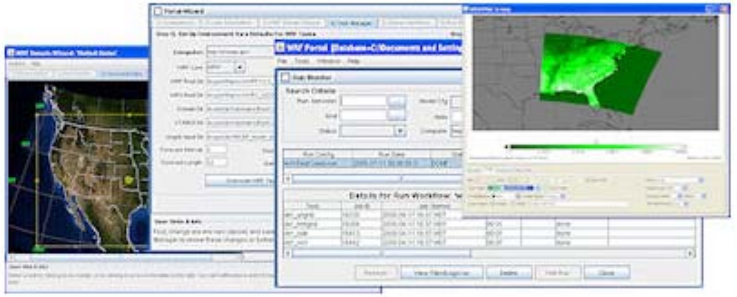
ESRL website
FSL website

What Is WRF Portal?

WRF Portal is the graphical user interface (GUI) front end for configuring and running both WRF cores: ARW and NMM, as well as configuring and running your own programs/scripts (like post). It simplies the selection/localization of your domain, the running and monitoring of WRF, and the visualization of your model's output. Written in Java to be portable to all platforms, WRF Portal includes WRF Domain Wizard.



What are WRF and WPS?

The Weather Research and Forecasting (WRF) Model is a mesocale numerical weather prediction framework designed for operational forecasting and atmospheric research needs. WPS stands for WRF Preprocessing System and is used to prepare a domain (region of the Earth) for WRF.

Program Features

- Includes WRF Domain Wizard for selecting your domain on a map, defining nests, creating namelist.input, running WPS programs
- Portal Wizard walks you through the steps of configuring computers, tasks, and running WPS/WRF
- Visualize NetCDF output files with a plethora of graphing/charting options
- Define worklows (tasks to run, associated namelist files, environment variables)
- Run workflows

Done

Support

- Email support and links to online forums here: http://wrfportal.org/about.html
- 17 video (flash) tutorials here: http://wrfportal.org/flash-tutorial.html
- 8 html tutorials here: http://wrfportal.org/html-tutorial.html

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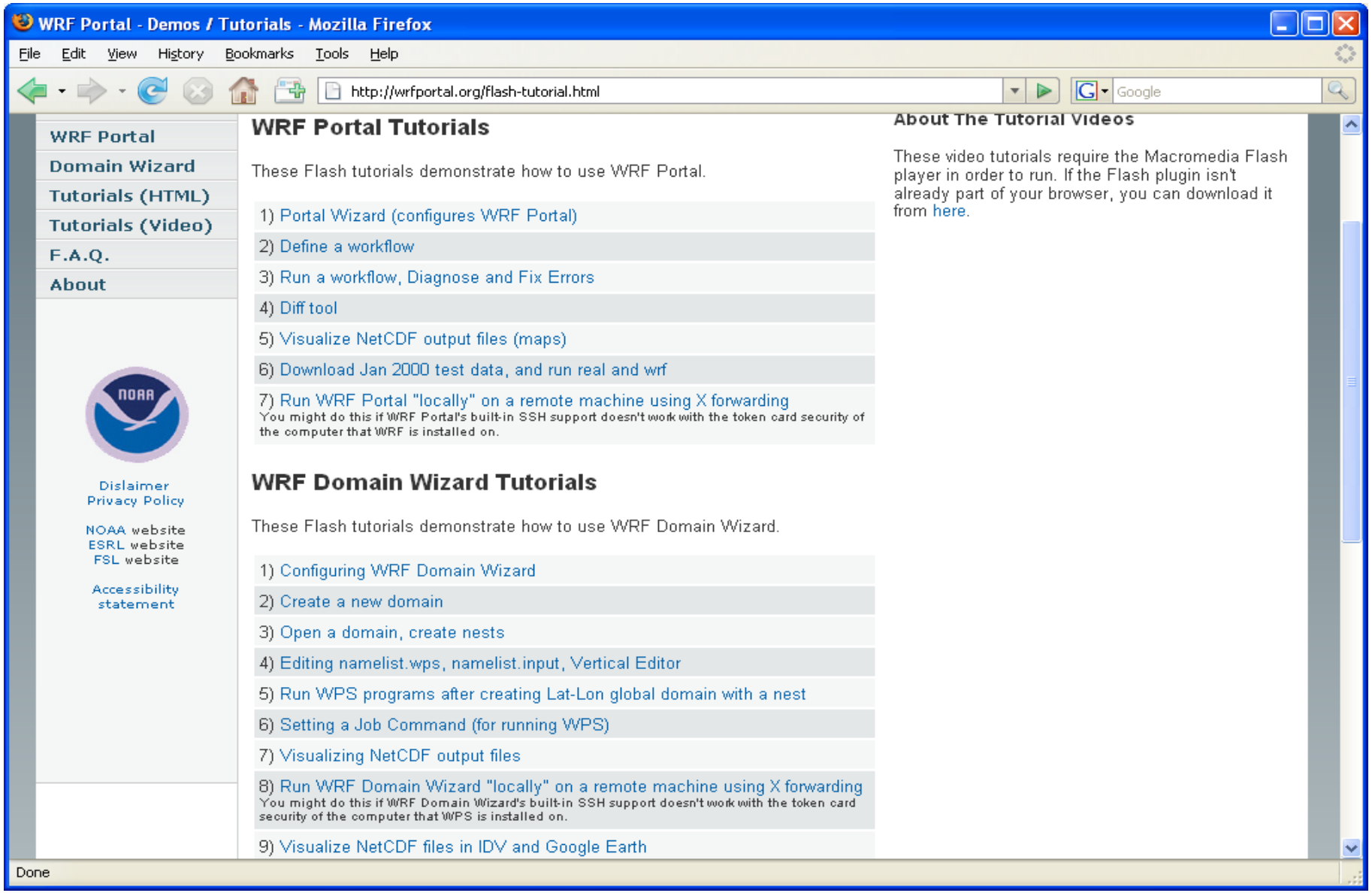

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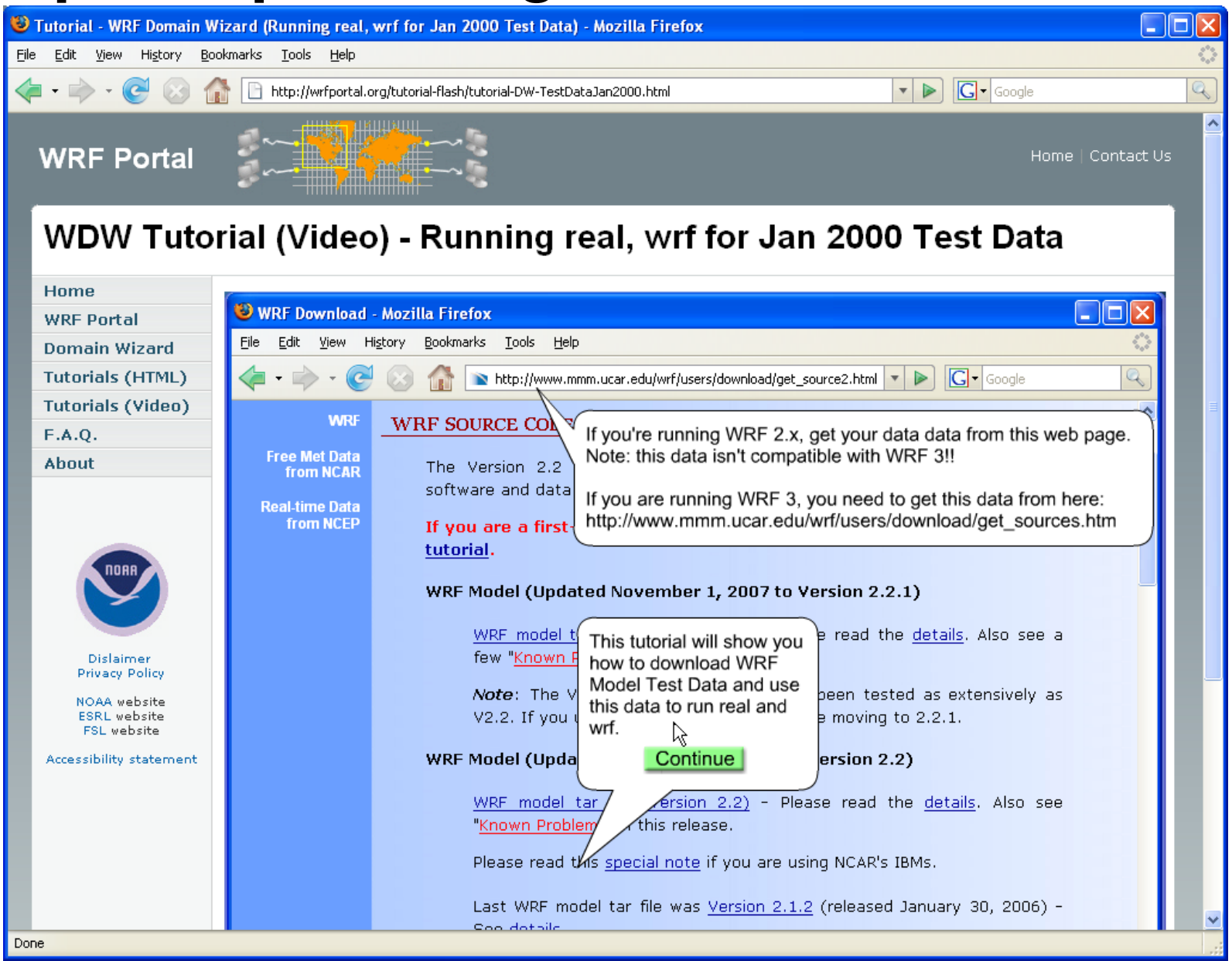

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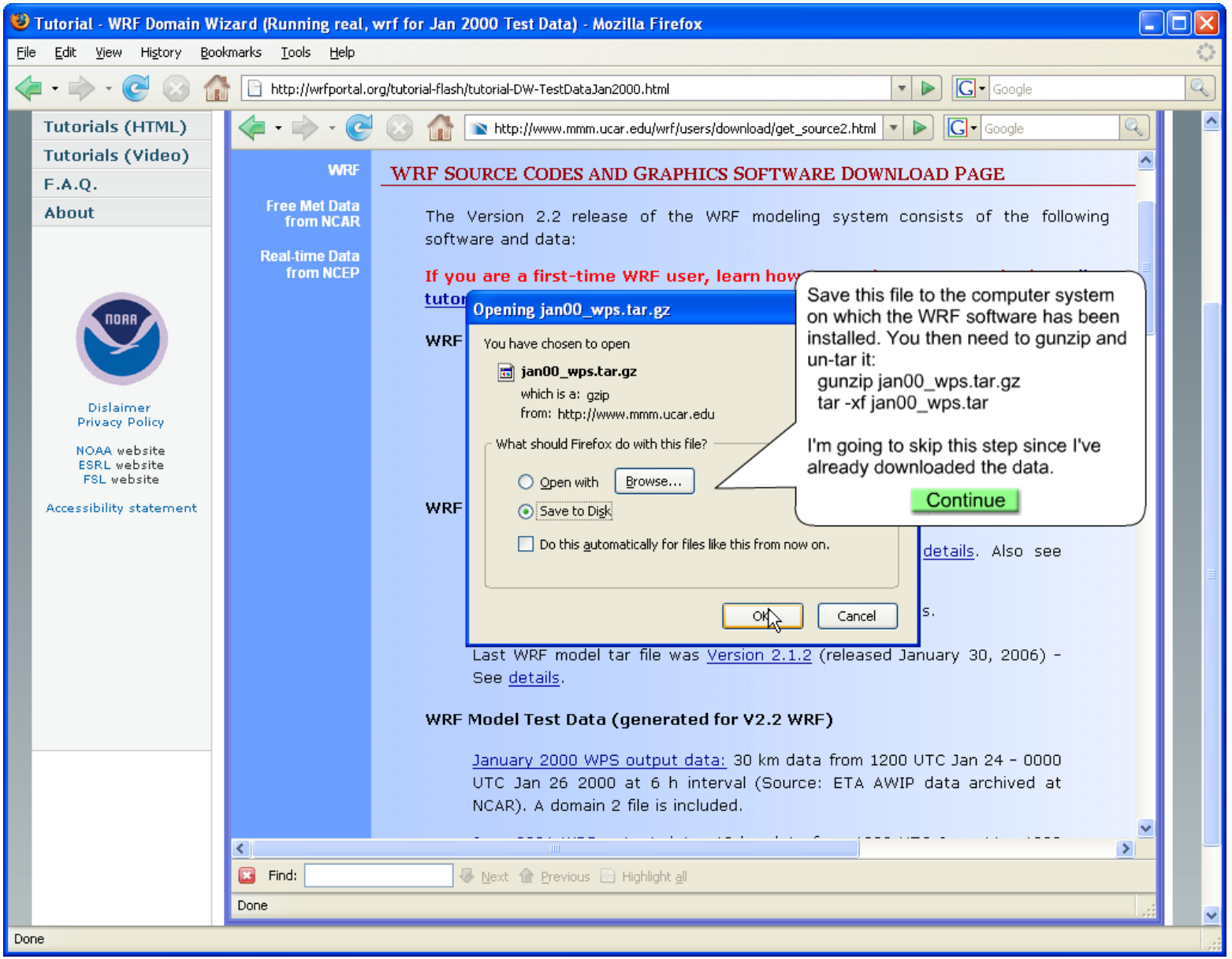

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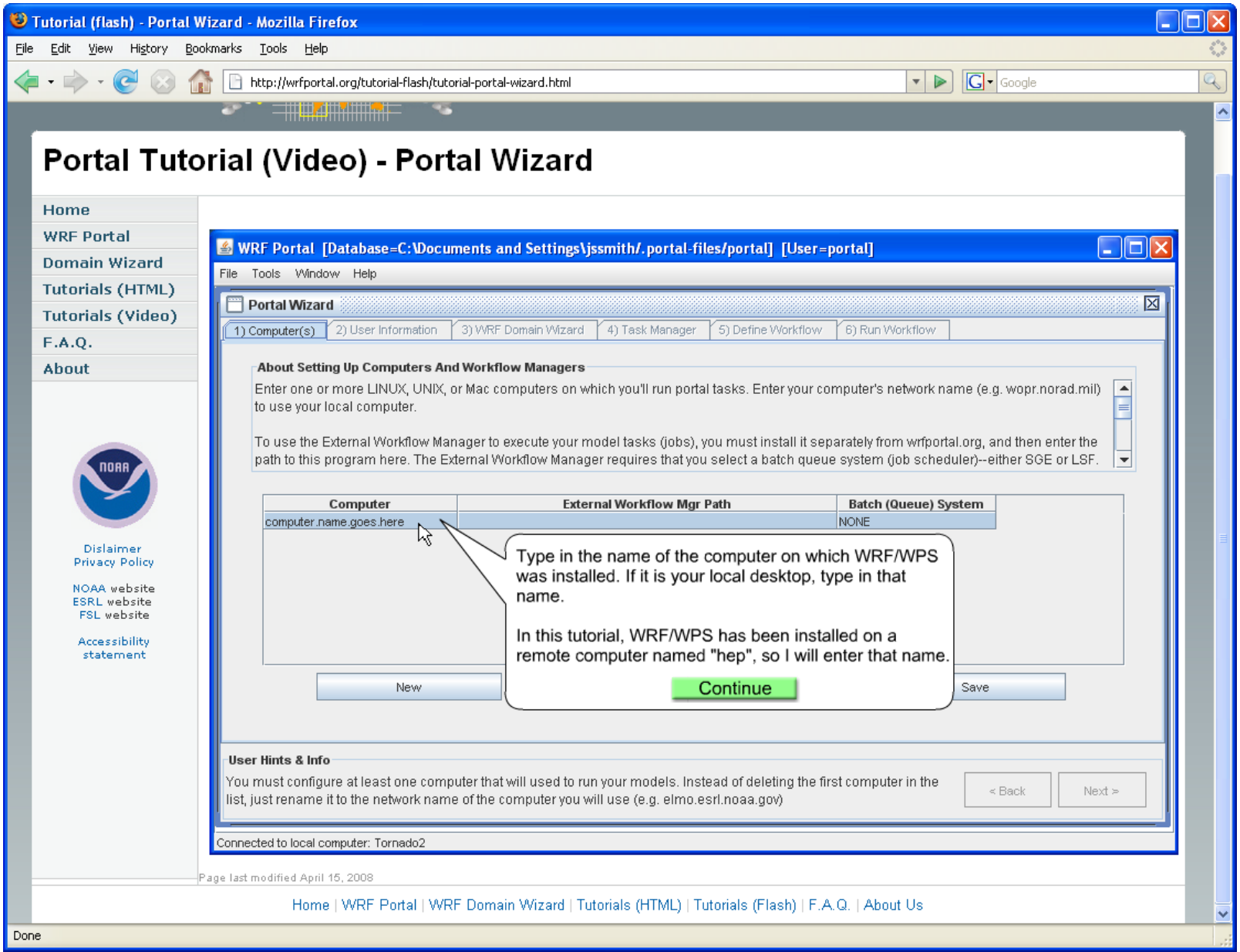

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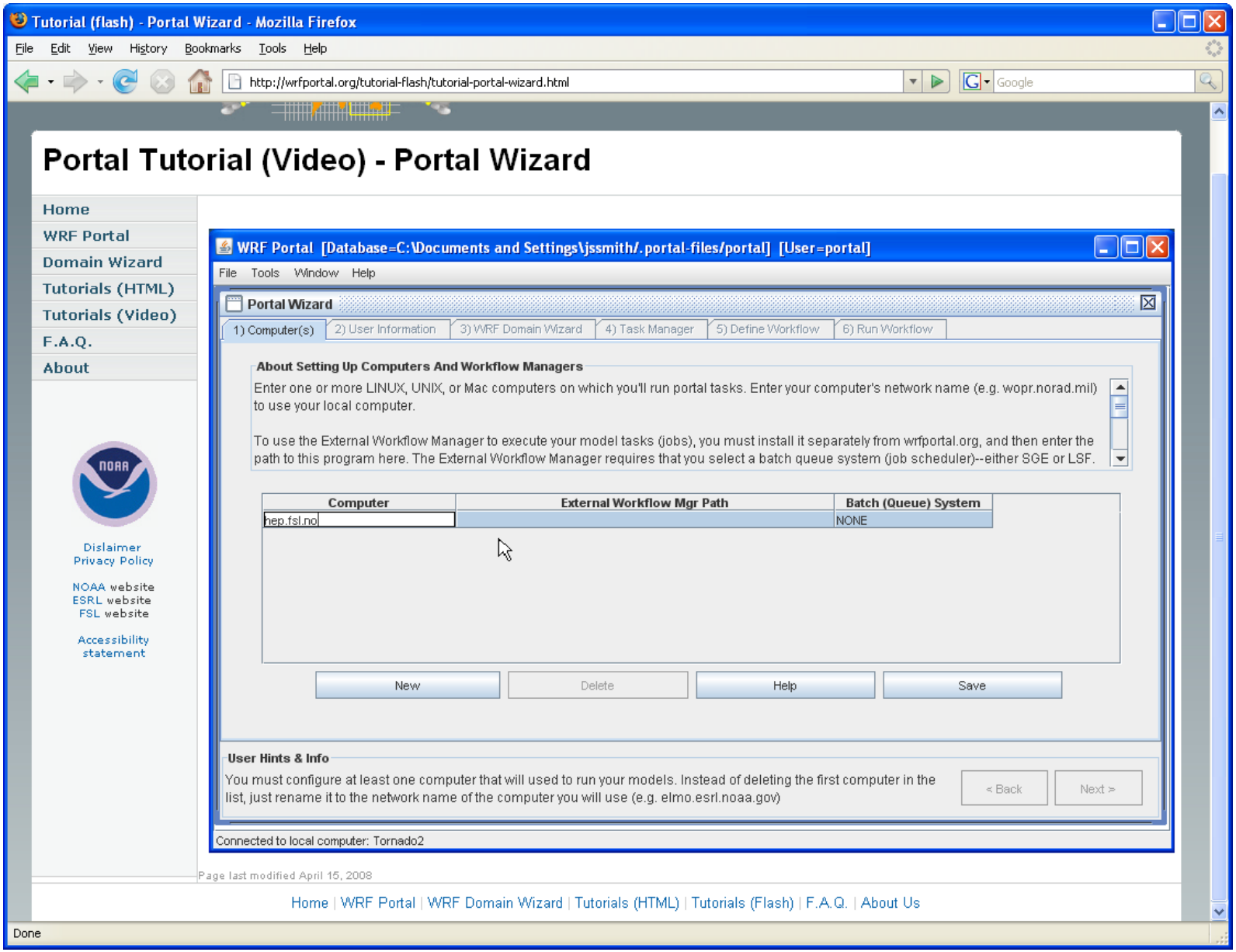
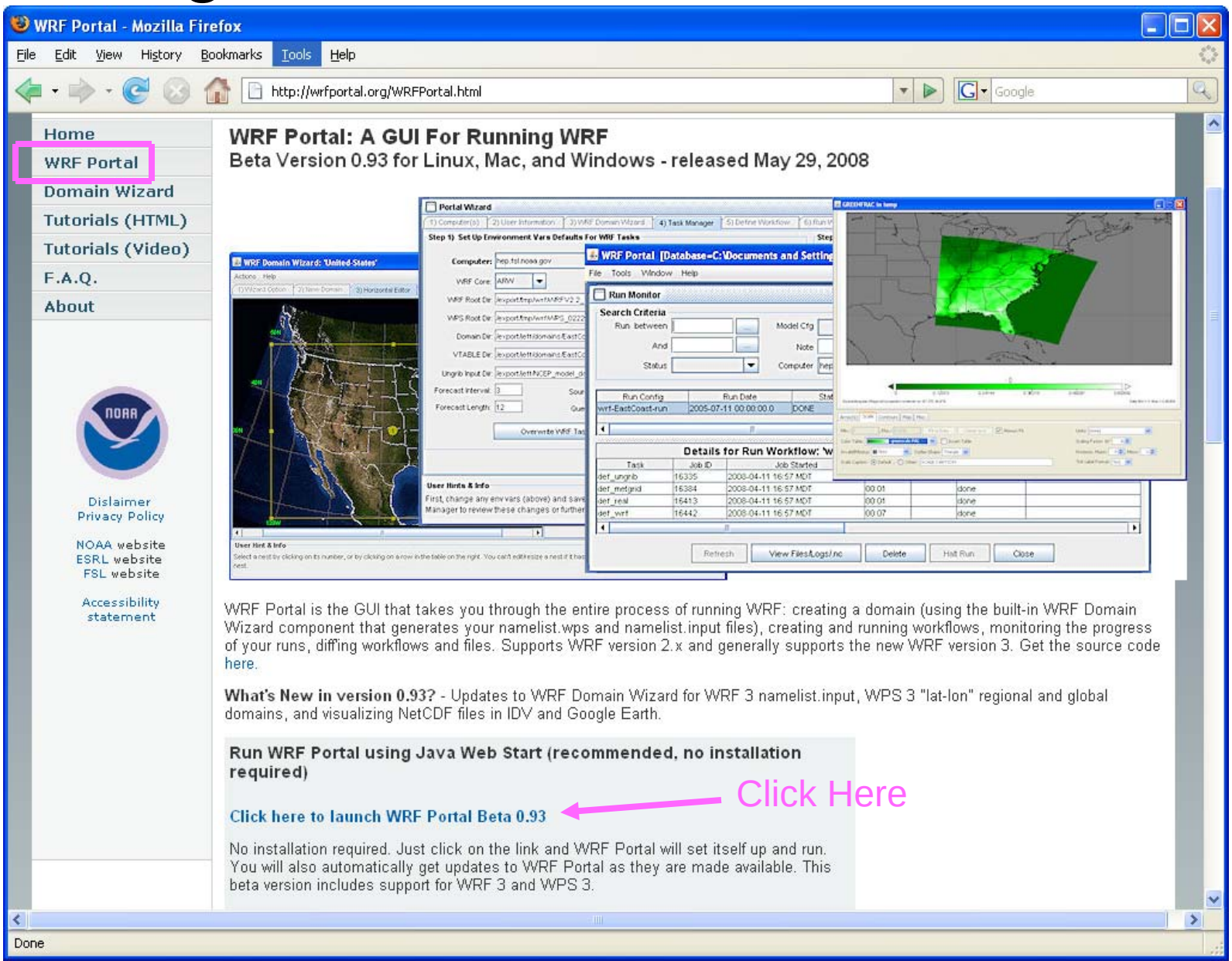
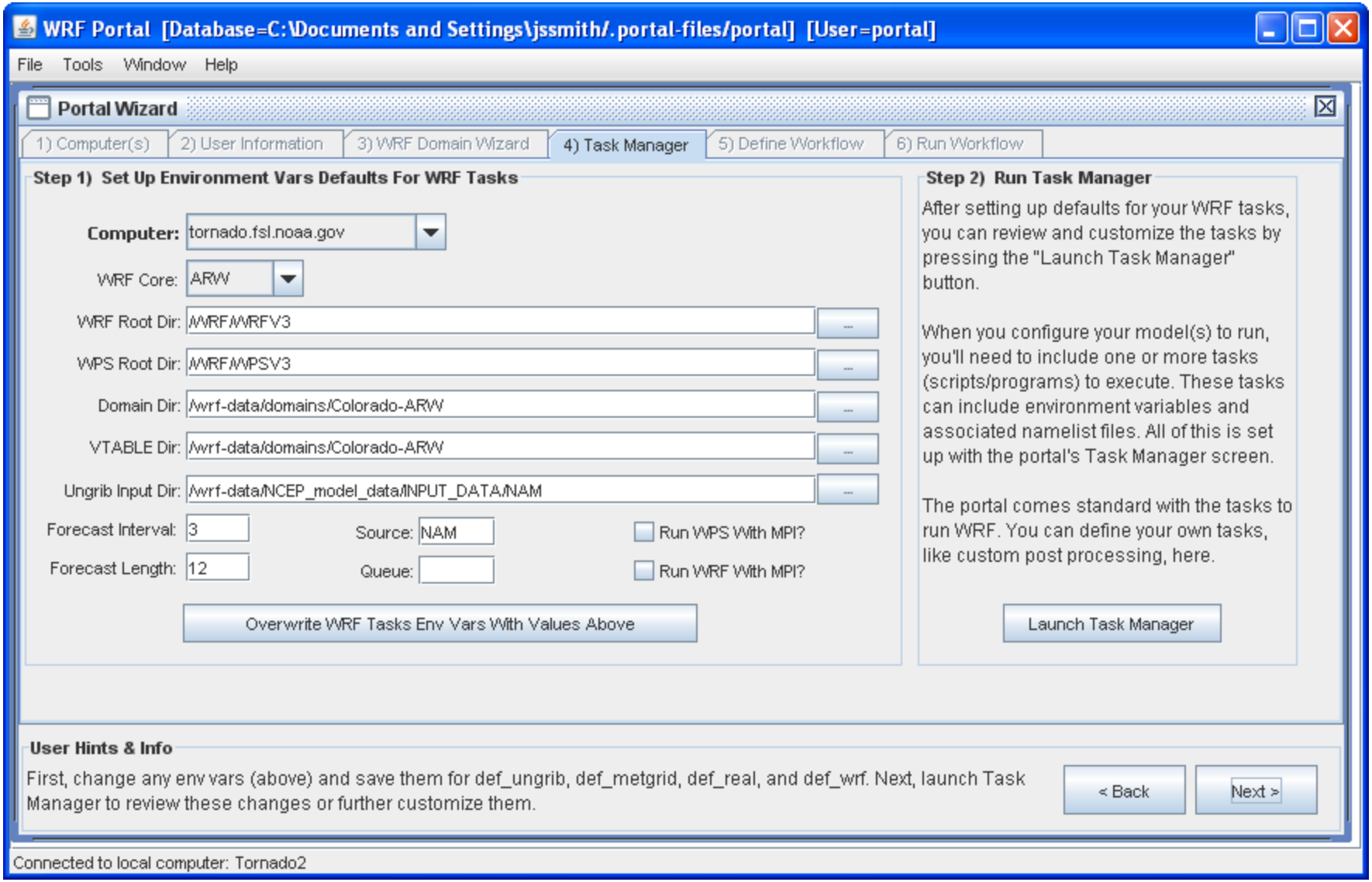


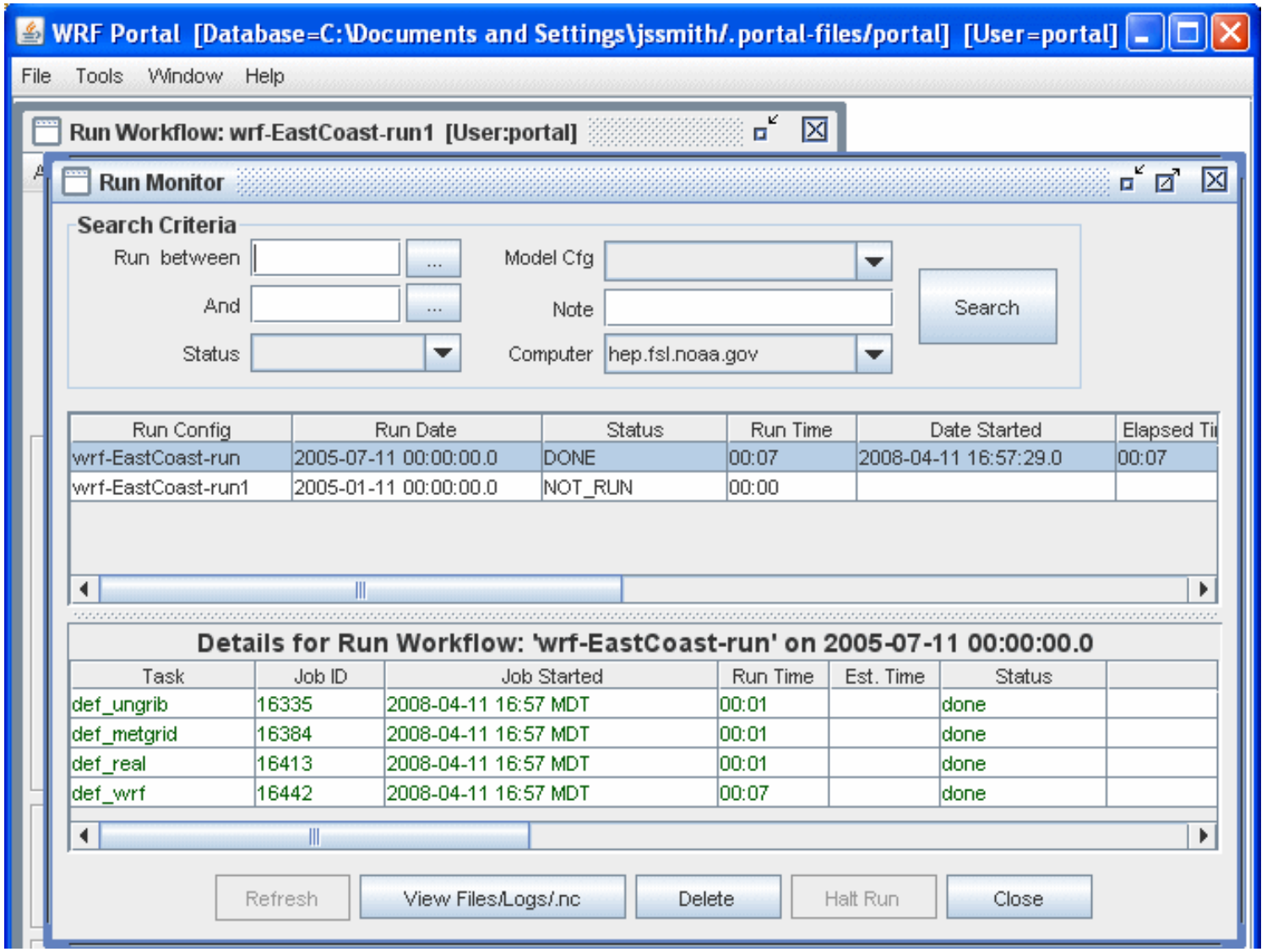
Running WRF Portal From The Web



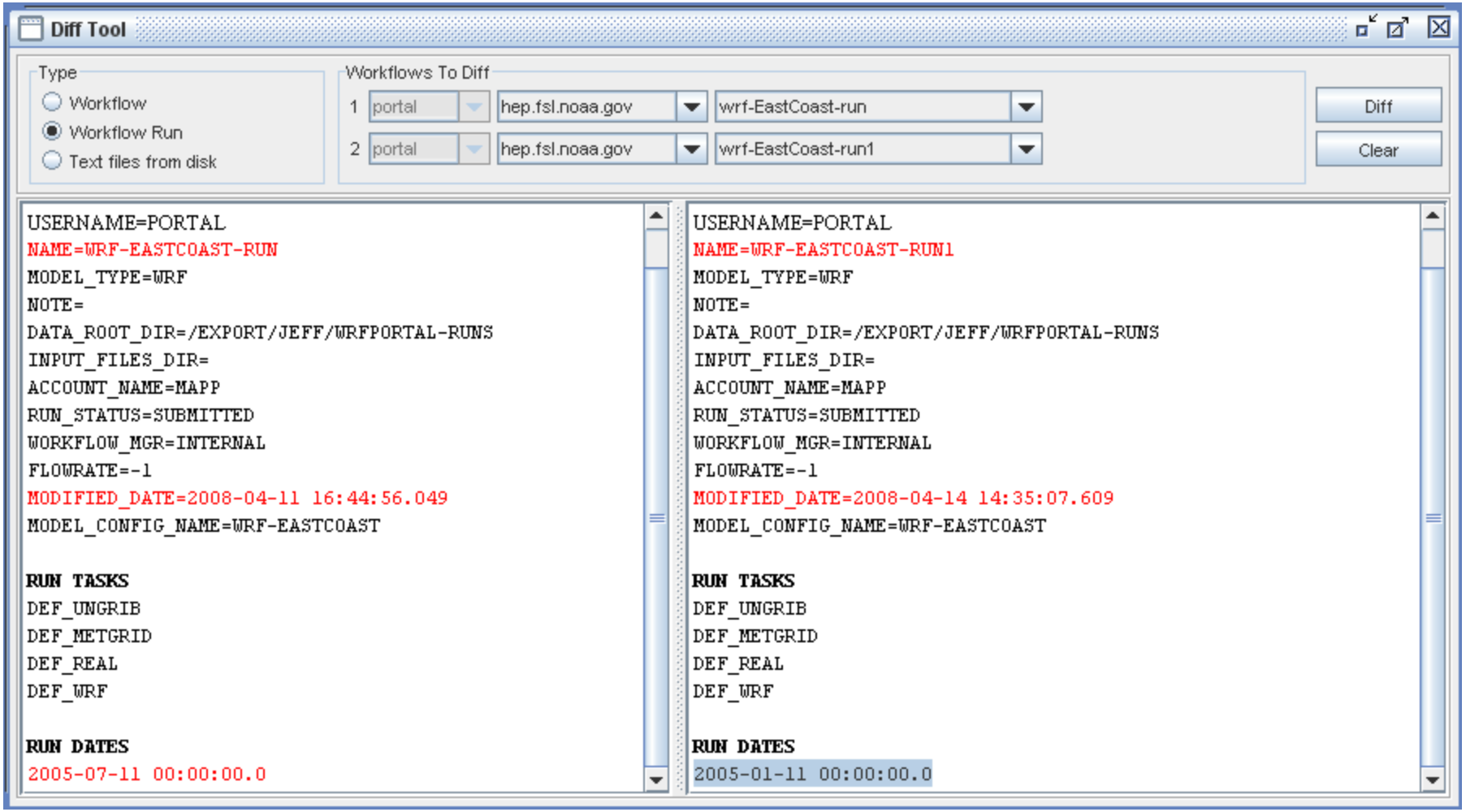
Portal Wizard (sets up WRF Portal)



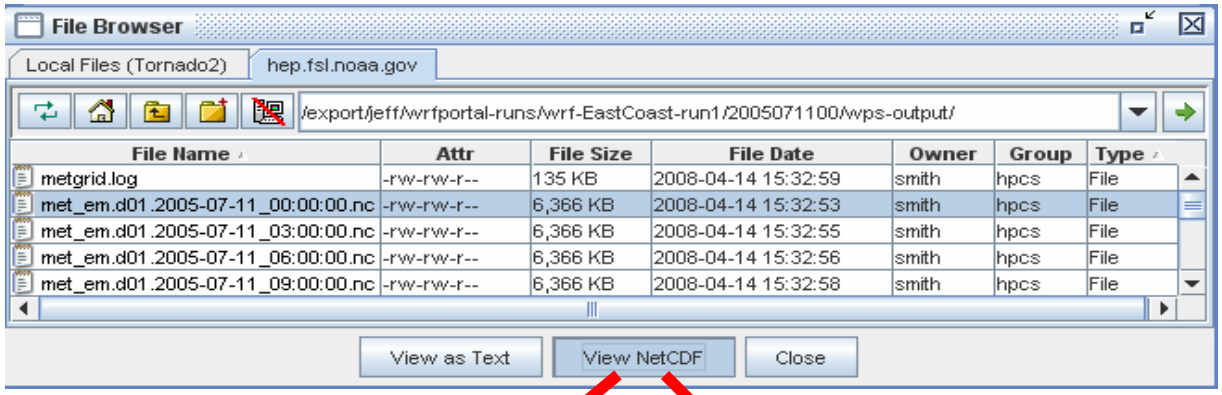
Monitor Workflow Runs

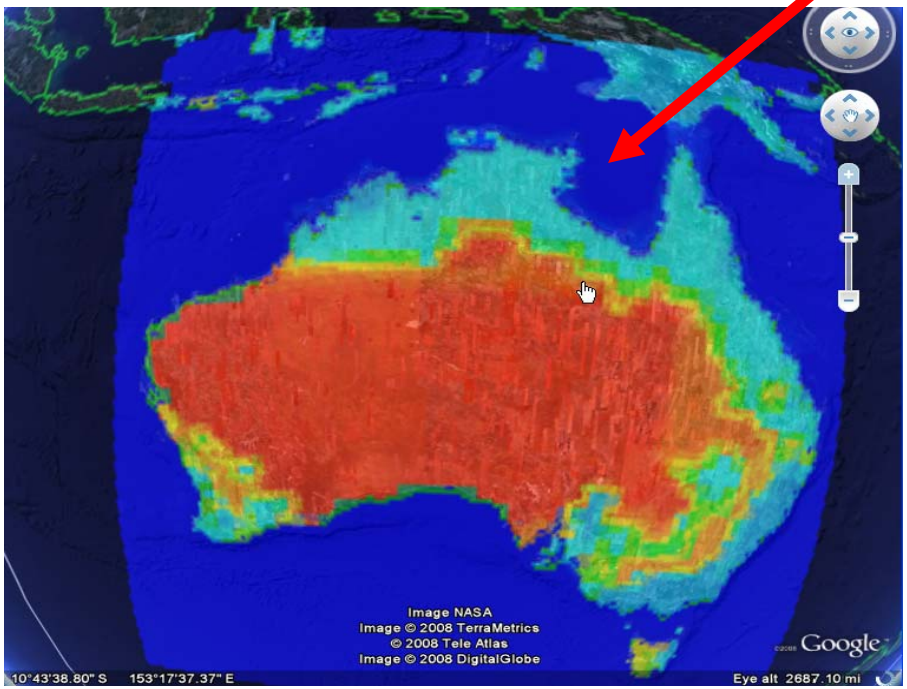


Diff Tool compares workflows and files

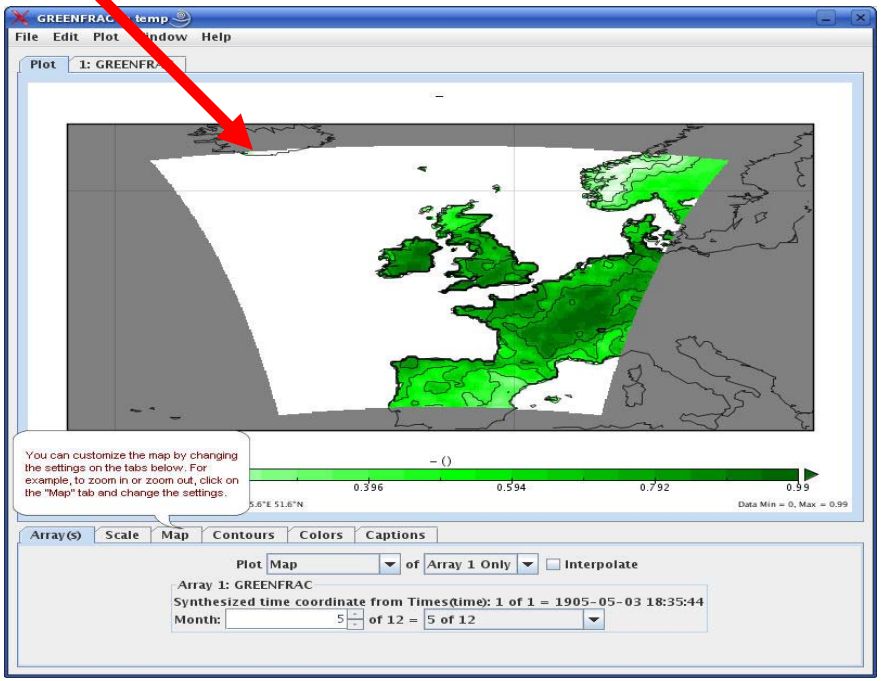


Visualize NetCDF output files





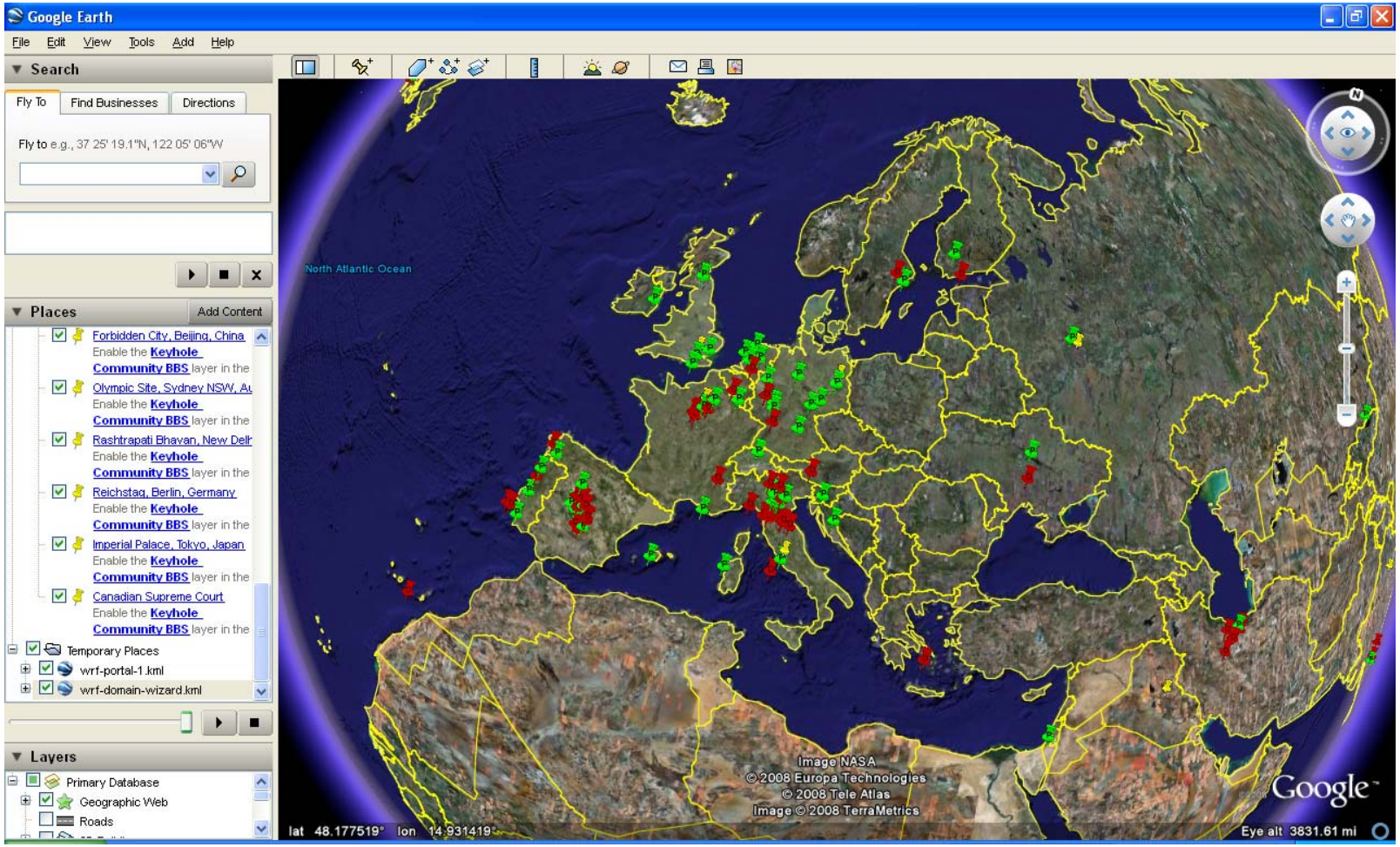
Google Earth



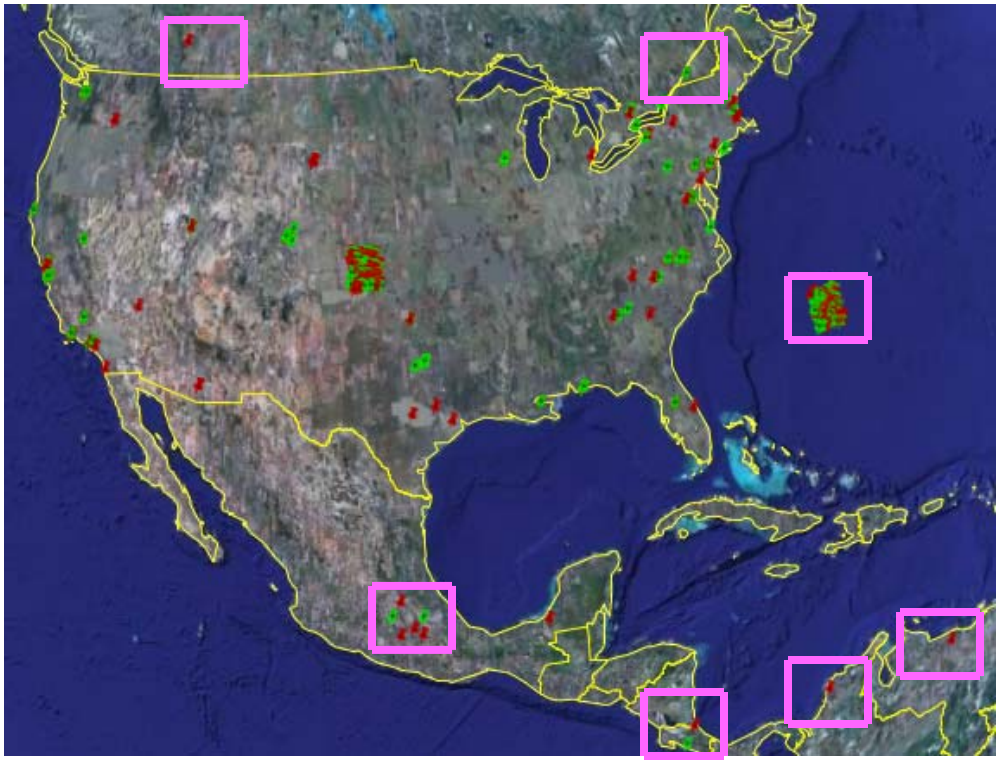
Panoply

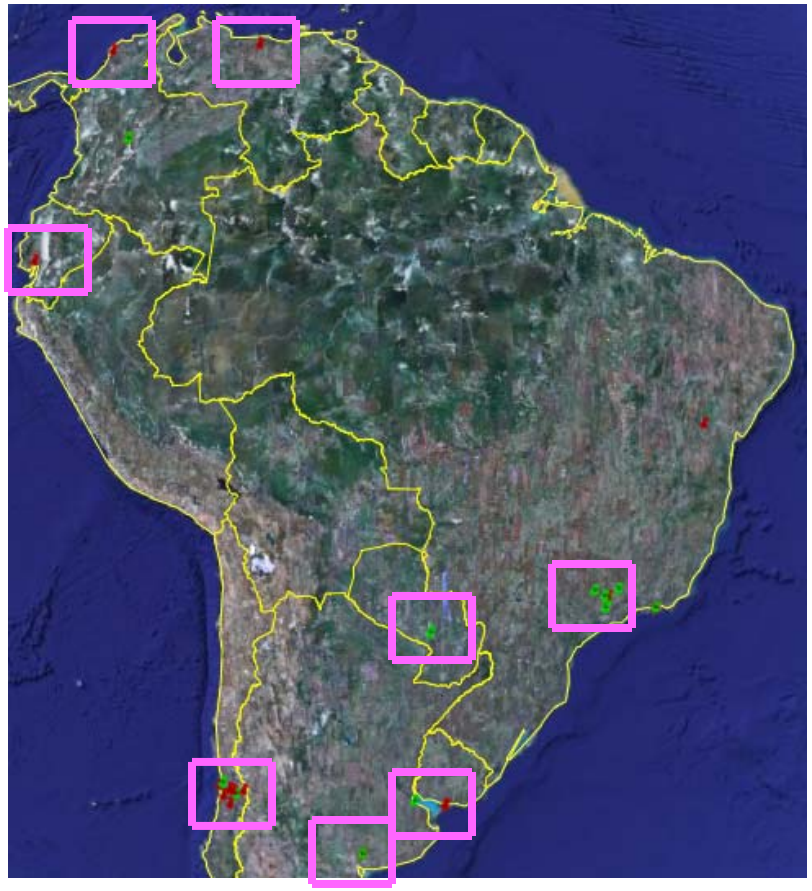
WRF Portal User Community -1

Software	Est. Users	Countries	Google Earth
WRF Portal	314	47	open in Google Earth
WRF Domain Wizard	448	47	open in Google Earth
Ext. Workflow Mgr	27	9	open in Google Earth



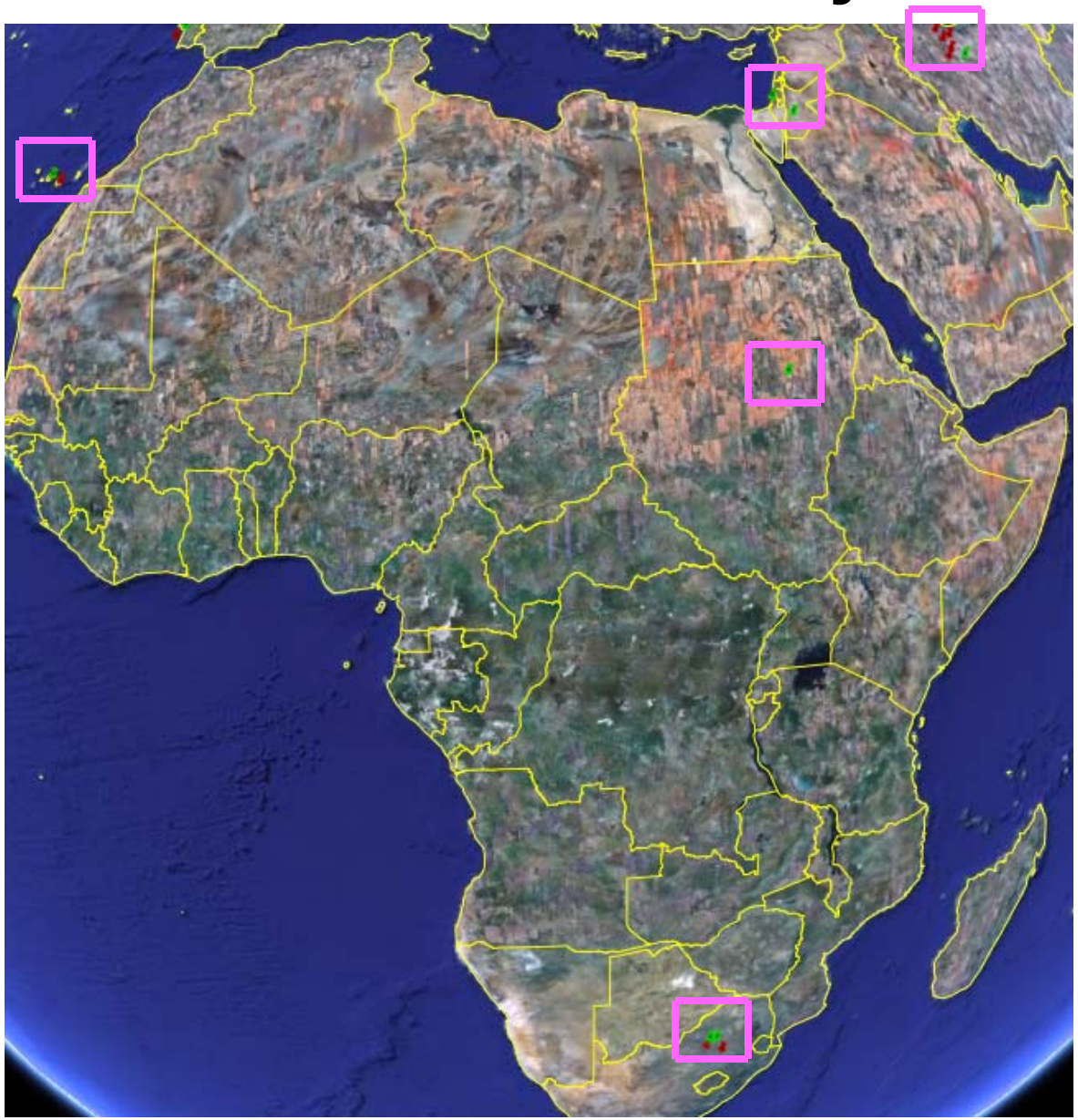
WRF Portal User Community -2





WRF Portal User Community -3

WRF Portal User Community -4



Credits

- Software developed by Aviation Branch of ESRL's Global Systems Division (part of NOAA)
- Jeff Smith, Mark Govett, Paula McCaslin, Chris Harrop
- See our poster on Wednesday afternoon

Questions?